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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
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Tel: (925)484-1919

TestAmerica Job ID: 720-88236-1
Client Project/Site: UPC OU-SM
Revision: 1

For:
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201 N. Civic Drive
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Walnut Creek, California 94596

Attn: Mr. Krys Jesionek

Authorized for release by:
11/6/2018 4:28:13 PM

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

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

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 5
Client Sample Results 6
Surrogate Summary 12
QC Sample Results 13
QC Association Summary 28
Lab Chronicle 30
Certification Summary 31
Method Summary 32
Sample Summary 33
Chain of Custody 34
Receipt Checklists 37

Definitions/Glossary

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

TestAmerica Job ID: 720-88236-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Job ID: 720-88236-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-88236-1

Comments
This report was revised on 11/6/18 to correct the method reference for the Volatile Organic Compounds by (GC/MS SIM) to reference method SRL 524M-TCP.

Receipt
The samples were received on 8/24/2018 3:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.0º C.

Receipt Exceptions
The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. The COC or sample labels do not specify that the CAM 17 metals HNO3 preserved 250ml poly container was field filtered; the methods were logged in as field filtered as in the prior submission. DG-B4W has note on COC that the Hex Chrom was not filtered.

GC/MS VOA
Method(s) 8260B: The matrix spike duplicate (MSD) recoveries for analytical batch 720-250641 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250641 recovered outside control limits for the following analytes: Carbon disulfide, Methylene Chloride, 1,1-Dichloroethene, 1,1,2-Trichloro-1,2,2-trifluoroethane and trans-1,2-Dichloroethene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The Gasoline Range Organics (GRO) concentration reported for the following sample is due to the presence of discrete peaks: DG-B5W (720-88236-1). Vinyl chloride and cis-1,2-Dichloroethene

Method(s) 8260B: The following volatile samples were analyzed with significant headspace in the sample containers: DG-B5W (720-88236-1) and DG-B4W (720-88236-2). Significant headspace is defined as a bubble greater than 6 mm in diameter.

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

GC Semi VOA
Method(s) 8015: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate in batch 720-250307. A laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) pair was analyzed.

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

Metals
Method(s) 6010B: The serial dilution performed for the following sample associated with batch 720-250390 was outside of the 10% control limits: (720-88220-D-7-B SD).

Analyte	Recovery
Barium	30%

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

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

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

Detection Summary

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

TestAmerica Job ID: 720-88236-1

Client Sample ID: DG-B5W — Lab Sample ID: 720-88236-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.44	J	0.50	0.11	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	160		10	1.5	ug/L	20		8260B	Total/NA
Gasoline Range Organics (GRO) -C4-C12	380		50	21	ug/L	1		8260B	Total/NA
Trichloroethene	8.5		0.50	0.20	ug/L	1		8260B	Total/NA
Vinyl chloride	410		10	4.0	ug/L	20		8260B	Total/NA
Diesel Range Organics [C10-C28]	57		53	32	ug/L	1		8015B	Total/NA
Arsenic	0.0084	J	0.010	0.0026	mg/L	1		6010B	Dissolved
Barium	0.32		0.010	0.0014	mg/L	1		6010B	Dissolved
Cobalt	0.0029		0.0020	0.0012	mg/L	1		6010B	Dissolved
Copper	0.0030	J	0.020	0.0015	mg/L	1		6010B	Dissolved
Lead	0.0079		0.0050	0.0023	mg/L	1		6010B	Dissolved
Molybdenum	0.0043	J	0.010	0.0023	mg/L	1		6010B	Dissolved
Nickel	0.0047	J	0.010	0.00080	mg/L	1		6010B	Dissolved
Vanadium	0.00091	J	0.010	0.00070	mg/L	1		6010B	Dissolved
Zinc	0.069		0.020	0.0096	mg/L	1		6010B	Dissolved

Client Sample ID: DG-B4W — Lab Sample ID: 720-88236-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.86		0.50	0.076	ug/L	1		8260B	Total/NA
Gasoline Range Organics (GRO) -C4-C12	30	J	50	21	ug/L	1		8260B	Total/NA
Vinyl chloride	1.8		0.50	0.20	ug/L	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	260		54	33	ug/L	1		8015B	Total/NA
Antimony	0.038		0.010	0.0027	mg/L	1		6010B	Dissolved
Arsenic	0.014		0.010	0.0026	mg/L	1		6010B	Dissolved
Barium	0.60		0.010	0.0014	mg/L	1		6010B	Dissolved
Chromium	0.0016	J	0.010	0.0015	mg/L	1		6010B	Dissolved
Cobalt	0.0035		0.0020	0.0012	mg/L	1		6010B	Dissolved
Copper	0.020		0.020	0.0015	mg/L	1		6010B	Dissolved
Lead	0.010		0.0050	0.0023	mg/L	1		6010B	Dissolved
Molybdenum	0.0090	J	0.010	0.0023	mg/L	1		6010B	Dissolved
Nickel	0.0046	J	0.010	0.00080	mg/L	1		6010B	Dissolved
Vanadium	0.0019	J	0.010	0.00070	mg/L	1		6010B	Dissolved
Zinc	0.15		0.020	0.0096	mg/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample Results

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

TestAmerica Job ID: 720-88236-1

Client Sample ID: DG-B5W

Date Collected: 08/23/18 16:15
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88236-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/31/18 13:19	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/31/18 13:19	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/31/18 13:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	0.50	0.091	ug/L			08/31/18 13:19	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/31/18 13:19	1
1,1-Dichloroethane	**0.44**	**J**	0.50	0.11	ug/L			08/31/18 13:19	1
1,1-Dichloroethene	ND		10	4.0	ug/L			09/04/18 15:28	20
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/31/18 13:19	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/31/18 13:19	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/31/18 13:19	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/31/18 13:19	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/31/18 13:19	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/31/18 13:19	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/31/18 13:19	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/31/18 13:19	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/31/18 13:19	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/31/18 13:19	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/31/18 13:19	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/31/18 13:19	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/31/18 13:19	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/31/18 13:19	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/31/18 13:19	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 13:19	1
2-Hexanone	ND		50	3.0	ug/L			08/31/18 13:19	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 13:19	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/31/18 13:19	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/31/18 13:19	1
Acetone	ND		50	20	ug/L			08/31/18 13:19	1
Benzene	ND		0.50	0.25	ug/L			08/31/18 13:19	1
Bromobenzene	ND		1.0	0.20	ug/L			08/31/18 13:19	1
Bromoform	ND		1.0	0.50	ug/L			08/31/18 13:19	1
Bromomethane	ND		1.0	0.49	ug/L			08/31/18 13:19	1
Carbon disulfide	ND	*	5.0	0.78	ug/L			08/31/18 13:19	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/31/18 13:19	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/31/18 13:19	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/31/18 13:19	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/31/18 13:19	1
Chloroethane	ND		1.0	0.17	ug/L			08/31/18 13:19	1
Chloroform	ND		1.0	0.40	ug/L			08/31/18 13:19	1
Chloromethane	ND		1.0	0.19	ug/L			08/31/18 13:19	1
cis-1,2-Dichloroethene	**160**		10	1.5	ug/L			09/04/18 15:28	20
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/31/18 13:19	1
Dibromomethane	ND		0.50	0.30	ug/L			08/31/18 13:19	1
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/31/18 13:19	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/31/18 13:19	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/31/18 13:19	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/31/18 13:19	1
Gasoline Range Organics (GRO) -C4-C12	**380**		50	21	ug/L			08/31/18 13:19	1

Client Sample Results

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

TestAmerica Job ID: 720-88236-1

Client Sample ID: DG-B5W

Date Collected: 08/23/18 16:15
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88236-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/31/18 13:19	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/31/18 13:19	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/31/18 13:19	1
Methylene Chloride	ND	*	5.0	1.5	ug/L			08/31/18 13:19	1
Naphthalene	ND		1.0	0.22	ug/L			08/31/18 13:19	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/31/18 13:19	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/31/18 13:19	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/31/18 13:19	1
Styrene	ND		0.50	0.22	ug/L			08/31/18 13:19	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/31/18 13:19	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/31/18 13:19	1
Toluene	ND		0.50	0.17	ug/L			08/31/18 13:19	1
trans-1,2-Dichloroethene	ND		10	2.6	ug/L			09/04/18 15:28	20
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/31/18 13:19	1
Trichloroethene	**8.5**		0.50	0.20	ug/L			08/31/18 13:19	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/31/18 13:19	1
Vinyl acetate	ND		10	0.60	ug/L			08/31/18 13:19	1
Vinyl chloride	**410**		10	4.0	ug/L			09/04/18 15:28	20
Xylenes, Total	ND		0.50	0.40	ug/L			08/31/18 13:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*72 - 130*		*08/31/18 13:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*72 - 130*		*09/04/18 15:28*	*20*
4-Bromofluorobenzene	*92*		*67 - 130*		*08/31/18 13:19*	*1*
4-Bromofluorobenzene	*95*		*67 - 130*		*09/04/18 15:28*	*20*
Toluene-d8 (Surr)	*92*		*70 - 130*		*08/31/18 13:19*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*09/04/18 15:28*	*20*

Method: SRL 524M-TCP - Volatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0017	ug/L			08/29/18 15:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**57**		53	32	ug/L		08/27/18 19:48	08/28/18 17:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*85*		*23 - 156*	*08/27/18 19:48*	*08/28/18 17:52*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010	0.0027	mg/L		08/25/18 11:40	08/28/18 12:03	1
Arsenic	**0.0084**	**J**	0.010	0.0026	mg/L		08/25/18 11:40	08/28/18 12:03	1
Barium	**0.32**		0.010	0.0014	mg/L		08/25/18 11:40	08/28/18 12:03	1
Beryllium	ND		0.0020	0.00033	mg/L		08/25/18 11:40	08/28/18 12:03	1
Cadmium	ND		0.0025	0.0013	mg/L		08/25/18 11:40	08/28/18 12:03	1
Chromium	ND		0.010	0.0015	mg/L		08/25/18 11:40	08/28/18 12:03	1
Cobalt	**0.0029**		0.0020	0.0012	mg/L		08/25/18 11:40	08/28/18 12:03	1
Copper	**0.0030**	**J**	0.020	0.0015	mg/L		08/25/18 11:40	08/28/18 12:03	1
Lead	**0.0079**		0.0050	0.0023	mg/L		08/25/18 11:40	08/28/18 12:03	1
Molybdenum	**0.0043**	**J**	0.010	0.0023	mg/L		08/25/18 11:40	08/28/18 12:03	1

Client Sample Results

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

TestAmerica Job ID: 720-88236-1

Client Sample ID: DG-B5W

Date Collected: 08/23/18 16:15
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88236-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**0.0047**	**J**	0.010	0.00080	mg/L		08/25/18 11:40	08/28/18 12:03	1
Selenium	ND		0.020	0.0071	mg/L		08/25/18 11:40	08/28/18 12:03	1
Silver	ND		0.0050	0.0012	mg/L		08/25/18 11:40	08/28/18 12:03	1
Thallium	ND		0.010	0.0035	mg/L		08/25/18 11:40	08/28/18 12:03	1
Vanadium	**0.00091**	**J**	0.010	0.00070	mg/L		08/25/18 11:40	08/28/18 12:03	1
Zinc	**0.069**		0.020	0.0096	mg/L		08/25/18 11:40	08/28/18 12:03	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/28/18 18:59	08/29/18 20:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.010	0.0037	mg/L			08/24/18 16:07	1

Client Sample Results

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

TestAmerica Job ID: 720-88236-1

Client Sample ID: DG-B4W

Date Collected: 08/23/18 16:30
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88236-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/31/18 13:48	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/31/18 13:48	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/31/18 13:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	0.50	0.091	ug/L			08/31/18 13:48	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/31/18 13:48	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/31/18 13:48	1
1,1-Dichloroethene	ND	*	0.50	0.20	ug/L			08/31/18 13:48	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/31/18 13:48	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/31/18 13:48	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/31/18 13:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/31/18 13:48	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/31/18 13:48	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/31/18 13:48	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/31/18 13:48	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/31/18 13:48	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/31/18 13:48	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/31/18 13:48	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/31/18 13:48	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/31/18 13:48	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/31/18 13:48	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/31/18 13:48	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/31/18 13:48	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 13:48	1
2-Hexanone	ND		50	3.0	ug/L			08/31/18 13:48	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 13:48	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/31/18 13:48	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/31/18 13:48	1
Acetone	ND		50	20	ug/L			08/31/18 13:48	1
Benzene	ND		0.50	0.25	ug/L			08/31/18 13:48	1
Bromobenzene	ND		1.0	0.20	ug/L			08/31/18 13:48	1
Bromoform	ND		1.0	0.50	ug/L			08/31/18 13:48	1
Bromomethane	ND		1.0	0.49	ug/L			08/31/18 13:48	1
Carbon disulfide	ND	*	5.0	0.78	ug/L			08/31/18 13:48	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/31/18 13:48	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/31/18 13:48	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/31/18 13:48	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/31/18 13:48	1
Chloroethane	ND		1.0	0.17	ug/L			08/31/18 13:48	1
Chloroform	ND		1.0	0.40	ug/L			08/31/18 13:48	1
Chloromethane	ND		1.0	0.19	ug/L			08/31/18 13:48	1
cis-1,2-Dichloroethene	**0.86**		0.50	0.076	ug/L			09/04/18 15:58	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/31/18 13:48	1
Dibromomethane	ND		0.50	0.30	ug/L			08/31/18 13:48	1
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/31/18 13:48	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/31/18 13:48	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/31/18 13:48	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/31/18 13:48	1
Gasoline Range Organics (GRO) -C4-C12	**30**	**J**	50	21	ug/L			08/31/18 13:48	1

Client Sample ID: DG-B4W

Date Collected: 08/23/18 16:30
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88236-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/31/18 13:48	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/31/18 13:48	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/31/18 13:48	1
Methylene Chloride	ND	*	5.0	1.5	ug/L			08/31/18 13:48	1
Naphthalene	ND		1.0	0.22	ug/L			08/31/18 13:48	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/31/18 13:48	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/31/18 13:48	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/31/18 13:48	1
Styrene	ND		0.50	0.22	ug/L			08/31/18 13:48	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/31/18 13:48	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/31/18 13:48	1
Toluene	ND		0.50	0.17	ug/L			08/31/18 13:48	1
trans-1,2-Dichloroethene	ND	*	0.50	0.13	ug/L			08/31/18 13:48	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/31/18 13:48	1
Trichloroethene	ND		0.50	0.20	ug/L			08/31/18 13:48	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/31/18 13:48	1
Vinyl acetate	ND		10	0.60	ug/L			08/31/18 13:48	1
Vinyl chloride	**1.8**		0.50	0.20	ug/L			09/04/18 15:58	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/31/18 13:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*72 - 130*		*08/31/18 13:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*72 - 130*		*09/04/18 15:58*	*1*
4-Bromofluorobenzene	*90*		*67 - 130*		*08/31/18 13:48*	*1*
4-Bromofluorobenzene	*95*		*67 - 130*		*09/04/18 15:58*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/31/18 13:48*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*09/04/18 15:58*	*1*

Method: SRL 524M-TCP - Volatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0017	ug/L			08/29/18 16:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**260**		54	33	ug/L		08/27/18 19:48	08/28/18 18:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*75*		*23 - 156*	*08/27/18 19:48*	*08/28/18 18:17*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.038**		0.010	0.0027	mg/L		08/25/18 11:40	08/28/18 12:08	1
Arsenic	**0.014**		0.010	0.0026	mg/L		08/25/18 11:40	08/28/18 12:08	1
Barium	**0.60**		0.010	0.0014	mg/L		08/25/18 11:40	08/28/18 12:08	1
Beryllium	ND		0.0020	0.00033	mg/L		08/25/18 11:40	08/28/18 12:08	1
Cadmium	ND		0.0025	0.0013	mg/L		08/25/18 11:40	08/28/18 12:08	1
Chromium	**0.0016**	**J**	0.010	0.0015	mg/L		08/25/18 11:40	08/28/18 12:08	1
Cobalt	**0.0035**		0.0020	0.0012	mg/L		08/25/18 11:40	08/28/18 12:08	1
Copper	**0.020**		0.020	0.0015	mg/L		08/25/18 11:40	08/28/18 12:08	1
Lead	**0.010**		0.0050	0.0023	mg/L		08/25/18 11:40	08/28/18 12:08	1
Molybdenum	**0.0090**	**J**	0.010	0.0023	mg/L		08/25/18 11:40	08/28/18 12:08	1

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

TestAmerica Job ID: 720-88236-1

Client Sample ID: DG-B4W

Lab Sample ID: 720-88236-2

Date Collected: 08/23/18 16:30

Matrix: Water

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**0.0046**	**J**	0.010	0.00080	mg/L		08/25/18 11:40	08/28/18 12:08	1
Selenium	ND		0.020	0.0071	mg/L		08/25/18 11:40	08/28/18 12:08	1
Silver	ND		0.0050	0.0012	mg/L		08/25/18 11:40	08/28/18 12:08	1
Thallium	ND		0.010	0.0035	mg/L		08/25/18 11:40	08/28/18 12:08	1
Vanadium	**0.0019**	**J**	0.010	0.00070	mg/L		08/25/18 11:40	08/28/18 12:08	1
Zinc	**0.15**		0.020	0.0096	mg/L		08/25/18 11:40	08/28/18 12:08	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/28/18 18:59	08/29/18 20:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.010	0.0037	mg/L			08/24/18 16:11	1

Surrogate Summary

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

TestAmerica Job ID: 720-88236-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)		
		DCA	BFB	TOL
Lab Sample ID	Client Sample ID	(72-130)	(67-130)	(70-130)
720-88209-A-1 MS	Matrix Spike	91	99	92
720-88209-A-1 MSD	Matrix Spike Duplicate	94	97	91
720-88236-1	DG-B5W	90	92	92
720-88236-1	DG-B5W	106	95	101
720-88236-2	DG-B4W	89	90	97
720-88236-2	DG-B4W	109	95	101
720-88267-A-1 MS	Matrix Spike	107	95	101
720-88267-A-1 MSD	Matrix Spike Duplicate	105	96	102
LCS 720-250641/5	Lab Control Sample	86	99	95
LCS 720-250641/7	Lab Control Sample	91	99	100
LCS 720-250782/5	Lab Control Sample	97	94	101
LCSD 720-250641/6	Lab Control Sample Dup	89	97	94
LCSD 720-250641/8	Lab Control Sample Dup	91	100	98
LCSD 720-250782/6	Lab Control Sample Dup	95	95	101
MB 720-250641/4	Method Blank	93	96	96
MB 720-250782/4	Method Blank	104	95	100

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)
		TPH1
Lab Sample ID	Client Sample ID	(23-156)
720-88236-1	DG-B5W	85
720-88236-2	DG-B4W	75
LCS 720-250307/2-A	Lab Control Sample	92
LCSD 720-250307/3-A	Lab Control Sample Dup	98
MB 720-250307/1-A	Method Blank	87

Surrogate Legend

TPH = p-Terphenyl

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

Lab Sample ID: MB 720-250641/4
Matrix: Water
Analysis Batch: 250641

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/31/18 07:32	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/31/18 07:32	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/31/18 07:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091	ug/L			08/31/18 07:32	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/31/18 07:32	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/31/18 07:32	1
1,1-Dichloroethene	ND		0.50	0.20	ug/L			08/31/18 07:32	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/31/18 07:32	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/31/18 07:32	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/31/18 07:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/31/18 07:32	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/31/18 07:32	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/31/18 07:32	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/31/18 07:32	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/31/18 07:32	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/31/18 07:32	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/31/18 07:32	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/31/18 07:32	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/31/18 07:32	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/31/18 07:32	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/31/18 07:32	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/31/18 07:32	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 07:32	1
2-Hexanone	ND		50	3.0	ug/L			08/31/18 07:32	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 07:32	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/31/18 07:32	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/31/18 07:32	1
Acetone	ND		50	20	ug/L			08/31/18 07:32	1
Benzene	ND		0.50	0.25	ug/L			08/31/18 07:32	1
Bromobenzene	ND		1.0	0.20	ug/L			08/31/18 07:32	1
Bromoform	ND		1.0	0.50	ug/L			08/31/18 07:32	1
Bromomethane	ND		1.0	0.49	ug/L			08/31/18 07:32	1
Carbon disulfide	ND		5.0	0.78	ug/L			08/31/18 07:32	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/31/18 07:32	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/31/18 07:32	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/31/18 07:32	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/31/18 07:32	1
Chloroethane	ND		1.0	0.17	ug/L			08/31/18 07:32	1
Chloroform	ND		1.0	0.40	ug/L			08/31/18 07:32	1
Chloromethane	ND		1.0	0.19	ug/L			08/31/18 07:32	1
cis-1,2-Dichloroethene	ND		0.50	0.076	ug/L			08/31/18 07:32	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/31/18 07:32	1
Dibromomethane	ND		0.50	0.30	ug/L			08/31/18 07:32	1
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/31/18 07:32	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/31/18 07:32	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/31/18 07:32	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/31/18 07:32	1

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

Lab Sample ID: MB 720-250641/4
Matrix: Water
Analysis Batch: 250641

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			08/31/18 07:32	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/31/18 07:32	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/31/18 07:32	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/31/18 07:32	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/31/18 07:32	1
Naphthalene	ND		1.0	0.22	ug/L			08/31/18 07:32	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/31/18 07:32	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/31/18 07:32	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/31/18 07:32	1
Styrene	ND		0.50	0.22	ug/L			08/31/18 07:32	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/31/18 07:32	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/31/18 07:32	1
Toluene	ND		0.50	0.17	ug/L			08/31/18 07:32	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			08/31/18 07:32	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/31/18 07:32	1
Trichloroethene	ND		0.50	0.20	ug/L			08/31/18 07:32	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/31/18 07:32	1
Vinyl acetate	ND		10	0.60	ug/L			08/31/18 07:32	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/31/18 07:32	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/31/18 07:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*72 - 130*		*08/31/18 07:32*	*1*
4-Bromofluorobenzene	*96*		*67 - 130*		*08/31/18 07:32*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/31/18 07:32*	*1*

Lab Sample ID: LCS 720-250641/5
Matrix: Water
Analysis Batch: 250641

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	25.7		ug/L		103	81 - 121
1,1,1-Trichloroethane	25.0	27.9		ug/L		111	74 - 130
1,1,2,2-Tetrachloroethane	25.0	21.0		ug/L		84	70 - 115
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	35.5	*	ug/L		142	70 - 133
1,1,2-Trichloroethane	25.0	24.7		ug/L		99	80 - 117
1,1-Dichloroethane	25.0	28.0		ug/L		112	77 - 119
1,1-Dichloroethene	25.0	33.2	*	ug/L		133	69 - 119
1,1-Dichloropropene	25.0	25.7		ug/L		103	83 - 130
1,2,3-Trichlorobenzene	25.0	26.9		ug/L		107	87 - 123
1,2,3-Trichloropropane	25.0	21.0		ug/L		84	77 - 120
1,2,4-Trichlorobenzene	25.0	28.2		ug/L		113	78 - 120
1,2,4-Trimethylbenzene	25.0	26.0		ug/L		104	75 - 115
1,2-Dibromo-3-Chloropropane	25.0	23.9		ug/L		96	74 - 126
1,2-Dichlorobenzene	25.0	24.8		ug/L		99	77 - 117
1,2-Dichloroethane	25.0	23.8		ug/L		95	73 - 122

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

Lab Sample ID: LCS 720-250641/5
Matrix: Water
Analysis Batch: 250641

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	25.0	25.8		ug/L		103	79 - 119
1,3,5-Trimethylbenzene	25.0	26.0		ug/L		104	77 - 117
1,3-Dichlorobenzene	25.0	24.5		ug/L		98	76 - 116
1,3-Dichloropropane	25.0	23.3		ug/L		93	77 - 117
1,4-Dichlorobenzene	25.0	24.3		ug/L		97	76 - 116
2,2-Dichloropropane	25.0	30.8		ug/L		123	74 - 156
2-Butanone (MEK)	125	104		ug/L		83	66 - 133
2-Chlorotoluene	25.0	25.3		ug/L		101	75 - 115
2-Hexanone	125	114		ug/L		91	63 - 140
4-Chlorotoluene	25.0	25.5		ug/L		102	73 - 119
4-Isopropyltoluene	25.0	25.9		ug/L		104	80 - 120
4-Methyl-2-pentanone (MIBK)	125	115		ug/L		92	66 - 140
Acetone	125	137		ug/L		109	61 - 147
Benzene	25.0	25.9		ug/L		103	79 - 119
Bromobenzene	25.0	24.6		ug/L		98	77 - 117
Bromoform	25.0	23.9		ug/L		95	75 - 127
Bromomethane	25.0	25.0		ug/L		100	70 - 132
Carbon disulfide	25.0	39.6	*	ug/L		158	64 - 127
Carbon tetrachloride	25.0	27.8		ug/L		111	72 - 142
Chlorobenzene	25.0	24.2		ug/L		97	76 - 116
Chlorobromomethane	25.0	27.6		ug/L		110	81 - 122
Chlorodibromomethane	25.0	24.6		ug/L		98	77 - 133
Chloroethane	25.0	24.2		ug/L		97	70 - 131
Chloroform	25.0	24.5		ug/L		98	82 - 119
Chloromethane	25.0	21.9		ug/L		87	49 - 134
cis-1,2-Dichloroethene	25.0	27.3		ug/L		109	77 - 117
cis-1,3-Dichloropropene	25.0	26.3		ug/L		105	82 - 119
Dibromomethane	25.0	24.1		ug/L		96	79 - 117
Dichlorobromomethane	25.0	23.7		ug/L		95	81 - 130
Dichlorodifluoromethane	25.0	14.5		ug/L		58	21 - 150
Ethylbenzene	25.0	25.2		ug/L		101	77 - 117
Ethylene Dibromide	25.0	23.2		ug/L		93	80 - 121
Hexachlorobutadiene	25.0	24.4		ug/L		98	78 - 140
Isopropylbenzene	25.0	27.7		ug/L		111	77 - 130
Methyl tert-butyl ether	25.0	26.1		ug/L		104	70 - 130
Methylene Chloride	25.0	30.0	*	ug/L		120	75 - 117
m-Xylene & p-Xylene	25.0	25.7		ug/L		103	74 - 119
Naphthalene	25.0	26.0		ug/L		104	81 - 121
n-Butylbenzene	25.0	25.9		ug/L		103	78 - 119
N-Propylbenzene	25.0	25.2		ug/L		101	77 - 117
o-Xylene	25.0	26.5		ug/L		106	77 - 118
sec-Butylbenzene	25.0	25.6		ug/L		102	78 - 118
Styrene	25.0	25.0		ug/L		100	76 - 116
tert-Butylbenzene	25.0	24.7		ug/L		99	78 - 118
Tetrachloroethene	25.0	26.9		ug/L		108	81 - 130
Toluene	25.0	24.0		ug/L		96	75 - 120
trans-1,2-Dichloroethene	25.0	32.4	*	ug/L		130	79 - 117
trans-1,3-Dichloropropene	25.0	23.8		ug/L		95	76 - 122

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

Lab Sample ID: LCS 720-250641/5
Matrix: Water
Analysis Batch: 250641

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichloroethene	25.0	24.8		ug/L		99	80 - 123
Trichlorofluoromethane	25.0	24.1		ug/L		96	75 - 141
Vinyl acetate	25.0	23.9		ug/L		95	50 - 126
Vinyl chloride	25.0	21.1		ug/L		84	58 - 138

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*86*		*72 - 130*
4-Bromofluorobenzene	*99*		*67 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*

Lab Sample ID: LCS 720-250641/7
Matrix: Water
Analysis Batch: 250641

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	500	592		ug/L		118	77 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*72 - 130*
4-Bromofluorobenzene	*99*		*67 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 720-250641/6
Matrix: Water
Analysis Batch: 250641

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	25.1		ug/L		100	81 - 121	2	20
1,1,1-Trichloroethane	25.0	26.0		ug/L		104	74 - 130	7	20
1,1,2,2-Tetrachloroethane	25.0	22.1		ug/L		88	70 - 115	5	20
1,1,2-Trichloro-1,2,2-trifluoroetha ne	25.0	33.2		ug/L		133	70 - 133	7	20
1,1,2-Trichloroethane	25.0	23.5		ug/L		94	80 - 117	5	20
1,1-Dichloroethane	25.0	26.9		ug/L		108	77 - 119	4	20
1,1-Dichloroethene	25.0	31.5	*	ug/L		126	69 - 119	5	20
1,1-Dichloropropene	25.0	25.9		ug/L		104	83 - 130	1	20
1,2,3-Trichlorobenzene	25.0	27.1		ug/L		109	87 - 123	1	20
1,2,3-Trichloropropane	25.0	22.7		ug/L		91	77 - 120	8	20
1,2,4-Trichlorobenzene	25.0	28.4		ug/L		114	78 - 120	1	20
1,2,4-Trimethylbenzene	25.0	26.4		ug/L		106	75 - 115	1	20
1,2-Dibromo-3-Chloropropane	25.0	26.5		ug/L		106	74 - 126	10	20
1,2-Dichlorobenzene	25.0	25.4		ug/L		102	77 - 117	2	20
1,2-Dichloroethane	25.0	23.9		ug/L		96	73 - 122	0	20
1,2-Dichloropropane	25.0	25.2		ug/L		101	79 - 119	3	20
1,3,5-Trimethylbenzene	25.0	26.4		ug/L		105	77 - 117	2	20
1,3-Dichlorobenzene	25.0	24.5		ug/L		98	76 - 116	0	20
1,3-Dichloropropane	25.0	22.8		ug/L		91	77 - 117	2	20

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

Lab Sample ID: LCSD 720-250641/6
Matrix: Water
Analysis Batch: 250641

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dichlorobenzene	25.0	24.7		ug/L		99	76 - 116	2	20
2,2-Dichloropropane	25.0	28.3		ug/L		113	74 - 156	8	20
2-Butanone (MEK)	125	113		ug/L		90	66 - 133	8	22
2-Chlorotoluene	25.0	25.7		ug/L		103	75 - 115	2	20
2-Hexanone	125	117		ug/L		93	63 - 140	2	24
4-Chlorotoluene	25.0	25.1		ug/L		100	73 - 119	2	20
4-Isopropyltoluene	25.0	26.2		ug/L		105	80 - 120	1	20
4-Methyl-2-pentanone (MIBK)	125	115		ug/L		92	66 - 140	0	21
Acetone	125	130		ug/L		104	61 - 147	5	30
Benzene	25.0	24.9		ug/L		100	79 - 119	4	20
Bromobenzene	25.0	25.1		ug/L		100	77 - 117	2	20
Bromoform	25.0	23.8		ug/L		95	75 - 127	0	20
Bromomethane	25.0	22.4		ug/L		89	70 - 132	11	20
Carbon disulfide	25.0	36.6	*	ug/L		146	64 - 127	8	20
Carbon tetrachloride	25.0	26.2		ug/L		105	72 - 142	6	20
Chlorobenzene	25.0	24.0		ug/L		96	76 - 116	1	20
Chlorobromomethane	25.0	26.4		ug/L		106	81 - 122	4	20
Chlorodibromomethane	25.0	23.9		ug/L		96	77 - 133	3	20
Chloroethane	25.0	21.8		ug/L		87	70 - 131	10	20
Chloroform	25.0	24.0		ug/L		96	82 - 119	2	20
Chloromethane	25.0	19.5		ug/L		78	49 - 134	12	20
cis-1,2-Dichloroethene	25.0	26.2		ug/L		105	77 - 117	4	20
cis-1,3-Dichloropropene	25.0	25.6		ug/L		102	82 - 119	3	20
Dibromomethane	25.0	23.6		ug/L		95	79 - 117	2	20
Dichlorobromomethane	25.0	23.4		ug/L		93	81 - 130	1	20
Dichlorodifluoromethane	25.0	13.0		ug/L		52	21 - 150	11	20
Ethylbenzene	25.0	25.0		ug/L		100	77 - 117	1	20
Ethylene Dibromide	25.0	23.2		ug/L		93	80 - 121	0	20
Hexachlorobutadiene	25.0	25.6		ug/L		102	78 - 140	5	20
Isopropylbenzene	25.0	26.9		ug/L		108	77 - 130	3	20
Methyl tert-butyl ether	25.0	24.2		ug/L		97	70 - 130	7	20
Methylene Chloride	25.0	27.4		ug/L		110	75 - 117	9	20
m-Xylene & p-Xylene	25.0	25.1		ug/L		101	74 - 119	2	20
Naphthalene	25.0	26.9		ug/L		108	81 - 121	3	20
n-Butylbenzene	25.0	26.2		ug/L		105	78 - 119	1	20
N-Propylbenzene	25.0	25.9		ug/L		103	77 - 117	3	20
o-Xylene	25.0	25.9		ug/L		104	77 - 118	2	20
sec-Butylbenzene	25.0	26.0		ug/L		104	78 - 118	2	20
Styrene	25.0	24.4		ug/L		97	76 - 116	3	20
tert-Butylbenzene	25.0	25.6		ug/L		102	78 - 118	3	20
Tetrachloroethene	25.0	26.0		ug/L		104	81 - 130	3	20
Toluene	25.0	24.4		ug/L		98	75 - 120	2	20
trans-1,2-Dichloroethene	25.0	31.2	*	ug/L		125	79 - 117	4	20
trans-1,3-Dichloropropene	25.0	23.3		ug/L		93	76 - 122	2	20
Trichloroethene	25.0	24.9		ug/L		100	80 - 123	1	20
Trichlorofluoromethane	25.0	22.3		ug/L		89	75 - 141	8	20
Vinyl acetate	25.0	24.7		ug/L		99	50 - 126	4	20
Vinyl chloride	25.0	19.3		ug/L		77	58 - 138	9	20

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

Lab Sample ID: LCSD 720-250641/6
Matrix: Water
Analysis Batch: 250641

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

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*72 - 130*
4-Bromofluorobenzene	*97*		*67 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

Lab Sample ID: LCSD 720-250641/8
Matrix: Water
Analysis Batch: 250641

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			500	556		ug/L		111	77 - 130	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*72 - 130*
4-Bromofluorobenzene	*100*		*67 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Lab Sample ID: 720-88209-A-1 MS
Matrix: Water
Analysis Batch: 250641

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		25.0	25.2		ug/L		101	60 - 140
1,1,1-Trichloroethane	ND		25.0	25.2		ug/L		101	60 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	22.0		ug/L		88	60 - 140
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	25.0	30.2		ug/L		121	60 - 140
1,1,2-Trichloroethane	ND		25.0	24.2		ug/L		97	60 - 140
1,1-Dichloroethane	ND		25.0	26.7		ug/L		107	60 - 140
1,1-Dichloroethene	ND	*	25.0	28.6		ug/L		114	60 - 140
1,1-Dichloropropene	ND		25.0	24.5		ug/L		98	60 - 140
1,2,3-Trichlorobenzene	ND		25.0	26.5		ug/L		106	60 - 140
1,2,3-Trichloropropane	ND		25.0	22.6		ug/L		91	60 - 140
1,2,4-Trichlorobenzene	ND		25.0	27.3		ug/L		109	60 - 140
1,2,4-Trimethylbenzene	ND		25.0	25.3		ug/L		101	60 - 140
1,2-Dibromo-3-Chloropropane	ND		25.0	25.4		ug/L		101	60 - 140
1,2-Dichlorobenzene	ND		25.0	24.7		ug/L		99	60 - 140
1,2-Dichloroethane	ND		25.0	24.0		ug/L		96	60 - 140
1,2-Dichloropropane	ND		25.0	25.7		ug/L		103	60 - 140
1,3,5-Trimethylbenzene	ND		25.0	24.8		ug/L		99	60 - 140
1,3-Dichlorobenzene	ND		25.0	23.8		ug/L		95	60 - 140
1,3-Dichloropropane	ND		25.0	22.3		ug/L		89	60 - 140
1,4-Dichlorobenzene	ND		25.0	23.7		ug/L		95	60 - 140
2,2-Dichloropropane	ND		25.0	25.9		ug/L		104	60 - 140
2-Butanone (MEK)	ND		125	103		ug/L		82	60 - 140
2-Chlorotoluene	ND		25.0	24.4		ug/L		98	60 - 140
2-Hexanone	ND		125	109		ug/L		87	60 - 140
4-Chlorotoluene	ND		25.0	24.6		ug/L		98	60 - 140

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

Lab Sample ID: 720-88209-A-1 MS
Matrix: Water
Analysis Batch: 250641

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Isopropyltoluene	ND		25.0	24.5		ug/L		98	60 - 140
4-Methyl-2-pentanone (MIBK)	ND		125	113		ug/L		90	58 - 130
Acetone	ND		125	113		ug/L		90	60 - 140
Benzene	ND		25.0	24.7		ug/L		99	60 - 140
Bromobenzene	ND		25.0	24.5		ug/L		98	60 - 140
Bromoform	ND		25.0	24.2		ug/L		97	56 - 140
Bromomethane	ND		25.0	21.4		ug/L		85	23 - 140
Carbon disulfide	ND	F1 *	25.0	33.7		ug/L		135	38 - 140
Carbon tetrachloride	ND		25.0	24.5		ug/L		98	60 - 140
Chlorobenzene	ND		25.0	23.3		ug/L		93	60 - 140
Chlorobromomethane	ND		25.0	26.5		ug/L		106	60 - 140
Chlorodibromomethane	ND		25.0	24.4		ug/L		98	60 - 140
Chloroethane	ND		25.0	20.6		ug/L		82	51 - 140
Chloroform	ND		25.0	24.2		ug/L		97	60 - 140
Chloromethane	ND		25.0	18.7		ug/L		75	52 - 140
cis-1,2-Dichloroethene	ND		25.0	26.0		ug/L		104	60 - 140
cis-1,3-Dichloropropene	ND		25.0	25.2		ug/L		101	60 - 140
Dibromomethane	ND		25.0	23.4		ug/L		94	60 - 140
Dichlorobromomethane	ND		25.0	23.5		ug/L		94	60 - 140
Dichlorodifluoromethane	ND		25.0	12.2		ug/L		49	38 - 140
Ethylbenzene	ND		25.0	23.5		ug/L		94	60 - 140
Ethylene Dibromide	ND		25.0	22.8		ug/L		91	60 - 140
Hexachlorobutadiene	ND		25.0	24.4		ug/L		98	60 - 140
Isopropylbenzene	ND		25.0	25.6		ug/L		102	60 - 140
Methyl tert-butyl ether	ND		25.0	24.5		ug/L		98	60 - 138
Methylene Chloride	ND	*	25.0	27.6		ug/L		110	40 - 140
m-Xylene & p-Xylene	ND		25.0	23.6		ug/L		95	60 - 140
Naphthalene	ND		25.0	25.9		ug/L		104	56 - 140
n-Butylbenzene	ND		25.0	24.4		ug/L		98	60 - 140
N-Propylbenzene	ND		25.0	24.4		ug/L		97	60 - 140
o-Xylene	ND		25.0	25.0		ug/L		100	60 - 140
sec-Butylbenzene	ND		25.0	24.3		ug/L		97	60 - 140
Styrene	ND		25.0	23.6		ug/L		94	60 - 140
tert-Butylbenzene	ND		25.0	24.3		ug/L		97	60 - 140
Tetrachloroethene	ND		25.0	23.8		ug/L		95	60 - 140
Toluene	ND		25.0	23.4		ug/L		94	60 - 140
trans-1,2-Dichloroethene	ND	*	25.0	29.2		ug/L		117	60 - 140
trans-1,3-Dichloropropene	ND		25.0	23.3		ug/L		93	60 - 140
Trichloroethene	ND		25.0	23.9		ug/L		96	60 - 140
Trichlorofluoromethane	ND		25.0	21.0		ug/L		84	60 - 140
Vinyl acetate	ND		25.0	23.6		ug/L		94	40 - 140
Vinyl chloride	ND		25.0	17.7		ug/L		71	58 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*72 - 130*
4-Bromofluorobenzene	*99*		*67 - 130*
Toluene-d8 (Surr)	*92*		*70 - 130*

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

Lab Sample ID: 720-88209-A-1 MSD
Matrix: Water
Analysis Batch: 250641

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		25.0	27.7		ug/L		111	60 - 140	10	20
1,1,1-Trichloroethane	ND		25.0	26.2		ug/L		105	60 - 140	4	20
1,1,2,2-Tetrachloroethane	ND		25.0	23.6		ug/L		94	60 - 140	7	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	25.0	31.7		ug/L		127	60 - 140	5	20
1,1,2-Trichloroethane	ND		25.0	24.0		ug/L		96	60 - 140	1	20
1,1-Dichloroethane	ND		25.0	28.1		ug/L		113	60 - 140	5	20
1,1-Dichloroethene	ND	*	25.0	30.6		ug/L		122	60 - 140	7	20
1,1-Dichloropropene	ND		25.0	24.5		ug/L		98	60 - 140	0	20
1,2,3-Trichlorobenzene	ND		25.0	29.3		ug/L		117	60 - 140	10	20
1,2,3-Trichloropropane	ND		25.0	23.3		ug/L		93	60 - 140	3	20
1,2,4-Trichlorobenzene	ND		25.0	28.4		ug/L		114	60 - 140	4	20
1,2,4-Trimethylbenzene	ND		25.0	26.3		ug/L		105	60 - 140	4	20
1,2-Dibromo-3-Chloropropane	ND		25.0	29.2		ug/L		117	60 - 140	14	20
1,2-Dichlorobenzene	ND		25.0	25.6		ug/L		103	60 - 140	4	20
1,2-Dichloroethane	ND		25.0	24.2		ug/L		97	60 - 140	1	20
1,2-Dichloropropane	ND		25.0	25.8		ug/L		103	60 - 140	1	20
1,3,5-Trimethylbenzene	ND		25.0	25.9		ug/L		103	60 - 140	4	20
1,3-Dichlorobenzene	ND		25.0	24.3		ug/L		97	60 - 140	2	20
1,3-Dichloropropane	ND		25.0	22.3		ug/L		89	60 - 140	0	20
1,4-Dichlorobenzene	ND		25.0	24.7		ug/L		99	60 - 140	4	20
2,2-Dichloropropane	ND		25.0	27.5		ug/L		110	60 - 140	6	20
2-Butanone (MEK)	ND		125	108		ug/L		86	60 - 140	5	20
2-Chlorotoluene	ND		25.0	25.5		ug/L		102	60 - 140	5	20
2-Hexanone	ND		125	113		ug/L		91	60 - 140	4	20
4-Chlorotoluene	ND		25.0	24.7		ug/L		99	60 - 140	0	20
4-Isopropyltoluene	ND		25.0	25.4		ug/L		102	60 - 140	4	20
4-Methyl-2-pentanone (MIBK)	ND		125	118		ug/L		94	58 - 130	4	20
Acetone	ND		125	120		ug/L		96	60 - 140	6	20
Benzene	ND		25.0	25.0		ug/L		100	60 - 140	1	20
Bromobenzene	ND		25.0	25.1		ug/L		100	60 - 140	2	20
Bromoform	ND		25.0	25.4		ug/L		101	56 - 140	5	20
Bromomethane	ND		25.0	22.4		ug/L		90	23 - 140	5	20
Carbon disulfide	ND	F1 *	25.0	35.9	F1	ug/L		144	38 - 140	6	20
Carbon tetrachloride	ND		25.0	25.4		ug/L		102	60 - 140	3	20
Chlorobenzene	ND		25.0	23.7		ug/L		95	60 - 140	2	20
Chlorobromomethane	ND		25.0	27.3		ug/L		109	60 - 140	3	20
Chlorodibromomethane	ND		25.0	24.7		ug/L		99	60 - 140	1	20
Chloroethane	ND		25.0	21.6		ug/L		86	51 - 140	5	20
Chloroform	ND		25.0	25.3		ug/L		101	60 - 140	5	20
Chloromethane	ND		25.0	19.7		ug/L		79	52 - 140	5	20
cis-1,2-Dichloroethene	ND		25.0	27.7		ug/L		111	60 - 140	6	20
cis-1,3-Dichloropropene	ND		25.0	25.3		ug/L		101	60 - 140	1	20
Dibromomethane	ND		25.0	24.8		ug/L		99	60 - 140	6	20
Dichlorobromomethane	ND		25.0	24.1		ug/L		96	60 - 140	3	20
Dichlorodifluoromethane	ND		25.0	12.2		ug/L		49	38 - 140	0	20
Ethylbenzene	ND		25.0	24.1		ug/L		96	60 - 140	2	20
Ethylene Dibromide	ND		25.0	22.5		ug/L		90	60 - 140	1	20

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

Lab Sample ID: 720-88209-A-1 MSD
Matrix: Water
Analysis Batch: 250641

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hexachlorobutadiene	ND		25.0	25.0		ug/L		100	60 - 140	2	20
Isopropylbenzene	ND		25.0	27.0		ug/L		108	60 - 140	5	20
Methyl tert-butyl ether	ND		25.0	27.6		ug/L		110	60 - 138	12	20
Methylene Chloride	ND	*	25.0	29.6		ug/L		118	40 - 140	7	20
m-Xylene & p-Xylene	ND		25.0	24.2		ug/L		97	60 - 140	2	20
Naphthalene	ND		25.0	29.9		ug/L		120	56 - 140	14	20
n-Butylbenzene	ND		25.0	24.3		ug/L		97	60 - 140	0	20
N-Propylbenzene	ND		25.0	24.4		ug/L		98	60 - 140	0	20
o-Xylene	ND		25.0	26.4		ug/L		106	60 - 140	6	20
sec-Butylbenzene	ND		25.0	25.5		ug/L		102	60 - 140	5	20
Styrene	ND		25.0	23.8		ug/L		95	60 - 140	1	20
tert-Butylbenzene	ND		25.0	25.9		ug/L		104	60 - 140	7	20
Tetrachloroethene	ND		25.0	23.1		ug/L		93	60 - 140	3	20
Toluene	ND		25.0	24.3		ug/L		97	60 - 140	4	20
trans-1,2-Dichloroethene	ND	*	25.0	31.7		ug/L		127	60 - 140	8	20
trans-1,3-Dichloropropene	ND		25.0	23.2		ug/L		93	60 - 140	1	20
Trichloroethene	ND		25.0	23.6		ug/L		94	60 - 140	1	20
Trichlorofluoromethane	ND		25.0	21.8		ug/L		87	60 - 140	3	20
Vinyl acetate	ND		25.0	24.2		ug/L		97	40 - 140	3	20
Vinyl chloride	ND		25.0	18.8		ug/L		75	58 - 140	6	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*72 - 130*
4-Bromofluorobenzene	*97*		*67 - 130*
Toluene-d8 (Surr)	*91*		*70 - 130*

Lab Sample ID: MB 720-250782/4
Matrix: Water
Analysis Batch: 250782

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.50	0.20	ug/L			09/04/18 10:57	1
cis-1,2-Dichloroethene	ND		0.50	0.076	ug/L			09/04/18 10:57	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			09/04/18 10:57	1
Vinyl chloride	ND		0.50	0.20	ug/L			09/04/18 10:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*72 - 130*		*09/04/18 10:57*	*1*
4-Bromofluorobenzene	*95*		*67 - 130*		*09/04/18 10:57*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*09/04/18 10:57*	*1*

Lab Sample ID: LCS 720-250782/5
Matrix: Water
Analysis Batch: 250782

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	25.0	26.1		ug/L		104	69 - 119
cis-1,2-Dichloroethene	25.0	22.0		ug/L		88	77 - 117

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

Lab Sample ID: LCS 720-250782/5
Matrix: Water
Analysis Batch: 250782

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	25.0	26.6		ug/L		106	79 - 117
Vinyl chloride	25.0	26.6		ug/L		106	58 - 138

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*72 - 130*
4-Bromofluorobenzene	*94*		*67 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 720-250782/6
Matrix: Water
Analysis Batch: 250782

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	25.0	24.9		ug/L		99	69 - 119	5	20
cis-1,2-Dichloroethene	25.0	21.3		ug/L		85	77 - 117	3	20
trans-1,2-Dichloroethene	25.0	26.4		ug/L		106	79 - 117	1	20
Vinyl chloride	25.0	26.3		ug/L		105	58 - 138	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*72 - 130*
4-Bromofluorobenzene	*95*		*67 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: 720-88267-A-1 MS
Matrix: Water
Analysis Batch: 250782

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	5.0		250	246		ug/L		96	60 - 140
cis-1,2-Dichloroethene	8.4		250	234		ug/L		90	60 - 140
trans-1,2-Dichloroethene	ND		250	257		ug/L		103	60 - 140
Vinyl chloride	ND		250	248		ug/L		99	58 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*72 - 130*
4-Bromofluorobenzene	*95*		*67 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: 720-88267-A-1 MSD
Matrix: Water
Analysis Batch: 250782

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	5.0		250	252		ug/L		99	60 - 140	2	20
cis-1,2-Dichloroethene	8.4		250	231		ug/L		89	60 - 140	1	20
trans-1,2-Dichloroethene	ND		250	258		ug/L		103	60 - 140	0	20
Vinyl chloride	ND		250	278		ug/L		111	58 - 140	12	20

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

Lab Sample ID: 720-88267-A-1 MSD
Matrix: Water
Analysis Batch: 250782

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*72 - 130*
4-Bromofluorobenzene	*96*		*67 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

Method: SRL 524M-TCP - Volatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 440-496340/5
Matrix: Water
Analysis Batch: 496340

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0017	ug/L			08/29/18 12:49	1

Lab Sample ID: LCS 440-496340/4
Matrix: Water
Analysis Batch: 496340

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,3-Trichloropropane			0.00500	0.00498	J	ug/L		100	80 - 120		

Lab Sample ID: 320-42553-E-2 DU
Matrix: Water
Analysis Batch: 496340

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
1,2,3-Trichloropropane	ND			ND		ug/L				NC	30

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

Lab Sample ID: MB 720-250307/1-A
Matrix: Water
Analysis Batch: 250252

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250307

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50	30	ug/L		08/27/18 14:49	08/28/18 00:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*87*		*23 - 156*	*08/27/18 14:49*	*08/28/18 00:22*	*1*

Lab Sample ID: LCS 720-250307/2-A
Matrix: Water
Analysis Batch: 250252

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250307

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			2500	2570		ug/L		103	34 - 115		

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

Lab Sample ID: LCS 720-250307/2-A
Matrix: Water
Analysis Batch: 250252

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250307

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*92*		*23 - 156*

Lab Sample ID: LCSD 720-250307/3-A
Matrix: Water
Analysis Batch: 250252

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 250307

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	2500	2560		ug/L		102	34 - 115	0	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
p-Terphenyl	*98*		*23 - 156*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-250227/1-A
Matrix: Water
Analysis Batch: 250390

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250227

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010	0.0027	mg/L		08/25/18 11:40	08/28/18 10:34	1
Arsenic	ND		0.010	0.0026	mg/L		08/25/18 11:40	08/28/18 10:34	1
Barium	ND		0.010	0.0014	mg/L		08/25/18 11:40	08/28/18 10:34	1
Beryllium	0.00135	J	0.0020	0.00033	mg/L		08/25/18 11:40	08/28/18 10:34	1
Cadmium	ND		0.0025	0.0013	mg/L		08/25/18 11:40	08/28/18 10:34	1
Chromium	ND		0.010	0.0015	mg/L		08/25/18 11:40	08/28/18 10:34	1
Cobalt	ND		0.0020	0.0012	mg/L		08/25/18 11:40	08/28/18 10:34	1
Copper	ND		0.020	0.0015	mg/L		08/25/18 11:40	08/28/18 10:34	1
Lead	ND		0.0050	0.0023	mg/L		08/25/18 11:40	08/28/18 10:34	1
Molybdenum	ND		0.010	0.0023	mg/L		08/25/18 11:40	08/28/18 10:34	1
Nickel	ND		0.010	0.00080	mg/L		08/25/18 11:40	08/28/18 10:34	1
Selenium	ND		0.020	0.0071	mg/L		08/25/18 11:40	08/28/18 10:34	1
Silver	ND		0.0050	0.0012	mg/L		08/25/18 11:40	08/28/18 10:34	1
Thallium	ND		0.010	0.0035	mg/L		08/25/18 11:40	08/28/18 10:34	1
Vanadium	ND		0.010	0.00070	mg/L		08/25/18 11:40	08/28/18 10:34	1
Zinc	ND		0.020	0.0096	mg/L		08/25/18 11:40	08/28/18 10:34	1

Lab Sample ID: LCS 720-250227/2-A
Matrix: Water
Analysis Batch: 250390

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250227

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.00	0.907		mg/L		91	80 - 120
Arsenic	1.00	0.901		mg/L		90	80 - 120
Barium	1.00	0.967		mg/L		97	80 - 120
Beryllium	1.00	0.974		mg/L		97	80 - 120
Cadmium	1.00	0.914		mg/L		91	80 - 120
Chromium	1.00	0.911		mg/L		91	80 - 120

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

Lab Sample ID: LCS 720-250227/2-A
Matrix: Water
Analysis Batch: 250390

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250227

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	1.00	0.932		mg/L		93	80 - 120
Copper	1.00	0.977		mg/L		98	80 - 120
Lead	1.00	0.930		mg/L		93	80 - 120
Molybdenum	1.00	0.933		mg/L		93	80 - 120
Nickel	1.00	0.931		mg/L		93	80 - 120
Selenium	1.00	0.879		mg/L		88	80 - 120
Silver	0.500	0.490		mg/L		98	80 - 120
Thallium	1.00	0.930		mg/L		93	80 - 120
Vanadium	1.00	0.973		mg/L		97	80 - 120
Zinc	1.00	0.921		mg/L		92	80 - 120

Lab Sample ID: 720-88220-B-7-A MS
Matrix: Water
Analysis Batch: 250390

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 250227

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND		1.00	0.917		mg/L		92	75 - 125
Arsenic	0.042		1.00	0.982		mg/L		94	75 - 125
Barium	0.24		1.00	1.14		mg/L		90	75 - 125
Beryllium	0.0030	B	1.00	0.920		mg/L		92	75 - 125
Cadmium	ND		1.00	0.913		mg/L		91	75 - 125
Chromium	0.0017	J	1.00	0.921		mg/L		92	75 - 125
Cobalt	0.0013	J	1.00	0.916		mg/L		91	75 - 125
Copper	0.0042	J	1.00	0.913		mg/L		91	75 - 125
Lead	0.0092		1.00	0.905		mg/L		90	75 - 125
Molybdenum	0.0058	J	1.00	0.948		mg/L		94	75 - 125
Nickel	0.0016	J	1.00	0.907		mg/L		91	75 - 125
Selenium	ND		1.00	0.910		mg/L		91	75 - 125
Silver	ND		0.500	0.476		mg/L		95	75 - 125
Thallium	ND		1.00	0.862		mg/L		86	75 - 125
Vanadium	0.0013	J	1.00	0.926		mg/L		92	75 - 125
Zinc	0.053		1.00	0.971		mg/L		92	75 - 125

Lab Sample ID: 720-88220-B-7-B MSD
Matrix: Water
Analysis Batch: 250390

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 250227

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND		1.00	0.922		mg/L		92	75 - 125	1	20
Arsenic	0.042		1.00	0.976		mg/L		93	75 - 125	1	20
Barium	0.24		1.00	1.16		mg/L		92	75 - 125	2	20
Beryllium	0.0030	B	1.00	0.939		mg/L		94	75 - 125	2	20
Cadmium	ND		1.00	0.909		mg/L		91	75 - 125	0	20
Chromium	0.0017	J	1.00	0.912		mg/L		91	75 - 125	1	20
Cobalt	0.0013	J	1.00	0.913		mg/L		91	75 - 125	0	20
Copper	0.0042	J	1.00	0.915		mg/L		91	75 - 125	0	20
Lead	0.0092		1.00	0.901		mg/L		89	75 - 125	0	20
Molybdenum	0.0058	J	1.00	0.945		mg/L		94	75 - 125	0	20
Nickel	0.0016	J	1.00	0.902		mg/L		90	75 - 125	1	20

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

Lab Sample ID: 720-88220-B-7-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 250390 — **Prep Batch: 250227**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Selenium	ND		1.00	0.908		mg/L		91	75 - 125	0	20
Silver	ND		0.500	0.476		mg/L		95	75 - 125	0	20
Thallium	ND		1.00	0.858		mg/L		86	75 - 125	1	20
Vanadium	0.0013	J	1.00	0.933		mg/L		93	75 - 125	1	20
Zinc	0.053		1.00	0.966		mg/L		91	75 - 125	0	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 720-250432/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250564 — **Prep Batch: 250432**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/28/18 18:59	08/29/18 20:18	1

Lab Sample ID: LCS 720-250432/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250564 — **Prep Batch: 250432**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0100	0.00944		mg/L		94	85 - 115

Lab Sample ID: 720-88220-B-7-C MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 250564 — **Prep Batch: 250432**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.0100	0.00959		mg/L		96	75 - 125

Lab Sample ID: 720-88220-B-7-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 250564 — **Prep Batch: 250432**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.0100	0.00954		mg/L		95	75 - 125	1	20

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 720-250205/9 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250205

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.010	0.0037	mg/L			08/24/18 16:02	1

Method: 7196A - Chromium, Hexavalent (Continued)

Lab Sample ID: LCS 720-250205/10 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250205

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cr (VI)			0.250	0.234		mg/L		94	90 - 110		

Lab Sample ID: LCSD 720-250205/11 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250205

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cr (VI)			0.250	0.234		mg/L		93	90 - 110	0	20

Lab Sample ID: 720-88236-1 MS — **Client Sample ID: DG-B5W**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250205

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cr (VI)	ND		0.250	0.255		mg/L		102	85 - 115		

Lab Sample ID: 720-88236-1 MSD — **Client Sample ID: DG-B5W**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250205

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cr (VI)	ND		0.250	0.256		mg/L		102	85 - 115	0	20

QC Association Summary

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

TestAmerica Job ID: 720-88236-1

GC/MS VOA

Analysis Batch: 250641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88236-1	DG-B5W	Total/NA	Water	8260B	
720-88236-2	DG-B4W	Total/NA	Water	8260B	
MB 720-250641/4	Method Blank	Total/NA	Water	8260B	
LCS 720-250641/5	Lab Control Sample	Total/NA	Water	8260B	
LCS 720-250641/7	Lab Control Sample	Total/NA	Water	8260B	
LCSD 720-250641/6	Lab Control Sample Dup	Total/NA	Water	8260B	
LCSD 720-250641/8	Lab Control Sample Dup	Total/NA	Water	8260B	
720-88209-A-1 MS	Matrix Spike	Total/NA	Water	8260B	
720-88209-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 250782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88236-1	DG-B5W	Total/NA	Water	8260B	
720-88236-2	DG-B4W	Total/NA	Water	8260B	
MB 720-250782/4	Method Blank	Total/NA	Water	8260B	
LCS 720-250782/5	Lab Control Sample	Total/NA	Water	8260B	
LCSD 720-250782/6	Lab Control Sample Dup	Total/NA	Water	8260B	
720-88267-A-1 MS	Matrix Spike	Total/NA	Water	8260B	
720-88267-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 496340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88236-1	DG-B5W	Total/NA	Water	SRL 524M-TCP	
720-88236-2	DG-B4W	Total/NA	Water	SRL 524M-TCP	
MB 440-496340/5	Method Blank	Total/NA	Water	SRL 524M-TCP	
LCS 440-496340/4	Lab Control Sample	Total/NA	Water	SRL 524M-TCP	
320-42553-E-2 DU	Duplicate	Total/NA	Water	SRL 524M-TCP	

GC Semi VOA

Analysis Batch: 250252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250307/1-A	Method Blank	Total/NA	Water	8015B	250307
LCS 720-250307/2-A	Lab Control Sample	Total/NA	Water	8015B	250307
LCSD 720-250307/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	250307

Prep Batch: 250307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88236-1	DG-B5W	Total/NA	Water	3510C	
720-88236-2	DG-B4W	Total/NA	Water	3510C	
MB 720-250307/1-A	Method Blank	Total/NA	Water	3510C	
LCS 720-250307/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 720-250307/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 250355

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88236-1	DG-B5W	Total/NA	Water	8015B	250307
720-88236-2	DG-B4W	Total/NA	Water	8015B	250307

QC Association Summary

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

TestAmerica Job ID: 720-88236-1

Metals

Prep Batch: 250227

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88236-1	DG-B5W	Dissolved	Water	3010A	
720-88236-2	DG-B4W	Dissolved	Water	3010A	
MB 720-250227/1-A	Method Blank	Total/NA	Water	3010A	
LCS 720-250227/2-A	Lab Control Sample	Total/NA	Water	3010A	
720-88220-B-7-A MS	Matrix Spike	Dissolved	Water	3010A	
720-88220-B-7-B MSD	Matrix Spike Duplicate	Dissolved	Water	3010A	

Analysis Batch: 250390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88236-1	DG-B5W	Dissolved	Water	6010B	250227
720-88236-2	DG-B4W	Dissolved	Water	6010B	250227
MB 720-250227/1-A	Method Blank	Total/NA	Water	6010B	250227
LCS 720-250227/2-A	Lab Control Sample	Total/NA	Water	6010B	250227
720-88220-B-7-A MS	Matrix Spike	Dissolved	Water	6010B	250227
720-88220-B-7-B MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	250227

Prep Batch: 250432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88236-1	DG-B5W	Dissolved	Water	7470A	
720-88236-2	DG-B4W	Dissolved	Water	7470A	
MB 720-250432/1-A	Method Blank	Total/NA	Water	7470A	
LCS 720-250432/2-A	Lab Control Sample	Total/NA	Water	7470A	
720-88220-B-7-C MS	Matrix Spike	Dissolved	Water	7470A	
720-88220-B-7-D MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	

Analysis Batch: 250564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88236-1	DG-B5W	Dissolved	Water	7470A	250432
720-88236-2	DG-B4W	Dissolved	Water	7470A	250432
MB 720-250432/1-A	Method Blank	Total/NA	Water	7470A	250432
LCS 720-250432/2-A	Lab Control Sample	Total/NA	Water	7470A	250432
720-88220-B-7-C MS	Matrix Spike	Dissolved	Water	7470A	250432
720-88220-B-7-D MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	250432

General Chemistry

Analysis Batch: 250205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88236-1	DG-B5W	Total/NA	Water	7196A	
720-88236-2	DG-B4W	Total/NA	Water	7196A	
MB 720-250205/9	Method Blank	Total/NA	Water	7196A	
LCS 720-250205/10	Lab Control Sample	Total/NA	Water	7196A	
LCSD 720-250205/11	Lab Control Sample Dup	Total/NA	Water	7196A	
720-88236-1 MS	DG-B5W	Total/NA	Water	7196A	
720-88236-1 MSD	DG-B5W	Total/NA	Water	7196A	

Lab Chronicle

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

TestAmerica Job ID: 720-88236-1

Client Sample ID: DG-B5W — Lab Sample ID: 720-88236-1

Date Collected: 08/23/18 16:15
Date Received: 08/24/18 15:00
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	250782	09/04/18 15:28	JRM	TAL PLS
Total/NA	Analysis	8260B		1	250641	08/31/18 13:19	AJS	TAL PLS
Total/NA	Analysis	SRL 524M-TCP		1	496340	08/29/18 15:41	GK	TAL IRV
Total/NA	Prep	3510C			250307	08/27/18 19:48	BRR	TAL PLS
Total/NA	Analysis	8015B		1	250355	08/28/18 17:52	JXL	TAL PLS
Dissolved	Prep	3010A			250227	08/25/18 11:40	MAA	TAL PLS
Dissolved	Analysis	6010B		1	250390	08/28/18 12:03	OBI	TAL PLS
Dissolved	Prep	7470A			250432	08/28/18 18:59	OBI	TAL PLS
Dissolved	Analysis	7470A		1	250564	08/29/18 20:59	OBI	TAL PLS
Total/NA	Analysis	7196A		1	250205	08/24/18 16:07	ECB	TAL PLS

Client Sample ID: DG-B4W — Lab Sample ID: 720-88236-2

Date Collected: 08/23/18 16:30
Date Received: 08/24/18 15:00
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250782	09/04/18 15:58	JRM	TAL PLS
Total/NA	Analysis	8260B		1	250641	08/31/18 13:48	AJS	TAL PLS
Total/NA	Analysis	SRL 524M-TCP		1	496340	08/29/18 16:11	GK	TAL IRV
Total/NA	Prep	3510C			250307	08/27/18 19:48	BRR	TAL PLS
Total/NA	Analysis	8015B		1	250355	08/28/18 18:17	JXL	TAL PLS
Dissolved	Prep	3010A			250227	08/25/18 11:40	MAA	TAL PLS
Dissolved	Analysis	6010B		1	250390	08/28/18 12:08	OBI	TAL PLS
Dissolved	Prep	7470A			250432	08/28/18 18:59	OBI	TAL PLS
Dissolved	Analysis	7470A		1	250564	08/29/18 20:57	OBI	TAL PLS
Total/NA	Analysis	7196A		1	250205	08/24/18 16:11	ECB	TAL PLS

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

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

TestAmerica Job ID: 720-88236-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

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

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Laboratory: TestAmerica Irvine

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	CA ELAP 2706	06-30-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Method Summary

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

TestAmerica Job ID: 720-88236-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PLS
SRL 524M-TCP	Volatile Organic Compounds (GC/MS SIM)	CADHS	TAL IRV
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
6010B	Metals (ICP)	SW846	TAL PLS
7470A	Mercury (CVAA)	SW846	TAL PLS
7196A	Chromium, Hexavalent	SW846	TAL PLS
3010A	Preparation, Total Metals	SW846	TAL PLS
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL PLS
5030B	Purge and Trap	SW846	TAL PLS
7470A	Preparation, Mercury	SW846	TAL PLS

Protocol References:

CADHS = California Department of Health Services

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

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

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

TestAmerica Job ID: 720-88236-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-88236-1	DG-B5W	Water	08/23/18 16:15	08/24/18 15:00
720-88236-2	DG-B4W	Water	08/23/18 16:30	08/24/18 15:00

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-88236

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

Reference #: 185108

Date 8/24 Page 1 of 1

11/6/2018 (Rev. 1)

Report To

Attn: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: mkahrilas@geosyntec.com

Bill To: GEOSYNTEC
Attn: A SMITH

Sampled By: M KAHRILAS
Phone: 847-530-7602

Analysis Request

Sample ID	Date	Time	Grab/Comp	Preserv.	Volatile Organics GC/MS (VOCs) ☒ EPA 8260B + TCLP	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☐ Motor Oil ☐ Other	Semi/Volatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☐ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☐ EPA 8081 PCBs ☐ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other	Metals: ☐ 6020 ☐ 200.8 (ICP-MS):	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☒ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	1,1,3-TCP (EPA 7 SIM)	
DG-B5W	8/23	1615	GW		X			X					X				X						X	
DG-B1W	8/23	1630	W		X			X					X				X						X	Hex chrom not filtered
~~DG-A1W~~	~~8/24~~	MK																						

Project Info.

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

Sample Receipt

# of Containers:
Head Space:
Temp:

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

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

1.0

Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [signature] Time: 1315	Signature: [signature] Time: 1500	720-88236 Chain of Custody
Printed Name: MIRANDA KAHRILAS Date: 8/24	Printed Name: [signature] Date: 8/24/18	Company
Company: GEO	Company: TA	

1) Received by:	2) Received by:	3) Received by:
Signature: [signature] Time: 1315	Signature: [signature] Time: 1502	Signature Time
Printed Name: Robert Date: 8/24/18	Printed Name: Mulberry Date: 8-24-18	Printed Name Date
Company: TA	Company: TA 720	Company

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39420.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): State Program - California		Job #: 720-88236-1
Address: 17461 Derian Ave, Suite 100,	Due Date Requested: 8/30/2018			
City: Irvine	TAT Requested (days):			
State, Zip: CA, 92614-5817				
Phone: 949-261-1022(Tel) 949-260-3297(Fax)	PO #			
Email:	WO #			
Project Name: UPC OU-SIM	Project #: 72013717			
Site:	SSOW#			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_SIM	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
GD-B5W (720-88236-1)	8/23/18	16:15 Pacific		Water			X	3	
GD-B4W (720-88236-2)	8/23/18	16:30 Pacific		Water			X	3	

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

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

Empty Kit Relinquished by	Date:	Time:	Method of Shipment

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	8-27-18 1600	PWA	[signature]		
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	8/28/18 @ 0930	HW

Custody Seals Intact: Δ Yes Δ No (circled: Yes) | Custody Seal No.: 4H-F1 9552 5071 | Cooler Temperature(s) °C and Other Remarks: 2.5 SA

Ver 09/20/2016

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler	Lab PM: Smith, Micah	Carrier Tracking No(s)	COC No: 720-39455.1
Client Contact: Shipping/Receiving	Phone	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): State Program - California		Job #: 720-88236-1
Address: 17461 Derian Ave, Suite 100,	Due Date Requested: 8/30/2018			
City: Irvine	TAT Requested (days):			
State, Zip: CA, 92614-5817				
Phone: 949-261-1022(Tel) 949-260-3297(Fax)	PO #			
Email	WO #			
Project Name: UPC OU-SIM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

GLYSHUTE
HCL
VOCS

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_SIM	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-B5W (720-88236-1)	8/23/18	16:15 Pacific		Water			X	1	
DG-B4W (720-88236-2)	8/23/18	16:30 Pacific		Water			X	1	

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

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

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment		
Relinquished by: [signature]	Date/Time: 8/28/18 14:15	Company: TAPZ	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by: [signature]	Date/Time: 8/29/18 7083	Company: TAIRU
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 9.6 IR-SC6 4471 9852 5763 2.4/2.7		

Ver: 09/20/2016

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88236-1

Login Number: 88236
List Number: 1
Creator: Bullock, Tracy

List Source: TestAmerica Pleasanton

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

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88236-1

Login Number: 88236
List Number: 2
Creator: Ornelas, Olga

List Source: TestAmerica Irvine
List Creation: 08/28/18 11:28 AM

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 720-88237-1
Client Project/Site: UPC OU-SM
Revision: 1

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

Attn: Mr. Krys Jesionek

Authorized for release by:
11/14/2018 7:18:32 PM

Micah Smith, Project Manager II
(925)484-1919
micah.smith@testamericainc.com

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

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

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 7
Client Sample Results 12
Surrogate Summary 110
QC Sample Results 113
QC Association Summary 144
Lab Chronicle 150
Certification Summary 154
Method Summary 155
Sample Summary 156
Subcontract Data 157
Chain of Custody 161
Receipt Checklists 164

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

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

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F2	MS/MSD RPD exceeds control limits

Glossary

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

Job ID: 720-88237-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-88237-1

Comments
This report was revised on 11/14/18 to change the units for the metals data to report in mg/Kg, as requested. The ID for sample DG-A7S-10-10.5 (720-88237-7) was also corrected.

Receipt
The samples were received on 8/24/2018 3:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.0º C.

Receipt Exceptions
Sample containers were not received full.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for analytical batch 720-250405 recovered outside control limits for the following analytes: 1,1-Dichloroethene. This analyte was biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample duplicate (LCSD) for analytical batch 720-250405 recovered outside control limits for the following analytes: 1,1-Dichloroethene and 1,1,2-Trichloro-1,2,2-trifluoroethane. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: Internal standard (ISTD) response for the following sample was outside control limits: DG-B7S-14.5-15 (720-88237-10). The sample(s) was re-extracted and/or re-analyzed with concurring results, and the second set of data has been reported.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250452 recovered outside control limits for the following analytes: 1,1-Dichloroethene and 1,1,2-Trichloro-1,2,2-trifluoroethane. These analytes were biased high in the LCS/LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250407 recovered outside control limits for the following analytes: 1,1-Dichloroethene. This analyte was biased high in the LCS/LCSD and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: Internal standard (ISTD) response for the following sample was outside control limits: DG-A7S-10-10.5 (720-88237-7). The sample(s) was re-extracted and/or re-analyzed using the sample collected in the field container which resulted in results different from the analysis of the terracore. The original set of data has been reported. The second terracore vial was no longer available for analysis due to container leakage.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 720-250443 and analytical batch 720-250407 recovered outside control limits for the following analytes: Carbon disulfide. This analyte was biased high in the LCS/LCSD and was detected in the associated samples. There was not another terracore available for analysis; therefore, the data have been reported.

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

GC/MS Semi VOA
Method(s) 8270C SIM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250376 and analytical batch 720-250578 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8270C SIM: The following sample was diluted due to the abundance of non-target analytes: DG-A7S-0.5-1 (720-88237-5). Elevated reporting limits (RLs) are provided.

Job ID: 720-88237-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

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

GC Semi VOA
Method(s) 8015B: The following sample required a dilution due to the nature of the sample matrix: DG-A7S-0.5-1 (720-88237-5). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method(s) 8081A: The following sample was diluted due to color: DG-A7S-0.5-1 (720-88237-5). Elevated reporting limits (RL) are provided.

Method(s) 8081A: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 720-250393 and analytical batch 720-250609 was outside control limits on one of the two columns. Sample matrix interference is suspected.

Method(s) 8082: Surrogate recovery for the following samples was outside control limits: (720-88240-F-3-C MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8082: The continuing calibration verification (CCV) associated with batch 240-343339 recovered above the upper control limit for 2154. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: DG-B7S-14.5-15 (720-88237-10).

Method(s) 8082: The following sample appears to contain polychlorinated biphenyls (PCBs); however, due to the contributions of patterns from multiple Aroclors present, the PCBs in the samples do not directly match any of the laboratory's Aroclor standards used for instrument calibration: DG-A7S-0.5-1 (720-88237-5). Per client's request the samples have been quantified and reported as Aroclors 1254 and 1260 which are the best overall Aroclor standards pattern match. Quantitation is suspect.

Method(s) 8082: The Aroclors in the continuing calibration verification (CCV) met criteria; however, the Decachlorobiphenyl surrogate failed to meet criteria at -19.6%. Surrogate recoveries for all samples were within control limits. After careful evaluation the data is reported. The following sample is impacted: DG-B7S-14.5-15 (720-88237-10).

Method(s) 8082: Surrogate Decachlorobiphenyl recovery for the following samples were outside control limits: (720-88240-F-3-C MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

Metals
Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250365 and analytical batch 720-250585 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 6010B: The following samples were diluted due to the abundance of non-target analytes: DG-B4S-0.5-1 (720-88237-1), DG-B4S-3.5-4 (720-88237-2), DG-C4S-0.5-1 (720-88237-3), DG-C4S-3.5-4 (720-88237-4), DG-A7S-0.5-1 (720-88237-5), DG-A7S-3.5-4 (720-88237-6) and DG-B7S-0.5-1 (720-88237-8). Elevated reporting limits (RLs) are provided.

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 720-250470 and analytical batch 720-250593 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) precision was within acceptance limits.

Method(s) 6010B: The post digestion spike % recovery associated with batch 720-250593 was outside of the 75-125% control limits.

Analyte	Recovery
Silver	145%
Arsenic	131%
Barium	175%

Job ID: 720-88237-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

Beryllium	157%
Cadmium	128%
Cobalt	130%
Chromium	149%
Copper	148%
Molybdenum	131%
Nickel	133%
Lead	138%
Antimony	128%
Selenium	128%
Vanadium	148%
Zinc	138%

Method(s) 6010B: The serial dilution performed for the following sample associated with batch 720-250593 was outside of the 10% control limits: (720-88237-A-9-C SD)

Analyte	Recovery
Barium	37%
Cobalt	33%
Chromium	35%
Nickel	31%
Lead	34%
Vanadium	33%

Method(s) 6010B: Internal standard responses were outside of acceptance limits for the ICSAB but recoveries met criteria: (ICSAB 720-250701/8). The sample(s) shows evidence of matrix interference.

Method(s) 6010B: The method blank for preparation batch 720-250385 and analytical batch 720-250634 contained Cr above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 720-250385 and analytical batch 720-250634 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) precision was within acceptance limits.

Method(s) 6010B: The method blank for preparation batch 720-250365 and analytical batch 720-250585 contained Sb and Ba above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

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

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

Detection Summary

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

TestAmerica Job ID: 720-88237-1

Client Sample ID: DG-B4S-0.5-1 — Lab Sample ID: 720-88237-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.5	B	1.3	0.21	mg/Kg	4		6010B	Total/NA
Arsenic	4.1		2.6	0.22	mg/Kg	4		6010B	Total/NA
Barium	74	B	1.3	0.18	mg/Kg	4		6010B	Total/NA
Cadmium	1.4		0.32	0.032	mg/Kg	4		6010B	Total/NA
Chromium	17		1.3	0.14	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.52	0.052	mg/Kg	4		6010B	Total/NA
Copper	200		3.9	1.8	mg/Kg	4		6010B	Total/NA
Lead	130		1.3	0.27	mg/Kg	4		6010B	Total/NA
Molybdenum	1.3		1.3	0.17	mg/Kg	4		6010B	Total/NA
Nickel	10		1.3	0.13	mg/Kg	4		6010B	Total/NA
Silver	0.47	J	0.65	0.13	mg/Kg	4		6010B	Total/NA
Thallium	0.66	J	1.3	0.37	mg/Kg	4		6010B	Total/NA
Vanadium	88		1.3	0.18	mg/Kg	4		6010B	Total/NA
Zinc	240		3.9	1.6	mg/Kg	4		6010B	Total/NA
Mercury	0.19		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-B4S-3.5-4 — Lab Sample ID: 720-88237-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.75	J B	1.1	0.18	mg/Kg	4		6010B	Total/NA
Arsenic	1.6	J	2.1	0.18	mg/Kg	4		6010B	Total/NA
Barium	47	B	1.1	0.15	mg/Kg	4		6010B	Total/NA
Cadmium	0.41		0.27	0.026	mg/Kg	4		6010B	Total/NA
Chromium	13		1.1	0.11	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.43	0.043	mg/Kg	4		6010B	Total/NA
Copper	120		3.2	1.5	mg/Kg	4		6010B	Total/NA
Lead	48		1.1	0.22	mg/Kg	4		6010B	Total/NA
Molybdenum	0.30	J	1.1	0.14	mg/Kg	4		6010B	Total/NA
Nickel	10		1.1	0.11	mg/Kg	4		6010B	Total/NA
Silver	0.19	J	0.53	0.11	mg/Kg	4		6010B	Total/NA
Thallium	0.84	J	1.1	0.31	mg/Kg	4		6010B	Total/NA
Vanadium	78		1.1	0.14	mg/Kg	4		6010B	Total/NA
Zinc	130		3.2	1.4	mg/Kg	4		6010B	Total/NA
Mercury	0.31		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-C4S-0.5-1 — Lab Sample ID: 720-88237-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	10	B	1.6	0.27	mg/Kg	4		6010B	Total/NA
Arsenic	24		3.2	0.27	mg/Kg	4		6010B	Total/NA
Barium	89	B	1.6	0.23	mg/Kg	4		6010B	Total/NA
Cadmium	1.1		0.40	0.040	mg/Kg	4		6010B	Total/NA
Chromium	17		1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.65	0.065	mg/Kg	4		6010B	Total/NA
Copper	310		4.8	2.3	mg/Kg	4		6010B	Total/NA
Lead	1000		1.6	0.34	mg/Kg	4		6010B	Total/NA
Molybdenum	0.34	J	1.6	0.21	mg/Kg	4		6010B	Total/NA
Nickel	13		1.6	0.16	mg/Kg	4		6010B	Total/NA
Silver	0.64	J	0.81	0.16	mg/Kg	4		6010B	Total/NA
Thallium	0.87	J	1.6	0.47	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-C4S-0.5-1 (Continued) — Lab Sample ID: 720-88237-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	74		1.6	0.22	mg/Kg	4		6010B	Total/NA
Zinc	320		4.8	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.20		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-C4S-3.5-4 — Lab Sample ID: 720-88237-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	4.1	B	1.7	0.28	mg/Kg	4		6010B	Total/NA
Arsenic	5.0		3.3	0.28	mg/Kg	4		6010B	Total/NA
Barium	110	B	1.7	0.24	mg/Kg	4		6010B	Total/NA
Beryllium	0.21	J	0.33	0.11	mg/Kg	4		6010B	Total/NA
Cadmium	0.50		0.42	0.041	mg/Kg	4		6010B	Total/NA
Chromium	62		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.67	0.067	mg/Kg	4		6010B	Total/NA
Copper	35		5.0	2.4	mg/Kg	4		6010B	Total/NA
Lead	1100		1.7	0.35	mg/Kg	4		6010B	Total/NA
Molybdenum	0.41	J	1.7	0.21	mg/Kg	4		6010B	Total/NA
Nickel	41		1.7	0.17	mg/Kg	4		6010B	Total/NA
Silver	0.19	J	0.83	0.17	mg/Kg	4		6010B	Total/NA
Vanadium	54		1.7	0.23	mg/Kg	4		6010B	Total/NA
Zinc	180		5.0	2.1	mg/Kg	4		6010B	Total/NA
Mercury	0.21		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-A7S-0.5-1 — Lab Sample ID: 720-88237-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	110		95	29	ug/Kg	10		8270C SIM	Total/NA
Benzo[a]pyrene	220		95	36	ug/Kg	10		8270C SIM	Total/NA
Benzo[b]fluoranthene	400		95	40	ug/Kg	10		8270C SIM	Total/NA
Benzo[g,h,i]perylene	150		95	82	ug/Kg	10		8270C SIM	Total/NA
Benzo[k]fluoranthene	120		95	40	ug/Kg	10		8270C SIM	Total/NA
Chrysene	140		95	27	ug/Kg	10		8270C SIM	Total/NA
Fluoranthene	140		95	27	ug/Kg	10		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	100		95	80	ug/Kg	10		8270C SIM	Total/NA
Phenanthrene	66	J	95	34	ug/Kg	10		8270C SIM	Total/NA
Pyrene	190		95	32	ug/Kg	10		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	280000		19000	7200	ug/Kg	10		8015B	Total/NA
Aroclor-1254	32	J	51	23	ug/Kg	1		8082	Total/NA
Aroclor-1260	42	J	51	22	ug/Kg	1		8082	Total/NA
Antimony	0.72	J B	1.9	0.31	mg/Kg	4		6010B	Total/NA
Arsenic	2.3	J	3.7	0.32	mg/Kg	4		6010B	Total/NA
Barium	53	B	1.9	0.27	mg/Kg	4		6010B	Total/NA
Cadmium	0.24	J	0.47	0.046	mg/Kg	4		6010B	Total/NA
Chromium	12		1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	9.6		0.75	0.075	mg/Kg	4		6010B	Total/NA
Copper	79		5.6	2.7	mg/Kg	4		6010B	Total/NA
Lead	48		1.9	0.39	mg/Kg	4		6010B	Total/NA
Molybdenum	0.65	J	1.9	0.24	mg/Kg	4		6010B	Total/NA
Nickel	15		1.9	0.19	mg/Kg	4		6010B	Total/NA
Vanadium	83		1.9	0.25	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-A7S-0.5-1 (Continued) — Lab Sample ID: 720-88237-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	79		5.6	2.4	mg/Kg	4		6010B	Total/NA
Mercury	0.078		0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-A7S-3.5-4 — Lab Sample ID: 720-88237-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	28	J	37	28	ug/Kg	1		8260B	Total/NA
2-Methylnaphthalene	34		9.6	4.8	ug/Kg	1		8270C SIM	Total/NA
Anthracene	3.6	J	4.8	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	8.8		4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	5.9		4.8	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	9.1		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	6.9		4.8	4.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	2.4	J	4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	13		4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Dibenz(a,h)anthracene	3.4	J	4.8	3.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	4.6	J	4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Fluorene	15		4.8	2.1	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	15		4.8	3.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	54		4.8	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	12		4.8	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	5600		1900	730	ug/Kg	1		8015B	Total/NA
Antimony	0.60	J	1.5	0.25	mg/Kg	4		6010B	Total/NA
Arsenic	14		3.0	0.25	mg/Kg	4		6010B	Total/NA
Barium	62		1.5	0.21	mg/Kg	4		6010B	Total/NA
Beryllium	0.16	J	0.30	0.096	mg/Kg	4		6010B	Total/NA
Chromium	67	B	1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	9.8		0.59	0.059	mg/Kg	4		6010B	Total/NA
Copper	20		4.4	2.1	mg/Kg	4		6010B	Total/NA
Lead	22		1.5	0.31	mg/Kg	4		6010B	Total/NA
Molybdenum	0.57	J	1.5	0.19	mg/Kg	4		6010B	Total/NA
Nickel	80		1.5	0.15	mg/Kg	4		6010B	Total/NA
Selenium	1.1	J	3.0	0.44	mg/Kg	4		6010B	Total/NA
Vanadium	41		1.5	0.20	mg/Kg	4		6010B	Total/NA
Zinc	37		4.4	1.9	mg/Kg	4		6010B	Total/NA
Mercury	0.076		0.015	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-A7S-10-10.5 — Lab Sample ID: 720-88237-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	33	J	40	30	ug/Kg	1		8260B	Total/NA
Carbon disulfide	3.0	J *	4.0	1.6	ug/Kg	1		8260B	Total/NA
cis-1,2-Dichloroethene	18		4.0	0.54	ug/Kg	1		8260B	Total/NA
trans-1,2-Dichloroethene	1.9	J	4.0	0.60	ug/Kg	1		8260B	Total/NA
Vinyl chloride	1.1	J	4.0	0.58	ug/Kg	1		8260B	Total/NA
Benzo[a]pyrene	2.2	J	4.9	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	15		4.9	2.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	4.1	J	4.9	2.1	ug/Kg	1		8270C SIM	Total/NA
Chrysene	8.0		4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	11		4.9	1.4	ug/Kg	1		8270C SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-A7S-10-10.5 (Continued) — Lab Sample ID: 720-88237-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	2.9	J	4.9	1.8	ug/Kg	1		8270C SIM	Total/NA
Pyrene	6.1		4.9	1.7	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	33000		2000	740	ug/Kg	1		8015B	Total/NA
Antimony	0.13	J	0.46	0.076	mg/Kg	1		6010B	Total/NA
Arsenic	0.43	J	0.92	0.078	mg/Kg	1		6010B	Total/NA
Barium	24		0.46	0.065	mg/Kg	1		6010B	Total/NA
Beryllium	0.10		0.092	0.030	mg/Kg	1		6010B	Total/NA
Chromium	34	B	0.46	0.049	mg/Kg	1		6010B	Total/NA
Cobalt	2.3		0.18	0.018	mg/Kg	1		6010B	Total/NA
Copper	4.2		1.4	0.65	mg/Kg	1		6010B	Total/NA
Lead	2.1		0.46	0.096	mg/Kg	1		6010B	Total/NA
Molybdenum	0.51		0.46	0.059	mg/Kg	1		6010B	Total/NA
Nickel	12		0.46	0.047	mg/Kg	1		6010B	Total/NA
Selenium	0.68	J	0.92	0.14	mg/Kg	1		6010B	Total/NA
Vanadium	24		0.46	0.062	mg/Kg	1		6010B	Total/NA
Zinc	13		1.4	0.58	mg/Kg	1		6010B	Total/NA
Mercury	0.012	J	0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-B7S-0.5-1 — Lab Sample ID: 720-88237-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.42	J	1.6	0.26	mg/Kg	4		6010B	Total/NA
Arsenic	4.4		3.1	0.27	mg/Kg	4		6010B	Total/NA
Barium	68		1.6	0.22	mg/Kg	4		6010B	Total/NA
Beryllium	0.24	J	0.31	0.10	mg/Kg	4		6010B	Total/NA
Cadmium	0.22	J	0.39	0.039	mg/Kg	4		6010B	Total/NA
Chromium	32	B	1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	8.9		0.63	0.063	mg/Kg	4		6010B	Total/NA
Copper	99		4.7	2.2	mg/Kg	4		6010B	Total/NA
Lead	62		1.6	0.33	mg/Kg	4		6010B	Total/NA
Molybdenum	2.1		1.6	0.20	mg/Kg	4		6010B	Total/NA
Nickel	23		1.6	0.16	mg/Kg	4		6010B	Total/NA
Selenium	0.51	J	3.1	0.47	mg/Kg	4		6010B	Total/NA
Vanadium	69		1.6	0.21	mg/Kg	4		6010B	Total/NA
Zinc	77		4.7	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.11		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-B7S-3.5-4 — Lab Sample ID: 720-88237-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.4	J F1	1.9	0.31	mg/Kg	4		6010B	Total/NA
Arsenic	4.3		3.8	0.32	mg/Kg	4		6010B	Total/NA
Barium	90		1.9	0.27	mg/Kg	4		6010B	Total/NA
Cadmium	0.20	J	0.47	0.047	mg/Kg	4		6010B	Total/NA
Chromium	45	F1	1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	9.1		0.75	0.075	mg/Kg	4		6010B	Total/NA
Copper	31	F1	5.7	2.7	mg/Kg	4		6010B	Total/NA
Lead	100	F1 F2	1.9	0.40	mg/Kg	4		6010B	Total/NA
Molybdenum	0.36	J	1.9	0.24	mg/Kg	4		6010B	Total/NA
Nickel	60	F1	1.9	0.19	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-B7S-3.5-4 (Continued) — Lab Sample ID: 720-88237-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	26	F1	1.9	0.26	mg/Kg	4		6010B	Total/NA
Zinc	86	F1	5.7	2.4	mg/Kg	4		6010B	Total/NA
Mercury	0.12		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-B7S-14.5-15 — Lab Sample ID: 720-88237-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	52	*	35	27	ug/Kg	1		8260B	Total/NA
Anthracene	2.1	J	4.7	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	1.9	J	4.7	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	12		4.7	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	2.8	J	4.7	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	5.6		4.7	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	20		4.7	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluorene	3.0	J	4.7	2.1	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	9.9		4.7	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	24		4.7	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	20000		1900	730	ug/Kg	1		8015B	Total/NA
Arsenic	0.61	J	3.9	0.33	mg/Kg	4		6010B	Total/NA
Barium	34		1.9	0.28	mg/Kg	4		6010B	Total/NA
Chromium	29		1.9	0.21	mg/Kg	4		6010B	Total/NA
Cobalt	0.81		0.78	0.078	mg/Kg	4		6010B	Total/NA
Lead	1.5	J	1.9	0.41	mg/Kg	4		6010B	Total/NA
Nickel	4.6		1.9	0.20	mg/Kg	4		6010B	Total/NA
Vanadium	23		1.9	0.26	mg/Kg	4		6010B	Total/NA
Zinc	3.2	J	5.8	2.5	mg/Kg	4		6010B	Total/NA
Mercury	0.018		0.015	0.0022	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

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

TestAmerica Job ID: 720-88237-1

Client Sample ID: DG-B4S-0.5-1

Date Collected: 08/23/18 14:10
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88237-1

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.5	B	1.3	0.21	mg/Kg		08/28/18 10:26	08/29/18 21:07	4
Arsenic	4.1		2.6	0.22	mg/Kg		08/28/18 10:26	08/29/18 21:07	4
Barium	74	B	1.3	0.18	mg/Kg		08/28/18 10:26	08/29/18 21:07	4
Beryllium	ND		0.26	0.084	mg/Kg		08/28/18 10:26	08/29/18 21:07	4
Cadmium	1.4		0.32	0.032	mg/Kg		08/28/18 10:26	08/29/18 21:07	4
Chromium	17		1.3	0.14	mg/Kg		08/28/18 10:26	08/29/18 21:07	4
Cobalt	11		0.52	0.052	mg/Kg		08/28/18 10:26	08/29/18 21:07	4
Copper	200		3.9	1.8	mg/Kg		08/28/18 10:26	08/29/18 21:07	4
Lead	130		1.3	0.27	mg/Kg		08/28/18 10:26	08/29/18 21:07	4
Molybdenum	1.3		1.3	0.17	mg/Kg		08/28/18 10:26	08/29/18 21:07	4
Nickel	10		1.3	0.13	mg/Kg		08/28/18 10:26	08/29/18 21:07	4
Selenium	ND		2.6	0.39	mg/Kg		08/28/18 10:26	08/29/18 21:07	4
Silver	0.47	J	0.65	0.13	mg/Kg		08/28/18 10:26	08/29/18 21:07	4
Thallium	0.66	J	1.3	0.37	mg/Kg		08/28/18 10:26	08/29/18 21:07	4
Vanadium	88		1.3	0.18	mg/Kg		08/28/18 10:26	08/29/18 21:07	4
Zinc	240		3.9	1.6	mg/Kg		08/28/18 10:26	08/29/18 21:07	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.19		0.017	0.0025	mg/Kg		08/29/18 15:39	08/30/18 18:22	1

Client Sample Results

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

TestAmerica Job ID: 720-88237-1

Client Sample ID: DG-B4S-3.5-4

Date Collected: 08/23/18 14:10
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88237-2

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.75	J B	1.1	0.18	mg/Kg		08/28/18 10:26	08/29/18 21:12	4
Arsenic	1.6	J	2.1	0.18	mg/Kg		08/28/18 10:26	08/29/18 21:12	4
Barium	47	B	1.1	0.15	mg/Kg		08/28/18 10:26	08/29/18 21:12	4
Beryllium	ND		0.21	0.069	mg/Kg		08/28/18 10:26	08/29/18 21:12	4
Cadmium	0.41		0.27	0.026	mg/Kg		08/28/18 10:26	08/29/18 21:12	4
Chromium	13		1.1	0.11	mg/Kg		08/28/18 10:26	08/29/18 21:12	4
Cobalt	11		0.43	0.043	mg/Kg		08/28/18 10:26	08/29/18 21:12	4
Copper	120		3.2	1.5	mg/Kg		08/28/18 10:26	08/29/18 21:12	4
Lead	48		1.1	0.22	mg/Kg		08/28/18 10:26	08/29/18 21:12	4
Molybdenum	0.30	J	1.1	0.14	mg/Kg		08/28/18 10:26	08/29/18 21:12	4
Nickel	10		1.1	0.11	mg/Kg		08/28/18 10:26	08/29/18 21:12	4
Selenium	ND		2.1	0.32	mg/Kg		08/28/18 10:26	08/29/18 21:12	4
Silver	0.19	J	0.53	0.11	mg/Kg		08/28/18 10:26	08/29/18 21:12	4
Thallium	0.84	J	1.1	0.31	mg/Kg		08/28/18 10:26	08/29/18 21:12	4
Vanadium	78		1.1	0.14	mg/Kg		08/28/18 10:26	08/29/18 21:12	4
Zinc	130		3.2	1.4	mg/Kg		08/28/18 10:26	08/29/18 21:12	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.31		0.016	0.0024	mg/Kg		08/29/18 15:39	08/30/18 18:29	1

Client Sample Results

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

TestAmerica Job ID: 720-88237-1

Client Sample ID: DG-C4S-0.5-1

Date Collected: 08/23/18 14:40
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88237-3

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	10	B	1.6	0.27	mg/Kg		08/28/18 10:26	08/29/18 21:17	4
Arsenic	24		3.2	0.27	mg/Kg		08/28/18 10:26	08/29/18 21:17	4
Barium	89	B	1.6	0.23	mg/Kg		08/28/18 10:26	08/29/18 21:17	4
Beryllium	ND		0.32	0.10	mg/Kg		08/28/18 10:26	08/29/18 21:17	4
Cadmium	1.1		0.40	0.040	mg/Kg		08/28/18 10:26	08/29/18 21:17	4
Chromium	17		1.6	0.17	mg/Kg		08/28/18 10:26	08/29/18 21:17	4
Cobalt	11		0.65	0.065	mg/Kg		08/28/18 10:26	08/29/18 21:17	4
Copper	310		4.8	2.3	mg/Kg		08/28/18 10:26	08/29/18 21:17	4
Lead	1000		1.6	0.34	mg/Kg		08/28/18 10:26	08/29/18 21:17	4
Molybdenum	0.34	J	1.6	0.21	mg/Kg		08/28/18 10:26	08/29/18 21:17	4
Nickel	13		1.6	0.16	mg/Kg		08/28/18 10:26	08/29/18 21:17	4
Selenium	ND		3.2	0.48	mg/Kg		08/28/18 10:26	08/29/18 21:17	4
Silver	0.64	J	0.81	0.16	mg/Kg		08/28/18 10:26	08/29/18 21:17	4
Thallium	0.87	J	1.6	0.47	mg/Kg		08/28/18 10:26	08/29/18 21:17	4
Vanadium	74		1.6	0.22	mg/Kg		08/28/18 10:26	08/29/18 21:17	4
Zinc	320		4.8	2.0	mg/Kg		08/28/18 10:26	08/29/18 21:17	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20		0.016	0.0024	mg/Kg		08/29/18 15:39	08/30/18 18:32	1

Client Sample Results

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

TestAmerica Job ID: 720-88237-1

Client Sample ID: DG-C4S-3.5-4

Date Collected: 08/23/18 14:40
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88237-4

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	4.1	B	1.7	0.28	mg/Kg		08/28/18 10:26	08/29/18 21:31	4
Arsenic	5.0		3.3	0.28	mg/Kg		08/28/18 10:26	08/29/18 21:31	4
Barium	110	B	1.7	0.24	mg/Kg		08/28/18 10:26	08/29/18 21:31	4
Beryllium	0.21	J	0.33	0.11	mg/Kg		08/28/18 10:26	08/29/18 21:31	4
Cadmium	0.50		0.42	0.041	mg/Kg		08/28/18 10:26	08/29/18 21:31	4
Chromium	62		1.7	0.18	mg/Kg		08/28/18 10:26	08/29/18 21:31	4
Cobalt	11		0.67	0.067	mg/Kg		08/28/18 10:26	08/29/18 21:31	4
Copper	35		5.0	2.4	mg/Kg		08/28/18 10:26	08/29/18 21:31	4
Lead	1100		1.7	0.35	mg/Kg		08/28/18 10:26	08/29/18 21:31	4
Molybdenum	0.41	J	1.7	0.21	mg/Kg		08/28/18 10:26	08/29/18 21:31	4
Nickel	41		1.7	0.17	mg/Kg		08/28/18 10:26	08/29/18 21:31	4
Selenium	ND		3.3	0.50	mg/Kg		08/28/18 10:26	08/29/18 21:31	4
Silver	0.19	J	0.83	0.17	mg/Kg		08/28/18 10:26	08/29/18 21:31	4
Thallium	ND		1.7	0.48	mg/Kg		08/28/18 10:26	08/29/18 21:31	4
Vanadium	54		1.7	0.23	mg/Kg		08/28/18 10:26	08/29/18 21:31	4
Zinc	180		5.0	2.1	mg/Kg		08/28/18 10:26	08/29/18 21:31	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.21		0.016	0.0024	mg/Kg		08/29/18 15:39	08/30/18 18:34	1

Client Sample Results

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

TestAmerica Job ID: 720-88237-1

Client Sample ID: DG-A7S-0.5-1

Date Collected: 08/23/18 15:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88237-5

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.1	0.98	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
Acetone	ND		41	31	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
Benzene	ND		4.1	0.53	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
Dichlorobromomethane	ND		4.1	0.59	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
Bromobenzene	ND		4.1	0.65	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
Chlorobromomethane	ND		16	0.59	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
Bromoform	ND		4.1	1.6	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
Bromomethane	ND		8.2	0.65	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
2-Butanone (MEK)	ND		41	17	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
n-Butylbenzene	ND		4.1	0.82	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
sec-Butylbenzene	ND		4.1	0.59	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
tert-Butylbenzene	ND		4.1	0.60	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
Carbon disulfide	ND		4.1	1.6	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
Carbon tetrachloride	ND		4.1	0.51	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
Chlorobenzene	ND		4.1	0.56	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
Chloroethane	ND		8.2	0.46	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
Chloroform	ND		4.1	0.54	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
Chloromethane	ND		8.2	0.65	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
2-Chlorotoluene	ND		4.1	0.53	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
4-Chlorotoluene	ND		4.1	0.56	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
Chlorodibromomethane	ND		4.1	0.58	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
1,2-Dichlorobenzene	ND		4.1	0.56	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
1,3-Dichlorobenzene	ND		4.1	0.59	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
1,4-Dichlorobenzene	ND		4.1	0.58	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
1,3-Dichloropropane	ND		4.1	0.60	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
1,1-Dichloropropene	ND		4.1	0.56	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
1,2-Dibromo-3-Chloropropane	ND		8.2	1.4	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
Ethylene Dibromide	ND		4.1	1.2	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
Dibromomethane	ND		8.2	0.70	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
Dichlorodifluoromethane	ND		8.2	0.65	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
1,1-Dichloroethane	ND		4.1	0.56	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
1,2-Dichloroethane	ND		4.1	0.62	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
1,1-Dichloroethene	ND	*	4.1	0.51	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
cis-1,2-Dichloroethene	ND		4.1	0.56	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
trans-1,2-Dichloroethene	ND		4.1	0.61	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
1,2-Dichloropropane	ND		4.1	0.51	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
cis-1,3-Dichloropropene	ND		4.1	0.56	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
trans-1,3-Dichloropropene	ND		4.1	0.55	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
Ethylbenzene	ND		4.1	0.61	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
Hexachlorobutadiene	ND		4.1	0.73	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
2-Hexanone	ND		41	8.2	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
Isopropylbenzene	ND		4.1	0.56	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
4-Isopropyltoluene	ND		4.1	2.0	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
Methylene Chloride	ND		8.2	4.6	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
4-Methyl-2-pentanone (MIBK)	ND		41	8.2	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
Naphthalene	ND		8.9	1.3	ug/Kg		08/25/18 03:05	08/29/18 14:21	1
N-Propylbenzene	ND		4.1	0.54	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
Styrene	ND		4.1	0.51	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
1,1,1,2-Tetrachloroethane	ND		4.1	0.62	ug/Kg		08/25/18 03:05	08/29/18 04:20	1

Client Sample ID: DG-A7S-0.5-1

Lab Sample ID: 720-88237-5

Date Collected: 08/23/18 15:00

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.1	0.61	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
Tetrachloroethene	ND		4.1	0.55	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
Toluene	ND		4.1	0.58	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
1,2,3-Trichlorobenzene	ND		4.1	0.60	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
1,2,4-Trichlorobenzene	ND		4.1	0.58	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
1,1,1-Trichloroethane	ND		4.1	0.50	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
1,1,2-Trichloroethane	ND		4.1	0.57	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
Trichloroethene	ND		4.1	0.51	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
Trichlorofluoromethane	ND		4.1	0.46	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
1,2,3-Trichloropropane	ND		4.1	0.63	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.1	1.7	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
1,2,4-Trimethylbenzene	ND		4.1	1.3	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
1,3,5-Trimethylbenzene	ND		4.1	0.53	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
Vinyl acetate	ND		16	4.1	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
Vinyl chloride	ND		4.1	0.60	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
Xylenes, Total	ND		4.1	1.0	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
2,2-Dichloropropane	ND		4.1	1.6	ug/Kg		08/25/18 03:05	08/29/18 04:20	1
Gasoline Range Organics (GRO) -C4-C12	ND		200	82	ug/Kg		08/25/18 03:05	08/29/18 04:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*45 - 131*	*08/25/18 03:05*	*08/29/18 04:20*	*1*
4-Bromofluorobenzene	*96*		*45 - 131*	*08/25/18 03:05*	*08/29/18 14:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*60 - 140*	*08/25/18 03:05*	*08/29/18 04:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*60 - 140*	*08/25/18 03:05*	*08/29/18 14:21*	*1*
Toluene-d8 (Surr)	*89*		*58 - 140*	*08/25/18 03:05*	*08/29/18 04:20*	*1*
Toluene-d8 (Surr)	*92*		*58 - 140*	*08/25/18 03:05*	*08/29/18 14:21*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		190	95	ug/Kg		08/28/18 10:30	09/01/18 00:22	10
Acenaphthene	ND		95	53	ug/Kg		08/28/18 10:30	09/01/18 00:22	10
Acenaphthylene	ND		95	46	ug/Kg		08/28/18 10:30	09/01/18 00:22	10
Anthracene	ND		95	38	ug/Kg		08/28/18 10:30	09/01/18 00:22	10
Benzo[a]anthracene	**110**		95	29	ug/Kg		08/28/18 10:30	09/01/18 00:22	10
Benzo[a]pyrene	**220**		95	36	ug/Kg		08/28/18 10:30	09/01/18 00:22	10
Benzo[b]fluoranthene	**400**		95	40	ug/Kg		08/28/18 10:30	09/01/18 00:22	10
Benzo[g,h,i]perylene	**150**		95	82	ug/Kg		08/28/18 10:30	09/01/18 00:22	10
Benzo[k]fluoranthene	**120**		95	40	ug/Kg		08/28/18 10:30	09/01/18 00:22	10
Chrysene	**140**		95	27	ug/Kg		08/28/18 10:30	09/01/18 00:22	10
Dibenz(a,h)anthracene	ND		95	67	ug/Kg		08/28/18 10:30	09/01/18 00:22	10
Fluoranthene	**140**		95	27	ug/Kg		08/28/18 10:30	09/01/18 00:22	10
Fluorene	ND		95	42	ug/Kg		08/28/18 10:30	09/01/18 00:22	10
Indeno[1,2,3-cd]pyrene	**100**		95	80	ug/Kg		08/28/18 10:30	09/01/18 00:22	10
Naphthalene	ND		95	67	ug/Kg		08/28/18 10:30	09/01/18 00:22	10
Phenanthrene	**66**	**J**	95	34	ug/Kg		08/28/18 10:30	09/01/18 00:22	10
Pyrene	**190**		95	32	ug/Kg		08/28/18 10:30	09/01/18 00:22	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*33 - 120*	*08/28/18 10:30*	*09/01/18 00:22*	*10*

Client Sample ID: DG-A7S-0.5-1

Lab Sample ID: 720-88237-5

Date Collected: 08/23/18 15:00

Matrix: Solid

Date Received: 08/24/18 15:00

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	105		35 - 146	08/28/18 10:30	09/01/18 00:22	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	280000		19000	7200	ug/Kg		08/28/18 11:24	08/31/18 05:47	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	0	D X	40 - 130	08/28/18 11:24	08/31/18 05:47	10

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		9.6	2.9	ug/Kg		08/28/18 13:36	09/01/18 04:20	5
4,4'-DDE	ND		9.6	2.0	ug/Kg		08/28/18 13:36	09/01/18 04:20	5
4,4'-DDT	ND		9.6	2.0	ug/Kg		08/28/18 13:36	09/01/18 04:20	5
Aldrin	ND		9.6	2.4	ug/Kg		08/28/18 13:36	09/01/18 04:20	5
alpha-BHC	ND		9.6	2.7	ug/Kg		08/28/18 13:36	09/01/18 04:20	5
beta-BHC	ND		9.6	1.7	ug/Kg		08/28/18 13:36	09/01/18 04:20	5
Chlordane (technical)	ND		190	15	ug/Kg		08/28/18 13:36	09/01/18 04:20	5
cis-Chlordane	ND		9.6	1.9	ug/Kg		08/28/18 13:36	09/01/18 04:20	5
delta-BHC	ND		9.6	2.1	ug/Kg		08/28/18 13:36	09/01/18 04:20	5
Dieldrin	ND		9.6	2.8	ug/Kg		08/28/18 13:36	09/01/18 04:20	5
Endosulfan I	ND		9.6	1.5	ug/Kg		08/28/18 13:36	09/01/18 04:20	5
Endosulfan II	ND		9.6	2.4	ug/Kg		08/28/18 13:36	09/01/18 04:20	5
Endosulfan sulfate	ND		9.6	1.8	ug/Kg		08/28/18 13:36	09/01/18 04:20	5
Endrin	ND		9.6	2.2	ug/Kg		08/28/18 13:36	09/01/18 04:20	5
Endrin aldehyde	ND		9.6	3.0	ug/Kg		08/28/18 13:36	09/01/18 04:20	5
Endrin ketone	ND		9.6	1.6	ug/Kg		08/28/18 13:36	09/01/18 04:20	5
gamma-BHC (Lindane)	ND		9.6	3.0	ug/Kg		08/28/18 13:36	09/01/18 04:20	5
Heptachlor	ND		9.6	2.2	ug/Kg		08/28/18 13:36	09/01/18 04:20	5
Heptachlor epoxide	ND		9.6	1.7	ug/Kg		08/28/18 13:36	09/01/18 04:20	5
Methoxychlor	ND		9.6	3.3	ug/Kg		08/28/18 13:36	09/01/18 04:20	5
Toxaphene	ND		190	33	ug/Kg		08/28/18 13:36	09/01/18 04:20	5
trans-Chlordane	ND		9.6	2.2	ug/Kg		08/28/18 13:36	09/01/18 04:20	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	66		21 - 136	08/28/18 13:36	09/01/18 04:20	5
Tetrachloro-m-xylene	69		21 - 145	08/28/18 13:36	09/01/18 04:20	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		51	22	ug/Kg		08/29/18 14:50	08/31/18 07:57	1
Aroclor-1221	ND		51	24	ug/Kg		08/29/18 14:50	08/31/18 07:57	1
Aroclor-1232	ND		51	23	ug/Kg		08/29/18 14:50	08/31/18 07:57	1
Aroclor-1242	ND		51	19	ug/Kg		08/29/18 14:50	08/31/18 07:57	1
Aroclor-1248	ND		51	24	ug/Kg		08/29/18 14:50	08/31/18 07:57	1
Aroclor-1254	32	J	51	23	ug/Kg		08/29/18 14:50	08/31/18 07:57	1
Aroclor-1260	42	J	51	22	ug/Kg		08/29/18 14:50	08/31/18 07:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	75		14 - 128	08/29/18 14:50	08/31/18 07:57	1

Client Sample ID: DG-A7S-0.5-1

Lab Sample ID: 720-88237-5

Date Collected: 08/23/18 15:00

Matrix: Solid

Date Received: 08/24/18 15:00

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*72*		*10 - 132*	*08/29/18 14:50*	*08/31/18 07:57*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.72**	**J B**	1.9	0.31	mg/Kg		08/28/18 10:26	08/29/18 21:36	4
Arsenic	**2.3**	**J**	3.7	0.32	mg/Kg		08/28/18 10:26	08/29/18 21:36	4
Barium	**53**	**B**	1.9	0.27	mg/Kg		08/28/18 10:26	08/29/18 21:36	4
Beryllium	ND		0.37	0.12	mg/Kg		08/28/18 10:26	08/29/18 21:36	4
Cadmium	**0.24**	**J**	0.47	0.046	mg/Kg		08/28/18 10:26	08/29/18 21:36	4
Chromium	**12**		1.9	0.20	mg/Kg		08/28/18 10:26	08/29/18 21:36	4
Cobalt	**9.6**		0.75	0.075	mg/Kg		08/28/18 10:26	08/29/18 21:36	4
Copper	**79**		5.6	2.7	mg/Kg		08/28/18 10:26	08/29/18 21:36	4
Lead	**48**		1.9	0.39	mg/Kg		08/28/18 10:26	08/29/18 21:36	4
Molybdenum	**0.65**	**J**	1.9	0.24	mg/Kg		08/28/18 10:26	08/29/18 21:36	4
Nickel	**15**		1.9	0.19	mg/Kg		08/28/18 10:26	08/29/18 21:36	4
Selenium	ND		3.7	0.56	mg/Kg		08/28/18 10:26	08/29/18 21:36	4
Silver	ND		0.93	0.19	mg/Kg		08/28/18 10:26	08/29/18 21:36	4
Thallium	ND		1.9	0.54	mg/Kg		08/28/18 10:26	08/29/18 21:36	4
Vanadium	**83**		1.9	0.25	mg/Kg		08/28/18 10:26	08/29/18 21:36	4
Zinc	**79**		5.6	2.4	mg/Kg		08/28/18 10:26	08/29/18 21:36	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.078**		0.014	0.0021	mg/Kg		08/29/18 15:39	08/30/18 18:36	1

Client Sample Results

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

TestAmerica Job ID: 720-88237-1

Client Sample ID: DG-A7S-3.5-4

Date Collected: 08/23/18 15:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88237-6

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.7	0.88	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
Acetone	**28**	**J**	37	28	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
Benzene	ND		3.7	0.47	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
Dichlorobromomethane	ND		3.7	0.53	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
Bromobenzene	ND		3.7	0.58	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
Chlorobromomethane	ND		15	0.53	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
Bromoform	ND		3.7	1.5	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
Bromomethane	ND		7.3	0.58	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
2-Butanone (MEK)	ND		37	15	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
n-Butylbenzene	ND		3.7	0.73	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
sec-Butylbenzene	ND		3.7	0.53	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
tert-Butylbenzene	ND		3.7	0.53	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
Carbon disulfide	ND		3.7	1.5	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
Carbon tetrachloride	ND		3.7	0.45	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
Chlorobenzene	ND		3.7	0.50	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
Chloroethane	ND		7.3	0.41	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
Chloroform	ND		3.7	0.48	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
Chloromethane	ND		7.3	0.58	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
2-Chlorotoluene	ND		3.7	0.47	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
4-Chlorotoluene	ND		3.7	0.50	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
Chlorodibromomethane	ND		3.7	0.52	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
1,2-Dichlorobenzene	ND		3.7	0.50	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
1,3-Dichlorobenzene	ND		3.7	0.53	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
1,4-Dichlorobenzene	ND		3.7	0.52	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
1,3-Dichloropropane	ND		3.7	0.53	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
1,1-Dichloropropene	ND		3.7	0.50	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
1,2-Dibromo-3-Chloropropane	ND		7.3	1.2	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
Ethylene Dibromide	ND		3.7	1.0	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
Dibromomethane	ND		7.3	0.63	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
Dichlorodifluoromethane	ND		7.3	0.58	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
1,1-Dichloroethane	ND		3.7	0.50	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
1,2-Dichloroethane	ND		3.7	0.56	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
1,1-Dichloroethene	ND	*	3.7	0.45	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
cis-1,2-Dichloroethene	ND		3.7	0.50	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
trans-1,2-Dichloroethene	ND		3.7	0.55	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
1,2-Dichloropropane	ND		3.7	0.46	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
cis-1,3-Dichloropropene	ND		3.7	0.50	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
trans-1,3-Dichloropropene	ND		3.7	0.49	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
Ethylbenzene	ND		3.7	0.55	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
Hexachlorobutadiene	ND		3.7	0.66	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
2-Hexanone	ND		37	7.3	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
Isopropylbenzene	ND		3.7	0.50	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
4-Isopropyltoluene	ND		3.7	1.8	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
Methylene Chloride	ND		7.3	4.1	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
4-Methyl-2-pentanone (MIBK)	ND		37	7.3	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
Naphthalene	ND		7.3	1.1	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
N-Propylbenzene	ND		3.7	0.48	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
Styrene	ND		3.7	0.46	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
1,1,1,2-Tetrachloroethane	ND		3.7	0.56	ug/Kg		08/25/18 03:05	08/29/18 14:52	1

Client Sample ID: DG-A7S-3.5-4

Date Collected: 08/23/18 15:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88237-6

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		3.7	0.55	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
Tetrachloroethene	ND		3.7	0.49	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
Toluene	ND		3.7	0.52	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
1,2,3-Trichlorobenzene	ND		3.7	0.54	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
1,2,4-Trichlorobenzene	ND		3.7	0.52	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
1,1,1-Trichloroethane	ND		3.7	0.45	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
1,1,2-Trichloroethane	ND		3.7	0.51	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
Trichloroethene	ND		3.7	0.46	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
Trichlorofluoromethane	ND		3.7	0.41	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
1,2,3-Trichloropropane	ND		3.7	0.56	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	3.7	1.5	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
1,2,4-Trimethylbenzene	ND		3.7	1.2	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
1,3,5-Trimethylbenzene	ND		3.7	0.47	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
Vinyl acetate	ND		15	3.7	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
Vinyl chloride	ND		3.7	0.53	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
Xylenes, Total	ND		3.7	0.89	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
2,2-Dichloropropane	ND		3.7	1.5	ug/Kg		08/25/18 03:05	08/29/18 14:52	1
Gasoline Range Organics (GRO) -C4-C12	ND		180	73	ug/Kg		08/25/18 03:05	08/29/18 14:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*45 - 131*	*08/25/18 03:05*	*08/29/18 14:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*	*08/25/18 03:05*	*08/29/18 14:52*	*1*
Toluene-d8 (Surr)	*93*		*58 - 140*	*08/25/18 03:05*	*08/29/18 14:52*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**34**		9.6	4.8	ug/Kg		08/28/18 10:30	08/31/18 20:26	1
Acenaphthene	ND		4.8	2.7	ug/Kg		08/28/18 10:30	08/31/18 20:26	1
Acenaphthylene	ND		4.8	2.3	ug/Kg		08/28/18 10:30	08/31/18 20:26	1
Anthracene	**3.6**	**J**	4.8	1.9	ug/Kg		08/28/18 10:30	08/31/18 20:26	1
Benzo[a]anthracene	**8.8**		4.8	1.4	ug/Kg		08/28/18 10:30	08/31/18 20:26	1
Benzo[a]pyrene	**5.9**		4.8	1.8	ug/Kg		08/28/18 10:30	08/31/18 20:26	1
Benzo[b]fluoranthene	**9.1**		4.8	2.0	ug/Kg		08/28/18 10:30	08/31/18 20:26	1
Benzo[g,h,i]perylene	**6.9**		4.8	4.1	ug/Kg		08/28/18 10:30	08/31/18 20:26	1
Benzo[k]fluoranthene	**2.4**	**J**	4.8	2.0	ug/Kg		08/28/18 10:30	08/31/18 20:26	1
Chrysene	**13**		4.8	1.4	ug/Kg		08/28/18 10:30	08/31/18 20:26	1
Dibenz(a,h)anthracene	**3.4**	**J**	4.8	3.4	ug/Kg		08/28/18 10:30	08/31/18 20:26	1
Fluoranthene	**4.6**	**J**	4.8	1.4	ug/Kg		08/28/18 10:30	08/31/18 20:26	1
Fluorene	**15**		4.8	2.1	ug/Kg		08/28/18 10:30	08/31/18 20:26	1
Indeno[1,2,3-cd]pyrene	ND		4.8	4.1	ug/Kg		08/28/18 10:30	08/31/18 20:26	1
Naphthalene	**15**		4.8	3.4	ug/Kg		08/28/18 10:30	08/31/18 20:26	1
Phenanthrene	**54**		4.8	1.7	ug/Kg		08/28/18 10:30	08/31/18 20:26	1
Pyrene	**12**		4.8	1.6	ug/Kg		08/28/18 10:30	08/31/18 20:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*33 - 120*	*08/28/18 10:30*	*08/31/18 20:26*	*1*
Terphenyl-d14	*92*		*35 - 146*	*08/28/18 10:30*	*08/31/18 20:26*	*1*

Client Sample Results

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

TestAmerica Job ID: 720-88237-1

Client Sample ID: DG-A7S-3.5-4

Date Collected: 08/23/18 15:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88237-6

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	5600		1900	730	ug/Kg		08/28/18 11:24	08/30/18 21:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*114*		*40 - 130*	*08/28/18 11:24*	*08/30/18 21:16*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.58	ug/Kg		08/28/18 13:36	09/01/18 04:37	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/28/18 13:36	09/01/18 04:37	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/28/18 13:36	09/01/18 04:37	1
Aldrin	ND		1.9	0.47	ug/Kg		08/28/18 13:36	09/01/18 04:37	1
alpha-BHC	ND		1.9	0.52	ug/Kg		08/28/18 13:36	09/01/18 04:37	1
beta-BHC	ND		1.9	0.34	ug/Kg		08/28/18 13:36	09/01/18 04:37	1
Chlordane (technical)	ND		38	3.0	ug/Kg		08/28/18 13:36	09/01/18 04:37	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/28/18 13:36	09/01/18 04:37	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/28/18 13:36	09/01/18 04:37	1
Dieldrin	ND		1.9	0.56	ug/Kg		08/28/18 13:36	09/01/18 04:37	1
Endosulfan I	ND		1.9	0.30	ug/Kg		08/28/18 13:36	09/01/18 04:37	1
Endosulfan II	ND		1.9	0.46	ug/Kg		08/28/18 13:36	09/01/18 04:37	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/28/18 13:36	09/01/18 04:37	1
Endrin	ND		1.9	0.44	ug/Kg		08/28/18 13:36	09/01/18 04:37	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/28/18 13:36	09/01/18 04:37	1
Endrin ketone	ND		1.9	0.31	ug/Kg		08/28/18 13:36	09/01/18 04:37	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/28/18 13:36	09/01/18 04:37	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/28/18 13:36	09/01/18 04:37	1
Heptachlor epoxide	ND		1.9	0.33	ug/Kg		08/28/18 13:36	09/01/18 04:37	1
Methoxychlor	ND		1.9	0.64	ug/Kg		08/28/18 13:36	09/01/18 04:37	1
Toxaphene	ND		38	6.5	ug/Kg		08/28/18 13:36	09/01/18 04:37	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/28/18 13:36	09/01/18 04:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*98*		*21 - 136*	*08/28/18 13:36*	*09/01/18 04:37*	*1*
Tetrachloro-m-xylene	*77*		*21 - 145*	*08/28/18 13:36*	*09/01/18 04:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		49	21	ug/Kg		08/29/18 14:50	08/31/18 08:15	1
Aroclor-1221	ND		49	23	ug/Kg		08/29/18 14:50	08/31/18 08:15	1
Aroclor-1232	ND		49	22	ug/Kg		08/29/18 14:50	08/31/18 08:15	1
Aroclor-1242	ND		49	19	ug/Kg		08/29/18 14:50	08/31/18 08:15	1
Aroclor-1248	ND		49	23	ug/Kg		08/29/18 14:50	08/31/18 08:15	1
Aroclor-1254	ND		49	22	ug/Kg		08/29/18 14:50	08/31/18 08:15	1
Aroclor-1260	ND		49	21	ug/Kg		08/29/18 14:50	08/31/18 08:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*70*		*14 - 128*	*08/29/18 14:50*	*08/31/18 08:15*	*1*
DCB Decachlorobiphenyl	*65*		*10 - 132*	*08/29/18 14:50*	*08/31/18 08:15*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.60	J	1.5	0.25	mg/Kg		08/28/18 12:45	08/31/18 00:29	4

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

TestAmerica Job ID: 720-88237-1

Client Sample ID: DG-A7S-3.5-4

Lab Sample ID: 720-88237-6

Date Collected: 08/23/18 15:00
Matrix: Solid
Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	14		3.0	0.25	mg/Kg		08/28/18 12:45	08/31/18 00:29	4
Barium	62		1.5	0.21	mg/Kg		08/28/18 12:45	08/31/18 00:29	4
Beryllium	0.16	J	0.30	0.096	mg/Kg		08/28/18 12:45	08/31/18 12:04	4
Cadmium	ND		0.37	0.037	mg/Kg		08/28/18 12:45	08/31/18 00:29	4
Chromium	67	B	1.5	0.16	mg/Kg		08/28/18 12:45	08/31/18 12:04	4
Cobalt	9.8		0.59	0.059	mg/Kg		08/28/18 12:45	08/31/18 00:29	4
Copper	20		4.4	2.1	mg/Kg		08/28/18 12:45	08/31/18 12:04	4
Lead	22		1.5	0.31	mg/Kg		08/28/18 12:45	08/31/18 00:29	4
Molybdenum	0.57	J	1.5	0.19	mg/Kg		08/28/18 12:45	08/31/18 00:29	4
Nickel	80		1.5	0.15	mg/Kg		08/28/18 12:45	08/31/18 00:29	4
Selenium	1.1	J	3.0	0.44	mg/Kg		08/28/18 12:45	08/31/18 00:29	4
Silver	ND		0.74	0.15	mg/Kg		08/28/18 12:45	08/31/18 12:04	4
Thallium	ND		1.5	0.43	mg/Kg		08/28/18 12:45	08/31/18 00:29	4
Vanadium	41		1.5	0.20	mg/Kg		08/28/18 12:45	08/31/18 12:04	4
Zinc	37		4.4	1.9	mg/Kg		08/28/18 12:45	08/31/18 00:29	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.076		0.015	0.0021	mg/Kg		08/29/18 15:39	08/30/18 18:39	1

Client Sample Results

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

TestAmerica Job ID: 720-88237-1

Client Sample ID: DG-A7S-10-10.5

Date Collected: 08/23/18 15:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88237-7

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.0	0.95	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
Acetone	**33**	**J**	40	30	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
Benzene	ND		4.0	0.52	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
Dichlorobromomethane	ND		4.0	0.57	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
Bromobenzene	ND	*	4.0	0.63	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
Chlorobromomethane	ND		16	0.57	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
Bromoform	ND		4.0	1.6	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
Bromomethane	ND		7.9	0.63	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
2-Butanone (MEK)	ND		40	17	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
n-Butylbenzene	ND	*	4.0	0.79	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
sec-Butylbenzene	ND	*	4.0	0.57	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
tert-Butylbenzene	ND	*	4.0	0.58	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
Carbon disulfide	**3.0**	**J ***	4.0	1.6	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
Carbon tetrachloride	ND		4.0	0.49	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
Chlorobenzene	ND		4.0	0.55	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
Chloroethane	ND		7.9	0.44	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
Chloroform	ND		4.0	0.52	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
Chloromethane	ND		7.9	0.63	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
2-Chlorotoluene	ND	*	4.0	0.52	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
4-Chlorotoluene	ND	*	4.0	0.54	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
Chlorodibromomethane	ND		4.0	0.56	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
1,2-Dichlorobenzene	ND	*	4.0	0.54	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
1,3-Dichlorobenzene	ND	*	4.0	0.57	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
1,4-Dichlorobenzene	ND	*	4.0	0.56	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
1,3-Dichloropropane	ND		4.0	0.58	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
1,1-Dichloropropene	ND		4.0	0.55	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
1,2-Dibromo-3-Chloropropane	ND	*	7.9	1.4	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
Ethylene Dibromide	ND		4.0	1.1	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
Dibromomethane	ND		7.9	0.68	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
Dichlorodifluoromethane	ND		7.9	0.63	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
1,1-Dichloroethane	ND		4.0	0.54	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
1,2-Dichloroethane	ND		4.0	0.60	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
1,1-Dichloroethene	ND	*	4.0	0.49	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
cis-1,2-Dichloroethene	**18**		4.0	0.54	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
trans-1,2-Dichloroethene	**1.9**	**J**	4.0	0.60	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
1,2-Dichloropropane	ND		4.0	0.50	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
cis-1,3-Dichloropropene	ND		4.0	0.55	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
trans-1,3-Dichloropropene	ND		4.0	0.53	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
Ethylbenzene	ND		4.0	0.60	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
Hexachlorobutadiene	ND	*	4.0	0.71	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
2-Hexanone	ND		40	7.9	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
Isopropylbenzene	ND		4.0	0.54	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
4-Isopropyltoluene	ND	*	4.0	2.0	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
Methylene Chloride	ND		7.9	4.4	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
4-Methyl-2-pentanone (MIBK)	ND		40	7.9	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
Naphthalene	ND	*	7.9	1.2	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
N-Propylbenzene	ND	*	4.0	0.52	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
Styrene	ND		4.0	0.50	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
1,1,1,2-Tetrachloroethane	ND		4.0	0.60	ug/Kg		08/23/18 20:47	08/29/18 02:24	1

Client Sample ID: DG-A7S-10-10.5

Lab Sample ID: 720-88237-7

Date Collected: 08/23/18 15:00

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	4.0	0.60	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
Tetrachloroethene	ND		4.0	0.53	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
Toluene	ND		4.0	0.56	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
1,2,3-Trichlorobenzene	ND	*	4.0	0.59	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
1,2,4-Trichlorobenzene	ND	*	4.0	0.56	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
1,1,1-Trichloroethane	ND		4.0	0.48	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
1,1,2-Trichloroethane	ND		4.0	0.56	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
Trichloroethene	ND		4.0	0.50	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
Trichlorofluoromethane	ND		4.0	0.44	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
1,2,3-Trichloropropane	ND	*	4.0	0.61	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.7	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
1,2,4-Trimethylbenzene	ND	*	4.0	1.3	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
1,3,5-Trimethylbenzene	ND	*	4.0	0.52	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
Vinyl acetate	ND		16	4.0	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
Vinyl chloride	**1.1**	**J**	4.0	0.58	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
Xylenes, Total	ND		4.0	0.97	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
2,2-Dichloropropane	ND		4.0	1.6	ug/Kg		08/23/18 20:47	08/29/18 02:24	1
Gasoline Range Organics (GRO) -C4-C12	ND		200	79	ug/Kg		08/23/18 20:47	08/29/18 02:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*78*		*45 - 131*	*08/23/18 20:47*	*08/29/18 02:24*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*60 - 140*	*08/23/18 20:47*	*08/29/18 02:24*	*1*
Toluene-d8 (Surr)	*97*		*58 - 140*	*08/23/18 20:47*	*08/29/18 02:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.8	4.9	ug/Kg		08/28/18 10:30	08/31/18 20:50	1
Acenaphthene	ND		4.9	2.7	ug/Kg		08/28/18 10:30	08/31/18 20:50	1
Acenaphthylene	ND		4.9	2.4	ug/Kg		08/28/18 10:30	08/31/18 20:50	1
Anthracene	ND		4.9	2.0	ug/Kg		08/28/18 10:30	08/31/18 20:50	1
Benzo[a]anthracene	ND		4.9	1.5	ug/Kg		08/28/18 10:30	08/31/18 20:50	1
Benzo[a]pyrene	**2.2**	**J**	4.9	1.9	ug/Kg		08/28/18 10:30	08/31/18 20:50	1
Benzo[b]fluoranthene	**15**		4.9	2.1	ug/Kg		08/28/18 10:30	08/31/18 20:50	1
Benzo[g,h,i]perylene	ND		4.9	4.2	ug/Kg		08/28/18 10:30	08/31/18 20:50	1
Benzo[k]fluoranthene	**4.1**	**J**	4.9	2.1	ug/Kg		08/28/18 10:30	08/31/18 20:50	1
Chrysene	**8.0**		4.9	1.4	ug/Kg		08/28/18 10:30	08/31/18 20:50	1
Dibenz(a,h)anthracene	ND		4.9	3.4	ug/Kg		08/28/18 10:30	08/31/18 20:50	1
Fluoranthene	**11**		4.9	1.4	ug/Kg		08/28/18 10:30	08/31/18 20:50	1
Fluorene	ND		4.9	2.2	ug/Kg		08/28/18 10:30	08/31/18 20:50	1
Indeno[1,2,3-cd]pyrene	ND		4.9	4.1	ug/Kg		08/28/18 10:30	08/31/18 20:50	1
Naphthalene	ND		4.9	3.4	ug/Kg		08/28/18 10:30	08/31/18 20:50	1
Phenanthrene	**2.9**	**J**	4.9	1.8	ug/Kg		08/28/18 10:30	08/31/18 20:50	1
Pyrene	**6.1**		4.9	1.7	ug/Kg		08/28/18 10:30	08/31/18 20:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*73*		*33 - 120*	*08/28/18 10:30*	*08/31/18 20:50*	*1*
Terphenyl-d14	*94*		*35 - 146*	*08/28/18 10:30*	*08/31/18 20:50*	*1*

Client Sample Results

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

TestAmerica Job ID: 720-88237-1

Client Sample ID: DG-A7S-10-10.5

Date Collected: 08/23/18 15:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88237-7

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	33000		2000	740	ug/Kg		08/28/18 11:24	08/30/18 20:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*89*		*40 - 130*	*08/28/18 11:24*	*08/30/18 20:52*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.58	ug/Kg		08/28/18 13:36	09/01/18 04:54	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/28/18 13:36	09/01/18 04:54	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/28/18 13:36	09/01/18 04:54	1
Aldrin	ND		1.9	0.48	ug/Kg		08/28/18 13:36	09/01/18 04:54	1
alpha-BHC	ND		1.9	0.52	ug/Kg		08/28/18 13:36	09/01/18 04:54	1
beta-BHC	ND		1.9	0.34	ug/Kg		08/28/18 13:36	09/01/18 04:54	1
Chlordane (technical)	ND		38	3.0	ug/Kg		08/28/18 13:36	09/01/18 04:54	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/28/18 13:36	09/01/18 04:54	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/28/18 13:36	09/01/18 04:54	1
Dieldrin	ND		1.9	0.56	ug/Kg		08/28/18 13:36	09/01/18 04:54	1
Endosulfan I	ND		1.9	0.30	ug/Kg		08/28/18 13:36	09/01/18 04:54	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/28/18 13:36	09/01/18 04:54	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/28/18 13:36	09/01/18 04:54	1
Endrin	ND		1.9	0.44	ug/Kg		08/28/18 13:36	09/01/18 04:54	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/28/18 13:36	09/01/18 04:54	1
Endrin ketone	ND		1.9	0.31	ug/Kg		08/28/18 13:36	09/01/18 04:54	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/28/18 13:36	09/01/18 04:54	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/28/18 13:36	09/01/18 04:54	1
Heptachlor epoxide	ND		1.9	0.33	ug/Kg		08/28/18 13:36	09/01/18 04:54	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/28/18 13:36	09/01/18 04:54	1
Toxaphene	ND		38	6.5	ug/Kg		08/28/18 13:36	09/01/18 04:54	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/28/18 13:36	09/01/18 04:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*79*		*21 - 136*	*08/28/18 13:36*	*09/01/18 04:54*	*1*
Tetrachloro-m-xylene	*68*		*21 - 145*	*08/28/18 13:36*	*09/01/18 04:54*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		52	23	ug/Kg		08/29/18 14:50	08/31/18 08:32	1
Aroclor-1221	ND		52	25	ug/Kg		08/29/18 14:50	08/31/18 08:32	1
Aroclor-1232	ND		52	24	ug/Kg		08/29/18 14:50	08/31/18 08:32	1
Aroclor-1242	ND		52	20	ug/Kg		08/29/18 14:50	08/31/18 08:32	1
Aroclor-1248	ND		52	25	ug/Kg		08/29/18 14:50	08/31/18 08:32	1
Aroclor-1254	ND		52	24	ug/Kg		08/29/18 14:50	08/31/18 08:32	1
Aroclor-1260	ND		52	23	ug/Kg		08/29/18 14:50	08/31/18 08:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*48*		*14 - 128*	*08/29/18 14:50*	*08/31/18 08:32*	*1*
DCB Decachlorobiphenyl	*43*		*10 - 132*	*08/29/18 14:50*	*08/31/18 08:32*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.13	J	0.46	0.076	mg/Kg		08/28/18 12:45	08/31/18 00:34	1

Client Sample ID: DG-A7S-10-10.5

Lab Sample ID: 720-88237-7

Date Collected: 08/23/18 15:00

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.43	J	0.92	0.078	mg/Kg		08/28/18 12:45	08/31/18 00:34	1
Barium	24		0.46	0.065	mg/Kg		08/28/18 12:45	08/31/18 00:34	1
Beryllium	0.10		0.092	0.030	mg/Kg		08/28/18 12:45	08/31/18 12:09	1
Cadmium	ND		0.11	0.011	mg/Kg		08/28/18 12:45	08/31/18 00:34	1
Chromium	34	B	0.46	0.049	mg/Kg		08/28/18 12:45	08/31/18 12:09	1
Cobalt	2.3		0.18	0.018	mg/Kg		08/28/18 12:45	08/31/18 00:34	1
Copper	4.2		1.4	0.65	mg/Kg		08/28/18 12:45	08/31/18 12:09	1
Lead	2.1		0.46	0.096	mg/Kg		08/28/18 12:45	08/31/18 00:34	1
Molybdenum	0.51		0.46	0.059	mg/Kg		08/28/18 12:45	08/31/18 00:34	1
Nickel	12		0.46	0.047	mg/Kg		08/28/18 12:45	08/31/18 00:34	1
Selenium	0.68	J	0.92	0.14	mg/Kg		08/28/18 12:45	08/31/18 00:34	1
Silver	ND		0.23	0.046	mg/Kg		08/28/18 12:45	08/31/18 12:09	1
Thallium	ND		0.46	0.13	mg/Kg		08/28/18 12:45	08/31/18 00:34	1
Vanadium	24		0.46	0.062	mg/Kg		08/28/18 12:45	08/31/18 12:09	1
Zinc	13		1.4	0.58	mg/Kg		08/28/18 12:45	08/31/18 00:34	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.012	J	0.015	0.0022	mg/Kg		08/29/18 15:39	08/30/18 18:41	1

Client Sample Results

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

TestAmerica Job ID: 720-88237-1

Client Sample ID: DG-B7S-0.5-1

Date Collected: 08/23/18 15:35
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88237-8

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.42	J	1.6	0.26	mg/Kg		08/28/18 12:45	08/31/18 00:39	4
Arsenic	4.4		3.1	0.27	mg/Kg		08/28/18 12:45	08/31/18 00:39	4
Barium	68		1.6	0.22	mg/Kg		08/28/18 12:45	08/31/18 00:39	4
Beryllium	0.24	J	0.31	0.10	mg/Kg		08/28/18 12:45	08/31/18 12:14	4
Cadmium	0.22	J	0.39	0.039	mg/Kg		08/28/18 12:45	08/31/18 00:39	4
Chromium	32	B	1.6	0.17	mg/Kg		08/28/18 12:45	08/31/18 00:39	4
Cobalt	8.9		0.63	0.063	mg/Kg		08/28/18 12:45	08/31/18 00:39	4
Copper	99		4.7	2.2	mg/Kg		08/28/18 12:45	08/31/18 00:39	4
Lead	62		1.6	0.33	mg/Kg		08/28/18 12:45	08/31/18 00:39	4
Molybdenum	2.1		1.6	0.20	mg/Kg		08/28/18 12:45	08/31/18 00:39	4
Nickel	23		1.6	0.16	mg/Kg		08/28/18 12:45	08/31/18 00:39	4
Selenium	0.51	J	3.1	0.47	mg/Kg		08/28/18 12:45	08/31/18 00:39	4
Silver	ND		0.79	0.16	mg/Kg		08/28/18 12:45	08/31/18 00:39	4
Thallium	ND		1.6	0.46	mg/Kg		08/28/18 12:45	08/31/18 00:39	4
Vanadium	69		1.6	0.21	mg/Kg		08/28/18 12:45	08/31/18 00:39	4
Zinc	77		4.7	2.0	mg/Kg		08/28/18 12:45	08/31/18 00:39	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.11		0.016	0.0024	mg/Kg		08/29/18 15:39	08/30/18 18:43	1

Client Sample Results

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

TestAmerica Job ID: 720-88237-1

Client Sample ID: DG-B7S-3.5-4

Date Collected: 08/23/18 15:35
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88237-9

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.4	J F1	1.9	0.31	mg/Kg		08/29/18 09:32	08/30/18 10:11	4
Arsenic	4.3		3.8	0.32	mg/Kg		08/29/18 09:32	08/30/18 10:11	4
Barium	90		1.9	0.27	mg/Kg		08/29/18 09:32	08/30/18 10:11	4
Beryllium	ND	F1	0.38	0.12	mg/Kg		08/29/18 09:32	08/30/18 10:11	4
Cadmium	0.20	J	0.47	0.047	mg/Kg		08/29/18 09:32	08/30/18 10:11	4
Chromium	45	F1	1.9	0.20	mg/Kg		08/29/18 09:32	08/30/18 10:11	4
Cobalt	9.1		0.75	0.075	mg/Kg		08/29/18 09:32	08/30/18 10:11	4
Copper	31	F1	5.7	2.7	mg/Kg		08/29/18 09:32	08/30/18 10:11	4
Lead	100	F1 F2	1.9	0.40	mg/Kg		08/29/18 09:32	08/30/18 10:11	4
Molybdenum	0.36	J	1.9	0.24	mg/Kg		08/29/18 09:32	08/30/18 10:11	4
Nickel	60	F1	1.9	0.19	mg/Kg		08/29/18 09:32	08/30/18 10:11	4
Selenium	ND		3.8	0.57	mg/Kg		08/29/18 09:32	08/30/18 10:11	4
Silver	ND	F1	0.94	0.19	mg/Kg		08/29/18 09:32	08/30/18 10:11	4
Thallium	ND		1.9	0.55	mg/Kg		08/29/18 09:32	08/30/18 10:11	4
Vanadium	26	F1	1.9	0.26	mg/Kg		08/29/18 09:32	08/30/18 10:11	4
Zinc	86	F1	5.7	2.4	mg/Kg		08/29/18 09:32	08/30/18 10:11	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12		0.016	0.0023	mg/Kg		08/29/18 15:39	08/30/18 18:20	1

Client Sample Results

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

TestAmerica Job ID: 720-88237-1

Client Sample ID: DG-B7S-14.5-15

Lab Sample ID: 720-88237-10

Date Collected: 08/23/18 15:35
Date Received: 08/24/18 15:00

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND	*	3.5	0.84	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
Acetone	**52**	*	35	27	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
Benzene	ND	*	3.5	0.46	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
Dichlorobromomethane	ND	*	3.5	0.51	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
Bromobenzene	ND	*	3.5	0.55	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
Chlorobromomethane	ND	*	14	0.51	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
Bromoform	ND	*	3.5	1.4	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
Bromomethane	ND	*	7.0	0.55	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
2-Butanone (MEK)	ND	*	35	15	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
n-Butylbenzene	ND	*	3.5	0.70	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
sec-Butylbenzene	ND	*	3.5	0.51	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
tert-Butylbenzene	ND	*	3.5	0.51	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
Carbon disulfide	ND	*	3.5	1.4	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
Carbon tetrachloride	ND	*	3.5	0.44	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
Chlorobenzene	ND	*	3.5	0.48	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
Chloroethane	ND	*	7.0	0.39	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
Chloroform	ND	*	3.5	0.46	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
Chloromethane	ND	*	7.0	0.55	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
2-Chlorotoluene	ND	*	3.5	0.46	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
4-Chlorotoluene	ND	*	3.5	0.48	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
Chlorodibromomethane	ND	*	3.5	0.50	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
1,2-Dichlorobenzene	ND	*	3.5	0.48	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
1,3-Dichlorobenzene	ND	*	3.5	0.51	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
1,4-Dichlorobenzene	ND	*	3.5	0.50	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
1,3-Dichloropropane	ND	*	3.5	0.51	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
1,1-Dichloropropene	ND	*	3.5	0.48	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
1,2-Dibromo-3-Chloropropane	ND	*	7.0	1.2	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
Ethylene Dibromide	ND	*	3.5	1.0	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
Dibromomethane	ND	*	7.0	0.60	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
Dichlorodifluoromethane	ND	*	7.0	0.55	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
1,1-Dichloroethane	ND	*	3.5	0.48	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
1,2-Dichloroethane	ND	*	3.5	0.53	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
1,1-Dichloroethene	ND	*	3.5	0.44	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
cis-1,2-Dichloroethene	ND	*	3.5	0.48	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
trans-1,2-Dichloroethene	ND	*	3.5	0.53	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
1,2-Dichloropropane	ND	*	3.5	0.44	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
cis-1,3-Dichloropropene	ND	*	3.5	0.48	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
trans-1,3-Dichloropropene	ND	*	3.5	0.47	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
Ethylbenzene	ND	*	3.5	0.53	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
Hexachlorobutadiene	ND	*	3.5	0.63	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
2-Hexanone	ND	*	35	7.0	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
Isopropylbenzene	ND	*	3.5	0.48	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
4-Isopropyltoluene	ND	*	3.5	1.8	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
Methylene Chloride	ND	*	7.0	3.9	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
4-Methyl-2-pentanone (MIBK)	ND	*	35	7.0	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
Naphthalene	ND	*	7.0	1.1	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
N-Propylbenzene	ND	*	3.5	0.46	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
Styrene	ND	*	3.5	0.44	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
1,1,1,2-Tetrachloroethane	ND	*	3.5	0.53	ug/Kg		08/25/18 03:05	08/29/18 15:25	1

Client Sample ID: DG-B7S-14.5-15

Lab Sample ID: 720-88237-10

Date Collected: 08/23/18 15:35

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	3.5	0.53	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
Tetrachloroethene	ND	*	3.5	0.47	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
Toluene	ND	*	3.5	0.50	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
1,2,3-Trichlorobenzene	ND	*	3.5	0.52	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
1,2,4-Trichlorobenzene	ND	*	3.5	0.50	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
1,1,1-Trichloroethane	ND	*	3.5	0.43	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
1,1,2-Trichloroethane	ND	*	3.5	0.49	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
Trichloroethene	ND	*	3.5	0.44	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
Trichlorofluoromethane	ND	*	3.5	0.39	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
1,2,3-Trichloropropane	ND	*	3.5	0.54	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	3.5	1.5	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
1,2,4-Trimethylbenzene	ND	*	3.5	1.2	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
1,3,5-Trimethylbenzene	ND	*	3.5	0.46	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
Vinyl acetate	ND	*	14	3.5	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
Vinyl chloride	ND	*	3.5	0.51	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
Xylenes, Total	ND		3.5	0.86	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
2,2-Dichloropropane	ND	*	3.5	1.4	ug/Kg		08/25/18 03:05	08/29/18 15:25	1
Gasoline Range Organics (GRO) -C4-C12	ND	*	180	70	ug/Kg		08/25/18 03:05	08/29/18 15:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*	*	*45 - 131*	*08/25/18 03:05*	*08/29/18 15:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*	*	*60 - 140*	*08/25/18 03:05*	*08/29/18 15:25*	*1*
Toluene-d8 (Surr)	*91*	*	*58 - 140*	*08/25/18 03:05*	*08/29/18 15:25*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.4	4.7	ug/Kg		08/28/18 10:30	09/02/18 19:38	1
Acenaphthene	ND		4.7	2.6	ug/Kg		08/28/18 10:30	09/02/18 19:38	1
Acenaphthylene	ND		4.7	2.3	ug/Kg		08/28/18 10:30	09/02/18 19:38	1
Anthracene	**2.1**	**J**	4.7	1.9	ug/Kg		08/28/18 10:30	09/02/18 19:38	1
Benzo[a]anthracene	ND		4.7	1.4	ug/Kg		08/28/18 10:30	09/02/18 19:38	1
Benzo[a]pyrene	**1.9**	**J**	4.7	1.8	ug/Kg		08/28/18 10:30	09/02/18 19:38	1
Benzo[b]fluoranthene	**12**		4.7	2.0	ug/Kg		08/28/18 10:30	09/02/18 19:38	1
Benzo[g,h,i]perylene	ND		4.7	4.1	ug/Kg		08/28/18 10:30	09/02/18 19:38	1
Benzo[k]fluoranthene	**2.8**	**J**	4.7	2.0	ug/Kg		08/28/18 10:30	09/02/18 19:38	1
Chrysene	**5.6**		4.7	1.3	ug/Kg		08/28/18 10:30	09/02/18 19:38	1
Dibenz(a,h)anthracene	ND		4.7	3.3	ug/Kg		08/28/18 10:30	09/02/18 19:38	1
Fluoranthene	**20**		4.7	1.3	ug/Kg		08/28/18 10:30	09/02/18 19:38	1
Fluorene	**3.0**	**J**	4.7	2.1	ug/Kg		08/28/18 10:30	09/02/18 19:38	1
Indeno[1,2,3-cd]pyrene	ND		4.7	4.0	ug/Kg		08/28/18 10:30	09/02/18 19:38	1
Naphthalene	ND		4.7	3.3	ug/Kg		08/28/18 10:30	09/02/18 19:38	1
Phenanthrene	**9.9**		4.7	1.7	ug/Kg		08/28/18 10:30	09/02/18 19:38	1
Pyrene	**24**		4.7	1.6	ug/Kg		08/28/18 10:30	09/02/18 19:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*67*		*33 - 120*	*08/28/18 10:30*	*09/02/18 19:38*	*1*
Terphenyl-d14	*82*		*35 - 146*	*08/28/18 10:30*	*09/02/18 19:38*	*1*

Client Sample Results

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

TestAmerica Job ID: 720-88237-1

Client Sample ID: DG-B7S-14.5-15

Date Collected: 08/23/18 15:35
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88237-10

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	20000		1900	730	ug/Kg		08/28/18 11:24	08/30/18 22:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*96*		*40 - 130*	*08/28/18 11:24*	*08/30/18 22:05*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		09/04/18 16:10	09/05/18 07:40	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		09/04/18 16:10	09/05/18 07:40	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		09/04/18 16:10	09/05/18 07:40	1
Aldrin	ND		1.9	0.48	ug/Kg		09/04/18 16:10	09/05/18 07:40	1
alpha-BHC	ND		1.9	0.53	ug/Kg		09/04/18 16:10	09/05/18 07:40	1
beta-BHC	ND		1.9	0.35	ug/Kg		09/04/18 16:10	09/05/18 07:40	1
Chlordane (technical)	ND		38	3.1	ug/Kg		09/04/18 16:10	09/05/18 07:40	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		09/04/18 16:10	09/05/18 07:40	1
delta-BHC	ND		1.9	0.42	ug/Kg		09/04/18 16:10	09/05/18 07:40	1
Dieldrin	ND		1.9	0.57	ug/Kg		09/04/18 16:10	09/05/18 07:40	1
Endosulfan I	ND		1.9	0.31	ug/Kg		09/04/18 16:10	09/05/18 07:40	1
Endosulfan II	ND		1.9	0.47	ug/Kg		09/04/18 16:10	09/05/18 07:40	1
Endosulfan sulfate	ND		1.9	0.37	ug/Kg		09/04/18 16:10	09/05/18 07:40	1
Endrin	ND		1.9	0.44	ug/Kg		09/04/18 16:10	09/05/18 07:40	1
Endrin aldehyde	ND		1.9	0.61	ug/Kg		09/04/18 16:10	09/05/18 07:40	1
Endrin ketone	ND		1.9	0.32	ug/Kg		09/04/18 16:10	09/05/18 07:40	1
gamma-BHC (Lindane)	ND		1.9	0.61	ug/Kg		09/04/18 16:10	09/05/18 07:40	1
Heptachlor	ND		1.9	0.44	ug/Kg		09/04/18 16:10	09/05/18 07:40	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		09/04/18 16:10	09/05/18 07:40	1
Methoxychlor	ND		1.9	0.65	ug/Kg		09/04/18 16:10	09/05/18 07:40	1
Toxaphene	ND		38	6.6	ug/Kg		09/04/18 16:10	09/05/18 07:40	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		09/04/18 16:10	09/05/18 07:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*100*		*21 - 136*	*09/04/18 16:10*	*09/05/18 07:40*	*1*
Tetrachloro-m-xylene	*68*		*21 - 145*	*09/04/18 16:10*	*09/05/18 07:40*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		49	22	ug/Kg		08/29/18 14:50	08/31/18 09:10	1
Aroclor-1221	ND		49	24	ug/Kg		08/29/18 14:50	08/31/18 09:10	1
Aroclor-1232	ND		49	23	ug/Kg		08/29/18 14:50	08/31/18 09:10	1
Aroclor-1242	ND		49	19	ug/Kg		08/29/18 14:50	08/31/18 09:10	1
Aroclor-1248	ND		49	24	ug/Kg		08/29/18 14:50	08/31/18 09:10	1
Aroclor-1254	ND		49	23	ug/Kg		08/29/18 14:50	08/31/18 09:10	1
Aroclor-1260	ND		49	22	ug/Kg		08/29/18 14:50	08/31/18 09:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*96*		*14 - 128*	*08/29/18 14:50*	*08/31/18 09:10*	*1*
DCB Decachlorobiphenyl	*110*		*10 - 132*	*08/29/18 14:50*	*08/31/18 09:10*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.9	0.32	mg/Kg		08/29/18 09:32	08/30/18 10:15	4

Client Sample Results

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

TestAmerica Job ID: 720-88237-1

Client Sample ID: DG-B7S-14.5-15

Lab Sample ID: 720-88237-10

Date Collected: 08/23/18 15:35

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.61**	**J**	3.9	0.33	mg/Kg		08/29/18 09:32	08/30/18 10:15	4
Barium	**34**		1.9	0.28	mg/Kg		08/29/18 09:32	08/30/18 10:15	4
Beryllium	ND		0.39	0.13	mg/Kg		08/29/18 09:32	08/30/18 10:15	4
Cadmium	ND		0.49	0.048	mg/Kg		08/29/18 09:32	08/30/18 10:15	4
Chromium	**29**		1.9	0.21	mg/Kg		08/29/18 09:32	08/30/18 10:15	4
Cobalt	**0.81**		0.78	0.078	mg/Kg		08/29/18 09:32	08/30/18 10:15	4
Copper	ND		5.8	2.8	mg/Kg		08/29/18 09:32	08/30/18 10:15	4
Lead	**1.5**	**J**	1.9	0.41	mg/Kg		08/29/18 09:32	08/30/18 10:15	4
Molybdenum	ND		1.9	0.25	mg/Kg		08/29/18 09:32	08/30/18 10:15	4
Nickel	**4.6**		1.9	0.20	mg/Kg		08/29/18 09:32	08/30/18 10:15	4
Selenium	ND		3.9	0.58	mg/Kg		08/29/18 09:32	08/30/18 10:15	4
Silver	ND		0.97	0.20	mg/Kg		08/29/18 09:32	08/30/18 10:15	4
Thallium	ND		1.9	0.56	mg/Kg		08/29/18 09:32	08/30/18 10:15	4
Vanadium	**23**		1.9	0.26	mg/Kg		08/29/18 09:32	08/30/18 10:15	4
Zinc	**3.2**	**J**	5.8	2.5	mg/Kg		08/29/18 09:32	08/30/18 10:15	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.018**		0.015	0.0022	mg/Kg		08/29/18 15:39	08/30/18 18:45	1

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88237-1
SDG No.:
Client Sample ID: DG-A7S-0-5-1
Lab Sample ID: 720-88237-5
Matrix: Solid
Lab File ID: FID1000043.D
Analysis Method: 8015B
Date Collected: 08/23/2018 15:00
Extraction Method: 3546
Date Extracted: 08/28/2018 11:24
Sample wt/vol: 15.55(g)
Date Analyzed: 08/31/2018 05:47
Con. Extract Vol.: 2(mL)
Dilution Factor: 10
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250568
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	280000		19000	7200

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	0	D X	40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\FID1000043.D
Lims ID: 720-88237-E-5-B
Client ID: DG-A7S--0-5-1
Sample Type: Client
Inject. Date: 31-Aug-2018 05:47:50 ALS Bottle#: 43 Worklist Smp#: 43
Injection Vol: 1.0 ul Dil. Factor: 10.0000
Sample Info: 720-0053573-043
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\DRO6_A.m
Limit Group: DRO
Last Update: 31-Aug-2018 11:26:27 Calib Date: 30-Aug-2018 10:14:10
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 11:26:27

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane	1.298	1.231	0.067	14443	NC	
23 n-Decane	2.097	2.118	-0.021	8647	NC	
A 21 Stoddard Solvent	2.735	(1.231-4.240)		4531565	2.54	M
A 1 C9-C13	2.735	(1.231-4.240)		4531565	2.55	M
A 57 C10-C12	2.866	(2.118-3.613)		2633467	1.71	
24 Dodecane	3.673	3.613	0.060	252868	NC	
A 3 C9 - C17	3.780	(1.231-6.330)		10920081	5.60	M
A 60 C10-C16	3.984	(2.118-5.849)		8874404	5.08	M
A 47 C9 - C18	4.006	(1.231-6.780)		13528935	8.38	M
A 25 C9-C19	4.220	(1.231-7.210)		18070955	9.21	M
A 15 Kerosene	4.220	(1.231-7.210)		18070955	11.2	M
26 C13	4.191	4.240	-0.049	216754	NC	M
$ 27 n-Decanoic Acid (Surr)		4.607			ND	U
A 59 C12-C16	4.731	(3.613-5.849)		6240937	4.05	M
A 62 C10-C20	4.871	(2.118-7.623)		27176534	17.6	M
A 28 C9-C24	5.172	(1.231-9.113)		98133815	63.6	M
A 29 C9-C25	5.341	(1.231-9.452)		98133815	63.6	M
A 54 C10-C23	5.440	(2.118-8.762)		58368610	37.8	M
A 4 C10-C24	5.616	(2.118-9.113)		97107702	63.0	M
A 16 C10-C25	5.785	(2.118-9.452)		97107702	63.0	M
45 Hexadecane	5.828	5.849	-0.021	346320	NC	M
A 14 C10-C26	5.948	(2.118-9.778)		97107702	63.0	M
A 67 C12-C22	6.005	(3.613-8.397)		55735143	36.1	M
A 12 Unknown Hydrocarbons	6.258	(2.118-10.399)		334549992	NC	M
A 5 Diesel	6.258	(2.118-10.399)		334549992	216.9	M
A 32 C10-C28	6.258	(2.118-10.399)		334549992	216.9	M
A 30 C13-C22	6.319	(4.240-8.397)		55079912	35.7	M
44 Heptadecane	6.372	6.330	0.042	1210635	NC	M
A 31 C12-C24	6.363	(3.613-9.113)		94474235	61.3	M
51 n-Octadecane	6.790	6.780	0.010	1154334	NC	M
A 52 Mineral oil	6.879	(1.231-12.528)		1967066959	1111.0	M
A 11 Bunker Range Organics (C9-	6.879	(1.231-12.528)		1967066959	NC	M

Report Date: 31-Aug-2018 11:26:29 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\FID1000043.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 9 Crude Oil Range Organics (	6.879	(1.231-12.528)		1967066959	NC	M
33 C19	7.214	7.210	0.004	2086528	NC	M
A 64 C13-C28	7.319	(4.240-10.399)		331261294	214.8	M
A 17 C10-C36	7.323	(2.118-12.528)		1966040846	1274.7	M
A 13 C9-C40	7.390	(1.231-13.549)		3157785624	2341.9	M
A 68 Crude Oil Range Organics (	7.390	(1.231-13.549)		3157785624	NC	M
A 58 C16-C24	7.481	(5.849-9.113)		88579618	57.4	M
61 icosane	7.618	7.623	-0.005	1617008	NC	M
A 6 C10-C40	7.834	(2.118-13.549)		3156759511	2342.7	M
$ 34 p-Terphenyl		8.114			ND	U
35 n-Docosane	8.312	8.397	-0.085	6309594	NC	M
A 18 C12-C40	8.581	(3.613-13.549)		3154126044	2347.2	M
36 Tricosane		8.762			ND	
A 66 C13-C40	8.894	(4.240-13.549)		3153470813	2349.3	M
37 n-Tetracosane		9.113			ND	
A 2 C16-C36 ORO	9.188	(5.849-12.528)		2049218407	1796.5	
38 C25		9.452			ND	
A 19 C16-C40	9.699	(5.849-13.549)		3148231427	2354.7	M
46 n-Hexacosane		9.778			ND	
A 20 C19-C36	9.869	(7.210-12.528)		2029434745	1526.9	
A 55 C23-C32	10.144	(8.762-11.526)		1049541365	1511.7	M
39 n-Octacosane		10.399			ND	
65 C29	10.732	10.694	0.038	56616917	NC	M
A 7 Motor Oil	10.820	(9.113-12.528)		1311457884	1472.7	
A 40 C24-C36	10.820	(9.113-12.528)		1836809190	2062.7	M
A 10 C22-C40	10.973	(8.397-13.549)		2102082060	1690.4	
A 49 C25-C36	10.990	(9.452-12.528)		1868933144	2087.8	M
A 41 C23-C40	11.156	(8.762-13.549)		3098390901	2424.1	M
A 8 C24-C40	11.331	(9.113-13.549)		3059651809	2513.3	M
56 Dotriacontane	11.532	11.526	0.006	67861990	NC	M
A 50 C28-C40	11.974	(10.399-13.549)		2822209519	2973.3	M
A 63 C29-C40	12.122	(10.694-13.549)		2582996929	2980.6	M
42 n-Hexatriacontane	12.477	12.528	-0.051	419898941	NC	M
43 C40		13.549			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

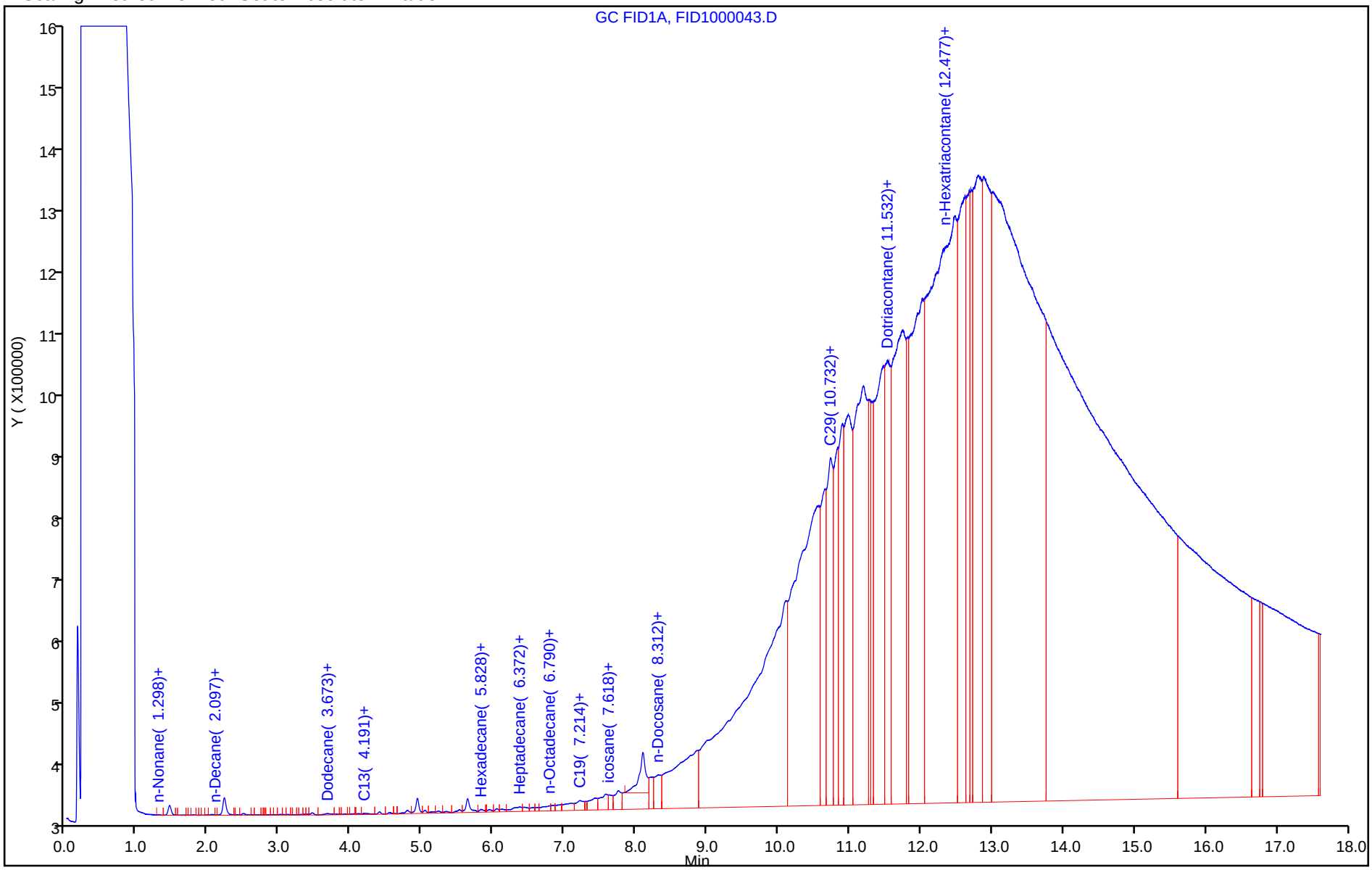
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 31-Aug-2018 11:26:29 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\FID1000043.D				
Injection Date:	31-Aug-2018 05:47:50	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88237-E-5-B	Lab Sample ID:	720-88237-5	Worklist Smp#:	43
Client ID:	DG-A7S--0-5-1				
Injection Vol:	1.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	43
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value

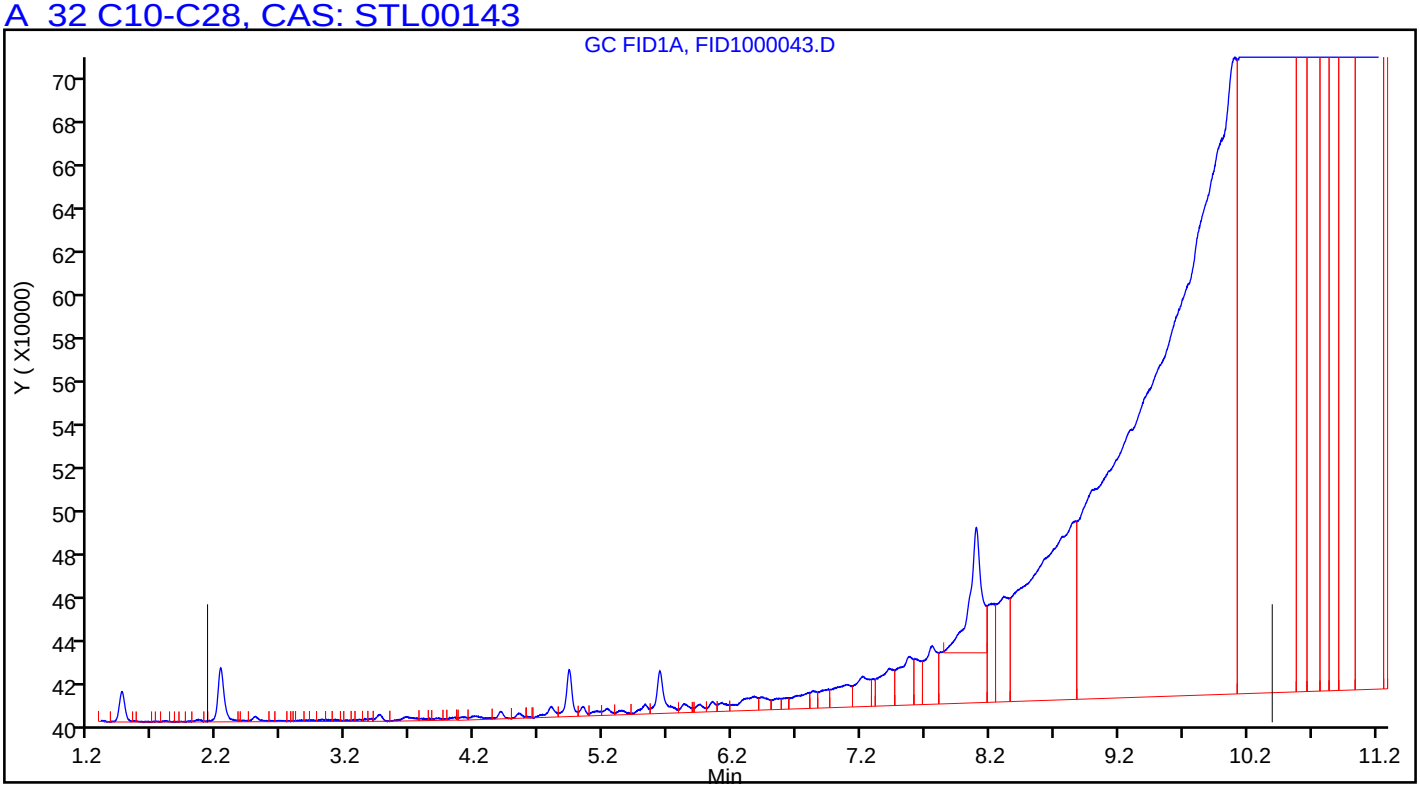


Report Date: 31-Aug-2018 11:26:39 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\FID1000043.D				
Injection Date:	31-Aug-2018 05:47:50	Instrument ID:	CHDRO6		
Lims ID:	720-88237-E-5-B	Lab Sample ID:	720-88237-5		
Client ID:	DG-A7S--0-5-1				
Operator ID:	DCH	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

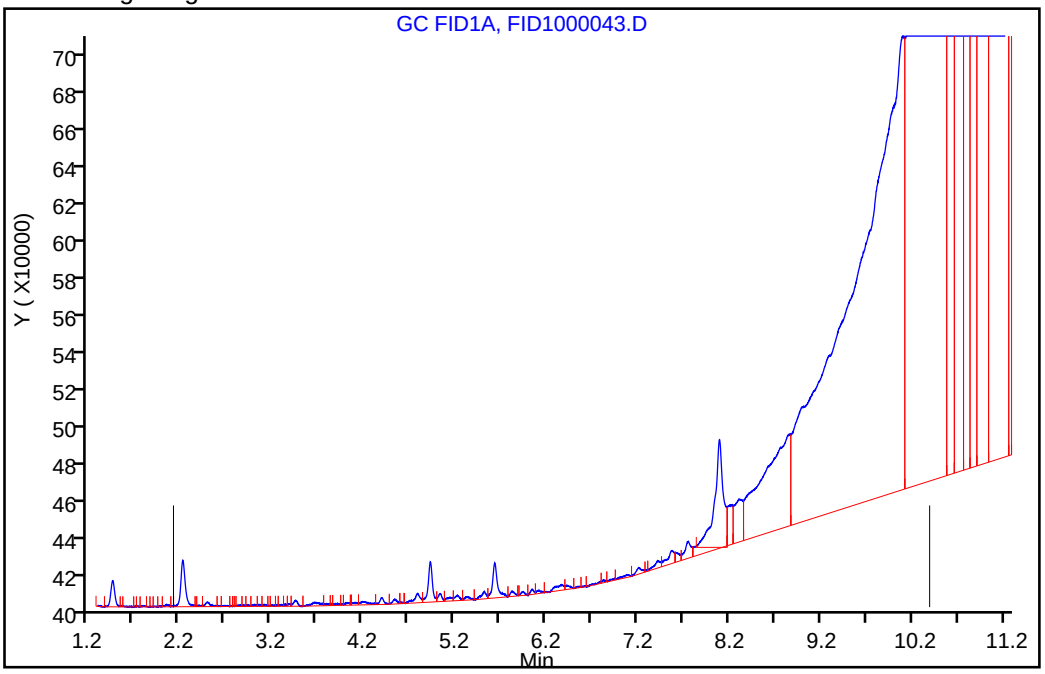
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\FID1000043.D				
Injection Date:	31-Aug-2018 05:47:50	Instrument ID:	CHDRO6		
Lims ID:	720-88237-E-5-B	Lab Sample ID:	720-88237-5		
Client ID:	DG-A7S--0-5-1				
Operator ID:	DCH	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.258, CAS: STL00143

Signal: 1

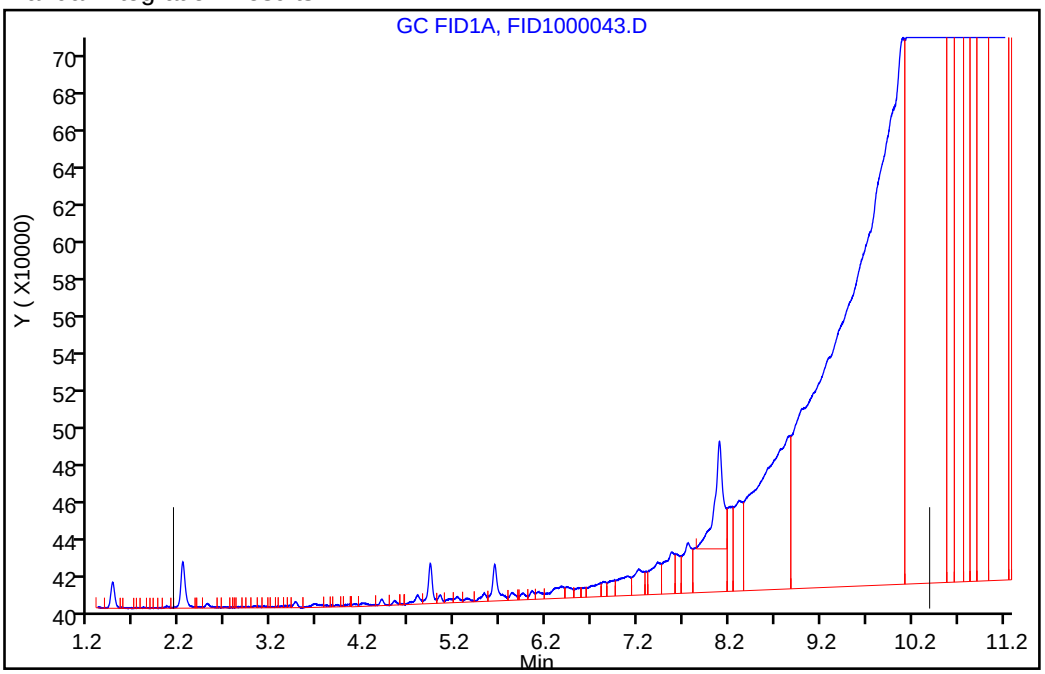
Processing Integration Results

RT: 6.26
Response: 214909363
Amount: 139.3336



Manual Integration Results

RT: 6.26
Response: 334549992
Amount: 216.9010



Reviewer: luj, 31-Aug-2018 11:25:57

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

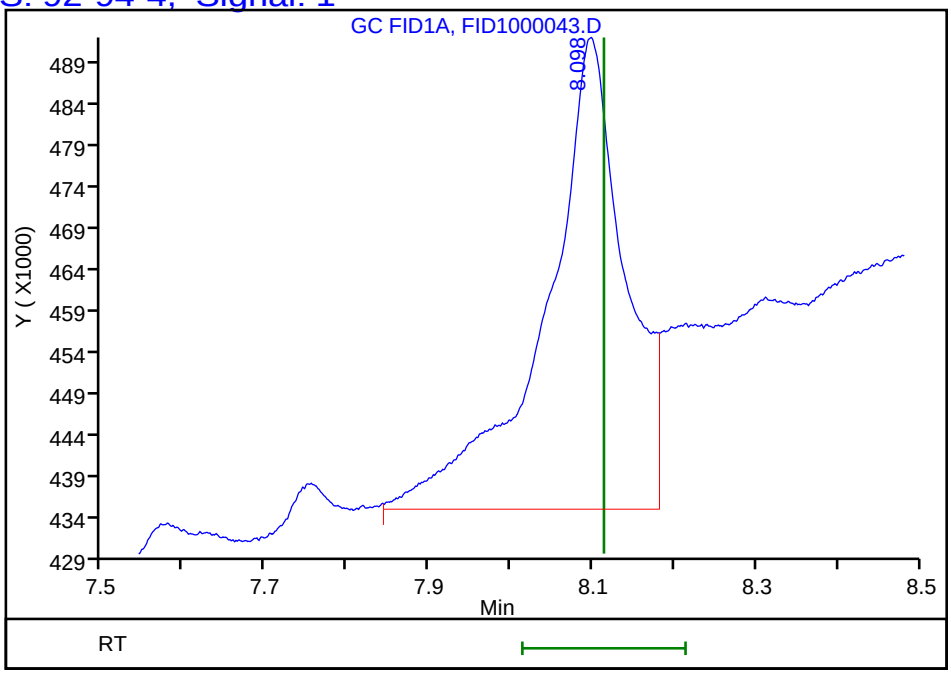
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\FID1000043.D				
Injection Date:	31-Aug-2018 05:47:50	Instrument ID:	CHDRO6		
Lims ID:	720-88237-E-5-B	Lab Sample ID:	720-88237-5		
Client ID:	DG-A7S--0-5-1				
Operator ID:	DCH	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4, Signal: 1

RT: 8.10
Response: 7677486
Amount: 3.997941



Reviewer: luj, 31-Aug-2018 11:26:27
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88237-1
SDG No.:
Client Sample ID: DG-A7S-3-5-4
Lab Sample ID: 720-88237-6
Matrix: Solid
Lab File ID: FID2000022.D
Analysis Method: 8015B
Date Collected: 08/23/2018 15:00
Extraction Method: 3546
Date Extracted: 08/28/2018 11:24
Sample wt/vol: 15.39(g)
Date Analyzed: 08/30/2018 21:16
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250569
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	5600		1900	730

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	114		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000022.D
Lims ID: 720-88237-D-6-B
Client ID: DG-A7S--3-5-4
Sample Type: Client
Inject. Date: 30-Aug-2018 21:16:53 ALS Bottle#: 72 Worklist Smp#: 22
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053574-022
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\DRO6_B.m
Limit Group: DRO
Last Update: 31-Aug-2018 13:51:43 Calib Date: 30-Aug-2018 10:14:10
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 13:51:43

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.310			ND	
23 n-Decane	2.162	2.172	-0.010	13119	NC	
A 1 C9-C13	2.778	(1.310-4.246)		1600324	0.7336	
A 21 Stoddard Solvent	2.778	(1.310-4.246)		1600324	NC	
A 57 C10-C12	2.901	(2.172-3.631)		1103466	7.92	
24 Dodecane	3.646	3.631	0.015	7291	NC	
A 3 C9 - C17	3.809	(1.310-6.309)		2857282	1.25	M
A 60 C10-C16	4.002	(2.172-5.833)		2461338	1.21	
A 47 C9 - C18	4.031	(1.310-6.752)		3518504	1.86	M
A 25 C9-C19	4.243	(1.310-7.176)		4524867	1.97	M
A 15 Kerosene	4.243	(1.310-7.176)		4524867	2.38	M
26 C13	4.289	4.246	0.043	348323	NC	
$ 27 n-Decanoic Acid (Surr)		4.639			ND	U
A 59 C12-C16	4.732	(3.631-5.833)		1357872	8.07	
A 61 C10-C20	4.878	(2.172-7.583)		6828511	11.2	M
A 28 C9-C24	5.181	(1.310-9.053)		25468134	21.7	M
A 29 C9-C25	5.348	(1.310-9.386)		41174669	30.6	M
A 54 C10-C23	5.440	(2.172-8.707)		25431536	21.7	M
A 4 C10-C24	5.612	(2.172-9.053)		25431536	21.7	M
A 16 C10-C25	5.779	(2.172-9.386)		41138071	30.6	M
45 Hexadecane	5.908	5.833	0.075	46166	NC	
A 14 C10-C26	5.940	(2.172-9.707)		49075298	35.1	M
A 67 C12-C22	5.989	(3.631-8.348)		20082976	18.7	M
A 32 C10-C28	6.245	(2.172-10.317)		63428790	43.2	M
A 5 Diesel	6.245	(2.172-10.317)		63428790	43.2	M
A 12 Unknown Hydrocarbons	6.245	(2.172-10.317)		63428790	NC	M
A 30 C13-C22	6.297	(4.246-8.348)		19622716	18.4	M
44 Heptadecane	6.362	6.309	0.053	510833	NC	M
A 31 C12-C24	6.342	(3.631-9.053)		24328070	21.1	M
49 n-Octadecane	6.822	6.752	0.070	428977	NC	M
A 9 Crude Oil Range Organics (	6.859	(1.310-12.408)		202753559	NC	M
A 11 Bunker Range Organics (C9-	6.859	(1.310-12.408)		202753559	NC	M

Report Date: 31-Aug-2018 13:51:45 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000022.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.859	(1.310-12.408)		202753559	96.0	M
33 C19	7.189	7.176	0.013	1310415	NC	M
A 64 C13-C28	7.282	(4.246-10.317)		61865064	42.3	M
A 17 C10-C36	7.290	(2.172-12.408)		202716961	122.1	M
A 68 Crude Oil Range Organics (	7.349	(1.310-13.389)		371451687	NC	M
A 13 C9-C40	7.349	(1.310-13.389)		371451687	237.8	M
A 58 C16-C24	7.443	(5.833-9.053)		22970198	20.3	M
62 icosane	7.599	7.583	0.016	1303263	NC	M
A 6 C10-C40	7.780	(2.172-13.389)		371415089	238.0	M
$ 34 p-Terphenyl	8.069	8.084	-0.015	49442993	28.5	
35 n-Docosane		8.348			ND	
A 18 C12-C40	8.510	(3.631-13.389)		370311623	238.0	M
36 Tricosane	8.706	8.707	-0.001	4245094	NC	M
A 66 C13-C40	8.817	(4.246-13.389)		369851363	237.9	M
37 n-Tetracosane	9.057	9.053	0.004	5646024	NC	M
A 2 C16-C36 ORO	9.121	(5.833-12.408)		200255623	169.4	M
38 C25	9.382	9.386	-0.004	7069094	NC	M
A 19 C16-C40	9.611	(5.833-13.389)		368953751	238.1	M
46 n-Hexacosane	9.707	9.707	0.000	7937227	NC	M
A 20 C19-C36	9.792	(7.176-12.408)		59493126	43.7	
A 55 C23-C32	10.066	(8.707-11.425)		113775172	147.0	M
39 n-Octacosane	10.322	10.317	0.005	10519738	NC	M
65 C29	10.608	10.607	0.001	14088656	NC	M
A 40 C24-C36	10.731	(9.053-12.408)		183098485	186.8	M
A 7 Motor Oil	10.731	(9.053-12.408)		104937159	107.0	
A 10 C22-C40	10.868	(8.348-13.389)		191057310	137.5	
A 50 C25-C36	10.897	(9.386-12.408)		97935304	106.3	
A 41 C23-C40	11.048	(8.707-13.389)		195868769	143.3	
A 8 C24-C40	11.221	(9.053-13.389)		213692385	159.3	
56 Dotriacontane	11.432	11.425	0.007	5610772	NC	M
A 51 C28-C40	11.853	(10.317-13.389)		209737390	193.4	
A 63 C29-C40	11.998	(10.607-13.389)		202642987	202.8	
42 n-Hexatriacontane		12.408			ND	
43 C40	13.328	13.389	-0.061	28051259	NC	M
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

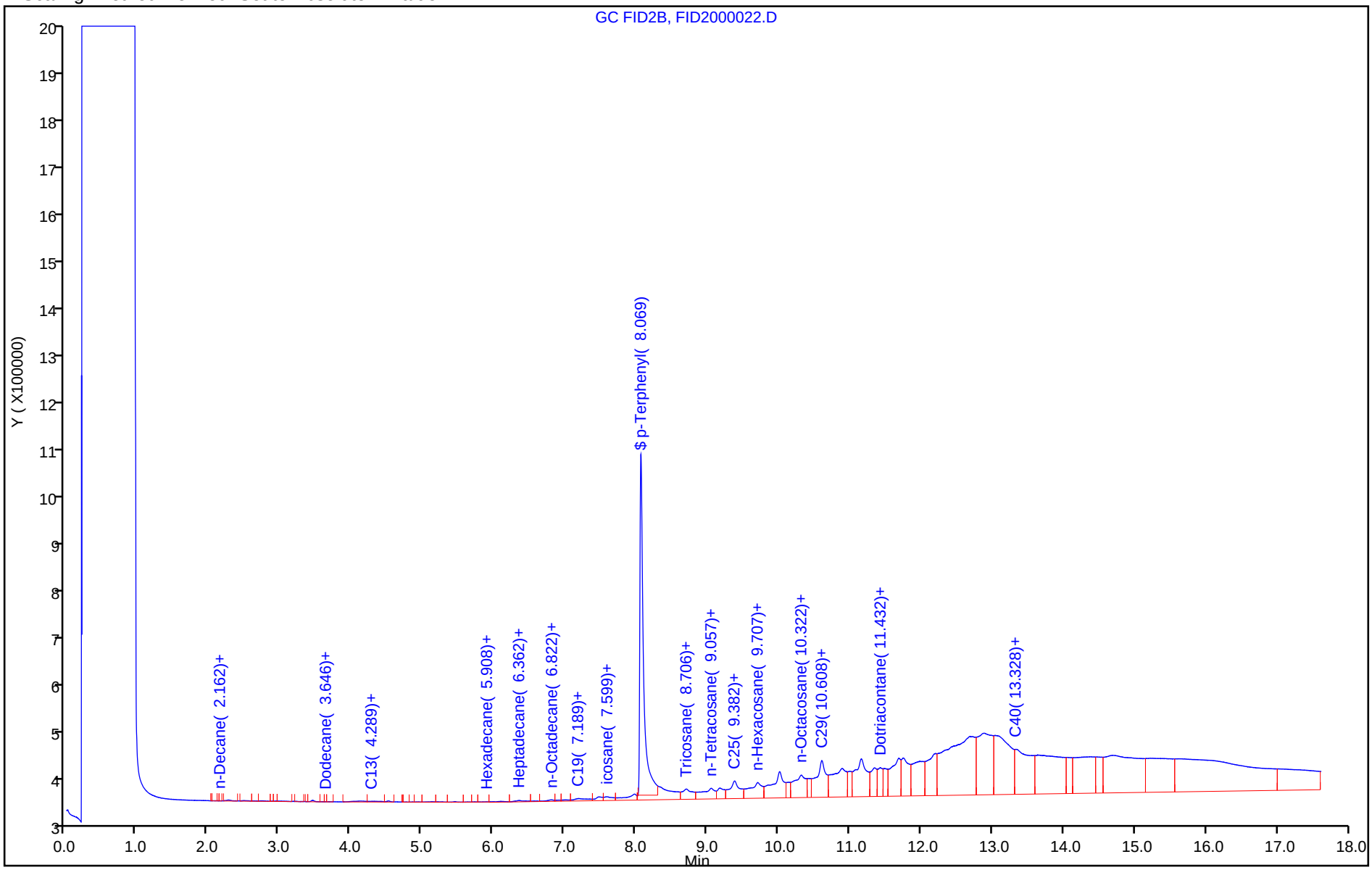
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 31-Aug-2018 13:51:46 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000022.D				
Injection Date:	30-Aug-2018 21:16:53	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88237-D-6-B	Lab Sample ID:	720-88237-6	Worklist Smp#:	22
Client ID:	DG-A7S--3-5-4				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	72
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000022.D
Lims ID: 720-88237-D-6-B
Client ID: DG-A7S--3-5-4
Sample Type: Client
Inject. Date: 30-Aug-2018 21:16:53 ALS Bottle#: 72 Worklist Smp#: 22
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053574-022
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\DRO6_B.m
Limit Group: DRO
Last Update: 31-Aug-2018 13:51:43 Calib Date: 30-Aug-2018 10:14:10
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 13:51:43

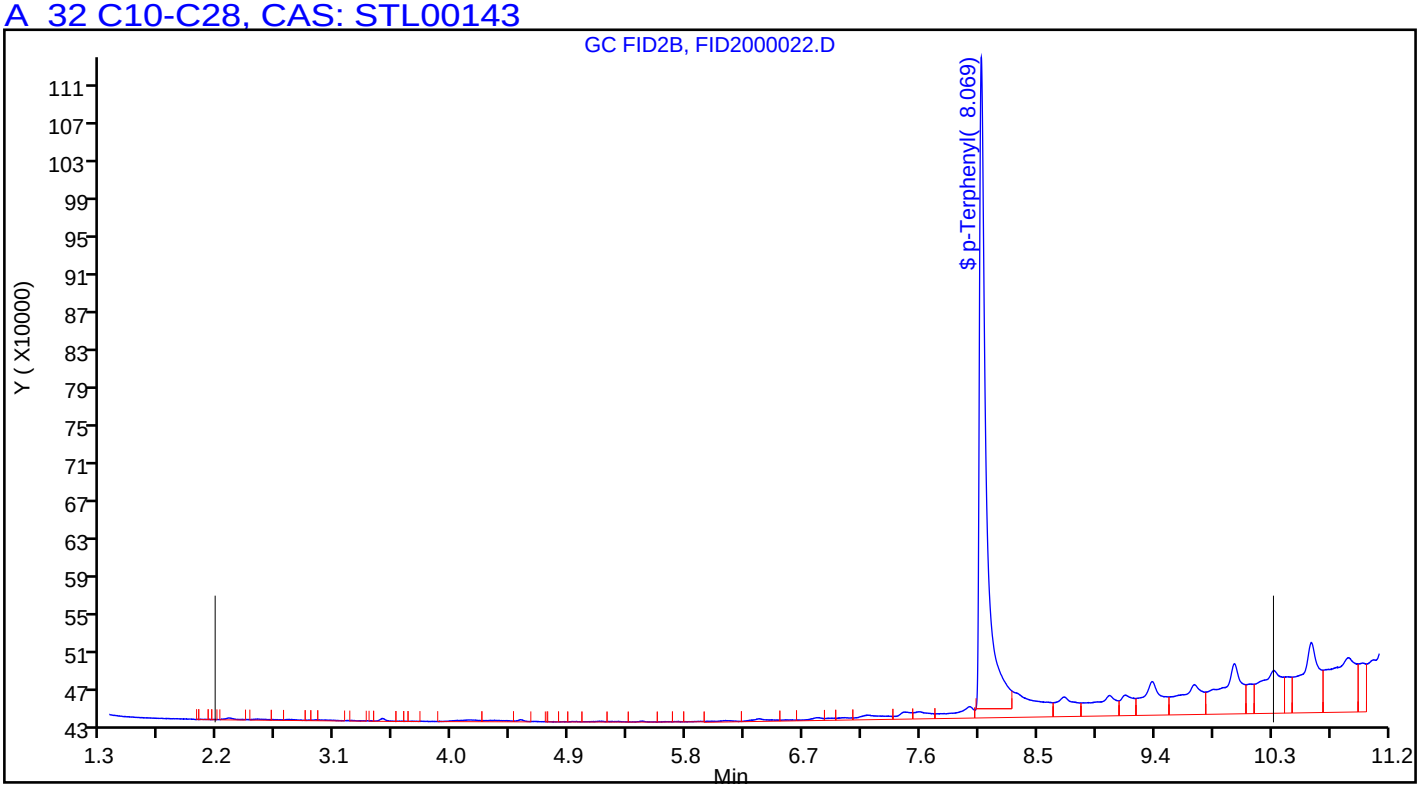
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	28.5	114.17

Report Date: 31-Aug-2018 13:51:50 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000022.D				
Injection Date:	30-Aug-2018 21:16:53	Instrument ID:	CHDRO6		
Lims ID:	720-88237-D-6-B	Lab Sample ID:	720-88237-6		
Client ID:	DG-A7S--3-5-4				
Operator ID:	DCH	ALS Bottle#:	72	Worklist Smp#:	22
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

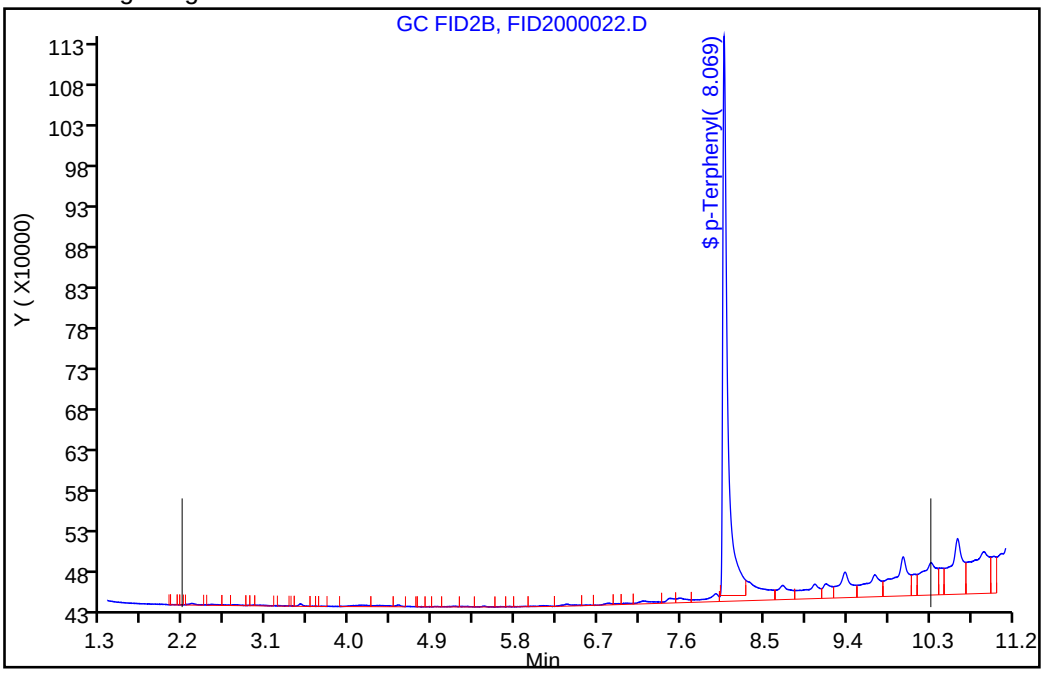
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000022.D				
Injection Date:	30-Aug-2018 21:16:53	Instrument ID:	CHDRO6		
Lims ID:	720-88237-D-6-B	Lab Sample ID:	720-88237-6		
Client ID:	DG-A7S--3-5-4				
Operator ID:	DCH	ALS Bottle#:	72	Worklist Smp#:	22
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.245, CAS: STL00143

Signal: 1

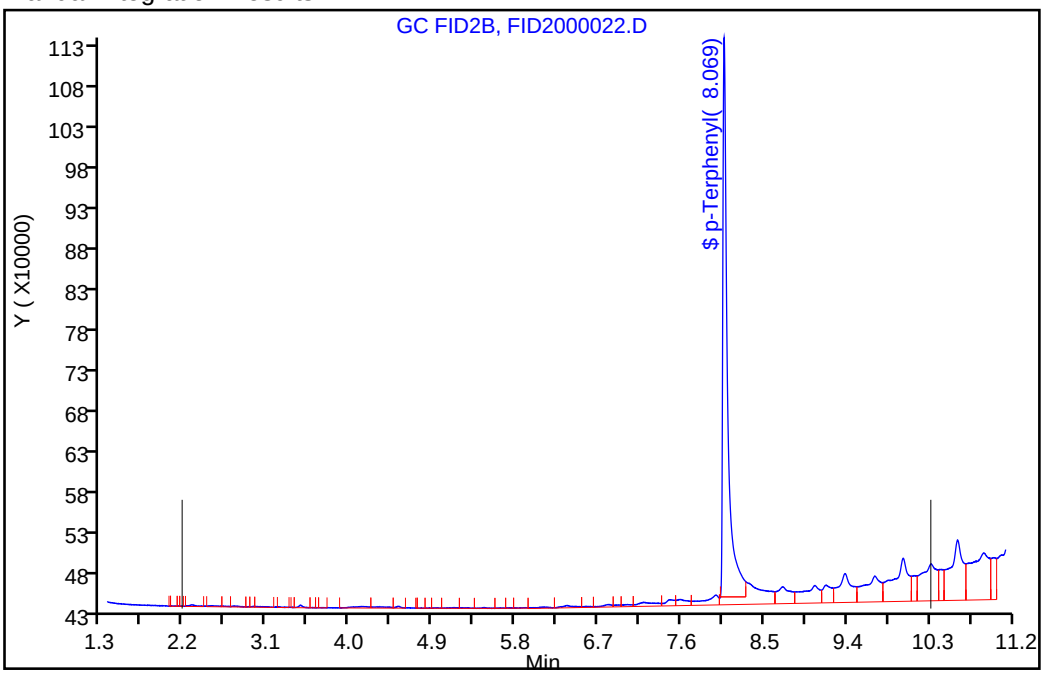
Processing Integration Results

RT: 6.24
Response: 50557690
Amount: 35.926098



Manual Integration Results

RT: 6.24
Response: 63428790
Amount: 43.213978



Reviewer: luj, 31-Aug-2018 13:51:14

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88237-1
SDG No.:
Client Sample ID: DG-A7S-10-10-5
Lab Sample ID: 720-88237-7
Matrix: Solid
Lab File ID: FID2000021.D
Analysis Method: 8015B
Date Collected: 08/23/2018 15:00
Extraction Method: 3546
Date Extracted: 08/28/2018 11:24
Sample wt/vol: 15.27(g)
Date Analyzed: 08/30/2018 20:52
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250569
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	33000		2000	740

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	89		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000021.D
Lims ID: 720-88237-E-7-B
Client ID: DG-A7S--10-10-5
Sample Type: Client
Inject. Date: 30-Aug-2018 20:52:36 ALS Bottle#: 71 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053574-021
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\DRO6_B.m
Limit Group: DRO
Last Update: 31-Aug-2018 13:46:24 Calib Date: 30-Aug-2018 10:14:10
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 13:46:24

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.310			ND	
23 n-Decane	2.181	2.172	0.009	128589	NC	
A 1 C9-C13	2.778	(1.310-4.246)		5329331	2.44	
A 21 Stoddard Solvent	2.778	(1.310-4.246)		5329331	NC	
A 57 C10-C12	2.901	(2.172-3.631)		4190483	9.67	
24 Dodecane	3.557	3.631	-0.074	57056	NC	
A 3 C9 - C17	3.809	(1.310-6.309)		9071254	3.97	M
A 60 C10-C16	4.002	(2.172-5.833)		6154897	3.04	M
A 47 C9 - C18	4.031	(1.310-6.752)		10324290	5.45	M
A 25 C9-C19	4.243	(1.310-7.176)		18109713	7.87	M
A 15 Kerosene	4.243	(1.310-7.176)		18109713	9.54	M
26 C13		4.246			ND	
$ 27 n-Decanoic Acid (Surr)		4.639			ND	U
A 59 C12-C16	4.732	(3.631-5.833)		2319188	8.61	M
A 61 C10-C20	4.878	(2.172-7.583)		22577853	20.1	M
A 28 C9-C24	5.181	(1.310-9.053)		72447063	48.3	M
A 29 C9-C25	5.348	(1.310-9.386)		249147804	148.4	M
A 54 C10-C23	5.440	(2.172-8.707)		51935376	36.7	M
A 4 C10-C24	5.612	(2.172-9.053)		72311805	48.2	M
A 16 C10-C25	5.779	(2.172-9.386)		249012546	148.3	M
45 Hexadecane	5.866	5.833	0.033	258606	NC	M
A 14 C10-C26	5.940	(2.172-9.707)		265733645	157.8	M
A 67 C12-C22	5.989	(3.631-8.348)		43749293	32.1	M
A 32 C10-C28	6.245	(2.172-10.317)		431675216	251.7	M
A 5 Diesel	6.245	(2.172-10.317)		431675216	251.7	M
A 12 Unknown Hydrocarbons	6.245	(2.172-10.317)		431675216	NC	M
A 30 C13-C22	6.297	(4.246-8.348)		42693839	31.5	M
44 Heptadecane	6.245	6.309	-0.064	2522493	NC	M
A 31 C12-C24	6.342	(3.631-9.053)		68476096	46.1	M
49 n-Octadecane	6.769	6.752	0.017	1291706	NC	M
A 9 Crude Oil Range Organics (	6.859	(1.310-12.408)		1114776196	NC	M
A 11 Bunker Range Organics (C9-	6.859	(1.310-12.408)		1114776196	NC	M

Report Date: 31-Aug-2018 13:46:27 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000021.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.859	(1.310-12.408)		1114776196	528.1	M
33 C19	7.171	7.176	-0.005	2030532	NC	M
A 64 C13-C28	7.282	(4.246-10.317)		426784053	249.0	M
A 17 C10-C36	7.290	(2.172-12.408)		1114640938	638.4	M
A 68 Crude Oil Range Organics (	7.349	(1.310-13.389)		1374038581	NC	M
A 13 C9-C40	7.349	(1.310-13.389)		1374038581	879.5	M
A 58 C16-C24	7.443	(5.833-9.053)		66156908	44.8	M
62 icosane	7.590	7.583	0.007	2021976	NC	M
A 6 C10-C40	7.780	(2.172-13.389)		1373903323	880.3	M
$ 34 p-Terphenyl	8.070	8.084	-0.014	38435894	22.2	
35 n-Docosane	8.356	8.348	0.008	4350374	NC	M
A 18 C12-C40	8.510	(3.631-13.389)		1370067614	880.4	M
36 Tricosane	8.723	8.707	0.016	20376429	NC	M
A 66 C13-C40	8.817	(4.246-13.389)		1369012160	880.7	M
37 n-Tetracosane	9.081	9.053	0.028	69614292	NC	M
A 2 C16-C36 ORO	9.121	(5.833-12.408)		1108486041	937.5	M
38 C25	9.359	9.386	-0.027	54383073	NC	M
A 19 C16-C40	9.611	(5.833-13.389)		1367748426	882.8	M
46 n-Hexacosane	9.747	9.707	0.040	23525984	NC	M
A 20 C19-C36	9.792	(7.176-12.408)		840117894	617.1	
A 55 C23-C32	10.066	(8.707-11.425)		584955126	755.9	M
39 n-Octacosane	10.302	10.317	-0.015	35308238	NC	M
65 C29	10.607	10.607	0.000	42035950	NC	M
A 40 C24-C36	10.731	(9.053-12.408)		947299216	966.2	M
A 7 Motor Oil	10.731	(9.053-12.408)		837765812	854.5	
A 10 C22-C40	10.868	(8.348-13.389)		1132899189	815.0	
A 50 C25-C36	10.897	(9.386-12.408)		721934296	783.7	
A 41 C23-C40	11.048	(8.707-13.389)		1133400378	829.3	
A 8 C24-C40	11.221	(9.053-13.389)		1102064743	821.7	
56 Dotriacontane	11.437	11.425	0.012	94713260	NC	M
A 51 C28-C40	11.853	(10.317-13.389)		851048678	784.6	
A 63 C29-C40	11.998	(10.607-13.389)		810347590	810.9	
42 n-Hexatriacontane	12.405	12.408	-0.003	74010772	NC	M
43 C40	13.460	13.389	0.071	24286497	NC	M
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

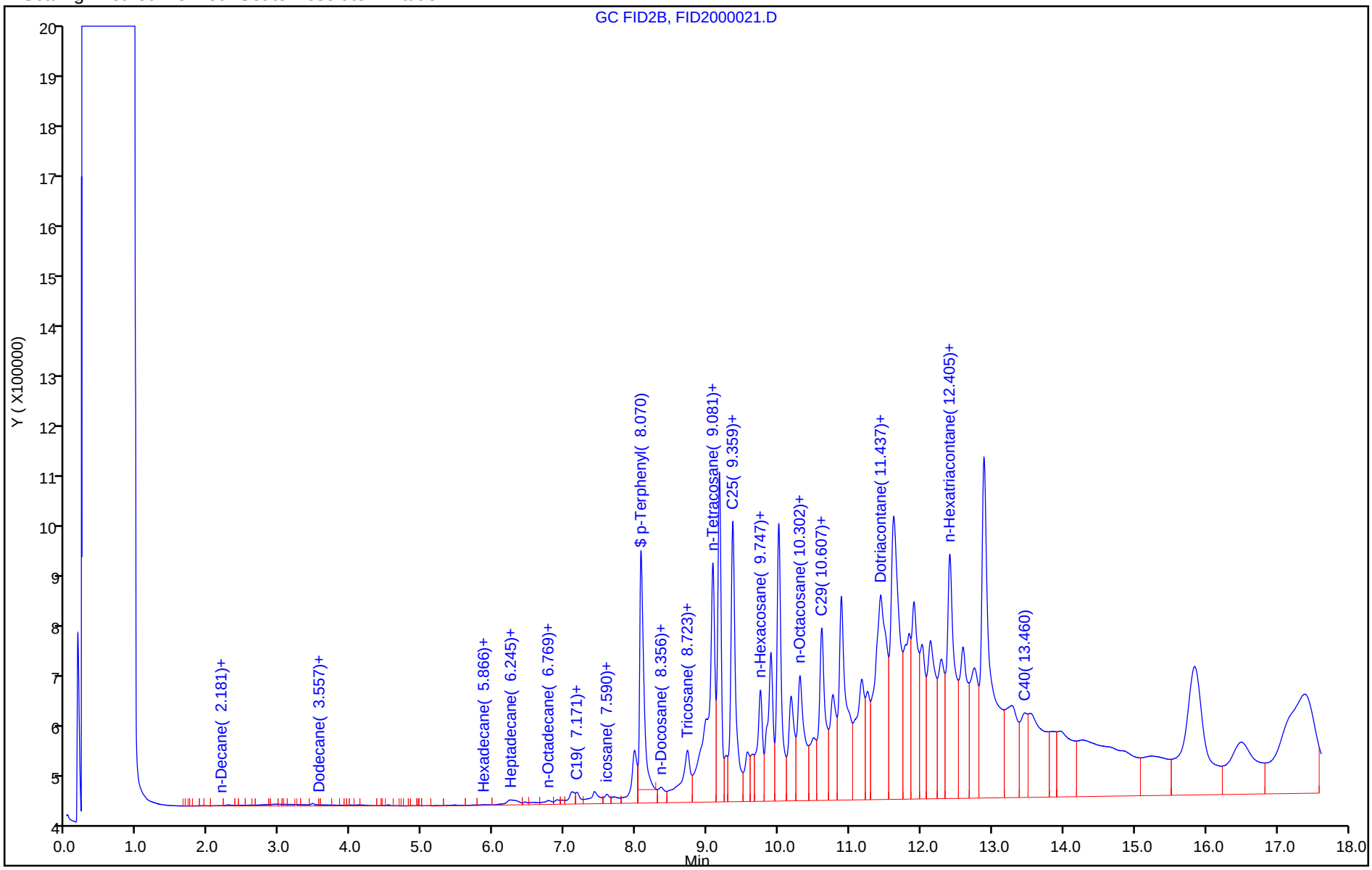
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 31-Aug-2018 13:46:28 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000021.D				
Injection Date:	30-Aug-2018 20:52:36	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88237-E-7-B	Lab Sample ID:	720-88237-7	Worklist Smp#:	21
Client ID:	DG-A7S--10-10-5				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	71
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000021.D
Lims ID: 720-88237-E-7-B
Client ID: DG-A7S--10-10-5
Sample Type: Client
Inject. Date: 30-Aug-2018 20:52:36 ALS Bottle#: 71 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053574-021
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\DRO6_B.m
Limit Group: DRO
Last Update: 31-Aug-2018 13:46:24 Calib Date: 30-Aug-2018 10:14:10
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 13:46:24

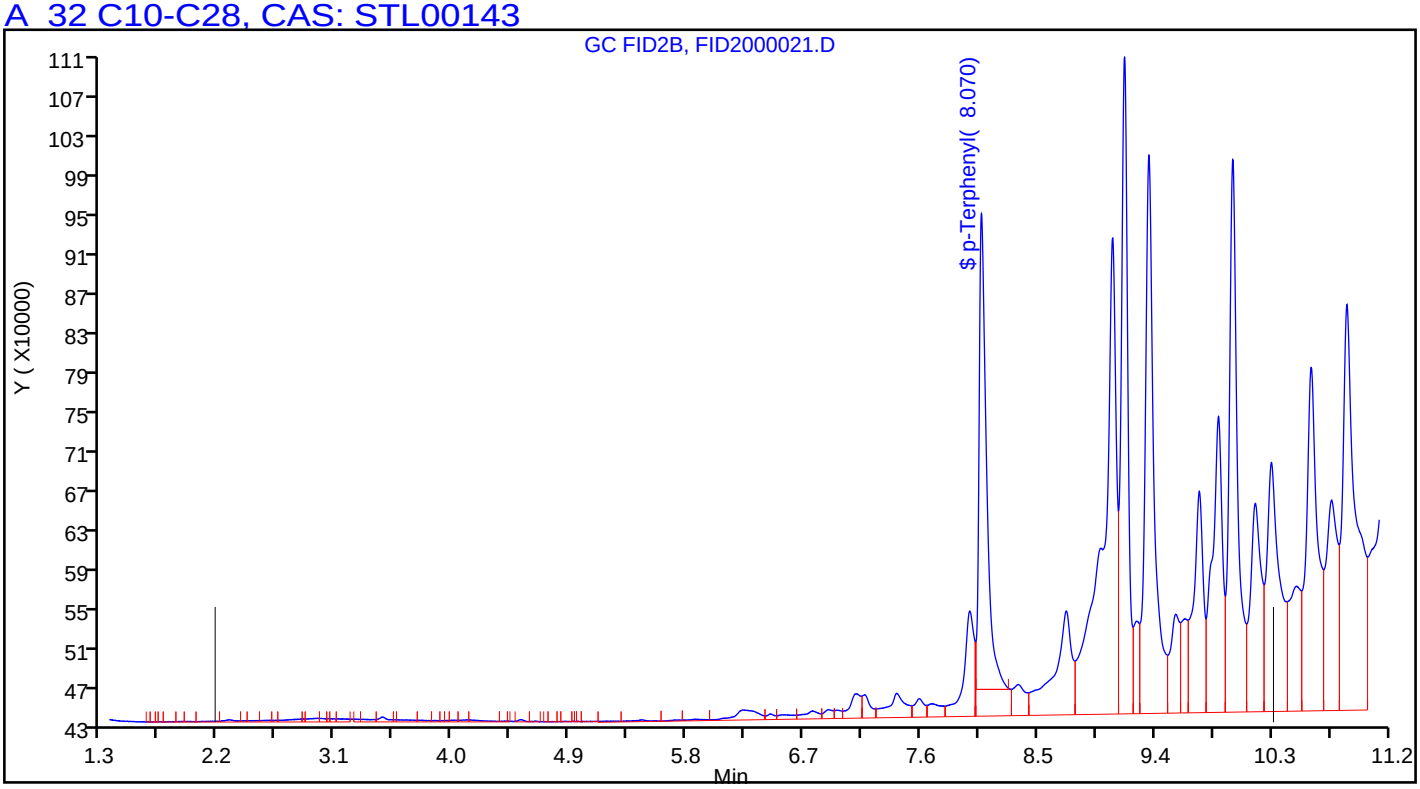
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	22.2	88.75

Report Date: 31-Aug-2018 13:46:33 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000021.D				
Injection Date:	30-Aug-2018 20:52:36	Instrument ID:	CHDRO6		
Lims ID:	720-88237-E-7-B	Lab Sample ID:	720-88237-7		
Client ID:	DG-A7S--10-10-5				
Operator ID:	DCH	ALS Bottle#:	71	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

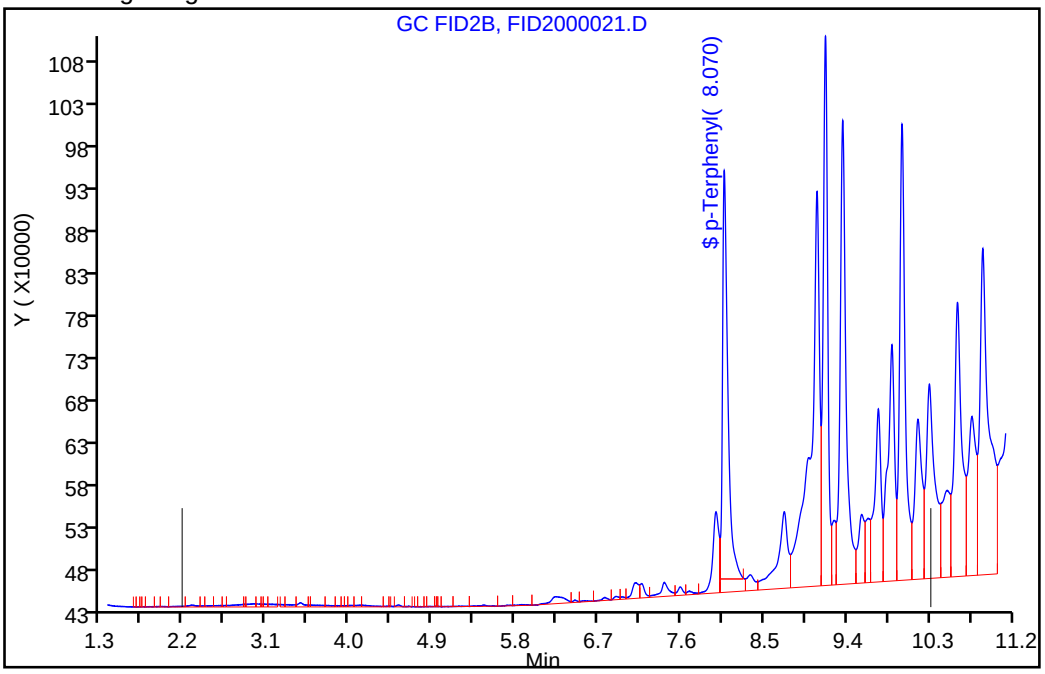
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000021.D				
Injection Date:	30-Aug-2018 20:52:36	Instrument ID:	CHDRO6		
Lims ID:	720-88237-E-7-B	Lab Sample ID:	720-88237-7		
Client ID:	DG-A7S--10-10-5				
Operator ID:	DCH	ALS Bottle#:	71	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.245, CAS: STL00143

Signal: 1

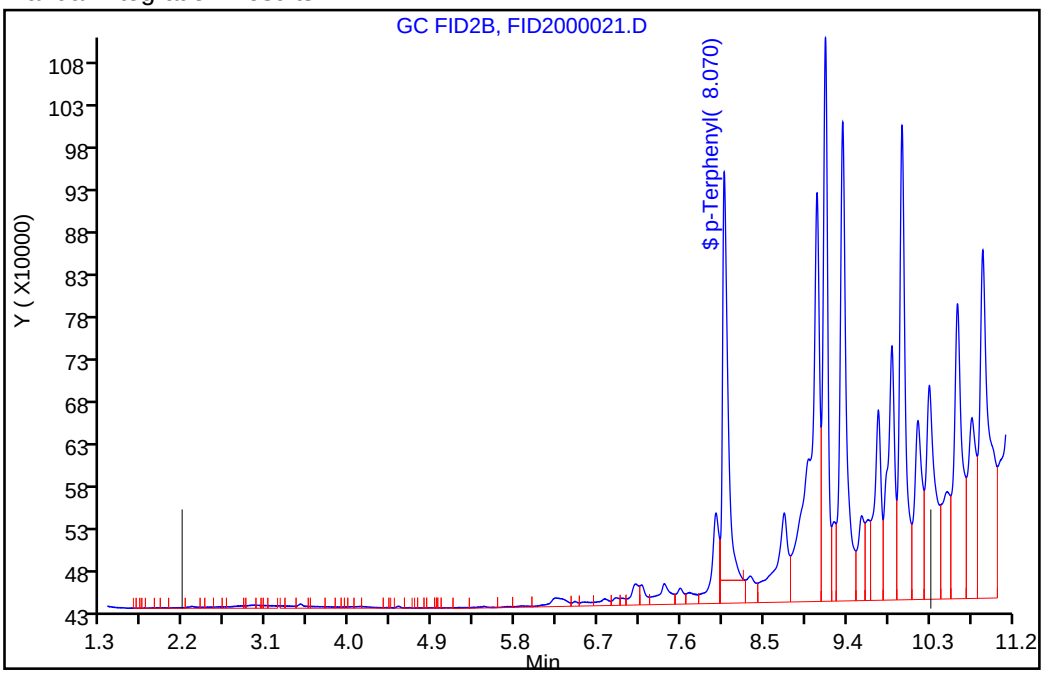
Processing Integration Results

RT: 6.24
Response: 366377690
Amount: 214.7498



Manual Integration Results

RT: 6.24
Response: 431675216
Amount: 251.7226



Reviewer: luj, 31-Aug-2018 13:43:55

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88237-1
SDG No.:
Client Sample ID: DG-B7S-14.5-15
Lab Sample ID: 720-88237-10
Matrix: Solid
Lab File ID: FID2000024.D
Analysis Method: 8015B
Date Collected: 08/23/2018 15:35
Extraction Method: 3546
Date Extracted: 08/28/2018 11:24
Sample wt/vol: 15.41(g)
Date Analyzed: 08/30/2018 22:05
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250569
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	20000		1900	730

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	96		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000024.D
Lims ID: 720-88237-E-10-B
Client ID: DG-B7S--14.5-15
Sample Type: Client
Inject. Date: 30-Aug-2018 22:05:50 ALS Bottle#: 74 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053574-024
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\DRO6_B.m
Limit Group: DRO
Last Update: 31-Aug-2018 13:58:08 Calib Date: 30-Aug-2018 10:14:10
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 13:58:08

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.310			ND	
23 n-Decane	2.182	2.172	0.010	56629	NC	
A 1 C9-C13	2.778	(1.310-4.246)		2537777	1.16	
A 21 Stoddard Solvent	2.778	(1.310-4.246)		2537777	NC	
A 57 C10-C12	2.901	(2.172-3.631)		1992304	8.43	
24 Dodecane	3.628	3.631	-0.003	11092	NC	
A 3 C9 - C17	3.809	(1.310-6.309)		11343281	4.97	M
A 60 C10-C16	4.002	(2.172-5.833)		4288791	2.12	M
A 47 C9 - C18	4.031	(1.310-6.752)		15530965	8.20	M
A 25 C9-C19	4.243	(1.310-7.176)		31569985	13.7	M
A 15 Kerosene	4.243	(1.310-7.176)		31569985	16.6	M
26 C13	4.211	4.246	-0.035	67648	NC	
$ 27 n-Decanoic Acid (Surr)		4.639			ND	U
A 59 C12-C16	4.732	(3.631-5.833)		2307579	8.61	M
A 61 C10-C20	4.878	(2.172-7.583)		36183317	27.8	M
A 28 C9-C24	5.181	(1.310-9.053)		80327906	52.8	M
A 29 C9-C25	5.348	(1.310-9.386)		145148487	89.5	M
A 54 C10-C23	5.440	(2.172-8.707)		67296528	45.4	M
A 4 C10-C24	5.612	(2.172-9.053)		80214819	52.7	M
A 16 C10-C25	5.779	(2.172-9.386)		145035400	89.4	M
45 Hexadecane	5.849	5.833	0.016	1171329	NC	M
A 14 C10-C26	5.940	(2.172-9.707)		154700748	94.9	M
A 67 C12-C22	5.989	(3.631-8.348)		65315316	44.3	M
A 32 C10-C28	6.245	(2.172-10.317)		262152237	155.7	M
A 5 Diesel	6.245	(2.172-10.317)		262152237	155.7	M
A 12 Unknown Hydrocarbons	6.245	(2.172-10.317)		262152237	NC	M
A 30 C13-C22	6.297	(4.246-8.348)		64939486	44.1	M
44 Heptadecane	6.300	6.309	-0.009	1727093	NC	M
A 31 C12-C24	6.342	(3.631-9.053)		78233607	51.6	M
49 n-Octadecane	6.751	6.752	-0.001	1943231	NC	M
A 9 Crude Oil Range Organics (	6.859	(1.310-12.408)		1080430294	NC	M
A 11 Bunker Range Organics (C9-	6.859	(1.310-12.408)		1080430294	NC	M

Report Date: 31-Aug-2018 13:58:10 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000024.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.859	(1.310-12.408)		1080430294	511.8	M
33 C19	7.172	7.176	-0.004	9774045	NC	M
A 64 C13-C28	7.282	(4.246-10.317)		259795195	154.4	M
A 17 C10-C36	7.290	(2.172-12.408)		1080317207	619.0	M
A 68 Crude Oil Range Organics (	7.349	(1.310-13.389)		1684321569	NC	M
A 13 C9-C40	7.349	(1.310-13.389)		1684321569	1078.1	M
A 58 C16-C24	7.443	(5.833-9.053)		75926028	50.3	M
62 icosane	7.587	7.583	0.004	3451755	NC	M
A 6 C10-C40	7.780	(2.172-13.389)		1684208482	1079.2	M
$ 34 p-Terphenyl	8.062	8.084	-0.022	41710035	24.1	
35 n-Docosane	8.347	8.348	-0.001	7073047	NC	M
A 18 C12-C40	8.510	(3.631-13.389)		1682227270	1081.0	M
36 Tricosane	8.711	8.707	0.004	12918291	NC	M
A 66 C13-C40	8.817	(4.246-13.389)		1681851440	1081.9	M
37 n-Tetracosane	9.073	9.053	0.020	29608456	NC	M
A 2 C16-C36 ORO	9.121	(5.833-12.408)		1076028416	910.0	M
38 C25	9.357	9.386	-0.029	35212125	NC	M
A 19 C16-C40	9.611	(5.833-13.389)		1679919691	1084.2	M
46 n-Hexacosane	9.742	9.707	0.035	15501703	NC	M
A 20 C19-C36	9.792	(7.176-12.408)		695972983	511.2	
A 55 C23-C32	10.066	(8.707-11.425)		483164035	624.3	M
39 n-Octacosane	10.300	10.317	-0.017	34783914	NC	M
65 C29	10.604	10.607	-0.003	72036255	NC	M
A 40 C24-C36	10.731	(9.053-12.408)		918620405	937.0	M
A 7 Motor Oil	10.731	(9.053-12.408)		751861205	766.9	
A 10 C22-C40	10.868	(8.348-13.389)		1350321802	971.5	
A 50 C25-C36	10.897	(9.386-12.408)		721979835	783.7	
A 41 C23-C40	11.048	(8.707-13.389)		1359436197	994.7	
A 8 C24-C40	11.221	(9.053-13.389)		1385249008	1032.8	
56 Dotriacontane	11.434	11.425	0.009	25557926	NC	M
A 51 C28-C40	11.853	(10.317-13.389)		1300604634	1199.0	
A 63 C29-C40	11.998	(10.607-13.389)		1256810618	1257.6	
42 n-Hexatriacontane	12.397	12.408	-0.011	98966350	NC	M
43 C40	13.433	13.389	0.044	134811649	NC	M
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

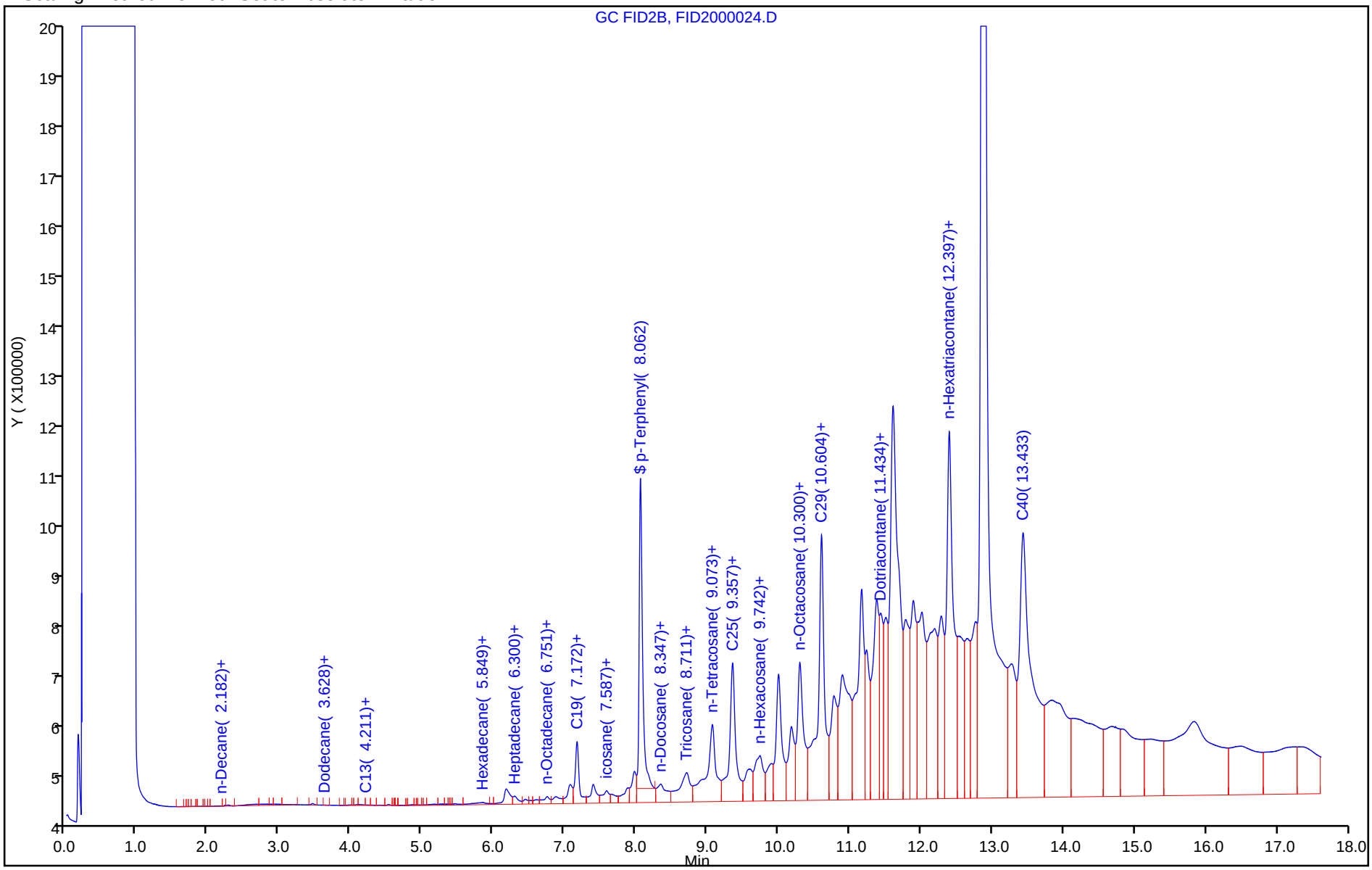
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 31-Aug-2018 13:58:10 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000024.D				
Injection Date:	30-Aug-2018 22:05:50	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88237-E-10-B	Lab Sample ID:	720-88237-10	Worklist Smp#:	24
Client ID:	DG-B7S--14.5-15				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	74
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000024.D
Lims ID: 720-88237-E-10-B
Client ID: DG-B7S--14.5-15
Sample Type: Client
Inject. Date: 30-Aug-2018 22:05:50 ALS Bottle#: 74 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053574-024
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\DRO6_B.m
Limit Group: DRO
Last Update: 31-Aug-2018 13:58:08 Calib Date: 30-Aug-2018 10:14:10
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 13:58:08

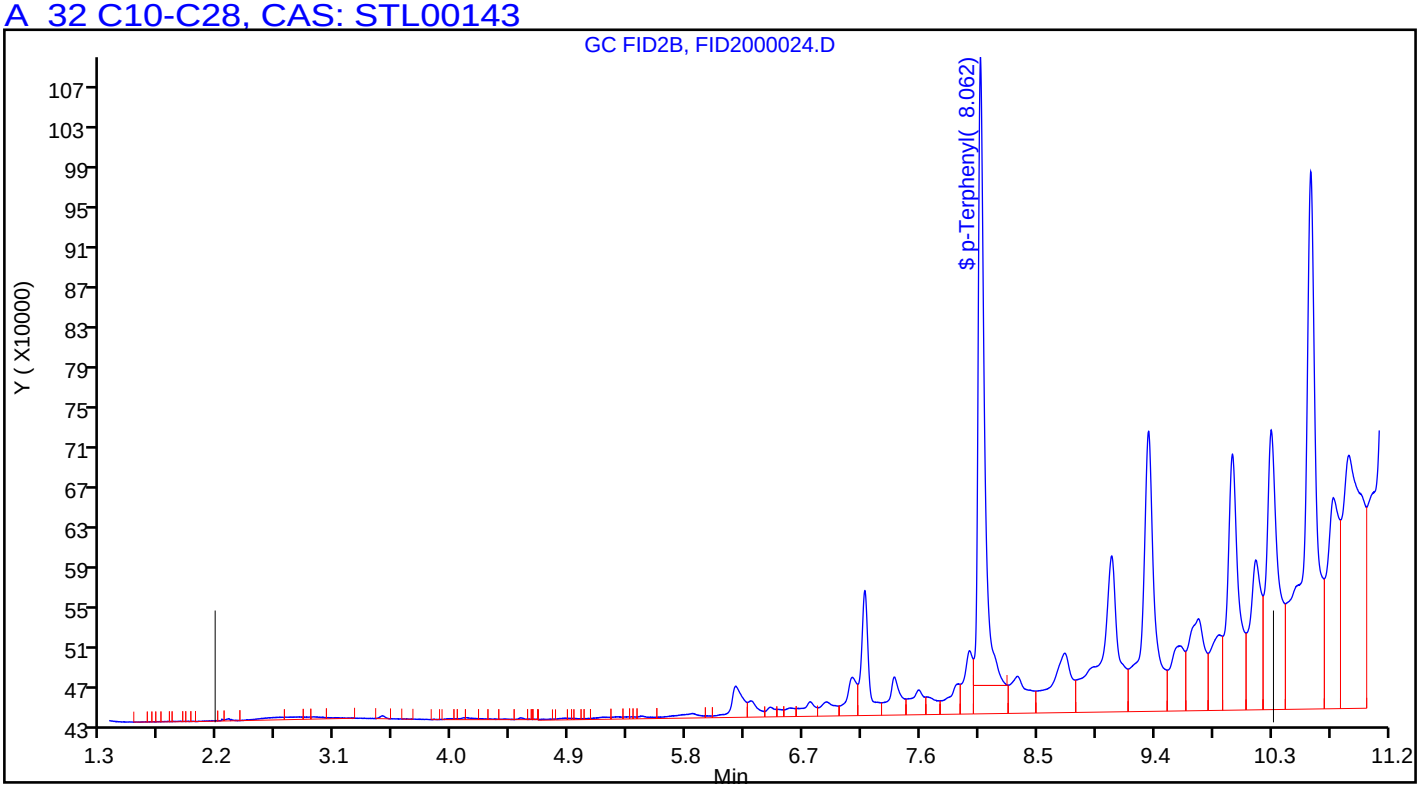
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	24.1	96.31

Report Date: 31-Aug-2018 13:58:14 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000024.D				
Injection Date:	30-Aug-2018 22:05:50	Instrument ID:	CHDRO6		
Lims ID:	720-88237-E-10-B	Lab Sample ID:	720-88237-10		
Client ID:	DG-B7S--14.5-15				
Operator ID:	DCH	ALS Bottle#:	74	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

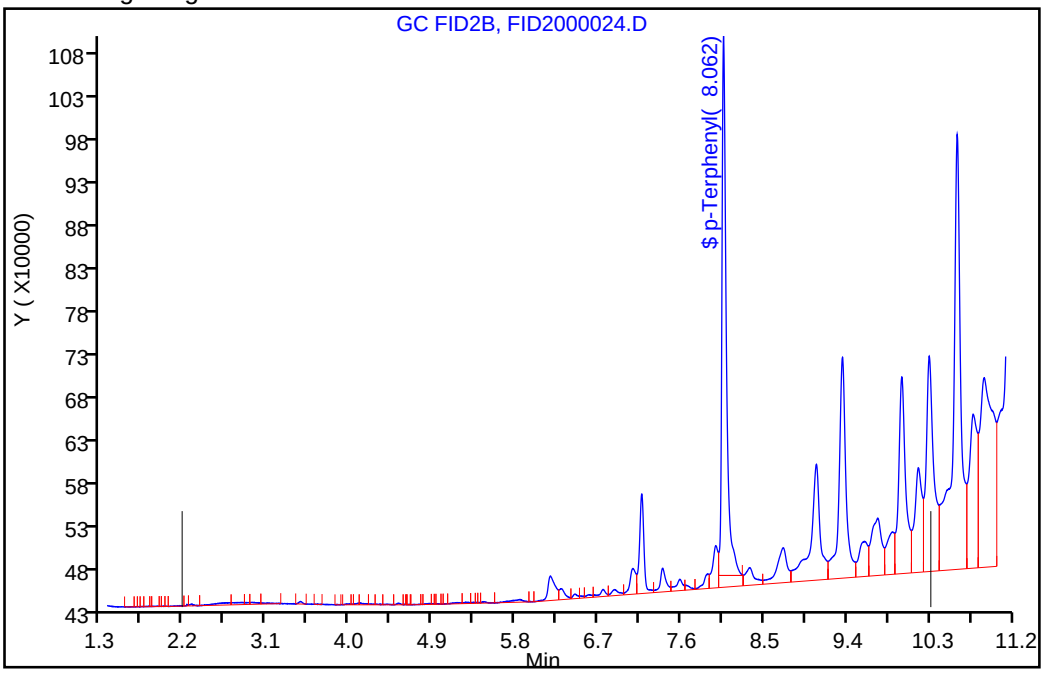
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000024.D				
Injection Date:	30-Aug-2018 22:05:50	Instrument ID:	CHDRO6		
Lims ID:	720-88237-E-10-B	Lab Sample ID:	720-88237-10		
Client ID:	DG-B7S--14.5-15				
Operator ID:	DCH	ALS Bottle#:	74	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.245, CAS: STL00143

Signal: 1

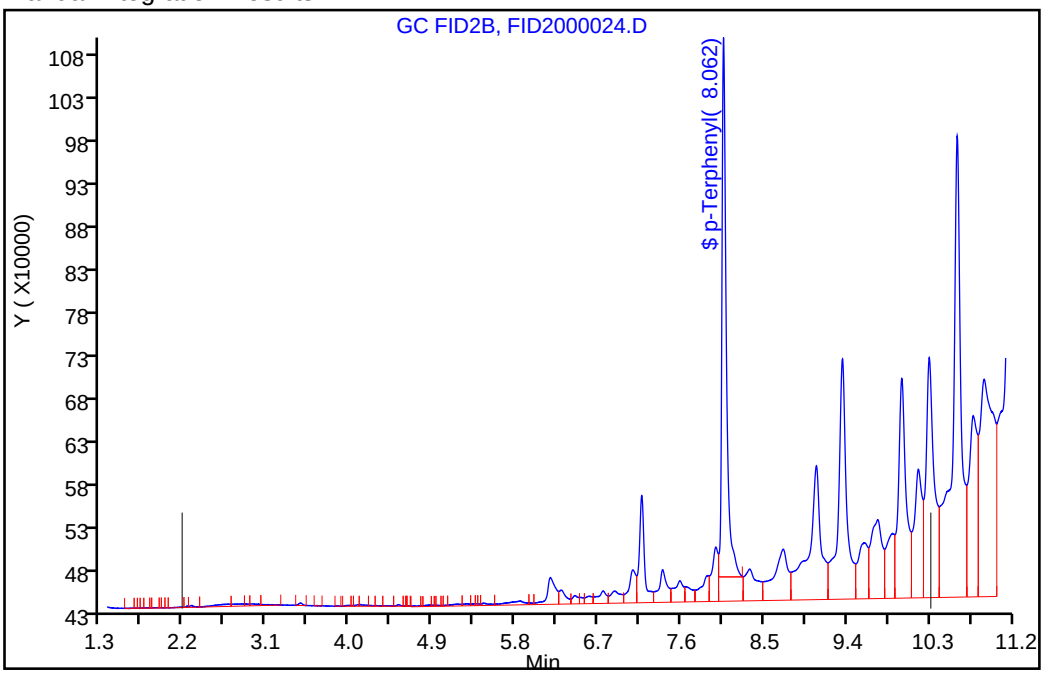
Processing Integration Results

RT: 6.24
Response: 178453126
Amount: 108.3431



Manual Integration Results

RT: 6.24
Response: 262152237
Amount: 155.7353



Reviewer: luj, 31-Aug-2018 13:57:42

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88237-1
SDG No.:
Client Sample ID: DG-A7S-0-5-1
Lab Sample ID: 720-88237-5
Matrix: Solid
Lab File ID: 08281842.D
Analysis Method: 8260B
Date Collected: 08/23/2018 15:00
Sample wt/vol: 6.124(g)
Date Analyzed: 08/29/2018 04:20
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250405
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.1	0.98
67-64-1	Acetone	ND		41	31
71-43-2	Benzene	ND		4.1	0.53
75-27-4	Dichlorobromomethane	ND		4.1	0.59
108-86-1	Bromobenzene	ND		4.1	0.65
74-97-5	Chlorobromomethane	ND		16	0.59
75-25-2	Bromoform	ND		4.1	1.6
74-83-9	Bromomethane	ND		8.2	0.65
78-93-3	2-Butanone (MEK)	ND		41	17
104-51-8	n-Butylbenzene	ND		4.1	0.82
135-98-8	sec-Butylbenzene	ND		4.1	0.59
98-06-6	tert-Butylbenzene	ND		4.1	0.60
75-15-0	Carbon disulfide	ND		4.1	1.6
56-23-5	Carbon tetrachloride	ND		4.1	0.51
108-90-7	Chlorobenzene	ND		4.1	0.56
75-00-3	Chloroethane	ND		8.2	0.46
67-66-3	Chloroform	ND		4.1	0.54
74-87-3	Chloromethane	ND		8.2	0.65
95-49-8	2-Chlorotoluene	ND		4.1	0.53
106-43-4	4-Chlorotoluene	ND		4.1	0.56
124-48-1	Chlorodibromomethane	ND		4.1	0.58
95-50-1	1,2-Dichlorobenzene	ND		4.1	0.56
541-73-1	1,3-Dichlorobenzene	ND		4.1	0.59
106-46-7	1,4-Dichlorobenzene	ND		4.1	0.58
142-28-9	1,3-Dichloropropane	ND		4.1	0.60
563-58-6	1,1-Dichloropropene	ND		4.1	0.56
96-12-8	1,2-Dibromo-3-Chloropropane	ND		8.2	1.4
106-93-4	Ethylene Dibromide	ND		4.1	1.2
74-95-3	Dibromomethane	ND		8.2	0.70
75-71-8	Dichlorodifluoromethane	ND		8.2	0.65
75-34-3	1,1-Dichloroethane	ND		4.1	0.56
107-06-2	1,2-Dichloroethane	ND		4.1	0.62
75-35-4	1,1-Dichloroethene	ND	*	4.1	0.51
156-59-2	cis-1,2-Dichloroethene	ND		4.1	0.56
156-60-5	trans-1,2-Dichloroethene	ND		4.1	0.61
78-87-5	1,2-Dichloropropane	ND		4.1	0.51

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88237-1
SDG No.:
Client Sample ID: DG-A7S-0-5-1
Lab Sample ID: 720-88237-5
Matrix: Solid
Lab File ID: 08281842.D
Analysis Method: 8260B
Date Collected: 08/23/2018 15:00
Sample wt/vol: 6.124(g)
Date Analyzed: 08/29/2018 04:20
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250405
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.1	0.56
10061-02-6	trans-1,3-Dichloropropene	ND		4.1	0.55
100-41-4	Ethylbenzene	ND		4.1	0.61
87-68-3	Hexachlorobutadiene	ND		4.1	0.73
591-78-6	2-Hexanone	ND		41	8.2
98-82-8	Isopropylbenzene	ND		4.1	0.56
99-87-6	4-Isopropyltoluene	ND		4.1	2.0
75-09-2	Methylene Chloride	ND		8.2	4.6
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		41	8.2
103-65-1	N-Propylbenzene	ND		4.1	0.54
100-42-5	Styrene	ND		4.1	0.51
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.1	0.62
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.1	0.61
127-18-4	Tetrachloroethene	ND		4.1	0.55
108-88-3	Toluene	ND		4.1	0.58
87-61-6	1,2,3-Trichlorobenzene	ND		4.1	0.60
120-82-1	1,2,4-Trichlorobenzene	ND		4.1	0.58
71-55-6	1,1,1-Trichloroethane	ND		4.1	0.50
79-00-5	1,1,2-Trichloroethane	ND		4.1	0.57
79-01-6	Trichloroethene	ND		4.1	0.51
75-69-4	Trichlorofluoromethane	ND		4.1	0.46
96-18-4	1,2,3-Trichloropropane	ND		4.1	0.63
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.1	1.7
95-63-6	1,2,4-Trimethylbenzene	ND		4.1	1.3
108-67-8	1,3,5-Trimethylbenzene	ND		4.1	0.53
108-05-4	Vinyl acetate	ND		16	4.1
75-01-4	Vinyl chloride	ND		4.1	0.60
1330-20-7	Xylenes, Total	ND		4.1	1.0
594-20-7	2,2-Dichloropropane	ND		4.1	1.6
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		200	82

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88237-1

SDG No.:

Client Sample ID: DG-A7S-0-5-1 Lab Sample ID: 720-88237-5

Matrix: Solid Lab File ID: 08281842.D

Analysis Method: 8260B Date Collected: 08/23/2018 15:00

Sample wt/vol: 6.124(g) Date Analyzed: 08/29/2018 04:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250405 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	89		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		60-140
2037-26-5	Toluene-d8 (Surr)	89		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281842.D
Lims ID: 720-88237-A-5-A
Client ID: DG-A7S--0-5-1
Sample Type: Client
Inject. Date: 29-Aug-2018 04:20:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88237-A-5
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 10:05:31 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 10:05:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.825	6.819	0.006	0	291001	250.0	
* 2 Fluorobenzene	96	10.605	10.599	0.006	99	845743	25.0	
* 4 Chlorobenzene-d5	117	14.439	14.439	0.000	87	577263	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.579	0.000	95	252711	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.190	9.190	0.000	94	72256	7.61	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.709	9.702	0.007	0	95226	8.01	
$ 10 Toluene-d8 (Surr)	98	12.708	12.708	0.000	93	228988	6.69	
$ 11 4-Bromofluorobenzene	95	15.933	15.933	0.000	94	74840	6.67	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.048	0.000	84	61638	6.30	
27 Isopropyl alcohol	45	6.374	6.276	0.098	8	286	0.3664	
28 Acetone	58	6.380	6.368	0.012	99	18379	18.5	
59 Benzene	78	10.379	10.367	0.012	90	1477	0.0410	
75 Toluene	92	12.793	12.787	0.006	97	2278	0.1200	
149 1-Chlorohexane	55	14.439	14.354	0.085	33	6230	0.5775	
128 Butyl Ether	87	14.665	14.659	0.006	95	788	0.1372	
84 Ethylbenzene	91	14.708	14.701	0.007	1	1119	0.0303	
112 Naphthalene	128	20.749	20.750	0.006	97	132584	5.10	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	1616389	20.8	
A 154 C6-C8	1	10.855	(8.556-13.153)		0	807652	10.4	
A 155 C6-C9	1	11.845	(8.556-15.134)		0	866936	11.2	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	2099345	27.1	
A 119 C6-C10	1	12.735	(8.556-16.914)		0	1114603	14.4	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	2056271	26.5	
A 120 C6-C12	1	14.281	(8.556-20.005)		0	1597559	20.6	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	309678	3.99	
A 121 C7-C12	1	15.448	(10.891-20.005)		0	845804	10.9	

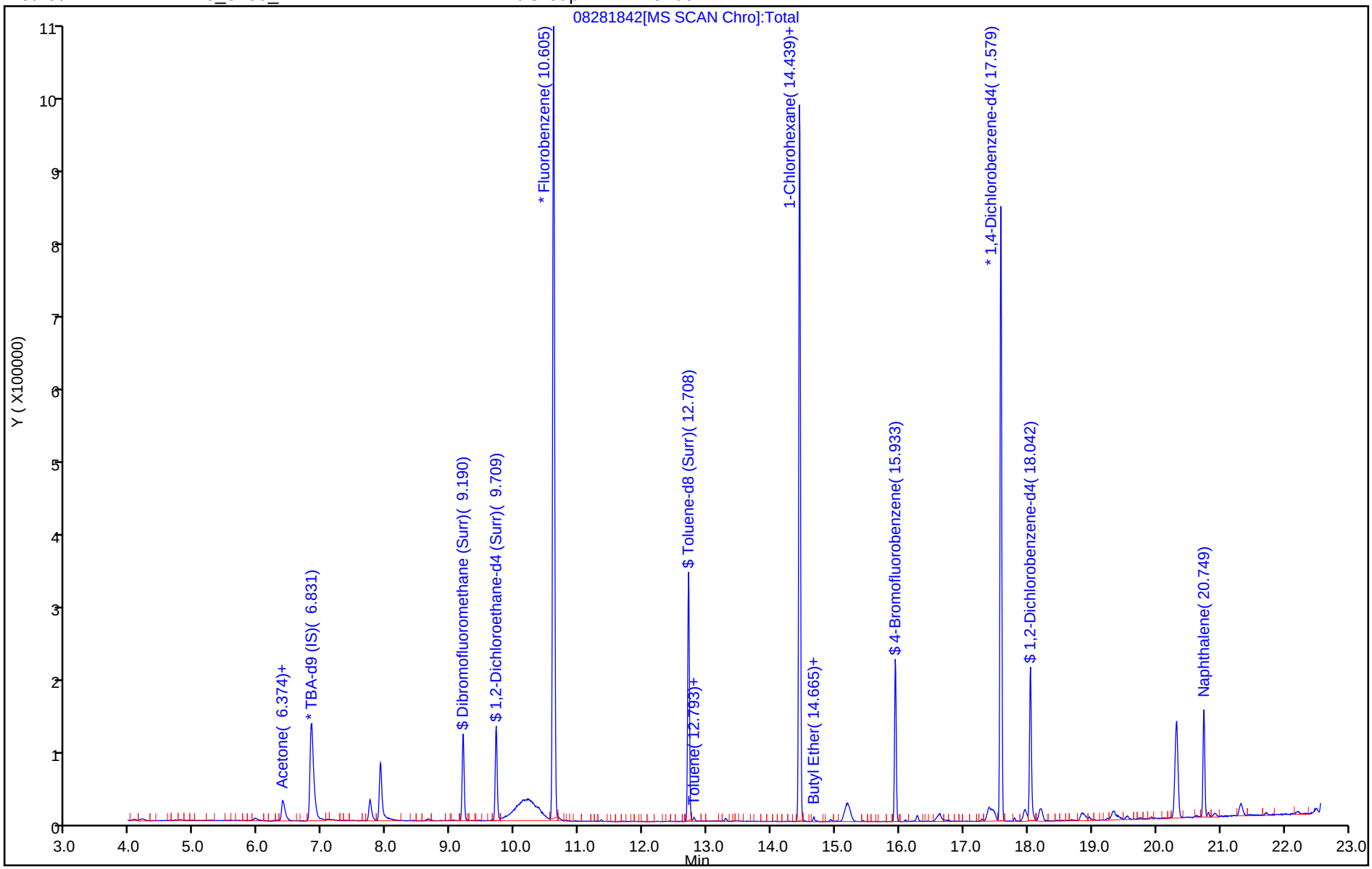
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 29-Aug-2018 10:05:53 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281842.D				
Injection Date:	29-Aug-2018 04:20:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88237-A-5-A	Lab Sample ID:	720-88237-5	Worklist Smp#:	21
Client ID:	DG-A7S--0-5-1				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281842.D
Lims ID: 720-88237-A-5-A
Client ID: DG-A7S--0-5-1
Sample Type: Client
Inject. Date: 29-Aug-2018 04:20:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88237-A-5
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 10:05:31 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 10:05:52

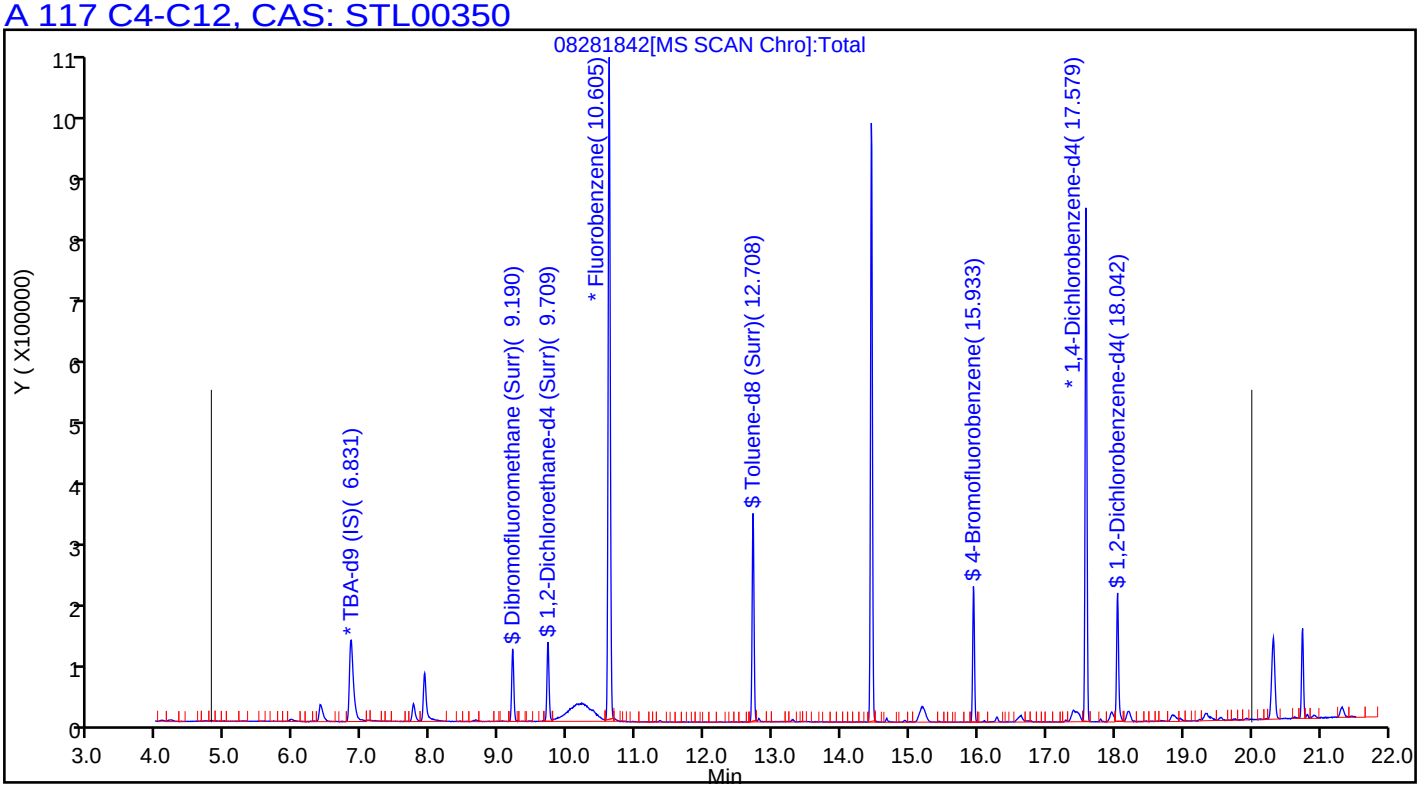
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.01	106.77
$ 10 Toluene-d8 (Surr)	7.50	6.69	89.26
$ 11 4-Bromofluorobenzene	7.50	6.67	88.89
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 29-Aug-2018 10:05:54 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281842.D				
Injection Date:	29-Aug-2018 04:20:30	Instrument ID:	HP13		
Lims ID:	720-88237-A-5-A	Lab Sample ID:	720-88237-5		
Client ID:	DG-A7S--0-5-1				
Operator ID:	VOA	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88237-1

SDG No.:

Client Sample ID: DG-A7S-0-5-1 Lab Sample ID: 720-88237-5

Matrix: Solid Lab File ID: 08291817.D

Analysis Method: 8260B Date Collected: 08/23/2018 15:00

Sample wt/vol: 5.599(g) Date Analyzed: 08/29/2018 14:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250452 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
91-20-3	Naphthalene	ND		8.9	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	96		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		60-140
2037-26-5	Toluene-d8 (Surr)	92		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180829-53540.b\08291817.D
Lims ID: 720-88237-B-5-A
Client ID: DG-A7S--0-5-1
Sample Type: Client
Inject. Date: 29-Aug-2018 14:21:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88237-B-5 RR
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180829-53540.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 09:05:49 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: chaijita Date: 30-Aug-2018 09:05:49

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.819	6.819	0.000	0	303945	250.0	
* 2 Fluorobenzene	96	10.598	10.599	-0.001	99	789594	25.0	
* 4 Chlorobenzene-d5	117	14.439	14.445	-0.006	87	603216	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.585	-0.006	95	294136	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.190	9.190	0.000	93	68648	7.75	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.702	9.709	-0.006	0	89685	8.08	
$ 10 Toluene-d8 (Surr)	98	12.708	12.708	0.000	93	220285	6.90	
$ 11 4-Bromofluorobenzene	95	15.933	15.926	0.000	94	84238	7.18	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.036	0.000	85	68320	6.00	
28 Acetone	58	6.374	6.374	0.000	99	27147	29.3	
75 Toluene	92	12.793	12.788	0.000	98	2167	0.1093	
128 Butyl Ether	87	14.665	14.653	0.006	95	1051	0.1751	
29 Pentane	43	6.374	6.410	-0.036	70	93662	NR	
131 n-Octane	43	13.104	13.110	-0.006	83	1096	NR	
135 n-Nonane	57	15.061	15.055	0.006	87	530	NR	
110 Dodecane	57	19.938	19.938	0.000	77	676	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	883666	12.2	
A 154 C6-C8	1	10.852	(8.550-13.153)		0	143105	1.98	
A 155 C6-C9	1	11.842	(8.550-15.134)		0	208727	2.88	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	966273	13.3	
A 119 C6-C10	1	12.732	(8.550-16.914)		0	250052	3.45	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	915301	12.6	
A 120 C6-C12	1	14.278	(8.550-20.005)		0	332659	4.59	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	112427	1.55	
A 121 C7-C12	1	15.451	(10.897-20.005)		0	248101	3.43	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

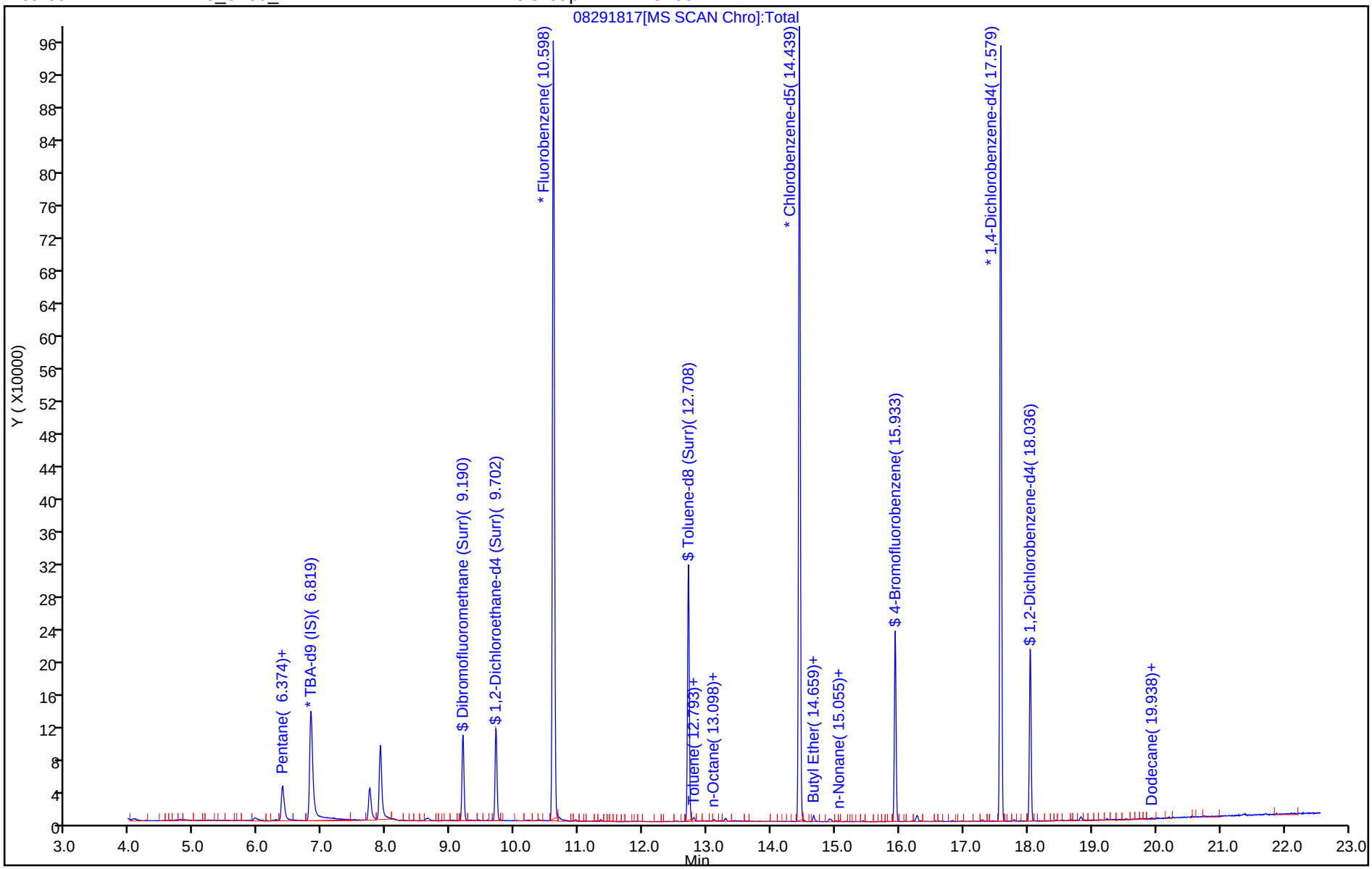
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 30-Aug-2018 09:05:51 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180829-53540.b\08291817.D				
Injection Date:	29-Aug-2018 14:21:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88237-B-5-A	Lab Sample ID:	720-88237-5	Worklist Smp#:	16
Client ID:	DG-A7S--0-5-1				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180829-53540.b\08291817.D
Lims ID: 720-88237-B-5-A
Client ID: DG-A7S--0-5-1
Sample Type: Client
Inject. Date: 29-Aug-2018 14:21:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88237-B-5 RR
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180829-53540.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 09:05:49 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: chaijita Date: 30-Aug-2018 09:05:49

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.08	107.71
$ 10 Toluene-d8 (Surr)	7.50	6.90	91.98
$ 11 4-Bromofluorobenzene	7.50	7.18	95.74
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88237-1
SDG No.:
Client Sample ID: DG-A7S-3-5-4
Lab Sample ID: 720-88237-6
Matrix: Solid
Lab File ID: 08291818.D
Analysis Method: 8260B
Date Collected: 08/23/2018 15:00
Sample wt/vol: 6.845(g)
Date Analyzed: 08/29/2018 14:52
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250452
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		3.7	0.88
67-64-1	Acetone	28	J	37	28
71-43-2	Benzene	ND		3.7	0.47
75-27-4	Dichlorobromomethane	ND		3.7	0.53
108-86-1	Bromobenzene	ND		3.7	0.58
74-97-5	Chlorobromomethane	ND		15	0.53
75-25-2	Bromoform	ND		3.7	1.5
74-83-9	Bromomethane	ND		7.3	0.58
78-93-3	2-Butanone (MEK)	ND		37	15
104-51-8	n-Butylbenzene	ND		3.7	0.73
135-98-8	sec-Butylbenzene	ND		3.7	0.53
98-06-6	tert-Butylbenzene	ND		3.7	0.53
75-15-0	Carbon disulfide	ND		3.7	1.5
56-23-5	Carbon tetrachloride	ND		3.7	0.45
108-90-7	Chlorobenzene	ND		3.7	0.50
75-00-3	Chloroethane	ND		7.3	0.41
67-66-3	Chloroform	ND		3.7	0.48
74-87-3	Chloromethane	ND		7.3	0.58
95-49-8	2-Chlorotoluene	ND		3.7	0.47
106-43-4	4-Chlorotoluene	ND		3.7	0.50
124-48-1	Chlorodibromomethane	ND		3.7	0.52
95-50-1	1,2-Dichlorobenzene	ND		3.7	0.50
541-73-1	1,3-Dichlorobenzene	ND		3.7	0.53
106-46-7	1,4-Dichlorobenzene	ND		3.7	0.52
142-28-9	1,3-Dichloropropane	ND		3.7	0.53
563-58-6	1,1-Dichloropropene	ND		3.7	0.50
96-12-8	1,2-Dibromo-3-Chloropropane	ND		7.3	1.2
106-93-4	Ethylene Dibromide	ND		3.7	1.0
74-95-3	Dibromomethane	ND		7.3	0.63
75-71-8	Dichlorodifluoromethane	ND		7.3	0.58
75-34-3	1,1-Dichloroethane	ND		3.7	0.50
107-06-2	1,2-Dichloroethane	ND		3.7	0.56
75-35-4	1,1-Dichloroethene	ND	*	3.7	0.45
156-59-2	cis-1,2-Dichloroethene	ND		3.7	0.50
156-60-5	trans-1,2-Dichloroethene	ND		3.7	0.55
78-87-5	1,2-Dichloropropane	ND		3.7	0.46

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88237-1

SDG No.:

Client Sample ID: DG-A7S-3-5-4 Lab Sample ID: 720-88237-6

Matrix: Solid Lab File ID: 08291818.D

Analysis Method: 8260B Date Collected: 08/23/2018 15:00

Sample wt/vol: 6.845(g) Date Analyzed: 08/29/2018 14:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250452 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		3.7	0.50
10061-02-6	trans-1,3-Dichloropropene	ND		3.7	0.49
100-41-4	Ethylbenzene	ND		3.7	0.55
87-68-3	Hexachlorobutadiene	ND		3.7	0.66
591-78-6	2-Hexanone	ND		37	7.3
98-82-8	Isopropylbenzene	ND		3.7	0.50
99-87-6	4-Isopropyltoluene	ND		3.7	1.8
75-09-2	Methylene Chloride	ND		7.3	4.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		37	7.3
91-20-3	Naphthalene	ND		7.3	1.1
103-65-1	N-Propylbenzene	ND		3.7	0.48
100-42-5	Styrene	ND		3.7	0.46
630-20-6	1,1,1,2-Tetrachloroethane	ND		3.7	0.56
79-34-5	1,1,2,2-Tetrachloroethane	ND		3.7	0.55
127-18-4	Tetrachloroethene	ND		3.7	0.49
108-88-3	Toluene	ND		3.7	0.52
87-61-6	1,2,3-Trichlorobenzene	ND		3.7	0.54
120-82-1	1,2,4-Trichlorobenzene	ND		3.7	0.52
71-55-6	1,1,1-Trichloroethane	ND		3.7	0.45
79-00-5	1,1,2-Trichloroethane	ND		3.7	0.51
79-01-6	Trichloroethene	ND		3.7	0.46
75-69-4	Trichlorofluoromethane	ND		3.7	0.41
96-18-4	1,2,3-Trichloropropane	ND		3.7	0.56
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	3.7	1.5
95-63-6	1,2,4-Trimethylbenzene	ND		3.7	1.2
108-67-8	1,3,5-Trimethylbenzene	ND		3.7	0.47
108-05-4	Vinyl acetate	ND		15	3.7
75-01-4	Vinyl chloride	ND		3.7	0.53
1330-20-7	Xylenes, Total	ND		3.7	0.89
594-20-7	2,2-Dichloropropane	ND		3.7	1.5
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		180	73

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88237-1

SDG No.:

Client Sample ID: DG-A7S-3-5-4 Lab Sample ID: 720-88237-6

Matrix: Solid Lab File ID: 08291818.D

Analysis Method: 8260B Date Collected: 08/23/2018 15:00

Sample wt/vol: 6.845(g) Date Analyzed: 08/29/2018 14:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250452 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	93		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		60-140
2037-26-5	Toluene-d8 (Surr)	93		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180829-53540.b\08291818.D
Lims ID: 720-88237-B-6-A
Client ID: DG-A7S--3-5-4
Sample Type: Client
Inject. Date: 29-Aug-2018 14:52:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88237-B-6 RR
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180829-53540.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 09:07:55 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: chaijita Date: 30-Aug-2018 09:07:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.825	6.819	0.006	0	286765	250.0	
* 2 Fluorobenzene	96	10.598	10.599	-0.001	98	712210	25.0	
* 4 Chlorobenzene-d5	117	14.439	14.445	-0.006	87	524116	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.585	-0.006	95	245263	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.190	9.190	0.000	94	61575	7.70	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.708	9.709	0.000	0	77136	7.70	
$ 10 Toluene-d8 (Surr)	98	12.708	12.708	0.000	93	200154	6.95	
$ 11 4-Bromofluorobenzene	95	15.933	15.926	0.000	94	71007	6.97	
$ 12 1,2-Dichlorobenzene-d4	152	18.036	18.036	-0.006	84	63467	6.68	
28 Acetone	58	6.380	6.374	0.006	98	15878	19.0	
75 Toluene	92	12.793	12.788	0.000	98	1320	0.0766	
128 Butyl Ether	87	14.665	14.653	0.006	43	222	0.0426	
85 m-Xylene & p-Xylene	91	14.927	14.927	-0.006	0	1982	0.0749	M
29 Pentane	43	6.380	6.410	-0.030	70	60282	NR	
131 n-Octane	43	13.098	13.110	-0.012	6	688	NR	
135 n-Nonane	57	15.061	15.055	0.006	87	537	NR	
110 Dodecane	57	19.938	19.938	0.000	74	597	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	790790	12.1	
A 154 C6-C8	1	10.852	(8.550-13.153)		0	117112	1.79	
A 155 C6-C9	1	11.842	(8.550-15.134)		0	171577	2.63	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	864704	13.2	
A 119 C6-C10	1	12.732	(8.550-16.914)		0	219154	3.36	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	810979	12.4	
A 120 C6-C12	1	14.278	(8.550-20.005)		0	293068	4.49	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	108485	1.66	
A 121 C7-C12	1	15.451	(10.897-20.005)		0	226743	3.47	
S 122 Xylenes, Total	1				0		0.0749	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

M - Manually Integrated

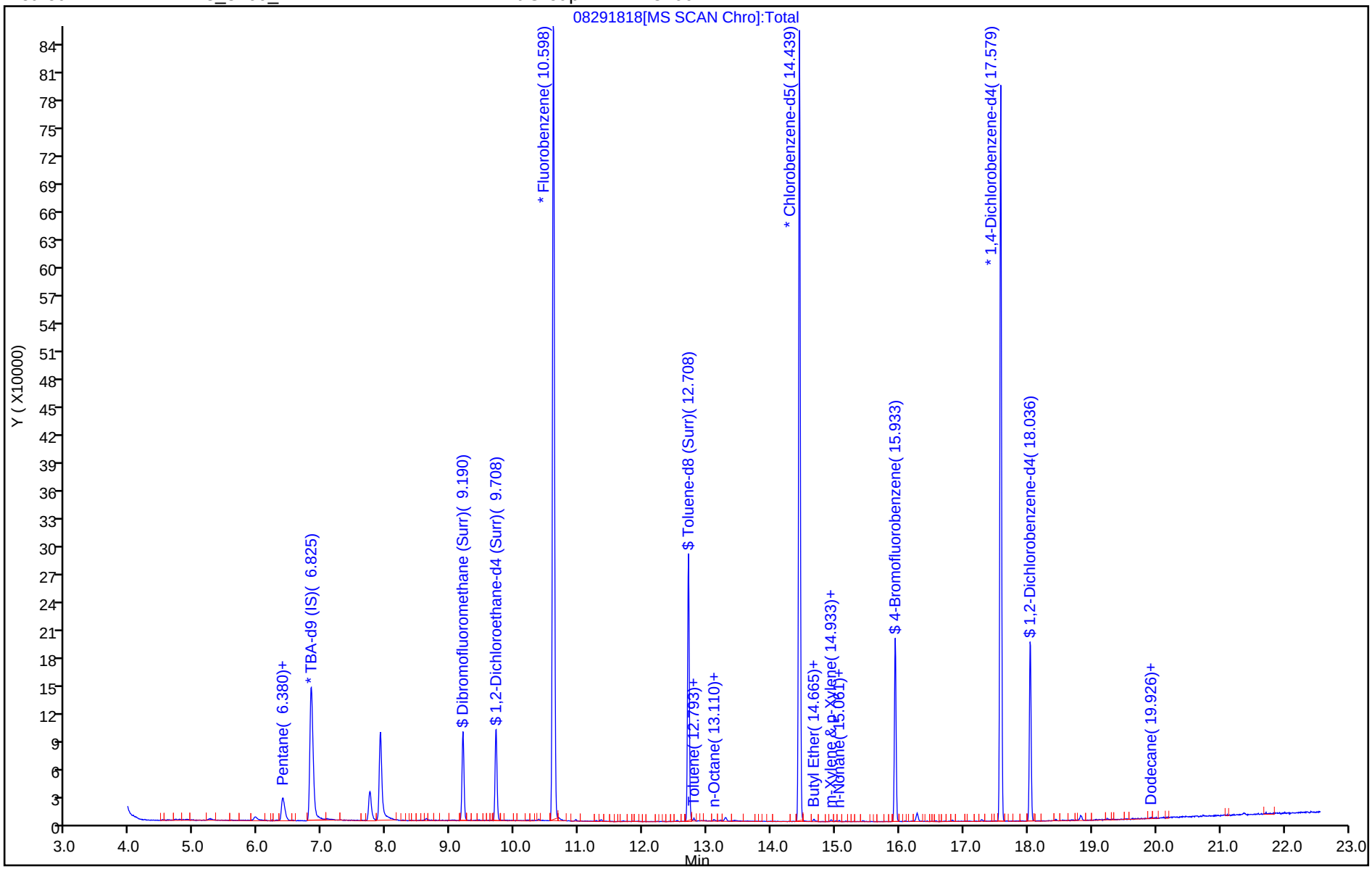
Reagents:

I_IS/SS_00092	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 30-Aug-2018 09:07:57 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180829-53540.b\08291818.D				
Injection Date:	29-Aug-2018 14:52:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88237-B-6-A	Lab Sample ID:	720-88237-6	Worklist Smp#:	17
Client ID:	DG-A7S--3-5-4				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180829-53540.b\08291818.D
Lims ID: 720-88237-B-6-A
Client ID: DG-A7S--3-5-4
Sample Type: Client
Inject. Date: 29-Aug-2018 14:52:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88237-B-6 RR
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180829-53540.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 09:07:55 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: chaijita Date: 30-Aug-2018 09:07:55

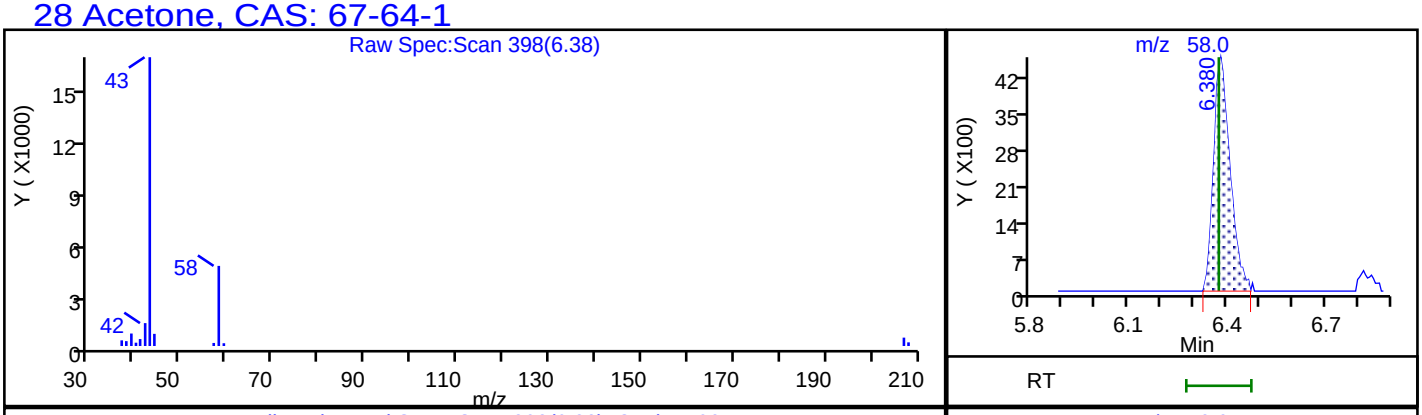
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.70	102.70
$ 10 Toluene-d8 (Surr)	7.50	6.95	92.65
$ 11 4-Bromofluorobenzene	7.50	6.97	92.89
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

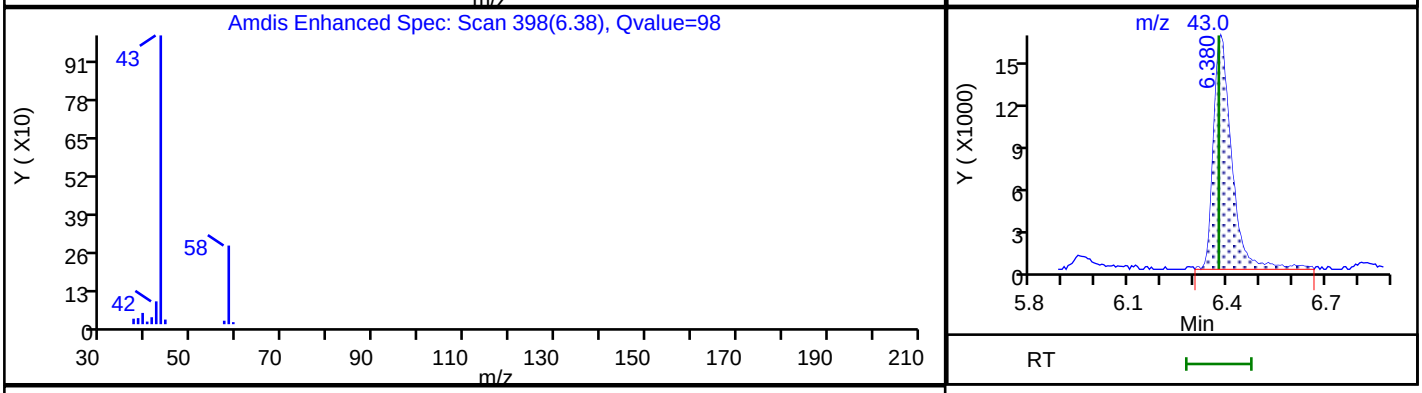
Report Date: 30-Aug-2018 09:07:57 Chrom Revision: 2.3 19-Jul-2018 15:14:50

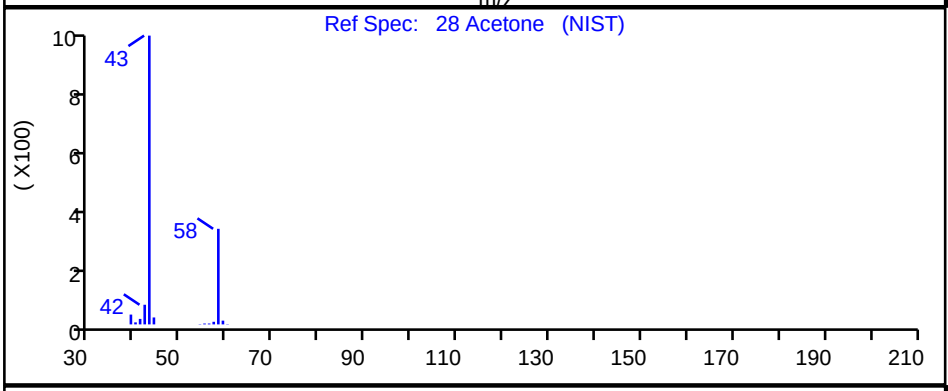
TestAmerica Pleasanton

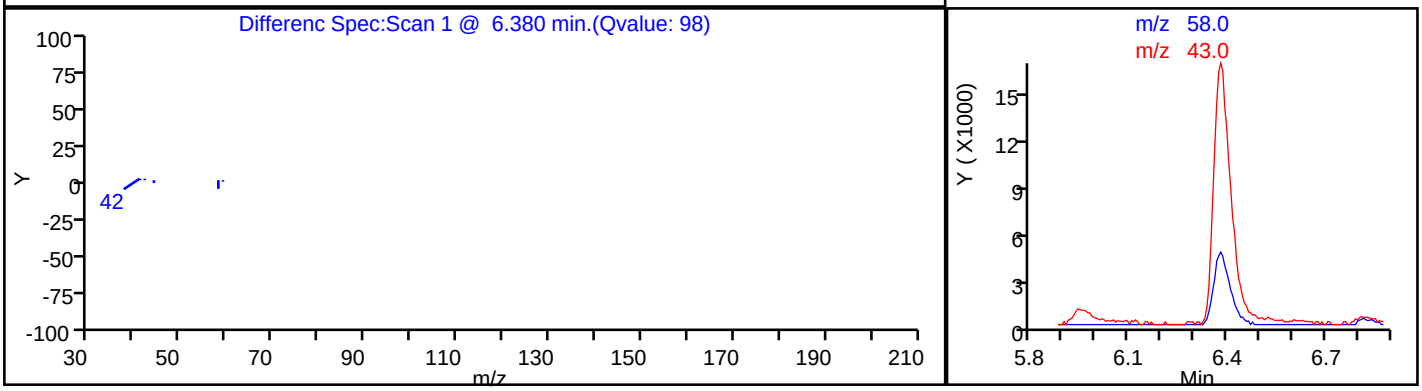
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180829-53540.b\08291818.D				
Injection Date:	29-Aug-2018 14:52:30	Instrument ID:	HP13		
Lims ID:	720-88237-B-6-A	Lab Sample ID:	720-88237-6		
Client ID:	DG-A7S--3-5-4				
Operator ID:	VOA	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1







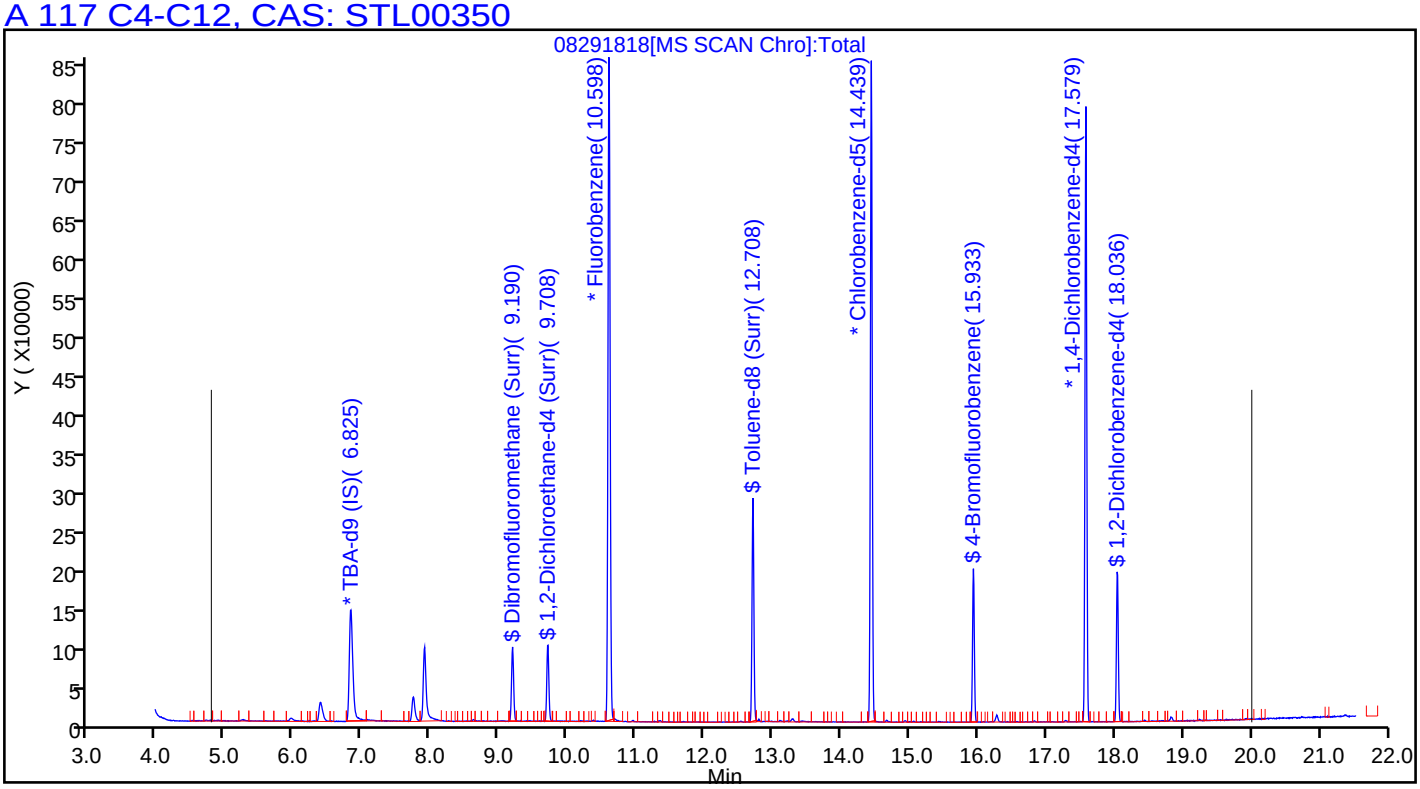


Report Date: 30-Aug-2018 09:08:05 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180829-53540.b\08291818.D				
Injection Date:	29-Aug-2018 14:52:30	Instrument ID:	HP13		
Lims ID:	720-88237-B-6-A	Lab Sample ID:	720-88237-6		
Client ID:	DG-A7S--3-5-4				
Operator ID:	VOA	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



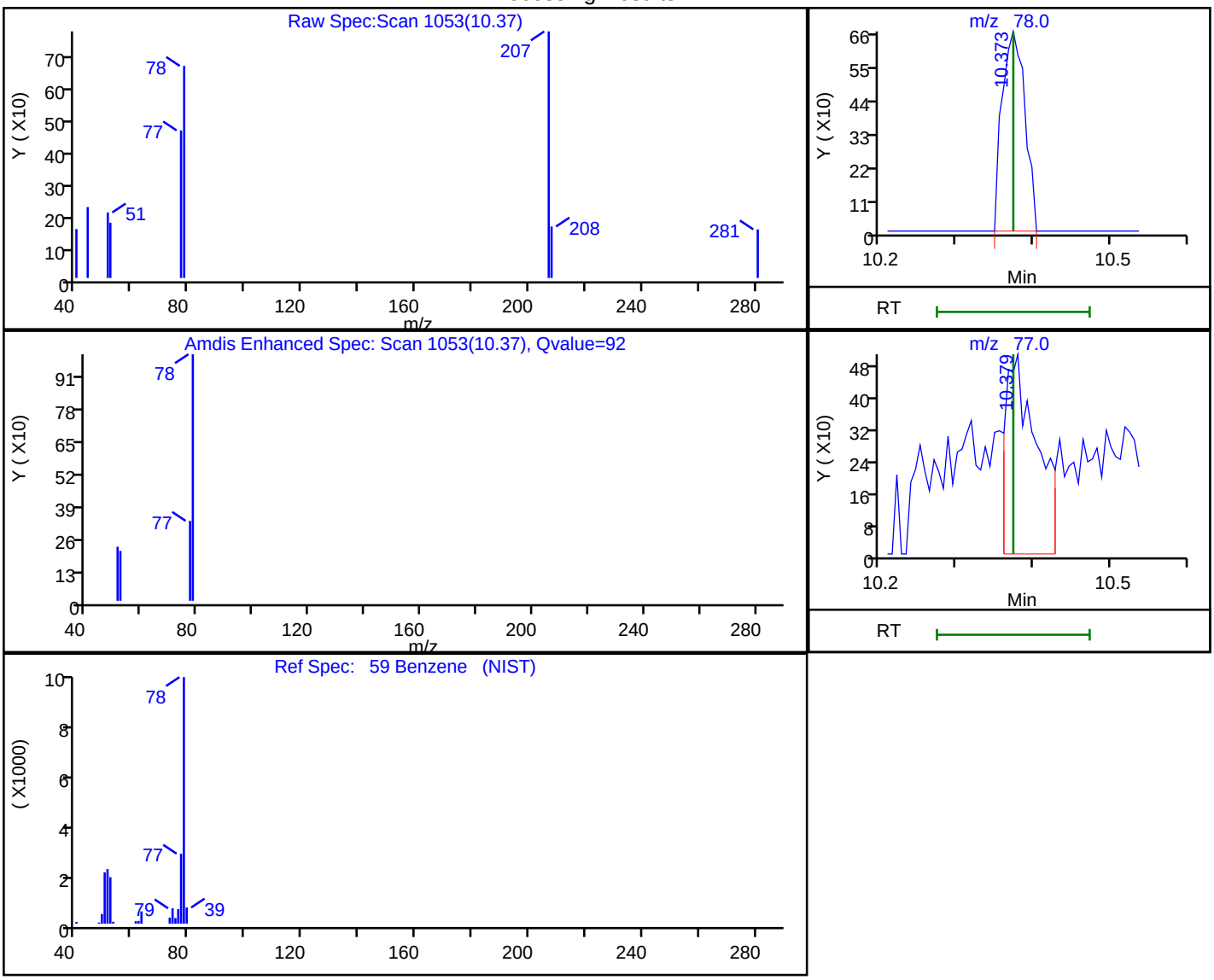
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180829-53540.b\08291818.D				
Injection Date:	29-Aug-2018 14:52:30	Instrument ID:	HP13		
Lims ID:	720-88237-B-6-A	Lab Sample ID:	720-88237-6		
Client ID:	DG-A7S--3-5-4				
Operator ID:	VOA	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

59 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
10.37	78.00	1372	0.045271
10.38	77.00	1459	

Reviewer: chaijita, 30-Aug-2018 09:07:23

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

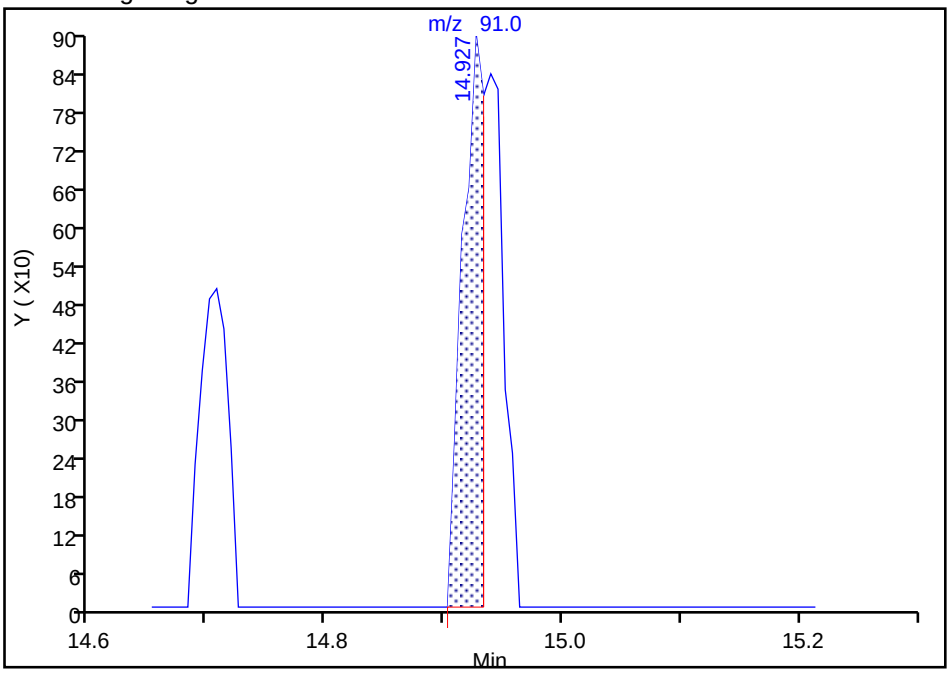
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180829-53540.b\08291818.D				
Injection Date:	29-Aug-2018 14:52:30	Instrument ID:	HP13		
Lims ID:	720-88237-B-6-A	Lab Sample ID:	720-88237-6		
Client ID:	DG-A7S--3-5-4				
Operator ID:	VOA	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

85 m-Xylene & p-Xylene, CAS: 179601-23-1

Signal: 1

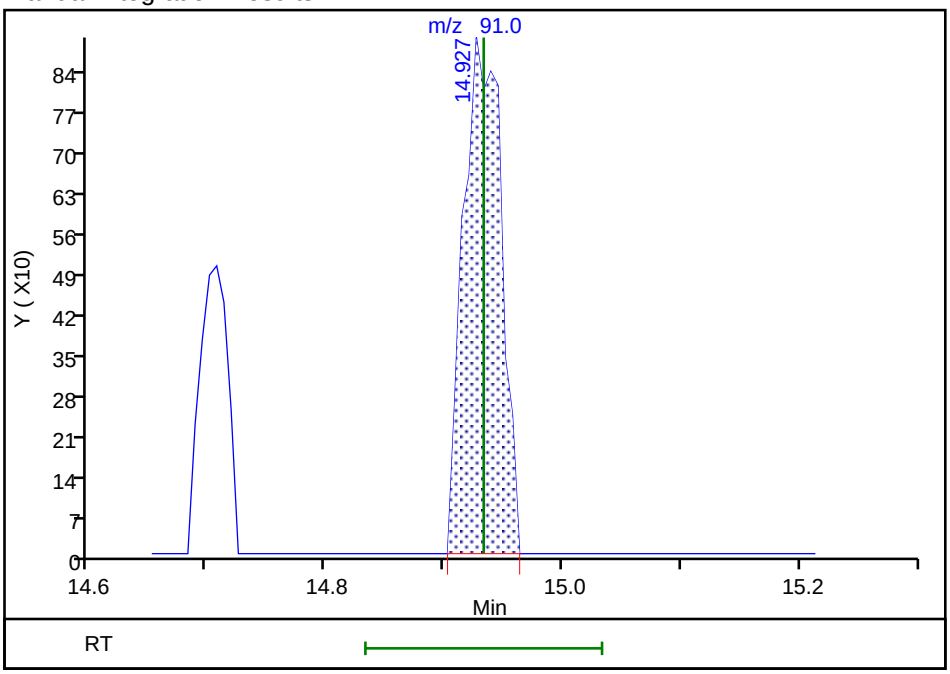
Processing Integration Results

RT: 14.93
Area: 1168
Amount: 0.044152
Amount Units: ug/L



Manual Integration Results

RT: 14.93
Area: 1982
Amount: 0.074923
Amount Units: ug/L



Reviewer: chaijita, 30-Aug-2018 09:07:42

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88237-1

SDG No.:

Client Sample ID: DG-A7S-10-10-5 Lab Sample ID: 720-88237-7

Matrix: Solid Lab File ID: 08281837.D

Analysis Method: 8260B Date Collected: 08/23/2018 15:00

Sample wt/vol: 6.294(g) Date Analyzed: 08/29/2018 02:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250407 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.0	0.95
67-64-1	Acetone	33	J	40	30
71-43-2	Benzene	ND		4.0	0.52
75-27-4	Dichlorobromomethane	ND		4.0	0.57
108-86-1	Bromobenzene	ND	*	4.0	0.63
74-97-5	Chlorobromomethane	ND		16	0.57
75-25-2	Bromoform	ND		4.0	1.6
74-83-9	Bromomethane	ND		7.9	0.63
78-93-3	2-Butanone (MEK)	ND		40	17
104-51-8	n-Butylbenzene	ND	*	4.0	0.79
135-98-8	sec-Butylbenzene	ND	*	4.0	0.57
98-06-6	tert-Butylbenzene	ND	*	4.0	0.58
75-15-0	Carbon disulfide	3.0	J *	4.0	1.6
56-23-5	Carbon tetrachloride	ND		4.0	0.49
108-90-7	Chlorobenzene	ND		4.0	0.55
75-00-3	Chloroethane	ND		7.9	0.44
67-66-3	Chloroform	ND		4.0	0.52
74-87-3	Chloromethane	ND		7.9	0.63
95-49-8	2-Chlorotoluene	ND	*	4.0	0.52
106-43-4	4-Chlorotoluene	ND	*	4.0	0.54
124-48-1	Chlorodibromomethane	ND		4.0	0.56
95-50-1	1,2-Dichlorobenzene	ND	*	4.0	0.54
541-73-1	1,3-Dichlorobenzene	ND	*	4.0	0.57
106-46-7	1,4-Dichlorobenzene	ND	*	4.0	0.56
142-28-9	1,3-Dichloropropane	ND		4.0	0.58
563-58-6	1,1-Dichloropropene	ND		4.0	0.55
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	7.9	1.4
106-93-4	Ethylene Dibromide	ND		4.0	1.1
74-95-3	Dibromomethane	ND		7.9	0.68
75-71-8	Dichlorodifluoromethane	ND		7.9	0.63
75-34-3	1,1-Dichloroethane	ND		4.0	0.54
107-06-2	1,2-Dichloroethane	ND		4.0	0.60
75-35-4	1,1-Dichloroethene	ND	*	4.0	0.49
156-59-2	cis-1,2-Dichloroethene	18		4.0	0.54
156-60-5	trans-1,2-Dichloroethene	1.9	J	4.0	0.60
78-87-5	1,2-Dichloropropane	ND		4.0	0.50

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88237-1
SDG No.:
Client Sample ID: DG-A7S-10-10-5
Lab Sample ID: 720-88237-7
Matrix: Solid
Lab File ID: 08281837.D
Analysis Method: 8260B
Date Collected: 08/23/2018 15:00
Sample wt/vol: 6.294(g)
Date Analyzed: 08/29/2018 02:24
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250407
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.0	0.55
10061-02-6	trans-1,3-Dichloropropene	ND		4.0	0.53
100-41-4	Ethylbenzene	ND		4.0	0.60
87-68-3	Hexachlorobutadiene	ND	*	4.0	0.71
591-78-6	2-Hexanone	ND		40	7.9
98-82-8	Isopropylbenzene	ND		4.0	0.54
99-87-6	4-Isopropyltoluene	ND	*	4.0	2.0
75-09-2	Methylene Chloride	ND		7.9	4.4
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		40	7.9
91-20-3	Naphthalene	ND	*	7.9	1.2
103-65-1	N-Propylbenzene	ND	*	4.0	0.52
100-42-5	Styrene	ND		4.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.0	0.60
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	4.0	0.60
127-18-4	Tetrachloroethene	ND		4.0	0.53
108-88-3	Toluene	ND		4.0	0.56
87-61-6	1,2,3-Trichlorobenzene	ND	*	4.0	0.59
120-82-1	1,2,4-Trichlorobenzene	ND	*	4.0	0.56
71-55-6	1,1,1-Trichloroethane	ND		4.0	0.48
79-00-5	1,1,2-Trichloroethane	ND		4.0	0.56
79-01-6	Trichloroethene	ND		4.0	0.50
75-69-4	Trichlorofluoromethane	ND		4.0	0.44
96-18-4	1,2,3-Trichloropropane	ND	*	4.0	0.61
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.7
95-63-6	1,2,4-Trimethylbenzene	ND	*	4.0	1.3
108-67-8	1,3,5-Trimethylbenzene	ND	*	4.0	0.52
108-05-4	Vinyl acetate	ND		16	4.0
75-01-4	Vinyl chloride	1.1	J	4.0	0.58
1330-20-7	Xylenes, Total	ND		4.0	0.97
594-20-7	2,2-Dichloropropane	ND		4.0	1.6
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		200	79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88237-1

SDG No.:

Client Sample ID: DG-A7S-10-10-5 Lab Sample ID: 720-88237-7

Matrix: Solid Lab File ID: 08281837.D

Analysis Method: 8260B Date Collected: 08/23/2018 15:00

Sample wt/vol: 6.294(g) Date Analyzed: 08/29/2018 02:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250407 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	78		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		60-140
2037-26-5	Toluene-d8 (Surr)	97		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281837.D
Lims ID: 720-88237-A-7a one voa
Client ID:
Sample Type: Client
Inject. Date: 29-Aug-2018 02:24:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88237-A-7 1 VOA
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 29-Aug-2018 09:15:45 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 09:17:29

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.094	7.101	-0.007	98	165652	250.0	
* 2 Fluorobenzene	96	10.901	10.899	0.002	98	900143	25.0	
* 4 Chlorobenzene-d5	117	14.749	14.747	0.002	85	533562	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.878	17.886	-0.008	95	167500	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.494	9.491	0.003	54	62578	7.66	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.010	10.008	0.002	98	64721	8.07	
$ 10 Toluene-d8 (Surr)	98	13.007	13.005	0.002	92	234849	7.25	
$ 11 4-Bromofluorobenzene	95	16.238	16.235	0.003	88	56856	5.86	
$ 12 1,2-Dichlorobenzene-d4	152	18.344	18.331	0.003	68	33236	5.38	
19 Vinyl chloride	62	4.998	4.975	0.023	20	9779	0.6934	
28 Acetone	58	6.648	6.646	0.002	95	11642	20.9	
34 Methylene Chloride	84	7.357	7.365	-0.008	29	1145	0.1416	
37 Carbon disulfide	76	7.661	7.668	-0.007	90	38014	1.86	
38 trans-1,2-Dichloroethene	96	8.167	8.165	0.002	65	10262	1.23	
44 2-Butanone (MEK)	72	8.937	8.924	0.013	69	1315	1.87	
48 cis-1,2-Dichloroethene	61	9.109	9.116	-0.008	82	143264	11.6	
59 Benzene	78	10.668	10.676	-0.008	31	5773	0.1645	
148 1-Chlorohexane	55	14.739	14.655	0.083	6	5777	0.5833	
126 Butyl Ether	87	14.941	14.949	-0.008	47	1361	0.2346	
A 116 C4-C10	1	11.085	(5.035-17.135)		0	1217839	16.3	
A 153 C6-C8	1	11.156	(8.853-13.459)		0	622619	8.31	
A 154 C6-C9	1	12.113	(8.853-15.373)		0	672381	8.97	
A 117 C4-C12	1	12.645	(5.035-20.255)		0	1237718	16.5	
A 119 C6-C10	1	12.994	(8.853-17.135)		0	676319	9.03	
A 118 C5-C12	1	13.429	(6.604-20.255)		0	1069334	14.3	
A 120 C6-C12	1	14.554	(8.853-20.255)		0	691178	9.22	
A 155 C8-C10	1	15.241	(13.348-17.135)		0	54925	0.7330	
A 121 C7-C12	1	15.724	(11.192-20.255)		0	127059	1.70	

QC Flag Legend

Processing Flags

s - Failed ISTD Recovery Test

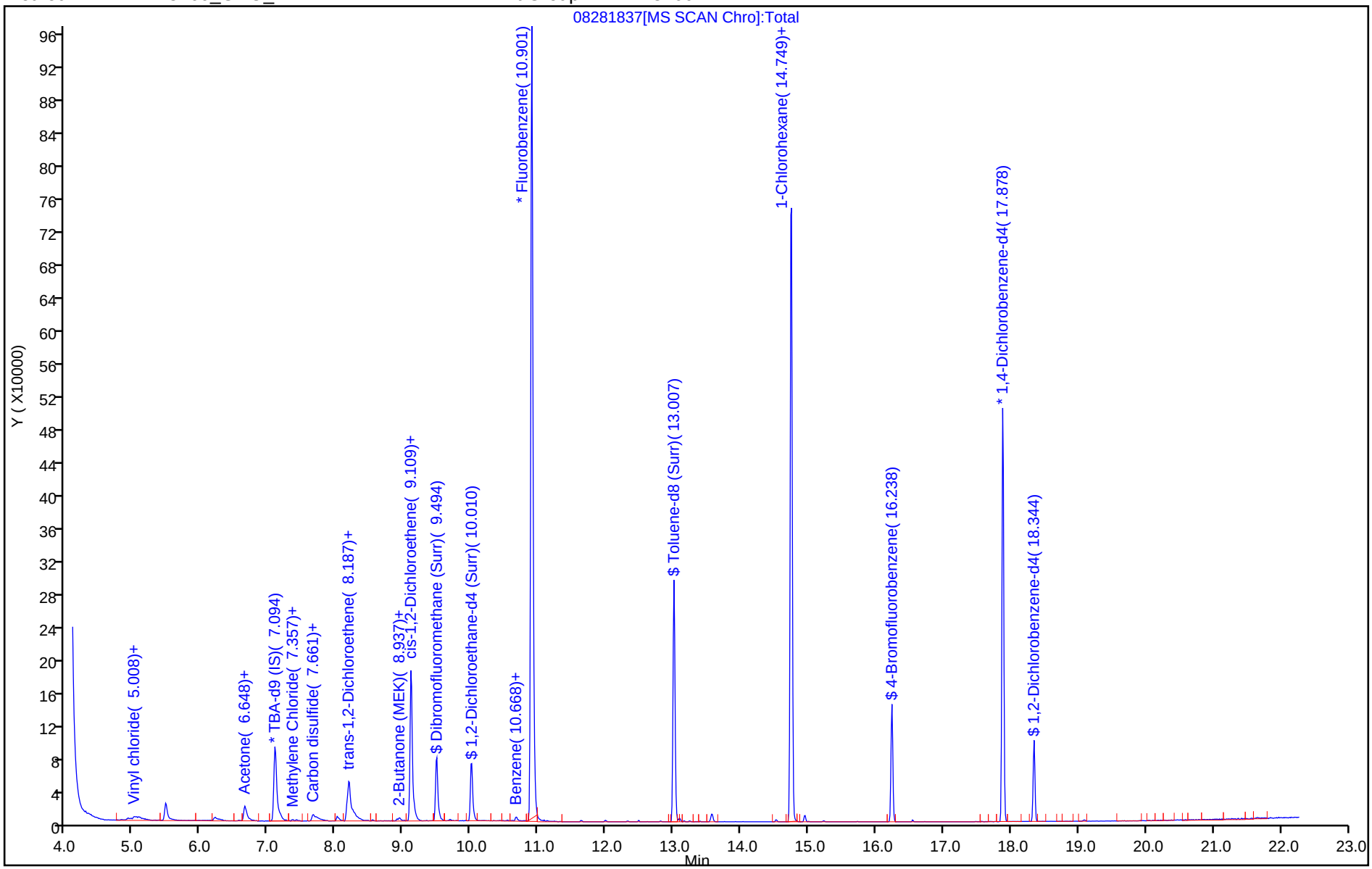
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 29-Aug-2018 09:17:29 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281837.D				
Injection Date:	29-Aug-2018 02:24:30	Instrument ID:	HP7	Operator ID:	SF
Lims ID:	720-88237-A-7a one voa	Lab Sample ID:	Client 720-250407/17-A	Worklist Smp#:	17
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8260_GRO_HP7	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281837.D
Lims ID: 720-88237-A-7a one voa
Client ID:
Sample Type: Client
Inject. Date: 29-Aug-2018 02:24:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88237-A-7 1 VOA
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 29-Aug-2018 09:15:45 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 09:17:29

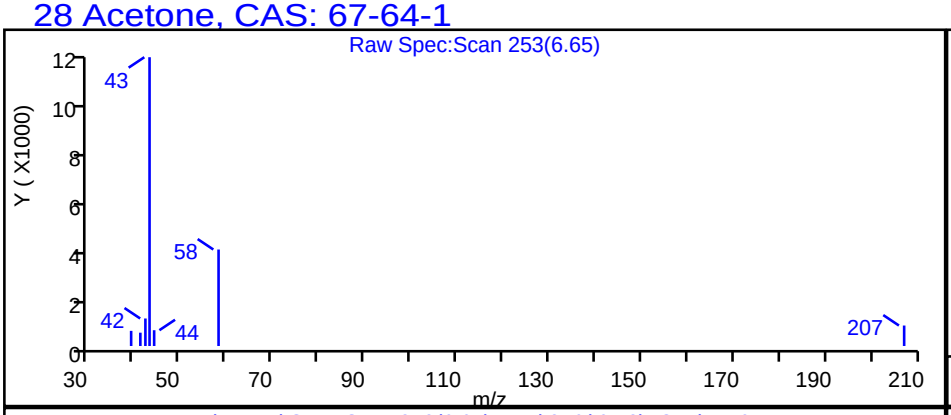
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	7.50	7.66	102.08
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.07	107.65
$ 10 Toluene-d8 (Surr)	7.50	7.25	96.66
$ 11 4-Bromofluorobenzene	7.50	5.86	78.15
$ 12 1,2-Dichlorobenzene-d4	6.00	5.38	89.59

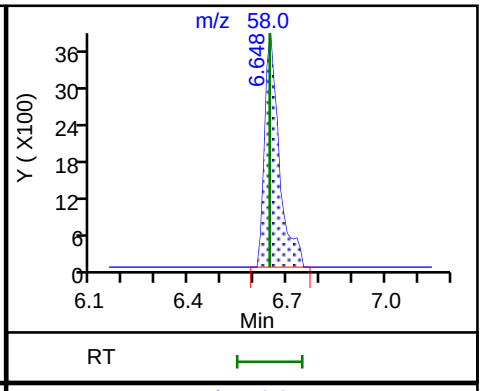
Report Date: 29-Aug-2018 09:17:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

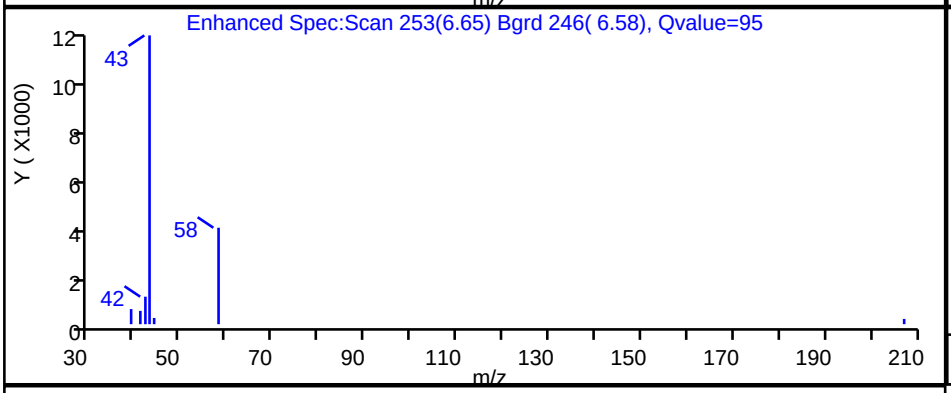
TestAmerica Pleasanton

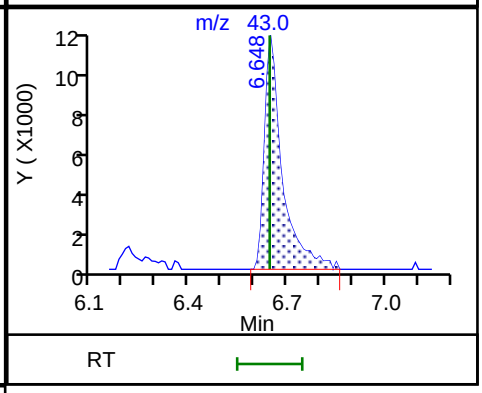
Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281837.D				
Injection Date:	29-Aug-2018 02:24:30	Instrument ID:	HP7		
Lims ID:	720-88237-A-7a one voa	Lab Sample ID:	Client 720-250407/17-A		
Client ID:					
Operator ID:	SF	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

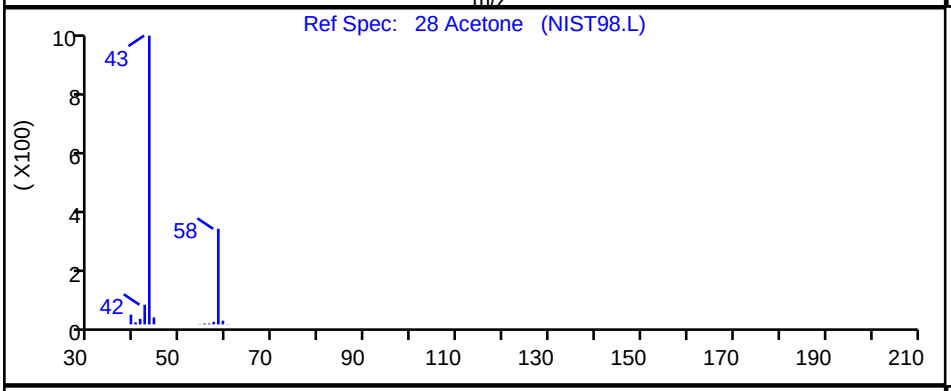
28 Acetone, CAS: 67-64-1

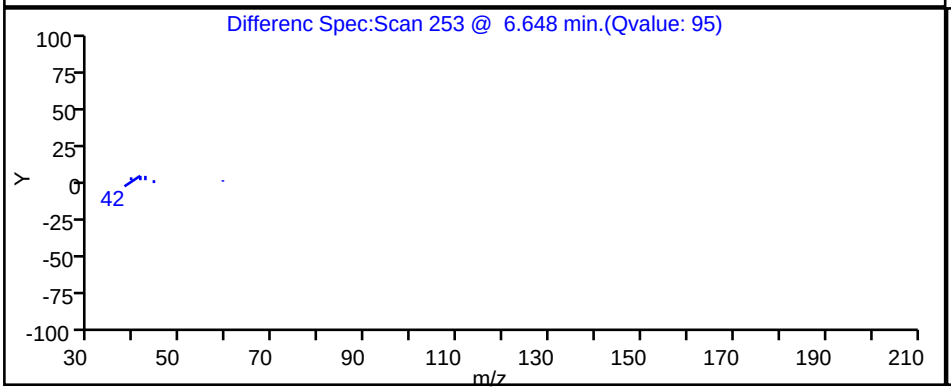


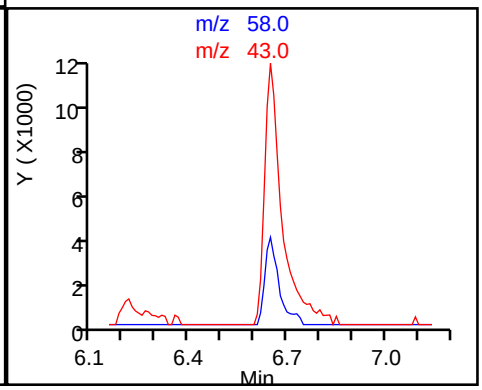










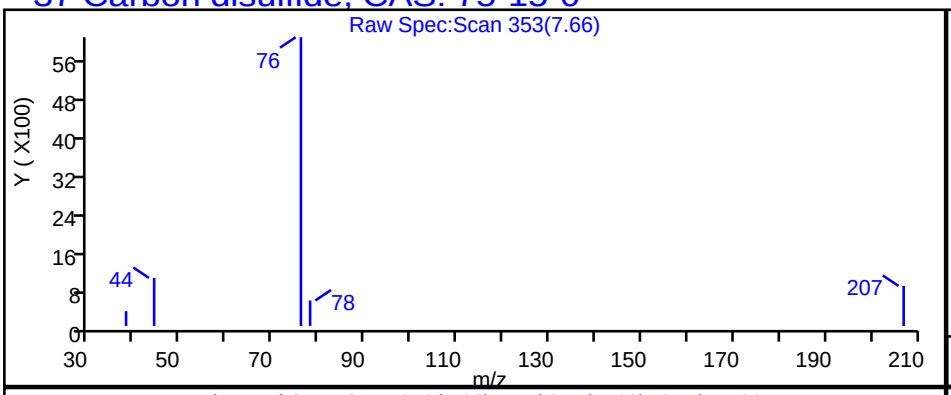


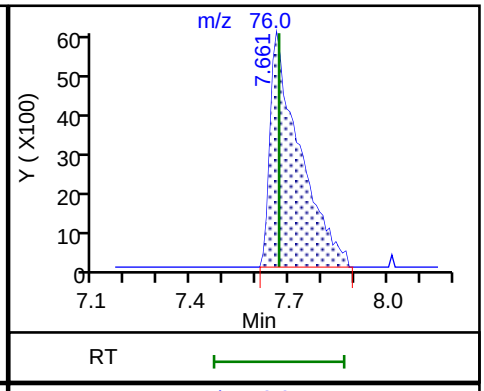
Report Date: 29-Aug-2018 09:17:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

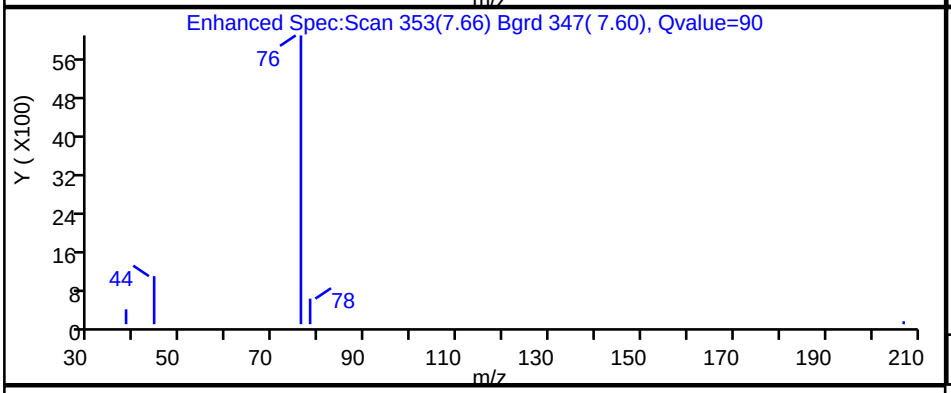
TestAmerica Pleasanton

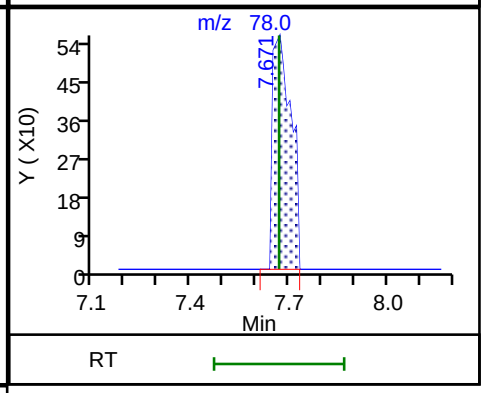
Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281837.D				
Injection Date:	29-Aug-2018 02:24:30	Instrument ID:	HP7		
Lims ID:	720-88237-A-7a one voa	Lab Sample ID:	Client 720-250407/17-A		
Client ID:					
Operator ID:	SF	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

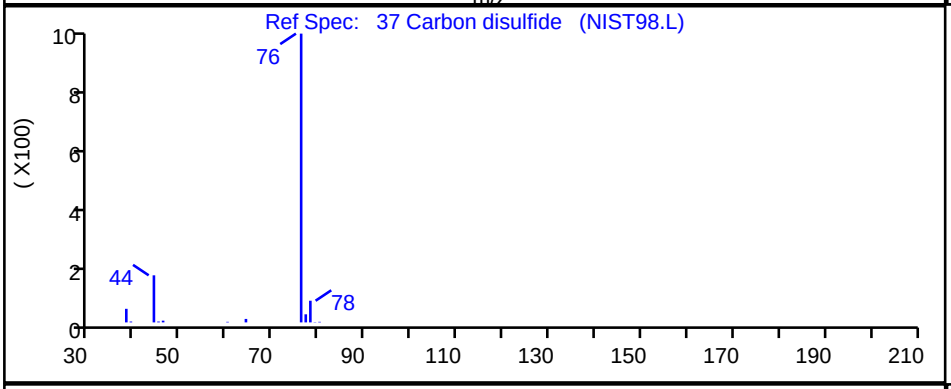
37 Carbon disulfide, CAS: 75-15-0

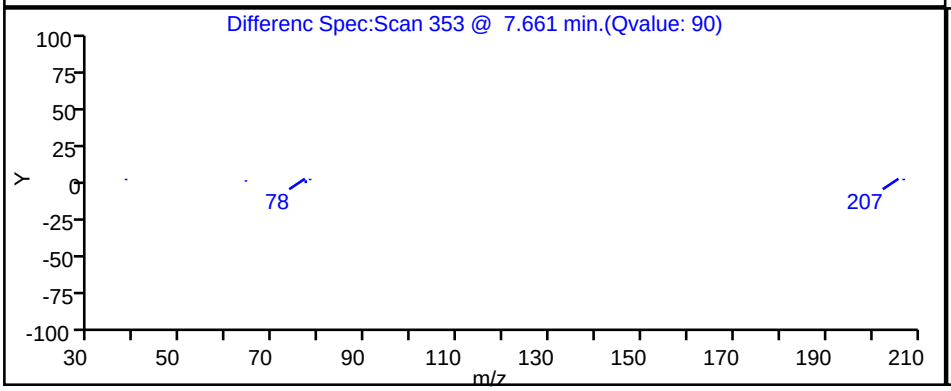


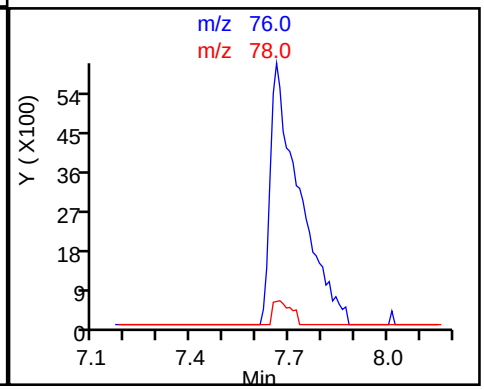










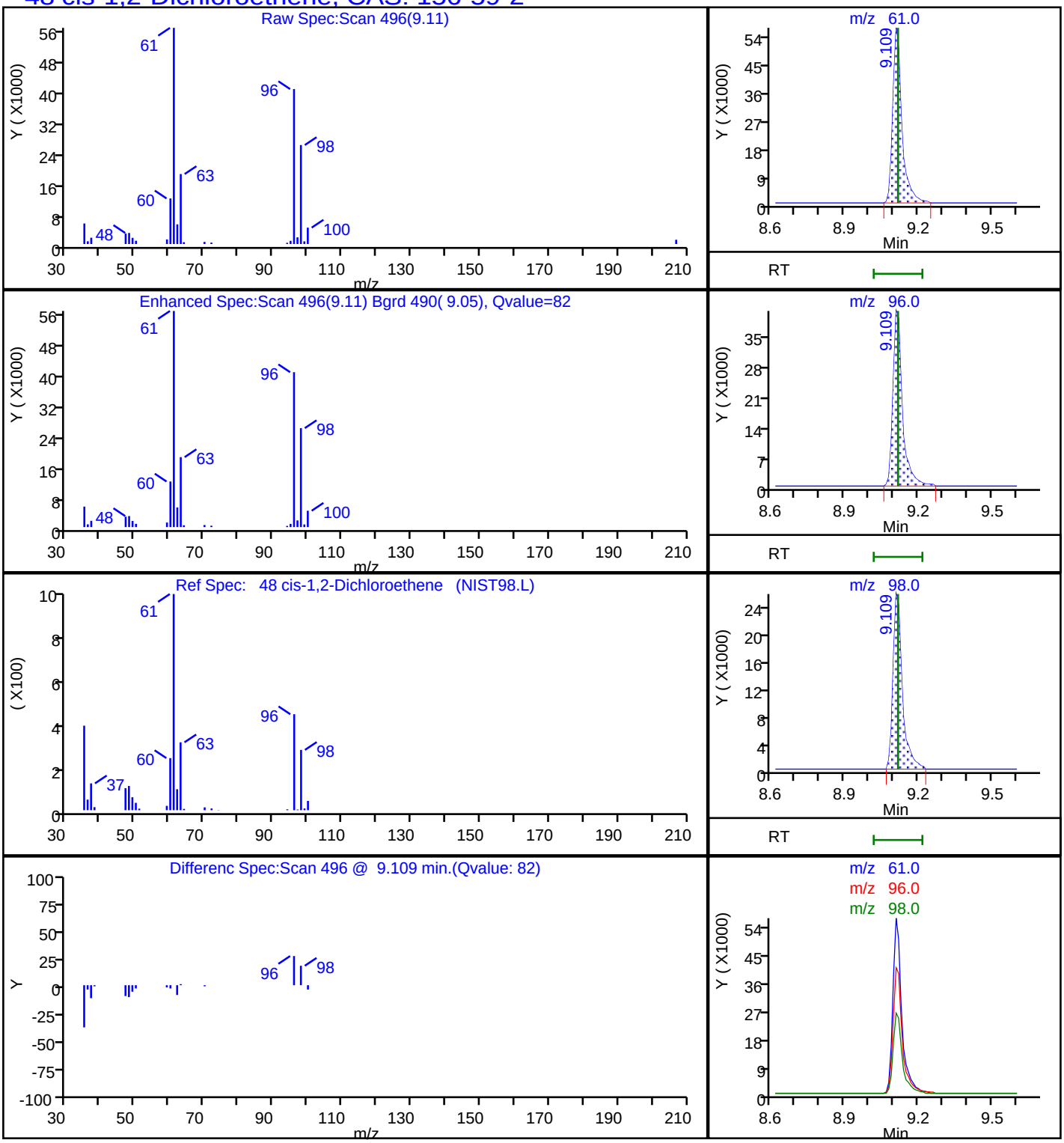


Report Date: 29-Aug-2018 09:17:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281837.D				
Injection Date:	29-Aug-2018 02:24:30	Instrument ID:	HP7		
Lims ID:	720-88237-A-7a one voa	Lab Sample ID:	Client 720-250407/17-A		
Client ID:					
Operator ID:	SF	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

48 cis-1,2-Dichloroethene, CAS: 156-59-2

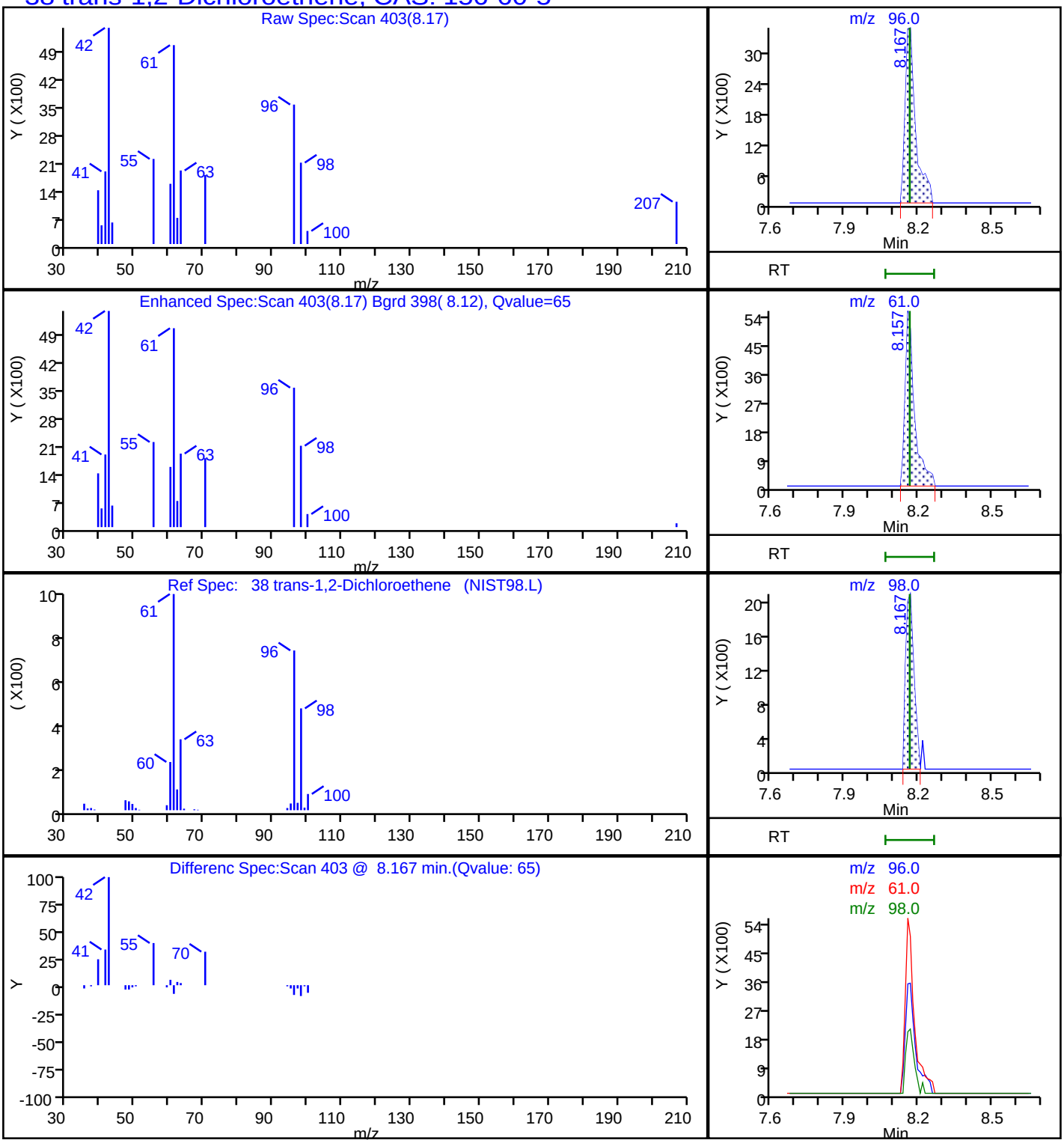


Report Date: 29-Aug-2018 09:17:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281837.D				
Injection Date:	29-Aug-2018 02:24:30	Instrument ID:	HP7		
Lims ID:	720-88237-A-7a one voa	Lab Sample ID:	Client 720-250407/17-A		
Client ID:					
Operator ID:	SF	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

38 trans-1,2-Dichloroethene, CAS: 156-60-5

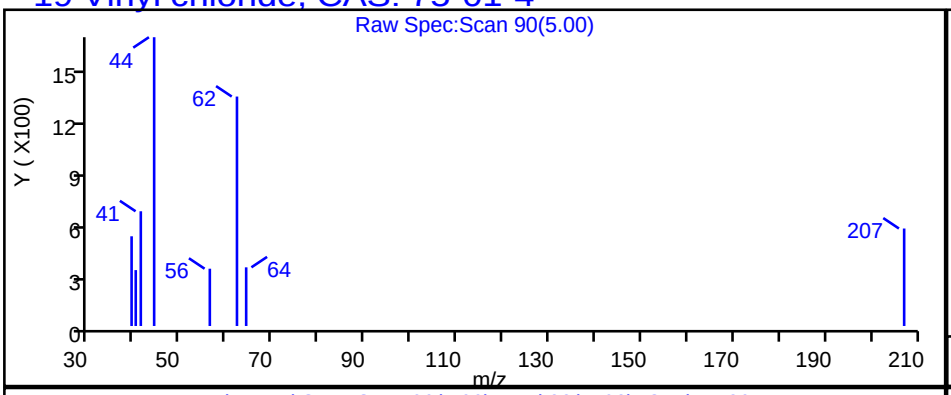


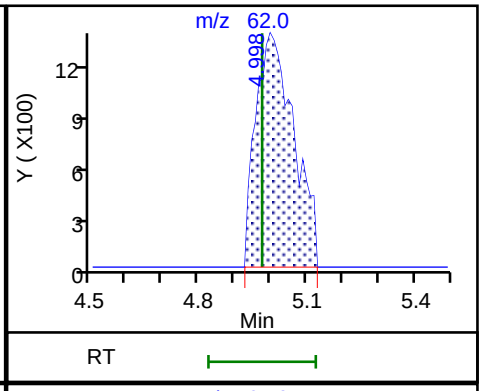
Report Date: 29-Aug-2018 09:17:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

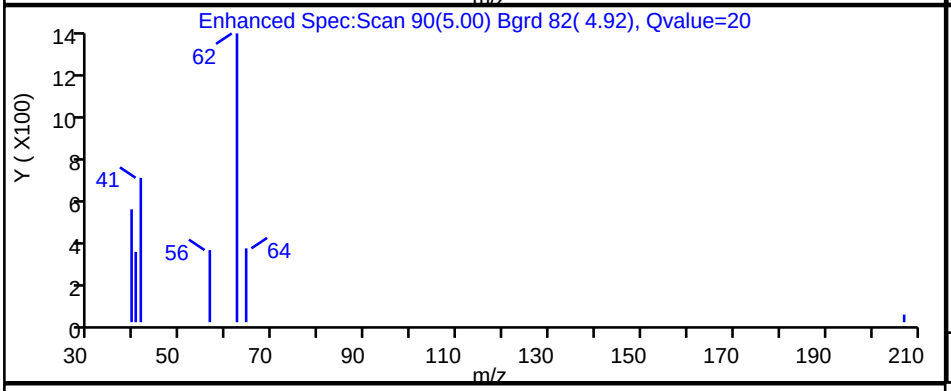
TestAmerica Pleasanton

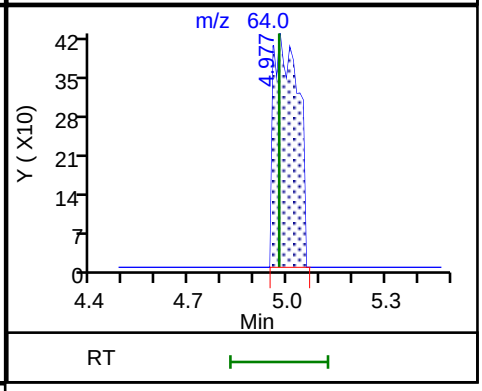
Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281837.D				
Injection Date:	29-Aug-2018 02:24:30	Instrument ID:	HP7		
Lims ID:	720-88237-A-7a one voa	Lab Sample ID:	Client 720-250407/17-A		
Client ID:					
Operator ID:	SF	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

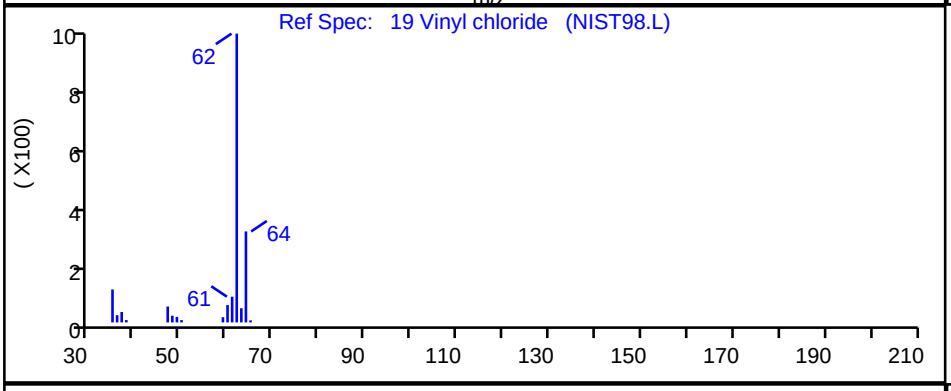
19 Vinyl chloride, CAS: 75-01-4

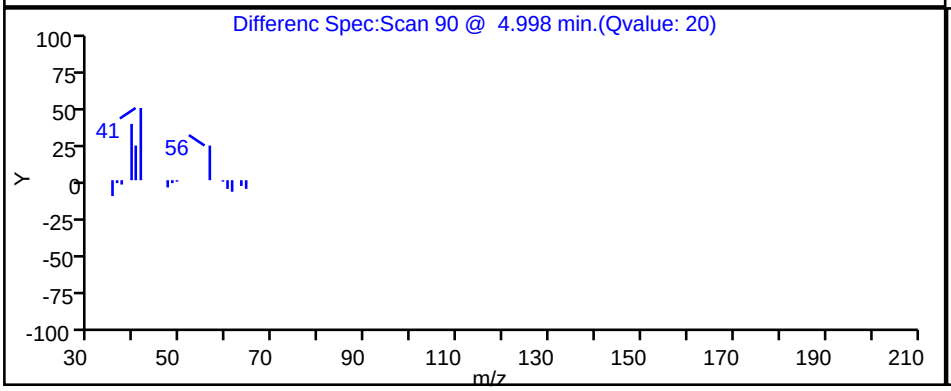


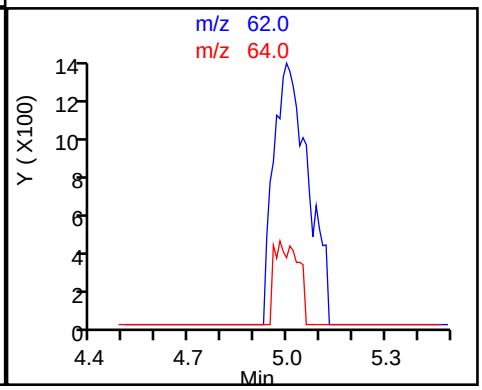










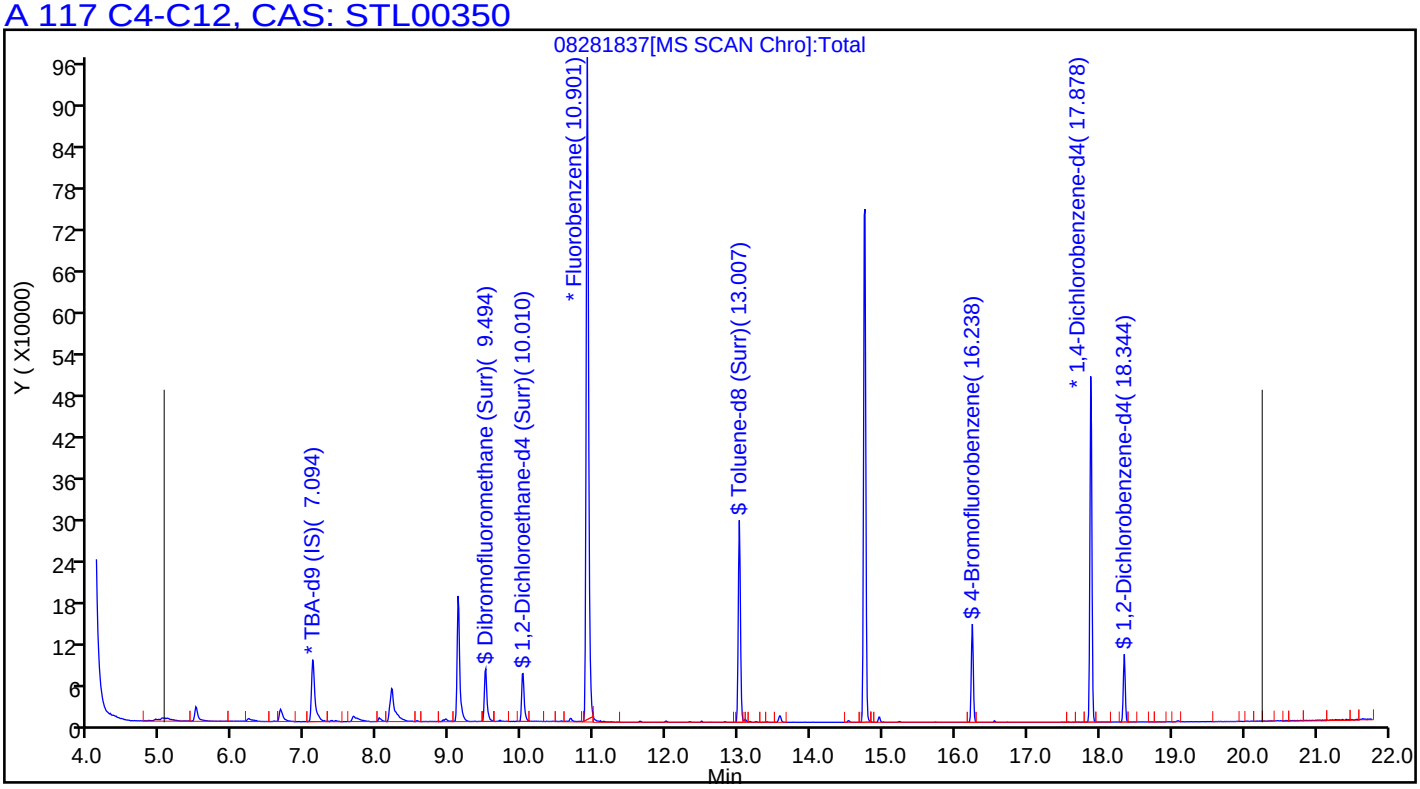


Report Date: 29-Aug-2018 09:17:31 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281837.D				
Injection Date:	29-Aug-2018 02:24:30	Instrument ID:	HP7		
Lims ID:	720-88237-A-7a one voa	Lab Sample ID:	Client 720-250407/17-A		
Client ID:					
Operator ID:	SF	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88237-1
SDG No.:
Client Sample ID: DG-B7S-14.5-15
Lab Sample ID: 720-88237-10
Matrix: Solid
Lab File ID: 08291819.D
Analysis Method: 8260B
Date Collected: 08/23/2018 15:35
Sample wt/vol: 7.118(g)
Date Analyzed: 08/29/2018 15:25
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250452
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND	*	3.5	0.84
67-64-1	Acetone	52	*	35	27
71-43-2	Benzene	ND	*	3.5	0.46
75-27-4	Dichlorobromomethane	ND	*	3.5	0.51
108-86-1	Bromobenzene	ND	*	3.5	0.55
74-97-5	Chlorobromomethane	ND	*	14	0.51
75-25-2	Bromoform	ND	*	3.5	1.4
74-83-9	Bromomethane	ND	*	7.0	0.55
78-93-3	2-Butanone (MEK)	ND	*	35	15
104-51-8	n-Butylbenzene	ND	*	3.5	0.70
135-98-8	sec-Butylbenzene	ND	*	3.5	0.51
98-06-6	tert-Butylbenzene	ND	*	3.5	0.51
75-15-0	Carbon disulfide	ND	*	3.5	1.4
56-23-5	Carbon tetrachloride	ND	*	3.5	0.44
108-90-7	Chlorobenzene	ND	*	3.5	0.48
75-00-3	Chloroethane	ND	*	7.0	0.39
67-66-3	Chloroform	ND	*	3.5	0.46
74-87-3	Chloromethane	ND	*	7.0	0.55
95-49-8	2-Chlorotoluene	ND	*	3.5	0.46
106-43-4	4-Chlorotoluene	ND	*	3.5	0.48
124-48-1	Chlorodibromomethane	ND	*	3.5	0.50
95-50-1	1,2-Dichlorobenzene	ND	*	3.5	0.48
541-73-1	1,3-Dichlorobenzene	ND	*	3.5	0.51
106-46-7	1,4-Dichlorobenzene	ND	*	3.5	0.50
142-28-9	1,3-Dichloropropane	ND	*	3.5	0.51
563-58-6	1,1-Dichloropropene	ND	*	3.5	0.48
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	7.0	1.2
106-93-4	Ethylene Dibromide	ND	*	3.5	1.0
74-95-3	Dibromomethane	ND	*	7.0	0.60
75-71-8	Dichlorodifluoromethane	ND	*	7.0	0.55
75-34-3	1,1-Dichloroethane	ND	*	3.5	0.48
107-06-2	1,2-Dichloroethane	ND	*	3.5	0.53
75-35-4	1,1-Dichloroethene	ND	*	3.5	0.44
156-59-2	cis-1,2-Dichloroethene	ND	*	3.5	0.48
156-60-5	trans-1,2-Dichloroethene	ND	*	3.5	0.53
78-87-5	1,2-Dichloropropane	ND	*	3.5	0.44

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88237-1

SDG No.:

Client Sample ID: DG-B7S-14.5-15 Lab Sample ID: 720-88237-10

Matrix: Solid Lab File ID: 08291819.D

Analysis Method: 8260B Date Collected: 08/23/2018 15:35

Sample wt/vol: 7.118(g) Date Analyzed: 08/29/2018 15:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250452 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND	*	3.5	0.48
10061-02-6	trans-1,3-Dichloropropene	ND	*	3.5	0.47
100-41-4	Ethylbenzene	ND	*	3.5	0.53
87-68-3	Hexachlorobutadiene	ND	*	3.5	0.63
591-78-6	2-Hexanone	ND	*	35	7.0
98-82-8	Isopropylbenzene	ND	*	3.5	0.48
99-87-6	4-Isopropyltoluene	ND	*	3.5	1.8
75-09-2	Methylene Chloride	ND	*	7.0	3.9
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	*	35	7.0
91-20-3	Naphthalene	ND	*	7.0	1.1
103-65-1	N-Propylbenzene	ND	*	3.5	0.46
100-42-5	Styrene	ND	*	3.5	0.44
630-20-6	1,1,1,2-Tetrachloroethane	ND	*	3.5	0.53
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	3.5	0.53
127-18-4	Tetrachloroethene	ND	*	3.5	0.47
108-88-3	Toluene	ND	*	3.5	0.50
87-61-6	1,2,3-Trichlorobenzene	ND	*	3.5	0.52
120-82-1	1,2,4-Trichlorobenzene	ND	*	3.5	0.50
71-55-6	1,1,1-Trichloroethane	ND	*	3.5	0.43
79-00-5	1,1,2-Trichloroethane	ND	*	3.5	0.49
79-01-6	Trichloroethene	ND	*	3.5	0.44
75-69-4	Trichlorofluoromethane	ND	*	3.5	0.39
96-18-4	1,2,3-Trichloropropane	ND	*	3.5	0.54
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	3.5	1.5
95-63-6	1,2,4-Trimethylbenzene	ND	*	3.5	1.2
108-67-8	1,3,5-Trimethylbenzene	ND	*	3.5	0.46
108-05-4	Vinyl acetate	ND	*	14	3.5
75-01-4	Vinyl chloride	ND	*	3.5	0.51
1330-20-7	Xylenes, Total	ND		3.5	0.86
594-20-7	2,2-Dichloropropane	ND	*	3.5	1.4
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND	*	180	70

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88237-1

SDG No.:

Client Sample ID: DG-B7S-14.5-15 Lab Sample ID: 720-88237-10

Matrix: Solid Lab File ID: 08291819.D

Analysis Method: 8260B Date Collected: 08/23/2018 15:35

Sample wt/vol: 7.118(g) Date Analyzed: 08/29/2018 15:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250452 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	90	*	45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101	*	60-140
2037-26-5	Toluene-d8 (Surr)	91	*	58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180829-53540.b\08291819.D				
Lims ID:	720-88237-B-10-A				
Client ID:	DG-B7S--14.5-15				
Sample Type:	Client				
Inject. Date:	29-Aug-2018 15:25:30	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	88237-B-10 RR				
Misc. Info.:	HP13				
Operator ID:	VOA	Instrument ID:	HP13		
Method:	\\ChromNA\Pleasanton\ChromData\HP13\20180829-53540.b\HP13_8260_LL.m				
Limit Group:	8260B				
Last Update:	30-Aug-2018 09:09:52	Calib Date:	25-Aug-2018 20:24:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK001				
First Level Reviewer: chaijita		Date:	30-Aug-2018 09:09:52		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.819	6.819	0.000	0	186799	250.0	
* 2 Fluorobenzene	96	10.598	10.599	-0.001	99	400469	25.0	s
* 4 Chlorobenzene-d5	117	14.439	14.445	-0.006	87	297945	25.0	s
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.585	-0.006	95	140667	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.190	9.190	0.000	93	34031	7.57	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.702	9.709	-0.006	0	42636	7.57	
$ 10 Toluene-d8 (Surr)	98	12.708	12.708	0.000	94	110175	6.80	
$ 11 4-Bromofluorobenzene	95	15.933	15.926	0.000	94	39028	6.74	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.036	0.000	84	32739	6.01	
28 Acetone	58	6.374	6.374	0.000	99	17411	37.1	
34 Methylene Chloride	84	7.075	7.081	-0.006	93	472	0.1089	
144 Methyl acetate	43	7.130	7.124	0.006	99	13339	3.90	
45 2-Butanone (MEK)	72	8.648	8.648	0.012	97	565	1.05	M
140 Ethyl acetate	43	9.013	9.001	0.012	99	13083	2.47	
128 Butyl Ether	87	14.653	14.653	-0.006	94	979	0.3302	
29 Pentane	43	6.374	6.410	-0.036	69	61054	NR	
131 n-Octane	43	13.110	13.110	0.000	89	799	NR	
135 n-Nonane	57	15.055	15.055	0.000	1	200	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	785597	21.4	
A 154 C6-C8	1	10.852	(8.550-13.153)		0	121145	3.30	
A 155 C6-C9	1	11.842	(8.550-15.134)		0	187237	5.10	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	847879	23.1	
A 119 C6-C10	1	12.732	(8.550-16.914)		0	228119	6.21	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	777018	21.2	
A 120 C6-C12	1	14.278	(8.550-20.005)		0	290401	7.91	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	113530	3.09	
A 121 C7-C12	1	15.451	(10.897-20.005)		0	215870	5.88	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

s - Failed ISTD Recovery Test

Review Flags

M - Manually Integrated

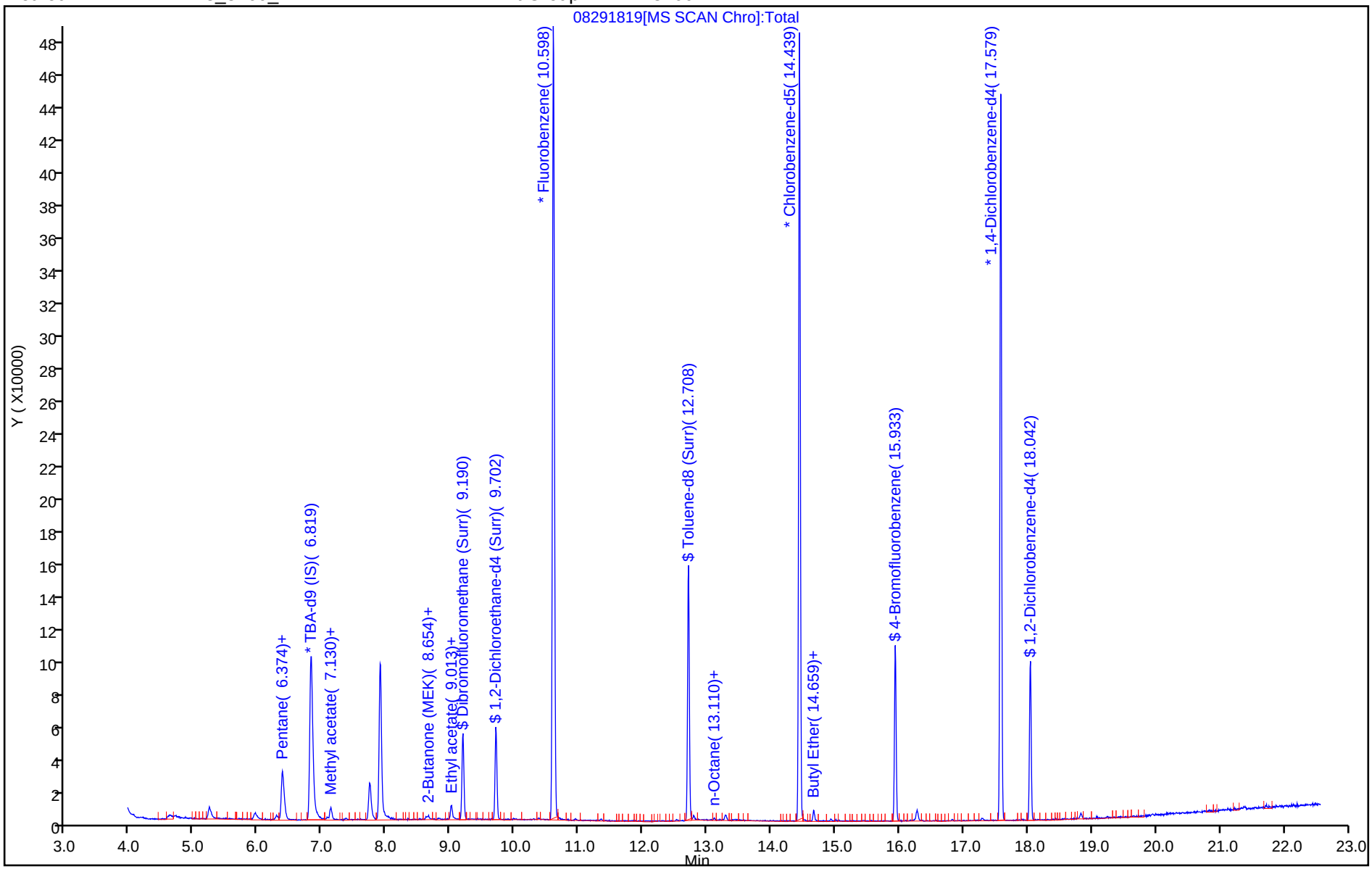
Reagents:

I_IS/SS_00092	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 30-Aug-2018 09:09:53 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180829-53540.b\08291819.D				
Injection Date:	29-Aug-2018 15:25:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88237-B-10-A	Lab Sample ID:	720-88237-10	Worklist Smp#:	18
Client ID:	DG-B7S--14.5-15				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180829-53540.b\08291819.D				
Lims ID:	720-88237-B-10-A				
Client ID:	DG-B7S--14.5-15				
Sample Type:	Client				
Inject. Date:	29-Aug-2018 15:25:30	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	88237-B-10 RR				
Misc. Info.:	HP13				
Operator ID:	VOA	Instrument ID:	HP13		
Method:	\\ChromNA\Pleasanton\ChromData\HP13\20180829-53540.b\HP13_8260_LL.m				
Limit Group:	8260B				
Last Update:	30-Aug-2018 09:09:52	Calib Date:	25-Aug-2018 20:24:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK001				

First Level Reviewer: chaijita Date: 30-Aug-2018 09:09:52

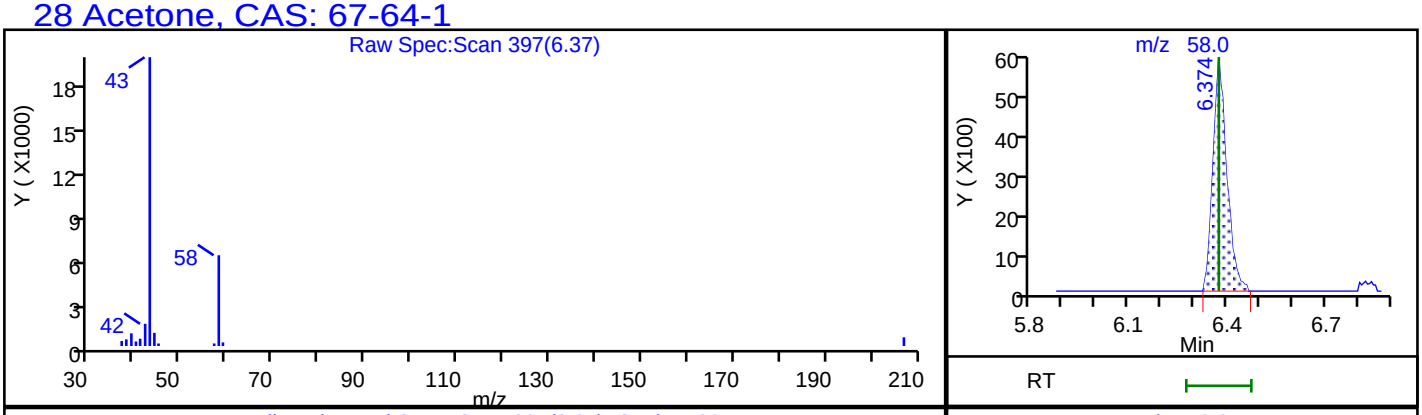
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.57	100.96
$ 10 Toluene-d8 (Surr)	7.50	6.80	90.70
$ 11 4-Bromofluorobenzene	7.50	6.74	89.81
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

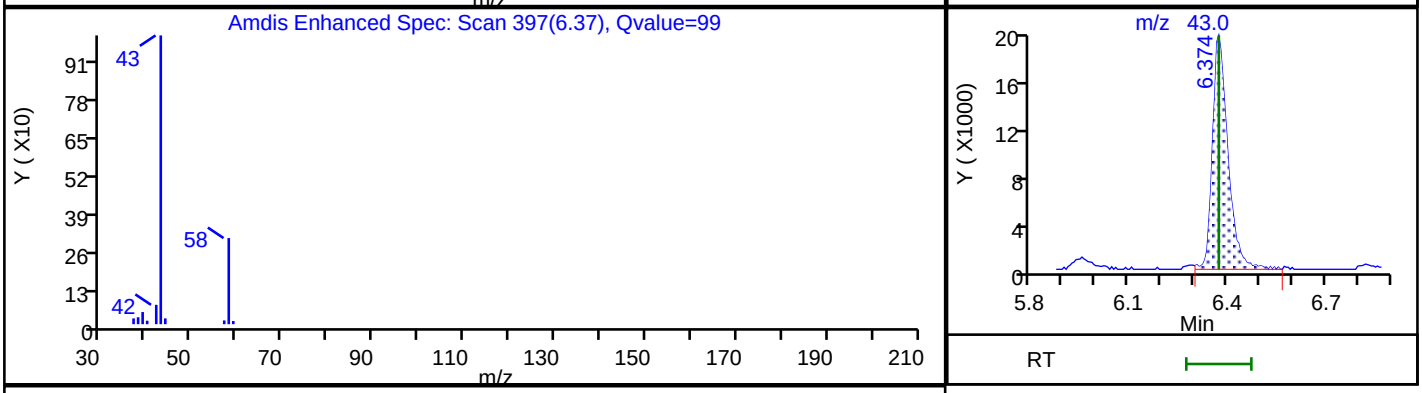
Report Date: 30-Aug-2018 09:09:53 Chrom Revision: 2.3 19-Jul-2018 15:14:50

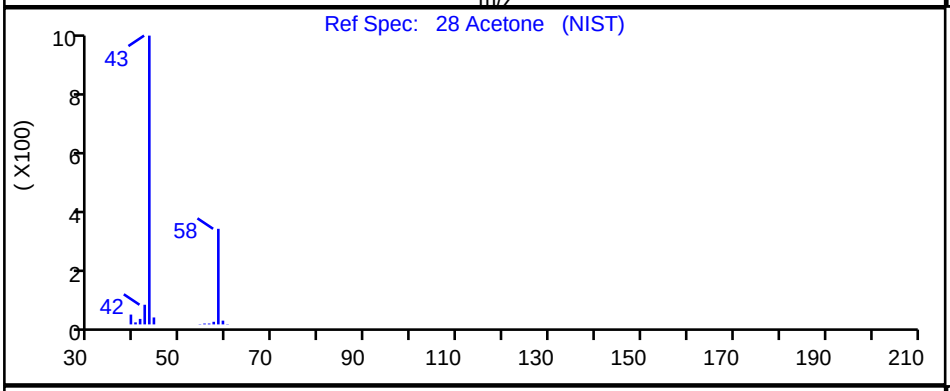
TestAmerica Pleasanton

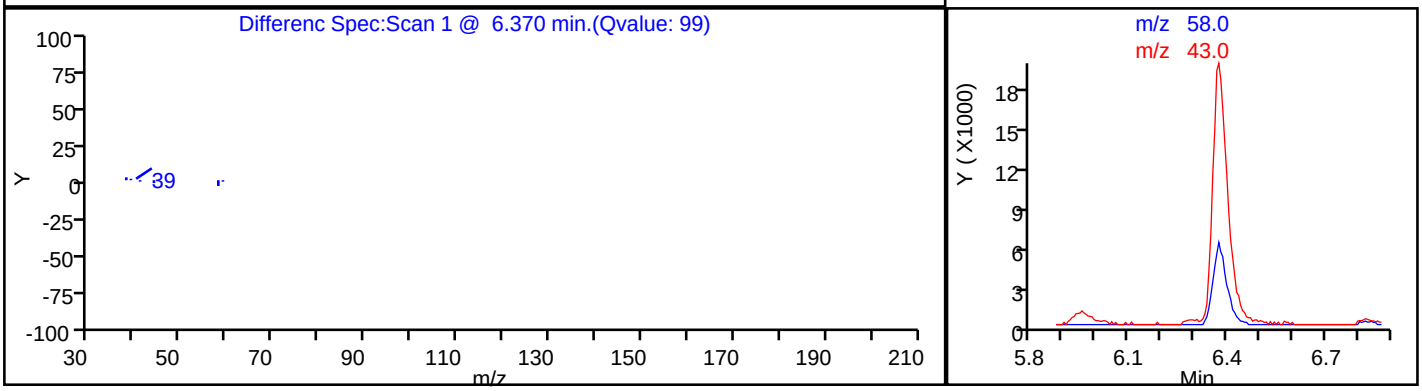
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180829-53540.b\08291819.D				
Injection Date:	29-Aug-2018 15:25:30	Instrument ID:	HP13		
Lims ID:	720-88237-B-10-A	Lab Sample ID:	720-88237-10		
Client ID:	DG-B7S--14.5-15				
Operator ID:	VOA	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1







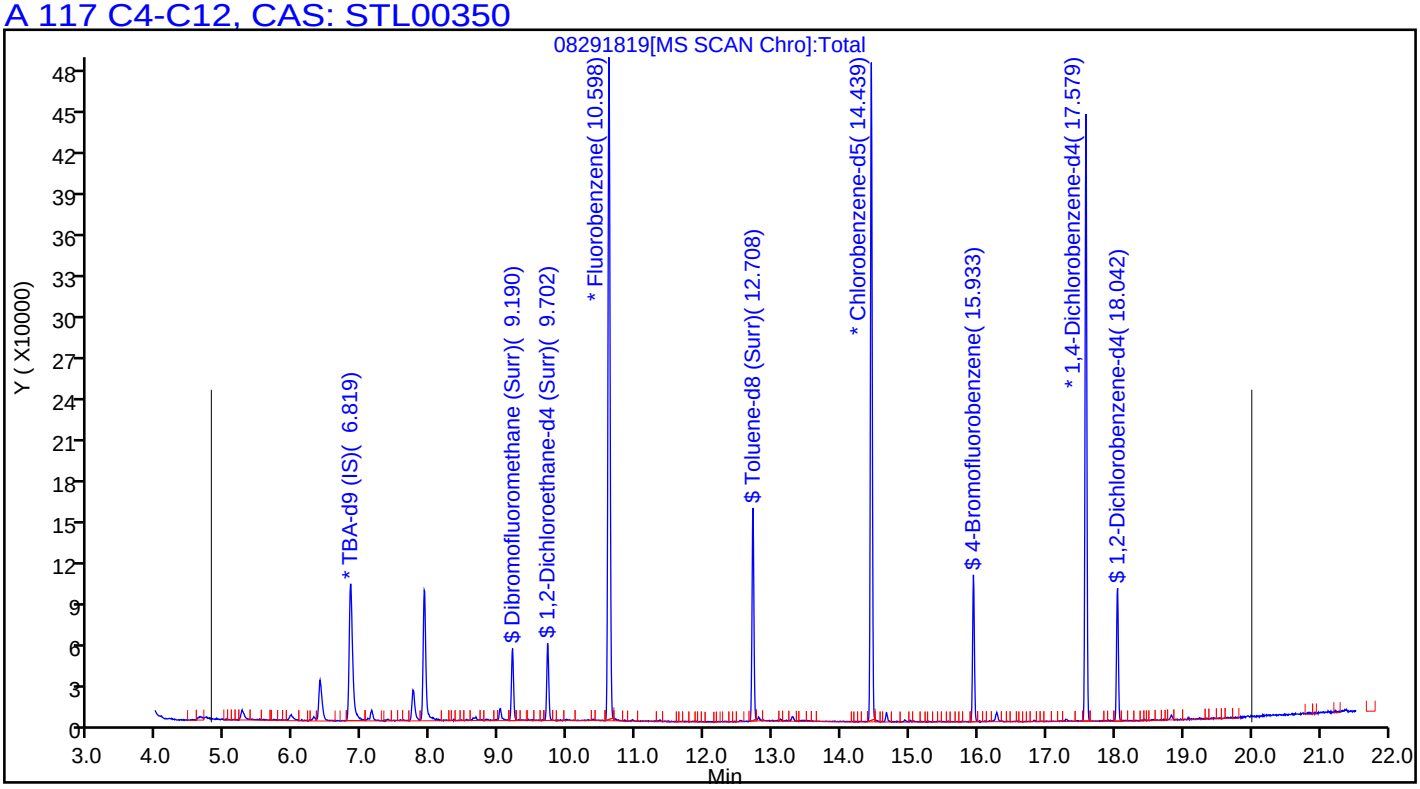


Report Date: 30-Aug-2018 09:09:54 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180829-53540.b\08291819.D				
Injection Date:	29-Aug-2018 15:25:30	Instrument ID:	HP13		
Lims ID:	720-88237-B-10-A	Lab Sample ID:	720-88237-10		
Client ID:	DG-B7S--14.5-15				
Operator ID:	VOA	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



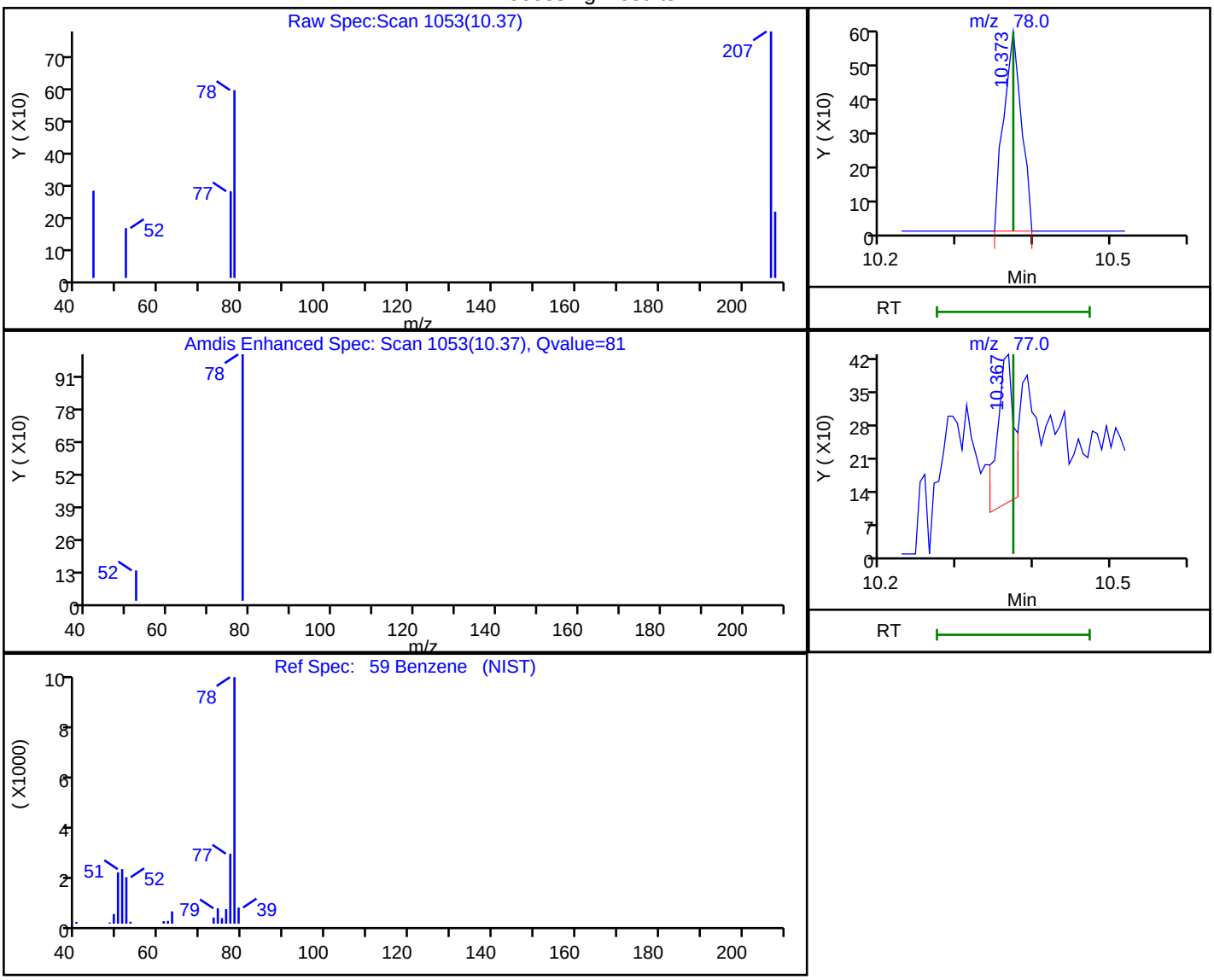
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180829-53540.b\08291819.D				
Injection Date:	29-Aug-2018 15:25:30	Instrument ID:	HP13		
Lims ID:	720-88237-B-10-A	Lab Sample ID:	720-88237-10		
Client ID:	DG-B7S--14.5-15				
Operator ID:	VOA	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

59 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
10.37	78.00	939	0.055102
10.37	77.00	486	

Reviewer: chaijita, 30-Aug-2018 09:09:30

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

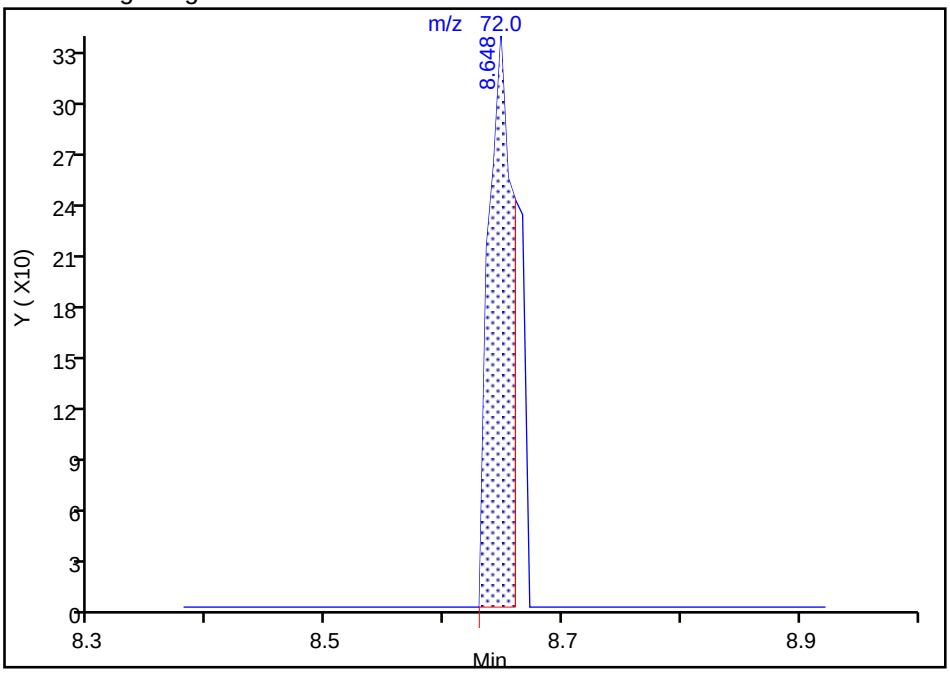
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180829-53540.b\08291819.D				
Injection Date:	29-Aug-2018 15:25:30	Instrument ID:	HP13		
Lims ID:	720-88237-B-10-A	Lab Sample ID:	720-88237-10		
Client ID:	DG-B7S--14.5-15				
Operator ID:	VOA	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

45 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

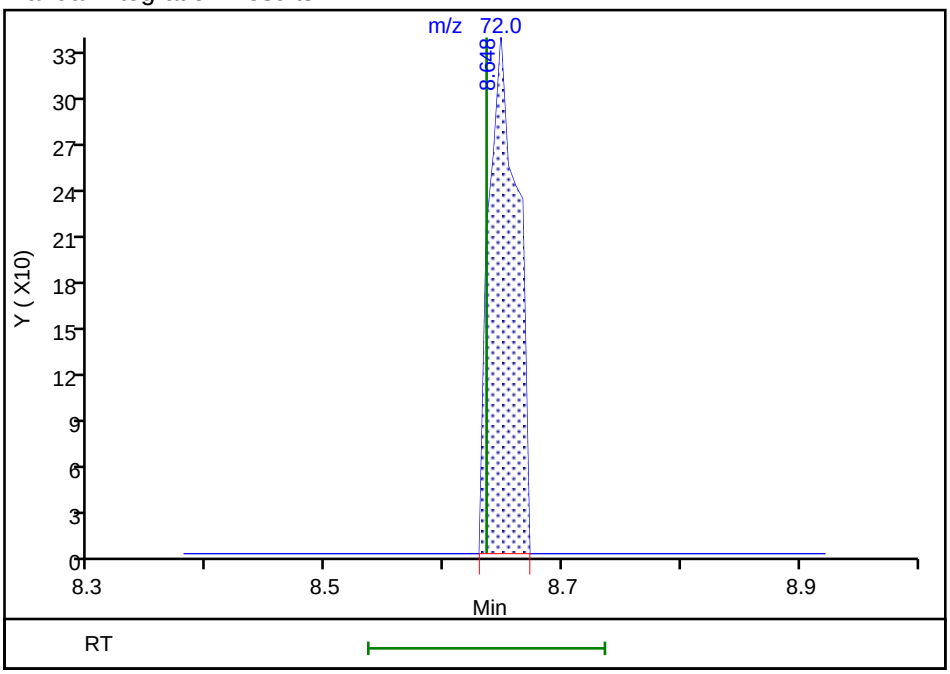
Processing Integration Results

RT: 8.65
Area: 480
Amount: 0.894853
Amount Units: ug/L



Manual Integration Results

RT: 8.65
Area: 565
Amount: 1.053317
Amount Units: ug/L



Reviewer: chaijita, 30-Aug-2018 09:09:16

Audit Action: Manually Integrated Audit Reason: Baseline

Surrogate Summary

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

TestAmerica Job ID: 720-88237-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DCA	TOL
Lab Sample ID	Client Sample ID	(45-131)	(60-140)	(58-140)
720-88237-5	DG-A7S-0.5-1	89	107	89
720-88237-5	DG-A7S-0.5-1	96	108	92
720-88237-6	DG-A7S-3.5-4	93	103	93
720-88237-7	DG-A7S-10-10.5	78	108	97
720-88237-10	DG-B7S-14.5-15	90 *	101 *	91 *
LCS 720-250405/5	Lab Control Sample	95	95	99
LCS 720-250405/7	Lab Control Sample	97	92	97
LCS 720-250407/5	Lab Control Sample	99	94	100
LCS 720-250407/7	Lab Control Sample	100	103	102
LCS 720-250452/5	Lab Control Sample	97	95	99
LCS 720-250452/7	Lab Control Sample	99	97	97
LCSD 720-250405/6	Lab Control Sample Dup	98	92	98
LCSD 720-250405/8	Lab Control Sample Dup	95	95	96
LCSD 720-250407/6	Lab Control Sample Dup	101	97	101
LCSD 720-250407/8	Lab Control Sample Dup	100	103	102
LCSD 720-250452/6	Lab Control Sample Dup	96	93	96
LCSD 720-250452/8	Lab Control Sample Dup	97	94	97
MB 720-250405/4	Method Blank	100	94	97
MB 720-250407/4	Method Blank	99	103	102
MB 720-250452/4	Method Blank	99	92	95

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		FBP	TPHL
Lab Sample ID	Client Sample ID	(33-120)	(35-146)
720-88237-5	DG-A7S-0.5-1	81	105
720-88237-6	DG-A7S-3.5-4	68	92
720-88237-7	DG-A7S-10-10.5	73	94
720-88237-10	DG-B7S-14.5-15	67	82
720-88265-D-10-A MS	Matrix Spike	61	89
720-88265-D-10-B MSD	Matrix Spike Duplicate	59	78
LCS 720-250376/2-A	Lab Control Sample	63	75
MB 720-250376/1-A	Method Blank	65	82

Surrogate Legend

FBP = 2-Fluorobiphenyl
TPHL = Terphenyl-d14

Surrogate Summary

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

TestAmerica Job ID: 720-88237-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	TPH1 (40-130)							
720-88237-5	DG-A7S-0.5-1	0 D X							
720-88237-6	DG-A7S-3.5-4	114							
720-88237-7	DG-A7S-10-10.5	89							
720-88237-10	DG-B7S-14.5-15	96							
720-88239-D-7-A MS	Matrix Spike	83							
720-88239-D-7-B MSD	Matrix Spike Duplicate	79							
LCS 720-250382/2-A	Lab Control Sample	81							
MB 720-250382/1-A	Method Blank	101							

Surrogate Legend

TPH = p-Terphenyl

Method: 8081A - Organochlorine Pesticides (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	DCBP2 (21-136)	TCX2 (21-145)						
720-88216-A-9-S MS	Matrix Spike	90	76						
720-88216-A-9-T MSD	Matrix Spike Duplicate	100	82						
LCS 720-250393/2-A	Lab Control Sample	95	84						
LCS 720-250843/2-A	Lab Control Sample	112	79						
LCSD 720-250843/3-A	Lab Control Sample Dup	112	84						
MB 720-250393/1-A	Method Blank	98	84						
MB 720-250843/1-A	Method Blank	111	88						

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	DCBP1 (21-136)	TCX2 (21-145)						
720-88237-10	DG-B7S-14.5-15	100	68						

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	DCBP1 (21-136)	TCX1 (21-145)						
720-88237-5	DG-A7S-0.5-1	66	69						
720-88237-7	DG-A7S-10-10.5	79	68						

Surrogate Summary

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

TestAmerica Job ID: 720-88237-1

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	**Client Sample ID**	**DCBP2 (21-136)**	**TCX1 (21-145)**
720-88237-6	DG-A7S-3.5-4	98	77

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	**Client Sample ID**	**TCX2 (14-128)**	**DCBP2 (10-132)**
720-88237-5	DG-A7S-0.5-1	75	72
720-88237-6	DG-A7S-3.5-4	70	65
720-88237-7	DG-A7S-10-10.5	48	43
720-88237-10	DG-B7S-14.5-15	96	110
720-88240-F-3-B MS	Matrix Spike	88	110
720-88240-F-3-C MSD	Matrix Spike Duplicate	97	151 X
LCS 240-343099/24-A	Lab Control Sample	87	101
MB 240-343099/23-A	Method Blank	88	106

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

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

Lab Sample ID: MB 720-250405/4
Matrix: Solid
Analysis Batch: 250405

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/28/18 19:56	1
Acetone	ND		50	38	ug/Kg			08/28/18 19:56	1
Benzene	ND		5.0	0.65	ug/Kg			08/28/18 19:56	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/28/18 19:56	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/28/18 19:56	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/28/18 19:56	1
Bromoform	ND		5.0	2.0	ug/Kg			08/28/18 19:56	1
Bromomethane	ND		10	0.79	ug/Kg			08/28/18 19:56	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/28/18 19:56	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/28/18 19:56	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/28/18 19:56	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/28/18 19:56	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/28/18 19:56	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/28/18 19:56	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/28/18 19:56	1
Chloroethane	ND		10	0.56	ug/Kg			08/28/18 19:56	1
Chloroform	ND		5.0	0.66	ug/Kg			08/28/18 19:56	1
Chloromethane	ND		10	0.79	ug/Kg			08/28/18 19:56	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/28/18 19:56	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/28/18 19:56	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/28/18 19:56	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/28/18 19:56	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/28/18 19:56	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 19:56	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/28/18 19:56	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 19:56	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/28/18 19:56	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/28/18 19:56	1
Dibromomethane	ND		10	0.86	ug/Kg			08/28/18 19:56	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/28/18 19:56	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/28/18 19:56	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/28/18 19:56	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/28/18 19:56	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/28/18 19:56	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/28/18 19:56	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/28/18 19:56	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 19:56	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/28/18 19:56	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/28/18 19:56	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/28/18 19:56	1
2-Hexanone	ND		50	10	ug/Kg			08/28/18 19:56	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/28/18 19:56	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/28/18 19:56	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/28/18 19:56	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/28/18 19:56	1
Naphthalene	ND		10	1.5	ug/Kg			08/28/18 19:56	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/28/18 19:56	1
Styrene	ND		5.0	0.63	ug/Kg			08/28/18 19:56	1

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

Lab Sample ID: MB 720-250405/4
Matrix: Solid
Analysis Batch: 250405

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/28/18 19:56	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/28/18 19:56	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/28/18 19:56	1
Toluene	ND		5.0	0.71	ug/Kg			08/28/18 19:56	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/28/18 19:56	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 19:56	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/28/18 19:56	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/28/18 19:56	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/28/18 19:56	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/28/18 19:56	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/28/18 19:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/28/18 19:56	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/28/18 19:56	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/28/18 19:56	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/28/18 19:56	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/28/18 19:56	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/28/18 19:56	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/28/18 19:56	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/28/18 19:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*45 - 131*		*08/28/18 19:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*		*08/28/18 19:56*	*1*
Toluene-d8 (Surr)	*97*		*58 - 140*		*08/28/18 19:56*	*1*

Lab Sample ID: LCS 720-250405/5
Matrix: Solid
Analysis Batch: 250405

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	50.0		ug/Kg		100	70 - 144
Acetone	250	226		ug/Kg		90	30 - 162
Benzene	50.0	50.5		ug/Kg		101	70 - 130
Dichlorobromomethane	50.0	50.2		ug/Kg		100	70 - 140
Bromobenzene	50.0	50.3		ug/Kg		101	70 - 130
Chlorobromomethane	50.0	53.9		ug/Kg		108	70 - 130
Bromoform	50.0	52.8		ug/Kg		106	59 - 158
Bromomethane	50.0	53.2		ug/Kg		106	59 - 132
2-Butanone (MEK)	250	239		ug/Kg		96	59 - 159
n-Butylbenzene	50.0	51.2		ug/Kg		102	70 - 142
sec-Butylbenzene	50.0	49.9		ug/Kg		100	70 - 136
tert-Butylbenzene	50.0	49.5		ug/Kg		99	70 - 130
Carbon disulfide	50.0	69.8		ug/Kg		140	60 - 140
Carbon tetrachloride	50.0	55.1		ug/Kg		110	70 - 142
Chlorobenzene	50.0	51.1		ug/Kg		102	70 - 130
Chloroethane	50.0	49.5		ug/Kg		99	65 - 130
Chloroform	50.0	51.2		ug/Kg		102	77 - 127

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

Lab Sample ID: LCS 720-250405/5
Matrix: Solid
Analysis Batch: 250405

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	50.0	53.9		ug/Kg		108	55 - 140
2-Chlorotoluene	50.0	48.0		ug/Kg		96	70 - 138
4-Chlorotoluene	50.0	48.3		ug/Kg		97	70 - 136
Chlorodibromomethane	50.0	53.0		ug/Kg		106	70 - 146
1,2-Dichlorobenzene	50.0	50.7		ug/Kg		101	70 - 130
1,3-Dichlorobenzene	50.0	50.1		ug/Kg		100	70 - 131
1,4-Dichlorobenzene	50.0	50.3		ug/Kg		101	70 - 130
1,3-Dichloropropane	50.0	49.5		ug/Kg		99	70 - 140
1,1-Dichloropropene	50.0	52.1		ug/Kg		104	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	51.4		ug/Kg		103	60 - 145
Ethylene Dibromide	50.0	51.5		ug/Kg		103	70 - 140
Dibromomethane	50.0	49.6		ug/Kg		99	70 - 139
Dichlorodifluoromethane	50.0	57.8		ug/Kg		116	37 - 158
1,1-Dichloroethane	50.0	53.0		ug/Kg		106	70 - 130
1,2-Dichloroethane	50.0	51.6		ug/Kg		103	70 - 130
1,1-Dichloroethene	50.0	64.5	*	ug/Kg		129	74 - 122
cis-1,2-Dichloroethene	50.0	51.7		ug/Kg		103	70 - 138
trans-1,2-Dichloroethene	50.0	56.0		ug/Kg		112	67 - 130
1,2-Dichloropropane	50.0	51.2		ug/Kg		102	73 - 127
cis-1,3-Dichloropropene	50.0	52.9		ug/Kg		106	68 - 147
trans-1,3-Dichloropropene	50.0	50.1		ug/Kg		100	70 - 155
Ethylbenzene	50.0	49.7		ug/Kg		99	80 - 137
Hexachlorobutadiene	50.0	52.5		ug/Kg		105	70 - 132
2-Hexanone	250	237		ug/Kg		95	62 - 158
Isopropylbenzene	50.0	51.4		ug/Kg		103	70 - 130
4-Isopropyltoluene	50.0	50.7		ug/Kg		101	70 - 133
Methylene Chloride	50.0	53.1		ug/Kg		106	70 - 134
4-Methyl-2-pentanone (MIBK)	250	235		ug/Kg		94	60 - 160
Naphthalene	50.0	49.1		ug/Kg		98	60 - 147
N-Propylbenzene	50.0	49.2		ug/Kg		98	70 - 130
Styrene	50.0	49.2		ug/Kg		98	70 - 130
1,1,1,2-Tetrachloroethane	50.0	52.7		ug/Kg		105	70 - 130
1,1,2,2-Tetrachloroethane	50.0	47.1		ug/Kg		94	70 - 146
Tetrachloroethene	50.0	54.4		ug/Kg		109	70 - 132
Toluene	50.0	51.0		ug/Kg		102	75 - 120
1,2,3-Trichlorobenzene	50.0	51.2		ug/Kg		102	60 - 140
1,2,4-Trichlorobenzene	50.0	52.2		ug/Kg		104	60 - 140
1,1,1-Trichloroethane	50.0	54.1		ug/Kg		108	70 - 130
1,1,2-Trichloroethane	50.0	50.3		ug/Kg		101	70 - 130
Trichloroethene	50.0	53.9		ug/Kg		108	70 - 133
Trichlorofluoromethane	50.0	55.7		ug/Kg		111	60 - 140
1,2,3-Trichloropropane	50.0	49.7		ug/Kg		99	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	69.7		ug/Kg		139	60 - 140
1,2,4-Trimethylbenzene	50.0	48.2		ug/Kg		96	70 - 130
1,3,5-Trimethylbenzene	50.0	48.9		ug/Kg		98	70 - 131
Vinyl acetate	50.0	47.6		ug/Kg		95	38 - 176
Vinyl chloride	50.0	51.3		ug/Kg		103	58 - 125

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

Lab Sample ID: LCS 720-250405/5
Matrix: Solid
Analysis Batch: 250405

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
m-Xylene & p-Xylene	50.0	49.5		ug/Kg		99	70 - 146
o-Xylene	50.0	49.8		ug/Kg		100	70 - 140
2,2-Dichloropropane	50.0	51.9		ug/Kg		104	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*99*		*58 - 140*

Lab Sample ID: LCS 720-250405/7
Matrix: Solid
Analysis Batch: 250405

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	920		ug/Kg		92	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*92*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: LCSD 720-250405/6
Matrix: Solid
Analysis Batch: 250405

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	50.2		ug/Kg		100	70 - 144	0	20
Acetone	250	202		ug/Kg		81	30 - 162	11	30
Benzene	50.0	49.4		ug/Kg		99	70 - 130	2	20
Dichlorobromomethane	50.0	49.9		ug/Kg		100	70 - 140	0	20
Bromobenzene	50.0	48.4		ug/Kg		97	70 - 130	4	20
Chlorobromomethane	50.0	53.7		ug/Kg		107	70 - 130	0	20
Bromoform	50.0	52.4		ug/Kg		105	59 - 158	1	20
Bromomethane	50.0	52.2		ug/Kg		104	59 - 132	2	20
2-Butanone (MEK)	250	224		ug/Kg		90	59 - 159	6	20
n-Butylbenzene	50.0	52.3		ug/Kg		105	70 - 142	2	20
sec-Butylbenzene	50.0	49.3		ug/Kg		99	70 - 136	1	20
tert-Butylbenzene	50.0	48.8		ug/Kg		98	70 - 130	1	20
Carbon disulfide	50.0	68.3		ug/Kg		137	60 - 140	2	20
Carbon tetrachloride	50.0	54.3		ug/Kg		109	70 - 142	1	20
Chlorobenzene	50.0	50.7		ug/Kg		101	70 - 130	1	20
Chloroethane	50.0	48.2		ug/Kg		96	65 - 130	3	20
Chloroform	50.0	49.8		ug/Kg		100	77 - 127	3	20
Chloromethane	50.0	52.8		ug/Kg		106	55 - 140	2	20
2-Chlorotoluene	50.0	46.5		ug/Kg		93	70 - 138	3	20
4-Chlorotoluene	50.0	46.8		ug/Kg		94	70 - 136	3	20
Chlorodibromomethane	50.0	52.0		ug/Kg		104	70 - 146	2	20

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

Lab Sample ID: LCSD 720-250405/6
Matrix: Solid
Analysis Batch: 250405

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene	50.0	50.1		ug/Kg		100	70 - 130	1	20
1,3-Dichlorobenzene	50.0	49.0		ug/Kg		98	70 - 131	2	20
1,4-Dichlorobenzene	50.0	49.7		ug/Kg		99	70 - 130	1	20
1,3-Dichloropropane	50.0	48.4		ug/Kg		97	70 - 140	2	20
1,1-Dichloropropene	50.0	52.0		ug/Kg		104	70 - 130	0	20
1,2-Dibromo-3-Chloropropane	50.0	50.6		ug/Kg		101	60 - 145	2	20
Ethylene Dibromide	50.0	50.0		ug/Kg		100	70 - 140	3	20
Dibromomethane	50.0	49.4		ug/Kg		99	70 - 139	0	20
Dichlorodifluoromethane	50.0	58.2		ug/Kg		116	37 - 158	1	20
1,1-Dichloroethane	50.0	51.1		ug/Kg		102	70 - 130	4	20
1,2-Dichloroethane	50.0	50.1		ug/Kg		100	70 - 130	3	20
1,1-Dichloroethene	50.0	61.9	*	ug/Kg		124	74 - 122	4	20
cis-1,2-Dichloroethene	50.0	50.3		ug/Kg		101	70 - 138	3	20
trans-1,2-Dichloroethene	50.0	55.4		ug/Kg		111	67 - 130	1	20
1,2-Dichloropropane	50.0	49.7		ug/Kg		99	73 - 127	3	20
cis-1,3-Dichloropropene	50.0	52.1		ug/Kg		104	68 - 147	1	20
trans-1,3-Dichloropropene	50.0	49.1		ug/Kg		98	70 - 155	2	20
Ethylbenzene	50.0	49.1		ug/Kg		98	80 - 137	1	20
Hexachlorobutadiene	50.0	55.2		ug/Kg		110	70 - 132	5	20
2-Hexanone	250	231		ug/Kg		92	62 - 158	3	20
Isopropylbenzene	50.0	51.2		ug/Kg		102	70 - 130	0	20
4-Isopropyltoluene	50.0	50.9		ug/Kg		102	70 - 133	0	20
Methylene Chloride	50.0	51.6		ug/Kg		103	70 - 134	3	20
4-Methyl-2-pentanone (MIBK)	250	231		ug/Kg		92	60 - 160	2	20
Naphthalene	50.0	49.4		ug/Kg		99	60 - 147	0	20
N-Propylbenzene	50.0	48.2		ug/Kg		96	70 - 130	2	20
Styrene	50.0	48.5		ug/Kg		97	70 - 130	1	20
1,1,1,2-Tetrachloroethane	50.0	52.6		ug/Kg		105	70 - 130	0	20
1,1,2,2-Tetrachloroethane	50.0	45.7		ug/Kg		91	70 - 146	3	20
Tetrachloroethene	50.0	53.5		ug/Kg		107	70 - 132	2	20
Toluene	50.0	49.8		ug/Kg		100	75 - 120	2	20
1,2,3-Trichlorobenzene	50.0	52.8		ug/Kg		106	60 - 140	3	20
1,2,4-Trichlorobenzene	50.0	53.6		ug/Kg		107	60 - 140	3	20
1,1,1-Trichloroethane	50.0	53.3		ug/Kg		107	70 - 130	2	20
1,1,2-Trichloroethane	50.0	49.6		ug/Kg		99	70 - 130	1	20
Trichloroethene	50.0	53.0		ug/Kg		106	70 - 133	2	20
Trichlorofluoromethane	50.0	54.3		ug/Kg		109	60 - 140	3	20
1,2,3-Trichloropropane	50.0	47.4		ug/Kg		95	70 - 146	5	20
1,1,2-Trichloro-1,2,2-trifluoroetha ne	50.0	70.5	*	ug/Kg		141	60 - 140	1	20
1,2,4-Trimethylbenzene	50.0	47.3		ug/Kg		95	70 - 130	2	20
1,3,5-Trimethylbenzene	50.0	47.7		ug/Kg		95	70 - 131	3	20
Vinyl acetate	50.0	47.3		ug/Kg		95	38 - 176	1	20
Vinyl chloride	50.0	51.5		ug/Kg		103	58 - 125	1	20
m-Xylene & p-Xylene	50.0	48.9		ug/Kg		98	70 - 146	1	20
o-Xylene	50.0	49.5		ug/Kg		99	70 - 140	1	20
2,2-Dichloropropane	50.0	54.3		ug/Kg		109	70 - 162	5	20

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

Lab Sample ID: LCSD 720-250405/6
Matrix: Solid
Analysis Batch: 250405

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

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*92*		*60 - 140*
Toluene-d8 (Surr)	*98*		*58 - 140*

Lab Sample ID: LCSD 720-250405/8
Matrix: Solid
Analysis Batch: 250405

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	876		ug/Kg		88	70 - 122	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: MB 720-250407/4
Matrix: Solid
Analysis Batch: 250407

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/28/18 19:46	1
Acetone	ND		50	38	ug/Kg			08/28/18 19:46	1
Benzene	ND		5.0	0.65	ug/Kg			08/28/18 19:46	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/28/18 19:46	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/28/18 19:46	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/28/18 19:46	1
Bromoform	ND		5.0	2.0	ug/Kg			08/28/18 19:46	1
Bromomethane	ND		10	0.79	ug/Kg			08/28/18 19:46	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/28/18 19:46	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/28/18 19:46	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/28/18 19:46	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/28/18 19:46	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/28/18 19:46	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/28/18 19:46	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/28/18 19:46	1
Chloroethane	ND		10	0.56	ug/Kg			08/28/18 19:46	1
Chloroform	ND		5.0	0.66	ug/Kg			08/28/18 19:46	1
Chloromethane	ND		10	0.79	ug/Kg			08/28/18 19:46	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/28/18 19:46	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/28/18 19:46	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/28/18 19:46	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/28/18 19:46	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/28/18 19:46	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 19:46	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/28/18 19:46	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 19:46	1

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

Lab Sample ID: MB 720-250407/4
Matrix: Solid
Analysis Batch: 250407

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/28/18 19:46	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/28/18 19:46	1
Dibromomethane	ND		10	0.86	ug/Kg			08/28/18 19:46	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/28/18 19:46	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/28/18 19:46	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/28/18 19:46	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/28/18 19:46	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/28/18 19:46	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/28/18 19:46	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/28/18 19:46	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 19:46	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/28/18 19:46	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/28/18 19:46	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/28/18 19:46	1
2-Hexanone	ND		50	10	ug/Kg			08/28/18 19:46	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/28/18 19:46	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/28/18 19:46	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/28/18 19:46	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/28/18 19:46	1
Naphthalene	ND		10	1.5	ug/Kg			08/28/18 19:46	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/28/18 19:46	1
Styrene	ND		5.0	0.63	ug/Kg			08/28/18 19:46	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/28/18 19:46	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/28/18 19:46	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/28/18 19:46	1
Toluene	ND		5.0	0.71	ug/Kg			08/28/18 19:46	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/28/18 19:46	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 19:46	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/28/18 19:46	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/28/18 19:46	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/28/18 19:46	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/28/18 19:46	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/28/18 19:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/28/18 19:46	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/28/18 19:46	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/28/18 19:46	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/28/18 19:46	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/28/18 19:46	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/28/18 19:46	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/28/18 19:46	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/28/18 19:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*45 - 131*		*08/28/18 19:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*		*08/28/18 19:46*	*1*
Toluene-d8 (Surr)	*102*		*58 - 140*		*08/28/18 19:46*	*1*

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

Lab Sample ID: LCS 720-250407/5
Matrix: Solid
Analysis Batch: 250407

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	52.3		ug/Kg		105	70 - 144
Acetone	250	219		ug/Kg		88	30 - 162
Benzene	50.0	55.2		ug/Kg		110	70 - 130
Dichlorobromomethane	50.0	53.5		ug/Kg		107	70 - 140
Bromobenzene	50.0	51.1		ug/Kg		102	70 - 130
Chlorobromomethane	50.0	53.8		ug/Kg		108	70 - 130
Bromoform	50.0	49.7		ug/Kg		99	59 - 158
Bromomethane	50.0	51.3		ug/Kg		103	59 - 132
2-Butanone (MEK)	250	231		ug/Kg		92	59 - 159
n-Butylbenzene	50.0	55.0		ug/Kg		110	70 - 142
sec-Butylbenzene	50.0	56.8		ug/Kg		114	70 - 136
tert-Butylbenzene	50.0	55.0		ug/Kg		110	70 - 130
Carbon disulfide	50.0	74.6	*	ug/Kg		149	60 - 140
Carbon tetrachloride	50.0	56.6		ug/Kg		113	70 - 142
Chlorobenzene	50.0	51.4		ug/Kg		103	70 - 130
Chloroethane	50.0	50.8		ug/Kg		102	65 - 130
Chloroform	50.0	54.3		ug/Kg		109	77 - 127
Chloromethane	50.0	55.7		ug/Kg		111	55 - 140
2-Chlorotoluene	50.0	54.5		ug/Kg		109	70 - 138
4-Chlorotoluene	50.0	54.9		ug/Kg		110	70 - 136
Chlorodibromomethane	50.0	52.1		ug/Kg		104	70 - 146
1,2-Dichlorobenzene	50.0	51.0		ug/Kg		102	70 - 130
1,3-Dichlorobenzene	50.0	51.6		ug/Kg		103	70 - 131
1,4-Dichlorobenzene	50.0	51.4		ug/Kg		103	70 - 130
1,3-Dichloropropane	50.0	50.8		ug/Kg		102	70 - 140
1,1-Dichloropropene	50.0	56.5		ug/Kg		113	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	50.5		ug/Kg		101	60 - 145
Ethylene Dibromide	50.0	51.9		ug/Kg		104	70 - 140
Dibromomethane	50.0	51.2		ug/Kg		102	70 - 139
Dichlorodifluoromethane	50.0	51.4		ug/Kg		103	37 - 158
1,1-Dichloroethane	50.0	58.1		ug/Kg		116	70 - 130
1,2-Dichloroethane	50.0	51.4		ug/Kg		103	70 - 130
1,1-Dichloroethene	50.0	63.4	*	ug/Kg		127	74 - 122
cis-1,2-Dichloroethene	50.0	56.6		ug/Kg		113	70 - 138
trans-1,2-Dichloroethene	50.0	59.4		ug/Kg		119	67 - 130
1,2-Dichloropropane	50.0	56.8		ug/Kg		114	73 - 127
cis-1,3-Dichloropropene	50.0	56.4		ug/Kg		113	68 - 147
trans-1,3-Dichloropropene	50.0	53.1		ug/Kg		106	70 - 155
Ethylbenzene	50.0	54.7		ug/Kg		109	80 - 137
Hexachlorobutadiene	50.0	49.1		ug/Kg		98	70 - 132
2-Hexanone	250	248		ug/Kg		99	62 - 158
Isopropylbenzene	50.0	53.0		ug/Kg		106	70 - 130
4-Isopropyltoluene	50.0	55.5		ug/Kg		111	70 - 133
Methylene Chloride	50.0	54.3		ug/Kg		109	70 - 134
4-Methyl-2-pentanone (MIBK)	250	255		ug/Kg		102	60 - 160
Naphthalene	50.0	48.2		ug/Kg		96	60 - 147
N-Propylbenzene	50.0	57.1		ug/Kg		114	70 - 130
Styrene	50.0	51.9		ug/Kg		104	70 - 130

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

Lab Sample ID: LCS 720-250407/5
Matrix: Solid
Analysis Batch: 250407

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	52.8		ug/Kg		106	70 - 130
1,1,2,2-Tetrachloroethane	50.0	51.3		ug/Kg		103	70 - 146
Tetrachloroethene	50.0	52.1		ug/Kg		104	70 - 132
Toluene	50.0	52.2		ug/Kg		104	75 - 120
1,2,3-Trichlorobenzene	50.0	47.3		ug/Kg		95	60 - 140
1,2,4-Trichlorobenzene	50.0	48.6		ug/Kg		97	60 - 140
1,1,1-Trichloroethane	50.0	55.6		ug/Kg		111	70 - 130
1,1,2-Trichloroethane	50.0	52.4		ug/Kg		105	70 - 130
Trichloroethene	50.0	51.4		ug/Kg		103	70 - 133
Trichlorofluoromethane	50.0	54.5		ug/Kg		109	60 - 140
1,2,3-Trichloropropane	50.0	50.8		ug/Kg		102	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroetha ne	50.0	66.9		ug/Kg		134	60 - 140
1,2,4-Trimethylbenzene	50.0	54.2		ug/Kg		108	70 - 130
1,3,5-Trimethylbenzene	50.0	55.2		ug/Kg		110	70 - 131
Vinyl acetate	50.0	53.1		ug/Kg		106	38 - 176
Vinyl chloride	50.0	53.9		ug/Kg		108	58 - 125
m-Xylene & p-Xylene	50.0	53.0		ug/Kg		106	70 - 146
o-Xylene	50.0	53.4		ug/Kg		107	70 - 140
2,2-Dichloropropane	50.0	57.7		ug/Kg		115	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*100*		*58 - 140*

Lab Sample ID: LCS 720-250407/7
Matrix: Solid
Analysis Batch: 250407

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	937		ug/Kg		94	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*
Toluene-d8 (Surr)	*102*		*58 - 140*

Lab Sample ID: LCSD 720-250407/6
Matrix: Solid
Analysis Batch: 250407

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	53.3		ug/Kg		107	70 - 144	2	20
Acetone	250	232		ug/Kg		93	30 - 162	6	30
Benzene	50.0	53.9		ug/Kg		108	70 - 130	2	20
Dichlorobromomethane	50.0	53.0		ug/Kg		106	70 - 140	1	20

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

Lab Sample ID: LCSD 720-250407/6
Matrix: Solid
Analysis Batch: 250407

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromobenzene	50.0	49.7		ug/Kg		99	70 - 130	3	20
Chlorobromomethane	50.0	52.9		ug/Kg		106	70 - 130	2	20
Bromoform	50.0	51.5		ug/Kg		103	59 - 158	4	20
Bromomethane	50.0	51.5		ug/Kg		103	59 - 132	0	20
2-Butanone (MEK)	250	232		ug/Kg		93	59 - 159	1	20
n-Butylbenzene	50.0	54.6		ug/Kg		109	70 - 142	1	20
sec-Butylbenzene	50.0	55.2		ug/Kg		110	70 - 136	3	20
tert-Butylbenzene	50.0	53.7		ug/Kg		107	70 - 130	2	20
Carbon disulfide	50.0	72.7	*	ug/Kg		145	60 - 140	3	20
Carbon tetrachloride	50.0	54.8		ug/Kg		110	70 - 142	3	20
Chlorobenzene	50.0	51.6		ug/Kg		103	70 - 130	0	20
Chloroethane	50.0	51.0		ug/Kg		102	65 - 130	0	20
Chloroform	50.0	53.1		ug/Kg		106	77 - 127	2	20
Chloromethane	50.0	54.5		ug/Kg		109	55 - 140	2	20
2-Chlorotoluene	50.0	53.4		ug/Kg		107	70 - 138	2	20
4-Chlorotoluene	50.0	53.6		ug/Kg		107	70 - 136	2	20
Chlorodibromomethane	50.0	51.6		ug/Kg		103	70 - 146	1	20
1,2-Dichlorobenzene	50.0	50.3		ug/Kg		101	70 - 130	1	20
1,3-Dichlorobenzene	50.0	50.8		ug/Kg		102	70 - 131	2	20
1,4-Dichlorobenzene	50.0	50.4		ug/Kg		101	70 - 130	2	20
1,3-Dichloropropane	50.0	50.7		ug/Kg		101	70 - 140	0	20
1,1-Dichloropropene	50.0	55.3		ug/Kg		111	70 - 130	2	20
1,2-Dibromo-3-Chloropropane	50.0	51.2		ug/Kg		102	60 - 145	1	20
Ethylene Dibromide	50.0	51.9		ug/Kg		104	70 - 140	0	20
Dibromomethane	50.0	51.2		ug/Kg		102	70 - 139	0	20
Dichlorodifluoromethane	50.0	51.9		ug/Kg		104	37 - 158	1	20
1,1-Dichloroethane	50.0	57.1		ug/Kg		114	70 - 130	2	20
1,2-Dichloroethane	50.0	51.5		ug/Kg		103	70 - 130	0	20
1,1-Dichloroethene	50.0	61.4	*	ug/Kg		123	74 - 122	3	20
cis-1,2-Dichloroethene	50.0	55.9		ug/Kg		112	70 - 138	1	20
trans-1,2-Dichloroethene	50.0	58.3		ug/Kg		117	67 - 130	2	20
1,2-Dichloropropane	50.0	56.4		ug/Kg		113	73 - 127	1	20
cis-1,3-Dichloropropene	50.0	56.8		ug/Kg		114	68 - 147	1	20
trans-1,3-Dichloropropene	50.0	53.6		ug/Kg		107	70 - 155	1	20
Ethylbenzene	50.0	54.4		ug/Kg		109	80 - 137	1	20
Hexachlorobutadiene	50.0	48.7		ug/Kg		97	70 - 132	1	20
2-Hexanone	250	257		ug/Kg		103	62 - 158	4	20
Isopropylbenzene	50.0	52.9		ug/Kg		106	70 - 130	0	20
4-Isopropyltoluene	50.0	54.5		ug/Kg		109	70 - 133	2	20
Methylene Chloride	50.0	54.0		ug/Kg		108	70 - 134	1	20
4-Methyl-2-pentanone (MIBK)	250	261		ug/Kg		105	60 - 160	2	20
Naphthalene	50.0	49.5		ug/Kg		99	60 - 147	3	20
N-Propylbenzene	50.0	55.8		ug/Kg		112	70 - 130	2	20
Styrene	50.0	52.2		ug/Kg		104	70 - 130	1	20
1,1,1,2-Tetrachloroethane	50.0	53.0		ug/Kg		106	70 - 130	0	20
1,1,2,2-Tetrachloroethane	50.0	51.0		ug/Kg		102	70 - 146	1	20
Tetrachloroethene	50.0	50.7		ug/Kg		101	70 - 132	3	20
Toluene	50.0	52.5		ug/Kg		105	75 - 120	1	20

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

Lab Sample ID: LCSD 720-250407/6
Matrix: Solid
Analysis Batch: 250407

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichlorobenzene			50.0	49.0		ug/Kg		98	60 - 140	4	20
1,2,4-Trichlorobenzene			50.0	49.1		ug/Kg		98	60 - 140	1	20
1,1,1-Trichloroethane			50.0	53.8		ug/Kg		108	70 - 130	3	20
1,1,2-Trichloroethane			50.0	52.6		ug/Kg		105	70 - 130	1	20
Trichloroethene			50.0	50.3		ug/Kg		101	70 - 133	2	20
Trichlorofluoromethane			50.0	53.4		ug/Kg		107	60 - 140	2	20
1,2,3-Trichloropropane			50.0	51.0		ug/Kg		102	70 - 146	0	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	64.7		ug/Kg		129	60 - 140	3	20
1,2,4-Trimethylbenzene			50.0	53.1		ug/Kg		106	70 - 130	2	20
1,3,5-Trimethylbenzene			50.0	53.9		ug/Kg		108	70 - 131	2	20
Vinyl acetate			50.0	52.6		ug/Kg		105	38 - 176	1	20
Vinyl chloride			50.0	53.4		ug/Kg		107	58 - 125	1	20
m-Xylene & p-Xylene			50.0	53.0		ug/Kg		106	70 - 146	0	20
o-Xylene			50.0	53.6		ug/Kg		107	70 - 140	0	20
2,2-Dichloropropane			50.0	57.5		ug/Kg		115	70 - 162	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*97*		*60 - 140*
Toluene-d8 (Surr)	*101*		*58 - 140*

Lab Sample ID: LCSD 720-250407/8
Matrix: Solid
Analysis Batch: 250407

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	943		ug/Kg		94	70 - 122	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*
Toluene-d8 (Surr)	*102*		*58 - 140*

Lab Sample ID: MB 720-250452/4
Matrix: Solid
Analysis Batch: 250452

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/29/18 08:36	1
Acetone	ND		50	38	ug/Kg			08/29/18 08:36	1
Benzene	ND		5.0	0.65	ug/Kg			08/29/18 08:36	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/29/18 08:36	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/29/18 08:36	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/29/18 08:36	1
Bromoform	ND		5.0	2.0	ug/Kg			08/29/18 08:36	1
Bromomethane	ND		10	0.79	ug/Kg			08/29/18 08:36	1

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

Lab Sample ID: MB 720-250452/4
Matrix: Solid
Analysis Batch: 250452

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		50	21	ug/Kg			08/29/18 08:36	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/29/18 08:36	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/29/18 08:36	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/29/18 08:36	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/29/18 08:36	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/29/18 08:36	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/29/18 08:36	1
Chloroethane	ND		10	0.56	ug/Kg			08/29/18 08:36	1
Chloroform	ND		5.0	0.66	ug/Kg			08/29/18 08:36	1
Chloromethane	ND		10	0.79	ug/Kg			08/29/18 08:36	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/29/18 08:36	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/29/18 08:36	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/29/18 08:36	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/29/18 08:36	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/29/18 08:36	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/29/18 08:36	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/29/18 08:36	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/29/18 08:36	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/29/18 08:36	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/29/18 08:36	1
Dibromomethane	ND		10	0.86	ug/Kg			08/29/18 08:36	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/29/18 08:36	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/29/18 08:36	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/29/18 08:36	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/29/18 08:36	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/29/18 08:36	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/29/18 08:36	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/29/18 08:36	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/29/18 08:36	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/29/18 08:36	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/29/18 08:36	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/29/18 08:36	1
2-Hexanone	ND		50	10	ug/Kg			08/29/18 08:36	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/29/18 08:36	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/29/18 08:36	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/29/18 08:36	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/29/18 08:36	1
Naphthalene	ND		10	1.5	ug/Kg			08/29/18 08:36	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/29/18 08:36	1
Styrene	ND		5.0	0.63	ug/Kg			08/29/18 08:36	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/29/18 08:36	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/29/18 08:36	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/29/18 08:36	1
Toluene	ND		5.0	0.71	ug/Kg			08/29/18 08:36	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/29/18 08:36	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/29/18 08:36	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/29/18 08:36	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/29/18 08:36	1

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

Lab Sample ID: MB 720-250452/4
Matrix: Solid
Analysis Batch: 250452

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		5.0	0.63	ug/Kg			08/29/18 08:36	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/29/18 08:36	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/29/18 08:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/29/18 08:36	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/29/18 08:36	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/29/18 08:36	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/29/18 08:36	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/29/18 08:36	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/29/18 08:36	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/29/18 08:36	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/29/18 08:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*45 - 131*		*08/29/18 08:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*60 - 140*		*08/29/18 08:36*	*1*
Toluene-d8 (Surr)	*95*		*58 - 140*		*08/29/18 08:36*	*1*

Lab Sample ID: LCS 720-250452/5
Matrix: Solid
Analysis Batch: 250452

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	49.6		ug/Kg		99	70 - 144
Acetone	250	230		ug/Kg		92	30 - 162
Benzene	50.0	50.9		ug/Kg		102	70 - 130
Dichlorobromomethane	50.0	49.9		ug/Kg		100	70 - 140
Bromobenzene	50.0	49.3		ug/Kg		99	70 - 130
Chlorobromomethane	50.0	54.1		ug/Kg		108	70 - 130
Bromoform	50.0	51.7		ug/Kg		103	59 - 158
Bromomethane	50.0	52.3		ug/Kg		105	59 - 132
2-Butanone (MEK)	250	229		ug/Kg		92	59 - 159
n-Butylbenzene	50.0	51.4		ug/Kg		103	70 - 142
sec-Butylbenzene	50.0	49.6		ug/Kg		99	70 - 136
tert-Butylbenzene	50.0	49.3		ug/Kg		99	70 - 130
Carbon disulfide	50.0	69.0		ug/Kg		138	60 - 140
Carbon tetrachloride	50.0	57.2		ug/Kg		114	70 - 142
Chlorobenzene	50.0	51.3		ug/Kg		103	70 - 130
Chloroethane	50.0	50.6		ug/Kg		101	65 - 130
Chloroform	50.0	51.2		ug/Kg		102	77 - 127
Chloromethane	50.0	53.9		ug/Kg		108	55 - 140
2-Chlorotoluene	50.0	47.4		ug/Kg		95	70 - 138
4-Chlorotoluene	50.0	47.8		ug/Kg		96	70 - 136
Chlorodibromomethane	50.0	54.0		ug/Kg		108	70 - 146
1,2-Dichlorobenzene	50.0	50.0		ug/Kg		100	70 - 130
1,3-Dichlorobenzene	50.0	49.5		ug/Kg		99	70 - 131
1,4-Dichlorobenzene	50.0	50.1		ug/Kg		100	70 - 130
1,3-Dichloropropane	50.0	50.3		ug/Kg		101	70 - 140

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

Lab Sample ID: LCS 720-250452/5
Matrix: Solid
Analysis Batch: 250452

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloropropene	50.0	53.6		ug/Kg		107	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	47.5		ug/Kg		95	60 - 145
Ethylene Dibromide	50.0	51.6		ug/Kg		103	70 - 140
Dibromomethane	50.0	50.5		ug/Kg		101	70 - 139
Dichlorodifluoromethane	50.0	57.1		ug/Kg		114	37 - 158
1,1-Dichloroethane	50.0	53.2		ug/Kg		106	70 - 130
1,2-Dichloroethane	50.0	52.1		ug/Kg		104	70 - 130
1,1-Dichloroethene	50.0	64.4	*	ug/Kg		129	74 - 122
cis-1,2-Dichloroethene	50.0	51.7		ug/Kg		103	70 - 138
trans-1,2-Dichloroethene	50.0	56.0		ug/Kg		112	67 - 130
1,2-Dichloropropane	50.0	51.6		ug/Kg		103	73 - 127
cis-1,3-Dichloropropene	50.0	53.4		ug/Kg		107	68 - 147
trans-1,3-Dichloropropene	50.0	50.2		ug/Kg		100	70 - 155
Ethylbenzene	50.0	50.0		ug/Kg		100	80 - 137
Hexachlorobutadiene	50.0	54.0		ug/Kg		108	70 - 132
2-Hexanone	250	235		ug/Kg		94	62 - 158
Isopropylbenzene	50.0	51.6		ug/Kg		103	70 - 130
4-Isopropyltoluene	50.0	51.4		ug/Kg		103	70 - 133
Methylene Chloride	50.0	52.2		ug/Kg		104	70 - 134
4-Methyl-2-pentanone (MIBK)	250	235		ug/Kg		94	60 - 160
Naphthalene	50.0	47.2		ug/Kg		94	60 - 147
N-Propylbenzene	50.0	49.2		ug/Kg		98	70 - 130
Styrene	50.0	49.5		ug/Kg		99	70 - 130
1,1,1,2-Tetrachloroethane	50.0	52.0		ug/Kg		104	70 - 130
1,1,2,2-Tetrachloroethane	50.0	44.5		ug/Kg		89	70 - 146
Tetrachloroethene	50.0	56.5		ug/Kg		113	70 - 132
Toluene	50.0	50.4		ug/Kg		101	75 - 120
1,2,3-Trichlorobenzene	50.0	51.8		ug/Kg		104	60 - 140
1,2,4-Trichlorobenzene	50.0	53.5		ug/Kg		107	60 - 140
1,1,1-Trichloroethane	50.0	55.2		ug/Kg		110	70 - 130
1,1,2-Trichloroethane	50.0	50.9		ug/Kg		102	70 - 130
Trichloroethene	50.0	55.1		ug/Kg		110	70 - 133
Trichlorofluoromethane	50.0	58.8		ug/Kg		118	60 - 140
1,2,3-Trichloropropane	50.0	46.9		ug/Kg		94	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	71.8	*	ug/Kg		144	60 - 140
1,2,4-Trimethylbenzene	50.0	47.7		ug/Kg		95	70 - 130
1,3,5-Trimethylbenzene	50.0	48.5		ug/Kg		97	70 - 131
Vinyl acetate	50.0	47.3		ug/Kg		95	38 - 176
Vinyl chloride	50.0	52.1		ug/Kg		104	58 - 125
m-Xylene & p-Xylene	50.0	50.0		ug/Kg		100	70 - 146
o-Xylene	50.0	49.8		ug/Kg		100	70 - 140
2,2-Dichloropropane	50.0	53.9		ug/Kg		108	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*99*		*58 - 140*

Lab Sample ID: LCS 720-250452/7
Matrix: Solid
Analysis Batch: 250452

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	978		ug/Kg		98	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*97*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: LCSD 720-250452/6
Matrix: Solid
Analysis Batch: 250452

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	49.5		ug/Kg		99	70 - 144	0	20
Acetone	250	205		ug/Kg		82	30 - 162	12	30
Benzene	50.0	50.2		ug/Kg		100	70 - 130	1	20
Dichlorobromomethane	50.0	51.1		ug/Kg		102	70 - 140	2	20
Bromobenzene	50.0	49.5		ug/Kg		99	70 - 130	0	20
Chlorobromomethane	50.0	53.9		ug/Kg		108	70 - 130	0	20
Bromoform	50.0	51.6		ug/Kg		103	59 - 158	0	20
Bromomethane	50.0	51.6		ug/Kg		103	59 - 132	1	20
2-Butanone (MEK)	250	214		ug/Kg		85	59 - 159	7	20
n-Butylbenzene	50.0	52.2		ug/Kg		104	70 - 142	2	20
sec-Butylbenzene	50.0	50.1		ug/Kg		100	70 - 136	1	20
tert-Butylbenzene	50.0	49.7		ug/Kg		99	70 - 130	1	20
Carbon disulfide	50.0	68.2		ug/Kg		136	60 - 140	1	20
Carbon tetrachloride	50.0	55.3		ug/Kg		111	70 - 142	3	20
Chlorobenzene	50.0	51.1		ug/Kg		102	70 - 130	0	20
Chloroethane	50.0	48.5		ug/Kg		97	65 - 130	4	20
Chloroform	50.0	51.0		ug/Kg		102	77 - 127	1	20
Chloromethane	50.0	52.7		ug/Kg		105	55 - 140	2	20
2-Chlorotoluene	50.0	47.8		ug/Kg		96	70 - 138	1	20
4-Chlorotoluene	50.0	48.3		ug/Kg		97	70 - 136	1	20
Chlorodibromomethane	50.0	52.7		ug/Kg		105	70 - 146	2	20
1,2-Dichlorobenzene	50.0	51.3		ug/Kg		103	70 - 130	2	20
1,3-Dichlorobenzene	50.0	50.6		ug/Kg		101	70 - 131	2	20
1,4-Dichlorobenzene	50.0	50.8		ug/Kg		102	70 - 130	1	20
1,3-Dichloropropane	50.0	48.4		ug/Kg		97	70 - 140	4	20
1,1-Dichloropropene	50.0	52.2		ug/Kg		104	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	50.0	49.2		ug/Kg		98	60 - 145	3	20
Ethylene Dibromide	50.0	49.6		ug/Kg		99	70 - 140	4	20
Dibromomethane	50.0	49.4		ug/Kg		99	70 - 139	2	20
Dichlorodifluoromethane	50.0	53.1		ug/Kg		106	37 - 158	7	20
1,1-Dichloroethane	50.0	53.0		ug/Kg		106	70 - 130	0	20
1,2-Dichloroethane	50.0	50.6		ug/Kg		101	70 - 130	3	20
1,1-Dichloroethene	50.0	63.1	*	ug/Kg		126	74 - 122	2	20
cis-1,2-Dichloroethene	50.0	51.3		ug/Kg		103	70 - 138	1	20
trans-1,2-Dichloroethene	50.0	56.2		ug/Kg		112	67 - 130	0	20
1,2-Dichloropropane	50.0	50.7		ug/Kg		101	73 - 127	2	20
cis-1,3-Dichloropropene	50.0	52.2		ug/Kg		104	68 - 147	2	20

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

Lab Sample ID: LCSD 720-250452/6
Matrix: Solid
Analysis Batch: 250452

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,3-Dichloropropene	50.0	48.9		ug/Kg		98	70 - 155	3	20
Ethylbenzene	50.0	49.6		ug/Kg		99	80 - 137	1	20
Hexachlorobutadiene	50.0	55.4		ug/Kg		111	70 - 132	3	20
2-Hexanone	250	223		ug/Kg		89	62 - 158	5	20
Isopropylbenzene	50.0	51.5		ug/Kg		103	70 - 130	0	20
4-Isopropyltoluene	50.0	51.5		ug/Kg		103	70 - 133	0	20
Methylene Chloride	50.0	52.0		ug/Kg		104	70 - 134	0	20
4-Methyl-2-pentanone (MIBK)	250	225		ug/Kg		90	60 - 160	5	20
Naphthalene	50.0	49.3		ug/Kg		99	60 - 147	4	20
N-Propylbenzene	50.0	49.2		ug/Kg		98	70 - 130	0	20
Styrene	50.0	49.5		ug/Kg		99	70 - 130	0	20
1,1,1,2-Tetrachloroethane	50.0	52.7		ug/Kg		105	70 - 130	1	20
1,1,2,2-Tetrachloroethane	50.0	45.4		ug/Kg		91	70 - 146	2	20
Tetrachloroethene	50.0	54.0		ug/Kg		108	70 - 132	5	20
Toluene	50.0	50.6		ug/Kg		101	75 - 120	0	20
1,2,3-Trichlorobenzene	50.0	53.4		ug/Kg		107	60 - 140	3	20
1,2,4-Trichlorobenzene	50.0	54.4		ug/Kg		109	60 - 140	2	20
1,1,1-Trichloroethane	50.0	53.9		ug/Kg		108	70 - 130	2	20
1,1,2-Trichloroethane	50.0	49.8		ug/Kg		100	70 - 130	2	20
Trichloroethene	50.0	53.8		ug/Kg		108	70 - 133	2	20
Trichlorofluoromethane	50.0	54.1		ug/Kg		108	60 - 140	8	20
1,2,3-Trichloropropane	50.0	47.8		ug/Kg		96	70 - 146	2	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	71.2	*	ug/Kg		142	60 - 140	1	20
1,2,4-Trimethylbenzene	50.0	48.1		ug/Kg		96	70 - 130	1	20
1,3,5-Trimethylbenzene	50.0	48.9		ug/Kg		98	70 - 131	1	20
Vinyl acetate	50.0	46.0		ug/Kg		92	38 - 176	3	20
Vinyl chloride	50.0	50.1		ug/Kg		100	58 - 125	4	20
m-Xylene & p-Xylene	50.0	49.1		ug/Kg		98	70 - 146	2	20
o-Xylene	50.0	49.7		ug/Kg		99	70 - 140	0	20
2,2-Dichloropropane	50.0	54.1		ug/Kg		108	70 - 162	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*93*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCSD 720-250452/8
Matrix: Solid
Analysis Batch: 250452

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12	1000	948		ug/Kg		95	70 - 122	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*

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

Lab Sample ID: LCSD 720-250452/8
Matrix: Solid
Analysis Batch: 250452

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	97		58 - 140

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

Lab Sample ID: MB 720-250376/1-A
Matrix: Solid
Analysis Batch: 250578

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250376

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		10	5.0	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Acenaphthene	ND		5.0	2.8	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Anthracene	ND		5.0	2.0	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Benzo[a]anthracene	ND		5.0	1.5	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Benzo[a]pyrene	ND		5.0	1.9	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Benzo[b]fluoranthene	ND		5.0	2.1	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Benzo[g,h,i]perylene	ND		5.0	4.3	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Benzo[k]fluoranthene	ND		5.0	2.1	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Chrysene	ND		5.0	1.4	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Fluoranthene	ND		5.0	1.4	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Fluorene	ND		5.0	2.2	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Indeno[1,2,3-cd]pyrene	ND		5.0	4.2	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Naphthalene	ND		5.0	3.5	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Phenanthrene	ND		5.0	1.8	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Pyrene	ND		5.0	1.7	ug/Kg		08/28/18 10:30	08/30/18 13:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	65		33 - 120	08/28/18 10:30	08/30/18 13:27	1
Terphenyl-d14	82		35 - 146	08/28/18 10:30	08/30/18 13:27	1

Lab Sample ID: LCS 720-250376/2-A
Matrix: Solid
Analysis Batch: 250578

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250376

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	667	399		ug/Kg		60	46 - 110
Acenaphthene	667	424		ug/Kg		64	46 - 106
Acenaphthylene	667	430		ug/Kg		64	46 - 108
Anthracene	667	441		ug/Kg		66	55 - 103
Benzo[a]anthracene	667	495		ug/Kg		74	54 - 110
Benzo[a]pyrene	667	517		ug/Kg		78	62 - 111
Benzo[b]fluoranthene	667	490		ug/Kg		73	60 - 109
Benzo[g,h,i]perylene	667	512		ug/Kg		77	52 - 114
Benzo[k]fluoranthene	667	493		ug/Kg		74	58 - 109
Chrysene	667	461		ug/Kg		69	54 - 108
Dibenz(a,h)anthracene	667	534		ug/Kg		80	58 - 112

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

Lab Sample ID: LCS 720-250376/2-A
Matrix: Solid
Analysis Batch: 250578

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250376

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoranthene	667	464		ug/Kg		70	59 - 109
Fluorene	667	456		ug/Kg		68	52 - 106
Indeno[1,2,3-cd]pyrene	667	538		ug/Kg		81	55 - 120
Naphthalene	667	393		ug/Kg		59	49 - 110
Phenanthrene	667	447		ug/Kg		67	57 - 110
Pyrene	667	494		ug/Kg		74	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*63*		*33 - 120*
Terphenyl-d14	*75*		*35 - 146*

Lab Sample ID: 720-88265-D-10-A MS
Matrix: Solid
Analysis Batch: 250578

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250376

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	ND		633	379		ug/Kg		60	46 - 110
Acenaphthene	ND		633	460		ug/Kg		73	46 - 106
Acenaphthylene	410		633	770		ug/Kg		57	46 - 108
Anthracene	300		633	795		ug/Kg		78	55 - 103
Benzo[a]anthracene	2100	F1	633	2290	F1	ug/Kg		24	54 - 110
Benzo[a]pyrene	1900	F1	633	2150	F1	ug/Kg		43	62 - 111
Benzo[b]fluoranthene	2200	F1	633	2350	F1	ug/Kg		17	60 - 109
Benzo[g,h,i]perylene	340	F1	633	501	F1	ug/Kg		26	52 - 114
Benzo[k]fluoranthene	860	F1	633	1680	F1	ug/Kg		130	58 - 109
Chrysene	2300	F1	633	2310	F1	ug/Kg		-0.3	54 - 108
Dibenz(a,h)anthracene	180	F1	633	478	F1	ug/Kg		47	58 - 112
Fluoranthene	2400	F1	633	2590	F1	ug/Kg		33	59 - 109
Fluorene	39	J	633	514		ug/Kg		75	52 - 106
Indeno[1,2,3-cd]pyrene	380	F1	633	604	F1	ug/Kg		35	55 - 120
Naphthalene	130		633	467		ug/Kg		53	49 - 110
Phenanthrene	950	F1	633	1390		ug/Kg		69	57 - 110
Pyrene	4100		633	3870	4	ug/Kg		-36	50 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*61*		*33 - 120*
Terphenyl-d14	*89*		*35 - 146*

Lab Sample ID: 720-88265-D-10-B MSD
Matrix: Solid
Analysis Batch: 250578

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250376

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	ND		633	362		ug/Kg		57	46 - 110	5	35
Acenaphthene	ND		633	427		ug/Kg		68	46 - 106	7	35
Acenaphthylene	410		633	723		ug/Kg		50	46 - 108	6	35
Anthracene	300		633	730		ug/Kg		68	55 - 103	8	35
Benzo[a]anthracene	2100	F1	633	2110	F1	ug/Kg		-4	54 - 110	8	35

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

Lab Sample ID: 720-88265-D-10-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250578 — **Prep Batch: 250376**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]pyrene	1900	F1	633	1900	F1	ug/Kg		2	62 - 111	13	35
Benzo[b]fluoranthene	2200	F1	633	2070	F1	ug/Kg		-28	60 - 109	13	35
Benzo[g,h,i]perylene	340	F1	633	473	F1	ug/Kg		22	52 - 114	6	35
Benzo[k]fluoranthene	860	F1	633	1360		ug/Kg		79	58 - 109	21	35
Chrysene	2300	F1	633	2190	F1	ug/Kg		-20	54 - 108	6	35
Dibenz(a,h)anthracene	180	F1	633	427	F1	ug/Kg		39	58 - 112	11	35
Fluoranthene	2400	F1	633	2200	F1	ug/Kg		-29	59 - 109	16	35
Fluorene	39	J	633	458		ug/Kg		66	52 - 106	12	35
Indeno[1,2,3-cd]pyrene	380	F1	633	568	F1	ug/Kg		29	55 - 120	6	35
Naphthalene	130		633	446		ug/Kg		50	49 - 110	5	35
Phenanthrene	950	F1	633	1200	F1	ug/Kg		40	57 - 110	14	35
Pyrene	4100		633	3410	4	ug/Kg		-110	50 - 120	13	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*59*		*33 - 120*
Terphenyl-d14	*78*		*35 - 146*

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

Lab Sample ID: MB 720-250382/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250456 — **Prep Batch: 250382**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		2000	750	ug/Kg		08/28/18 11:24	08/29/18 23:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*101*		*40 - 130*	*08/28/18 11:24*	*08/29/18 23:58*	*1*

Lab Sample ID: LCS 720-250382/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250456 — **Prep Batch: 250382**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	167000	163000		ug/Kg		98	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*81*		*40 - 130*

Lab Sample ID: 720-88239-D-7-A MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250456 — **Prep Batch: 250382**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	11000		161000	157000		ug/Kg		91	50 - 150

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

Lab Sample ID: 720-88239-D-7-A MS
Matrix: Solid
Analysis Batch: 250456

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250382

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
p-Terphenyl	*83*		*40 - 130*

Lab Sample ID: 720-88239-D-7-B MSD
Matrix: Solid
Analysis Batch: 250456

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250382

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	11000		161000	156000		ug/Kg		89	50 - 150	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
p-Terphenyl	*79*		*40 - 130*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 720-250393/1-A
Matrix: Solid
Analysis Batch: 250609

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250393

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.61	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Aldrin	ND		2.0	0.50	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
alpha-BHC	ND		2.0	0.55	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Dieldrin	ND		2.0	0.59	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Endrin	ND		2.0	0.46	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Endrin aldehyde	ND		2.0	0.63	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Methoxychlor	ND		2.0	0.68	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Toxaphene	ND		40	6.8	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/28/18 13:36	08/30/18 23:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*98*		*21 - 136*	*08/28/18 13:36*	*08/30/18 23:31*	*1*
Tetrachloro-m-xylene	*84*		*21 - 145*	*08/28/18 13:36*	*08/30/18 23:31*	*1*

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 720-250393/2-A
Matrix: Solid
Analysis Batch: 250609

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250393

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	16.2		ug/Kg		97	75 - 128
4,4'-DDE	16.7	15.4		ug/Kg		92	76 - 126
4,4'-DDT	16.7	14.2		ug/Kg		85	63 - 127
Aldrin	16.7	13.7		ug/Kg		82	65 - 120
alpha-BHC	16.7	11.2		ug/Kg		67	46 - 122
beta-BHC	16.7	16.6		ug/Kg		99	78 - 136
cis-Chlordane	16.7	15.0		ug/Kg		90	70 - 120
delta-BHC	16.7	13.6		ug/Kg		81	43 - 125
Dieldrin	16.7	15.0		ug/Kg		90	72 - 120
Endosulfan I	16.7	15.3		ug/Kg		92	62 - 120
Endosulfan II	16.7	15.6		ug/Kg		94	65 - 120
Endosulfan sulfate	16.7	15.0		ug/Kg		90	72 - 121
Endrin	16.7	15.7		ug/Kg		94	68 - 120
Endrin aldehyde	16.7	16.7		ug/Kg		100	68 - 120
Endrin ketone	16.7	15.5		ug/Kg		93	75 - 136
gamma-BHC (Lindane)	16.7	14.6		ug/Kg		88	72 - 120
Heptachlor	16.7	15.1		ug/Kg		91	69 - 120
Heptachlor epoxide	16.7	15.5		ug/Kg		93	68 - 120
Methoxychlor	16.7	15.9		ug/Kg		96	71 - 132
trans-Chlordane	16.7	15.1		ug/Kg		91	68 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*95*		*21 - 136*
Tetrachloro-m-xylene	*84*		*21 - 145*

Lab Sample ID: 720-88216-A-9-S MS
Matrix: Solid
Analysis Batch: 250609

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250393

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	0.90	J p	15.9	13.9		ug/Kg		82	40 - 120
4,4'-DDE	0.76	J	15.9	13.9		ug/Kg		82	40 - 120
4,4'-DDT	ND		15.9	14.2		ug/Kg		89	17 - 144
Aldrin	ND		15.9	12.2		ug/Kg		77	53 - 120
alpha-BHC	ND		15.9	10.4		ug/Kg		65	40 - 120
beta-BHC	ND		15.9	15.2		ug/Kg		95	40 - 120
cis-Chlordane	ND		15.9	12.8		ug/Kg		80	40 - 120
delta-BHC	ND		15.9	12.0		ug/Kg		75	40 - 120
Dieldrin	ND		15.9	13.6		ug/Kg		85	46 - 130
Endosulfan I	ND		15.9	13.2		ug/Kg		83	40 - 120
Endosulfan II	ND		15.9	13.4		ug/Kg		84	40 - 120
Endosulfan sulfate	ND	F2	15.9	14.3		ug/Kg		90	40 - 120
Endrin	ND		15.9	14.7		ug/Kg		92	32 - 143
Endrin aldehyde	ND		15.9	12.9		ug/Kg		81	40 - 120
Endrin ketone	ND		15.9	13.5		ug/Kg		84	40 - 120
gamma-BHC (Lindane)	ND		15.9	13.0		ug/Kg		82	58 - 120
Heptachlor	ND		15.9	13.2		ug/Kg		83	52 - 120
Heptachlor epoxide	ND		15.9	13.1		ug/Kg		82	40 - 120

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 720-88216-A-9-S MS
Matrix: Solid
Analysis Batch: 250609

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250393

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methoxychlor	ND		15.9	15.2		ug/Kg		95	40 - 120
trans-Chlordane	ND		15.9	13.1		ug/Kg		82	40 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*90*		*21 - 136*
Tetrachloro-m-xylene	*76*		*21 - 145*

Lab Sample ID: 720-88216-A-9-T MSD
Matrix: Solid
Analysis Batch: 250609

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250393

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	0.90	J p	15.9	15.8		ug/Kg		94	40 - 120	13	20
4,4'-DDE	0.76	J	15.9	15.7		ug/Kg		94	40 - 120	12	20
4,4'-DDT	ND		15.9	15.9		ug/Kg		100	17 - 144	12	20
Aldrin	ND		15.9	13.8		ug/Kg		87	53 - 120	12	20
alpha-BHC	ND		15.9	11.8		ug/Kg		74	40 - 120	12	20
beta-BHC	ND		15.9	17.0		ug/Kg		107	40 - 120	11	20
cis-Chlordane	ND		15.9	14.5		ug/Kg		91	40 - 120	12	20
delta-BHC	ND		15.9	13.7		ug/Kg		86	40 - 120	13	20
Dieldrin	ND		15.9	15.3		ug/Kg		96	46 - 130	12	20
Endosulfan I	ND		15.9	14.9		ug/Kg		93	40 - 120	12	20
Endosulfan II	ND		15.9	15.3		ug/Kg		96	40 - 120	13	30
Endosulfan sulfate	ND	F2	15.9	16.5		ug/Kg		104	40 - 120	15	20
Endrin	ND		15.9	16.7		ug/Kg		105	32 - 143	12	20
Endrin aldehyde	ND		15.9	14.3		ug/Kg		90	40 - 120	10	20
Endrin ketone	ND		15.9	15.2		ug/Kg		96	40 - 120	12	20
gamma-BHC (Lindane)	ND		15.9	14.9		ug/Kg		93	58 - 120	14	20
Heptachlor	ND		15.9	15.1		ug/Kg		95	52 - 120	13	20
Heptachlor epoxide	ND		15.9	14.9		ug/Kg		93	40 - 120	13	20
Methoxychlor	ND		15.9	16.2		ug/Kg		102	40 - 120	7	20
trans-Chlordane	ND		15.9	14.8		ug/Kg		93	40 - 120	12	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*100*		*21 - 136*
Tetrachloro-m-xylene	*82*		*21 - 145*

Lab Sample ID: MB 720-250843/1-A
Matrix: Solid
Analysis Batch: 250868

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250843

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.61	ug/Kg		09/04/18 16:10	09/05/18 06:50	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		09/04/18 16:10	09/05/18 06:50	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		09/04/18 16:10	09/05/18 06:50	1
Aldrin	ND		2.0	0.50	ug/Kg		09/04/18 16:10	09/05/18 06:50	1
alpha-BHC	ND		2.0	0.55	ug/Kg		09/04/18 16:10	09/05/18 06:50	1
beta-BHC	ND		2.0	0.36	ug/Kg		09/04/18 16:10	09/05/18 06:50	1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 720-250843/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250868 — **Prep Batch: 250843**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	ND		40	3.2	ug/Kg		09/04/18 16:10	09/05/18 06:50	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		09/04/18 16:10	09/05/18 06:50	1
delta-BHC	ND		2.0	0.44	ug/Kg		09/04/18 16:10	09/05/18 06:50	1
Dieldrin	ND		2.0	0.59	ug/Kg		09/04/18 16:10	09/05/18 06:50	1
Endosulfan I	ND		2.0	0.32	ug/Kg		09/04/18 16:10	09/05/18 06:50	1
Endosulfan II	ND		2.0	0.49	ug/Kg		09/04/18 16:10	09/05/18 06:50	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		09/04/18 16:10	09/05/18 06:50	1
Endrin	ND		2.0	0.46	ug/Kg		09/04/18 16:10	09/05/18 06:50	1
Endrin aldehyde	ND		2.0	0.63	ug/Kg		09/04/18 16:10	09/05/18 06:50	1
Endrin ketone	ND		2.0	0.33	ug/Kg		09/04/18 16:10	09/05/18 06:50	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		09/04/18 16:10	09/05/18 06:50	1
Heptachlor	ND		2.0	0.46	ug/Kg		09/04/18 16:10	09/05/18 06:50	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		09/04/18 16:10	09/05/18 06:50	1
Methoxychlor	ND		2.0	0.68	ug/Kg		09/04/18 16:10	09/05/18 06:50	1
Toxaphene	ND		40	6.8	ug/Kg		09/04/18 16:10	09/05/18 06:50	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		09/04/18 16:10	09/05/18 06:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*111*		*21 - 136*	*09/04/18 16:10*	*09/05/18 06:50*	*1*
Tetrachloro-m-xylene	*88*		*21 - 145*	*09/04/18 16:10*	*09/05/18 06:50*	*1*

Lab Sample ID: LCS 720-250843/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250868 — **Prep Batch: 250843**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	19.4		ug/Kg		116	75 - 128
4,4'-DDE	16.7	18.2		ug/Kg		109	76 - 126
4,4'-DDT	16.7	17.6		ug/Kg		106	63 - 127
Aldrin	16.7	14.4		ug/Kg		87	65 - 120
alpha-BHC	16.7	11.1		ug/Kg		67	46 - 122
beta-BHC	16.7	16.9		ug/Kg		101	78 - 136
cis-Chlordane	16.7	17.0		ug/Kg		102	70 - 120
delta-BHC	16.7	14.7		ug/Kg		88	43 - 125
Dieldrin	16.7	17.1		ug/Kg		102	72 - 120
Endosulfan I	16.7	16.7		ug/Kg		100	62 - 120
Endosulfan II	16.7	18.0		ug/Kg		108	65 - 120
Endosulfan sulfate	16.7	17.7		ug/Kg		106	72 - 121
Endrin	16.7	18.1		ug/Kg		109	68 - 120
Endrin aldehyde	16.7	18.7		ug/Kg		112	68 - 120
Endrin ketone	16.7	18.1		ug/Kg		109	75 - 136
gamma-BHC (Lindane)	16.7	14.8		ug/Kg		89	72 - 120
Heptachlor	16.7	15.5		ug/Kg		93	69 - 120
Heptachlor epoxide	16.7	16.9		ug/Kg		101	68 - 120
Methoxychlor	16.7	19.3		ug/Kg		116	71 - 132
trans-Chlordane	16.7	17.1		ug/Kg		102	68 - 120

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 720-250843/2-A
Matrix: Solid
Analysis Batch: 250868

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250843

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	112		21 - 136
Tetrachloro-m-xylene	79		21 - 145

Lab Sample ID: LCSD 720-250843/3-A
Matrix: Solid
Analysis Batch: 250868

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 250843

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	16.7	19.5		ug/Kg		117	75 - 128	0	20
4,4'-DDE	16.7	18.3		ug/Kg		110	76 - 126	1	20
4,4'-DDT	16.7	17.6		ug/Kg		106	63 - 127	0	20
Aldrin	16.7	15.1		ug/Kg		91	65 - 120	5	20
alpha-BHC	16.7	11.6		ug/Kg		70	46 - 122	5	20
beta-BHC	16.7	17.1		ug/Kg		103	78 - 136	1	20
cis-Chlordane	16.7	17.2		ug/Kg		103	70 - 120	1	20
delta-BHC	16.7	15.0		ug/Kg		90	43 - 125	2	20
Dieldrin	16.7	17.3		ug/Kg		104	72 - 120	1	20
Endosulfan I	16.7	17.0		ug/Kg		102	62 - 120	2	20
Endosulfan II	16.7	18.1		ug/Kg		109	65 - 120	0	35
Endosulfan sulfate	16.7	17.8		ug/Kg		107	72 - 121	0	20
Endrin	16.7	18.2		ug/Kg		109	68 - 120	0	20
Endrin aldehyde	16.7	18.9		ug/Kg		113	68 - 120	1	20
Endrin ketone	16.7	18.3		ug/Kg		110	75 - 136	1	20
gamma-BHC (Lindane)	16.7	15.2		ug/Kg		91	72 - 120	3	20
Heptachlor	16.7	16.1		ug/Kg		97	69 - 120	4	20
Heptachlor epoxide	16.7	17.0		ug/Kg		102	68 - 120	1	20
Methoxychlor	16.7	19.2		ug/Kg		115	71 - 132	0	20
trans-Chlordane	16.7	17.2		ug/Kg		103	68 - 120	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl	112		21 - 136
Tetrachloro-m-xylene	84		21 - 145

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

Lab Sample ID: MB 240-343099/23-A
Matrix: Solid
Analysis Batch: 343339

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 343099

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/29/18 14:50	08/31/18 08:41	1
Aroclor-1221	ND		50	24	ug/Kg		08/29/18 14:50	08/31/18 08:41	1
Aroclor-1232	ND		50	23	ug/Kg		08/29/18 14:50	08/31/18 08:41	1
Aroclor-1242	ND		50	19	ug/Kg		08/29/18 14:50	08/31/18 08:41	1
Aroclor-1248	ND		50	24	ug/Kg		08/29/18 14:50	08/31/18 08:41	1
Aroclor-1254	ND		50	23	ug/Kg		08/29/18 14:50	08/31/18 08:41	1
Aroclor-1260	ND		50	22	ug/Kg		08/29/18 14:50	08/31/18 08:41	1

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

Lab Sample ID: MB 240-343099/23-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 343339 — **Prep Batch: 343099**

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	88		14 - 128	08/29/18 14:50	08/31/18 08:41	1
DCB Decachlorobiphenyl	106		10 - 132	08/29/18 14:50	08/31/18 08:41	1

Lab Sample ID: LCS 240-343099/24-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 343339 — **Prep Batch: 343099**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	1000	826		ug/Kg		83	47 - 120
Aroclor-1260	1000	986		ug/Kg		99	46 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	87		14 - 128
DCB Decachlorobiphenyl	101		10 - 132

Lab Sample ID: 720-88240-F-3-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 343339 — **Prep Batch: 343099**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	ND		991	854		ug/Kg		86	31 - 120
Aroclor-1260	ND		991	968		ug/Kg		98	21 - 122

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	88		14 - 128
DCB Decachlorobiphenyl	110		10 - 132

Lab Sample ID: 720-88240-F-3-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 343339 — **Prep Batch: 343099**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	ND		997	944		ug/Kg		95	31 - 120	10	30
Aroclor-1260	ND		997	1150		ug/Kg		116	21 - 122	18	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Tetrachloro-m-xylene	97		14 - 128
DCB Decachlorobiphenyl	151	X	10 - 132

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-250365/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250585 — **Prep Batch: 250365**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.105	J	0.50	0.083	mg/Kg		08/28/18 10:26	08/29/18 20:06	1

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

Lab Sample ID: MB 720-250365/1-A
Matrix: Solid
Analysis Batch: 250585

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250365

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.0	0.085	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Barium	0.0888	J	0.50	0.071	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Beryllium	ND		0.10	0.033	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Cadmium	ND		0.13	0.012	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Chromium	ND		0.50	0.053	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Cobalt	ND		0.20	0.020	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Copper	ND		1.5	0.71	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Lead	ND		0.50	0.11	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Nickel	ND		0.50	0.051	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Selenium	ND		1.0	0.15	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Silver	ND		0.25	0.051	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Thallium	ND		0.50	0.15	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Vanadium	ND		0.50	0.068	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Zinc	ND		1.5	0.64	mg/Kg		08/28/18 10:26	08/29/18 20:06	1

Lab Sample ID: LCS 720-250365/2-A
Matrix: Solid
Analysis Batch: 250585

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250365

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	47.1		mg/Kg		94	80 - 120
Arsenic	50.0	47.7		mg/Kg		95	80 - 120
Barium	50.0	49.3		mg/Kg		99	80 - 120
Beryllium	50.0	48.6		mg/Kg		97	80 - 120
Cadmium	50.0	48.2		mg/Kg		96	80 - 120
Chromium	50.0	48.2		mg/Kg		96	80 - 120
Cobalt	50.0	49.6		mg/Kg		99	80 - 120
Copper	50.0	47.8		mg/Kg		96	80 - 120
Lead	50.0	49.1		mg/Kg		98	80 - 120
Molybdenum	50.0	48.6		mg/Kg		97	80 - 120
Nickel	50.0	48.4		mg/Kg		97	80 - 120
Selenium	50.0	46.1		mg/Kg		92	80 - 120
Silver	25.0	24.5		mg/Kg		98	80 - 120
Thallium	50.0	48.5		mg/Kg		97	80 - 120
Vanadium	50.0	48.4		mg/Kg		97	80 - 120
Zinc	50.0	48.6		mg/Kg		97	80 - 120

Lab Sample ID: 720-88216-A-17-Y MS
Matrix: Solid
Analysis Batch: 250585

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250365

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.85	J B F1	45.5	12.2	F1	mg/Kg		25	75 - 125
Arsenic	2.0	J	45.5	43.5		mg/Kg		91	75 - 125
Barium	55	B	45.5	105		mg/Kg		109	75 - 125
Beryllium	ND		45.5	43.8		mg/Kg		96	75 - 125
Cadmium	0.064	J	45.5	43.5		mg/Kg		96	75 - 125
Chromium	63		45.5	115		mg/Kg		114	75 - 125

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

Lab Sample ID: 720-88216-A-17-Y MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250585 — **Prep Batch: 250365**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	13		45.5	58.8		mg/Kg		101	75 - 125
Copper	29		45.5	74.8		mg/Kg		102	75 - 125
Lead	25		45.5	65.7		mg/Kg		89	75 - 125
Molybdenum	ND		45.5	40.7		mg/Kg		90	75 - 125
Nickel	35		45.5	80.9		mg/Kg		100	75 - 125
Selenium	ND		45.5	38.9		mg/Kg		86	75 - 125
Silver	ND		22.7	23.3		mg/Kg		103	75 - 125
Thallium	0.69	J	45.5	42.6		mg/Kg		92	75 - 125
Vanadium	79		45.5	136		mg/Kg		124	75 - 125
Zinc	37		45.5	84.5		mg/Kg		105	75 - 125

Lab Sample ID: 720-88216-A-17-Z MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250585 — **Prep Batch: 250365**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.85	J B F1	44.6	12.0	F1	mg/Kg		25	75 - 125	2	20
Arsenic	2.0	J	44.6	41.3		mg/Kg		88	75 - 125	5	20
Barium	55	B	44.6	104		mg/Kg		110	75 - 125	0	20
Beryllium	ND		44.6	42.1		mg/Kg		94	75 - 125	4	20
Cadmium	0.064	J	44.6	41.7		mg/Kg		93	75 - 125	4	20
Chromium	63		44.6	110		mg/Kg		105	75 - 125	4	20
Cobalt	13		44.6	56.2		mg/Kg		96	75 - 125	5	20
Copper	29		44.6	74.5		mg/Kg		103	75 - 125	0	20
Lead	25		44.6	62.1		mg/Kg		82	75 - 125	6	20
Molybdenum	ND		44.6	38.4		mg/Kg		86	75 - 125	6	20
Nickel	35		44.6	83.6		mg/Kg		108	75 - 125	3	20
Selenium	ND		44.6	37.4		mg/Kg		84	75 - 125	4	20
Silver	ND		22.3	22.5		mg/Kg		101	75 - 125	4	20
Thallium	0.69	J	44.6	41.0		mg/Kg		90	75 - 125	4	20
Vanadium	79		44.6	130		mg/Kg		113	75 - 125	5	20
Zinc	37		44.6	81.0		mg/Kg		99	75 - 125	4	20

Lab Sample ID: MB 720-250385/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250634 — **Prep Batch: 250385**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Arsenic	ND		1.0	0.085	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Barium	ND		0.50	0.071	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Beryllium	ND		0.10	0.033	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Cadmium	ND		0.13	0.012	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Chromium	0.0676	J	0.50	0.053	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Cobalt	ND		0.20	0.020	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Copper	ND		1.5	0.71	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Lead	ND		0.50	0.11	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Nickel	ND		0.50	0.051	mg/Kg		08/28/18 12:45	08/30/18 14:17	1

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

Lab Sample ID: MB 720-250385/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250634 — **Prep Batch: 250385**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		1.0	0.15	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Silver	ND		0.25	0.051	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Thallium	ND		0.50	0.15	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Vanadium	ND		0.50	0.068	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Zinc	ND		1.5	0.64	mg/Kg		08/28/18 12:45	08/30/18 14:17	1

Lab Sample ID: LCS 720-250385/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250634 — **Prep Batch: 250385**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	49.5		mg/Kg		99	80 - 120
Arsenic	50.0	49.0		mg/Kg		98	80 - 120
Barium	50.0	48.9		mg/Kg		98	80 - 120
Beryllium	50.0	46.1		mg/Kg		92	80 - 120
Cadmium	50.0	49.1		mg/Kg		98	80 - 120
Chromium	50.0	50.3		mg/Kg		101	80 - 120
Cobalt	50.0	50.1		mg/Kg		100	80 - 120
Copper	50.0	50.9		mg/Kg		102	80 - 120
Lead	50.0	49.6		mg/Kg		99	80 - 120
Molybdenum	50.0	50.7		mg/Kg		101	80 - 120
Nickel	50.0	50.8		mg/Kg		102	80 - 120
Selenium	50.0	49.3		mg/Kg		99	80 - 120
Silver	25.0	25.3		mg/Kg		101	80 - 120
Thallium	50.0	50.1		mg/Kg		100	80 - 120
Vanadium	50.0	49.2		mg/Kg		98	80 - 120
Zinc	50.0	49.4		mg/Kg		99	80 - 120

Lab Sample ID: 720-88240-D-3-A MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250634 — **Prep Batch: 250385**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.4	J F1	43.1	12.0	F1	mg/Kg		25	75 - 125
Arsenic	38	F1 F2	43.1	169	F1	mg/Kg		303	75 - 125
Barium	90	F1 F2	43.1	256	F1	mg/Kg		387	75 - 125
Beryllium	ND		43.1	50.3		mg/Kg		117	75 - 125
Cadmium	0.12	J	43.1	46.5		mg/Kg		108	75 - 125
Chromium	51	B F1	43.1	135	F1	mg/Kg		194	75 - 125
Cobalt	9.5		43.1	61.4		mg/Kg		120	75 - 125
Copper	55	F1	43.1	119	F1	mg/Kg		147	75 - 125
Lead	120	F1	43.1	204	F1	mg/Kg		188	75 - 125
Molybdenum	0.90	J	43.1	48.5		mg/Kg		110	75 - 125
Nickel	52	F1	43.1	130	F1	mg/Kg		180	75 - 125
Selenium	1.6	J	43.1	50.5		mg/Kg		113	75 - 125
Silver	ND	F1	21.6	26.3		mg/Kg		122	75 - 125
Thallium	ND		43.1	44.7		mg/Kg		104	75 - 125
Vanadium	43	F1	43.1	98.6	F1	mg/Kg		129	75 - 125
Zinc	130	F1 F2	43.1	193	F1	mg/Kg		154	75 - 125

QC Sample Results

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

TestAmerica Job ID: 720-88237-1

Lab Sample ID: 720-88240-D-3-B MSD
Matrix: Solid
Analysis Batch: 250634

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250385

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	1.4	J F1	42.7	12.6	F1	mg/Kg		26	75 - 125	5	20
Arsenic	38	F1 F2	42.7	121	F1 F2	mg/Kg		195	75 - 125	33	20
Barium	90	F1 F2	42.7	195	F1 F2	mg/Kg		247	75 - 125	27	20
Beryllium	ND		42.7	53.3		mg/Kg		125	75 - 125	6	20
Cadmium	0.12	J	42.7	49.3		mg/Kg		115	75 - 125	6	20
Chromium	51	B F1	42.7	137	F1	mg/Kg		201	75 - 125	2	20
Cobalt	9.5		42.7	62.1		mg/Kg		123	75 - 125	1	20
Copper	55	F1	42.7	129	F1	mg/Kg		171	75 - 125	8	20
Lead	120	F1	42.7	249	F1	mg/Kg		293	75 - 125	20	20
Molybdenum	0.90	J	42.7	51.1		mg/Kg		117	75 - 125	5	20
Nickel	52	F1	42.7	123	F1	mg/Kg		166	75 - 125	5	20
Selenium	1.6	J	42.7	51.6		mg/Kg		117	75 - 125	2	20
Silver	ND	F1	21.4	27.6	F1	mg/Kg		129	75 - 125	5	20
Thallium	ND		42.7	45.9		mg/Kg		107	75 - 125	3	20
Vanadium	43	F1	42.7	106	F1	mg/Kg		149	75 - 125	8	20
Zinc	130	F1 F2	42.7	239	F1 F2	mg/Kg		264	75 - 125	22	20

Lab Sample ID: MB 720-250470/1-A
Matrix: Solid
Analysis Batch: 250593

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250470

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Arsenic	ND		1.0	0.085	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Barium	ND		0.50	0.071	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Beryllium	ND		0.10	0.033	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Cadmium	ND		0.13	0.012	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Chromium	ND		0.50	0.053	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Cobalt	ND		0.20	0.020	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Copper	ND		1.5	0.71	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Lead	ND		0.50	0.11	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Nickel	ND		0.50	0.051	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Selenium	ND		1.0	0.15	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Silver	ND		0.25	0.051	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Thallium	ND		0.50	0.15	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Vanadium	ND		0.50	0.068	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Zinc	ND		1.5	0.64	mg/Kg		08/29/18 09:32	08/30/18 09:42	1

Lab Sample ID: LCS 720-250470/2-A
Matrix: Solid
Analysis Batch: 250593

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250470

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	47.3		mg/Kg		95	80 - 120
Arsenic	50.0	47.2		mg/Kg		94	80 - 120
Barium	50.0	49.1		mg/Kg		98	80 - 120
Beryllium	50.0	50.0		mg/Kg		100	80 - 120
Cadmium	50.0	48.1		mg/Kg		96	80 - 120
Chromium	50.0	48.9		mg/Kg		98	80 - 120
Cobalt	50.0	48.8		mg/Kg		98	80 - 120

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

Lab Sample ID: LCS 720-250470/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250593 — **Prep Batch: 250470**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	50.0	48.8		mg/Kg		98	80 - 120
Lead	50.0	48.5		mg/Kg		97	80 - 120
Molybdenum	50.0	48.7		mg/Kg		97	80 - 120
Nickel	50.0	48.8		mg/Kg		98	80 - 120
Selenium	50.0	46.1		mg/Kg		92	80 - 120
Silver	25.0	24.0		mg/Kg		96	80 - 120
Thallium	50.0	48.4		mg/Kg		97	80 - 120
Vanadium	50.0	48.9		mg/Kg		98	80 - 120
Zinc	50.0	47.8		mg/Kg		96	80 - 120

Lab Sample ID: 720-88237-9 MS — **Client Sample ID: DG-B7S-3.5-4**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250593 — **Prep Batch: 250470**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.4	J F1	46.3	19.4	F1	mg/Kg		39	75 - 125
Arsenic	4.3		46.3	55.2		mg/Kg		110	75 - 125
Barium	90		46.3	126		mg/Kg		79	75 - 125
Beryllium	ND	F1	46.3	54.8		mg/Kg		118	75 - 125
Cadmium	0.20	J	46.3	50.8		mg/Kg		109	75 - 125
Chromium	45	F1	46.3	110	F1	mg/Kg		140	75 - 125
Cobalt	9.1		46.3	61.2		mg/Kg		113	75 - 125
Copper	31	F1	46.3	91.0	F1	mg/Kg		129	75 - 125
Lead	100	F1 F2	46.3	108	F1	mg/Kg		13	75 - 125
Molybdenum	0.36	J	46.3	49.6		mg/Kg		106	75 - 125
Nickel	60	F1	46.3	108		mg/Kg		104	75 - 125
Selenium	ND		46.3	48.2		mg/Kg		104	75 - 125
Silver	ND	F1	23.1	27.4		mg/Kg		118	75 - 125
Thallium	ND		46.3	49.8		mg/Kg		108	75 - 125
Vanadium	26	F1	46.3	90.4	F1	mg/Kg		140	75 - 125
Zinc	86	F1	46.3	108	F1	mg/Kg		48	75 - 125

Lab Sample ID: 720-88237-9 MSD — **Client Sample ID: DG-B7S-3.5-4**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250593 — **Prep Batch: 250470**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	1.4	J F1	47.2	19.9	F1	mg/Kg		39	75 - 125	3	20
Arsenic	4.3		47.2	60.3		mg/Kg		119	75 - 125	9	20
Barium	90		47.2	139		mg/Kg		105	75 - 125	10	20
Beryllium	ND	F1	47.2	59.8	F1	mg/Kg		127	75 - 125	9	20
Cadmium	0.20	J	47.2	56.4		mg/Kg		119	75 - 125	11	20
Chromium	45	F1	47.2	128	F1	mg/Kg		175	75 - 125	15	20
Cobalt	9.1		47.2	67.9		mg/Kg		125	75 - 125	10	20
Copper	31	F1	47.2	107	F1	mg/Kg		161	75 - 125	16	20
Lead	100	F1 F2	47.2	133	F1 F2	mg/Kg		66	75 - 125	21	20
Molybdenum	0.36	J	47.2	54.6		mg/Kg		115	75 - 125	10	20
Nickel	60	F1	47.2	120	F1	mg/Kg		126	75 - 125	10	20
Selenium	ND		47.2	53.5		mg/Kg		113	75 - 125	10	20

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

Lab Sample ID: 720-88237-9 MSD — **Client Sample ID: DG-B7S-3.5-4**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250593 — **Prep Batch: 250470**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	ND	F1	23.6	30.9	F1	mg/Kg		131	75 - 125	12	20
Thallium	ND		47.2	55.4		mg/Kg		118	75 - 125	11	20
Vanadium	26	F1	47.2	104	F1	mg/Kg		166	75 - 125	14	20
Zinc	86	F1	47.2	118	F1	mg/Kg		67	75 - 125	8	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-250521/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250677 — **Prep Batch: 250521**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/29/18 15:39	08/30/18 18:10	1

Lab Sample ID: LCS 720-250521/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250677 — **Prep Batch: 250521**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.826		mg/Kg		99	80 - 120

Lab Sample ID: 720-88237-9 MS — **Client Sample ID: DG-B7S-3.5-4**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250677 — **Prep Batch: 250521**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.12		0.769	0.801		mg/Kg		88	75 - 125

Lab Sample ID: 720-88237-9 MSD — **Client Sample ID: DG-B7S-3.5-4**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250677 — **Prep Batch: 250521**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.12		0.781	0.844		mg/Kg		93	75 - 125	5	20

QC Association Summary

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

TestAmerica Job ID: 720-88237-1

GC/MS VOA

Analysis Batch: 250405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88237-5	DG-A7S-0.5-1	Total/NA	Solid	8260B	250443
MB 720-250405/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250405/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250405/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250405/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250405/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 250407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88237-7	DG-A7S-10-10.5	Total/NA	Solid	8260B	250443
MB 720-250407/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250407/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250407/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250407/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250407/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 250443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88237-5	DG-A7S-0.5-1	Total/NA	Solid	5035	
720-88237-7	DG-A7S-10-10.5	Total/NA	Solid	5035	

Analysis Batch: 250452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88237-5	DG-A7S-0.5-1	Total/NA	Solid	8260B	250481
720-88237-6	DG-A7S-3.5-4	Total/NA	Solid	8260B	250481
720-88237-10	DG-B7S-14.5-15	Total/NA	Solid	8260B	250481
MB 720-250452/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250452/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250452/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250452/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250452/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 250481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88237-5	DG-A7S-0.5-1	Total/NA	Solid	5035	
720-88237-6	DG-A7S-3.5-4	Total/NA	Solid	5035	
720-88237-10	DG-B7S-14.5-15	Total/NA	Solid	5035	

GC/MS Semi VOA

Prep Batch: 250376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88237-5	DG-A7S-0.5-1	Total/NA	Solid	3546	
720-88237-6	DG-A7S-3.5-4	Total/NA	Solid	3546	
720-88237-7	DG-A7S-10-10.5	Total/NA	Solid	3546	
720-88237-10	DG-B7S-14.5-15	Total/NA	Solid	3546	
MB 720-250376/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250376/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88265-D-10-A MS	Matrix Spike	Total/NA	Solid	3546	
720-88265-D-10-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

GC/MS Semi VOA (Continued)

Analysis Batch: 250578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250376/1-A	Method Blank	Total/NA	Solid	8270C SIM	250376
LCS 720-250376/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	250376
720-88265-D-10-A MS	Matrix Spike	Total/NA	Solid	8270C SIM	250376
720-88265-D-10-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8270C SIM	250376

Analysis Batch: 250730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88237-5	DG-A7S-0.5-1	Total/NA	Solid	8270C SIM	250376
720-88237-6	DG-A7S-3.5-4	Total/NA	Solid	8270C SIM	250376
720-88237-7	DG-A7S-10-10.5	Total/NA	Solid	8270C SIM	250376

Analysis Batch: 250745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88237-10	DG-B7S-14.5-15	Total/NA	Solid	8270C SIM	250376

GC Semi VOA

Prep Batch: 250382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88237-5	DG-A7S-0.5-1	Total/NA	Solid	3546	
720-88237-6	DG-A7S-3.5-4	Total/NA	Solid	3546	
720-88237-7	DG-A7S-10-10.5	Total/NA	Solid	3546	
720-88237-10	DG-B7S-14.5-15	Total/NA	Solid	3546	
MB 720-250382/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250382/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88239-D-7-A MS	Matrix Spike	Total/NA	Solid	3546	
720-88239-D-7-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Prep Batch: 250393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88237-5	DG-A7S-0.5-1	Total/NA	Solid	3546	
720-88237-6	DG-A7S-3.5-4	Total/NA	Solid	3546	
720-88237-7	DG-A7S-10-10.5	Total/NA	Solid	3546	
MB 720-250393/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250393/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88216-A-9-S MS	Matrix Spike	Total/NA	Solid	3546	
720-88216-A-9-T MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 250456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250382/1-A	Method Blank	Total/NA	Solid	8015B	250382
LCS 720-250382/2-A	Lab Control Sample	Total/NA	Solid	8015B	250382
720-88239-D-7-A MS	Matrix Spike	Total/NA	Solid	8015B	250382
720-88239-D-7-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	250382

Analysis Batch: 250568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88237-5	DG-A7S-0.5-1	Total/NA	Solid	8015B	250382

GC Semi VOA (Continued)

Analysis Batch: 250569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88237-6	DG-A7S-3.5-4	Total/NA	Solid	8015B	250382
720-88237-7	DG-A7S-10-10.5	Total/NA	Solid	8015B	250382
720-88237-10	DG-B7S-14.5-15	Total/NA	Solid	8015B	250382

Analysis Batch: 250609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250393/1-A	Method Blank	Total/NA	Solid	8081A	250393
LCS 720-250393/2-A	Lab Control Sample	Total/NA	Solid	8081A	250393
720-88216-A-9-S MS	Matrix Spike	Total/NA	Solid	8081A	250393
720-88216-A-9-T MSD	Matrix Spike Duplicate	Total/NA	Solid	8081A	250393

Analysis Batch: 250737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88237-5	DG-A7S-0.5-1	Total/NA	Solid	8081A	250393
720-88237-6	DG-A7S-3.5-4	Total/NA	Solid	8081A	250393
720-88237-7	DG-A7S-10-10.5	Total/NA	Solid	8081A	250393

Prep Batch: 250843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88237-10	DG-B7S-14.5-15	Total/NA	Solid	3546	
MB 720-250843/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250843/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 720-250843/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 250868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88237-10	DG-B7S-14.5-15	Total/NA	Solid	8081A	250843
MB 720-250843/1-A	Method Blank	Total/NA	Solid	8081A	250843
LCS 720-250843/2-A	Lab Control Sample	Total/NA	Solid	8081A	250843
LCSD 720-250843/3-A	Lab Control Sample Dup	Total/NA	Solid	8081A	250843

Prep Batch: 343099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88237-5	DG-A7S-0.5-1	Total/NA	Solid	3540C	
720-88237-6	DG-A7S-3.5-4	Total/NA	Solid	3540C	
720-88237-7	DG-A7S-10-10.5	Total/NA	Solid	3540C	
720-88237-10	DG-B7S-14.5-15	Total/NA	Solid	3540C	
MB 240-343099/23-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-343099/24-A	Lab Control Sample	Total/NA	Solid	3540C	
720-88240-F-3-B MS	Matrix Spike	Total/NA	Solid	3540C	
720-88240-F-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3540C	

Analysis Batch: 343336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88237-5	DG-A7S-0.5-1	Total/NA	Solid	8082	343099
720-88237-6	DG-A7S-3.5-4	Total/NA	Solid	8082	343099
720-88237-7	DG-A7S-10-10.5	Total/NA	Solid	8082	343099

Analysis Batch: 343339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88237-10	DG-B7S-14.5-15	Total/NA	Solid	8082	343099

GC Semi VOA (Continued)

Analysis Batch: 343339 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-343099/23-A	Method Blank	Total/NA	Solid	8082	343099
LCS 240-343099/24-A	Lab Control Sample	Total/NA	Solid	8082	343099
720-88240-F-3-B MS	Matrix Spike	Total/NA	Solid	8082	343099
720-88240-F-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8082	343099

Metals

Prep Batch: 250365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88237-1	DG-B4S-0.5-1	Total/NA	Solid	3050B	
720-88237-2	DG-B4S-3.5-4	Total/NA	Solid	3050B	
720-88237-3	DG-C4S-0.5-1	Total/NA	Solid	3050B	
720-88237-4	DG-C4S-3.5-4	Total/NA	Solid	3050B	
720-88237-5	DG-A7S-0.5-1	Total/NA	Solid	3050B	
MB 720-250365/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250365/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88216-A-17-Y MS	Matrix Spike	Total/NA	Solid	3050B	
720-88216-A-17-Z MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Prep Batch: 250385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88237-6	DG-A7S-3.5-4	Total/NA	Solid	3050B	
720-88237-7	DG-A7S-10-10.5	Total/NA	Solid	3050B	
720-88237-8	DG-B7S-0.5-1	Total/NA	Solid	3050B	
MB 720-250385/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250385/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88240-D-3-A MS	Matrix Spike	Total/NA	Solid	3050B	
720-88240-D-3-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Prep Batch: 250470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88237-9	DG-B7S-3.5-4	Total/NA	Solid	3050B	
720-88237-10	DG-B7S-14.5-15	Total/NA	Solid	3050B	
MB 720-250470/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250470/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88237-9 MS	DG-B7S-3.5-4	Total/NA	Solid	3050B	
720-88237-9 MSD	DG-B7S-3.5-4	Total/NA	Solid	3050B	

Prep Batch: 250521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88237-1	DG-B4S-0.5-1	Total/NA	Solid	7471A	
720-88237-2	DG-B4S-3.5-4	Total/NA	Solid	7471A	
720-88237-3	DG-C4S-0.5-1	Total/NA	Solid	7471A	
720-88237-4	DG-C4S-3.5-4	Total/NA	Solid	7471A	
720-88237-5	DG-A7S-0.5-1	Total/NA	Solid	7471A	
720-88237-6	DG-A7S-3.5-4	Total/NA	Solid	7471A	
720-88237-7	DG-A7S-10-10.5	Total/NA	Solid	7471A	
720-88237-8	DG-B7S-0.5-1	Total/NA	Solid	7471A	
720-88237-9	DG-B7S-3.5-4	Total/NA	Solid	7471A	
720-88237-10	DG-B7S-14.5-15	Total/NA	Solid	7471A	

Metals (Continued)

Prep Batch: 250521 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250521/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250521/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88237-9 MS	DG-B7S-3.5-4	Total/NA	Solid	7471A	
720-88237-9 MSD	DG-B7S-3.5-4	Total/NA	Solid	7471A	

Analysis Batch: 250585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88237-1	DG-B4S-0.5-1	Total/NA	Solid	6010B	250365
720-88237-2	DG-B4S-3.5-4	Total/NA	Solid	6010B	250365
720-88237-3	DG-C4S-0.5-1	Total/NA	Solid	6010B	250365
720-88237-4	DG-C4S-3.5-4	Total/NA	Solid	6010B	250365
720-88237-5	DG-A7S-0.5-1	Total/NA	Solid	6010B	250365
MB 720-250365/1-A	Method Blank	Total/NA	Solid	6010B	250365
LCS 720-250365/2-A	Lab Control Sample	Total/NA	Solid	6010B	250365
720-88216-A-17-Y MS	Matrix Spike	Total/NA	Solid	6010B	250365
720-88216-A-17-Z MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250365

Analysis Batch: 250593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88237-9	DG-B7S-3.5-4	Total/NA	Solid	6010B	250470
720-88237-10	DG-B7S-14.5-15	Total/NA	Solid	6010B	250470
MB 720-250470/1-A	Method Blank	Total/NA	Solid	6010B	250470
LCS 720-250470/2-A	Lab Control Sample	Total/NA	Solid	6010B	250470
720-88237-9 MS	DG-B7S-3.5-4	Total/NA	Solid	6010B	250470
720-88237-9 MSD	DG-B7S-3.5-4	Total/NA	Solid	6010B	250470

Analysis Batch: 250634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250385/1-A	Method Blank	Total/NA	Solid	6010B	250385
LCS 720-250385/2-A	Lab Control Sample	Total/NA	Solid	6010B	250385
720-88240-D-3-A MS	Matrix Spike	Total/NA	Solid	6010B	250385
720-88240-D-3-B MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250385

Analysis Batch: 250650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88237-6	DG-A7S-3.5-4	Total/NA	Solid	6010B	250385
720-88237-7	DG-A7S-10-10.5	Total/NA	Solid	6010B	250385
720-88237-8	DG-B7S-0.5-1	Total/NA	Solid	6010B	250385

Analysis Batch: 250677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88237-1	DG-B4S-0.5-1	Total/NA	Solid	7471A	250521
720-88237-2	DG-B4S-3.5-4	Total/NA	Solid	7471A	250521
720-88237-3	DG-C4S-0.5-1	Total/NA	Solid	7471A	250521
720-88237-4	DG-C4S-3.5-4	Total/NA	Solid	7471A	250521
720-88237-5	DG-A7S-0.5-1	Total/NA	Solid	7471A	250521
720-88237-6	DG-A7S-3.5-4	Total/NA	Solid	7471A	250521
720-88237-7	DG-A7S-10-10.5	Total/NA	Solid	7471A	250521
720-88237-8	DG-B7S-0.5-1	Total/NA	Solid	7471A	250521
720-88237-9	DG-B7S-3.5-4	Total/NA	Solid	7471A	250521
720-88237-10	DG-B7S-14.5-15	Total/NA	Solid	7471A	250521

Metals (Continued)

Analysis Batch: 250677 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250521/1-A	Method Blank	Total/NA	Solid	7471A	250521
LCS 720-250521/2-A	Lab Control Sample	Total/NA	Solid	7471A	250521
720-88237-9 MS	DG-B7S-3.5-4	Total/NA	Solid	7471A	250521
720-88237-9 MSD	DG-B7S-3.5-4	Total/NA	Solid	7471A	250521

Analysis Batch: 250701

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88237-6	DG-A7S-3.5-4	Total/NA	Solid	6010B	250385
720-88237-7	DG-A7S-10-10.5	Total/NA	Solid	6010B	250385
720-88237-8	DG-B7S-0.5-1	Total/NA	Solid	6010B	250385

Lab Chronicle

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

TestAmerica Job ID: 720-88237-1

Client Sample ID: DG-B4S-0.5-1 — Lab Sample ID: 720-88237-1

Date Collected: 08/23/18 14:10 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250365	08/28/18 10:26	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250585	08/29/18 21:07	OBI	TAL PLS
Total/NA	Prep	7471A			250521	08/29/18 15:39	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250677	08/30/18 18:22	OBI	TAL PLS

Client Sample ID: DG-B4S-3.5-4 — Lab Sample ID: 720-88237-2

Date Collected: 08/23/18 14:10 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250365	08/28/18 10:26	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250585	08/29/18 21:12	OBI	TAL PLS
Total/NA	Prep	7471A			250521	08/29/18 15:39	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250677	08/30/18 18:29	OBI	TAL PLS

Client Sample ID: DG-C4S-0.5-1 — Lab Sample ID: 720-88237-3

Date Collected: 08/23/18 14:40 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250365	08/28/18 10:26	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250585	08/29/18 21:17	OBI	TAL PLS
Total/NA	Prep	7471A			250521	08/29/18 15:39	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250677	08/30/18 18:32	OBI	TAL PLS

Client Sample ID: DG-C4S-3.5-4 — Lab Sample ID: 720-88237-4

Date Collected: 08/23/18 14:40 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250365	08/28/18 10:26	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250585	08/29/18 21:31	OBI	TAL PLS
Total/NA	Prep	7471A			250521	08/29/18 15:39	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250677	08/30/18 18:34	OBI	TAL PLS

Client Sample ID: DG-A7S-0.5-1 — Lab Sample ID: 720-88237-5

Date Collected: 08/23/18 15:00 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250443	08/25/18 03:05	MJK	TAL PLS
Total/NA	Analysis	8260B		1	250405	08/29/18 04:20	JRM	TAL PLS
Total/NA	Prep	5035			250481	08/25/18 03:05	LRC	TAL PLS

Client Sample ID: DG-A7S-0.5-1 — Lab Sample ID: 720-88237-5

Date Collected: 08/23/18 15:00 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250452	08/29/18 14:21	A1C	TAL PLS
Total/NA	Prep	3546			250376	08/28/18 10:30	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		10	250730	09/01/18 00:22	MQL	TAL PLS
Total/NA	Prep	3546			250382	08/28/18 11:24	MAB	TAL PLS
Total/NA	Analysis	8015B		10	250568	08/31/18 05:47	JXL	TAL PLS
Total/NA	Prep	3546			250393	08/28/18 13:36	MAB	TAL PLS
Total/NA	Analysis	8081A		5	250737	09/01/18 04:20	JZT	TAL PLS
Total/NA	Prep	3540C			343099	08/29/18 14:50	AMT	TAL CAN
Total/NA	Analysis	8082		1	343336	08/31/18 07:57	LSH	TAL CAN
Total/NA	Prep	3050B			250365	08/28/18 10:26	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250585	08/29/18 21:36	OBI	TAL PLS
Total/NA	Prep	7471A			250521	08/29/18 15:39	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250677	08/30/18 18:36	OBI	TAL PLS

Client Sample ID: DG-A7S-3.5-4 — Lab Sample ID: 720-88237-6

Date Collected: 08/23/18 15:00 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250481	08/25/18 03:05	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250452	08/29/18 14:52	A1C	TAL PLS
Total/NA	Prep	3546			250376	08/28/18 10:30	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250730	08/31/18 20:26	MQL	TAL PLS
Total/NA	Prep	3546			250382	08/28/18 11:24	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250569	08/30/18 21:16	JXL	TAL PLS
Total/NA	Prep	3546			250393	08/28/18 13:36	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250737	09/01/18 04:37	JZT	TAL PLS
Total/NA	Prep	3540C			343099	08/29/18 14:50	AMT	TAL CAN
Total/NA	Analysis	8082		1	343336	08/31/18 08:15	LSH	TAL CAN
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250650	08/31/18 00:29	OBI	TAL PLS
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250701	08/31/18 12:04	OBI	TAL PLS
Total/NA	Prep	7471A			250521	08/29/18 15:39	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250677	08/30/18 18:39	OBI	TAL PLS

Client Sample ID: DG-A7S-10-10.5 — Lab Sample ID: 720-88237-7

Date Collected: 08/23/18 15:00 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250443	08/23/18 20:47	MJK	TAL PLS
Total/NA	Analysis	8260B		1	250407	08/29/18 02:24	JRM	TAL PLS

Client Sample ID: DG-A7S-10-10.5 — Lab Sample ID: 720-88237-7

Date Collected: 08/23/18 15:00 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			250376	08/28/18 10:30	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250730	08/31/18 20:50	MQL	TAL PLS
Total/NA	Prep	3546			250382	08/28/18 11:24	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250569	08/30/18 20:52	JXL	TAL PLS
Total/NA	Prep	3546			250393	08/28/18 13:36	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250737	09/01/18 04:54	JZT	TAL PLS
Total/NA	Prep	3540C			343099	08/29/18 14:50	AMT	TAL CAN
Total/NA	Analysis	8082		1	343336	08/31/18 08:32	LSH	TAL CAN
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		1	250650	08/31/18 00:34	OBI	TAL PLS
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		1	250701	08/31/18 12:09	OBI	TAL PLS
Total/NA	Prep	7471A			250521	08/29/18 15:39	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250677	08/30/18 18:41	OBI	TAL PLS

Client Sample ID: DG-B7S-0.5-1 — Lab Sample ID: 720-88237-8

Date Collected: 08/23/18 15:35 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250650	08/31/18 00:39	OBI	TAL PLS
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250701	08/31/18 12:14	OBI	TAL PLS
Total/NA	Prep	7471A			250521	08/29/18 15:39	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250677	08/30/18 18:43	OBI	TAL PLS

Client Sample ID: DG-B7S-3.5-4 — Lab Sample ID: 720-88237-9

Date Collected: 08/23/18 15:35 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250470	08/29/18 09:32	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250593	08/30/18 10:11	BKR	TAL PLS
Total/NA	Prep	7471A			250521	08/29/18 15:39	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250677	08/30/18 18:20	OBI	TAL PLS

Client Sample ID: DG-B7S-14.5-15 — Lab Sample ID: 720-88237-10

Date Collected: 08/23/18 15:35 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250481	08/25/18 03:05	LRC	TAL PLS

Lab Chronicle

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

TestAmerica Job ID: 720-88237-1

Client Sample ID: DG-B7S-14.5-15

Lab Sample ID: 720-88237-10

Date Collected: 08/23/18 15:35

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250452	08/29/18 15:25	A1C	TAL PLS
Total/NA	Prep	3546			250376	08/28/18 10:30	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250745	09/02/18 19:38	LPL	TAL PLS
Total/NA	Prep	3546			250382	08/28/18 11:24	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250569	08/30/18 22:05	JXL	TAL PLS
Total/NA	Prep	3546			250843	09/04/18 16:10	KLM	TAL PLS
Total/NA	Analysis	8081A		1	250868	09/05/18 07:40	MQL	TAL PLS
Total/NA	Prep	3540C			343099	08/29/18 14:50	AMT	TAL CAN
Total/NA	Analysis	8082		1	343339	08/31/18 09:10	LSH	TAL CAN
Total/NA	Prep	3050B			250470	08/29/18 09:32	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250593	08/30/18 10:15	BKR	TAL PLS
Total/NA	Prep	7471A			250521	08/29/18 15:39	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250677	08/30/18 18:45	OBI	TAL PLS

Laboratory References:

= Asbestos TEM Laboratories, Inc., 630 BANCROFT WAY, Berkeley, CA 94710

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

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

TestAmerica Job ID: 720-88237-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

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

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Laboratory: TestAmerica Canton

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

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-19
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19
Illinois	NELAP	5	200004	07-31-19
Kansas	NELAP	7	E-10336	01-31-19
Kentucky (UST)	State Program	4	58	02-23-19
Kentucky (WW)	State Program	4	98016	12-31-18 *
Minnesota	NELAP	5	039-999-348	12-31-18 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19
New York	NELAP	2	10975	03-31-19
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-19
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-17-9	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19
Washington	State Program	10	C971	01-12-19
West Virginia DEP	State Program	3	210	12-31-18 *

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

Method Summary

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

TestAmerica Job ID: 720-88237-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PLS
8270C SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
8081A	Organochlorine Pesticides (GC)	SW846	TAL PLS
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS
Subcontract	Asbestos - CARB 435	None	
3050B	Preparation, Metals	SW846	TAL PLS
3540C	Soxhlet Extraction	SW846	TAL CAN
3546	Microwave Extraction	SW846	TAL PLS
5035	Closed System Purge and Trap	SW846	TAL PLS
7471A	Preparation, Mercury	SW846	TAL PLS

Protocol References:

None = None

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

Laboratory References:

= Asbestos TEM Laboratories, Inc., 630 BANCROFT WAY, Berkeley, CA 94710

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

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

TestAmerica Job ID: 720-88237-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-88237-1	DG-B4S-0.5-1	Solid	08/23/18 14:10	08/24/18 15:00
720-88237-2	DG-B4S-3.5-4	Solid	08/23/18 14:10	08/24/18 15:00
720-88237-3	DG-C4S-0.5-1	Solid	08/23/18 14:40	08/24/18 15:00
720-88237-4	DG-C4S-3.5-4	Solid	08/23/18 14:40	08/24/18 15:00
720-88237-5	DG-A7S-0.5-1	Solid	08/23/18 15:00	08/24/18 15:00
720-88237-6	DG-A7S-3.5-4	Solid	08/23/18 15:00	08/24/18 15:00
720-88237-7	DG-A7S-10-10.5	Solid	08/23/18 15:00	08/24/18 15:00
720-88237-8	DG-B7S-0.5-1	Solid	08/23/18 15:35	08/24/18 15:00
720-88237-9	DG-B7S-3.5-4	Solid	08/23/18 15:35	08/24/18 15:00
720-88237-10	DG-B7S-14.5-15	Solid	08/23/18 15:35	08/24/18 15:00

ASBESTOS TEM LABORATORIES, INC.

CARB Method 435
Polarized Light Microscopy
Analytical Report

Laboratory Job # 1283-01201

630 Bancroft Way
Berkeley, CA 94710
(510) 704-8930
FAX (510) 704-8429

ASBESTOS TEM LABORATORIES, INC

CA DPH ELAP
Lab No. 1866

NVLAP Lab Code: 101891-0
Berkeley, CA

Aug/31/2018

Micah Smith
TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

RE: LABORATORY JOB # 1283-01201
Polarized light microscopy analytical results for 4 bulk sample(s).
Job Site: 720-88237-1
Job No.: UPC-OU-SM

Enclosed please find the bulk material analytical results for one or more samples submitted for asbestos analysis. The analyses were performed in accordance with the California Air Resources Board (ARB) Method 435 for the determination of asbestos in serpentine aggregate samples.

Prior to analysis, samples are logged-in and all data pertinent to the sample recorded. The samples are checked for damage or disruption of any chain-of-custody seals. A unique laboratory ID number is assigned to each sample. A hard copy log-in sheet containing all pertinent information concerning the sample is generated. This and all other relevant paper work are kept with the sample throughout the analytical procedures to assure proper analysis.

Sample preparation follows a standard CARB 435 prep method. The entire sample is dried at 135-150 C and then crushed to ~3/8" gravel size using a Bico Chipmunk crusher. If the submitted sample is >1 pint, the sample was split using a 1/2" riffle splitter following ASTM Method C-702-98 to obtain a 1 pint aliquot. The entire 1 pint aliquot, or entire original sample, is then pulverized in a Bico Braun disc pulverizer calibrated to produce a nominal 200 mesh final product. If necessary, additional homogenization steps are undertaken using a 3/8" riffle splitter. Small aliquots are collected from throughout the pulverized material to create three separate microsope slide mounts containing the appropriate refractive index oil. The prepared slides are placed under a polarizing light microscope where standard mineralogical techniques are used to analyze the various materials present, including asbestos. If asbestos is identified and of less than 10% concentration by visual area estimate then an additional five sample mounts are prepared. Quantification of asbestos concentration is obtained using the standard CAL ARB Method 435 point count protocol. For samples observed to contain visible asbestos of less than 10% concentration, a point counting techinique is used with 50 points counted on each of eight sample mounts for a total of 400 points. The data is then compiled into standard report format and subjected to a thorough quality assurance check before the information is released to the client.

While the CARB 435 method has much to commend it, there are a number of situations where it fails to provide sufficient accuracy to make a definitive determination of the presence/absence of asbestos and/or an accurate count of the asbestos concentration present in a given sample. These problems include, but are not limited to, 1) statistical uncertainty with samples containing <1% asbestos when too few particles are counted, 2) definitive identification and discrimination between various fibrous amphibole minerals such as tremolite/actinolite/hornblende and the "Libby amphiboles" such as tremolite/winchite/richterite/arfvedsonite, and C) small asbestiform fibers which are near or below the resolution limit of the PLM microscope such as those found in various California coast range serpentine bodies. In these cases, further analysis by transmission electron microscopy is recommended to obtain a more accurate result.

Sincerely Yours,

Lab Manager
ASBESTOS TEM LABORATORIES, INC.

--- These results relate only to the samples tested and must not be reproduced, except in full, without the approval of the laboratory. ---

630 BANCROFT WAY ▪ BERKELEY, CA 94710 ▪ PH. (510) 704-8930 ▪ FAX (510) 704-8429
With Branch Offices Located At: 1350 FREEPORT BLVD. UNIT 104, SPARKS, NV 89431

POLARIZED LIGHT MICROSCOPY
CARB 435 ANALYTICAL REPORT

Contact: Micah Smith

Address: TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

Samples Submittec 4

Samples Analyzed: 4

Job Site / No. UPC-OU-SM
720-88237-1

Report No. **359879**
Date Submitted: Aug-27-18
Date Reported: Aug-31-18

SAMPLE ID	POINTS COUNTED	ASBESTOS %	ASBESTOS TYPE	LOCATION / DESCRIPTION
DG-A7S-0.5-1 Lab ID # 1283-01201-001	**400** - Total Points	**<0.25%**	**None Detected**	720-88237-5 No Asbestos Detected
DG-A7S-3.5-4 Lab ID # 1283-01201-002	**400** - Total Points	**<0.25%**	**None Detected**	720-88237-6 No Asbestos Detected
DG-A7S-10-10.5 Lab ID # 1283-01201-003	**400** - Total Points	**<0.25%**	**None Detected**	720-88237-7 No Asbestos Detected
DG-B7S-14.5-15 Lab ID # 1283-01201-004	**400** - Total Points	**<0.25%**	**None Detected**	720-88237-10 No Asbestos Detected
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			

QC Reviewer _____ **Analys** _____

#359879

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39418.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: Asbestos TEM Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88237-1
Address: 630 BANCROFT WAY, ,	Due Date Requested: 8/31/2018			
City: Berkeley	TAT Requested (days):			
State, Zip: CA, 94710				
Phone:	PO #:			
Email:	WO #:			
Project Name: UPC OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-6, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Asbestos - CARB 435)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-A7S--0-5-1 (720-88237-5)	8/23/18	15:00 Pacific		Solid			X	1	
DG-A7S--3-5-4 (720-88237-6)	8/23/18	15:00 Pacific		Solid			X	1	
DG-A7S--10-10-5 (720-88237-7)	8/23/18	15:00 Pacific		Solid			X	1	
DG-B7S--14.5-15 (720-88237-10)	8/23/18	15:35 Pacific		Solid			X	1	

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

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

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

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	8-27-18 10:35	TA720			
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
				AUG27	3SHM
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: AUG27 '18 10:38AM

Ver: 09/20/2016

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-88237

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

Reference #: 185109

Date 8/23 Page 1 of 1

11/14/2018 (Rev. 1)

Report To

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

Analysis Request

Sample ID	Date	Time	Mtx	Preserv	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B ☐ EPA 8260B	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other ___	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☐ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☐ EPA 8081 ☐ EPA 8082 PCBs	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: ___	Metals: ☐ 6020 ☐ 200.8 (ICP-MS): ___	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	Asbestos (CARB 435)	
DG-B4S-0.5-1	8/23	1410	S	N									X											
DG-B4S-3.5-4	↓	1410	↓	↓									X											
DG-C4S-0.5-1		1440											X											
DG-C4S-3.5-4		1440		↓									X											
DG-A7S-0.5-1		1500		N	X			X		X		X	X									X		
DG-A7S-3.5-4		1500		↓	X			X		X		X	X									X		
DG-A7S-10-10.5		1500		N	X			X		X		X	X									X		
DG-B7S-0.5-1		1535		N									X											
DG-B7S-3.5-4		1535		N									X											
DG-B7S-14.5-15	↓	1535	↓	N	X			X		X		X	X									X		MS/MSD

Project Info.

Project Name/ #: UPC SW-SM
PO#: 1100256513/06
Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt

# of Containers:
Head Space:
Temp:

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

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

1.0°C

See Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [signature] Time: 1315	Signature: [signature] Time: 1500	720-88237 Chain of Custody
Printed Name: MIRANDA KAHRILAS Date: 8/24	Printed Name: [signature] Date: 8/24/18	
Company: GEO	Company: TA	

1) Received by:	2) Received by:	3) Received by:
Signature: [signature] Time: 1315	Signature: [signature] Time: 1500	Signature: Time:
Printed Name: Robert Date: 8/24/18	Printed Name: T Bullock Date: 8/24/18	Printed Name: Date:
Company: TA	Company: TA-720	Company:

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39419.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88237-1
Address: 4101 Shuffel Street NW, ,	Due Date Requested: 8/31/2018			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: UPC OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

CD07

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8082/3540C (MOD) PCB 7 Aroclors	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-A7S--0-5-1 (720-88237-5)	8/23/18	15:00 Pacific		Solid			X	1	
DG-A7S--3-5-4 (720-88237-6)	8/23/18	15:00 Pacific		Solid			X	1	
DG-A7S--10-10-5 (720-88237-7)	8/23/18	15:00 Pacific		Solid			X	1	
DG-B7S--14.5-15 (720-88237-10)	8/23/18	15:35 Pacific		Solid			X	1	

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

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

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: [signature]	Date/Time: 8-27-18 1600	Company: Pleasn	Received by: [signature]	Date/Time: 8/29/18 935	Company: TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		

Ver: 09/20/2016

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** _____
Canton Facility

Client TA Pleasanton Site Name _____ Cooler unpacked by: SSC
Cooler Received on 8/29/18 Opened on 8/29/18
FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other _____
Packing material used: Bubble Wrap Foam Plastic Bag None Other _____
COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF +0 °C) Observed Cooler Temp. 1.4 °C Corrected Cooler Temp. 1.4 °C
   IR GUN #36 (CF -0.3°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   -Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
   -Were tamper/custody seals intact and uncompromised? Yes No NA
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No
    If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC849151**
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
16. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

_____
_____
_____
_____
_____

18. SAMPLE CONDITION
Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION
Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____.

WI-NC-099

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88237-1

Login Number: 88237
List Number: 1
Creator: Bullock, Tracy

List Source: TestAmerica Pleasanton

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 720-88238-1
Client Project/Site: UPC OU-SM
Revision: 1

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

Attn: Mr. Krys Jesionek

Authorized for release by:
11/27/2018 6:39:42 PM

Micah Smith, Project Manager II
(925)484-1919
micah.smith@testamericainc.com

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

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

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 6
Client Sample Results 9
Surrogate Summary 94
QC Sample Results 97
QC Association Summary 123
Lab Chronicle 127
Certification Summary 130
Method Summary 131
Sample Summary 132
Subcontract Data 133
Chain of Custody 137
Receipt Checklists 140

Definitions/Glossary

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

TestAmerica Job ID: 720-88238-1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

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

GC Semi VOA

Qualifier	Qualifier Description
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
X	Surrogate is outside control limits
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Metals

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

Glossary

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

Job ID: 720-88238-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-88238-1

Comments
This report was revised on 11/27/18 to change the units for the metals data to report in mg/Kg, as requested.

Receipt
The samples were received on 8/24/2018 3:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.2º C.

Receipt Exceptions
Sample containers were not received full.

Collection times were not noted on the chain of custody.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batches 720-250405 and 720-250452 recovered outside control limits for the following analytes: 1,1-Dichloroethene and 1,1,2-Trichloro-1,2,2-trifluoroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250528 recovered outside control limits for the following analytes: 1,1-Dichloroethene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: Internal standard (ISTD) response for the following sample was outside control limits: DUP-25 (720-88238-4). The sample was re-extracted and/or re-analyzed, using the sample collected in the field container, with concurring results, and the original set of data has been reported. There was no reportable data in the analysis of the other low level terracore.

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

GC/MS Semi VOA
Method(s) 8270C SIM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250376 and analytical batch 720-250578 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8270C SIM: The following samples were diluted due to the abundance of non-target analytes: DUP-25 (720-88238-4) and DUP-14 (720-88238-5). Elevated reporting limits (RLs) are provided.

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

GC Semi VOA
Method(s) 8015B: The following sample required a dilution due to the nature of the sample matrix: DUP-25 (720-88238-4). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method(s) 8081A: The %RPD between the primary and confirmation column exceeded 40% for trans-Chlordane for the following sample: DUP-25 (720-88238-4). The lower value has been reported and qualified in accordance with the laboratory's SOP.

Method(s) 8081A: The following sample was diluted due to color: DUP-25 (720-88238-4). Elevated reporting limits (RL) are provided.

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

Metals
Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 720-250470 and

Job ID: 720-88238-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

analytical batch 720-250593 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) precision was within acceptance limits.

Method(s) 6010B: The following samples were diluted due to the abundance of non-target analytes: DUP-11 (720-88238-1), DUP-05 (720-88238-2), DUP-15 (720-88238-3), DUP-25 (720-88238-4) and DUP-14 (720-88238-5). Elevated reporting limits (RLs) are provided.

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

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

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

Detection Summary

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

TestAmerica Job ID: 720-88238-1

Client Sample ID: DUP-11 — Lab Sample ID: 720-88238-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.1	J	1.4	0.23	mg/Kg	4		6010B	Total/NA
Arsenic	3.9		2.7	0.23	mg/Kg	4		6010B	Total/NA
Barium	80		1.4	0.19	mg/Kg	4		6010B	Total/NA
Cadmium	1.3		0.34	0.034	mg/Kg	4		6010B	Total/NA
Chromium	21		1.4	0.15	mg/Kg	4		6010B	Total/NA
Cobalt	12		0.55	0.055	mg/Kg	4		6010B	Total/NA
Copper	200		4.1	2.0	mg/Kg	4		6010B	Total/NA
Lead	130		1.4	0.29	mg/Kg	4		6010B	Total/NA
Molybdenum	1.4		1.4	0.18	mg/Kg	4		6010B	Total/NA
Nickel	11		1.4	0.14	mg/Kg	4		6010B	Total/NA
Silver	0.27	J	0.68	0.14	mg/Kg	4		6010B	Total/NA
Thallium	1.0	J	1.4	0.40	mg/Kg	4		6010B	Total/NA
Vanadium	100		1.4	0.19	mg/Kg	4		6010B	Total/NA
Zinc	240		4.1	1.7	mg/Kg	4		6010B	Total/NA
Mercury	0.21		0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DUP-05 — Lab Sample ID: 720-88238-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	52		37	28	ug/Kg	1		8260B	Total/NA
Carbon disulfide	2.0	J	3.7	1.5	ug/Kg	1		8260B	Total/NA
cis-1,2-Dichloroethene	12		3.7	0.50	ug/Kg	1		8260B	Total/NA
trans-1,2-Dichloroethene	1.1	J	3.7	0.56	ug/Kg	1		8260B	Total/NA
Benzo[a]pyrene	2.0	J	4.9	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	7.2		4.9	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	2.1	J	4.9	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	4.2	J	4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	6.0		4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	4.3	J	4.9	3.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	3.4	J	4.9	1.8	ug/Kg	1		8270C SIM	Total/NA
Pyrene	5.4		4.9	1.7	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	24000		1900	710	ug/Kg	1		8015B	Total/NA
Arsenic	0.83	J	3.4	0.29	mg/Kg	4		6010B	Total/NA
Barium	32		1.7	0.24	mg/Kg	4		6010B	Total/NA
Chromium	46		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	1.7		0.69	0.069	mg/Kg	4		6010B	Total/NA
Lead	2.0		1.7	0.36	mg/Kg	4		6010B	Total/NA
Nickel	6.5		1.7	0.18	mg/Kg	4		6010B	Total/NA
Vanadium	45		1.7	0.23	mg/Kg	4		6010B	Total/NA
Zinc	5.9		5.2	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.0047	J	0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DUP-15 — Lab Sample ID: 720-88238-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	2.2	J	4.7	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	2.1	J	4.7	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	2.5	J	4.7	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	1.8	J	4.7	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	2.9	J	4.7	1.3	ug/Kg	1		8270C SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP-15 (Continued) — Lab Sample ID: 720-88238-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	3.1	J	4.7	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	2.7	J	4.7	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	13000		1900	720	ug/Kg	1		8015B	Total/NA
Antimony	2.8		1.9	0.31	mg/Kg	4		6010B	Total/NA
Arsenic	5.2		3.8	0.32	mg/Kg	4		6010B	Total/NA
Barium	60		1.9	0.27	mg/Kg	4		6010B	Total/NA
Cadmium	0.98		0.47	0.047	mg/Kg	4		6010B	Total/NA
Chromium	16		1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.75	0.075	mg/Kg	4		6010B	Total/NA
Copper	210		5.7	2.7	mg/Kg	4		6010B	Total/NA
Lead	310		1.9	0.40	mg/Kg	4		6010B	Total/NA
Molybdenum	2.5		1.9	0.24	mg/Kg	4		6010B	Total/NA
Nickel	9.4		1.9	0.19	mg/Kg	4		6010B	Total/NA
Silver	0.30	J	0.94	0.19	mg/Kg	4		6010B	Total/NA
Thallium	1.2	J	1.9	0.55	mg/Kg	4		6010B	Total/NA
Vanadium	93		1.9	0.26	mg/Kg	4		6010B	Total/NA
Zinc	150		5.7	2.4	mg/Kg	4		6010B	Total/NA
Mercury	0.17		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DUP-25 — Lab Sample ID: 720-88238-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	59	J	98	49	ug/Kg	10		8270C SIM	Total/NA
Acenaphthylene	89		49	23	ug/Kg	10		8270C SIM	Total/NA
Anthracene	430		49	20	ug/Kg	10		8270C SIM	Total/NA
Benzo[a]anthracene	110		49	15	ug/Kg	10		8270C SIM	Total/NA
Benzo[a]pyrene	220		49	19	ug/Kg	10		8270C SIM	Total/NA
Benzo[b]fluoranthene	210		49	21	ug/Kg	10		8270C SIM	Total/NA
Benzo[g,h,i]perylene	280		49	42	ug/Kg	10		8270C SIM	Total/NA
Benzo[k]fluoranthene	91		49	21	ug/Kg	10		8270C SIM	Total/NA
Chrysene	82		49	14	ug/Kg	10		8270C SIM	Total/NA
Fluoranthene	120		49	14	ug/Kg	10		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	170		49	41	ug/Kg	10		8270C SIM	Total/NA
Naphthalene	62		49	34	ug/Kg	10		8270C SIM	Total/NA
Phenanthrene	130		49	18	ug/Kg	10		8270C SIM	Total/NA
Pyrene	220		49	17	ug/Kg	10		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	570000		9800	3700	ug/Kg	5		8015B	Total/NA
Chlordane (technical)	82		77	6.2	ug/Kg	2		8081A	Total/NA
cis-Chlordane	12		3.9	0.77	ug/Kg	2		8081A	Total/NA
trans-Chlordane	8.4	p	3.9	0.89	ug/Kg	2		8081A	Total/NA
Antimony	9.1		1.9	0.31	mg/Kg	4		6010B	Total/NA
Arsenic	39		3.8	0.32	mg/Kg	4		6010B	Total/NA
Barium	370		1.9	0.27	mg/Kg	4		6010B	Total/NA
Cadmium	1.4		0.47	0.047	mg/Kg	4		6010B	Total/NA
Chromium	68		1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	8.4		0.75	0.075	mg/Kg	4		6010B	Total/NA
Copper	210		5.7	2.7	mg/Kg	4		6010B	Total/NA
Lead	13000		4.7	0.99	mg/Kg	10		6010B	Total/NA
Molybdenum	1.8	J	1.9	0.24	mg/Kg	4		6010B	Total/NA
Nickel	41		1.9	0.19	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP-25 (Continued) — Lab Sample ID: 720-88238-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silver	0.58	J	0.94	0.19	mg/Kg	4		6010B	Total/NA
Thallium	1.2	J	1.9	0.55	mg/Kg	4		6010B	Total/NA
Vanadium	45		1.9	0.26	mg/Kg	4		6010B	Total/NA
Zinc	450		14	6.0	mg/Kg	10		6010B	Total/NA
Mercury	0.49		0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DUP-14 — Lab Sample ID: 720-88238-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.69	J	4.6	0.65	ug/Kg	1		8260B	Total/NA
Trichloroethene	2.5	J	4.6	0.57	ug/Kg	1		8260B	Total/NA
2-Methylnaphthalene	29		19	9.6	ug/Kg	2		8270C SIM	Total/NA
Acenaphthylene	76		9.6	4.6	ug/Kg	2		8270C SIM	Total/NA
Anthracene	31		9.6	3.9	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]anthracene	150		9.6	2.9	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]pyrene	260		9.6	3.7	ug/Kg	2		8270C SIM	Total/NA
Benzo[b]fluoranthene	340		9.6	4.0	ug/Kg	2		8270C SIM	Total/NA
Benzo[g,h,i]perylene	97		9.6	8.3	ug/Kg	2		8270C SIM	Total/NA
Benzo[k]fluoranthene	160		9.6	4.0	ug/Kg	2		8270C SIM	Total/NA
Chrysene	220		9.6	2.7	ug/Kg	2		8270C SIM	Total/NA
Dibenz(a,h)anthracene	24		9.6	6.7	ug/Kg	2		8270C SIM	Total/NA
Fluoranthene	270		9.6	2.7	ug/Kg	2		8270C SIM	Total/NA
Fluorene	9.1	J	9.6	4.2	ug/Kg	2		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	90		9.6	8.1	ug/Kg	2		8270C SIM	Total/NA
Naphthalene	59		9.6	6.7	ug/Kg	2		8270C SIM	Total/NA
Phenanthrene	210		9.6	3.5	ug/Kg	2		8270C SIM	Total/NA
Pyrene	510		9.6	3.3	ug/Kg	2		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	39000		1900	710	ug/Kg	1		8015B	Total/NA
Antimony	1.6		1.3	0.22	mg/Kg	4		6010B	Total/NA
Arsenic	71		2.6	0.22	mg/Kg	4		6010B	Total/NA
Barium	33		1.3	0.18	mg/Kg	4		6010B	Total/NA
Cadmium	0.34		0.32	0.032	mg/Kg	4		6010B	Total/NA
Chromium	10		1.3	0.14	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.52	0.052	mg/Kg	4		6010B	Total/NA
Copper	210		3.9	1.8	mg/Kg	4		6010B	Total/NA
Lead	230		1.3	0.27	mg/Kg	4		6010B	Total/NA
Molybdenum	0.27	J	1.3	0.17	mg/Kg	4		6010B	Total/NA
Nickel	7.6		1.3	0.13	mg/Kg	4		6010B	Total/NA
Silver	0.23	J	0.65	0.13	mg/Kg	4		6010B	Total/NA
Thallium	0.58	J	1.3	0.38	mg/Kg	4		6010B	Total/NA
Vanadium	79		1.3	0.18	mg/Kg	4		6010B	Total/NA
Zinc	140		3.9	1.6	mg/Kg	4		6010B	Total/NA
Mercury	0.21		0.014	0.0021	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

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

TestAmerica Job ID: 720-88238-1

Client Sample ID: DUP-11

Date Collected: 08/23/18 00:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88238-1

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.1	J	1.4	0.23	mg/Kg		08/29/18 09:32	08/30/18 10:20	4
Arsenic	3.9		2.7	0.23	mg/Kg		08/29/18 09:32	08/30/18 10:20	4
Barium	80		1.4	0.19	mg/Kg		08/29/18 09:32	08/30/18 10:20	4
Beryllium	ND		0.27	0.089	mg/Kg		08/29/18 09:32	08/30/18 10:20	4
Cadmium	1.3		0.34	0.034	mg/Kg		08/29/18 09:32	08/30/18 10:20	4
Chromium	21		1.4	0.15	mg/Kg		08/29/18 09:32	08/30/18 10:20	4
Cobalt	12		0.55	0.055	mg/Kg		08/29/18 09:32	08/30/18 10:20	4
Copper	200		4.1	2.0	mg/Kg		08/29/18 09:32	08/30/18 10:20	4
Lead	130		1.4	0.29	mg/Kg		08/29/18 09:32	08/30/18 10:20	4
Molybdenum	1.4		1.4	0.18	mg/Kg		08/29/18 09:32	08/30/18 10:20	4
Nickel	11		1.4	0.14	mg/Kg		08/29/18 09:32	08/30/18 10:20	4
Selenium	ND		2.7	0.41	mg/Kg		08/29/18 09:32	08/30/18 10:20	4
Silver	0.27	J	0.68	0.14	mg/Kg		08/29/18 09:32	08/30/18 10:20	4
Thallium	1.0	J	1.4	0.40	mg/Kg		08/29/18 09:32	08/30/18 10:20	4
Vanadium	100		1.4	0.19	mg/Kg		08/29/18 09:32	08/30/18 10:20	4
Zinc	240		4.1	1.7	mg/Kg		08/29/18 09:32	08/30/18 10:20	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.21		0.014	0.0021	mg/Kg		08/29/18 15:39	08/30/18 18:48	1

Client Sample Results

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

TestAmerica Job ID: 720-88238-1

Client Sample ID: DUP-05

Date Collected: 08/23/18 00:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88238-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.7	0.89	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
Acetone	**52**		37	28	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
Benzene	ND		3.7	0.48	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
Dichlorobromomethane	ND		3.7	0.53	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
Bromobenzene	ND		3.7	0.59	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
Chlorobromomethane	ND		15	0.53	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
Bromoform	ND		3.7	1.5	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
Bromomethane	ND		7.4	0.59	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
2-Butanone (MEK)	ND		37	16	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
n-Butylbenzene	ND		3.7	0.74	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
sec-Butylbenzene	ND		3.7	0.53	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
tert-Butylbenzene	ND		3.7	0.54	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
Carbon disulfide	**2.0**	**J**	3.7	1.5	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
Carbon tetrachloride	ND		3.7	0.46	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
Chlorobenzene	ND		3.7	0.51	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
Chloroethane	ND		7.4	0.42	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
Chloroform	ND		3.7	0.49	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
Chloromethane	ND		7.4	0.59	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
2-Chlorotoluene	ND		3.7	0.48	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
4-Chlorotoluene	ND		3.7	0.50	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
Chlorodibromomethane	ND		3.7	0.53	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
1,2-Dichlorobenzene	ND		3.7	0.50	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
1,3-Dichlorobenzene	ND		3.7	0.53	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
1,4-Dichlorobenzene	ND		3.7	0.53	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
1,3-Dichloropropane	ND		3.7	0.54	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
1,1-Dichloropropene	ND		3.7	0.51	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
1,2-Dibromo-3-Chloropropane	ND		7.4	1.3	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
Ethylene Dibromide	ND		3.7	1.1	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
Dibromomethane	ND		7.4	0.64	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
Dichlorodifluoromethane	ND		7.4	0.59	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
1,1-Dichloroethane	ND		3.7	0.50	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
1,2-Dichloroethane	ND		3.7	0.56	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
1,1-Dichloroethene	ND	*	3.7	0.46	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
cis-1,2-Dichloroethene	**12**		3.7	0.50	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
trans-1,2-Dichloroethene	**1.1**	**J**	3.7	0.56	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
1,2-Dichloropropane	ND		3.7	0.47	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
cis-1,3-Dichloropropene	ND		3.7	0.51	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
trans-1,3-Dichloropropene	ND		3.7	0.50	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
Ethylbenzene	ND		3.7	0.56	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
Hexachlorobutadiene	ND		3.7	0.67	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
2-Hexanone	ND		37	7.4	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
Isopropylbenzene	ND		3.7	0.50	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
4-Isopropyltoluene	ND		3.7	1.9	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
Methylene Chloride	ND		7.4	4.2	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
4-Methyl-2-pentanone (MIBK)	ND		37	7.4	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
Naphthalene	ND		7.4	1.1	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
N-Propylbenzene	ND		3.7	0.49	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
Styrene	ND		3.7	0.47	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
1,1,1,2-Tetrachloroethane	ND		3.7	0.56	ug/Kg		08/25/18 03:05	08/29/18 06:01	1

Client Sample ID: DUP-05

Date Collected: 08/23/18 00:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88238-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		3.7	0.56	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
Tetrachloroethene	ND		3.7	0.50	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
Toluene	ND		3.7	0.53	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
1,2,3-Trichlorobenzene	ND		3.7	0.55	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
1,2,4-Trichlorobenzene	ND		3.7	0.53	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
1,1,1-Trichloroethane	ND		3.7	0.45	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
1,1,2-Trichloroethane	ND		3.7	0.52	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
Trichloroethene	ND		3.7	0.47	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
Trichlorofluoromethane	ND		3.7	0.42	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
1,2,3-Trichloropropane	ND		3.7	0.57	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	3.7	1.5	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
1,2,4-Trimethylbenzene	ND		3.7	1.2	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
1,3,5-Trimethylbenzene	ND		3.7	0.48	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
Vinyl acetate	ND		15	3.7	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
Vinyl chloride	ND		3.7	0.54	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
Xylenes, Total	ND		3.7	0.90	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
2,2-Dichloropropane	ND		3.7	1.5	ug/Kg		08/25/18 03:05	08/29/18 06:01	1
Gasoline Range Organics (GRO) -C4-C12	ND		190	74	ug/Kg		08/25/18 03:05	08/29/18 06:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*87*		*45 - 131*	*08/25/18 03:05*	*08/29/18 06:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*60 - 140*	*08/25/18 03:05*	*08/29/18 06:01*	*1*
Toluene-d8 (Surr)	*92*		*58 - 140*	*08/25/18 03:05*	*08/29/18 06:01*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.7	4.9	ug/Kg		08/28/18 10:30	08/31/18 13:26	1
Acenaphthene	ND		4.9	2.7	ug/Kg		08/28/18 10:30	08/31/18 13:26	1
Acenaphthylene	ND		4.9	2.3	ug/Kg		08/28/18 10:30	08/31/18 13:26	1
Anthracene	ND		4.9	1.9	ug/Kg		08/28/18 10:30	08/31/18 13:26	1
Benzo[a]anthracene	ND		4.9	1.5	ug/Kg		08/28/18 10:30	08/31/18 13:26	1
Benzo[a]pyrene	**2.0**	**J**	4.9	1.9	ug/Kg		08/28/18 10:30	08/31/18 13:26	1
Benzo[b]fluoranthene	**7.2**		4.9	2.0	ug/Kg		08/28/18 10:30	08/31/18 13:26	1
Benzo[g,h,i]perylene	ND		4.9	4.2	ug/Kg		08/28/18 10:30	08/31/18 13:26	1
Benzo[k]fluoranthene	**2.1**	**J**	4.9	2.0	ug/Kg		08/28/18 10:30	08/31/18 13:26	1
Chrysene	**4.2**	**J**	4.9	1.4	ug/Kg		08/28/18 10:30	08/31/18 13:26	1
Dibenz(a,h)anthracene	ND		4.9	3.4	ug/Kg		08/28/18 10:30	08/31/18 13:26	1
Fluoranthene	**6.0**		4.9	1.4	ug/Kg		08/28/18 10:30	08/31/18 13:26	1
Fluorene	ND		4.9	2.1	ug/Kg		08/28/18 10:30	08/31/18 13:26	1
Indeno[1,2,3-cd]pyrene	ND		4.9	4.1	ug/Kg		08/28/18 10:30	08/31/18 13:26	1
Naphthalene	**4.3**	**J**	4.9	3.4	ug/Kg		08/28/18 10:30	08/31/18 13:26	1
Phenanthrene	**3.4**	**J**	4.9	1.8	ug/Kg		08/28/18 10:30	08/31/18 13:26	1
Pyrene	**5.4**		4.9	1.7	ug/Kg		08/28/18 10:30	08/31/18 13:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*33 - 120*	*08/28/18 10:30*	*08/31/18 13:26*	*1*
Terphenyl-d14	*102*		*35 - 146*	*08/28/18 10:30*	*08/31/18 13:26*	*1*

Client Sample Results

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

TestAmerica Job ID: 720-88238-1

Client Sample ID: DUP-05

Date Collected: 08/23/18 00:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88238-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	24000		1900	710	ug/Kg		08/28/18 11:24	08/30/18 21:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*100*		*40 - 130*	*08/28/18 11:24*	*08/30/18 21:41*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/28/18 13:36	09/01/18 05:10	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/28/18 13:36	09/01/18 05:10	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/28/18 13:36	09/01/18 05:10	1
Aldrin	ND		1.9	0.48	ug/Kg		08/28/18 13:36	09/01/18 05:10	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/28/18 13:36	09/01/18 05:10	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/28/18 13:36	09/01/18 05:10	1
Chlordane (technical)	ND		39	3.1	ug/Kg		08/28/18 13:36	09/01/18 05:10	1
cis-Chlordane	ND		1.9	0.39	ug/Kg		08/28/18 13:36	09/01/18 05:10	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/28/18 13:36	09/01/18 05:10	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/28/18 13:36	09/01/18 05:10	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/28/18 13:36	09/01/18 05:10	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/28/18 13:36	09/01/18 05:10	1
Endosulfan sulfate	ND		1.9	0.37	ug/Kg		08/28/18 13:36	09/01/18 05:10	1
Endrin	ND		1.9	0.44	ug/Kg		08/28/18 13:36	09/01/18 05:10	1
Endrin aldehyde	ND		1.9	0.61	ug/Kg		08/28/18 13:36	09/01/18 05:10	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/28/18 13:36	09/01/18 05:10	1
gamma-BHC (Lindane)	ND		1.9	0.61	ug/Kg		08/28/18 13:36	09/01/18 05:10	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/28/18 13:36	09/01/18 05:10	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/28/18 13:36	09/01/18 05:10	1
Methoxychlor	ND		1.9	0.66	ug/Kg		08/28/18 13:36	09/01/18 05:10	1
Toxaphene	ND		39	6.6	ug/Kg		08/28/18 13:36	09/01/18 05:10	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/28/18 13:36	09/01/18 05:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*81*		*21 - 136*	*08/28/18 13:36*	*09/01/18 05:10*	*1*
Tetrachloro-m-xylene	*82*		*21 - 145*	*08/28/18 13:36*	*09/01/18 05:10*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/29/18 14:50	08/31/18 08:50	1
Aroclor-1221	ND		50	24	ug/Kg		08/29/18 14:50	08/31/18 08:50	1
Aroclor-1232	ND		50	23	ug/Kg		08/29/18 14:50	08/31/18 08:50	1
Aroclor-1242	ND		50	19	ug/Kg		08/29/18 14:50	08/31/18 08:50	1
Aroclor-1248	ND		50	24	ug/Kg		08/29/18 14:50	08/31/18 08:50	1
Aroclor-1254	ND		50	23	ug/Kg		08/29/18 14:50	08/31/18 08:50	1
Aroclor-1260	ND		50	22	ug/Kg		08/29/18 14:50	08/31/18 08:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*77*		*14 - 128*	*08/29/18 14:50*	*08/31/18 08:50*	*1*
DCB Decachlorobiphenyl	*72*		*10 - 132*	*08/29/18 14:50*	*08/31/18 08:50*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.7	0.29	mg/Kg		08/29/18 09:32	08/30/18 10:25	4

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

TestAmerica Job ID: 720-88238-1

Client Sample ID: DUP-05

Date Collected: 08/23/18 00:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88238-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.83**	**J**	3.4	0.29	mg/Kg		08/29/18 09:32	08/30/18 10:25	4
Barium	**32**		1.7	0.24	mg/Kg		08/29/18 09:32	08/30/18 10:25	4
Beryllium	ND		0.34	0.11	mg/Kg		08/29/18 09:32	08/30/18 10:25	4
Cadmium	ND		0.43	0.043	mg/Kg		08/29/18 09:32	08/30/18 10:25	4
Chromium	**46**		1.7	0.18	mg/Kg		08/29/18 09:32	08/30/18 10:25	4
Cobalt	**1.7**		0.69	0.069	mg/Kg		08/29/18 09:32	08/30/18 10:25	4
Copper	ND		5.2	2.5	mg/Kg		08/29/18 09:32	08/30/18 10:25	4
Lead	**2.0**		1.7	0.36	mg/Kg		08/29/18 09:32	08/30/18 10:25	4
Molybdenum	ND		1.7	0.22	mg/Kg		08/29/18 09:32	08/30/18 10:25	4
Nickel	**6.5**		1.7	0.18	mg/Kg		08/29/18 09:32	08/30/18 10:25	4
Selenium	ND		3.4	0.52	mg/Kg		08/29/18 09:32	08/30/18 10:25	4
Silver	ND		0.86	0.17	mg/Kg		08/29/18 09:32	08/30/18 10:25	4
Thallium	ND		1.7	0.50	mg/Kg		08/29/18 09:32	08/30/18 10:25	4
Vanadium	**45**		1.7	0.23	mg/Kg		08/29/18 09:32	08/30/18 10:25	4
Zinc	**5.9**		5.2	2.2	mg/Kg		08/29/18 09:32	08/30/18 10:25	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0047**	**J**	0.014	0.0021	mg/Kg		08/29/18 15:39	08/30/18 18:50	1

Client Sample Results

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

TestAmerica Job ID: 720-88238-1

Client Sample ID: DUP-15

Date Collected: 08/24/18 00:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88238-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		8.1	1.9	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
Acetone	ND		81	62	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
Benzene	ND		8.1	1.1	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
Dichlorobromomethane	ND		8.1	1.2	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
Bromobenzene	ND		8.1	1.3	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
Chlorobromomethane	ND		32	1.2	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
Bromoform	ND		8.1	3.2	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
Bromomethane	ND		16	1.3	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
2-Butanone (MEK)	ND		81	34	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
n-Butylbenzene	ND		8.1	1.6	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
sec-Butylbenzene	ND		8.1	1.2	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
tert-Butylbenzene	ND		8.1	1.2	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
Carbon disulfide	ND		8.1	3.2	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
Carbon tetrachloride	ND		8.1	1.0	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
Chlorobenzene	ND		8.1	1.1	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
Chloroethane	ND		16	0.91	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
Chloroform	ND		8.1	1.1	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
Chloromethane	ND		16	1.3	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
2-Chlorotoluene	ND		8.1	1.1	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
4-Chlorotoluene	ND		8.1	1.1	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
Chlorodibromomethane	ND		8.1	1.2	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
1,2-Dichlorobenzene	ND		8.1	1.1	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
1,3-Dichlorobenzene	ND		8.1	1.2	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
1,4-Dichlorobenzene	ND		8.1	1.2	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
1,3-Dichloropropane	ND		8.1	1.2	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
1,1-Dichloropropene	ND		8.1	1.1	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
1,2-Dibromo-3-Chloropropane	ND		16	2.8	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
Ethylene Dibromide	ND		8.1	2.3	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
Dibromomethane	ND		16	1.4	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
Dichlorodifluoromethane	ND		16	1.3	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
1,1-Dichloroethane	ND		8.1	1.1	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
1,2-Dichloroethane	ND		8.1	1.2	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
1,1-Dichloroethene	ND	*	8.1	1.0	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
cis-1,2-Dichloroethene	ND		8.1	1.1	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
trans-1,2-Dichloroethene	ND		8.1	1.2	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
1,2-Dichloropropane	ND		8.1	1.0	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
cis-1,3-Dichloropropene	ND		8.1	1.1	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
trans-1,3-Dichloropropene	ND		8.1	1.1	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
Ethylbenzene	ND		8.1	1.2	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
Hexachlorobutadiene	ND		8.1	1.5	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
2-Hexanone	ND		81	16	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
Isopropylbenzene	ND		8.1	1.1	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
4-Isopropyltoluene	ND		8.1	4.1	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
Methylene Chloride	ND		16	9.1	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
4-Methyl-2-pentanone (MIBK)	ND		81	16	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
Naphthalene	ND		16	2.4	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
N-Propylbenzene	ND		8.1	1.1	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
Styrene	ND		8.1	1.0	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
1,1,1,2-Tetrachloroethane	ND		8.1	1.2	ug/Kg		08/25/18 03:05	08/29/18 17:36	1

Client Sample ID: DUP-15

Date Collected: 08/24/18 00:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88238-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		8.1	1.2	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
Tetrachloroethene	ND		8.1	1.1	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
Toluene	ND		8.1	1.2	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
1,2,3-Trichlorobenzene	ND		8.1	1.2	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
1,2,4-Trichlorobenzene	ND		8.1	1.2	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
1,1,1-Trichloroethane	ND		8.1	0.99	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
1,1,2-Trichloroethane	ND		8.1	1.1	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
Trichloroethene	ND		8.1	1.0	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
Trichlorofluoromethane	ND		8.1	0.91	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
1,2,3-Trichloropropane	ND		8.1	1.3	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	8.1	3.4	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
1,2,4-Trimethylbenzene	ND		8.1	2.7	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
1,3,5-Trimethylbenzene	ND		8.1	1.1	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
Vinyl acetate	ND		32	8.1	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
Vinyl chloride	ND		8.1	1.2	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
Xylenes, Total	ND		8.1	2.0	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
2,2-Dichloropropane	ND		8.1	3.2	ug/Kg		08/25/18 03:05	08/29/18 17:36	1
Gasoline Range Organics (GRO) -C4-C12	ND		410	160	ug/Kg		08/25/18 03:05	08/29/18 17:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*45 - 131*	*08/25/18 03:05*	*08/29/18 17:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*60 - 140*	*08/25/18 03:05*	*08/29/18 17:36*	*1*
Toluene-d8 (Surr)	*93*		*58 - 140*	*08/25/18 03:05*	*08/29/18 17:36*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.5	4.7	ug/Kg		08/28/18 10:30	08/31/18 18:27	1
Acenaphthene	ND		4.7	2.7	ug/Kg		08/28/18 10:30	08/31/18 18:27	1
Acenaphthylene	ND		4.7	2.3	ug/Kg		08/28/18 10:30	08/31/18 18:27	1
Anthracene	**2.2**	**J**	4.7	1.9	ug/Kg		08/28/18 10:30	08/31/18 18:27	1
Benzo[a]anthracene	ND		4.7	1.4	ug/Kg		08/28/18 10:30	08/31/18 18:27	1
Benzo[a]pyrene	**2.1**	**J**	4.7	1.8	ug/Kg		08/28/18 10:30	08/31/18 18:27	1
Benzo[b]fluoranthene	**2.5**	**J**	4.7	2.0	ug/Kg		08/28/18 10:30	08/31/18 18:27	1
Benzo[g,h,i]perylene	ND		4.7	4.1	ug/Kg		08/28/18 10:30	08/31/18 18:27	1
Benzo[k]fluoranthene	ND		4.7	2.0	ug/Kg		08/28/18 10:30	08/31/18 18:27	1
Chrysene	**1.8**	**J**	4.7	1.3	ug/Kg		08/28/18 10:30	08/31/18 18:27	1
Dibenz(a,h)anthracene	ND		4.7	3.3	ug/Kg		08/28/18 10:30	08/31/18 18:27	1
Fluoranthene	**2.9**	**J**	4.7	1.3	ug/Kg		08/28/18 10:30	08/31/18 18:27	1
Fluorene	ND		4.7	2.1	ug/Kg		08/28/18 10:30	08/31/18 18:27	1
Indeno[1,2,3-cd]pyrene	ND		4.7	4.0	ug/Kg		08/28/18 10:30	08/31/18 18:27	1
Naphthalene	ND		4.7	3.3	ug/Kg		08/28/18 10:30	08/31/18 18:27	1
Phenanthrene	**3.1**	**J**	4.7	1.7	ug/Kg		08/28/18 10:30	08/31/18 18:27	1
Pyrene	**2.7**	**J**	4.7	1.6	ug/Kg		08/28/18 10:30	08/31/18 18:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*33 - 120*	*08/28/18 10:30*	*08/31/18 18:27*	*1*
Terphenyl-d14	*93*		*35 - 146*	*08/28/18 10:30*	*08/31/18 18:27*	*1*

Client Sample Results

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

TestAmerica Job ID: 720-88238-1

Client Sample ID: DUP-15

Date Collected: 08/24/18 00:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88238-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	13000		1900	720	ug/Kg		08/28/18 11:24	08/30/18 20:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*93*		*40 - 130*	*08/28/18 11:24*	*08/30/18 20:28*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.60	ug/Kg		08/28/18 13:36	09/01/18 05:26	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/28/18 13:36	09/01/18 05:26	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/28/18 13:36	09/01/18 05:26	1
Aldrin	ND		2.0	0.49	ug/Kg		08/28/18 13:36	09/01/18 05:26	1
alpha-BHC	ND		2.0	0.54	ug/Kg		08/28/18 13:36	09/01/18 05:26	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/28/18 13:36	09/01/18 05:26	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/28/18 13:36	09/01/18 05:26	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/28/18 13:36	09/01/18 05:26	1
delta-BHC	ND		2.0	0.43	ug/Kg		08/28/18 13:36	09/01/18 05:26	1
Dieldrin	ND		2.0	0.58	ug/Kg		08/28/18 13:36	09/01/18 05:26	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/28/18 13:36	09/01/18 05:26	1
Endosulfan II	ND		2.0	0.48	ug/Kg		08/28/18 13:36	09/01/18 05:26	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/28/18 13:36	09/01/18 05:26	1
Endrin	ND		2.0	0.45	ug/Kg		08/28/18 13:36	09/01/18 05:26	1
Endrin aldehyde	ND		2.0	0.62	ug/Kg		08/28/18 13:36	09/01/18 05:26	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/28/18 13:36	09/01/18 05:26	1
gamma-BHC (Lindane)	ND		2.0	0.62	ug/Kg		08/28/18 13:36	09/01/18 05:26	1
Heptachlor	ND		2.0	0.45	ug/Kg		08/28/18 13:36	09/01/18 05:26	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/28/18 13:36	09/01/18 05:26	1
Methoxychlor	ND		2.0	0.67	ug/Kg		08/28/18 13:36	09/01/18 05:26	1
Toxaphene	ND		40	6.7	ug/Kg		08/28/18 13:36	09/01/18 05:26	1
trans-Chlordane	ND		2.0	0.45	ug/Kg		08/28/18 13:36	09/01/18 05:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*79*		*21 - 136*	*08/28/18 13:36*	*09/01/18 05:26*	*1*
Tetrachloro-m-xylene	*88*		*21 - 145*	*08/28/18 13:36*	*09/01/18 05:26*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		49	22	ug/Kg		08/29/18 14:50	08/31/18 09:07	1
Aroclor-1221	ND		49	24	ug/Kg		08/29/18 14:50	08/31/18 09:07	1
Aroclor-1232	ND		49	23	ug/Kg		08/29/18 14:50	08/31/18 09:07	1
Aroclor-1242	ND		49	19	ug/Kg		08/29/18 14:50	08/31/18 09:07	1
Aroclor-1248	ND		49	24	ug/Kg		08/29/18 14:50	08/31/18 09:07	1
Aroclor-1254	ND		49	23	ug/Kg		08/29/18 14:50	08/31/18 09:07	1
Aroclor-1260	ND		49	22	ug/Kg		08/29/18 14:50	08/31/18 09:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*77*		*14 - 128*	*08/29/18 14:50*	*08/31/18 09:07*	*1*
DCB Decachlorobiphenyl	*78*		*10 - 132*	*08/29/18 14:50*	*08/31/18 09:07*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.8		1.9	0.31	mg/Kg		08/29/18 09:32	08/30/18 10:39	4

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

TestAmerica Job ID: 720-88238-1

Client Sample ID: DUP-15

Date Collected: 08/24/18 00:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88238-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.2		3.8	0.32	mg/Kg		08/29/18 09:32	08/30/18 10:39	4
Barium	60		1.9	0.27	mg/Kg		08/29/18 09:32	08/30/18 10:39	4
Beryllium	ND		0.38	0.12	mg/Kg		08/29/18 09:32	08/30/18 10:39	4
Cadmium	0.98		0.47	0.047	mg/Kg		08/29/18 09:32	08/30/18 10:39	4
Chromium	16		1.9	0.20	mg/Kg		08/29/18 09:32	08/30/18 10:39	4
Cobalt	11		0.75	0.075	mg/Kg		08/29/18 09:32	08/30/18 10:39	4
Copper	210		5.7	2.7	mg/Kg		08/29/18 09:32	08/30/18 10:39	4
Lead	310		1.9	0.40	mg/Kg		08/29/18 09:32	08/30/18 10:39	4
Molybdenum	2.5		1.9	0.24	mg/Kg		08/29/18 09:32	08/30/18 10:39	4
Nickel	9.4		1.9	0.19	mg/Kg		08/29/18 09:32	08/30/18 10:39	4
Selenium	ND		3.8	0.57	mg/Kg		08/29/18 09:32	08/30/18 10:39	4
Silver	0.30	J	0.94	0.19	mg/Kg		08/29/18 09:32	08/30/18 10:39	4
Thallium	1.2	J	1.9	0.55	mg/Kg		08/29/18 09:32	08/30/18 10:39	4
Vanadium	93		1.9	0.26	mg/Kg		08/29/18 09:32	08/30/18 10:39	4
Zinc	150		5.7	2.4	mg/Kg		08/29/18 09:32	08/30/18 10:39	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.17		0.016	0.0023	mg/Kg		08/29/18 15:39	08/30/18 18:57	1

Client Sample Results

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

TestAmerica Job ID: 720-88238-1

Client Sample ID: DUP-25

Date Collected: 08/24/18 00:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88238-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
Acetone	ND		50	38	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
Benzene	ND		5.0	0.65	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
Bromobenzene	ND	*	5.0	0.79	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
Chlorobromomethane	ND		20	0.72	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
Bromoform	ND		5.0	2.0	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
Bromomethane	ND		10	0.79	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
2-Butanone (MEK)	ND		50	21	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
n-Butylbenzene	ND	*	5.0	1.0	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
sec-Butylbenzene	ND	*	5.0	0.72	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
tert-Butylbenzene	ND	*	5.0	0.73	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
Carbon disulfide	ND		5.0	2.0	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
Chlorobenzene	ND		5.0	0.69	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
Chloroethane	ND		10	0.56	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
Chloroform	ND		5.0	0.66	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
Chloromethane	ND		10	0.79	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
2-Chlorotoluene	ND	*	5.0	0.65	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
4-Chlorotoluene	ND	*	5.0	0.68	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
1,2-Dichlorobenzene	ND	*	5.0	0.68	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
1,3-Dichlorobenzene	ND	*	5.0	0.72	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
1,4-Dichlorobenzene	ND	*	5.0	0.71	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
1,2-Dibromo-3-Chloropropane	ND	*	10	1.7	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
Dibromomethane	ND		10	0.86	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
1,1-Dichloroethene	ND	*	5.0	0.62	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
Ethylbenzene	ND		5.0	0.75	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
Hexachlorobutadiene	ND	*	5.0	0.90	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
2-Hexanone	ND		50	10	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
4-Isopropyltoluene	ND	*	5.0	2.5	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
Methylene Chloride	ND		10	5.6	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
Naphthalene	ND	*	10	1.5	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
N-Propylbenzene	ND	*	5.0	0.66	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
Styrene	ND		5.0	0.63	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg		08/25/18 03:05	08/29/18 21:24	1

Client Sample ID: DUP-25

Date Collected: 08/24/18 00:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88238-4
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	5.0	0.75	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
Toluene	ND		5.0	0.71	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
1,2,3-Trichlorobenzene	ND	*	5.0	0.74	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
1,2,4-Trichlorobenzene	ND	*	5.0	0.71	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
Trichloroethene	ND		5.0	0.63	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
1,2,3-Trichloropropane	ND	*	5.0	0.77	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
1,2,4-Trimethylbenzene	ND	*	5.0	1.6	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
1,3,5-Trimethylbenzene	ND	*	5.0	0.65	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
Vinyl acetate	ND		20	5.0	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
Vinyl chloride	ND		5.0	0.73	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
Xylenes, Total	ND		5.0	1.2	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg		08/25/18 03:05	08/29/18 21:24	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg		08/25/18 03:05	08/29/18 21:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*45 - 131*	*08/25/18 03:05*	*08/29/18 21:24*	*1*
1,2-Dichloroethane-d4 (Surr)	*129*		*60 - 140*	*08/25/18 03:05*	*08/29/18 21:24*	*1*
Toluene-d8 (Surr)	*85*		*58 - 140*	*08/25/18 03:05*	*08/29/18 21:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**59**	**J**	98	49	ug/Kg		08/28/18 10:30	09/01/18 00:46	10
Acenaphthene	ND		49	27	ug/Kg		08/28/18 10:30	09/01/18 00:46	10
Acenaphthylene	**89**		49	23	ug/Kg		08/28/18 10:30	09/01/18 00:46	10
Anthracene	**430**		49	20	ug/Kg		08/28/18 10:30	09/01/18 00:46	10
Benzo[a]anthracene	**110**		49	15	ug/Kg		08/28/18 10:30	09/01/18 00:46	10
Benzo[a]pyrene	**220**		49	19	ug/Kg		08/28/18 10:30	09/01/18 00:46	10
Benzo[b]fluoranthene	**210**		49	21	ug/Kg		08/28/18 10:30	09/01/18 00:46	10
Benzo[g,h,i]perylene	**280**		49	42	ug/Kg		08/28/18 10:30	09/01/18 00:46	10
Benzo[k]fluoranthene	**91**		49	21	ug/Kg		08/28/18 10:30	09/01/18 00:46	10
Chrysene	**82**		49	14	ug/Kg		08/28/18 10:30	09/01/18 00:46	10
Dibenz(a,h)anthracene	ND		49	34	ug/Kg		08/28/18 10:30	09/01/18 00:46	10
Fluoranthene	**120**		49	14	ug/Kg		08/28/18 10:30	09/01/18 00:46	10
Fluorene	ND		49	22	ug/Kg		08/28/18 10:30	09/01/18 00:46	10
Indeno[1,2,3-cd]pyrene	**170**		49	41	ug/Kg		08/28/18 10:30	09/01/18 00:46	10
Naphthalene	**62**		49	34	ug/Kg		08/28/18 10:30	09/01/18 00:46	10
Phenanthrene	**130**		49	18	ug/Kg		08/28/18 10:30	09/01/18 00:46	10
Pyrene	**220**		49	17	ug/Kg		08/28/18 10:30	09/01/18 00:46	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*33 - 120*	*08/28/18 10:30*	*09/01/18 00:46*	*10*
Terphenyl-d14	*95*		*35 - 146*	*08/28/18 10:30*	*09/01/18 00:46*	*10*

Client Sample Results

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

TestAmerica Job ID: 720-88238-1

Client Sample ID: DUP-25

Date Collected: 08/24/18 00:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88238-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	570000		9800	3700	ug/Kg		08/28/18 11:24	08/31/18 05:23	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*0*	*D X*	*40 - 130*	*08/28/18 11:24*	*08/31/18 05:23*	*5*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.9	1.2	ug/Kg		08/28/18 13:36	09/01/18 05:43	2
4,4'-DDE	ND		3.9	0.81	ug/Kg		08/28/18 13:36	09/01/18 05:43	2
4,4'-DDT	ND		3.9	0.79	ug/Kg		08/28/18 13:36	09/01/18 05:43	2
Aldrin	ND		3.9	0.97	ug/Kg		08/28/18 13:36	09/01/18 05:43	2
alpha-BHC	ND		3.9	1.1	ug/Kg		08/28/18 13:36	09/01/18 05:43	2
beta-BHC	ND		3.9	0.70	ug/Kg		08/28/18 13:36	09/01/18 05:43	2
Chlordane (technical)	82		77	6.2	ug/Kg		08/28/18 13:36	09/01/18 05:43	2
cis-Chlordane	12		3.9	0.77	ug/Kg		08/28/18 13:36	09/01/18 05:43	2
delta-BHC	ND		3.9	0.85	ug/Kg		08/28/18 13:36	09/01/18 05:43	2
Dieldrin	ND		3.9	1.1	ug/Kg		08/28/18 13:36	09/01/18 05:43	2
Endosulfan I	ND		3.9	0.62	ug/Kg		08/28/18 13:36	09/01/18 05:43	2
Endosulfan II	ND		3.9	0.95	ug/Kg		08/28/18 13:36	09/01/18 05:43	2
Endosulfan sulfate	ND		3.9	0.74	ug/Kg		08/28/18 13:36	09/01/18 05:43	2
Endrin	ND		3.9	0.89	ug/Kg		08/28/18 13:36	09/01/18 05:43	2
Endrin aldehyde	ND		3.9	1.2	ug/Kg		08/28/18 13:36	09/01/18 05:43	2
Endrin ketone	ND		3.9	0.64	ug/Kg		08/28/18 13:36	09/01/18 05:43	2
gamma-BHC (Lindane)	ND		3.9	1.2	ug/Kg		08/28/18 13:36	09/01/18 05:43	2
Heptachlor	ND		3.9	0.89	ug/Kg		08/28/18 13:36	09/01/18 05:43	2
Heptachlor epoxide	ND		3.9	0.68	ug/Kg		08/28/18 13:36	09/01/18 05:43	2
Methoxychlor	ND		3.9	1.3	ug/Kg		08/28/18 13:36	09/01/18 05:43	2
Toxaphene	ND		77	13	ug/Kg		08/28/18 13:36	09/01/18 05:43	2
trans-Chlordane	8.4	p	3.9	0.89	ug/Kg		08/28/18 13:36	09/01/18 05:43	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*78*	*p*	*21 - 136*	*08/28/18 13:36*	*09/01/18 05:43*	*2*
Tetrachloro-m-xylene	*67*		*21 - 145*	*08/28/18 13:36*	*09/01/18 05:43*	*2*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		49	21	ug/Kg		08/29/18 14:50	08/31/18 09:24	1
Aroclor-1221	ND		49	23	ug/Kg		08/29/18 14:50	08/31/18 09:24	1
Aroclor-1232	ND		49	22	ug/Kg		08/29/18 14:50	08/31/18 09:24	1
Aroclor-1242	ND		49	19	ug/Kg		08/29/18 14:50	08/31/18 09:24	1
Aroclor-1248	ND		49	23	ug/Kg		08/29/18 14:50	08/31/18 09:24	1
Aroclor-1254	ND		49	22	ug/Kg		08/29/18 14:50	08/31/18 09:24	1
Aroclor-1260	ND		49	21	ug/Kg		08/29/18 14:50	08/31/18 09:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*94*		*14 - 128*	*08/29/18 14:50*	*08/31/18 09:24*	*1*
DCB Decachlorobiphenyl	*91*		*10 - 132*	*08/29/18 14:50*	*08/31/18 09:24*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	9.1		1.9	0.31	mg/Kg		08/29/18 09:32	08/30/18 10:44	4

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

TestAmerica Job ID: 720-88238-1

Client Sample ID: DUP-25

Date Collected: 08/24/18 00:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88238-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	39		3.8	0.32	mg/Kg		08/29/18 09:32	08/30/18 10:44	4
Barium	370		1.9	0.27	mg/Kg		08/29/18 09:32	08/30/18 10:44	4
Beryllium	ND		0.38	0.12	mg/Kg		08/29/18 09:32	08/30/18 10:44	4
Cadmium	1.4		0.47	0.047	mg/Kg		08/29/18 09:32	08/30/18 10:44	4
Chromium	68		1.9	0.20	mg/Kg		08/29/18 09:32	08/30/18 10:44	4
Cobalt	8.4		0.75	0.075	mg/Kg		08/29/18 09:32	08/30/18 10:44	4
Copper	210		5.7	2.7	mg/Kg		08/29/18 09:32	08/30/18 10:44	4
Lead	13000		4.7	0.99	mg/Kg		08/29/18 09:32	08/30/18 22:48	10
Molybdenum	1.8	J	1.9	0.24	mg/Kg		08/29/18 09:32	08/30/18 10:44	4
Nickel	41		1.9	0.19	mg/Kg		08/29/18 09:32	08/30/18 10:44	4
Selenium	ND		3.8	0.57	mg/Kg		08/29/18 09:32	08/30/18 10:44	4
Silver	0.58	J	0.94	0.19	mg/Kg		08/29/18 09:32	08/30/18 10:44	4
Thallium	1.2	J	1.9	0.55	mg/Kg		08/29/18 09:32	08/30/18 10:44	4
Vanadium	45		1.9	0.26	mg/Kg		08/29/18 09:32	08/30/18 10:44	4
Zinc	450		14	6.0	mg/Kg		08/29/18 09:32	08/30/18 22:48	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.49		0.014	0.0021	mg/Kg		08/29/18 15:39	08/30/18 18:59	1

Client Sample Results

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

TestAmerica Job ID: 720-88238-1

Client Sample ID: DUP-14

Date Collected: 08/24/18 00:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88238-5

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.6	1.1	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
Acetone	ND		46	35	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
Benzene	ND		4.6	0.59	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
Dichlorobromomethane	ND		4.6	0.66	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
Bromobenzene	ND		4.6	0.72	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
Chlorobromomethane	ND		18	0.66	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
Bromoform	ND		4.6	1.8	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
Bromomethane	ND		9.1	0.72	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
2-Butanone (MEK)	ND		46	19	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
n-Butylbenzene	ND		4.6	0.91	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
sec-Butylbenzene	ND		4.6	0.66	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
tert-Butylbenzene	ND		4.6	0.67	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
Carbon disulfide	ND		4.6	1.8	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
Carbon tetrachloride	ND		4.6	0.57	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
Chlorobenzene	ND		4.6	0.63	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
Chloroethane	ND		9.1	0.51	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
Chloroform	ND		4.6	0.60	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
Chloromethane	ND		9.1	0.72	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
2-Chlorotoluene	ND		4.6	0.59	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
4-Chlorotoluene	ND		4.6	0.62	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
Chlorodibromomethane	ND		4.6	0.65	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
1,2-Dichlorobenzene	ND		4.6	0.62	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
1,3-Dichlorobenzene	ND		4.6	0.66	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
1,4-Dichlorobenzene	ND		4.6	0.65	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
1,3-Dichloropropane	ND		4.6	0.67	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
1,1-Dichloropropene	ND		4.6	0.63	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
1,2-Dibromo-3-Chloropropane	ND		9.1	1.6	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
Ethylene Dibromide	ND		4.6	1.3	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
Dibromomethane	ND		9.1	0.78	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
Dichlorodifluoromethane	ND		9.1	0.72	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
1,1-Dichloroethane	ND		4.6	0.62	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
1,2-Dichloroethane	ND		4.6	0.69	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
1,1-Dichloroethene	ND	*	4.6	0.57	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
cis-1,2-Dichloroethene	ND		4.6	0.62	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
trans-1,2-Dichloroethene	ND		4.6	0.68	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
1,2-Dichloropropane	ND		4.6	0.57	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
cis-1,3-Dichloropropene	ND		4.6	0.63	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
trans-1,3-Dichloropropene	ND		4.6	0.61	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
Ethylbenzene	ND		4.6	0.68	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
Hexachlorobutadiene	ND		4.6	0.82	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
2-Hexanone	ND		46	9.1	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
Isopropylbenzene	ND		4.6	0.62	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
4-Isopropyltoluene	ND		4.6	2.3	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
Methylene Chloride	ND		9.1	5.1	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
4-Methyl-2-pentanone (MIBK)	ND		46	9.1	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
Naphthalene	ND		9.1	1.4	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
N-Propylbenzene	ND		4.6	0.60	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
Styrene	ND		4.6	0.57	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
1,1,1,2-Tetrachloroethane	ND		4.6	0.69	ug/Kg		08/25/18 03:05	08/29/18 21:52	1

Client Sample ID: DUP-14

Date Collected: 08/24/18 00:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88238-5

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.6	0.68	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
Tetrachloroethene	ND		4.6	0.61	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
Toluene	**0.69**	**J**	4.6	0.65	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
1,2,3-Trichlorobenzene	ND		4.6	0.68	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
1,2,4-Trichlorobenzene	ND		4.6	0.65	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
1,1,1-Trichloroethane	ND		4.6	0.56	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
1,1,2-Trichloroethane	ND		4.6	0.64	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
Trichloroethene	**2.5**	**J**	4.6	0.57	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
Trichlorofluoromethane	ND		4.6	0.51	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
1,2,3-Trichloropropane	ND		4.6	0.70	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.6	1.9	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
1,2,4-Trimethylbenzene	ND		4.6	1.5	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
1,3,5-Trimethylbenzene	ND		4.6	0.59	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
Vinyl acetate	ND		18	4.6	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
Vinyl chloride	ND		4.6	0.67	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
Xylenes, Total	ND		4.6	1.1	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
2,2-Dichloropropane	ND		4.6	1.8	ug/Kg		08/25/18 03:05	08/29/18 21:52	1
Gasoline Range Organics (GRO) -C4-C12	ND		230	91	ug/Kg		08/25/18 03:05	08/29/18 21:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*45 - 131*	*08/25/18 03:05*	*08/29/18 21:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*60 - 140*	*08/25/18 03:05*	*08/29/18 21:52*	*1*
Toluene-d8 (Surr)	*95*		*58 - 140*	*08/25/18 03:05*	*08/29/18 21:52*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**29**		19	9.6	ug/Kg		08/28/18 10:30	09/02/18 20:02	2
Acenaphthene	ND		9.6	5.4	ug/Kg		08/28/18 10:30	09/02/18 20:02	2
Acenaphthylene	**76**		9.6	4.6	ug/Kg		08/28/18 10:30	09/02/18 20:02	2
Anthracene	**31**		9.6	3.9	ug/Kg		08/28/18 10:30	09/02/18 20:02	2
Benzo[a]anthracene	**150**		9.6	2.9	ug/Kg		08/28/18 10:30	09/02/18 20:02	2
Benzo[a]pyrene	**260**		9.6	3.7	ug/Kg		08/28/18 10:30	09/02/18 20:02	2
Benzo[b]fluoranthene	**340**		9.6	4.0	ug/Kg		08/28/18 10:30	09/02/18 20:02	2
Benzo[g,h,i]perylene	**97**		9.6	8.3	ug/Kg		08/28/18 10:30	09/02/18 20:02	2
Benzo[k]fluoranthene	**160**		9.6	4.0	ug/Kg		08/28/18 10:30	09/02/18 20:02	2
Chrysene	**220**		9.6	2.7	ug/Kg		08/28/18 10:30	09/02/18 20:02	2
Dibenz(a,h)anthracene	**24**		9.6	6.7	ug/Kg		08/28/18 10:30	09/02/18 20:02	2
Fluoranthene	**270**		9.6	2.7	ug/Kg		08/28/18 10:30	09/02/18 20:02	2
Fluorene	**9.1**	**J**	9.6	4.2	ug/Kg		08/28/18 10:30	09/02/18 20:02	2
Indeno[1,2,3-cd]pyrene	**90**		9.6	8.1	ug/Kg		08/28/18 10:30	09/02/18 20:02	2
Naphthalene	**59**		9.6	6.7	ug/Kg		08/28/18 10:30	09/02/18 20:02	2
Phenanthrene	**210**		9.6	3.5	ug/Kg		08/28/18 10:30	09/02/18 20:02	2
Pyrene	**510**		9.6	3.3	ug/Kg		08/28/18 10:30	09/02/18 20:02	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*62*		*33 - 120*	*08/28/18 10:30*	*09/02/18 20:02*	*2*
Terphenyl-d14	*88*		*35 - 146*	*08/28/18 10:30*	*09/02/18 20:02*	*2*

Client Sample Results

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

TestAmerica Job ID: 720-88238-1

Client Sample ID: DUP-14

Date Collected: 08/24/18 00:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88238-5

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	39000		1900	710	ug/Kg		08/28/18 11:24	08/31/18 00:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*84*		*40 - 130*	*08/28/18 11:24*	*08/31/18 00:07*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.58	ug/Kg		08/28/18 13:36	09/01/18 05:59	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/28/18 13:36	09/01/18 05:59	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/28/18 13:36	09/01/18 05:59	1
Aldrin	ND		1.9	0.47	ug/Kg		08/28/18 13:36	09/01/18 05:59	1
alpha-BHC	ND		1.9	0.52	ug/Kg		08/28/18 13:36	09/01/18 05:59	1
beta-BHC	ND		1.9	0.34	ug/Kg		08/28/18 13:36	09/01/18 05:59	1
Chlordane (technical)	ND		38	3.0	ug/Kg		08/28/18 13:36	09/01/18 05:59	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/28/18 13:36	09/01/18 05:59	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/28/18 13:36	09/01/18 05:59	1
Dieldrin	ND		1.9	0.56	ug/Kg		08/28/18 13:36	09/01/18 05:59	1
Endosulfan I	ND		1.9	0.30	ug/Kg		08/28/18 13:36	09/01/18 05:59	1
Endosulfan II	ND		1.9	0.46	ug/Kg		08/28/18 13:36	09/01/18 05:59	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/28/18 13:36	09/01/18 05:59	1
Endrin	ND		1.9	0.44	ug/Kg		08/28/18 13:36	09/01/18 05:59	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/28/18 13:36	09/01/18 05:59	1
Endrin ketone	ND		1.9	0.31	ug/Kg		08/28/18 13:36	09/01/18 05:59	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/28/18 13:36	09/01/18 05:59	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/28/18 13:36	09/01/18 05:59	1
Heptachlor epoxide	ND		1.9	0.33	ug/Kg		08/28/18 13:36	09/01/18 05:59	1
Methoxychlor	ND		1.9	0.64	ug/Kg		08/28/18 13:36	09/01/18 05:59	1
Toxaphene	ND		38	6.4	ug/Kg		08/28/18 13:36	09/01/18 05:59	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/28/18 13:36	09/01/18 05:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*83*	*p*	*21 - 136*	*08/28/18 13:36*	*09/01/18 05:59*	*1*
Tetrachloro-m-xylene	*84*		*21 - 145*	*08/28/18 13:36*	*09/01/18 05:59*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		48	21	ug/Kg		08/29/18 14:50	08/31/18 09:42	1
Aroclor-1221	ND		48	23	ug/Kg		08/29/18 14:50	08/31/18 09:42	1
Aroclor-1232	ND		48	22	ug/Kg		08/29/18 14:50	08/31/18 09:42	1
Aroclor-1242	ND		48	18	ug/Kg		08/29/18 14:50	08/31/18 09:42	1
Aroclor-1248	ND		48	23	ug/Kg		08/29/18 14:50	08/31/18 09:42	1
Aroclor-1254	ND		48	22	ug/Kg		08/29/18 14:50	08/31/18 09:42	1
Aroclor-1260	ND		48	21	ug/Kg		08/29/18 14:50	08/31/18 09:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*80*		*14 - 128*	*08/29/18 14:50*	*08/31/18 09:42*	*1*
DCB Decachlorobiphenyl	*79*		*10 - 132*	*08/29/18 14:50*	*08/31/18 09:42*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.6		1.3	0.22	mg/Kg		08/29/18 09:32	08/30/18 10:48	4

Client Sample Results

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

TestAmerica Job ID: 720-88238-1

Client Sample ID: DUP-14

Date Collected: 08/24/18 00:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88238-5

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	71		2.6	0.22	mg/Kg		08/29/18 09:32	08/30/18 10:48	4
Barium	33		1.3	0.18	mg/Kg		08/29/18 09:32	08/30/18 10:48	4
Beryllium	ND		0.26	0.084	mg/Kg		08/29/18 09:32	08/30/18 10:48	4
Cadmium	0.34		0.32	0.032	mg/Kg		08/29/18 09:32	08/30/18 10:48	4
Chromium	10		1.3	0.14	mg/Kg		08/29/18 09:32	08/30/18 10:48	4
Cobalt	11		0.52	0.052	mg/Kg		08/29/18 09:32	08/30/18 10:48	4
Copper	210		3.9	1.8	mg/Kg		08/29/18 09:32	08/30/18 10:48	4
Lead	230		1.3	0.27	mg/Kg		08/29/18 09:32	08/30/18 10:48	4
Molybdenum	0.27	J	1.3	0.17	mg/Kg		08/29/18 09:32	08/30/18 10:48	4
Nickel	7.6		1.3	0.13	mg/Kg		08/29/18 09:32	08/30/18 10:48	4
Selenium	ND		2.6	0.39	mg/Kg		08/29/18 09:32	08/30/18 10:48	4
Silver	0.23	J	0.65	0.13	mg/Kg		08/29/18 09:32	08/30/18 10:48	4
Thallium	0.58	J	1.3	0.38	mg/Kg		08/29/18 09:32	08/30/18 10:48	4
Vanadium	79		1.3	0.18	mg/Kg		08/29/18 09:32	08/30/18 10:48	4
Zinc	140		3.9	1.6	mg/Kg		08/29/18 09:32	08/30/18 10:48	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.21		0.014	0.0021	mg/Kg		08/29/18 15:39	08/30/18 19:02	1

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88238-1

SDG No.:

Client Sample ID: DUP-05 Lab Sample ID: 720-88238-2

Matrix: Solid Lab File ID: FID2000023.D

Analysis Method: 8015B Date Collected: 08/23/2018 00:00

Extraction Method: 3546 Date Extracted: 08/28/2018 11:24

Sample wt/vol: 15.84(g) Date Analyzed: 08/30/2018 21:41

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250569 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	24000		1900	710

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	100		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000023.D
Lims ID: 720-88238-D-2-B
Client ID: DUP-05
Sample Type: Client
Inject. Date: 30-Aug-2018 21:41:38 ALS Bottle#: 73 Worklist Smp#: 23
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053574-023
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\DRO6_B.m
Limit Group: DRO
Last Update: 31-Aug-2018 13:56:49 Calib Date: 30-Aug-2018 10:14:10
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 13:56:49

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.310			ND	
23 n-Decane		2.172			ND	
A 1 C9-C13	2.778	(1.310-4.246)		1466213	0.6721	
A 21 Stoddard Solvent	2.778	(1.310-4.246)		1466213	NC	
A 57 C10-C12	2.901	(2.172-3.631)		885813	7.80	
24 Dodecane	3.611	3.631	-0.020	57218	NC	
A 3 C9 - C17	3.809	(1.310-6.309)		5060492	2.22	M
A 60 C10-C16	4.002	(2.172-5.833)		2531924	1.25	M
A 47 C9 - C18	4.031	(1.310-6.752)		8118676	4.29	M
A 25 C9-C19	4.243	(1.310-7.176)		16993302	7.38	M
A 15 Kerosene	4.243	(1.310-7.176)		16993302	8.95	M
26 C13	4.326	4.246	0.080	30088	NC	
$ 27 n-Decanoic Acid (Surr)		4.639			ND	U
A 59 C12-C16	4.732	(3.631-5.833)		1703329	8.26	M
A 61 C10-C20	4.878	(2.172-7.583)		23022020	20.3	M
A 28 C9-C24	5.181	(1.310-9.053)		68063785	45.8	M
A 29 C9-C25	5.348	(1.310-9.386)		174819747	106.3	M
A 54 C10-C23	5.440	(2.172-8.707)		53792156	37.8	M
A 4 C10-C24	5.612	(2.172-9.053)		68063785	45.8	M
A 16 C10-C25	5.779	(2.172-9.386)		174819747	106.3	M
45 Hexadecane	5.855	5.833	0.022	447320	NC	M
A 14 C10-C26	5.940	(2.172-9.707)		185843515	112.5	M
A 67 C12-C22	5.989	(3.631-8.348)		50852673	36.1	M
A 32 C10-C28	6.245	(2.172-10.317)		321474378	189.3	M
A 5 Diesel	6.245	(2.172-10.317)		321474378	189.3	M
A 12 Unknown Hydrocarbons	6.245	(2.172-10.317)		321474378	NC	M
A 30 C13-C22	6.297	(4.246-8.348)		50612372	36.0	M
44 Heptadecane	6.309	6.309	0.000	1155279	NC	M
A 31 C12-C24	6.342	(3.631-9.053)		67235190	45.4	M
49 n-Octadecane	6.763	6.752	0.011	1535268	NC	M
A 9 Crude Oil Range Organics (	6.859	(1.310-12.408)		1064280455	NC	M
A 11 Bunker Range Organics (C9-	6.859	(1.310-12.408)		1064280455	NC	M

Report Date: 31-Aug-2018 13:56:50 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000023.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.859	(1.310-12.408)		1064280455	504.1	M
33 C19	7.174	7.176	-0.002	2270794	NC	M
A 64 C13-C28	7.282	(4.246-10.317)		320405482	188.7	M
A 17 C10-C36	7.290	(2.172-12.408)		1064280455	609.9	M
A 68 Crude Oil Range Organics (	7.349	(1.310-13.389)		1354551202	NC	M
A 13 C9-C40	7.349	(1.310-13.389)		1354551202	867.0	M
A 58 C16-C24	7.443	(5.833-9.053)		65531861	44.4	M
62 icosane	7.592	7.583	0.009	2603915	NC	M
A 6 C10-C40	7.780	(2.172-13.389)		1354551202	867.9	M
$ 34 p-Terphenyl	8.066	8.084	-0.018	43430604	25.1	
35 n-Docosane	8.346	8.348	-0.002	5221205	NC	M
A 18 C12-C40	8.510	(3.631-13.389)		1353722607	869.9	M
36 Tricosane	8.719	8.707	0.012	14271629	NC	M
A 66 C13-C40	8.817	(4.246-13.389)		1353482306	870.7	M
37 n-Tetracosane	9.079	9.053	0.026	39586472	NC	M
A 2 C16-C36 ORO	9.121	(5.833-12.408)		1061748531	897.9	M
38 C25	9.360	9.386	-0.026	41938341	NC	M
A 19 C16-C40	9.611	(5.833-13.389)		1352019278	872.6	M
46 n-Hexacosane	9.747	9.707	0.040	18894981	NC	M
A 20 C19-C36	9.792	(7.176-12.408)		755024593	554.6	
A 55 C23-C32	10.066	(8.707-11.425)		488101737	630.7	M
39 n-Octacosane	10.304	10.317	-0.013	30890673	NC	M
65 C29	10.608	10.607	0.001	45452015	NC	M
A 40 C24-C36	10.731	(9.053-12.408)		910849867	929.1	M
A 7 Motor Oil	10.731	(9.053-12.408)		784656655	800.3	
A 10 C22-C40	10.868	(8.348-13.389)		1078431909	775.9	
A 50 C25-C36	10.897	(9.386-12.408)		720209725	781.8	
A 41 C23-C40	11.048	(8.707-13.389)		1083128350	792.5	
A 8 C24-C40	11.221	(9.053-13.389)		1072209982	799.4	
56 Dotriacontane	11.442	11.425	0.017	103249994	NC	M
A 51 C28-C40	11.853	(10.317-13.389)		916699295	845.1	
A 63 C29-C40	11.998	(10.607-13.389)		877415790	878.0	
42 n-Hexatriacontane	12.407	12.408	-0.001	70734528	NC	M
43 C40	13.455	13.389	0.066	83894305	NC	M
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

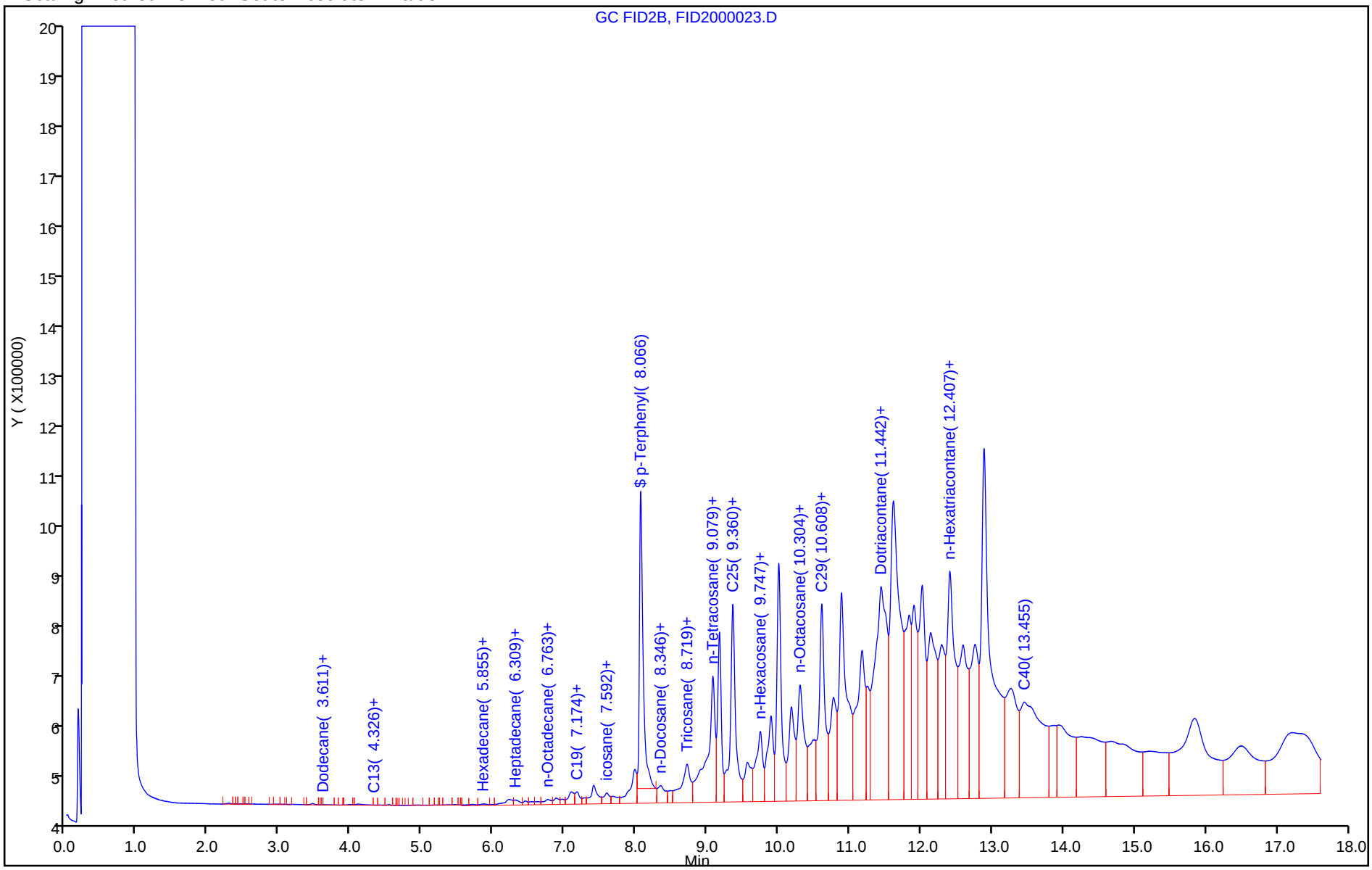
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 31-Aug-2018 13:56:50 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000023.D				
Injection Date:	30-Aug-2018 21:41:38	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88238-D-2-B	Lab Sample ID:	720-88238-2	Worklist Smp#:	23
Client ID:	DUP-05				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	73
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000023.D
Lims ID: 720-88238-D-2-B
Client ID: DUP-05
Sample Type: Client
Inject. Date: 30-Aug-2018 21:41:38 ALS Bottle#: 73 Worklist Smp#: 23
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053574-023
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\DRO6_B.m
Limit Group: DRO
Last Update: 31-Aug-2018 13:56:49 Calib Date: 30-Aug-2018 10:14:10
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 13:56:49

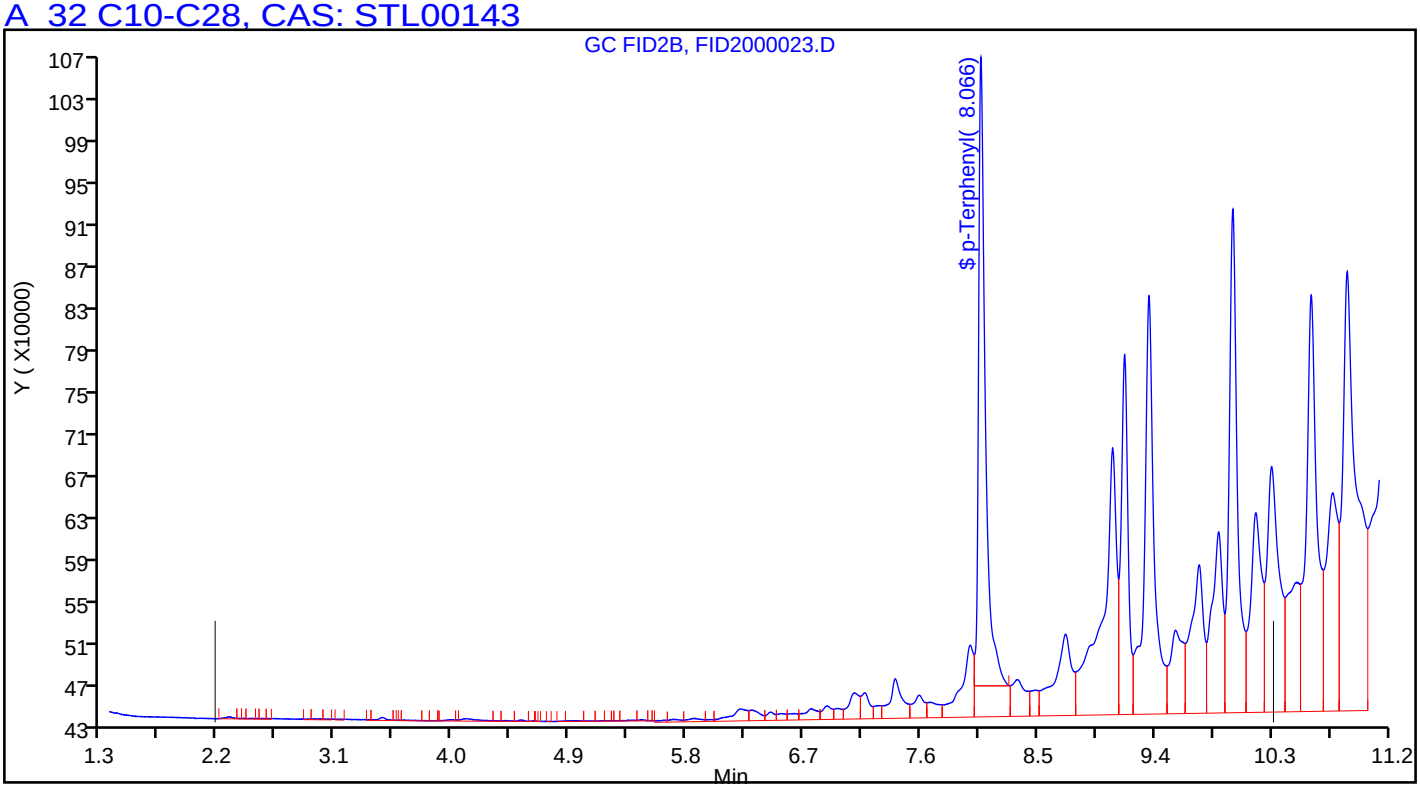
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	25.1	100.29

Report Date: 31-Aug-2018 13:56:54 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000023.D				
Injection Date:	30-Aug-2018 21:41:38	Instrument ID:	CHDRO6		
Lims ID:	720-88238-D-2-B	Lab Sample ID:	720-88238-2		
Client ID:	DUP-05				
Operator ID:	DCH	ALS Bottle#:	73	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

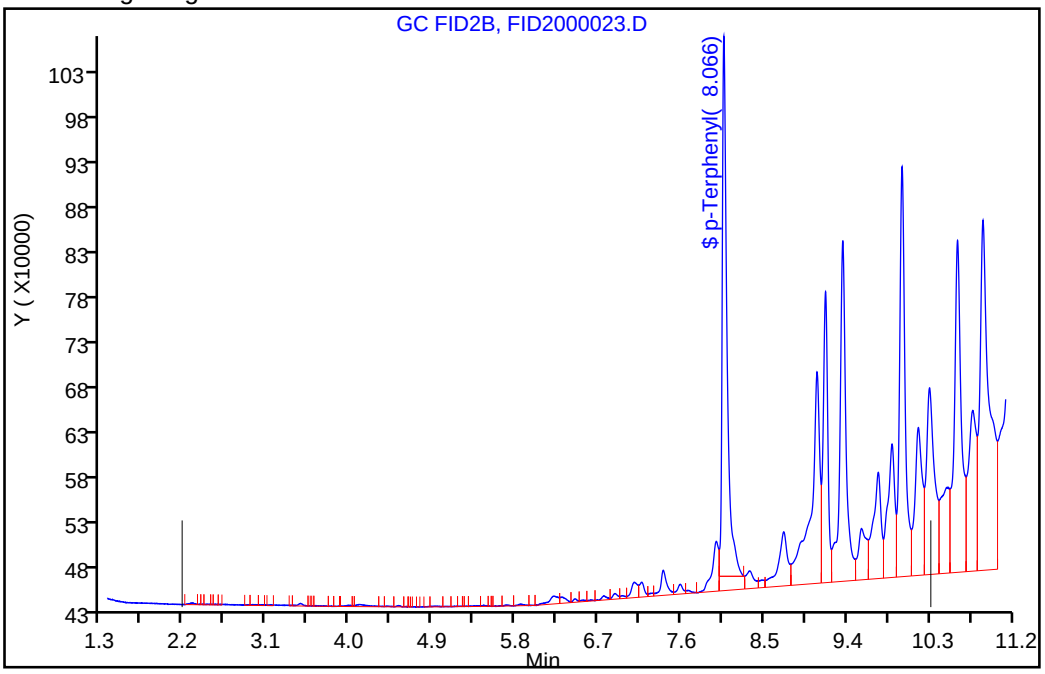
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000023.D				
Injection Date:	30-Aug-2018 21:41:38	Instrument ID:	CHDRO6		
Lims ID:	720-88238-D-2-B	Lab Sample ID:	720-88238-2		
Client ID:	DUP-05				
Operator ID:	DCH	ALS Bottle#:	73	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.245, CAS: STL00143

Signal: 1

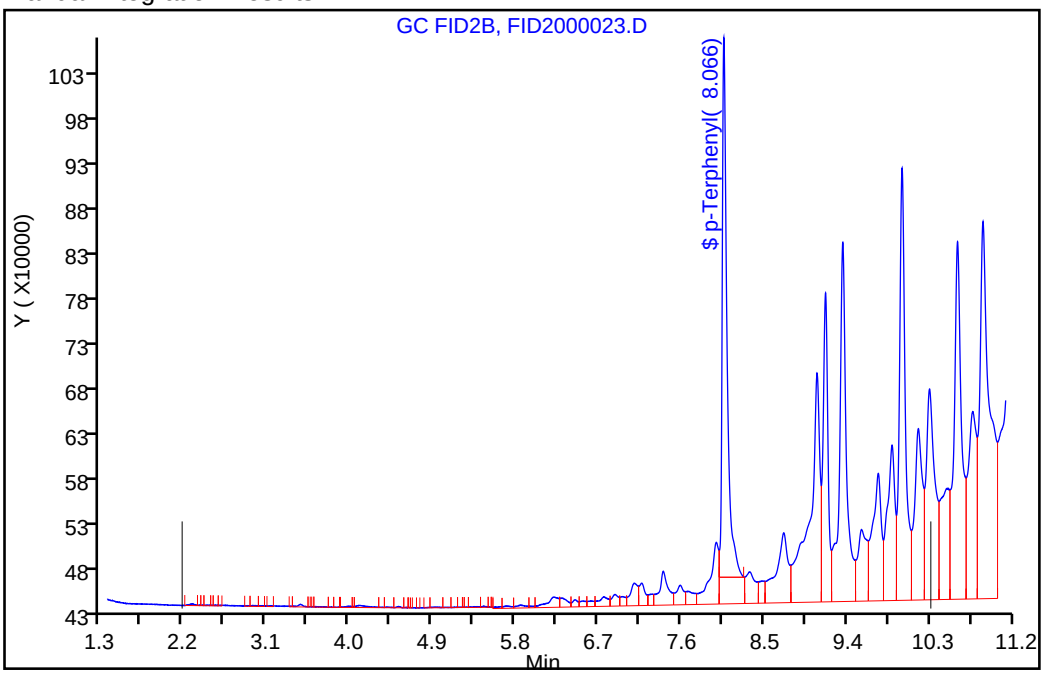
Processing Integration Results

RT: 6.24
Response: 243379674
Amount: 145.1059



Manual Integration Results

RT: 6.24
Response: 321474378
Amount: 189.3247



Reviewer: luj, 31-Aug-2018 13:56:12

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88238-1

SDG No.:

Client Sample ID: DUP-15 Lab Sample ID: 720-88238-3

Matrix: Solid Lab File ID: FID2000020.D

Analysis Method: 8015B Date Collected: 08/24/2018 00:00

Extraction Method: 3546 Date Extracted: 08/28/2018 11:24

Sample wt/vol: 15.71(g) Date Analyzed: 08/30/2018 20:28

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250569 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	13000		1900	720

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	93		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000020.D
Lims ID: 720-88238-D-3-B
Client ID: DUP-15
Sample Type: Client
Inject. Date: 30-Aug-2018 20:28:16 ALS Bottle#: 70 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053574-020
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\DRO6_B.m
Limit Group: DRO
Last Update: 31-Aug-2018 13:42:13 Calib Date: 30-Aug-2018 10:14:10
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 13:42:13

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.310			ND	
23 n-Decane		2.172			ND	
A 1 C9-C13	2.778	(1.310-4.246)		1730456	0.7933	
A 21 Stoddard Solvent	2.778	(1.310-4.246)		1730456	NC	
A 57 C10-C12	2.901	(2.172-3.631)		1166362	7.96	
24 Dodecane	3.606	3.631	-0.025	11425	NC	
A 3 C9 - C17	3.809	(1.310-6.309)		5318323	2.33	M
A 60 C10-C16	4.002	(2.172-5.833)		2835830	1.40	M
A 47 C9 - C18	4.031	(1.310-6.752)		12078034	6.38	M
A 25 C9-C19	4.243	(1.310-7.176)		29950944	13.0	M
A 15 Kerosene	4.243	(1.310-7.176)		29950944	15.8	M
26 C13	4.165	4.246	-0.081	287001	NC	
$ 27 n-Decanoic Acid (Surr)		4.639			ND	U
A 59 C12-C16	4.732	(3.631-5.833)		1680893	8.25	M
A 61 C10-C20	4.878	(2.172-7.583)		29950944	24.3	M
A 28 C9-C24	5.181	(1.310-9.053)		114700081	72.2	M
A 29 C9-C25	5.348	(1.310-9.386)		127632605	79.6	M
A 54 C10-C23	5.440	(2.172-8.707)		98717742	63.2	M
A 4 C10-C24	5.612	(2.172-9.053)		114700081	72.2	M
A 16 C10-C25	5.779	(2.172-9.386)		127632605	79.6	M
45 Hexadecane		5.833			ND	
A 14 C10-C26	5.940	(2.172-9.707)		142385541	87.9	M
A 67 C12-C22	5.989	(3.631-8.348)		86392955	56.2	M
A 32 C10-C28	6.245	(2.172-10.317)		173267545	105.4	M
A 5 Diesel	6.245	(2.172-10.317)		173267545	105.4	M
A 12 Unknown Hydrocarbons	6.245	(2.172-10.317)		173267545	NC	M
A 30 C13-C22	6.297	(4.246-8.348)		86104437	56.1	M
44 Heptadecane	6.357	6.309	0.048	4076744	NC	M
A 31 C12-C24	6.342	(3.631-9.053)		113545144	71.6	M
49 n-Octadecane	6.812	6.752	0.060	5325920	NC	M
A 9 Crude Oil Range Organics (	6.859	(1.310-12.408)		293331350	NC	M
A 11 Bunker Range Organics (C9-	6.859	(1.310-12.408)		293331350	NC	M

Report Date: 31-Aug-2018 13:42:14 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000020.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.859	(1.310-12.408)		293331350	139.0	M
33 C19	7.172	7.176	-0.004	12546990	NC	M
A 64 C13-C28	7.282	(4.246-10.317)		171824090	104.6	M
A 17 C10-C36	7.290	(2.172-12.408)		293331350	173.4	M
A 68 Crude Oil Range Organics (	7.349	(1.310-13.389)		382472984	NC	M
A 13 C9-C40	7.349	(1.310-13.389)		382472984	244.8	M
A 58 C16-C24	7.443	(5.833-9.053)		111864251	70.6	M
62 icosane	7.592	7.583	0.009	17840615	NC	M
A 6 C10-C40	7.780	(2.172-13.389)		382472984	245.1	M
$ 34 p-Terphenyl	8.074	8.084	-0.010	40475813	23.4	
35 n-Docosane		8.348			ND	
A 18 C12-C40	8.510	(3.631-13.389)		381318047	245.0	M
36 Tricosane	8.720	8.707	0.013	4184541	NC	M
A 66 C13-C40	8.817	(4.246-13.389)		381029529	245.1	M
37 n-Tetracosane	9.064	9.053	0.011	5120576	NC	M
A 2 C16-C36 ORO	9.121	(5.833-12.408)		290495520	245.7	M
38 C25	9.393	9.386	0.007	8385982	NC	M
A 19 C16-C40	9.611	(5.833-13.389)		379637154	245.0	M
46 n-Hexacosane	9.734	9.707	0.027	6413676	NC	M
A 20 C19-C36	9.792	(7.176-12.408)		162650149	119.5	
A 55 C23-C32	10.066	(8.707-11.425)		149353429	193.0	M
39 n-Octacosane	10.384	10.317	0.067	12449425	NC	M
65 C29	10.617	10.607	0.010	11414977	NC	M
A 40 C24-C36	10.731	(9.053-12.408)		176698804	180.2	M
A 7 Motor Oil	10.731	(9.053-12.408)		137580882	140.3	
A 10 C22-C40	10.868	(8.348-13.389)		190831436	137.3	
A 50 C25-C36	10.897	(9.386-12.408)		110405846	119.9	
A 41 C23-C40	11.048	(8.707-13.389)		179988910	131.7	
A 8 C24-C40	11.221	(9.053-13.389)		177709228	132.5	
56 Dotriacontane	11.387	11.425	-0.038	15203913	NC	M
A 51 C28-C40	11.853	(10.317-13.389)		145719159	134.3	
A 63 C29-C40	11.998	(10.607-13.389)		134397731	134.5	
42 n-Hexatriacontane	12.503	12.408	0.095	15942220	NC	M
43 C40		13.389			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

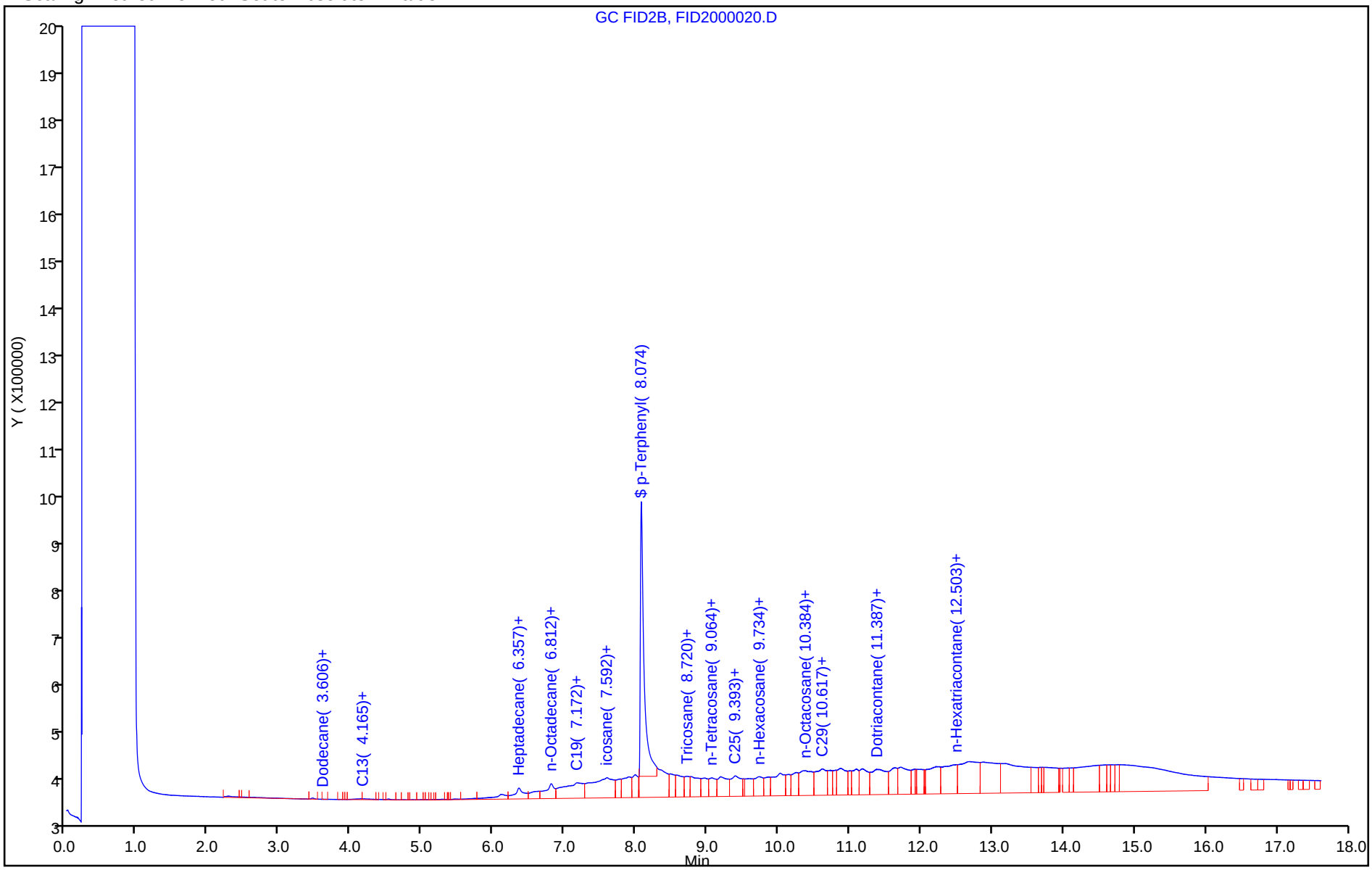
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 31-Aug-2018 13:42:14 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000020.D				
Injection Date:	30-Aug-2018 20:28:16	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88238-D-3-B	Lab Sample ID:	720-88238-3	Worklist Smp#:	20
Client ID:	DUP-15				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	70
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000020.D
Lims ID: 720-88238-D-3-B
Client ID: DUP-15
Sample Type: Client
Inject. Date: 30-Aug-2018 20:28:16 ALS Bottle#: 70 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053574-020
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\DRO6_B.m
Limit Group: DRO
Last Update: 31-Aug-2018 13:42:13 Calib Date: 30-Aug-2018 10:14:10
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 13:42:13

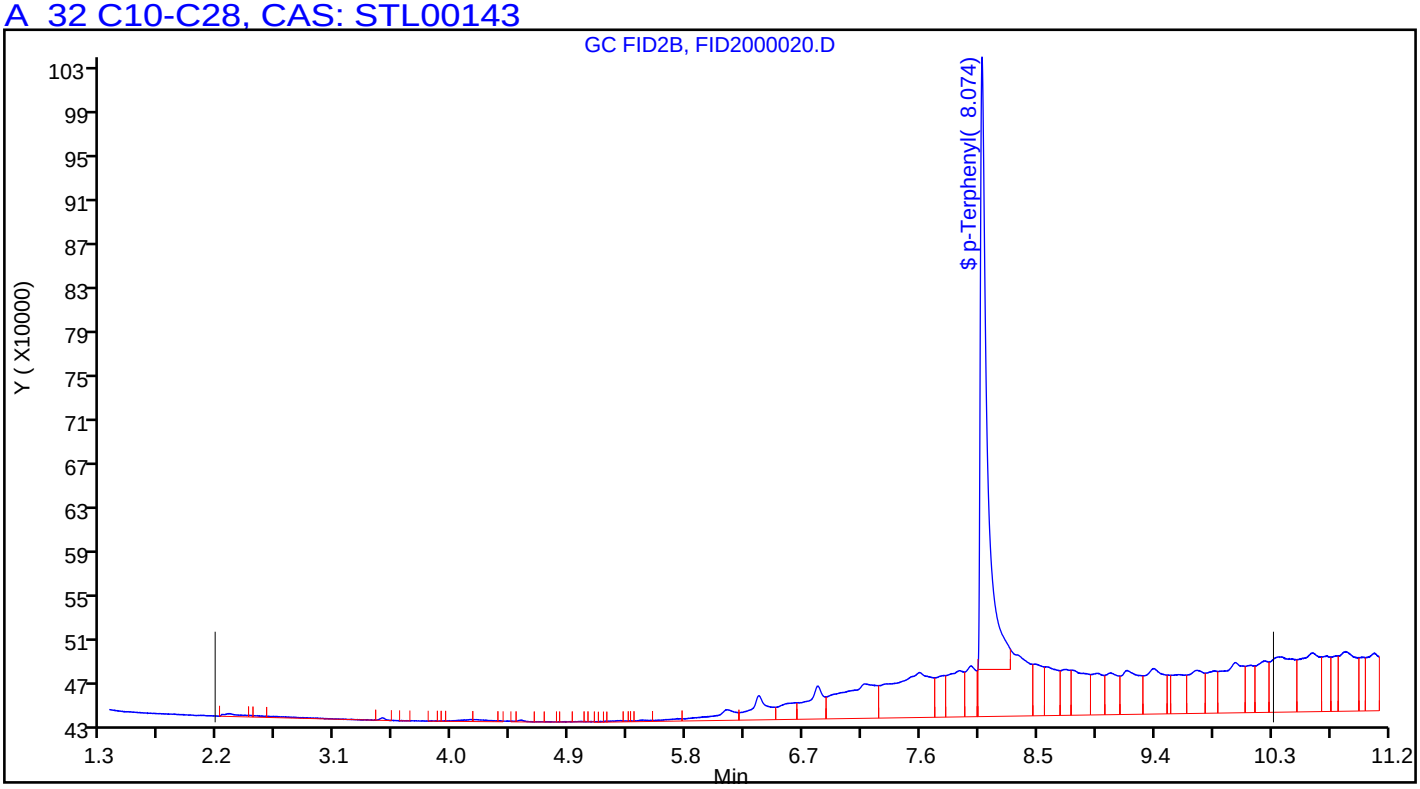
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	23.4	93.46

Report Date: 31-Aug-2018 13:42:19 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000020.D				
Injection Date:	30-Aug-2018 20:28:16	Instrument ID:	CHDRO6		
Lims ID:	720-88238-D-3-B	Lab Sample ID:	720-88238-3		
Client ID:	DUP-15				
Operator ID:	DCH	ALS Bottle#:	70	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

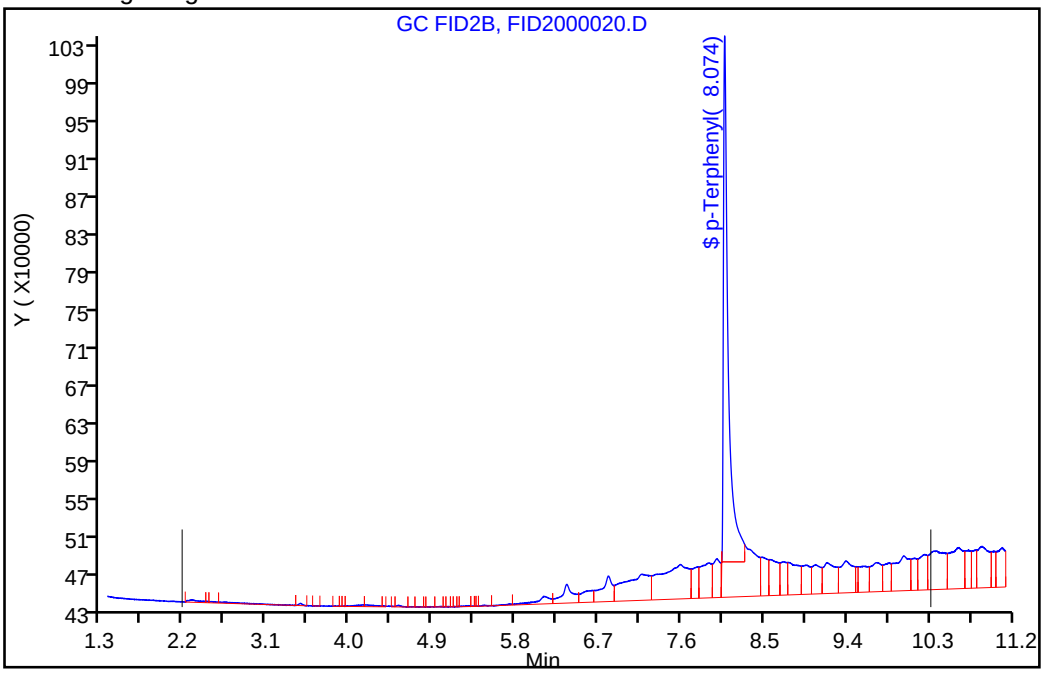
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000020.D				
Injection Date:	30-Aug-2018 20:28:16	Instrument ID:	CHDRO6		
Lims ID:	720-88238-D-3-B	Lab Sample ID:	720-88238-3		
Client ID:	DUP-15				
Operator ID:	DCH	ALS Bottle#:	70	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.245, CAS: STL00143

Signal: 1

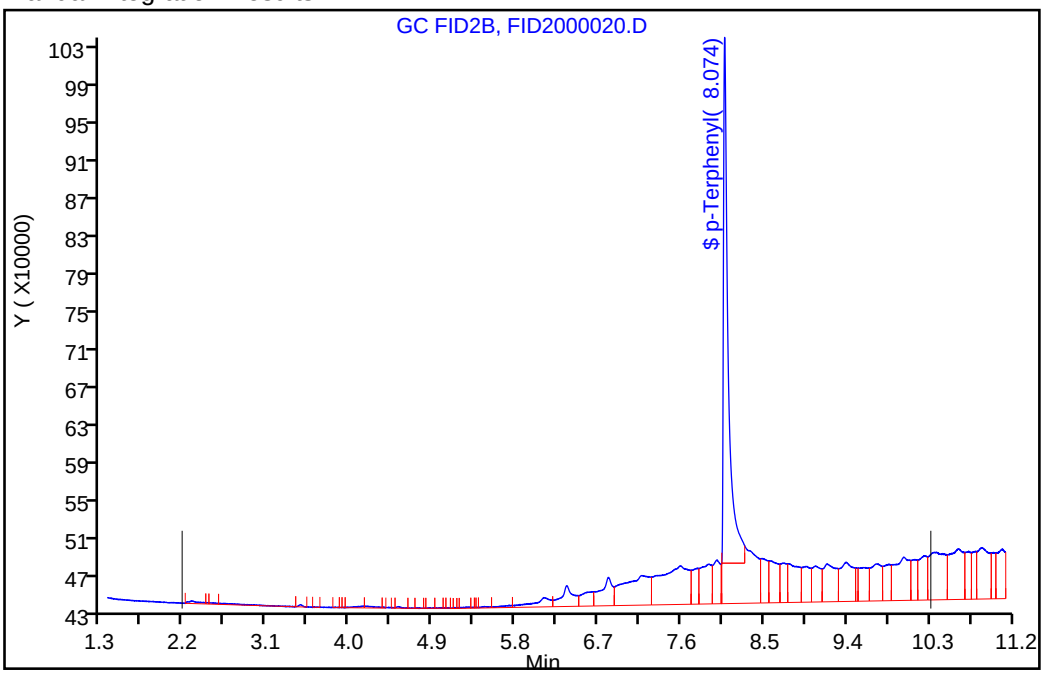
Processing Integration Results

RT: 6.24
Response: 143589820
Amount: 88.602794



Manual Integration Results

RT: 6.24
Response: 173267545
Amount: 105.4069



Reviewer: luj, 31-Aug-2018 13:38:09

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88238-1
SDG No.:
Client Sample ID: DUP-25
Lab Sample ID: 720-88238-4
Matrix: Solid
Lab File ID: FID1000042.D
Analysis Method: 8015B
Date Collected: 08/24/2018 00:00
Extraction Method: 3546
Date Extracted: 08/28/2018 11:24
Sample wt/vol: 15.35(g)
Date Analyzed: 08/31/2018 05:23
Con. Extract Vol.: 2(mL)
Dilution Factor: 5
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250568
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	570000		9800	3700

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	0	D X	40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\FID1000042.D
Lims ID: 720-88238-D-4-B
Client ID: DUP-25
Sample Type: Client
Inject. Date: 31-Aug-2018 05:23:39 ALS Bottle#: 42 Worklist Smp#: 42
Injection Vol: 1.0 ul Dil. Factor: 5.0000
Sample Info: 720-0053573-042
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\DRO6_A.m
Limit Group: DRO
Last Update: 31-Aug-2018 12:46:46 Calib Date: 30-Aug-2018 10:14:10
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 12:46:46

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane	1.162	1.231	-0.069	30789	NC	
23 n-Decane	2.183	2.118	0.065	133641	NC	
A 21 Stoddard Solvent	2.735	(1.231-4.240)		3546469	1.99	M
A 1 C9-C13	2.735	(1.231-4.240)		3546469	2.00	M
A 57 C10-C12	2.866	(2.118-3.613)		2021006	1.31	
24 Dodecane	3.624	3.613	0.011	54295	NC	
A 3 C9 - C17	3.780	(1.231-6.330)		44534394	22.8	M
A 60 C10-C16	3.984	(2.118-5.849)		34988766	20.0	M
A 47 C9 - C18	4.006	(1.231-6.780)		78223634	48.4	M
A 25 C9-C19	4.220	(1.231-7.210)		78223634	39.9	M
A 15 Kerosene	4.220	(1.231-7.210)		78223634	48.4	M
26 C13	4.248	4.240	0.008	197091	NC	M
$ 27 n-Decanoic Acid (Surr)		4.607			ND	U
A 59 C12-C16	4.731	(3.613-5.849)		32967760	21.4	M
A 62 C10-C20	4.871	(2.118-7.623)		261689183	169.7	M
A 28 C9-C24	5.172	(1.231-9.113)		739690661	479.6	M
A 29 C9-C25	5.341	(1.231-9.452)		905807949	587.3	M
A 54 C10-C23	5.440	(2.118-8.762)		478132117	310.0	M
A 4 C10-C24	5.616	(2.118-9.113)		739389417	479.4	M
A 16 C10-C25	5.785	(2.118-9.452)		905506705	587.1	M
45 Hexadecane	5.849	5.849	0.000	3465522	NC	M
A 14 C10-C26	5.948	(2.118-9.778)		1045725133	678.0	M
A 67 C12-C22	6.005	(3.613-8.397)		476111111	308.7	M
A 12 Unknown Hydrocarbons	6.258	(2.118-10.399)		1351011286	NC	M
A 5 Diesel	6.258	(2.118-10.399)		1351011286	875.9	M
A 32 C10-C28	6.258	(2.118-10.399)		1351011286	875.9	M
A 30 C13-C22	6.319	(4.240-8.397)		474886892	307.9	M
44 Heptadecane	6.376	6.330	0.046	17715793	NC	M
A 31 C12-C24	6.363	(3.613-9.113)		737368411	478.1	M
51 n-Octadecane		6.780			ND	
A 52 Mineral oil	6.879	(1.231-12.528)		2724319353	1538.6	M
A 11 Bunker Range Organics (C9-	6.879	(1.231-12.528)		2724319353	NC	M

Report Date: 31-Aug-2018 12:46:48 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\FID1000042.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 9 Crude Oil Range Organics (	6.879	(1.231-12.528)		2724319353	NC	M
33 C19		7.210		ND		
A 64 C13-C28	7.319	(4.240-10.399)		1347766061	873.8	M
A 17 C10-C36	7.323	(2.118-12.528)		2724018109	1766.1	M
A 13 C9-C40	7.390	(1.231-13.549)		3514393252	2606.3	M
A 68 Crude Oil Range Organics (	7.390	(1.231-13.549)		3514393252	NC	M
A 58 C16-C24	7.481	(5.849-9.113)		707866173	458.9	M
61 icosane	7.591	7.623	-0.032	28213338	NC	M
A 6 C10-C40	7.834	(2.118-13.549)		3514092008	2607.9	M
$ 34 p-Terphenyl		8.114		ND		U
35 n-Docosane	8.324	8.397	-0.073	30375394	NC	M
A 18 C12-C40	8.581	(3.613-13.549)		3512071002	2613.6	M
36 Tricosane	8.762	8.762	0.000	160851219	NC	M
A 66 C13-C40	8.894	(4.240-13.549)		3510846783	2615.5	M
37 n-Tetracosane	9.123	9.113	0.010	40957891	NC	M
A 2 C16-C36 ORO	9.188	(5.849-12.528)		2839955426	2489.7	
38 C25	9.431	9.452	-0.021	29073357	NC	M
A 19 C16-C40	9.699	(5.849-13.549)		3482568764	2604.8	M
46 n-Hexacosane	9.816	9.778	0.038	35850664	NC	M
A 20 C19-C36	9.869	(7.210-12.528)		2695386627	2028.0	
A 55 C23-C32	10.144	(8.762-11.526)		1630178374	2348.1	M
39 n-Octacosane	10.464	10.399	0.065	89680100	NC	M
65 C29	10.667	10.694	-0.027	100207847	NC	M
A 7 Motor Oil	10.820	(9.113-12.528)		1589121768	1784.5	
A 40 C24-C36	10.820	(9.113-12.528)		1933271808	2171.0	M
A 10 C22-C40	10.973	(8.397-13.549)		2238574196	1800.2	
A 49 C25-C36	10.990	(9.452-12.528)		1818511404	2031.5	M
A 41 C23-C40	11.156	(8.762-13.549)		3035959891	2375.3	M
A 8 C24-C40	11.331	(9.113-13.549)		2774702591	2279.3	M
56 Dotriacontane	11.524	11.526	-0.002	49269412	NC	M
A 50 C28-C40	11.974	(10.399-13.549)		2163080722	2278.9	M
A 63 C29-C40	12.122	(10.694-13.549)		2011411012	2321.0	M
42 n-Hexatriacontane	12.577	12.528	0.049	68454017	NC	M
43 C40	13.538	13.549	-0.011	259252276	NC	M
$ 69 Stearic Acid (Surr)		0.000		ND		

QC Flag Legend

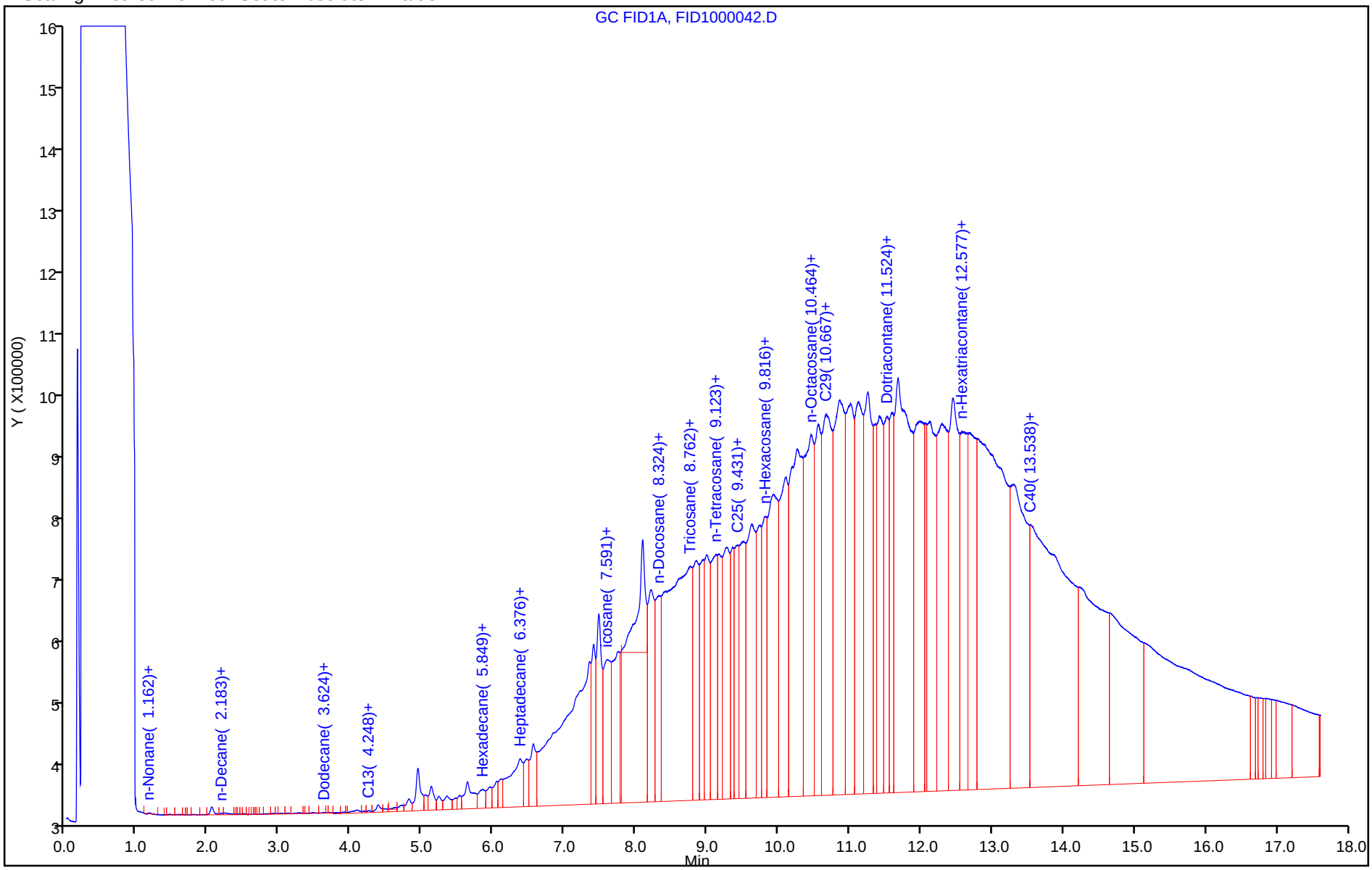
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 31-Aug-2018 12:46:48 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\FID1000042.D				
Injection Date:	31-Aug-2018 05:23:39	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88238-D-4-B	Lab Sample ID:	720-88238-4	Worklist Smp#:	42
Client ID:	DUP-25				
Injection Vol:	1.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	42
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value

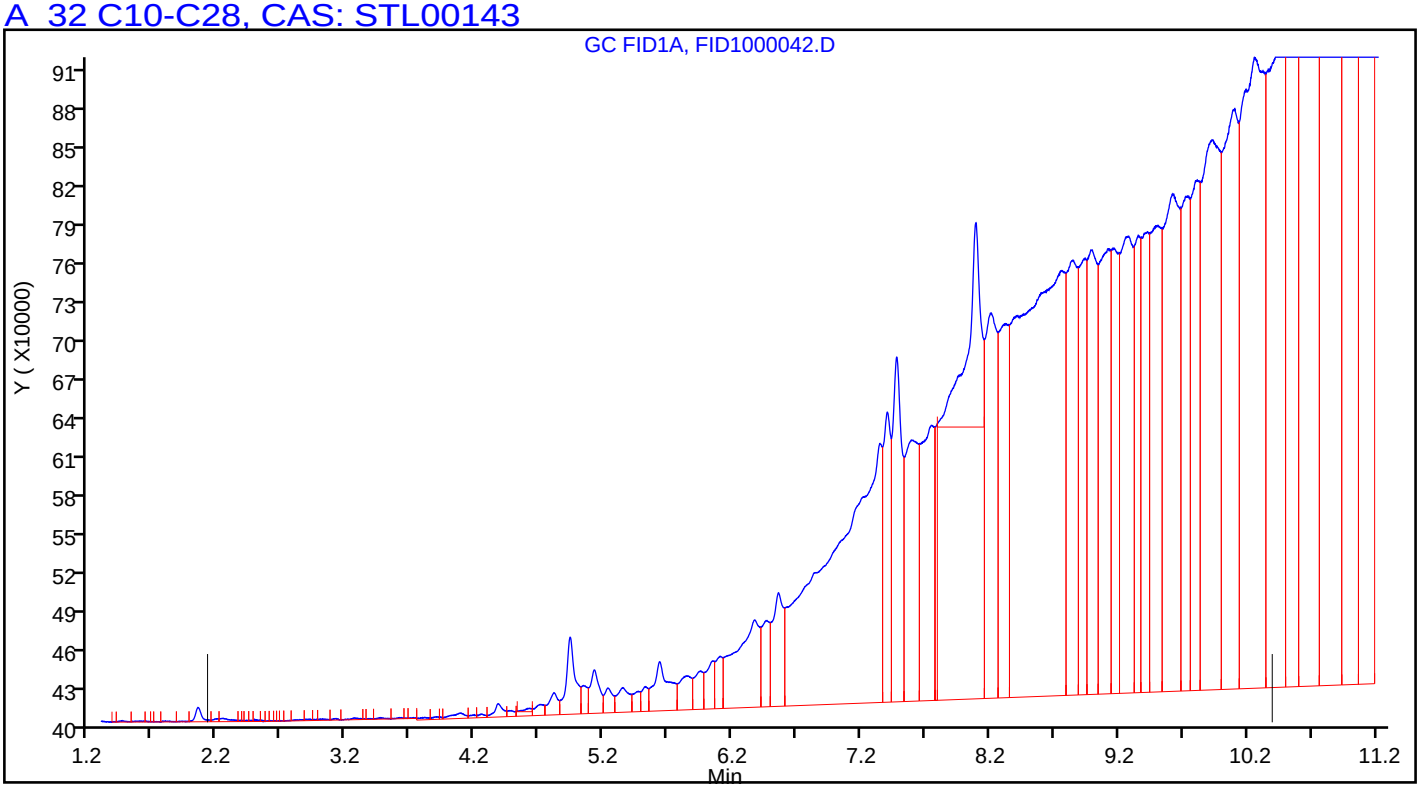


Report Date: 31-Aug-2018 12:46:53 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\FID1000042.D				
Injection Date:	31-Aug-2018 05:23:39	Instrument ID:	CHDRO6		
Lims ID:	720-88238-D-4-B	Lab Sample ID:	720-88238-4		
Client ID:	DUP-25				
Operator ID:	DCH	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

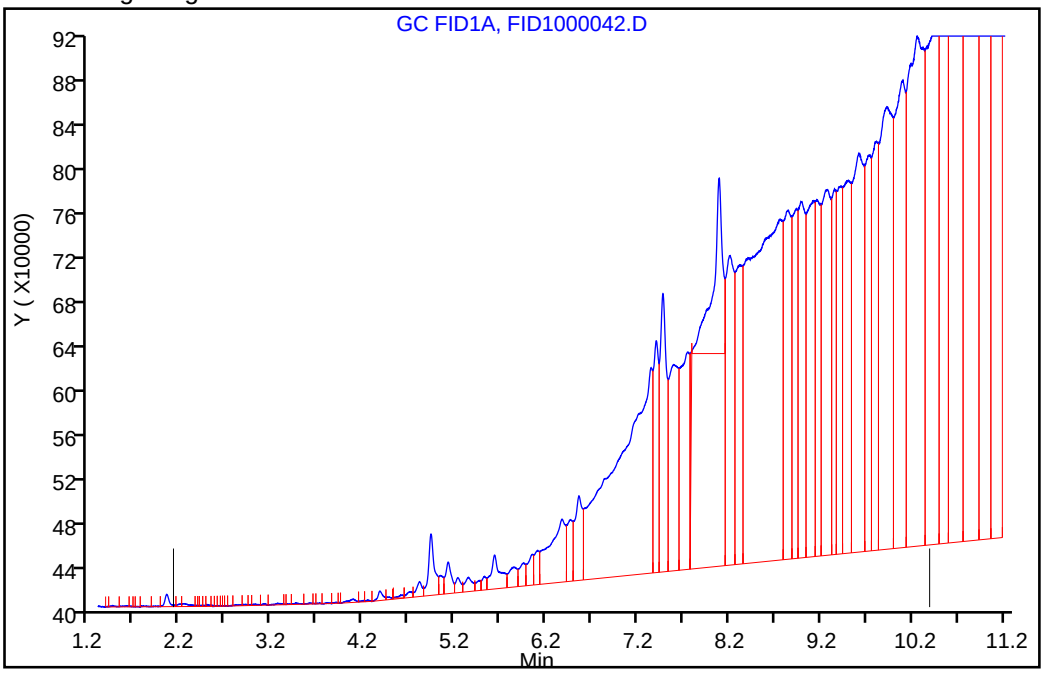
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\FID1000042.D				
Injection Date:	31-Aug-2018 05:23:39	Instrument ID:	CHDRO6		
Lims ID:	720-88238-D-4-B	Lab Sample ID:	720-88238-4		
Client ID:	DUP-25				
Operator ID:	DCH	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.258, CAS: STL00143

Signal: 1

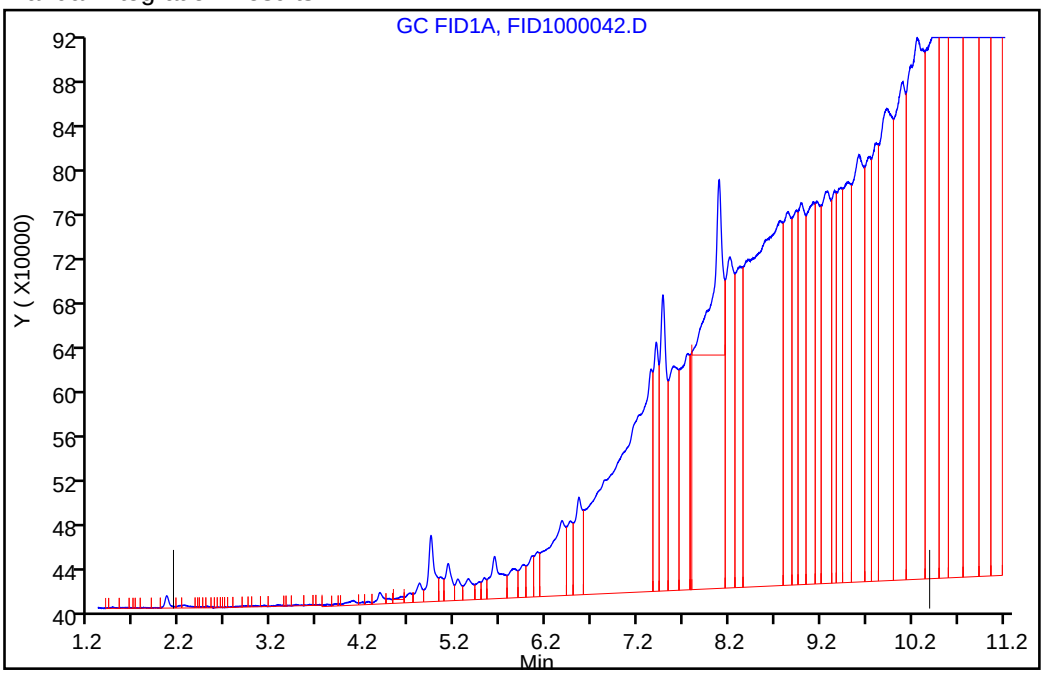
Processing Integration Results

RT: 6.26
Response: 1212879124
Amount: 786.3540



Manual Integration Results

RT: 6.26
Response: 1351011286
Amount: 875.9101



Reviewer: luj, 31-Aug-2018 12:46:35

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

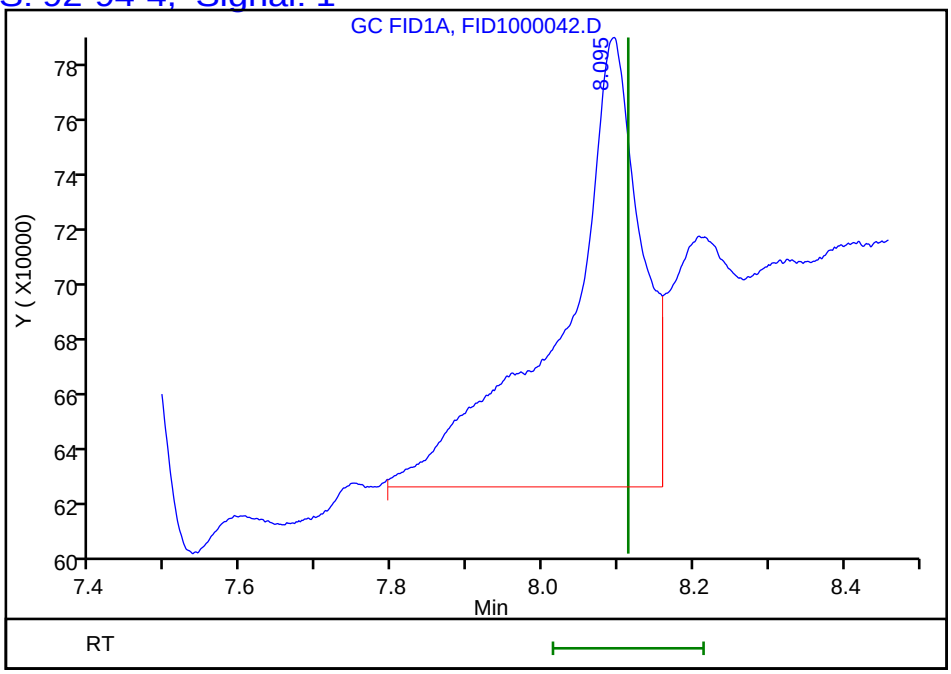
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\FID1000042.D				
Injection Date:	31-Aug-2018 05:23:39	Instrument ID:	CHDRO6		
Lims ID:	720-88238-D-4-B	Lab Sample ID:	720-88238-4		
Client ID:	DUP-25				
Operator ID:	DCH	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4, Signal: 1

RT: 8.09
Response: 22980426
Amount: 11.966728



Reviewer: luj, 31-Aug-2018 12:46:46
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88238-1
SDG No.:
Client Sample ID: DUP-14
Lab Sample ID: 720-88238-5
Matrix: Solid
Lab File ID: FID2000029.D
Analysis Method: 8015B
Date Collected: 08/24/2018 00:00
Extraction Method: 3546
Date Extracted: 08/28/2018 11:24
Sample wt/vol: 15.95(g)
Date Analyzed: 08/31/2018 00:07
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: MXT-1
ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250569
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	39000		1900	710

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	84		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000029.D
Lims ID: 720-88238-D-5-B
Client ID: DUP-14
Sample Type: Client
Inject. Date: 31-Aug-2018 00:07:26 ALS Bottle#: 79 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053574-029
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\DRO6_B.m
Limit Group: DRO
Last Update: 31-Aug-2018 14:09:05 Calib Date: 30-Aug-2018 10:14:10
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 14:09:05

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.310			ND	
23 n-Decane		2.172			ND	
A 1 C9-C13	2.778	(1.310-4.246)		4843930	2.22	M
A 21 Stoddard Solvent	2.778	(1.310-4.246)		4843930	NC	M
A 57 C10-C12	2.901	(2.172-3.631)		2567833	8.75	M
24 Dodecane	3.702	3.631	0.071	307650	NC	M
A 3 C9 - C17	3.809	(1.310-6.309)		18005596	7.89	M
A 60 C10-C16	4.002	(2.172-5.833)		12838540	6.33	M
A 47 C9 - C18	4.031	(1.310-6.752)		29648162	15.7	M
A 25 C9-C19	4.243	(1.310-7.176)		49481842	21.5	M
A 15 Kerosene	4.243	(1.310-7.176)		49481842	26.1	M
26 C13		4.246			ND	
$ 27 n-Decanoic Acid (Surr)		4.639			ND	MU
A 59 C12-C16	4.732	(3.631-5.833)		10270707	13.1	M
A 61 C10-C20	4.878	(2.172-7.583)		64285585	43.7	M
A 28 C9-C24	5.181	(1.310-9.053)		270599473	160.5	M
A 29 C9-C25	5.348	(1.310-9.386)		295041119	174.4	M
A 54 C10-C23	5.440	(2.172-8.707)		170548455	103.9	M
A 4 C10-C24	5.612	(2.172-9.053)		269889922	160.1	M
A 16 C10-C25	5.779	(2.172-9.386)		294331568	174.0	M
45 Hexadecane	5.854	5.833	0.021	1284570	NC	M
A 14 C10-C26	5.940	(2.172-9.707)		350563612	205.8	M
A 67 C12-C22	5.989	(3.631-8.348)		149478297	91.9	M
A 32 C10-C28	6.245	(2.172-10.317)		541438565	313.9	M
A 5 Diesel	6.245	(2.172-10.317)		541438565	313.9	M
A 12 Unknown Hydrocarbons	6.245	(2.172-10.317)		541438565	NC	M
A 30 C13-C22	6.297	(4.246-8.348)		147911751	91.0	M
44 Heptadecane	6.339	6.309	0.030	4556745	NC	M
A 31 C12-C24	6.342	(3.631-9.053)		267322089	158.7	M
49 n-Octadecane	6.799	6.752	0.047	5248674	NC	M
A 9 Crude Oil Range Organics (	6.859	(1.310-12.408)		1366126092	NC	M
A 11 Bunker Range Organics (C9-	6.859	(1.310-12.408)		1366126092	NC	M

Report Date: 31-Aug-2018 14:09:06 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000029.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.859	(1.310-12.408)		1366126092	647.1	M
33 C19	7.171	7.176	-0.005	6054385	NC	M
A 64 C13-C28	7.282	(4.246-10.317)		537304186	311.5	M
A 17 C10-C36	7.290	(2.172-12.408)		1365416541	780.4	M
A 68 Crude Oil Range Organics (	7.349	(1.310-13.389)		1770579850	NC	M
A 13 C9-C40	7.349	(1.310-13.389)		1770579850	1133.3	M
A 58 C16-C24	7.443	(5.833-9.053)		257051382	152.8	M
62 icosane	7.584	7.583	0.001	16777232	NC	M
A 6 C10-C40	7.780	(2.172-13.389)		1769870299	1134.1	M
$ 34 p-Terphenyl	8.063	8.084	-0.021	36200172	20.9	M
35 n-Docosane	8.352	8.348	0.004	18502325	NC	M
A 18 C12-C40	8.510	(3.631-13.389)		1767302466	1135.6	M
36 Tricosane	8.711	8.707	0.004	36626753	NC	M
A 66 C13-C40	8.817	(4.246-13.389)		1765735920	1135.9	M
37 n-Tetracosane	9.002	9.053	-0.051	45866818	NC	M
A 2 C16-C36 ORO	9.121	(5.833-12.408)		1352578001	1143.9	M
38 C25	9.390	9.386	0.004	32154375	NC	M
A 19 C16-C40	9.611	(5.833-13.389)		1757031759	1134.0	M
46 n-Hexacosane	9.742	9.707	0.035	47351744	NC	M
A 20 C19-C36	9.792	(7.176-12.408)		834438756	612.9	
A 55 C23-C32	10.066	(8.707-11.425)		796756211	1029.6	M
39 n-Octacosane	10.386	10.317	0.069	50036559	NC	M
65 C29	10.621	10.607	0.014	88390104	NC	M
A 40 C24-C36	10.731	(9.053-12.408)		1050955792	1072.0	M
A 7 Motor Oil	10.731	(9.053-12.408)		808584990	824.8	
A 10 C22-C40	10.868	(8.348-13.389)		1114694787	801.9	
A 50 C25-C36	10.897	(9.386-12.408)		747035696	810.9	
A 41 C23-C40	11.048	(8.707-13.389)		1101818046	806.2	
A 8 C24-C40	11.221	(9.053-13.389)		1106915523	825.3	
56 Dotriacontane	11.374	11.425	-0.051	52945820	NC	M
A 51 C28-C40	11.853	(10.317-13.389)		916409721	844.8	
A 63 C29-C40	11.998	(10.607-13.389)		842000563	842.6	
42 n-Hexatriacontane	12.375	12.408	-0.033	79250122	NC	M
43 C40		13.389		ND		
$ 69 Stearic Acid (Surr)		0.000		ND		

QC Flag Legend

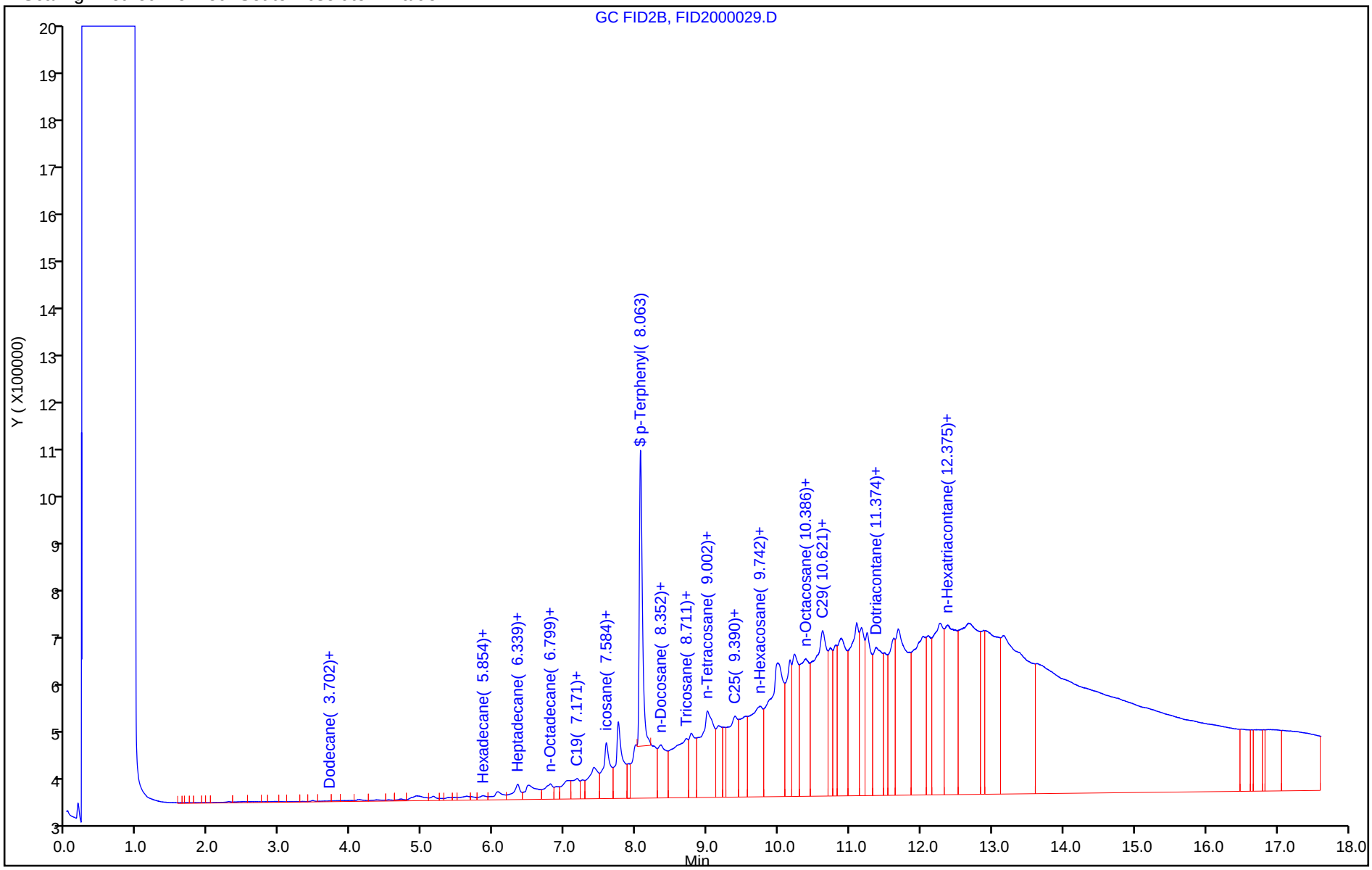
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 31-Aug-2018 14:09:06 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000029.D				
Injection Date:	31-Aug-2018 00:07:26	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88238-D-5-B	Lab Sample ID:	720-88238-5	Worklist Smp#:	29
Client ID:	DUP-14				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	79
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000029.D
Lims ID: 720-88238-D-5-B
Client ID: DUP-14
Sample Type: Client
Inject. Date: 31-Aug-2018 00:07:26 ALS Bottle#: 79 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053574-029
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\DRO6_B.m
Limit Group: DRO
Last Update: 31-Aug-2018 14:09:05 Calib Date: 30-Aug-2018 10:14:10
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 14:09:05

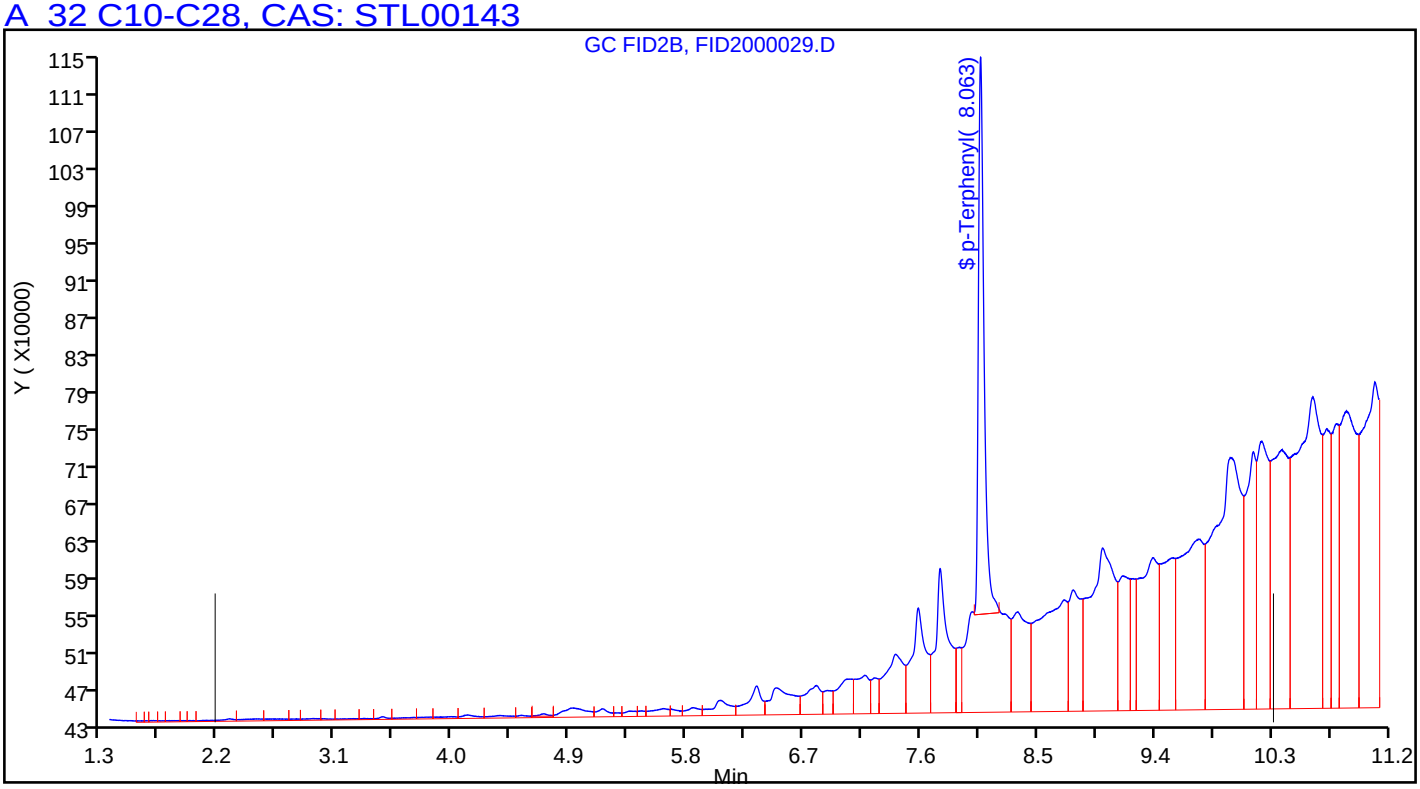
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	20.9	83.59

Report Date: 31-Aug-2018 14:09:10 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000029.D				
Injection Date:	31-Aug-2018 00:07:26	Instrument ID:	CHDRO6		
Lims ID:	720-88238-D-5-B	Lab Sample ID:	720-88238-5		
Client ID:	DUP-14				
Operator ID:	DCH	ALS Bottle#:	79	Worklist Smp#:	29
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

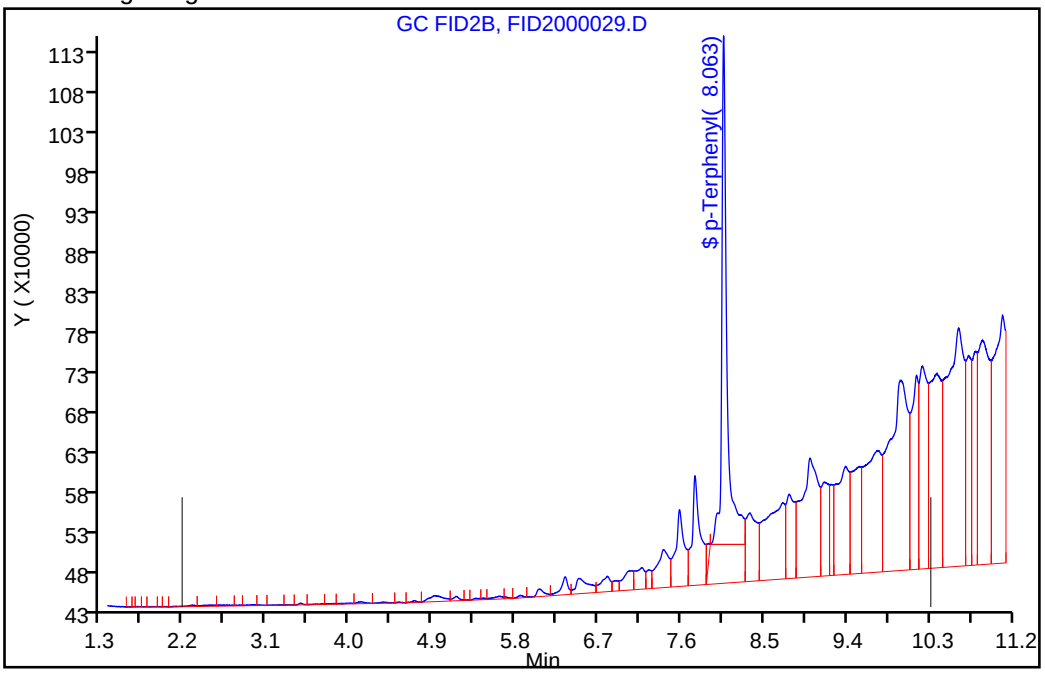
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000029.D				
Injection Date:	31-Aug-2018 00:07:26	Instrument ID:	CHDRO6		
Lims ID:	720-88238-D-5-B	Lab Sample ID:	720-88238-5		
Client ID:	DUP-14				
Operator ID:	DCH	ALS Bottle#:	79	Worklist Smp#:	29
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.245, CAS: STL00143

Signal: 1

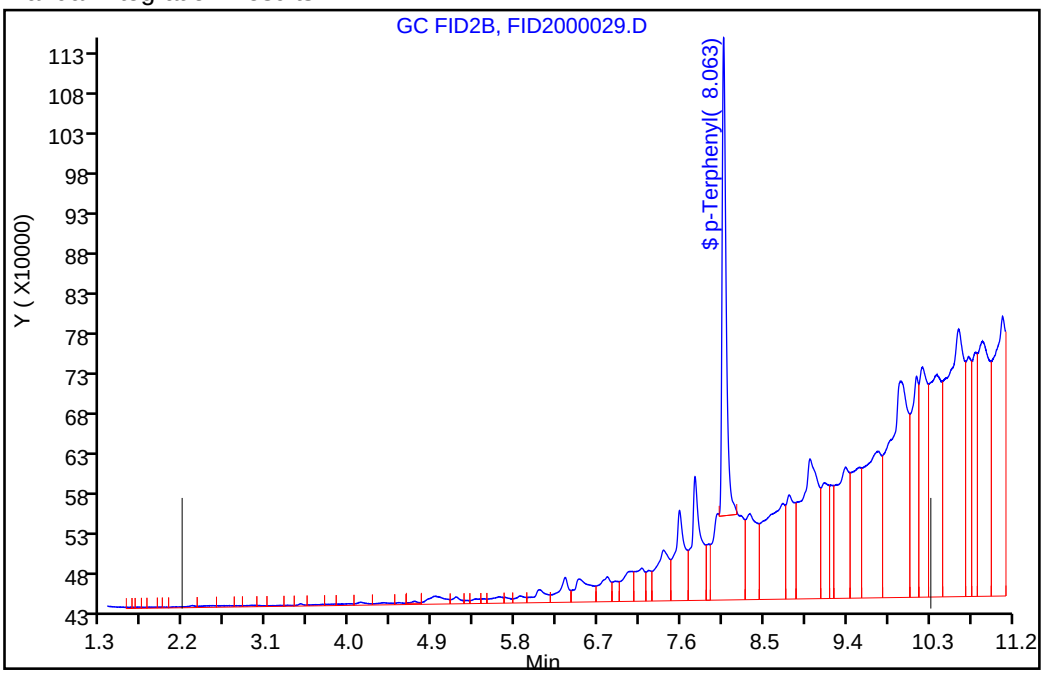
Processing Integration Results

RT: 6.24
Response: 409894657
Amount: 239.3900



Manual Integration Results

RT: 6.24
Response: 541438565
Amount: 313.8729



Reviewer: luj, 31-Aug-2018 14:08:25

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

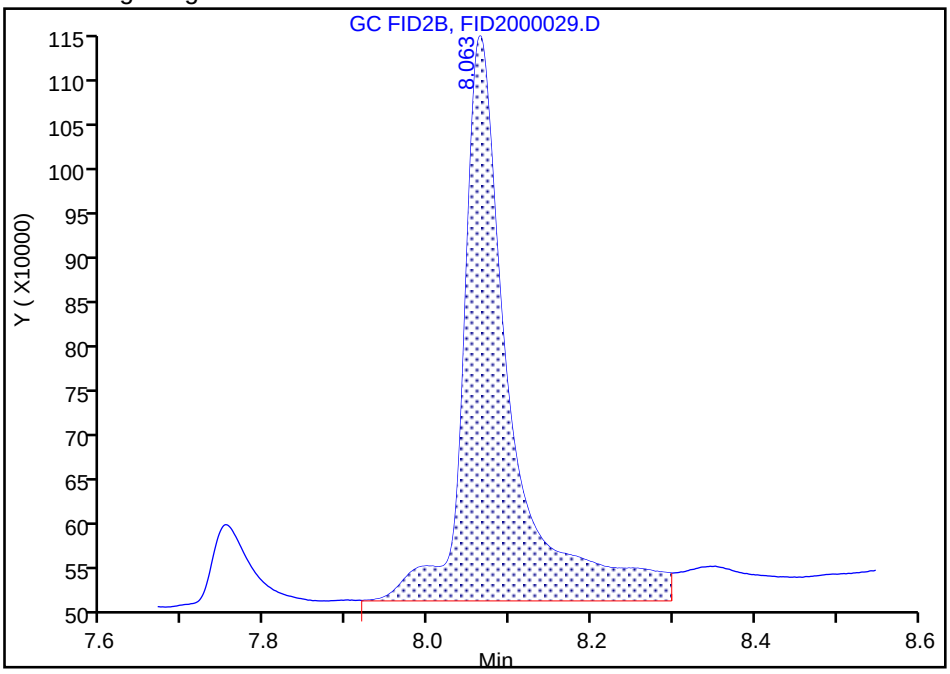
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000029.D				
Injection Date:	31-Aug-2018 00:07:26	Instrument ID:	CHDRO6		
Lims ID:	720-88238-D-5-B	Lab Sample ID:	720-88238-5		
Client ID:	DUP-14				
Operator ID:	DCH	ALS Bottle#:	79	Worklist Smp#:	29
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

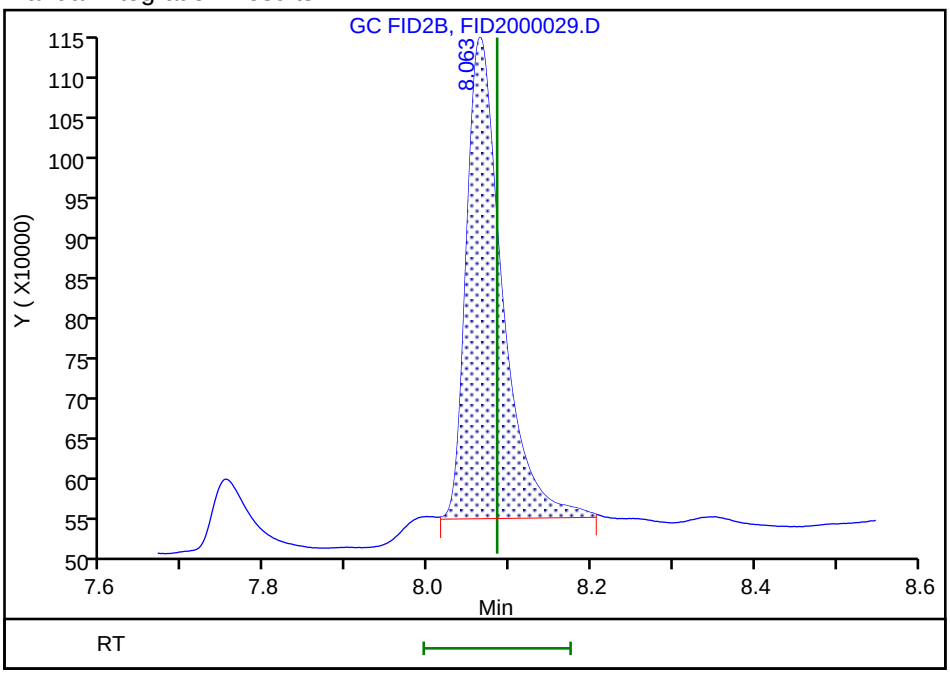
Processing Integration Results

RT: 8.06
Area: 50982045
Amount: 29.430578
Amount Units: mg/L



Manual Integration Results

RT: 8.06
Area: 36200172
Amount: 20.897396
Amount Units: mg/L



Reviewer: luj, 31-Aug-2018 14:08:40

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88238-1
SDG No.:
Client Sample ID: DUP-05
Lab Sample ID: 720-88238-2
Matrix: Solid
Lab File ID: 08281845.D
Analysis Method: 8260B
Date Collected: 08/23/2018 00:00
Sample wt/vol: 6.742(g)
Date Analyzed: 08/29/2018 06:01
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250405
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		3.7	0.89
67-64-1	Acetone	52		37	28
71-43-2	Benzene	ND		3.7	0.48
75-27-4	Dichlorobromomethane	ND		3.7	0.53
108-86-1	Bromobenzene	ND		3.7	0.59
74-97-5	Chlorobromomethane	ND		15	0.53
75-25-2	Bromoform	ND		3.7	1.5
74-83-9	Bromomethane	ND		7.4	0.59
78-93-3	2-Butanone (MEK)	ND		37	16
104-51-8	n-Butylbenzene	ND		3.7	0.74
135-98-8	sec-Butylbenzene	ND		3.7	0.53
98-06-6	tert-Butylbenzene	ND		3.7	0.54
75-15-0	Carbon disulfide	2.0	J	3.7	1.5
56-23-5	Carbon tetrachloride	ND		3.7	0.46
108-90-7	Chlorobenzene	ND		3.7	0.51
75-00-3	Chloroethane	ND		7.4	0.42
67-66-3	Chloroform	ND		3.7	0.49
74-87-3	Chloromethane	ND		7.4	0.59
95-49-8	2-Chlorotoluene	ND		3.7	0.48
106-43-4	4-Chlorotoluene	ND		3.7	0.50
124-48-1	Chlorodibromomethane	ND		3.7	0.53
95-50-1	1,2-Dichlorobenzene	ND		3.7	0.50
541-73-1	1,3-Dichlorobenzene	ND		3.7	0.53
106-46-7	1,4-Dichlorobenzene	ND		3.7	0.53
142-28-9	1,3-Dichloropropane	ND		3.7	0.54
563-58-6	1,1-Dichloropropene	ND		3.7	0.51
96-12-8	1,2-Dibromo-3-Chloropropane	ND		7.4	1.3
106-93-4	Ethylene Dibromide	ND		3.7	1.1
74-95-3	Dibromomethane	ND		7.4	0.64
75-71-8	Dichlorodifluoromethane	ND		7.4	0.59
75-34-3	1,1-Dichloroethane	ND		3.7	0.50
107-06-2	1,2-Dichloroethane	ND		3.7	0.56
75-35-4	1,1-Dichloroethene	ND	*	3.7	0.46
156-59-2	cis-1,2-Dichloroethene	12		3.7	0.50
156-60-5	trans-1,2-Dichloroethene	1.1	J	3.7	0.56
78-87-5	1,2-Dichloropropane	ND		3.7	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88238-1

SDG No.:

Client Sample ID: DUP-05 Lab Sample ID: 720-88238-2

Matrix: Solid Lab File ID: 08281845.D

Analysis Method: 8260B Date Collected: 08/23/2018 00:00

Sample wt/vol: 6.742(g) Date Analyzed: 08/29/2018 06:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250405 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		3.7	0.51
10061-02-6	trans-1,3-Dichloropropene	ND		3.7	0.50
100-41-4	Ethylbenzene	ND		3.7	0.56
87-68-3	Hexachlorobutadiene	ND		3.7	0.67
591-78-6	2-Hexanone	ND		37	7.4
98-82-8	Isopropylbenzene	ND		3.7	0.50
99-87-6	4-Isopropyltoluene	ND		3.7	1.9
75-09-2	Methylene Chloride	ND		7.4	4.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		37	7.4
91-20-3	Naphthalene	ND		7.4	1.1
103-65-1	N-Propylbenzene	ND		3.7	0.49
100-42-5	Styrene	ND		3.7	0.47
630-20-6	1,1,1,2-Tetrachloroethane	ND		3.7	0.56
79-34-5	1,1,2,2-Tetrachloroethane	ND		3.7	0.56
127-18-4	Tetrachloroethene	ND		3.7	0.50
108-88-3	Toluene	ND		3.7	0.53
87-61-6	1,2,3-Trichlorobenzene	ND		3.7	0.55
120-82-1	1,2,4-Trichlorobenzene	ND		3.7	0.53
71-55-6	1,1,1-Trichloroethane	ND		3.7	0.45
79-00-5	1,1,2-Trichloroethane	ND		3.7	0.52
79-01-6	Trichloroethene	ND		3.7	0.47
75-69-4	Trichlorofluoromethane	ND		3.7	0.42
96-18-4	1,2,3-Trichloropropane	ND		3.7	0.57
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	3.7	1.5
95-63-6	1,2,4-Trimethylbenzene	ND		3.7	1.2
108-67-8	1,3,5-Trimethylbenzene	ND		3.7	0.48
108-05-4	Vinyl acetate	ND		15	3.7
75-01-4	Vinyl chloride	ND		3.7	0.54
1330-20-7	Xylenes, Total	ND		3.7	0.90
594-20-7	2,2-Dichloropropane	ND		3.7	1.5
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		190	74

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88238-1

SDG No.:

Client Sample ID: DUP-05 Lab Sample ID: 720-88238-2

Matrix: Solid Lab File ID: 08281845.D

Analysis Method: 8260B Date Collected: 08/23/2018 00:00

Sample wt/vol: 6.742(g) Date Analyzed: 08/29/2018 06:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250405 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	87		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	110		60-140
2037-26-5	Toluene-d8 (Surr)	92		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281845.D
Lims ID: 720-88238-A-2-A
Client ID: DUP-05
Sample Type: Client
Inject. Date: 29-Aug-2018 06:01:30 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88238-A-2
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 10:05:31 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 10:06:50

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.819	6.819	0.000	0	265722	250.0	
* 2 Fluorobenzene	96	10.599	10.599	0.000	99	755642	25.0	
* 4 Chlorobenzene-d5	117	14.439	14.439	0.000	87	540409	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.579	0.000	95	228608	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.190	9.190	0.000	93	66588	7.85	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.702	9.702	0.000	0	87675	8.25	
$ 10 Toluene-d8 (Surr)	98	12.708	12.708	0.000	93	211382	6.92	
$ 11 4-Bromofluorobenzene	95	15.933	15.933	0.000	95	68601	6.53	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.048	0.000	85	52488	5.93	
$ 6 BFB	95	8.812	6.434	2.378	0	1686	NR	
28 Acetone	58	6.368	6.368	0.000	99	31259	35.3	
34 Methylene Chloride	84	7.081	7.075	0.006	96	897	0.1097	
144 Methyl acetate	43	7.124	7.124	0.000	99	12213	1.89	
37 Carbon disulfide	76	7.367	7.367	0.000	100	23908	1.35	
38 trans-1,2-Dichloroethene	96	7.873	7.867	0.006	97	5757	0.7715	
45 2-Butanone (MEK)	72	8.642	8.635	0.007	99	3500	3.46	
49 cis-1,2-Dichloroethene	61	8.812	8.812	0.000	82	103182	8.30	
140 Ethyl acetate	43	9.007	9.001	0.006	99	8609	0.8603	
59 Benzene	78	10.367	10.367	0.000	94	3395	0.1056	
75 Toluene	92	12.793	12.787	0.006	97	2649	0.1491	
149 1-Chlorohexane	55	14.439	14.354	0.085	33	5780	0.5997	
128 Butyl Ether	87	14.665	14.659	0.006	97	2088	0.3883	
29 Pentane	43	6.374	6.410	-0.036	70	108623	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	1302361	18.8	
A 154 C6-C8	1	10.855	(8.556-13.153)		0	522540	7.54	
A 155 C6-C9	1	11.845	(8.556-15.134)		0	612569	8.84	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	1398268	20.2	
A 119 C6-C10	1	12.735	(8.556-16.914)		0	667140	9.63	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	1262514	18.2	
A 120 C6-C12	1	14.281	(8.556-20.005)		0	763047	11.0	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	148915	2.15	

Report Date: 29-Aug-2018 10:06:51 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281845.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
A 121 C7-C12	1	15.448	(10.891-20.005)		0	299942	4.33	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

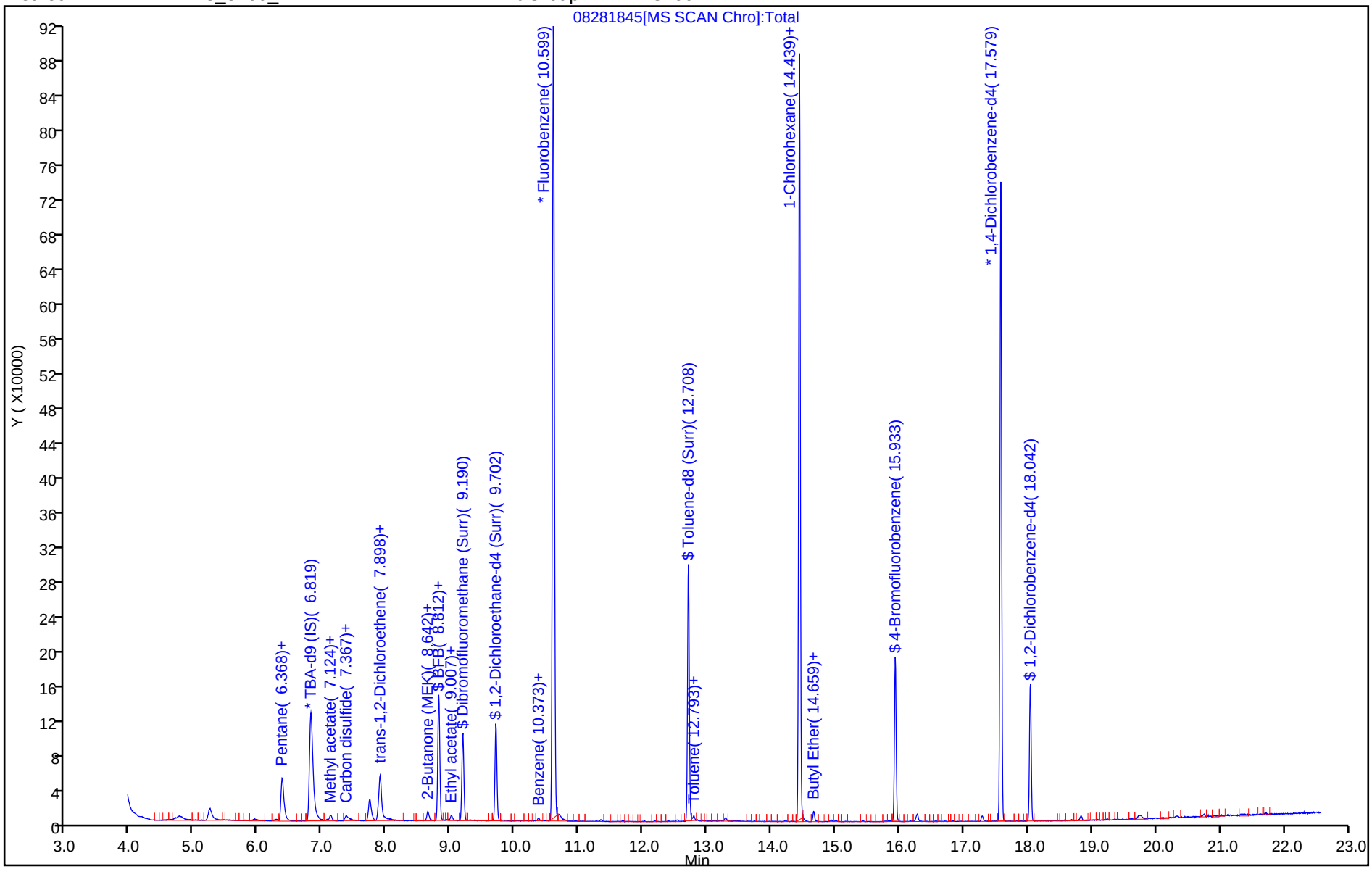
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 29-Aug-2018 10:06:51 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281845.D				
Injection Date:	29-Aug-2018 06:01:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88238-A-2-A	Lab Sample ID:	720-88238-2	Worklist Smp#:	24
Client ID:	DUP-05				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281845.D
Lims ID: 720-88238-A-2-A
Client ID: DUP-05
Sample Type: Client
Inject. Date: 29-Aug-2018 06:01:30 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88238-A-2
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 10:05:31 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 10:06:50

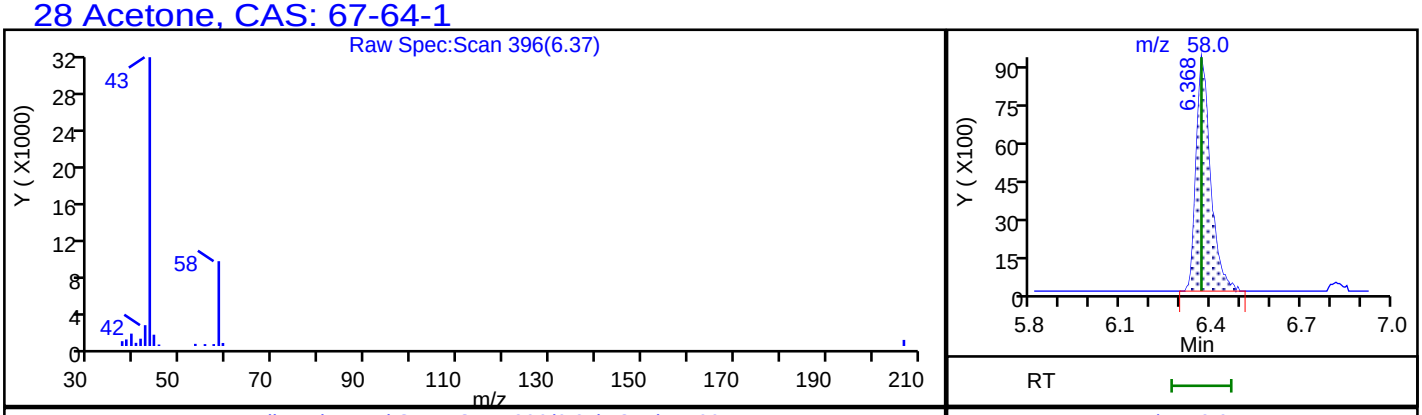
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.25	110.03
$ 10 Toluene-d8 (Surr)	7.50	6.92	92.22
$ 11 4-Bromofluorobenzene	7.50	6.53	87.03
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00
$ 6 BFB	0.0	0	0.00

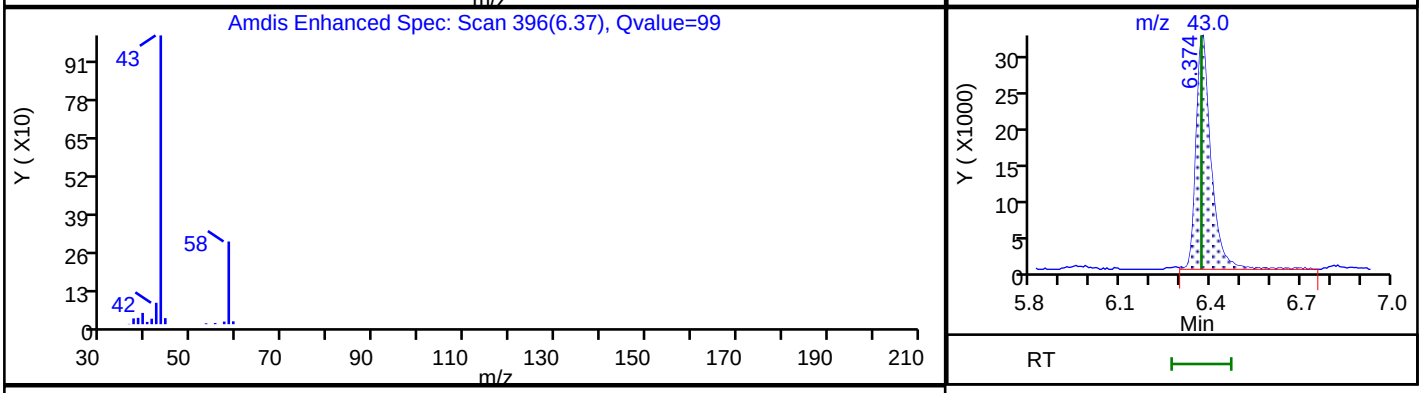
Report Date: 29-Aug-2018 10:06:51 Chrom Revision: 2.3 19-Jul-2018 15:14:50

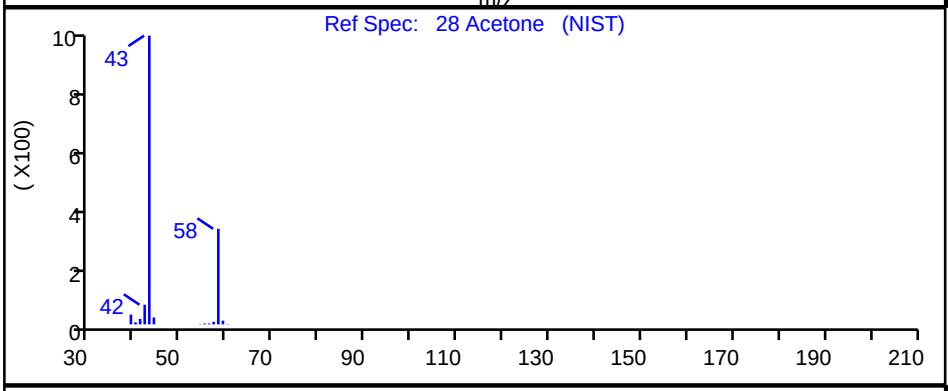
TestAmerica Pleasanton

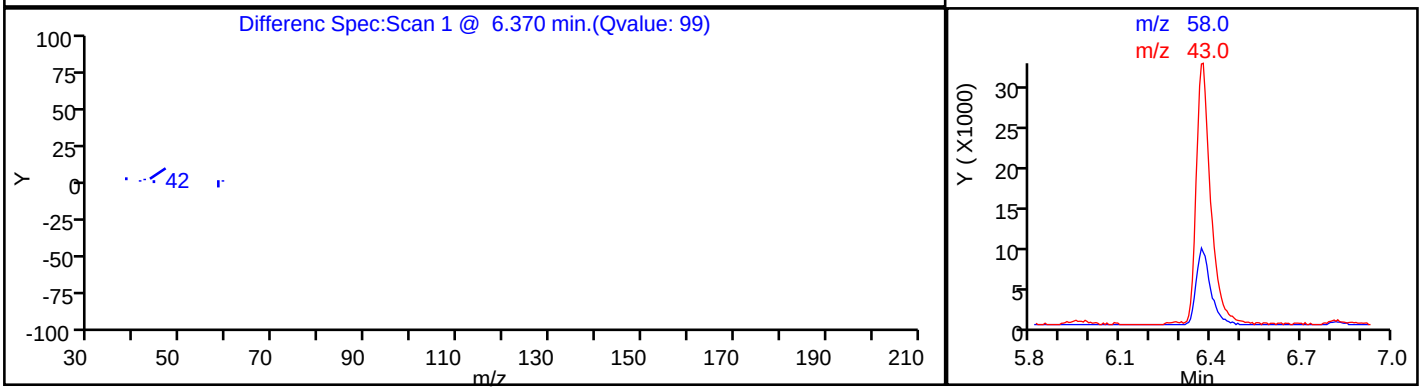
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281845.D				
Injection Date:	29-Aug-2018 06:01:30	Instrument ID:	HP13		
Lims ID:	720-88238-A-2-A	Lab Sample ID:	720-88238-2		
Client ID:	DUP-05				
Operator ID:	VOA	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1







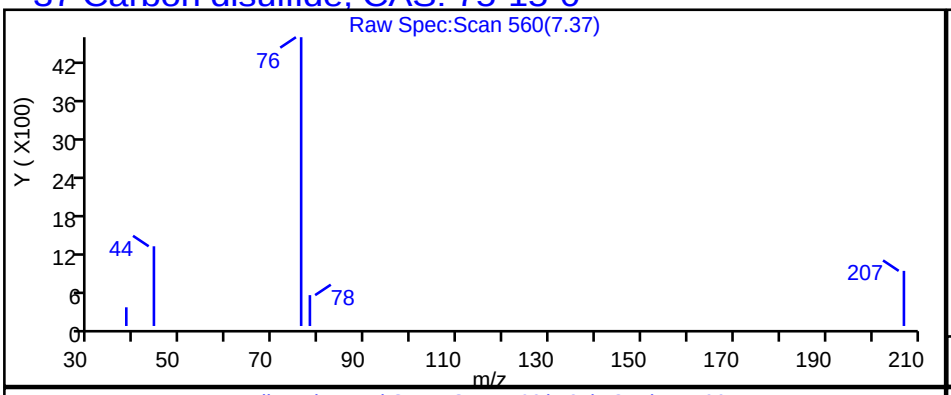


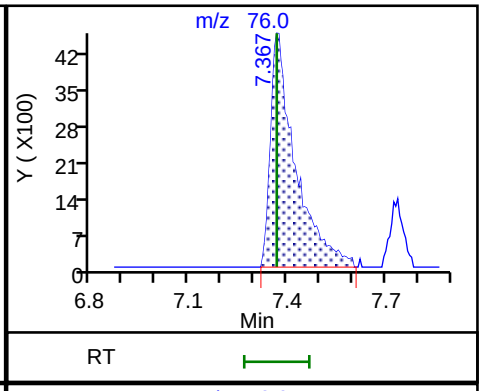
Report Date: 29-Aug-2018 10:06:52 Chrom Revision: 2.3 19-Jul-2018 15:14:50

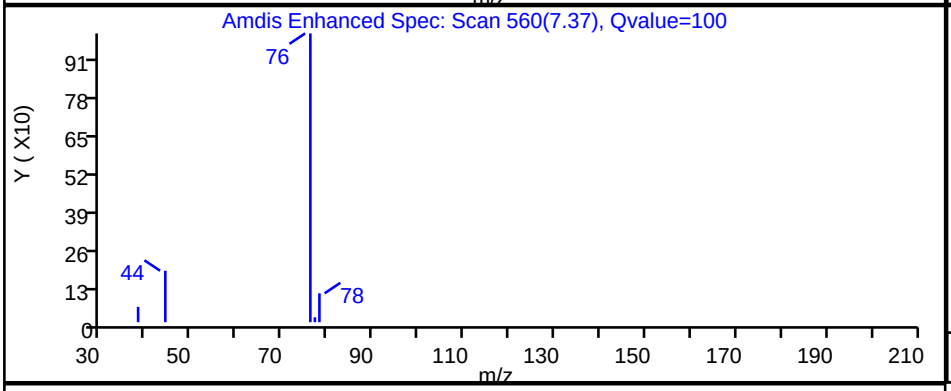
TestAmerica Pleasanton

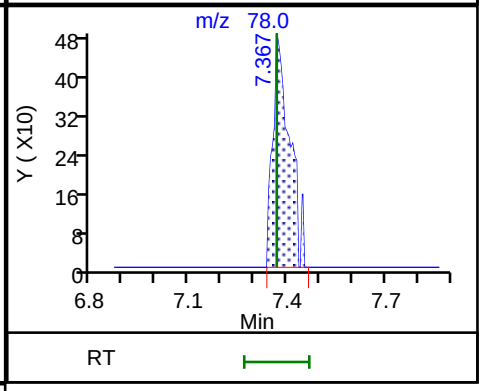
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281845.D				
Injection Date:	29-Aug-2018 06:01:30	Instrument ID:	HP13		
Lims ID:	720-88238-A-2-A	Lab Sample ID:	720-88238-2		
Client ID:	DUP-05				
Operator ID:	VOA	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

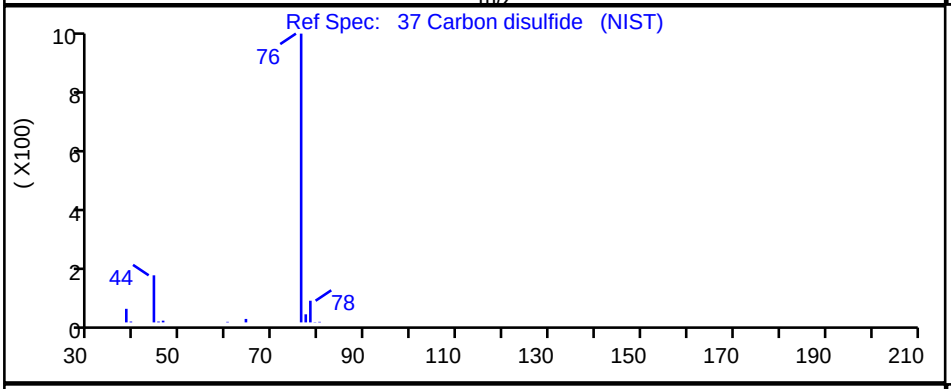
37 Carbon disulfide, CAS: 75-15-0

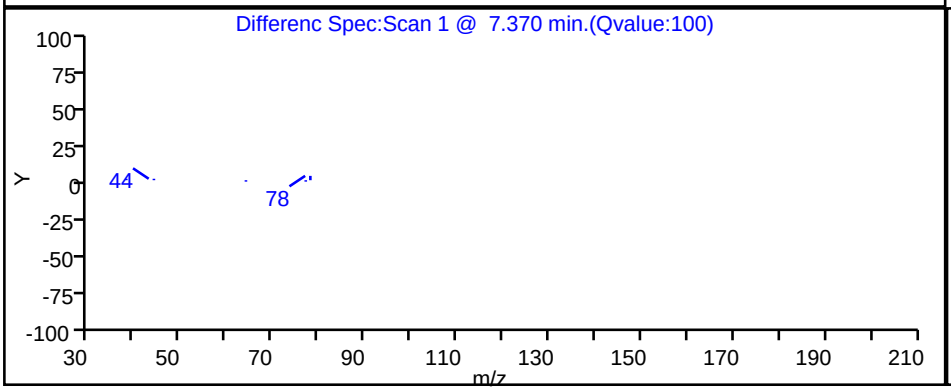


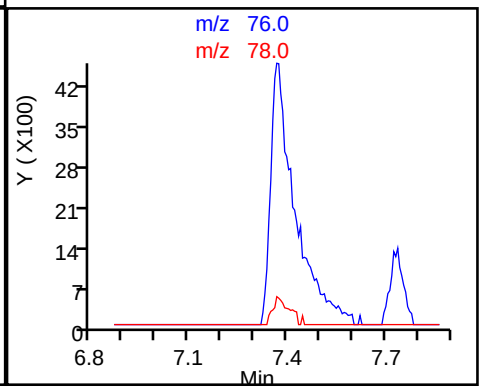










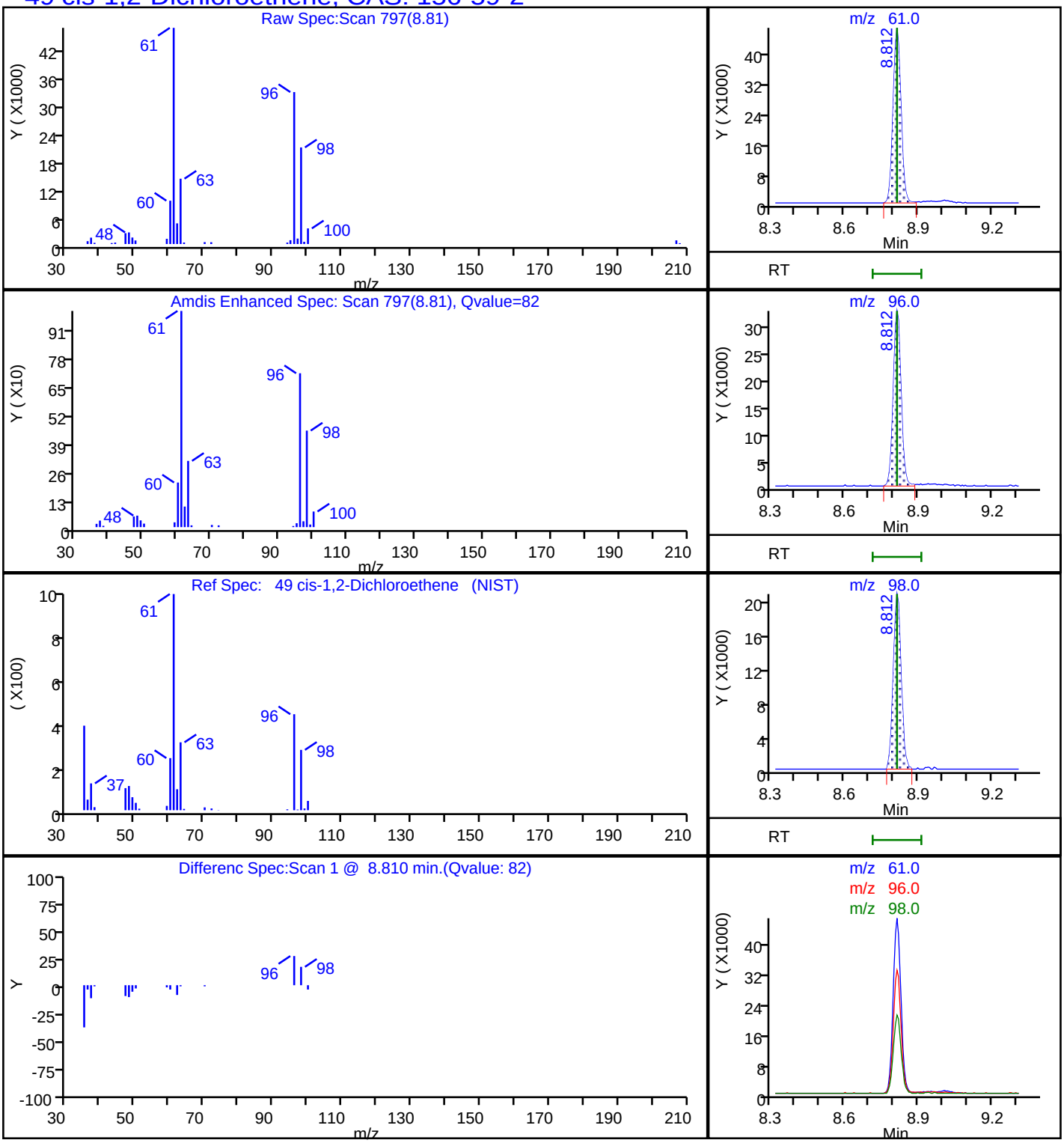


Report Date: 29-Aug-2018 10:06:52 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281845.D				
Injection Date:	29-Aug-2018 06:01:30	Instrument ID:	HP13		
Lims ID:	720-88238-A-2-A	Lab Sample ID:	720-88238-2		
Client ID:	DUP-05				
Operator ID:	VOA	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

49 cis-1,2-Dichloroethene, CAS: 156-59-2

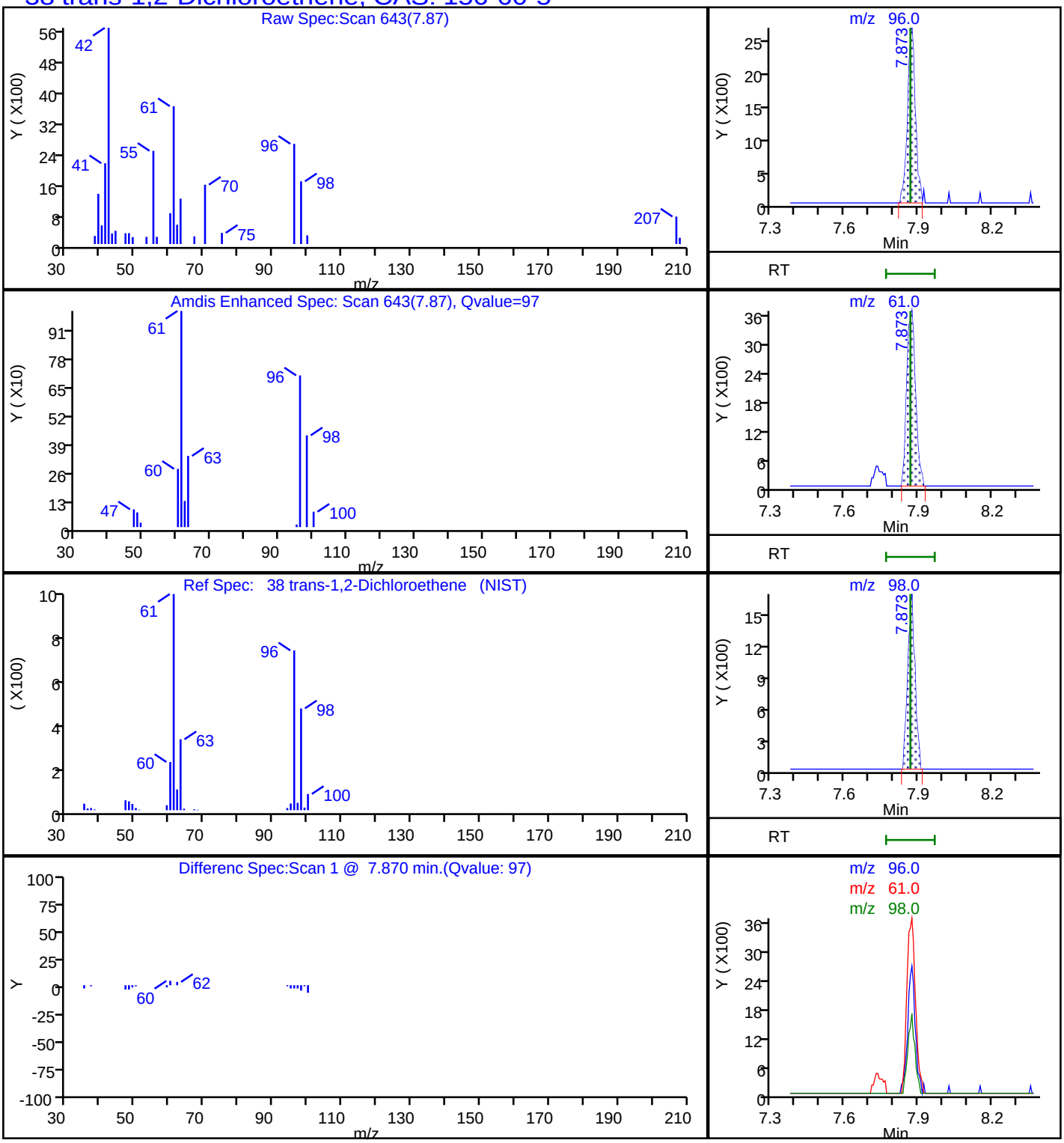


Report Date: 29-Aug-2018 10:06:52 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281845.D				
Injection Date:	29-Aug-2018 06:01:30	Instrument ID:	HP13		
Lims ID:	720-88238-A-2-A	Lab Sample ID:	720-88238-2		
Client ID:	DUP-05				
Operator ID:	VOA	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

38 trans-1,2-Dichloroethene, CAS: 156-60-5

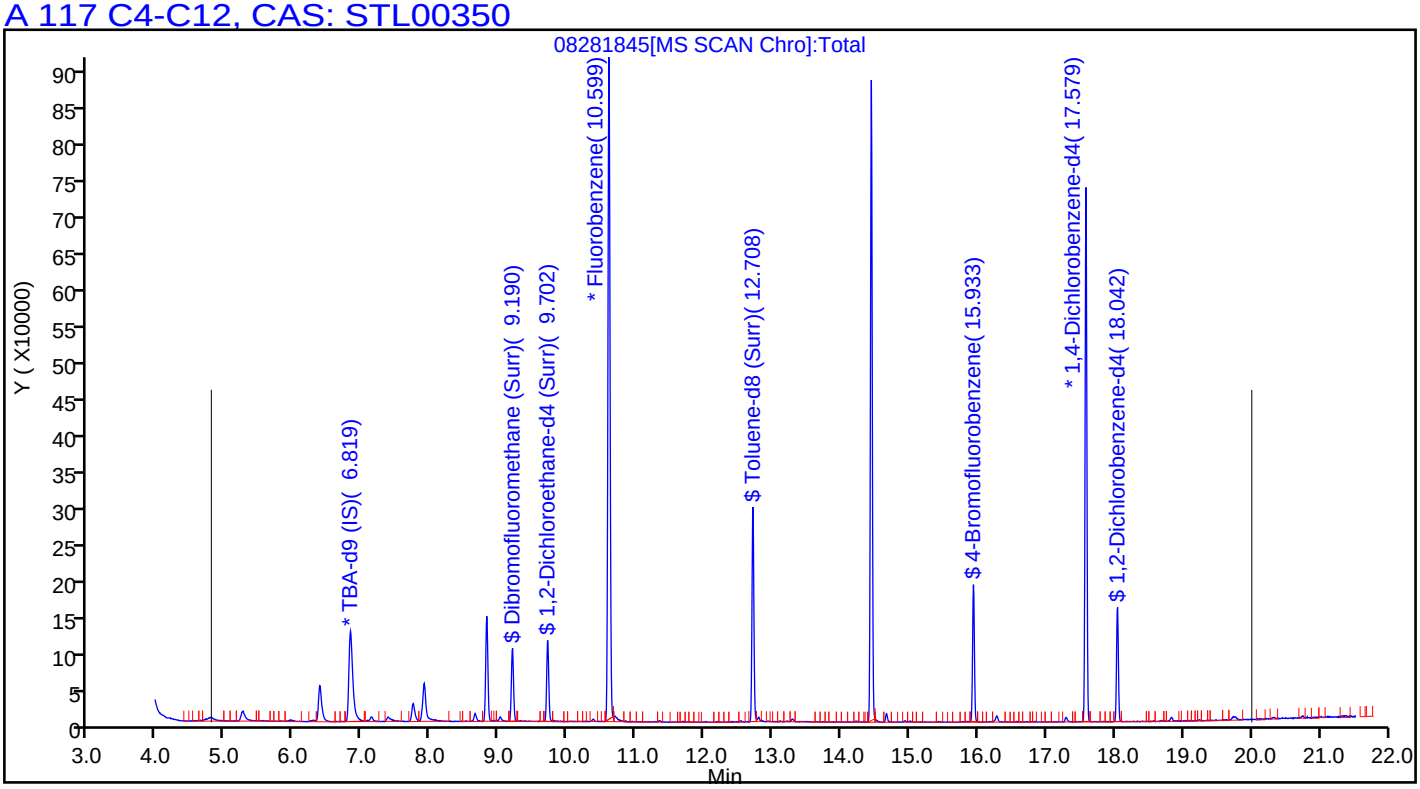


Report Date: 29-Aug-2018 10:06:52 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281845.D				
Injection Date:	29-Aug-2018 06:01:30	Instrument ID:	HP13		
Lims ID:	720-88238-A-2-A	Lab Sample ID:	720-88238-2		
Client ID:	DUP-05				
Operator ID:	VOA	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88238-1
SDG No.:
Client Sample ID: DUP-15
Lab Sample ID: 720-88238-3
Matrix: Solid
Lab File ID: 08291823.D
Analysis Method: 8260B
Date Collected: 08/24/2018 00:00
Sample wt/vol: 3.078(g)
Date Analyzed: 08/29/2018 17:36
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250452
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		8.1	1.9
67-64-1	Acetone	ND		81	62
71-43-2	Benzene	ND		8.1	1.1
75-27-4	Dichlorobromomethane	ND		8.1	1.2
108-86-1	Bromobenzene	ND		8.1	1.3
74-97-5	Chlorobromomethane	ND		32	1.2
75-25-2	Bromoform	ND		8.1	3.2
74-83-9	Bromomethane	ND		16	1.3
78-93-3	2-Butanone (MEK)	ND		81	34
104-51-8	n-Butylbenzene	ND		8.1	1.6
135-98-8	sec-Butylbenzene	ND		8.1	1.2
98-06-6	tert-Butylbenzene	ND		8.1	1.2
75-15-0	Carbon disulfide	ND		8.1	3.2
56-23-5	Carbon tetrachloride	ND		8.1	1.0
108-90-7	Chlorobenzene	ND		8.1	1.1
75-00-3	Chloroethane	ND		16	0.91
67-66-3	Chloroform	ND		8.1	1.1
74-87-3	Chloromethane	ND		16	1.3
95-49-8	2-Chlorotoluene	ND		8.1	1.1
106-43-4	4-Chlorotoluene	ND		8.1	1.1
124-48-1	Chlorodibromomethane	ND		8.1	1.2
95-50-1	1,2-Dichlorobenzene	ND		8.1	1.1
541-73-1	1,3-Dichlorobenzene	ND		8.1	1.2
106-46-7	1,4-Dichlorobenzene	ND		8.1	1.2
142-28-9	1,3-Dichloropropane	ND		8.1	1.2
563-58-6	1,1-Dichloropropene	ND		8.1	1.1
96-12-8	1,2-Dibromo-3-Chloropropane	ND		16	2.8
106-93-4	Ethylene Dibromide	ND		8.1	2.3
74-95-3	Dibromomethane	ND		16	1.4
75-71-8	Dichlorodifluoromethane	ND		16	1.3
75-34-3	1,1-Dichloroethane	ND		8.1	1.1
107-06-2	1,2-Dichloroethane	ND		8.1	1.2
75-35-4	1,1-Dichloroethene	ND	*	8.1	1.0
156-59-2	cis-1,2-Dichloroethene	ND		8.1	1.1
156-60-5	trans-1,2-Dichloroethene	ND		8.1	1.2
78-87-5	1,2-Dichloropropane	ND		8.1	1.0

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88238-1

SDG No.:

Client Sample ID: DUP-15 Lab Sample ID: 720-88238-3

Matrix: Solid Lab File ID: 08291823.D

Analysis Method: 8260B Date Collected: 08/24/2018 00:00

Sample wt/vol: 3.078(g) Date Analyzed: 08/29/2018 17:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250452 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		8.1	1.1
10061-02-6	trans-1,3-Dichloropropene	ND		8.1	1.1
100-41-4	Ethylbenzene	ND		8.1	1.2
87-68-3	Hexachlorobutadiene	ND		8.1	1.5
591-78-6	2-Hexanone	ND		81	16
98-82-8	Isopropylbenzene	ND		8.1	1.1
99-87-6	4-Isopropyltoluene	ND		8.1	4.1
75-09-2	Methylene Chloride	ND		16	9.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		81	16
91-20-3	Naphthalene	ND		16	2.4
103-65-1	N-Propylbenzene	ND		8.1	1.1
100-42-5	Styrene	ND		8.1	1.0
630-20-6	1,1,1,2-Tetrachloroethane	ND		8.1	1.2
79-34-5	1,1,2,2-Tetrachloroethane	ND		8.1	1.2
127-18-4	Tetrachloroethene	ND		8.1	1.1
108-88-3	Toluene	ND		8.1	1.2
87-61-6	1,2,3-Trichlorobenzene	ND		8.1	1.2
120-82-1	1,2,4-Trichlorobenzene	ND		8.1	1.2
71-55-6	1,1,1-Trichloroethane	ND		8.1	0.99
79-00-5	1,1,2-Trichloroethane	ND		8.1	1.1
79-01-6	Trichloroethene	ND		8.1	1.0
75-69-4	Trichlorofluoromethane	ND		8.1	0.91
96-18-4	1,2,3-Trichloropropane	ND		8.1	1.3
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	8.1	3.4
95-63-6	1,2,4-Trimethylbenzene	ND		8.1	2.7
108-67-8	1,3,5-Trimethylbenzene	ND		8.1	1.1
108-05-4	Vinyl acetate	ND		32	8.1
75-01-4	Vinyl chloride	ND		8.1	1.2
1330-20-7	Xylenes, Total	ND		8.1	2.0
594-20-7	2,2-Dichloropropane	ND		8.1	3.2
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		410	160

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88238-1

SDG No.:

Client Sample ID: DUP-15 Lab Sample ID: 720-88238-3

Matrix: Solid Lab File ID: 08291823.D

Analysis Method: 8260B Date Collected: 08/24/2018 00:00

Sample wt/vol: 3.078(g) Date Analyzed: 08/29/2018 17:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250452 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	96		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		60-140
2037-26-5	Toluene-d8 (Surr)	93		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180829-53540.b\08291823.D
Lims ID: 720-88238-A-3-A
Client ID: DUP-15
Sample Type: Client
Inject. Date: 29-Aug-2018 17:36:30 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88238-A-3
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180829-53540.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 09:14:32 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: chaijita Date: 30-Aug-2018 09:14:32

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.825	6.819	0.006	0	293437	250.0	
* 2 Fluorobenzene	96	10.599	10.599	0.000	99	830592	25.0	
* 4 Chlorobenzene-d5	117	14.439	14.445	-0.006	87	640352	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.585	-0.006	95	337268	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.190	9.190	0.000	94	71422	7.66	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.702	9.709	-0.006	0	90753	7.77	
$ 10 Toluene-d8 (Surr)	98	12.708	12.708	0.000	93	234127	6.97	
$ 11 4-Bromofluorobenzene	95	15.933	15.926	0.000	94	89639	7.20	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.036	0.000	85	80910	6.19	
28 Acetone	58	6.380	6.374	0.006	98	8431	8.65	
34 Methylene Chloride	84	7.075	7.081	-0.006	95	3000	0.3338	
144 Methyl acetate	43	7.130	7.124	0.006	96	2686	0.3784	
140 Ethyl acetate	43	9.007	9.001	0.006	98	9692	0.8811	
59 Benzene	78	10.373	10.373	0.000	95	3365	0.0952	
75 Toluene	92	12.787	12.788	-0.006	98	7254	0.3446	
107 n-Butylbenzene	91	18.164	18.164	-0.006	93	1578	0.0478	
142 1,3,5-Trichlorobenzene	180	19.719	19.718	-0.006	89	1128	0.0694	
111 1,2,4-Trichlorobenzene	180	20.408	20.407	-0.006	86	1848	0.1245	
112 Naphthalene	128	20.749	20.742	0.000	97	7263	0.2092	
113 Hexachlorobutadiene	225	20.798	20.797	-0.006	86	1352	0.1549	
114 1,2,3-Trichlorobenzene	180	21.011	21.010	-0.006	93	2502	0.1787	
29 Pentane	43	6.374	6.410	-0.036	70	31538	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	480213	6.31	
A 154 C6-C8	1	10.852	(8.550-13.153)		0	167447	2.20	
A 155 C6-C9	1	11.842	(8.550-15.134)		0	217605	2.86	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	570328	7.49	
A 119 C6-C10	1	12.732	(8.550-16.914)		0	247317	3.25	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	541821	7.11	
A 120 C6-C12	1	14.278	(8.550-20.005)		0	337432	4.43	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	84366	1.11	
A 121 C7-C12	1	15.451	(10.897-20.005)		0	244343	3.21	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

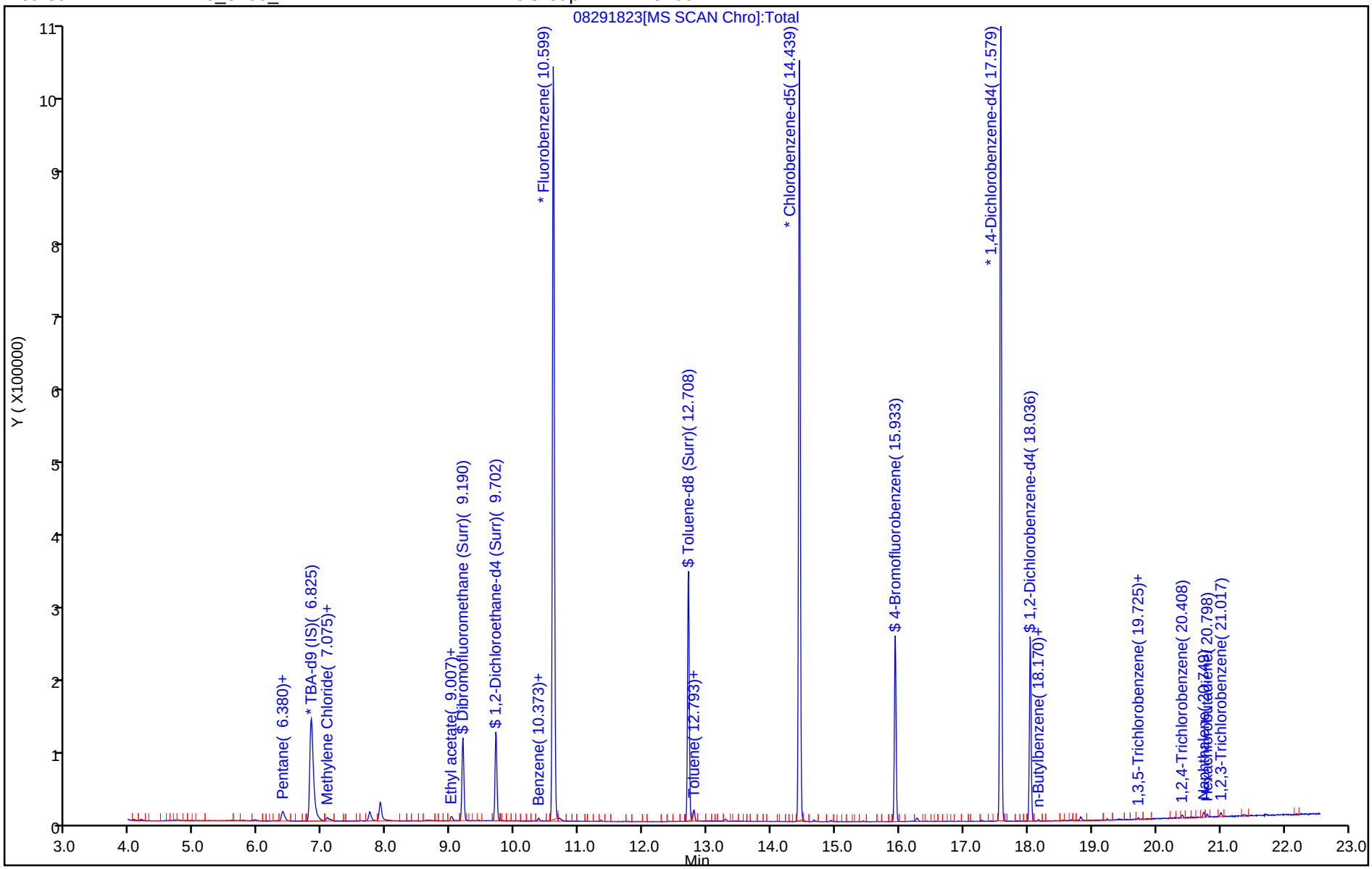
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 30-Aug-2018 09:14:33 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180829-53540.b\08291823.D				
Injection Date:	29-Aug-2018 17:36:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88238-A-3-A	Lab Sample ID:	720-88238-3	Worklist Smp#:	22
Client ID:	DUP-15				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180829-53540.b\08291823.D
Lims ID: 720-88238-A-3-A
Client ID: DUP-15
Sample Type: Client
Inject. Date: 29-Aug-2018 17:36:30 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88238-A-3
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180829-53540.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 09:14:32 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: chaijita Date: 30-Aug-2018 09:14:32

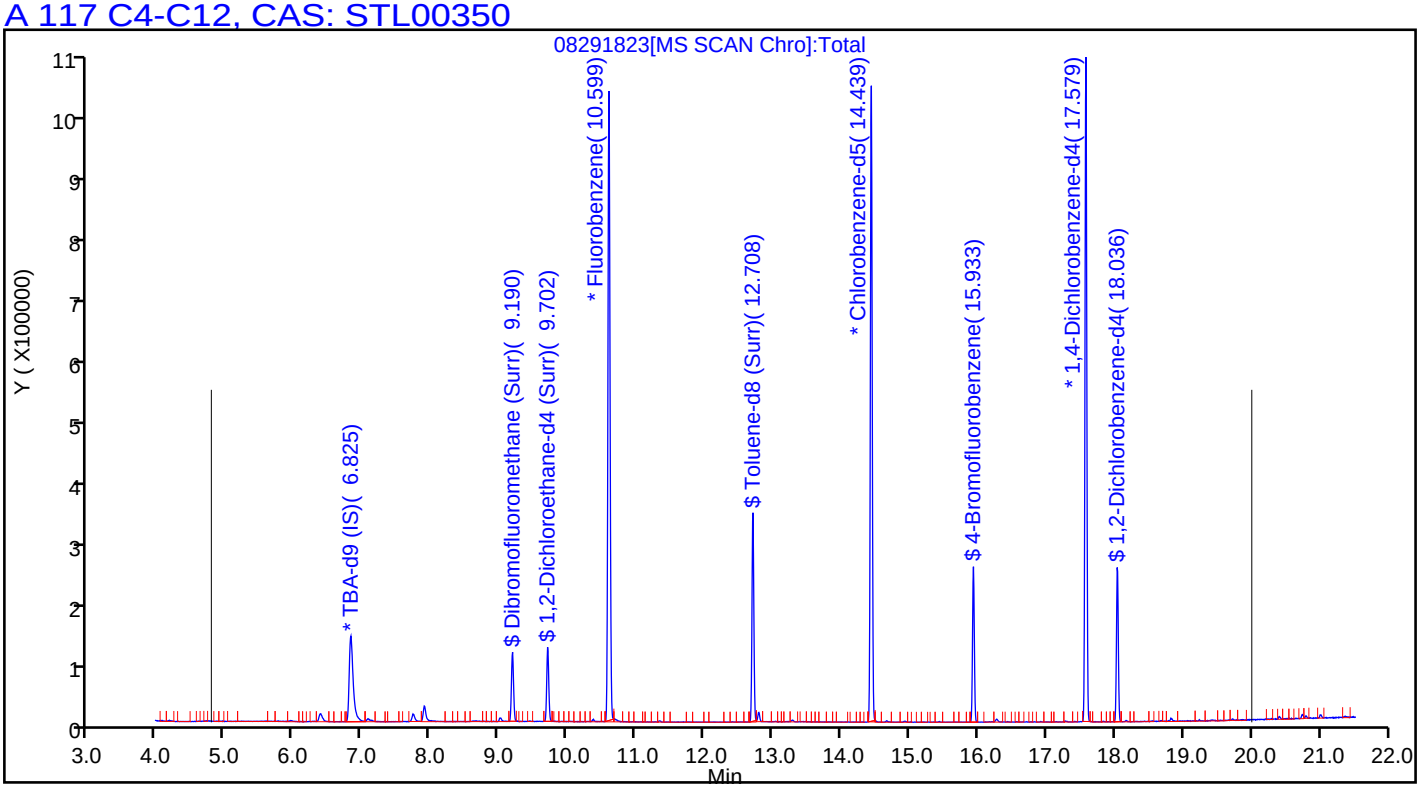
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.77	103.61
$ 10 Toluene-d8 (Surr)	7.50	6.97	92.93
$ 11 4-Bromofluorobenzene	7.50	7.20	95.97
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 30-Aug-2018 09:14:35 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180829-53540.b\08291823.D				
Injection Date:	29-Aug-2018 17:36:30	Instrument ID:	HP13		
Lims ID:	720-88238-A-3-A	Lab Sample ID:	720-88238-3		
Client ID:	DUP-15				
Operator ID:	VOA	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88238-1
SDG No.:
Client Sample ID: DUP-25
Lab Sample ID: 720-88238-4
Matrix: Solid
Lab File ID: 08291833.D
Analysis Method: 8260B
Date Collected: 08/24/2018 00:00
Sample wt/vol: 5.008(g)
Date Analyzed: 08/29/2018 21:24
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250528
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		5.0	1.2
67-64-1	Acetone	ND		50	38
71-43-2	Benzene	ND		5.0	0.65
75-27-4	Dichlorobromomethane	ND		5.0	0.72
108-86-1	Bromobenzene	ND	*	5.0	0.79
74-97-5	Chlorobromomethane	ND		20	0.72
75-25-2	Bromoform	ND		5.0	2.0
74-83-9	Bromomethane	ND		10	0.79
78-93-3	2-Butanone (MEK)	ND		50	21
104-51-8	n-Butylbenzene	ND	*	5.0	1.0
135-98-8	sec-Butylbenzene	ND	*	5.0	0.72
98-06-6	tert-Butylbenzene	ND	*	5.0	0.73
75-15-0	Carbon disulfide	ND		5.0	2.0
56-23-5	Carbon tetrachloride	ND		5.0	0.62
108-90-7	Chlorobenzene	ND		5.0	0.69
75-00-3	Chloroethane	ND		10	0.56
67-66-3	Chloroform	ND		5.0	0.66
74-87-3	Chloromethane	ND		10	0.79
95-49-8	2-Chlorotoluene	ND	*	5.0	0.65
106-43-4	4-Chlorotoluene	ND	*	5.0	0.68
124-48-1	Chlorodibromomethane	ND		5.0	0.71
95-50-1	1,2-Dichlorobenzene	ND	*	5.0	0.68
541-73-1	1,3-Dichlorobenzene	ND	*	5.0	0.72
106-46-7	1,4-Dichlorobenzene	ND	*	5.0	0.71
142-28-9	1,3-Dichloropropane	ND		5.0	0.73
563-58-6	1,1-Dichloropropene	ND		5.0	0.69
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	10	1.7
106-93-4	Ethylene Dibromide	ND		5.0	1.4
74-95-3	Dibromomethane	ND		10	0.86
75-71-8	Dichlorodifluoromethane	ND		10	0.79
75-34-3	1,1-Dichloroethane	ND		5.0	0.68
107-06-2	1,2-Dichloroethane	ND		5.0	0.76
75-35-4	1,1-Dichloroethene	ND	*	5.0	0.62
156-59-2	cis-1,2-Dichloroethene	ND		5.0	0.68
156-60-5	trans-1,2-Dichloroethene	ND		5.0	0.75
78-87-5	1,2-Dichloropropane	ND		5.0	0.63

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88238-1
SDG No.:
Client Sample ID: DUP-25
Lab Sample ID: 720-88238-4
Matrix: Solid
Lab File ID: 08291833.D
Analysis Method: 8260B
Date Collected: 08/24/2018 00:00
Sample wt/vol: 5.008(g)
Date Analyzed: 08/29/2018 21:24
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250528
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	0.69
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	0.67
100-41-4	Ethylbenzene	ND		5.0	0.75
87-68-3	Hexachlorobutadiene	ND	*	5.0	0.90
591-78-6	2-Hexanone	ND		50	10
98-82-8	Isopropylbenzene	ND		5.0	0.68
99-87-6	4-Isopropyltoluene	ND	*	5.0	2.5
75-09-2	Methylene Chloride	ND		10	5.6
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	10
91-20-3	Naphthalene	ND	*	10	1.5
103-65-1	N-Propylbenzene	ND	*	5.0	0.66
100-42-5	Styrene	ND		5.0	0.63
630-20-6	1,1,1,2-Tetrachloroethane	ND		5.0	0.76
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	5.0	0.75
127-18-4	Tetrachloroethene	ND		5.0	0.67
108-88-3	Toluene	ND		5.0	0.71
87-61-6	1,2,3-Trichlorobenzene	ND	*	5.0	0.74
120-82-1	1,2,4-Trichlorobenzene	ND	*	5.0	0.71
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.61
79-00-5	1,1,2-Trichloroethane	ND		5.0	0.70
79-01-6	Trichloroethene	ND		5.0	0.63
75-69-4	Trichlorofluoromethane	ND		5.0	0.56
96-18-4	1,2,3-Trichloropropane	ND	*	5.0	0.77
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1
95-63-6	1,2,4-Trimethylbenzene	ND	*	5.0	1.6
108-67-8	1,3,5-Trimethylbenzene	ND	*	5.0	0.65
108-05-4	Vinyl acetate	ND		20	5.0
75-01-4	Vinyl chloride	ND		5.0	0.73
1330-20-7	Xylenes, Total	ND		5.0	1.2
594-20-7	2,2-Dichloropropane	ND		5.0	2.0
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		250	100

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88238-1

SDG No.:

Client Sample ID: DUP-25 Lab Sample ID: 720-88238-4

Matrix: Solid Lab File ID: 08291833.D

Analysis Method: 8260B Date Collected: 08/24/2018 00:00

Sample wt/vol: 5.008(g) Date Analyzed: 08/29/2018 21:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250528 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	79		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	129		60-140
2037-26-5	Toluene-d8 (Surr)	85		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291833.D
Lims ID: 720-88238-A-4-A
Client ID: DUP-25
Sample Type: Client
Inject. Date: 29-Aug-2018 21:24:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88238-A-4
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 09:10:00 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: sanjumnair Date: 31-Aug-2018 08:47:10

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	187725	250.0	
* 2 Fluorobenzene	96	10.709	10.709	0.000	98	807666	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.554	0.010	86	500077	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	95	140704	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.305	9.294	0.011	92	56108	8.20	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.812	9.812	0.000	0	70896	9.65	
$ 10 Toluene-d8 (Surr)	98	12.822	12.822	0.000	94	203937	6.36	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	91	46014	5.91	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	84	29780	6.05	
28 Acetone	58	6.474	6.474	0.000	98	4319	6.96	
124 Butane	43	5.006	4.996	0.010	2	954	NR	
138 n-Nonane	43	15.166	15.198	-0.032	1	302	NR	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	505132	8.10	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	243598	3.91	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	257580	4.13	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	568552	9.12	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	278814	4.47	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	278814	NC	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	542591	8.70	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	342234	5.49	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	75205	1.21	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	192808	3.09	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard
NC - Not Calibrated
s - Failed ISTD Recovery Test

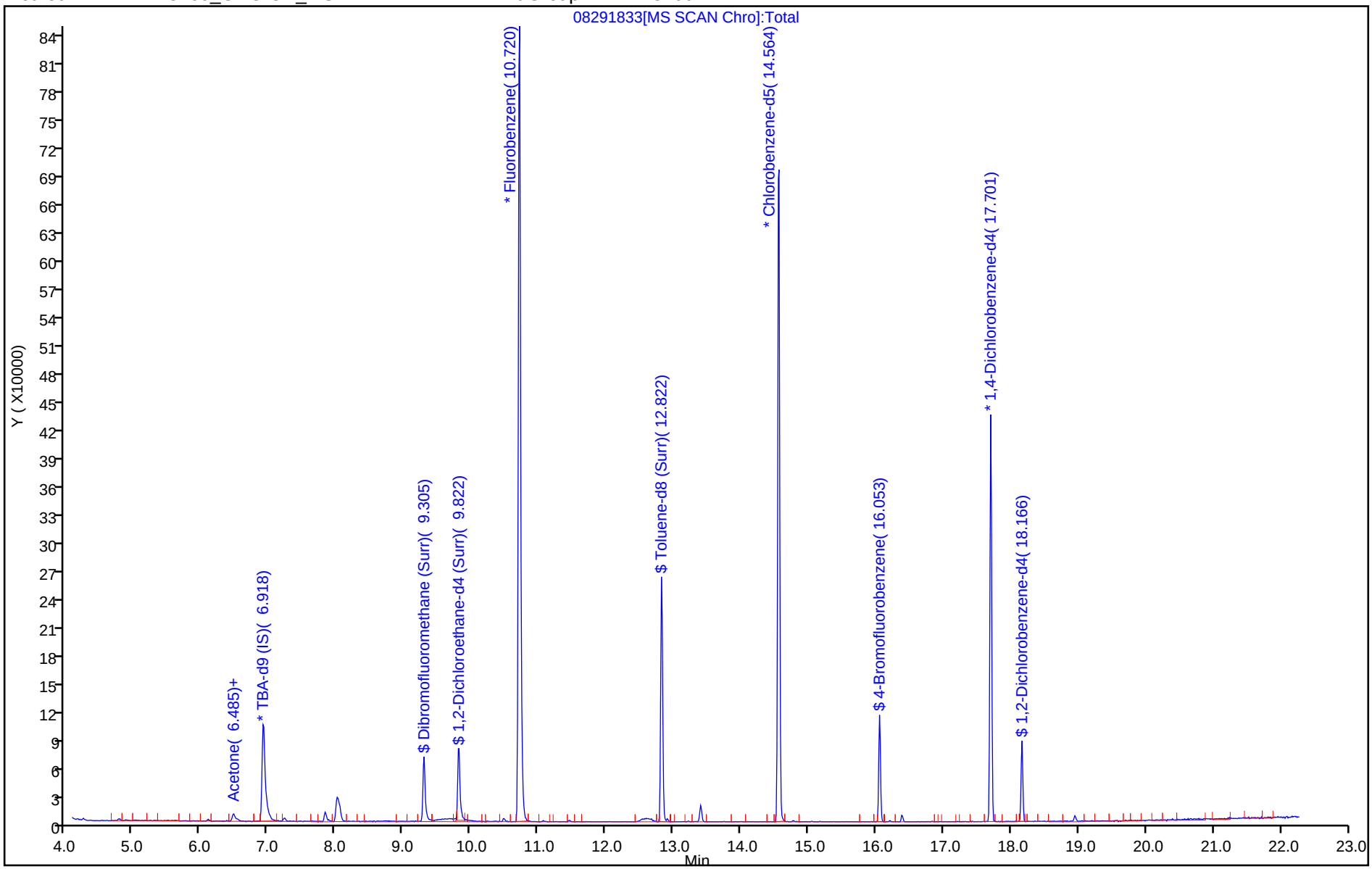
Reagents:

I_IS/SS_00092	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 31-Aug-2018 09:10:14 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291833.D				
Injection Date:	29-Aug-2018 21:24:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88238-A-4-A	Lab Sample ID:	720-88238-4	Worklist Smp#:	9
Client ID:	DUP-25				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291833.D
Lims ID: 720-88238-A-4-A
Client ID: DUP-25
Sample Type: Client
Inject. Date: 29-Aug-2018 21:24:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88238-A-4
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 09:10:00 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: sanjumnair Date: 31-Aug-2018 08:47:10

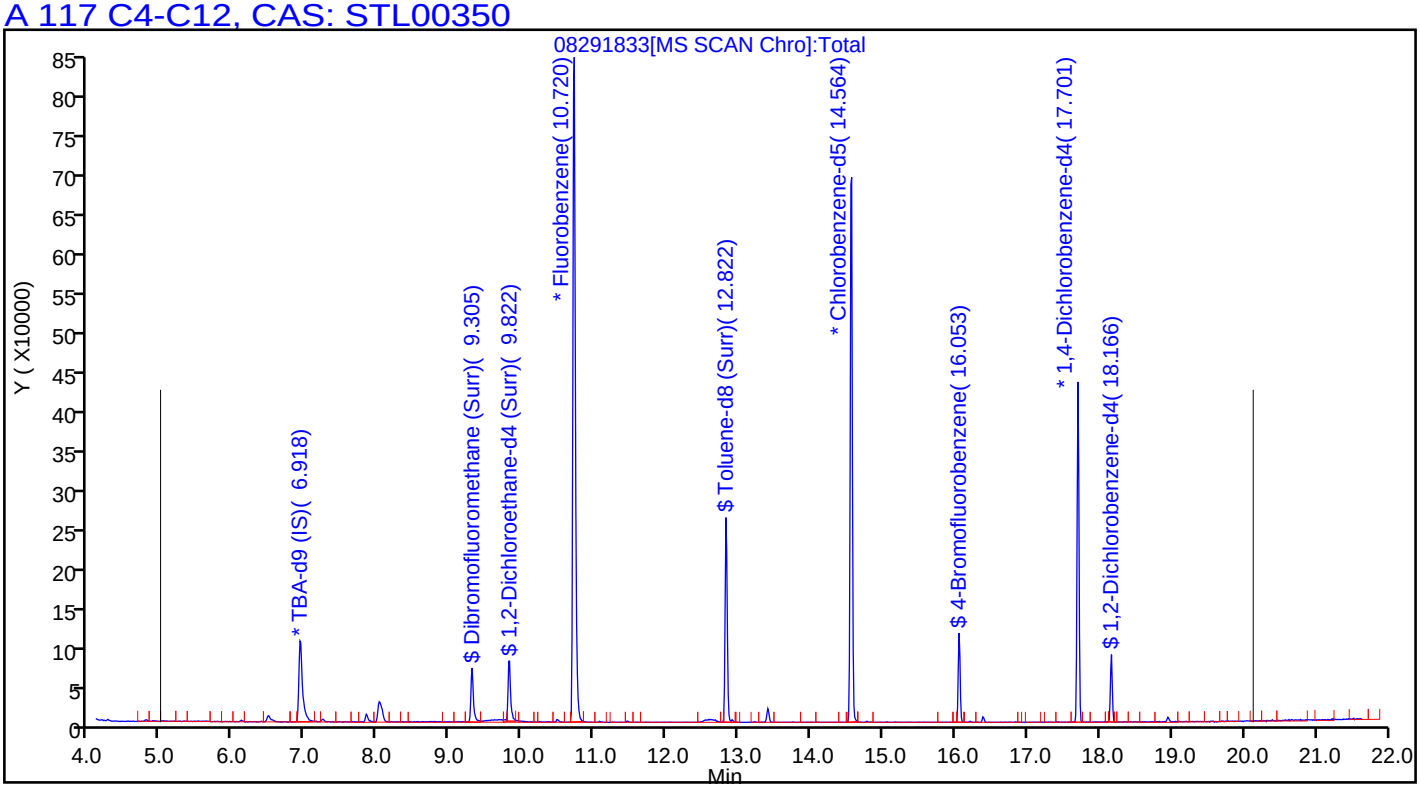
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	9.65	128.61
$ 10 Toluene-d8 (Surr)	7.50	6.36	84.79
$ 11 4-Bromofluorobenzene	7.50	5.91	78.79
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 31-Aug-2018 09:10:14 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291833.D				
Injection Date:	29-Aug-2018 21:24:30	Instrument ID:	CHMSV2		
Lims ID:	720-88238-A-4-A	Lab Sample ID:	720-88238-4		
Client ID:	DUP-25				
Operator ID:	VOA	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



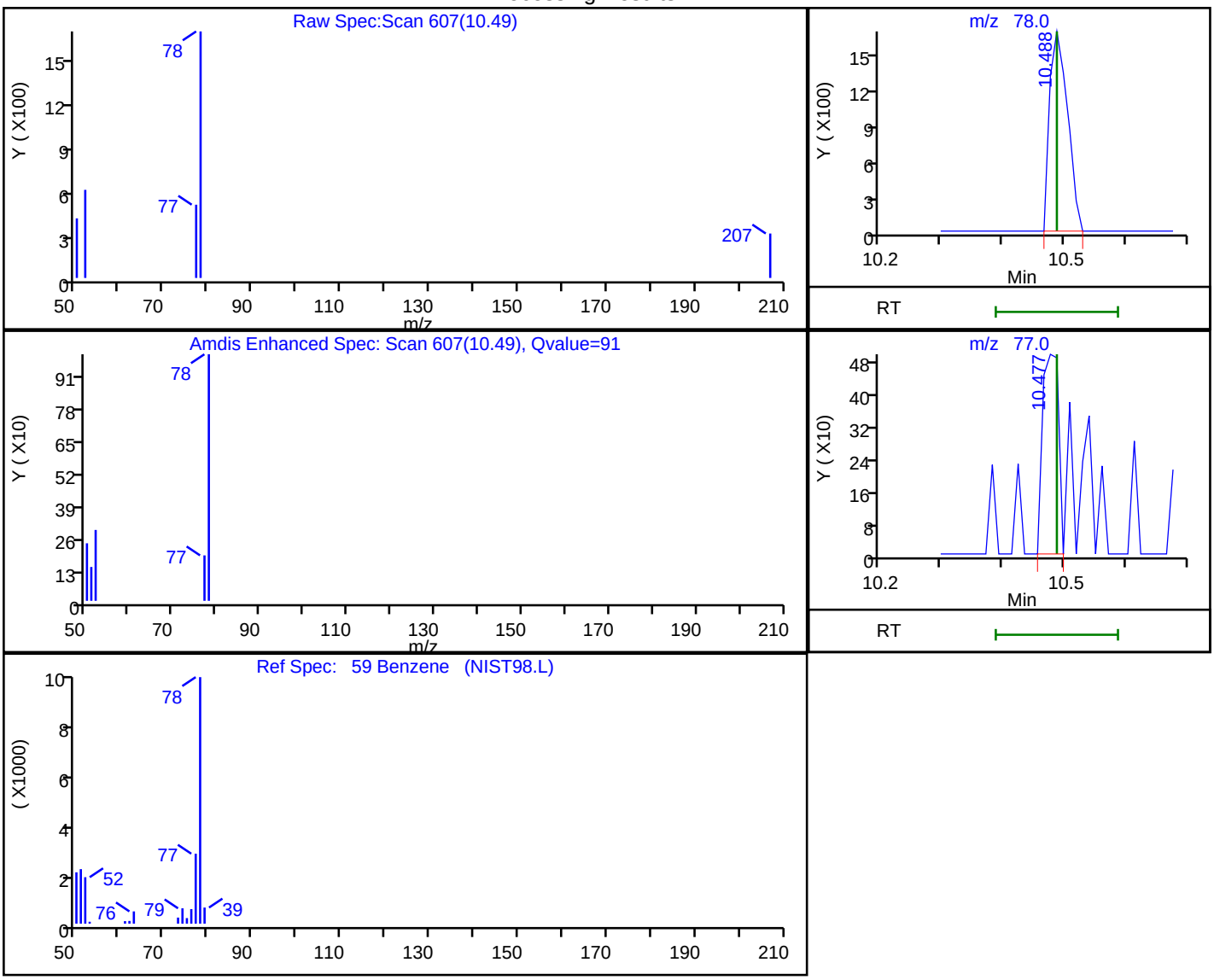
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291833.D				
Injection Date:	29-Aug-2018 21:24:30	Instrument ID:	CHMSV2		
Lims ID:	720-88238-A-4-A	Lab Sample ID:	720-88238-4		
Client ID:	DUP-25				
Operator ID:	VOA	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

59 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
10.49	78.00	3360	0.115327
10.48	77.00	907	

Reviewer: chaijita, 31-Aug-2018 08:09:03

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88238-1
SDG No.:
Client Sample ID: DUP-14
Lab Sample ID: 720-88238-5
Matrix: Solid
Lab File ID: 08291834.D
Analysis Method: 8260B
Date Collected: 08/24/2018 00:00
Sample wt/vol: 5.48(g)
Date Analyzed: 08/29/2018 21:52
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250528
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.6	1.1
67-64-1	Acetone	ND		46	35
71-43-2	Benzene	ND		4.6	0.59
75-27-4	Dichlorobromomethane	ND		4.6	0.66
108-86-1	Bromobenzene	ND		4.6	0.72
74-97-5	Chlorobromomethane	ND		18	0.66
75-25-2	Bromoform	ND		4.6	1.8
74-83-9	Bromomethane	ND		9.1	0.72
78-93-3	2-Butanone (MEK)	ND		46	19
104-51-8	n-Butylbenzene	ND		4.6	0.91
135-98-8	sec-Butylbenzene	ND		4.6	0.66
98-06-6	tert-Butylbenzene	ND		4.6	0.67
75-15-0	Carbon disulfide	ND		4.6	1.8
56-23-5	Carbon tetrachloride	ND		4.6	0.57
108-90-7	Chlorobenzene	ND		4.6	0.63
75-00-3	Chloroethane	ND		9.1	0.51
67-66-3	Chloroform	ND		4.6	0.60
74-87-3	Chloromethane	ND		9.1	0.72
95-49-8	2-Chlorotoluene	ND		4.6	0.59
106-43-4	4-Chlorotoluene	ND		4.6	0.62
124-48-1	Chlorodibromomethane	ND		4.6	0.65
95-50-1	1,2-Dichlorobenzene	ND		4.6	0.62
541-73-1	1,3-Dichlorobenzene	ND		4.6	0.66
106-46-7	1,4-Dichlorobenzene	ND		4.6	0.65
142-28-9	1,3-Dichloropropane	ND		4.6	0.67
563-58-6	1,1-Dichloropropene	ND		4.6	0.63
96-12-8	1,2-Dibromo-3-Chloropropane	ND		9.1	1.6
106-93-4	Ethylene Dibromide	ND		4.6	1.3
74-95-3	Dibromomethane	ND		9.1	0.78
75-71-8	Dichlorodifluoromethane	ND		9.1	0.72
75-34-3	1,1-Dichloroethane	ND		4.6	0.62
107-06-2	1,2-Dichloroethane	ND		4.6	0.69
75-35-4	1,1-Dichloroethene	ND	*	4.6	0.57
156-59-2	cis-1,2-Dichloroethene	ND		4.6	0.62
156-60-5	trans-1,2-Dichloroethene	ND		4.6	0.68
78-87-5	1,2-Dichloropropane	ND		4.6	0.57

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88238-1
SDG No.:
Client Sample ID: DUP-14
Lab Sample ID: 720-88238-5
Matrix: Solid
Lab File ID: 08291834.D
Analysis Method: 8260B
Date Collected: 08/24/2018 00:00
Sample wt/vol: 5.48(g)
Date Analyzed: 08/29/2018 21:52
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250528
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.6	0.63
10061-02-6	trans-1,3-Dichloropropene	ND		4.6	0.61
100-41-4	Ethylbenzene	ND		4.6	0.68
87-68-3	Hexachlorobutadiene	ND		4.6	0.82
591-78-6	2-Hexanone	ND		46	9.1
98-82-8	Isopropylbenzene	ND		4.6	0.62
99-87-6	4-Isopropyltoluene	ND		4.6	2.3
75-09-2	Methylene Chloride	ND		9.1	5.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		46	9.1
91-20-3	Naphthalene	ND		9.1	1.4
103-65-1	N-Propylbenzene	ND		4.6	0.60
100-42-5	Styrene	ND		4.6	0.57
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.6	0.69
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.6	0.68
127-18-4	Tetrachloroethene	ND		4.6	0.61
108-88-3	Toluene	0.69	J	4.6	0.65
87-61-6	1,2,3-Trichlorobenzene	ND		4.6	0.68
120-82-1	1,2,4-Trichlorobenzene	ND		4.6	0.65
71-55-6	1,1,1-Trichloroethane	ND		4.6	0.56
79-00-5	1,1,2-Trichloroethane	ND		4.6	0.64
79-01-6	Trichloroethene	2.5	J	4.6	0.57
75-69-4	Trichlorofluoromethane	ND		4.6	0.51
96-18-4	1,2,3-Trichloropropane	ND		4.6	0.70
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.6	1.9
95-63-6	1,2,4-Trimethylbenzene	ND		4.6	1.5
108-67-8	1,3,5-Trimethylbenzene	ND		4.6	0.59
108-05-4	Vinyl acetate	ND		18	4.6
75-01-4	Vinyl chloride	ND		4.6	0.67
1330-20-7	Xylenes, Total	ND		4.6	1.1
594-20-7	2,2-Dichloropropane	ND		4.6	1.8
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		230	91

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88238-1

SDG No.:

Client Sample ID: DUP-14 Lab Sample ID: 720-88238-5

Matrix: Solid Lab File ID: 08291834.D

Analysis Method: 8260B Date Collected: 08/24/2018 00:00

Sample wt/vol: 5.48(g) Date Analyzed: 08/29/2018 21:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250528 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	92		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		60-140
2037-26-5	Toluene-d8 (Surr)	95		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291834.D
Lims ID: 720-88238-A-5-A
Client ID: DUP-14
Sample Type: Client
Inject. Date: 29-Aug-2018 21:52:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88238-A-5
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 09:10:00 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: chaijita Date: 31-Aug-2018 08:13:14

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	176721	250.0	
* 2 Fluorobenzene	96	10.720	10.709	0.011	98	1128056	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.554	0.010	86	923991	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	95	421718	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.305	9.294	0.011	93	74228	7.77	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.812	0.010	0	83370	8.12	
$ 10 Toluene-d8 (Surr)	98	12.822	12.822	0.000	95	318382	7.11	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	90	98798	6.87	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	84	88006	5.96	
28 Acetone	58	6.474	6.474	0.000	97	6575	7.59	
48 cis-1,2-Dichloroethene	61	8.924	8.924	0.000	81	3672	0.2030	
144 Ethyl acetate	43	9.114	9.104	0.010	97	36370	3.04	
59 Benzene	78	10.487	10.488	-0.001	93	3240	0.0796	
65 Trichloroethene	132	11.206	11.206	0.000	94	17376	1.39	
75 Toluene	92	12.906	12.906	0.000	98	11312	0.3807	
131 Butyl Ether	87	14.775	14.775	0.000	93	655	0.0835	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	492399	5.66	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	254819	2.93	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	285323	3.28	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	551339	6.33	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	304003	3.49	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	304003	NC	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	478827	5.50	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	362943	4.17	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	88277	1.01	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	243691	2.80	

QC Flag Legend

Processing Flags

NC - Not Calibrated

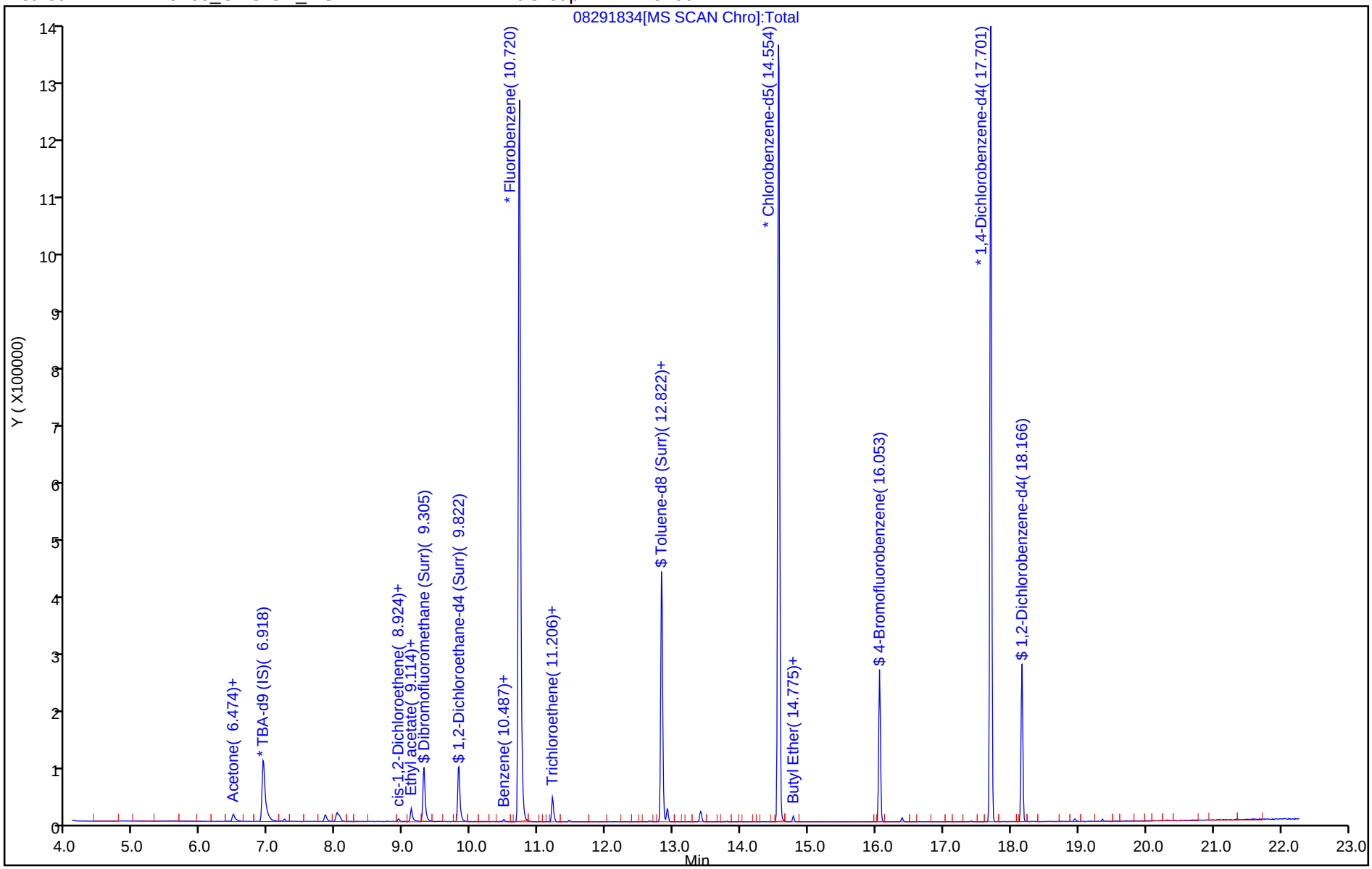
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 09:10:17 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291834.D				
Injection Date:	29-Aug-2018 21:52:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88238-A-5-A	Lab Sample ID:	720-88238-5	Worklist Smp#:	10
Client ID:	DUP-14				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291834.D
Lims ID: 720-88238-A-5-A
Client ID: DUP-14
Sample Type: Client
Inject. Date: 29-Aug-2018 21:52:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88238-A-5
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 09:10:00 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: chaijita Date: 31-Aug-2018 08:13:14

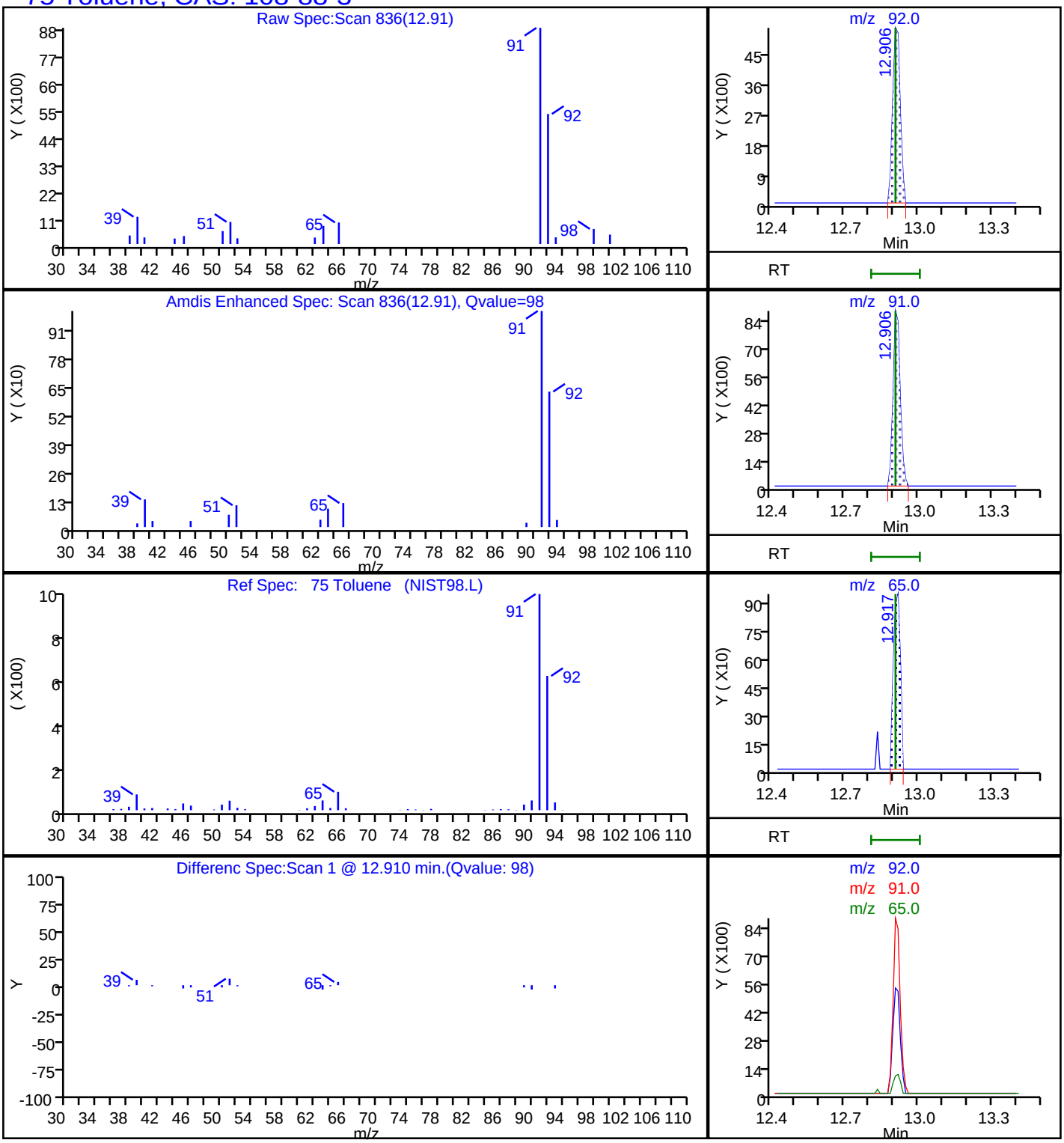
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.12	108.28
$ 10 Toluene-d8 (Surr)	7.50	7.11	94.78
$ 11 4-Bromofluorobenzene	7.50	6.87	91.56
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 31-Aug-2018 09:10:17 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291834.D				
Injection Date:	29-Aug-2018 21:52:30	Instrument ID:	CHMSV2		
Lims ID:	720-88238-A-5-A	Lab Sample ID:	720-88238-5		
Client ID:	DUP-14				
Operator ID:	VOA	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

75 Toluene, CAS: 108-88-3

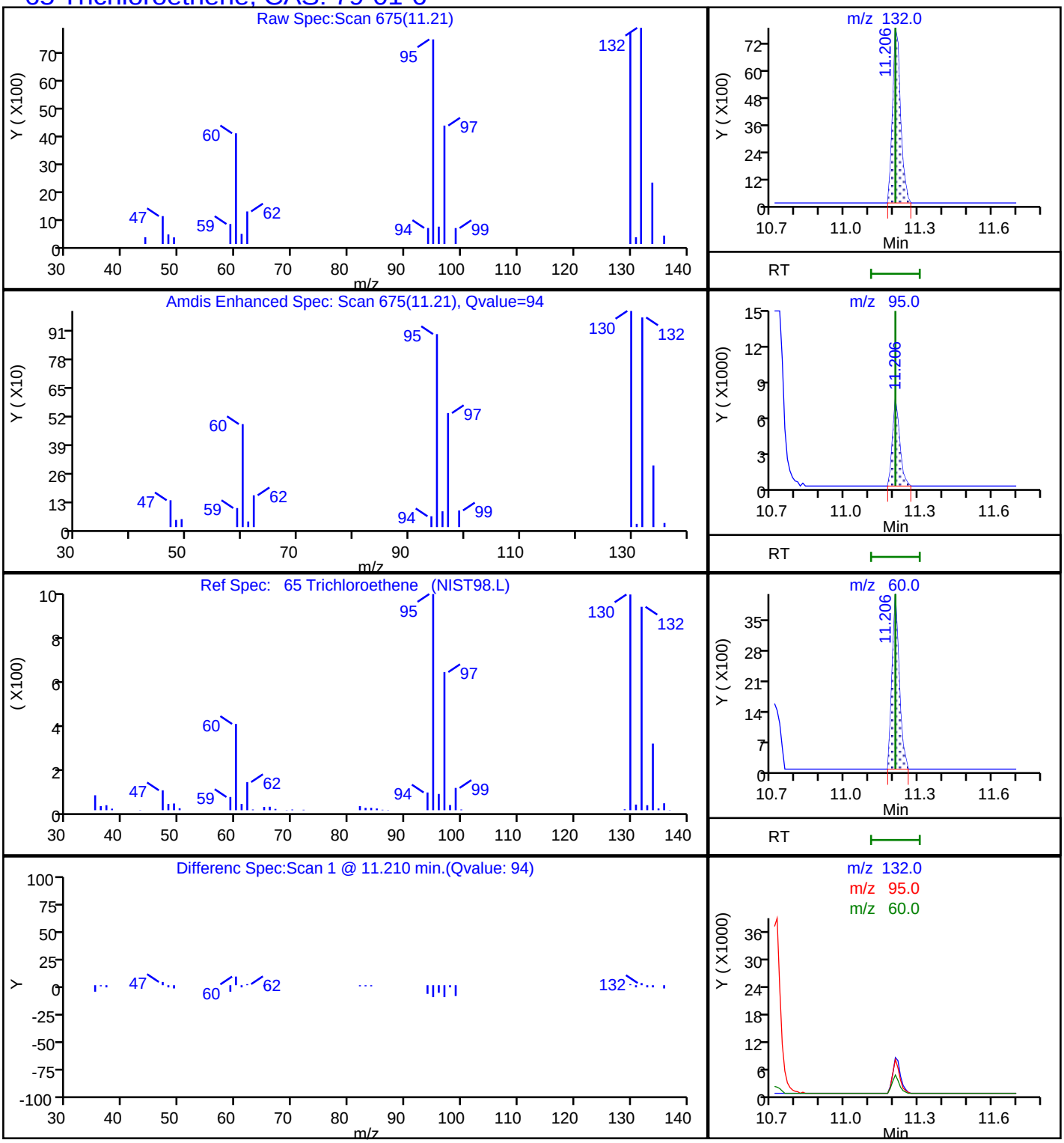


Report Date: 31-Aug-2018 09:10:17 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291834.D				
Injection Date:	29-Aug-2018 21:52:30	Instrument ID:	CHMSV2		
Lims ID:	720-88238-A-5-A	Lab Sample ID:	720-88238-5		
Client ID:	DUP-14				
Operator ID:	VOA	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

65 Trichloroethene, CAS: 79-01-6

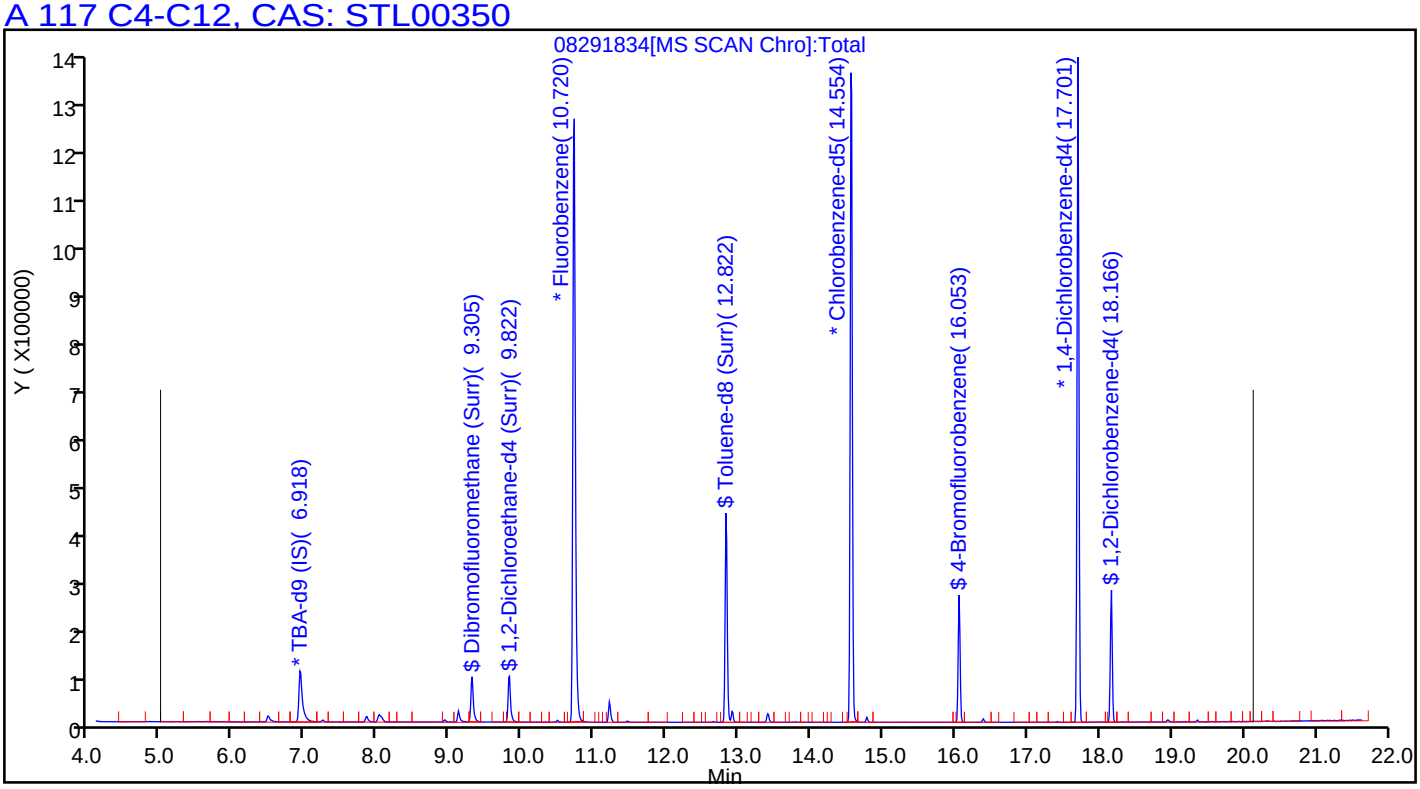


Report Date: 31-Aug-2018 09:10:18 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291834.D				
Injection Date:	29-Aug-2018 21:52:30	Instrument ID:	CHMSV2		
Lims ID:	720-88238-A-5-A	Lab Sample ID:	720-88238-5		
Client ID:	DUP-14				
Operator ID:	VOA	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



Surrogate Summary

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

TestAmerica Job ID: 720-88238-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DCA	TOL
Lab Sample ID	Client Sample ID	(45-131)	(60-140)	(58-140)
720-88238-2	DUP-05	87	110	92
720-88238-3	DUP-15	96	104	93
720-88238-4	DUP-25	79	129	85
720-88238-5	DUP-14	92	108	95
LCS 720-250405/5	Lab Control Sample	95	95	99
LCS 720-250405/7	Lab Control Sample	97	92	97
LCS 720-250452/5	Lab Control Sample	97	95	99
LCS 720-250452/7	Lab Control Sample	99	97	97
LCS 720-250528/5	Lab Control Sample	98	98	96
LCS 720-250528/7	Lab Control Sample	98	102	97
LCSD 720-250405/6	Lab Control Sample Dup	98	92	98
LCSD 720-250405/8	Lab Control Sample Dup	95	95	96
LCSD 720-250452/6	Lab Control Sample Dup	96	93	96
LCSD 720-250452/8	Lab Control Sample Dup	97	94	97
LCSD 720-250528/6	Lab Control Sample Dup	93	100	97
LCSD 720-250528/8	Lab Control Sample Dup	95	103	96
MB 720-250405/4	Method Blank	100	94	97
MB 720-250452/4	Method Blank	99	92	95
MB 720-250528/4	Method Blank	94	105	97

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		FBP	TPHL
Lab Sample ID	Client Sample ID	(33-120)	(35-146)
720-88238-2	DUP-05	68	102
720-88238-3	DUP-15	74	93
720-88238-4	DUP-25	69	95
720-88238-5	DUP-14	62	88
720-88265-D-10-A MS	Matrix Spike	61	89
720-88265-D-10-B MSD	Matrix Spike Duplicate	59	78
LCS 720-250376/2-A	Lab Control Sample	63	75
MB 720-250376/1-A	Method Blank	65	82

Surrogate Legend

FBP = 2-Fluorobiphenyl
TPHL = Terphenyl-d14

Surrogate Summary

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

TestAmerica Job ID: 720-88238-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	TPH1 (40-130)
720-88238-2	DUP-05	100
720-88238-3	DUP-15	93
720-88238-4	DUP-25	0 D X
720-88238-5	DUP-14	84
720-88239-D-7-A MS	Matrix Spike	83
720-88239-D-7-B MSD	Matrix Spike Duplicate	79
LCS 720-250382/2-A	Lab Control Sample	81
MB 720-250382/1-A	Method Blank	101

Surrogate Legend

TPH = p-Terphenyl

Method: 8081A - Organochlorine Pesticides (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCBP2 (21-136)	TCX2 (21-145)
720-88216-A-9-S MS	Matrix Spike	90	76
720-88216-A-9-T MSD	Matrix Spike Duplicate	100	82
720-88238-2	DUP-05	81	82
720-88238-3	DUP-15	79	88
LCS 720-250393/2-A	Lab Control Sample	95	84
MB 720-250393/1-A	Method Blank	98	84

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCBP1 (21-136)	TCX1 (21-145)
720-88238-4	DUP-25	78 p	67

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCBP1 (21-136)	TCX2 (21-145)
720-88238-5	DUP-14	83 p	84

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

Surrogate Summary

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

TestAmerica Job ID: 720-88238-1

TCX = Tetrachloro-m-xylene

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	**Client Sample ID**	**TCX2 (14-128)**	**DCBP2 (10-132)**
720-88238-2	DUP-05	77	72
720-88238-3	DUP-15	77	78
720-88238-4	DUP-25	94	91
720-88238-5	DUP-14	80	79
720-88240-F-3-B MS	Matrix Spike	88	110
720-88240-F-3-C MSD	Matrix Spike Duplicate	97	151 X
LCS 240-343099/24-A	Lab Control Sample	87	101
MB 240-343099/23-A	Method Blank	88	106

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

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

Lab Sample ID: MB 720-250405/4
Matrix: Solid
Analysis Batch: 250405

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/28/18 19:56	1
Acetone	ND		50	38	ug/Kg			08/28/18 19:56	1
Benzene	ND		5.0	0.65	ug/Kg			08/28/18 19:56	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/28/18 19:56	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/28/18 19:56	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/28/18 19:56	1
Bromoform	ND		5.0	2.0	ug/Kg			08/28/18 19:56	1
Bromomethane	ND		10	0.79	ug/Kg			08/28/18 19:56	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/28/18 19:56	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/28/18 19:56	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/28/18 19:56	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/28/18 19:56	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/28/18 19:56	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/28/18 19:56	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/28/18 19:56	1
Chloroethane	ND		10	0.56	ug/Kg			08/28/18 19:56	1
Chloroform	ND		5.0	0.66	ug/Kg			08/28/18 19:56	1
Chloromethane	ND		10	0.79	ug/Kg			08/28/18 19:56	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/28/18 19:56	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/28/18 19:56	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/28/18 19:56	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/28/18 19:56	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/28/18 19:56	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 19:56	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/28/18 19:56	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 19:56	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/28/18 19:56	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/28/18 19:56	1
Dibromomethane	ND		10	0.86	ug/Kg			08/28/18 19:56	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/28/18 19:56	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/28/18 19:56	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/28/18 19:56	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/28/18 19:56	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/28/18 19:56	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/28/18 19:56	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/28/18 19:56	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 19:56	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/28/18 19:56	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/28/18 19:56	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/28/18 19:56	1
2-Hexanone	ND		50	10	ug/Kg			08/28/18 19:56	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/28/18 19:56	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/28/18 19:56	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/28/18 19:56	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/28/18 19:56	1
Naphthalene	ND		10	1.5	ug/Kg			08/28/18 19:56	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/28/18 19:56	1
Styrene	ND		5.0	0.63	ug/Kg			08/28/18 19:56	1

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

Lab Sample ID: MB 720-250405/4
Matrix: Solid
Analysis Batch: 250405

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/28/18 19:56	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/28/18 19:56	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/28/18 19:56	1
Toluene	ND		5.0	0.71	ug/Kg			08/28/18 19:56	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/28/18 19:56	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 19:56	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/28/18 19:56	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/28/18 19:56	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/28/18 19:56	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/28/18 19:56	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/28/18 19:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/28/18 19:56	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/28/18 19:56	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/28/18 19:56	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/28/18 19:56	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/28/18 19:56	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/28/18 19:56	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/28/18 19:56	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/28/18 19:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*45 - 131*		*08/28/18 19:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*		*08/28/18 19:56*	*1*
Toluene-d8 (Surr)	*97*		*58 - 140*		*08/28/18 19:56*	*1*

Lab Sample ID: LCS 720-250405/5
Matrix: Solid
Analysis Batch: 250405

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	50.0		ug/Kg		100	70 - 144
Acetone	250	226		ug/Kg		90	30 - 162
Benzene	50.0	50.5		ug/Kg		101	70 - 130
Dichlorobromomethane	50.0	50.2		ug/Kg		100	70 - 140
Bromobenzene	50.0	50.3		ug/Kg		101	70 - 130
Chlorobromomethane	50.0	53.9		ug/Kg		108	70 - 130
Bromoform	50.0	52.8		ug/Kg		106	59 - 158
Bromomethane	50.0	53.2		ug/Kg		106	59 - 132
2-Butanone (MEK)	250	239		ug/Kg		96	59 - 159
n-Butylbenzene	50.0	51.2		ug/Kg		102	70 - 142
sec-Butylbenzene	50.0	49.9		ug/Kg		100	70 - 136
tert-Butylbenzene	50.0	49.5		ug/Kg		99	70 - 130
Carbon disulfide	50.0	69.8		ug/Kg		140	60 - 140
Carbon tetrachloride	50.0	55.1		ug/Kg		110	70 - 142
Chlorobenzene	50.0	51.1		ug/Kg		102	70 - 130
Chloroethane	50.0	49.5		ug/Kg		99	65 - 130
Chloroform	50.0	51.2		ug/Kg		102	77 - 127

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

Lab Sample ID: LCS 720-250405/5
Matrix: Solid
Analysis Batch: 250405

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	50.0	53.9		ug/Kg		108	55 - 140
2-Chlorotoluene	50.0	48.0		ug/Kg		96	70 - 138
4-Chlorotoluene	50.0	48.3		ug/Kg		97	70 - 136
Chlorodibromomethane	50.0	53.0		ug/Kg		106	70 - 146
1,2-Dichlorobenzene	50.0	50.7		ug/Kg		101	70 - 130
1,3-Dichlorobenzene	50.0	50.1		ug/Kg		100	70 - 131
1,4-Dichlorobenzene	50.0	50.3		ug/Kg		101	70 - 130
1,3-Dichloropropane	50.0	49.5		ug/Kg		99	70 - 140
1,1-Dichloropropene	50.0	52.1		ug/Kg		104	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	51.4		ug/Kg		103	60 - 145
Ethylene Dibromide	50.0	51.5		ug/Kg		103	70 - 140
Dibromomethane	50.0	49.6		ug/Kg		99	70 - 139
Dichlorodifluoromethane	50.0	57.8		ug/Kg		116	37 - 158
1,1-Dichloroethane	50.0	53.0		ug/Kg		106	70 - 130
1,2-Dichloroethane	50.0	51.6		ug/Kg		103	70 - 130
1,1-Dichloroethene	50.0	64.5	*	ug/Kg		129	74 - 122
cis-1,2-Dichloroethene	50.0	51.7		ug/Kg		103	70 - 138
trans-1,2-Dichloroethene	50.0	56.0		ug/Kg		112	67 - 130
1,2-Dichloropropane	50.0	51.2		ug/Kg		102	73 - 127
cis-1,3-Dichloropropene	50.0	52.9		ug/Kg		106	68 - 147
trans-1,3-Dichloropropene	50.0	50.1		ug/Kg		100	70 - 155
Ethylbenzene	50.0	49.7		ug/Kg		99	80 - 137
Hexachlorobutadiene	50.0	52.5		ug/Kg		105	70 - 132
2-Hexanone	250	237		ug/Kg		95	62 - 158
Isopropylbenzene	50.0	51.4		ug/Kg		103	70 - 130
4-Isopropyltoluene	50.0	50.7		ug/Kg		101	70 - 133
Methylene Chloride	50.0	53.1		ug/Kg		106	70 - 134
4-Methyl-2-pentanone (MIBK)	250	235		ug/Kg		94	60 - 160
Naphthalene	50.0	49.1		ug/Kg		98	60 - 147
N-Propylbenzene	50.0	49.2		ug/Kg		98	70 - 130
Styrene	50.0	49.2		ug/Kg		98	70 - 130
1,1,1,2-Tetrachloroethane	50.0	52.7		ug/Kg		105	70 - 130
1,1,2,2-Tetrachloroethane	50.0	47.1		ug/Kg		94	70 - 146
Tetrachloroethene	50.0	54.4		ug/Kg		109	70 - 132
Toluene	50.0	51.0		ug/Kg		102	75 - 120
1,2,3-Trichlorobenzene	50.0	51.2		ug/Kg		102	60 - 140
1,2,4-Trichlorobenzene	50.0	52.2		ug/Kg		104	60 - 140
1,1,1-Trichloroethane	50.0	54.1		ug/Kg		108	70 - 130
1,1,2-Trichloroethane	50.0	50.3		ug/Kg		101	70 - 130
Trichloroethene	50.0	53.9		ug/Kg		108	70 - 133
Trichlorofluoromethane	50.0	55.7		ug/Kg		111	60 - 140
1,2,3-Trichloropropane	50.0	49.7		ug/Kg		99	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	69.7		ug/Kg		139	60 - 140
1,2,4-Trimethylbenzene	50.0	48.2		ug/Kg		96	70 - 130
1,3,5-Trimethylbenzene	50.0	48.9		ug/Kg		98	70 - 131
Vinyl acetate	50.0	47.6		ug/Kg		95	38 - 176
Vinyl chloride	50.0	51.3		ug/Kg		103	58 - 125

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

Lab Sample ID: LCS 720-250405/5
Matrix: Solid
Analysis Batch: 250405

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
m-Xylene & p-Xylene	50.0	49.5		ug/Kg		99	70 - 146
o-Xylene	50.0	49.8		ug/Kg		100	70 - 140
2,2-Dichloropropane	50.0	51.9		ug/Kg		104	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*99*		*58 - 140*

Lab Sample ID: LCS 720-250405/7
Matrix: Solid
Analysis Batch: 250405

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	920		ug/Kg		92	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*92*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: LCSD 720-250405/6
Matrix: Solid
Analysis Batch: 250405

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	50.2		ug/Kg		100	70 - 144	0	20
Acetone	250	202		ug/Kg		81	30 - 162	11	30
Benzene	50.0	49.4		ug/Kg		99	70 - 130	2	20
Dichlorobromomethane	50.0	49.9		ug/Kg		100	70 - 140	0	20
Bromobenzene	50.0	48.4		ug/Kg		97	70 - 130	4	20
Chlorobromomethane	50.0	53.7		ug/Kg		107	70 - 130	0	20
Bromoform	50.0	52.4		ug/Kg		105	59 - 158	1	20
Bromomethane	50.0	52.2		ug/Kg		104	59 - 132	2	20
2-Butanone (MEK)	250	224		ug/Kg		90	59 - 159	6	20
n-Butylbenzene	50.0	52.3		ug/Kg		105	70 - 142	2	20
sec-Butylbenzene	50.0	49.3		ug/Kg		99	70 - 136	1	20
tert-Butylbenzene	50.0	48.8		ug/Kg		98	70 - 130	1	20
Carbon disulfide	50.0	68.3		ug/Kg		137	60 - 140	2	20
Carbon tetrachloride	50.0	54.3		ug/Kg		109	70 - 142	1	20
Chlorobenzene	50.0	50.7		ug/Kg		101	70 - 130	1	20
Chloroethane	50.0	48.2		ug/Kg		96	65 - 130	3	20
Chloroform	50.0	49.8		ug/Kg		100	77 - 127	3	20
Chloromethane	50.0	52.8		ug/Kg		106	55 - 140	2	20
2-Chlorotoluene	50.0	46.5		ug/Kg		93	70 - 138	3	20
4-Chlorotoluene	50.0	46.8		ug/Kg		94	70 - 136	3	20
Chlorodibromomethane	50.0	52.0		ug/Kg		104	70 - 146	2	20

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

Lab Sample ID: LCSD 720-250405/6
Matrix: Solid
Analysis Batch: 250405

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene	50.0	50.1		ug/Kg		100	70 - 130	1	20
1,3-Dichlorobenzene	50.0	49.0		ug/Kg		98	70 - 131	2	20
1,4-Dichlorobenzene	50.0	49.7		ug/Kg		99	70 - 130	1	20
1,3-Dichloropropane	50.0	48.4		ug/Kg		97	70 - 140	2	20
1,1-Dichloropropene	50.0	52.0		ug/Kg		104	70 - 130	0	20
1,2-Dibromo-3-Chloropropane	50.0	50.6		ug/Kg		101	60 - 145	2	20
Ethylene Dibromide	50.0	50.0		ug/Kg		100	70 - 140	3	20
Dibromomethane	50.0	49.4		ug/Kg		99	70 - 139	0	20
Dichlorodifluoromethane	50.0	58.2		ug/Kg		116	37 - 158	1	20
1,1-Dichloroethane	50.0	51.1		ug/Kg		102	70 - 130	4	20
1,2-Dichloroethane	50.0	50.1		ug/Kg		100	70 - 130	3	20
1,1-Dichloroethene	50.0	61.9	*	ug/Kg		124	74 - 122	4	20
cis-1,2-Dichloroethene	50.0	50.3		ug/Kg		101	70 - 138	3	20
trans-1,2-Dichloroethene	50.0	55.4		ug/Kg		111	67 - 130	1	20
1,2-Dichloropropane	50.0	49.7		ug/Kg		99	73 - 127	3	20
cis-1,3-Dichloropropene	50.0	52.1		ug/Kg		104	68 - 147	1	20
trans-1,3-Dichloropropene	50.0	49.1		ug/Kg		98	70 - 155	2	20
Ethylbenzene	50.0	49.1		ug/Kg		98	80 - 137	1	20
Hexachlorobutadiene	50.0	55.2		ug/Kg		110	70 - 132	5	20
2-Hexanone	250	231		ug/Kg		92	62 - 158	3	20
Isopropylbenzene	50.0	51.2		ug/Kg		102	70 - 130	0	20
4-Isopropyltoluene	50.0	50.9		ug/Kg		102	70 - 133	0	20
Methylene Chloride	50.0	51.6		ug/Kg		103	70 - 134	3	20
4-Methyl-2-pentanone (MIBK)	250	231		ug/Kg		92	60 - 160	2	20
Naphthalene	50.0	49.4		ug/Kg		99	60 - 147	0	20
N-Propylbenzene	50.0	48.2		ug/Kg		96	70 - 130	2	20
Styrene	50.0	48.5		ug/Kg		97	70 - 130	1	20
1,1,1,2-Tetrachloroethane	50.0	52.6		ug/Kg		105	70 - 130	0	20
1,1,2,2-Tetrachloroethane	50.0	45.7		ug/Kg		91	70 - 146	3	20
Tetrachloroethene	50.0	53.5		ug/Kg		107	70 - 132	2	20
Toluene	50.0	49.8		ug/Kg		100	75 - 120	2	20
1,2,3-Trichlorobenzene	50.0	52.8		ug/Kg		106	60 - 140	3	20
1,2,4-Trichlorobenzene	50.0	53.6		ug/Kg		107	60 - 140	3	20
1,1,1-Trichloroethane	50.0	53.3		ug/Kg		107	70 - 130	2	20
1,1,2-Trichloroethane	50.0	49.6		ug/Kg		99	70 - 130	1	20
Trichloroethene	50.0	53.0		ug/Kg		106	70 - 133	2	20
Trichlorofluoromethane	50.0	54.3		ug/Kg		109	60 - 140	3	20
1,2,3-Trichloropropane	50.0	47.4		ug/Kg		95	70 - 146	5	20
1,1,2-Trichloro-1,2,2-trifluoroetha ne	50.0	70.5	*	ug/Kg		141	60 - 140	1	20
1,2,4-Trimethylbenzene	50.0	47.3		ug/Kg		95	70 - 130	2	20
1,3,5-Trimethylbenzene	50.0	47.7		ug/Kg		95	70 - 131	3	20
Vinyl acetate	50.0	47.3		ug/Kg		95	38 - 176	1	20
Vinyl chloride	50.0	51.5		ug/Kg		103	58 - 125	1	20
m-Xylene & p-Xylene	50.0	48.9		ug/Kg		98	70 - 146	1	20
o-Xylene	50.0	49.5		ug/Kg		99	70 - 140	1	20
2,2-Dichloropropane	50.0	54.3		ug/Kg		109	70 - 162	5	20

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

Lab Sample ID: LCSD 720-250405/6
Matrix: Solid
Analysis Batch: 250405

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

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*92*		*60 - 140*
Toluene-d8 (Surr)	*98*		*58 - 140*

Lab Sample ID: LCSD 720-250405/8
Matrix: Solid
Analysis Batch: 250405

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	876		ug/Kg		88	70 - 122	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: MB 720-250452/4
Matrix: Solid
Analysis Batch: 250452

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/29/18 08:36	1
Acetone	ND		50	38	ug/Kg			08/29/18 08:36	1
Benzene	ND		5.0	0.65	ug/Kg			08/29/18 08:36	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/29/18 08:36	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/29/18 08:36	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/29/18 08:36	1
Bromoform	ND		5.0	2.0	ug/Kg			08/29/18 08:36	1
Bromomethane	ND		10	0.79	ug/Kg			08/29/18 08:36	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/29/18 08:36	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/29/18 08:36	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/29/18 08:36	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/29/18 08:36	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/29/18 08:36	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/29/18 08:36	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/29/18 08:36	1
Chloroethane	ND		10	0.56	ug/Kg			08/29/18 08:36	1
Chloroform	ND		5.0	0.66	ug/Kg			08/29/18 08:36	1
Chloromethane	ND		10	0.79	ug/Kg			08/29/18 08:36	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/29/18 08:36	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/29/18 08:36	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/29/18 08:36	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/29/18 08:36	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/29/18 08:36	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/29/18 08:36	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/29/18 08:36	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/29/18 08:36	1

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

Lab Sample ID: MB 720-250452/4
Matrix: Solid
Analysis Batch: 250452

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/29/18 08:36	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/29/18 08:36	1
Dibromomethane	ND		10	0.86	ug/Kg			08/29/18 08:36	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/29/18 08:36	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/29/18 08:36	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/29/18 08:36	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/29/18 08:36	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/29/18 08:36	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/29/18 08:36	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/29/18 08:36	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/29/18 08:36	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/29/18 08:36	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/29/18 08:36	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/29/18 08:36	1
2-Hexanone	ND		50	10	ug/Kg			08/29/18 08:36	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/29/18 08:36	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/29/18 08:36	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/29/18 08:36	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/29/18 08:36	1
Naphthalene	ND		10	1.5	ug/Kg			08/29/18 08:36	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/29/18 08:36	1
Styrene	ND		5.0	0.63	ug/Kg			08/29/18 08:36	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/29/18 08:36	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/29/18 08:36	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/29/18 08:36	1
Toluene	ND		5.0	0.71	ug/Kg			08/29/18 08:36	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/29/18 08:36	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/29/18 08:36	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/29/18 08:36	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/29/18 08:36	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/29/18 08:36	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/29/18 08:36	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/29/18 08:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/29/18 08:36	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/29/18 08:36	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/29/18 08:36	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/29/18 08:36	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/29/18 08:36	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/29/18 08:36	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/29/18 08:36	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/29/18 08:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*45 - 131*		*08/29/18 08:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*60 - 140*		*08/29/18 08:36*	*1*
Toluene-d8 (Surr)	*95*		*58 - 140*		*08/29/18 08:36*	*1*

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

Lab Sample ID: LCS 720-250452/5
Matrix: Solid
Analysis Batch: 250452

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	49.6		ug/Kg		99	70 - 144
Acetone	250	230		ug/Kg		92	30 - 162
Benzene	50.0	50.9		ug/Kg		102	70 - 130
Dichlorobromomethane	50.0	49.9		ug/Kg		100	70 - 140
Bromobenzene	50.0	49.3		ug/Kg		99	70 - 130
Chlorobromomethane	50.0	54.1		ug/Kg		108	70 - 130
Bromoform	50.0	51.7		ug/Kg		103	59 - 158
Bromomethane	50.0	52.3		ug/Kg		105	59 - 132
2-Butanone (MEK)	250	229		ug/Kg		92	59 - 159
n-Butylbenzene	50.0	51.4		ug/Kg		103	70 - 142
sec-Butylbenzene	50.0	49.6		ug/Kg		99	70 - 136
tert-Butylbenzene	50.0	49.3		ug/Kg		99	70 - 130
Carbon disulfide	50.0	69.0		ug/Kg		138	60 - 140
Carbon tetrachloride	50.0	57.2		ug/Kg		114	70 - 142
Chlorobenzene	50.0	51.3		ug/Kg		103	70 - 130
Chloroethane	50.0	50.6		ug/Kg		101	65 - 130
Chloroform	50.0	51.2		ug/Kg		102	77 - 127
Chloromethane	50.0	53.9		ug/Kg		108	55 - 140
2-Chlorotoluene	50.0	47.4		ug/Kg		95	70 - 138
4-Chlorotoluene	50.0	47.8		ug/Kg		96	70 - 136
Chlorodibromomethane	50.0	54.0		ug/Kg		108	70 - 146
1,2-Dichlorobenzene	50.0	50.0		ug/Kg		100	70 - 130
1,3-Dichlorobenzene	50.0	49.5		ug/Kg		99	70 - 131
1,4-Dichlorobenzene	50.0	50.1		ug/Kg		100	70 - 130
1,3-Dichloropropane	50.0	50.3		ug/Kg		101	70 - 140
1,1-Dichloropropene	50.0	53.6		ug/Kg		107	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	47.5		ug/Kg		95	60 - 145
Ethylene Dibromide	50.0	51.6		ug/Kg		103	70 - 140
Dibromomethane	50.0	50.5		ug/Kg		101	70 - 139
Dichlorodifluoromethane	50.0	57.1		ug/Kg		114	37 - 158
1,1-Dichloroethane	50.0	53.2		ug/Kg		106	70 - 130
1,2-Dichloroethane	50.0	52.1		ug/Kg		104	70 - 130
1,1-Dichloroethene	50.0	64.4	*	ug/Kg		129	74 - 122
cis-1,2-Dichloroethene	50.0	51.7		ug/Kg		103	70 - 138
trans-1,2-Dichloroethene	50.0	56.0		ug/Kg		112	67 - 130
1,2-Dichloropropane	50.0	51.6		ug/Kg		103	73 - 127
cis-1,3-Dichloropropene	50.0	53.4		ug/Kg		107	68 - 147
trans-1,3-Dichloropropene	50.0	50.2		ug/Kg		100	70 - 155
Ethylbenzene	50.0	50.0		ug/Kg		100	80 - 137
Hexachlorobutadiene	50.0	54.0		ug/Kg		108	70 - 132
2-Hexanone	250	235		ug/Kg		94	62 - 158
Isopropylbenzene	50.0	51.6		ug/Kg		103	70 - 130
4-Isopropyltoluene	50.0	51.4		ug/Kg		103	70 - 133
Methylene Chloride	50.0	52.2		ug/Kg		104	70 - 134
4-Methyl-2-pentanone (MIBK)	250	235		ug/Kg		94	60 - 160
Naphthalene	50.0	47.2		ug/Kg		94	60 - 147
N-Propylbenzene	50.0	49.2		ug/Kg		98	70 - 130
Styrene	50.0	49.5		ug/Kg		99	70 - 130

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

Lab Sample ID: LCS 720-250452/5
Matrix: Solid
Analysis Batch: 250452

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	52.0		ug/Kg		104	70 - 130
1,1,2,2-Tetrachloroethane	50.0	44.5		ug/Kg		89	70 - 146
Tetrachloroethene	50.0	56.5		ug/Kg		113	70 - 132
Toluene	50.0	50.4		ug/Kg		101	75 - 120
1,2,3-Trichlorobenzene	50.0	51.8		ug/Kg		104	60 - 140
1,2,4-Trichlorobenzene	50.0	53.5		ug/Kg		107	60 - 140
1,1,1-Trichloroethane	50.0	55.2		ug/Kg		110	70 - 130
1,1,2-Trichloroethane	50.0	50.9		ug/Kg		102	70 - 130
Trichloroethene	50.0	55.1		ug/Kg		110	70 - 133
Trichlorofluoromethane	50.0	58.8		ug/Kg		118	60 - 140
1,2,3-Trichloropropane	50.0	46.9		ug/Kg		94	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	71.8	*	ug/Kg		144	60 - 140
1,2,4-Trimethylbenzene	50.0	47.7		ug/Kg		95	70 - 130
1,3,5-Trimethylbenzene	50.0	48.5		ug/Kg		97	70 - 131
Vinyl acetate	50.0	47.3		ug/Kg		95	38 - 176
Vinyl chloride	50.0	52.1		ug/Kg		104	58 - 125
m-Xylene & p-Xylene	50.0	50.0		ug/Kg		100	70 - 146
o-Xylene	50.0	49.8		ug/Kg		100	70 - 140
2,2-Dichloropropane	50.0	53.9		ug/Kg		108	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*99*		*58 - 140*

Lab Sample ID: LCS 720-250452/7
Matrix: Solid
Analysis Batch: 250452

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	978		ug/Kg		98	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*97*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: LCSD 720-250452/6
Matrix: Solid
Analysis Batch: 250452

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	49.5		ug/Kg		99	70 - 144	0	20
Acetone	250	205		ug/Kg		82	30 - 162	12	30
Benzene	50.0	50.2		ug/Kg		100	70 - 130	1	20
Dichlorobromomethane	50.0	51.1		ug/Kg		102	70 - 140	2	20

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

Lab Sample ID: LCSD 720-250452/6
Matrix: Solid
Analysis Batch: 250452

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromobenzene	50.0	49.5		ug/Kg		99	70 - 130	0	20
Chlorobromomethane	50.0	53.9		ug/Kg		108	70 - 130	0	20
Bromoform	50.0	51.6		ug/Kg		103	59 - 158	0	20
Bromomethane	50.0	51.6		ug/Kg		103	59 - 132	1	20
2-Butanone (MEK)	250	214		ug/Kg		85	59 - 159	7	20
n-Butylbenzene	50.0	52.2		ug/Kg		104	70 - 142	2	20
sec-Butylbenzene	50.0	50.1		ug/Kg		100	70 - 136	1	20
tert-Butylbenzene	50.0	49.7		ug/Kg		99	70 - 130	1	20
Carbon disulfide	50.0	68.2		ug/Kg		136	60 - 140	1	20
Carbon tetrachloride	50.0	55.3		ug/Kg		111	70 - 142	3	20
Chlorobenzene	50.0	51.1		ug/Kg		102	70 - 130	0	20
Chloroethane	50.0	48.5		ug/Kg		97	65 - 130	4	20
Chloroform	50.0	51.0		ug/Kg		102	77 - 127	1	20
Chloromethane	50.0	52.7		ug/Kg		105	55 - 140	2	20
2-Chlorotoluene	50.0	47.8		ug/Kg		96	70 - 138	1	20
4-Chlorotoluene	50.0	48.3		ug/Kg		97	70 - 136	1	20
Chlorodibromomethane	50.0	52.7		ug/Kg		105	70 - 146	2	20
1,2-Dichlorobenzene	50.0	51.3		ug/Kg		103	70 - 130	2	20
1,3-Dichlorobenzene	50.0	50.6		ug/Kg		101	70 - 131	2	20
1,4-Dichlorobenzene	50.0	50.8		ug/Kg		102	70 - 130	1	20
1,3-Dichloropropane	50.0	48.4		ug/Kg		97	70 - 140	4	20
1,1-Dichloropropene	50.0	52.2		ug/Kg		104	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	50.0	49.2		ug/Kg		98	60 - 145	3	20
Ethylene Dibromide	50.0	49.6		ug/Kg		99	70 - 140	4	20
Dibromomethane	50.0	49.4		ug/Kg		99	70 - 139	2	20
Dichlorodifluoromethane	50.0	53.1		ug/Kg		106	37 - 158	7	20
1,1-Dichloroethane	50.0	53.0		ug/Kg		106	70 - 130	0	20
1,2-Dichloroethane	50.0	50.6		ug/Kg		101	70 - 130	3	20
1,1-Dichloroethene	50.0	63.1	*	ug/Kg		126	74 - 122	2	20
cis-1,2-Dichloroethene	50.0	51.3		ug/Kg		103	70 - 138	1	20
trans-1,2-Dichloroethene	50.0	56.2		ug/Kg		112	67 - 130	0	20
1,2-Dichloropropane	50.0	50.7		ug/Kg		101	73 - 127	2	20
cis-1,3-Dichloropropene	50.0	52.2		ug/Kg		104	68 - 147	2	20
trans-1,3-Dichloropropene	50.0	48.9		ug/Kg		98	70 - 155	3	20
Ethylbenzene	50.0	49.6		ug/Kg		99	80 - 137	1	20
Hexachlorobutadiene	50.0	55.4		ug/Kg		111	70 - 132	3	20
2-Hexanone	250	223		ug/Kg		89	62 - 158	5	20
Isopropylbenzene	50.0	51.5		ug/Kg		103	70 - 130	0	20
4-Isopropyltoluene	50.0	51.5		ug/Kg		103	70 - 133	0	20
Methylene Chloride	50.0	52.0		ug/Kg		104	70 - 134	0	20
4-Methyl-2-pentanone (MIBK)	250	225		ug/Kg		90	60 - 160	5	20
Naphthalene	50.0	49.3		ug/Kg		99	60 - 147	4	20
N-Propylbenzene	50.0	49.2		ug/Kg		98	70 - 130	0	20
Styrene	50.0	49.5		ug/Kg		99	70 - 130	0	20
1,1,1,2-Tetrachloroethane	50.0	52.7		ug/Kg		105	70 - 130	1	20
1,1,2,2-Tetrachloroethane	50.0	45.4		ug/Kg		91	70 - 146	2	20
Tetrachloroethene	50.0	54.0		ug/Kg		108	70 - 132	5	20
Toluene	50.0	50.6		ug/Kg		101	75 - 120	0	20

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

Lab Sample ID: LCSD 720-250452/6
Matrix: Solid
Analysis Batch: 250452

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichlorobenzene			50.0	53.4		ug/Kg		107	60 - 140	3	20
1,2,4-Trichlorobenzene			50.0	54.4		ug/Kg		109	60 - 140	2	20
1,1,1-Trichloroethane			50.0	53.9		ug/Kg		108	70 - 130	2	20
1,1,2-Trichloroethane			50.0	49.8		ug/Kg		100	70 - 130	2	20
Trichloroethene			50.0	53.8		ug/Kg		108	70 - 133	2	20
Trichlorofluoromethane			50.0	54.1		ug/Kg		108	60 - 140	8	20
1,2,3-Trichloropropane			50.0	47.8		ug/Kg		96	70 - 146	2	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	71.2	*	ug/Kg		142	60 - 140	1	20
1,2,4-Trimethylbenzene			50.0	48.1		ug/Kg		96	70 - 130	1	20
1,3,5-Trimethylbenzene			50.0	48.9		ug/Kg		98	70 - 131	1	20
Vinyl acetate			50.0	46.0		ug/Kg		92	38 - 176	3	20
Vinyl chloride			50.0	50.1		ug/Kg		100	58 - 125	4	20
m-Xylene & p-Xylene			50.0	49.1		ug/Kg		98	70 - 146	2	20
o-Xylene			50.0	49.7		ug/Kg		99	70 - 140	0	20
2,2-Dichloropropane			50.0	54.1		ug/Kg		108	70 - 162	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*93*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCSD 720-250452/8
Matrix: Solid
Analysis Batch: 250452

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	948		ug/Kg		95	70 - 122	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: MB 720-250528/4
Matrix: Solid
Analysis Batch: 250528

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/29/18 19:01	1
Acetone	ND		50	38	ug/Kg			08/29/18 19:01	1
Benzene	ND		5.0	0.65	ug/Kg			08/29/18 19:01	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/29/18 19:01	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/29/18 19:01	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/29/18 19:01	1
Bromoform	ND		5.0	2.0	ug/Kg			08/29/18 19:01	1
Bromomethane	ND		10	0.79	ug/Kg			08/29/18 19:01	1

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

Lab Sample ID: MB 720-250528/4
Matrix: Solid
Analysis Batch: 250528

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		50	21	ug/Kg			08/29/18 19:01	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/29/18 19:01	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/29/18 19:01	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/29/18 19:01	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/29/18 19:01	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/29/18 19:01	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/29/18 19:01	1
Chloroethane	ND		10	0.56	ug/Kg			08/29/18 19:01	1
Chloroform	ND		5.0	0.66	ug/Kg			08/29/18 19:01	1
Chloromethane	ND		10	0.79	ug/Kg			08/29/18 19:01	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/29/18 19:01	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/29/18 19:01	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/29/18 19:01	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/29/18 19:01	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/29/18 19:01	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/29/18 19:01	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/29/18 19:01	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/29/18 19:01	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/29/18 19:01	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/29/18 19:01	1
Dibromomethane	ND		10	0.86	ug/Kg			08/29/18 19:01	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/29/18 19:01	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/29/18 19:01	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/29/18 19:01	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/29/18 19:01	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/29/18 19:01	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/29/18 19:01	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/29/18 19:01	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/29/18 19:01	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/29/18 19:01	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/29/18 19:01	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/29/18 19:01	1
2-Hexanone	ND		50	10	ug/Kg			08/29/18 19:01	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/29/18 19:01	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/29/18 19:01	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/29/18 19:01	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/29/18 19:01	1
Naphthalene	ND		10	1.5	ug/Kg			08/29/18 19:01	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/29/18 19:01	1
Styrene	ND		5.0	0.63	ug/Kg			08/29/18 19:01	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/29/18 19:01	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/29/18 19:01	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/29/18 19:01	1
Toluene	ND		5.0	0.71	ug/Kg			08/29/18 19:01	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/29/18 19:01	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/29/18 19:01	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/29/18 19:01	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/29/18 19:01	1

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

Lab Sample ID: MB 720-250528/4
Matrix: Solid
Analysis Batch: 250528

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		5.0	0.63	ug/Kg			08/29/18 19:01	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/29/18 19:01	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/29/18 19:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/29/18 19:01	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/29/18 19:01	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/29/18 19:01	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/29/18 19:01	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/29/18 19:01	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/29/18 19:01	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/29/18 19:01	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/29/18 19:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*45 - 131*		*08/29/18 19:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*60 - 140*		*08/29/18 19:01*	*1*
Toluene-d8 (Surr)	*97*		*58 - 140*		*08/29/18 19:01*	*1*

Lab Sample ID: LCS 720-250528/5
Matrix: Solid
Analysis Batch: 250528

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	53.0		ug/Kg		106	70 - 144
Acetone	250	195		ug/Kg		78	30 - 162
Benzene	50.0	50.4		ug/Kg		101	70 - 130
Dichlorobromomethane	50.0	54.1		ug/Kg		108	70 - 140
Bromobenzene	50.0	48.6		ug/Kg		97	70 - 130
Chlorobromomethane	50.0	54.3		ug/Kg		109	70 - 130
Bromoform	50.0	49.4		ug/Kg		99	59 - 158
Bromomethane	50.0	54.0		ug/Kg		108	59 - 132
2-Butanone (MEK)	250	209		ug/Kg		84	59 - 159
n-Butylbenzene	50.0	48.8		ug/Kg		98	70 - 142
sec-Butylbenzene	50.0	48.6		ug/Kg		97	70 - 136
tert-Butylbenzene	50.0	48.8		ug/Kg		98	70 - 130
Carbon disulfide	50.0	67.6		ug/Kg		135	60 - 140
Carbon tetrachloride	50.0	59.3		ug/Kg		119	70 - 142
Chlorobenzene	50.0	52.0		ug/Kg		104	70 - 130
Chloroethane	50.0	47.9		ug/Kg		96	65 - 130
Chloroform	50.0	53.3		ug/Kg		107	77 - 127
Chloromethane	50.0	48.2		ug/Kg		96	55 - 140
2-Chlorotoluene	50.0	48.6		ug/Kg		97	70 - 138
4-Chlorotoluene	50.0	48.9		ug/Kg		98	70 - 136
Chlorodibromomethane	50.0	53.0		ug/Kg		106	70 - 146
1,2-Dichlorobenzene	50.0	49.7		ug/Kg		99	70 - 130
1,3-Dichlorobenzene	50.0	51.6		ug/Kg		103	70 - 131
1,4-Dichlorobenzene	50.0	49.3		ug/Kg		99	70 - 130
1,3-Dichloropropane	50.0	48.3		ug/Kg		97	70 - 140

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

Lab Sample ID: LCS 720-250528/5
Matrix: Solid
Analysis Batch: 250528

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloropropene	50.0	53.8		ug/Kg		108	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	44.5		ug/Kg		89	60 - 145
Ethylene Dibromide	50.0	52.6		ug/Kg		105	70 - 140
Dibromomethane	50.0	51.3		ug/Kg		103	70 - 139
Dichlorodifluoromethane	50.0	61.1		ug/Kg		122	37 - 158
1,1-Dichloroethane	50.0	52.6		ug/Kg		105	70 - 130
1,2-Dichloroethane	50.0	53.6		ug/Kg		107	70 - 130
1,1-Dichloroethene	50.0	65.0	*	ug/Kg		130	74 - 122
cis-1,2-Dichloroethene	50.0	52.6		ug/Kg		105	70 - 138
trans-1,2-Dichloroethene	50.0	58.3		ug/Kg		117	67 - 130
1,2-Dichloropropane	50.0	50.2		ug/Kg		100	73 - 127
cis-1,3-Dichloropropene	50.0	52.1		ug/Kg		104	68 - 147
trans-1,3-Dichloropropene	50.0	50.2		ug/Kg		100	70 - 155
Ethylbenzene	50.0	50.6		ug/Kg		101	80 - 137
Hexachlorobutadiene	50.0	52.7		ug/Kg		105	70 - 132
2-Hexanone	250	208		ug/Kg		83	62 - 158
Isopropylbenzene	50.0	53.1		ug/Kg		106	70 - 130
4-Isopropyltoluene	50.0	50.1		ug/Kg		100	70 - 133
Methylene Chloride	50.0	50.2		ug/Kg		100	70 - 134
4-Methyl-2-pentanone (MIBK)	250	208		ug/Kg		83	60 - 160
Naphthalene	50.0	46.8		ug/Kg		94	60 - 147
N-Propylbenzene	50.0	48.1		ug/Kg		96	70 - 130
Styrene	50.0	48.1		ug/Kg		96	70 - 130
1,1,1,2-Tetrachloroethane	50.0	55.1		ug/Kg		110	70 - 130
1,1,2,2-Tetrachloroethane	50.0	42.9		ug/Kg		86	70 - 146
Tetrachloroethene	50.0	56.4		ug/Kg		113	70 - 132
Toluene	50.0	49.4		ug/Kg		99	75 - 120
1,2,3-Trichlorobenzene	50.0	50.3		ug/Kg		101	60 - 140
1,2,4-Trichlorobenzene	50.0	52.3		ug/Kg		105	60 - 140
1,1,1-Trichloroethane	50.0	58.3		ug/Kg		117	70 - 130
1,1,2-Trichloroethane	50.0	49.3		ug/Kg		99	70 - 130
Trichloroethene	50.0	55.3		ug/Kg		111	70 - 133
Trichlorofluoromethane	50.0	56.6		ug/Kg		113	60 - 140
1,2,3-Trichloropropane	50.0	46.1		ug/Kg		92	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	68.3		ug/Kg		137	60 - 140
1,2,4-Trimethylbenzene	50.0	50.3		ug/Kg		101	70 - 130
1,3,5-Trimethylbenzene	50.0	50.3		ug/Kg		101	70 - 131
Vinyl acetate	50.0	45.4		ug/Kg		91	38 - 176
Vinyl chloride	50.0	51.4		ug/Kg		103	58 - 125
m-Xylene & p-Xylene	50.0	52.4		ug/Kg		105	70 - 146
o-Xylene	50.0	52.7		ug/Kg		105	70 - 140
2,2-Dichloropropane	50.0	64.3		ug/Kg		129	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*98*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

QC Sample Results

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

TestAmerica Job ID: 720-88238-1

Lab Sample ID: LCS 720-250528/7
Matrix: Solid
Analysis Batch: 250528

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	1030		ug/Kg		103	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*102*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: LCSD 720-250528/6
Matrix: Solid
Analysis Batch: 250528

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	55.2		ug/Kg		110	70 - 144	4	20
Acetone	250	198		ug/Kg		79	30 - 162	2	30
Benzene	50.0	51.2		ug/Kg		102	70 - 130	2	20
Dichlorobromomethane	50.0	55.6		ug/Kg		111	70 - 140	3	20
Bromobenzene	50.0	51.2		ug/Kg		102	70 - 130	5	20
Chlorobromomethane	50.0	55.9		ug/Kg		112	70 - 130	3	20
Bromoform	50.0	50.9		ug/Kg		102	59 - 158	3	20
Bromomethane	50.0	56.0		ug/Kg		112	59 - 132	4	20
2-Butanone (MEK)	250	210		ug/Kg		84	59 - 159	0	20
n-Butylbenzene	50.0	48.7		ug/Kg		97	70 - 142	0	20
sec-Butylbenzene	50.0	49.2		ug/Kg		98	70 - 136	1	20
tert-Butylbenzene	50.0	50.0		ug/Kg		100	70 - 130	3	20
Carbon disulfide	50.0	69.3		ug/Kg		139	60 - 140	2	20
Carbon tetrachloride	50.0	59.7		ug/Kg		119	70 - 142	1	20
Chlorobenzene	50.0	51.2		ug/Kg		102	70 - 130	1	20
Chloroethane	50.0	48.9		ug/Kg		98	65 - 130	2	20
Chloroform	50.0	54.4		ug/Kg		109	77 - 127	2	20
Chloromethane	50.0	49.2		ug/Kg		98	55 - 140	2	20
2-Chlorotoluene	50.0	50.6		ug/Kg		101	70 - 138	4	20
4-Chlorotoluene	50.0	50.2		ug/Kg		100	70 - 136	3	20
Chlorodibromomethane	50.0	53.6		ug/Kg		107	70 - 146	1	20
1,2-Dichlorobenzene	50.0	50.9		ug/Kg		102	70 - 130	2	20
1,3-Dichlorobenzene	50.0	52.3		ug/Kg		105	70 - 131	1	20
1,4-Dichlorobenzene	50.0	51.1		ug/Kg		102	70 - 130	4	20
1,3-Dichloropropane	50.0	50.6		ug/Kg		101	70 - 140	5	20
1,1-Dichloropropene	50.0	54.1		ug/Kg		108	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	50.0	47.8		ug/Kg		96	60 - 145	7	20
Ethylene Dibromide	50.0	53.6		ug/Kg		107	70 - 140	2	20
Dibromomethane	50.0	52.1		ug/Kg		104	70 - 139	2	20
Dichlorodifluoromethane	50.0	61.8		ug/Kg		124	37 - 158	1	20
1,1-Dichloroethane	50.0	54.1		ug/Kg		108	70 - 130	3	20
1,2-Dichloroethane	50.0	55.7		ug/Kg		111	70 - 130	4	20
1,1-Dichloroethene	50.0	66.3	*	ug/Kg		133	74 - 122	2	20
cis-1,2-Dichloroethene	50.0	53.4		ug/Kg		107	70 - 138	1	20
trans-1,2-Dichloroethene	50.0	59.3		ug/Kg		119	67 - 130	2	20
1,2-Dichloropropane	50.0	50.8		ug/Kg		102	73 - 127	1	20
cis-1,3-Dichloropropene	50.0	53.1		ug/Kg		106	68 - 147	2	20

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

Lab Sample ID: LCSD 720-250528/6
Matrix: Solid
Analysis Batch: 250528

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,3-Dichloropropene	50.0	50.7		ug/Kg		101	70 - 155	1	20
Ethylbenzene	50.0	50.3		ug/Kg		101	80 - 137	1	20
Hexachlorobutadiene	50.0	53.2		ug/Kg		106	70 - 132	1	20
2-Hexanone	250	213		ug/Kg		85	62 - 158	2	20
Isopropylbenzene	50.0	52.7		ug/Kg		105	70 - 130	1	20
4-Isopropyltoluene	50.0	50.9		ug/Kg		102	70 - 133	1	20
Methylene Chloride	50.0	51.4		ug/Kg		103	70 - 134	2	20
4-Methyl-2-pentanone (MIBK)	250	213		ug/Kg		85	60 - 160	2	20
Naphthalene	50.0	48.7		ug/Kg		97	60 - 147	4	20
N-Propylbenzene	50.0	49.3		ug/Kg		99	70 - 130	2	20
Styrene	50.0	48.2		ug/Kg		96	70 - 130	0	20
1,1,1,2-Tetrachloroethane	50.0	55.6		ug/Kg		111	70 - 130	1	20
1,1,2,2-Tetrachloroethane	50.0	46.6		ug/Kg		93	70 - 146	8	20
Tetrachloroethene	50.0	55.6		ug/Kg		111	70 - 132	1	20
Toluene	50.0	49.4		ug/Kg		99	75 - 120	0	20
1,2,3-Trichlorobenzene	50.0	51.2		ug/Kg		102	60 - 140	2	20
1,2,4-Trichlorobenzene	50.0	51.8		ug/Kg		104	60 - 140	1	20
1,1,1-Trichloroethane	50.0	59.3		ug/Kg		119	70 - 130	2	20
1,1,2-Trichloroethane	50.0	51.7		ug/Kg		103	70 - 130	5	20
Trichloroethene	50.0	55.9		ug/Kg		112	70 - 133	1	20
Trichlorofluoromethane	50.0	57.4		ug/Kg		115	60 - 140	1	20
1,2,3-Trichloropropane	50.0	48.6		ug/Kg		97	70 - 146	5	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	69.8		ug/Kg		140	60 - 140	2	20
1,2,4-Trimethylbenzene	50.0	51.2		ug/Kg		102	70 - 130	2	20
1,3,5-Trimethylbenzene	50.0	51.3		ug/Kg		103	70 - 131	2	20
Vinyl acetate	50.0	46.9		ug/Kg		94	38 - 176	3	20
Vinyl chloride	50.0	52.2		ug/Kg		104	58 - 125	1	20
m-Xylene & p-Xylene	50.0	52.2		ug/Kg		104	70 - 146	0	20
o-Xylene	50.0	52.2		ug/Kg		104	70 - 140	1	20
2,2-Dichloropropane	50.0	64.5		ug/Kg		129	70 - 162	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*93*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*100*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: LCSD 720-250528/8
Matrix: Solid
Analysis Batch: 250528

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12	1000	1040		ug/Kg		104	70 - 122	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*

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

Lab Sample ID: LCSD 720-250528/8
Matrix: Solid
Analysis Batch: 250528

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	96		58 - 140

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

Lab Sample ID: MB 720-250376/1-A
Matrix: Solid
Analysis Batch: 250578

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250376

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		10	5.0	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Acenaphthene	ND		5.0	2.8	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Anthracene	ND		5.0	2.0	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Benzo[a]anthracene	ND		5.0	1.5	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Benzo[a]pyrene	ND		5.0	1.9	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Benzo[b]fluoranthene	ND		5.0	2.1	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Benzo[g,h,i]perylene	ND		5.0	4.3	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Benzo[k]fluoranthene	ND		5.0	2.1	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Chrysene	ND		5.0	1.4	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Fluoranthene	ND		5.0	1.4	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Fluorene	ND		5.0	2.2	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Indeno[1,2,3-cd]pyrene	ND		5.0	4.2	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Naphthalene	ND		5.0	3.5	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Phenanthrene	ND		5.0	1.8	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Pyrene	ND		5.0	1.7	ug/Kg		08/28/18 10:30	08/30/18 13:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	65		33 - 120	08/28/18 10:30	08/30/18 13:27	1
Terphenyl-d14	82		35 - 146	08/28/18 10:30	08/30/18 13:27	1

Lab Sample ID: LCS 720-250376/2-A
Matrix: Solid
Analysis Batch: 250578

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250376

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	667	399		ug/Kg		60	46 - 110
Acenaphthene	667	424		ug/Kg		64	46 - 106
Acenaphthylene	667	430		ug/Kg		64	46 - 108
Anthracene	667	441		ug/Kg		66	55 - 103
Benzo[a]anthracene	667	495		ug/Kg		74	54 - 110
Benzo[a]pyrene	667	517		ug/Kg		78	62 - 111
Benzo[b]fluoranthene	667	490		ug/Kg		73	60 - 109
Benzo[g,h,i]perylene	667	512		ug/Kg		77	52 - 114
Benzo[k]fluoranthene	667	493		ug/Kg		74	58 - 109
Chrysene	667	461		ug/Kg		69	54 - 108
Dibenz(a,h)anthracene	667	534		ug/Kg		80	58 - 112

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

Lab Sample ID: LCS 720-250376/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250578 — **Prep Batch: 250376**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoranthene	667	464		ug/Kg		70	59 - 109
Fluorene	667	456		ug/Kg		68	52 - 106
Indeno[1,2,3-cd]pyrene	667	538		ug/Kg		81	55 - 120
Naphthalene	667	393		ug/Kg		59	49 - 110
Phenanthrene	667	447		ug/Kg		67	57 - 110
Pyrene	667	494		ug/Kg		74	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*63*		*33 - 120*
Terphenyl-d14	*75*		*35 - 146*

Lab Sample ID: 720-88265-D-10-A MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250578 — **Prep Batch: 250376**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	ND		633	379		ug/Kg		60	46 - 110
Acenaphthene	ND		633	460		ug/Kg		73	46 - 106
Acenaphthylene	410		633	770		ug/Kg		57	46 - 108
Anthracene	300		633	795		ug/Kg		78	55 - 103
Benzo[a]anthracene	2100	F1	633	2290	F1	ug/Kg		24	54 - 110
Benzo[a]pyrene	1900	F1	633	2150	F1	ug/Kg		43	62 - 111
Benzo[b]fluoranthene	2200	F1	633	2350	F1	ug/Kg		17	60 - 109
Benzo[g,h,i]perylene	340	F1	633	501	F1	ug/Kg		26	52 - 114
Benzo[k]fluoranthene	860	F1	633	1680	F1	ug/Kg		130	58 - 109
Chrysene	2300	F1	633	2310	F1	ug/Kg		-0.3	54 - 108
Dibenz(a,h)anthracene	180	F1	633	478	F1	ug/Kg		47	58 - 112
Fluoranthene	2400	F1	633	2590	F1	ug/Kg		33	59 - 109
Fluorene	39	J	633	514		ug/Kg		75	52 - 106
Indeno[1,2,3-cd]pyrene	380	F1	633	604	F1	ug/Kg		35	55 - 120
Naphthalene	130		633	467		ug/Kg		53	49 - 110
Phenanthrene	950	F1	633	1390		ug/Kg		69	57 - 110
Pyrene	4100		633	3870	4	ug/Kg		-36	50 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*61*		*33 - 120*
Terphenyl-d14	*89*		*35 - 146*

Lab Sample ID: 720-88265-D-10-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250578 — **Prep Batch: 250376**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	ND		633	362		ug/Kg		57	46 - 110	5	35
Acenaphthene	ND		633	427		ug/Kg		68	46 - 106	7	35
Acenaphthylene	410		633	723		ug/Kg		50	46 - 108	6	35
Anthracene	300		633	730		ug/Kg		68	55 - 103	8	35
Benzo[a]anthracene	2100	F1	633	2110	F1	ug/Kg		-4	54 - 110	8	35

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

Lab Sample ID: 720-88265-D-10-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250578 — **Prep Batch: 250376**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]pyrene	1900	F1	633	1900	F1	ug/Kg		2	62 - 111	13	35
Benzo[b]fluoranthene	2200	F1	633	2070	F1	ug/Kg		-28	60 - 109	13	35
Benzo[g,h,i]perylene	340	F1	633	473	F1	ug/Kg		22	52 - 114	6	35
Benzo[k]fluoranthene	860	F1	633	1360		ug/Kg		79	58 - 109	21	35
Chrysene	2300	F1	633	2190	F1	ug/Kg		-20	54 - 108	6	35
Dibenz(a,h)anthracene	180	F1	633	427	F1	ug/Kg		39	58 - 112	11	35
Fluoranthene	2400	F1	633	2200	F1	ug/Kg		-29	59 - 109	16	35
Fluorene	39	J	633	458		ug/Kg		66	52 - 106	12	35
Indeno[1,2,3-cd]pyrene	380	F1	633	568	F1	ug/Kg		29	55 - 120	6	35
Naphthalene	130		633	446		ug/Kg		50	49 - 110	5	35
Phenanthrene	950	F1	633	1200	F1	ug/Kg		40	57 - 110	14	35
Pyrene	4100		633	3410	4	ug/Kg		-110	50 - 120	13	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*59*		*33 - 120*
Terphenyl-d14	*78*		*35 - 146*

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

Lab Sample ID: MB 720-250382/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250456 — **Prep Batch: 250382**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		2000	750	ug/Kg		08/28/18 11:24	08/29/18 23:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*101*		*40 - 130*	*08/28/18 11:24*	*08/29/18 23:58*	*1*

Lab Sample ID: LCS 720-250382/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250456 — **Prep Batch: 250382**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	167000	163000		ug/Kg		98	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*81*		*40 - 130*

Lab Sample ID: 720-88239-D-7-A MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250456 — **Prep Batch: 250382**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	11000		161000	157000		ug/Kg		91	50 - 150

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

Lab Sample ID: 720-88239-D-7-A MS
Matrix: Solid
Analysis Batch: 250456

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250382

Surrogate	MS %Recovery	MS Qualifier	Limits
p-Terphenyl	*83*		*40 - 130*

Lab Sample ID: 720-88239-D-7-B MSD
Matrix: Solid
Analysis Batch: 250456

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250382

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	11000		161000	156000		ug/Kg		89	50 - 150	1	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
p-Terphenyl	*79*		*40 - 130*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 720-250393/1-A
Matrix: Solid
Analysis Batch: 250609

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250393

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.61	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Aldrin	ND		2.0	0.50	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
alpha-BHC	ND		2.0	0.55	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Dieldrin	ND		2.0	0.59	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Endrin	ND		2.0	0.46	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Endrin aldehyde	ND		2.0	0.63	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Methoxychlor	ND		2.0	0.68	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Toxaphene	ND		40	6.8	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/28/18 13:36	08/30/18 23:31	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	*98*		*21 - 136*	*08/28/18 13:36*	*08/30/18 23:31*	*1*
Tetrachloro-m-xylene	*84*		*21 - 145*	*08/28/18 13:36*	*08/30/18 23:31*	*1*

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 720-250393/2-A
Matrix: Solid
Analysis Batch: 250609

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250393

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	16.2		ug/Kg		97	75 - 128
4,4'-DDE	16.7	15.4		ug/Kg		92	76 - 126
4,4'-DDT	16.7	14.2		ug/Kg		85	63 - 127
Aldrin	16.7	13.7		ug/Kg		82	65 - 120
alpha-BHC	16.7	11.2		ug/Kg		67	46 - 122
beta-BHC	16.7	16.6		ug/Kg		99	78 - 136
cis-Chlordane	16.7	15.0		ug/Kg		90	70 - 120
delta-BHC	16.7	13.6		ug/Kg		81	43 - 125
Dieldrin	16.7	15.0		ug/Kg		90	72 - 120
Endosulfan I	16.7	15.3		ug/Kg		92	62 - 120
Endosulfan II	16.7	15.6		ug/Kg		94	65 - 120
Endosulfan sulfate	16.7	15.0		ug/Kg		90	72 - 121
Endrin	16.7	15.7		ug/Kg		94	68 - 120
Endrin aldehyde	16.7	16.7		ug/Kg		100	68 - 120
Endrin ketone	16.7	15.5		ug/Kg		93	75 - 136
gamma-BHC (Lindane)	16.7	14.6		ug/Kg		88	72 - 120
Heptachlor	16.7	15.1		ug/Kg		91	69 - 120
Heptachlor epoxide	16.7	15.5		ug/Kg		93	68 - 120
Methoxychlor	16.7	15.9		ug/Kg		96	71 - 132
trans-Chlordane	16.7	15.1		ug/Kg		91	68 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*95*		*21 - 136*
Tetrachloro-m-xylene	*84*		*21 - 145*

Lab Sample ID: 720-88216-A-9-S MS
Matrix: Solid
Analysis Batch: 250609

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250393

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	0.90	J p	15.9	13.9		ug/Kg		82	40 - 120
4,4'-DDE	0.76	J	15.9	13.9		ug/Kg		82	40 - 120
4,4'-DDT	ND		15.9	14.2		ug/Kg		89	17 - 144
Aldrin	ND		15.9	12.2		ug/Kg		77	53 - 120
alpha-BHC	ND		15.9	10.4		ug/Kg		65	40 - 120
beta-BHC	ND		15.9	15.2		ug/Kg		95	40 - 120
cis-Chlordane	ND		15.9	12.8		ug/Kg		80	40 - 120
delta-BHC	ND		15.9	12.0		ug/Kg		75	40 - 120
Dieldrin	ND		15.9	13.6		ug/Kg		85	46 - 130
Endosulfan I	ND		15.9	13.2		ug/Kg		83	40 - 120
Endosulfan II	ND		15.9	13.4		ug/Kg		84	40 - 120
Endosulfan sulfate	ND	F2	15.9	14.3		ug/Kg		90	40 - 120
Endrin	ND		15.9	14.7		ug/Kg		92	32 - 143
Endrin aldehyde	ND		15.9	12.9		ug/Kg		81	40 - 120
Endrin ketone	ND		15.9	13.5		ug/Kg		84	40 - 120
gamma-BHC (Lindane)	ND		15.9	13.0		ug/Kg		82	58 - 120
Heptachlor	ND		15.9	13.2		ug/Kg		83	52 - 120
Heptachlor epoxide	ND		15.9	13.1		ug/Kg		82	40 - 120

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 720-88216-A-9-S MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250609 — **Prep Batch: 250393**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methoxychlor	ND		15.9	15.2		ug/Kg		95	40 - 120
trans-Chlordane	ND		15.9	13.1		ug/Kg		82	40 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*90*		*21 - 136*
Tetrachloro-m-xylene	*76*		*21 - 145*

Lab Sample ID: 720-88216-A-9-T MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250609 — **Prep Batch: 250393**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	0.90	J p	15.9	15.8		ug/Kg		94	40 - 120	13	20
4,4'-DDE	0.76	J	15.9	15.7		ug/Kg		94	40 - 120	12	20
4,4'-DDT	ND		15.9	15.9		ug/Kg		100	17 - 144	12	20
Aldrin	ND		15.9	13.8		ug/Kg		87	53 - 120	12	20
alpha-BHC	ND		15.9	11.8		ug/Kg		74	40 - 120	12	20
beta-BHC	ND		15.9	17.0		ug/Kg		107	40 - 120	11	20
cis-Chlordane	ND		15.9	14.5		ug/Kg		91	40 - 120	12	20
delta-BHC	ND		15.9	13.7		ug/Kg		86	40 - 120	13	20
Dieldrin	ND		15.9	15.3		ug/Kg		96	46 - 130	12	20
Endosulfan I	ND		15.9	14.9		ug/Kg		93	40 - 120	12	20
Endosulfan II	ND		15.9	15.3		ug/Kg		96	40 - 120	13	30
Endosulfan sulfate	ND	F2	15.9	16.5		ug/Kg		104	40 - 120	15	20
Endrin	ND		15.9	16.7		ug/Kg		105	32 - 143	12	20
Endrin aldehyde	ND		15.9	14.3		ug/Kg		90	40 - 120	10	20
Endrin ketone	ND		15.9	15.2		ug/Kg		96	40 - 120	12	20
gamma-BHC (Lindane)	ND		15.9	14.9		ug/Kg		93	58 - 120	14	20
Heptachlor	ND		15.9	15.1		ug/Kg		95	52 - 120	13	20
Heptachlor epoxide	ND		15.9	14.9		ug/Kg		93	40 - 120	13	20
Methoxychlor	ND		15.9	16.2		ug/Kg		102	40 - 120	7	20
trans-Chlordane	ND		15.9	14.8		ug/Kg		93	40 - 120	12	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*100*		*21 - 136*
Tetrachloro-m-xylene	*82*		*21 - 145*

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

Lab Sample ID: MB 240-343099/23-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 343339 — **Prep Batch: 343099**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/29/18 14:50	08/31/18 08:41	1
Aroclor-1221	ND		50	24	ug/Kg		08/29/18 14:50	08/31/18 08:41	1
Aroclor-1232	ND		50	23	ug/Kg		08/29/18 14:50	08/31/18 08:41	1

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

Lab Sample ID: MB 240-343099/23-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 343339 — **Prep Batch: 343099**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1242	ND		50	19	ug/Kg		08/29/18 14:50	08/31/18 08:41	1
Aroclor-1248	ND		50	24	ug/Kg		08/29/18 14:50	08/31/18 08:41	1
Aroclor-1254	ND		50	23	ug/Kg		08/29/18 14:50	08/31/18 08:41	1
Aroclor-1260	ND		50	22	ug/Kg		08/29/18 14:50	08/31/18 08:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*88*		*14 - 128*	*08/29/18 14:50*	*08/31/18 08:41*	*1*
DCB Decachlorobiphenyl	*106*		*10 - 132*	*08/29/18 14:50*	*08/31/18 08:41*	*1*

Lab Sample ID: LCS 240-343099/24-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 343339 — **Prep Batch: 343099**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	1000	826		ug/Kg		83	47 - 120
Aroclor-1260	1000	986		ug/Kg		99	46 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*87*		*14 - 128*
DCB Decachlorobiphenyl	*101*		*10 - 132*

Lab Sample ID: 720-88240-F-3-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 343339 — **Prep Batch: 343099**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	ND		991	854		ug/Kg		86	31 - 120
Aroclor-1260	ND		991	968		ug/Kg		98	21 - 122

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*88*		*14 - 128*
DCB Decachlorobiphenyl	*110*		*10 - 132*

Lab Sample ID: 720-88240-F-3-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 343339 — **Prep Batch: 343099**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	ND		997	944		ug/Kg		95	31 - 120	10	30
Aroclor-1260	ND		997	1150		ug/Kg		116	21 - 122	18	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*97*		*14 - 128*
DCB Decachlorobiphenyl	*151*	*X*	*10 - 132*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-250470/1-A
Matrix: Solid
Analysis Batch: 250593

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250470

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Arsenic	ND		1.0	0.085	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Barium	ND		0.50	0.071	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Beryllium	ND		0.10	0.033	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Cadmium	ND		0.13	0.012	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Chromium	ND		0.50	0.053	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Cobalt	ND		0.20	0.020	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Copper	ND		1.5	0.71	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Lead	ND		0.50	0.11	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Nickel	ND		0.50	0.051	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Selenium	ND		1.0	0.15	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Silver	ND		0.25	0.051	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Thallium	ND		0.50	0.15	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Vanadium	ND		0.50	0.068	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Zinc	ND		1.5	0.64	mg/Kg		08/29/18 09:32	08/30/18 09:42	1

Lab Sample ID: LCS 720-250470/2-A
Matrix: Solid
Analysis Batch: 250593

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250470

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	47.3		mg/Kg		95	80 - 120
Arsenic	50.0	47.2		mg/Kg		94	80 - 120
Barium	50.0	49.1		mg/Kg		98	80 - 120
Beryllium	50.0	50.0		mg/Kg		100	80 - 120
Cadmium	50.0	48.1		mg/Kg		96	80 - 120
Chromium	50.0	48.9		mg/Kg		98	80 - 120
Cobalt	50.0	48.8		mg/Kg		98	80 - 120
Copper	50.0	48.8		mg/Kg		98	80 - 120
Lead	50.0	48.5		mg/Kg		97	80 - 120
Molybdenum	50.0	48.7		mg/Kg		97	80 - 120
Nickel	50.0	48.8		mg/Kg		98	80 - 120
Selenium	50.0	46.1		mg/Kg		92	80 - 120
Silver	25.0	24.0		mg/Kg		96	80 - 120
Thallium	50.0	48.4		mg/Kg		97	80 - 120
Vanadium	50.0	48.9		mg/Kg		98	80 - 120
Zinc	50.0	47.8		mg/Kg		96	80 - 120

Lab Sample ID: 720-88237-A-9-A MS
Matrix: Solid
Analysis Batch: 250593

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250470

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.4	J F1	46.3	19.4	F1	mg/Kg		39	75 - 125
Arsenic	4.3		46.3	55.2		mg/Kg		110	75 - 125
Barium	90		46.3	126		mg/Kg		79	75 - 125
Beryllium	ND	F1	46.3	54.8		mg/Kg		118	75 - 125

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

Lab Sample ID: 720-88237-A-9-A MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250593 — **Prep Batch: 250470**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.20	J	46.3	50.8		mg/Kg		109	75 - 125
Chromium	45	F1	46.3	110	F1	mg/Kg		140	75 - 125
Cobalt	9.1		46.3	61.2		mg/Kg		113	75 - 125
Copper	31	F1	46.3	91.0	F1	mg/Kg		129	75 - 125
Lead	100	F1 F2	46.3	108	F1	mg/Kg		13	75 - 125
Molybdenum	0.36	J	46.3	49.6		mg/Kg		106	75 - 125
Nickel	60	F1	46.3	108		mg/Kg		104	75 - 125
Selenium	ND		46.3	48.2		mg/Kg		104	75 - 125
Silver	ND	F1	23.1	27.4		mg/Kg		118	75 - 125
Thallium	ND		46.3	49.8		mg/Kg		108	75 - 125
Vanadium	26	F1	46.3	90.4	F1	mg/Kg		140	75 - 125
Zinc	86	F1	46.3	108	F1	mg/Kg		48	75 - 125

Lab Sample ID: 720-88237-A-9-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250593 — **Prep Batch: 250470**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	1.4	J F1	47.2	19.9	F1	mg/Kg		39	75 - 125	3	20
Arsenic	4.3		47.2	60.3		mg/Kg		119	75 - 125	9	20
Barium	90		47.2	139		mg/Kg		105	75 - 125	10	20
Beryllium	ND	F1	47.2	59.8	F1	mg/Kg		127	75 - 125	9	20
Cadmium	0.20	J	47.2	56.4		mg/Kg		119	75 - 125	11	20
Chromium	45	F1	47.2	128	F1	mg/Kg		175	75 - 125	15	20
Cobalt	9.1		47.2	67.9		mg/Kg		125	75 - 125	10	20
Copper	31	F1	47.2	107	F1	mg/Kg		161	75 - 125	16	20
Lead	100	F1 F2	47.2	133	F1 F2	mg/Kg		66	75 - 125	21	20
Molybdenum	0.36	J	47.2	54.6		mg/Kg		115	75 - 125	10	20
Nickel	60	F1	47.2	120	F1	mg/Kg		126	75 - 125	10	20
Selenium	ND		47.2	53.5		mg/Kg		113	75 - 125	10	20
Silver	ND	F1	23.6	30.9	F1	mg/Kg		131	75 - 125	12	20
Thallium	ND		47.2	55.4		mg/Kg		118	75 - 125	11	20
Vanadium	26	F1	47.2	104	F1	mg/Kg		166	75 - 125	14	20
Zinc	86	F1	47.2	118	F1	mg/Kg		67	75 - 125	8	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-250521/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250677 — **Prep Batch: 250521**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/29/18 15:39	08/30/18 18:10	1

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 720-250521/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250677 — **Prep Batch: 250521**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.833	0.826		mg/Kg		99	80 - 120		

Lab Sample ID: 720-88237-A-9-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250677 — **Prep Batch: 250521**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.12		0.769	0.801		mg/Kg		88	75 - 125		

Lab Sample ID: 720-88237-A-9-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250677 — **Prep Batch: 250521**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.12		0.781	0.844		mg/Kg		93	75 - 125	5	20

QC Association Summary

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

TestAmerica Job ID: 720-88238-1

GC/MS VOA

Analysis Batch: 250405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88238-2	DUP-05	Total/NA	Solid	8260B	250443
MB 720-250405/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250405/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250405/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250405/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250405/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 250443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88238-2	DUP-05	Total/NA	Solid	5035	

Analysis Batch: 250452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88238-3	DUP-15	Total/NA	Solid	8260B	250473
MB 720-250452/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250452/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250452/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250452/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250452/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 250473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88238-3	DUP-15	Total/NA	Solid	5035	
720-88238-4	DUP-25	Total/NA	Solid	5035	
720-88238-5	DUP-14	Total/NA	Solid	5035	

Analysis Batch: 250528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88238-4	DUP-25	Total/NA	Solid	8260B	250473
720-88238-5	DUP-14	Total/NA	Solid	8260B	250473
MB 720-250528/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250528/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250528/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250528/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250528/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 250376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88238-2	DUP-05	Total/NA	Solid	3546	
720-88238-3	DUP-15	Total/NA	Solid	3546	
720-88238-4	DUP-25	Total/NA	Solid	3546	
720-88238-5	DUP-14	Total/NA	Solid	3546	
MB 720-250376/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250376/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88265-D-10-A MS	Matrix Spike	Total/NA	Solid	3546	
720-88265-D-10-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

GC/MS Semi VOA (Continued)

Analysis Batch: 250578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250376/1-A	Method Blank	Total/NA	Solid	8270C SIM	250376
LCS 720-250376/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	250376
720-88265-D-10-A MS	Matrix Spike	Total/NA	Solid	8270C SIM	250376
720-88265-D-10-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8270C SIM	250376

Analysis Batch: 250660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88238-2	DUP-05	Total/NA	Solid	8270C SIM	250376

Analysis Batch: 250730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88238-3	DUP-15	Total/NA	Solid	8270C SIM	250376
720-88238-4	DUP-25	Total/NA	Solid	8270C SIM	250376

Analysis Batch: 250745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88238-5	DUP-14	Total/NA	Solid	8270C SIM	250376

GC Semi VOA

Prep Batch: 250382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88238-2	DUP-05	Total/NA	Solid	3546	
720-88238-3	DUP-15	Total/NA	Solid	3546	
720-88238-4	DUP-25	Total/NA	Solid	3546	
720-88238-5	DUP-14	Total/NA	Solid	3546	
MB 720-250382/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250382/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88239-D-7-A MS	Matrix Spike	Total/NA	Solid	3546	
720-88239-D-7-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Prep Batch: 250393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88238-2	DUP-05	Total/NA	Solid	3546	
720-88238-3	DUP-15	Total/NA	Solid	3546	
720-88238-4	DUP-25	Total/NA	Solid	3546	
720-88238-5	DUP-14	Total/NA	Solid	3546	
MB 720-250393/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250393/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88216-A-9-S MS	Matrix Spike	Total/NA	Solid	3546	
720-88216-A-9-T MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 250456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250382/1-A	Method Blank	Total/NA	Solid	8015B	250382
LCS 720-250382/2-A	Lab Control Sample	Total/NA	Solid	8015B	250382
720-88239-D-7-A MS	Matrix Spike	Total/NA	Solid	8015B	250382
720-88239-D-7-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	250382

GC Semi VOA (Continued)

Analysis Batch: 250568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88238-4	DUP-25	Total/NA	Solid	8015B	250382

Analysis Batch: 250569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88238-2	DUP-05	Total/NA	Solid	8015B	250382
720-88238-3	DUP-15	Total/NA	Solid	8015B	250382
720-88238-5	DUP-14	Total/NA	Solid	8015B	250382

Analysis Batch: 250609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250393/1-A	Method Blank	Total/NA	Solid	8081A	250393
LCS 720-250393/2-A	Lab Control Sample	Total/NA	Solid	8081A	250393
720-88216-A-9-S MS	Matrix Spike	Total/NA	Solid	8081A	250393
720-88216-A-9-T MSD	Matrix Spike Duplicate	Total/NA	Solid	8081A	250393

Analysis Batch: 250737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88238-2	DUP-05	Total/NA	Solid	8081A	250393
720-88238-3	DUP-15	Total/NA	Solid	8081A	250393
720-88238-4	DUP-25	Total/NA	Solid	8081A	250393
720-88238-5	DUP-14	Total/NA	Solid	8081A	250393

Prep Batch: 343099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88238-2	DUP-05	Total/NA	Solid	3540C	
720-88238-3	DUP-15	Total/NA	Solid	3540C	
720-88238-4	DUP-25	Total/NA	Solid	3540C	
720-88238-5	DUP-14	Total/NA	Solid	3540C	
MB 240-343099/23-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-343099/24-A	Lab Control Sample	Total/NA	Solid	3540C	
720-88240-F-3-B MS	Matrix Spike	Total/NA	Solid	3540C	
720-88240-F-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3540C	

Analysis Batch: 343336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88238-2	DUP-05	Total/NA	Solid	8082	343099
720-88238-3	DUP-15	Total/NA	Solid	8082	343099
720-88238-4	DUP-25	Total/NA	Solid	8082	343099
720-88238-5	DUP-14	Total/NA	Solid	8082	343099

Analysis Batch: 343339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-343099/23-A	Method Blank	Total/NA	Solid	8082	343099
LCS 240-343099/24-A	Lab Control Sample	Total/NA	Solid	8082	343099
720-88240-F-3-B MS	Matrix Spike	Total/NA	Solid	8082	343099
720-88240-F-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8082	343099

QC Association Summary

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

TestAmerica Job ID: 720-88238-1

Metals

Prep Batch: 250470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88238-1	DUP-11	Total/NA	Solid	3050B	
720-88238-2	DUP-05	Total/NA	Solid	3050B	
720-88238-3	DUP-15	Total/NA	Solid	3050B	
720-88238-4	DUP-25	Total/NA	Solid	3050B	
720-88238-5	DUP-14	Total/NA	Solid	3050B	
MB 720-250470/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250470/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88237-A-9-A MS	Matrix Spike	Total/NA	Solid	3050B	
720-88237-A-9-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Prep Batch: 250521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88238-1	DUP-11	Total/NA	Solid	7471A	
720-88238-2	DUP-05	Total/NA	Solid	7471A	
720-88238-3	DUP-15	Total/NA	Solid	7471A	
720-88238-4	DUP-25	Total/NA	Solid	7471A	
720-88238-5	DUP-14	Total/NA	Solid	7471A	
MB 720-250521/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250521/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88237-A-9-D MS	Matrix Spike	Total/NA	Solid	7471A	
720-88237-A-9-E MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	

Analysis Batch: 250593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88238-1	DUP-11	Total/NA	Solid	6010B	250470
720-88238-2	DUP-05	Total/NA	Solid	6010B	250470
720-88238-3	DUP-15	Total/NA	Solid	6010B	250470
720-88238-4	DUP-25	Total/NA	Solid	6010B	250470
720-88238-5	DUP-14	Total/NA	Solid	6010B	250470
MB 720-250470/1-A	Method Blank	Total/NA	Solid	6010B	250470
LCS 720-250470/2-A	Lab Control Sample	Total/NA	Solid	6010B	250470
720-88237-A-9-A MS	Matrix Spike	Total/NA	Solid	6010B	250470
720-88237-A-9-B MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250470

Analysis Batch: 250649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88238-4	DUP-25	Total/NA	Solid	6010B	250470

Analysis Batch: 250677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88238-1	DUP-11	Total/NA	Solid	7471A	250521
720-88238-2	DUP-05	Total/NA	Solid	7471A	250521
720-88238-3	DUP-15	Total/NA	Solid	7471A	250521
720-88238-4	DUP-25	Total/NA	Solid	7471A	250521
720-88238-5	DUP-14	Total/NA	Solid	7471A	250521
MB 720-250521/1-A	Method Blank	Total/NA	Solid	7471A	250521
LCS 720-250521/2-A	Lab Control Sample	Total/NA	Solid	7471A	250521
720-88237-A-9-D MS	Matrix Spike	Total/NA	Solid	7471A	250521
720-88237-A-9-E MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	250521

Client Sample ID: DUP-11 — Lab Sample ID: 720-88238-1

Date Collected: 08/23/18 00:00 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250470	08/29/18 09:32	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250593	08/30/18 10:20	BKR	TAL PLS
Total/NA	Prep	7471A			250521	08/29/18 15:39	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250677	08/30/18 18:48	OBI	TAL PLS

Client Sample ID: DUP-05 — Lab Sample ID: 720-88238-2

Date Collected: 08/23/18 00:00 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250443	08/25/18 03:05	MJK	TAL PLS
Total/NA	Analysis	8260B		1	250405	08/29/18 06:01	JRM	TAL PLS
Total/NA	Prep	3546			250376	08/28/18 10:30	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250660	08/31/18 13:26	LPL	TAL PLS
Total/NA	Prep	3546			250382	08/28/18 11:24	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250569	08/30/18 21:41	JXL	TAL PLS
Total/NA	Prep	3546			250393	08/28/18 13:36	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250737	09/01/18 05:10	JZT	TAL PLS
Total/NA	Prep	3540C			343099	08/29/18 14:50	AMT	TAL CAN
Total/NA	Analysis	8082		1	343336	08/31/18 08:50	LSH	TAL CAN
Total/NA	Prep	3050B			250470	08/29/18 09:32	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250593	08/30/18 10:25	BKR	TAL PLS
Total/NA	Prep	7471A			250521	08/29/18 15:39	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250677	08/30/18 18:50	OBI	TAL PLS

Client Sample ID: DUP-15 — Lab Sample ID: 720-88238-3

Date Collected: 08/24/18 00:00 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250473	08/25/18 03:05	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250452	08/29/18 17:36	A1C	TAL PLS
Total/NA	Prep	3546			250376	08/28/18 10:30	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250730	08/31/18 18:27	MQL	TAL PLS
Total/NA	Prep	3546			250382	08/28/18 11:24	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250569	08/30/18 20:28	JXL	TAL PLS
Total/NA	Prep	3546			250393	08/28/18 13:36	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250737	09/01/18 05:26	JZT	TAL PLS
Total/NA	Prep	3540C			343099	08/29/18 14:50	AMT	TAL CAN
Total/NA	Analysis	8082		1	343336	08/31/18 09:07	LSH	TAL CAN
Total/NA	Prep	3050B			250470	08/29/18 09:32	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250593	08/30/18 10:39	BKR	TAL PLS
Total/NA	Prep	7471A			250521	08/29/18 15:39	MAG	TAL PLS

Lab Chronicle

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

TestAmerica Job ID: 720-88238-1

Client Sample ID: DUP-15

Lab Sample ID: 720-88238-3
Date Collected: 08/24/18 00:00
Matrix: Solid
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1	250677	08/30/18 18:57	OBI	TAL PLS

Client Sample ID: DUP-25

Lab Sample ID: 720-88238-4
Date Collected: 08/24/18 00:00
Matrix: Solid
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250473	08/25/18 03:05	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250528	08/29/18 21:24	A1C	TAL PLS
Total/NA	Prep	3546			250376	08/28/18 10:30	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		10	250730	09/01/18 00:46	MQL	TAL PLS
Total/NA	Prep	3546			250382	08/28/18 11:24	MAB	TAL PLS
Total/NA	Analysis	8015B		5	250568	08/31/18 05:23	JXL	TAL PLS
Total/NA	Prep	3546			250393	08/28/18 13:36	MAB	TAL PLS
Total/NA	Analysis	8081A		2	250737	09/01/18 05:43	JZT	TAL PLS
Total/NA	Prep	3540C			343099	08/29/18 14:50	AMT	TAL CAN
Total/NA	Analysis	8082		1	343336	08/31/18 09:24	LSH	TAL CAN
Total/NA	Prep	3050B			250470	08/29/18 09:32	GLL	TAL PLS
Total/NA	Analysis	6010B		10	250649	08/30/18 22:48	OBI	TAL PLS
Total/NA	Prep	3050B			250470	08/29/18 09:32	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250593	08/30/18 10:44	BKR	TAL PLS
Total/NA	Prep	7471A			250521	08/29/18 15:39	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250677	08/30/18 18:59	OBI	TAL PLS

Client Sample ID: DUP-14

Lab Sample ID: 720-88238-5
Date Collected: 08/24/18 00:00
Matrix: Solid
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250473	08/25/18 03:05	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250528	08/29/18 21:52	A1C	TAL PLS
Total/NA	Prep	3546			250376	08/28/18 10:30	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		2	250745	09/02/18 20:02	LPL	TAL PLS
Total/NA	Prep	3546			250382	08/28/18 11:24	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250569	08/31/18 00:07	JXL	TAL PLS
Total/NA	Prep	3546			250393	08/28/18 13:36	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250737	09/01/18 05:59	JZT	TAL PLS
Total/NA	Prep	3540C			343099	08/29/18 14:50	AMT	TAL CAN
Total/NA	Analysis	8082		1	343336	08/31/18 09:42	LSH	TAL CAN
Total/NA	Prep	3050B			250470	08/29/18 09:32	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250593	08/30/18 10:48	BKR	TAL PLS
Total/NA	Prep	7471A			250521	08/29/18 15:39	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250677	08/30/18 19:02	OBI	TAL PLS

Laboratory References:

= Asbestos TEM Laboratories, Inc., 630 BANCROFT WAY, Berkeley, CA 94710

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

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

TestAmerica Job ID: 720-88238-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

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

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Laboratory: TestAmerica Canton

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

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-19
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19
Illinois	NELAP	5	200004	07-31-19
Kansas	NELAP	7	E-10336	01-31-19
Kentucky (UST)	State Program	4	58	02-23-19
Kentucky (WW)	State Program	4	98016	12-31-18 *
Minnesota	NELAP	5	039-999-348	12-31-18 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19
New York	NELAP	2	10975	03-31-19
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-19
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-18-10	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19
Washington	State Program	10	C971	01-12-19
West Virginia DEP	State Program	3	210	12-31-18 *

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

Method Summary

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

TestAmerica Job ID: 720-88238-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PLS
8270C SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
8081A	Organochlorine Pesticides (GC)	SW846	TAL PLS
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS
Subcontract	Asbestos - CARB 435	None	
3050B	Preparation, Metals	SW846	TAL PLS
3540C	Soxhlet Extraction	SW846	TAL CAN
3546	Microwave Extraction	SW846	TAL PLS
5035	Closed System Purge and Trap	SW846	TAL PLS
7471A	Preparation, Mercury	SW846	TAL PLS

Protocol References:

None = None

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

Laboratory References:

= Asbestos TEM Laboratories, Inc., 630 BANCROFT WAY, Berkeley, CA 94710

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

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

TestAmerica Job ID: 720-88238-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-88238-1	DUP-11	Solid	08/23/18 00:00	08/24/18 15:00
720-88238-2	DUP-05	Solid	08/23/18 00:00	08/24/18 15:00
720-88238-3	DUP-15	Solid	08/24/18 00:00	08/24/18 15:00
720-88238-4	DUP-25	Solid	08/24/18 00:00	08/24/18 15:00
720-88238-5	DUP-14	Solid	08/24/18 00:00	08/24/18 15:00

ASBESTOS TEM LABORATORIES, INC.

CARB Method 435
Polarized Light Microscopy
Analytical Report

Laboratory Job # 1283-01202

630 Bancroft Way
Berkeley, CA 94710
(510) 704-8930
FAX (510) 704-8429

ASBESTOS TEM LABORATORIES, INC

CA DPH ELAP
Lab No. 1866

NVLAP Lab Code: 101891-0
Berkeley, CA

Aug/31/2018

Micah Smith
TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

RE: LABORATORY JOB # 1283-01202
Polarized light microscopy analytical results for 4 bulk sample(s).
Job Site: 720-88238-1
Job No.:

Enclosed please find the bulk material analytical results for one or more samples submitted for asbestos analysis. The analyses were performed in accordance with the California Air Resources Board (ARB) Method 435 for the determination of asbestos in serpentine aggregate samples.

Prior to analysis, samples are logged-in and all data pertinent to the sample recorded. The samples are checked for damage or disruption of any chain-of-custody seals. A unique laboratory ID number is assigned to each sample. A hard copy log-in sheet containing all pertinent information concerning the sample is generated. This and all other relevant paper work are kept with the sample throughout the analytical procedures to assure proper analysis.

Sample preparation follows a standard CARB 435 prep method. The entire sample is dried at 135-150 C and then crushed to ~3/8" gravel size using a Bico Chipmunk crusher. If the submitted sample is >1 pint, the sample was split using a 1/2" riffle splitter following ASTM Method C-702-98 to obtain a 1 pint aliquot. The entire 1 pint aliquot, or entire original sample, is then pulverized in a Bico Braun disc pulverizer calibrated to produce a nominal 200 mesh final product. If necessary, additional homogenization steps are undertaken using a 3/8" riffle splitter. Small aliquots are collected from throughout the pulverized material to create three separate microsope slide mounts containing the appropriate refractive index oil. The prepared slides are placed under a polarizing light microscope where standard mineralogical techniques are used to analyze the various materials present, including asbestos. If asbestos is identified and of less than 10% concentration by visual area estimate then an additional five sample mounts are prepared. Quantification of asbestos concentration is obtained using the standard CAL ARB Method 435 point count protocol. For samples observed to contain visible asbestos of less than 10% concentration, a point counting techinique is used with 50 points counted on each of eight sample mounts for a total of 400 points. The data is then compiled into standard report format and subjected to a thorough quality assurance check before the information is released to the client.

While the CARB 435 method has much to commend it, there are a number of situations where it fails to provide sufficient accuracy to make a definitive determination of the presence/absence of asbestos and/or an accurate count of the asbestos concentration present in a given sample. These problems include, but are not limited to, 1) statistical uncertainty with samples containing <1% asbestos when too few particles are counted, 2) definitive identification and discrimination between various fibrous amphibole minerals such as tremolite/actinolite/hornblende and the "Libby amphiboles" such as tremolite/winchite/richterite/arfvedsonite, and C) small asbestiform fibers which are near or below the resolution limit of the PLM microscope such as those found in various California coast range serpentine bodies. In these cases, further analysis by transmission electron microscopy is recommended to obtain a more accurate result.

Sincerely Yours,

Lab Manager
ASBESTOS TEM LABORATORIES, INC.

--- These results relate only to the samples tested and must not be reproduced, except in full, without the approval of the laboratory. ---

630 BANCROFT WAY ▪ BERKELEY, CA 94710 ▪ PH. (510) 704-8930 ▪ FAX (510) 704-8429
With Branch Offices Located At: 1350 FREEPORT BLVD. UNIT 104, SPARKS, NV 89431

POLARIZED LIGHT MICROSCOPY
CARB 435 ANALYTICAL REPORT

Contact: Micah Smith

Address: TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

Samples Submitted: 4

Samples Analyzed: 4

Job Site / No. 720-88238-1

Report No. **359880**

Date Submitted: Aug-27-18

Date Reported: Aug-31-18

SAMPLE ID	POINTS COUNTED	ASBESTOS %	ASBESTOS TYPE	LOCATION / DESCRIPTION
DUP-05 Lab ID # 1283-01202-001	**400** - Total Points	**<0.25%**	**None Detected**	720-88238-2 No Asbestos Detected
DUP-15 Lab ID # 1283-01202-002	**400** - Total Points	**<0.25%**	**None Detected**	720-88238-3 No Asbestos Detected
DUP-25 Lab ID # 1283-01202-003	**400** - Total Points	**<0.25%**	**None Detected**	720-88238-4 No Asbestos Detected
DUP-14 Lab ID # 1283-01202-004	**400** - Total Points	**<0.25%**	**None Detected**	720-88238-5 No Asbestos Detected
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			

QC Reviewer _____ **Analys** _____

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

Chain of Custody Record

#359880

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39418.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: Asbestos TEM Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88238-1
Address: 630 BANCROFT WAY,	Due Date Requested: 8/31/2018			
City: Berkeley	TAT Requested (days):			
State, Zip: CA, 94710				
Phone:	PO #:			
Email:	WO #:			
Project Name: UPC OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

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

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Asbestos - CARB 435)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DUP-05 (720-88238-2)	8/23/18	Pacific		Solid			X	1	
DUP-15 (720-88238-3)	8/24/18	Pacific		Solid			X	1	
DUP-25 (720-88238-4)	8/24/18	Pacific		Solid			X	1	
DUP-14 (720-88238-5)	8/24/18	Pacific		Solid			X	1	

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

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

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 8-27-18 10:35	Company: TA 720	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: AUG27 '18 10:38AM		

Ver: 09/20/2016

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

720-88238

TESTAMERICA Pleasanton Chain of Custody

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

Reference #: 185112

Date 8/24 Page 1 of 1

Report To
Attn: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: mkahrilas@geosyntec.com
To: GEOSYNTEC
Sampled By: M. KAHRILAS
Attn: A SMITH
Phone: 347-530-7652

Analysis Request

Sample ID	Date	Time	Matrix	Preserv.	Volatile Organics GC/MS (VOCs) ☒ EPA 8260B	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☐ Motor Oil ☐ Other	SemiVolatile Organics GCMS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☒ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☒ EPA 8081 PCBs ☒ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other	Metals: ☐ 6020 ☐ 200.8 (ICP-MS):	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	Asbestos (CARB435)
DUP-11	8/23												X										
DUP-05	8/23				X			X		X		X	X										X
DUP-15	8/24				X			X		X		X	X										X
DUP-25	↓				X			X		X		X	X										X
DUP-14	↓				X			X		X		X	X										X

Project Info.
Project Name/#: UPL OU-SM
#: WG256502
Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt
# of Containers:
Head Space:
Temp:

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

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID _____
3.2°

Terms and Conditions on reverse

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

1) Received by:
Signature: [illegible] Time: 1315
Printed Name: R. Lt Date: 8/24/18
Company: TA

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

2) Received by:
Signature: [illegible] Time: 1500
Printed Name: J. Bullock Date: 8/24/18
Company: TA-720

3) Relinquished by:
720-88238 Chain of Custody
Company

3) Received by:
Signature Time
Printed Name Date
Company

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39419.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88238-1
Address: 4101 Shuffel Street NW,	Due Date Requested: 8/31/2018			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: UPC OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

C207

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8082/3540C (MOD) PCB 7 Aroclors	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DUP-05 (720-88238-2)	8/23/18	Pacific		Solid			X	1	
DUP-15 (720-88238-3)	8/24/18	Pacific		Solid			X	1	
DUP-25 (720-88238-4)	8/24/18	Pacific		Solid			X	1	
DUP-14 (720-88238-5)	8/24/18	Pacific		Solid			X	1	

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

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

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

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	8-27-18/600	TAL	[signature]	8/29/18 935	TAL

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

Ver: 09/20/2016

TestAmerica Canton Sample Receipt Form/Narrative **Login # :**_____
Canton Facility

Client TA Pleasanton Site Name_____ Cooler unpacked by: SC
Cooler Received on 8/29/18 Opened on 8/29/18
FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time_____ Storage Location_____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other_____
Packing material used: Bubble Wrap Foam Plastic Bag None Other_____
COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF +0 °C) Observed Cooler Temp. 1.4 °C Corrected Cooler Temp. 1.4 °C
   IR GUN #36 (CF -0.3°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   -Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
   -Were tamper/custody seals intact and uncompromised? Yes No NA
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No
    If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC849151**
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____ Yes No
16. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s):_____.

WI-NC-099

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88238-1

Login Number: 88238
List Number: 1
Creator: Bullock, Tracy

List Source: TestAmerica Pleasanton

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

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ANALYTICAL REPORT

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

TestAmerica Job ID: 720-88239-1
Client Project/Site: UPC OU-SM
Revision: 1

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

Attn: Mr. Krys Jesionek

Authorized for release by:
11/21/2018 6:44:10 PM

Micah Smith, Project Manager II
(925)484-1919
micah.smith@testamericainc.com

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

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

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 5
Detection Summary 9
Client Sample Results 22
Surrogate Summary 425
QC Sample Results 430
QC Association Summary 479
Lab Chronicle 491
Certification Summary 500
Method Summary 501
Sample Summary 502
Subcontract Data 503
Chain of Custody 514
Receipt Checklists 524

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	ISTD response or retention time outside acceptable limits
F1	MS and/or MSD Recovery is outside acceptance limits.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
X	Surrogate is outside control limits
F2	MS/MSD RPD exceeds control limits
F1	MS and/or MSD Recovery is outside acceptance limits.

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

Glossary

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

Glossary (Continued)

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

Job ID: 720-88239-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-88239-1

Comments
This report was revised on 11/21/18 to change the units for the metals data to report in mg/Kg, as requested.

Receipt
The samples were received on 8/24/2018 3:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.0º C.

Receipt Exceptions
The following sample was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): DG-B9S-9.5-10 2/24/18 @ 10:20. As requested, this sample was analyzed for all requested methods.

1.) The container labels for the following samples did not match the information listed on the Chain-of-Custody (COC): DG-B9--0.5-1 and DG-B9--B3.5-4. Received 6 Terra Cores(4-DI and 2-MeOH) with container labels list DG-B9--05-1, and did not receive any Terra Cores DG-B9-3.5-4. Can not distinguish which Terra core vial they go to which sample, logged VOC+Gas on the sample jars for these two samples.

2.) The container label for the following samples did not match the information listed on the Chain-of-Custody (COC): DG-B9S--0.5-1 @ 10:40. The container labels list BG-B10S-0.5-1 (10:40), while the COC lists DG-B9S-0.5-1 (10:40). Logged by container label DG-B10S-0.5-1 (10:40) since page 2 of the COC this same ID: DG-B9S-0.5-1 (10:20) exist .

3.) The container label for the following samples did not match the information listed on the Chain-of-Custody (COC): DG-B9S--3.5-4 @ 10:40. The container labels list BG-B10S-3.5-4 (10:40), while the COC lists DG-B9S-0.5-1 (10:40). Logged by container label DG-B10S-3.5-4 (10:40) since page 2 of the COC this same ID: DG-B9S-3.5-4 (10:20) exist .

4.) Received 6 Terra cores for DG-C7S-0.5-1 @ 07:50.

8081A analysis for samples DE-DE89-0.5-1, DG-DE89-3.5-4, and DG-DW89-9.5-10 was canceled at the emailed request of the client on August 31, 2018.

Sample containers were not received full.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for analytical batch 720-250532 recovered outside control limits for the following analytes: Carbon disulfide and 1,1-Dichloroethene. The laboratory control sample duplicate (LCSD) for analytical batch 720-250532 recovered outside control limits for the following analytes: Carbon disulfide. These analytes were biased high in the LCS/LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250555 recovered outside control limits for the following analytes: 1,1-Dichloroethene and 1,1,2-Trichloro-1,2,2-trifluoroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250528 recovered outside control limits for the following analytes: 1,1-Dichloroethene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample (LCS) for analytical batch 720-250755 recovered outside control limits for the following analytes: 1,1-Dichloroethene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: Internal standard (ISTD) response for the following samples were outside control limits: DG-M7S-0.5-1 (720-88239-13) and DG-DE89-9.5-10 (720-88239-19). The samples were re-extracted and/or re-analyzed with concurring results, and the second set of data has been reported.

Job ID: 720-88239-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

Method(s) 8260B: Internal standard (ISTD) response for the following sample was outside control limits: DG-B10S-0.5-1 (720-88239-9). The sample(s) was re-extracted and/or re-analyzed, using the sample collected in the field container, with concurring results, and the original set of data has been reported. There is no reportable data in the low level analysis of the other terracore.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250812 and analytical batch 720-250755 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits for 1,1-Dichloroethene and high for 1,1,2-Trichloro-1,2,2-trifluoroethane.

Method(s) 8260B: Reportable data was not available in the analysis of low level terracores due to sample matrix or issues with sample container causing loss of sample at the time of purging; therefore, the following samples were analyzed and reported using the samples collected in the field container. DG-C7S-9.5-10 (720-88239-3), DG-E7S-3.5-4 (720-88239-5) and DG-DE89-3.5-4 (720-88239-18)

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

GC/MS Semi VOA
Method(s) 8270C SIM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batches 720-250520 and analytical batch 720-250578 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. The parent for these batch QC samples is from a non-project source.

Method(s) 8270C SIM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batches 720-250580 and analytical batch 720-250745 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8270C SIM: The following samples were diluted due to the abundance of non-target analytes:DG-G7S-3.5-4 (720-88239-8), DG-B10S-0.5-1 (720-88239-9), DG-I7S-0.5-1 (720-88239-11), DG-M7S-0.5-1 (720-88239-13) and DG-B9S-0.5-1 (720-88239-15), and DG-DE89-3.5-4 (720-88239-18).. Elevated reporting limits (RLs) are provided.

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

GC Semi VOA
Method(s) 8015B: The following samples required a dilution due to the nature of the sample matrix: DG-M7S-0.5-1 (720-88239-13), DG-B9S-0.5-1 (720-88239-15), DG-DE89-3.5-4 (720-88239-18), (720-88240-D-3-I), (720-88240-D-3-G MS) and (720-88240-D-3-H MSD). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation may not provide useful information. Elevated reporting limits (RL) are provided.

Method(s) 8015B: The following samples required a dilution to bring the results within the calibrated range of the instrument: DG-B10S-0.5-1 (720-88239-9), and DG-I7S-0.5-1 (720-88239-11). Elevated reporting limits (RL) are provided.

Method(s) 8081: The following samples were diluted due to the nature of the sample matrix: DG-M7S-0.5-1 (720-88239-13), DG-B9S-0.5-1 (720-88239-15). Elevated reporting limits (RL) are provided.

Method(s) 8081A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 720-250531 and analytical batch 720-250746 were outside control limits. Sample matrix interference and non-homogeneity are suspected because the associated laboratory control sample was within acceptance limits.

Method(s) 8081A: The %RPD between the primary and confirmation column exceeded 40% for 4,4'-DDD for the following sample: DG-I7S-0.5-1 (720-88239-11). The lower value has been reported and qualified in accordance with the laboratory's SOP.

Method(s) 8082: The following samples were diluted due to the nature of the sample matrix: DG-G7S-0.5-1 (720-88239-7) and DG-G7S-3.5-4 (720-88239-8). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

Job ID: 720-88239-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

Method(s) 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: DG-C7S-3.5-4 (720-88239-2), DG-C7S-9.5-10 (720-88239-3), DG-E7S-3.5-4 (720-88239-5), DG-E7S-9.5-10 (720-88239-6), DG-G7S-3.5-4 (720-88239-8), DG-B10S-0.5-1 (720-88239-9), DG-B10S-3.5-4 (720-88239-10), DG-M7S-3.5-4 (720-88239-14), DG-B9S-3.5-4 (720-88239-16), DG-DE89-3.5-4 (720-88239-18), (720-88218-F-21-A), (720-88218-F-21-B MS), (720-88218-F-21-C MSD), and DG-B9S-9.5-10 (720-88239-20).

Method(s) 8082: The continuing calibration verification (CCV) associated with batch 240-343587 recovered above the upper control limit for 1242. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: DG-B9S-9.5-10 (720-88239-20), (MB 240-343472/7-A) and (720-88291-F-10-A).

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

Metals
Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250365 and analytical batch 720-250585 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 6010B: The following samples were diluted due to the abundance of non-target analytes: DG-C7S-0.5-1 (720-88239-1), DG-C7S-3.5-4 (720-88239-2), DG-C7S-9.5-10 (720-88239-3), DG-E7S-0.5-1 (720-88239-4), DG-E7S-3.5-4 (720-88239-5), DG-E7S-9.5-10 (720-88239-6), DG-G7S-0.5-1 (720-88239-7), DG-G7S-3.5-4 (720-88239-8) and DG-B10S-0.5-1 (720-88239-9), DG-B10S-3.5-4 (720-88239-10), DG-I7S-0.5-1 (720-88239-11), DG-I7S-3.5-4 (720-88239-12), DG-B9S-0.5-1 (720-88239-15), DG-DE89-0.5-1 (720-88239-17), DG-DE89-3.5-4 (720-88239-18), DG-DE89-9.5-10 (720-88239-19), and DG-B9S-9.5-10 (720-88239-20). Elevated reporting limits (RLs) are provided.

Method(s) 7471A: Due to the high concentration of Hg, the matrix spike duplicate (MSD) for preparation batch 720-250416 and analytical batch 720-250599 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 720-250470 and analytical batch 720-250593 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) precision was within acceptance limits.

Method(s) 6010B: The post digestion spike % recovery associated with batch 720-250593 was outside of the 75-125% control limits.

Analyte	Recovery
Silver	145%
Arsenic	131%
Barium	175%
Beryllium	157%
Cadmium	128%
Cobalt	130%
Chromium	149%
Copper	148%
Molybdenum	131%
Nickel	133%
Lead	138%
Antimony	128%
Selenium	128%
Vanadium	148%
Zinc	138%

Method(s) 6010B: The serial dilution performed for the following sample associated with batch 720-250593 was outside of the 10% control limits: (720-88237-A-9-C SD)

Job ID: 720-88239-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

Analyte	Recovery
Barium	37%
Cobalt	33%
Chromium	35%
Nickel	31%
Lead	34%
Vanadium	33%

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250513 and analytical batch 720-250635 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 6010B: The method blank for preparation batch 720-250365 and analytical batch 720-250585 contained Antimony and Barium above the method detection limit. These target analyte concentrations were less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

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

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

Detection Summary

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-C7S-0.5-1 — Lab Sample ID: 720-88239-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	12		9.8	4.9	ug/Kg	1		8270C SIM	Total/NA
Acenaphthylene	5.6		4.9	2.3	ug/Kg	1		8270C SIM	Total/NA
Anthracene	12		4.9	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	12		4.9	1.5	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	15		4.9	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	29		4.9	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	13		4.9	4.2	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	7.3		4.9	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	20		4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	22		4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	7.8		4.9	4.1	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	8.0		4.9	3.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	20		4.9	1.8	ug/Kg	1		8270C SIM	Total/NA
Pyrene	31		4.9	1.7	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	130000		1900	720	ug/Kg	1		8015B	Total/NA
Antimony	24		1.5	0.25	mg/Kg	4		6010B	Total/NA
Arsenic	9.4		3.0	0.26	mg/Kg	4		6010B	Total/NA
Barium	120		1.5	0.22	mg/Kg	4		6010B	Total/NA
Cadmium	0.56		0.38	0.038	mg/Kg	4		6010B	Total/NA
Chromium	17		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	12		0.61	0.061	mg/Kg	4		6010B	Total/NA
Copper	220		4.5	2.2	mg/Kg	4		6010B	Total/NA
Lead	910		1.5	0.32	mg/Kg	4		6010B	Total/NA
Molybdenum	1.7		1.5	0.19	mg/Kg	4		6010B	Total/NA
Nickel	10		1.5	0.15	mg/Kg	4		6010B	Total/NA
Silver	0.60	J	0.76	0.15	mg/Kg	4		6010B	Total/NA
Thallium	0.72	J	1.5	0.44	mg/Kg	4		6010B	Total/NA
Vanadium	89		1.5	0.21	mg/Kg	4		6010B	Total/NA
Zinc	190		4.5	1.9	mg/Kg	4		6010B	Total/NA
Mercury	0.20		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-C7S-3.5-4 — Lab Sample ID: 720-88239-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	43		36	27	ug/Kg	1		8260B	Total/NA
2-Methylnaphthalene	12		9.4	4.7	ug/Kg	1		8270C SIM	Total/NA
Acenaphthylene	4.7		4.7	2.3	ug/Kg	1		8270C SIM	Total/NA
Anthracene	9.8		4.7	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	25		4.7	1.4	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	27		4.7	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	38		4.7	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	10		4.7	4.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	13		4.7	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	29		4.7	1.3	ug/Kg	1		8270C SIM	Total/NA
Dibenz(a,h)anthracene	3.9	J	4.7	3.3	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	54		4.7	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluorene	2.9	J	4.7	2.1	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	9.7		4.7	3.9	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	8.4		4.7	3.3	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	47		4.7	1.7	ug/Kg	1		8270C SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-C7S-3.5-4 (Continued) — Lab Sample ID: 720-88239-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pyrene	67		4.7	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	12000		1900	710	ug/Kg	1		8015B	Total/NA
Antimony	4.4		1.1	0.19	mg/Kg	4		6010B	Total/NA
Arsenic	7.1		2.2	0.19	mg/Kg	4		6010B	Total/NA
Barium	68		1.1	0.16	mg/Kg	4		6010B	Total/NA
Cadmium	0.41		0.28	0.028	mg/Kg	4		6010B	Total/NA
Chromium	32		1.1	0.12	mg/Kg	4		6010B	Total/NA
Cobalt	7.1		0.45	0.045	mg/Kg	4		6010B	Total/NA
Copper	82		3.4	1.6	mg/Kg	4		6010B	Total/NA
Lead	170		1.1	0.24	mg/Kg	4		6010B	Total/NA
Molybdenum	0.40	J	1.1	0.14	mg/Kg	4		6010B	Total/NA
Nickel	34		1.1	0.11	mg/Kg	4		6010B	Total/NA
Silver	0.20	J	0.56	0.11	mg/Kg	4		6010B	Total/NA
Thallium	0.56	J	1.1	0.33	mg/Kg	4		6010B	Total/NA
Vanadium	39		1.1	0.15	mg/Kg	4		6010B	Total/NA
Zinc	92		3.4	1.4	mg/Kg	4		6010B	Total/NA
Mercury	0.042		0.015	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-C7S-9.5-10 — Lab Sample ID: 720-88239-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	130		9.6	4.8	ug/Kg	1		8270C SIM	Total/NA
Acenaphthene	5.6		4.8	2.7	ug/Kg	1		8270C SIM	Total/NA
Anthracene	8.5		4.8	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	9.5		4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	10		4.8	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	14		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	5.6		4.8	4.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	3.7	J	4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	25		4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Dibenz(a,h)anthracene	3.7	J	4.8	3.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	13		4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluorene	52		4.8	2.1	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	49		4.8	3.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	120		4.8	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	30		4.8	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	8200		1900	720	ug/Kg	1		8015B	Total/NA
Antimony	1.1	J	1.6	0.27	mg/Kg	4		6010B	Total/NA
Arsenic	6.8		3.3	0.28	mg/Kg	4		6010B	Total/NA
Barium	73		1.6	0.23	mg/Kg	4		6010B	Total/NA
Beryllium	0.14	J	0.33	0.11	mg/Kg	4		6010B	Total/NA
Chromium	66		1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	14		0.65	0.065	mg/Kg	4		6010B	Total/NA
Copper	25		4.9	2.3	mg/Kg	4		6010B	Total/NA
Lead	8.6		1.6	0.34	mg/Kg	4		6010B	Total/NA
Molybdenum	0.42	J	1.6	0.21	mg/Kg	4		6010B	Total/NA
Nickel	83		1.6	0.17	mg/Kg	4		6010B	Total/NA
Thallium	0.82	J	1.6	0.47	mg/Kg	4		6010B	Total/NA
Vanadium	43		1.6	0.22	mg/Kg	4		6010B	Total/NA
Zinc	59		4.9	2.1	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-C7S-9.5-10 (Continued) — Lab Sample ID: 720-88239-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.049		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-E7S-0.5-1 — Lab Sample ID: 720-88239-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	2.8	J	4.9	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	6.7		4.9	1.5	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	8.3		4.9	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	12		4.9	2.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	22		4.9	4.2	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	5.3		4.9	2.1	ug/Kg	1		8270C SIM	Total/NA
Chrysene	8.2		4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	9.9		4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	6.1		4.9	4.1	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	7.9		4.9	1.8	ug/Kg	1		8270C SIM	Total/NA
Pyrene	14		4.9	1.7	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	28000		1900	710	ug/Kg	1		8015B	Total/NA
Arsenic	3.5		3.3	0.28	mg/Kg	4		6010B	Total/NA
Barium	58		1.7	0.23	mg/Kg	4		6010B	Total/NA
Cadmium	0.36	J	0.41	0.041	mg/Kg	4		6010B	Total/NA
Chromium	14		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.66	0.066	mg/Kg	4		6010B	Total/NA
Copper	170		5.0	2.4	mg/Kg	4		6010B	Total/NA
Lead	110		1.7	0.35	mg/Kg	4		6010B	Total/NA
Nickel	8.5		1.7	0.17	mg/Kg	4		6010B	Total/NA
Silver	0.35	J	0.83	0.17	mg/Kg	4		6010B	Total/NA
Thallium	0.98	J	1.7	0.48	mg/Kg	4		6010B	Total/NA
Vanadium	110		1.7	0.22	mg/Kg	4		6010B	Total/NA
Zinc	150		5.0	2.1	mg/Kg	4		6010B	Total/NA
Mercury	0.070		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-E7S-3.5-4 — Lab Sample ID: 720-88239-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	2.0	J	5.0	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	2.9	J	5.0	2.1	ug/Kg	1		8270C SIM	Total/NA
Chrysene	2.3	J	5.0	1.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	3.7	J	5.0	1.4	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	4.0	J	5.0	3.5	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	3.8	J	5.0	1.8	ug/Kg	1		8270C SIM	Total/NA
Pyrene	3.6	J	5.0	1.7	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	6100		1900	710	ug/Kg	1		8015B	Total/NA
Antimony	0.98	J	1.5	0.25	mg/Kg	4		6010B	Total/NA
Arsenic	2.8	J	3.0	0.26	mg/Kg	4		6010B	Total/NA
Barium	110		1.5	0.22	mg/Kg	4		6010B	Total/NA
Beryllium	0.13	J	0.30	0.098	mg/Kg	4		6010B	Total/NA
Cadmium	0.17	J	0.38	0.038	mg/Kg	4		6010B	Total/NA
Chromium	52		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	9.1		0.61	0.061	mg/Kg	4		6010B	Total/NA
Copper	20		4.5	2.2	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-E7S-3.5-4 (Continued) — Lab Sample ID: 720-88239-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	28		1.5	0.32	mg/Kg	4		6010B	Total/NA
Molybdenum	0.29	J	1.5	0.19	mg/Kg	4		6010B	Total/NA
Nickel	44		1.5	0.15	mg/Kg	4		6010B	Total/NA
Vanadium	42		1.5	0.21	mg/Kg	4		6010B	Total/NA
Zinc	57		4.5	1.9	mg/Kg	4		6010B	Total/NA
Mercury	0.042		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-E7S-9.5-10 — Lab Sample ID: 720-88239-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.75	J	4.6	0.65	ug/Kg	1		8260B	Total/NA
Fluoranthene	1.4	J	4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	2.7	J	4.8	1.7	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	1700	J	1900	710	ug/Kg	1		8015B	Total/NA
Antimony	1.3	J	1.5	0.25	mg/Kg	4		6010B	Total/NA
Arsenic	1.2	J	3.0	0.26	mg/Kg	4		6010B	Total/NA
Barium	97		1.5	0.22	mg/Kg	4		6010B	Total/NA
Beryllium	0.20	J	0.30	0.098	mg/Kg	4		6010B	Total/NA
Chromium	60		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	29		0.61	0.061	mg/Kg	4		6010B	Total/NA
Copper	47		4.5	2.2	mg/Kg	4		6010B	Total/NA
Lead	0.75	J	1.5	0.32	mg/Kg	4		6010B	Total/NA
Molybdenum	0.36	J	1.5	0.19	mg/Kg	4		6010B	Total/NA
Nickel	53		1.5	0.15	mg/Kg	4		6010B	Total/NA
Silver	0.46	J	0.76	0.15	mg/Kg	4		6010B	Total/NA
Thallium	1.6		1.5	0.44	mg/Kg	4		6010B	Total/NA
Vanadium	140		1.5	0.21	mg/Kg	4		6010B	Total/NA
Zinc	65		4.5	1.9	mg/Kg	4		6010B	Total/NA
Mercury	0.19		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-G7S-0.5-1 — Lab Sample ID: 720-88239-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.81	J	4.2	0.59	ug/Kg	1		8260B	Total/NA
Benzo[a]pyrene	4.0	J	4.9	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	4.1	J	4.9	2.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	2.8	J	4.9	2.1	ug/Kg	1		8270C SIM	Total/NA
Chrysene	2.8	J	4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	3.9	J	4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	2.4	J	4.9	1.8	ug/Kg	1		8270C SIM	Total/NA
Pyrene	4.3	J	4.9	1.7	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	11000		1900	730	ug/Kg	1		8015B	Total/NA
Arsenic	2.8	J	3.1	0.27	mg/Kg	4		6010B	Total/NA
Barium	85		1.6	0.22	mg/Kg	4		6010B	Total/NA
Cadmium	0.11	J	0.39	0.039	mg/Kg	4		6010B	Total/NA
Chromium	26		1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.63	0.063	mg/Kg	4		6010B	Total/NA
Copper	110		4.7	2.2	mg/Kg	4		6010B	Total/NA
Lead	510		1.6	0.33	mg/Kg	4		6010B	Total/NA
Molybdenum	0.24	J	1.6	0.20	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-G7S-0.5-1 (Continued) — Lab Sample ID: 720-88239-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	18		1.6	0.16	mg/Kg	4		6010B	Total/NA
Silver	0.20	J	0.79	0.16	mg/Kg	4		6010B	Total/NA
Thallium	0.88	J	1.6	0.46	mg/Kg	4		6010B	Total/NA
Vanadium	85		1.6	0.21	mg/Kg	4		6010B	Total/NA
Zinc	110		4.7	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.078		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-G7S-3.5-4 — Lab Sample ID: 720-88239-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.8	J	3.5	0.48	ug/Kg	1		8260B	Total/NA
Tetrachloroethene	1.8	J	3.5	0.47	ug/Kg	1		8260B	Total/NA
Trichloroethene	31		3.5	0.44	ug/Kg	1		8260B	Total/NA
2-Methylnaphthalene	26		19	9.7	ug/Kg	2		8270C SIM	Total/NA
Acenaphthene	48		9.7	5.4	ug/Kg	2		8270C SIM	Total/NA
Acenaphthylene	57		9.7	4.6	ug/Kg	2		8270C SIM	Total/NA
Anthracene	86		9.7	3.9	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]anthracene	300		9.7	2.9	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]pyrene	340		9.7	3.7	ug/Kg	2		8270C SIM	Total/NA
Benzo[b]fluoranthene	410		9.7	4.1	ug/Kg	2		8270C SIM	Total/NA
Benzo[g,h,i]perylene	100		9.7	8.3	ug/Kg	2		8270C SIM	Total/NA
Benzo[k]fluoranthene	190		9.7	4.1	ug/Kg	2		8270C SIM	Total/NA
Chrysene	360		9.7	2.7	ug/Kg	2		8270C SIM	Total/NA
Dibenz(a,h)anthracene	42		9.7	6.8	ug/Kg	2		8270C SIM	Total/NA
Fluoranthene	440		9.7	2.7	ug/Kg	2		8270C SIM	Total/NA
Fluorene	95		9.7	4.2	ug/Kg	2		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	98		9.7	8.1	ug/Kg	2		8270C SIM	Total/NA
Naphthalene	24		9.7	6.8	ug/Kg	2		8270C SIM	Total/NA
Phenanthrene	590		9.7	3.5	ug/Kg	2		8270C SIM	Total/NA
Pyrene	610		9.7	3.3	ug/Kg	2		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	47000		1900	710	ug/Kg	1		8015B	Total/NA
Antimony	3.0		1.5	0.25	mg/Kg	4		6010B	Total/NA
Arsenic	5.8		3.0	0.26	mg/Kg	4		6010B	Total/NA
Barium	200		1.5	0.21	mg/Kg	4		6010B	Total/NA
Chromium	390		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	28		0.60	0.060	mg/Kg	4		6010B	Total/NA
Copper	81		4.5	2.1	mg/Kg	4		6010B	Total/NA
Lead	61		1.5	0.32	mg/Kg	4		6010B	Total/NA
Nickel	400		1.5	0.15	mg/Kg	4		6010B	Total/NA
Silver	0.41	J	0.75	0.15	mg/Kg	4		6010B	Total/NA
Thallium	1.4	J	1.5	0.44	mg/Kg	4		6010B	Total/NA
Vanadium	86		1.5	0.20	mg/Kg	4		6010B	Total/NA
Zinc	170		4.5	1.9	mg/Kg	4		6010B	Total/NA
Mercury	0.89		0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-B10S-0.5-1 — Lab Sample ID: 720-88239-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	27		19	9.6	ug/Kg	2		8270C SIM	Total/NA
Acenaphthylene	29		9.6	4.6	ug/Kg	2		8270C SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-B10S-0.5-1 (Continued) — Lab Sample ID: 720-88239-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	44		9.6	3.8	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]anthracene	45		9.6	2.9	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]pyrene	45		9.6	3.6	ug/Kg	2		8270C SIM	Total/NA
Benzo[b]fluoranthene	66		9.6	4.0	ug/Kg	2		8270C SIM	Total/NA
Benzo[g,h,i]perylene	28		9.6	8.2	ug/Kg	2		8270C SIM	Total/NA
Benzo[k]fluoranthene	32		9.6	4.0	ug/Kg	2		8270C SIM	Total/NA
Chrysene	53		9.6	2.7	ug/Kg	2		8270C SIM	Total/NA
Dibenz(a,h)anthracene	7.1	J	9.6	6.7	ug/Kg	2		8270C SIM	Total/NA
Fluoranthene	59		9.6	2.7	ug/Kg	2		8270C SIM	Total/NA
Fluorene	5.6	J	9.6	4.2	ug/Kg	2		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	19		9.6	8.0	ug/Kg	2		8270C SIM	Total/NA
Naphthalene	22		9.6	6.7	ug/Kg	2		8270C SIM	Total/NA
Phenanthrene	67		9.6	3.4	ug/Kg	2		8270C SIM	Total/NA
Pyrene	81		9.6	3.3	ug/Kg	2		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	100000		5700	2100	ug/Kg	3		8015B	Total/NA
Antimony	7.4		1.9	0.32	mg/Kg	4		6010B	Total/NA
Arsenic	28		3.8	0.33	mg/Kg	4		6010B	Total/NA
Barium	150		1.9	0.27	mg/Kg	4		6010B	Total/NA
Cadmium	0.72		0.48	0.048	mg/Kg	4		6010B	Total/NA
Chromium	72		1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	14		0.77	0.077	mg/Kg	4		6010B	Total/NA
Copper	140		5.8	2.7	mg/Kg	4		6010B	Total/NA
Lead	610		1.9	0.40	mg/Kg	4		6010B	Total/NA
Molybdenum	0.83	J	1.9	0.25	mg/Kg	4		6010B	Total/NA
Nickel	72		1.9	0.20	mg/Kg	4		6010B	Total/NA
Silver	0.50	J	0.96	0.19	mg/Kg	4		6010B	Total/NA
Thallium	1.2	J	1.9	0.56	mg/Kg	4		6010B	Total/NA
Vanadium	60		1.9	0.26	mg/Kg	4		6010B	Total/NA
Zinc	250		5.8	2.4	mg/Kg	4		6010B	Total/NA
Mercury	0.34		0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-B10S-3.5-4 — Lab Sample ID: 720-88239-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	52		40	31	ug/Kg	1		8260B	Total/NA
n-Butylbenzene	0.86	J	4.0	0.81	ug/Kg	1		8260B	Total/NA
sec-Butylbenzene	1.1	J	4.0	0.58	ug/Kg	1		8260B	Total/NA
Isopropylbenzene	1.9	J	4.0	0.55	ug/Kg	1		8260B	Total/NA
N-Propylbenzene	1.6	J	4.0	0.53	ug/Kg	1		8260B	Total/NA
Xylenes, Total	1.1	J	4.0	0.99	ug/Kg	1		8260B	Total/NA
Gasoline Range Organics (GRO) -C4-C12	880		200	81	ug/Kg	1		8260B	Total/NA
Acenaphthene	4.8		4.7	2.7	ug/Kg	1		8270C SIM	Total/NA
Acenaphthylene	4.0	J	4.7	2.3	ug/Kg	1		8270C SIM	Total/NA
Anthracene	9.2		4.7	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	5.9		4.7	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	4.1	J	4.7	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	21		4.7	4.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	2.0	J	4.7	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	2.8	J	4.7	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	3.5	J	4.7	1.3	ug/Kg	1		8270C SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-B10S-3.5-4 (Continued) — Lab Sample ID: 720-88239-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Indeno[1,2,3-cd]pyrene	14		4.7	4.0	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	5.9		4.7	3.3	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	4.3	J	4.7	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	4.9		4.7	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	16000		2000	740	ug/Kg	1		8015B	Total/NA
Arsenic	1.3	J	3.1	0.26	mg/Kg	4		6010B	Total/NA
Barium	36	B	1.5	0.22	mg/Kg	4		6010B	Total/NA
Beryllium	0.13	J	0.31	0.10	mg/Kg	4		6010B	Total/NA
Chromium	28		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	4.2		0.62	0.062	mg/Kg	4		6010B	Total/NA
Copper	6.1		4.6	2.2	mg/Kg	4		6010B	Total/NA
Lead	6.9		1.5	0.32	mg/Kg	4		6010B	Total/NA
Nickel	16		1.5	0.16	mg/Kg	4		6010B	Total/NA
Vanadium	22		1.5	0.21	mg/Kg	4		6010B	Total/NA
Zinc	22		4.6	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.048		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-I7S-0.5-1 — Lab Sample ID: 720-88239-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	37	J	44	34	ug/Kg	1		8260B	Total/NA
Acenaphthylene	33		20	9.5	ug/Kg	2		8270C SIM	Total/NA
Anthracene	75		20	7.9	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]anthracene	49		20	5.9	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]pyrene	77		20	7.5	ug/Kg	2		8270C SIM	Total/NA
Benzo[b]fluoranthene	110		20	8.3	ug/Kg	2		8270C SIM	Total/NA
Benzo[g,h,i]perylene	58		20	17	ug/Kg	2		8270C SIM	Total/NA
Benzo[k]fluoranthene	39		20	8.3	ug/Kg	2		8270C SIM	Total/NA
Chrysene	85		20	5.5	ug/Kg	2		8270C SIM	Total/NA
Dibenz(a,h)anthracene	16	J	20	14	ug/Kg	2		8270C SIM	Total/NA
Fluoranthene	86		20	5.5	ug/Kg	2		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	48		20	17	ug/Kg	2		8270C SIM	Total/NA
Naphthalene	14	J	20	14	ug/Kg	2		8270C SIM	Total/NA
Phenanthrene	55		20	7.1	ug/Kg	2		8270C SIM	Total/NA
Pyrene	110		20	6.7	ug/Kg	2		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	47000		3800	1400	ug/Kg	2		8015B	Total/NA
4,4'-DDD	0.65	J p	2.0	0.61	ug/Kg	1		8081A	Total/NA
Antimony	0.44	J B	1.2	0.19	mg/Kg	4		6010B	Total/NA
Arsenic	2.5		2.3	0.20	mg/Kg	4		6010B	Total/NA
Barium	35	B	1.2	0.16	mg/Kg	4		6010B	Total/NA
Beryllium	0.10	J	0.23	0.075	mg/Kg	4		6010B	Total/NA
Cadmium	0.15	J	0.29	0.029	mg/Kg	4		6010B	Total/NA
Chromium	11		1.2	0.12	mg/Kg	4		6010B	Total/NA
Cobalt	8.0		0.46	0.046	mg/Kg	4		6010B	Total/NA
Copper	130		3.5	1.6	mg/Kg	4		6010B	Total/NA
Lead	49		1.2	0.24	mg/Kg	4		6010B	Total/NA
Molybdenum	0.30	J	1.2	0.15	mg/Kg	4		6010B	Total/NA
Nickel	4.8		1.2	0.12	mg/Kg	4		6010B	Total/NA
Silver	0.19	J	0.58	0.12	mg/Kg	4		6010B	Total/NA
Thallium	0.48	J	1.2	0.34	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-I7S-0.5-1 (Continued) — Lab Sample ID: 720-88239-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	69		1.2	0.16	mg/Kg	4		6010B	Total/NA
Zinc	65		3.5	1.5	mg/Kg	4		6010B	Total/NA
Mercury	0.14		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-I7S-3.5-4 — Lab Sample ID: 720-88239-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.97	J	4.1	0.51	ug/Kg	1		8260B	Total/NA
Acenaphthylene	3.3	J	4.8	2.3	ug/Kg	1		8270C SIM	Total/NA
Anthracene	3.3	J	4.8	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	6.1		4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	9.3		4.8	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	11		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	5.2		4.8	4.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	5.0		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	6.7		4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	7.9		4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	4.6	J	4.8	4.1	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	5.4		4.8	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	11		4.8	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	10000		2000	740	ug/Kg	1		8015B	Total/NA
Antimony	1.3	B	1.2	0.20	mg/Kg	4		6010B	Total/NA
Arsenic	21		2.4	0.20	mg/Kg	4		6010B	Total/NA
Barium	30	B	1.2	0.17	mg/Kg	4		6010B	Total/NA
Cadmium	0.20	J	0.30	0.030	mg/Kg	4		6010B	Total/NA
Chromium	11		1.2	0.13	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.48	0.048	mg/Kg	4		6010B	Total/NA
Copper	140		3.6	1.7	mg/Kg	4		6010B	Total/NA
Lead	170		1.2	0.25	mg/Kg	4		6010B	Total/NA
Nickel	8.8		1.2	0.12	mg/Kg	4		6010B	Total/NA
Silver	0.35	J	0.60	0.12	mg/Kg	4		6010B	Total/NA
Thallium	0.95	J	1.2	0.35	mg/Kg	4		6010B	Total/NA
Vanadium	86		1.2	0.16	mg/Kg	4		6010B	Total/NA
Zinc	120		3.6	1.5	mg/Kg	4		6010B	Total/NA
Mercury	0.050		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-M7S-0.5-1 — Lab Sample ID: 720-88239-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.71	J	4.1	0.59	ug/Kg	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	1600000		38000	14000	ug/Kg	20		8015B	Total/NA
Antimony	0.82	J B	1.8	0.29	mg/Kg	4		6010B	Total/NA
Arsenic	270		3.5	0.30	mg/Kg	4		6010B	Total/NA
Barium	55	B	1.8	0.25	mg/Kg	4		6010B	Total/NA
Cadmium	0.18	J	0.44	0.044	mg/Kg	4		6010B	Total/NA
Chromium	66		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	4.8		0.71	0.071	mg/Kg	4		6010B	Total/NA
Copper	8.2		5.3	2.5	mg/Kg	4		6010B	Total/NA
Lead	7.4		1.8	0.37	mg/Kg	4		6010B	Total/NA
Nickel	32		1.8	0.18	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-M7S-0.5-1 (Continued) — Lab Sample ID: 720-88239-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	55		1.8	0.24	mg/Kg	4		6010B	Total/NA
Zinc	650		5.3	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.020		0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-M7S-3.5-4 — Lab Sample ID: 720-88239-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	45		37	28	ug/Kg	1		8260B	Total/NA
Fluoranthene	1.7	J	4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Pyrene	2.0	J	4.9	1.7	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	8300		2000	740	ug/Kg	1		8015B	Total/NA
Antimony	1.0	J B	1.7	0.27	mg/Kg	4		6010B	Total/NA
Arsenic	1.8	J	3.3	0.28	mg/Kg	4		6010B	Total/NA
Barium	44	B	1.7	0.23	mg/Kg	4		6010B	Total/NA
Chromium	51		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	5.7		0.66	0.066	mg/Kg	4		6010B	Total/NA
Copper	6.7		5.0	2.4	mg/Kg	4		6010B	Total/NA
Lead	1.3	J	1.7	0.35	mg/Kg	4		6010B	Total/NA
Nickel	30		1.7	0.17	mg/Kg	4		6010B	Total/NA
Vanadium	37		1.7	0.22	mg/Kg	4		6010B	Total/NA
Zinc	17		5.0	2.1	mg/Kg	4		6010B	Total/NA
Mercury	0.030		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-B9S-0.5-1 — Lab Sample ID: 720-88239-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	150	J	190	94	ug/Kg	10		8270C SIM	Total/NA
Anthracene	89	J	94	38	ug/Kg	10		8270C SIM	Total/NA
Benzo[a]anthracene	220		94	28	ug/Kg	10		8270C SIM	Total/NA
Benzo[a]pyrene	270		94	36	ug/Kg	10		8270C SIM	Total/NA
Benzo[b]fluoranthene	360		94	40	ug/Kg	10		8270C SIM	Total/NA
Benzo[g,h,i]perylene	100		94	81	ug/Kg	10		8270C SIM	Total/NA
Benzo[k]fluoranthene	140		94	40	ug/Kg	10		8270C SIM	Total/NA
Chrysene	220		94	26	ug/Kg	10		8270C SIM	Total/NA
Fluoranthene	370		94	26	ug/Kg	10		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	82	J	94	79	ug/Kg	10		8270C SIM	Total/NA
Naphthalene	99		94	66	ug/Kg	10		8270C SIM	Total/NA
Phenanthrene	340		94	34	ug/Kg	10		8270C SIM	Total/NA
Pyrene	350		94	32	ug/Kg	10		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	440000		20000	7400	ug/Kg	10		8015B	Total/NA
Antimony	10	B	3.9	0.65	mg/Kg	10		6010B	Total/NA
Arsenic	24		7.8	0.66	mg/Kg	10		6010B	Total/NA
Barium	50	B	3.9	0.55	mg/Kg	10		6010B	Total/NA
Cadmium	3.0		0.98	0.097	mg/Kg	10		6010B	Total/NA
Chromium	21		3.9	0.41	mg/Kg	10		6010B	Total/NA
Cobalt	17		1.6	0.16	mg/Kg	10		6010B	Total/NA
Copper	590		12	5.6	mg/Kg	10		6010B	Total/NA
Lead	2600		3.9	0.82	mg/Kg	10		6010B	Total/NA
Molybdenum	5.8		3.9	0.50	mg/Kg	10		6010B	Total/NA
Nickel	21		3.9	0.40	mg/Kg	10		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-B9S-0.5-1 (Continued) — Lab Sample ID: 720-88239-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silver	4.1		2.0	0.39	mg/Kg	10		6010B	Total/NA
Vanadium	62		3.9	0.53	mg/Kg	10		6010B	Total/NA
Zinc	640		12	5.0	mg/Kg	10		6010B	Total/NA
Mercury	0.76		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-B9S-3.5-4 — Lab Sample ID: 720-88239-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	5.9	J	9.7	4.8	ug/Kg	1		8270C SIM	Total/NA
Acenaphthylene	2.9	J	4.8	2.3	ug/Kg	1		8270C SIM	Total/NA
Anthracene	2.8	J	4.8	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	10		4.8	1.5	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	14		4.8	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	19		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	5.0		4.8	4.2	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	9.3		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	12		4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	14		4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	5.0		4.8	4.1	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	4.5	J	4.8	3.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	12		4.8	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	17		4.8	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	14000		1900	730	ug/Kg	1		8015B	Total/NA
Antimony	1.6	J B	1.8	0.29	mg/Kg	4		6010B	Total/NA
Arsenic	3.8		3.5	0.30	mg/Kg	4		6010B	Total/NA
Barium	75	B	1.8	0.25	mg/Kg	4		6010B	Total/NA
Cadmium	0.12	J	0.44	0.044	mg/Kg	4		6010B	Total/NA
Chromium	83		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.71	0.071	mg/Kg	4		6010B	Total/NA
Copper	34		5.3	2.5	mg/Kg	4		6010B	Total/NA
Lead	36		1.8	0.37	mg/Kg	4		6010B	Total/NA
Molybdenum	0.39	J	1.8	0.23	mg/Kg	4		6010B	Total/NA
Nickel	73		1.8	0.18	mg/Kg	4		6010B	Total/NA
Vanadium	38		1.8	0.24	mg/Kg	4		6010B	Total/NA
Zinc	61		5.3	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.54		0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-DE89-0.5-1 — Lab Sample ID: 720-88239-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	29	J	35	26	ug/Kg	1		8260B	Total/NA
Toluene	0.49	J	3.5	0.49	ug/Kg	1		8260B	Total/NA
Benzo[a]pyrene	2.1	J	4.8	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	2.6	J	4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	1.7	J	4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	2.8	J	4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	2.2	J	4.8	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	2.6	J	4.8	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	12000		2000	730	ug/Kg	1		8015B	Total/NA
Antimony	0.57	J B	1.3	0.21	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-DE89-0.5-1 (Continued) — Lab Sample ID: 720-88239-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.25	J	2.6	0.22	mg/Kg	4		6010B	Total/NA
Barium	8.2	B	1.3	0.18	mg/Kg	4		6010B	Total/NA
Cadmium	0.070	J	0.32	0.032	mg/Kg	4		6010B	Total/NA
Chromium	8.3		1.3	0.14	mg/Kg	4		6010B	Total/NA
Cobalt	15		0.51	0.051	mg/Kg	4		6010B	Total/NA
Copper	120		3.8	1.8	mg/Kg	4		6010B	Total/NA
Lead	13		1.3	0.27	mg/Kg	4		6010B	Total/NA
Molybdenum	0.41	J	1.3	0.16	mg/Kg	4		6010B	Total/NA
Nickel	4.5		1.3	0.13	mg/Kg	4		6010B	Total/NA
Silver	0.36	J	0.64	0.13	mg/Kg	4		6010B	Total/NA
Thallium	0.70	J	1.3	0.37	mg/Kg	4		6010B	Total/NA
Vanadium	110		1.3	0.17	mg/Kg	4		6010B	Total/NA
Zinc	71		3.8	1.6	mg/Kg	4		6010B	Total/NA
Mercury	0.047		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-DE89-3.5-4 — Lab Sample ID: 720-88239-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	320		48	24	ug/Kg	5		8270C SIM	Total/NA
Acenaphthene	23	J	24	13	ug/Kg	5		8270C SIM	Total/NA
Acenaphthylene	23	J	24	11	ug/Kg	5		8270C SIM	Total/NA
Anthracene	93		24	9.6	ug/Kg	5		8270C SIM	Total/NA
Benzo[a]anthracene	120		24	7.2	ug/Kg	5		8270C SIM	Total/NA
Benzo[a]pyrene	140		24	9.1	ug/Kg	5		8270C SIM	Total/NA
Benzo[b]fluoranthene	240		24	10	ug/Kg	5		8270C SIM	Total/NA
Benzo[g,h,i]perylene	51		24	21	ug/Kg	5		8270C SIM	Total/NA
Benzo[k]fluoranthene	66		24	10	ug/Kg	5		8270C SIM	Total/NA
Chrysene	240		24	6.7	ug/Kg	5		8270C SIM	Total/NA
Dibenz(a,h)anthracene	26		24	17	ug/Kg	5		8270C SIM	Total/NA
Fluoranthene	190		24	6.7	ug/Kg	5		8270C SIM	Total/NA
Fluorene	68		24	11	ug/Kg	5		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	39		24	20	ug/Kg	5		8270C SIM	Total/NA
Naphthalene	240		24	17	ug/Kg	5		8270C SIM	Total/NA
Phenanthrene	440		24	8.6	ug/Kg	5		8270C SIM	Total/NA
Pyrene	240		24	8.1	ug/Kg	5		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	910000		20000	7400	ug/Kg	10		8015B	Total/NA
Antimony	21	B	3.6	0.60	mg/Kg	10		6010B	Total/NA
Arsenic	34		7.2	0.61	mg/Kg	10		6010B	Total/NA
Barium	430	B	3.6	0.51	mg/Kg	10		6010B	Total/NA
Cadmium	5.9		0.90	0.089	mg/Kg	10		6010B	Total/NA
Chromium	61		3.6	0.38	mg/Kg	10		6010B	Total/NA
Cobalt	12		1.4	0.14	mg/Kg	10		6010B	Total/NA
Copper	750		11	5.1	mg/Kg	10		6010B	Total/NA
Lead	6100		3.6	0.76	mg/Kg	10		6010B	Total/NA
Molybdenum	0.54	J	3.6	0.46	mg/Kg	10		6010B	Total/NA
Nickel	30		3.6	0.37	mg/Kg	10		6010B	Total/NA
Silver	2.9		1.8	0.36	mg/Kg	10		6010B	Total/NA
Vanadium	51		3.6	0.49	mg/Kg	10		6010B	Total/NA
Zinc	2100		11	4.6	mg/Kg	10		6010B	Total/NA
Mercury	0.15		0.015	0.0021	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-DE89-9.5-10 — Lab Sample ID: 720-88239-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	190		9.6	4.8	ug/Kg	1		8270C SIM	Total/NA
Acenaphthene	5.7		4.8	2.7	ug/Kg	1		8270C SIM	Total/NA
Anthracene	6.0		4.8	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	14		4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	11		4.8	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	19		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	10		4.8	4.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	3.7	J	4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	38		4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Dibenz(a,h)anthracene	6.1		4.8	3.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	13		4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluorene	92		4.8	2.1	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	4.6	J	4.8	4.0	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	51		4.8	3.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	150		4.8	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	37		4.8	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	17000		1900	720	ug/Kg	1		8015B	Total/NA
Antimony	1.9	B	1.2	0.20	mg/Kg	4		6010B	Total/NA
Arsenic	6.8		2.4	0.21	mg/Kg	4		6010B	Total/NA
Barium	160	B	1.2	0.17	mg/Kg	4		6010B	Total/NA
Beryllium	0.42		0.24	0.079	mg/Kg	4		6010B	Total/NA
Cadmium	0.059	J	0.30	0.030	mg/Kg	4		6010B	Total/NA
Chromium	180		1.2	0.13	mg/Kg	4		6010B	Total/NA
Cobalt	20		0.49	0.049	mg/Kg	4		6010B	Total/NA
Copper	44		3.7	1.7	mg/Kg	4		6010B	Total/NA
Lead	8.2		1.2	0.26	mg/Kg	4		6010B	Total/NA
Molybdenum	0.35	J	1.2	0.16	mg/Kg	4		6010B	Total/NA
Nickel	230		1.2	0.12	mg/Kg	4		6010B	Total/NA
Silver	0.31	J	0.61	0.12	mg/Kg	4		6010B	Total/NA
Vanadium	63		1.2	0.17	mg/Kg	4		6010B	Total/NA
Zinc	78		3.7	1.5	mg/Kg	4		6010B	Total/NA
Mercury	0.096		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-B9S-9.5-10 — Lab Sample ID: 720-88239-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	79		40	31	ug/Kg	1		8260B	Total/NA
Benzo[a]pyrene	4.5	J	4.8	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	7.9		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	3.3	J	4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	3.9	J	4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	6.8		4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	4.2	J	4.8	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	7.3		4.8	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	5600		1900	720	ug/Kg	1		8015B	Total/NA
Antimony	0.39	J	1.1	0.18	mg/Kg	4		6010B	Total/NA
Arsenic	1.8	J	2.2	0.18	mg/Kg	4		6010B	Total/NA
Barium	56		1.1	0.15	mg/Kg	4		6010B	Total/NA
Beryllium	0.075	J	0.22	0.071	mg/Kg	4		6010B	Total/NA
Chromium	34		1.1	0.12	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-B9S-9.5-10 (Continued) — Lab Sample ID: 720-88239-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	5.5		0.43	0.043	mg/Kg	4		6010B	Total/NA
Copper	7.4		3.3	1.5	mg/Kg	4		6010B	Total/NA
Lead	5.5		1.1	0.23	mg/Kg	4		6010B	Total/NA
Nickel	20		1.1	0.11	mg/Kg	4		6010B	Total/NA
Vanadium	26		1.1	0.15	mg/Kg	4		6010B	Total/NA
Zinc	23		3.3	1.4	mg/Kg	4		6010B	Total/NA
Mercury	0.072		0.017	0.0025	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-C7S-0.5-1

Date Collected: 08/24/18 07:50
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.4	1.1	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
Acetone	ND		44	34	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
Benzene	ND		4.4	0.58	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
Dichlorobromomethane	ND		4.4	0.64	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
Bromobenzene	ND		4.4	0.70	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
Chlorobromomethane	ND		18	0.64	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
Bromoform	ND		4.4	1.8	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
Bromomethane	ND		8.8	0.70	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
2-Butanone (MEK)	ND		44	19	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
n-Butylbenzene	ND		4.4	0.88	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
sec-Butylbenzene	ND		4.4	0.64	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
tert-Butylbenzene	ND		4.4	0.65	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
Carbon disulfide	ND		4.4	1.8	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
Carbon tetrachloride	ND		4.4	0.55	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
Chlorobenzene	ND		4.4	0.61	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
Chloroethane	ND		8.8	0.50	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
Chloroform	ND		4.4	0.58	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
Chloromethane	ND		8.8	0.70	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
2-Chlorotoluene	ND		4.4	0.58	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
4-Chlorotoluene	ND		4.4	0.60	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
Chlorodibromomethane	ND		4.4	0.63	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
1,2-Dichlorobenzene	ND		4.4	0.60	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
1,3-Dichlorobenzene	ND		4.4	0.64	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
1,4-Dichlorobenzene	ND		4.4	0.63	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
1,3-Dichloropropane	ND		4.4	0.65	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
1,1-Dichloropropene	ND		4.4	0.61	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
1,2-Dibromo-3-Chloropropane	ND		8.8	1.5	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
Ethylene Dibromide	ND		4.4	1.3	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
Dibromomethane	ND		8.8	0.76	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
Dichlorodifluoromethane	ND		8.8	0.70	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
1,1-Dichloroethane	ND		4.4	0.60	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
1,2-Dichloroethane	ND		4.4	0.67	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
1,1-Dichloroethene	ND	*	4.4	0.55	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
cis-1,2-Dichloroethene	ND		4.4	0.60	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
trans-1,2-Dichloroethene	ND		4.4	0.66	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
1,2-Dichloropropane	ND		4.4	0.56	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
cis-1,3-Dichloropropene	ND		4.4	0.61	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
trans-1,3-Dichloropropene	ND		4.4	0.59	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
Ethylbenzene	ND		4.4	0.66	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
Hexachlorobutadiene	ND		4.4	0.80	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
2-Hexanone	ND		44	8.8	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
Isopropylbenzene	ND		4.4	0.60	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
4-Isopropyltoluene	ND		4.4	2.2	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
Methylene Chloride	ND		8.8	5.0	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
4-Methyl-2-pentanone (MIBK)	ND		44	8.8	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
Naphthalene	ND		8.8	1.3	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
N-Propylbenzene	ND		4.4	0.58	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
Styrene	ND		4.4	0.56	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
1,1,1,2-Tetrachloroethane	ND		4.4	0.67	ug/Kg		08/25/18 03:05	08/29/18 22:21	1

Client Sample ID: DG-C7S-0.5-1

Lab Sample ID: 720-88239-1

Date Collected: 08/24/18 07:50

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.4	0.66	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
Tetrachloroethene	ND		4.4	0.59	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
Toluene	ND		4.4	0.63	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
1,2,3-Trichlorobenzene	ND		4.4	0.65	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
1,2,4-Trichlorobenzene	ND		4.4	0.63	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
1,1,1-Trichloroethane	ND		4.4	0.54	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
1,1,2-Trichloroethane	ND		4.4	0.62	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
Trichloroethene	ND		4.4	0.56	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
Trichlorofluoromethane	ND		4.4	0.50	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
1,2,3-Trichloropropane	ND		4.4	0.68	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.4	1.8	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
1,2,4-Trimethylbenzene	ND		4.4	1.5	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
1,3,5-Trimethylbenzene	ND		4.4	0.58	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
Vinyl acetate	ND		18	4.4	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
Vinyl chloride	ND		4.4	0.65	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
Xylenes, Total	ND		4.4	1.1	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
2,2-Dichloropropane	ND		4.4	1.8	ug/Kg		08/25/18 03:05	08/29/18 22:21	1
Gasoline Range Organics (GRO) -C4-C12	ND		220	88	ug/Kg		08/25/18 03:05	08/29/18 22:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*45 - 131*	*08/25/18 03:05*	*08/29/18 22:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*60 - 140*	*08/25/18 03:05*	*08/29/18 22:21*	*1*
Toluene-d8 (Surr)	*95*		*58 - 140*	*08/25/18 03:05*	*08/29/18 22:21*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**12**		9.8	4.9	ug/Kg		09/04/18 17:46	09/06/18 04:32	1
Acenaphthene	ND		4.9	2.7	ug/Kg		09/04/18 17:46	09/06/18 04:32	1
Acenaphthylene	**5.6**		4.9	2.3	ug/Kg		09/04/18 17:46	09/06/18 04:32	1
Anthracene	**12**		4.9	2.0	ug/Kg		09/04/18 17:46	09/06/18 04:32	1
Benzo[a]anthracene	**12**		4.9	1.5	ug/Kg		09/04/18 17:46	09/06/18 04:32	1
Benzo[a]pyrene	**15**		4.9	1.9	ug/Kg		09/04/18 17:46	09/06/18 04:32	1
Benzo[b]fluoranthene	**29**		4.9	2.0	ug/Kg		09/04/18 17:46	09/06/18 04:32	1
Benzo[g,h,i]perylene	**13**		4.9	4.2	ug/Kg		09/04/18 17:46	09/06/18 04:32	1
Benzo[k]fluoranthene	**7.3**		4.9	2.0	ug/Kg		09/04/18 17:46	09/06/18 04:32	1
Chrysene	**20**		4.9	1.4	ug/Kg		09/04/18 17:46	09/06/18 04:32	1
Dibenz(a,h)anthracene	ND		4.9	3.4	ug/Kg		09/04/18 17:46	09/06/18 04:32	1
Fluoranthene	**22**		4.9	1.4	ug/Kg		09/04/18 17:46	09/06/18 04:32	1
Fluorene	ND		4.9	2.1	ug/Kg		09/04/18 17:46	09/06/18 04:32	1
Indeno[1,2,3-cd]pyrene	**7.8**		4.9	4.1	ug/Kg		09/04/18 17:46	09/06/18 04:32	1
Naphthalene	**8.0**		4.9	3.4	ug/Kg		09/04/18 17:46	09/06/18 04:32	1
Phenanthrene	**20**		4.9	1.8	ug/Kg		09/04/18 17:46	09/06/18 04:32	1
Pyrene	**31**		4.9	1.7	ug/Kg		09/04/18 17:46	09/06/18 04:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*33 - 120*	*09/04/18 17:46*	*09/06/18 04:32*	*1*
Terphenyl-d14	*84*		*35 - 146*	*09/04/18 17:46*	*09/06/18 04:32*	*1*

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-C7S-0.5-1

Date Collected: 08/24/18 07:50
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	130000		1900	720	ug/Kg		08/28/18 11:24	08/30/18 23:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*76*		*40 - 130*	*08/28/18 11:24*	*08/30/18 23:43*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.58	ug/Kg		08/28/18 13:36	09/01/18 06:15	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/28/18 13:36	09/01/18 06:15	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/28/18 13:36	09/01/18 06:15	1
Aldrin	ND		1.9	0.47	ug/Kg		08/28/18 13:36	09/01/18 06:15	1
alpha-BHC	ND		1.9	0.52	ug/Kg		08/28/18 13:36	09/01/18 06:15	1
beta-BHC	ND		1.9	0.34	ug/Kg		08/28/18 13:36	09/01/18 06:15	1
Chlordane (technical)	ND		38	3.0	ug/Kg		08/28/18 13:36	09/01/18 06:15	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/28/18 13:36	09/01/18 06:15	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/28/18 13:36	09/01/18 06:15	1
Dieldrin	ND		1.9	0.56	ug/Kg		08/28/18 13:36	09/01/18 06:15	1
Endosulfan I	ND		1.9	0.30	ug/Kg		08/28/18 13:36	09/01/18 06:15	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/28/18 13:36	09/01/18 06:15	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/28/18 13:36	09/01/18 06:15	1
Endrin	ND		1.9	0.44	ug/Kg		08/28/18 13:36	09/01/18 06:15	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/28/18 13:36	09/01/18 06:15	1
Endrin ketone	ND		1.9	0.31	ug/Kg		08/28/18 13:36	09/01/18 06:15	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/28/18 13:36	09/01/18 06:15	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/28/18 13:36	09/01/18 06:15	1
Heptachlor epoxide	ND		1.9	0.33	ug/Kg		08/28/18 13:36	09/01/18 06:15	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/28/18 13:36	09/01/18 06:15	1
Toxaphene	ND		38	6.5	ug/Kg		08/28/18 13:36	09/01/18 06:15	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/28/18 13:36	09/01/18 06:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*87*		*21 - 136*	*08/28/18 13:36*	*09/01/18 06:15*	*1*
Tetrachloro-m-xylene	*80*		*21 - 145*	*08/28/18 13:36*	*09/01/18 06:15*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		51	22	ug/Kg		08/29/18 14:18	08/31/18 08:21	1
Aroclor-1221	ND		51	24	ug/Kg		08/29/18 14:18	08/31/18 08:21	1
Aroclor-1232	ND		51	23	ug/Kg		08/29/18 14:18	08/31/18 08:21	1
Aroclor-1242	ND		51	19	ug/Kg		08/29/18 14:18	08/31/18 08:21	1
Aroclor-1248	ND		51	24	ug/Kg		08/29/18 14:18	08/31/18 08:21	1
Aroclor-1254	ND		51	23	ug/Kg		08/29/18 14:18	08/31/18 08:21	1
Aroclor-1260	ND		51	22	ug/Kg		08/29/18 14:18	08/31/18 08:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*56*		*14 - 128*	*08/29/18 14:18*	*08/31/18 08:21*	*1*
DCB Decachlorobiphenyl	*71*		*10 - 132*	*08/29/18 14:18*	*08/31/18 08:21*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	24		1.5	0.25	mg/Kg		08/29/18 09:32	08/30/18 11:55	4

Client Sample ID: DG-C7S-0.5-1

Lab Sample ID: 720-88239-1

Date Collected: 08/24/18 07:50

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	9.4		3.0	0.26	mg/Kg		08/29/18 09:32	08/30/18 11:55	4
Barium	120		1.5	0.22	mg/Kg		08/29/18 09:32	08/30/18 11:55	4
Beryllium	ND		0.30	0.098	mg/Kg		08/29/18 09:32	08/30/18 11:55	4
Cadmium	0.56		0.38	0.038	mg/Kg		08/29/18 09:32	08/30/18 11:55	4
Chromium	17		1.5	0.16	mg/Kg		08/29/18 09:32	08/30/18 11:55	4
Cobalt	12		0.61	0.061	mg/Kg		08/29/18 09:32	08/30/18 11:55	4
Copper	220		4.5	2.2	mg/Kg		08/29/18 09:32	08/30/18 11:55	4
Lead	910		1.5	0.32	mg/Kg		08/29/18 09:32	08/30/18 11:55	4
Molybdenum	1.7		1.5	0.19	mg/Kg		08/29/18 09:32	08/30/18 11:55	4
Nickel	10		1.5	0.15	mg/Kg		08/29/18 09:32	08/30/18 11:55	4
Selenium	ND		3.0	0.45	mg/Kg		08/29/18 09:32	08/30/18 11:55	4
Silver	0.60	J	0.76	0.15	mg/Kg		08/29/18 09:32	08/30/18 11:55	4
Thallium	0.72	J	1.5	0.44	mg/Kg		08/29/18 09:32	08/30/18 11:55	4
Vanadium	89		1.5	0.21	mg/Kg		08/29/18 09:32	08/30/18 11:55	4
Zinc	190		4.5	1.9	mg/Kg		08/29/18 09:32	08/30/18 11:55	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20		0.017	0.0025	mg/Kg		08/29/18 15:39	08/30/18 19:04	1

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-C7S-3.5-4

Date Collected: 08/24/18 08:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.6	0.85	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
Acetone	**43**		36	27	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
Benzene	ND		3.6	0.46	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
Dichlorobromomethane	ND		3.6	0.51	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
Bromobenzene	ND		3.6	0.56	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
Chlorobromomethane	ND		14	0.51	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
Bromoform	ND		3.6	1.4	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
Bromomethane	ND		7.1	0.56	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
2-Butanone (MEK)	ND		36	15	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
n-Butylbenzene	ND		3.6	0.71	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
sec-Butylbenzene	ND		3.6	0.51	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
tert-Butylbenzene	ND		3.6	0.52	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
Carbon disulfide	ND		3.6	1.4	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
Carbon tetrachloride	ND		3.6	0.44	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
Chlorobenzene	ND		3.6	0.49	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
Chloroethane	ND		7.1	0.40	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
Chloroform	ND		3.6	0.47	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
Chloromethane	ND		7.1	0.56	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
2-Chlorotoluene	ND		3.6	0.46	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
4-Chlorotoluene	ND		3.6	0.48	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
Chlorodibromomethane	ND		3.6	0.50	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
1,2-Dichlorobenzene	ND		3.6	0.48	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
1,3-Dichlorobenzene	ND		3.6	0.51	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
1,4-Dichlorobenzene	ND		3.6	0.50	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
1,3-Dichloropropane	ND		3.6	0.52	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
1,1-Dichloropropene	ND		3.6	0.49	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
1,2-Dibromo-3-Chloropropane	ND		7.1	1.2	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
Ethylene Dibromide	ND		3.6	1.0	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
Dibromomethane	ND		7.1	0.61	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
Dichlorodifluoromethane	ND		7.1	0.56	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
1,1-Dichloroethane	ND		3.6	0.48	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
1,2-Dichloroethane	ND		3.6	0.54	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
1,1-Dichloroethene	ND	*	3.6	0.44	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
cis-1,2-Dichloroethene	ND		3.6	0.48	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
trans-1,2-Dichloroethene	ND		3.6	0.53	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
1,2-Dichloropropane	ND		3.6	0.45	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
cis-1,3-Dichloropropene	ND		3.6	0.49	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
trans-1,3-Dichloropropene	ND		3.6	0.48	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
Ethylbenzene	ND		3.6	0.53	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
Hexachlorobutadiene	ND		3.6	0.64	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
2-Hexanone	ND		36	7.1	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
Isopropylbenzene	ND		3.6	0.48	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
4-Isopropyltoluene	ND		3.6	1.8	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
Methylene Chloride	ND		7.1	4.0	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
4-Methyl-2-pentanone (MIBK)	ND		36	7.1	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
Naphthalene	ND		7.1	1.1	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
N-Propylbenzene	ND		3.6	0.47	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
Styrene	ND		3.6	0.45	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
1,1,1,2-Tetrachloroethane	ND		3.6	0.54	ug/Kg		08/25/18 03:05	08/29/18 22:49	1

Client Sample ID: DG-C7S-3.5-4

Date Collected: 08/24/18 08:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		3.6	0.53	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
Tetrachloroethene	ND		3.6	0.48	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
Toluene	ND		3.6	0.50	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
1,2,3-Trichlorobenzene	ND		3.6	0.53	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
1,2,4-Trichlorobenzene	ND		3.6	0.50	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
1,1,1-Trichloroethane	ND		3.6	0.43	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
1,1,2-Trichloroethane	ND		3.6	0.50	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
Trichloroethene	ND		3.6	0.45	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
Trichlorofluoromethane	ND		3.6	0.40	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
1,2,3-Trichloropropane	ND		3.6	0.55	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.6	1.5	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
1,2,4-Trimethylbenzene	ND		3.6	1.2	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
1,3,5-Trimethylbenzene	ND		3.6	0.46	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
Vinyl acetate	ND		14	3.6	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
Vinyl chloride	ND		3.6	0.52	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
Xylenes, Total	ND		3.6	0.87	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
2,2-Dichloropropane	ND		3.6	1.4	ug/Kg		08/25/18 03:05	08/29/18 22:49	1
Gasoline Range Organics (GRO) -C4-C12	ND		180	71	ug/Kg		08/25/18 03:05	08/29/18 22:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*45 - 131*	*08/25/18 03:05*	*08/29/18 22:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*60 - 140*	*08/25/18 03:05*	*08/29/18 22:49*	*1*
Toluene-d8 (Surr)	*95*		*58 - 140*	*08/25/18 03:05*	*08/29/18 22:49*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**12**		9.4	4.7	ug/Kg		09/04/18 17:46	09/06/18 04:56	1
Acenaphthene	ND		4.7	2.6	ug/Kg		09/04/18 17:46	09/06/18 04:56	1
Acenaphthylene	**4.7**		4.7	2.3	ug/Kg		09/04/18 17:46	09/06/18 04:56	1
Anthracene	**9.8**		4.7	1.9	ug/Kg		09/04/18 17:46	09/06/18 04:56	1
Benzo[a]anthracene	**25**		4.7	1.4	ug/Kg		09/04/18 17:46	09/06/18 04:56	1
Benzo[a]pyrene	**27**		4.7	1.8	ug/Kg		09/04/18 17:46	09/06/18 04:56	1
Benzo[b]fluoranthene	**38**		4.7	2.0	ug/Kg		09/04/18 17:46	09/06/18 04:56	1
Benzo[g,h,i]perylene	**10**		4.7	4.0	ug/Kg		09/04/18 17:46	09/06/18 04:56	1
Benzo[k]fluoranthene	**13**		4.7	2.0	ug/Kg		09/04/18 17:46	09/06/18 04:56	1
Chrysene	**29**		4.7	1.3	ug/Kg		09/04/18 17:46	09/06/18 04:56	1
Dibenz(a,h)anthracene	**3.9**	**J**	4.7	3.3	ug/Kg		09/04/18 17:46	09/06/18 04:56	1
Fluoranthene	**54**		4.7	1.3	ug/Kg		09/04/18 17:46	09/06/18 04:56	1
Fluorene	**2.9**	**J**	4.7	2.1	ug/Kg		09/04/18 17:46	09/06/18 04:56	1
Indeno[1,2,3-cd]pyrene	**9.7**		4.7	3.9	ug/Kg		09/04/18 17:46	09/06/18 04:56	1
Naphthalene	**8.4**		4.7	3.3	ug/Kg		09/04/18 17:46	09/06/18 04:56	1
Phenanthrene	**47**		4.7	1.7	ug/Kg		09/04/18 17:46	09/06/18 04:56	1
Pyrene	**67**		4.7	1.6	ug/Kg		09/04/18 17:46	09/06/18 04:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*71*		*33 - 120*	*09/04/18 17:46*	*09/06/18 04:56*	*1*
Terphenyl-d14	*86*		*35 - 146*	*09/04/18 17:46*	*09/06/18 04:56*	*1*

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-C7S-3.5-4

Date Collected: 08/24/18 08:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	12000		1900	710	ug/Kg		08/28/18 11:24	08/30/18 22:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*111*		*40 - 130*	*08/28/18 11:24*	*08/30/18 22:30*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/28/18 13:36	09/01/18 06:31	1
4,4'-DDE	ND		1.9	0.41	ug/Kg		08/28/18 13:36	09/01/18 06:31	1
4,4'-DDT	ND		1.9	0.40	ug/Kg		08/28/18 13:36	09/01/18 06:31	1
Aldrin	ND		1.9	0.49	ug/Kg		08/28/18 13:36	09/01/18 06:31	1
alpha-BHC	ND		1.9	0.54	ug/Kg		08/28/18 13:36	09/01/18 06:31	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/28/18 13:36	09/01/18 06:31	1
Chlordane (technical)	ND		39	3.1	ug/Kg		08/28/18 13:36	09/01/18 06:31	1
cis-Chlordane	ND		1.9	0.39	ug/Kg		08/28/18 13:36	09/01/18 06:31	1
delta-BHC	ND		1.9	0.43	ug/Kg		08/28/18 13:36	09/01/18 06:31	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/28/18 13:36	09/01/18 06:31	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/28/18 13:36	09/01/18 06:31	1
Endosulfan II	ND		1.9	0.48	ug/Kg		08/28/18 13:36	09/01/18 06:31	1
Endosulfan sulfate	ND		1.9	0.37	ug/Kg		08/28/18 13:36	09/01/18 06:31	1
Endrin	ND		1.9	0.45	ug/Kg		08/28/18 13:36	09/01/18 06:31	1
Endrin aldehyde	ND		1.9	0.61	ug/Kg		08/28/18 13:36	09/01/18 06:31	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/28/18 13:36	09/01/18 06:31	1
gamma-BHC (Lindane)	ND		1.9	0.61	ug/Kg		08/28/18 13:36	09/01/18 06:31	1
Heptachlor	ND		1.9	0.45	ug/Kg		08/28/18 13:36	09/01/18 06:31	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/28/18 13:36	09/01/18 06:31	1
Methoxychlor	ND		1.9	0.66	ug/Kg		08/28/18 13:36	09/01/18 06:31	1
Toxaphene	ND		39	6.6	ug/Kg		08/28/18 13:36	09/01/18 06:31	1
trans-Chlordane	ND		1.9	0.45	ug/Kg		08/28/18 13:36	09/01/18 06:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*73*		*21 - 136*	*08/28/18 13:36*	*09/01/18 06:31*	*1*
Tetrachloro-m-xylene	*68*		*21 - 145*	*08/28/18 13:36*	*09/01/18 06:31*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/29/18 14:18	08/31/18 08:43	1
Aroclor-1221	ND		50	24	ug/Kg		08/29/18 14:18	08/31/18 08:43	1
Aroclor-1232	ND		50	23	ug/Kg		08/29/18 14:18	08/31/18 08:43	1
Aroclor-1242	ND		50	19	ug/Kg		08/29/18 14:18	08/31/18 08:43	1
Aroclor-1248	ND		50	24	ug/Kg		08/29/18 14:18	08/31/18 08:43	1
Aroclor-1254	ND		50	23	ug/Kg		08/29/18 14:18	08/31/18 08:43	1
Aroclor-1260	ND		50	22	ug/Kg		08/29/18 14:18	08/31/18 08:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*86*		*14 - 128*	*08/29/18 14:18*	*08/31/18 08:43*	*1*
DCB Decachlorobiphenyl	*107*		*10 - 132*	*08/29/18 14:18*	*08/31/18 08:43*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	4.4		1.1	0.19	mg/Kg		08/29/18 09:32	08/30/18 11:59	4

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-C7S-3.5-4

Lab Sample ID: 720-88239-2

Date Collected: 08/24/18 08:00

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.1		2.2	0.19	mg/Kg		08/29/18 09:32	08/30/18 11:59	4
Barium	68		1.1	0.16	mg/Kg		08/29/18 09:32	08/30/18 11:59	4
Beryllium	ND		0.22	0.073	mg/Kg		08/29/18 09:32	08/30/18 11:59	4
Cadmium	0.41		0.28	0.028	mg/Kg		08/29/18 09:32	08/30/18 11:59	4
Chromium	32		1.1	0.12	mg/Kg		08/29/18 09:32	08/30/18 11:59	4
Cobalt	7.1		0.45	0.045	mg/Kg		08/29/18 09:32	08/30/18 11:59	4
Copper	82		3.4	1.6	mg/Kg		08/29/18 09:32	08/30/18 11:59	4
Lead	170		1.1	0.24	mg/Kg		08/29/18 09:32	08/30/18 11:59	4
Molybdenum	0.40	J	1.1	0.14	mg/Kg		08/29/18 09:32	08/30/18 11:59	4
Nickel	34		1.1	0.11	mg/Kg		08/29/18 09:32	08/30/18 11:59	4
Selenium	ND		2.2	0.34	mg/Kg		08/29/18 09:32	08/30/18 11:59	4
Silver	0.20	J	0.56	0.11	mg/Kg		08/29/18 09:32	08/30/18 11:59	4
Thallium	0.56	J	1.1	0.33	mg/Kg		08/29/18 09:32	08/30/18 11:59	4
Vanadium	39		1.1	0.15	mg/Kg		08/29/18 09:32	08/30/18 11:59	4
Zinc	92		3.4	1.4	mg/Kg		08/29/18 09:32	08/30/18 11:59	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.042		0.015	0.0021	mg/Kg		08/29/18 15:39	08/30/18 19:06	1

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-C7S-9.5-10

Date Collected: 08/24/18 08:05
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.7	1.1	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
Acetone	ND		47	36	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
Benzene	ND		4.7	0.61	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
Dichlorobromomethane	ND		4.7	0.68	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
Bromobenzene	ND		4.7	0.75	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
Chlorobromomethane	ND		19	0.68	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
Bromoform	ND		4.7	1.9	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
Bromomethane	ND		9.4	0.75	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
2-Butanone (MEK)	ND		47	20	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
n-Butylbenzene	ND		4.7	0.94	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
sec-Butylbenzene	ND		4.7	0.68	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
tert-Butylbenzene	ND		4.7	0.69	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
Carbon disulfide	ND		4.7	1.9	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
Carbon tetrachloride	ND		4.7	0.58	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
Chlorobenzene	ND		4.7	0.65	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
Chloroethane	ND		9.4	0.53	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
Chloroform	ND		4.7	0.62	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
Chloromethane	ND		9.4	0.75	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
2-Chlorotoluene	ND		4.7	0.61	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
4-Chlorotoluene	ND		4.7	0.64	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
Chlorodibromomethane	ND		4.7	0.67	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
1,2-Dichlorobenzene	ND		4.7	0.64	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
1,3-Dichlorobenzene	ND		4.7	0.68	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
1,4-Dichlorobenzene	ND		4.7	0.67	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
1,3-Dichloropropane	ND		4.7	0.69	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
1,1-Dichloropropene	ND		4.7	0.65	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
1,2-Dibromo-3-Chloropropane	ND		9.4	1.6	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
Ethylene Dibromide	ND		4.7	1.3	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
Dibromomethane	ND		9.4	0.81	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
Dichlorodifluoromethane	ND	F1	9.4	0.75	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
1,1-Dichloroethane	ND		4.7	0.64	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
1,2-Dichloroethane	ND		4.7	0.72	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
1,1-Dichloroethene	ND	*	4.7	0.58	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
cis-1,2-Dichloroethene	ND		4.7	0.64	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
trans-1,2-Dichloroethene	ND		4.7	0.71	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
1,2-Dichloropropane	ND		4.7	0.59	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
cis-1,3-Dichloropropene	ND		4.7	0.65	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
trans-1,3-Dichloropropene	ND		4.7	0.63	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
Ethylbenzene	ND		4.7	0.71	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
Hexachlorobutadiene	ND		4.7	0.85	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
2-Hexanone	ND		47	9.4	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
Isopropylbenzene	ND		4.7	0.64	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
4-Isopropyltoluene	ND		4.7	2.4	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
Methylene Chloride	ND		9.4	5.3	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
4-Methyl-2-pentanone (MIBK)	ND		47	9.4	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
Naphthalene	ND		9.4	1.4	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
N-Propylbenzene	ND		4.7	0.62	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
Styrene	ND		4.7	0.59	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
1,1,1,2-Tetrachloroethane	ND		4.7	0.72	ug/Kg		09/04/18 11:29	09/04/18 12:22	1

Client Sample ID: DG-C7S-9.5-10

Lab Sample ID: 720-88239-3

Date Collected: 08/24/18 08:05

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.7	0.71	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
Tetrachloroethene	ND		4.7	0.63	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
Toluene	ND		4.7	0.67	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
1,2,3-Trichlorobenzene	ND		4.7	0.70	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
1,2,4-Trichlorobenzene	ND		4.7	0.67	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
1,1,1-Trichloroethane	ND		4.7	0.58	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
1,1,2-Trichloroethane	ND		4.7	0.66	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
Trichloroethene	ND		4.7	0.59	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
Trichlorofluoromethane	ND		4.7	0.53	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
1,2,3-Trichloropropane	ND		4.7	0.73	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	F1	4.7	2.0	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
1,2,4-Trimethylbenzene	ND		4.7	1.5	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
1,3,5-Trimethylbenzene	ND		4.7	0.61	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
Vinyl acetate	ND		19	4.7	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
Vinyl chloride	ND		4.7	0.69	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
Xylenes, Total	ND		4.7	1.2	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
2,2-Dichloropropane	ND		4.7	1.9	ug/Kg		09/04/18 11:29	09/04/18 12:22	1
Gasoline Range Organics (GRO) -C4-C12	ND		240	94	ug/Kg		09/04/18 11:29	09/04/18 12:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*45 - 131*	*09/04/18 11:29*	*09/04/18 12:22*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*60 - 140*	*09/04/18 11:29*	*09/04/18 12:22*	*1*
Toluene-d8 (Surr)	*94*		*58 - 140*	*09/04/18 11:29*	*09/04/18 12:22*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**130**		9.6	4.8	ug/Kg		09/04/18 20:14	09/06/18 05:43	1
Acenaphthene	**5.6**		4.8	2.7	ug/Kg		09/04/18 20:14	09/06/18 05:43	1
Acenaphthylene	ND		4.8	2.3	ug/Kg		09/04/18 20:14	09/06/18 05:43	1
Anthracene	**8.5**		4.8	1.9	ug/Kg		09/04/18 20:14	09/06/18 05:43	1
Benzo[a]anthracene	**9.5**		4.8	1.4	ug/Kg		09/04/18 20:14	09/06/18 05:43	1
Benzo[a]pyrene	**10**		4.8	1.8	ug/Kg		09/04/18 20:14	09/06/18 05:43	1
Benzo[b]fluoranthene	**14**		4.8	2.0	ug/Kg		09/04/18 20:14	09/06/18 05:43	1
Benzo[g,h,i]perylene	**5.6**		4.8	4.1	ug/Kg		09/04/18 20:14	09/06/18 05:43	1
Benzo[k]fluoranthene	**3.7**	**J**	4.8	2.0	ug/Kg		09/04/18 20:14	09/06/18 05:43	1
Chrysene	**25**		4.8	1.3	ug/Kg		09/04/18 20:14	09/06/18 05:43	1
Dibenz(a,h)anthracene	**3.7**	**J**	4.8	3.4	ug/Kg		09/04/18 20:14	09/06/18 05:43	1
Fluoranthene	**13**		4.8	1.3	ug/Kg		09/04/18 20:14	09/06/18 05:43	1
Fluorene	**52**		4.8	2.1	ug/Kg		09/04/18 20:14	09/06/18 05:43	1
Indeno[1,2,3-cd]pyrene	ND		4.8	4.0	ug/Kg		09/04/18 20:14	09/06/18 05:43	1
Naphthalene	**49**		4.8	3.4	ug/Kg		09/04/18 20:14	09/06/18 05:43	1
Phenanthrene	**120**		4.8	1.7	ug/Kg		09/04/18 20:14	09/06/18 05:43	1
Pyrene	**30**		4.8	1.6	ug/Kg		09/04/18 20:14	09/06/18 05:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*33 - 120*	*09/04/18 20:14*	*09/06/18 05:43*	*1*
Terphenyl-d14	*83*		*35 - 146*	*09/04/18 20:14*	*09/06/18 05:43*	*1*

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-C7S-9.5-10

Date Collected: 08/24/18 08:05
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	8200		1900	720	ug/Kg		08/28/18 11:24	08/30/18 22:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*104*		*40 - 130*	*08/28/18 11:24*	*08/30/18 22:54*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.58	ug/Kg		08/28/18 13:36	09/01/18 06:48	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/28/18 13:36	09/01/18 06:48	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/28/18 13:36	09/01/18 06:48	1
Aldrin	ND		1.9	0.48	ug/Kg		08/28/18 13:36	09/01/18 06:48	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/28/18 13:36	09/01/18 06:48	1
beta-BHC	ND		1.9	0.34	ug/Kg		08/28/18 13:36	09/01/18 06:48	1
Chlordane (technical)	ND		38	3.1	ug/Kg		08/28/18 13:36	09/01/18 06:48	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/28/18 13:36	09/01/18 06:48	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/28/18 13:36	09/01/18 06:48	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/28/18 13:36	09/01/18 06:48	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/28/18 13:36	09/01/18 06:48	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/28/18 13:36	09/01/18 06:48	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/28/18 13:36	09/01/18 06:48	1
Endrin	ND		1.9	0.44	ug/Kg		08/28/18 13:36	09/01/18 06:48	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/28/18 13:36	09/01/18 06:48	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/28/18 13:36	09/01/18 06:48	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/28/18 13:36	09/01/18 06:48	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/28/18 13:36	09/01/18 06:48	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/28/18 13:36	09/01/18 06:48	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/28/18 13:36	09/01/18 06:48	1
Toxaphene	ND		38	6.5	ug/Kg		08/28/18 13:36	09/01/18 06:48	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/28/18 13:36	09/01/18 06:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*89*		*21 - 136*	*08/28/18 13:36*	*09/01/18 06:48*	*1*
Tetrachloro-m-xylene	*76*		*21 - 145*	*08/28/18 13:36*	*09/01/18 06:48*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		49	21	ug/Kg		08/29/18 14:18	08/31/18 09:04	1
Aroclor-1221	ND		49	23	ug/Kg		08/29/18 14:18	08/31/18 09:04	1
Aroclor-1232	ND		49	22	ug/Kg		08/29/18 14:18	08/31/18 09:04	1
Aroclor-1242	ND		49	19	ug/Kg		08/29/18 14:18	08/31/18 09:04	1
Aroclor-1248	ND		49	23	ug/Kg		08/29/18 14:18	08/31/18 09:04	1
Aroclor-1254	ND		49	22	ug/Kg		08/29/18 14:18	08/31/18 09:04	1
Aroclor-1260	ND		49	21	ug/Kg		08/29/18 14:18	08/31/18 09:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*87*		*14 - 128*	*08/29/18 14:18*	*08/31/18 09:04*	*1*
DCB Decachlorobiphenyl	*111*		*10 - 132*	*08/29/18 14:18*	*08/31/18 09:04*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.1	J	1.6	0.27	mg/Kg		08/29/18 09:32	08/30/18 10:53	4

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-C7S-9.5-10

Lab Sample ID: 720-88239-3

Date Collected: 08/24/18 08:05

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.8		3.3	0.28	mg/Kg		08/29/18 09:32	08/30/18 10:53	4
Barium	73		1.6	0.23	mg/Kg		08/29/18 09:32	08/30/18 10:53	4
Beryllium	0.14	J	0.33	0.11	mg/Kg		08/29/18 09:32	08/30/18 10:53	4
Cadmium	ND		0.41	0.040	mg/Kg		08/29/18 09:32	08/30/18 10:53	4
Chromium	66		1.6	0.17	mg/Kg		08/29/18 09:32	08/30/18 10:53	4
Cobalt	14		0.65	0.065	mg/Kg		08/29/18 09:32	08/30/18 10:53	4
Copper	25		4.9	2.3	mg/Kg		08/29/18 09:32	08/30/18 10:53	4
Lead	8.6		1.6	0.34	mg/Kg		08/29/18 09:32	08/30/18 10:53	4
Molybdenum	0.42	J	1.6	0.21	mg/Kg		08/29/18 09:32	08/30/18 10:53	4
Nickel	83		1.6	0.17	mg/Kg		08/29/18 09:32	08/30/18 10:53	4
Selenium	ND		3.3	0.49	mg/Kg		08/29/18 09:32	08/30/18 10:53	4
Silver	ND		0.81	0.16	mg/Kg		08/29/18 09:32	08/30/18 10:53	4
Thallium	0.82	J	1.6	0.47	mg/Kg		08/29/18 09:32	08/30/18 10:53	4
Vanadium	43		1.6	0.22	mg/Kg		08/29/18 09:32	08/30/18 10:53	4
Zinc	59		4.9	2.1	mg/Kg		08/29/18 09:32	08/30/18 10:53	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.049		0.016	0.0023	mg/Kg		08/29/18 15:39	08/30/18 19:09	1

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-E7S-0.5-1

Date Collected: 08/24/18 08:25
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.3	1.3	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
Acetone	ND		53	41	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
Benzene	ND		5.3	0.70	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
Dichlorobromomethane	ND		5.3	0.77	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
Bromobenzene	ND		5.3	0.85	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
Chlorobromomethane	ND		21	0.77	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
Bromoform	ND		5.3	2.1	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
Bromomethane	ND		11	0.85	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
2-Butanone (MEK)	ND		53	22	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
n-Butylbenzene	ND		5.3	1.1	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
sec-Butylbenzene	ND		5.3	0.77	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
tert-Butylbenzene	ND		5.3	0.78	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
Carbon disulfide	ND		5.3	2.1	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
Carbon tetrachloride	ND		5.3	0.66	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
Chlorobenzene	ND		5.3	0.74	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
Chloroethane	ND		11	0.60	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
Chloroform	ND		5.3	0.71	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
Chloromethane	ND		11	0.85	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
2-Chlorotoluene	ND		5.3	0.70	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
4-Chlorotoluene	ND		5.3	0.73	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
Chlorodibromomethane	ND		5.3	0.76	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
1,2-Dichlorobenzene	ND		5.3	0.73	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
1,3-Dichlorobenzene	ND		5.3	0.77	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
1,4-Dichlorobenzene	ND		5.3	0.76	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
1,3-Dichloropropane	ND		5.3	0.78	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
1,1-Dichloropropene	ND		5.3	0.74	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
1,2-Dibromo-3-Chloropropane	ND		11	1.8	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
Ethylene Dibromide	ND		5.3	1.5	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
Dibromomethane	ND		11	0.92	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
Dichlorodifluoromethane	ND		11	0.85	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
1,1-Dichloroethane	ND		5.3	0.73	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
1,2-Dichloroethane	ND		5.3	0.81	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
1,1-Dichloroethene	ND	*	5.3	0.66	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
cis-1,2-Dichloroethene	ND		5.3	0.73	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
trans-1,2-Dichloroethene	ND		5.3	0.80	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
1,2-Dichloropropane	ND		5.3	0.67	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
cis-1,3-Dichloropropene	ND		5.3	0.74	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
trans-1,3-Dichloropropene	ND		5.3	0.72	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
Ethylbenzene	ND		5.3	0.80	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
Hexachlorobutadiene	ND		5.3	0.96	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
2-Hexanone	ND		53	11	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
Isopropylbenzene	ND		5.3	0.73	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
4-Isopropyltoluene	ND		5.3	2.7	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
Methylene Chloride	ND		11	6.0	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
4-Methyl-2-pentanone (MIBK)	ND		53	11	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
Naphthalene	ND		11	1.6	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
N-Propylbenzene	ND		5.3	0.71	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
Styrene	ND		5.3	0.67	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
1,1,1,2-Tetrachloroethane	ND		5.3	0.81	ug/Kg		08/25/18 03:05	08/29/18 23:46	1

Client Sample ID: DG-E7S-0.5-1

Date Collected: 08/24/18 08:25
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		5.3	0.80	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
Tetrachloroethene	ND		5.3	0.72	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
Toluene	ND		5.3	0.76	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
1,2,3-Trichlorobenzene	ND		5.3	0.79	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
1,2,4-Trichlorobenzene	ND		5.3	0.76	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
1,1,1-Trichloroethane	ND		5.3	0.65	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
1,1,2-Trichloroethane	ND		5.3	0.75	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
Trichloroethene	ND		5.3	0.67	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
Trichlorofluoromethane	ND		5.3	0.60	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
1,2,3-Trichloropropane	ND		5.3	0.82	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.3	2.2	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
1,2,4-Trimethylbenzene	ND		5.3	1.8	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
1,3,5-Trimethylbenzene	ND		5.3	0.70	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
Vinyl acetate	ND		21	5.3	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
Vinyl chloride	ND		5.3	0.78	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
Xylenes, Total	ND		5.3	1.3	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
2,2-Dichloropropane	ND		5.3	2.1	ug/Kg		08/25/18 03:05	08/29/18 23:46	1
Gasoline Range Organics (GRO) -C4-C12	ND		270	110	ug/Kg		08/25/18 03:05	08/29/18 23:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*45 - 131*	*08/25/18 03:05*	*08/29/18 23:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*60 - 140*	*08/25/18 03:05*	*08/29/18 23:46*	*1*
Toluene-d8 (Surr)	*93*		*58 - 140*	*08/25/18 03:05*	*08/29/18 23:46*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.8	4.9	ug/Kg		09/04/18 17:46	09/06/18 05:19	1
Acenaphthene	ND		4.9	2.7	ug/Kg		09/04/18 17:46	09/06/18 05:19	1
Acenaphthylene	ND		4.9	2.3	ug/Kg		09/04/18 17:46	09/06/18 05:19	1
Anthracene	**2.8**	**J**	4.9	2.0	ug/Kg		09/04/18 17:46	09/06/18 05:19	1
Benzo[a]anthracene	**6.7**		4.9	1.5	ug/Kg		09/04/18 17:46	09/06/18 05:19	1
Benzo[a]pyrene	**8.3**		4.9	1.9	ug/Kg		09/04/18 17:46	09/06/18 05:19	1
Benzo[b]fluoranthene	**12**		4.9	2.1	ug/Kg		09/04/18 17:46	09/06/18 05:19	1
Benzo[g,h,i]perylene	**22**		4.9	4.2	ug/Kg		09/04/18 17:46	09/06/18 05:19	1
Benzo[k]fluoranthene	**5.3**		4.9	2.1	ug/Kg		09/04/18 17:46	09/06/18 05:19	1
Chrysene	**8.2**		4.9	1.4	ug/Kg		09/04/18 17:46	09/06/18 05:19	1
Dibenz(a,h)anthracene	ND		4.9	3.4	ug/Kg		09/04/18 17:46	09/06/18 05:19	1
Fluoranthene	**9.9**		4.9	1.4	ug/Kg		09/04/18 17:46	09/06/18 05:19	1
Fluorene	ND		4.9	2.1	ug/Kg		09/04/18 17:46	09/06/18 05:19	1
Indeno[1,2,3-cd]pyrene	**6.1**		4.9	4.1	ug/Kg		09/04/18 17:46	09/06/18 05:19	1
Naphthalene	ND		4.9	3.4	ug/Kg		09/04/18 17:46	09/06/18 05:19	1
Phenanthrene	**7.9**		4.9	1.8	ug/Kg		09/04/18 17:46	09/06/18 05:19	1
Pyrene	**14**		4.9	1.7	ug/Kg		09/04/18 17:46	09/06/18 05:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*33 - 120*	*09/04/18 17:46*	*09/06/18 05:19*	*1*
Terphenyl-d14	*87*		*35 - 146*	*09/04/18 17:46*	*09/06/18 05:19*	*1*

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-E7S-0.5-1

Date Collected: 08/24/18 08:25
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	28000		1900	710	ug/Kg		08/28/18 11:24	08/30/18 23:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*98*		*40 - 130*	*08/28/18 11:24*	*08/30/18 23:18*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/28/18 13:36	09/01/18 07:04	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/28/18 13:36	09/01/18 07:04	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/28/18 13:36	09/01/18 07:04	1
Aldrin	ND		1.9	0.48	ug/Kg		08/28/18 13:36	09/01/18 07:04	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/28/18 13:36	09/01/18 07:04	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/28/18 13:36	09/01/18 07:04	1
Chlordane (technical)	ND		38	3.1	ug/Kg		08/28/18 13:36	09/01/18 07:04	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/28/18 13:36	09/01/18 07:04	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/28/18 13:36	09/01/18 07:04	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/28/18 13:36	09/01/18 07:04	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/28/18 13:36	09/01/18 07:04	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/28/18 13:36	09/01/18 07:04	1
Endosulfan sulfate	ND		1.9	0.37	ug/Kg		08/28/18 13:36	09/01/18 07:04	1
Endrin	ND		1.9	0.44	ug/Kg		08/28/18 13:36	09/01/18 07:04	1
Endrin aldehyde	ND		1.9	0.61	ug/Kg		08/28/18 13:36	09/01/18 07:04	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/28/18 13:36	09/01/18 07:04	1
gamma-BHC (Lindane)	ND		1.9	0.61	ug/Kg		08/28/18 13:36	09/01/18 07:04	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/28/18 13:36	09/01/18 07:04	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/28/18 13:36	09/01/18 07:04	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/28/18 13:36	09/01/18 07:04	1
Toxaphene	ND		38	6.5	ug/Kg		08/28/18 13:36	09/01/18 07:04	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/28/18 13:36	09/01/18 07:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*109*		*21 - 136*	*08/28/18 13:36*	*09/01/18 07:04*	*1*
Tetrachloro-m-xylene	*76*		*21 - 145*	*08/28/18 13:36*	*09/01/18 07:04*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		48	21	ug/Kg		08/29/18 14:18	08/31/18 09:26	1
Aroclor-1221	ND		48	23	ug/Kg		08/29/18 14:18	08/31/18 09:26	1
Aroclor-1232	ND		48	22	ug/Kg		08/29/18 14:18	08/31/18 09:26	1
Aroclor-1242	ND		48	18	ug/Kg		08/29/18 14:18	08/31/18 09:26	1
Aroclor-1248	ND		48	23	ug/Kg		08/29/18 14:18	08/31/18 09:26	1
Aroclor-1254	ND		48	22	ug/Kg		08/29/18 14:18	08/31/18 09:26	1
Aroclor-1260	ND		48	21	ug/Kg		08/29/18 14:18	08/31/18 09:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*85*		*14 - 128*	*08/29/18 14:18*	*08/31/18 09:26*	*1*
DCB Decachlorobiphenyl	*106*		*10 - 132*	*08/29/18 14:18*	*08/31/18 09:26*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.7	0.27	mg/Kg		08/29/18 09:32	08/30/18 10:58	4

Client Sample ID: DG-E7S-0.5-1

Lab Sample ID: 720-88239-4

Date Collected: 08/24/18 08:25

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.5		3.3	0.28	mg/Kg		08/29/18 09:32	08/30/18 10:58	4
Barium	58		1.7	0.23	mg/Kg		08/29/18 09:32	08/30/18 10:58	4
Beryllium	ND		0.33	0.11	mg/Kg		08/29/18 09:32	08/30/18 10:58	4
Cadmium	0.36	J	0.41	0.041	mg/Kg		08/29/18 09:32	08/30/18 10:58	4
Chromium	14		1.7	0.18	mg/Kg		08/29/18 09:32	08/30/18 10:58	4
Cobalt	11		0.66	0.066	mg/Kg		08/29/18 09:32	08/30/18 10:58	4
Copper	170		5.0	2.4	mg/Kg		08/29/18 09:32	08/30/18 10:58	4
Lead	110		1.7	0.35	mg/Kg		08/29/18 09:32	08/30/18 10:58	4
Molybdenum	ND		1.7	0.21	mg/Kg		08/29/18 09:32	08/30/18 10:58	4
Nickel	8.5		1.7	0.17	mg/Kg		08/29/18 09:32	08/30/18 10:58	4
Selenium	ND		3.3	0.50	mg/Kg		08/29/18 09:32	08/30/18 10:58	4
Silver	0.35	J	0.83	0.17	mg/Kg		08/29/18 09:32	08/30/18 10:58	4
Thallium	0.98	J	1.7	0.48	mg/Kg		08/29/18 09:32	08/30/18 10:58	4
Vanadium	110		1.7	0.22	mg/Kg		08/29/18 09:32	08/30/18 10:58	4
Zinc	150		5.0	2.1	mg/Kg		08/29/18 09:32	08/30/18 10:58	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.070		0.017	0.0025	mg/Kg		08/29/18 15:39	08/30/18 19:11	1

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-E7S-3.5-4

Date Collected: 08/24/18 08:25
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-5

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.7	1.1	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
Acetone	ND		47	36	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
Benzene	ND		4.7	0.62	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
Dichlorobromomethane	ND		4.7	0.68	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
Bromobenzene	ND		4.7	0.75	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
Chlorobromomethane	ND		19	0.68	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
Bromoform	ND		4.7	1.9	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
Bromomethane	ND		9.5	0.75	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
2-Butanone (MEK)	ND		47	20	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
n-Butylbenzene	ND		4.7	0.95	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
sec-Butylbenzene	ND		4.7	0.68	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
tert-Butylbenzene	ND		4.7	0.69	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
Carbon disulfide	ND		4.7	1.9	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
Carbon tetrachloride	ND		4.7	0.59	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
Chlorobenzene	ND		4.7	0.65	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
Chloroethane	ND		9.5	0.53	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
Chloroform	ND		4.7	0.63	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
Chloromethane	ND		9.5	0.75	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
2-Chlorotoluene	ND		4.7	0.62	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
4-Chlorotoluene	ND		4.7	0.65	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
Chlorodibromomethane	ND		4.7	0.67	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
1,2-Dichlorobenzene	ND		4.7	0.65	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
1,3-Dichlorobenzene	ND		4.7	0.68	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
1,4-Dichlorobenzene	ND		4.7	0.67	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
1,3-Dichloropropane	ND		4.7	0.69	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
1,1-Dichloropropene	ND		4.7	0.65	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
1,2-Dibromo-3-Chloropropane	ND		9.5	1.6	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
Ethylene Dibromide	ND		4.7	1.4	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
Dibromomethane	ND		9.5	0.82	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
Dichlorodifluoromethane	ND		9.5	0.75	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
1,1-Dichloroethane	ND		4.7	0.65	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
1,2-Dichloroethane	ND		4.7	0.72	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
1,1-Dichloroethene	ND	*	4.7	0.59	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
cis-1,2-Dichloroethene	ND		4.7	0.65	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
trans-1,2-Dichloroethene	ND		4.7	0.71	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
1,2-Dichloropropane	ND		4.7	0.60	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
cis-1,3-Dichloropropene	ND		4.7	0.65	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
trans-1,3-Dichloropropene	ND		4.7	0.64	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
Ethylbenzene	ND		4.7	0.71	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
Hexachlorobutadiene	ND		4.7	0.85	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
2-Hexanone	ND		47	9.5	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
Isopropylbenzene	ND		4.7	0.65	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
4-Isopropyltoluene	ND		4.7	2.4	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
Methylene Chloride	ND		9.5	5.3	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
4-Methyl-2-pentanone (MIBK)	ND		47	9.5	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
Naphthalene	ND		9.5	1.4	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
N-Propylbenzene	ND		4.7	0.63	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
Styrene	ND		4.7	0.60	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
1,1,1,2-Tetrachloroethane	ND		4.7	0.72	ug/Kg		09/04/18 10:40	09/04/18 11:25	1

Client Sample ID: DG-E7S-3.5-4

Date Collected: 08/24/18 08:25
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-5

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.7	0.71	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
Tetrachloroethene	ND		4.7	0.64	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
Toluene	ND		4.7	0.67	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
1,2,3-Trichlorobenzene	ND		4.7	0.70	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
1,2,4-Trichlorobenzene	ND		4.7	0.67	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
1,1,1-Trichloroethane	ND		4.7	0.58	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
1,1,2-Trichloroethane	ND		4.7	0.66	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
Trichloroethene	ND		4.7	0.60	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
Trichlorofluoromethane	ND		4.7	0.53	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
1,2,3-Trichloropropane	ND		4.7	0.73	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.7	2.0	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
1,2,4-Trimethylbenzene	ND		4.7	1.6	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
1,3,5-Trimethylbenzene	ND		4.7	0.62	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
Vinyl acetate	ND		19	4.7	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
Vinyl chloride	ND		4.7	0.69	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
Xylenes, Total	ND		4.7	1.2	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
2,2-Dichloropropane	ND		4.7	1.9	ug/Kg		09/04/18 10:40	09/04/18 11:25	1
Gasoline Range Organics (GRO) -C4-C12	ND		240	95	ug/Kg		09/04/18 10:40	09/04/18 11:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*45 - 131*	*09/04/18 10:40*	*09/04/18 11:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*60 - 140*	*09/04/18 10:40*	*09/04/18 11:25*	*1*
Toluene-d8 (Surr)	*95*		*58 - 140*	*09/04/18 10:40*	*09/04/18 11:25*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		10	5.0	ug/Kg		08/29/18 15:27	09/01/18 16:13	1
Acenaphthene	ND		5.0	2.8	ug/Kg		08/29/18 15:27	09/01/18 16:13	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		08/29/18 15:27	09/01/18 16:13	1
Anthracene	ND		5.0	2.0	ug/Kg		08/29/18 15:27	09/01/18 16:13	1
Benzo[a]anthracene	ND		5.0	1.5	ug/Kg		08/29/18 15:27	09/01/18 16:13	1
Benzo[a]pyrene	**2.0**	**J**	5.0	1.9	ug/Kg		08/29/18 15:27	09/01/18 16:13	1
Benzo[b]fluoranthene	**2.9**	**J**	5.0	2.1	ug/Kg		08/29/18 15:27	09/01/18 16:13	1
Benzo[g,h,i]perylene	ND		5.0	4.3	ug/Kg		08/29/18 15:27	09/01/18 16:13	1
Benzo[k]fluoranthene	ND		5.0	2.1	ug/Kg		08/29/18 15:27	09/01/18 16:13	1
Chrysene	**2.3**	**J**	5.0	1.4	ug/Kg		08/29/18 15:27	09/01/18 16:13	1
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		08/29/18 15:27	09/01/18 16:13	1
Fluoranthene	**3.7**	**J**	5.0	1.4	ug/Kg		08/29/18 15:27	09/01/18 16:13	1
Fluorene	ND		5.0	2.2	ug/Kg		08/29/18 15:27	09/01/18 16:13	1
Indeno[1,2,3-cd]pyrene	ND		5.0	4.2	ug/Kg		08/29/18 15:27	09/01/18 16:13	1
Naphthalene	**4.0**	**J**	5.0	3.5	ug/Kg		08/29/18 15:27	09/01/18 16:13	1
Phenanthrene	**3.8**	**J**	5.0	1.8	ug/Kg		08/29/18 15:27	09/01/18 16:13	1
Pyrene	**3.6**	**J**	5.0	1.7	ug/Kg		08/29/18 15:27	09/01/18 16:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*56*		*33 - 120*	*08/29/18 15:27*	*09/01/18 16:13*	*1*
Terphenyl-d14	*71*		*35 - 146*	*08/29/18 15:27*	*09/01/18 16:13*	*1*

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-E7S-3.5-4

Date Collected: 08/24/18 08:25
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-5

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	6100		1900	710	ug/Kg		08/28/18 11:24	08/30/18 20:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*78*		*40 - 130*	*08/28/18 11:24*	*08/30/18 20:03*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.58	ug/Kg		08/28/18 13:36	09/01/18 07:20	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/28/18 13:36	09/01/18 07:20	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/28/18 13:36	09/01/18 07:20	1
Aldrin	ND		1.9	0.47	ug/Kg		08/28/18 13:36	09/01/18 07:20	1
alpha-BHC	ND		1.9	0.52	ug/Kg		08/28/18 13:36	09/01/18 07:20	1
beta-BHC	ND		1.9	0.34	ug/Kg		08/28/18 13:36	09/01/18 07:20	1
Chlordane (technical)	ND		38	3.0	ug/Kg		08/28/18 13:36	09/01/18 07:20	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/28/18 13:36	09/01/18 07:20	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/28/18 13:36	09/01/18 07:20	1
Dieldrin	ND		1.9	0.56	ug/Kg		08/28/18 13:36	09/01/18 07:20	1
Endosulfan I	ND		1.9	0.30	ug/Kg		08/28/18 13:36	09/01/18 07:20	1
Endosulfan II	ND		1.9	0.46	ug/Kg		08/28/18 13:36	09/01/18 07:20	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/28/18 13:36	09/01/18 07:20	1
Endrin	ND		1.9	0.44	ug/Kg		08/28/18 13:36	09/01/18 07:20	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/28/18 13:36	09/01/18 07:20	1
Endrin ketone	ND		1.9	0.31	ug/Kg		08/28/18 13:36	09/01/18 07:20	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/28/18 13:36	09/01/18 07:20	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/28/18 13:36	09/01/18 07:20	1
Heptachlor epoxide	ND		1.9	0.33	ug/Kg		08/28/18 13:36	09/01/18 07:20	1
Methoxychlor	ND		1.9	0.64	ug/Kg		08/28/18 13:36	09/01/18 07:20	1
Toxaphene	ND		38	6.4	ug/Kg		08/28/18 13:36	09/01/18 07:20	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/28/18 13:36	09/01/18 07:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*88*		*21 - 136*	*08/28/18 13:36*	*09/01/18 07:20*	*1*
Tetrachloro-m-xylene	*76*		*21 - 145*	*08/28/18 13:36*	*09/01/18 07:20*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/29/18 14:18	08/31/18 09:48	1
Aroclor-1221	ND		50	24	ug/Kg		08/29/18 14:18	08/31/18 09:48	1
Aroclor-1232	ND		50	23	ug/Kg		08/29/18 14:18	08/31/18 09:48	1
Aroclor-1242	ND		50	19	ug/Kg		08/29/18 14:18	08/31/18 09:48	1
Aroclor-1248	ND		50	24	ug/Kg		08/29/18 14:18	08/31/18 09:48	1
Aroclor-1254	ND		50	23	ug/Kg		08/29/18 14:18	08/31/18 09:48	1
Aroclor-1260	ND		50	22	ug/Kg		08/29/18 14:18	08/31/18 09:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*64*		*14 - 128*	*08/29/18 14:18*	*08/31/18 09:48*	*1*
DCB Decachlorobiphenyl	*78*		*10 - 132*	*08/29/18 14:18*	*08/31/18 09:48*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.98	J	1.5	0.25	mg/Kg		08/29/18 09:32	08/30/18 11:03	4

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-E7S-3.5-4

Lab Sample ID: 720-88239-5

Date Collected: 08/24/18 08:25

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.8	J	3.0	0.26	mg/Kg		08/29/18 09:32	08/30/18 11:03	4
Barium	110		1.5	0.22	mg/Kg		08/29/18 09:32	08/30/18 11:03	4
Beryllium	0.13	J	0.30	0.098	mg/Kg		08/29/18 09:32	08/30/18 11:03	4
Cadmium	0.17	J	0.38	0.038	mg/Kg		08/29/18 09:32	08/30/18 11:03	4
Chromium	52		1.5	0.16	mg/Kg		08/29/18 09:32	08/30/18 11:03	4
Cobalt	9.1		0.61	0.061	mg/Kg		08/29/18 09:32	08/30/18 11:03	4
Copper	20		4.5	2.2	mg/Kg		08/29/18 09:32	08/30/18 11:03	4
Lead	28		1.5	0.32	mg/Kg		08/29/18 09:32	08/30/18 11:03	4
Molybdenum	0.29	J	1.5	0.19	mg/Kg		08/29/18 09:32	08/30/18 11:03	4
Nickel	44		1.5	0.15	mg/Kg		08/29/18 09:32	08/30/18 11:03	4
Selenium	ND		3.0	0.45	mg/Kg		08/29/18 09:32	08/30/18 11:03	4
Silver	ND		0.76	0.15	mg/Kg		08/29/18 09:32	08/30/18 11:03	4
Thallium	ND		1.5	0.44	mg/Kg		08/29/18 09:32	08/30/18 11:03	4
Vanadium	42		1.5	0.21	mg/Kg		08/29/18 09:32	08/30/18 11:03	4
Zinc	57		4.5	1.9	mg/Kg		08/29/18 09:32	08/30/18 11:03	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.042		0.015	0.0022	mg/Kg		08/29/18 15:39	08/30/18 19:13	1

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-E7S-9.5-10

Lab Sample ID: 720-88239-6

Date Collected: 08/24/18 08:25
Matrix: Solid
Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.6	1.1	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
Acetone	ND		46	35	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
Benzene	ND		4.6	0.59	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
Dichlorobromomethane	ND		4.6	0.66	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
Bromobenzene	ND		4.6	0.72	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
Chlorobromomethane	ND		18	0.66	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
Bromoform	ND		4.6	1.8	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
Bromomethane	ND		9.1	0.72	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
2-Butanone (MEK)	ND		46	19	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
n-Butylbenzene	ND		4.6	0.91	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
sec-Butylbenzene	ND		4.6	0.66	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
tert-Butylbenzene	ND		4.6	0.67	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
Carbon disulfide	ND		4.6	1.8	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
Carbon tetrachloride	ND		4.6	0.57	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
Chlorobenzene	ND		4.6	0.63	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
Chloroethane	ND		9.1	0.51	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
Chloroform	ND		4.6	0.60	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
Chloromethane	ND		9.1	0.72	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
2-Chlorotoluene	ND		4.6	0.59	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
4-Chlorotoluene	ND		4.6	0.62	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
Chlorodibromomethane	ND		4.6	0.65	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
1,2-Dichlorobenzene	ND		4.6	0.62	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
1,3-Dichlorobenzene	ND		4.6	0.66	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
1,4-Dichlorobenzene	ND		4.6	0.65	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
1,3-Dichloropropane	ND		4.6	0.67	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
1,1-Dichloropropene	ND		4.6	0.63	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
1,2-Dibromo-3-Chloropropane	ND		9.1	1.6	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
Ethylene Dibromide	ND		4.6	1.3	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
Dibromomethane	ND		9.1	0.78	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
Dichlorodifluoromethane	ND		9.1	0.72	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
1,1-Dichloroethane	ND		4.6	0.62	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
1,2-Dichloroethane	ND		4.6	0.69	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
1,1-Dichloroethene	ND	*	4.6	0.57	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
cis-1,2-Dichloroethene	ND		4.6	0.62	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
trans-1,2-Dichloroethene	ND		4.6	0.68	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
1,2-Dichloropropane	ND		4.6	0.57	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
cis-1,3-Dichloropropene	ND		4.6	0.63	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
trans-1,3-Dichloropropene	ND		4.6	0.61	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
Ethylbenzene	ND		4.6	0.68	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
Hexachlorobutadiene	ND		4.6	0.82	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
2-Hexanone	ND		46	9.1	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
Isopropylbenzene	ND		4.6	0.62	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
4-Isopropyltoluene	ND		4.6	2.3	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
Methylene Chloride	ND		9.1	5.1	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
4-Methyl-2-pentanone (MIBK)	ND		46	9.1	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
Naphthalene	ND		9.1	1.4	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
N-Propylbenzene	ND		4.6	0.60	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
Styrene	ND		4.6	0.57	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
1,1,1,2-Tetrachloroethane	ND		4.6	0.69	ug/Kg		08/25/18 03:05	08/30/18 00:43	1

Client Sample ID: DG-E7S-9.5-10

Lab Sample ID: 720-88239-6

Date Collected: 08/24/18 08:25

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.6	0.68	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
Tetrachloroethene	ND		4.6	0.61	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
Toluene	**0.75**	**J**	4.6	0.65	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
1,2,3-Trichlorobenzene	ND		4.6	0.67	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
1,2,4-Trichlorobenzene	ND		4.6	0.65	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
1,1,1-Trichloroethane	ND		4.6	0.56	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
1,1,2-Trichloroethane	ND		4.6	0.64	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
Trichloroethene	ND		4.6	0.57	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
Trichlorofluoromethane	ND		4.6	0.51	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
1,2,3-Trichloropropane	ND		4.6	0.70	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.6	1.9	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
1,2,4-Trimethylbenzene	ND		4.6	1.5	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
1,3,5-Trimethylbenzene	ND		4.6	0.59	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
Vinyl acetate	ND		18	4.6	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
Vinyl chloride	ND		4.6	0.67	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
Xylenes, Total	ND		4.6	1.1	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
2,2-Dichloropropane	ND		4.6	1.8	ug/Kg		08/25/18 03:05	08/30/18 00:43	1
Gasoline Range Organics (GRO) -C4-C12	ND		230	91	ug/Kg		08/25/18 03:05	08/30/18 00:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*45 - 131*	*08/25/18 03:05*	*08/30/18 00:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*113*		*60 - 140*	*08/25/18 03:05*	*08/30/18 00:43*	*1*
Toluene-d8 (Surr)	*93*		*58 - 140*	*08/25/18 03:05*	*08/30/18 00:43*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.7	4.8	ug/Kg		08/29/18 15:27	09/01/18 19:00	1
Acenaphthene	ND		4.8	2.7	ug/Kg		08/29/18 15:27	09/01/18 19:00	1
Acenaphthylene	ND		4.8	2.3	ug/Kg		08/29/18 15:27	09/01/18 19:00	1
Anthracene	ND		4.8	1.9	ug/Kg		08/29/18 15:27	09/01/18 19:00	1
Benzo[a]anthracene	ND		4.8	1.4	ug/Kg		08/29/18 15:27	09/01/18 19:00	1
Benzo[a]pyrene	ND		4.8	1.8	ug/Kg		08/29/18 15:27	09/01/18 19:00	1
Benzo[b]fluoranthene	ND		4.8	2.0	ug/Kg		08/29/18 15:27	09/01/18 19:00	1
Benzo[g,h,i]perylene	ND		4.8	4.2	ug/Kg		08/29/18 15:27	09/01/18 19:00	1
Benzo[k]fluoranthene	ND		4.8	2.0	ug/Kg		08/29/18 15:27	09/01/18 19:00	1
Chrysene	ND		4.8	1.4	ug/Kg		08/29/18 15:27	09/01/18 19:00	1
Dibenz(a,h)anthracene	ND		4.8	3.4	ug/Kg		08/29/18 15:27	09/01/18 19:00	1
Fluoranthene	**1.4**	**J**	4.8	1.4	ug/Kg		08/29/18 15:27	09/01/18 19:00	1
Fluorene	ND		4.8	2.1	ug/Kg		08/29/18 15:27	09/01/18 19:00	1
Indeno[1,2,3-cd]pyrene	ND		4.8	4.1	ug/Kg		08/29/18 15:27	09/01/18 19:00	1
Naphthalene	ND		4.8	3.4	ug/Kg		08/29/18 15:27	09/01/18 19:00	1
Phenanthrene	**2.7**	**J**	4.8	1.7	ug/Kg		08/29/18 15:27	09/01/18 19:00	1
Pyrene	ND		4.8	1.6	ug/Kg		08/29/18 15:27	09/01/18 19:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*56*		*33 - 120*	*08/29/18 15:27*	*09/01/18 19:00*	*1*
Terphenyl-d14	*79*		*35 - 146*	*08/29/18 15:27*	*09/01/18 19:00*	*1*

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-E7S-9.5-10

Date Collected: 08/24/18 08:25
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-6

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1700	J	1900	710	ug/Kg		08/28/18 11:24	08/31/18 04:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*104*		*40 - 130*	*08/28/18 11:24*	*08/31/18 04:34*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.60	ug/Kg		08/28/18 13:36	09/01/18 07:36	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/28/18 13:36	09/01/18 07:36	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/28/18 13:36	09/01/18 07:36	1
Aldrin	ND		2.0	0.50	ug/Kg		08/28/18 13:36	09/01/18 07:36	1
alpha-BHC	ND		2.0	0.55	ug/Kg		08/28/18 13:36	09/01/18 07:36	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/28/18 13:36	09/01/18 07:36	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/28/18 13:36	09/01/18 07:36	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/28/18 13:36	09/01/18 07:36	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/28/18 13:36	09/01/18 07:36	1
Dieldrin	ND		2.0	0.58	ug/Kg		08/28/18 13:36	09/01/18 07:36	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/28/18 13:36	09/01/18 07:36	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/28/18 13:36	09/01/18 07:36	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/28/18 13:36	09/01/18 07:36	1
Endrin	ND		2.0	0.46	ug/Kg		08/28/18 13:36	09/01/18 07:36	1
Endrin aldehyde	ND		2.0	0.62	ug/Kg		08/28/18 13:36	09/01/18 07:36	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/28/18 13:36	09/01/18 07:36	1
gamma-BHC (Lindane)	ND		2.0	0.62	ug/Kg		08/28/18 13:36	09/01/18 07:36	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/28/18 13:36	09/01/18 07:36	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/28/18 13:36	09/01/18 07:36	1
Methoxychlor	ND		2.0	0.67	ug/Kg		08/28/18 13:36	09/01/18 07:36	1
Toxaphene	ND		40	6.8	ug/Kg		08/28/18 13:36	09/01/18 07:36	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/28/18 13:36	09/01/18 07:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*103*		*21 - 136*	*08/28/18 13:36*	*09/01/18 07:36*	*1*
Tetrachloro-m-xylene	*82*		*21 - 145*	*08/28/18 13:36*	*09/01/18 07:36*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/29/18 14:18	08/31/18 10:10	1
Aroclor-1221	ND		50	24	ug/Kg		08/29/18 14:18	08/31/18 10:10	1
Aroclor-1232	ND		50	23	ug/Kg		08/29/18 14:18	08/31/18 10:10	1
Aroclor-1242	ND		50	19	ug/Kg		08/29/18 14:18	08/31/18 10:10	1
Aroclor-1248	ND		50	24	ug/Kg		08/29/18 14:18	08/31/18 10:10	1
Aroclor-1254	ND		50	23	ug/Kg		08/29/18 14:18	08/31/18 10:10	1
Aroclor-1260	ND		50	22	ug/Kg		08/29/18 14:18	08/31/18 10:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*72*		*14 - 128*	*08/29/18 14:18*	*08/31/18 10:10*	*1*
DCB Decachlorobiphenyl	*84*		*10 - 132*	*08/29/18 14:18*	*08/31/18 10:10*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.3	J	1.5	0.25	mg/Kg		08/29/18 09:32	08/30/18 11:07	4

Client Sample ID: DG-E7S-9.5-10

Lab Sample ID: 720-88239-6

Date Collected: 08/24/18 08:25

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.2	J	3.0	0.26	mg/Kg		08/29/18 09:32	08/30/18 11:07	4
Barium	97		1.5	0.22	mg/Kg		08/29/18 09:32	08/30/18 11:07	4
Beryllium	0.20	J	0.30	0.098	mg/Kg		08/29/18 09:32	08/30/18 11:07	4
Cadmium	ND		0.38	0.038	mg/Kg		08/29/18 09:32	08/30/18 11:07	4
Chromium	60		1.5	0.16	mg/Kg		08/29/18 09:32	08/30/18 11:07	4
Cobalt	29		0.61	0.061	mg/Kg		08/29/18 09:32	08/30/18 11:07	4
Copper	47		4.5	2.2	mg/Kg		08/29/18 09:32	08/30/18 11:07	4
Lead	0.75	J	1.5	0.32	mg/Kg		08/29/18 09:32	08/30/18 11:07	4
Molybdenum	0.36	J	1.5	0.19	mg/Kg		08/29/18 09:32	08/30/18 11:07	4
Nickel	53		1.5	0.15	mg/Kg		08/29/18 09:32	08/30/18 11:07	4
Selenium	ND		3.0	0.45	mg/Kg		08/29/18 09:32	08/30/18 11:07	4
Silver	0.46	J	0.76	0.15	mg/Kg		08/29/18 09:32	08/30/18 11:07	4
Thallium	1.6		1.5	0.44	mg/Kg		08/29/18 09:32	08/30/18 11:07	4
Vanadium	140		1.5	0.21	mg/Kg		08/29/18 09:32	08/30/18 11:07	4
Zinc	65		4.5	1.9	mg/Kg		08/29/18 09:32	08/30/18 11:07	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.19		0.016	0.0023	mg/Kg		08/29/18 21:54	08/30/18 21:59	1

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-G7S-0.5-1

Date Collected: 08/24/18 08:50
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-7

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.2	1.0	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
Acetone	ND		42	32	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
Benzene	ND		4.2	0.54	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
Dichlorobromomethane	ND		4.2	0.60	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
Bromobenzene	ND		4.2	0.66	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
Chlorobromomethane	ND		17	0.60	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
Bromoform	ND		4.2	1.7	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
Bromomethane	ND		8.4	0.66	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
2-Butanone (MEK)	ND		42	18	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
n-Butylbenzene	ND		4.2	0.84	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
sec-Butylbenzene	ND		4.2	0.60	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
tert-Butylbenzene	ND		4.2	0.61	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
Carbon disulfide	ND		4.2	1.7	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
Carbon tetrachloride	ND		4.2	0.52	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
Chlorobenzene	ND		4.2	0.58	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
Chloroethane	ND		8.4	0.47	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
Chloroform	ND		4.2	0.55	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
Chloromethane	ND		8.4	0.66	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
2-Chlorotoluene	ND		4.2	0.54	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
4-Chlorotoluene	ND		4.2	0.57	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
Chlorodibromomethane	ND		4.2	0.59	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
1,2-Dichlorobenzene	ND		4.2	0.57	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
1,3-Dichlorobenzene	ND		4.2	0.60	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
1,4-Dichlorobenzene	ND		4.2	0.59	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
1,3-Dichloropropane	ND		4.2	0.61	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
1,1-Dichloropropene	ND		4.2	0.58	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
1,2-Dibromo-3-Chloropropane	ND		8.4	1.4	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
Ethylene Dibromide	ND		4.2	1.2	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
Dibromomethane	ND		8.4	0.72	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
Dichlorodifluoromethane	ND		8.4	0.66	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
1,1-Dichloroethane	ND		4.2	0.57	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
1,2-Dichloroethane	ND		4.2	0.64	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
1,1-Dichloroethene	ND	*	4.2	0.52	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
cis-1,2-Dichloroethene	ND		4.2	0.57	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
trans-1,2-Dichloroethene	ND		4.2	0.63	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
1,2-Dichloropropane	ND		4.2	0.53	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
cis-1,3-Dichloropropene	ND		4.2	0.58	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
trans-1,3-Dichloropropene	ND		4.2	0.56	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
Ethylbenzene	ND		4.2	0.63	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
Hexachlorobutadiene	ND		4.2	0.75	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
2-Hexanone	ND		42	8.4	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
Isopropylbenzene	ND		4.2	0.57	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
4-Isopropyltoluene	ND		4.2	2.1	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
Methylene Chloride	ND		8.4	4.7	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
4-Methyl-2-pentanone (MIBK)	ND		42	8.4	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
Naphthalene	ND		8.4	1.3	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
N-Propylbenzene	ND		4.2	0.55	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
Styrene	ND		4.2	0.53	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
1,1,1,2-Tetrachloroethane	ND		4.2	0.64	ug/Kg		08/25/18 03:05	08/30/18 01:12	1

Client Sample ID: DG-G7S-0.5-1

Lab Sample ID: 720-88239-7

Date Collected: 08/24/18 08:50

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.2	0.63	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
Tetrachloroethene	ND		4.2	0.56	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
Toluene	**0.81**	**J**	4.2	0.59	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
1,2,3-Trichlorobenzene	ND		4.2	0.62	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
1,2,4-Trichlorobenzene	ND		4.2	0.59	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
1,1,1-Trichloroethane	ND		4.2	0.51	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
1,1,2-Trichloroethane	ND		4.2	0.59	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
Trichloroethene	ND		4.2	0.53	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
Trichlorofluoromethane	ND		4.2	0.47	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
1,2,3-Trichloropropane	ND		4.2	0.64	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.2	1.7	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
1,2,4-Trimethylbenzene	ND		4.2	1.4	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
1,3,5-Trimethylbenzene	ND		4.2	0.54	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
Vinyl acetate	ND		17	4.2	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
Vinyl chloride	ND		4.2	0.61	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
Xylenes, Total	ND		4.2	1.0	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
2,2-Dichloropropane	ND		4.2	1.7	ug/Kg		08/25/18 03:05	08/30/18 01:12	1
Gasoline Range Organics (GRO) -C4-C12	ND		210	84	ug/Kg		08/25/18 03:05	08/30/18 01:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*45 - 131*	*08/25/18 03:05*	*08/30/18 01:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*118*		*60 - 140*	*08/25/18 03:05*	*08/30/18 01:12*	*1*
Toluene-d8 (Surr)	*93*		*58 - 140*	*08/25/18 03:05*	*08/30/18 01:12*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.9	4.9	ug/Kg		08/29/18 15:27	09/01/18 19:24	1
Acenaphthene	ND		4.9	2.8	ug/Kg		08/29/18 15:27	09/01/18 19:24	1
Acenaphthylene	ND		4.9	2.4	ug/Kg		08/29/18 15:27	09/01/18 19:24	1
Anthracene	ND		4.9	2.0	ug/Kg		08/29/18 15:27	09/01/18 19:24	1
Benzo[a]anthracene	ND		4.9	1.5	ug/Kg		08/29/18 15:27	09/01/18 19:24	1
Benzo[a]pyrene	**4.0**	**J**	4.9	1.9	ug/Kg		08/29/18 15:27	09/01/18 19:24	1
Benzo[b]fluoranthene	**4.1**	**J**	4.9	2.1	ug/Kg		08/29/18 15:27	09/01/18 19:24	1
Benzo[g,h,i]perylene	ND		4.9	4.2	ug/Kg		08/29/18 15:27	09/01/18 19:24	1
Benzo[k]fluoranthene	**2.8**	**J**	4.9	2.1	ug/Kg		08/29/18 15:27	09/01/18 19:24	1
Chrysene	**2.8**	**J**	4.9	1.4	ug/Kg		08/29/18 15:27	09/01/18 19:24	1
Dibenz(a,h)anthracene	ND		4.9	3.5	ug/Kg		08/29/18 15:27	09/01/18 19:24	1
Fluoranthene	**3.9**	**J**	4.9	1.4	ug/Kg		08/29/18 15:27	09/01/18 19:24	1
Fluorene	ND		4.9	2.2	ug/Kg		08/29/18 15:27	09/01/18 19:24	1
Indeno[1,2,3-cd]pyrene	ND		4.9	4.2	ug/Kg		08/29/18 15:27	09/01/18 19:24	1
Naphthalene	ND		4.9	3.5	ug/Kg		08/29/18 15:27	09/01/18 19:24	1
Phenanthrene	**2.4**	**J**	4.9	1.8	ug/Kg		08/29/18 15:27	09/01/18 19:24	1
Pyrene	**4.3**	**J**	4.9	1.7	ug/Kg		08/29/18 15:27	09/01/18 19:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*59*		*33 - 120*	*08/29/18 15:27*	*09/01/18 19:24*	*1*
Terphenyl-d14	*79*		*35 - 146*	*08/29/18 15:27*	*09/01/18 19:24*	*1*

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-G7S-0.5-1

Date Collected: 08/24/18 08:50
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-7

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	11000		1900	730	ug/Kg		08/28/18 11:24	08/30/18 00:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*79*		*40 - 130*	*08/28/18 11:24*	*08/30/18 00:57*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/28/18 13:36	09/01/18 07:53	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/28/18 13:36	09/01/18 07:53	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/28/18 13:36	09/01/18 07:53	1
Aldrin	ND		1.9	0.48	ug/Kg		08/28/18 13:36	09/01/18 07:53	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/28/18 13:36	09/01/18 07:53	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/28/18 13:36	09/01/18 07:53	1
Chlordane (technical)	ND		38	3.1	ug/Kg		08/28/18 13:36	09/01/18 07:53	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/28/18 13:36	09/01/18 07:53	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/28/18 13:36	09/01/18 07:53	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/28/18 13:36	09/01/18 07:53	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/28/18 13:36	09/01/18 07:53	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/28/18 13:36	09/01/18 07:53	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/28/18 13:36	09/01/18 07:53	1
Endrin	ND		1.9	0.44	ug/Kg		08/28/18 13:36	09/01/18 07:53	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/28/18 13:36	09/01/18 07:53	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/28/18 13:36	09/01/18 07:53	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/28/18 13:36	09/01/18 07:53	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/28/18 13:36	09/01/18 07:53	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/28/18 13:36	09/01/18 07:53	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/28/18 13:36	09/01/18 07:53	1
Toxaphene	ND		38	6.5	ug/Kg		08/28/18 13:36	09/01/18 07:53	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/28/18 13:36	09/01/18 07:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*100*		*21 - 136*	*08/28/18 13:36*	*09/01/18 07:53*	*1*
Tetrachloro-m-xylene	*82*		*21 - 145*	*08/28/18 13:36*	*09/01/18 07:53*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		1000	450	ug/Kg		08/29/18 14:18	08/31/18 10:32	20
Aroclor-1221	ND		1000	490	ug/Kg		08/29/18 14:18	08/31/18 10:32	20
Aroclor-1232	ND		1000	470	ug/Kg		08/29/18 14:18	08/31/18 10:32	20
Aroclor-1242	ND		1000	390	ug/Kg		08/29/18 14:18	08/31/18 10:32	20
Aroclor-1248	ND		1000	490	ug/Kg		08/29/18 14:18	08/31/18 10:32	20
Aroclor-1254	ND		1000	470	ug/Kg		08/29/18 14:18	08/31/18 10:32	20
Aroclor-1260	ND		1000	450	ug/Kg		08/29/18 14:18	08/31/18 10:32	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*14 - 128*	*08/29/18 14:18*	*08/31/18 10:32*	*20*
DCB Decachlorobiphenyl	*0*	*X*	*10 - 132*	*08/29/18 14:18*	*08/31/18 10:32*	*20*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.6	0.26	mg/Kg		08/29/18 09:32	08/30/18 11:12	4

Client Sample ID: DG-G7S-0.5-1

Lab Sample ID: 720-88239-7

Date Collected: 08/24/18 08:50

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.8	J	3.1	0.27	mg/Kg		08/29/18 09:32	08/30/18 11:12	4
Barium	85		1.6	0.22	mg/Kg		08/29/18 09:32	08/30/18 11:12	4
Beryllium	ND		0.31	0.10	mg/Kg		08/29/18 09:32	08/30/18 11:12	4
Cadmium	0.11	J	0.39	0.039	mg/Kg		08/29/18 09:32	08/30/18 11:12	4
Chromium	26		1.6	0.17	mg/Kg		08/29/18 09:32	08/30/18 11:12	4
Cobalt	11		0.63	0.063	mg/Kg		08/29/18 09:32	08/30/18 11:12	4
Copper	110		4.7	2.2	mg/Kg		08/29/18 09:32	08/30/18 11:12	4
Lead	510		1.6	0.33	mg/Kg		08/29/18 09:32	08/30/18 11:12	4
Molybdenum	0.24	J	1.6	0.20	mg/Kg		08/29/18 09:32	08/30/18 11:12	4
Nickel	18		1.6	0.16	mg/Kg		08/29/18 09:32	08/30/18 11:12	4
Selenium	ND		3.1	0.47	mg/Kg		08/29/18 09:32	08/30/18 11:12	4
Silver	0.20	J	0.79	0.16	mg/Kg		08/29/18 09:32	08/30/18 11:12	4
Thallium	0.88	J	1.6	0.46	mg/Kg		08/29/18 09:32	08/30/18 11:12	4
Vanadium	85		1.6	0.21	mg/Kg		08/29/18 09:32	08/30/18 11:12	4
Zinc	110		4.7	2.0	mg/Kg		08/29/18 09:32	08/30/18 11:12	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.078		0.015	0.0022	mg/Kg		08/29/18 21:54	08/30/18 22:01	1

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-G7S-3.5-4

Date Collected: 08/24/18 08:50
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-8

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.5	0.84	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
Acetone	ND		35	27	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
Benzene	ND		3.5	0.45	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
Dichlorobromomethane	ND		3.5	0.50	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
Bromobenzene	ND		3.5	0.55	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
Chlorobromomethane	ND		14	0.50	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
Bromoform	ND		3.5	1.4	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
Bromomethane	ND		7.0	0.55	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
2-Butanone (MEK)	ND		35	15	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
n-Butylbenzene	ND		3.5	0.70	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
sec-Butylbenzene	ND		3.5	0.50	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
tert-Butylbenzene	ND		3.5	0.51	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
Carbon disulfide	ND		3.5	1.4	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
Carbon tetrachloride	ND		3.5	0.43	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
Chlorobenzene	ND		3.5	0.48	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
Chloroethane	ND		7.0	0.39	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
Chloroform	ND		3.5	0.46	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
Chloromethane	ND		7.0	0.55	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
2-Chlorotoluene	ND		3.5	0.45	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
4-Chlorotoluene	ND		3.5	0.48	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
Chlorodibromomethane	ND		3.5	0.50	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
1,2-Dichlorobenzene	ND		3.5	0.48	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
1,3-Dichlorobenzene	ND		3.5	0.50	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
1,4-Dichlorobenzene	ND		3.5	0.50	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
1,3-Dichloropropane	ND		3.5	0.51	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
1,1-Dichloropropene	ND		3.5	0.48	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
1,2-Dibromo-3-Chloropropane	ND		7.0	1.2	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
Ethylene Dibromide	ND		3.5	1.0	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
Dibromomethane	ND		7.0	0.60	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
Dichlorodifluoromethane	ND		7.0	0.55	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
1,1-Dichloroethane	ND		3.5	0.48	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
1,2-Dichloroethane	ND		3.5	0.53	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
1,1-Dichloroethene	ND	*	3.5	0.43	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
cis-1,2-Dichloroethene	**2.8**	**J**	3.5	0.48	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
trans-1,2-Dichloroethene	ND		3.5	0.52	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
1,2-Dichloropropane	ND		3.5	0.44	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
cis-1,3-Dichloropropene	ND		3.5	0.48	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
trans-1,3-Dichloropropene	ND		3.5	0.47	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
Ethylbenzene	ND		3.5	0.52	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
Hexachlorobutadiene	ND		3.5	0.63	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
2-Hexanone	ND		35	7.0	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
Isopropylbenzene	ND		3.5	0.48	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
4-Isopropyltoluene	ND		3.5	1.7	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
Methylene Chloride	ND		7.0	3.9	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
4-Methyl-2-pentanone (MIBK)	ND		35	7.0	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
Naphthalene	ND		7.0	1.0	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
N-Propylbenzene	ND		3.5	0.46	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
Styrene	ND		3.5	0.44	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
1,1,1,2-Tetrachloroethane	ND		3.5	0.53	ug/Kg		08/25/18 03:05	08/30/18 13:49	1

Client Sample ID: DG-G7S-3.5-4

Lab Sample ID: 720-88239-8

Date Collected: 08/24/18 08:50

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		3.5	0.52	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
Tetrachloroethene	**1.8**	**J**	3.5	0.47	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
Toluene	ND		3.5	0.50	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
1,2,3-Trichlorobenzene	ND		3.5	0.52	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
1,2,4-Trichlorobenzene	ND		3.5	0.50	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
1,1,1-Trichloroethane	ND		3.5	0.43	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
1,1,2-Trichloroethane	ND		3.5	0.49	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
Trichloroethene	**31**		3.5	0.44	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
Trichlorofluoromethane	ND		3.5	0.39	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
1,2,3-Trichloropropane	ND		3.5	0.54	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	3.5	1.5	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
1,2,4-Trimethylbenzene	ND		3.5	1.1	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
1,3,5-Trimethylbenzene	ND		3.5	0.45	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
Vinyl acetate	ND		14	3.5	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
Vinyl chloride	ND		3.5	0.51	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
Xylenes, Total	ND		3.5	0.85	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
2,2-Dichloropropane	ND		3.5	1.4	ug/Kg		08/25/18 03:05	08/30/18 13:49	1
Gasoline Range Organics (GRO) -C4-C12	ND		170	70	ug/Kg		08/25/18 03:05	08/30/18 13:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*45 - 131*	*08/25/18 03:05*	*08/30/18 13:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*60 - 140*	*08/25/18 03:05*	*08/30/18 13:49*	*1*
Toluene-d8 (Surr)	*93*		*58 - 140*	*08/25/18 03:05*	*08/30/18 13:49*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**26**		19	9.7	ug/Kg		08/29/18 15:27	09/01/18 19:47	2
Acenaphthene	**48**		9.7	5.4	ug/Kg		08/29/18 15:27	09/01/18 19:47	2
Acenaphthylene	**57**		9.7	4.6	ug/Kg		08/29/18 15:27	09/01/18 19:47	2
Anthracene	**86**		9.7	3.9	ug/Kg		08/29/18 15:27	09/01/18 19:47	2
Benzo[a]anthracene	**300**		9.7	2.9	ug/Kg		08/29/18 15:27	09/01/18 19:47	2
Benzo[a]pyrene	**340**		9.7	3.7	ug/Kg		08/29/18 15:27	09/01/18 19:47	2
Benzo[b]fluoranthene	**410**		9.7	4.1	ug/Kg		08/29/18 15:27	09/01/18 19:47	2
Benzo[g,h,i]perylene	**100**		9.7	8.3	ug/Kg		08/29/18 15:27	09/01/18 19:47	2
Benzo[k]fluoranthene	**190**		9.7	4.1	ug/Kg		08/29/18 15:27	09/01/18 19:47	2
Chrysene	**360**		9.7	2.7	ug/Kg		08/29/18 15:27	09/01/18 19:47	2
Dibenz(a,h)anthracene	**42**		9.7	6.8	ug/Kg		08/29/18 15:27	09/01/18 19:47	2
Fluoranthene	**440**		9.7	2.7	ug/Kg		08/29/18 15:27	09/01/18 19:47	2
Fluorene	**95**		9.7	4.2	ug/Kg		08/29/18 15:27	09/01/18 19:47	2
Indeno[1,2,3-cd]pyrene	**98**		9.7	8.1	ug/Kg		08/29/18 15:27	09/01/18 19:47	2
Naphthalene	**24**		9.7	6.8	ug/Kg		08/29/18 15:27	09/01/18 19:47	2
Phenanthrene	**590**		9.7	3.5	ug/Kg		08/29/18 15:27	09/01/18 19:47	2
Pyrene	**610**		9.7	3.3	ug/Kg		08/29/18 15:27	09/01/18 19:47	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*57*		*33 - 120*	*08/29/18 15:27*	*09/01/18 19:47*	*2*
Terphenyl-d14	*78*		*35 - 146*	*08/29/18 15:27*	*09/01/18 19:47*	*2*

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-G7S-3.5-4

Date Collected: 08/24/18 08:50
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-8

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	47000		1900	710	ug/Kg		08/28/18 11:24	08/31/18 04:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*95*		*40 - 130*	*08/28/18 11:24*	*08/31/18 04:59*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/28/18 13:36	09/01/18 08:09	1
4,4'-DDE	ND		1.9	0.41	ug/Kg		08/28/18 13:36	09/01/18 08:09	1
4,4'-DDT	ND		1.9	0.40	ug/Kg		08/28/18 13:36	09/01/18 08:09	1
Aldrin	ND		1.9	0.48	ug/Kg		08/28/18 13:36	09/01/18 08:09	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/28/18 13:36	09/01/18 08:09	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/28/18 13:36	09/01/18 08:09	1
Chlordane (technical)	ND		39	3.1	ug/Kg		08/28/18 13:36	09/01/18 08:09	1
cis-Chlordane	ND		1.9	0.39	ug/Kg		08/28/18 13:36	09/01/18 08:09	1
delta-BHC	ND		1.9	0.43	ug/Kg		08/28/18 13:36	09/01/18 08:09	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/28/18 13:36	09/01/18 08:09	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/28/18 13:36	09/01/18 08:09	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/28/18 13:36	09/01/18 08:09	1
Endosulfan sulfate	ND		1.9	0.37	ug/Kg		08/28/18 13:36	09/01/18 08:09	1
Endrin	ND		1.9	0.45	ug/Kg		08/28/18 13:36	09/01/18 08:09	1
Endrin aldehyde	ND		1.9	0.61	ug/Kg		08/28/18 13:36	09/01/18 08:09	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/28/18 13:36	09/01/18 08:09	1
gamma-BHC (Lindane)	ND		1.9	0.61	ug/Kg		08/28/18 13:36	09/01/18 08:09	1
Heptachlor	ND		1.9	0.45	ug/Kg		08/28/18 13:36	09/01/18 08:09	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/28/18 13:36	09/01/18 08:09	1
Methoxychlor	ND		1.9	0.66	ug/Kg		08/28/18 13:36	09/01/18 08:09	1
Toxaphene	ND		39	6.6	ug/Kg		08/28/18 13:36	09/01/18 08:09	1
trans-Chlordane	ND		1.9	0.45	ug/Kg		08/28/18 13:36	09/01/18 08:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*86*		*21 - 136*	*08/28/18 13:36*	*09/01/18 08:09*	*1*
Tetrachloro-m-xylene	*93*		*21 - 145*	*08/28/18 13:36*	*09/01/18 08:09*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		260	110	ug/Kg		08/29/18 14:18	08/31/18 12:44	5
Aroclor-1221	ND		260	120	ug/Kg		08/29/18 14:18	08/31/18 12:44	5
Aroclor-1232	ND		260	120	ug/Kg		08/29/18 14:18	08/31/18 12:44	5
Aroclor-1242	ND		260	97	ug/Kg		08/29/18 14:18	08/31/18 12:44	5
Aroclor-1248	ND		260	120	ug/Kg		08/29/18 14:18	08/31/18 12:44	5
Aroclor-1254	ND		260	120	ug/Kg		08/29/18 14:18	08/31/18 12:44	5
Aroclor-1260	ND		260	110	ug/Kg		08/29/18 14:18	08/31/18 12:44	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*142*	*X*	*14 - 128*	*08/29/18 14:18*	*08/31/18 12:44*	*5*
DCB Decachlorobiphenyl	*881*	*X*	*10 - 132*	*08/29/18 14:18*	*08/31/18 12:44*	*5*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.0		1.5	0.25	mg/Kg		08/29/18 09:32	08/30/18 11:17	4

Client Sample ID: DG-G7S-3.5-4

Lab Sample ID: 720-88239-8

Date Collected: 08/24/18 08:50

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.8		3.0	0.26	mg/Kg		08/29/18 09:32	08/30/18 11:17	4
Barium	200		1.5	0.21	mg/Kg		08/29/18 09:32	08/30/18 11:17	4
Beryllium	ND		0.30	0.098	mg/Kg		08/29/18 09:32	08/30/18 11:17	4
Cadmium	ND		0.38	0.037	mg/Kg		08/29/18 09:32	08/30/18 11:17	4
Chromium	390		1.5	0.16	mg/Kg		08/29/18 09:32	08/30/18 11:17	4
Cobalt	28		0.60	0.060	mg/Kg		08/29/18 09:32	08/30/18 11:17	4
Copper	81		4.5	2.1	mg/Kg		08/29/18 09:32	08/30/18 11:17	4
Lead	61		1.5	0.32	mg/Kg		08/29/18 09:32	08/30/18 11:17	4
Molybdenum	ND		1.5	0.19	mg/Kg		08/29/18 09:32	08/30/18 11:17	4
Nickel	400		1.5	0.15	mg/Kg		08/29/18 09:32	08/30/18 11:17	4
Selenium	ND		3.0	0.45	mg/Kg		08/29/18 09:32	08/30/18 11:17	4
Silver	0.41	J	0.75	0.15	mg/Kg		08/29/18 09:32	08/30/18 11:17	4
Thallium	1.4	J	1.5	0.44	mg/Kg		08/29/18 09:32	08/30/18 11:17	4
Vanadium	86		1.5	0.20	mg/Kg		08/29/18 09:32	08/30/18 11:17	4
Zinc	170		4.5	1.9	mg/Kg		08/29/18 09:32	08/30/18 11:17	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.89		0.014	0.0021	mg/Kg		08/29/18 21:54	08/30/18 22:03	1

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-B10S-0.5-1

Date Collected: 08/24/18 10:40
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-9

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.7	1.1	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
Acetone	ND		47	36	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
Benzene	ND		4.7	0.61	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
Dichlorobromomethane	ND		4.7	0.67	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
Bromobenzene	ND	*	4.7	0.74	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
Chlorobromomethane	ND		19	0.67	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
Bromoform	ND	*	4.7	1.9	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
Bromomethane	ND		9.4	0.74	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
2-Butanone (MEK)	ND		47	20	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
n-Butylbenzene	ND	*	4.7	0.94	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
sec-Butylbenzene	ND	*	4.7	0.67	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
tert-Butylbenzene	ND	*	4.7	0.68	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
Carbon disulfide	ND		4.7	1.9	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
Carbon tetrachloride	ND		4.7	0.58	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
Chlorobenzene	ND	*	4.7	0.65	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
Chloroethane	ND		9.4	0.52	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
Chloroform	ND		4.7	0.62	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
Chloromethane	ND		9.4	0.74	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
2-Chlorotoluene	ND	*	4.7	0.61	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
4-Chlorotoluene	ND	*	4.7	0.64	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
Chlorodibromomethane	ND		4.7	0.66	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
1,2-Dichlorobenzene	ND	*	4.7	0.64	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
1,3-Dichlorobenzene	ND	*	4.7	0.67	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
1,4-Dichlorobenzene	ND	*	4.7	0.66	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
1,3-Dichloropropane	ND		4.7	0.68	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
1,1-Dichloropropene	ND		4.7	0.65	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
1,2-Dibromo-3-Chloropropane	ND	*	9.4	1.6	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
Ethylene Dibromide	ND		4.7	1.3	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
Dibromomethane	ND		9.4	0.81	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
Dichlorodifluoromethane	ND		9.4	0.74	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
1,1-Dichloroethane	ND		4.7	0.64	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
1,2-Dichloroethane	ND		4.7	0.71	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
1,1-Dichloroethene	ND	*	4.7	0.58	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
cis-1,2-Dichloroethene	ND		4.7	0.64	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
trans-1,2-Dichloroethene	ND		4.7	0.70	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
1,2-Dichloropropane	ND		4.7	0.59	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
cis-1,3-Dichloropropene	ND		4.7	0.65	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
trans-1,3-Dichloropropene	ND		4.7	0.63	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
Ethylbenzene	ND	*	4.7	0.70	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
Hexachlorobutadiene	ND	*	4.7	0.84	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
2-Hexanone	ND		47	9.4	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
Isopropylbenzene	ND	*	4.7	0.64	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
4-Isopropyltoluene	ND	*	4.7	2.3	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
Methylene Chloride	ND		9.4	5.2	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
4-Methyl-2-pentanone (MIBK)	ND		47	9.4	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
Naphthalene	ND	*	9.4	1.4	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
N-Propylbenzene	ND	*	4.7	0.62	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
Styrene	ND	*	4.7	0.59	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
1,1,1,2-Tetrachloroethane	ND	*	4.7	0.71	ug/Kg		08/25/18 03:05	08/30/18 14:18	1

Client Sample ID: DG-B10S-0.5-1

Lab Sample ID: 720-88239-9

Date Collected: 08/24/18 10:40

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	4.7	0.70	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
Tetrachloroethene	ND		4.7	0.63	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
Toluene	ND	*	4.7	0.66	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
1,2,3-Trichlorobenzene	ND	*	4.7	0.69	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
1,2,4-Trichlorobenzene	ND	*	4.7	0.66	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
1,1,1-Trichloroethane	ND		4.7	0.57	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
1,1,2-Trichloroethane	ND		4.7	0.66	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
Trichloroethene	ND		4.7	0.59	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
Trichlorofluoromethane	ND		4.7	0.52	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
1,2,3-Trichloropropane	ND	*	4.7	0.72	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.7	1.9	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
1,2,4-Trimethylbenzene	ND	*	4.7	1.5	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
1,3,5-Trimethylbenzene	ND	*	4.7	0.61	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
Vinyl acetate	ND		19	4.7	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
Vinyl chloride	ND		4.7	0.68	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
Xylenes, Total	ND		4.7	1.1	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
2,2-Dichloropropane	ND		4.7	1.9	ug/Kg		08/25/18 03:05	08/30/18 14:18	1
Gasoline Range Organics (GRO) -C4-C12	ND		230	94	ug/Kg		08/25/18 03:05	08/30/18 14:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*68*	*	*45 - 131*	*08/25/18 03:05*	*08/30/18 14:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*123*		*60 - 140*	*08/25/18 03:05*	*08/30/18 14:18*	*1*
Toluene-d8 (Surr)	*85*		*58 - 140*	*08/25/18 03:05*	*08/30/18 14:18*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**27**		19	9.6	ug/Kg		08/29/18 15:27	09/04/18 15:56	2
Acenaphthene	ND		9.6	5.4	ug/Kg		08/29/18 15:27	09/04/18 15:56	2
Acenaphthylene	**29**		9.6	4.6	ug/Kg		08/29/18 15:27	09/04/18 15:56	2
Anthracene	**44**		9.6	3.8	ug/Kg		08/29/18 15:27	09/04/18 15:56	2
Benzo[a]anthracene	**45**		9.6	2.9	ug/Kg		08/29/18 15:27	09/04/18 15:56	2
Benzo[a]pyrene	**45**		9.6	3.6	ug/Kg		08/29/18 15:27	09/04/18 15:56	2
Benzo[b]fluoranthene	**66**		9.6	4.0	ug/Kg		08/29/18 15:27	09/04/18 15:56	2
Benzo[g,h,i]perylene	**28**		9.6	8.2	ug/Kg		08/29/18 15:27	09/04/18 15:56	2
Benzo[k]fluoranthene	**32**		9.6	4.0	ug/Kg		08/29/18 15:27	09/04/18 15:56	2
Chrysene	**53**		9.6	2.7	ug/Kg		08/29/18 15:27	09/04/18 15:56	2
Dibenz(a,h)anthracene	**7.1**	**J**	9.6	6.7	ug/Kg		08/29/18 15:27	09/04/18 15:56	2
Fluoranthene	**59**		9.6	2.7	ug/Kg		08/29/18 15:27	09/04/18 15:56	2
Fluorene	**5.6**	**J**	9.6	4.2	ug/Kg		08/29/18 15:27	09/04/18 15:56	2
Indeno[1,2,3-cd]pyrene	**19**		9.6	8.0	ug/Kg		08/29/18 15:27	09/04/18 15:56	2
Naphthalene	**22**		9.6	6.7	ug/Kg		08/29/18 15:27	09/04/18 15:56	2
Phenanthrene	**67**		9.6	3.4	ug/Kg		08/29/18 15:27	09/04/18 15:56	2
Pyrene	**81**		9.6	3.3	ug/Kg		08/29/18 15:27	09/04/18 15:56	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*60*		*33 - 120*	*08/29/18 15:27*	*09/04/18 15:56*	*2*
Terphenyl-d14	*77*		*35 - 146*	*08/29/18 15:27*	*09/04/18 15:56*	*2*

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-B10S-0.5-1

Date Collected: 08/24/18 10:40
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-9

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	100000		5700	2100	ug/Kg		08/29/18 13:41	08/31/18 12:14	3

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*74*		*40 - 130*	*08/29/18 13:41*	*08/31/18 12:14*	*3*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/28/18 13:36	09/01/18 08:26	1
4,4'-DDE	ND		1.9	0.41	ug/Kg		08/28/18 13:36	09/01/18 08:26	1
4,4'-DDT	ND		1.9	0.40	ug/Kg		08/28/18 13:36	09/01/18 08:26	1
Aldrin	ND		1.9	0.49	ug/Kg		08/28/18 13:36	09/01/18 08:26	1
alpha-BHC	ND		1.9	0.54	ug/Kg		08/28/18 13:36	09/01/18 08:26	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/28/18 13:36	09/01/18 08:26	1
Chlordane (technical)	ND		39	3.1	ug/Kg		08/28/18 13:36	09/01/18 08:26	1
cis-Chlordane	ND		1.9	0.39	ug/Kg		08/28/18 13:36	09/01/18 08:26	1
delta-BHC	ND		1.9	0.43	ug/Kg		08/28/18 13:36	09/01/18 08:26	1
Dieldrin	ND		1.9	0.58	ug/Kg		08/28/18 13:36	09/01/18 08:26	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/28/18 13:36	09/01/18 08:26	1
Endosulfan II	ND		1.9	0.48	ug/Kg		08/28/18 13:36	09/01/18 08:26	1
Endosulfan sulfate	ND		1.9	0.37	ug/Kg		08/28/18 13:36	09/01/18 08:26	1
Endrin	ND		1.9	0.45	ug/Kg		08/28/18 13:36	09/01/18 08:26	1
Endrin aldehyde	ND		1.9	0.61	ug/Kg		08/28/18 13:36	09/01/18 08:26	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/28/18 13:36	09/01/18 08:26	1
gamma-BHC (Lindane)	ND		1.9	0.61	ug/Kg		08/28/18 13:36	09/01/18 08:26	1
Heptachlor	ND		1.9	0.45	ug/Kg		08/28/18 13:36	09/01/18 08:26	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/28/18 13:36	09/01/18 08:26	1
Methoxychlor	ND		1.9	0.66	ug/Kg		08/28/18 13:36	09/01/18 08:26	1
Toxaphene	ND		39	6.6	ug/Kg		08/28/18 13:36	09/01/18 08:26	1
trans-Chlordane	ND		1.9	0.45	ug/Kg		08/28/18 13:36	09/01/18 08:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*112*		*21 - 136*	*08/28/18 13:36*	*09/01/18 08:26*	*1*
Tetrachloro-m-xylene	*88*		*21 - 145*	*08/28/18 13:36*	*09/01/18 08:26*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/29/18 14:18	08/31/18 11:15	1
Aroclor-1221	ND		50	24	ug/Kg		08/29/18 14:18	08/31/18 11:15	1
Aroclor-1232	ND		50	23	ug/Kg		08/29/18 14:18	08/31/18 11:15	1
Aroclor-1242	ND		50	19	ug/Kg		08/29/18 14:18	08/31/18 11:15	1
Aroclor-1248	ND		50	24	ug/Kg		08/29/18 14:18	08/31/18 11:15	1
Aroclor-1254	ND		50	23	ug/Kg		08/29/18 14:18	08/31/18 11:15	1
Aroclor-1260	ND		50	22	ug/Kg		08/29/18 14:18	08/31/18 11:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*80*		*14 - 128*	*08/29/18 14:18*	*08/31/18 11:15*	*1*
DCB Decachlorobiphenyl	*93*		*10 - 132*	*08/29/18 14:18*	*08/31/18 11:15*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	7.4		1.9	0.32	mg/Kg		08/29/18 09:32	08/30/18 11:21	4

Client Sample ID: DG-B10S-0.5-1

Lab Sample ID: 720-88239-9

Date Collected: 08/24/18 10:40

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	28		3.8	0.33	mg/Kg		08/29/18 09:32	08/30/18 11:21	4
Barium	150		1.9	0.27	mg/Kg		08/29/18 09:32	08/30/18 11:21	4
Beryllium	ND		0.38	0.13	mg/Kg		08/29/18 09:32	08/30/18 11:21	4
Cadmium	0.72		0.48	0.048	mg/Kg		08/29/18 09:32	08/30/18 11:21	4
Chromium	72		1.9	0.20	mg/Kg		08/29/18 09:32	08/30/18 11:21	4
Cobalt	14		0.77	0.077	mg/Kg		08/29/18 09:32	08/30/18 11:21	4
Copper	140		5.8	2.7	mg/Kg		08/29/18 09:32	08/30/18 11:21	4
Lead	610		1.9	0.40	mg/Kg		08/29/18 09:32	08/30/18 11:21	4
Molybdenum	0.83	J	1.9	0.25	mg/Kg		08/29/18 09:32	08/30/18 11:21	4
Nickel	72		1.9	0.20	mg/Kg		08/29/18 09:32	08/30/18 11:21	4
Selenium	ND		3.8	0.58	mg/Kg		08/29/18 09:32	08/30/18 11:21	4
Silver	0.50	J	0.96	0.19	mg/Kg		08/29/18 09:32	08/30/18 11:21	4
Thallium	1.2	J	1.9	0.56	mg/Kg		08/29/18 09:32	08/30/18 11:21	4
Vanadium	60		1.9	0.26	mg/Kg		08/29/18 09:32	08/30/18 11:21	4
Zinc	250		5.8	2.4	mg/Kg		08/29/18 09:32	08/30/18 11:21	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.34		0.014	0.0021	mg/Kg		08/29/18 21:54	08/30/18 22:06	1

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-B10S-3.5-4

Date Collected: 08/24/18 10:40
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-10

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.0	0.97	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
Acetone	**52**		40	31	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
Benzene	ND		4.0	0.53	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
Dichlorobromomethane	ND		4.0	0.58	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
Bromobenzene	ND		4.0	0.64	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
Chlorobromomethane	ND		16	0.58	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
Bromoform	ND		4.0	1.6	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
Bromomethane	ND		8.1	0.64	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
2-Butanone (MEK)	ND		40	17	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
n-Butylbenzene	**0.86**	**J**	4.0	0.81	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
sec-Butylbenzene	**1.1**	**J**	4.0	0.58	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
tert-Butylbenzene	ND		4.0	0.59	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
Carbon disulfide	ND		4.0	1.6	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
Carbon tetrachloride	ND		4.0	0.50	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
Chlorobenzene	ND		4.0	0.56	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
Chloroethane	ND		8.1	0.45	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
Chloroform	ND		4.0	0.53	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
Chloromethane	ND		8.1	0.64	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
2-Chlorotoluene	ND		4.0	0.53	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
4-Chlorotoluene	ND		4.0	0.55	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
Chlorodibromomethane	ND		4.0	0.57	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
1,2-Dichlorobenzene	ND		4.0	0.55	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
1,3-Dichlorobenzene	ND		4.0	0.58	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
1,4-Dichlorobenzene	ND		4.0	0.57	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
1,3-Dichloropropane	ND		4.0	0.59	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
1,1-Dichloropropene	ND		4.0	0.56	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
1,2-Dibromo-3-Chloropropane	ND		8.1	1.4	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
Ethylene Dibromide	ND		4.0	1.2	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
Dibromomethane	ND		8.1	0.70	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
Dichlorodifluoromethane	ND		8.1	0.64	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
1,1-Dichloroethane	ND		4.0	0.55	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
1,2-Dichloroethane	ND		4.0	0.61	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
1,1-Dichloroethene	ND	*	4.0	0.50	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
cis-1,2-Dichloroethene	ND		4.0	0.55	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
trans-1,2-Dichloroethene	ND		4.0	0.61	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
1,2-Dichloropropane	ND		4.0	0.51	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
cis-1,3-Dichloropropene	ND		4.0	0.56	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
trans-1,3-Dichloropropene	ND		4.0	0.54	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
Ethylbenzene	ND		4.0	0.61	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
Hexachlorobutadiene	ND		4.0	0.73	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
2-Hexanone	ND		40	8.1	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
Isopropylbenzene	**1.9**	**J**	4.0	0.55	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
4-Isopropyltoluene	ND		4.0	2.0	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
Methylene Chloride	ND		8.1	4.5	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
4-Methyl-2-pentanone (MIBK)	ND		40	8.1	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
Naphthalene	ND		8.1	1.2	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
N-Propylbenzene	**1.6**	**J**	4.0	0.53	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
Styrene	ND		4.0	0.51	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
1,1,1,2-Tetrachloroethane	ND		4.0	0.61	ug/Kg		08/25/18 03:05	08/30/18 02:38	1

Client Sample ID: DG-B10S-3.5-4

Lab Sample ID: 720-88239-10

Date Collected: 08/24/18 10:40

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.0	0.61	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
Tetrachloroethene	ND		4.0	0.54	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
Toluene	ND		4.0	0.57	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
1,2,3-Trichlorobenzene	ND		4.0	0.60	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
1,2,4-Trichlorobenzene	ND		4.0	0.57	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
1,1,1-Trichloroethane	ND		4.0	0.49	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
1,1,2-Trichloroethane	ND		4.0	0.57	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
Trichloroethene	ND		4.0	0.51	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
Trichlorofluoromethane	ND		4.0	0.45	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
1,2,3-Trichloropropane	ND		4.0	0.62	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.7	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
1,2,4-Trimethylbenzene	ND		4.0	1.3	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
1,3,5-Trimethylbenzene	ND		4.0	0.53	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
Vinyl acetate	ND		16	4.0	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
Vinyl chloride	ND		4.0	0.59	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
Xylenes, Total	**1.1**	**J**	4.0	0.99	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
2,2-Dichloropropane	ND		4.0	1.6	ug/Kg		08/25/18 03:05	08/30/18 02:38	1
Gasoline Range Organics (GRO) -C4-C12	**880**		200	81	ug/Kg		08/25/18 03:05	08/30/18 02:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*45 - 131*	*08/25/18 03:05*	*08/30/18 02:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*60 - 140*	*08/25/18 03:05*	*08/30/18 02:38*	*1*
Toluene-d8 (Surr)	*94*		*58 - 140*	*08/25/18 03:05*	*08/30/18 02:38*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.5	4.7	ug/Kg		08/29/18 15:27	09/01/18 16:37	1
Acenaphthene	**4.8**		4.7	2.7	ug/Kg		08/29/18 15:27	09/01/18 16:37	1
Acenaphthylene	**4.0**	**J**	4.7	2.3	ug/Kg		08/29/18 15:27	09/01/18 16:37	1
Anthracene	**9.2**		4.7	1.9	ug/Kg		08/29/18 15:27	09/01/18 16:37	1
Benzo[a]anthracene	ND		4.7	1.4	ug/Kg		08/29/18 15:27	09/01/18 16:37	1
Benzo[a]pyrene	**5.9**		4.7	1.8	ug/Kg		08/29/18 15:27	09/01/18 16:37	1
Benzo[b]fluoranthene	**4.1**	**J**	4.7	2.0	ug/Kg		08/29/18 15:27	09/01/18 16:37	1
Benzo[g,h,i]perylene	**21**		4.7	4.1	ug/Kg		08/29/18 15:27	09/01/18 16:37	1
Benzo[k]fluoranthene	**2.0**	**J**	4.7	2.0	ug/Kg		08/29/18 15:27	09/01/18 16:37	1
Chrysene	**2.8**	**J**	4.7	1.3	ug/Kg		08/29/18 15:27	09/01/18 16:37	1
Dibenz(a,h)anthracene	ND		4.7	3.3	ug/Kg		08/29/18 15:27	09/01/18 16:37	1
Fluoranthene	**3.5**	**J**	4.7	1.3	ug/Kg		08/29/18 15:27	09/01/18 16:37	1
Fluorene	ND		4.7	2.1	ug/Kg		08/29/18 15:27	09/01/18 16:37	1
Indeno[1,2,3-cd]pyrene	**14**		4.7	4.0	ug/Kg		08/29/18 15:27	09/01/18 16:37	1
Naphthalene	**5.9**		4.7	3.3	ug/Kg		08/29/18 15:27	09/01/18 16:37	1
Phenanthrene	**4.3**	**J**	4.7	1.7	ug/Kg		08/29/18 15:27	09/01/18 16:37	1
Pyrene	**4.9**		4.7	1.6	ug/Kg		08/29/18 15:27	09/01/18 16:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*53*		*33 - 120*	*08/29/18 15:27*	*09/01/18 16:37*	*1*
Terphenyl-d14	*69*		*35 - 146*	*08/29/18 15:27*	*09/01/18 16:37*	*1*

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-B10S-3.5-4

Date Collected: 08/24/18 10:40
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-10

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	16000		2000	740	ug/Kg		08/29/18 13:41	08/31/18 22:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*101*		*40 - 130*	*08/29/18 13:41*	*08/31/18 22:41*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.58	ug/Kg		08/29/18 17:11	09/03/18 17:38	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/29/18 17:11	09/03/18 17:38	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/29/18 17:11	09/03/18 17:38	1
Aldrin	ND		1.9	0.47	ug/Kg		08/29/18 17:11	09/03/18 17:38	1
alpha-BHC	ND		1.9	0.52	ug/Kg		08/29/18 17:11	09/03/18 17:38	1
beta-BHC	ND		1.9	0.34	ug/Kg		08/29/18 17:11	09/03/18 17:38	1
Chlordane (technical)	ND		38	3.0	ug/Kg		08/29/18 17:11	09/03/18 17:38	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/29/18 17:11	09/03/18 17:38	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/29/18 17:11	09/03/18 17:38	1
Dieldrin	ND		1.9	0.56	ug/Kg		08/29/18 17:11	09/03/18 17:38	1
Endosulfan I	ND		1.9	0.30	ug/Kg		08/29/18 17:11	09/03/18 17:38	1
Endosulfan II	ND		1.9	0.46	ug/Kg		08/29/18 17:11	09/03/18 17:38	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/29/18 17:11	09/03/18 17:38	1
Endrin	ND		1.9	0.44	ug/Kg		08/29/18 17:11	09/03/18 17:38	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/29/18 17:11	09/03/18 17:38	1
Endrin ketone	ND		1.9	0.31	ug/Kg		08/29/18 17:11	09/03/18 17:38	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/29/18 17:11	09/03/18 17:38	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/29/18 17:11	09/03/18 17:38	1
Heptachlor epoxide	ND		1.9	0.33	ug/Kg		08/29/18 17:11	09/03/18 17:38	1
Methoxychlor	ND		1.9	0.64	ug/Kg		08/29/18 17:11	09/03/18 17:38	1
Toxaphene	ND		38	6.4	ug/Kg		08/29/18 17:11	09/03/18 17:38	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/29/18 17:11	09/03/18 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*96*		*21 - 136*	*08/29/18 17:11*	*09/03/18 17:38*	*1*
Tetrachloro-m-xylene	*78*		*21 - 145*	*08/29/18 17:11*	*09/03/18 17:38*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		49	22	ug/Kg		08/29/18 14:18	08/31/18 11:37	1
Aroclor-1221	ND		49	24	ug/Kg		08/29/18 14:18	08/31/18 11:37	1
Aroclor-1232	ND		49	23	ug/Kg		08/29/18 14:18	08/31/18 11:37	1
Aroclor-1242	ND		49	19	ug/Kg		08/29/18 14:18	08/31/18 11:37	1
Aroclor-1248	ND		49	24	ug/Kg		08/29/18 14:18	08/31/18 11:37	1
Aroclor-1254	ND		49	23	ug/Kg		08/29/18 14:18	08/31/18 11:37	1
Aroclor-1260	ND		49	22	ug/Kg		08/29/18 14:18	08/31/18 11:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*81*		*14 - 128*	*08/29/18 14:18*	*08/31/18 11:37*	*1*
DCB Decachlorobiphenyl	*98*		*10 - 132*	*08/29/18 14:18*	*08/31/18 11:37*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.5	0.26	mg/Kg		08/28/18 10:26	08/29/18 21:41	4

Client Sample ID: DG-B10S-3.5-4

Lab Sample ID: 720-88239-10

Date Collected: 08/24/18 10:40

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.3	J	3.1	0.26	mg/Kg		08/28/18 10:26	08/29/18 21:41	4
Barium	36	B	1.5	0.22	mg/Kg		08/28/18 10:26	08/29/18 21:41	4
Beryllium	0.13	J	0.31	0.10	mg/Kg		08/28/18 10:26	08/29/18 21:41	4
Cadmium	ND		0.38	0.038	mg/Kg		08/28/18 10:26	08/29/18 21:41	4
Chromium	28		1.5	0.16	mg/Kg		08/28/18 10:26	08/29/18 21:41	4
Cobalt	4.2		0.62	0.062	mg/Kg		08/28/18 10:26	08/29/18 21:41	4
Copper	6.1		4.6	2.2	mg/Kg		08/28/18 10:26	08/29/18 21:41	4
Lead	6.9		1.5	0.32	mg/Kg		08/28/18 10:26	08/29/18 21:41	4
Molybdenum	ND		1.5	0.20	mg/Kg		08/28/18 10:26	08/29/18 21:41	4
Nickel	16		1.5	0.16	mg/Kg		08/28/18 10:26	08/29/18 21:41	4
Selenium	ND		3.1	0.46	mg/Kg		08/28/18 10:26	08/29/18 21:41	4
Silver	ND		0.77	0.16	mg/Kg		08/28/18 10:26	08/29/18 21:41	4
Thallium	ND		1.5	0.45	mg/Kg		08/28/18 10:26	08/29/18 21:41	4
Vanadium	22		1.5	0.21	mg/Kg		08/28/18 10:26	08/29/18 21:41	4
Zinc	22		4.6	2.0	mg/Kg		08/28/18 10:26	08/29/18 21:41	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.048		0.017	0.0025	mg/Kg		08/28/18 15:53	08/30/18 12:45	1

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-I7S-0.5-1

Date Collected: 08/24/18 09:25
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-11

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.4	1.1	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
Acetone	**37**	**J**	44	34	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
Benzene	ND		4.4	0.58	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
Dichlorobromomethane	ND		4.4	0.64	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
Bromobenzene	ND		4.4	0.70	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
Chlorobromomethane	ND		18	0.64	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
Bromoform	ND		4.4	1.8	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
Bromomethane	ND		8.9	0.70	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
2-Butanone (MEK)	ND		44	19	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
n-Butylbenzene	ND		4.4	0.89	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
sec-Butylbenzene	ND		4.4	0.64	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
tert-Butylbenzene	ND		4.4	0.65	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
Carbon disulfide	ND		4.4	1.8	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
Carbon tetrachloride	ND		4.4	0.55	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
Chlorobenzene	ND		4.4	0.61	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
Chloroethane	ND		8.9	0.50	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
Chloroform	ND		4.4	0.58	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
Chloromethane	ND		8.9	0.70	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
2-Chlorotoluene	ND		4.4	0.58	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
4-Chlorotoluene	ND		4.4	0.60	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
Chlorodibromomethane	ND		4.4	0.63	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
1,2-Dichlorobenzene	ND		4.4	0.60	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
1,3-Dichlorobenzene	ND		4.4	0.64	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
1,4-Dichlorobenzene	ND		4.4	0.63	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
1,3-Dichloropropane	ND		4.4	0.65	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
1,1-Dichloropropene	ND		4.4	0.61	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
1,2-Dibromo-3-Chloropropane	ND		8.9	1.5	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
Ethylene Dibromide	ND		4.4	1.3	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
Dibromomethane	ND		8.9	0.76	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
Dichlorodifluoromethane	ND		8.9	0.70	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
1,1-Dichloroethane	ND		4.4	0.60	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
1,2-Dichloroethane	ND		4.4	0.67	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
1,1-Dichloroethene	ND	*	4.4	0.55	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
cis-1,2-Dichloroethene	ND		4.4	0.60	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
trans-1,2-Dichloroethene	ND		4.4	0.66	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
1,2-Dichloropropane	ND		4.4	0.56	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
cis-1,3-Dichloropropene	ND		4.4	0.61	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
trans-1,3-Dichloropropene	ND		4.4	0.59	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
Ethylbenzene	ND		4.4	0.66	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
Hexachlorobutadiene	ND		4.4	0.80	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
2-Hexanone	ND		44	8.9	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
Isopropylbenzene	ND		4.4	0.60	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
4-Isopropyltoluene	ND		4.4	2.2	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
Methylene Chloride	ND		8.9	5.0	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
4-Methyl-2-pentanone (MIBK)	ND		44	8.9	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
Naphthalene	ND		8.9	1.3	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
N-Propylbenzene	ND		4.4	0.58	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
Styrene	ND		4.4	0.56	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
1,1,1,2-Tetrachloroethane	ND		4.4	0.67	ug/Kg		08/25/18 03:05	08/30/18 03:06	1

Client Sample ID: DG-I7S-0.5-1

Lab Sample ID: 720-88239-11

Date Collected: 08/24/18 09:25

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.4	0.66	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
Tetrachloroethene	ND		4.4	0.59	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
Toluene	ND		4.4	0.63	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
1,2,3-Trichlorobenzene	ND		4.4	0.66	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
1,2,4-Trichlorobenzene	ND		4.4	0.63	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
1,1,1-Trichloroethane	ND		4.4	0.54	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
1,1,2-Trichloroethane	ND		4.4	0.62	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
Trichloroethene	ND		4.4	0.56	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
Trichlorofluoromethane	ND		4.4	0.50	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
1,2,3-Trichloropropane	ND		4.4	0.68	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.4	1.8	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
1,2,4-Trimethylbenzene	ND		4.4	1.5	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
1,3,5-Trimethylbenzene	ND		4.4	0.58	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
Vinyl acetate	ND		18	4.4	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
Vinyl chloride	ND		4.4	0.65	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
Xylenes, Total	ND		4.4	1.1	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
2,2-Dichloropropane	ND		4.4	1.8	ug/Kg		08/25/18 03:05	08/30/18 03:06	1
Gasoline Range Organics (GRO) -C4-C12	ND		220	89	ug/Kg		08/25/18 03:05	08/30/18 03:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*45 - 131*	*08/25/18 03:05*	*08/30/18 03:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*120*		*60 - 140*	*08/25/18 03:05*	*08/30/18 03:06*	*1*
Toluene-d8 (Surr)	*91*		*58 - 140*	*08/25/18 03:05*	*08/30/18 03:06*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		40	20	ug/Kg		08/29/18 15:27	09/01/18 17:01	2
Acenaphthene	ND		20	11	ug/Kg		08/29/18 15:27	09/01/18 17:01	2
Acenaphthylene	**33**		20	9.5	ug/Kg		08/29/18 15:27	09/01/18 17:01	2
Anthracene	**75**		20	7.9	ug/Kg		08/29/18 15:27	09/01/18 17:01	2
Benzo[a]anthracene	**49**		20	5.9	ug/Kg		08/29/18 15:27	09/01/18 17:01	2
Benzo[a]pyrene	**77**		20	7.5	ug/Kg		08/29/18 15:27	09/01/18 17:01	2
Benzo[b]fluoranthene	**110**		20	8.3	ug/Kg		08/29/18 15:27	09/01/18 17:01	2
Benzo[g,h,i]perylene	**58**		20	17	ug/Kg		08/29/18 15:27	09/01/18 17:01	2
Benzo[k]fluoranthene	**39**		20	8.3	ug/Kg		08/29/18 15:27	09/01/18 17:01	2
Chrysene	**85**		20	5.5	ug/Kg		08/29/18 15:27	09/01/18 17:01	2
Dibenz(a,h)anthracene	**16**	**J**	20	14	ug/Kg		08/29/18 15:27	09/01/18 17:01	2
Fluoranthene	**86**		20	5.5	ug/Kg		08/29/18 15:27	09/01/18 17:01	2
Fluorene	ND		20	8.7	ug/Kg		08/29/18 15:27	09/01/18 17:01	2
Indeno[1,2,3-cd]pyrene	**48**		20	17	ug/Kg		08/29/18 15:27	09/01/18 17:01	2
Naphthalene	**14**	**J**	20	14	ug/Kg		08/29/18 15:27	09/01/18 17:01	2
Phenanthrene	**55**		20	7.1	ug/Kg		08/29/18 15:27	09/01/18 17:01	2
Pyrene	**110**		20	6.7	ug/Kg		08/29/18 15:27	09/01/18 17:01	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*56*		*33 - 120*	*08/29/18 15:27*	*09/01/18 17:01*	*2*
Terphenyl-d14	*73*		*35 - 146*	*08/29/18 15:27*	*09/01/18 17:01*	*2*

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-I7S-0.5-1

Date Collected: 08/24/18 09:25
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-11

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	47000		3800	1400	ug/Kg		08/29/18 13:41	08/31/18 23:54	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*89*		*40 - 130*	*08/29/18 13:41*	*08/31/18 23:54*	*2*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.65	J p	2.0	0.61	ug/Kg		08/29/18 17:11	09/03/18 17:55	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/29/18 17:11	09/03/18 17:55	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/29/18 17:11	09/03/18 17:55	1
Aldrin	ND		2.0	0.50	ug/Kg		08/29/18 17:11	09/03/18 17:55	1
alpha-BHC	ND		2.0	0.55	ug/Kg		08/29/18 17:11	09/03/18 17:55	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/29/18 17:11	09/03/18 17:55	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/29/18 17:11	09/03/18 17:55	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/29/18 17:11	09/03/18 17:55	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/29/18 17:11	09/03/18 17:55	1
Dieldrin	ND		2.0	0.59	ug/Kg		08/29/18 17:11	09/03/18 17:55	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/29/18 17:11	09/03/18 17:55	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/29/18 17:11	09/03/18 17:55	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/29/18 17:11	09/03/18 17:55	1
Endrin	ND		2.0	0.46	ug/Kg		08/29/18 17:11	09/03/18 17:55	1
Endrin aldehyde	ND		2.0	0.63	ug/Kg		08/29/18 17:11	09/03/18 17:55	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/29/18 17:11	09/03/18 17:55	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		08/29/18 17:11	09/03/18 17:55	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/29/18 17:11	09/03/18 17:55	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/29/18 17:11	09/03/18 17:55	1
Methoxychlor	ND		2.0	0.68	ug/Kg		08/29/18 17:11	09/03/18 17:55	1
Toxaphene	ND		40	6.8	ug/Kg		08/29/18 17:11	09/03/18 17:55	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/29/18 17:11	09/03/18 17:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*86*		*21 - 136*	*08/29/18 17:11*	*09/03/18 17:55*	*1*
Tetrachloro-m-xylene	*85*		*21 - 145*	*08/29/18 17:11*	*09/03/18 17:55*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		48	21	ug/Kg		08/29/18 14:18	08/31/18 12:00	1
Aroclor-1221	ND		48	23	ug/Kg		08/29/18 14:18	08/31/18 12:00	1
Aroclor-1232	ND		48	22	ug/Kg		08/29/18 14:18	08/31/18 12:00	1
Aroclor-1242	ND		48	18	ug/Kg		08/29/18 14:18	08/31/18 12:00	1
Aroclor-1248	ND		48	23	ug/Kg		08/29/18 14:18	08/31/18 12:00	1
Aroclor-1254	ND		48	22	ug/Kg		08/29/18 14:18	08/31/18 12:00	1
Aroclor-1260	ND		48	21	ug/Kg		08/29/18 14:18	08/31/18 12:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*70*		*14 - 128*	*08/29/18 14:18*	*08/31/18 12:00*	*1*
DCB Decachlorobiphenyl	*87*		*10 - 132*	*08/29/18 14:18*	*08/31/18 12:00*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.44	J B	1.2	0.19	mg/Kg		08/28/18 10:26	08/29/18 21:45	4

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-I7S-0.5-1

Lab Sample ID: 720-88239-11

Date Collected: 08/24/18 09:25

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.5		2.3	0.20	mg/Kg		08/28/18 10:26	08/29/18 21:45	4
Barium	35	B	1.2	0.16	mg/Kg		08/28/18 10:26	08/29/18 21:45	4
Beryllium	0.10	J	0.23	0.075	mg/Kg		08/28/18 10:26	08/29/18 21:45	4
Cadmium	0.15	J	0.29	0.029	mg/Kg		08/28/18 10:26	08/29/18 21:45	4
Chromium	11		1.2	0.12	mg/Kg		08/28/18 10:26	08/29/18 21:45	4
Cobalt	8.0		0.46	0.046	mg/Kg		08/28/18 10:26	08/29/18 21:45	4
Copper	130		3.5	1.6	mg/Kg		08/28/18 10:26	08/29/18 21:45	4
Lead	49		1.2	0.24	mg/Kg		08/28/18 10:26	08/29/18 21:45	4
Molybdenum	0.30	J	1.2	0.15	mg/Kg		08/28/18 10:26	08/29/18 21:45	4
Nickel	4.8		1.2	0.12	mg/Kg		08/28/18 10:26	08/29/18 21:45	4
Selenium	ND		2.3	0.35	mg/Kg		08/28/18 10:26	08/29/18 21:45	4
Silver	0.19	J	0.58	0.12	mg/Kg		08/28/18 10:26	08/29/18 21:45	4
Thallium	0.48	J	1.2	0.34	mg/Kg		08/28/18 10:26	08/29/18 21:45	4
Vanadium	69		1.2	0.16	mg/Kg		08/28/18 10:26	08/29/18 21:45	4
Zinc	65		3.5	1.5	mg/Kg		08/28/18 10:26	08/29/18 21:45	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.14		0.017	0.0025	mg/Kg		08/28/18 15:53	08/30/18 12:48	1

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-I7S-3.5-4

Date Collected: 08/24/18 09:25
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-12

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.1	0.98	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
Acetone	ND		41	31	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
Benzene	ND		4.1	0.53	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
Dichlorobromomethane	ND		4.1	0.59	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
Bromobenzene	ND		4.1	0.64	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
Chlorobromomethane	ND		16	0.59	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
Bromoform	ND		4.1	1.6	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
Bromomethane	ND		8.1	0.64	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
2-Butanone (MEK)	ND		41	17	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
n-Butylbenzene	ND		4.1	0.81	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
sec-Butylbenzene	ND		4.1	0.59	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
tert-Butylbenzene	ND		4.1	0.59	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
Carbon disulfide	ND		4.1	1.6	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
Carbon tetrachloride	ND		4.1	0.51	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
Chlorobenzene	ND		4.1	0.56	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
Chloroethane	ND		8.1	0.46	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
Chloroform	ND		4.1	0.54	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
Chloromethane	ND		8.1	0.64	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
2-Chlorotoluene	ND		4.1	0.53	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
4-Chlorotoluene	ND		4.1	0.55	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
Chlorodibromomethane	ND		4.1	0.58	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
1,2-Dichlorobenzene	ND		4.1	0.55	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
1,3-Dichlorobenzene	ND		4.1	0.59	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
1,4-Dichlorobenzene	ND		4.1	0.58	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
1,3-Dichloropropane	ND		4.1	0.59	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
1,1-Dichloropropene	ND		4.1	0.56	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
1,2-Dibromo-3-Chloropropane	ND		8.1	1.4	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
Ethylene Dibromide	ND		4.1	1.2	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
Dibromomethane	ND		8.1	0.70	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
Dichlorodifluoromethane	ND		8.1	0.64	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
1,1-Dichloroethane	ND		4.1	0.55	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
1,2-Dichloroethane	ND		4.1	0.62	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
1,1-Dichloroethene	ND	*	4.1	0.51	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
cis-1,2-Dichloroethene	ND		4.1	0.55	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
trans-1,2-Dichloroethene	ND		4.1	0.61	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
1,2-Dichloropropane	ND		4.1	0.51	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
cis-1,3-Dichloropropene	ND		4.1	0.56	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
trans-1,3-Dichloropropene	ND		4.1	0.55	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
Ethylbenzene	ND		4.1	0.61	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
Hexachlorobutadiene	ND		4.1	0.73	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
2-Hexanone	ND		41	8.1	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
Isopropylbenzene	ND		4.1	0.55	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
4-Isopropyltoluene	ND		4.1	2.0	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
Methylene Chloride	ND		8.1	4.6	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
4-Methyl-2-pentanone (MIBK)	ND		41	8.1	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
Naphthalene	ND		8.1	1.2	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
N-Propylbenzene	ND		4.1	0.54	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
Styrene	ND		4.1	0.51	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
1,1,1,2-Tetrachloroethane	ND		4.1	0.62	ug/Kg		08/25/18 03:05	08/30/18 03:35	1

Client Sample ID: DG-I7S-3.5-4

Lab Sample ID: 720-88239-12

Date Collected: 08/24/18 09:25

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.1	0.61	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
Tetrachloroethene	ND		4.1	0.55	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
Toluene	ND		4.1	0.58	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
1,2,3-Trichlorobenzene	ND		4.1	0.60	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
1,2,4-Trichlorobenzene	ND		4.1	0.58	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
1,1,1-Trichloroethane	ND		4.1	0.50	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
1,1,2-Trichloroethane	ND		4.1	0.57	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
Trichloroethene	**0.97**	**J**	4.1	0.51	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
Trichlorofluoromethane	ND		4.1	0.46	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
1,2,3-Trichloropropane	ND		4.1	0.63	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.1	1.7	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
1,2,4-Trimethylbenzene	ND		4.1	1.3	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
1,3,5-Trimethylbenzene	ND		4.1	0.53	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
Vinyl acetate	ND		16	4.1	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
Vinyl chloride	ND		4.1	0.59	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
Xylenes, Total	ND		4.1	0.99	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
2,2-Dichloropropane	ND		4.1	1.6	ug/Kg		08/25/18 03:05	08/30/18 03:35	1
Gasoline Range Organics (GRO) -C4-C12	ND		200	81	ug/Kg		08/25/18 03:05	08/30/18 03:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*45 - 131*	*08/25/18 03:05*	*08/30/18 03:35*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*60 - 140*	*08/25/18 03:05*	*08/30/18 03:35*	*1*
Toluene-d8 (Surr)	*95*		*58 - 140*	*08/25/18 03:05*	*08/30/18 03:35*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.6	4.8	ug/Kg		08/29/18 15:27	09/01/18 20:35	1
Acenaphthene	ND		4.8	2.7	ug/Kg		08/29/18 15:27	09/01/18 20:35	1
Acenaphthylene	**3.3**	**J**	4.8	2.3	ug/Kg		08/29/18 15:27	09/01/18 20:35	1
Anthracene	**3.3**	**J**	4.8	1.9	ug/Kg		08/29/18 15:27	09/01/18 20:35	1
Benzo[a]anthracene	**6.1**		4.8	1.4	ug/Kg		08/29/18 15:27	09/01/18 20:35	1
Benzo[a]pyrene	**9.3**		4.8	1.8	ug/Kg		08/29/18 15:27	09/01/18 20:35	1
Benzo[b]fluoranthene	**11**		4.8	2.0	ug/Kg		08/29/18 15:27	09/01/18 20:35	1
Benzo[g,h,i]perylene	**5.2**		4.8	4.1	ug/Kg		08/29/18 15:27	09/01/18 20:35	1
Benzo[k]fluoranthene	**5.0**		4.8	2.0	ug/Kg		08/29/18 15:27	09/01/18 20:35	1
Chrysene	**6.7**		4.8	1.4	ug/Kg		08/29/18 15:27	09/01/18 20:35	1
Dibenz(a,h)anthracene	ND		4.8	3.4	ug/Kg		08/29/18 15:27	09/01/18 20:35	1
Fluoranthene	**7.9**		4.8	1.4	ug/Kg		08/29/18 15:27	09/01/18 20:35	1
Fluorene	ND		4.8	2.1	ug/Kg		08/29/18 15:27	09/01/18 20:35	1
Indeno[1,2,3-cd]pyrene	**4.6**	**J**	4.8	4.1	ug/Kg		08/29/18 15:27	09/01/18 20:35	1
Naphthalene	ND		4.8	3.4	ug/Kg		08/29/18 15:27	09/01/18 20:35	1
Phenanthrene	**5.4**		4.8	1.7	ug/Kg		08/29/18 15:27	09/01/18 20:35	1
Pyrene	**11**		4.8	1.6	ug/Kg		08/29/18 15:27	09/01/18 20:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*59*		*33 - 120*	*08/29/18 15:27*	*09/01/18 20:35*	*1*
Terphenyl-d14	*80*		*35 - 146*	*08/29/18 15:27*	*09/01/18 20:35*	*1*

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-I7S-3.5-4

Date Collected: 08/24/18 09:25
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-12

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	10000		2000	740	ug/Kg		08/29/18 13:41	08/31/18 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*85*		*40 - 130*	*08/29/18 13:41*	*08/31/18 14:16*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.60	ug/Kg		08/29/18 17:11	09/03/18 15:24	1
4,4'-DDE	ND		2.0	0.41	ug/Kg		08/29/18 17:11	09/03/18 15:24	1
4,4'-DDT	ND		2.0	0.40	ug/Kg		08/29/18 17:11	09/03/18 15:24	1
Aldrin	ND		2.0	0.49	ug/Kg		08/29/18 17:11	09/03/18 15:24	1
alpha-BHC	ND		2.0	0.54	ug/Kg		08/29/18 17:11	09/03/18 15:24	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/29/18 17:11	09/03/18 15:24	1
Chlordane (technical)	ND		39	3.2	ug/Kg		08/29/18 17:11	09/03/18 15:24	1
cis-Chlordane	ND		2.0	0.39	ug/Kg		08/29/18 17:11	09/03/18 15:24	1
delta-BHC	ND		2.0	0.43	ug/Kg		08/29/18 17:11	09/03/18 15:24	1
Dieldrin	ND		2.0	0.58	ug/Kg		08/29/18 17:11	09/03/18 15:24	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/29/18 17:11	09/03/18 15:24	1
Endosulfan II	ND		2.0	0.48	ug/Kg		08/29/18 17:11	09/03/18 15:24	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/29/18 17:11	09/03/18 15:24	1
Endrin	ND		2.0	0.45	ug/Kg		08/29/18 17:11	09/03/18 15:24	1
Endrin aldehyde	ND		2.0	0.62	ug/Kg		08/29/18 17:11	09/03/18 15:24	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/29/18 17:11	09/03/18 15:24	1
gamma-BHC (Lindane)	ND		2.0	0.62	ug/Kg		08/29/18 17:11	09/03/18 15:24	1
Heptachlor	ND		2.0	0.45	ug/Kg		08/29/18 17:11	09/03/18 15:24	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/29/18 17:11	09/03/18 15:24	1
Methoxychlor	ND		2.0	0.67	ug/Kg		08/29/18 17:11	09/03/18 15:24	1
Toxaphene	ND		39	6.7	ug/Kg		08/29/18 17:11	09/03/18 15:24	1
trans-Chlordane	ND		2.0	0.45	ug/Kg		08/29/18 17:11	09/03/18 15:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*106*		*21 - 136*	*08/29/18 17:11*	*09/03/18 15:24*	*1*
Tetrachloro-m-xylene	*82*		*21 - 145*	*08/29/18 17:11*	*09/03/18 15:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/29/18 14:18	08/31/18 12:22	1
Aroclor-1221	ND		50	24	ug/Kg		08/29/18 14:18	08/31/18 12:22	1
Aroclor-1232	ND		50	23	ug/Kg		08/29/18 14:18	08/31/18 12:22	1
Aroclor-1242	ND		50	19	ug/Kg		08/29/18 14:18	08/31/18 12:22	1
Aroclor-1248	ND		50	24	ug/Kg		08/29/18 14:18	08/31/18 12:22	1
Aroclor-1254	ND		50	23	ug/Kg		08/29/18 14:18	08/31/18 12:22	1
Aroclor-1260	ND		50	22	ug/Kg		08/29/18 14:18	08/31/18 12:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*71*		*14 - 128*	*08/29/18 14:18*	*08/31/18 12:22*	*1*
DCB Decachlorobiphenyl	*88*		*10 - 132*	*08/29/18 14:18*	*08/31/18 12:22*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.3	B	1.2	0.20	mg/Kg		08/28/18 10:26	08/29/18 21:50	4

Client Sample ID: DG-I7S-3.5-4

Lab Sample ID: 720-88239-12

Date Collected: 08/24/18 09:25

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	21		2.4	0.20	mg/Kg		08/28/18 10:26	08/29/18 21:50	4
Barium	30	B	1.2	0.17	mg/Kg		08/28/18 10:26	08/29/18 21:50	4
Beryllium	ND		0.24	0.078	mg/Kg		08/28/18 10:26	08/29/18 21:50	4
Cadmium	0.20	J	0.30	0.030	mg/Kg		08/28/18 10:26	08/29/18 21:50	4
Chromium	11		1.2	0.13	mg/Kg		08/28/18 10:26	08/29/18 21:50	4
Cobalt	11		0.48	0.048	mg/Kg		08/28/18 10:26	08/29/18 21:50	4
Copper	140		3.6	1.7	mg/Kg		08/28/18 10:26	08/29/18 21:50	4
Lead	170		1.2	0.25	mg/Kg		08/28/18 10:26	08/29/18 21:50	4
Molybdenum	ND		1.2	0.15	mg/Kg		08/28/18 10:26	08/29/18 21:50	4
Nickel	8.8		1.2	0.12	mg/Kg		08/28/18 10:26	08/29/18 21:50	4
Selenium	ND		2.4	0.36	mg/Kg		08/28/18 10:26	08/29/18 21:50	4
Silver	0.35	J	0.60	0.12	mg/Kg		08/28/18 10:26	08/29/18 21:50	4
Thallium	0.95	J	1.2	0.35	mg/Kg		08/28/18 10:26	08/29/18 21:50	4
Vanadium	86		1.2	0.16	mg/Kg		08/28/18 10:26	08/29/18 21:50	4
Zinc	120		3.6	1.5	mg/Kg		08/28/18 10:26	08/29/18 21:50	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.050		0.015	0.0022	mg/Kg		08/28/18 15:53	08/30/18 12:50	1

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-M7S-0.5-1

Date Collected: 08/24/18 09:55
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-13

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.1	0.99	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
Acetone	ND		41	31	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
Benzene	ND		4.1	0.54	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
Dichlorobromomethane	ND		4.1	0.60	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
Bromobenzene	ND	*	4.1	0.65	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
Chlorobromomethane	ND		17	0.60	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
Bromoform	ND		4.1	1.7	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
Bromomethane	ND		8.3	0.65	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
2-Butanone (MEK)	ND		41	17	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
n-Butylbenzene	ND	*	4.1	0.83	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
sec-Butylbenzene	ND	*	4.1	0.60	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
tert-Butylbenzene	ND	*	4.1	0.60	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
Carbon disulfide	ND		4.1	1.7	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
Carbon tetrachloride	ND		4.1	0.51	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
Chlorobenzene	ND		4.1	0.57	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
Chloroethane	ND		8.3	0.46	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
Chloroform	ND		4.1	0.55	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
Chloromethane	ND		8.3	0.65	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
2-Chlorotoluene	ND	*	4.1	0.54	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
4-Chlorotoluene	ND	*	4.1	0.56	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
Chlorodibromomethane	ND		4.1	0.59	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
1,2-Dichlorobenzene	ND	*	4.1	0.56	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
1,3-Dichlorobenzene	ND	*	4.1	0.60	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
1,4-Dichlorobenzene	ND	*	4.1	0.59	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
1,3-Dichloropropane	ND		4.1	0.60	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
1,1-Dichloropropene	ND		4.1	0.57	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
1,2-Dibromo-3-Chloropropane	ND	*	8.3	1.4	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
Ethylene Dibromide	ND		4.1	1.2	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
Dibromomethane	ND		8.3	0.71	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
Dichlorodifluoromethane	ND		8.3	0.65	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
1,1-Dichloroethane	ND		4.1	0.56	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
1,2-Dichloroethane	ND		4.1	0.63	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
1,1-Dichloroethene	ND	*	4.1	0.51	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
cis-1,2-Dichloroethene	ND		4.1	0.56	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
trans-1,2-Dichloroethene	ND		4.1	0.62	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
1,2-Dichloropropane	ND		4.1	0.52	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
cis-1,3-Dichloropropene	ND		4.1	0.57	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
trans-1,3-Dichloropropene	ND		4.1	0.55	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
Ethylbenzene	ND		4.1	0.62	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
Hexachlorobutadiene	ND	*	4.1	0.75	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
2-Hexanone	ND		41	8.3	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
Isopropylbenzene	ND		4.1	0.56	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
4-Isopropyltoluene	ND	*	4.1	2.1	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
Methylene Chloride	ND		8.3	4.6	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
4-Methyl-2-pentanone (MIBK)	ND		41	8.3	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
Naphthalene	ND	*	8.3	1.2	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
N-Propylbenzene	ND	*	4.1	0.55	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
Styrene	ND		4.1	0.52	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
1,1,1,2-Tetrachloroethane	ND		4.1	0.63	ug/Kg		08/25/18 03:05	08/30/18 14:46	1

Client Sample ID: DG-M7S-0.5-1

Lab Sample ID: 720-88239-13

Date Collected: 08/24/18 09:55

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	4.1	0.62	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
Tetrachloroethene	ND		4.1	0.55	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
Toluene	**0.71**	**J**	4.1	0.59	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
1,2,3-Trichlorobenzene	ND	*	4.1	0.61	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
1,2,4-Trichlorobenzene	ND	*	4.1	0.59	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
1,1,1-Trichloroethane	ND		4.1	0.51	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
1,1,2-Trichloroethane	ND		4.1	0.58	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
Trichloroethene	ND		4.1	0.52	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
Trichlorofluoromethane	ND		4.1	0.46	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
1,2,3-Trichloropropane	ND	*	4.1	0.64	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.1	1.7	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
1,2,4-Trimethylbenzene	ND	*	4.1	1.4	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
1,3,5-Trimethylbenzene	ND	*	4.1	0.54	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
Vinyl acetate	ND		17	4.1	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
Vinyl chloride	ND		4.1	0.60	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
Xylenes, Total	ND		4.1	1.0	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
2,2-Dichloropropane	ND		4.1	1.7	ug/Kg		08/25/18 03:05	08/30/18 14:46	1
Gasoline Range Organics (GRO) -C4-C12	ND		210	83	ug/Kg		08/25/18 03:05	08/30/18 14:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*		*45 - 131*	*08/25/18 03:05*	*08/30/18 14:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*122*		*60 - 140*	*08/25/18 03:05*	*08/30/18 14:46*	*1*
Toluene-d8 (Surr)	*90*		*58 - 140*	*08/25/18 03:05*	*08/30/18 14:46*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		380	190	ug/Kg		08/29/18 15:27	09/01/18 17:25	20
Acenaphthene	ND		190	110	ug/Kg		08/29/18 15:27	09/01/18 17:25	20
Acenaphthylene	ND		190	90	ug/Kg		08/29/18 15:27	09/01/18 17:25	20
Anthracene	ND		190	75	ug/Kg		08/29/18 15:27	09/01/18 17:25	20
Benzo[a]anthracene	ND		190	56	ug/Kg		08/29/18 15:27	09/01/18 17:25	20
Benzo[a]pyrene	ND		190	72	ug/Kg		08/29/18 15:27	09/01/18 17:25	20
Benzo[b]fluoranthene	ND		190	79	ug/Kg		08/29/18 15:27	09/01/18 17:25	20
Benzo[g,h,i]perylene	ND		190	160	ug/Kg		08/29/18 15:27	09/01/18 17:25	20
Benzo[k]fluoranthene	ND		190	79	ug/Kg		08/29/18 15:27	09/01/18 17:25	20
Chrysene	ND		190	53	ug/Kg		08/29/18 15:27	09/01/18 17:25	20
Dibenz(a,h)anthracene	ND		190	130	ug/Kg		08/29/18 15:27	09/01/18 17:25	20
Fluoranthene	ND		190	53	ug/Kg		08/29/18 15:27	09/01/18 17:25	20
Fluorene	ND		190	83	ug/Kg		08/29/18 15:27	09/01/18 17:25	20
Indeno[1,2,3-cd]pyrene	ND		190	160	ug/Kg		08/29/18 15:27	09/01/18 17:25	20
Naphthalene	ND		190	130	ug/Kg		08/29/18 15:27	09/01/18 17:25	20
Phenanthrene	ND		190	68	ug/Kg		08/29/18 15:27	09/01/18 17:25	20
Pyrene	ND		190	64	ug/Kg		08/29/18 15:27	09/01/18 17:25	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*65*		*33 - 120*	*08/29/18 15:27*	*09/01/18 17:25*	*20*
Terphenyl-d14	*78*		*35 - 146*	*08/29/18 15:27*	*09/01/18 17:25*	*20*

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-M7S-0.5-1

Date Collected: 08/24/18 09:55
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-13

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1600000		38000	14000	ug/Kg		08/29/18 13:41	08/31/18 12:39	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*0*	*D X*	*40 - 130*	*08/29/18 13:41*	*08/31/18 12:39*	*20*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		9.5	2.9	ug/Kg		08/29/18 17:11	09/03/18 15:07	5
4,4'-DDE	ND		9.5	2.0	ug/Kg		08/29/18 17:11	09/03/18 15:07	5
4,4'-DDT	ND		9.5	1.9	ug/Kg		08/29/18 17:11	09/03/18 15:07	5
Aldrin	ND	F2	9.5	2.4	ug/Kg		08/29/18 17:11	09/03/18 15:07	5
alpha-BHC	ND		9.5	2.6	ug/Kg		08/29/18 17:11	09/03/18 15:07	5
beta-BHC	ND		9.5	1.7	ug/Kg		08/29/18 17:11	09/03/18 15:07	5
Chlordane (technical)	ND		190	15	ug/Kg		08/29/18 17:11	09/03/18 15:07	5
cis-Chlordane	ND		9.5	1.9	ug/Kg		08/29/18 17:11	09/03/18 15:07	5
delta-BHC	ND	F2	9.5	2.1	ug/Kg		08/29/18 17:11	09/03/18 15:07	5
Dieldrin	ND		9.5	2.8	ug/Kg		08/29/18 17:11	09/03/18 15:07	5
Endosulfan I	ND		9.5	1.5	ug/Kg		08/29/18 17:11	09/03/18 15:07	5
Endosulfan II	ND		9.5	2.3	ug/Kg		08/29/18 17:11	09/03/18 15:07	5
Endosulfan sulfate	ND		9.5	1.8	ug/Kg		08/29/18 17:11	09/03/18 15:07	5
Endrin	ND		9.5	2.2	ug/Kg		08/29/18 17:11	09/03/18 15:07	5
Endrin aldehyde	ND	F2	9.5	3.0	ug/Kg		08/29/18 17:11	09/03/18 15:07	5
Endrin ketone	ND		9.5	1.6	ug/Kg		08/29/18 17:11	09/03/18 15:07	5
gamma-BHC (Lindane)	ND		9.5	3.0	ug/Kg		08/29/18 17:11	09/03/18 15:07	5
Heptachlor	ND		9.5	2.2	ug/Kg		08/29/18 17:11	09/03/18 15:07	5
Heptachlor epoxide	ND		9.5	1.7	ug/Kg		08/29/18 17:11	09/03/18 15:07	5
Methoxychlor	ND	F2	9.5	3.2	ug/Kg		08/29/18 17:11	09/03/18 15:07	5
Toxaphene	ND		190	32	ug/Kg		08/29/18 17:11	09/03/18 15:07	5
trans-Chlordane	ND	F1	9.5	2.2	ug/Kg		08/29/18 17:11	09/03/18 15:07	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*101*		*21 - 136*	*08/29/18 17:11*	*09/03/18 15:07*	*5*
Tetrachloro-m-xylene	*79*		*21 - 145*	*08/29/18 17:11*	*09/03/18 15:07*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/29/18 14:18	08/31/18 08:36	1
Aroclor-1221	ND		50	24	ug/Kg		08/29/18 14:18	08/31/18 08:36	1
Aroclor-1232	ND		50	23	ug/Kg		08/29/18 14:18	08/31/18 08:36	1
Aroclor-1242	ND		50	19	ug/Kg		08/29/18 14:18	08/31/18 08:36	1
Aroclor-1248	ND		50	24	ug/Kg		08/29/18 14:18	08/31/18 08:36	1
Aroclor-1254	ND		50	23	ug/Kg		08/29/18 14:18	08/31/18 08:36	1
Aroclor-1260	ND		50	22	ug/Kg		08/29/18 14:18	08/31/18 08:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*86*		*14 - 128*	*08/29/18 14:18*	*08/31/18 08:36*	*1*
DCB Decachlorobiphenyl	*72*		*10 - 132*	*08/29/18 14:18*	*08/31/18 08:36*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.82	J B	1.8	0.29	mg/Kg		08/28/18 10:26	08/29/18 21:55	4

Client Sample ID: DG-M7S-0.5-1

Lab Sample ID: 720-88239-13

Date Collected: 08/24/18 09:55

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	270		3.5	0.30	mg/Kg		08/28/18 10:26	08/29/18 21:55	4
Barium	55	B	1.8	0.25	mg/Kg		08/28/18 10:26	08/29/18 21:55	4
Beryllium	ND		0.35	0.12	mg/Kg		08/28/18 10:26	08/29/18 21:55	4
Cadmium	0.18	J	0.44	0.044	mg/Kg		08/28/18 10:26	08/29/18 21:55	4
Chromium	66		1.8	0.19	mg/Kg		08/28/18 10:26	08/29/18 21:55	4
Cobalt	4.8		0.71	0.071	mg/Kg		08/28/18 10:26	08/29/18 21:55	4
Copper	8.2		5.3	2.5	mg/Kg		08/28/18 10:26	08/29/18 21:55	4
Lead	7.4		1.8	0.37	mg/Kg		08/28/18 10:26	08/29/18 21:55	4
Molybdenum	ND		1.8	0.23	mg/Kg		08/28/18 10:26	08/29/18 21:55	4
Nickel	32		1.8	0.18	mg/Kg		08/28/18 10:26	08/29/18 21:55	4
Selenium	ND		3.5	0.53	mg/Kg		08/28/18 10:26	08/29/18 21:55	4
Silver	ND		0.88	0.18	mg/Kg		08/28/18 10:26	08/29/18 21:55	4
Thallium	ND		1.8	0.51	mg/Kg		08/28/18 10:26	08/29/18 21:55	4
Vanadium	55		1.8	0.24	mg/Kg		08/28/18 10:26	08/29/18 21:55	4
Zinc	650		5.3	2.2	mg/Kg		08/28/18 10:26	08/29/18 21:55	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020		0.014	0.0021	mg/Kg		08/28/18 15:53	08/30/18 12:52	1

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-M7S-3.5-4

Date Collected: 08/24/18 09:55
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-14

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.7	0.90	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
Acetone	**45**		37	28	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
Benzene	ND		3.7	0.49	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
Dichlorobromomethane	ND		3.7	0.54	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
Bromobenzene	ND		3.7	0.59	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
Chlorobromomethane	ND		15	0.54	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
Bromoform	ND		3.7	1.5	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
Bromomethane	ND		7.5	0.59	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
2-Butanone (MEK)	ND		37	16	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
n-Butylbenzene	ND		3.7	0.75	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
sec-Butylbenzene	ND		3.7	0.54	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
tert-Butylbenzene	ND		3.7	0.55	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
Carbon disulfide	ND		3.7	1.5	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
Carbon tetrachloride	ND		3.7	0.46	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
Chlorobenzene	ND		3.7	0.52	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
Chloroethane	ND		7.5	0.42	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
Chloroform	ND		3.7	0.49	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
Chloromethane	ND		7.5	0.59	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
2-Chlorotoluene	ND		3.7	0.49	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
4-Chlorotoluene	ND		3.7	0.51	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
Chlorodibromomethane	ND		3.7	0.53	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
1,2-Dichlorobenzene	ND		3.7	0.51	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
1,3-Dichlorobenzene	ND		3.7	0.54	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
1,4-Dichlorobenzene	ND		3.7	0.53	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
1,3-Dichloropropane	ND		3.7	0.55	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
1,1-Dichloropropene	ND		3.7	0.52	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
1,2-Dibromo-3-Chloropropane	ND		7.5	1.3	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
Ethylene Dibromide	ND		3.7	1.1	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
Dibromomethane	ND		7.5	0.64	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
Dichlorodifluoromethane	ND		7.5	0.59	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
1,1-Dichloroethane	ND		3.7	0.51	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
1,2-Dichloroethane	ND		3.7	0.57	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
1,1-Dichloroethene	ND	*	3.7	0.46	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
cis-1,2-Dichloroethene	ND		3.7	0.51	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
trans-1,2-Dichloroethene	ND		3.7	0.56	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
1,2-Dichloropropane	ND		3.7	0.47	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
cis-1,3-Dichloropropene	ND		3.7	0.52	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
trans-1,3-Dichloropropene	ND		3.7	0.50	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
Ethylbenzene	ND		3.7	0.56	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
Hexachlorobutadiene	ND		3.7	0.67	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
2-Hexanone	ND		37	7.5	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
Isopropylbenzene	ND		3.7	0.51	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
4-Isopropyltoluene	ND		3.7	1.9	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
Methylene Chloride	ND		7.5	4.2	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
4-Methyl-2-pentanone (MIBK)	ND		37	7.5	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
Naphthalene	ND		7.5	1.1	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
N-Propylbenzene	ND		3.7	0.49	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
Styrene	ND		3.7	0.47	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
1,1,1,2-Tetrachloroethane	ND		3.7	0.57	ug/Kg		08/25/18 03:05	08/30/18 04:32	1

Client Sample ID: DG-M7S-3.5-4

Date Collected: 08/24/18 09:55
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-14

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		3.7	0.56	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
Tetrachloroethene	ND		3.7	0.50	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
Toluene	ND		3.7	0.53	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
1,2,3-Trichlorobenzene	ND		3.7	0.55	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
1,2,4-Trichlorobenzene	ND		3.7	0.53	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
1,1,1-Trichloroethane	ND		3.7	0.46	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
1,1,2-Trichloroethane	ND		3.7	0.52	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
Trichloroethene	ND		3.7	0.47	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
Trichlorofluoromethane	ND		3.7	0.42	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
1,2,3-Trichloropropane	ND		3.7	0.58	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.7	1.6	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
1,2,4-Trimethylbenzene	ND		3.7	1.2	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
1,3,5-Trimethylbenzene	ND		3.7	0.49	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
Vinyl acetate	ND		15	3.7	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
Vinyl chloride	ND		3.7	0.55	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
Xylenes, Total	ND		3.7	0.91	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
2,2-Dichloropropane	ND		3.7	1.5	ug/Kg		08/25/18 03:05	08/30/18 04:32	1
Gasoline Range Organics (GRO) -C4-C12	ND		190	75	ug/Kg		08/25/18 03:05	08/30/18 04:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*87*		*45 - 131*	*08/25/18 03:05*	*08/30/18 04:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*60 - 140*	*08/25/18 03:05*	*08/30/18 04:32*	*1*
Toluene-d8 (Surr)	*91*		*58 - 140*	*08/25/18 03:05*	*08/30/18 04:32*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.7	4.9	ug/Kg		08/29/18 15:27	09/01/18 20:59	1
Acenaphthene	ND		4.9	2.7	ug/Kg		08/29/18 15:27	09/01/18 20:59	1
Acenaphthylene	ND		4.9	2.3	ug/Kg		08/29/18 15:27	09/01/18 20:59	1
Anthracene	ND		4.9	1.9	ug/Kg		08/29/18 15:27	09/01/18 20:59	1
Benzo[a]anthracene	ND		4.9	1.5	ug/Kg		08/29/18 15:27	09/01/18 20:59	1
Benzo[a]pyrene	ND		4.9	1.9	ug/Kg		08/29/18 15:27	09/01/18 20:59	1
Benzo[b]fluoranthene	ND		4.9	2.0	ug/Kg		08/29/18 15:27	09/01/18 20:59	1
Benzo[g,h,i]perylene	ND		4.9	4.2	ug/Kg		08/29/18 15:27	09/01/18 20:59	1
Benzo[k]fluoranthene	ND		4.9	2.0	ug/Kg		08/29/18 15:27	09/01/18 20:59	1
Chrysene	ND		4.9	1.4	ug/Kg		08/29/18 15:27	09/01/18 20:59	1
Dibenz(a,h)anthracene	ND		4.9	3.4	ug/Kg		08/29/18 15:27	09/01/18 20:59	1
Fluoranthene	**1.7**	**J**	4.9	1.4	ug/Kg		08/29/18 15:27	09/01/18 20:59	1
Fluorene	ND		4.9	2.1	ug/Kg		08/29/18 15:27	09/01/18 20:59	1
Indeno[1,2,3-cd]pyrene	ND		4.9	4.1	ug/Kg		08/29/18 15:27	09/01/18 20:59	1
Naphthalene	ND		4.9	3.4	ug/Kg		08/29/18 15:27	09/01/18 20:59	1
Phenanthrene	ND		4.9	1.8	ug/Kg		08/29/18 15:27	09/01/18 20:59	1
Pyrene	**2.0**	**J**	4.9	1.7	ug/Kg		08/29/18 15:27	09/01/18 20:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*54*		*33 - 120*	*08/29/18 15:27*	*09/01/18 20:59*	*1*
Terphenyl-d14	*80*		*35 - 146*	*08/29/18 15:27*	*09/01/18 20:59*	*1*

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-M7S-3.5-4

Date Collected: 08/24/18 09:55
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-14

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	8300		2000	740	ug/Kg		08/29/18 13:41	08/31/18 14:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*82*		*40 - 130*	*08/29/18 13:41*	*08/31/18 14:41*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/29/18 17:11	09/03/18 15:41	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/29/18 17:11	09/03/18 15:41	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/29/18 17:11	09/03/18 15:41	1
Aldrin	ND		1.9	0.48	ug/Kg		08/29/18 17:11	09/03/18 15:41	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/29/18 17:11	09/03/18 15:41	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/29/18 17:11	09/03/18 15:41	1
Chlordane (technical)	ND		38	3.1	ug/Kg		08/29/18 17:11	09/03/18 15:41	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/29/18 17:11	09/03/18 15:41	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/29/18 17:11	09/03/18 15:41	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/29/18 17:11	09/03/18 15:41	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/29/18 17:11	09/03/18 15:41	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/29/18 17:11	09/03/18 15:41	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/29/18 17:11	09/03/18 15:41	1
Endrin	ND		1.9	0.44	ug/Kg		08/29/18 17:11	09/03/18 15:41	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/29/18 17:11	09/03/18 15:41	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/29/18 17:11	09/03/18 15:41	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/29/18 17:11	09/03/18 15:41	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/29/18 17:11	09/03/18 15:41	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/29/18 17:11	09/03/18 15:41	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/29/18 17:11	09/03/18 15:41	1
Toxaphene	ND		38	6.5	ug/Kg		08/29/18 17:11	09/03/18 15:41	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/29/18 17:11	09/03/18 15:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*109*		*21 - 136*	*08/29/18 17:11*	*09/03/18 15:41*	*1*
Tetrachloro-m-xylene	*82*		*21 - 145*	*08/29/18 17:11*	*09/03/18 15:41*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		51	22	ug/Kg		08/29/18 14:18	08/31/18 08:55	1
Aroclor-1221	ND		51	24	ug/Kg		08/29/18 14:18	08/31/18 08:55	1
Aroclor-1232	ND		51	23	ug/Kg		08/29/18 14:18	08/31/18 08:55	1
Aroclor-1242	ND		51	19	ug/Kg		08/29/18 14:18	08/31/18 08:55	1
Aroclor-1248	ND		51	24	ug/Kg		08/29/18 14:18	08/31/18 08:55	1
Aroclor-1254	ND		51	23	ug/Kg		08/29/18 14:18	08/31/18 08:55	1
Aroclor-1260	ND		51	22	ug/Kg		08/29/18 14:18	08/31/18 08:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*62*		*14 - 128*	*08/29/18 14:18*	*08/31/18 08:55*	*1*
DCB Decachlorobiphenyl	*51*		*10 - 132*	*08/29/18 14:18*	*08/31/18 08:55*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.0	J B	1.7	0.27	mg/Kg		08/28/18 10:26	08/29/18 22:00	4

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-M7S-3.5-4

Lab Sample ID: 720-88239-14

Date Collected: 08/24/18 09:55

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.8	J	3.3	0.28	mg/Kg		08/28/18 10:26	08/29/18 22:00	4
Barium	44	B	1.7	0.23	mg/Kg		08/28/18 10:26	08/29/18 22:00	4
Beryllium	ND		0.33	0.11	mg/Kg		08/28/18 10:26	08/29/18 22:00	4
Cadmium	ND		0.41	0.041	mg/Kg		08/28/18 10:26	08/29/18 22:00	4
Chromium	51		1.7	0.18	mg/Kg		08/28/18 10:26	08/29/18 22:00	4
Cobalt	5.7		0.66	0.066	mg/Kg		08/28/18 10:26	08/29/18 22:00	4
Copper	6.7		5.0	2.4	mg/Kg		08/28/18 10:26	08/29/18 22:00	4
Lead	1.3	J	1.7	0.35	mg/Kg		08/28/18 10:26	08/29/18 22:00	4
Molybdenum	ND		1.7	0.21	mg/Kg		08/28/18 10:26	08/29/18 22:00	4
Nickel	30		1.7	0.17	mg/Kg		08/28/18 10:26	08/29/18 22:00	4
Selenium	ND		3.3	0.50	mg/Kg		08/28/18 10:26	08/29/18 22:00	4
Silver	ND		0.83	0.17	mg/Kg		08/28/18 10:26	08/29/18 22:00	4
Thallium	ND		1.7	0.48	mg/Kg		08/28/18 10:26	08/29/18 22:00	4
Vanadium	37		1.7	0.22	mg/Kg		08/28/18 10:26	08/29/18 22:00	4
Zinc	17		5.0	2.1	mg/Kg		08/28/18 10:26	08/29/18 22:00	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.030		0.015	0.0022	mg/Kg		08/28/18 15:53	08/30/18 12:55	1

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-B9S-0.5-1

Date Collected: 08/24/18 10:20
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-15

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.8	1.1	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
Acetone	ND		48	36	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
Benzene	ND		4.8	0.62	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
Dichlorobromomethane	ND		4.8	0.69	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
Bromobenzene	ND		4.8	0.75	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
Chlorobromomethane	ND		19	0.69	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
Bromoform	ND		4.8	1.9	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
Bromomethane	ND		9.5	0.75	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
2-Butanone (MEK)	ND		48	20	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
n-Butylbenzene	ND		4.8	0.95	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
sec-Butylbenzene	ND		4.8	0.69	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
tert-Butylbenzene	ND		4.8	0.70	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
Carbon disulfide	ND		4.8	1.9	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
Carbon tetrachloride	ND		4.8	0.59	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
Chlorobenzene	ND		4.8	0.66	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
Chloroethane	ND		9.5	0.53	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
Chloroform	ND		4.8	0.63	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
Chloromethane	ND		9.5	0.75	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
2-Chlorotoluene	ND		4.8	0.62	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
4-Chlorotoluene	ND		4.8	0.65	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
Chlorodibromomethane	ND		4.8	0.68	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
1,2-Dichlorobenzene	ND		4.8	0.65	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
1,3-Dichlorobenzene	ND		4.8	0.69	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
1,4-Dichlorobenzene	ND		4.8	0.68	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
1,3-Dichloropropane	ND		4.8	0.70	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
1,1-Dichloropropene	ND		4.8	0.66	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
1,2-Dibromo-3-Chloropropane	ND		9.5	1.6	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
Ethylene Dibromide	ND		4.8	1.4	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
Dibromomethane	ND		9.5	0.82	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
Dichlorodifluoromethane	ND		9.5	0.75	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
1,1-Dichloroethane	ND		4.8	0.65	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
1,2-Dichloroethane	ND		4.8	0.72	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
1,1-Dichloroethene	ND	*	4.8	0.59	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
cis-1,2-Dichloroethene	ND		4.8	0.65	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
trans-1,2-Dichloroethene	ND		4.8	0.71	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
1,2-Dichloropropane	ND		4.8	0.60	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
cis-1,3-Dichloropropene	ND		4.8	0.66	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
trans-1,3-Dichloropropene	ND		4.8	0.64	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
Ethylbenzene	ND		4.8	0.71	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
Hexachlorobutadiene	ND		4.8	0.86	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
2-Hexanone	ND		48	9.5	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
Isopropylbenzene	ND		4.8	0.65	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
4-Isopropyltoluene	ND		4.8	2.4	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
Methylene Chloride	ND		9.5	5.3	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
4-Methyl-2-pentanone (MIBK)	ND		48	9.5	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
Naphthalene	ND		9.5	1.4	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
N-Propylbenzene	ND		4.8	0.63	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
Styrene	ND		4.8	0.60	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
1,1,1,2-Tetrachloroethane	ND		4.8	0.72	ug/Kg		09/04/18 11:29	09/04/18 12:51	1

Client Sample ID: DG-B9S-0.5-1

Lab Sample ID: 720-88239-15

Date Collected: 08/24/18 10:20

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.8	0.71	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
Tetrachloroethene	ND		4.8	0.64	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
Toluene	ND		4.8	0.68	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
1,2,3-Trichlorobenzene	ND		4.8	0.70	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
1,2,4-Trichlorobenzene	ND		4.8	0.68	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
1,1,1-Trichloroethane	ND		4.8	0.58	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
1,1,2-Trichloroethane	ND		4.8	0.67	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
Trichloroethene	ND		4.8	0.60	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
Trichlorofluoromethane	ND		4.8	0.53	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
1,2,3-Trichloropropane	ND		4.8	0.73	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.8	2.0	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
1,2,4-Trimethylbenzene	ND		4.8	1.6	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
1,3,5-Trimethylbenzene	ND		4.8	0.62	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
Vinyl acetate	ND		19	4.8	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
Vinyl chloride	ND		4.8	0.70	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
Xylenes, Total	ND		4.8	1.2	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
2,2-Dichloropropane	ND		4.8	1.9	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
C4-C10	ND		240	95	ug/Kg		09/04/18 11:29	09/04/18 12:51	1
Gasoline Range Organics (GRO) -C4-C12	ND		240	95	ug/Kg		09/04/18 11:29	09/04/18 12:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*78*		*45 - 131*	*09/04/18 11:29*	*09/04/18 12:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*	*09/04/18 11:29*	*09/04/18 12:51*	*1*
Toluene-d8 (Surr)	*88*		*58 - 140*	*09/04/18 11:29*	*09/04/18 12:51*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**150**	**J**	190	94	ug/Kg		08/29/18 15:27	09/01/18 17:49	10
Acenaphthene	ND		94	53	ug/Kg		08/29/18 15:27	09/01/18 17:49	10
Acenaphthylene	ND		94	45	ug/Kg		08/29/18 15:27	09/01/18 17:49	10
Anthracene	**89**	**J**	94	38	ug/Kg		08/29/18 15:27	09/01/18 17:49	10
Benzo[a]anthracene	**220**		94	28	ug/Kg		08/29/18 15:27	09/01/18 17:49	10
Benzo[a]pyrene	**270**		94	36	ug/Kg		08/29/18 15:27	09/01/18 17:49	10
Benzo[b]fluoranthene	**360**		94	40	ug/Kg		08/29/18 15:27	09/01/18 17:49	10
Benzo[g,h,i]perylene	**100**		94	81	ug/Kg		08/29/18 15:27	09/01/18 17:49	10
Benzo[k]fluoranthene	**140**		94	40	ug/Kg		08/29/18 15:27	09/01/18 17:49	10
Chrysene	**220**		94	26	ug/Kg		08/29/18 15:27	09/01/18 17:49	10
Dibenz(a,h)anthracene	ND		94	66	ug/Kg		08/29/18 15:27	09/01/18 17:49	10
Fluoranthene	**370**		94	26	ug/Kg		08/29/18 15:27	09/01/18 17:49	10
Fluorene	ND		94	41	ug/Kg		08/29/18 15:27	09/01/18 17:49	10
Indeno[1,2,3-cd]pyrene	**82**	**J**	94	79	ug/Kg		08/29/18 15:27	09/01/18 17:49	10
Naphthalene	**99**		94	66	ug/Kg		08/29/18 15:27	09/01/18 17:49	10
Phenanthrene	**340**		94	34	ug/Kg		08/29/18 15:27	09/01/18 17:49	10
Pyrene	**350**		94	32	ug/Kg		08/29/18 15:27	09/01/18 17:49	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*33 - 120*	*08/29/18 15:27*	*09/01/18 17:49*	*10*
Terphenyl-d14	*80*		*35 - 146*	*08/29/18 15:27*	*09/01/18 17:49*	*10*

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-B9S-0.5-1

Date Collected: 08/24/18 10:20
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-15

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	440000		20000	7400	ug/Kg		08/29/18 13:41	08/31/18 13:03	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*0*	*D X*	*40 - 130*	*08/29/18 13:41*	*08/31/18 13:03*	*10*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		4.0	1.2	ug/Kg		08/29/18 17:11	09/03/18 15:58	2
4,4'-DDE	ND		4.0	0.83	ug/Kg		08/29/18 17:11	09/03/18 15:58	2
4,4'-DDT	ND		4.0	0.81	ug/Kg		08/29/18 17:11	09/03/18 15:58	2
Aldrin	ND		4.0	0.99	ug/Kg		08/29/18 17:11	09/03/18 15:58	2
alpha-BHC	ND		4.0	1.1	ug/Kg		08/29/18 17:11	09/03/18 15:58	2
beta-BHC	ND		4.0	0.71	ug/Kg		08/29/18 17:11	09/03/18 15:58	2
Chlordane (technical)	ND		79	6.3	ug/Kg		08/29/18 17:11	09/03/18 15:58	2
cis-Chlordane	ND		4.0	0.79	ug/Kg		08/29/18 17:11	09/03/18 15:58	2
delta-BHC	ND		4.0	0.87	ug/Kg		08/29/18 17:11	09/03/18 15:58	2
Dieldrin	ND		4.0	1.2	ug/Kg		08/29/18 17:11	09/03/18 15:58	2
Endosulfan I	ND		4.0	0.63	ug/Kg		08/29/18 17:11	09/03/18 15:58	2
Endosulfan II	ND		4.0	0.97	ug/Kg		08/29/18 17:11	09/03/18 15:58	2
Endosulfan sulfate	ND		4.0	0.75	ug/Kg		08/29/18 17:11	09/03/18 15:58	2
Endrin	ND		4.0	0.91	ug/Kg		08/29/18 17:11	09/03/18 15:58	2
Endrin aldehyde	ND		4.0	1.2	ug/Kg		08/29/18 17:11	09/03/18 15:58	2
Endrin ketone	ND		4.0	0.65	ug/Kg		08/29/18 17:11	09/03/18 15:58	2
gamma-BHC (Lindane)	ND		4.0	1.2	ug/Kg		08/29/18 17:11	09/03/18 15:58	2
Heptachlor	ND		4.0	0.91	ug/Kg		08/29/18 17:11	09/03/18 15:58	2
Heptachlor epoxide	ND		4.0	0.69	ug/Kg		08/29/18 17:11	09/03/18 15:58	2
Methoxychlor	ND		4.0	1.3	ug/Kg		08/29/18 17:11	09/03/18 15:58	2
Toxaphene	ND		79	14	ug/Kg		08/29/18 17:11	09/03/18 15:58	2
trans-Chlordane	ND		4.0	0.91	ug/Kg		08/29/18 17:11	09/03/18 15:58	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*77*		*21 - 136*	*08/29/18 17:11*	*09/03/18 15:58*	*2*
Tetrachloro-m-xylene	*93*		*21 - 145*	*08/29/18 17:11*	*09/03/18 15:58*	*2*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		49	21	ug/Kg		08/29/18 14:18	08/31/18 09:14	1
Aroclor-1221	ND		49	23	ug/Kg		08/29/18 14:18	08/31/18 09:14	1
Aroclor-1232	ND		49	22	ug/Kg		08/29/18 14:18	08/31/18 09:14	1
Aroclor-1242	ND		49	18	ug/Kg		08/29/18 14:18	08/31/18 09:14	1
Aroclor-1248	ND		49	23	ug/Kg		08/29/18 14:18	08/31/18 09:14	1
Aroclor-1254	ND		49	22	ug/Kg		08/29/18 14:18	08/31/18 09:14	1
Aroclor-1260	ND		49	21	ug/Kg		08/29/18 14:18	08/31/18 09:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*96*		*14 - 128*	*08/29/18 14:18*	*08/31/18 09:14*	*1*
DCB Decachlorobiphenyl	*78*		*10 - 132*	*08/29/18 14:18*	*08/31/18 09:14*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	10	B	3.9	0.65	mg/Kg		08/28/18 10:26	08/29/18 22:04	10

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-B9S-0.5-1

Lab Sample ID: 720-88239-15

Date Collected: 08/24/18 10:20

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	24		7.8	0.66	mg/Kg		08/28/18 10:26	08/29/18 22:04	10
Barium	50	B	3.9	0.55	mg/Kg		08/28/18 10:26	08/29/18 22:04	10
Beryllium	ND		0.78	0.25	mg/Kg		08/28/18 10:26	08/29/18 22:04	10
Cadmium	3.0		0.98	0.097	mg/Kg		08/28/18 10:26	08/29/18 22:04	10
Chromium	21		3.9	0.41	mg/Kg		08/28/18 10:26	08/29/18 22:04	10
Cobalt	17		1.6	0.16	mg/Kg		08/28/18 10:26	08/29/18 22:04	10
Copper	590		12	5.6	mg/Kg		08/28/18 10:26	08/29/18 22:04	10
Lead	2600		3.9	0.82	mg/Kg		08/28/18 10:26	08/29/18 22:04	10
Molybdenum	5.8		3.9	0.50	mg/Kg		08/28/18 10:26	08/29/18 22:04	10
Nickel	21		3.9	0.40	mg/Kg		08/28/18 10:26	08/29/18 22:04	10
Selenium	ND		7.8	1.2	mg/Kg		08/28/18 10:26	08/29/18 22:04	10
Silver	4.1		2.0	0.39	mg/Kg		08/28/18 10:26	08/29/18 22:04	10
Thallium	ND		3.9	1.1	mg/Kg		08/28/18 10:26	08/29/18 22:04	10
Vanadium	62		3.9	0.53	mg/Kg		08/28/18 10:26	08/29/18 22:04	10
Zinc	640		12	5.0	mg/Kg		08/28/18 10:26	08/29/18 22:04	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.76		0.016	0.0024	mg/Kg		08/28/18 15:53	08/30/18 13:02	1

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-B9S-3.5-4

Date Collected: 08/24/18 10:20
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-16

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.9	1.2	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
Acetone	ND		49	37	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
Benzene	ND		4.9	0.64	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
Dichlorobromomethane	ND		4.9	0.71	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
Bromobenzene	ND		4.9	0.77	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
Chlorobromomethane	ND		20	0.71	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
Bromoform	ND		4.9	2.0	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
Bromomethane	ND		9.8	0.77	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
2-Butanone (MEK)	ND		49	21	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
n-Butylbenzene	ND		4.9	0.98	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
sec-Butylbenzene	ND		4.9	0.71	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
tert-Butylbenzene	ND		4.9	0.72	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
Carbon disulfide	ND		4.9	2.0	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
Carbon tetrachloride	ND		4.9	0.61	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
Chlorobenzene	ND		4.9	0.68	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
Chloroethane	ND		9.8	0.55	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
Chloroform	ND		4.9	0.65	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
Chloromethane	ND		9.8	0.77	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
2-Chlorotoluene	ND		4.9	0.64	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
4-Chlorotoluene	ND		4.9	0.67	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
Chlorodibromomethane	ND		4.9	0.70	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
1,2-Dichlorobenzene	ND		4.9	0.67	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
1,3-Dichlorobenzene	ND		4.9	0.71	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
1,4-Dichlorobenzene	ND		4.9	0.70	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
1,3-Dichloropropane	ND		4.9	0.72	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
1,1-Dichloropropene	ND		4.9	0.68	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
1,2-Dibromo-3-Chloropropane	ND		9.8	1.7	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
Ethylene Dibromide	ND		4.9	1.4	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
Dibromomethane	ND		9.8	0.84	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
Dichlorodifluoromethane	ND		9.8	0.77	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
1,1-Dichloroethane	ND		4.9	0.67	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
1,2-Dichloroethane	ND		4.9	0.75	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
1,1-Dichloroethene	ND	*	4.9	0.61	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
cis-1,2-Dichloroethene	ND		4.9	0.67	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
trans-1,2-Dichloroethene	ND		4.9	0.74	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
1,2-Dichloropropane	ND		4.9	0.62	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
cis-1,3-Dichloropropene	ND		4.9	0.68	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
trans-1,3-Dichloropropene	ND		4.9	0.66	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
Ethylbenzene	ND		4.9	0.74	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
Hexachlorobutadiene	ND		4.9	0.88	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
2-Hexanone	ND		49	9.8	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
Isopropylbenzene	ND		4.9	0.67	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
4-Isopropyltoluene	ND		4.9	2.5	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
Methylene Chloride	ND		9.8	5.5	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
4-Methyl-2-pentanone (MIBK)	ND		49	9.8	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
Naphthalene	ND		9.8	1.5	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
N-Propylbenzene	ND		4.9	0.65	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
Styrene	ND		4.9	0.62	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
1,1,1,2-Tetrachloroethane	ND		4.9	0.75	ug/Kg		09/04/18 11:29	09/04/18 13:20	1

Client Sample ID: DG-B9S-3.5-4

Lab Sample ID: 720-88239-16

Date Collected: 08/24/18 10:20

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.9	0.74	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
Tetrachloroethene	ND		4.9	0.66	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
Toluene	ND		4.9	0.70	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
1,2,3-Trichlorobenzene	ND		4.9	0.73	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
1,2,4-Trichlorobenzene	ND		4.9	0.70	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
1,1,1-Trichloroethane	ND		4.9	0.60	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
1,1,2-Trichloroethane	ND		4.9	0.69	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
Trichloroethene	ND		4.9	0.62	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
Trichlorofluoromethane	ND		4.9	0.55	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
1,2,3-Trichloropropane	ND		4.9	0.75	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.9	2.0	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
1,2,4-Trimethylbenzene	ND		4.9	1.6	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
1,3,5-Trimethylbenzene	ND		4.9	0.64	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
Vinyl acetate	ND		20	4.9	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
Vinyl chloride	ND		4.9	0.72	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
Xylenes, Total	ND		4.9	1.2	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
2,2-Dichloropropane	ND		4.9	2.0	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
C4-C10	ND		250	98	ug/Kg		09/04/18 11:29	09/04/18 13:20	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	98	ug/Kg		09/04/18 11:29	09/04/18 13:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*85*		*45 - 131*	*09/04/18 11:29*	*09/04/18 13:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*60 - 140*	*09/04/18 11:29*	*09/04/18 13:20*	*1*
Toluene-d8 (Surr)	*94*		*58 - 140*	*09/04/18 11:29*	*09/04/18 13:20*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**5.9**	**J**	9.7	4.8	ug/Kg		08/29/18 15:27	09/01/18 21:22	1
Acenaphthene	ND		4.8	2.7	ug/Kg		08/29/18 15:27	09/01/18 21:22	1
Acenaphthylene	**2.9**	**J**	4.8	2.3	ug/Kg		08/29/18 15:27	09/01/18 21:22	1
Anthracene	**2.8**	**J**	4.8	1.9	ug/Kg		08/29/18 15:27	09/01/18 21:22	1
Benzo[a]anthracene	**10**		4.8	1.5	ug/Kg		08/29/18 15:27	09/01/18 21:22	1
Benzo[a]pyrene	**14**		4.8	1.8	ug/Kg		08/29/18 15:27	09/01/18 21:22	1
Benzo[b]fluoranthene	**19**		4.8	2.0	ug/Kg		08/29/18 15:27	09/01/18 21:22	1
Benzo[g,h,i]perylene	**5.0**		4.8	4.2	ug/Kg		08/29/18 15:27	09/01/18 21:22	1
Benzo[k]fluoranthene	**9.3**		4.8	2.0	ug/Kg		08/29/18 15:27	09/01/18 21:22	1
Chrysene	**12**		4.8	1.4	ug/Kg		08/29/18 15:27	09/01/18 21:22	1
Dibenz(a,h)anthracene	ND		4.8	3.4	ug/Kg		08/29/18 15:27	09/01/18 21:22	1
Fluoranthene	**14**		4.8	1.4	ug/Kg		08/29/18 15:27	09/01/18 21:22	1
Fluorene	ND		4.8	2.1	ug/Kg		08/29/18 15:27	09/01/18 21:22	1
Indeno[1,2,3-cd]pyrene	**5.0**		4.8	4.1	ug/Kg		08/29/18 15:27	09/01/18 21:22	1
Naphthalene	**4.5**	**J**	4.8	3.4	ug/Kg		08/29/18 15:27	09/01/18 21:22	1
Phenanthrene	**12**		4.8	1.7	ug/Kg		08/29/18 15:27	09/01/18 21:22	1
Pyrene	**17**		4.8	1.6	ug/Kg		08/29/18 15:27	09/01/18 21:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*53*		*33 - 120*	*08/29/18 15:27*	*09/01/18 21:22*	*1*
Terphenyl-d14	*76*		*35 - 146*	*08/29/18 15:27*	*09/01/18 21:22*	*1*

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-B9S-3.5-4

Date Collected: 08/24/18 10:20
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-16

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	14000		1900	730	ug/Kg		08/29/18 13:41	08/31/18 15:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*90*		*40 - 130*	*08/29/18 13:41*	*08/31/18 15:05*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/29/18 17:11	09/03/18 16:14	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/29/18 17:11	09/03/18 16:14	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/29/18 17:11	09/03/18 16:14	1
Aldrin	ND		1.9	0.48	ug/Kg		08/29/18 17:11	09/03/18 16:14	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/29/18 17:11	09/03/18 16:14	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/29/18 17:11	09/03/18 16:14	1
Chlordane (technical)	ND		38	3.1	ug/Kg		08/29/18 17:11	09/03/18 16:14	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/29/18 17:11	09/03/18 16:14	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/29/18 17:11	09/03/18 16:14	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/29/18 17:11	09/03/18 16:14	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/29/18 17:11	09/03/18 16:14	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/29/18 17:11	09/03/18 16:14	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/29/18 17:11	09/03/18 16:14	1
Endrin	ND		1.9	0.44	ug/Kg		08/29/18 17:11	09/03/18 16:14	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/29/18 17:11	09/03/18 16:14	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/29/18 17:11	09/03/18 16:14	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/29/18 17:11	09/03/18 16:14	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/29/18 17:11	09/03/18 16:14	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/29/18 17:11	09/03/18 16:14	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/29/18 17:11	09/03/18 16:14	1
Toxaphene	ND		38	6.5	ug/Kg		08/29/18 17:11	09/03/18 16:14	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/29/18 17:11	09/03/18 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*85*		*21 - 136*	*08/29/18 17:11*	*09/03/18 16:14*	*1*
Tetrachloro-m-xylene	*73*		*21 - 145*	*08/29/18 17:11*	*09/03/18 16:14*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		49	21	ug/Kg		08/29/18 14:18	08/31/18 09:33	1
Aroclor-1221	ND		49	23	ug/Kg		08/29/18 14:18	08/31/18 09:33	1
Aroclor-1232	ND		49	22	ug/Kg		08/29/18 14:18	08/31/18 09:33	1
Aroclor-1242	ND		49	19	ug/Kg		08/29/18 14:18	08/31/18 09:33	1
Aroclor-1248	ND		49	23	ug/Kg		08/29/18 14:18	08/31/18 09:33	1
Aroclor-1254	ND		49	22	ug/Kg		08/29/18 14:18	08/31/18 09:33	1
Aroclor-1260	ND		49	21	ug/Kg		08/29/18 14:18	08/31/18 09:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*91*		*14 - 128*	*08/29/18 14:18*	*08/31/18 09:33*	*1*
DCB Decachlorobiphenyl	*79*		*10 - 132*	*08/29/18 14:18*	*08/31/18 09:33*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.6	J B	1.8	0.29	mg/Kg		08/28/18 10:26	08/29/18 22:09	4

Client Sample ID: DG-B9S-3.5-4

Lab Sample ID: 720-88239-16

Date Collected: 08/24/18 10:20

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.8		3.5	0.30	mg/Kg		08/28/18 10:26	08/29/18 22:09	4
Barium	75	B	1.8	0.25	mg/Kg		08/28/18 10:26	08/29/18 22:09	4
Beryllium	ND		0.35	0.12	mg/Kg		08/28/18 10:26	08/29/18 22:09	4
Cadmium	0.12	J	0.44	0.044	mg/Kg		08/28/18 10:26	08/29/18 22:09	4
Chromium	83		1.8	0.19	mg/Kg		08/28/18 10:26	08/29/18 22:09	4
Cobalt	11		0.71	0.071	mg/Kg		08/28/18 10:26	08/29/18 22:09	4
Copper	34		5.3	2.5	mg/Kg		08/28/18 10:26	08/29/18 22:09	4
Lead	36		1.8	0.37	mg/Kg		08/28/18 10:26	08/29/18 22:09	4
Molybdenum	0.39	J	1.8	0.23	mg/Kg		08/28/18 10:26	08/29/18 22:09	4
Nickel	73		1.8	0.18	mg/Kg		08/28/18 10:26	08/29/18 22:09	4
Selenium	ND		3.5	0.53	mg/Kg		08/28/18 10:26	08/29/18 22:09	4
Silver	ND		0.88	0.18	mg/Kg		08/28/18 10:26	08/29/18 22:09	4
Thallium	ND		1.8	0.51	mg/Kg		08/28/18 10:26	08/29/18 22:09	4
Vanadium	38		1.8	0.24	mg/Kg		08/28/18 10:26	08/29/18 22:09	4
Zinc	61		5.3	2.2	mg/Kg		08/28/18 10:26	08/29/18 22:09	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.54		0.014	0.0021	mg/Kg		08/28/18 15:53	08/30/18 13:04	1

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-DE89-0.5-1

Date Collected: 08/24/18 11:20
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-17

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.5	0.83	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
Acetone	**29**	**J**	35	26	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
Benzene	ND		3.5	0.45	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
Dichlorobromomethane	ND		3.5	0.50	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
Bromobenzene	ND		3.5	0.55	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
Chlorobromomethane	ND		14	0.50	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
Bromoform	ND		3.5	1.4	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
Bromomethane	ND		6.9	0.55	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
2-Butanone (MEK)	ND		35	14	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
n-Butylbenzene	ND		3.5	0.69	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
sec-Butylbenzene	ND		3.5	0.50	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
tert-Butylbenzene	ND		3.5	0.50	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
Carbon disulfide	ND		3.5	1.4	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
Carbon tetrachloride	ND		3.5	0.43	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
Chlorobenzene	ND		3.5	0.48	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
Chloroethane	ND		6.9	0.39	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
Chloroform	ND		3.5	0.46	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
Chloromethane	ND		6.9	0.55	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
2-Chlorotoluene	ND		3.5	0.45	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
4-Chlorotoluene	ND		3.5	0.47	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
Chlorodibromomethane	ND		3.5	0.49	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
1,2-Dichlorobenzene	ND		3.5	0.47	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
1,3-Dichlorobenzene	ND		3.5	0.50	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
1,4-Dichlorobenzene	ND		3.5	0.49	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
1,3-Dichloropropane	ND		3.5	0.50	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
1,1-Dichloropropene	ND		3.5	0.48	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
1,2-Dibromo-3-Chloropropane	ND		6.9	1.2	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
Ethylene Dibromide	ND		3.5	0.99	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
Dibromomethane	ND		6.9	0.59	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
Dichlorodifluoromethane	ND		6.9	0.55	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
1,1-Dichloroethane	ND		3.5	0.47	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
1,2-Dichloroethane	ND		3.5	0.52	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
1,1-Dichloroethene	ND	*	3.5	0.43	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
cis-1,2-Dichloroethene	ND		3.5	0.47	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
trans-1,2-Dichloroethene	ND		3.5	0.52	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
1,2-Dichloropropane	ND		3.5	0.43	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
cis-1,3-Dichloropropene	ND		3.5	0.48	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
trans-1,3-Dichloropropene	ND		3.5	0.46	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
Ethylbenzene	ND		3.5	0.52	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
Hexachlorobutadiene	ND		3.5	0.62	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
2-Hexanone	ND		35	6.9	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
Isopropylbenzene	ND		3.5	0.47	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
4-Isopropyltoluene	ND		3.5	1.7	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
Methylene Chloride	ND		6.9	3.9	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
4-Methyl-2-pentanone (MIBK)	ND		35	6.9	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
Naphthalene	ND		6.9	1.0	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
N-Propylbenzene	ND		3.5	0.46	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
Styrene	ND		3.5	0.43	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
1,1,1,2-Tetrachloroethane	ND		3.5	0.52	ug/Kg		08/25/18 03:05	08/30/18 05:00	1

Client Sample ID: DG-DE89-0.5-1

Lab Sample ID: 720-88239-17

Date Collected: 08/24/18 11:20

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		3.5	0.52	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
Tetrachloroethene	ND		3.5	0.46	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
Toluene	**0.49**	**J**	3.5	0.49	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
1,2,3-Trichlorobenzene	ND		3.5	0.51	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
1,2,4-Trichlorobenzene	ND		3.5	0.49	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
1,1,1-Trichloroethane	ND		3.5	0.42	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
1,1,2-Trichloroethane	ND		3.5	0.48	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
Trichloroethene	ND		3.5	0.43	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
Trichlorofluoromethane	ND		3.5	0.39	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
1,2,3-Trichloropropane	ND		3.5	0.53	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.5	1.4	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
1,2,4-Trimethylbenzene	ND		3.5	1.1	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
1,3,5-Trimethylbenzene	ND		3.5	0.45	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
Vinyl acetate	ND		14	3.5	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
Vinyl chloride	ND		3.5	0.50	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
Xylenes, Total	ND		3.5	0.84	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
2,2-Dichloropropane	ND		3.5	1.4	ug/Kg		08/25/18 03:05	08/30/18 05:00	1
Gasoline Range Organics (GRO) -C4-C12	ND		170	69	ug/Kg		08/25/18 03:05	08/30/18 05:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*45 - 131*	*08/25/18 03:05*	*08/30/18 05:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*118*		*60 - 140*	*08/25/18 03:05*	*08/30/18 05:00*	*1*
Toluene-d8 (Surr)	*90*		*58 - 140*	*08/25/18 03:05*	*08/30/18 05:00*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.6	4.8	ug/Kg		08/29/18 15:27	09/01/18 18:12	1
Acenaphthene	ND		4.8	2.7	ug/Kg		08/29/18 15:27	09/01/18 18:12	1
Acenaphthylene	ND		4.8	2.3	ug/Kg		08/29/18 15:27	09/01/18 18:12	1
Anthracene	ND		4.8	1.9	ug/Kg		08/29/18 15:27	09/01/18 18:12	1
Benzo[a]anthracene	ND		4.8	1.4	ug/Kg		08/29/18 15:27	09/01/18 18:12	1
Benzo[a]pyrene	**2.1**	**J**	4.8	1.8	ug/Kg		08/29/18 15:27	09/01/18 18:12	1
Benzo[b]fluoranthene	**2.6**	**J**	4.8	2.0	ug/Kg		08/29/18 15:27	09/01/18 18:12	1
Benzo[g,h,i]perylene	ND		4.8	4.1	ug/Kg		08/29/18 15:27	09/01/18 18:12	1
Benzo[k]fluoranthene	ND		4.8	2.0	ug/Kg		08/29/18 15:27	09/01/18 18:12	1
Chrysene	**1.7**	**J**	4.8	1.3	ug/Kg		08/29/18 15:27	09/01/18 18:12	1
Dibenz(a,h)anthracene	ND		4.8	3.4	ug/Kg		08/29/18 15:27	09/01/18 18:12	1
Fluoranthene	**2.8**	**J**	4.8	1.3	ug/Kg		08/29/18 15:27	09/01/18 18:12	1
Fluorene	ND		4.8	2.1	ug/Kg		08/29/18 15:27	09/01/18 18:12	1
Indeno[1,2,3-cd]pyrene	ND		4.8	4.0	ug/Kg		08/29/18 15:27	09/01/18 18:12	1
Naphthalene	ND		4.8	3.4	ug/Kg		08/29/18 15:27	09/01/18 18:12	1
Phenanthrene	**2.2**	**J**	4.8	1.7	ug/Kg		08/29/18 15:27	09/01/18 18:12	1
Pyrene	**2.6**	**J**	4.8	1.6	ug/Kg		08/29/18 15:27	09/01/18 18:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*54*		*33 - 120*	*08/29/18 15:27*	*09/01/18 18:12*	*1*
Terphenyl-d14	*70*		*35 - 146*	*08/29/18 15:27*	*09/01/18 18:12*	*1*

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-DE89-0.5-1

Date Collected: 08/24/18 11:20
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-17

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	12000		2000	730	ug/Kg		08/29/18 13:41	08/31/18 20:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*104*		*40 - 130*	*08/29/18 13:41*	*08/31/18 20:14*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		51	23	ug/Kg		08/29/18 14:18	08/31/18 09:52	1
Aroclor-1221	ND		51	25	ug/Kg		08/29/18 14:18	08/31/18 09:52	1
Aroclor-1232	ND		51	24	ug/Kg		08/29/18 14:18	08/31/18 09:52	1
Aroclor-1242	ND		51	20	ug/Kg		08/29/18 14:18	08/31/18 09:52	1
Aroclor-1248	ND		51	25	ug/Kg		08/29/18 14:18	08/31/18 09:52	1
Aroclor-1254	ND		51	24	ug/Kg		08/29/18 14:18	08/31/18 09:52	1
Aroclor-1260	ND		51	23	ug/Kg		08/29/18 14:18	08/31/18 09:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*71*		*14 - 128*	*08/29/18 14:18*	*08/31/18 09:52*	*1*
DCB Decachlorobiphenyl	*63*		*10 - 132*	*08/29/18 14:18*	*08/31/18 09:52*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.57	J B	1.3	0.21	mg/Kg		08/28/18 10:26	08/29/18 22:14	4
Arsenic	0.25	J	2.6	0.22	mg/Kg		08/28/18 10:26	08/29/18 22:14	4
Barium	8.2	B	1.3	0.18	mg/Kg		08/28/18 10:26	08/29/18 22:14	4
Beryllium	ND		0.26	0.083	mg/Kg		08/28/18 10:26	08/29/18 22:14	4
Cadmium	0.070	J	0.32	0.032	mg/Kg		08/28/18 10:26	08/29/18 22:14	4
Chromium	8.3		1.3	0.14	mg/Kg		08/28/18 10:26	08/29/18 22:14	4
Cobalt	15		0.51	0.051	mg/Kg		08/28/18 10:26	08/29/18 22:14	4
Copper	120		3.8	1.8	mg/Kg		08/28/18 10:26	08/29/18 22:14	4
Lead	13		1.3	0.27	mg/Kg		08/28/18 10:26	08/29/18 22:14	4
Molybdenum	0.41	J	1.3	0.16	mg/Kg		08/28/18 10:26	08/29/18 22:14	4
Nickel	4.5		1.3	0.13	mg/Kg		08/28/18 10:26	08/29/18 22:14	4
Selenium	ND		2.6	0.38	mg/Kg		08/28/18 10:26	08/29/18 22:14	4
Silver	0.36	J	0.64	0.13	mg/Kg		08/28/18 10:26	08/29/18 22:14	4
Thallium	0.70	J	1.3	0.37	mg/Kg		08/28/18 10:26	08/29/18 22:14	4
Vanadium	110		1.3	0.17	mg/Kg		08/28/18 10:26	08/29/18 22:14	4
Zinc	71		3.8	1.6	mg/Kg		08/28/18 10:26	08/29/18 22:14	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.047		0.016	0.0024	mg/Kg		08/28/18 15:53	08/30/18 13:06	1

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-DE89-3.5-4

Date Collected: 08/24/18 11:20
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-18

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.6	1.1	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
Acetone	ND		46	35	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
Benzene	ND		4.6	0.60	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
Dichlorobromomethane	ND		4.6	0.67	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
Bromobenzene	ND		4.6	0.73	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
Chlorobromomethane	ND		19	0.67	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
Bromoform	ND		4.6	1.9	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
Bromomethane	ND		9.3	0.73	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
2-Butanone (MEK)	ND		46	19	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
n-Butylbenzene	ND		4.6	0.93	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
sec-Butylbenzene	ND		4.6	0.67	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
tert-Butylbenzene	ND		4.6	0.68	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
Carbon disulfide	ND		4.6	1.9	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
Carbon tetrachloride	ND		4.6	0.58	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
Chlorobenzene	ND		4.6	0.64	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
Chloroethane	ND		9.3	0.52	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
Chloroform	ND		4.6	0.61	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
Chloromethane	ND		9.3	0.73	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
2-Chlorotoluene	ND		4.6	0.60	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
4-Chlorotoluene	ND		4.6	0.63	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
Chlorodibromomethane	ND		4.6	0.66	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
1,2-Dichlorobenzene	ND		4.6	0.63	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
1,3-Dichlorobenzene	ND		4.6	0.67	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
1,4-Dichlorobenzene	ND		4.6	0.66	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
1,3-Dichloropropane	ND		4.6	0.68	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
1,1-Dichloropropene	ND		4.6	0.64	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
1,2-Dibromo-3-Chloropropane	ND		9.3	1.6	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
Ethylene Dibromide	ND		4.6	1.3	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
Dibromomethane	ND		9.3	0.80	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
Dichlorodifluoromethane	ND		9.3	0.73	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
1,1-Dichloroethane	ND		4.6	0.63	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
1,2-Dichloroethane	ND		4.6	0.71	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
1,1-Dichloroethene	ND	*	4.6	0.58	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
cis-1,2-Dichloroethene	ND		4.6	0.63	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
trans-1,2-Dichloroethene	ND		4.6	0.70	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
1,2-Dichloropropane	ND		4.6	0.58	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
cis-1,3-Dichloropropene	ND		4.6	0.64	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
trans-1,3-Dichloropropene	ND		4.6	0.62	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
Ethylbenzene	ND		4.6	0.70	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
Hexachlorobutadiene	ND		4.6	0.83	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
2-Hexanone	ND		46	9.3	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
Isopropylbenzene	ND		4.6	0.63	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
4-Isopropyltoluene	ND		4.6	2.3	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
Methylene Chloride	ND		9.3	5.2	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
4-Methyl-2-pentanone (MIBK)	ND		46	9.3	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
Naphthalene	ND		9.3	1.4	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
N-Propylbenzene	ND		4.6	0.61	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
Styrene	ND		4.6	0.58	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
1,1,1,2-Tetrachloroethane	ND		4.6	0.71	ug/Kg		09/04/18 10:40	09/04/18 11:54	1

Client Sample ID: DG-DE89-3.5-4

Lab Sample ID: 720-88239-18

Date Collected: 08/24/18 11:20

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.6	0.70	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
Tetrachloroethene	ND		4.6	0.62	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
Toluene	ND		4.6	0.66	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
1,2,3-Trichlorobenzene	ND		4.6	0.69	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
1,2,4-Trichlorobenzene	ND		4.6	0.66	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
1,1,1-Trichloroethane	ND		4.6	0.57	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
1,1,2-Trichloroethane	ND		4.6	0.65	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
Trichloroethene	ND		4.6	0.58	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
Trichlorofluoromethane	ND		4.6	0.52	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
1,2,3-Trichloropropane	ND		4.6	0.71	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.6	1.9	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
1,2,4-Trimethylbenzene	ND		4.6	1.5	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
1,3,5-Trimethylbenzene	ND		4.6	0.60	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
Vinyl acetate	ND		19	4.6	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
Vinyl chloride	ND		4.6	0.68	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
Xylenes, Total	ND		4.6	1.1	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
2,2-Dichloropropane	ND		4.6	1.9	ug/Kg		09/04/18 10:40	09/04/18 11:54	1
Gasoline Range Organics (GRO) -C4-C12	ND		230	93	ug/Kg		09/04/18 10:40	09/04/18 11:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*45 - 131*	*09/04/18 10:40*	*09/04/18 11:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*60 - 140*	*09/04/18 10:40*	*09/04/18 11:54*	*1*
Toluene-d8 (Surr)	*94*		*58 - 140*	*09/04/18 10:40*	*09/04/18 11:54*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**320**		48	24	ug/Kg		08/30/18 10:18	09/02/18 17:15	5
Acenaphthene	**23**	**J**	24	13	ug/Kg		08/30/18 10:18	09/02/18 17:15	5
Acenaphthylene	**23**	**J**	24	11	ug/Kg		08/30/18 10:18	09/02/18 17:15	5
Anthracene	**93**		24	9.6	ug/Kg		08/30/18 10:18	09/02/18 17:15	5
Benzo[a]anthracene	**120**		24	7.2	ug/Kg		08/30/18 10:18	09/02/18 17:15	5
Benzo[a]pyrene	**140**		24	9.1	ug/Kg		08/30/18 10:18	09/02/18 17:15	5
Benzo[b]fluoranthene	**240**		24	10	ug/Kg		08/30/18 10:18	09/02/18 17:15	5
Benzo[g,h,i]perylene	**51**		24	21	ug/Kg		08/30/18 10:18	09/02/18 17:15	5
Benzo[k]fluoranthene	**66**		24	10	ug/Kg		08/30/18 10:18	09/02/18 17:15	5
Chrysene	**240**		24	6.7	ug/Kg		08/30/18 10:18	09/02/18 17:15	5
Dibenz(a,h)anthracene	**26**		24	17	ug/Kg		08/30/18 10:18	09/02/18 17:15	5
Fluoranthene	**190**		24	6.7	ug/Kg		08/30/18 10:18	09/02/18 17:15	5
Fluorene	**68**		24	11	ug/Kg		08/30/18 10:18	09/02/18 17:15	5
Indeno[1,2,3-cd]pyrene	**39**		24	20	ug/Kg		08/30/18 10:18	09/02/18 17:15	5
Naphthalene	**240**		24	17	ug/Kg		08/30/18 10:18	09/02/18 17:15	5
Phenanthrene	**440**		24	8.6	ug/Kg		08/30/18 10:18	09/02/18 17:15	5
Pyrene	**240**		24	8.1	ug/Kg		08/30/18 10:18	09/02/18 17:15	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*42*		*33 - 120*	*08/30/18 10:18*	*09/02/18 17:15*	*5*
Terphenyl-d14	*54*		*35 - 146*	*08/30/18 10:18*	*09/02/18 17:15*	*5*

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-DE89-3.5-4

Date Collected: 08/24/18 11:20
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-18

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	910000		20000	7400	ug/Kg		08/29/18 13:41	08/31/18 15:30	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*0*	*D X*	*40 - 130*	*08/29/18 13:41*	*08/31/18 15:30*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		49	22	ug/Kg		08/29/18 14:18	08/31/18 10:11	1
Aroclor-1221	ND		49	24	ug/Kg		08/29/18 14:18	08/31/18 10:11	1
Aroclor-1232	ND		49	23	ug/Kg		08/29/18 14:18	08/31/18 10:11	1
Aroclor-1242	ND		49	19	ug/Kg		08/29/18 14:18	08/31/18 10:11	1
Aroclor-1248	ND		49	24	ug/Kg		08/29/18 14:18	08/31/18 10:11	1
Aroclor-1254	ND		49	23	ug/Kg		08/29/18 14:18	08/31/18 10:11	1
Aroclor-1260	ND		49	22	ug/Kg		08/29/18 14:18	08/31/18 10:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*65*		*14 - 128*	*08/29/18 14:18*	*08/31/18 10:11*	*1*
DCB Decachlorobiphenyl	*55*		*10 - 132*	*08/29/18 14:18*	*08/31/18 10:11*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	21	B	3.6	0.60	mg/Kg		08/28/18 10:26	08/29/18 22:28	10
Arsenic	34		7.2	0.61	mg/Kg		08/28/18 10:26	08/29/18 22:28	10
Barium	430	B	3.6	0.51	mg/Kg		08/28/18 10:26	08/29/18 22:28	10
Beryllium	ND		0.72	0.23	mg/Kg		08/28/18 10:26	08/29/18 22:28	10
Cadmium	5.9		0.90	0.089	mg/Kg		08/28/18 10:26	08/29/18 22:28	10
Chromium	61		3.6	0.38	mg/Kg		08/28/18 10:26	08/29/18 22:28	10
Cobalt	12		1.4	0.14	mg/Kg		08/28/18 10:26	08/29/18 22:28	10
Copper	750		11	5.1	mg/Kg		08/28/18 10:26	08/29/18 22:28	10
Lead	6100		3.6	0.76	mg/Kg		08/28/18 10:26	08/29/18 22:28	10
Molybdenum	0.54	J	3.6	0.46	mg/Kg		08/28/18 10:26	08/29/18 22:28	10
Nickel	30		3.6	0.37	mg/Kg		08/28/18 10:26	08/29/18 22:28	10
Selenium	ND		7.2	1.1	mg/Kg		08/28/18 10:26	08/29/18 22:28	10
Silver	2.9		1.8	0.36	mg/Kg		08/28/18 10:26	08/29/18 22:28	10
Thallium	ND		3.6	1.0	mg/Kg		08/28/18 10:26	08/29/18 22:28	10
Vanadium	51		3.6	0.49	mg/Kg		08/28/18 10:26	08/29/18 22:28	10
Zinc	2100		11	4.6	mg/Kg		08/28/18 10:26	08/29/18 22:28	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.15		0.015	0.0021	mg/Kg		08/29/18 21:54	08/30/18 22:08	1

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-DE89-9.5-10

Lab Sample ID: 720-88239-19

Date Collected: 08/24/18 11:20
Matrix: Solid
Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.6	0.88	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
Acetone	ND		36	28	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
Benzene	ND		3.6	0.47	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
Dichlorobromomethane	ND		3.6	0.53	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
Bromobenzene	ND	*	3.6	0.58	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
Chlorobromomethane	ND		15	0.53	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
Bromoform	ND	*	3.6	1.5	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
Bromomethane	ND		7.3	0.58	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
2-Butanone (MEK)	ND		36	15	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
n-Butylbenzene	ND	*	3.6	0.73	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
sec-Butylbenzene	ND	*	3.6	0.53	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
tert-Butylbenzene	ND	*	3.6	0.53	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
Carbon disulfide	ND		3.6	1.5	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
Carbon tetrachloride	ND		3.6	0.45	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
Chlorobenzene	ND	*	3.6	0.50	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
Chloroethane	ND		7.3	0.41	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
Chloroform	ND		3.6	0.48	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
Chloromethane	ND		7.3	0.58	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
2-Chlorotoluene	ND	*	3.6	0.47	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
4-Chlorotoluene	ND	*	3.6	0.50	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
Chlorodibromomethane	ND		3.6	0.52	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
1,2-Dichlorobenzene	ND	*	3.6	0.50	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
1,3-Dichlorobenzene	ND	*	3.6	0.53	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
1,4-Dichlorobenzene	ND	*	3.6	0.52	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
1,3-Dichloropropane	ND		3.6	0.53	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
1,1-Dichloropropene	ND		3.6	0.50	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
1,2-Dibromo-3-Chloropropane	ND	*	7.3	1.2	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
Ethylene Dibromide	ND		3.6	1.0	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
Dibromomethane	ND		7.3	0.63	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
Dichlorodifluoromethane	ND		7.3	0.58	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
1,1-Dichloroethane	ND		3.6	0.50	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
1,2-Dichloroethane	ND		3.6	0.55	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
1,1-Dichloroethene	ND	*	3.6	0.45	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
cis-1,2-Dichloroethene	ND		3.6	0.50	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
trans-1,2-Dichloroethene	ND		3.6	0.55	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
1,2-Dichloropropane	ND		3.6	0.46	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
cis-1,3-Dichloropropene	ND		3.6	0.50	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
trans-1,3-Dichloropropene	ND		3.6	0.49	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
Ethylbenzene	ND	*	3.6	0.55	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
Hexachlorobutadiene	ND	*	3.6	0.66	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
2-Hexanone	ND		36	7.3	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
Isopropylbenzene	ND	*	3.6	0.50	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
4-Isopropyltoluene	ND	*	3.6	1.8	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
Methylene Chloride	ND		7.3	4.1	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
4-Methyl-2-pentanone (MIBK)	ND		36	7.3	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
Naphthalene	ND	*	7.3	1.1	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
N-Propylbenzene	ND	*	3.6	0.48	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
Styrene	ND	*	3.6	0.46	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
1,1,1,2-Tetrachloroethane	ND	*	3.6	0.55	ug/Kg		08/25/18 03:05	08/30/18 15:15	1

Client Sample ID: DG-DE89-9.5-10

Lab Sample ID: 720-88239-19

Date Collected: 08/24/18 11:20

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	3.6	0.55	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
Tetrachloroethene	ND		3.6	0.49	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
Toluene	ND	*	3.6	0.52	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
1,2,3-Trichlorobenzene	ND	*	3.6	0.54	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
1,2,4-Trichlorobenzene	ND	*	3.6	0.52	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
1,1,1-Trichloroethane	ND		3.6	0.45	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
1,1,2-Trichloroethane	ND		3.6	0.51	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
Trichloroethene	ND		3.6	0.46	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
Trichlorofluoromethane	ND		3.6	0.41	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
1,2,3-Trichloropropane	ND	*	3.6	0.56	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	3.6	1.5	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
1,2,4-Trimethylbenzene	ND	*	3.6	1.2	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
1,3,5-Trimethylbenzene	ND	*	3.6	0.47	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
Vinyl acetate	ND		15	3.6	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
Vinyl chloride	ND		3.6	0.53	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
Xylenes, Total	ND		3.6	0.89	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
2,2-Dichloropropane	ND		3.6	1.5	ug/Kg		08/25/18 03:05	08/30/18 15:15	1
Gasoline Range Organics (GRO) -C4-C12	ND		180	73	ug/Kg		08/25/18 03:05	08/30/18 15:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*64*	*	*45 - 131*	*08/25/18 03:05*	*08/30/18 15:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*60 - 140*	*08/25/18 03:05*	*08/30/18 15:15*	*1*
Toluene-d8 (Surr)	*81*		*58 - 140*	*08/25/18 03:05*	*08/30/18 15:15*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**190**		9.6	4.8	ug/Kg		09/04/18 20:14	09/06/18 06:07	1
Acenaphthene	**5.7**		4.8	2.7	ug/Kg		09/04/18 20:14	09/06/18 06:07	1
Acenaphthylene	ND		4.8	2.3	ug/Kg		09/04/18 20:14	09/06/18 06:07	1
Anthracene	**6.0**		4.8	1.9	ug/Kg		09/04/18 20:14	09/06/18 06:07	1
Benzo[a]anthracene	**14**		4.8	1.4	ug/Kg		09/04/18 20:14	09/06/18 06:07	1
Benzo[a]pyrene	**11**		4.8	1.8	ug/Kg		09/04/18 20:14	09/06/18 06:07	1
Benzo[b]fluoranthene	**19**		4.8	2.0	ug/Kg		09/04/18 20:14	09/06/18 06:07	1
Benzo[g,h,i]perylene	**10**		4.8	4.1	ug/Kg		09/04/18 20:14	09/06/18 06:07	1
Benzo[k]fluoranthene	**3.7**	**J**	4.8	2.0	ug/Kg		09/04/18 20:14	09/06/18 06:07	1
Chrysene	**38**		4.8	1.3	ug/Kg		09/04/18 20:14	09/06/18 06:07	1
Dibenz(a,h)anthracene	**6.1**		4.8	3.4	ug/Kg		09/04/18 20:14	09/06/18 06:07	1
Fluoranthene	**13**		4.8	1.3	ug/Kg		09/04/18 20:14	09/06/18 06:07	1
Fluorene	**92**		4.8	2.1	ug/Kg		09/04/18 20:14	09/06/18 06:07	1
Indeno[1,2,3-cd]pyrene	**4.6**	**J**	4.8	4.0	ug/Kg		09/04/18 20:14	09/06/18 06:07	1
Naphthalene	**51**		4.8	3.4	ug/Kg		09/04/18 20:14	09/06/18 06:07	1
Phenanthrene	**150**		4.8	1.7	ug/Kg		09/04/18 20:14	09/06/18 06:07	1
Pyrene	**37**		4.8	1.6	ug/Kg		09/04/18 20:14	09/06/18 06:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*65*		*33 - 120*	*09/04/18 20:14*	*09/06/18 06:07*	*1*
Terphenyl-d14	*85*		*35 - 146*	*09/04/18 20:14*	*09/06/18 06:07*	*1*

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-DE89-9.5-10

Lab Sample ID: 720-88239-19

Date Collected: 08/24/18 11:20
Matrix: Solid
Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	17000		1900	720	ug/Kg		08/29/18 09:03	08/31/18 21:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*102*		*40 - 130*	*08/29/18 09:03*	*08/31/18 21:03*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/29/18 14:18	08/31/18 10:30	1
Aroclor-1221	ND		50	24	ug/Kg		08/29/18 14:18	08/31/18 10:30	1
Aroclor-1232	ND		50	23	ug/Kg		08/29/18 14:18	08/31/18 10:30	1
Aroclor-1242	ND		50	19	ug/Kg		08/29/18 14:18	08/31/18 10:30	1
Aroclor-1248	ND		50	24	ug/Kg		08/29/18 14:18	08/31/18 10:30	1
Aroclor-1254	ND		50	23	ug/Kg		08/29/18 14:18	08/31/18 10:30	1
Aroclor-1260	ND		50	22	ug/Kg		08/29/18 14:18	08/31/18 10:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*71*		*14 - 128*	*08/29/18 14:18*	*08/31/18 10:30*	*1*
DCB Decachlorobiphenyl	*69*		*10 - 132*	*08/29/18 14:18*	*08/31/18 10:30*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.9	B	1.2	0.20	mg/Kg		08/28/18 10:26	08/29/18 22:33	4
Arsenic	6.8		2.4	0.21	mg/Kg		08/28/18 10:26	08/29/18 22:33	4
Barium	160	B	1.2	0.17	mg/Kg		08/28/18 10:26	08/29/18 22:33	4
Beryllium	0.42		0.24	0.079	mg/Kg		08/28/18 10:26	08/29/18 22:33	4
Cadmium	0.059	J	0.30	0.030	mg/Kg		08/28/18 10:26	08/29/18 22:33	4
Chromium	180		1.2	0.13	mg/Kg		08/28/18 10:26	08/29/18 22:33	4
Cobalt	20		0.49	0.049	mg/Kg		08/28/18 10:26	08/29/18 22:33	4
Copper	44		3.7	1.7	mg/Kg		08/28/18 10:26	08/29/18 22:33	4
Lead	8.2		1.2	0.26	mg/Kg		08/28/18 10:26	08/29/18 22:33	4
Molybdenum	0.35	J	1.2	0.16	mg/Kg		08/28/18 10:26	08/29/18 22:33	4
Nickel	230		1.2	0.12	mg/Kg		08/28/18 10:26	08/29/18 22:33	4
Selenium	ND		2.4	0.37	mg/Kg		08/28/18 10:26	08/29/18 22:33	4
Silver	0.31	J	0.61	0.12	mg/Kg		08/28/18 10:26	08/29/18 22:33	4
Thallium	ND		1.2	0.35	mg/Kg		08/28/18 10:26	08/29/18 22:33	4
Vanadium	63		1.2	0.17	mg/Kg		08/28/18 10:26	08/29/18 22:33	4
Zinc	78		3.7	1.5	mg/Kg		08/28/18 10:26	08/29/18 22:33	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.096		0.016	0.0023	mg/Kg		08/29/18 21:54	08/30/18 22:11	1

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-B9S-9.5-10

Lab Sample ID: 720-88239-20

Date Collected: 08/24/18 10:20
Matrix: Solid
Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.0	0.97	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
Acetone	**79**		40	31	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
Benzene	ND		4.0	0.52	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
Dichlorobromomethane	ND		4.0	0.58	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
Bromobenzene	ND		4.0	0.64	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
Chlorobromomethane	ND		16	0.58	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
Bromoform	ND		4.0	1.6	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
Bromomethane	ND		8.0	0.64	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
2-Butanone (MEK)	ND		40	17	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
n-Butylbenzene	ND		4.0	0.80	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
sec-Butylbenzene	ND		4.0	0.58	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
tert-Butylbenzene	ND		4.0	0.59	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
Carbon disulfide	ND	*	4.0	1.6	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
Carbon tetrachloride	ND		4.0	0.50	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
Chlorobenzene	ND		4.0	0.56	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
Chloroethane	ND		8.0	0.45	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
Chloroform	ND		4.0	0.53	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
Chloromethane	ND		8.0	0.64	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
2-Chlorotoluene	ND		4.0	0.52	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
4-Chlorotoluene	ND		4.0	0.55	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
Chlorodibromomethane	ND		4.0	0.57	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
1,2-Dichlorobenzene	ND		4.0	0.55	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
1,3-Dichlorobenzene	ND		4.0	0.58	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
1,4-Dichlorobenzene	ND		4.0	0.57	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
1,3-Dichloropropane	ND		4.0	0.59	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
1,1-Dichloropropene	ND		4.0	0.56	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
1,2-Dibromo-3-Chloropropane	ND		8.0	1.4	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
Ethylene Dibromide	ND		4.0	1.2	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
Dibromomethane	ND		8.0	0.69	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
Dichlorodifluoromethane	ND		8.0	0.64	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
1,1-Dichloroethane	ND		4.0	0.55	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
1,2-Dichloroethane	ND		4.0	0.61	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
1,1-Dichloroethene	ND	*	4.0	0.50	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
cis-1,2-Dichloroethene	ND		4.0	0.55	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
trans-1,2-Dichloroethene	ND		4.0	0.60	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
1,2-Dichloropropane	ND		4.0	0.51	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
cis-1,3-Dichloropropene	ND		4.0	0.56	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
trans-1,3-Dichloropropene	ND		4.0	0.54	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
Ethylbenzene	ND		4.0	0.60	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
Hexachlorobutadiene	ND		4.0	0.72	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
2-Hexanone	ND		40	8.0	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
Isopropylbenzene	ND		4.0	0.55	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
4-Isopropyltoluene	ND		4.0	2.0	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
Methylene Chloride	ND		8.0	4.5	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
4-Methyl-2-pentanone (MIBK)	ND		40	8.0	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
Naphthalene	ND		8.0	1.2	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
N-Propylbenzene	ND		4.0	0.53	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
Styrene	ND		4.0	0.51	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
1,1,1,2-Tetrachloroethane	ND		4.0	0.61	ug/Kg		08/25/18 03:05	08/29/18 22:12	1

Client Sample ID: DG-B9S-9.5-10

Lab Sample ID: 720-88239-20

Date Collected: 08/24/18 10:20

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.0	0.60	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
Tetrachloroethene	ND		4.0	0.54	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
Toluene	ND		4.0	0.57	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
1,2,3-Trichlorobenzene	ND		4.0	0.60	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
1,2,4-Trichlorobenzene	ND		4.0	0.57	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
1,1,1-Trichloroethane	ND		4.0	0.49	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
1,1,2-Trichloroethane	ND		4.0	0.56	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
Trichloroethene	ND		4.0	0.51	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
Trichlorofluoromethane	ND		4.0	0.45	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
1,2,3-Trichloropropane	ND		4.0	0.62	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.7	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
1,2,4-Trimethylbenzene	ND		4.0	1.3	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
1,3,5-Trimethylbenzene	ND		4.0	0.52	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
Vinyl acetate	ND		16	4.0	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
Vinyl chloride	ND		4.0	0.59	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
Xylenes, Total	ND		4.0	0.98	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
2,2-Dichloropropane	ND		4.0	1.6	ug/Kg		08/25/18 03:05	08/29/18 22:12	1
Gasoline Range Organics (GRO) -C4-C12	ND		200	80	ug/Kg		08/25/18 03:05	08/29/18 22:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*87*		*45 - 131*	*08/25/18 03:05*	*08/29/18 22:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*60 - 140*	*08/25/18 03:05*	*08/29/18 22:12*	*1*
Toluene-d8 (Surr)	*96*		*58 - 140*	*08/25/18 03:05*	*08/29/18 22:12*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.6	4.8	ug/Kg		08/30/18 10:18	09/02/18 00:55	1
Acenaphthene	ND		4.8	2.7	ug/Kg		08/30/18 10:18	09/02/18 00:55	1
Acenaphthylene	ND		4.8	2.3	ug/Kg		08/30/18 10:18	09/02/18 00:55	1
Anthracene	ND		4.8	1.9	ug/Kg		08/30/18 10:18	09/02/18 00:55	1
Benzo[a]anthracene	ND		4.8	1.4	ug/Kg		08/30/18 10:18	09/02/18 00:55	1
Benzo[a]pyrene	**4.5**	**J**	4.8	1.8	ug/Kg		08/30/18 10:18	09/02/18 00:55	1
Benzo[b]fluoranthene	**7.9**		4.8	2.0	ug/Kg		08/30/18 10:18	09/02/18 00:55	1
Benzo[g,h,i]perylene	ND		4.8	4.1	ug/Kg		08/30/18 10:18	09/02/18 00:55	1
Benzo[k]fluoranthene	**3.3**	**J**	4.8	2.0	ug/Kg		08/30/18 10:18	09/02/18 00:55	1
Chrysene	**3.9**	**J**	4.8	1.3	ug/Kg		08/30/18 10:18	09/02/18 00:55	1
Dibenz(a,h)anthracene	ND		4.8	3.3	ug/Kg		08/30/18 10:18	09/02/18 00:55	1
Fluoranthene	**6.8**		4.8	1.3	ug/Kg		08/30/18 10:18	09/02/18 00:55	1
Fluorene	ND		4.8	2.1	ug/Kg		08/30/18 10:18	09/02/18 00:55	1
Indeno[1,2,3-cd]pyrene	ND		4.8	4.0	ug/Kg		08/30/18 10:18	09/02/18 00:55	1
Naphthalene	ND		4.8	3.3	ug/Kg		08/30/18 10:18	09/02/18 00:55	1
Phenanthrene	**4.2**	**J**	4.8	1.7	ug/Kg		08/30/18 10:18	09/02/18 00:55	1
Pyrene	**7.3**		4.8	1.6	ug/Kg		08/30/18 10:18	09/02/18 00:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*44*		*33 - 120*	*08/30/18 10:18*	*09/02/18 00:55*	*1*
Terphenyl-d14	*69*		*35 - 146*	*08/30/18 10:18*	*09/02/18 00:55*	*1*

Client Sample Results

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-B9S-9.5-10

Date Collected: 08/24/18 10:20
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88239-20

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	5600		1900	720	ug/Kg		08/29/18 13:41	08/31/18 20:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*100*		*40 - 130*	*08/29/18 13:41*	*08/31/18 20:38*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.61	ug/Kg		08/29/18 17:11	09/03/18 16:48	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/29/18 17:11	09/03/18 16:48	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/29/18 17:11	09/03/18 16:48	1
Aldrin	ND		2.0	0.50	ug/Kg		08/29/18 17:11	09/03/18 16:48	1
alpha-BHC	ND		2.0	0.55	ug/Kg		08/29/18 17:11	09/03/18 16:48	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/29/18 17:11	09/03/18 16:48	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/29/18 17:11	09/03/18 16:48	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/29/18 17:11	09/03/18 16:48	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/29/18 17:11	09/03/18 16:48	1
Dieldrin	ND		2.0	0.59	ug/Kg		08/29/18 17:11	09/03/18 16:48	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/29/18 17:11	09/03/18 16:48	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/29/18 17:11	09/03/18 16:48	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/29/18 17:11	09/03/18 16:48	1
Endrin	ND		2.0	0.46	ug/Kg		08/29/18 17:11	09/03/18 16:48	1
Endrin aldehyde	ND		2.0	0.63	ug/Kg		08/29/18 17:11	09/03/18 16:48	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/29/18 17:11	09/03/18 16:48	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		08/29/18 17:11	09/03/18 16:48	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/29/18 17:11	09/03/18 16:48	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/29/18 17:11	09/03/18 16:48	1
Methoxychlor	ND		2.0	0.68	ug/Kg		08/29/18 17:11	09/03/18 16:48	1
Toxaphene	ND		40	6.8	ug/Kg		08/29/18 17:11	09/03/18 16:48	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/29/18 17:11	09/03/18 16:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*86*		*21 - 136*	*08/29/18 17:11*	*09/03/18 16:48*	*1*
Tetrachloro-m-xylene	*72*		*21 - 145*	*08/29/18 17:11*	*09/03/18 16:48*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		52	23	ug/Kg		09/01/18 08:09	09/02/18 18:48	1
Aroclor-1221	ND		52	25	ug/Kg		09/01/18 08:09	09/02/18 18:48	1
Aroclor-1232	ND		52	24	ug/Kg		09/01/18 08:09	09/02/18 18:48	1
Aroclor-1242	ND		52	20	ug/Kg		09/01/18 08:09	09/02/18 18:48	1
Aroclor-1248	ND		52	25	ug/Kg		09/01/18 08:09	09/02/18 18:48	1
Aroclor-1254	ND		52	24	ug/Kg		09/01/18 08:09	09/02/18 18:48	1
Aroclor-1260	ND		52	23	ug/Kg		09/01/18 08:09	09/02/18 18:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*80*		*14 - 128*	*09/01/18 08:09*	*09/02/18 18:48*	*1*
DCB Decachlorobiphenyl	*73*		*10 - 132*	*09/01/18 08:09*	*09/02/18 18:48*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.39	J	1.1	0.18	mg/Kg		08/29/18 15:55	08/30/18 16:37	4

Client Sample ID: DG-B9S-9.5-10

Lab Sample ID: 720-88239-20

Date Collected: 08/24/18 10:20

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.8	J	2.2	0.18	mg/Kg		08/29/18 15:55	08/30/18 16:37	4
Barium	56		1.1	0.15	mg/Kg		08/29/18 15:55	08/30/18 16:37	4
Beryllium	0.075	J	0.22	0.071	mg/Kg		08/29/18 15:55	08/30/18 16:37	4
Cadmium	ND		0.27	0.027	mg/Kg		08/29/18 15:55	08/30/18 16:37	4
Chromium	34		1.1	0.12	mg/Kg		08/29/18 15:55	08/30/18 16:37	4
Cobalt	5.5		0.43	0.043	mg/Kg		08/29/18 15:55	08/30/18 16:37	4
Copper	7.4		3.3	1.5	mg/Kg		08/29/18 15:55	08/30/18 16:37	4
Lead	5.5		1.1	0.23	mg/Kg		08/29/18 15:55	08/30/18 16:37	4
Molybdenum	ND		1.1	0.14	mg/Kg		08/29/18 15:55	08/30/18 16:37	4
Nickel	20		1.1	0.11	mg/Kg		08/29/18 15:55	08/30/18 16:37	4
Selenium	ND		2.2	0.33	mg/Kg		08/29/18 15:55	08/30/18 16:37	4
Silver	ND		0.54	0.11	mg/Kg		08/29/18 15:55	08/30/18 16:37	4
Thallium	ND		1.1	0.32	mg/Kg		08/29/18 15:55	08/30/18 16:37	4
Vanadium	26		1.1	0.15	mg/Kg		08/29/18 15:55	08/30/18 16:37	4
Zinc	23		3.3	1.4	mg/Kg		08/29/18 15:55	08/30/18 16:37	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.072		0.017	0.0025	mg/Kg		08/29/18 21:54	08/30/18 22:18	1

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-C7S-0.5-1 Lab Sample ID: 720-88239-1

Matrix: Solid Lab File ID: FID2000028.D

Analysis Method: 8015B Date Collected: 08/24/2018 07:50

Extraction Method: 3546 Date Extracted: 08/28/2018 11:24

Sample wt/vol: 15.61(g) Date Analyzed: 08/30/2018 23:43

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250569 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	130000		1900	720

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	76		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000028.D
Lims ID: 720-88239-D-1-A
Client ID: DG-C7S--0.5-1
Sample Type: Client
Inject. Date: 30-Aug-2018 23:43:00 ALS Bottle#: 78 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053574-028
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\DRO6_B.m
Limit Group: DRO
Last Update: 31-Aug-2018 14:07:43 Calib Date: 30-Aug-2018 10:14:10
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 14:07:43

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.310			ND	
23 n-Decane	2.133	2.172	-0.039	14572	NC	
A 1 C9-C13	2.778	(1.310-4.246)		7058130	3.24	M
A 21 Stoddard Solvent	2.778	(1.310-4.246)		7058130	NC	M
A 57 C10-C12	2.901	(2.172-3.631)		3546099	9.31	M
24 Dodecane	3.621	3.631	-0.010	129664	NC	M
A 3 C9 - C17	3.809	(1.310-6.309)		58991134	25.8	M
A 60 C10-C16	4.002	(2.172-5.833)		31655810	15.6	M
A 47 C9 - C18	4.031	(1.310-6.752)		92873496	49.0	M
A 25 C9-C19	4.243	(1.310-7.176)		258592560	112.3	M
A 15 Kerosene	4.243	(1.310-7.176)		258592560	136.2	M
26 C13	4.180	4.246	-0.066	531090	NC	M
$ 27 n-Decanoic Acid (Surr)		4.639			ND	MU
A 59 C12-C16	4.732	(3.631-5.833)		28239375	23.3	M
A 61 C10-C20	4.878	(2.172-7.583)		258576152	153.7	M
A 28 C9-C24	5.181	(1.310-9.053)		1064493555	610.0	M
A 29 C9-C25	5.348	(1.310-9.386)		1297386833	741.9	M
A 54 C10-C23	5.440	(2.172-8.707)		936028742	537.3	M
A 4 C10-C24	5.612	(2.172-9.053)		1064477147	610.0	M
A 16 C10-C25	5.779	(2.172-9.386)		1297370425	741.9	M
45 Hexadecane	5.842	5.833	0.009	8473738	NC	M
A 14 C10-C26	5.940	(2.172-9.707)		1374017592	785.3	M
A 67 C12-C22	5.989	(3.631-8.348)		789544390	454.4	M
A 32 C10-C28	6.245	(2.172-10.317)		1792972879	1022.5	M
A 5 Diesel	6.245	(2.172-10.317)		1792972879	1022.5	M
A 12 Unknown Hydrocarbons	6.245	(2.172-10.317)		1792972879	NC	M
A 30 C13-C22	6.297	(4.246-8.348)		785919103	452.3	M
44 Heptadecane	6.337	6.309	0.028	27572969	NC	M
A 31 C12-C24	6.342	(3.631-9.053)		1061060712	608.1	M
49 n-Octadecane	6.795	6.752	0.043	69185838	NC	M
A 9 Crude Oil Range Organics (	6.859	(1.310-12.408)		3376665881	NC	M
A 11 Bunker Range Organics (C9-	6.859	(1.310-12.408)		3376665881	NC	M

Report Date: 31-Aug-2018 14:07:44 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000028.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.859	(1.310-12.408)		3376665881	1599.5	M
33 C19	7.168	7.176	-0.008	96533226	NC	M
A 64 C13-C28	7.282	(4.246-10.317)		1785931157	1018.5	M
A 17 C10-C36	7.290	(2.172-12.408)		3376649473	1919.2	M
A 68 Crude Oil Range Organics (	7.349	(1.310-13.389)		4642982253	NC	M
A 13 C9-C40	7.349	(1.310-13.389)		4642982253	2971.9	M
A 58 C16-C24	7.443	(5.833-9.053)		1032821337	592.1	M
62 icosane	7.584	7.583	0.001	143050078	NC	M
A 6 C10-C40	7.780	(2.172-13.389)		4642965845	2975.1	M
$ 34 p-Terphenyl	8.064	8.084	-0.020	33020172	19.1	
35 n-Docosane	8.347	8.348	-0.001	66152262	NC	M
A 18 C12-C40	8.510	(3.631-13.389)		4639549410	2981.2	M
36 Tricosane	8.700	8.707	-0.007	58693837	NC	M
A 66 C13-C40	8.817	(4.246-13.389)		4635924123	2982.3	M
37 n-Tetracosane	9.058	9.053	0.005	56596667	NC	M
A 2 C16-C36 ORO	9.121	(5.833-12.408)		3344993663	2828.9	M
38 C25	9.382	9.386	-0.004	76841413	NC	M
A 19 C16-C40	9.611	(5.833-13.389)		4611310035	2976.2	M
46 n-Hexacosane	9.745	9.707	0.038	90858543	NC	M
A 20 C19-C36	9.792	(7.176-12.408)		2302774435	1691.5	
A 55 C23-C32	10.066	(8.707-11.425)		1845861804	2385.2	M
39 n-Octacosane	10.379	10.317	0.062	104019926	NC	M
65 C29	10.604	10.607	-0.003	139555655	NC	M
A 40 C24-C36	10.731	(9.053-12.408)		2191134565	2235.0	M
A 7 Motor Oil	10.731	(9.053-12.408)		1849096945	1886.1	
A 10 C22-C40	10.868	(8.348-13.389)		2395297468	1723.2	
A 50 C25-C36	10.897	(9.386-12.408)		1602163003	1739.2	
A 41 C23-C40	11.048	(8.707-13.389)		2269433643	1660.5	
A 8 C24-C40	11.221	(9.053-13.389)		2184614032	1628.8	
56 Dotriacontane	11.367	11.425	-0.058	137446990	NC	M
A 51 C28-C40	11.853	(10.317-13.389)		1636997329	1509.1	
A 63 C29-C40	11.998	(10.607-13.389)		1450253510	1451.2	
42 n-Hexatriacontane	12.372	12.408	-0.036	156077096	NC	M
43 C40		13.389		ND		
$ 69 Stearic Acid (Surr)		0.000		ND		

QC Flag Legend

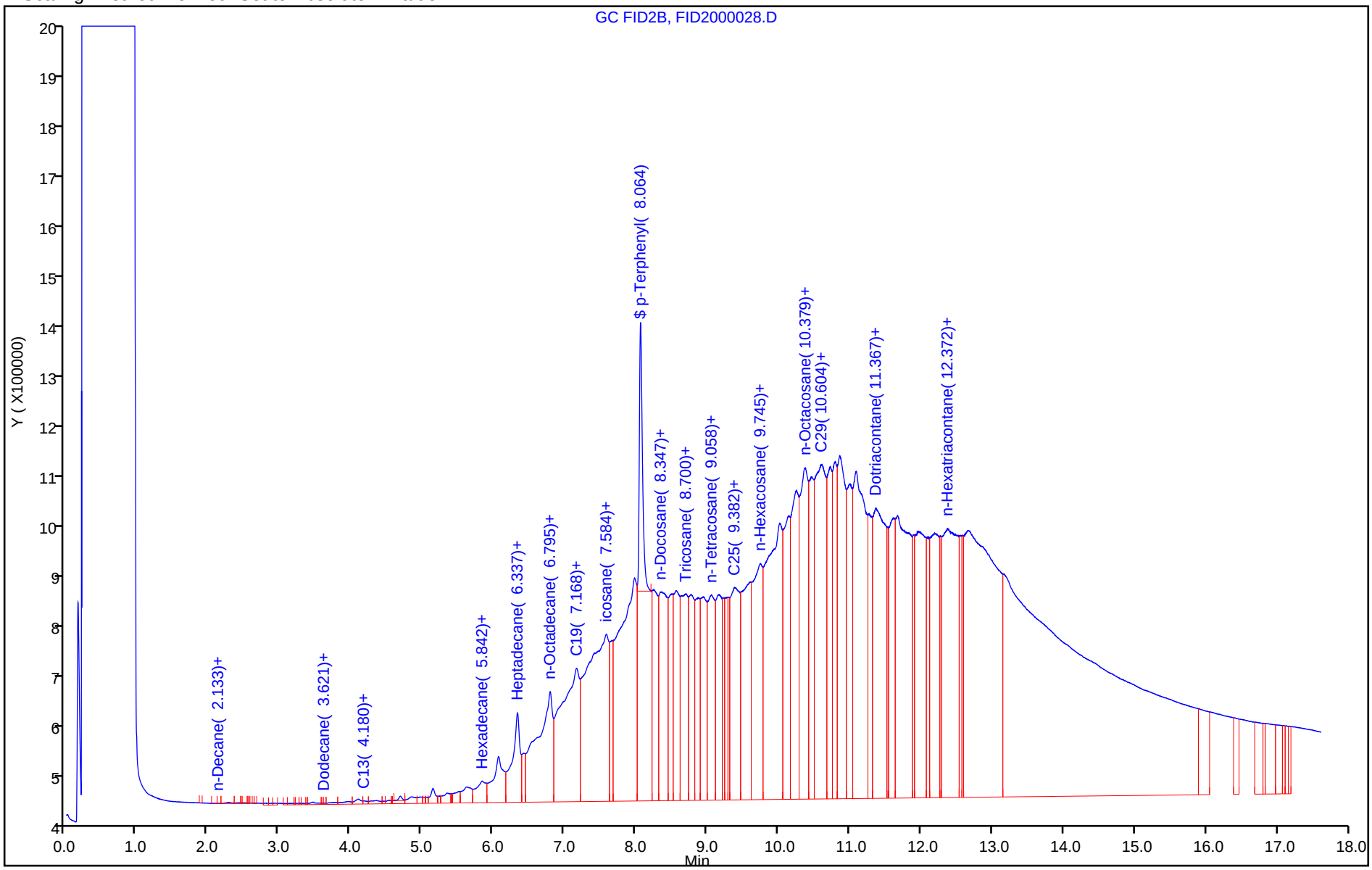
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 31-Aug-2018 14:07:44 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000028.D				
Injection Date:	30-Aug-2018 23:43:00	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88239-D-1-A	Lab Sample ID:	720-88239-1	Worklist Smp#:	28
Client ID:	DG-C7S--0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	78
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000028.D
Lims ID: 720-88239-D-1-A
Client ID: DG-C7S--0.5-1
Sample Type: Client
Inject. Date: 30-Aug-2018 23:43:00 ALS Bottle#: 78 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053574-028
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\DRO6_B.m
Limit Group: DRO
Last Update: 31-Aug-2018 14:07:43 Calib Date: 30-Aug-2018 10:14:10
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 14:07:43

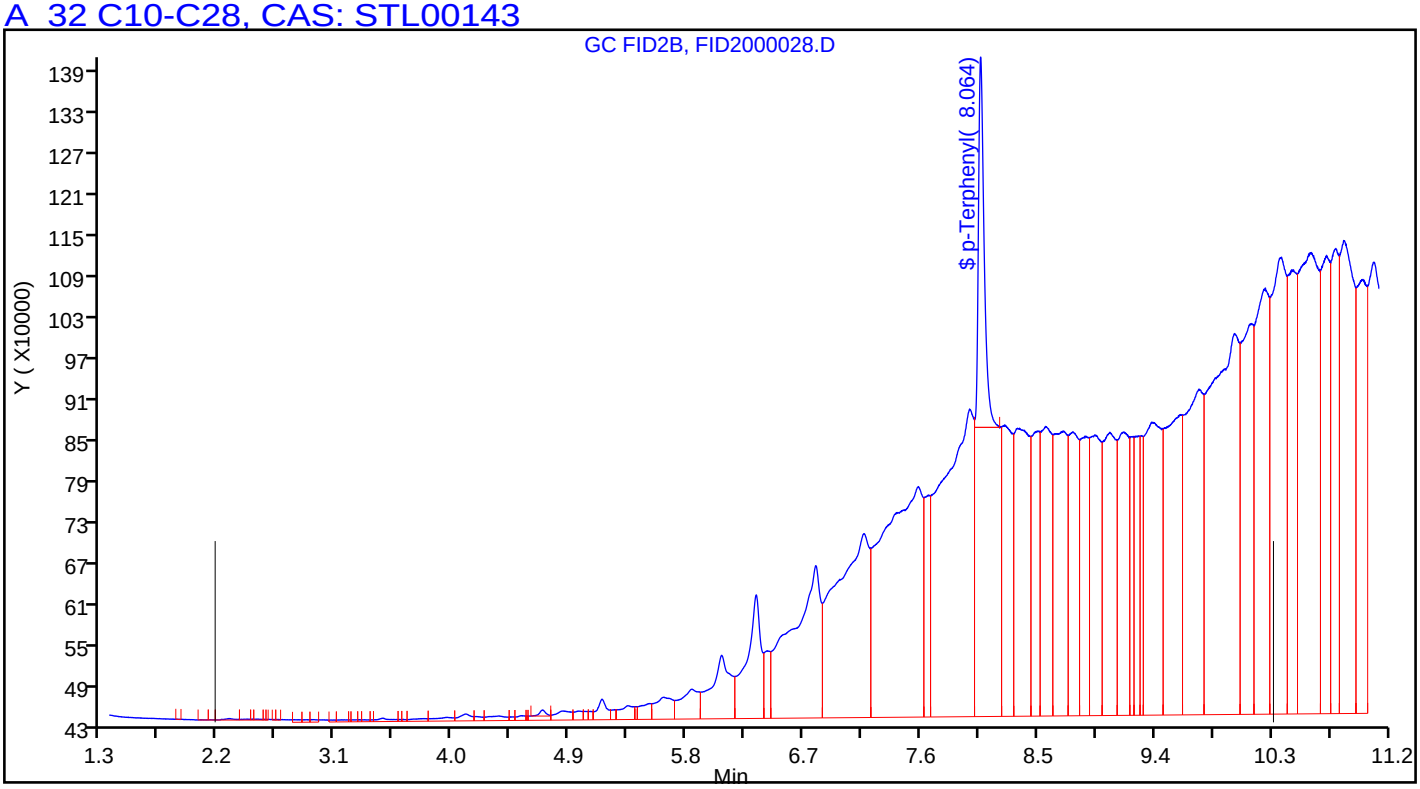
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	19.1	76.25

Report Date: 31-Aug-2018 14:07:48 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000028.D				
Injection Date:	30-Aug-2018 23:43:00	Instrument ID:	CHDRO6		
Lims ID:	720-88239-D-1-A	Lab Sample ID:	720-88239-1		
Client ID:	DG-C7S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	78	Worklist Smp#:	28
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

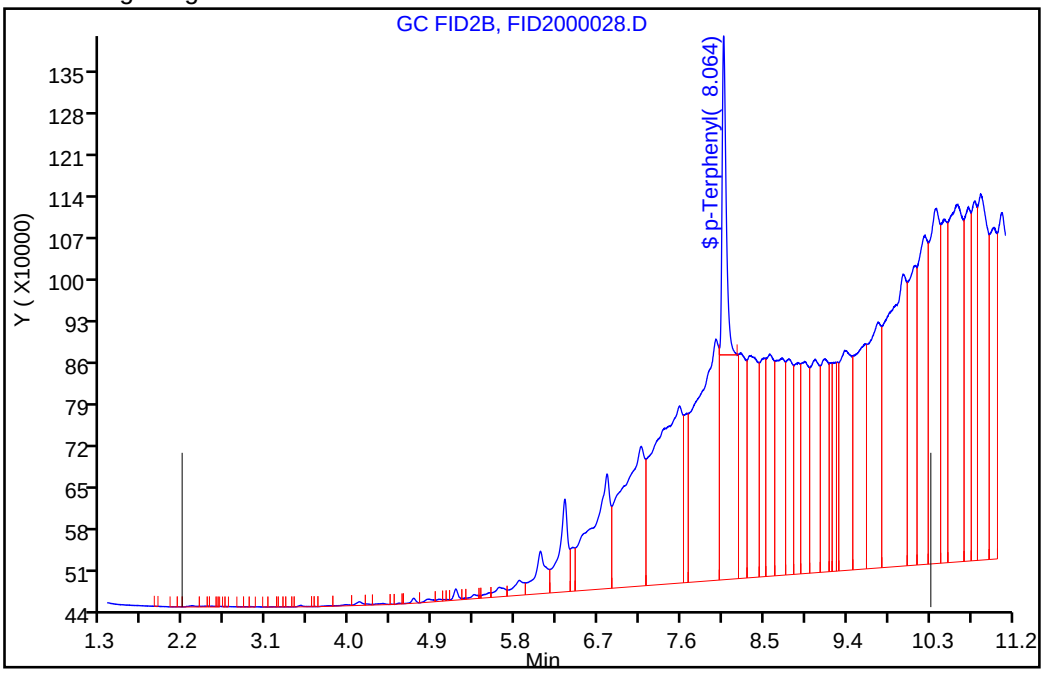
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000028.D				
Injection Date:	30-Aug-2018 23:43:00	Instrument ID:	CHDRO6		
Lims ID:	720-88239-D-1-A	Lab Sample ID:	720-88239-1		
Client ID:	DG-C7S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	78	Worklist Smp#:	28
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.245, CAS: STL00143

Signal: 1

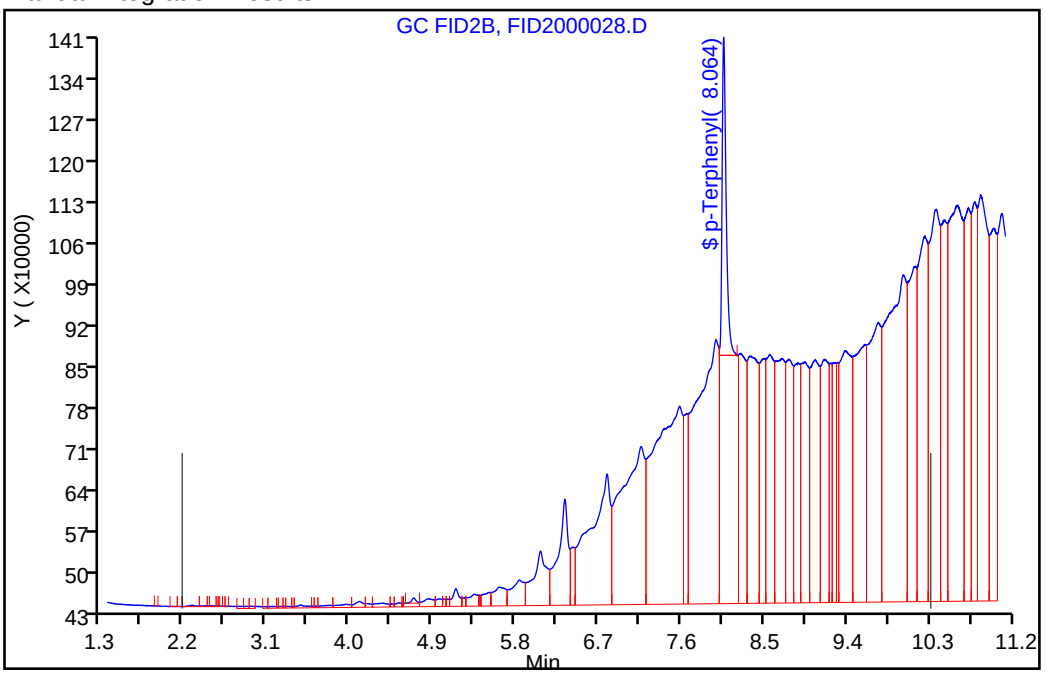
Processing Integration Results

RT: 6.24
Response: 1539064163
Amount: 878.7489



Manual Integration Results

RT: 6.24
Response: 1792972879
Amount: 1022.5172



Reviewer: luj, 31-Aug-2018 14:07:15

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-C7S-3.5-4 Lab Sample ID: 720-88239-2

Matrix: Solid Lab File ID: FID2000025.D

Analysis Method: 8015B Date Collected: 08/24/2018 08:00

Extraction Method: 3546 Date Extracted: 08/28/2018 11:24

Sample wt/vol: 15.89(g) Date Analyzed: 08/30/2018 22:30

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250569 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	12000		1900	710

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	111		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000025.D
Lims ID: 720-88239-D-2-A
Client ID: DG-C7S--3.5-4
Sample Type: Client
Inject. Date: 30-Aug-2018 22:30:01 ALS Bottle#: 75 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053574-025
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\DRO6_B.m
Limit Group: DRO
Last Update: 31-Aug-2018 13:59:09 Calib Date: 30-Aug-2018 10:14:10
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 13:59:09

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.310			ND	
23 n-Decane	2.105	2.172	-0.067	39608	NC	
A 1 C9-C13	2.778	(1.310-4.246)		2408592	1.10	
A 21 Stoddard Solvent	2.778	(1.310-4.246)		2408592	NC	
A 57 C10-C12	2.901	(2.172-3.631)		1626641	8.22	
24 Dodecane	3.640	3.631	0.009	90511	NC	
A 3 C9 - C17	3.809	(1.310-6.309)		6208406	2.72	M
A 60 C10-C16	4.002	(2.172-5.833)		4230232	2.09	M
A 47 C9 - C18	4.031	(1.310-6.752)		9069706	4.79	M
A 25 C9-C19	4.243	(1.310-7.176)		20741958	9.01	M
A 15 Kerosene	4.243	(1.310-7.176)		20741958	10.9	M
26 C13		4.246			ND	
$ 27 n-Decanoic Acid (Surr)		4.639			ND	U
A 59 C12-C16	4.732	(3.631-5.833)		2656016	8.80	M
A 61 C10-C20	4.878	(2.172-7.583)		28040644	23.2	M
A 28 C9-C24	5.181	(1.310-9.053)		87116520	56.6	M
A 29 C9-C25	5.348	(1.310-9.386)		113054092	71.3	M
A 54 C10-C23	5.440	(2.172-8.707)		78462537	51.7	M
A 4 C10-C24	5.612	(2.172-9.053)		86955240	56.5	M
A 16 C10-C25	5.779	(2.172-9.386)		112892812	71.2	M
45 Hexadecane	5.865	5.833	0.032	580712	NC	M
A 14 C10-C26	5.940	(2.172-9.707)		112892812	71.2	M
A 67 C12-C22	5.989	(3.631-8.348)		60881394	41.8	M
A 32 C10-C28	6.245	(2.172-10.317)		157271665	96.3	M
A 5 Diesel	6.245	(2.172-10.317)		157271665	96.3	M
A 12 Unknown Hydrocarbons	6.245	(2.172-10.317)		157271665	NC	M
A 30 C13-C22	6.297	(4.246-8.348)		60484657	41.5	M
44 Heptadecane	6.338	6.309	0.029	2266335	NC	M
A 31 C12-C24	6.342	(3.631-9.053)		85381024	55.6	M
49 n-Octadecane	6.794	6.752	0.042	4207946	NC	M
A 9 Crude Oil Range Organics (	6.859	(1.310-12.408)		377370852	NC	M
A 11 Bunker Range Organics (C9-	6.859	(1.310-12.408)		377370852	NC	M

Report Date: 31-Aug-2018 13:59:11 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000025.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.859	(1.310-12.408)		377370852	178.8	M
33 C19	7.168	7.176	-0.008	7464306	NC	M
A 64 C13-C28	7.282	(4.246-10.317)		155300712	95.2	M
A 17 C10-C36	7.290	(2.172-12.408)		377209572	220.9	M
A 68 Crude Oil Range Organics (	7.349	(1.310-13.389)		732143107	NC	M
A 13 C9-C40	7.349	(1.310-13.389)		732143107	468.6	M
A 58 C16-C24	7.443	(5.833-9.053)		82725008	54.1	M
62 icosane	7.587	7.583	0.004	3244277	NC	M
A 6 C10-C40	7.780	(2.172-13.389)		731981827	469.0	M
$ 34 p-Terphenyl	8.064	8.084	-0.020	48040933	27.7	
35 n-Docosane	8.341	8.348	-0.007	6625207	NC	M
A 18 C12-C40	8.510	(3.631-13.389)		730407611	469.3	M
36 Tricosane	8.702	8.707	-0.005	9458223	NC	M
A 66 C13-C40	8.817	(4.246-13.389)		730010874	469.6	M
37 n-Tetracosane	9.060	9.053	0.007	6451580	NC	M
A 2 C16-C36 ORO	9.121	(5.833-12.408)		372979340	315.4	M
38 C25	9.380	9.386	-0.006	12008247	NC	M
A 19 C16-C40	9.611	(5.833-13.389)		727751595	469.7	M
46 n-Hexacosane	9.709	9.707	0.002	17468931	NC	M
A 20 C19-C36	9.792	(7.176-12.408)		153628895	112.8	
A 55 C23-C32	10.066	(8.707-11.425)		207875172	268.6	M
39 n-Octacosane	10.327	10.317	0.010	16618423	NC	M
65 C29	10.609	10.607	0.002	21643116	NC	M
A 40 C24-C36	10.731	(9.053-12.408)		292149205	298.0	M
A 7 Motor Oil	10.731	(9.053-12.408)		181443653	185.1	
A 10 C22-C40	10.868	(8.348-13.389)		266348407	191.6	
A 50 C25-C36	10.897	(9.386-12.408)		164283114	178.3	
A 41 C23-C40	11.048	(8.707-13.389)		266507579	195.0	
A 8 C24-C40	11.221	(9.053-13.389)		273157573	203.7	
56 Dotriacontane	11.438	11.425	0.013	7638505	NC	M
A 51 C28-C40	11.853	(10.317-13.389)		245964135	226.7	
A 63 C29-C40	11.998	(10.607-13.389)		230726343	230.9	
42 n-Hexatriacontane	12.419	12.408	0.011	28416900	NC	M
43 C40		13.389			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

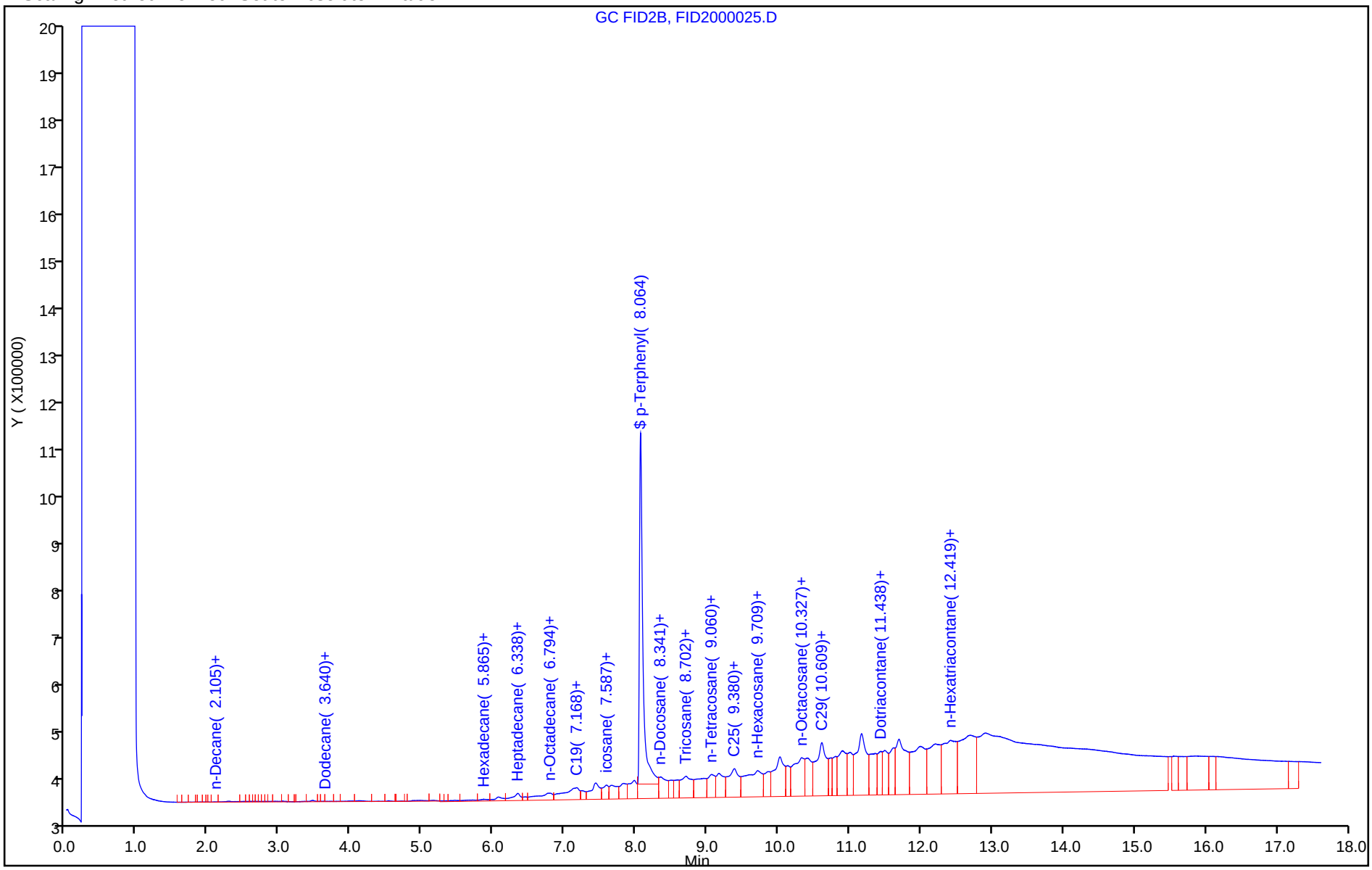
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 31-Aug-2018 13:59:11 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000025.D				
Injection Date:	30-Aug-2018 22:30:01	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88239-D-2-A	Lab Sample ID:	720-88239-2	Worklist Smp#:	25
Client ID:	DG-C7S--3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	75
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000025.D				
Lims ID:	720-88239-D-2-A				
Client ID:	DG-C7S--3.5-4				
Sample Type:	Client				
Inject. Date:	30-Aug-2018 22:30:01	ALS Bottle#:	75	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	720-0053574-025				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\DRO6_B.m				
Limit Group:	DRO				
Last Update:	31-Aug-2018 13:59:09	Calib Date:	30-Aug-2018 10:14:10		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000003.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK020				
First Level Reviewer: luj		Date:	31-Aug-2018 13:59:09		

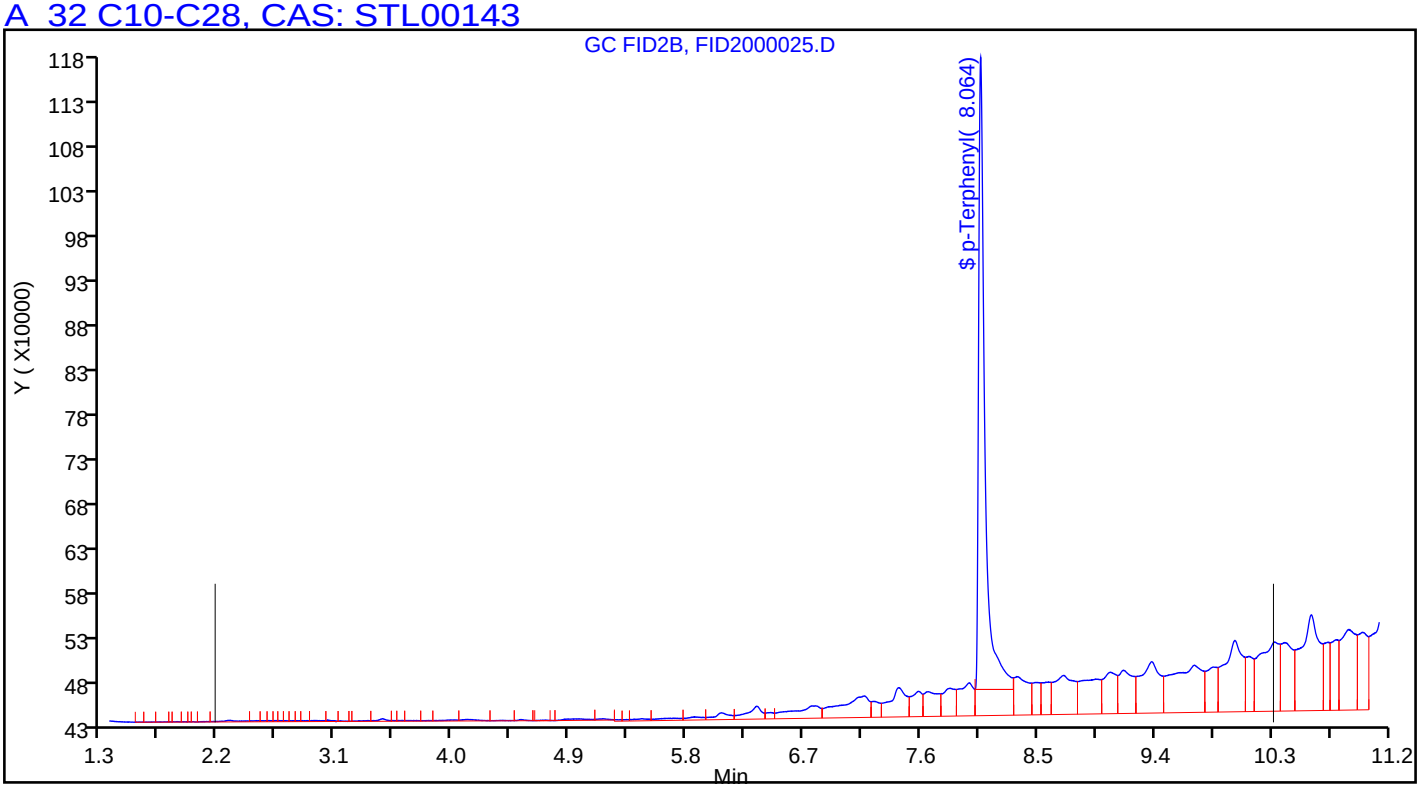
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	27.7	110.93

Report Date: 31-Aug-2018 13:59:15 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000025.D				
Injection Date:	30-Aug-2018 22:30:01	Instrument ID:	CHDRO6		
Lims ID:	720-88239-D-2-A	Lab Sample ID:	720-88239-2		
Client ID:	DG-C7S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	75	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

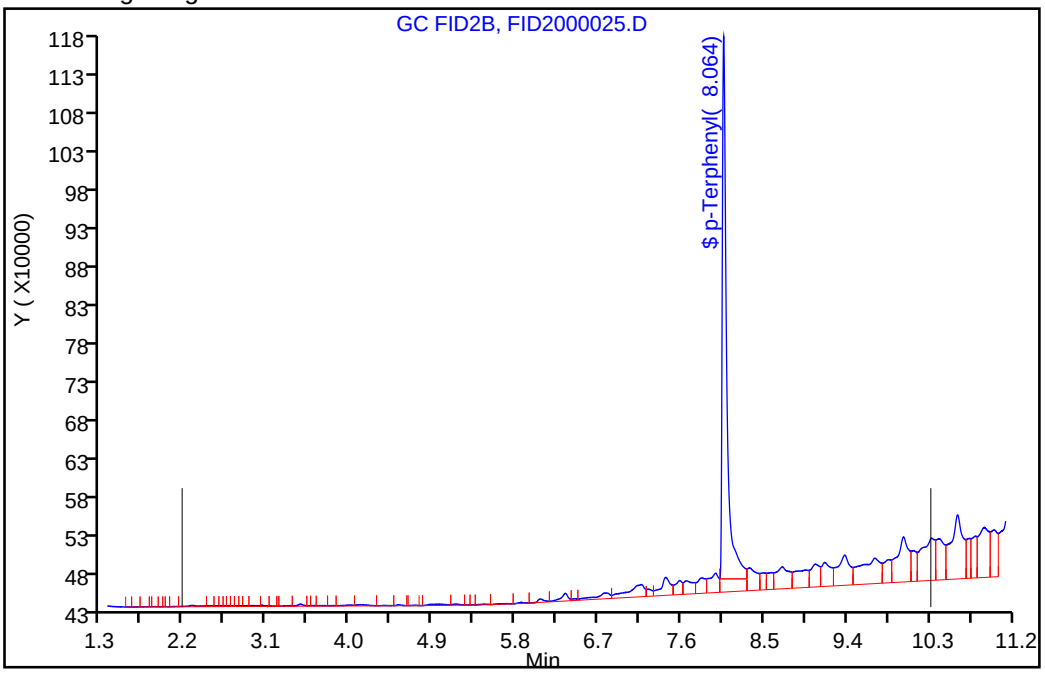
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000025.D				
Injection Date:	30-Aug-2018 22:30:01	Instrument ID:	CHDRO6		
Lims ID:	720-88239-D-2-A	Lab Sample ID:	720-88239-2		
Client ID:	DG-C7S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	75	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.245, CAS: STL00143

Signal: 1

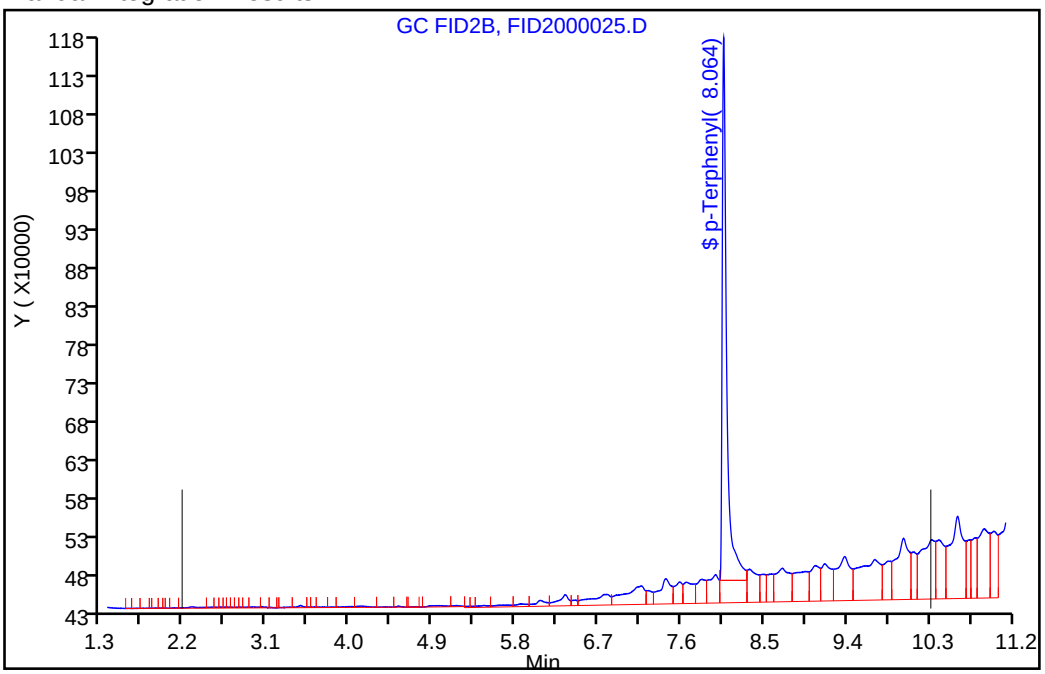
Processing Integration Results

RT: 6.24
Response: 93671878
Amount: 60.338234



Manual Integration Results

RT: 6.24
Response: 157271665
Amount: 96.349735



Reviewer: luj, 31-Aug-2018 13:58:40

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-C7S-9.5-10 Lab Sample ID: 720-88239-3

Matrix: Solid Lab File ID: FID2000026.D

Analysis Method: 8015B Date Collected: 08/24/2018 08:05

Extraction Method: 3546 Date Extracted: 08/28/2018 11:24

Sample wt/vol: 15.61(g) Date Analyzed: 08/30/2018 22:54

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250569 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	8200		1900	720

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	104		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000026.D
Lims ID: 720-88239-D-3-A
Client ID: DG-C7S--9.5-10
Sample Type: Client
Inject. Date: 30-Aug-2018 22:54:30 ALS Bottle#: 76 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053574-026
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\DRO6_B.m
Limit Group: DRO
Last Update: 31-Aug-2018 14:00:29 Calib Date: 30-Aug-2018 10:14:10
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 14:00:29

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.310			ND	
23 n-Decane	2.128	2.172	-0.044	402179	NC	M
A 1 C9-C13	2.778	(1.310-4.246)		13488779	6.18	M
A 21 Stoddard Solvent	2.778	(1.310-4.246)		13488779	NC	M
A 57 C10-C12	2.901	(2.172-3.631)		5676132	10.5	M
24 Dodecane	3.708	3.631	0.077	439625	NC	M
A 3 C9 - C17	3.809	(1.310-6.309)		29021248	12.7	M
A 60 C10-C16	4.002	(2.172-5.833)		23703054	11.7	M
A 47 C9 - C18	4.031	(1.310-6.752)		32708136	17.3	M
A 25 C9-C19	4.243	(1.310-7.176)		42832706	18.6	M
A 15 Kerosene	4.243	(1.310-7.176)		42832706	22.6	M
26 C13	4.210	4.246	-0.036	4475511	NC	M
$ 27 n-Decanoic Acid (Surr)		4.639			ND	U
A 59 C12-C16	4.732	(3.631-5.833)		19196576	18.2	M
A 61 C10-C20	4.878	(2.172-7.583)		48768392	34.9	M
A 28 C9-C24	5.181	(1.310-9.053)		73640004	49.0	M
A 29 C9-C25	5.348	(1.310-9.386)		84414852	55.1	M
A 54 C10-C23	5.440	(2.172-8.707)		63394829	43.2	M
A 4 C10-C24	5.612	(2.172-9.053)		71975348	48.1	M
A 16 C10-C25	5.779	(2.172-9.386)		82750196	54.2	M
45 Hexadecane	5.850	5.833	0.017	1090226	NC	M
A 14 C10-C26	5.940	(2.172-9.707)		86606084	56.3	M
A 67 C12-C22	5.989	(3.631-8.348)		58888351	40.6	M
A 32 C10-C28	6.245	(2.172-10.317)		100807145	64.4	M
A 5 Diesel	6.245	(2.172-10.317)		100807145	64.4	M
A 12 Unknown Hydrocarbons	6.245	(2.172-10.317)		100807145	NC	M
A 30 C13-C22	6.297	(4.246-8.348)		56046217	39.0	M
44 Heptadecane	6.312	6.309	0.003	1862030	NC	M
A 31 C12-C24	6.342	(3.631-9.053)		67468870	45.5	M
49 n-Octadecane	6.758	6.752	0.006	2539870	NC	M
A 9 Crude Oil Range Organics (	6.859	(1.310-12.408)		194238539	NC	M
A 11 Bunker Range Organics (C9-	6.859	(1.310-12.408)		194238539	NC	M

Report Date: 31-Aug-2018 14:00:29 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000026.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.859	(1.310-12.408)		194238539	92.0	M
33 C19		7.176			ND	
A 64 C13-C28	7.282	(4.246-10.317)		93458533	60.2	M
A 17 C10-C36	7.290	(2.172-12.408)		192573883	116.3	M
A 68 Crude Oil Range Organics (	7.349	(1.310-13.389)		273008034	NC	M
A 13 C9-C40	7.349	(1.310-13.389)		273008034	174.7	M
A 58 C16-C24	7.443	(5.833-9.053)		48272294	34.6	M
62 icosane	7.573	7.583	-0.010	7600342	NC	M
A 6 C10-C40	7.780	(2.172-13.389)		271343378	173.9	M
$ 34 p-Terphenyl	8.065	8.084	-0.019	44910049	25.9	M
35 n-Docosane	8.335	8.348	-0.013	4138625	NC	M
A 18 C12-C40	8.510	(3.631-13.389)		266836900	171.5	M
36 Tricosane	8.708	8.707	0.001	8580519	NC	M
A 66 C13-C40	8.817	(4.246-13.389)		263994766	169.8	M
37 n-Tetracosane	9.067	9.053	0.014	2489969	NC	M
A 2 C16-C36 ORO	9.121	(5.833-12.408)		168870829	142.8	M
38 C25	9.383	9.386	-0.003	4527766	NC	M
A 19 C16-C40	9.611	(5.833-13.389)		247640324	159.8	M
46 n-Hexacosane	9.712	9.707	0.005	2450632	NC	M
A 20 C19-C36	9.792	(7.176-12.408)		13907043	10.2	
A 55 C23-C32	10.066	(8.707-11.425)		70914465	91.6	M
39 n-Octacosane	10.325	10.317	0.008	4026913	NC	M
65 C29	10.607	10.607	0.000	6638376	NC	M
A 40 C24-C36	10.731	(9.053-12.408)		119478637	121.9	M
A 7 Motor Oil	10.731	(9.053-12.408)		44298031	45.2	
A 10 C22-C40	10.868	(8.348-13.389)		85743496	61.7	
A 50 C25-C36	10.897	(9.386-12.408)		38505101	41.8	
A 41 C23-C40	11.048	(8.707-13.389)		89320234	65.4	
A 8 C24-C40	11.221	(9.053-13.389)		89725067	66.9	
56 Dotriacontane	11.502	11.425	0.077	11220153	NC	M
A 51 C28-C40	11.853	(10.317-13.389)		95097467	87.7	
A 63 C29-C40	11.998	(10.607-13.389)		94873784	94.9	
42 n-Hexatriacontane	12.342	12.408	-0.066	18941500	NC	M
43 C40	13.484	13.389	0.095	14795883	NC	M
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

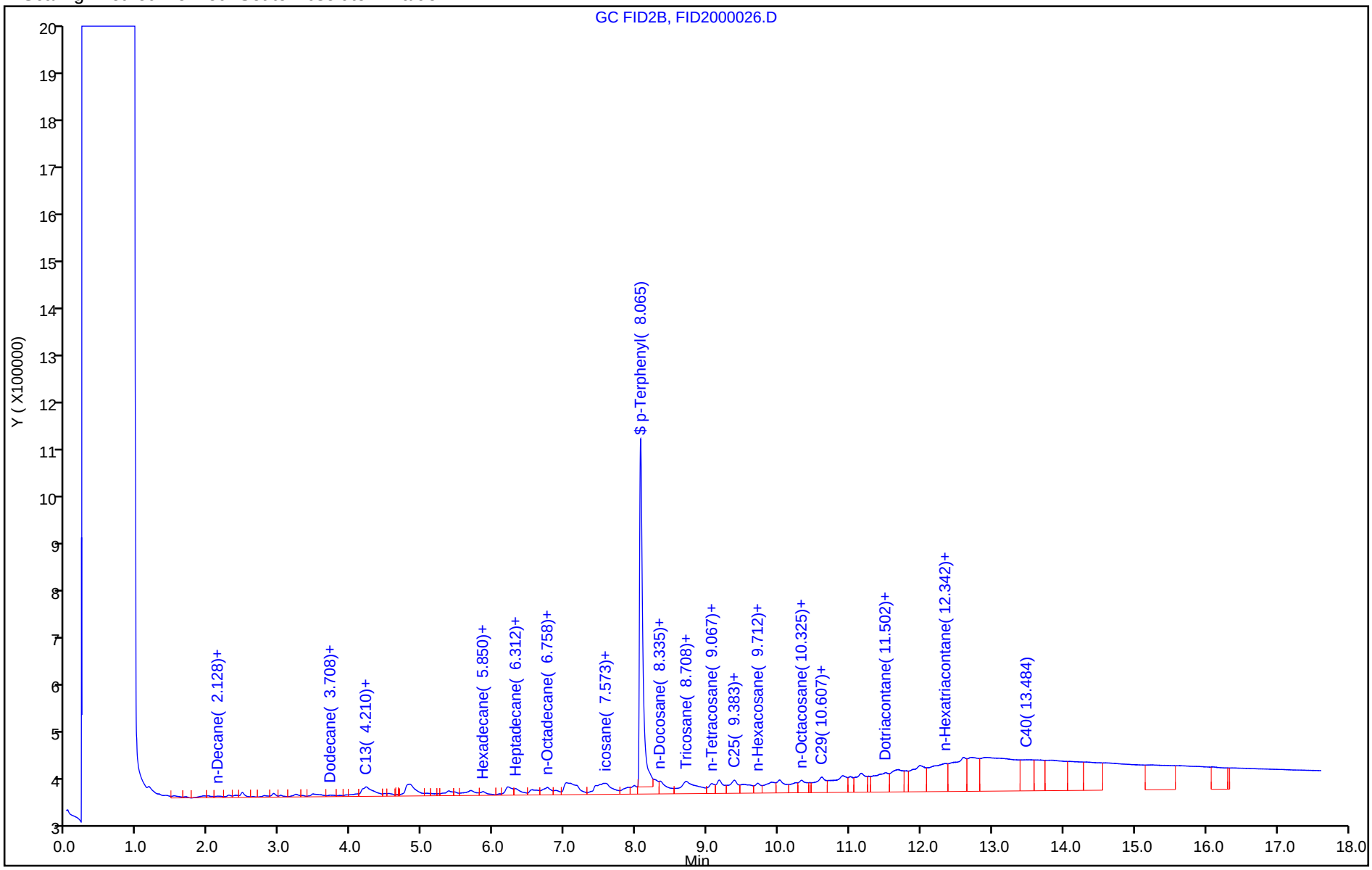
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 31-Aug-2018 14:00:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000026.D				
Injection Date:	30-Aug-2018 22:54:30	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88239-D-3-A	Lab Sample ID:	720-88239-3	Worklist Smp#:	26
Client ID:	DG-C7S--9.5-10				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	76
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000026.D
Lims ID: 720-88239-D-3-A
Client ID: DG-C7S--9.5-10
Sample Type: Client
Inject. Date: 30-Aug-2018 22:54:30 ALS Bottle#: 76 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053574-026
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\DRO6_B.m
Limit Group: DRO
Last Update: 31-Aug-2018 14:00:29 Calib Date: 30-Aug-2018 10:14:10
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 14:00:29

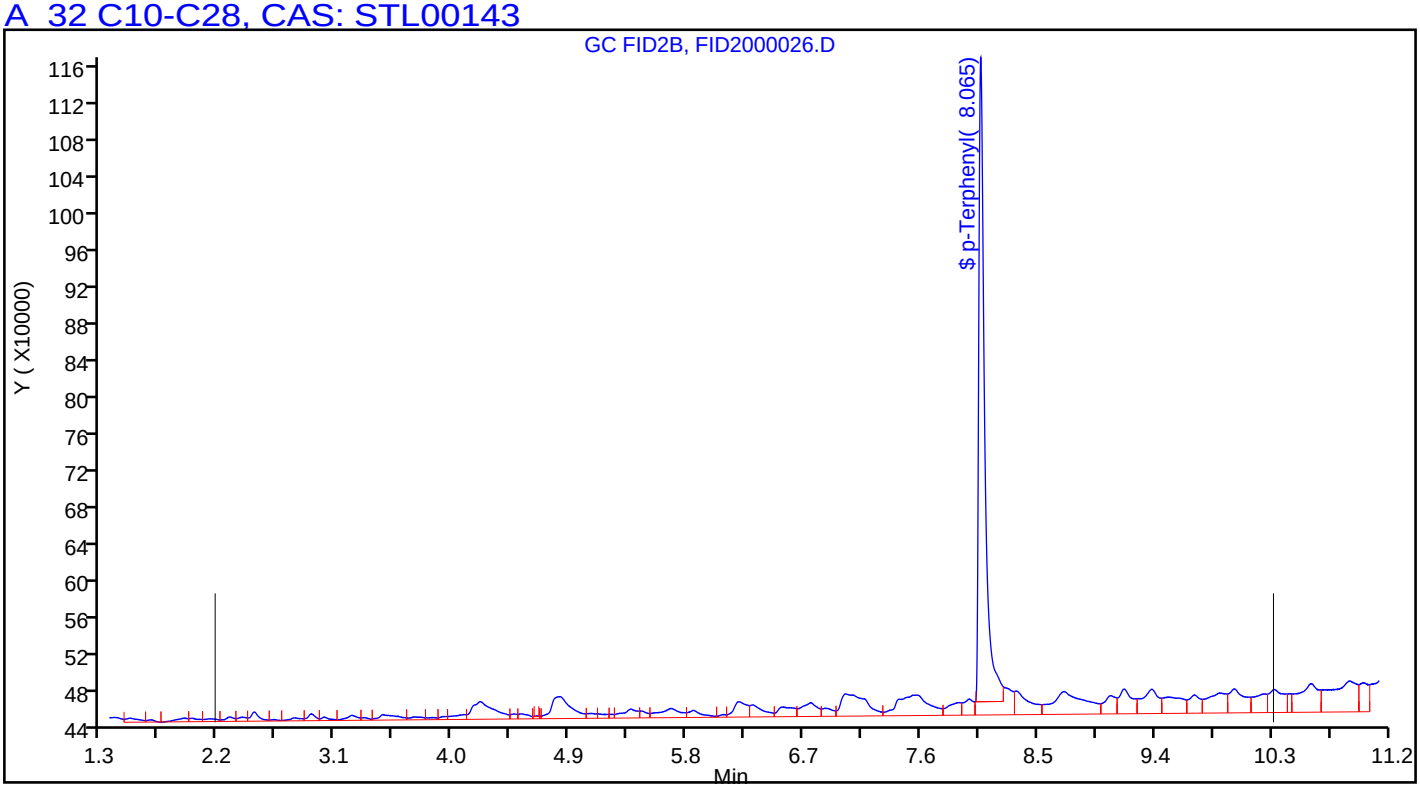
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	25.9	103.70

Report Date: 31-Aug-2018 14:00:35 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000026.D				
Injection Date:	30-Aug-2018 22:54:30	Instrument ID:	CHDRO6		
Lims ID:	720-88239-D-3-A	Lab Sample ID:	720-88239-3		
Client ID:	DG-C7S--9.5-10				
Operator ID:	DCH	ALS Bottle#:	76	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

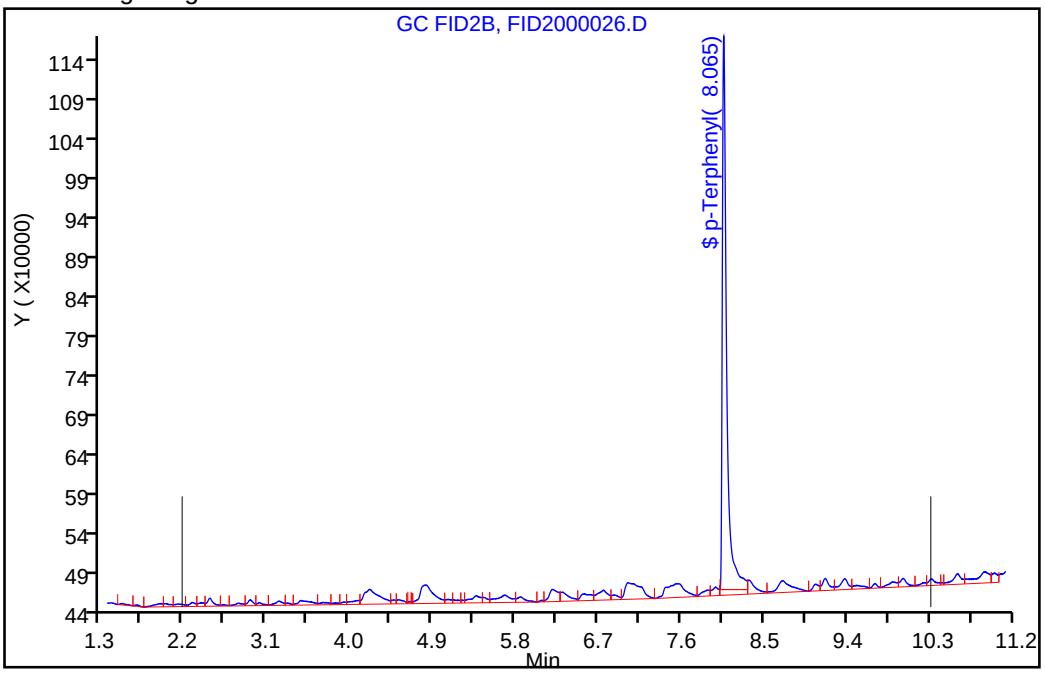
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000026.D				
Injection Date:	30-Aug-2018 22:54:30	Instrument ID:	CHDRO6		
Lims ID:	720-88239-D-3-A	Lab Sample ID:	720-88239-3		
Client ID:	DG-C7S--9.5-10				
Operator ID:	DCH	ALS Bottle#:	76	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.245, CAS: STL00143

Signal: 1

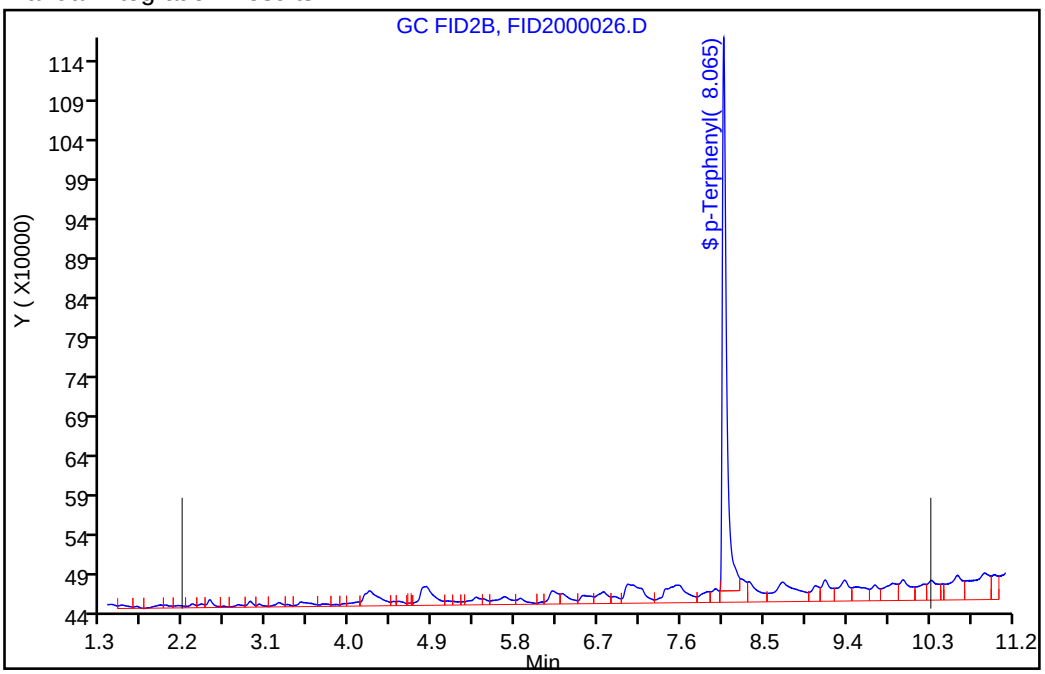
Processing Integration Results

RT: 6.24
Response: 57666287
Amount: 39.951131



Manual Integration Results

RT: 6.24
Response: 100807145
Amount: 64.378368



Reviewer: luj, 31-Aug-2018 13:59:48

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

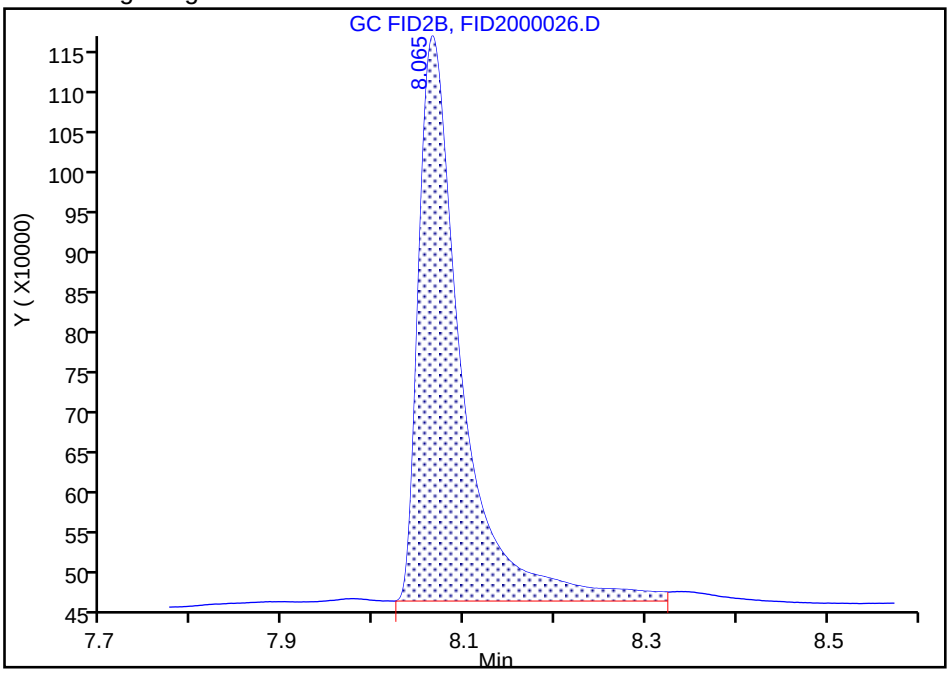
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000026.D				
Injection Date:	30-Aug-2018 22:54:30	Instrument ID:	CHDRO6		
Lims ID:	720-88239-D-3-A	Lab Sample ID:	720-88239-3		
Client ID:	DG-C7S--9.5-10				
Operator ID:	DCH	ALS Bottle#:	76	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

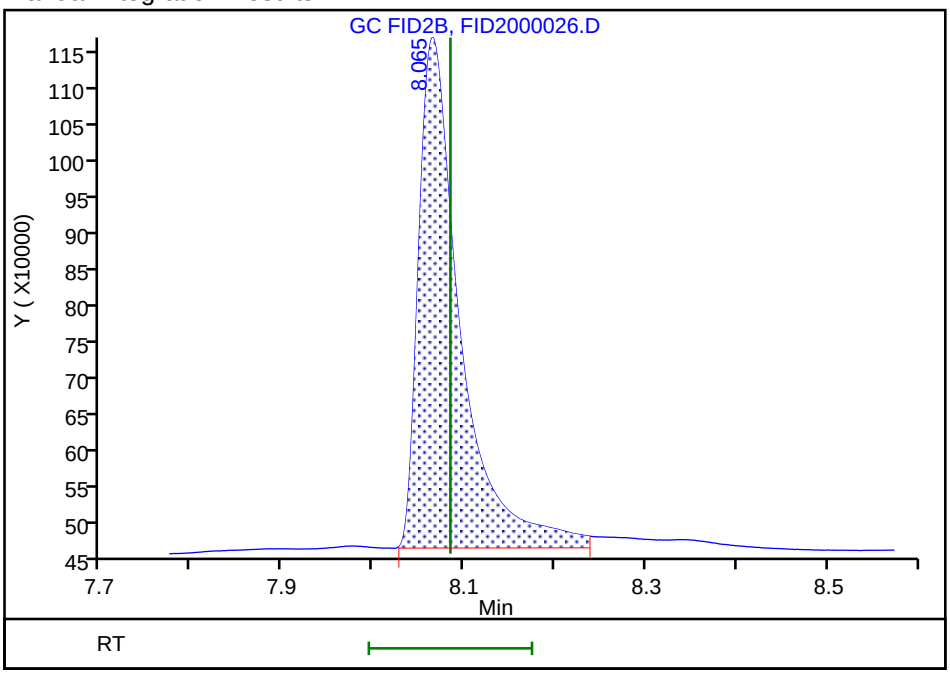
Processing Integration Results

RT: 8.07
Area: 46400013
Amount: 26.785493
Amount Units: mg/L



Manual Integration Results

RT: 8.07
Area: 44910049
Amount: 25.925377
Amount Units: mg/L



Reviewer: luj, 31-Aug-2018 14:00:21

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-E7S-0.5-1 Lab Sample ID: 720-88239-4

Matrix: Solid Lab File ID: FID2000027.D

Analysis Method: 8015B Date Collected: 08/24/2018 08:25

Extraction Method: 3546 Date Extracted: 08/28/2018 11:24

Sample wt/vol: 15.78(g) Date Analyzed: 08/30/2018 23:18

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250569 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	28000		1900	710

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	98		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000027.D
Lims ID: 720-88239-E-4-A
Client ID: DG-E7S--0.5-1
Sample Type: Client
Inject. Date: 30-Aug-2018 23:18:44 ALS Bottle#: 77 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053574-027
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\DRO6_B.m
Limit Group: DRO
Last Update: 31-Aug-2018 14:04:28 Calib Date: 30-Aug-2018 10:14:10
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 14:04:28

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.310			ND	
23 n-Decane	2.188	2.172	0.016	23885	NC	
A 1 C9-C13	2.778	(1.310-4.246)		1558505	0.7145	
A 21 Stoddard Solvent	2.778	(1.310-4.246)		1558505	NC	
A 57 C10-C12	2.901	(2.172-3.631)		1058379	7.90	
24 Dodecane		3.631			ND	
A 3 C9 - C17	3.809	(1.310-6.309)		3345278	1.47	M
A 60 C10-C16	4.002	(2.172-5.833)		2430195	1.20	M
A 47 C9 - C18	4.031	(1.310-6.752)		7002080	3.70	M
A 25 C9-C19	4.243	(1.310-7.176)		10058039	4.37	M
A 15 Kerosene	4.243	(1.310-7.176)		10058039	5.30	M
26 C13	4.259	4.246	0.013	26076	NC	
$ 27 n-Decanoic Acid (Surr)		4.639			ND	U
A 59 C12-C16	4.732	(3.631-5.833)		1371816	8.08	M
A 61 C10-C20	4.878	(2.172-7.583)		32900467	25.9	M
A 28 C9-C24	5.181	(1.310-9.053)		187642840	113.5	M
A 29 C9-C25	5.348	(1.310-9.386)		257066122	152.9	M
A 54 C10-C23	5.440	(2.172-8.707)		155766240	95.5	M
A 4 C10-C24	5.612	(2.172-9.053)		187536954	113.5	M
A 16 C10-C25	5.779	(2.172-9.386)		256960236	152.8	M
45 Hexadecane	5.872	5.833	0.039	139539	NC	M
A 14 C10-C26	5.940	(2.172-9.707)		256960236	152.8	M
A 67 C12-C22	5.989	(3.631-8.348)		102084635	65.1	M
A 32 C10-C28	6.245	(2.172-10.317)		374558534	219.4	M
A 5 Diesel	6.245	(2.172-10.317)		374558534	219.4	M
A 12 Unknown Hydrocarbons	6.245	(2.172-10.317)		374558534	NC	M
A 30 C13-C22	6.297	(4.246-8.348)		101690395	64.9	M
44 Heptadecane	6.342	6.309	0.033	2091139	NC	M
A 31 C12-C24	6.342	(3.631-9.053)		186478575	112.9	M
49 n-Octadecane	6.801	6.752	0.049	3055959	NC	M
A 9 Crude Oil Range Organics (	6.859	(1.310-12.408)		737120920	NC	M
A 11 Bunker Range Organics (C9-	6.859	(1.310-12.408)		737120920	NC	M

Report Date: 31-Aug-2018 14:04:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000027.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.859	(1.310-12.408)		737120920	349.2	M
33 C19	7.181	7.176	0.005	10087321	NC	M
A 64 C13-C28	7.282	(4.246-10.317)		373105915	218.6	M
A 17 C10-C36	7.290	(2.172-12.408)		737015034	424.6	M
A 68 Crude Oil Range Organics (	7.349	(1.310-13.389)		1078919410	NC	M
A 13 C9-C40	7.349	(1.310-13.389)		1078919410	690.6	M
A 58 C16-C24	7.443	(5.833-9.053)		185106759	112.1	M
62 icosane	7.590	7.583	0.007	8113816	NC	M
A 6 C10-C40	7.780	(2.172-13.389)		1078813524	691.3	M
$ 34 p-Terphenyl	8.067	8.084	-0.017	42476790	24.5	M
35 n-Docosane	8.355	8.348	0.007	16490703	NC	M
A 18 C12-C40	8.510	(3.631-13.389)		1077755145	692.5	M
36 Tricosane	8.706	8.707	-0.001	15677692	NC	M
A 66 C13-C40	8.817	(4.246-13.389)		1077360905	693.1	M
37 n-Tetracosane	9.059	9.053	0.006	14994334	NC	M
A 2 C16-C36 ORO	9.121	(5.833-12.408)		734584839	621.2	M
38 C25	9.386	9.386	0.000	33724569	NC	M
A 19 C16-C40	9.611	(5.833-13.389)		1076383329	694.7	M
46 n-Hexacosane	9.744	9.707	0.037	38061413	NC	M
A 20 C19-C36	9.792	(7.176-12.408)		545307375	400.6	
A 55 C23-C32	10.066	(8.707-11.425)		461211268	596.0	M
39 n-Octacosane	10.372	10.317	0.055	39105256	NC	M
65 C29	10.610	10.607	0.003	35848255	NC	M
A 40 C24-C36	10.731	(9.053-12.408)		531208259	541.8	M
A 7 Motor Oil	10.731	(9.053-12.408)		453842463	462.9	
A 10 C22-C40	10.868	(8.348-13.389)		625521343	450.0	
A 50 C25-C36	10.897	(9.386-12.408)		408840430	443.8	
A 41 C23-C40	11.048	(8.707-13.389)		594863620	435.2	
A 8 C24-C40	11.221	(9.053-13.389)		567747758	423.3	
56 Dotriacontane	11.373	11.425	-0.052	43884635	NC	M
A 51 C28-C40	11.853	(10.317-13.389)		424116816	391.0	
A 63 C29-C40	11.998	(10.607-13.389)		378700223	378.9	
42 n-Hexatriacontane	12.424	12.408	0.016	22535525	NC	M
43 C40		13.389			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

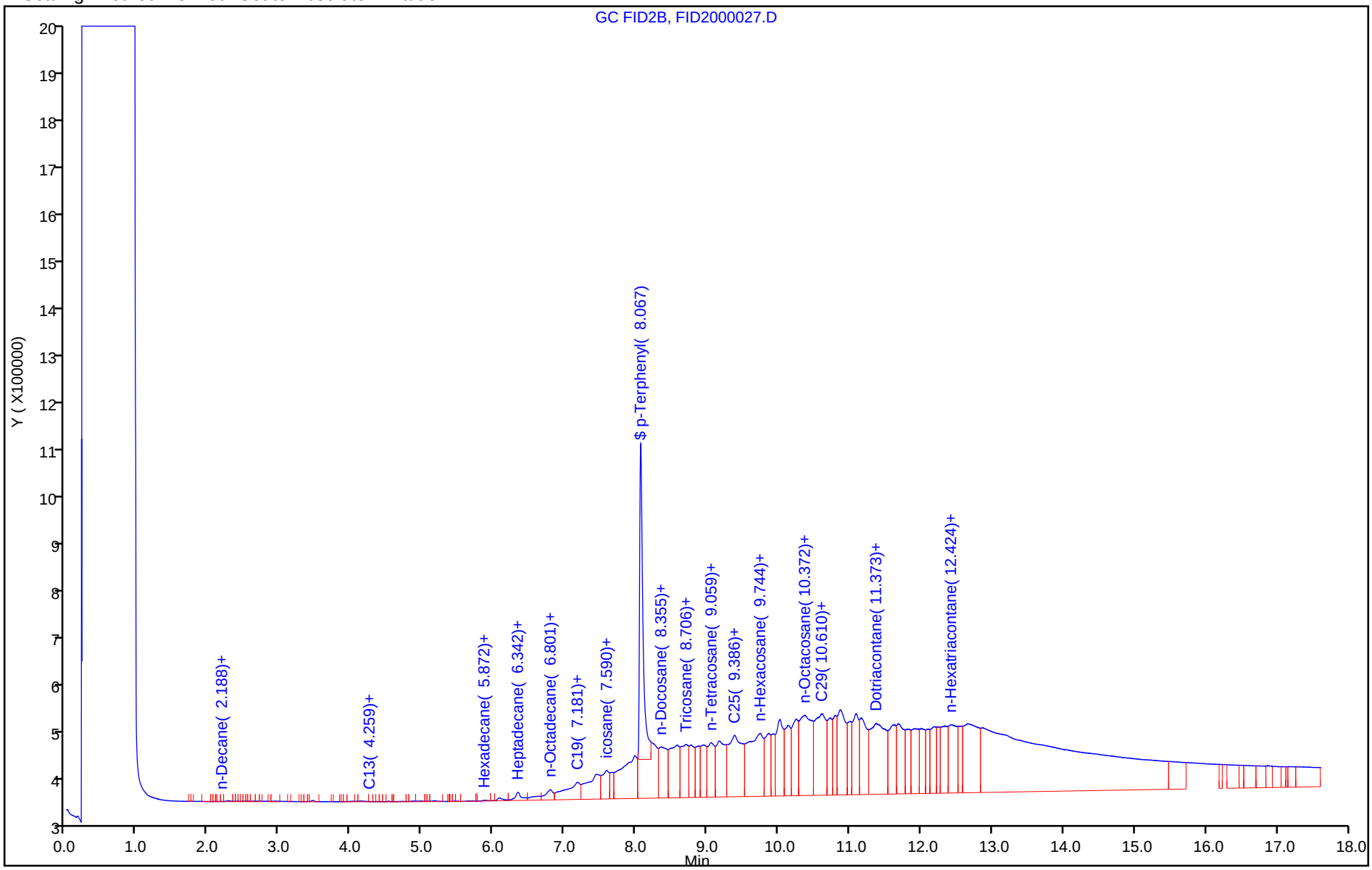
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 31-Aug-2018 14:04:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000027.D				
Injection Date:	30-Aug-2018 23:18:44	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88239-E-4-A	Lab Sample ID:	720-88239-4	Worklist Smp#:	27
Client ID:	DG-E7S--0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	77
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000027.D
Lims ID: 720-88239-E-4-A
Client ID: DG-E7S--0.5-1
Sample Type: Client
Inject. Date: 30-Aug-2018 23:18:44 ALS Bottle#: 77 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053574-027
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\DRO6_B.m
Limit Group: DRO
Last Update: 31-Aug-2018 14:04:28 Calib Date: 30-Aug-2018 10:14:10
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 14:04:28

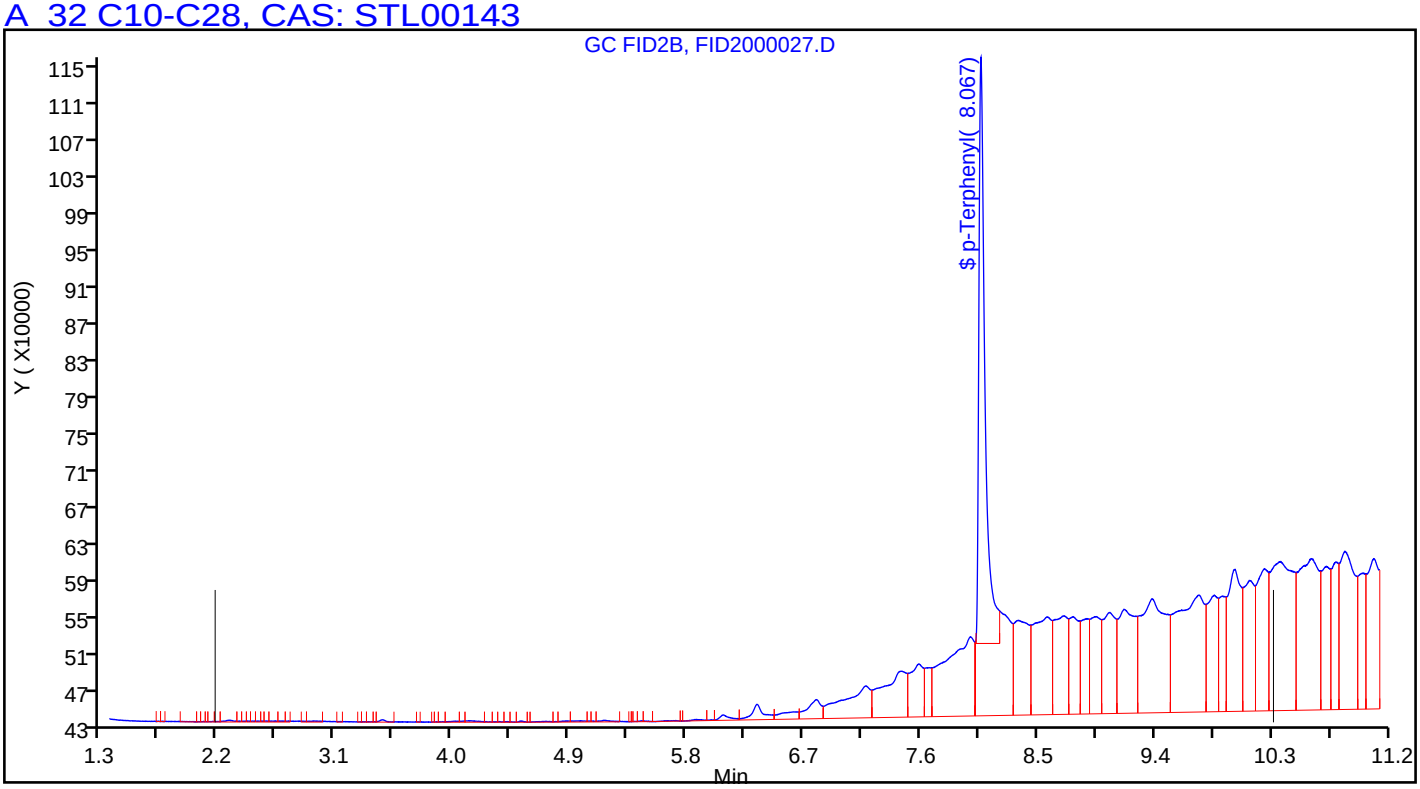
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	24.5	98.08

Report Date: 31-Aug-2018 14:04:35 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000027.D				
Injection Date:	30-Aug-2018 23:18:44	Instrument ID:	CHDRO6		
Lims ID:	720-88239-E-4-A	Lab Sample ID:	720-88239-4		
Client ID:	DG-E7S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	77	Worklist Smp#:	27
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

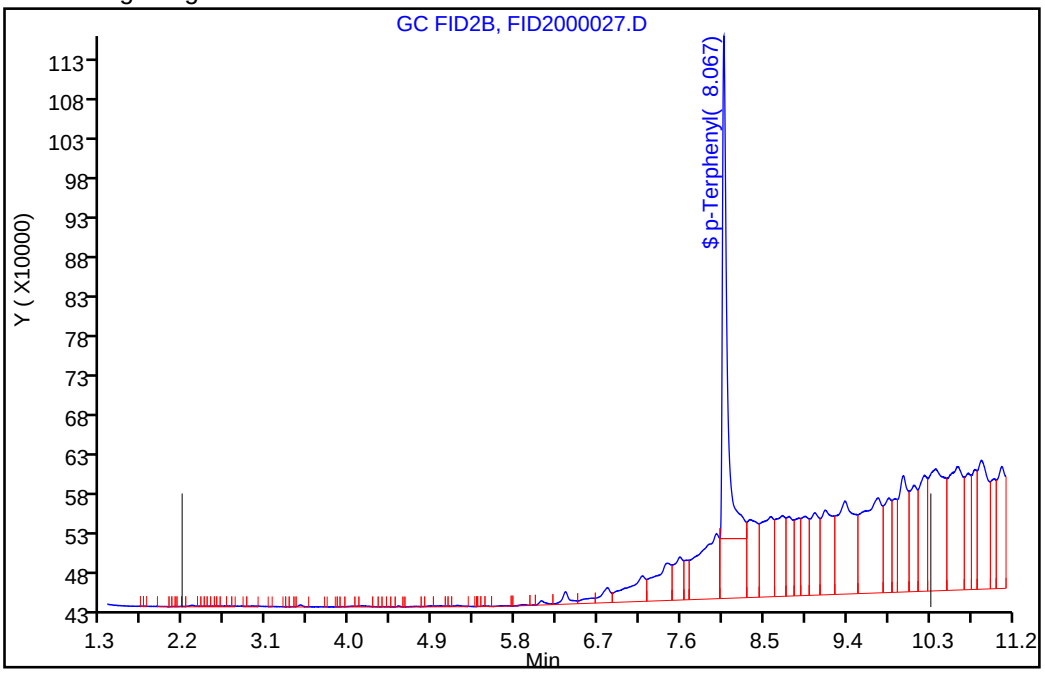
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000027.D				
Injection Date:	30-Aug-2018 23:18:44	Instrument ID:	CHDRO6		
Lims ID:	720-88239-E-4-A	Lab Sample ID:	720-88239-4		
Client ID:	DG-E7S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	77	Worklist Smp#:	27
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.245, CAS: STL00143

Signal: 1

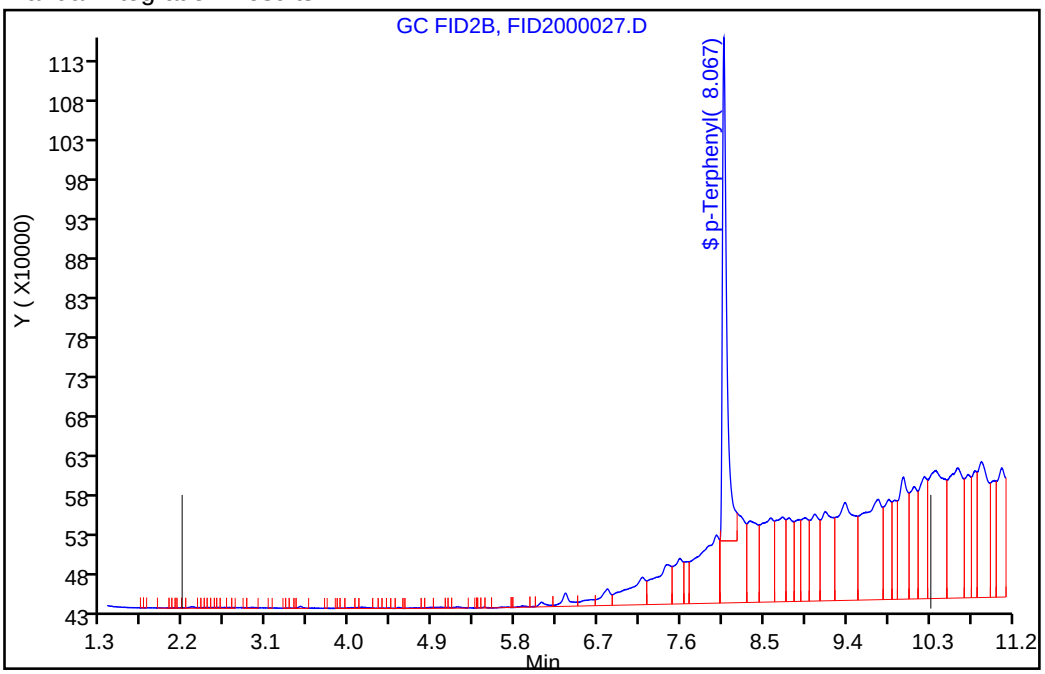
Processing Integration Results

RT: 6.24
Response: 348769295
Amount: 204.7796



Manual Integration Results

RT: 6.24
Response: 374558534
Amount: 219.3820



Reviewer: luj, 31-Aug-2018 14:03:49

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

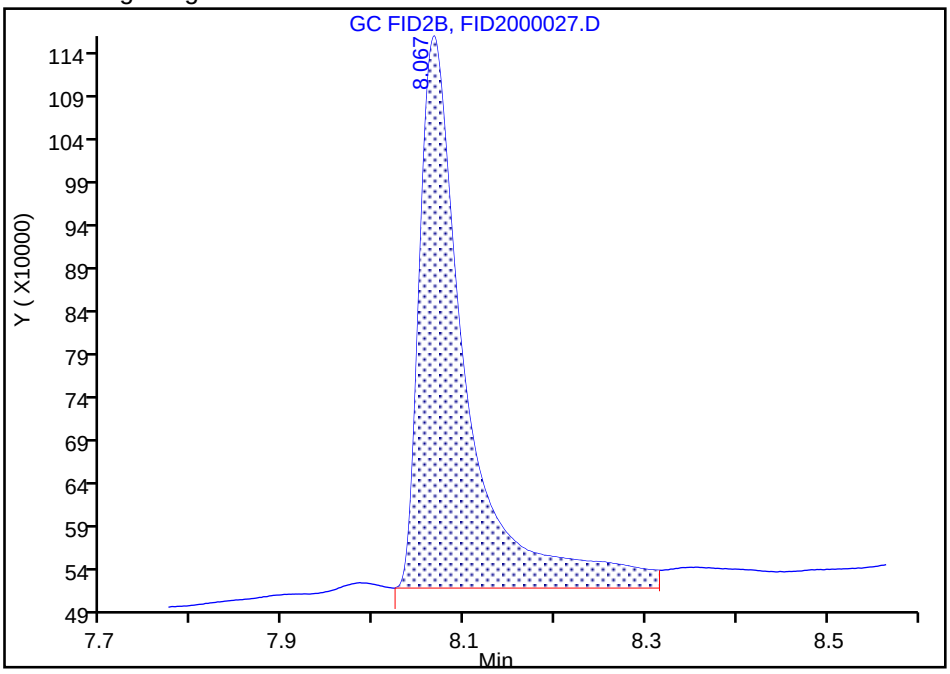
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000027.D				
Injection Date:	30-Aug-2018 23:18:44	Instrument ID:	CHDRO6		
Lims ID:	720-88239-E-4-A	Lab Sample ID:	720-88239-4		
Client ID:	DG-E7S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	77	Worklist Smp#:	27
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

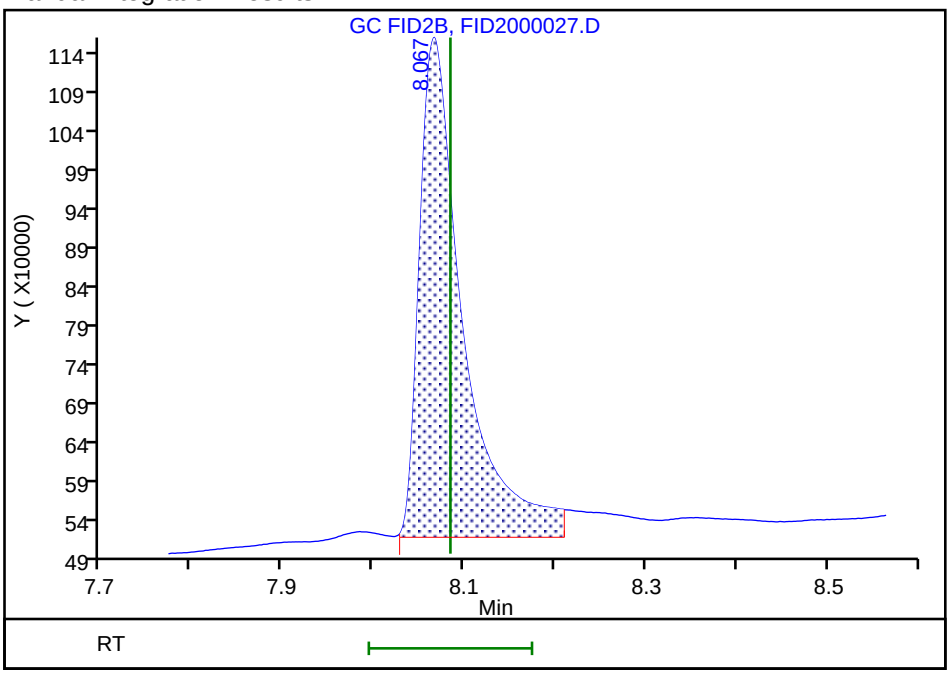
Processing Integration Results

RT: 8.07
Area: 45736485
Amount: 26.402456
Amount Units: mg/L



Manual Integration Results

RT: 8.07
Area: 42476790
Amount: 24.520721
Amount Units: mg/L



Reviewer: luj, 31-Aug-2018 14:04:07

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-E7S-3.5-4
Lab Sample ID: 720-88239-5
Matrix: Solid
Lab File ID: FID2000019.D
Analysis Method: 8015B
Date Collected: 08/24/2018 08:25
Extraction Method: 3546
Date Extracted: 08/28/2018 11:24
Sample wt/vol: 15.80(g)
Date Analyzed: 08/30/2018 20:03
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250569
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	6100		1900	710

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	78		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000019.D
Lims ID: 720-88239-D-5-A
Client ID: DG-E7S--3.5-4
Sample Type: Client
Inject. Date: 30-Aug-2018 20:03:46 ALS Bottle#: 69 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053574-019
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\DRO6_B.m
Limit Group: DRO
Last Update: 31-Aug-2018 13:22:56 Calib Date: 30-Aug-2018 10:14:10
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 13:22:55

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.310			ND	
23 n-Decane	2.183	2.172	0.011	14813	NC	
A 1 C9-C13	2.778	(1.310-4.246)		1639281	0.7515	
A 21 Stoddard Solvent	2.778	(1.310-4.246)		1639281	NC	
A 57 C10-C12	2.901	(2.172-3.631)		1144000	7.95	
24 Dodecane	3.665	3.631	0.034	12359	NC	
A 3 C9 - C17	3.809	(1.310-6.309)		3217685	1.41	M
A 60 C10-C16	4.002	(2.172-5.833)		2483204	1.22	M
A 47 C9 - C18	4.031	(1.310-6.752)		4529296	2.39	M
A 25 C9-C19	4.243	(1.310-7.176)		7331658	3.19	M
A 15 Kerosene	4.243	(1.310-7.176)		7331658	3.86	M
26 C13	4.222	4.246	-0.024	99109	NC	
$ 27 n-Decanoic Acid (Surr)		4.639			ND	U
A 59 C12-C16	4.732	(3.631-5.833)		1364788	8.07	M
A 61 C10-C20	4.878	(2.172-7.583)		9039551	12.4	M
A 28 C9-C24	5.181	(1.310-9.053)		34454610	26.8	M
A 29 C9-C25	5.348	(1.310-9.386)		50781641	36.1	M
A 54 C10-C23	5.440	(2.172-8.707)		29145085	23.8	M
A 4 C10-C24	5.612	(2.172-9.053)		34376691	26.8	M
A 16 C10-C25	5.779	(2.172-9.386)		50703722	36.0	M
45 Hexadecane	5.828	5.833	-0.005	55826	NC	M
A 14 C10-C26	5.940	(2.172-9.707)		50703722	36.0	M
A 67 C12-C22	5.989	(3.631-8.348)		26717767	22.4	M
A 32 C10-C28	6.245	(2.172-10.317)		72792084	48.5	M
A 5 Diesel	6.245	(2.172-10.317)		72792084	48.5	M
A 12 Unknown Hydrocarbons	6.245	(2.172-10.317)		72792084	NC	M
A 30 C13-C22	6.297	(4.246-8.348)		26373930	22.2	M
44 Heptadecane	6.361	6.309	0.052	850178	NC	M
A 31 C12-C24	6.342	(3.631-9.053)		33258275	26.1	M
49 n-Octadecane	6.816	6.752	0.064	450124	NC	M
A 9 Crude Oil Range Organics (	6.859	(1.310-12.408)		190236425	NC	M
A 11 Bunker Range Organics (C9-	6.859	(1.310-12.408)		190236425	NC	M

Report Date: 31-Aug-2018 13:22:57 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000019.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.859	(1.310-12.408)		190236425	90.1	M
33 C19	7.132	7.176	-0.044	1678200	NC	M
A 64 C13-C28	7.282	(4.246-10.317)		71329831	47.7	M
A 17 C10-C36	7.290	(2.172-12.408)		190158506	115.0	M
A 68 Crude Oil Range Organics (	7.349	(1.310-13.389)		298913409	NC	M
A 13 C9-C40	7.349	(1.310-13.389)		298913409	191.3	M
A 58 C16-C24	7.443	(5.833-9.053)		31949313	25.4	M
62 icosane	7.592	7.583	0.009	2313004	NC	M
A 6 C10-C40	7.780	(2.172-13.389)		298835490	191.5	M
$ 34 p-Terphenyl	8.076	8.084	-0.008	33901805	19.6	M
35 n-Docosane		8.348			ND	
A 18 C12-C40	8.510	(3.631-13.389)		297717074	191.3	M
36 Tricosane	8.715	8.707	0.008	5231606	NC	M
A 66 C13-C40	8.817	(4.246-13.389)		297373237	191.3	M
37 n-Tetracosane	9.057	9.053	0.004	5372171	NC	M
A 2 C16-C36 ORO	9.121	(5.833-12.408)		187731128	158.8	M
38 C25	9.386	9.386	0.000	7764601	NC	M
A 19 C16-C40	9.611	(5.833-13.389)		296408112	191.3	M
46 n-Hexacosane	9.716	9.707	0.009	6708489	NC	M
A 20 C19-C36	9.792	(7.176-12.408)		106602009	78.3	
A 55 C23-C32	10.066	(8.707-11.425)		99098738	128.1	M
39 n-Octacosane	10.327	10.317	0.010	8277289	NC	M
65 C29	10.612	10.607	0.005	14438278	NC	M
A 40 C24-C36	10.731	(9.053-12.408)		145080673	148.0	M
A 7 Motor Oil	10.731	(9.053-12.408)		118133353	120.5	
A 10 C22-C40	10.868	(8.348-13.389)		134963708	97.1	
A 50 C25-C36	10.897	(9.386-12.408)		110375382	119.8	
A 41 C23-C40	11.048	(8.707-13.389)		172984093	126.6	
A 8 C24-C40	11.221	(9.053-13.389)		171990902	128.2	
56 Dotriacontane	11.434	11.425	0.009	5113770	NC	M
A 51 C28-C40	11.853	(10.317-13.389)		154778279	142.7	
A 63 C29-C40	11.998	(10.607-13.389)		146289063	146.4	
42 n-Hexatriacontane	12.422	12.408	0.014	6321869	NC	M
43 C40		13.389			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

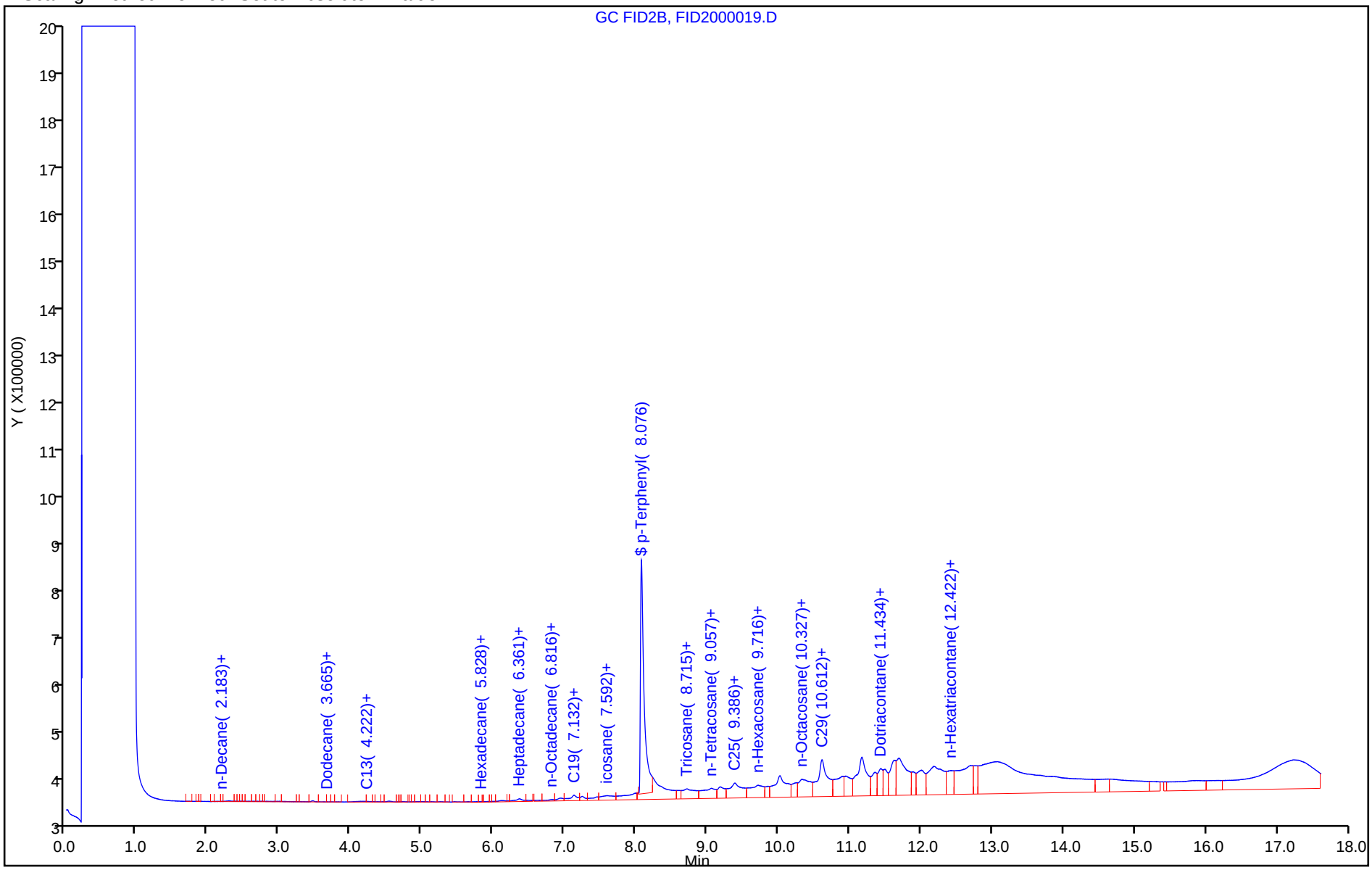
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 31-Aug-2018 13:22:58 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000019.D				
Injection Date:	30-Aug-2018 20:03:46	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88239-D-5-A	Lab Sample ID:	720-88239-5	Worklist Smp#:	19
Client ID:	DG-E7S--3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	69
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000019.D
Lims ID: 720-88239-D-5-A
Client ID: DG-E7S--3.5-4
Sample Type: Client
Inject. Date: 30-Aug-2018 20:03:46 ALS Bottle#: 69 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053574-019
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\DRO6_B.m
Limit Group: DRO
Last Update: 31-Aug-2018 13:22:56 Calib Date: 30-Aug-2018 10:14:10
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 13:22:55

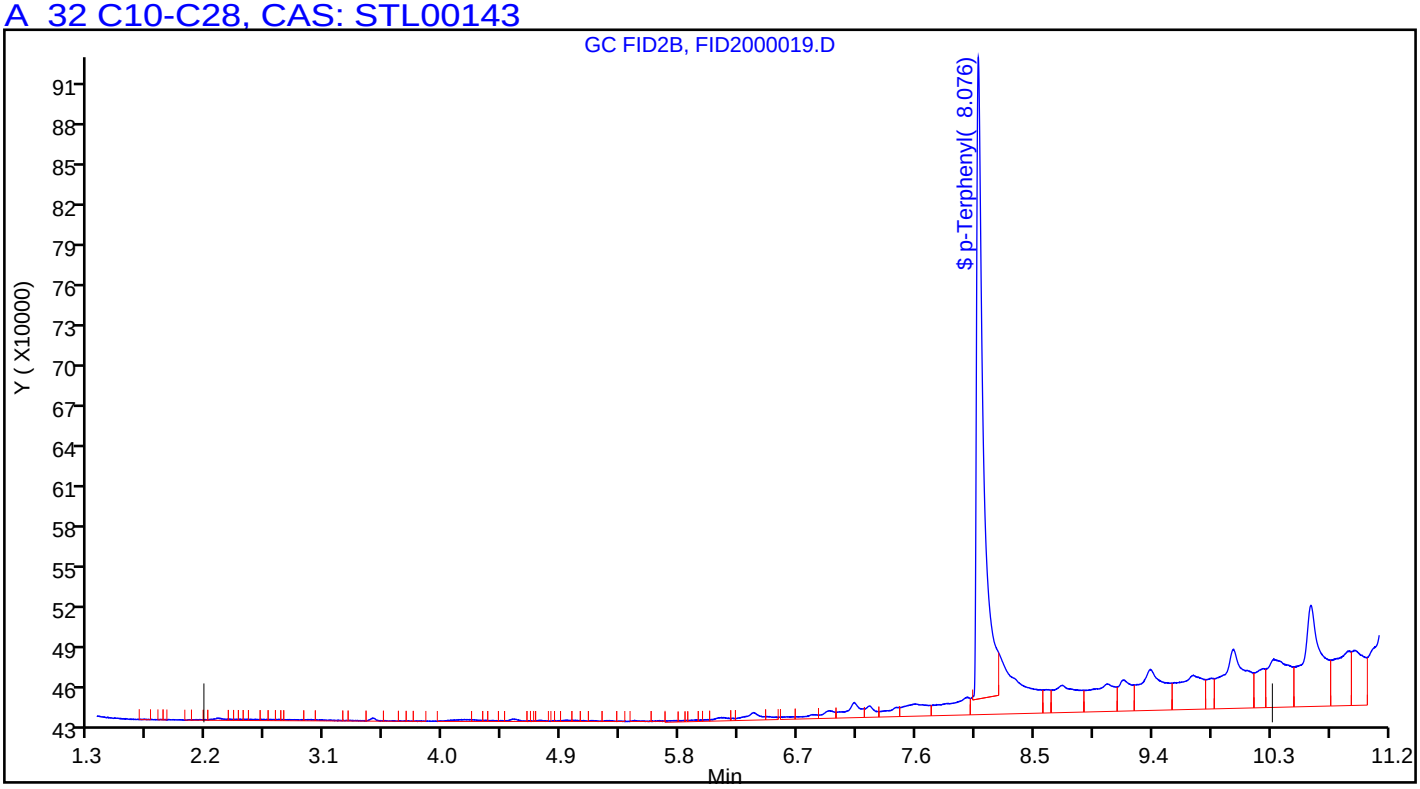
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	19.6	78.28

Report Date: 31-Aug-2018 13:23:03 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000019.D				
Injection Date:	30-Aug-2018 20:03:46	Instrument ID:	CHDRO6		
Lims ID:	720-88239-D-5-A	Lab Sample ID:	720-88239-5		
Client ID:	DG-E7S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	69	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

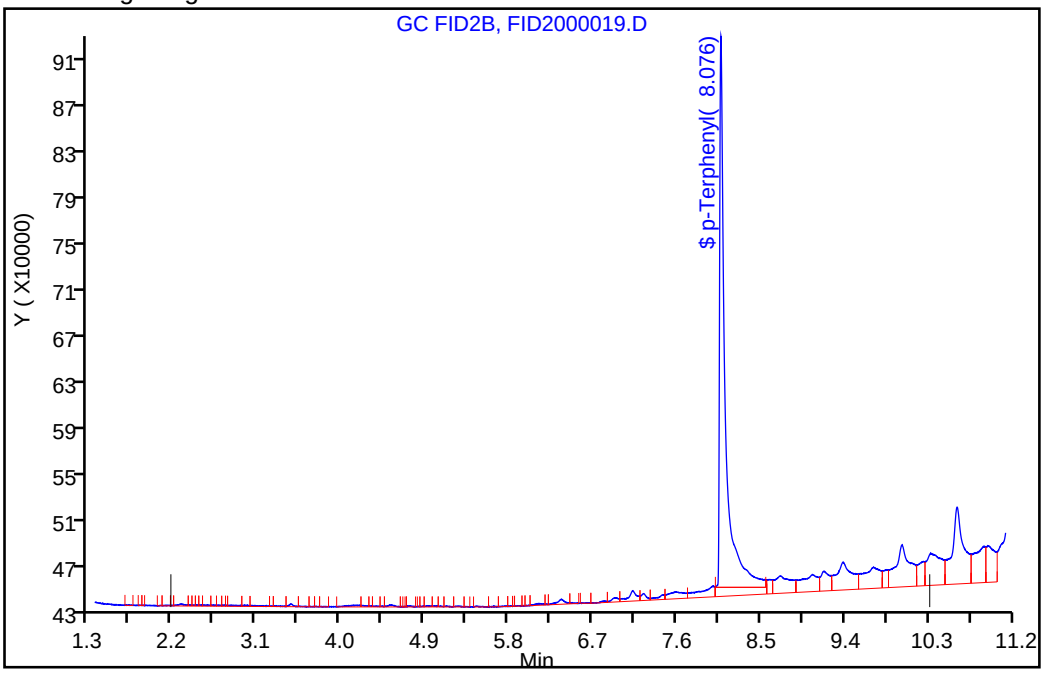
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000019.D				
Injection Date:	30-Aug-2018 20:03:46	Instrument ID:	CHDRO6		
Lims ID:	720-88239-D-5-A	Lab Sample ID:	720-88239-5		
Client ID:	DG-E7S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	69	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.245, CAS: STL00143

Signal: 1

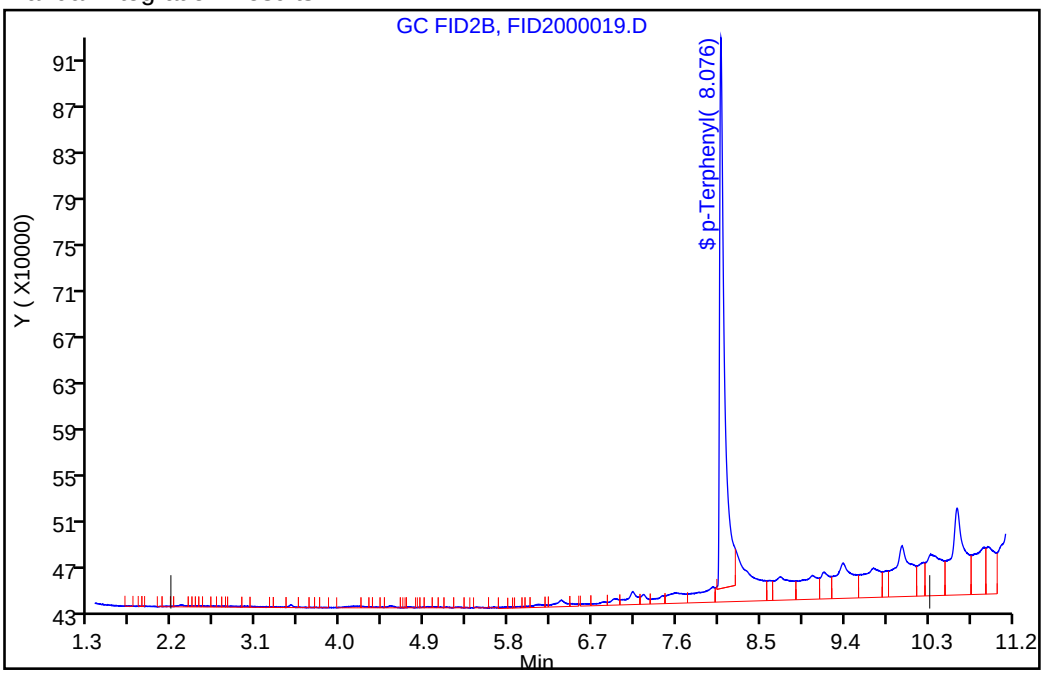
Processing Integration Results

RT: 6.24
Response: 45367059
Amount: 32.987056



Manual Integration Results

RT: 6.24
Response: 72792084
Amount: 48.515667



Reviewer: luj, 31-Aug-2018 13:22:15

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

TestAmerica Pleasanton

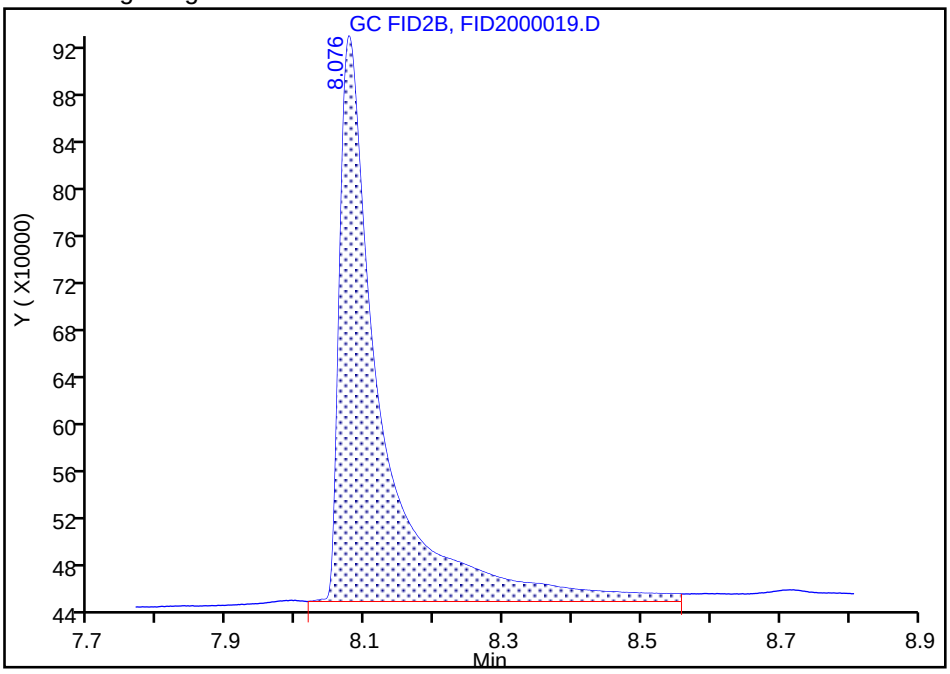
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000019.D				
Injection Date:	30-Aug-2018 20:03:46	Instrument ID:	CHDRO6		
Lims ID:	720-88239-D-5-A	Lab Sample ID:	720-88239-5		
Client ID:	DG-E7S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	69	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

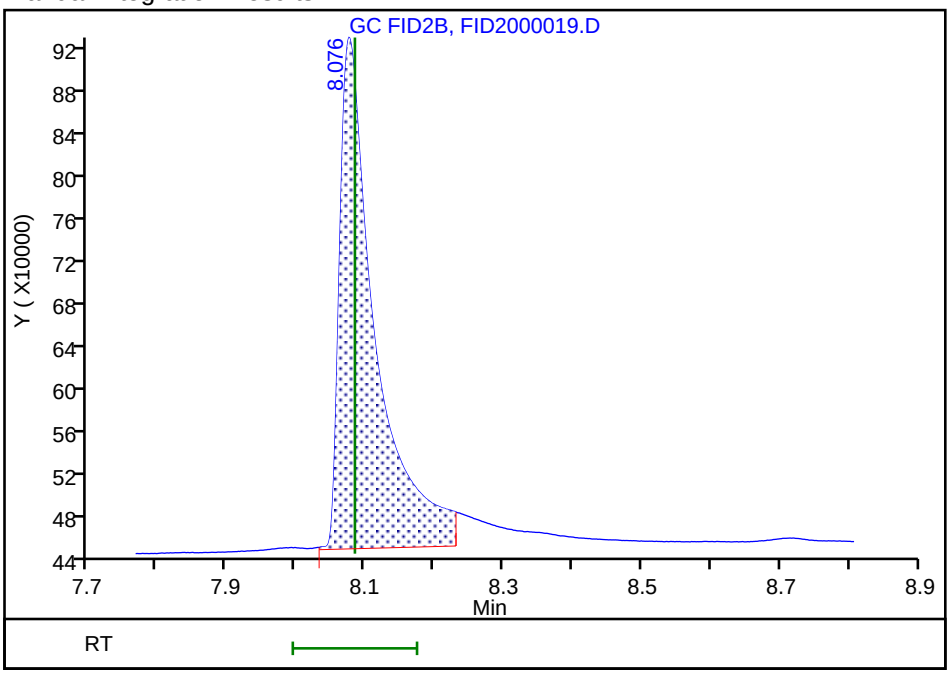
Processing Integration Results

RT: 8.08
Area: 39454508
Amount: 22.776038
Amount Units: mg/L



Manual Integration Results

RT: 8.08
Area: 33901805
Amount: 19.570610
Amount Units: mg/L



Reviewer: luj, 31-Aug-2018 13:22:36
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-E7S-9.5-10
Lab Sample ID: 720-88239-6
Matrix: Solid
Lab File ID: FID2000040.D
Analysis Method: 8015B
Date Collected: 08/24/2018 08:25
Extraction Method: 3546
Date Extracted: 08/28/2018 11:24
Sample wt/vol: 15.74(g)
Date Analyzed: 08/31/2018 04:34
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250569
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	1700	J	1900	710

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	104		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000040.D
Lims ID: 720-88239-E-6-A
Client ID: DG-E7S--9.5-10
Sample Type: Client
Inject. Date: 31-Aug-2018 04:34:54 ALS Bottle#: 90 Worklist Smp#: 40
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053574-040
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\DRO6_B.m
Limit Group: DRO
Last Update: 31-Aug-2018 10:58:43 Calib Date: 30-Aug-2018 10:14:10
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 10:58:43

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.310			ND	
23 n-Decane	2.183	2.172	0.011	16207	NC	
A 1 C9-C13	2.778	(1.310-4.246)		1477363	0.6773	
A 21 Stoddard Solvent	2.778	(1.310-4.246)		1477363	NC	
A 57 C10-C12	2.901	(2.172-3.631)		847922	7.78	
24 Dodecane		3.631			ND	
A 3 C9 - C17	3.809	(1.310-6.309)		1964793	0.8607	
A 60 C10-C16	4.002	(2.172-5.833)		1719924	0.8482	
A 47 C9 - C18	4.031	(1.310-6.752)		2344972	1.24	
A 25 C9-C19	4.243	(1.310-7.176)		2628000	1.14	
A 15 Kerosene	4.243	(1.310-7.176)		2628000	1.38	
26 C13		4.246			ND	
$ 27 n-Decanoic Acid (Surr)		4.639			ND	U
A 59 C12-C16	4.732	(3.631-5.833)		872002	7.79	
A 61 C10-C20	4.878	(2.172-7.583)		3179307	9.10	
A 28 C9-C24	5.181	(1.310-9.053)		7864444	11.8	
A 29 C9-C25	5.348	(1.310-9.386)		9892088	12.9	
A 54 C10-C23	5.440	(2.172-8.707)		7772008	11.7	
A 4 C10-C24	5.612	(2.172-9.053)		7772008	11.7	
A 16 C10-C25	5.779	(2.172-9.386)		9799652	12.8	
45 Hexadecane	5.925	5.833	0.092	53633	NC	
A 14 C10-C26	5.940	(2.172-9.707)		9799652	12.8	
A 67 C12-C22	5.989	(3.631-8.348)		6158218	10.8	
A 32 C10-C28	6.245	(2.172-10.317)		11092825	13.6	
A 5 Diesel	6.245	(2.172-10.317)		11092825	13.6	
A 12 Unknown Hydrocarbons	6.245	(2.172-10.317)		11092825	NC	
A 30 C13-C22	6.297	(4.246-8.348)		5984412	10.7	
44 Heptadecane	6.349	6.309	0.040	259817	NC	
A 31 C12-C24	6.342	(3.631-9.053)		6924086	11.2	
49 n-Octadecane	6.800	6.752	0.048	142360	NC	
A 9 Crude Oil Range Organics (	6.859	(1.310-12.408)		37032779	NC	
A 11 Bunker Range Organics (C9-	6.859	(1.310-12.408)		37032779	NC	

Report Date: 31-Aug-2018 10:58:44 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000040.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.859	(1.310-12.408)		37032779	17.5	
33 C19	7.189	7.176	0.013	297356	NC	
A 64 C13-C28	7.282	(4.246-10.317)		10071097	13.0	
A 17 C10-C36	7.290	(2.172-12.408)		36940343	28.2	
A 68 Crude Oil Range Organics (	7.349	(1.310-13.389)		104516993	NC	
A 13 C9-C40	7.349	(1.310-13.389)		104516993	66.9	
A 58 C16-C24	7.443	(5.833-9.053)		6052084	10.7	
62 icosane	7.598	7.583	0.015	350572	NC	
A 6 C10-C40	7.780	(2.172-13.389)		104424557	66.9	
$ 34 p-Terphenyl	8.062	8.084	-0.022	44866360	25.9	
35 n-Docosane	8.309	8.348	-0.039	3078114	NC	
A 18 C12-C40	8.510	(3.631-13.389)		103576635	66.6	
36 Tricosane	8.705	8.707	-0.002	765868	NC	
A 66 C13-C40	8.817	(4.246-13.389)		103402829	66.5	
37 n-Tetracosane	9.056	9.053	0.003	341698	NC	
A 2 C16-C36 ORO	9.121	(5.833-12.408)		35220419	29.8	
38 C25	9.386	9.386	0.000	1148163	NC	
A 19 C16-C40	9.611	(5.833-13.389)		102704633	66.3	
46 n-Hexacosane	9.709	9.707	0.002	441604	NC	
A 20 C19-C36		(7.176-12.408)			ND	
A 55 C23-C32	10.066	(8.707-11.425)		8518810	11.0	
39 n-Octacosane	10.323	10.317	0.006	542629	NC	
65 C29	10.611	10.607	0.004	777214	NC	
A 40 C24-C36	10.731	(9.053-12.408)		71720254	73.2	M
A 7 Motor Oil	10.731	(9.053-12.408)		24183812	24.7	
A 10 C22-C40	10.868	(8.348-13.389)		84664196	60.9	
A 50 C25-C36	10.897	(9.386-12.408)		27199397	29.5	
A 41 C23-C40	11.048	(8.707-13.389)		90727407	66.4	
A 8 C24-C40	11.221	(9.053-13.389)		86617798	64.6	
56 Dotriacontane	11.492	11.425	0.067	4860482	NC	
A 51 C28-C40	11.853	(10.317-13.389)		108634936	100.1	
A 63 C29-C40	11.998	(10.607-13.389)		112014095	112.1	
42 n-Hexatriacontane		12.408			ND	
43 C40	13.406	13.389	0.017	5989160	NC	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
- NC - Not Calibrated

Review Flags
- M - Manually Integrated
- U - Marked Undetected

Report Date: 31-Aug-2018 10:58:44 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000040.D				
Injection Date:	31-Aug-2018 04:34:54	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88239-E-6-A	Lab Sample ID:	720-88239-6	Worklist Smp#:	40
Client ID:	DG-E7S--9.5-10				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	90
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value

TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000040.D
Lims ID: 720-88239-E-6-A
Client ID: DG-E7S--9.5-10
Sample Type: Client
Inject. Date: 31-Aug-2018 04:34:54 ALS Bottle#: 90 Worklist Smp#: 40
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053574-040
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\DRO6_B.m
Limit Group: DRO
Last Update: 31-Aug-2018 10:58:43 Calib Date: 30-Aug-2018 10:14:10
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 10:58:43

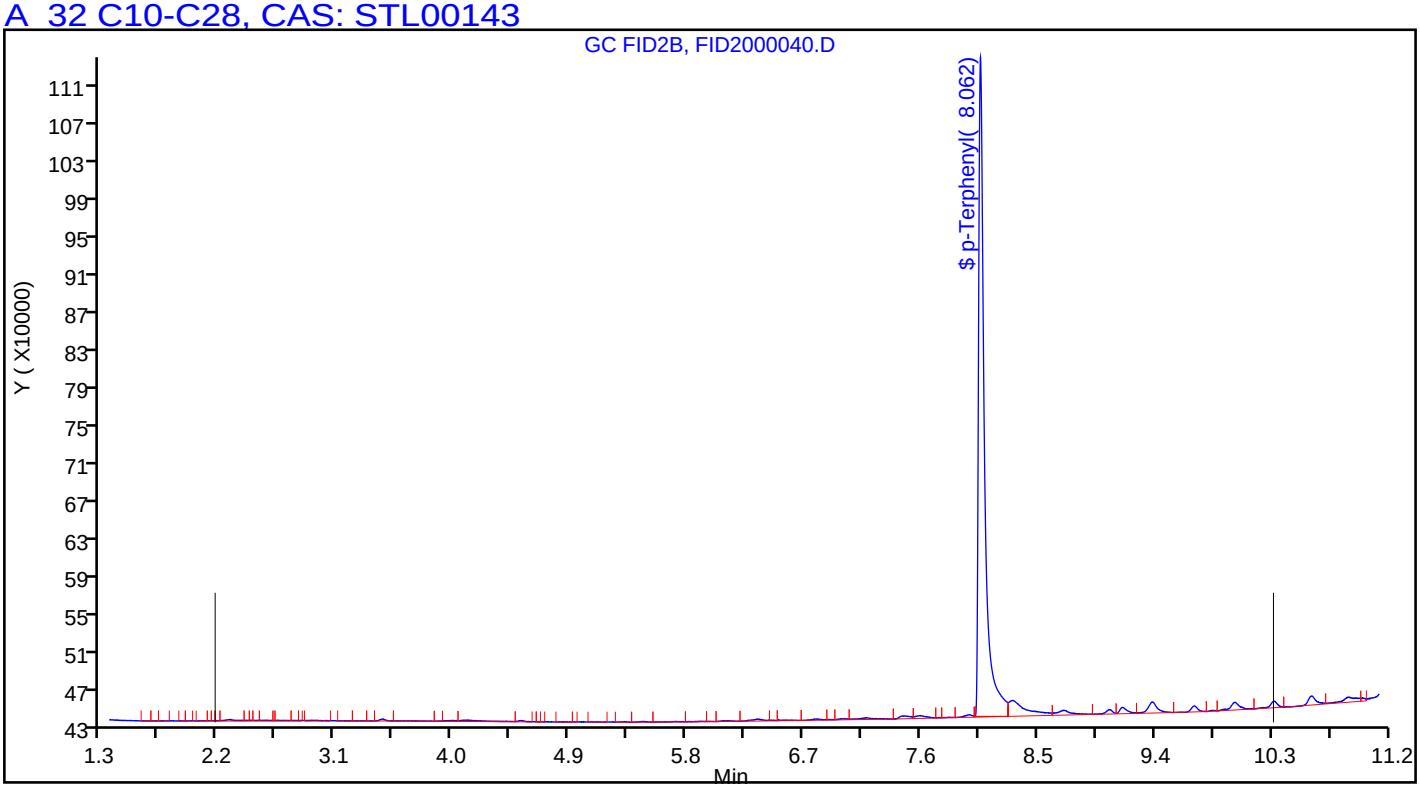
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	25.9	103.60

Report Date: 31-Aug-2018 10:58:45 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000040.D				
Injection Date:	31-Aug-2018 04:34:54	Instrument ID:	CHDRO6		
Lims ID:	720-88239-E-6-A	Lab Sample ID:	720-88239-6		
Client ID:	DG-E7S--9.5-10				
Operator ID:	DCH	ALS Bottle#:	90	Worklist Smp#:	40
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-G7S-0.5-1
Lab Sample ID: 720-88239-7
Matrix: Solid
Lab File ID: 5a082918_024.d
Analysis Method: 8015B
Date Collected: 08/24/2018 08:50
Extraction Method: 3546
Date Extracted: 08/28/2018 11:24
Sample wt/vol: 15.51(g)
Date Analyzed: 08/30/2018 00:57
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: ZB-5 ID: 320(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250456
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	11000		1900	730

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	79		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_024.d
Lims ID: 720-88239-D-7-C
Client ID: DG-G7S--0.5-1
Sample Type: Client
Inject. Date: 30-Aug-2018 00:57:27 ALS Bottle#: 0 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: #: 007 Name: 720-0053542-024
Operator ID: manager Instrument ID: CHDRO5

Method: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\DRO5A.m
Limit Group: DRO
Last Update: 30-Aug-2018 14:32:36 Calib Date: 29-Aug-2018 09:16:57
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_003.d

Column 1 : Det: GC FID1A
Process Host: XAWRK001

First Level Reviewer: luj Date: 30-Aug-2018 14:32:36

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		2.353			ND	
23 n-Decane	3.649	3.631	0.018	1128	NC	
A 21 Stoddard Solvent	4.369	(2.353-6.384)		284441	27.2	
A 1 C9-C13	4.369	(2.353-6.384)		284441	25.4	
A 57 C10-C12	4.604	(3.631-5.578)		16510	1.69	
24 Dodecane		5.578			ND	
A 3 C9 - C17	5.727	(2.353-9.102)		306709	24.3	
A 47 C9 - C18	6.024	(2.353-9.695)		306709	28.9	
A 60 C10-C16	6.050	(3.631-8.469)		39004	3.47	
A 25 C9-C19	6.296	(2.353-10.239)		345944	27.2	
A 15 Kerosene	6.296	(2.353-10.239)		345944	32.6	
26 C13	6.481	6.384	0.097	1794	NC	
A 59 C12-C16	7.023	(5.578-8.469)		22494	2.30	
$ 27 n-Decanoic Acid (Surr)		7.115			ND	U
A 62 C10-C20	7.203	(3.631-10.776)		173264	17.7	
A 28 C9-C24	7.529	(2.353-12.705)		646695	66.0	
A 29 C9-C25	7.747	(2.353-13.140)		714616	73.0	
A 54 C10-C23	7.941	(3.631-12.251)		331455	33.9	
A 4 C10-C24	8.168	(3.631-12.705)		382661	39.1	
A 16 C10-C25	8.386	(3.631-13.140)		450582	46.0	
45 Hexadecane	8.504	8.469	0.035	3671	NC	
A 14 C10-C26	8.596	(3.631-13.561)		594069	60.7	
A 67 C12-C22	8.678	(5.578-11.779)		314945	32.2	
A 5 Diesel	8.995	(3.631-14.360)		857347	87.6	
A 32 C10-C28	8.995	(3.631-14.360)		857347	87.6	
A 12 Unknown Hydrocarbons	8.995	(3.631-14.360)		857347	NC	
A 30 C13-C22	9.082	(6.384-11.779)		311048	31.8	
44 Heptadecane		9.102			ND	
A 31 C12-C24	9.141	(5.578-12.705)		366151	37.4	
49 n-Octadecane	9.700	9.695	0.005	13607	NC	
A 11 Bunker Range Organics (C9-	9.723	(2.353-17.094)		3498975	NC	
A 52 Mineral oil	9.723	(2.353-17.094)		2327672	206.9	

Report Date: 30-Aug-2018 14:32:37 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_024.d

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 9 Crude Oil Range Organics (	9.723	(2.353-17.094)		2327672	NC	
33 C19	10.233	10.239	-0.006	7650	NC	
A 17 C10-C36	10.362	(3.631-17.094)		3234941	330.4	
A 64 C13-C28	10.372	(6.384-14.360)		836940	85.5	
A 68 Crude Oil Range Organics (	10.450	(2.353-18.548)		2978657	NC	
A 13 C9-C40	10.450	(2.353-18.548)		2978657	297.7	
A 58 C16-C24	10.587	(8.469-12.705)		343657	35.1	
61 icosane		10.776			ND	
A 6 C10-C40	11.089	(3.631-18.548)		2973388	297.3	
35 n-Docosane		11.779			ND	
$ 34 p-Terphenyl	11.807	11.823	-0.016	259073	19.9	M
A 18 C12-C40	12.063	(5.578-18.548)		2955191	295.6	
36 Tricosane	12.255	12.251	0.004	51206	NC	
A 66 C13-C40	12.466	(6.384-18.548)		2950288	295.2	
37 n-Tetracosane	12.707	12.705	0.002	42438	NC	
A 2 C16-C36 ORO	12.781	(8.469-17.094)		2274817	281.9	
38 C25		13.140			ND	
A 19 C16-C40	13.508	(8.469-18.548)		2925802	293.1	
46 n-Hexacosane	13.537	13.561	-0.024	143487	NC	
A 20 C19-C36	13.666	(10.239-17.094)		2102871	270.2	
A 55 C23-C32	14.029	(12.251-15.807)		1137952	233.2	
39 n-Octacosane	14.351	14.360	-0.009	155987	NC	
65 C29	14.744	14.738	0.006	164518	NC	
A 40 C24-C36	14.899	(12.705-17.094)		1767430	278.4	
A 7 Motor Oil	14.899	(12.705-17.094)		1767430	278.4	
A 50 C25-C36	15.117	(13.140-17.094)		1695740	282.8	
A 10 C22-C40	15.163	(11.779-18.548)		2513026	274.2	
A 41 C23-C40	15.399	(12.251-18.548)		2457472	274.7	
A 8 C24-C40	15.626	(12.705-18.548)		2393563	276.7	
56 Dotriacontane		15.807			ND	
A 51 C28-C40	16.454	(14.360-18.548)		1992553	288.9	
A 63 C29-C40	16.643	(14.738-18.548)		1847046	291.3	
42 n-Hexatriacontane		17.094			ND	
43 C40		18.548			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

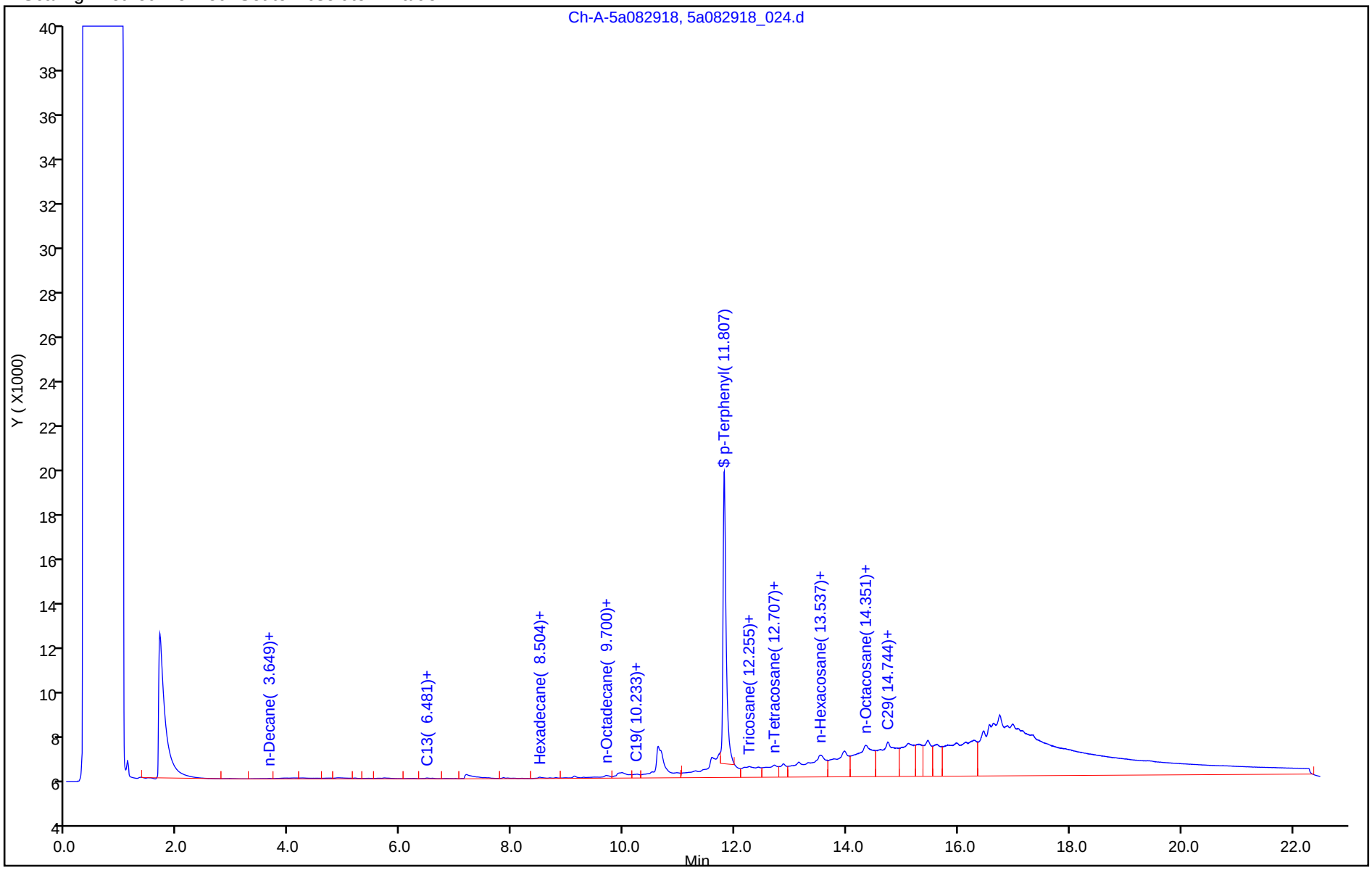
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 30-Aug-2018 14:32:37 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_024.d				
Injection Date:	30-Aug-2018 00:57:27	Instrument ID:	CHDRO5	Operator ID:	manager
Lims ID:	720-88239-D-7-C	Lab Sample ID:	720-88239-7	Worklist Smp#:	24
Client ID:	DG-G7S--0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	DRO5A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_024.d
Lims ID: 720-88239-D-7-C
Client ID: DG-G7S--0.5-1
Sample Type: Client
Inject. Date: 30-Aug-2018 00:57:27 ALS Bottle#: 0 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: #: 007 Name: 720-0053542-024
Operator ID: manager Instrument ID: CHDRO5

Method: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\DRO5A.m
Limit Group: DRO
Last Update: 30-Aug-2018 14:32:36 Calib Date: 29-Aug-2018 09:16:57
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_003.d

Column 1 : Det: GC FID1A
Process Host: XAWRK001

First Level Reviewer: luj Date: 30-Aug-2018 14:32:36

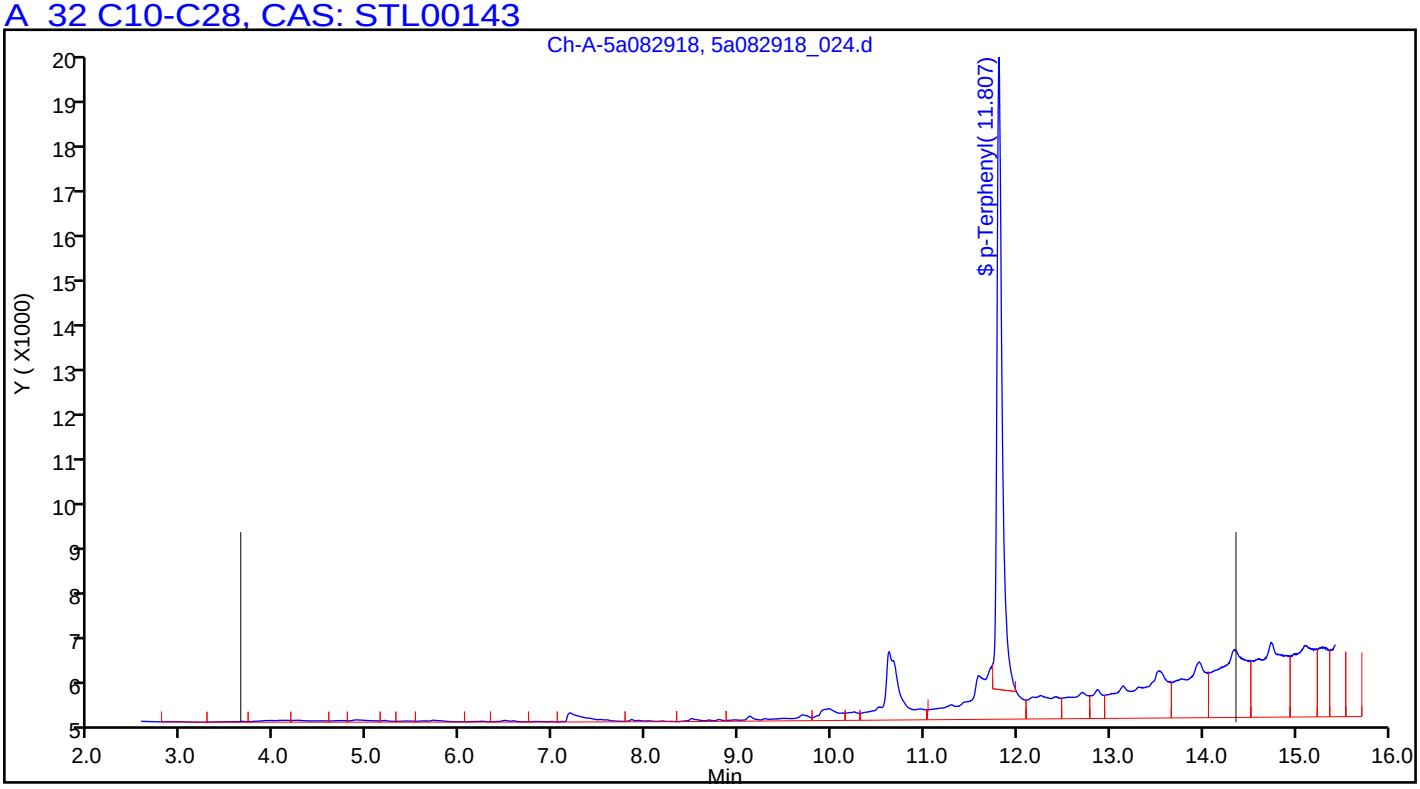
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	19.9	79.44

Report Date: 30-Aug-2018 14:32:38 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_024.d				
Injection Date:	30-Aug-2018 00:57:27	Instrument ID:	CHDRO5		
Lims ID:	720-88239-D-7-C	Lab Sample ID:	720-88239-7		
Client ID:	DG-G7S--0.5-1				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

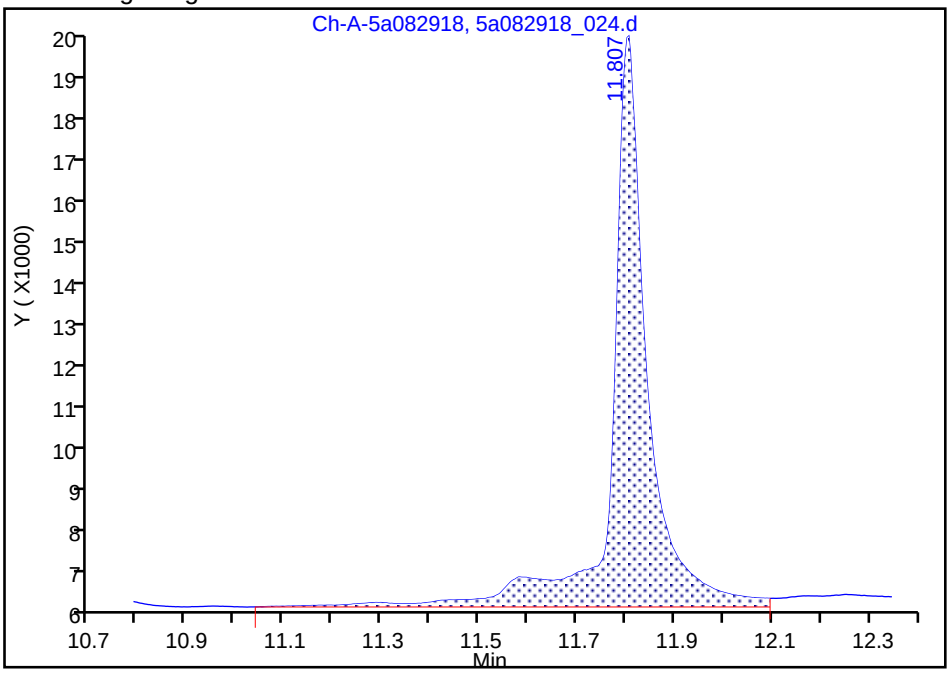
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_024.d				
Injection Date:	30-Aug-2018 00:57:27	Instrument ID:	CHDRO5		
Lims ID:	720-88239-D-7-C	Lab Sample ID:	720-88239-7		
Client ID:	DG-G7S--0.5-1				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

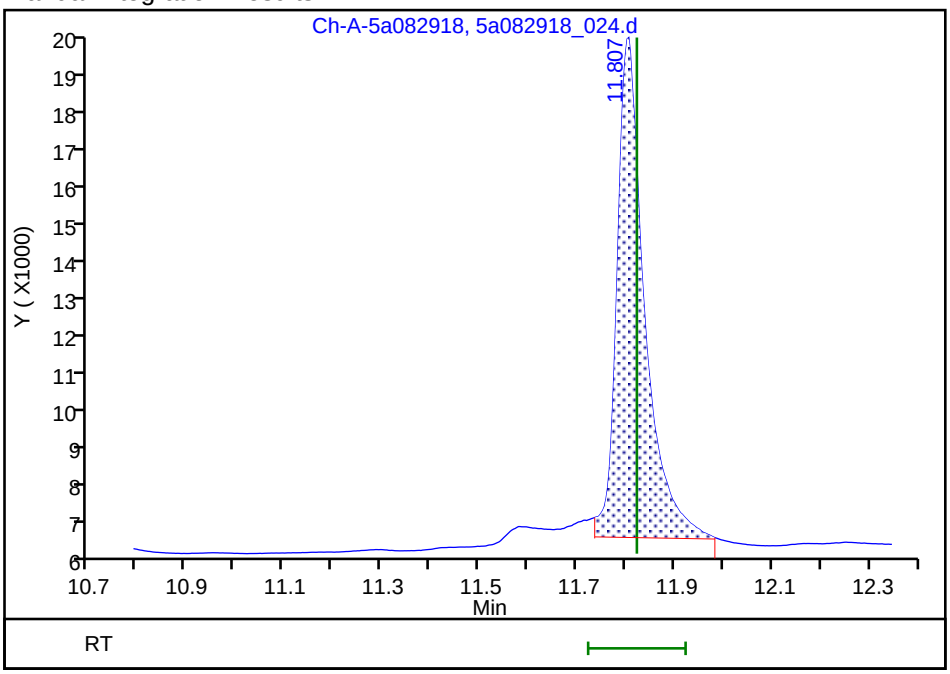
Processing Integration Results

RT: 11.81
Area: 352661
Amount: 27.035284
Amount Units: mg/L



Manual Integration Results

RT: 11.81
Area: 259073
Amount: 19.860751
Amount Units: mg/L



Reviewer: luj, 30-Aug-2018 14:32:29

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-G7S-3.5-4
Lab Sample ID: 720-88239-8
Matrix: Solid
Lab File ID: FID2000041.D
Analysis Method: 8015B
Date Collected: 08/24/2018 08:50
Extraction Method: 3546
Date Extracted: 08/28/2018 11:24
Sample wt/vol: 15.84(g)
Date Analyzed: 08/31/2018 04:59
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250569
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	47000		1900	710

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	95		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000041.D
Lims ID: 720-88239-D-8-A
Client ID: DG-G7S--3.5-4
Sample Type: Client
Inject. Date: 31-Aug-2018 04:59:26 ALS Bottle#: 91 Worklist Smp#: 41
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053574-041
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\DRO6_B.m
Limit Group: DRO
Last Update: 31-Aug-2018 10:59:42 Calib Date: 30-Aug-2018 10:14:10
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 10:59:42

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.310			ND	
23 n-Decane	2.174	2.172	0.002	194567	NC	
A 1 C9-C13	2.778	(1.310-4.246)		3517528	1.61	
A 21 Stoddard Solvent	2.778	(1.310-4.246)		3517528	NC	
A 57 C10-C12	2.901	(2.172-3.631)		2249526	8.57	
24 Dodecane	3.596	3.631	-0.035	47850	NC	
A 3 C9 - C17	3.809	(1.310-6.309)		29624330	13.0	
A 60 C10-C16	4.002	(2.172-5.833)		18855944	9.30	
A 47 C9 - C18	4.031	(1.310-6.752)		60024562	31.7	
A 25 C9-C19	4.243	(1.310-7.176)		94509841	41.1	
A 15 Kerosene	4.243	(1.310-7.176)		94509841	49.8	
26 C13	4.218	4.246	-0.028	418977	NC	
$ 27 n-Decanoic Acid (Surr)		4.639			ND	U
A 59 C12-C16	4.732	(3.631-5.833)		16606418	16.7	
A 61 C10-C20	4.878	(2.172-7.583)		161860509	98.9	
A 28 C9-C24	5.181	(1.310-9.053)		401027679	234.4	
A 29 C9-C25	5.348	(1.310-9.386)		430484536	251.0	
A 54 C10-C23	5.440	(2.172-8.707)		311785265	183.8	
A 4 C10-C24	5.612	(2.172-9.053)		400748090	234.2	
A 16 C10-C25	5.779	(2.172-9.386)		430204947	250.9	
45 Hexadecane	5.838	5.833	0.005	4257396	NC	
A 14 C10-C26	5.940	(2.172-9.707)		493660089	286.8	
A 67 C12-C22	5.989	(3.631-8.348)		282218483	167.1	
A 32 C10-C28	6.245	(2.172-10.317)		638272423	368.7	
A 5 Diesel	6.245	(2.172-10.317)		638272423	368.7	
A 12 Unknown Hydrocarbons	6.245	(2.172-10.317)		638272423	NC	
A 30 C13-C22	6.297	(4.246-8.348)		281230070	166.5	
44 Heptadecane	6.333	6.309	0.024	7498673	NC	
A 31 C12-C24	6.342	(3.631-9.053)		398498564	232.9	
49 n-Octadecane	6.757	6.752	0.005	8125634	NC	
A 9 Crude Oil Range Organics (	6.859	(1.310-12.408)		1170881052	NC	
A 11 Bunker Range Organics (C9-	6.859	(1.310-12.408)		1170881052	NC	

Report Date: 31-Aug-2018 10:59:43 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000041.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.859	(1.310-12.408)		1170881052	554.6	
33 C19	7.176	7.176	0.000	9182614	NC	
A 64 C13-C28	7.282	(4.246-10.317)		635034484	366.9	
A 17 C10-C36	7.290	(2.172-12.408)		1170601463	670.1	
A 68 Crude Oil Range Organics (	7.349	(1.310-13.389)		1522226954	NC	
A 13 C9-C40	7.349	(1.310-13.389)		1522226954	974.3	
A 58 C16-C24	7.443	(5.833-9.053)		381892146	223.5	
62 icosane	7.557	7.583	-0.026	32219899	NC	
A 6 C10-C40	7.780	(2.172-13.389)		1521947365	975.2	
$ 34 p-Terphenyl	8.058	8.084	-0.026	40966732	23.6	M
35 n-Docosane	8.303	8.348	-0.045	22118882	NC	
A 18 C12-C40	8.510	(3.631-13.389)		1519697839	976.5	
36 Tricosane	8.740	8.707	0.033	36144114	NC	
A 66 C13-C40	8.817	(4.246-13.389)		1518709426	977.0	
37 n-Tetracosane	8.967	9.053	-0.086	41708228	NC	
A 2 C16-C36 ORO	9.121	(5.833-12.408)		1151745519	974.0	
38 C25	9.392	9.386	0.006	32202115	NC	
A 19 C16-C40	9.611	(5.833-13.389)		1503091421	970.1	
46 n-Hexacosane	9.762	9.707	0.055	24060085	NC	
A 20 C19-C36	9.792	(7.176-12.408)		808135911	593.6	
A 55 C23-C32	10.066	(8.707-11.425)		613800031	793.1	
39 n-Octacosane	10.358	10.317	0.041	24766599	NC	
65 C29	10.611	10.607	0.004	33777306	NC	
A 40 C24-C36	10.731	(9.053-12.408)		901466053	919.5	M
A 7 Motor Oil	10.731	(9.053-12.408)		680399343	694.0	
A 10 C22-C40	10.868	(8.348-13.389)		898224646	646.2	
A 50 C25-C36	10.897	(9.386-12.408)		586876756	637.1	
A 41 C23-C40	11.048	(8.707-13.389)		868413632	635.4	
A 8 C24-C40	11.221	(9.053-13.389)		829899723	618.7	
56 Dotriacontane	11.424	11.425	-0.001	16316684	NC	
A 51 C28-C40	11.853	(10.317-13.389)		635341133	585.7	
A 63 C29-C40	11.998	(10.607-13.389)		578782082	579.2	
42 n-Hexatriacontane	12.404	12.408	-0.004	30406837	NC	
43 C40		13.389		ND		
$ 69 Stearic Acid (Surr)		0.000		ND		

QC Flag Legend

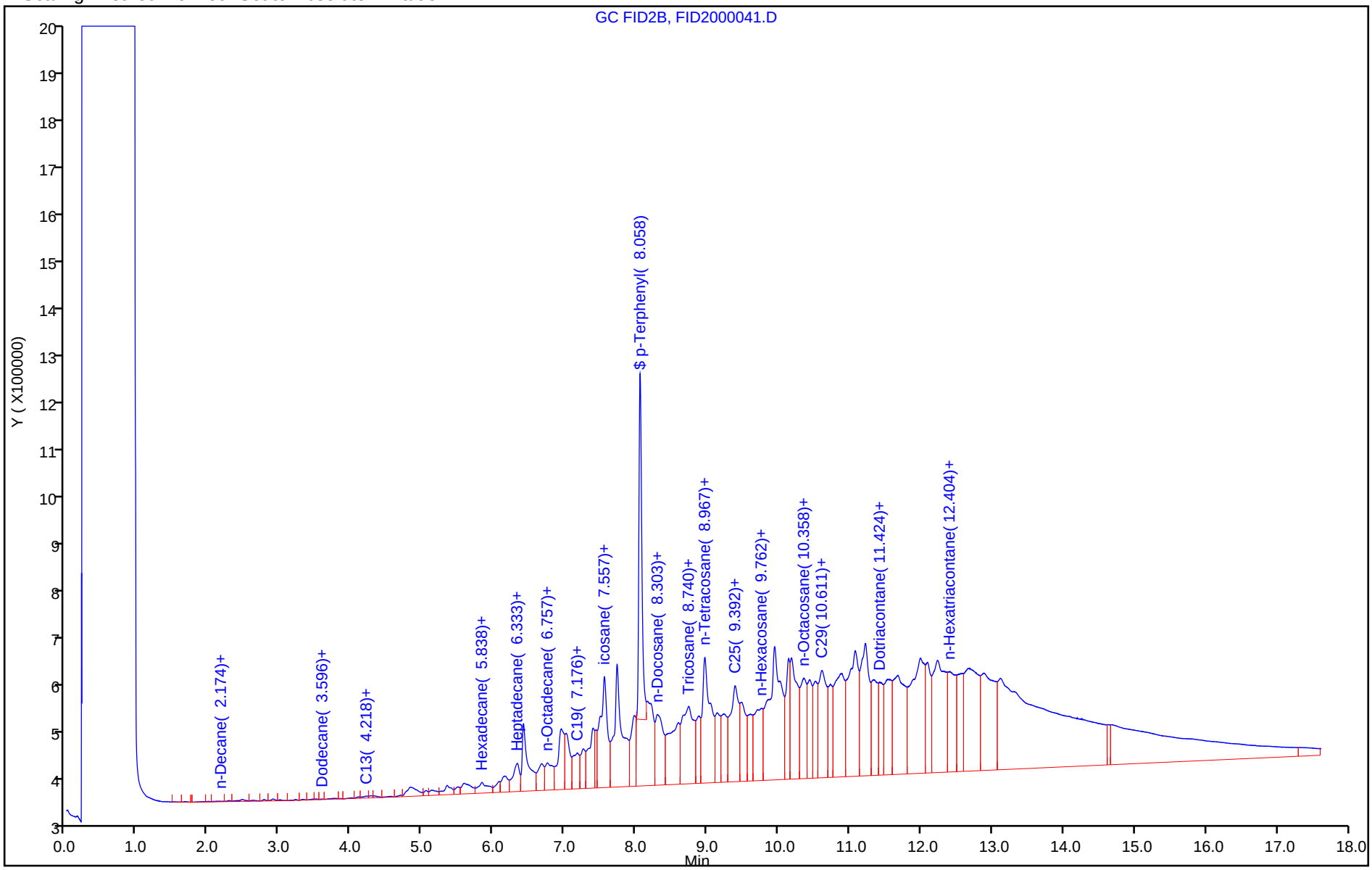
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 31-Aug-2018 10:59:43 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000041.D				
Injection Date:	31-Aug-2018 04:59:26	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88239-D-8-A	Lab Sample ID:	720-88239-8	Worklist Smp#:	41
Client ID:	DG-G7S--3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	91
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000041.D				
Lims ID:	720-88239-D-8-A				
Client ID:	DG-G7S--3.5-4				
Sample Type:	Client				
Inject. Date:	31-Aug-2018 04:59:26	ALS Bottle#:	91	Worklist Smp#:	41
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	720-0053574-041				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\DRO6_B.m				
Limit Group:	DRO				
Last Update:	31-Aug-2018 10:59:42	Calib Date:	30-Aug-2018 10:14:10		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000003.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK020				

First Level Reviewer: luj Date: 31-Aug-2018 10:59:42

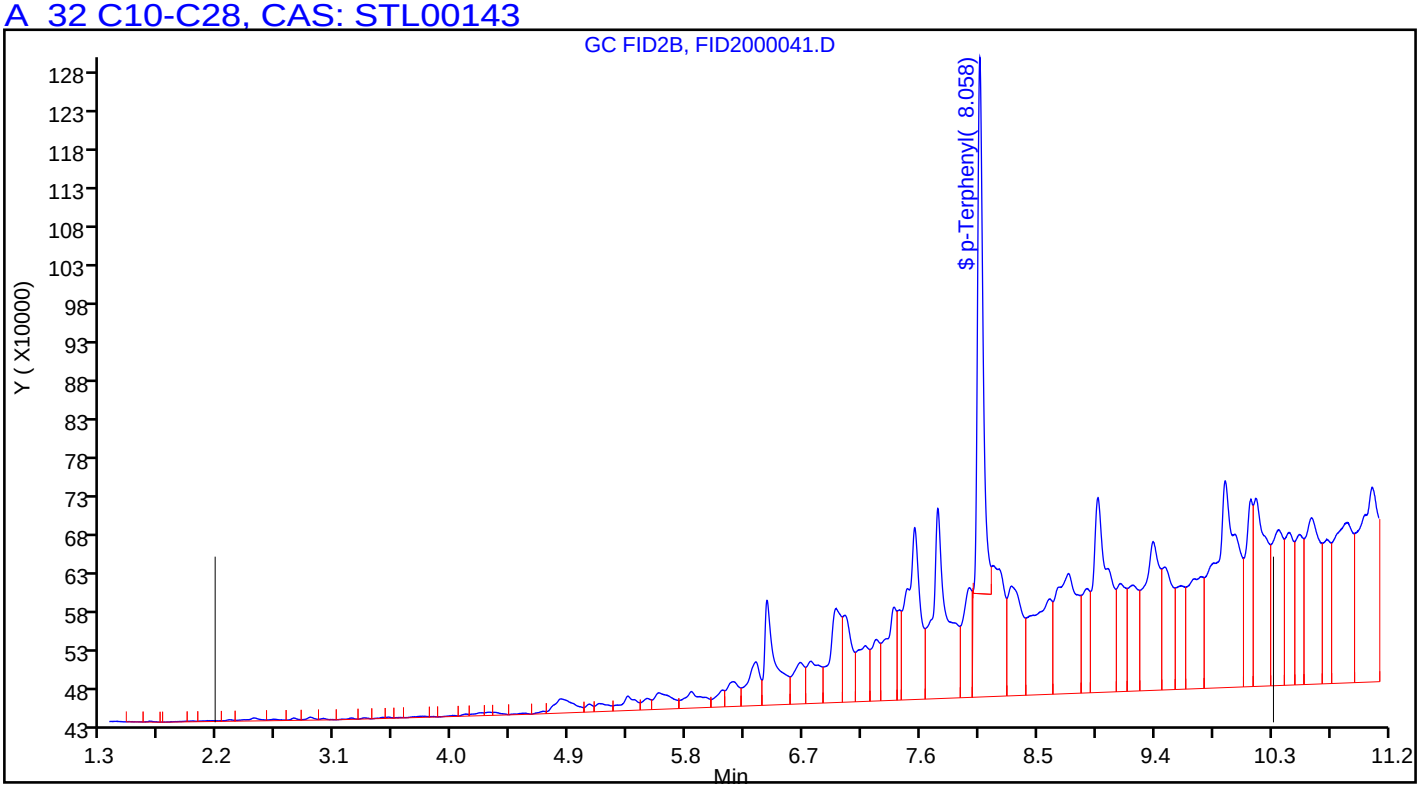
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	23.6	94.60

Report Date: 31-Aug-2018 10:59:45 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000041.D				
Injection Date:	31-Aug-2018 04:59:26	Instrument ID:	CHDRO6		
Lims ID:	720-88239-D-8-A	Lab Sample ID:	720-88239-8		
Client ID:	DG-G7S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	91	Worklist Smp#:	41
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

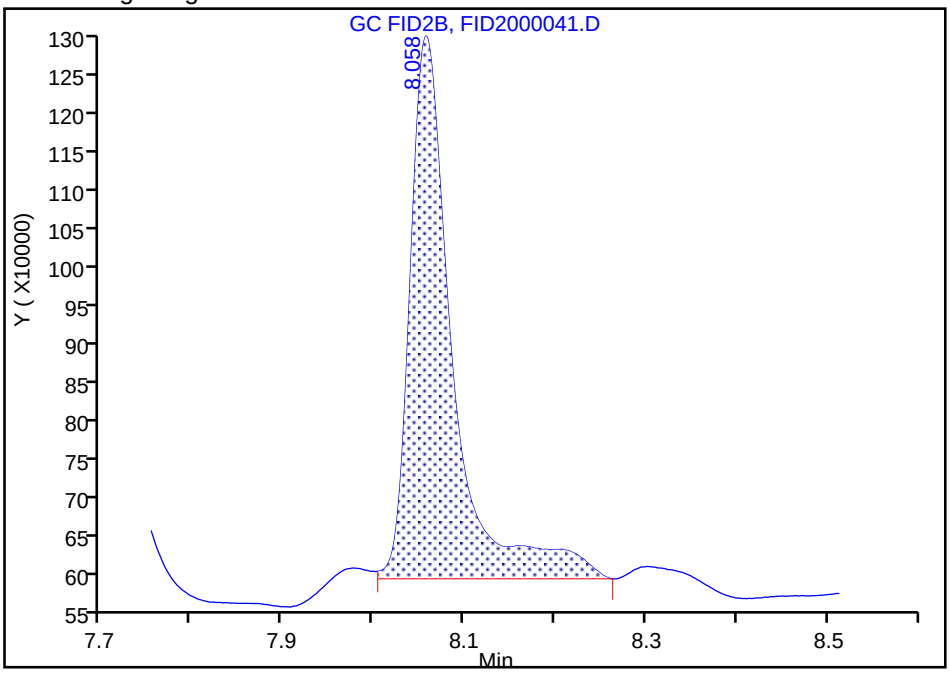
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000041.D				
Injection Date:	31-Aug-2018 04:59:26	Instrument ID:	CHDRO6		
Lims ID:	720-88239-D-8-A	Lab Sample ID:	720-88239-8		
Client ID:	DG-G7S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	91	Worklist Smp#:	41
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

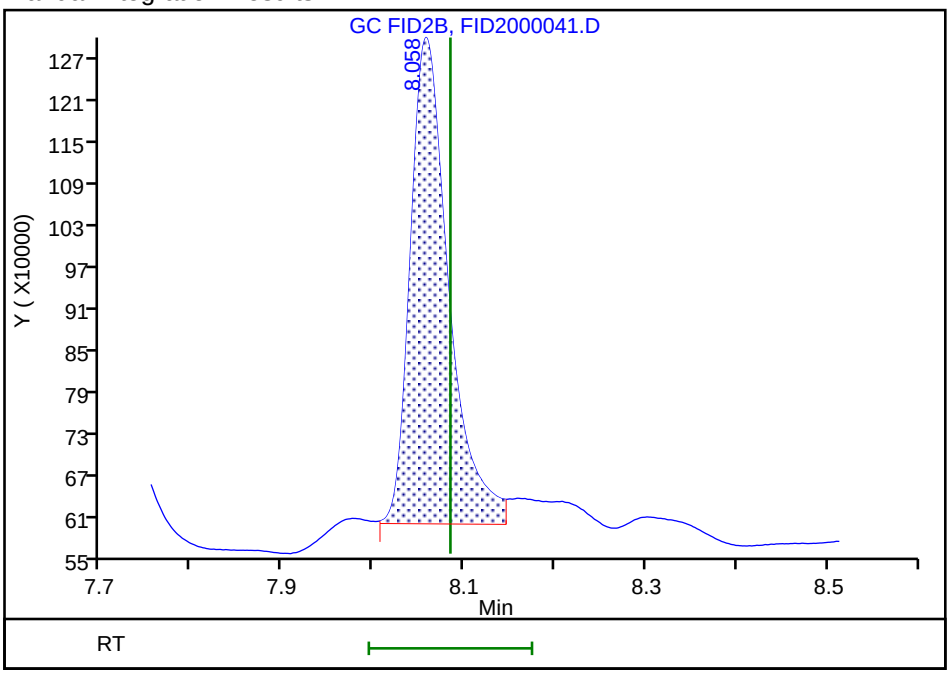
Processing Integration Results

RT: 8.06
Area: 46293877
Amount: 26.724224
Amount Units: mg/L



Manual Integration Results

RT: 8.06
Area: 40966732
Amount: 23.649005
Amount Units: mg/L



Reviewer: luj, 31-Aug-2018 10:59:24

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-B10S-0.5-1
Lab Sample ID: 720-88239-9
Matrix: Solid
Lab File ID: FID2000008.D
Analysis Method: 8015B
Date Collected: 08/24/2018 10:40
Extraction Method: 3546
Date Extracted: 08/29/2018 13:41
Sample wt/vol: 15.90(g)
Date Analyzed: 08/31/2018 12:14
Con. Extract Vol.: 2(mL)
Dilution Factor: 3
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250656
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	100000		5700	2100

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	74		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000008.D
Lims ID: 720-88239-E-9-C
Client ID: DG-B10S--0.5-1
Sample Type: Client
Inject. Date: 31-Aug-2018 12:14:21 ALS Bottle#: 58 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 3.0000
Sample Info: 720-0053602-008
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\DRO6_B.m
Limit Group: DRO
Last Update: 31-Aug-2018 13:07:45 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 13:07:45

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.307			ND	
23 n-Decane	2.226	2.169	0.057	58052	NC	
A 1 C9-C13	2.775	(1.307-4.243)		1717842	0.7875	M
A 21 Stoddard Solvent	2.775	(1.307-4.243)		1717842	NC	M
A 57 C10-C12	2.898	(2.169-3.628)		719126	7.71	
24 Dodecane	3.634	3.628	0.006	9740	NC	
A 3 C9 - C17	3.806	(1.307-6.306)		19358999	8.48	M
A 60 C10-C16	4.000	(2.169-5.830)		14145454	6.98	M
A 47 C9 - C18	4.028	(1.307-6.750)		27196311	14.4	M
A 25 C9-C19	4.240	(1.307-7.174)		41220120	17.9	M
A 15 Kerosene	4.240	(1.307-7.174)		41220120	21.7	M
26 C13	4.286	4.243	0.043	69641	NC	M
$ 27 n-Decanoic Acid (Surr)		4.632			ND	U
A 59 C12-C16	4.729	(3.628-5.830)		13426328	14.9	M
A 61 C10-C20	4.875	(2.169-7.581)		78170222	51.6	M
A 28 C9-C24	5.179	(1.307-9.051)		216654335	130.0	M
A 29 C9-C25	5.345	(1.307-9.384)		266816065	158.4	M
A 54 C10-C23	5.437	(2.169-8.705)		166465015	101.6	M
A 4 C10-C24	5.610	(2.169-9.051)		216576739	129.9	M
A 16 C10-C25	5.777	(2.169-9.384)		266738469	158.3	M
45 Hexadecane	5.850	5.830	0.020	1941013	NC	M
A 14 C10-C26	5.937	(2.169-9.705)		318361594	187.6	M
A 67 C12-C22	5.986	(3.628-8.345)		130561161	81.2	M
A 32 C10-C28	6.243	(2.169-10.317)		456181168	265.6	M
A 5 Diesel	6.243	(2.169-10.317)		456181168	265.6	M
A 12 Unknown Hydrocarbons	6.243	(2.169-10.317)		456181168	NC	M
A 30 C13-C22	6.294	(4.243-8.345)		129798168	80.8	M
44 Heptadecane	6.343	6.306	0.037	3362582	NC	M
A 31 C12-C24	6.339	(3.628-9.051)		215857613	129.5	M
49 n-Octadecane	6.796	6.750	0.046	4129272	NC	M
A 9 Crude Oil Range Organics (	6.859	(1.307-12.411)		1148620243	NC	M
A 11 Bunker Range Organics (C9-	6.859	(1.307-12.411)		1148620243	NC	M

Report Date: 31-Aug-2018 13:07:47 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000008.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.859	(1.307-12.411)		1148620243	544.1	M
33 C19	7.178	7.174	0.004	2147799	NC	M
A 64 C13-C28	7.280	(4.243-10.317)		454699049	264.8	M
A 17 C10-C36	7.290	(2.169-12.411)		1148542647	657.6	M
A 68 Crude Oil Range Organics (	7.349	(1.307-13.391)		1819456915	NC	M
A 13 C9-C40	7.349	(1.307-13.391)		1819456915	1164.6	M
A 58 C16-C24	7.441	(5.830-9.051)		202431285	121.9	M
62 icosane	7.576	7.581	-0.005	10992521	NC	M
A 6 C10-C40	7.780	(2.169-13.391)		1819379319	1165.8	M
$ 34 p-Terphenyl	8.088	8.077	0.011	10736956	6.20	
35 n-Docosane	8.353	8.345	0.008	13644632	NC	M
A 18 C12-C40	8.509	(3.628-13.391)		1818660193	1168.6	M
36 Tricosane	8.707	8.705	0.002	17365420	NC	M
A 66 C13-C40	8.817	(4.243-13.391)		1817897200	1169.4	M
37 n-Tetracosane	9.058	9.051	0.007	17485739	NC	M
A 2 C16-C36 ORO	9.120	(5.830-12.411)		1134397193	959.4	M
38 C25	9.389	9.384	0.005	23690701	NC	M
A 19 C16-C40	9.611	(5.830-13.391)		1805233865	1165.1	M
46 n-Hexacosane	9.722	9.705	0.017	28223295	NC	M
A 20 C19-C36	9.792	(7.174-12.411)		852974974	626.6	
A 55 C23-C32	10.065	(8.705-11.426)		673958557	870.9	M
39 n-Octacosane	10.257	10.317	-0.060	26212729	NC	M
65 C29	10.617	10.607	0.010	69021204	NC	M
A 40 C24-C36	10.731	(9.051-12.411)		900815746	918.8	M
A 7 Motor Oil	10.731	(9.051-12.411)		772675237	788.1	
A 10 C22-C40	10.868	(8.345-13.391)		1089482739	783.8	
A 50 C25-C36	10.898	(9.384-12.411)		717924448	779.3	
A 41 C23-C40	11.048	(8.705-13.391)		1065462733	779.6	
A 8 C24-C40	11.221	(9.051-13.391)		1054146205	785.9	
56 Dotriacontane	11.411	11.426	-0.015	64630384	NC	M
A 51 C28-C40	11.854	(10.317-13.391)		867267358	799.5	
A 63 C29-C40	11.999	(10.607-13.391)		796756154	797.3	
42 n-Hexatriacontane	12.468	12.411	0.057	13368984	NC	M
43 C40		13.391		ND		
$ 69 Stearic Acid (Surr)		0.000		ND		

QC Flag Legend

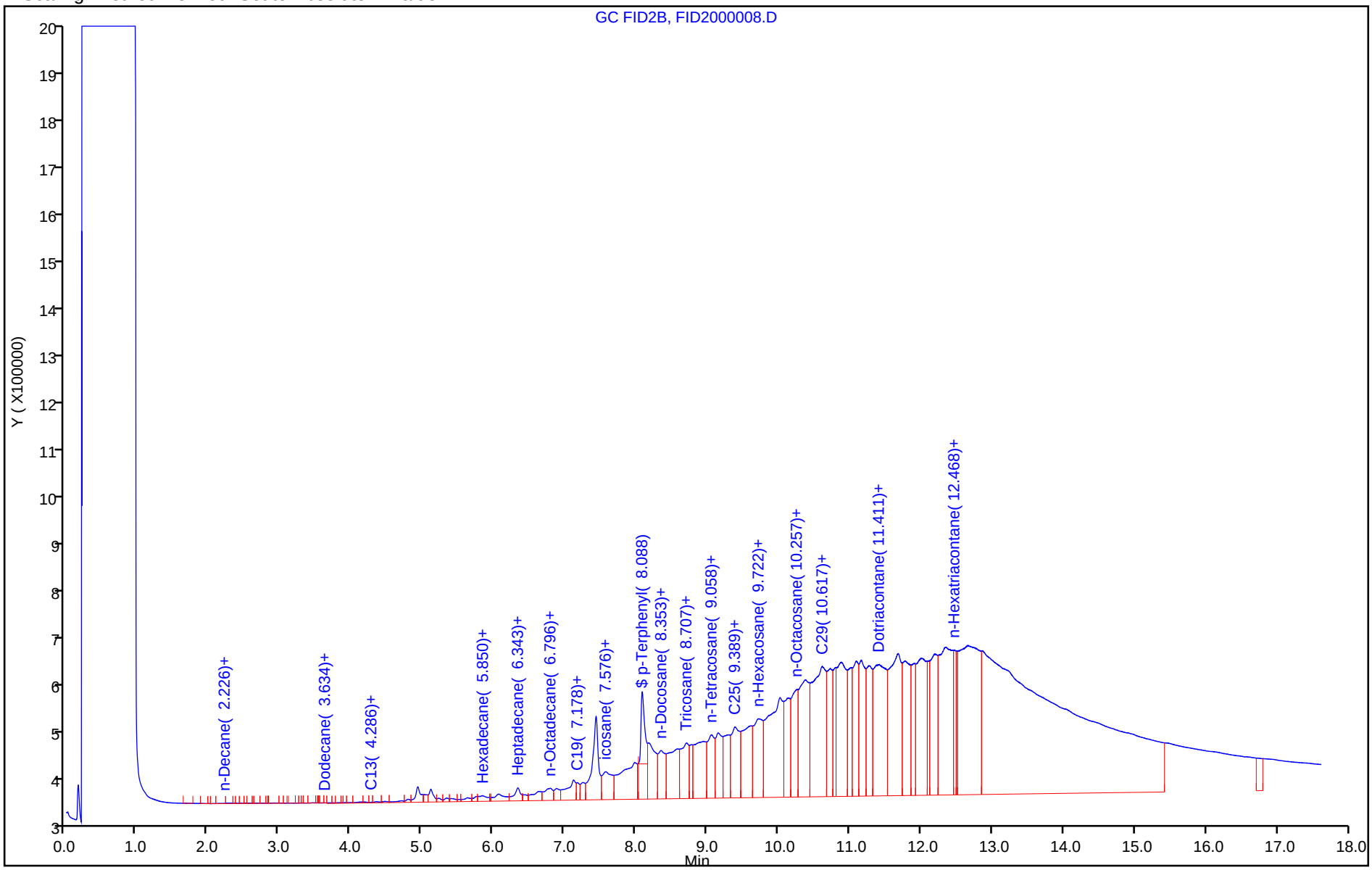
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 31-Aug-2018 13:07:47 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000008.D				
Injection Date:	31-Aug-2018 12:14:21	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88239-E-9-C	Lab Sample ID:	720-88239-9	Worklist Smp#:	8
Client ID:	DG-B10S--0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	3.0000	ALS Bottle#:	58
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000008.D
Lims ID: 720-88239-E-9-C
Client ID: DG-B10S--0.5-1
Sample Type: Client
Inject. Date: 31-Aug-2018 12:14:21 ALS Bottle#: 58 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 3.0000
Sample Info: 720-0053602-008
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\DRO6_B.m
Limit Group: DRO
Last Update: 31-Aug-2018 13:07:45 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 13:07:45

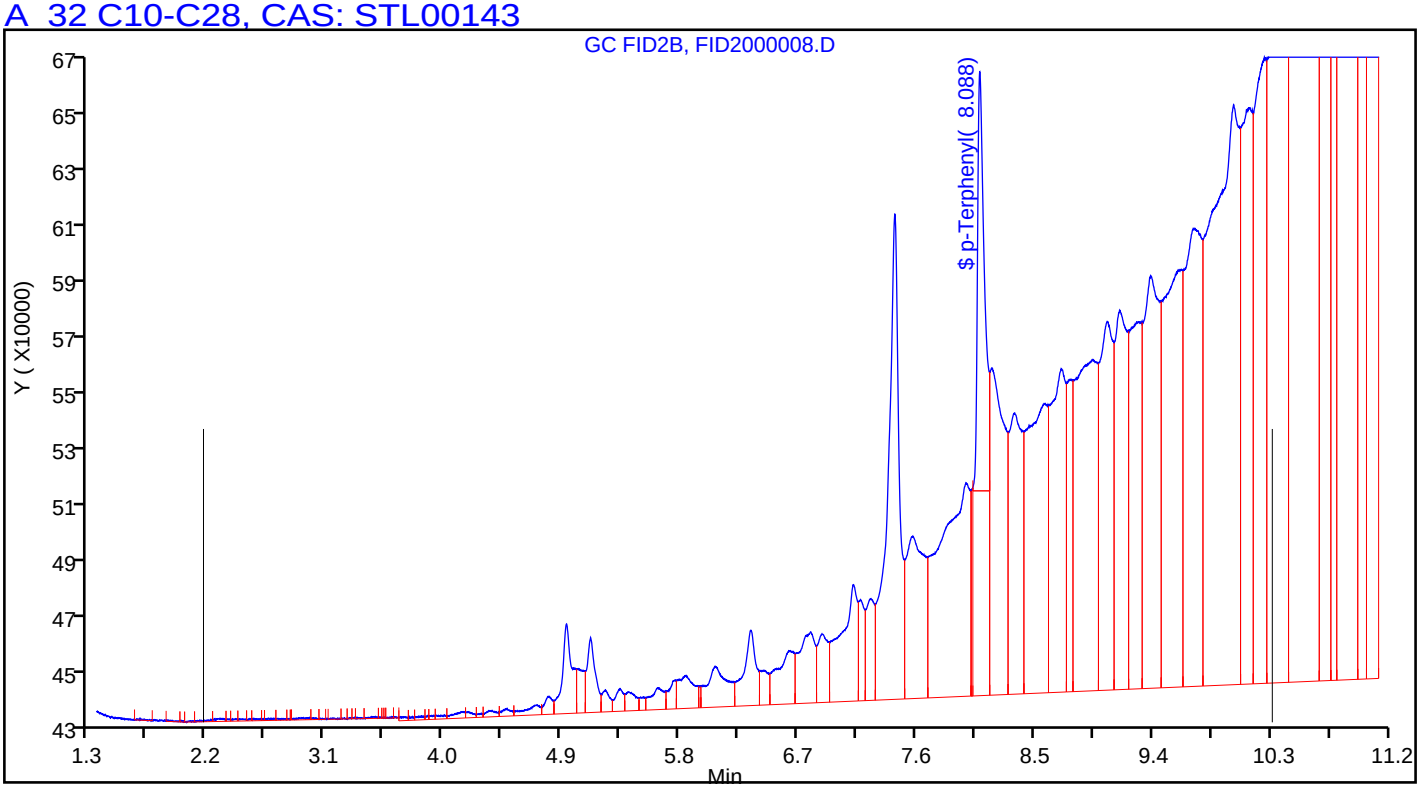
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	6.20	24.79

Report Date: 31-Aug-2018 13:07:52 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000008.D				
Injection Date:	31-Aug-2018 12:14:21	Instrument ID:	CHDRO6		
Lims ID:	720-88239-E-9-C	Lab Sample ID:	720-88239-9		
Client ID:	DG-B10S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	58	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	3.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

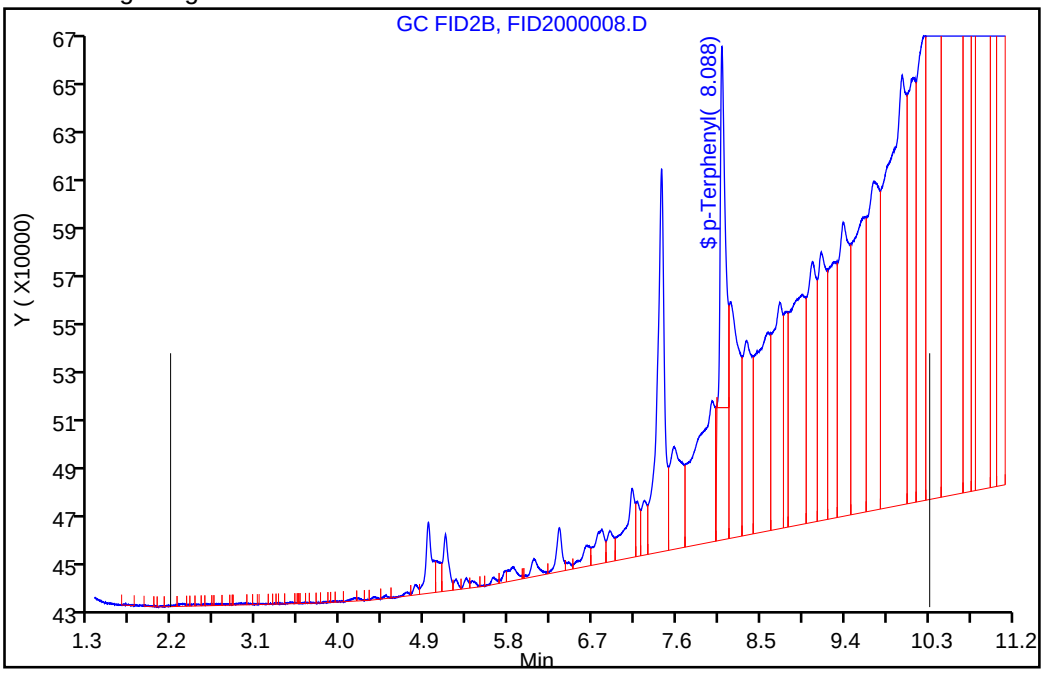
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000008.D				
Injection Date:	31-Aug-2018 12:14:21	Instrument ID:	CHDRO6		
Lims ID:	720-88239-E-9-C	Lab Sample ID:	720-88239-9		
Client ID:	DG-B10S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	58	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	3.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.243, CAS: STL00143

Signal: 1

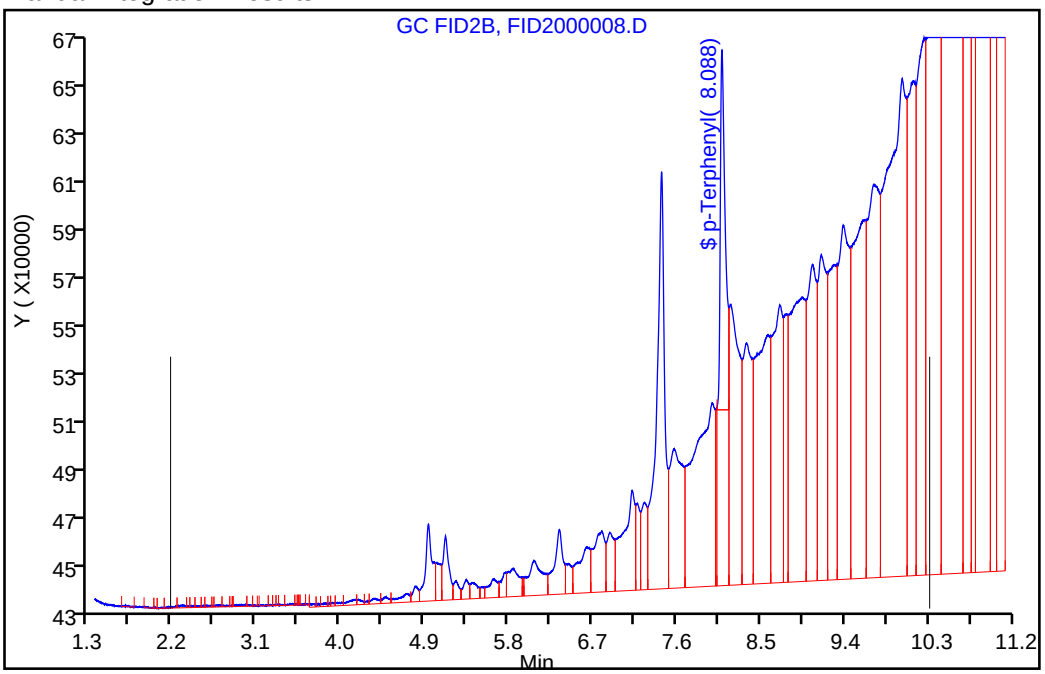
Processing Integration Results

RT: 6.24
Response: 354089098
Amount: 207.7918



Manual Integration Results

RT: 6.24
Response: 456181168
Amount: 265.5984



Reviewer: luj, 31-Aug-2018 13:07:37

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-B10S-3.5-4 Lab Sample ID: 720-88239-10

Matrix: Solid Lab File ID: FID2000030.D

Analysis Method: 8015B Date Collected: 08/24/2018 10:40

Extraction Method: 3546 Date Extracted: 08/29/2018 13:41

Sample wt/vol: 15.24(g) Date Analyzed: 08/31/2018 22:41

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250656 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	16000		2000	740

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	101		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000030.D
Lims ID: 720-88239-D-10-B
Client ID: DG-B10S--3.5-4
Sample Type: Client
Inject. Date: 31-Aug-2018 22:41:02 ALS Bottle#: 80 Worklist Smp#: 30
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053602-030
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\DRO6_B.m
Limit Group: DRO
Last Update: 04-Sep-2018 12:56:54 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK017

First Level Reviewer: luj Date: 04-Sep-2018 12:56:54

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.307			ND	
23 n-Decane	2.165	2.169	-0.005	119813	NC	
A 1 C9-C13	2.775	(1.307-4.243)		6331777	2.90	
A 21 Stoddard Solvent	2.775	(1.307-4.243)		6331777	NC	
A 57 C10-C12	2.898	(2.169-3.628)		4637678	9.93	
24 Dodecane	3.688	3.628	0.060	127664	NC	
A 3 C9 - C17	3.806	(1.307-6.306)		13868413	6.07	M
A 60 C10-C16	4.000	(2.169-5.830)		11251993	5.55	M
A 47 C9 - C18	4.028	(1.307-6.750)		17490050	9.24	M
A 25 C9-C19	4.240	(1.307-7.174)		32320964	14.0	M
A 15 Kerosene	4.240	(1.307-7.174)		32320964	17.0	M
26 C13	4.316	4.243	0.073	16417	NC	
$ 27 n-Decanoic Acid (Surr)		4.632			ND	U
A 59 C12-C16	4.729	(3.628-5.830)		8509730	12.1	M
A 61 C10-C20	4.875	(2.169-7.581)		39964704	29.9	M
A 28 C9-C24	5.179	(1.307-9.051)		111170106	70.2	M
A 29 C9-C25	5.345	(1.307-9.384)		146105504	90.0	M
A 54 C10-C23	5.437	(2.169-8.705)		100799572	64.4	M
A 4 C10-C24	5.610	(2.169-9.051)		111109133	70.2	M
A 16 C10-C25	5.777	(2.169-9.384)		146044531	90.0	M
45 Hexadecane	5.862	5.830	0.032	616594	NC	M
A 14 C10-C26	5.937	(2.169-9.705)		156535413	95.9	M
A 67 C12-C22	5.986	(3.628-8.345)		78656949	51.8	M
A 32 C10-C28	6.243	(2.169-10.317)		207342978	124.7	M
A 5 Diesel	6.243	(2.169-10.317)		207342978	124.7	M
A 12 Unknown Hydrocarbons	6.243	(2.169-10.317)		207342978	NC	M
A 30 C13-C22	6.294	(4.243-8.345)		75128408	49.8	M
44 Heptadecane	6.337	6.306	0.031	2421290	NC	M
A 31 C12-C24	6.339	(3.628-9.051)		108366870	68.7	M
49 n-Octadecane	6.799	6.750	0.049	5222341	NC	M
A 9 Crude Oil Range Organics (	6.859	(1.307-12.411)		545507233	NC	M
A 11 Bunker Range Organics (C9-	6.859	(1.307-12.411)		545507233	NC	M

Report Date: 04-Sep-2018 12:56:55 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000030.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.859	(1.307-12.411)		545507233	258.4	M
33 C19	7.154	7.174	-0.020	3878786	NC	M
A 64 C13-C28	7.280	(4.243-10.317)		201072174	121.2	M
A 17 C10-C36	7.290	(2.169-12.411)		545446260	316.1	M
A 68 Crude Oil Range Organics (	7.349	(1.307-13.391)		706001751	NC	M
A 13 C9-C40	7.349	(1.307-13.391)		706001751	451.9	M
A 58 C16-C24	7.441	(5.830-9.051)		99857140	63.8	M
62 icosane	7.594	7.581	0.013	4919828	NC	M
A 6 C10-C40	7.780	(2.169-13.391)		705940778	452.3	M
$ 34 p-Terphenyl	8.062	8.077	-0.015	43793552	25.3	M
35 n-Docosane	8.332	8.345	-0.013	7071503	NC	M
A 18 C12-C40	8.509	(3.628-13.391)		703198515	451.9	M
36 Tricosane	8.699	8.705	-0.006	11654777	NC	M
A 66 C13-C40	8.817	(4.243-13.391)		699669974	450.1	M
37 n-Tetracosane	9.061	9.051	0.010	7818624	NC	M
A 2 C16-C36 ORO	9.120	(5.830-12.411)		534194267	451.8	M
38 C25	9.382	9.384	-0.002	16969139	NC	M
A 19 C16-C40	9.611	(5.830-13.391)		694688785	448.4	M
46 n-Hexacosane	9.707	9.705	0.002	13255292	NC	M
A 20 C19-C36	9.792	(7.174-12.411)		268679781	197.4	
A 55 C23-C32	10.065	(8.705-11.426)		271638550	351.0	M
39 n-Octacosane	10.337	10.317	0.020	26567334	NC	M
65 C29	10.615	10.607	0.008	31091511	NC	M
A 40 C24-C36	10.731	(9.051-12.411)		412435687	420.7	M
A 7 Motor Oil	10.731	(9.051-12.411)		292286568	298.1	
A 10 C22-C40	10.868	(8.345-13.391)		411231427	295.9	
A 50 C25-C36	10.898	(9.384-12.411)		267724840	290.6	
A 41 C23-C40	11.048	(8.705-13.391)		410370142	300.3	
A 8 C24-C40	11.221	(9.051-13.391)		418348682	311.9	
56 Dotriacontane	11.507	11.426	0.081	32916742	NC	M
A 51 C28-C40	11.854	(10.317-13.391)		365947399	337.4	
A 63 C29-C40	11.999	(10.607-13.391)		342621171	342.8	
42 n-Hexatriacontane	12.407	12.411	-0.004	18332888	NC	M
43 C40	13.422	13.391	0.031	12833177	NC	M
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

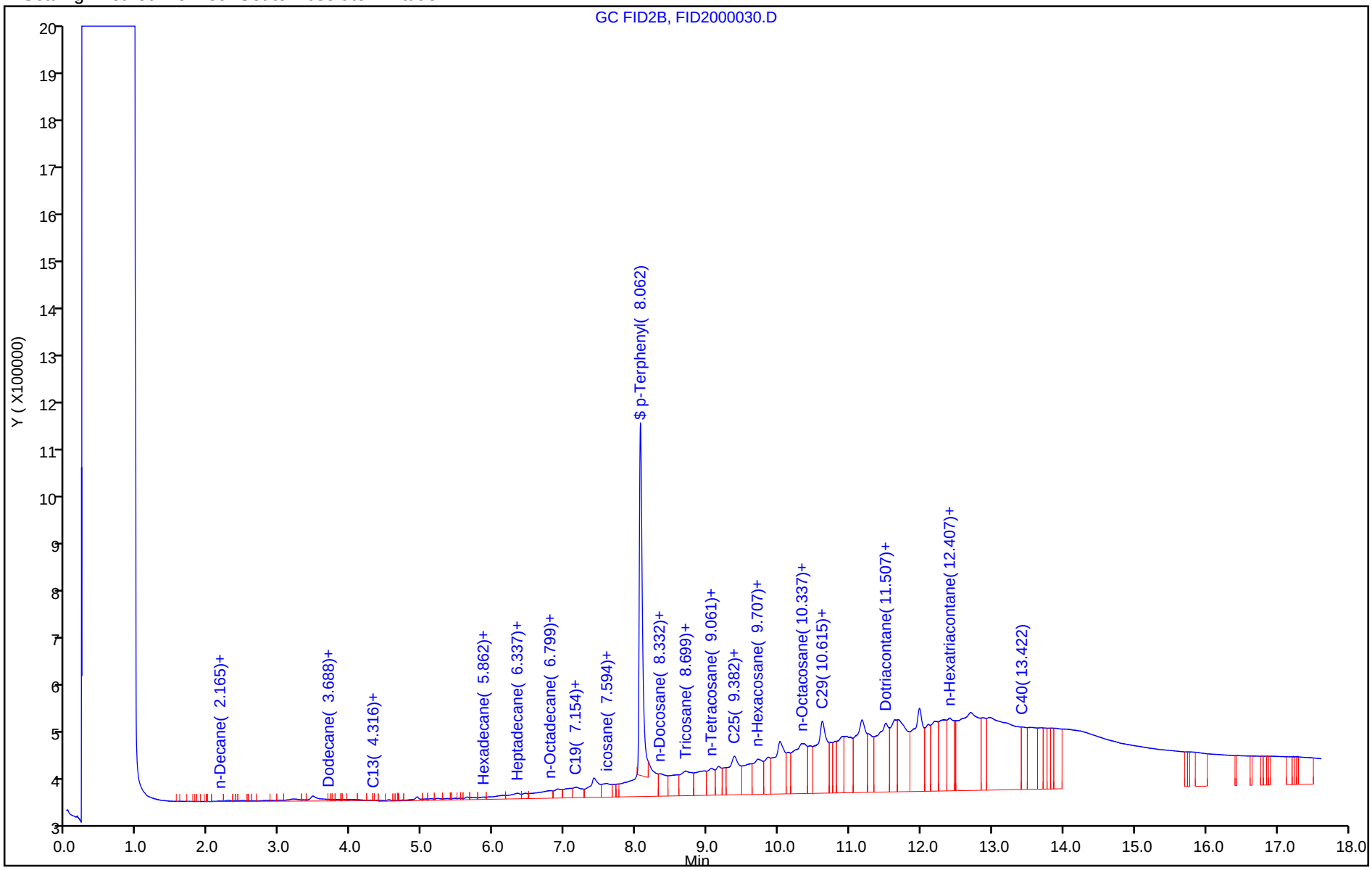
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 04-Sep-2018 12:56:55 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000030.D				
Injection Date:	31-Aug-2018 22:41:02	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88239-D-10-B	Lab Sample ID:	720-88239-10	Worklist Smp#:	30
Client ID:	DG-B10S--3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	80
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000030.D
Lims ID: 720-88239-D-10-B
Client ID: DG-B10S--3.5-4
Sample Type: Client
Inject. Date: 31-Aug-2018 22:41:02 ALS Bottle#: 80 Worklist Smp#: 30
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053602-030
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\DRO6_B.m
Limit Group: DRO
Last Update: 04-Sep-2018 12:56:54 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK017

First Level Reviewer: luj Date: 04-Sep-2018 12:56:54

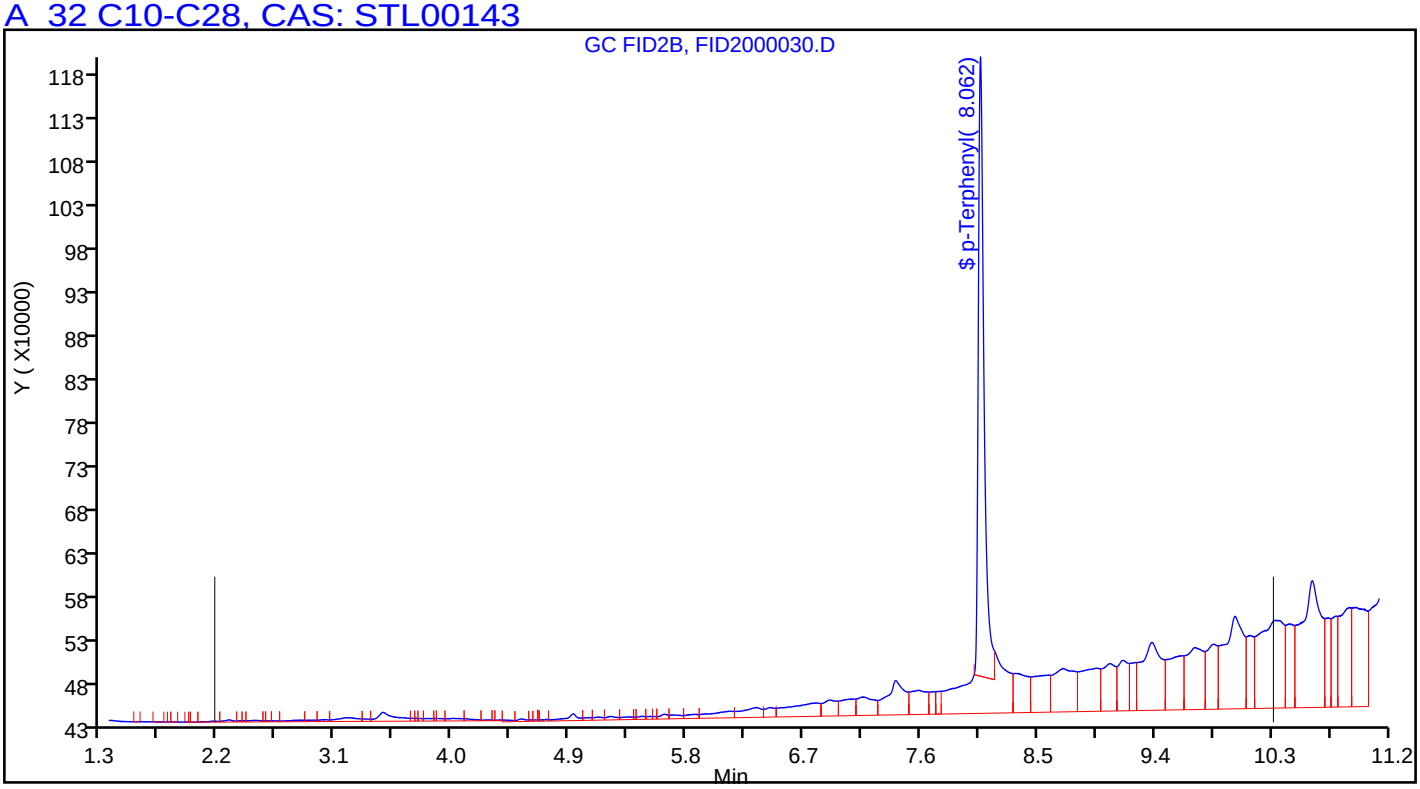
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	25.3	101.12

Report Date: 04-Sep-2018 12:56:58 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000030.D				
Injection Date:	31-Aug-2018 22:41:02	Instrument ID:	CHDRO6		
Lims ID:	720-88239-D-10-B	Lab Sample ID:	720-88239-10		
Client ID:	DG-B10S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	80	Worklist Smp#:	30
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

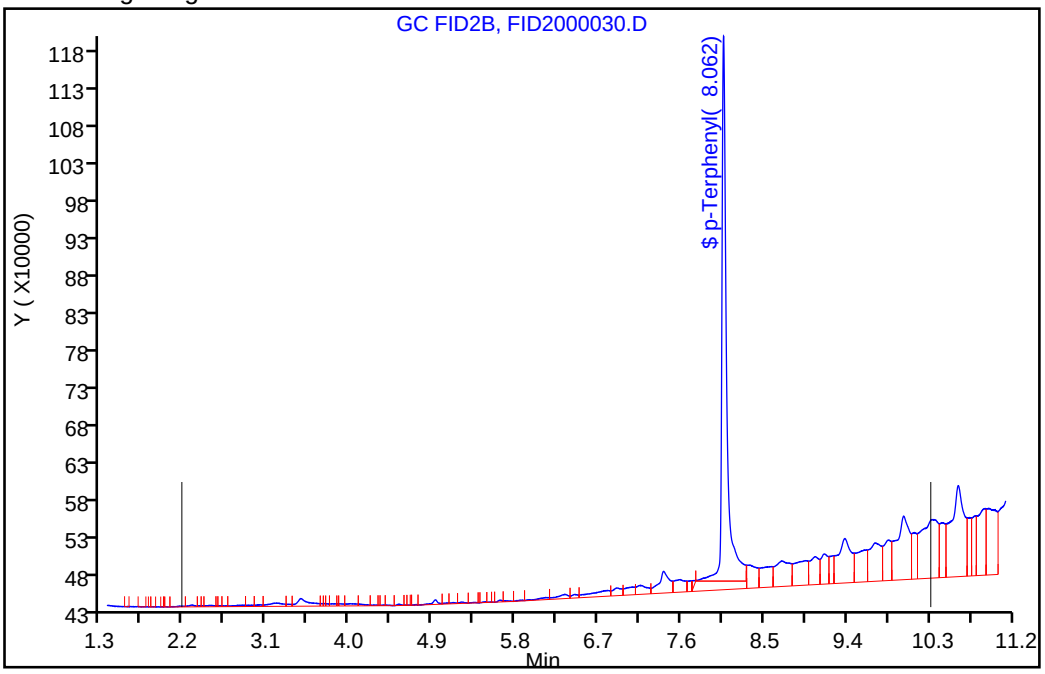
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000030.D				
Injection Date:	31-Aug-2018 22:41:02	Instrument ID:	CHDRO6		
Lims ID:	720-88239-D-10-B	Lab Sample ID:	720-88239-10		
Client ID:	DG-B10S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	80	Worklist Smp#:	30
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.243, CAS: STL00143

Signal: 1

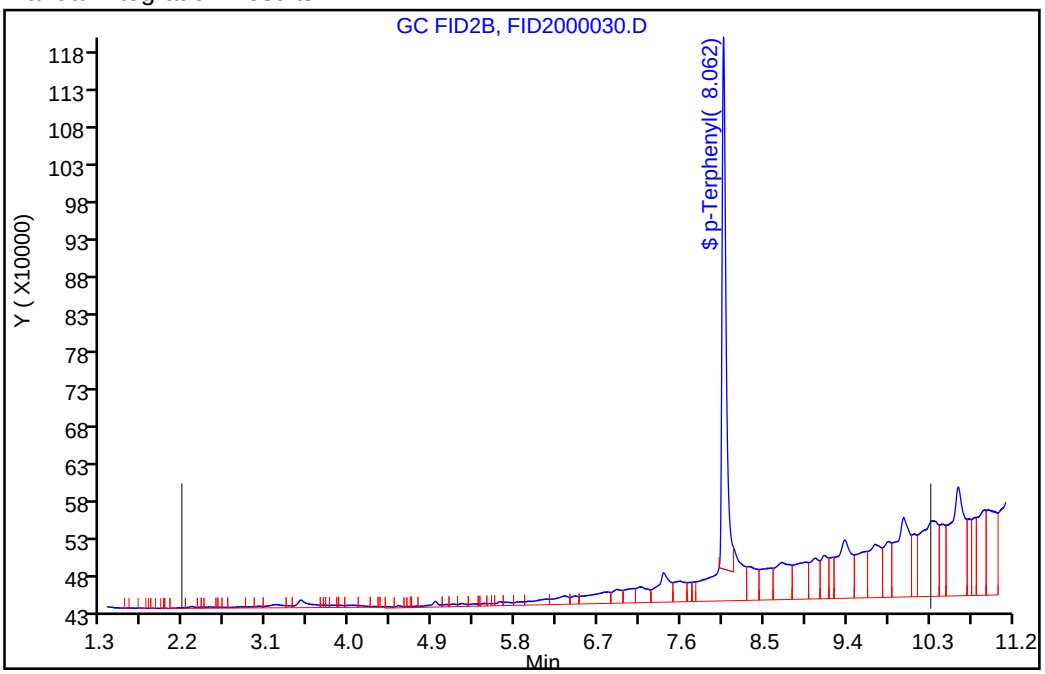
Processing Integration Results

RT: 6.24
Response: 126779096
Amount: 79.084218



Manual Integration Results

RT: 6.24
Response: 207342978
Amount: 124.7011



Reviewer: luj, 04-Sep-2018 12:55:58

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

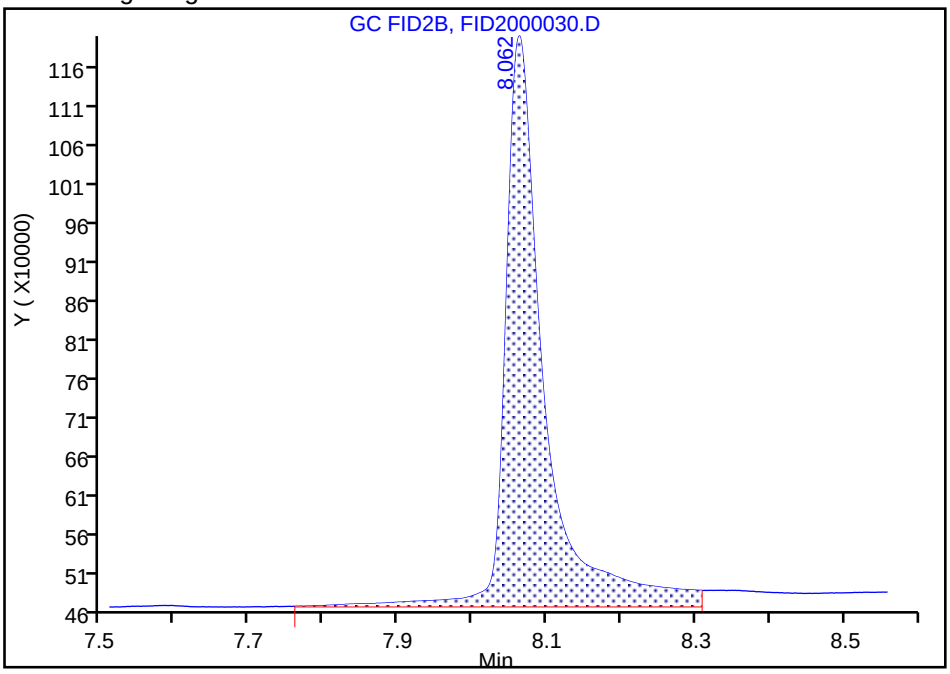
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000030.D				
Injection Date:	31-Aug-2018 22:41:02	Instrument ID:	CHDRO6		
Lims ID:	720-88239-D-10-B	Lab Sample ID:	720-88239-10		
Client ID:	DG-B10S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	80	Worklist Smp#:	30
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

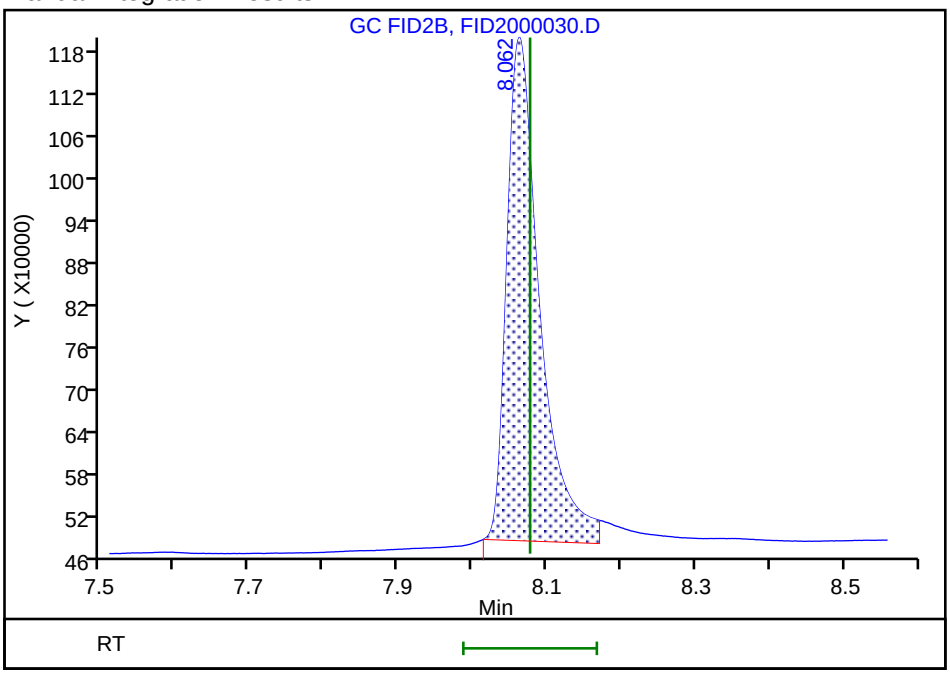
Processing Integration Results

RT: 8.06
Area: 53768022
Amount: 31.038849
Amount Units: mg/L



Manual Integration Results

RT: 8.06
Area: 43793552
Amount: 25.280853
Amount Units: mg/L



Reviewer: luj, 04-Sep-2018 12:56:16

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-I7S-0.5-1
Lab Sample ID: 720-88239-11
Matrix: Solid
Lab File ID: FID2000033.D
Analysis Method: 8015B
Date Collected: 08/24/2018 09:25
Extraction Method: 3546
Date Extracted: 08/29/2018 13:41
Sample wt/vol: 15.71(g)
Date Analyzed: 08/31/2018 23:54
Con. Extract Vol.: 2(mL)
Dilution Factor: 2
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250656
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	47000		3800	1400

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	89		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000033.D
Lims ID: 720-88239-D-11-A
Client ID: DG-I7S--0.5-1
Sample Type: Client
Inject. Date: 31-Aug-2018 23:54:06 ALS Bottle#: 83 Worklist Smp#: 33
Injection Vol: 1.0 ul Dil. Factor: 2.0000
Sample Info: 720-0053602-033
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\DRO6_B.m
Limit Group: DRO
Last Update: 04-Sep-2018 13:08:07 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK017

First Level Reviewer: luj Date: 04-Sep-2018 13:08:07

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.307			ND	
23 n-Decane	2.195	2.169	0.026	50075	NC	
A 1 C9-C13	2.775	(1.307-4.243)		4089820	1.87	M
A 21 Stoddard Solvent	2.775	(1.307-4.243)		4089820	NC	M
A 57 C10-C12	2.898	(2.169-3.628)		2807708	8.89	M
24 Dodecane	3.612	3.628	-0.016	205482	NC	M
A 3 C9 - C17	3.806	(1.307-6.306)		8952080	3.92	M
A 60 C10-C16	4.000	(2.169-5.830)		7342443	3.62	M
A 47 C9 - C18	4.028	(1.307-6.750)		12617264	6.66	M
A 25 C9-C19	4.240	(1.307-7.174)		16804605	7.30	M
A 15 Kerosene	4.240	(1.307-7.174)		16804605	8.85	M
26 C13	4.237	4.243	-0.006	34334	NC	M
$ 27 n-Decanoic Acid (Surr)		4.632			ND	U
A 59 C12-C16	4.729	(3.628-5.830)		4740217	9.98	M
A 61 C10-C20	4.875	(2.169-7.581)		31539891	25.2	M
A 28 C9-C24	5.179	(1.307-9.051)		107542459	68.2	M
A 29 C9-C25	5.345	(1.307-9.384)		146496643	90.2	M
A 54 C10-C23	5.437	(2.169-8.705)		77975781	51.5	M
A 4 C10-C24	5.610	(2.169-9.051)		107408307	68.1	M
A 16 C10-C25	5.777	(2.169-9.384)		146362491	90.2	M
45 Hexadecane	5.857	5.830	0.027	512806	NC	M
A 14 C10-C26	5.937	(2.169-9.705)		203026494	122.3	M
A 67 C12-C22	5.986	(3.628-8.345)		67323944	45.4	M
A 32 C10-C28	6.243	(2.169-10.317)		315398742	185.9	M
A 5 Diesel	6.243	(2.169-10.317)		315398742	185.9	M
A 12 Unknown Hydrocarbons	6.243	(2.169-10.317)		315398742	NC	M
A 30 C13-C22	6.294	(4.243-8.345)		65970502	44.7	M
44 Heptadecane	6.340	6.306	0.034	1453337	NC	M
A 31 C12-C24	6.339	(3.628-9.051)		104806081	66.6	M
49 n-Octadecane	6.754	6.750	0.004	1273387	NC	M
A 9 Crude Oil Range Organics (	6.859	(1.307-12.411)		966777547	NC	M
A 11 Bunker Range Organics (C9-	6.859	(1.307-12.411)		966777547	NC	M

Report Date: 04-Sep-2018 13:08:08 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000033.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.859	(1.307-12.411)		966777547	458.0	M
33 C19	7.178	7.174	0.004	4681542	NC	M
A 64 C13-C28	7.280	(4.243-10.317)		311443074	183.6	M
A 17 C10-C36	7.290	(2.169-12.411)		966643395	554.6	M
A 68 Crude Oil Range Organics (	7.349	(1.307-13.391)		1631728928	NC	M
A 13 C9-C40	7.349	(1.307-13.391)		1631728928	1044.4	M
A 58 C16-C24	7.441	(5.830-9.051)		100065864	64.0	M
62 icosane	7.600	7.581	0.019	6526150	NC	M
A 6 C10-C40	7.780	(2.169-13.391)		1631594776	1045.5	M
$ 34 p-Terphenyl	8.070	8.077	-0.007	19319697	11.2	M
35 n-Docosane	8.349	8.345	0.004	8049611	NC	M
A 18 C12-C40	8.509	(3.628-13.391)		1628992550	1046.7	M
36 Tricosane	8.709	8.705	0.004	23712089	NC	M
A 66 C13-C40	8.817	(4.243-13.391)		1627639108	1047.1	M
37 n-Tetracosane	9.065	9.051	0.014	29643443	NC	M
A 2 C16-C36 ORO	9.120	(5.830-12.411)		959300952	811.3	M
38 C25	9.387	9.384	0.003	31486485	NC	M
A 19 C16-C40	9.611	(5.830-13.391)		1624252333	1048.3	M
46 n-Hexacosane	9.747	9.705	0.042	19250727	NC	M
A 20 C19-C36	9.792	(7.174-12.411)		531153934	390.2	
A 55 C23-C32	10.065	(8.705-11.426)		553802432	715.6	M
39 n-Octacosane	10.369	10.317	0.052	32562991	NC	M
65 C29	10.626	10.607	0.019	71599302	NC	M
A 40 C24-C36	10.731	(9.051-12.411)		812311412	828.6	M
A 7 Motor Oil	10.731	(9.051-12.411)		592952509	604.8	
A 10 C22-C40	10.868	(8.345-13.391)		865268148	622.5	
A 50 C25-C36	10.898	(9.384-12.411)		563743646	612.0	
A 41 C23-C40	11.048	(8.705-13.391)		870260480	636.8	
A 8 C24-C40	11.221	(9.051-13.391)		892985845	665.8	
56 Dotriacontane	11.376	11.426	-0.050	39633611	NC	M
A 51 C28-C40	11.854	(10.317-13.391)		795690958	733.5	
A 63 C29-C40	11.999	(10.607-13.391)		748056492	748.5	
42 n-Hexatriacontane	12.411	12.411	0.000	15939625	NC	M
43 C40		13.391		ND		
$ 69 Stearic Acid (Surr)		0.000		ND		

QC Flag Legend

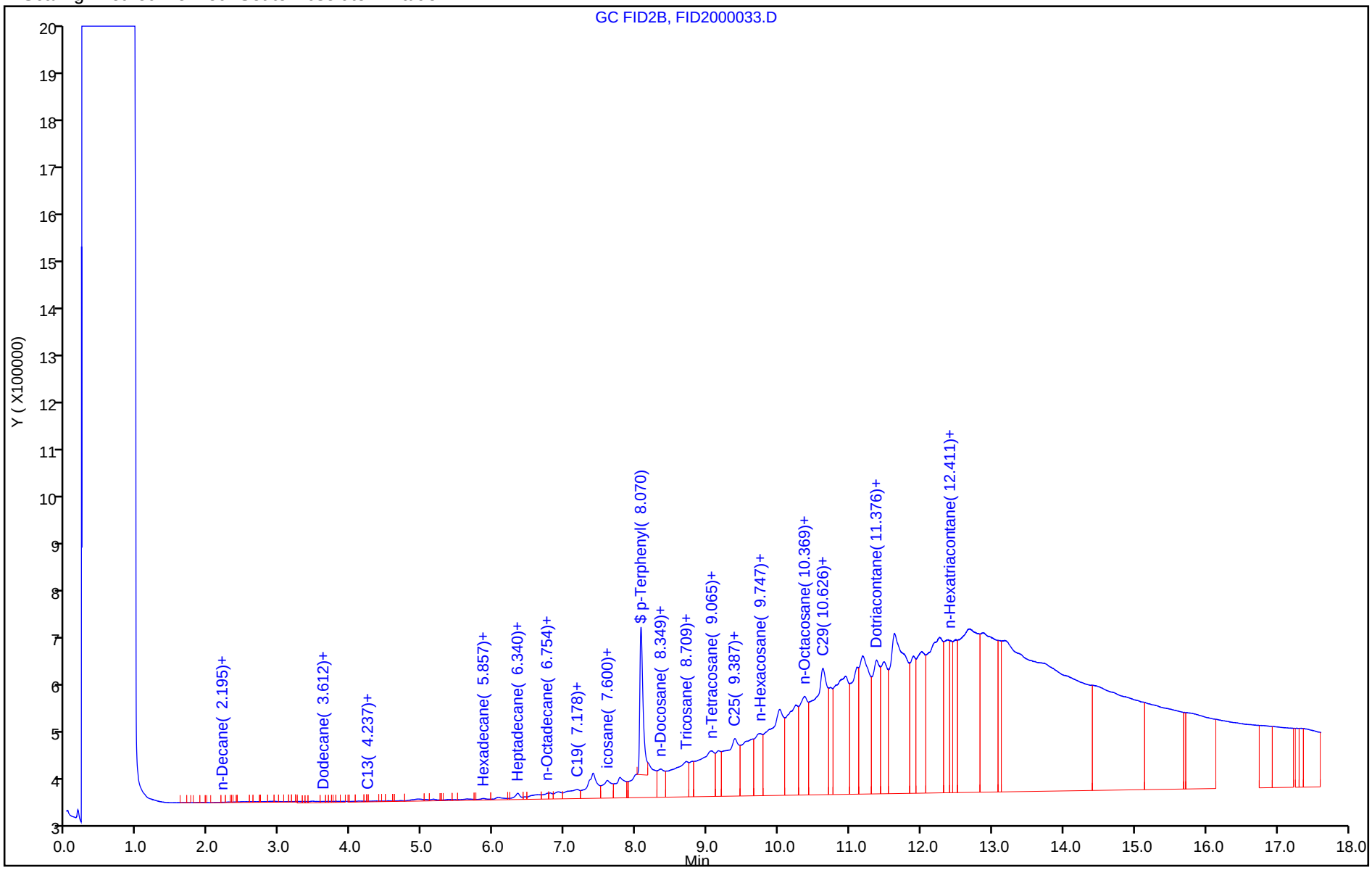
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 04-Sep-2018 13:08:08 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000033.D				
Injection Date:	31-Aug-2018 23:54:06	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88239-D-11-A	Lab Sample ID:	720-88239-11	Worklist Smp#:	33
Client ID:	DG-I7S--0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	2.0000	ALS Bottle#:	83
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000033.D
Lims ID: 720-88239-D-11-A
Client ID: DG-I7S--0.5-1
Sample Type: Client
Inject. Date: 31-Aug-2018 23:54:06 ALS Bottle#: 83 Worklist Smp#: 33
Injection Vol: 1.0 ul Dil. Factor: 2.0000
Sample Info: 720-0053602-033
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\DRO6_B.m
Limit Group: DRO
Last Update: 04-Sep-2018 13:08:07 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK017

First Level Reviewer: luj Date: 04-Sep-2018 13:08:07

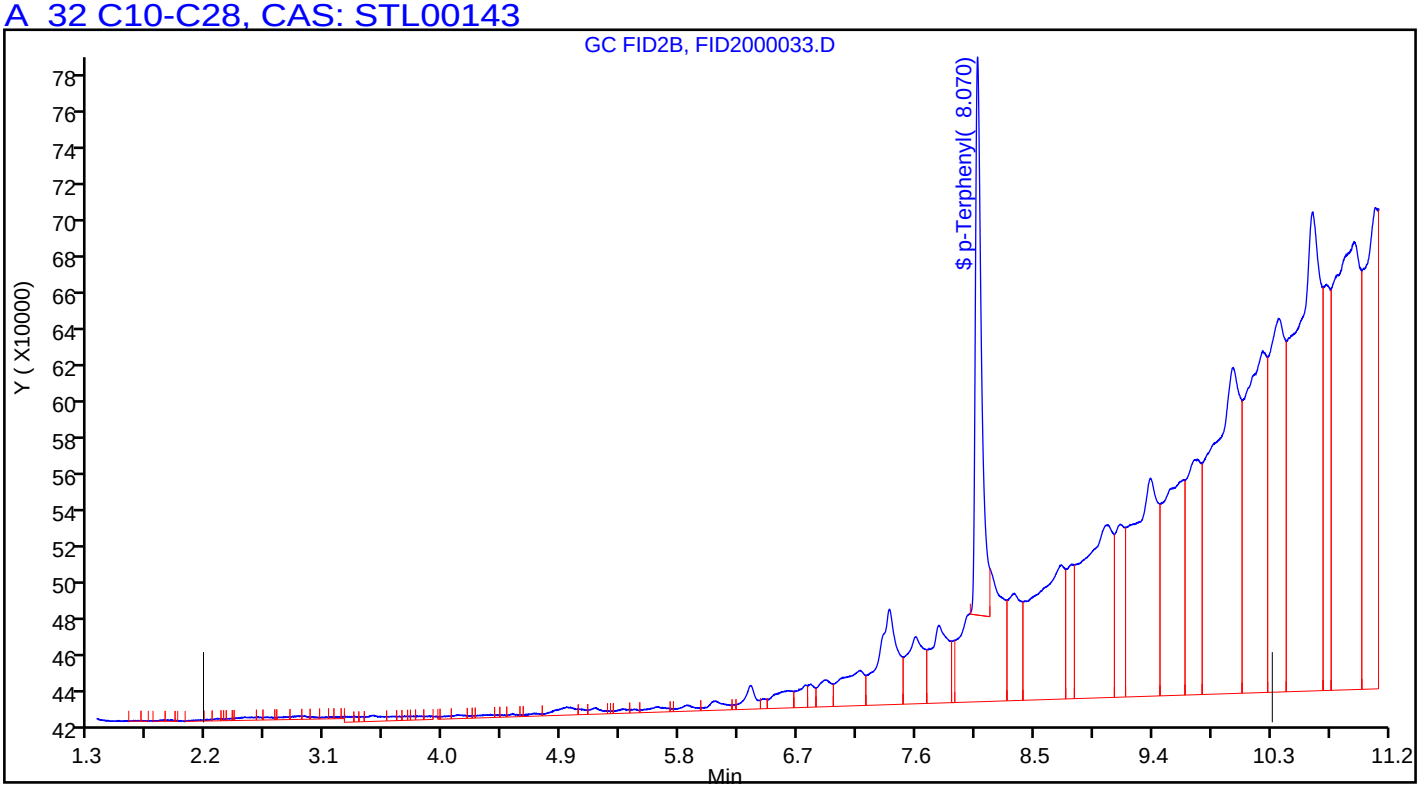
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	11.2	44.61

Report Date: 04-Sep-2018 13:08:12 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000033.D				
Injection Date:	31-Aug-2018 23:54:06	Instrument ID:	CHDRO6		
Lims ID:	720-88239-D-11-A	Lab Sample ID:	720-88239-11		
Client ID:	DG-I7S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	83	Worklist Smp#:	33
Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

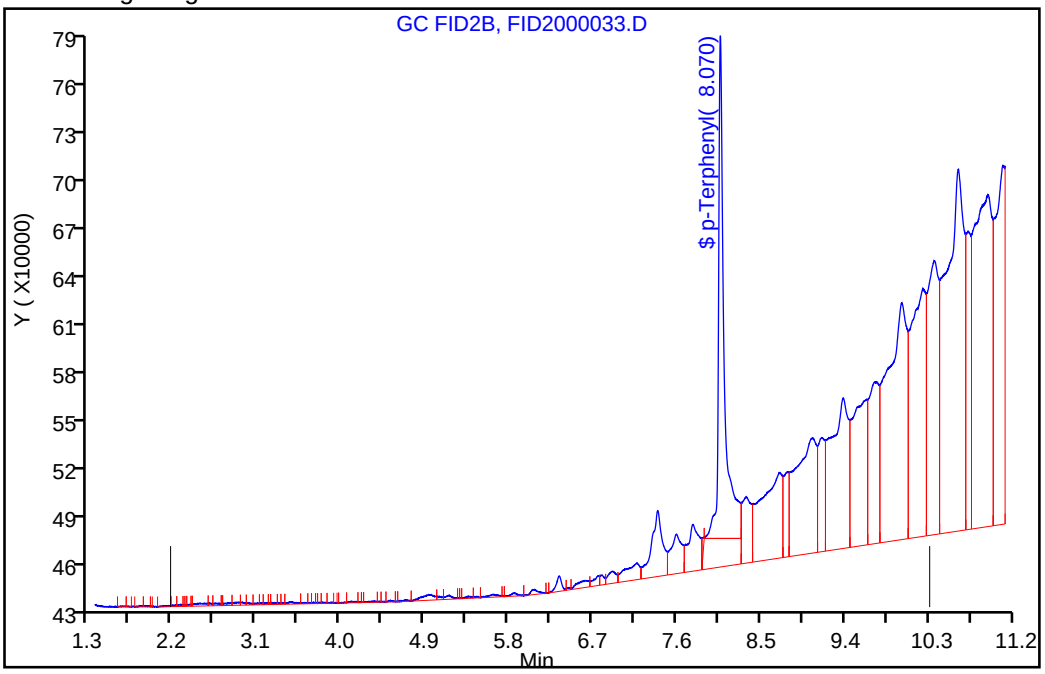
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000033.D				
Injection Date:	31-Aug-2018 23:54:06	Instrument ID:	CHDRO6		
Lims ID:	720-88239-D-11-A	Lab Sample ID:	720-88239-11		
Client ID:	DG-I7S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	83	Worklist Smp#:	33
Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.243, CAS: STL00143

Signal: 1

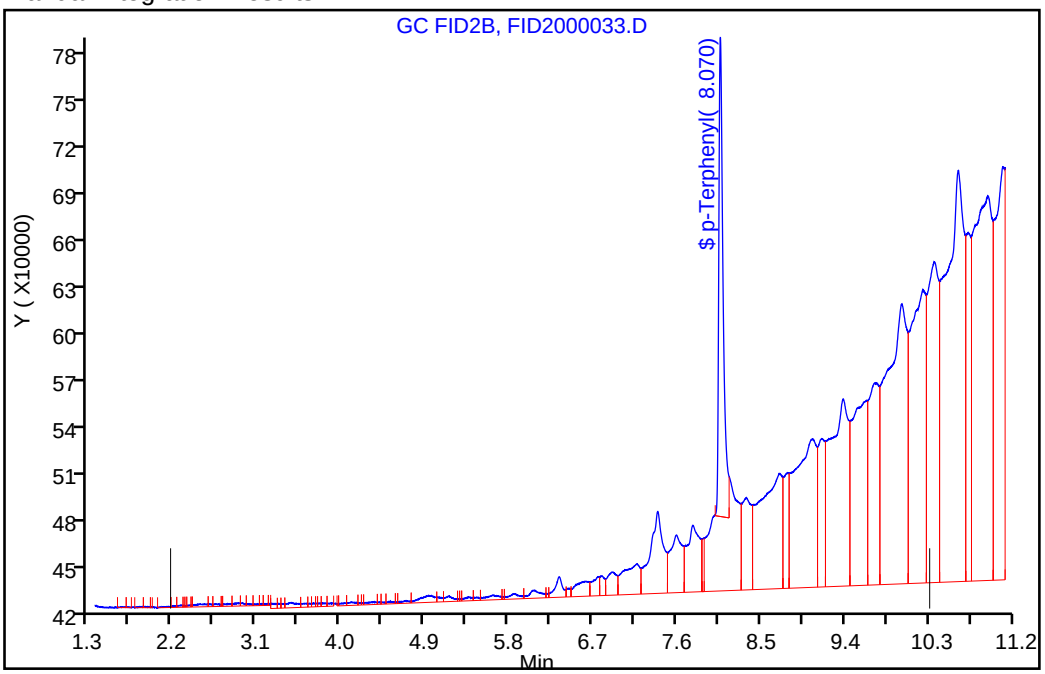
Processing Integration Results

RT: 6.24
Response: 226852760
Amount: 135.7480



Manual Integration Results

RT: 6.24
Response: 315398742
Amount: 185.8845



Reviewer: luj, 04-Sep-2018 13:07:32

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

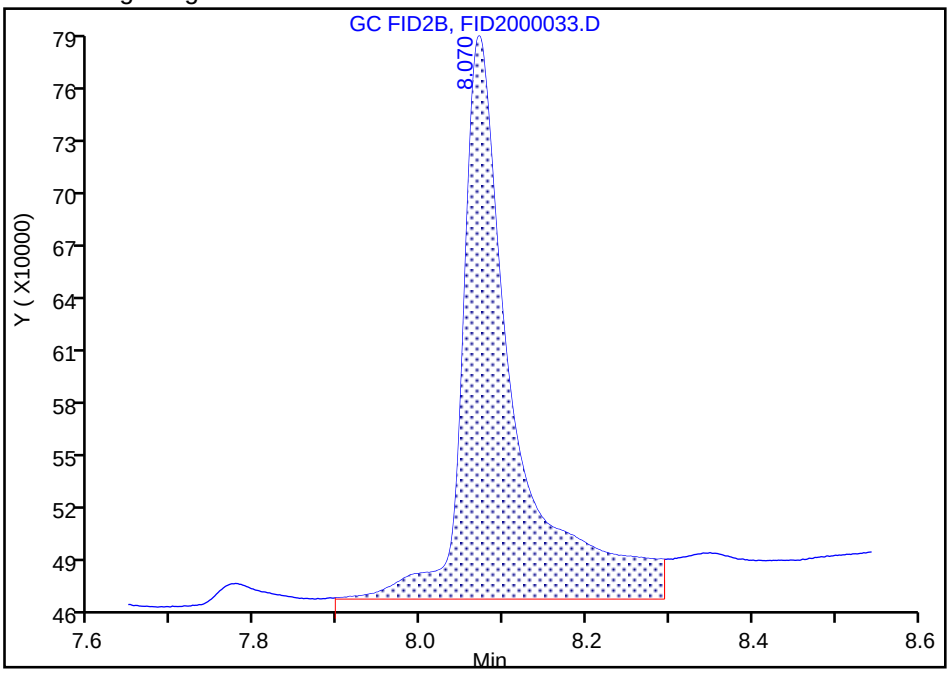
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000033.D				
Injection Date:	31-Aug-2018 23:54:06	Instrument ID:	CHDRO6		
Lims ID:	720-88239-D-11-A	Lab Sample ID:	720-88239-11		
Client ID:	DG-I7S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	83	Worklist Smp#:	33
Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

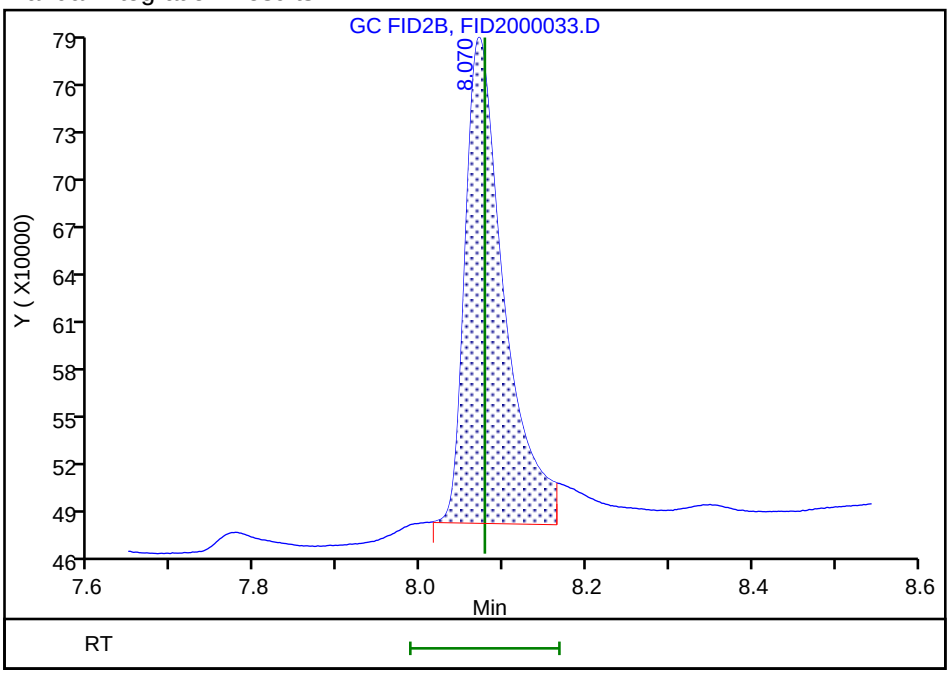
Processing Integration Results

RT: 8.07
Area: 27102981
Amount: 15.645830
Amount Units: mg/L



Manual Integration Results

RT: 8.07
Area: 19319697
Amount: 11.152747
Amount Units: mg/L



Reviewer: luj, 04-Sep-2018 13:06:58

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-I7S-3.5-4
Lab Sample ID: 720-88239-12
Matrix: Solid
Lab File ID: FID1000013.D
Analysis Method: 8015B
Date Collected: 08/24/2018 09:25
Extraction Method: 3546
Date Extracted: 08/29/2018 13:41
Sample wt/vol: 15.28(g)
Date Analyzed: 08/31/2018 14:16
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250653
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	10000		2000	740

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	85		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000013.D
Lims ID: 720-88239-D-12-D
Client ID: DG-I7S--3.5-4
Sample Type: Client
Inject. Date: 31-Aug-2018 14:16:52 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053601-013
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\DRO6_A.m
Limit Group: DRO
Last Update: 31-Aug-2018 14:48:07 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 14:48:07

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane		1.229			ND	
	23 n-Decane	2.041	2.116	-0.075	14852	NC	
A	21 Stoddard Solvent	2.735	(1.229-4.240)		1313348	0.7375	
A	1 C9-C13	2.735	(1.229-4.240)		1313348	0.7395	
A	57 C10-C12	2.864	(2.116-3.612)		830763	0.5386	
	24 Dodecane	3.643	3.612	0.031	4551	NC	
A	3 C9 - C17	3.780	(1.229-6.332)		2642711	1.35	
A	60 C10-C16	3.983	(2.116-5.850)		2394748	1.37	
A	47 C9 - C18	4.006	(1.229-6.783)		3587653	2.22	
A	25 C9-C19	4.221	(1.229-7.212)		5211166	2.66	
A	15 Kerosene	4.221	(1.229-7.212)		5211166	3.23	
	26 C13	4.278	4.240	0.038	53889	NC	
$	27 n-Decanoic Acid (Surr)		4.611			ND	U
A	59 C12-C16	4.731	(3.612-5.850)		1576251	1.02	
A	62 C10-C20	4.871	(2.116-7.625)		11718557	7.60	
A	28 C9-C24	5.172	(1.229-9.115)		48440002	31.4	
A	29 C9-C25	5.341	(1.229-9.454)		52851415	34.3	
A	54 C10-C23	5.440	(2.116-8.764)		35041045	22.7	
A	4 C10-C24	5.616	(2.116-9.115)		48440002	31.4	
A	16 C10-C25	5.785	(2.116-9.454)		52851415	34.3	
	45 Hexadecane	5.868	5.850	0.018	46145	NC	
A	14 C10-C26	5.948	(2.116-9.781)		77100368	50.0	
A	67 C12-C22	6.006	(3.612-8.399)		25371443	16.4	
A	12 Unknown Hydrocarbons	6.259	(2.116-10.402)		118145671	NC	
A	5 Diesel	6.259	(2.116-10.402)		118145671	76.6	
A	32 C10-C28	6.259	(2.116-10.402)		118145671	76.6	
A	30 C13-C22	6.320	(4.240-8.399)		24923688	16.2	
	44 Heptadecane	6.373	6.332	0.041	311695	NC	
A	31 C12-C24	6.364	(3.612-9.115)		47621505	30.9	
	51 n-Octadecane	6.836	6.783	0.053	501791	NC	
A	52 Mineral oil	6.881	(1.229-12.534)		239993055	135.5	
A	11 Bunker Range Organics (C9-	6.881	(1.229-12.534)		239993055	NC	

Report Date: 31-Aug-2018 14:48:08 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000013.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 9 Crude Oil Range Organics (	6.881	(1.229-12.534)		239993055	NC	
33 C19	7.220	7.212	0.008	507746	NC	
A 64 C13-C28	7.321	(4.240-10.402)		116879419	75.8	
A 17 C10-C36	7.325	(2.116-12.534)		239993055	155.6	
A 13 C9-C40	7.391	(1.229-13.554)		271922653	201.7	
A 68 Crude Oil Range Organics (	7.391	(1.229-13.554)		271922653	NC	
A 58 C16-C24	7.483	(5.850-9.115)		46045254	29.9	
61 icosane	7.616	7.625	-0.009	1469886	NC	
A 6 C10-C40	7.835	(2.116-13.554)		271922653	201.8	
$ 34 p-Terphenyl	8.095	8.102	-0.007	40943645	21.3	
35 n-Docosane	8.403	8.399	0.004	3379183	NC	
A 18 C12-C40	8.583	(3.612-13.554)		271104156	201.7	
36 Tricosane	8.779	8.764	0.015	3866821	NC	
A 66 C13-C40	8.897	(4.240-13.554)		270656401	201.6	
37 n-Tetracosane	9.126	9.115	0.011	4411413	NC	
A 2 C16-C36 ORO	9.192	(5.850-12.534)		275748123	241.7	
38 C25	9.461	9.454	0.007	17679483	NC	
A 19 C16-C40	9.702	(5.850-13.554)		269527905	201.6	
46 n-Hexacosane	9.795	9.781	0.014	8759814	NC	
A 20 C19-C36	9.873	(7.212-12.534)		270791891	203.7	
A 55 C23-C32	10.147	(8.764-11.531)		154997634	223.3	
39 n-Octacosane	10.419	10.402	0.016	12668315	NC	
65 C29	10.702	10.697	0.005	14813497	NC	
A 7 Motor Oil	10.824	(9.115-12.534)		181274646	203.6	
A 40 C24-C36	10.824	(9.115-12.534)		181274646	203.6	
A 10 C22-C40	10.976	(8.399-13.554)		238901095	192.1	
A 49 C25-C36	10.994	(9.454-12.534)		187141640	209.1	
A 41 C23-C40	11.159	(8.764-13.554)		236881608	185.3	
A 8 C24-C40	11.334	(9.115-13.554)		223482651	183.6	
56 Dotriacontane	11.532	11.531	0.001	4203031	NC	
A 50 C28-C40	11.978	(10.402-13.554)		153776982	162.0	
A 63 C29-C40	12.125	(10.697-13.554)		139766100	161.3	
42 n-Hexatriacontane	12.552	12.534	0.018	2723663	NC	
43 C40		13.554		ND		
$ 69 Stearic Acid (Surr)		0.000		ND		

QC Flag Legend

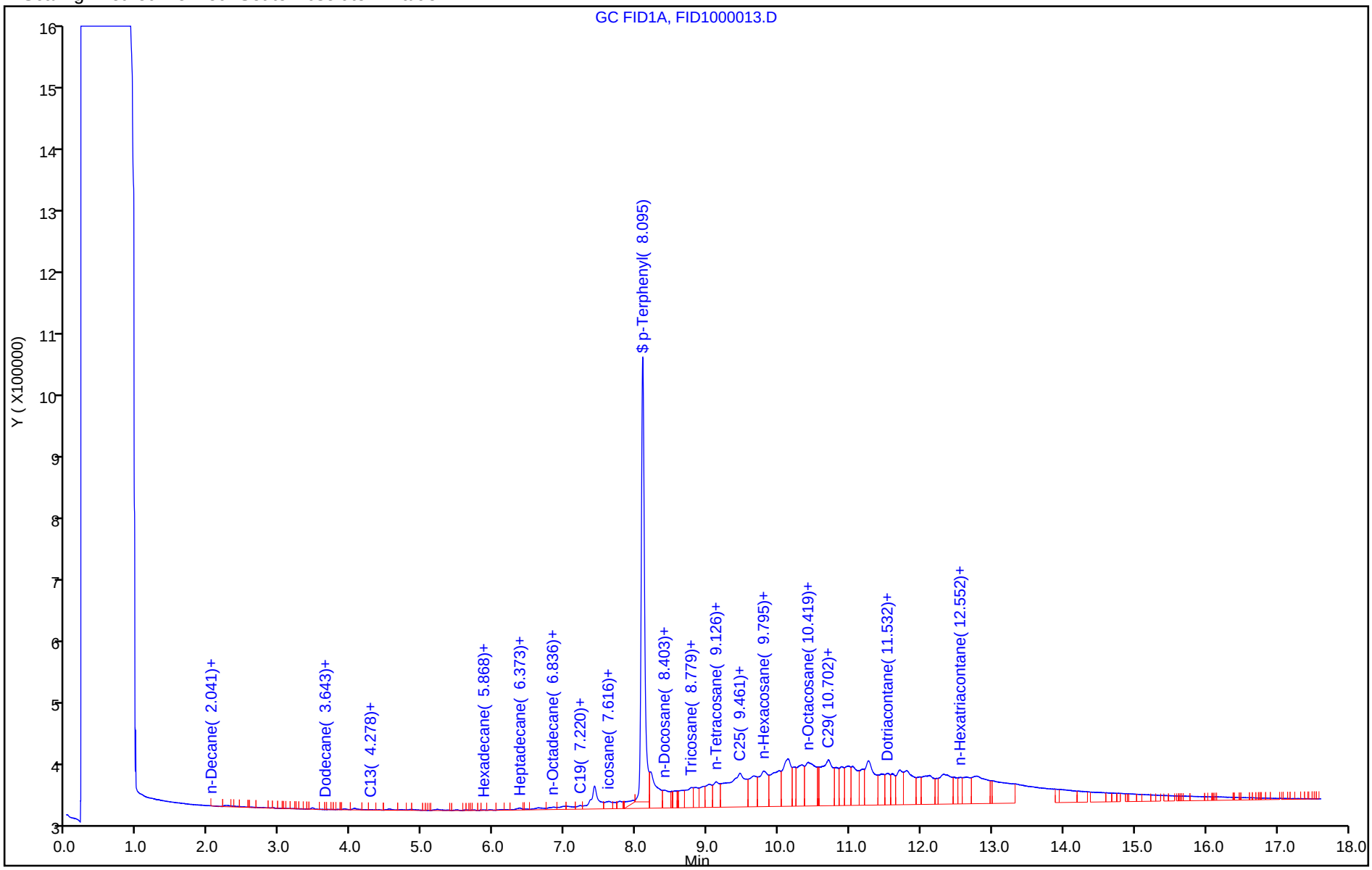
Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

Report Date: 31-Aug-2018 14:48:08 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000013.D				
Injection Date:	31-Aug-2018 14:16:52	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88239-D-12-D	Lab Sample ID:	720-88239-12	Worklist Smp#:	13
Client ID:	DG-I7S--3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000013.D
Lims ID: 720-88239-D-12-D
Client ID: DG-I7S--3.5-4
Sample Type: Client
Inject. Date: 31-Aug-2018 14:16:52 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053601-013
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\DRO6_A.m
Limit Group: DRO
Last Update: 31-Aug-2018 14:48:07 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 14:48:07

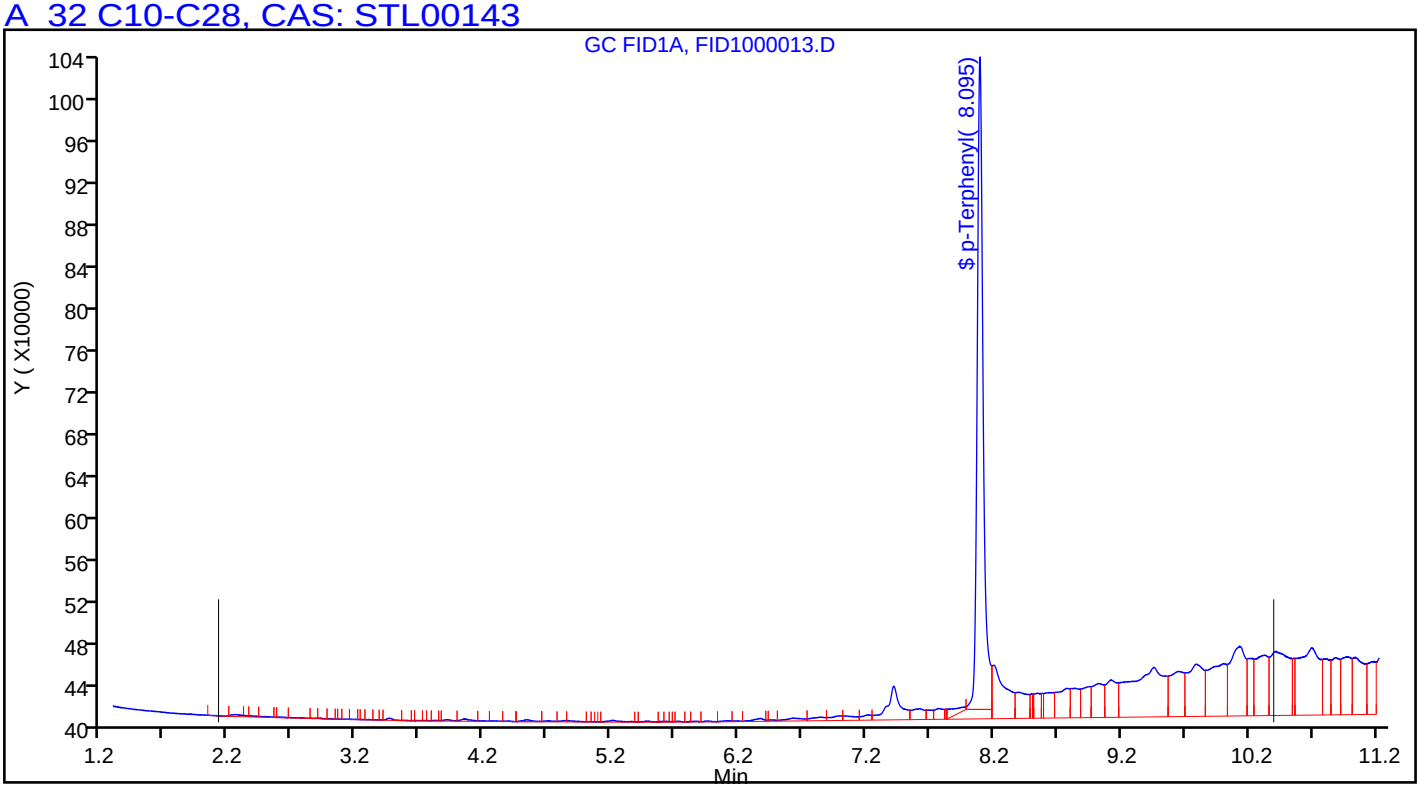
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	21.3	85.28

Report Date: 31-Aug-2018 14:48:10 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000013.D				
Injection Date:	31-Aug-2018 14:16:52	Instrument ID:	CHDRO6		
Lims ID:	720-88239-D-12-D	Lab Sample ID:	720-88239-12		
Client ID:	DG-I7S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-M7S-0.5-1 Lab Sample ID: 720-88239-13

Matrix: Solid Lab File ID: FID2000009.D

Analysis Method: 8015B Date Collected: 08/24/2018 09:55

Extraction Method: 3546 Date Extracted: 08/29/2018 13:41

Sample wt/vol: 15.90(g) Date Analyzed: 08/31/2018 12:39

Con. Extract Vol.: 2(mL) Dilution Factor: 20

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250656 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	1600000		38000	14000

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	0	D X	40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000009.D
Lims ID: 720-88239-D-13-C
Client ID: DG-M7S--0.5-1
Sample Type: Client
Inject. Date: 31-Aug-2018 12:39:01 ALS Bottle#: 59 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 20.0000
Sample Info: 720-0053602-009
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\DRO6_B.m
Limit Group: DRO
Last Update: 31-Aug-2018 14:11:05 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 14:11:05

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.307			ND	
23 n-Decane	2.088	2.169	-0.081	40317	NC	
A 1 C9-C13	2.775	(1.307-4.243)		1527112	0.7001	M
A 21 Stoddard Solvent	2.775	(1.307-4.243)		1527112	NC	M
A 57 C10-C12	2.898	(2.169-3.628)		564458	7.62	
24 Dodecane	3.668	3.628	0.040	67129	NC	
A 3 C9 - C17	3.806	(1.307-6.306)		67242976	29.5	M
A 60 C10-C16	4.000	(2.169-5.830)		10494310	5.18	M
A 47 C9 - C18	4.028	(1.307-6.750)		128987306	68.1	M
A 25 C9-C19	4.240	(1.307-7.174)		196132707	85.2	M
A 15 Kerosene	4.240	(1.307-7.174)		196132707	103.3	M
26 C13		4.243			ND	
$ 27 n-Decanoic Acid (Surr)		4.632			ND	
A 59 C12-C16	4.729	(3.628-5.830)		9929852	12.9	M
A 61 C10-C20	4.875	(2.169-7.581)		266248757	158.1	M
A 28 C9-C24	5.179	(1.307-9.051)		605753999	350.3	M
A 29 C9-C25	5.345	(1.307-9.384)		684338202	394.8	M
A 54 C10-C23	5.437	(2.169-8.705)		524105518	304.1	M
A 4 C10-C24	5.610	(2.169-9.051)		605694743	350.3	M
A 16 C10-C25	5.777	(2.169-9.384)		684278946	394.8	M
45 Hexadecane		5.830			ND	
A 14 C10-C26	5.937	(2.169-9.705)		684278946	394.8	M
A 67 C12-C22	5.986	(3.628-8.345)		415147663	242.4	M
A 32 C10-C28	6.243	(2.169-10.317)		1115435836	638.9	M
A 5 Diesel	6.243	(2.169-10.317)		1115435836	638.9	M
A 12 Unknown Hydrocarbons	6.243	(2.169-10.317)		1115435836	NC	M
A 30 C13-C22	6.294	(4.243-8.345)		414244265	241.9	M
44 Heptadecane	6.327	6.306	0.021	14849213	NC	M
A 31 C12-C24	6.339	(3.628-9.051)		605130285	349.9	M
49 n-Octadecane	6.711	6.750	-0.039	25744070	NC	M
A 9 Crude Oil Range Organics (	6.859	(1.307-12.411)		2492999826	NC	M
A 11 Bunker Range Organics (C9-	6.859	(1.307-12.411)		2492999826	NC	M

Report Date: 31-Aug-2018 14:11:05 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000009.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.859	(1.307-12.411)		2492999826	1180.9	M
33 C19	7.170	7.174	-0.004	15900683	NC	M
A 64 C13-C28	7.280	(4.243-10.317)		1113967980	638.1	M
A 17 C10-C36	7.290	(2.169-12.411)		2492940570	1418.9	M
A 68 Crude Oil Range Organics (	7.349	(1.307-13.391)		4186146844	NC	M
A 13 C9-C40	7.349	(1.307-13.391)		4186146844	2679.5	M
A 58 C16-C24	7.441	(5.830-9.051)		595200433	344.3	M
62 icosane	7.580	7.581	-0.001	15991928	NC	M
A 6 C10-C40	7.780	(2.169-13.391)		4186087588	2682.3	M
$ 34 p-Terphenyl		8.077			ND	U
35 n-Docosane	8.394	8.345	0.049	35702257	NC	M
A 18 C12-C40	8.509	(3.628-13.391)		4185523130	2689.5	M
36 Tricosane	8.658	8.705	-0.047	33191926	NC	M
A 66 C13-C40	8.817	(4.243-13.391)		4184619732	2692.0	M
37 n-Tetracosane	9.061	9.051	0.010	30396023	NC	M
A 2 C16-C36 ORO	9.120	(5.830-12.411)		2482446260	2099.4	M
38 C25		9.384			ND	
A 19 C16-C40	9.611	(5.830-13.391)		4175593278	2695.0	M
46 n-Hexacosane		9.705			ND	
A 20 C19-C36	9.792	(7.174-12.411)		1569862894	1153.2	
A 55 C23-C32	10.065	(8.705-11.426)		1422532819	1838.2	M
39 n-Octacosane	10.270	10.317	-0.047	135430330	NC	M
65 C29	10.646	10.607	0.039	60428308	NC	M
A 40 C24-C36	10.731	(9.051-12.411)		1856658889	1893.8	M
A 7 Motor Oil	10.731	(9.051-12.411)		1503501178	1533.6	
A 10 C22-C40	10.868	(8.345-13.391)		2001225398	1439.7	
A 50 C25-C36	10.898	(9.384-12.411)		1341309142	1456.1	
A 41 C23-C40	11.048	(8.705-13.391)		1957049667	1431.9	
A 8 C24-C40	11.221	(9.051-13.391)		1949993712	1453.9	
56 Dotriacontane	11.360	11.426	-0.066	132472999	NC	M
A 51 C28-C40	11.854	(10.317-13.391)		1614655851	1488.5	
A 63 C29-C40	11.999	(10.607-13.391)		1462202431	1463.2	
42 n-Hexatriacontane	12.367	12.411	-0.044	314930745	NC	M
43 C40		13.391			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

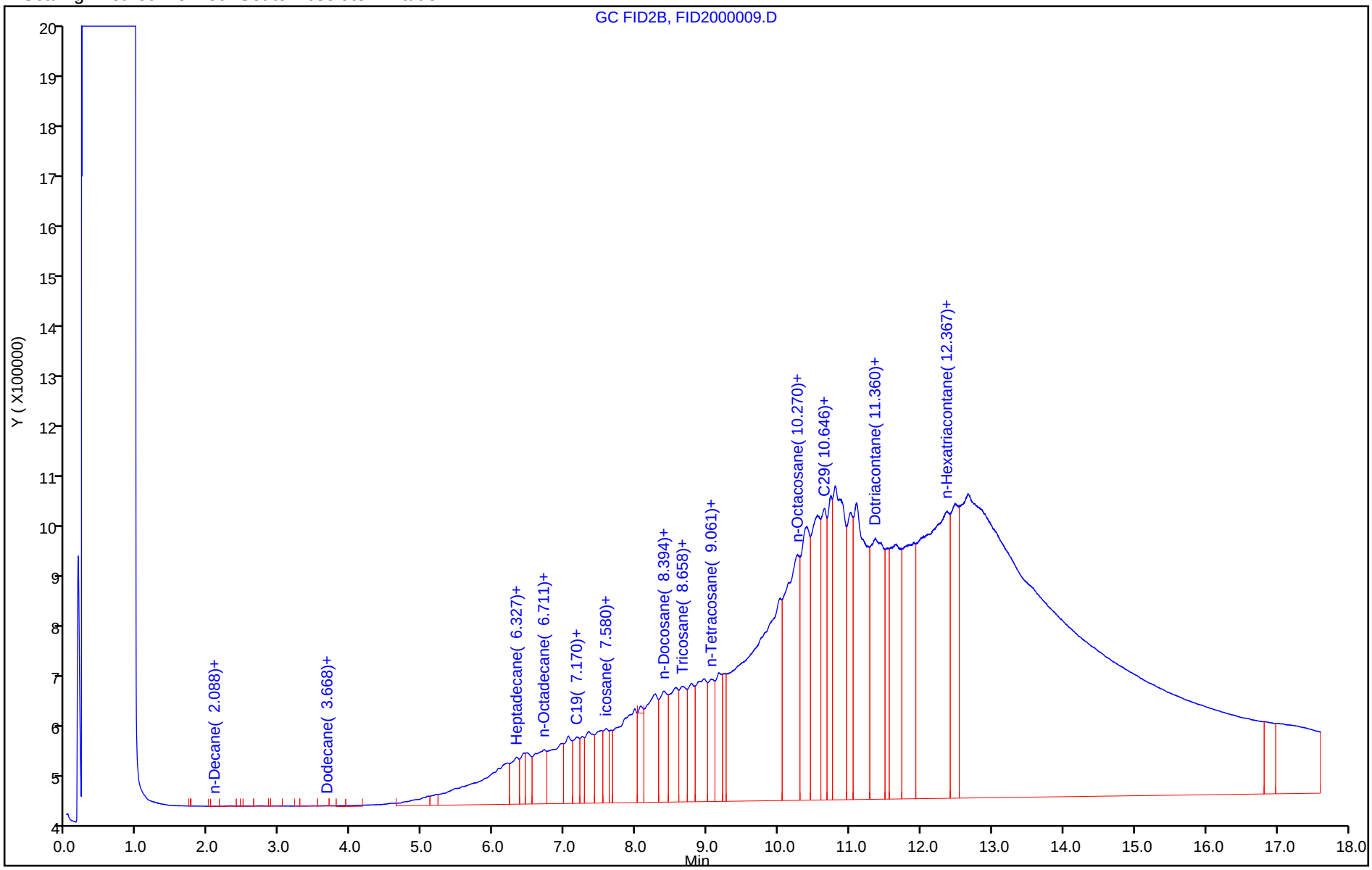
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 31-Aug-2018 14:11:05 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000009.D				
Injection Date:	31-Aug-2018 12:39:01	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88239-D-13-C	Lab Sample ID:	720-88239-13	Worklist Smp#:	9
Client ID:	DG-M7S--0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	20.0000	ALS Bottle#:	59
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value

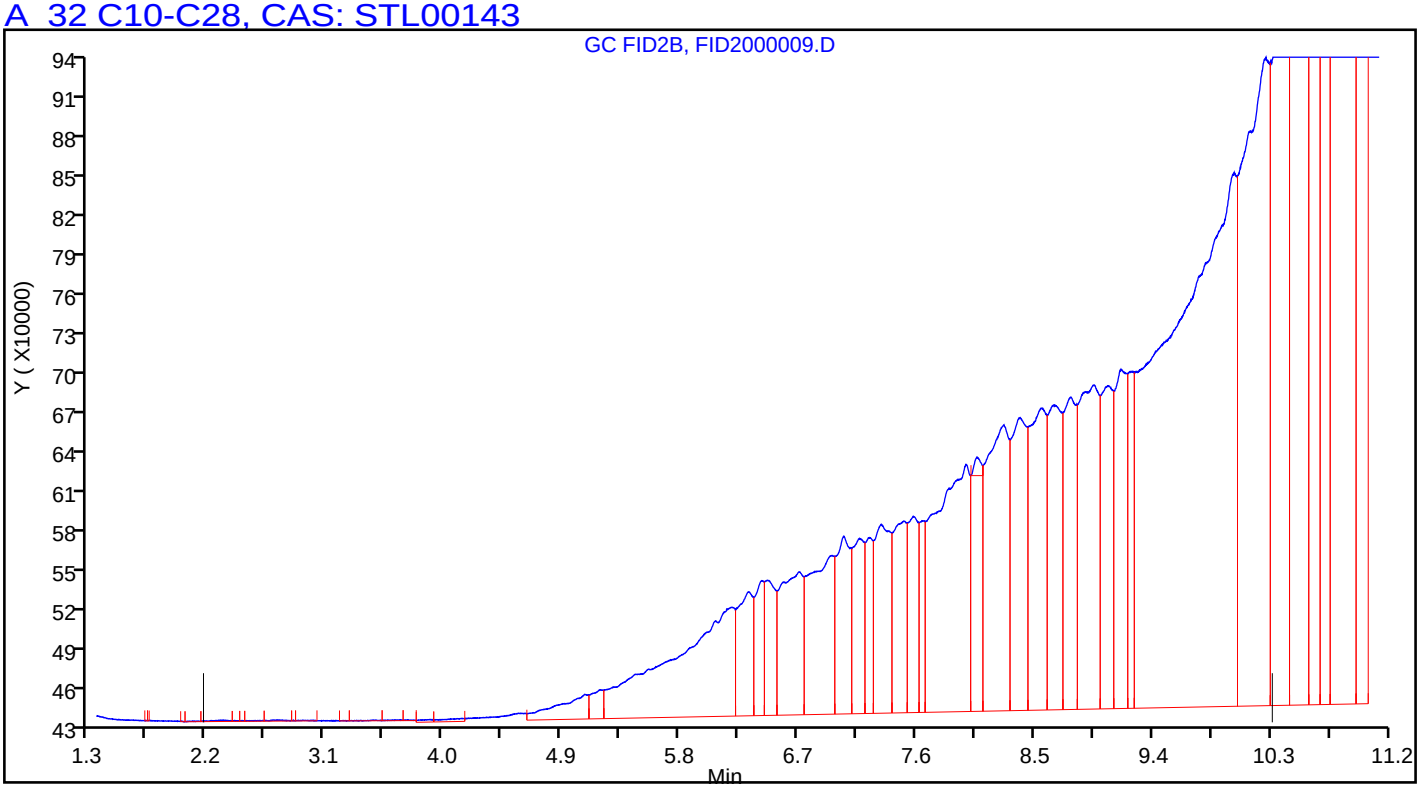


Report Date: 31-Aug-2018 14:11:09 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000009.D				
Injection Date:	31-Aug-2018 12:39:01	Instrument ID:	CHDRO6		
Lims ID:	720-88239-D-13-C	Lab Sample ID:	720-88239-13		
Client ID:	DG-M7S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	59	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	20.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

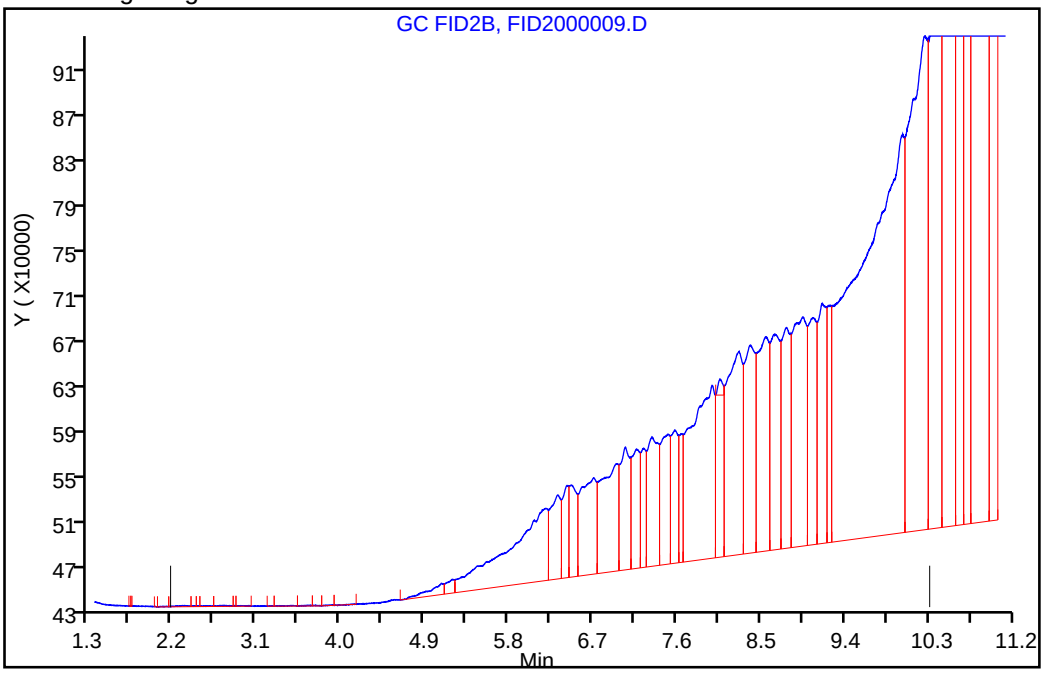
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000009.D				
Injection Date:	31-Aug-2018 12:39:01	Instrument ID:	CHDRO6		
Lims ID:	720-88239-D-13-C	Lab Sample ID:	720-88239-13		
Client ID:	DG-M7S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	59	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	20.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.243, CAS: STL00143

Signal: 1

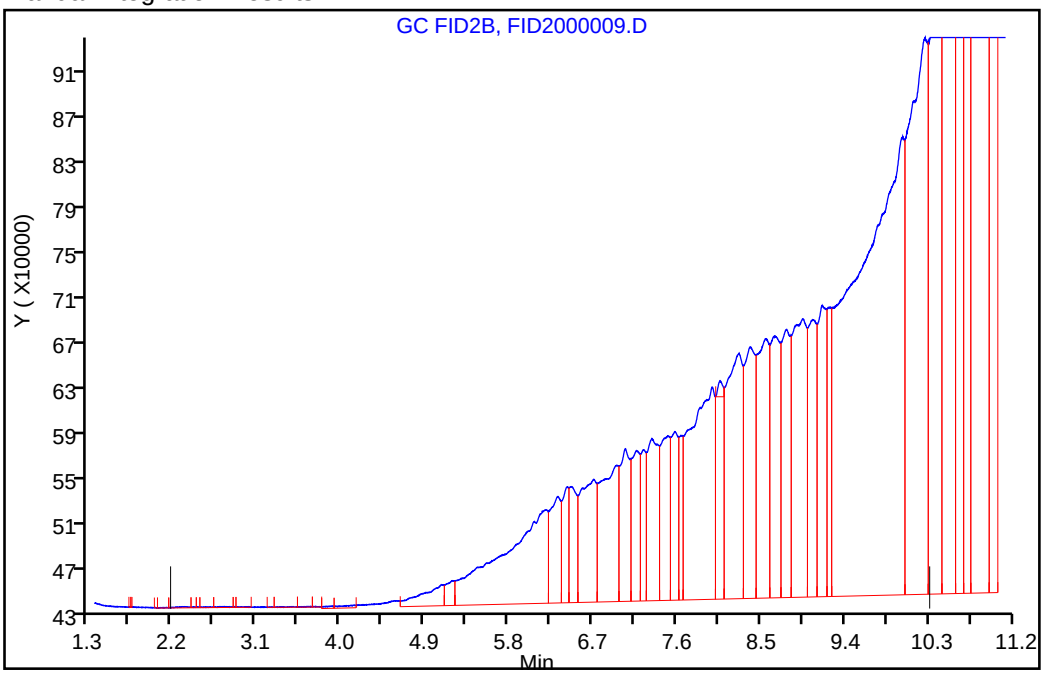
Processing Integration Results

RT: 6.24
Response: 900294138
Amount: 517.0643



Manual Integration Results

RT: 6.24
Response: 1115435836
Amount: 638.8819



Reviewer: luj, 31-Aug-2018 14:10:57

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

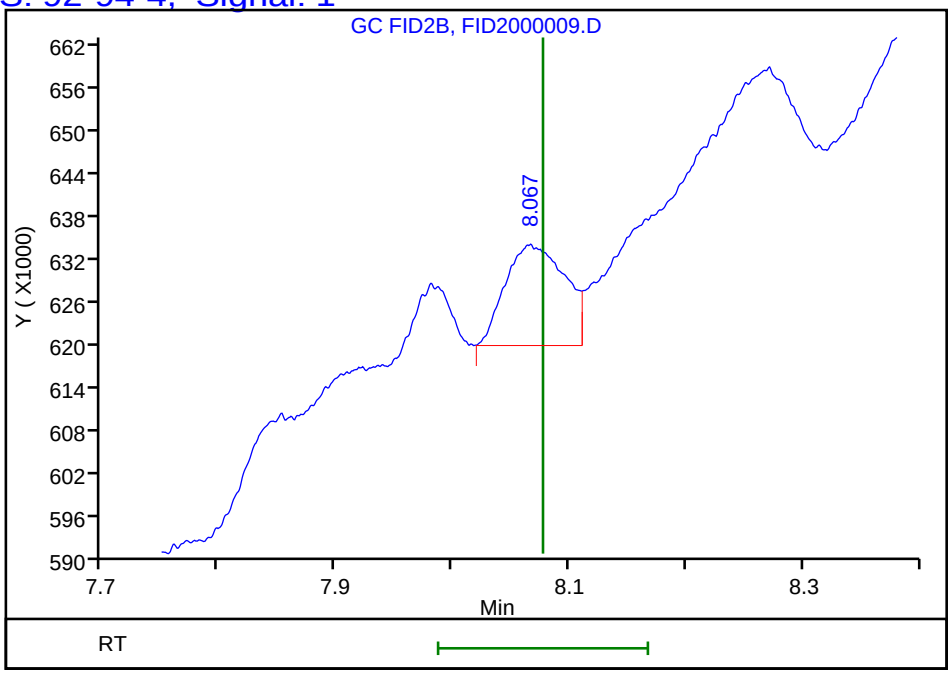
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000009.D				
Injection Date:	31-Aug-2018 12:39:01	Instrument ID:	CHDRO6		
Lims ID:	720-88239-D-13-C	Lab Sample ID:	720-88239-13		
Client ID:	DG-M7S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	59	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	20.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4, Signal: 1

RT: 8.07
Response: 1005572
Amount: 0.580490



Reviewer: luj, 31-Aug-2018 14:11:05
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-M7S-3.5-4
Lab Sample ID: 720-88239-14
Matrix: Solid
Lab File ID: FID1000014.D
Analysis Method: 8015B
Date Collected: 08/24/2018 09:55
Extraction Method: 3546
Date Extracted: 08/29/2018 13:41
Sample wt/vol: 15.15(g)
Date Analyzed: 08/31/2018 14:41
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250653
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	8300		2000	740

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	82		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000014.D
Lims ID: 720-88239-D-14-C
Client ID: DG-M7S--3.5-4
Sample Type: Client
Inject. Date: 31-Aug-2018 14:41:19 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053601-014
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\DRO6_A.m
Limit Group: DRO
Last Update: 31-Aug-2018 18:24:16 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 18:24:15

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.229			ND	
23 n-Decane	2.113	2.116	-0.003	62574	NC	
A 21 Stoddard Solvent	2.735	(1.229-4.240)		1522872	0.8552	
A 1 C9-C13	2.735	(1.229-4.240)		1522872	0.8575	
A 57 C10-C12	2.864	(2.116-3.612)		620846	0.4025	
24 Dodecane	3.629	3.612	0.017	8060	NC	
A 3 C9 - C17	3.780	(1.229-6.332)		5726679	2.93	
A 60 C10-C16	3.983	(2.116-5.850)		3368368	1.93	
A 47 C9 - C18	4.006	(1.229-6.783)		9709990	6.01	
A 25 C9-C19	4.221	(1.229-7.212)		14502402	7.39	
A 15 Kerosene	4.221	(1.229-7.212)		14502402	8.98	
26 C13	4.225	4.240	-0.015	14425	NC	
$ 27 n-Decanoic Acid (Surr)		4.611			ND	U
A 59 C12-C16	4.731	(3.612-5.850)		2747522	1.78	
A 62 C10-C20	4.871	(2.116-7.625)		21626583	14.0	
A 28 C9-C24	5.172	(1.229-9.115)		57916048	37.5	
A 29 C9-C25	5.341	(1.229-9.454)		71202898	46.2	
A 54 C10-C23	5.440	(2.116-8.764)		49480381	32.1	
A 4 C10-C24	5.616	(2.116-9.115)		57514560	37.3	
A 16 C10-C25	5.785	(2.116-9.454)		70801410	45.9	
45 Hexadecane	5.857	5.850	0.007	347043	NC	
A 14 C10-C26	5.948	(2.116-9.781)		74647699	48.4	
A 67 C12-C22	6.006	(3.612-8.399)		44291860	28.7	
A 12 Unknown Hydrocarbons	6.259	(2.116-10.402)		97556004	NC	
A 5 Diesel	6.259	(2.116-10.402)		97556004	63.2	
A 32 C10-C28	6.259	(2.116-10.402)		97556004	63.2	
A 30 C13-C22	6.320	(4.240-8.399)		43791322	28.4	
44 Heptadecane	6.335	6.332	0.003	896195	NC	
A 31 C12-C24	6.364	(3.612-9.115)		56893714	36.9	
51 n-Octadecane	6.809	6.783	0.026	995758	NC	
A 52 Mineral oil	6.881	(1.229-12.534)		192201838	108.6	
A 11 Bunker Range Organics (C9-	6.881	(1.229-12.534)		192201838	NC	

Report Date: 31-Aug-2018 18:24:18 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000014.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 9 Crude Oil Range Organics (	6.881	(1.229-12.534)		192201838	NC	
33 C19	7.217	7.212	0.005	1239556	NC	
A 64 C13-C28	7.321	(4.240-10.402)		96434620	62.5	
A 17 C10-C36	7.325	(2.116-12.534)		191800350	124.4	
A 13 C9-C40	7.391	(1.229-13.554)		233893549	173.5	
A 68 Crude Oil Range Organics (	7.391	(1.229-13.554)		233893549	NC	
A 58 C16-C24	7.483	(5.850-9.115)		54146192	35.1	
61 icosane	7.628	7.625	0.003	2240944	NC	
A 6 C10-C40	7.835	(2.116-13.554)		233492061	173.3	
$ 34 p-Terphenyl	8.094	8.102	-0.008	39240266	20.4	
35 n-Docosane	8.397	8.399	-0.002	3801178	NC	
A 18 C12-C40	8.583	(3.612-13.554)		232871215	173.3	
36 Tricosane	8.771	8.764	0.007	3906435	NC	
A 66 C13-C40	8.897	(4.240-13.554)		232370677	173.1	
37 n-Tetracosane	9.126	9.115	0.011	4206774	NC	
A 2 C16-C36 ORO	9.192	(5.850-12.534)		252568797	221.4	
38 C25	9.415	9.454	-0.039	9080076	NC	
A 19 C16-C40	9.702	(5.850-13.554)		230123693	172.1	
46 n-Hexacosane	9.794	9.781	0.013	4874351	NC	
A 20 C19-C36	9.873	(7.212-12.534)		234616019	176.5	
A 55 C23-C32	10.147	(8.764-11.531)		98431326	141.8	
39 n-Octacosane	10.450	10.402	0.048	6565933	NC	
65 C29	10.701	10.697	0.004	8265472	NC	
A 7 Motor Oil	10.824	(9.115-12.534)		114497621	128.6	
A 40 C24-C36	10.824	(9.115-12.534)		114497621	128.6	
A 10 C22-C40	10.976	(8.399-13.554)		162187151	130.4	
A 49 C25-C36	10.994	(9.454-12.534)		130079016	145.3	
A 41 C23-C40	11.159	(8.764-13.554)		184011680	144.0	
A 8 C24-C40	11.334	(9.115-13.554)		175977501	144.6	
56 Dotriacontane	11.534	11.531	0.003	3309378	NC	
A 50 C28-C40	11.978	(10.402-13.554)		135936057	143.2	
A 63 C29-C40	12.125	(10.697-13.554)		125447901	144.8	
42 n-Hexatriacontane	12.546	12.534	0.012	4059673	NC	
43 C40	13.551	13.554	-0.003	632016	NC	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

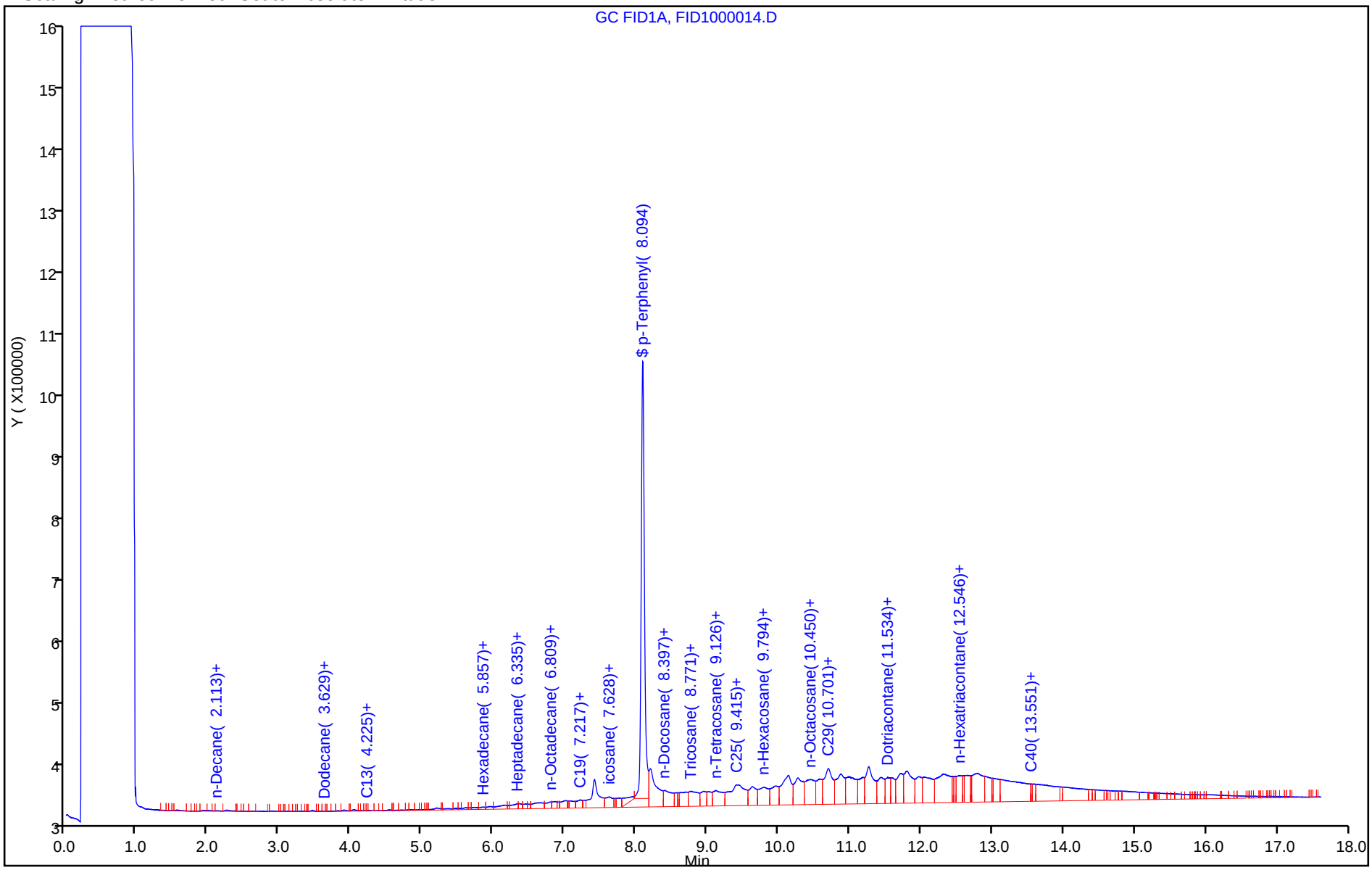
Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

Report Date: 31-Aug-2018 18:24:19 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000014.D				
Injection Date:	31-Aug-2018 14:41:19	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88239-D-14-C	Lab Sample ID:	720-88239-14	Worklist Smp#:	14
Client ID:	DG-M7S--3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000014.D
Lims ID: 720-88239-D-14-C
Client ID: DG-M7S--3.5-4
Sample Type: Client
Inject. Date: 31-Aug-2018 14:41:19 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053601-014
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\DRO6_A.m
Limit Group: DRO
Last Update: 31-Aug-2018 18:24:16 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 18:24:15

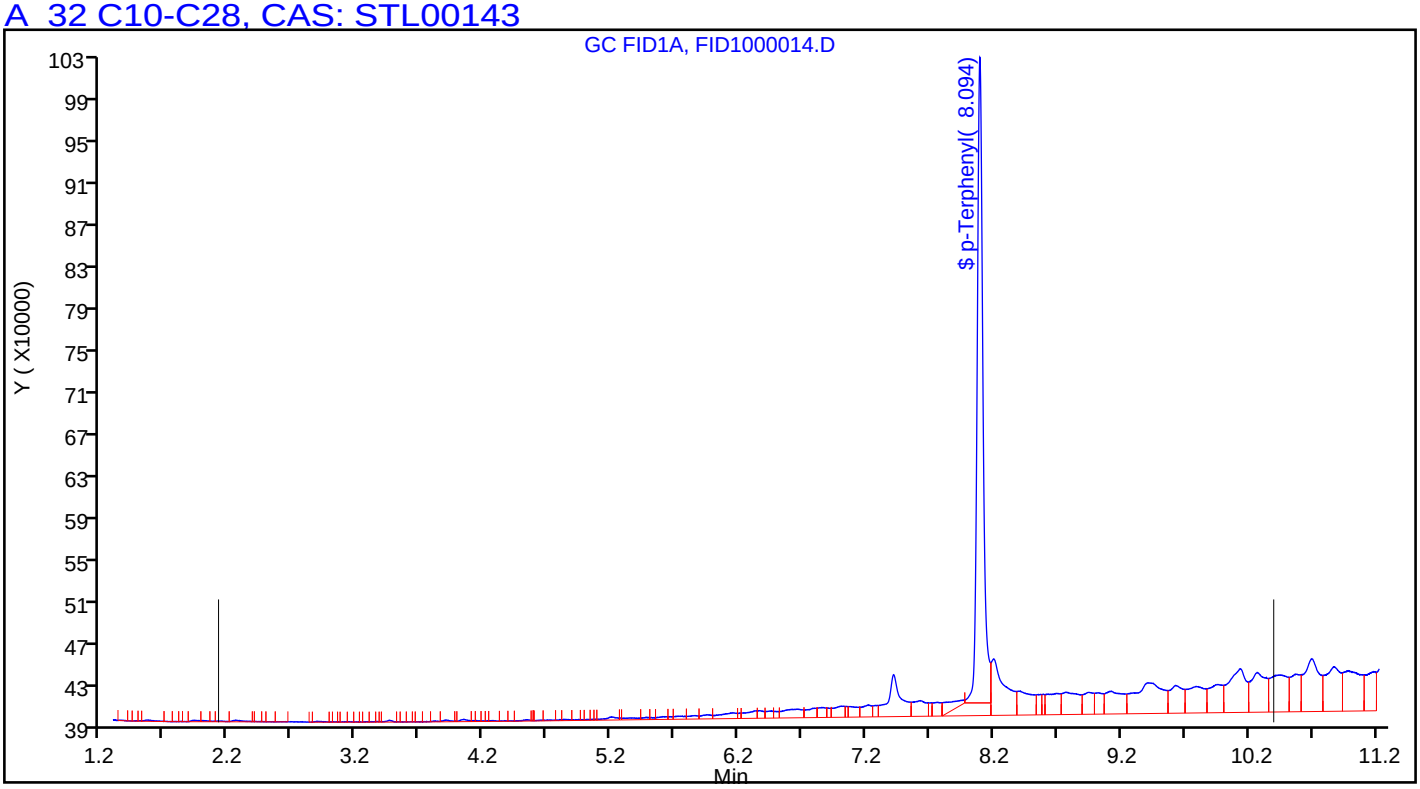
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	20.4	81.74

Report Date: 31-Aug-2018 18:24:20 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000014.D				
Injection Date:	31-Aug-2018 14:41:19	Instrument ID:	CHDRO6		
Lims ID:	720-88239-D-14-C	Lab Sample ID:	720-88239-14		
Client ID:	DG-M7S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-B9S-0.5-1
Lab Sample ID: 720-88239-15
Matrix: Solid
Lab File ID: FID2000010.D
Analysis Method: 8015B
Date Collected: 08/24/2018 10:20
Extraction Method: 3546
Date Extracted: 08/29/2018 13:41
Sample wt/vol: 15.30(g)
Date Analyzed: 08/31/2018 13:03
Con. Extract Vol.: 2(mL)
Dilution Factor: 10
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250656
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	440000		20000	7400

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	0	D X	40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000010.D
Lims ID: 720-88239-E-15-C
Client ID: DG-B9S--0.5-1
Sample Type: Client
Inject. Date: 31-Aug-2018 13:03:26 ALS Bottle#: 60 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 10.0000
Sample Info: 720-0053602-010
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\DRO6_B.m
Limit Group: DRO
Last Update: 31-Aug-2018 14:12:17 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 14:12:17

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.307			ND	
23 n-Decane	2.112	2.169	-0.057	44235	NC	
A 1 C9-C13	2.775	(1.307-4.243)		3197955	1.47	M
A 21 Stoddard Solvent	2.775	(1.307-4.243)		3197955	NC	M
A 57 C10-C12	2.898	(2.169-3.628)		1018915	7.88	M
24 Dodecane	3.597	3.628	-0.031	150302	NC	M
A 3 C9 - C17	3.806	(1.307-6.306)		15185813	6.65	M
A 60 C10-C16	4.000	(2.169-5.830)		10686899	5.27	M
A 47 C9 - C18	4.028	(1.307-6.750)		20401100	10.8	M
A 25 C9-C19	4.240	(1.307-7.174)		43928169	19.1	M
A 15 Kerosene	4.240	(1.307-7.174)		43928169	23.1	M
26 C13		4.243			ND	
$ 27 n-Decanoic Acid (Surr)		4.632			ND	U
A 59 C12-C16	4.729	(3.628-5.830)		9667984	12.8	M
A 61 C10-C20	4.875	(2.169-7.581)		52052285	36.8	M
A 28 C9-C24	5.179	(1.307-9.051)		252849255	150.5	M
A 29 C9-C25	5.345	(1.307-9.384)		297251248	175.6	M
A 54 C10-C23	5.437	(2.169-8.705)		190134253	115.0	M
A 4 C10-C24	5.610	(2.169-9.051)		252697904	150.4	M
A 16 C10-C25	5.777	(2.169-9.384)		297099897	175.5	M
45 Hexadecane	5.870	5.830	0.040	1382130	NC	M
A 14 C10-C26	5.937	(2.169-9.705)		297099897	175.5	M
A 67 C12-C22	5.986	(3.628-8.345)		146561596	90.3	M
A 32 C10-C28	6.243	(2.169-10.317)		577764168	334.4	M
A 5 Diesel	6.243	(2.169-10.317)		577764168	334.4	M
A 12 Unknown Hydrocarbons	6.243	(2.169-10.317)		577764168	NC	M
A 30 C13-C22	6.294	(4.243-8.345)		145364241	89.6	M
44 Heptadecane	6.346	6.306	0.040	3775612	NC	M
A 31 C12-C24	6.339	(3.628-9.051)		251678989	149.8	M
49 n-Octadecane	6.801	6.750	0.051	10168543	NC	M
A 9 Crude Oil Range Organics (	6.859	(1.307-12.411)		1575422661	NC	M
A 11 Bunker Range Organics (C9-	6.859	(1.307-12.411)		1575422661	NC	M

Report Date: 31-Aug-2018 14:12:18 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000010.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.859	(1.307-12.411)		1575422661	746.3	M
33 C19	7.181	7.174	0.007	3237731	NC	M
A 64 C13-C28	7.280	(4.243-10.317)		575547898	333.2	M
A 17 C10-C36	7.290	(2.169-12.411)		1575271310	899.3	M
A 68 Crude Oil Range Organics (	7.349	(1.307-13.391)		3251407170	NC	M
A 13 C9-C40	7.349	(1.307-13.391)		3251407170	2081.1	M
A 58 C16-C24	7.441	(5.830-9.051)		242011005	144.3	M
62 icosane	7.610	7.581	0.029	28770839	NC	M
A 6 C10-C40	7.780	(2.169-13.391)		3251255819	2083.3	M
$ 34 p-Terphenyl		8.077			ND	U
35 n-Docosane	8.376	8.345	0.031	17554012	NC	M
A 18 C12-C40	8.509	(3.628-13.391)		3250236904	2088.5	M
36 Tricosane	8.788	8.705	0.083	34653295	NC	M
A 66 C13-C40	8.817	(4.243-13.391)		3249039549	2090.1	M
37 n-Tetracosane	9.068	9.051	0.017	23306191	NC	M
A 2 C16-C36 ORO	9.120	(5.830-12.411)		1564584411	1323.2	M
38 C25		9.384			ND	
A 19 C16-C40	9.611	(5.830-13.391)		3240568920	2091.5	M
46 n-Hexacosane		9.705			ND	
A 20 C19-C36	9.792	(7.174-12.411)		1020400950	749.5	
A 55 C23-C32	10.065	(8.705-11.426)		919005203	1187.5	M
39 n-Octacosane	10.258	10.317	-0.059	80538407	NC	M
65 C29	10.632	10.607	0.025	96443193	NC	M
A 40 C24-C36	10.731	(9.051-12.411)		1285988936	1311.7	M
A 7 Motor Oil	10.731	(9.051-12.411)		1014866478	1035.2	
A 10 C22-C40	10.868	(8.345-13.391)		1453747927	1045.9	
A 50 C25-C36	10.898	(9.384-12.411)		941330329	1021.9	
A 41 C23-C40	11.048	(8.705-13.391)		1438935199	1052.8	
A 8 C24-C40	11.221	(9.051-13.391)		1453486167	1083.7	
56 Dotriacontane	11.383	11.426	-0.043	74974055	NC	M
A 51 C28-C40	11.854	(10.317-13.391)		1248654694	1151.1	
A 63 C29-C40	11.999	(10.607-13.391)		1153001086	1153.8	
42 n-Hexatriacontane	12.376	12.411	-0.035	187806487	NC	M
43 C40		13.391			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

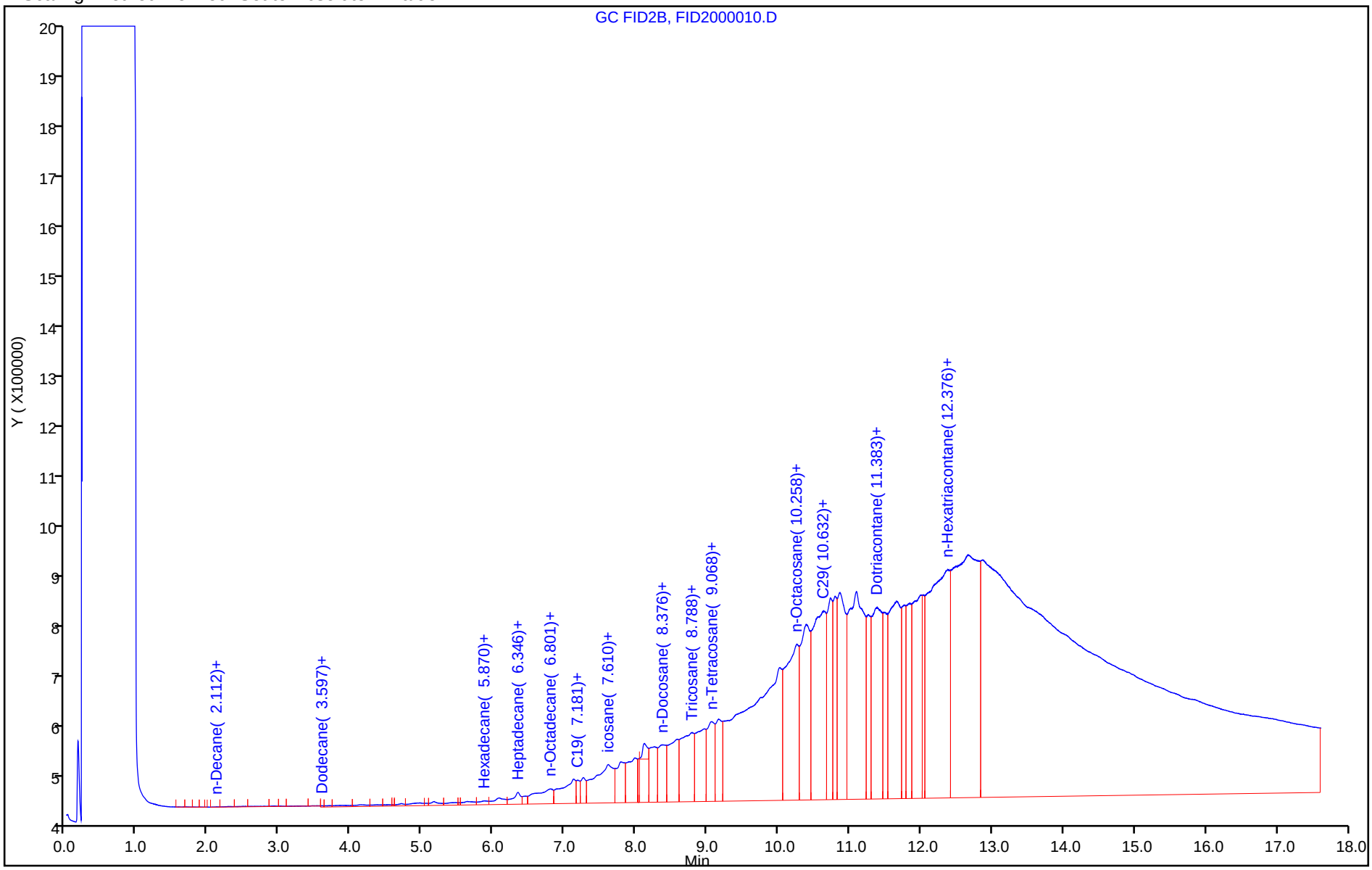
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 31-Aug-2018 14:12:18 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000010.D				
Injection Date:	31-Aug-2018 13:03:26	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88239-E-15-C	Lab Sample ID:	720-88239-15	Worklist Smp#:	10
Client ID:	DG-B9S--0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	60
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value

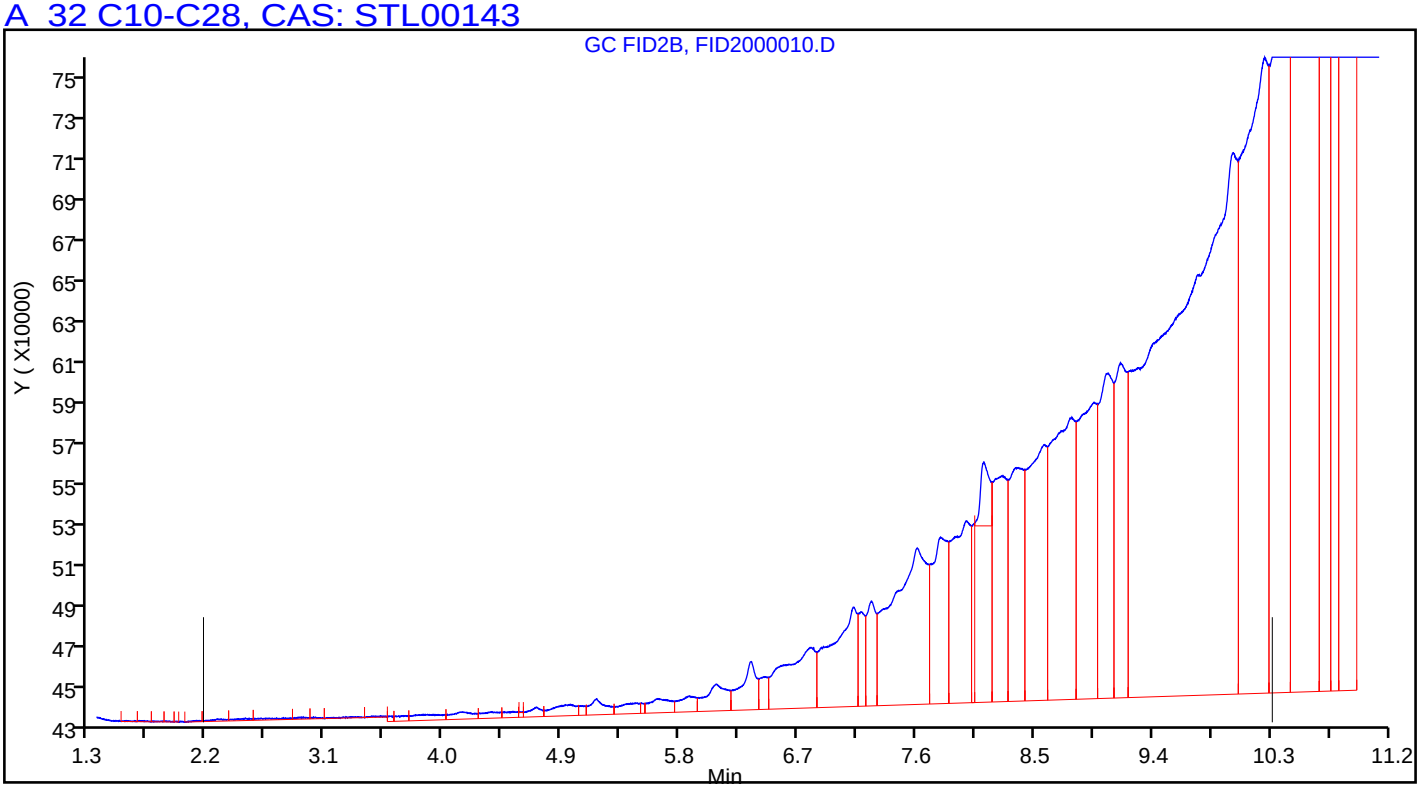


Report Date: 31-Aug-2018 14:12:22 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000010.D				
Injection Date:	31-Aug-2018 13:03:26	Instrument ID:	CHDRO6		
Lims ID:	720-88239-E-15-C	Lab Sample ID:	720-88239-15		
Client ID:	DG-B9S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	60	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

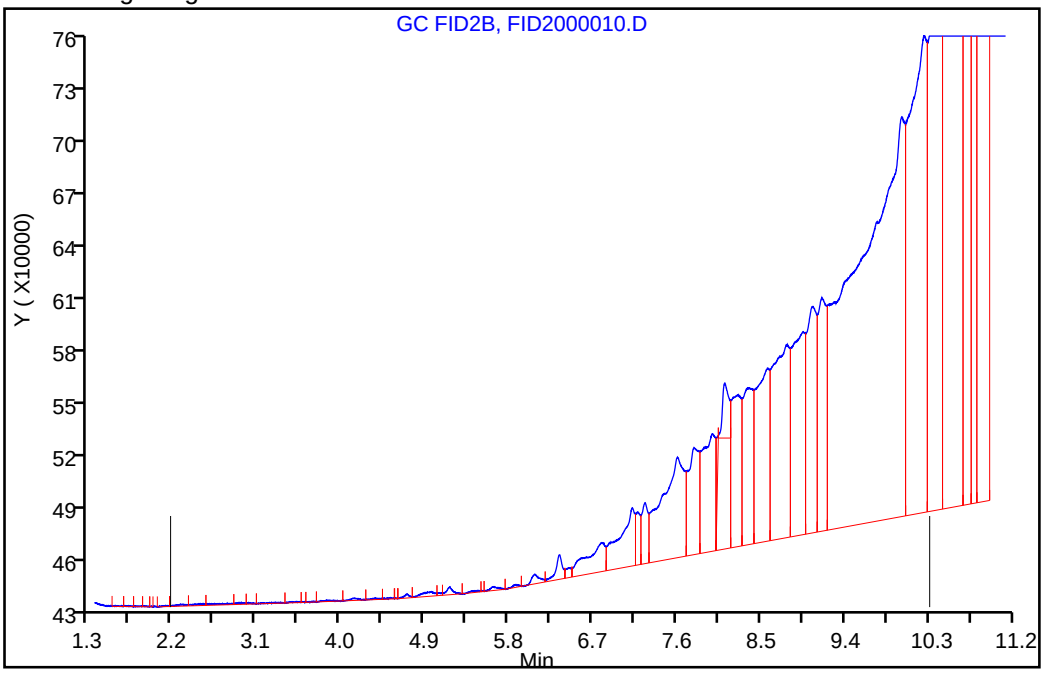
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000010.D				
Injection Date:	31-Aug-2018 13:03:26	Instrument ID:	CHDRO6		
Lims ID:	720-88239-E-15-C	Lab Sample ID:	720-88239-15		
Client ID:	DG-B9S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	60	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.243, CAS: STL00143

Signal: 1

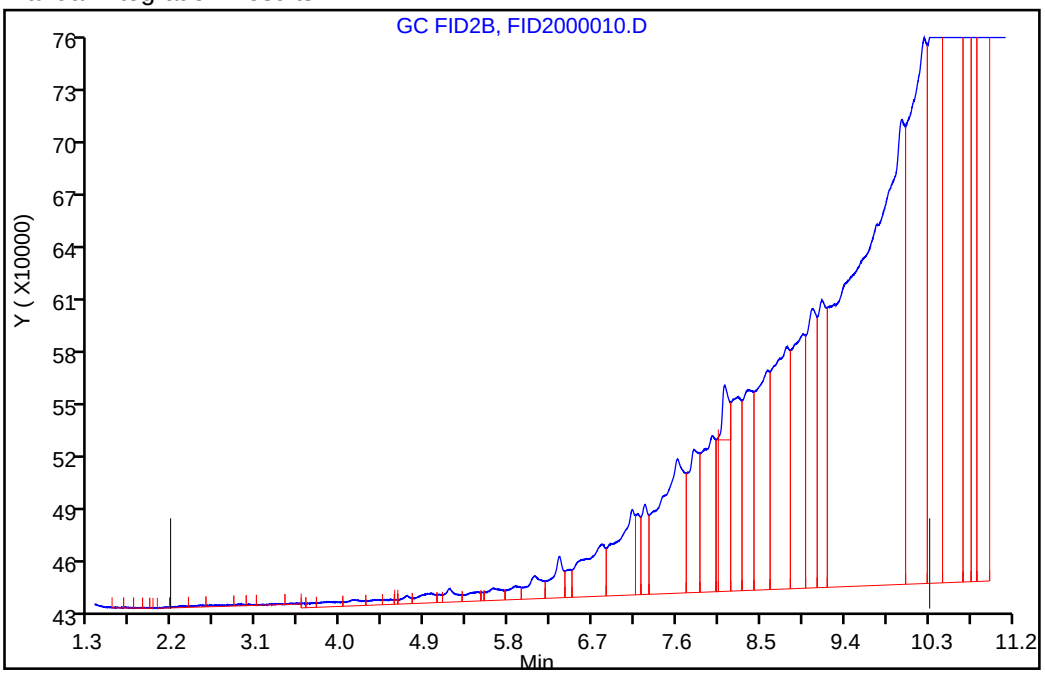
Processing Integration Results

RT: 6.24
Response: 442756025
Amount: 257.9968



Manual Integration Results

RT: 6.24
Response: 577764168
Amount: 334.4412



Reviewer: luj, 31-Aug-2018 14:12:08

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

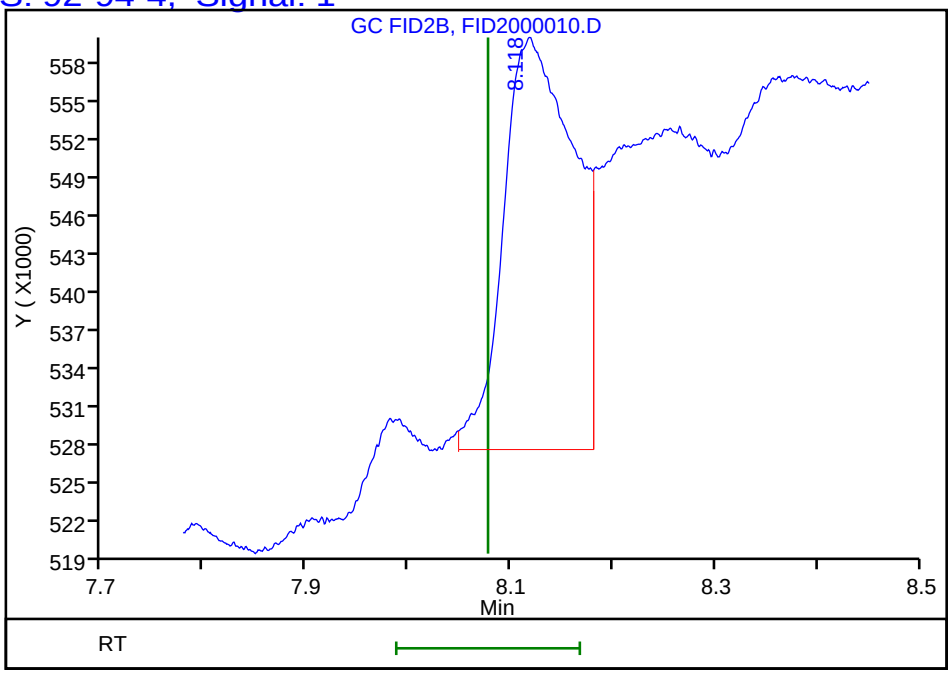
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000010.D				
Injection Date:	31-Aug-2018 13:03:26	Instrument ID:	CHDRO6		
Lims ID:	720-88239-E-15-C	Lab Sample ID:	720-88239-15		
Client ID:	DG-B9S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	60	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4, Signal: 1

RT: 8.12
Response: 3082053
Amount: 1.779187



Reviewer: luj, 31-Aug-2018 14:12:17
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-B9S-3.5-4 Lab Sample ID: 720-88239-16

Matrix: Solid Lab File ID: FID1000015.D

Analysis Method: 8015B Date Collected: 08/24/2018 10:20

Extraction Method: 3546 Date Extracted: 08/29/2018 13:41

Sample wt/vol: 15.48(g) Date Analyzed: 08/31/2018 15:05

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250653 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	14000		1900	730

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	90		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000015.D
Lims ID: 720-88239-E-16-C
Client ID: DG-B9S--3.5-4
Sample Type: Client
Inject. Date: 31-Aug-2018 15:05:58 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053601-015
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\DRO6_A.m
Limit Group: DRO
Last Update: 31-Aug-2018 18:24:16 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 18:25:36

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane	1.307	1.229	0.078	20407	NC	
23 n-Decane	2.126	2.116	0.010	190904	NC	
A 21 Stoddard Solvent	2.735	(1.229-4.240)		3780272	2.12	
A 1 C9-C13	2.735	(1.229-4.240)		3780272	2.13	
A 57 C10-C12	2.864	(2.116-3.612)		1830993	1.19	
24 Dodecane	3.622	3.612	0.010	162010	NC	
A 3 C9 - C17	3.780	(1.229-6.332)		26582654	13.6	
A 60 C10-C16	3.983	(2.116-5.850)		20509284	11.7	
A 47 C9 - C18	4.006	(1.229-6.783)		33368750	20.7	
A 25 C9-C19	4.221	(1.229-7.212)		42484727	21.7	
A 15 Kerosene	4.221	(1.229-7.212)		42484727	26.3	
26 C13	4.253	4.240	0.013	221330	NC	
$ 27 n-Decanoic Acid (Surr)		4.611			ND	
A 59 C12-C16	4.731	(3.612-5.850)		18678291	12.1	
A 62 C10-C20	4.871	(2.116-7.625)		54814745	35.5	
A 28 C9-C24	5.172	(1.229-9.115)		100175808	64.9	
A 29 C9-C25	5.341	(1.229-9.454)		107201007	69.5	
A 54 C10-C23	5.440	(2.116-8.764)		83338694	54.0	
A 4 C10-C24	5.616	(2.116-9.115)		99721388	64.7	
A 16 C10-C25	5.785	(2.116-9.454)		106596738	69.1	
45 Hexadecane	5.851	5.850	0.001	1209718	NC	
A 14 C10-C26	5.948	(2.116-9.781)		129323053	83.8	
A 67 C12-C22	6.006	(3.612-8.399)		71219718	46.2	
A 12 Unknown Hydrocarbons	6.259	(2.116-10.402)		172516037	NC	
A 5 Diesel	6.259	(2.116-10.402)		172516037	111.8	
A 32 C10-C28	6.259	(2.116-10.402)		172516037	111.8	
A 30 C13-C22	6.320	(4.240-8.399)		69874708	45.3	
44 Heptadecane	6.372	6.332	0.040	4162018	NC	
A 31 C12-C24	6.364	(3.612-9.115)		97890395	63.5	
51 n-Octadecane	6.785	6.783	0.002	1036458	NC	
A 52 Mineral oil	6.881	(1.229-12.534)		388816952	219.6	
A 11 Bunker Range Organics (C9-	6.881	(1.229-12.534)		388816952	NC	

Report Date: 31-Aug-2018 18:25:39 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000015.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 9 Crude Oil Range Organics (	6.881	(1.229-12.534)		388816952	NC	
33 C19	7.157	7.212	-0.055	3596932	NC	
A 64 C13-C28	7.321	(4.240-10.402)		169340034	109.8	
A 17 C10-C36	7.325	(2.116-12.534)		388212683	251.7	
A 13 C9-C40	7.391	(1.229-13.554)		466754946	346.2	
A 68 Crude Oil Range Organics (	7.391	(1.229-13.554)		466754946	NC	
A 58 C16-C24	7.483	(5.850-9.115)		79212104	51.4	
61 icosane	7.604	7.625	-0.021	4166258	NC	
A 6 C10-C40	7.835	(2.116-13.554)		466150677	345.9	
$ 34 p-Terphenyl	8.093	8.102	-0.009	43007049	22.4	
35 n-Docosane	8.401	8.399	0.002	5248709	NC	
A 18 C12-C40	8.583	(3.612-13.554)		464319684	345.5	
36 Tricosane	8.769	8.764	0.005	6253576	NC	
A 66 C13-C40	8.897	(4.240-13.554)		462974674	344.9	
37 n-Tetracosane	9.121	9.115	0.006	6875350	NC	
A 2 C16-C36 ORO	9.192	(5.850-12.534)		406345023	356.2	
38 C25	9.458	9.454	0.004	16052885	NC	
A 19 C16-C40	9.702	(5.850-13.554)		445641393	333.3	
46 n-Hexacosane	9.788	9.781	0.007	8732607	NC	
A 20 C19-C36	9.873	(7.212-12.534)		381141542	286.8	
A 55 C23-C32	10.147	(8.764-11.531)		200785941	289.2	
39 n-Octacosane	10.416	10.402	0.014	6749207	NC	
65 C29	10.701	10.697	0.004	17978086	NC	
A 7 Motor Oil	10.824	(9.115-12.534)		235557953	264.5	
A 40 C24-C36	10.824	(9.115-12.534)		235557953	264.5	
A 10 C22-C40	10.976	(8.399-13.554)		311684062	250.6	
A 49 C25-C36	10.994	(9.454-12.534)		281615945	314.6	
A 41 C23-C40	11.159	(8.764-13.554)		382811983	299.5	
A 8 C24-C40	11.334	(9.115-13.554)		366429289	301.0	
56 Dotriacontane	11.552	11.531	0.021	5876760	NC	
A 50 C28-C40	11.978	(10.402-13.554)		293634640	309.4	
A 63 C29-C40	12.125	(10.697-13.554)		271353784	313.1	
42 n-Hexatriacontane	12.453	12.534	-0.081	17706841	NC	
43 C40		13.554		ND		
$ 69 Stearic Acid (Surr)		0.000		ND		

QC Flag Legend

Processing Flags

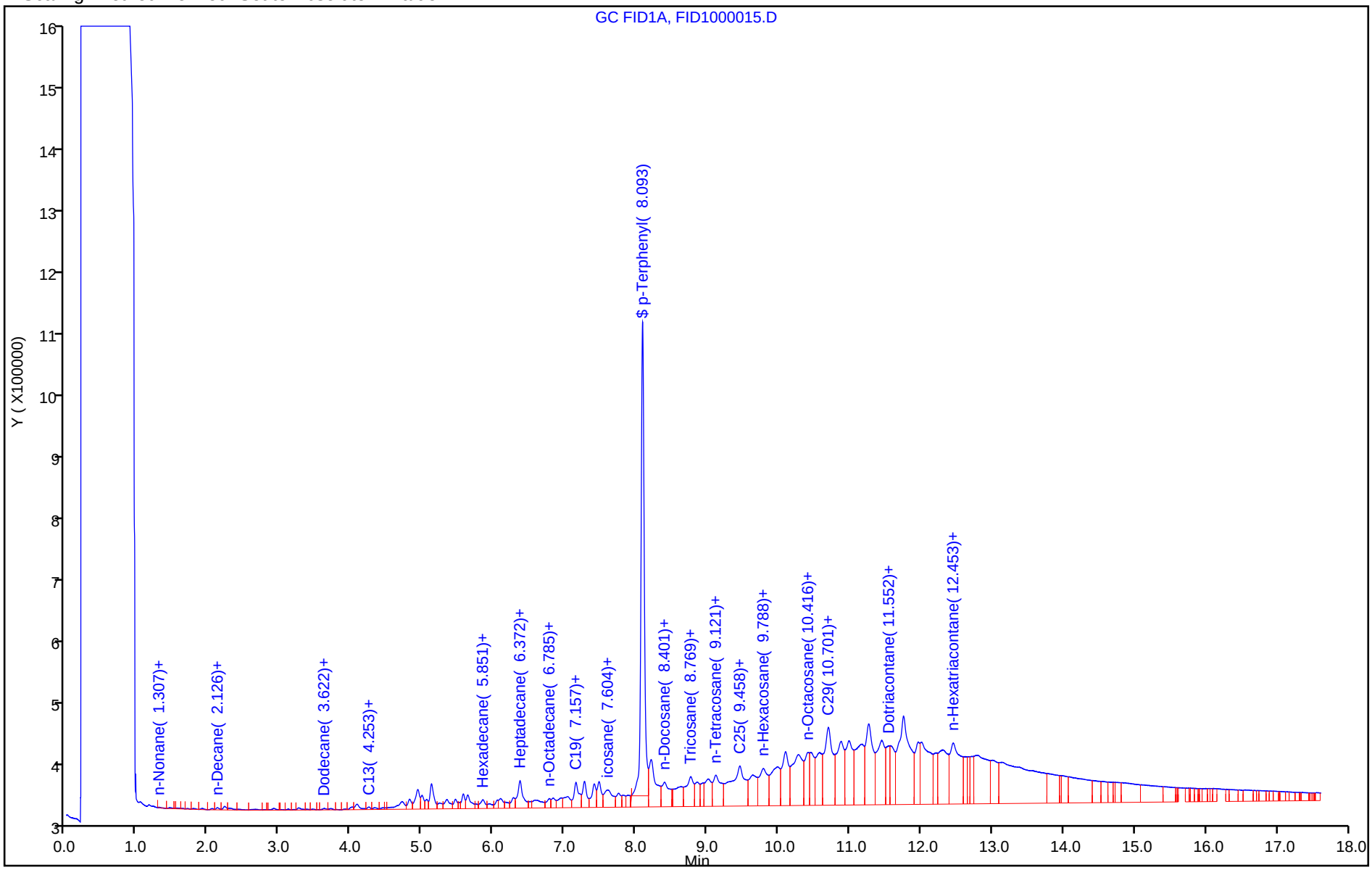
NC - Not Calibrated

Report Date: 31-Aug-2018 18:25:39 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000015.D				
Injection Date:	31-Aug-2018 15:05:58	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88239-E-16-C	Lab Sample ID:	720-88239-16	Worklist Smp#:	15
Client ID:	DG-B9S--3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000015.D
Lims ID: 720-88239-E-16-C
Client ID: DG-B9S--3.5-4
Sample Type: Client
Inject. Date: 31-Aug-2018 15:05:58 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053601-015
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\DRO6_A.m
Limit Group: DRO
Last Update: 31-Aug-2018 18:24:16 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 18:25:36

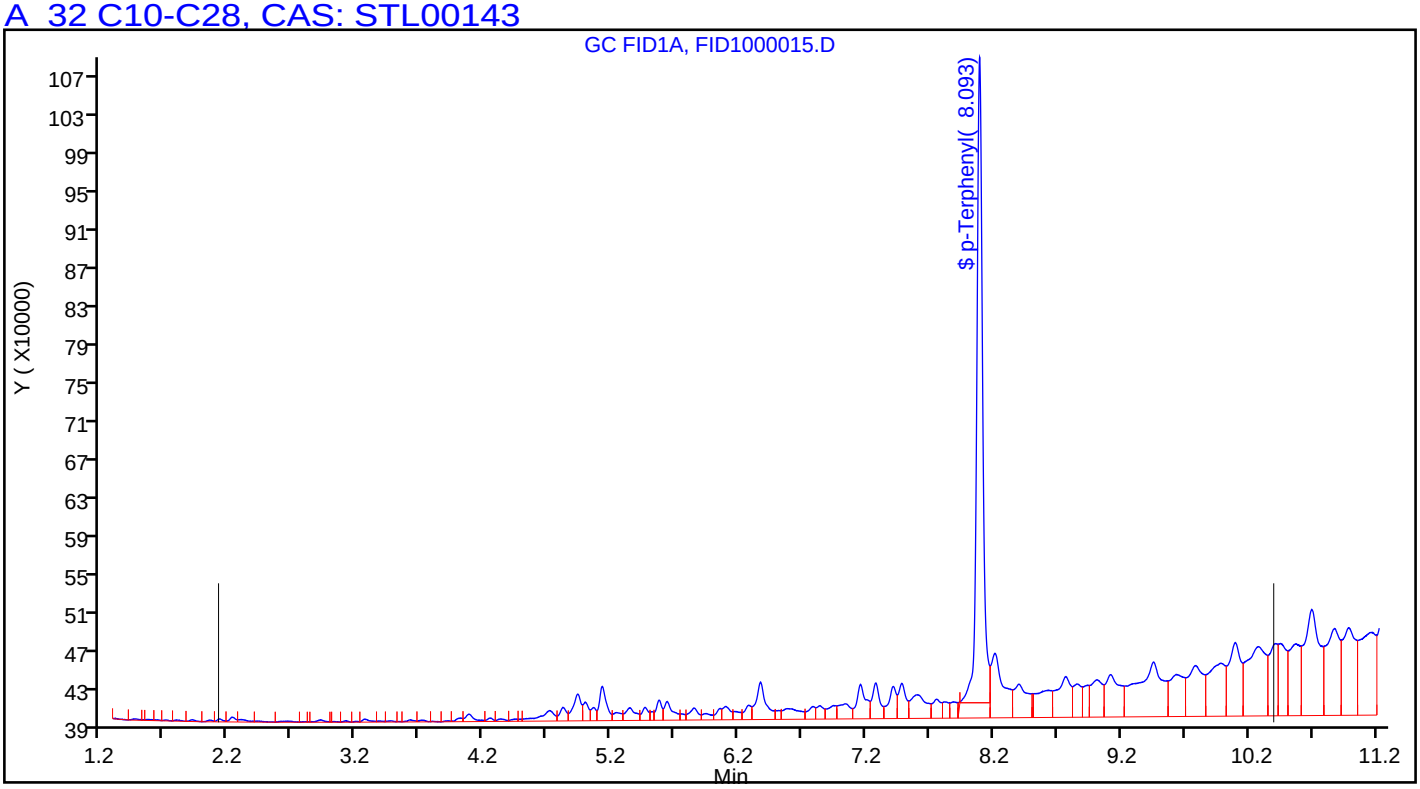
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	22.4	89.58

Report Date: 31-Aug-2018 18:25:43 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000015.D				
Injection Date:	31-Aug-2018 15:05:58	Instrument ID:	CHDRO6		
Lims ID:	720-88239-E-16-C	Lab Sample ID:	720-88239-16		
Client ID:	DG-B9S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-DE89-0.5-1
Lab Sample ID: 720-88239-17
Matrix: Solid
Lab File ID: FID2000024.D
Analysis Method: 8015B
Date Collected: 08/24/2018 11:20
Extraction Method: 3546
Date Extracted: 08/29/2018 13:41
Sample wt/vol: 15.33(g)
Date Analyzed: 08/31/2018 20:14
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250656
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	12000		2000	730

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	104		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000024.D
Lims ID: 720-88239-D-17-C
Client ID: DG-DE89--0.5-1
Sample Type: Client
Inject. Date: 31-Aug-2018 20:14:26 ALS Bottle#: 74 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053602-024
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\DRO6_B.m
Limit Group: DRO
Last Update: 04-Sep-2018 12:38:45 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK017

First Level Reviewer: luj Date: 04-Sep-2018 12:38:45

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.307			ND	
23 n-Decane	2.184	2.169	0.015	11787	NC	
A 1 C9-C13	2.775	(1.307-4.243)		1874524	0.8593	
A 21 Stoddard Solvent	2.775	(1.307-4.243)		1874524	NC	
A 57 C10-C12	2.898	(2.169-3.628)		1302733	8.04	
24 Dodecane	3.588	3.628	-0.040	14055	NC	
A 3 C9 - C17	3.806	(1.307-6.306)		3708151	1.62	M
A 60 C10-C16	4.000	(2.169-5.830)		2835757	1.40	M
A 47 C9 - C18	4.028	(1.307-6.750)		5289613	2.79	M
A 25 C9-C19	4.240	(1.307-7.174)		12052238	5.24	M
A 15 Kerosene	4.240	(1.307-7.174)		12052238	6.35	M
26 C13	4.271	4.243	0.028	64728	NC	
$ 27 n-Decanoic Acid (Surr)		4.632			ND	U
A 59 C12-C16	4.729	(3.628-5.830)		1533024	8.17	M
A 61 C10-C20	4.875	(2.169-7.581)		16696658	16.8	M
A 28 C9-C24	5.179	(1.307-9.051)		66325607	44.9	M
A 29 C9-C25	5.345	(1.307-9.384)		91909688	59.3	M
A 54 C10-C23	5.437	(2.169-8.705)		54566684	38.2	M
A 4 C10-C24	5.610	(2.169-9.051)		66114062	44.7	M
A 16 C10-C25	5.777	(2.169-9.384)		91698143	59.2	M
45 Hexadecane	5.846	5.830	0.016	290338	NC	M
A 14 C10-C26	5.937	(2.169-9.705)		113001125	71.3	M
A 67 C12-C22	5.986	(3.628-8.345)		46016890	33.4	M
A 32 C10-C28	6.243	(2.169-10.317)		155623544	95.4	M
A 5 Diesel	6.243	(2.169-10.317)		155623544	95.4	M
A 12 Unknown Hydrocarbons	6.243	(2.169-10.317)		155623544	NC	M
A 30 C13-C22	6.294	(4.243-8.345)		45656644	33.2	M
44 Heptadecane	6.333	6.306	0.027	721225	NC	M
A 31 C12-C24	6.339	(3.628-9.051)		64811329	44.0	M
49 n-Octadecane	6.763	6.750	0.013	876476	NC	M
A 9 Crude Oil Range Organics (	6.859	(1.307-12.411)		336205457	NC	M
A 11 Bunker Range Organics (C9-	6.859	(1.307-12.411)		336205457	NC	M

Report Date: 04-Sep-2018 12:38:46 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000024.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.859	(1.307-12.411)		336205457	159.3	M
33 C19	7.153	7.174	-0.021	5239243	NC	M
A 64 C13-C28	7.280	(4.243-10.317)		153960565	94.5	M
A 17 C10-C36	7.290	(2.169-12.411)		335993912	197.5	M
A 68 Crude Oil Range Organics (	7.349	(1.307-13.391)		636174636	NC	M
A 13 C9-C40	7.349	(1.307-13.391)		636174636	407.2	M
A 58 C16-C24	7.441	(5.830-9.051)		63278305	43.1	M
62 icosane	7.584	7.581	0.003	4976632	NC	M
A 6 C10-C40	7.780	(2.169-13.391)		635963091	407.5	M
$ 34 p-Terphenyl	8.072	8.077	-0.005	45078777	26.0	
35 n-Docosane	8.339	8.345	-0.006	8077566	NC	M
A 18 C12-C40	8.509	(3.628-13.391)		634660358	407.8	M
36 Tricosane	8.711	8.705	0.006	11547378	NC	M
A 66 C13-C40	8.817	(4.243-13.391)		634300112	408.0	M
37 n-Tetracosane	9.063	9.051	0.012	13405682	NC	M
A 2 C16-C36 ORO	9.120	(5.830-12.411)		333158155	281.8	M
38 C25	9.392	9.384	0.008	14077900	NC	M
A 19 C16-C40	9.611	(5.830-13.391)		633127334	408.6	M
46 n-Hexacosane	9.719	9.705	0.014	9989711	NC	M
A 20 C19-C36	9.792	(7.174-12.411)		173550943	127.5	
A 55 C23-C32	10.065	(8.705-11.426)		205955827	266.1	M
39 n-Octacosane	10.347	10.317	0.030	9612133	NC	M
65 C29	10.632	10.607	0.025	15694438	NC	M
A 40 C24-C36	10.731	(9.051-12.411)		259429286	264.6	M
A 7 Motor Oil	10.731	(9.051-12.411)		183905311	187.6	
A 10 C22-C40	10.868	(8.345-13.391)		281018976	202.2	
A 50 C25-C36	10.898	(9.384-12.411)		164708506	178.8	
A 41 C23-C40	11.048	(8.705-13.391)		277027369	202.7	
A 8 C24-C40	11.221	(9.051-13.391)		276671583	206.3	
56 Dotriacontane	11.391	11.426	-0.035	22238890	NC	M
A 51 C28-C40	11.854	(10.317-13.391)		235609750	217.2	
A 63 C29-C40	11.999	(10.607-13.391)		221623655	221.8	
42 n-Hexatriacontane		12.411			ND	
43 C40		13.391			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

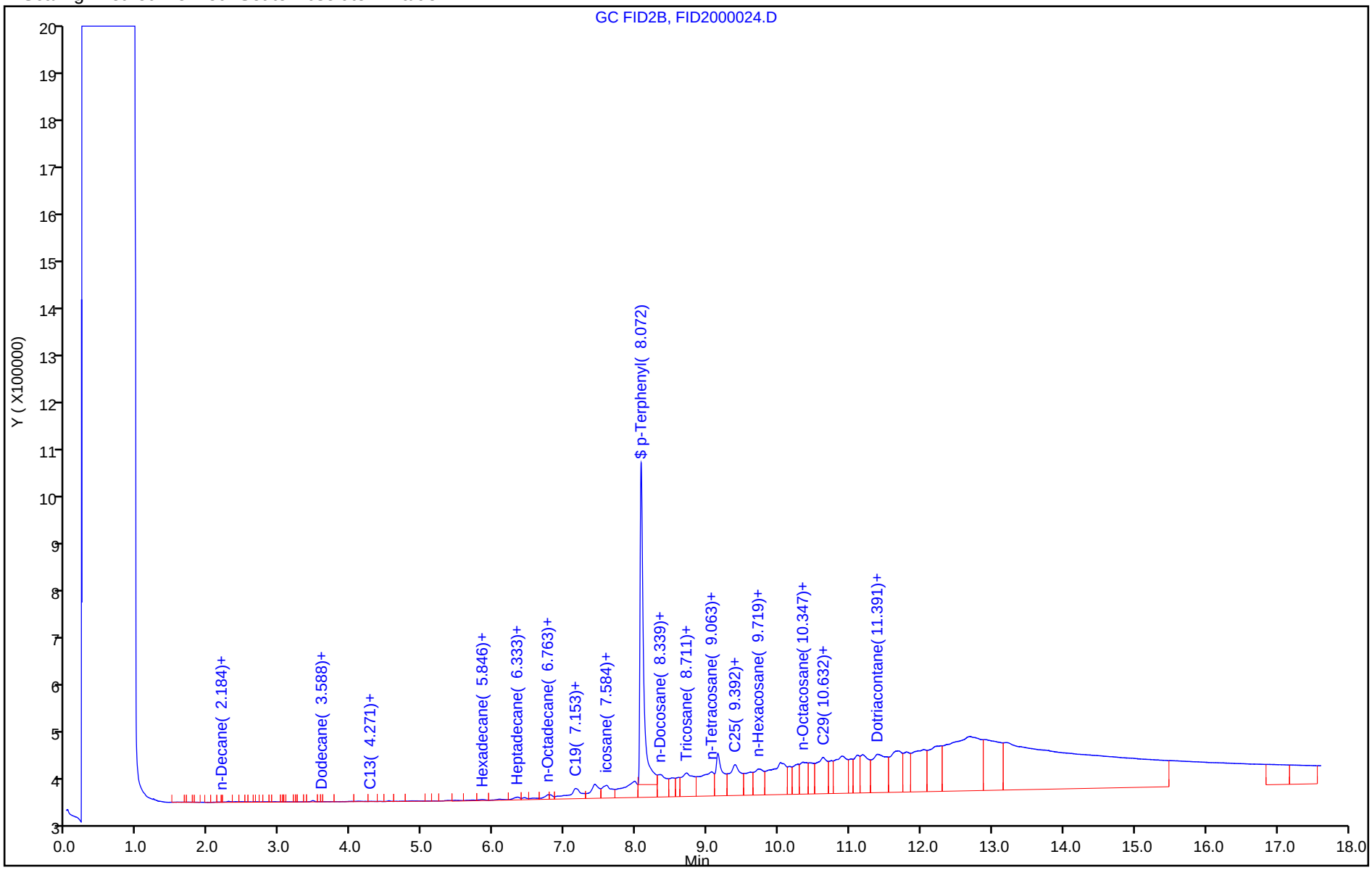
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 04-Sep-2018 12:38:46 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000024.D				
Injection Date:	31-Aug-2018 20:14:26	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88239-D-17-C	Lab Sample ID:	720-88239-17	Worklist Smp#:	24
Client ID:	DG-DE89--0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	74
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000024.D
Lims ID: 720-88239-D-17-C
Client ID: DG-DE89--0.5-1
Sample Type: Client
Inject. Date: 31-Aug-2018 20:14:26 ALS Bottle#: 74 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053602-024
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\DRO6_B.m
Limit Group: DRO
Last Update: 04-Sep-2018 12:38:45 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK017

First Level Reviewer: luj Date: 04-Sep-2018 12:38:45

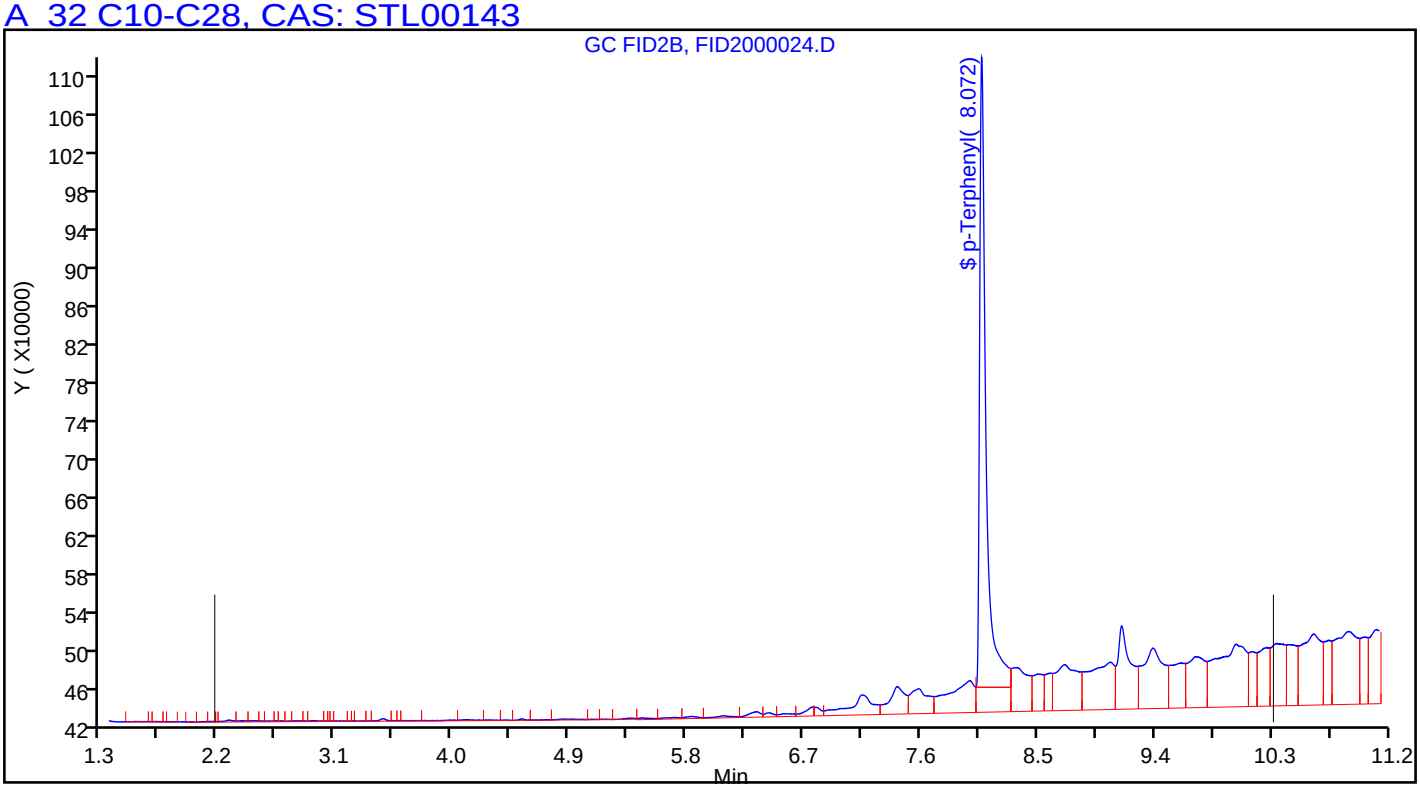
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	26.0	104.09

Report Date: 04-Sep-2018 12:38:48 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000024.D				
Injection Date:	31-Aug-2018 20:14:26	Instrument ID:	CHDRO6		
Lims ID:	720-88239-D-17-C	Lab Sample ID:	720-88239-17		
Client ID:	DG-DE89--0.5-1				
Operator ID:	DCH	ALS Bottle#:	74	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

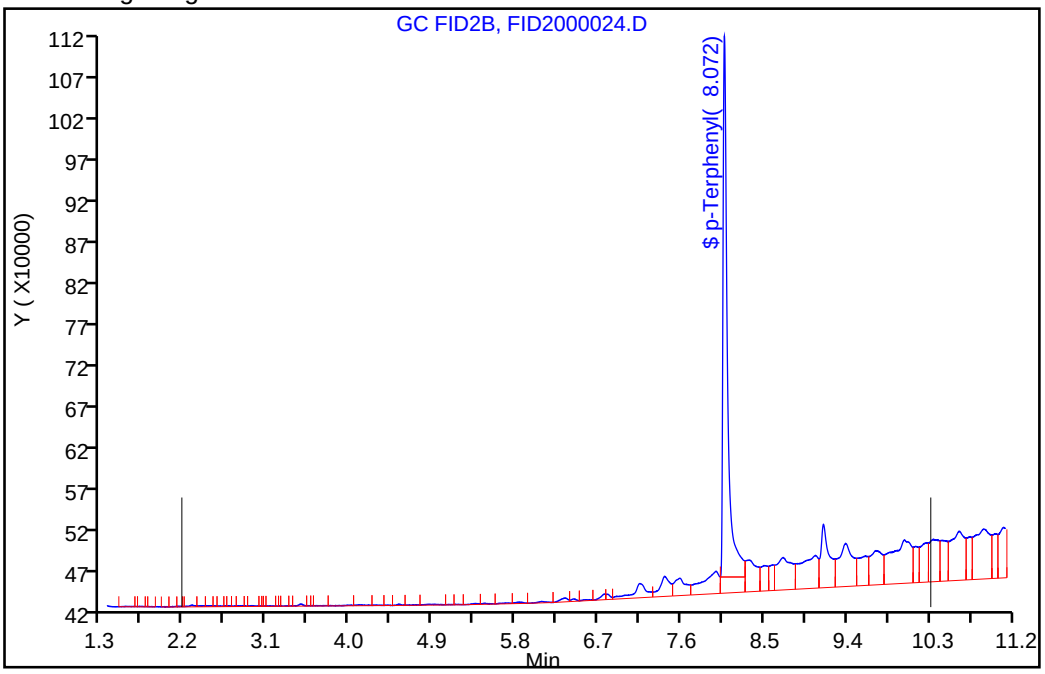
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000024.D				
Injection Date:	31-Aug-2018 20:14:26	Instrument ID:	CHDRO6		
Lims ID:	720-88239-D-17-C	Lab Sample ID:	720-88239-17		
Client ID:	DG-DE89--0.5-1				
Operator ID:	DCH	ALS Bottle#:	74	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.243, CAS: STL00143

Signal: 1

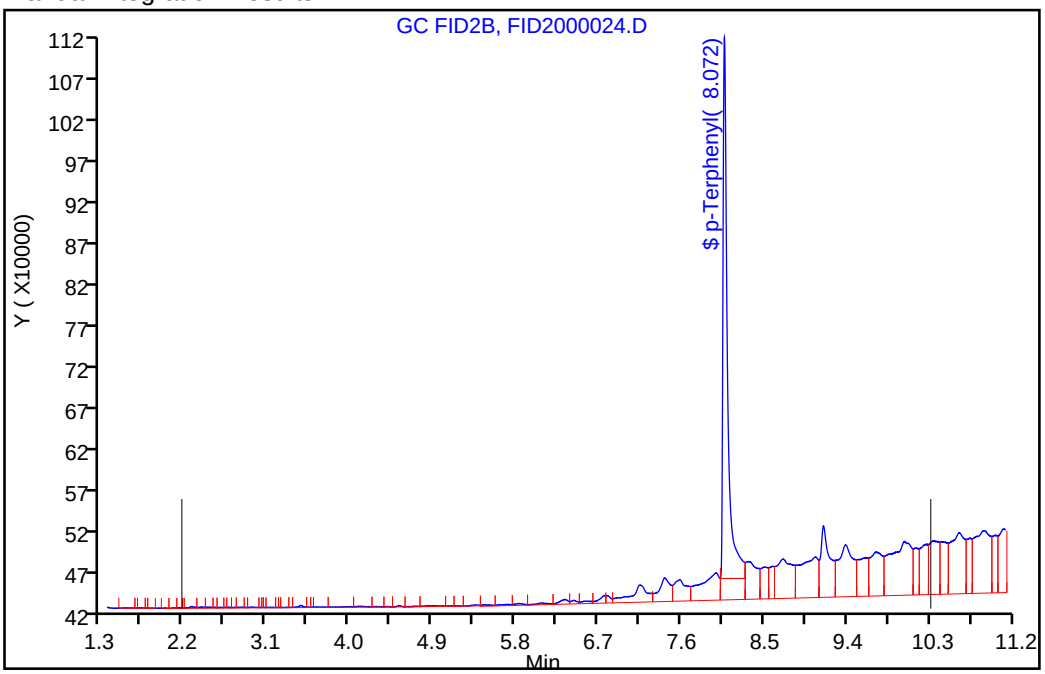
Processing Integration Results

RT: 6.24
Response: 119982101
Amount: 75.235620



Manual Integration Results

RT: 6.24
Response: 155623544
Amount: 95.416535



Reviewer: luj, 04-Sep-2018 12:38:24

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-DE89-3.5-4
Lab Sample ID: 720-88239-18
Matrix: Solid
Lab File ID: FID2000016.D
Analysis Method: 8015B
Date Collected: 08/24/2018 11:20
Extraction Method: 3546
Date Extracted: 08/29/2018 13:41
Sample wt/vol: 15.11(g)
Date Analyzed: 08/31/2018 15:30
Con. Extract Vol.: 2(mL)
Dilution Factor: 10
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250656
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	910000		20000	7400

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	0	D X	40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000016.D
Lims ID: 720-88239-E-18-A
Client ID: DG-DE89--3.5-4
Sample Type: Client
Inject. Date: 31-Aug-2018 15:30:25 ALS Bottle#: 66 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 10.0000
Sample Info: 720-0053602-016
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\DRO6_B.m
Limit Group: DRO
Last Update: 31-Aug-2018 17:37:30 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 17:37:30

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.307			ND	
23 n-Decane	2.177	2.169	0.008	73106	NC	M
A 1 C9-C13	2.775	(1.307-4.243)		11261668	5.16	M
A 21 Stoddard Solvent	2.775	(1.307-4.243)		11261668	NC	M
A 57 C10-C12	2.898	(2.169-3.628)		5784613	10.6	M
24 Dodecane		3.628			ND	
A 3 C9 - C17	3.806	(1.307-6.306)		48907408	21.4	M
A 60 C10-C16	4.000	(2.169-5.830)		32898281	16.2	M
A 47 C9 - C18	4.028	(1.307-6.750)		64295440	34.0	M
A 25 C9-C19	4.240	(1.307-7.174)		125523144	54.5	M
A 15 Kerosene	4.240	(1.307-7.174)		125523144	66.1	M
26 C13	4.273	4.243	0.030	1132820	NC	M
$ 27 n-Decanoic Acid (Surr)		4.632			ND	U
A 59 C12-C16	4.729	(3.628-5.830)		28622369	23.5	M
A 61 C10-C20	4.875	(2.169-7.581)		153074576	94.0	M
A 28 C9-C24	5.179	(1.307-9.051)		543166813	314.9	M
A 29 C9-C25	5.345	(1.307-9.384)		690136214	398.1	M
A 54 C10-C23	5.437	(2.169-8.705)		504473339	292.9	M
A 4 C10-C24	5.610	(2.169-9.051)		541868135	314.1	M
A 16 C10-C25	5.777	(2.169-9.384)		688837536	397.3	M
45 Hexadecane	5.838	5.830	0.008	4763900	NC	M
A 14 C10-C26	5.937	(2.169-9.705)		856649893	492.4	M
A 67 C12-C22	5.986	(3.628-8.345)		356169227	209.0	M
A 32 C10-C28	6.243	(2.169-10.317)		1206456893	690.4	M
A 5 Diesel	6.243	(2.169-10.317)		1206456893	690.4	M
A 12 Unknown Hydrocarbons	6.243	(2.169-10.317)		1206456893	NC	M
A 30 C13-C22	6.294	(4.243-8.345)		350482149	205.7	M
44 Heptadecane	6.336	6.306	0.030	7881011	NC	M
A 31 C12-C24	6.339	(3.628-9.051)		537592223	311.7	M
49 n-Octadecane	6.756	6.750	0.006	15990239	NC	M
A 9 Crude Oil Range Organics (	6.859	(1.307-12.411)		2436010371	NC	M
A 11 Bunker Range Organics (C9-	6.859	(1.307-12.411)		2436010371	NC	M

Report Date: 31-Aug-2018 17:37:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000016.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.859	(1.307-12.411)		2436010371	1153.9	M
33 C19	7.173	7.174	-0.001	14406748	NC	M
A 64 C13-C28	7.280	(4.243-10.317)		1196493903	684.8	M
A 17 C10-C36	7.290	(2.169-12.411)		2434711693	1385.9	M
A 68 Crude Oil Range Organics (	7.349	(1.307-13.391)		3647576377	NC	M
A 13 C9-C40	7.349	(1.307-13.391)		3647576377	2334.7	M
A 58 C16-C24	7.441	(5.830-9.051)		508969854	295.5	M
62 icosane	7.585	7.581	0.004	36838798	NC	M
A 6 C10-C40	7.780	(2.169-13.391)		3646277699	2336.4	M
$ 34 p-Terphenyl		8.077			ND	U
35 n-Docosane	8.351	8.345	0.006	26950036	NC	M
A 18 C12-C40	8.509	(3.628-13.391)		3642001787	2340.2	M
36 Tricosane	8.658	8.705	-0.047	103462277	NC	M
A 66 C13-C40	8.817	(4.243-13.391)		3636314709	2339.2	M
37 n-Tetracosane	9.059	9.051	0.008	101651030	NC	M
A 2 C16-C36 ORO	9.120	(5.830-12.411)		2401813412	2031.2	M
38 C25	9.404	9.384	0.020	95257057	NC	M
A 19 C16-C40	9.611	(5.830-13.391)		3613379418	2332.1	M
46 n-Hexacosane	9.762	9.705	0.057	78506620	NC	M
A 20 C19-C36	9.792	(7.174-12.411)		1795443842	1318.9	
A 55 C23-C32	10.065	(8.705-11.426)		1550879562	2004.0	M
39 n-Octacosane	10.371	10.317	0.054	127943965	NC	M
65 C29	10.642	10.607	0.035	63094661	NC	M
A 40 C24-C36	10.731	(9.051-12.411)		1793912080	1829.8	M
A 7 Motor Oil	10.731	(9.051-12.411)		1528583026	1559.2	
A 10 C22-C40	10.868	(8.345-13.391)		2046613829	1472.4	
A 50 C25-C36	10.898	(9.384-12.411)		1374900019	1492.5	
A 41 C23-C40	11.048	(8.705-13.391)		1963560154	1436.7	
A 8 C24-C40	11.221	(9.051-13.391)		1895171722	1413.0	
56 Dotriacontane	11.376	11.426	-0.050	131361824	NC	M
A 51 C28-C40	11.854	(10.317-13.391)		1425354330	1314.0	
A 63 C29-C40	11.999	(10.607-13.391)		1272519130	1273.4	
42 n-Hexatriacontane	12.442	12.411	0.031	26955558	NC	M
43 C40		13.391			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

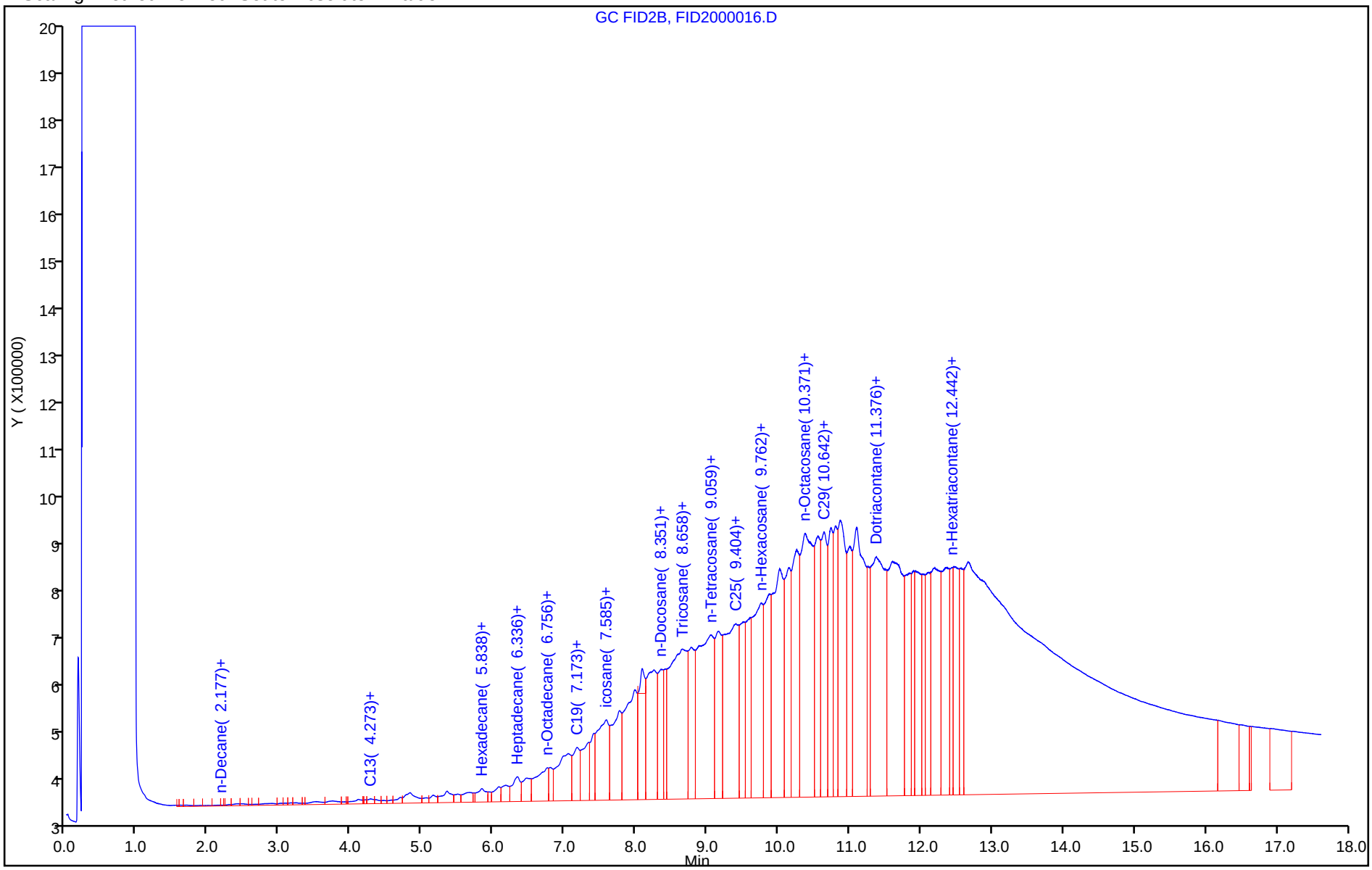
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 31-Aug-2018 17:37:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000016.D				
Injection Date:	31-Aug-2018 15:30:25	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88239-E-18-A	Lab Sample ID:	720-88239-18	Worklist Smp#:	16
Client ID:	DG-DE89--3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	66
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value

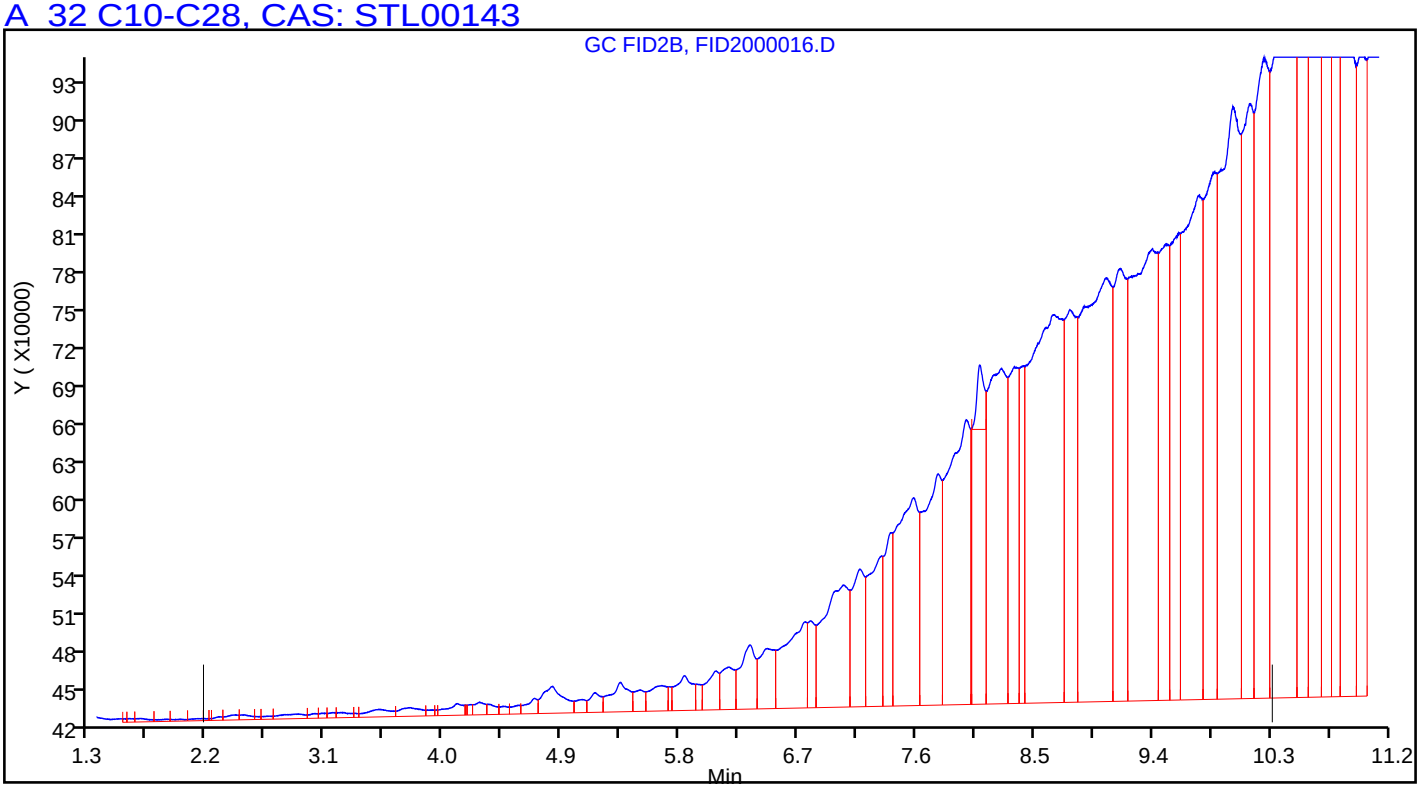


Report Date: 31-Aug-2018 17:37:34 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000016.D				
Injection Date:	31-Aug-2018 15:30:25	Instrument ID:	CHDRO6		
Lims ID:	720-88239-E-18-A	Lab Sample ID:	720-88239-18		
Client ID:	DG-DE89--3.5-4				
Operator ID:	DCH	ALS Bottle#:	66	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

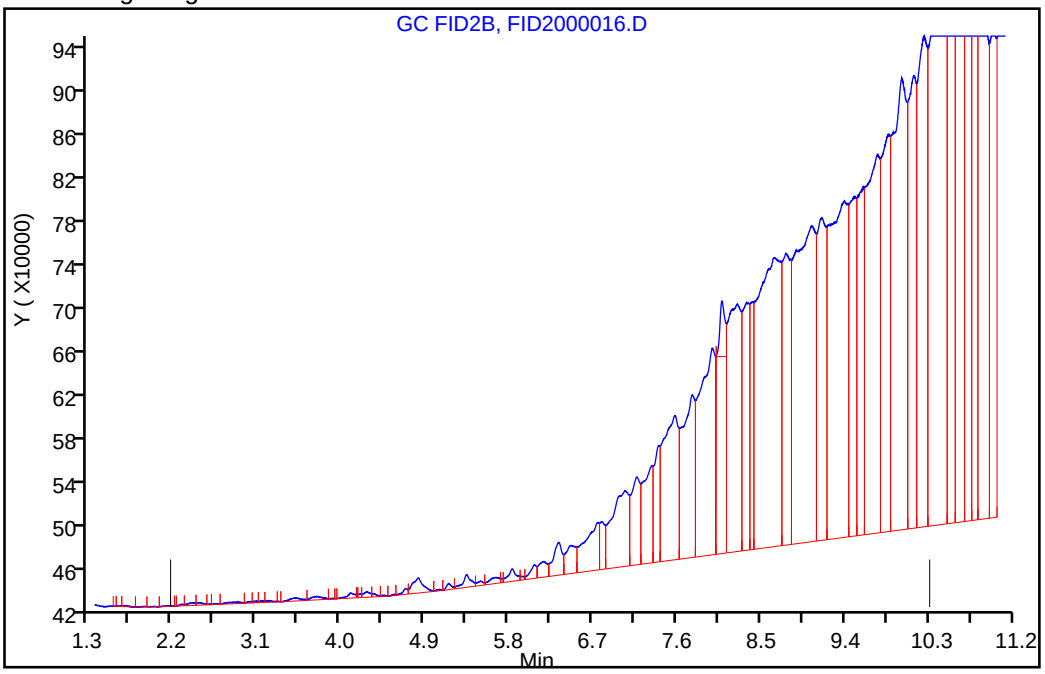
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000016.D				
Injection Date:	31-Aug-2018 15:30:25	Instrument ID:	CHDRO6		
Lims ID:	720-88239-E-18-A	Lab Sample ID:	720-88239-18		
Client ID:	DG-DE89--3.5-4				
Operator ID:	DCH	ALS Bottle#:	66	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.243, CAS: STL00143

Signal: 1

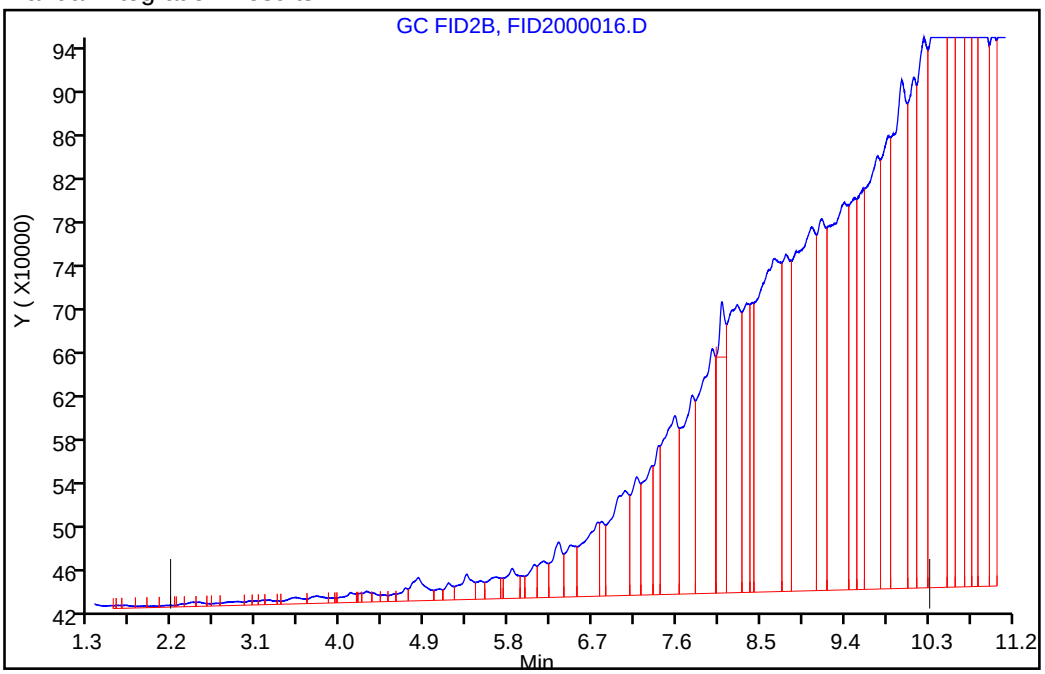
Processing Integration Results

RT: 6.24
Response: 979713531
Amount: 562.0332



Manual Integration Results

RT: 6.24
Response: 1206456893
Amount: 690.4199



Reviewer: luj, 31-Aug-2018 17:37:21

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

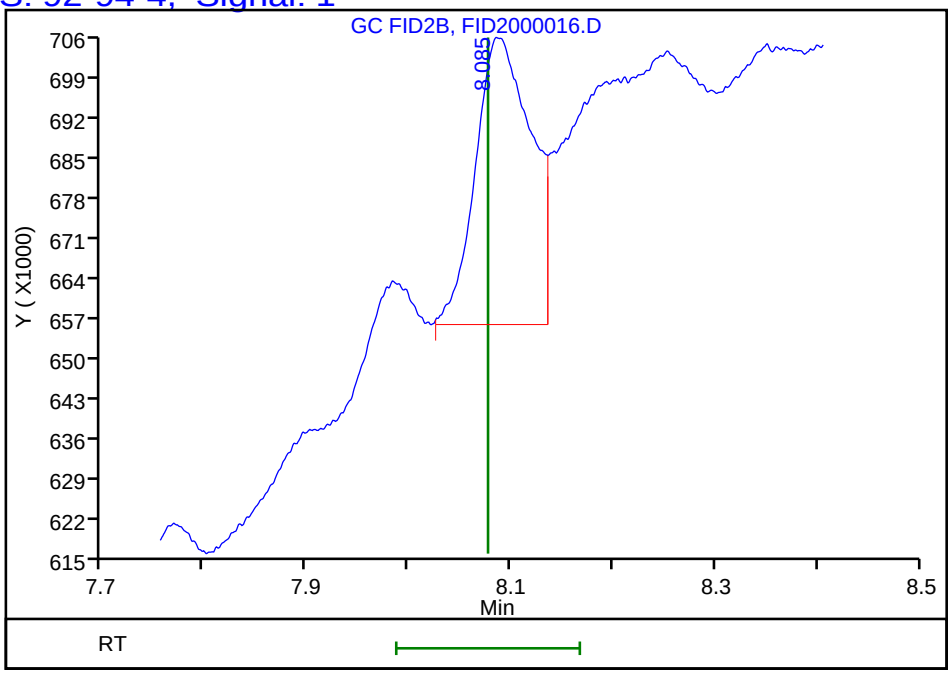
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000016.D				
Injection Date:	31-Aug-2018 15:30:25	Instrument ID:	CHDRO6		
Lims ID:	720-88239-E-18-A	Lab Sample ID:	720-88239-18		
Client ID:	DG-DE89--3.5-4				
Operator ID:	DCH	ALS Bottle#:	66	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4, Signal: 1

RT: 8.09
Response: 3826610
Amount: 2.209000



Reviewer: luj, 31-Aug-2018 17:37:30
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-DE89-9.5-10
Lab Sample ID: 720-88239-19
Matrix: Solid
Lab File ID: FID1000026.D
Analysis Method: 8015B
Date Collected: 08/24/2018 11:20
Extraction Method: 3546
Date Extracted: 08/29/2018 09:03
Sample wt/vol: 15.60(g)
Date Analyzed: 08/31/2018 21:03
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250653
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	17000		1900	720

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	102		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000026.D
Lims ID: 720-88239-D-19-B
Client ID: DG-DE89--9.5-10
Sample Type: Client
Inject. Date: 31-Aug-2018 21:03:01 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053601-026
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\DRO6_A.m
Limit Group: DRO
Last Update: 04-Sep-2018 11:29:57 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK017

First Level Reviewer: luj Date: 04-Sep-2018 11:29:57

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane	1.323	1.229	0.094	55975	NC	
23 n-Decane	2.121	2.116	0.005	1169583	NC	
A 21 Stoddard Solvent	2.735	(1.229-4.240)		23855436	13.4	
A 1 C9-C13	2.735	(1.229-4.240)		23855436	13.4	
A 57 C10-C12	2.864	(2.116-3.612)		11771280	7.63	
24 Dodecane	3.621	3.612	0.009	1248736	NC	
A 3 C9 - C17	3.780	(1.229-6.332)		63957369	32.8	
A 60 C10-C16	3.983	(2.116-5.850)		48571130	27.8	
A 47 C9 - C18	4.006	(1.229-6.783)		76684575	47.5	
A 25 C9-C19	4.221	(1.229-7.212)		91040343	46.4	
A 15 Kerosene	4.221	(1.229-7.212)		91040343	56.4	
26 C13	4.243	4.240	0.003	1693458	NC	
$ 27 n-Decanoic Acid (Surr)		4.611			ND	U
A 59 C12-C16	4.731	(3.612-5.850)		36799850	23.9	
A 62 C10-C20	4.871	(2.116-7.625)		105940673	68.7	
A 28 C9-C24	5.172	(1.229-9.115)		156818873	101.7	
A 29 C9-C25	5.341	(1.229-9.454)		176894126	114.7	
A 54 C10-C23	5.440	(2.116-8.764)		145996428	94.7	
A 4 C10-C24	5.616	(2.116-9.115)		153901518	99.8	
A 16 C10-C25	5.785	(2.116-9.454)		173976771	112.8	
45 Hexadecane	5.853	5.850	0.003	3016156	NC	
A 14 C10-C26	5.948	(2.116-9.781)		177527996	115.1	
A 67 C12-C22	6.006	(3.612-8.399)		118631392	76.9	
A 12 Unknown Hydrocarbons	6.259	(2.116-10.402)		201171968	NC	
A 5 Diesel	6.259	(2.116-10.402)		201171968	130.4	
A 32 C10-C28	6.259	(2.116-10.402)		201171968	130.4	
A 30 C13-C22	6.320	(4.240-8.399)		109464591	71.0	
44 Heptadecane	6.328	6.332	-0.004	1906933	NC	
A 31 C12-C24	6.364	(3.612-9.115)		142130238	92.1	
51 n-Octadecane	6.781	6.783	-0.002	2173220	NC	
A 52 Mineral oil	6.881	(1.229-12.534)		304168126	171.8	
A 11 Bunker Range Organics (C9-	6.881	(1.229-12.534)		304168126	NC	

Report Date: 04-Sep-2018 11:29:58 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000026.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 9 Crude Oil Range Organics (	6.881	(1.229-12.534)		304168126	NC	
33 C19	7.254	7.212	0.042	2444869	NC	
A 64 C13-C28	7.321	(4.240-10.402)		180233887	116.9	
A 17 C10-C36	7.325	(2.116-12.534)		301250771	195.3	
A 13 C9-C40	7.391	(1.229-13.554)		356436892	264.3	
A 68 Crude Oil Range Organics (	7.391	(1.229-13.554)		356436892	NC	
A 58 C16-C24	7.483	(5.850-9.115)		105330388	68.3	
61 icosane		7.625			ND	
A 6 C10-C40	7.835	(2.116-13.554)		353519537	262.4	
$ 34 p-Terphenyl	8.093	8.102	-0.009	49115297	25.6	
35 n-Docosane	8.402	8.399	0.003	3658262	NC	
A 18 C12-C40	8.583	(3.612-13.554)		341748257	254.3	
36 Tricosane	8.759	8.764	-0.005	3588253	NC	
A 66 C13-C40	8.897	(4.240-13.554)		332581456	247.8	
37 n-Tetracosane	9.120	9.115	0.005	8972289	NC	
A 2 C16-C36 ORO	9.192	(5.850-12.534)		266985149	234.1	
38 C25	9.431	9.454	-0.023	11102964	NC	
A 19 C16-C40	9.702	(5.850-13.554)		304948407	228.1	
46 n-Hexacosane	9.803	9.781	0.022	7201941	NC	
A 20 C19-C36	9.873	(7.212-12.534)		226880896	170.7	
A 55 C23-C32	10.147	(8.764-11.531)		105512045	152.0	
39 n-Octacosane	10.406	10.402	0.004	4983008	NC	
65 C29	10.704	10.697	0.007	5274849	NC	
A 7 Motor Oil	10.824	(9.115-12.534)		86209736	96.8	
A 40 C24-C36	10.824	(9.115-12.534)		86209736	96.8	
A 10 C22-C40	10.976	(8.399-13.554)		131025374	105.4	
A 49 C25-C36	10.994	(9.454-12.534)		138376964	154.6	
A 41 C23-C40	11.159	(8.764-13.554)		211111362	165.2	
A 8 C24-C40	11.334	(9.115-13.554)		199618019	164.0	
56 Dotriacontane	11.542	11.531	0.011	6603423	NC	
A 50 C28-C40	11.978	(10.402-13.554)		152347569	160.5	
A 63 C29-C40	12.125	(10.697-13.554)		139635466	161.1	
42 n-Hexatriacontane	12.466	12.534	-0.068	4625238	NC	
43 C40	13.582	13.554	0.028	4233591	NC	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

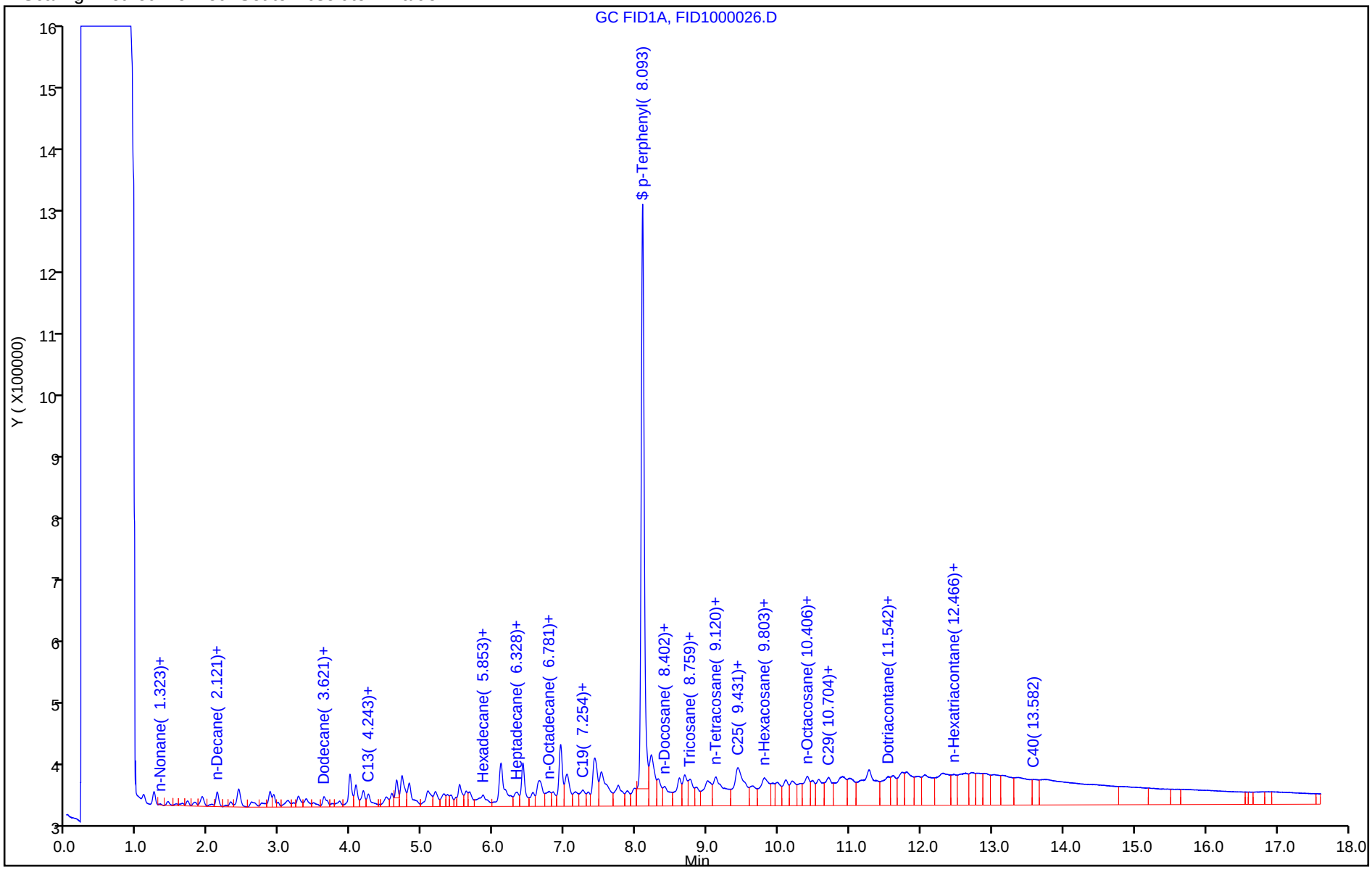
Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

Report Date: 04-Sep-2018 11:29:58 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000026.D				
Injection Date:	31-Aug-2018 21:03:01	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88239-D-19-B	Lab Sample ID:	720-88239-19	Worklist Smp#:	26
Client ID:	DG-DE89--9.5-10				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000026.D
Lims ID: 720-88239-D-19-B
Client ID: DG-DE89--9.5-10
Sample Type: Client
Inject. Date: 31-Aug-2018 21:03:01 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053601-026
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\DRO6_A.m
Limit Group: DRO
Last Update: 04-Sep-2018 11:29:57 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK017

First Level Reviewer: luj Date: 04-Sep-2018 11:29:57

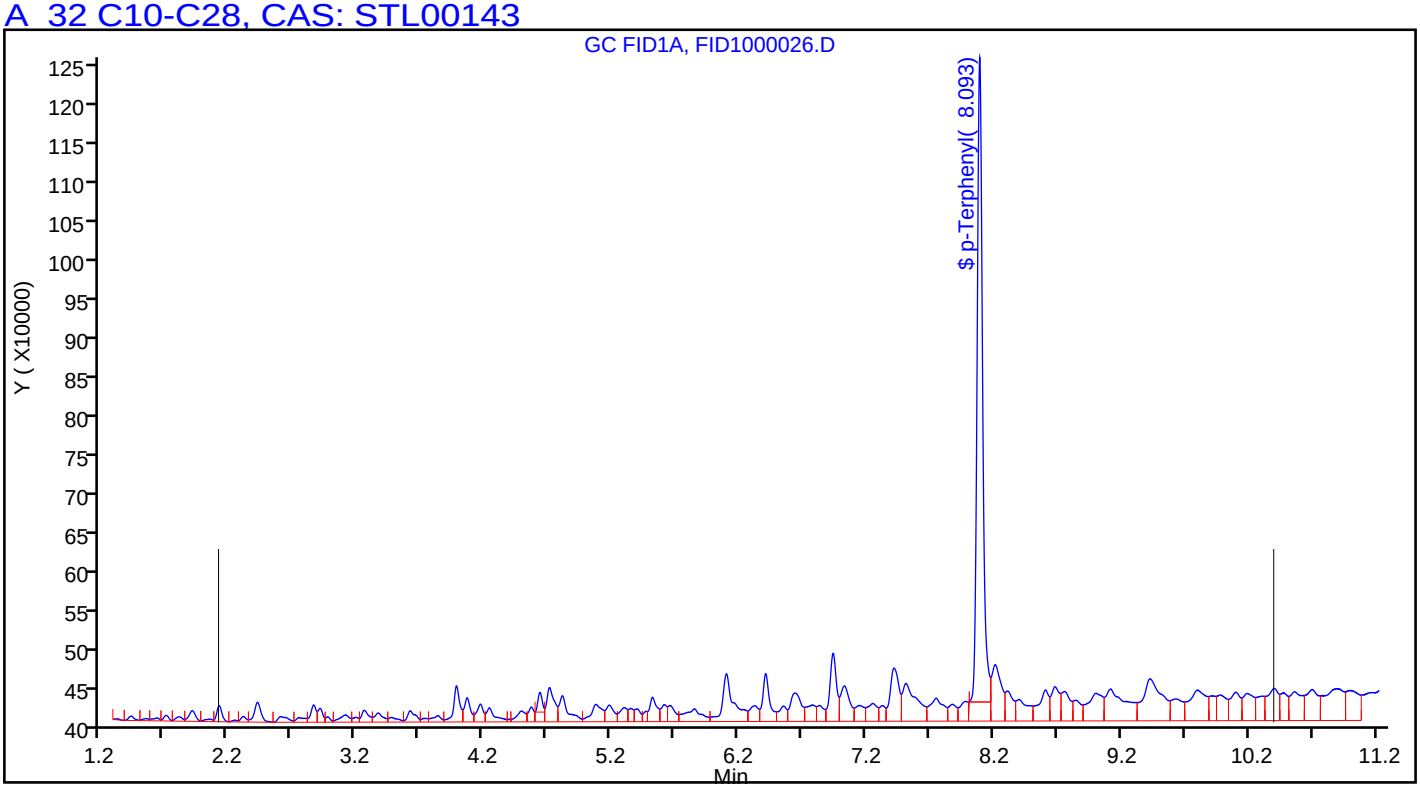
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	25.6	102.30

Report Date: 04-Sep-2018 11:29:59 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000026.D				
Injection Date:	31-Aug-2018 21:03:01	Instrument ID:	CHDRO6		
Lims ID:	720-88239-D-19-B	Lab Sample ID:	720-88239-19		
Client ID:	DG-DE89--9.5-10				
Operator ID:	DCH	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-B9S-9.5-10 Lab Sample ID: 720-88239-20

Matrix: Solid Lab File ID: FID2000025.D

Analysis Method: 8015B Date Collected: 08/24/2018 10:20

Extraction Method: 3546 Date Extracted: 08/29/2018 13:41

Sample wt/vol: 15.58(g) Date Analyzed: 08/31/2018 20:38

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250656 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	5600		1900	720

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	100		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000025.D
Lims ID: 720-88239-D-20-A
Client ID: DG-B9S--9.5-10
Sample Type: Client
Inject. Date: 31-Aug-2018 20:38:41 ALS Bottle#: 75 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053602-025
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\DRO6_B.m
Limit Group: DRO
Last Update: 04-Sep-2018 12:41:32 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK017

First Level Reviewer: luj Date: 04-Sep-2018 12:41:32

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.307			ND	
23 n-Decane		2.169			ND	
A 1 C9-C13	2.775	(1.307-4.243)		1336253	0.6126	
A 21 Stoddard Solvent	2.775	(1.307-4.243)		1336253	NC	
A 57 C10-C12	2.898	(2.169-3.628)		1172870	7.96	
24 Dodecane		3.628			ND	
A 3 C9 - C17	3.806	(1.307-6.306)		2529549	1.11	M
A 60 C10-C16	4.000	(2.169-5.830)		2039358	1.01	M
A 47 C9 - C18	4.028	(1.307-6.750)		3314961	1.75	M
A 25 C9-C19	4.240	(1.307-7.174)		6180104	2.68	M
A 15 Kerosene	4.240	(1.307-7.174)		6180104	3.26	M
26 C13	4.233	4.243	-0.010	4997	NC	
$ 27 n-Decanoic Acid (Surr)		4.632			ND	U
A 59 C12-C16	4.729	(3.628-5.830)		866488	7.79	M
A 61 C10-C20	4.875	(2.169-7.581)		10022552	13.0	M
A 28 C9-C24	5.179	(1.307-9.051)		25668809	21.8	M
A 29 C9-C25	5.345	(1.307-9.384)		38871096	29.3	M
A 54 C10-C23	5.437	(2.169-8.705)		19978149	18.6	M
A 4 C10-C24	5.610	(2.169-9.051)		25668809	21.8	M
A 16 C10-C25	5.777	(2.169-9.384)		38871096	29.3	M
45 Hexadecane	5.788	5.830	-0.042	3640	NC	
A 14 C10-C26	5.937	(2.169-9.705)		40958180	30.5	M
A 67 C12-C22	5.986	(3.628-8.345)		15983441	16.3	M
A 32 C10-C28	6.243	(2.169-10.317)		63953878	43.5	M
A 5 Diesel	6.243	(2.169-10.317)		63953878	43.5	M
A 12 Unknown Hydrocarbons	6.243	(2.169-10.317)		63953878	NC	M
A 30 C13-C22	6.294	(4.243-8.345)		15825055	16.3	M
44 Heptadecane	6.325	6.306	0.019	343428	NC	M
A 31 C12-C24	6.339	(3.628-9.051)		24495939	21.2	M
49 n-Octadecane	6.771	6.750	0.021	443825	NC	M
A 9 Crude Oil Range Organics (	6.859	(1.307-12.411)		347602477	NC	M
A 11 Bunker Range Organics (C9-	6.859	(1.307-12.411)		347602477	NC	M

Report Date: 04-Sep-2018 12:41:33 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000025.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.859	(1.307-12.411)		347602477	164.7	M
33 C19	7.176	7.174	0.002	736891	NC	M
A 64 C13-C28	7.280	(4.243-10.317)		62622622	42.8	M
A 17 C10-C36	7.290	(2.169-12.411)		347602477	204.1	M
A 68 Crude Oil Range Organics (	7.349	(1.307-13.391)		465571959	NC	M
A 13 C9-C40	7.349	(1.307-13.391)		465571959	298.0	M
A 58 C16-C24	7.441	(5.830-9.051)		23629451	20.7	M
62 icosane	7.597	7.581	0.016	802411	NC	M
A 6 C10-C40	7.780	(2.169-13.391)		465571959	298.3	M
$ 34 p-Terphenyl	8.064	8.077	-0.013	43353234	25.0	
35 n-Docosane	8.348	8.345	0.003	2020825	NC	M
A 18 C12-C40	8.509	(3.628-13.391)		464399089	298.4	M
36 Tricosane	8.710	8.705	0.005	3385935	NC	M
A 66 C13-C40	8.817	(4.243-13.391)		464240703	298.6	M
37 n-Tetracosane	9.082	9.051	0.031	2453332	NC	M
A 2 C16-C36 ORO	9.120	(5.830-12.411)		345563119	292.2	M
38 C25	9.372	9.384	-0.012	8681562	NC	M
A 19 C16-C40	9.611	(5.830-13.391)		463532601	299.2	M
46 n-Hexacosane	9.747	9.705	0.042	4580402	NC	M
A 20 C19-C36	9.792	(7.174-12.411)		157077522	115.4	
A 55 C23-C32	10.065	(8.705-11.426)		153025093	197.7	M
39 n-Octacosane	10.370	10.317	0.053	14838583	NC	M
65 C29	10.612	10.607	0.005	33127581	NC	M
A 40 C24-C36	10.731	(9.051-12.411)		301667409	307.7	M
A 7 Motor Oil	10.731	(9.051-12.411)		212727660	217.0	
A 10 C22-C40	10.868	(8.345-13.391)		282259321	203.1	
A 50 C25-C36	10.898	(9.384-12.411)		213517642	231.8	
A 41 C23-C40	11.048	(8.705-13.391)		291445142	213.2	
A 8 C24-C40	11.221	(9.051-13.391)		299365933	223.2	
56 Dotriacontane	11.497	11.426	0.071	37211604	NC	M
A 51 C28-C40	11.854	(10.317-13.391)		302479139	278.8	
A 63 C29-C40	11.999	(10.607-13.391)		286034632	286.2	
42 n-Hexatriacontane	12.401	12.411	-0.010	12115523	NC	M
43 C40	13.291	13.391	-0.100	25586484	NC	M
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

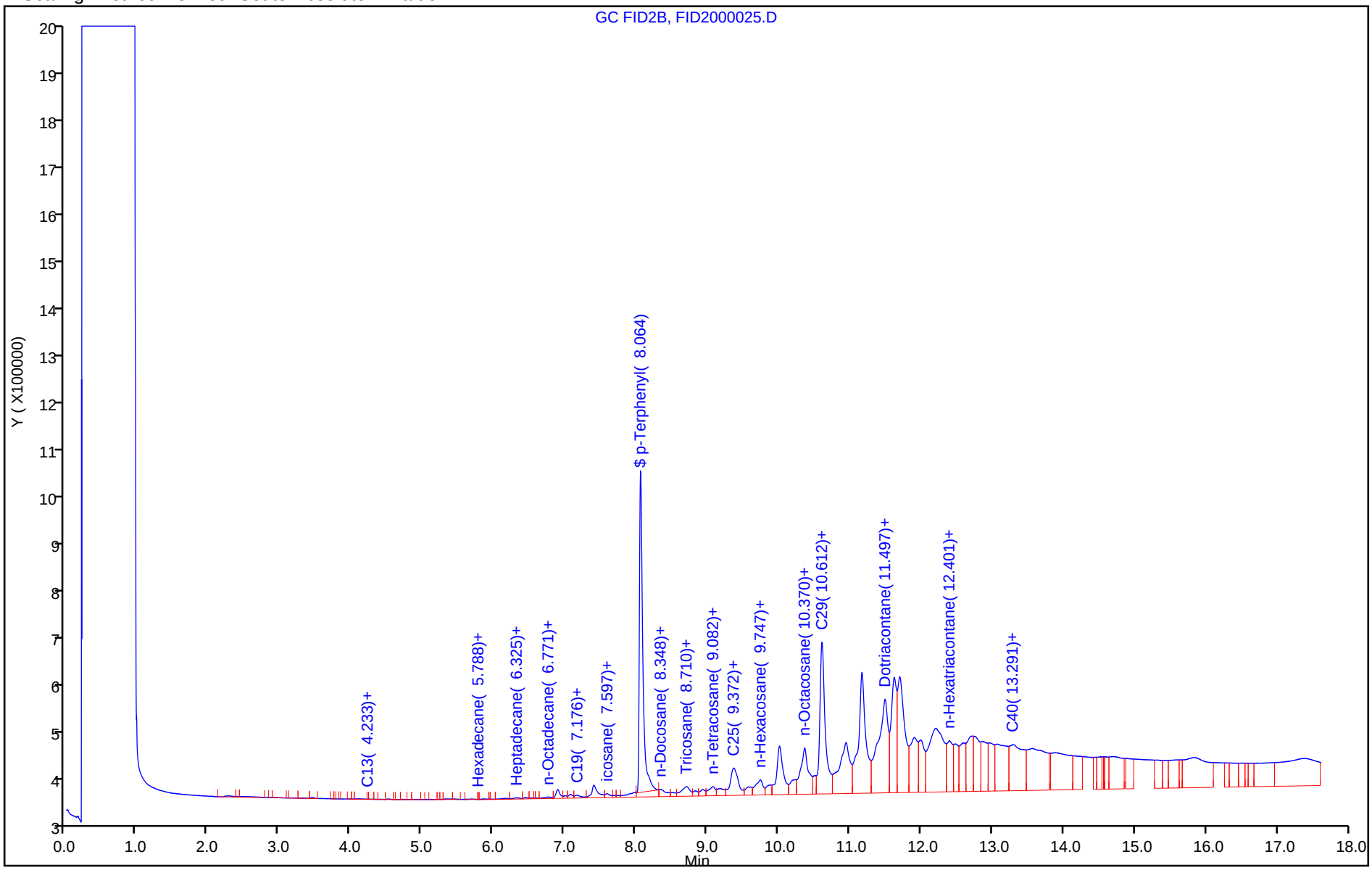
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 04-Sep-2018 12:41:33 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000025.D				
Injection Date:	31-Aug-2018 20:38:41	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88239-D-20-A	Lab Sample ID:	720-88239-20	Worklist Smp#:	25
Client ID:	DG-B9S--9.5-10				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	75
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000025.D
Lims ID: 720-88239-D-20-A
Client ID: DG-B9S--9.5-10
Sample Type: Client
Inject. Date: 31-Aug-2018 20:38:41 ALS Bottle#: 75 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053602-025
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\DRO6_B.m
Limit Group: DRO
Last Update: 04-Sep-2018 12:41:32 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK017

First Level Reviewer: luj Date: 04-Sep-2018 12:41:32

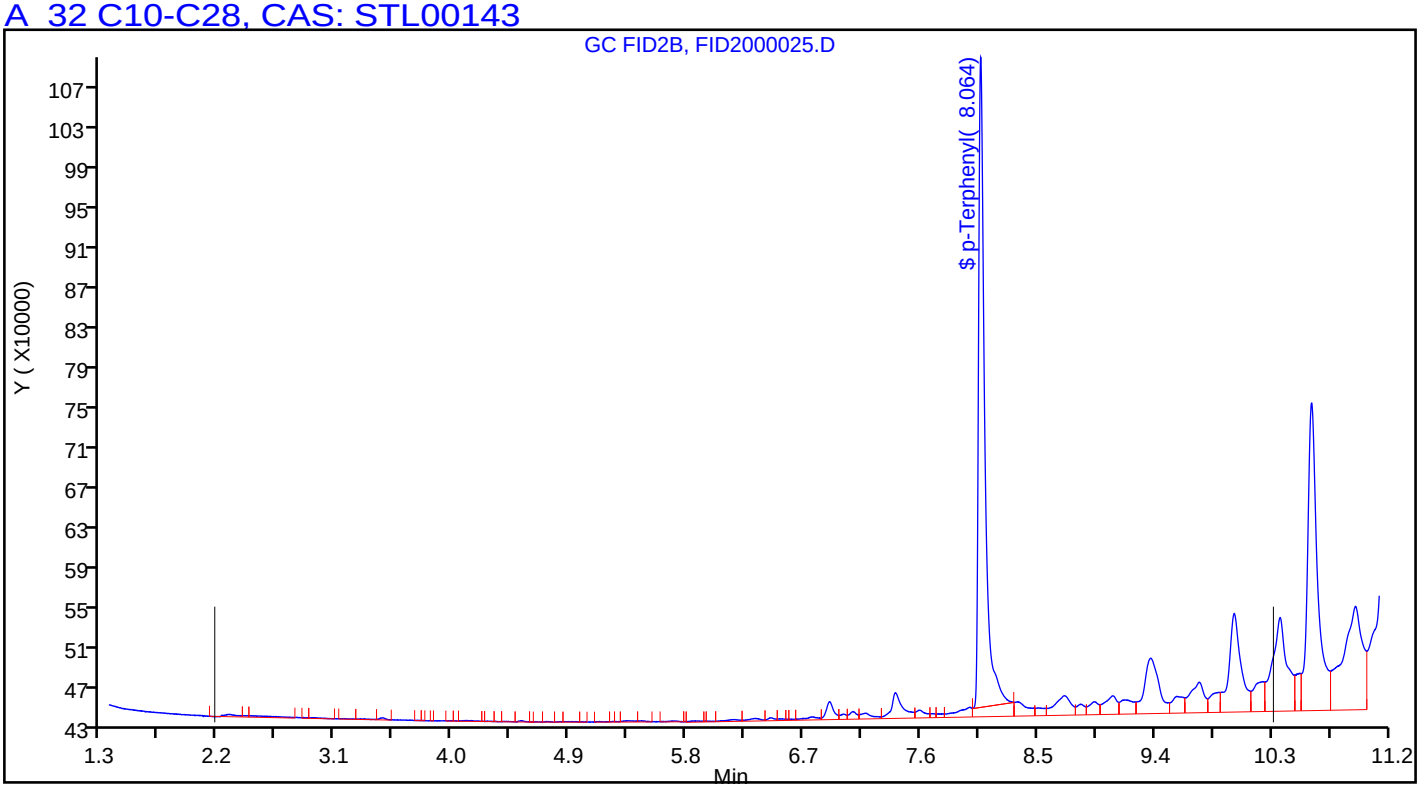
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	25.0	100.11

Report Date: 04-Sep-2018 12:41:35 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000025.D				
Injection Date:	31-Aug-2018 20:38:41	Instrument ID:	CHDRO6		
Lims ID:	720-88239-D-20-A	Lab Sample ID:	720-88239-20		
Client ID:	DG-B9S--9.5-10				
Operator ID:	DCH	ALS Bottle#:	75	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

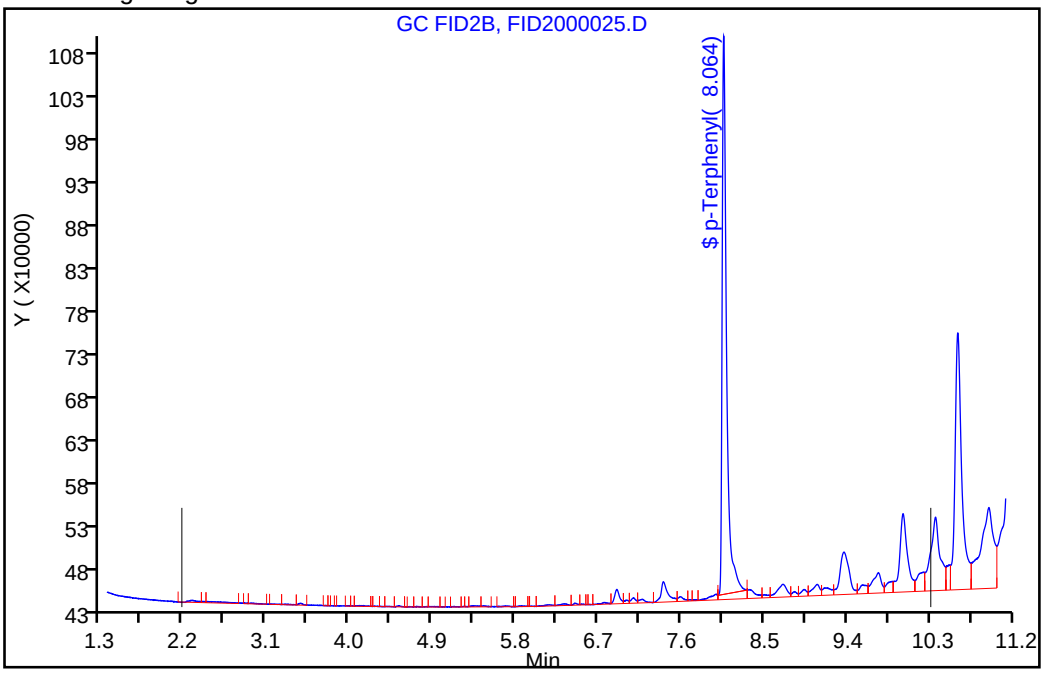
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000025.D				
Injection Date:	31-Aug-2018 20:38:41	Instrument ID:	CHDRO6		
Lims ID:	720-88239-D-20-A	Lab Sample ID:	720-88239-20		
Client ID:	DG-B9S--9.5-10				
Operator ID:	DCH	ALS Bottle#:	75	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.243, CAS: STL00143

Signal: 1

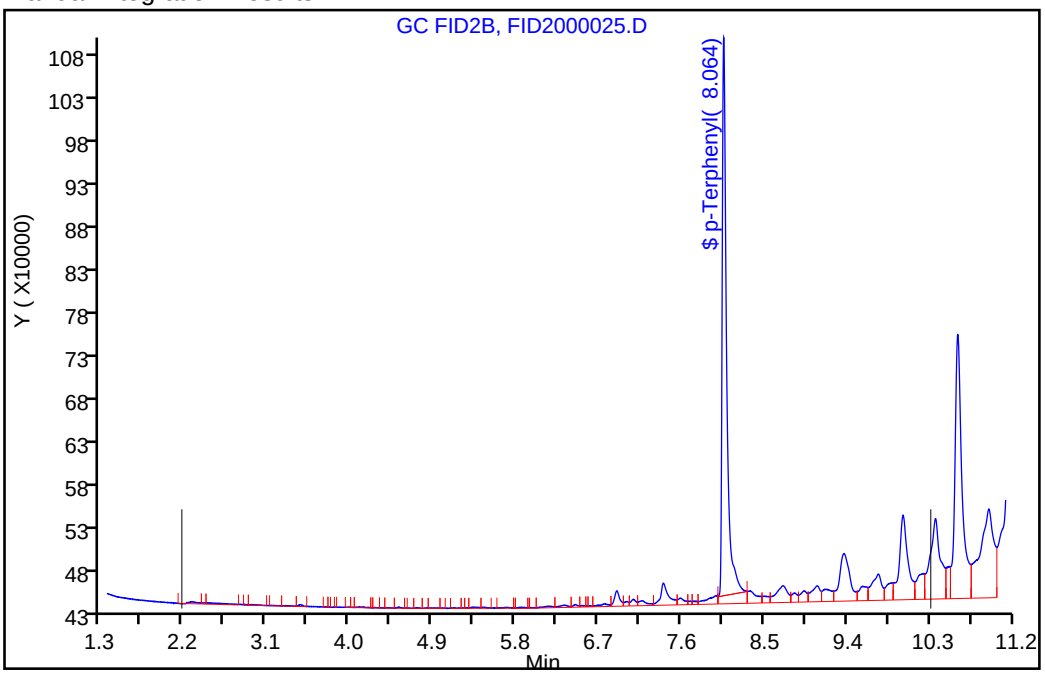
Processing Integration Results

RT: 6.24
Response: 44982059
Amount: 32.769061



Manual Integration Results

RT: 6.24
Response: 63953878
Amount: 43.511294



Reviewer: luj, 04-Sep-2018 12:41:23

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-C7S-0.5-1
Lab Sample ID: 720-88239-1
Matrix: Solid
Lab File ID: 08291835.D
Analysis Method: 8260B
Date Collected: 08/24/2018 07:50
Sample wt/vol: 5.652(g)
Date Analyzed: 08/29/2018 22:21
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250528
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.4	1.1
67-64-1	Acetone	ND		44	34
71-43-2	Benzene	ND		4.4	0.58
75-27-4	Dichlorobromomethane	ND		4.4	0.64
108-86-1	Bromobenzene	ND		4.4	0.70
74-97-5	Chlorobromomethane	ND		18	0.64
75-25-2	Bromoform	ND		4.4	1.8
74-83-9	Bromomethane	ND		8.8	0.70
78-93-3	2-Butanone (MEK)	ND		44	19
104-51-8	n-Butylbenzene	ND		4.4	0.88
135-98-8	sec-Butylbenzene	ND		4.4	0.64
98-06-6	tert-Butylbenzene	ND		4.4	0.65
75-15-0	Carbon disulfide	ND		4.4	1.8
56-23-5	Carbon tetrachloride	ND		4.4	0.55
108-90-7	Chlorobenzene	ND		4.4	0.61
75-00-3	Chloroethane	ND		8.8	0.50
67-66-3	Chloroform	ND		4.4	0.58
74-87-3	Chloromethane	ND		8.8	0.70
95-49-8	2-Chlorotoluene	ND		4.4	0.58
106-43-4	4-Chlorotoluene	ND		4.4	0.60
124-48-1	Chlorodibromomethane	ND		4.4	0.63
95-50-1	1,2-Dichlorobenzene	ND		4.4	0.60
541-73-1	1,3-Dichlorobenzene	ND		4.4	0.64
106-46-7	1,4-Dichlorobenzene	ND		4.4	0.63
142-28-9	1,3-Dichloropropane	ND		4.4	0.65
563-58-6	1,1-Dichloropropene	ND		4.4	0.61
96-12-8	1,2-Dibromo-3-Chloropropane	ND		8.8	1.5
106-93-4	Ethylene Dibromide	ND		4.4	1.3
74-95-3	Dibromomethane	ND		8.8	0.76
75-71-8	Dichlorodifluoromethane	ND		8.8	0.70
75-34-3	1,1-Dichloroethane	ND		4.4	0.60
107-06-2	1,2-Dichloroethane	ND		4.4	0.67
75-35-4	1,1-Dichloroethene	ND	*	4.4	0.55
156-59-2	cis-1,2-Dichloroethene	ND		4.4	0.60
156-60-5	trans-1,2-Dichloroethene	ND		4.4	0.66
78-87-5	1,2-Dichloropropane	ND		4.4	0.56

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-C7S-0.5-1 Lab Sample ID: 720-88239-1

Matrix: Solid Lab File ID: 08291835.D

Analysis Method: 8260B Date Collected: 08/24/2018 07:50

Sample wt/vol: 5.652(g) Date Analyzed: 08/29/2018 22:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250528 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.4	0.61
10061-02-6	trans-1,3-Dichloropropene	ND		4.4	0.59
100-41-4	Ethylbenzene	ND		4.4	0.66
87-68-3	Hexachlorobutadiene	ND		4.4	0.80
591-78-6	2-Hexanone	ND		44	8.8
98-82-8	Isopropylbenzene	ND		4.4	0.60
99-87-6	4-Isopropyltoluene	ND		4.4	2.2
75-09-2	Methylene Chloride	ND		8.8	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		44	8.8
91-20-3	Naphthalene	ND		8.8	1.3
103-65-1	N-Propylbenzene	ND		4.4	0.58
100-42-5	Styrene	ND		4.4	0.56
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.4	0.67
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.4	0.66
127-18-4	Tetrachloroethene	ND		4.4	0.59
108-88-3	Toluene	ND		4.4	0.63
87-61-6	1,2,3-Trichlorobenzene	ND		4.4	0.65
120-82-1	1,2,4-Trichlorobenzene	ND		4.4	0.63
71-55-6	1,1,1-Trichloroethane	ND		4.4	0.54
79-00-5	1,1,2-Trichloroethane	ND		4.4	0.62
79-01-6	Trichloroethene	ND		4.4	0.56
75-69-4	Trichlorofluoromethane	ND		4.4	0.50
96-18-4	1,2,3-Trichloropropane	ND		4.4	0.68
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.4	1.8
95-63-6	1,2,4-Trimethylbenzene	ND		4.4	1.5
108-67-8	1,3,5-Trimethylbenzene	ND		4.4	0.58
108-05-4	Vinyl acetate	ND		18	4.4
75-01-4	Vinyl chloride	ND		4.4	0.65
1330-20-7	Xylenes, Total	ND		4.4	1.1
594-20-7	2,2-Dichloropropane	ND		4.4	1.8
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		220	88

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-C7S-0.5-1 Lab Sample ID: 720-88239-1

Matrix: Solid Lab File ID: 08291835.D

Analysis Method: 8260B Date Collected: 08/24/2018 07:50

Sample wt/vol: 5.652(g) Date Analyzed: 08/29/2018 22:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250528 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	92		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	110		60-140
2037-26-5	Toluene-d8 (Surr)	95		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291835.D
Lims ID: 720-88239-A-1-A
Client ID: DG-C7S--0.5-1
Sample Type: Client
Inject. Date: 29-Aug-2018 22:21:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-A-1
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 09:10:00 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: sanjumnair Date: 31-Aug-2018 08:49:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	163149	250.0	
* 2 Fluorobenzene	96	10.720	10.709	0.011	98	1047522	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.554	0.010	86	860653	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	95	398694	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.304	9.294	0.010	93	69665	7.85	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.812	0.010	0	78714	8.26	
$ 10 Toluene-d8 (Surr)	98	12.821	12.822	-0.001	94	297386	7.15	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	90	92637	6.91	
$ 12 1,2-Dichlorobenzene-d4	152	18.165	18.166	-0.001	84	82927	5.94	
28 Acetone	58	6.485	6.474	0.011	97	10010	12.4	
59 Benzene	78	10.487	10.488	-0.001	92	2129	0.0563	
75 Toluene	92	12.906	12.906	0.000	98	7080	0.2558	
131 Butyl Ether	87	14.775	14.775	0.000	94	776	0.1062	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	388953	4.81	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	122137	1.51	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	144727	1.79	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	432250	5.35	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	161631	2.00	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	161631	NC	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	421208	5.21	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	203755	2.52	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	79185	0.9795	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	131973	1.63	

QC Flag Legend

Processing Flags

NC - Not Calibrated

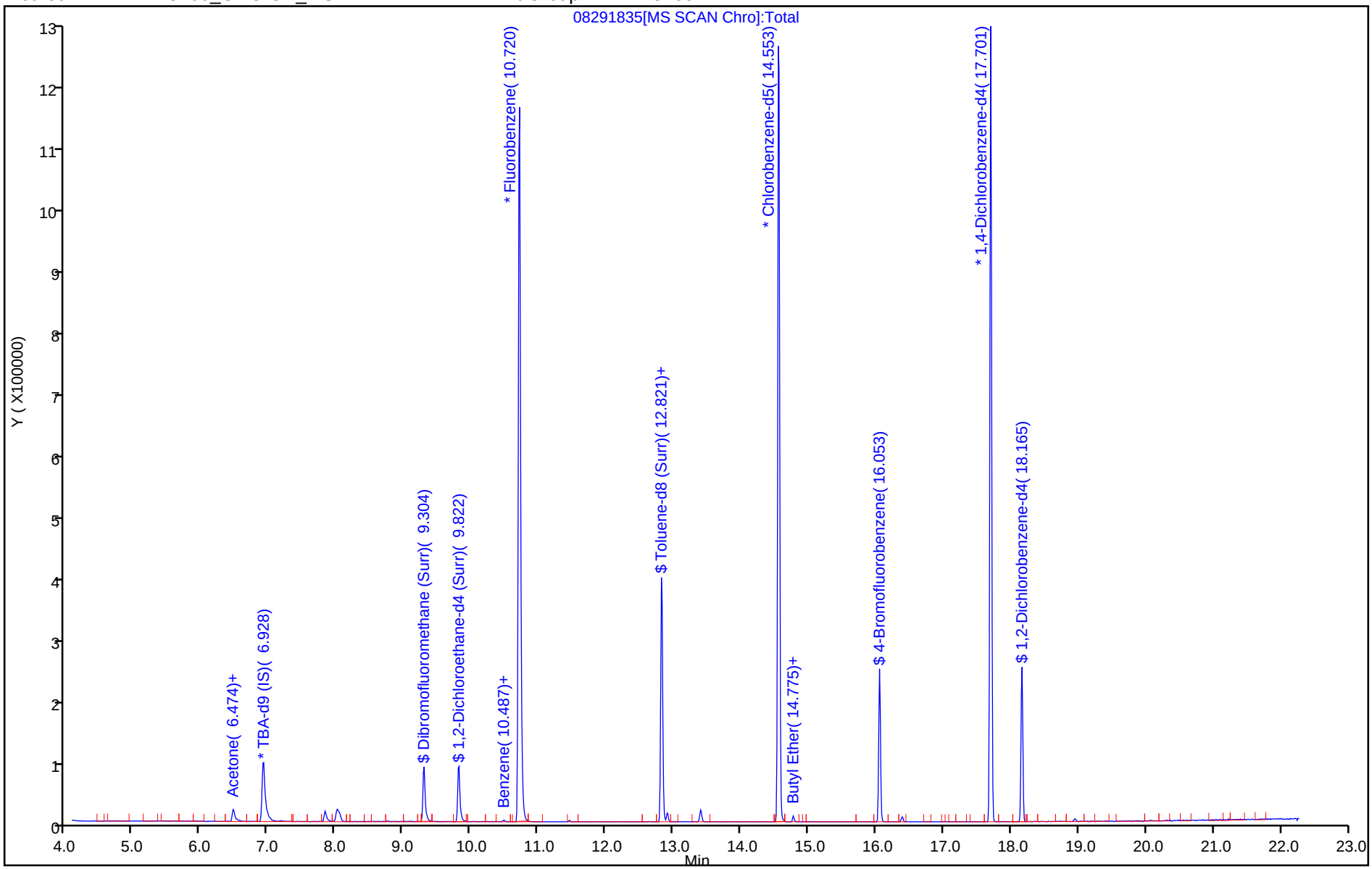
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 09:10:20 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291835.D				
Injection Date:	29-Aug-2018 22:21:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88239-A-1-A	Lab Sample ID:	720-88239-1	Worklist Smp#:	11
Client ID:	DG-C7S--0.5-1				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291835.D
Lims ID: 720-88239-A-1-A
Client ID: DG-C7S--0.5-1
Sample Type: Client
Inject. Date: 29-Aug-2018 22:21:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-A-1
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 09:10:00 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: sanjumnair Date: 31-Aug-2018 08:49:59

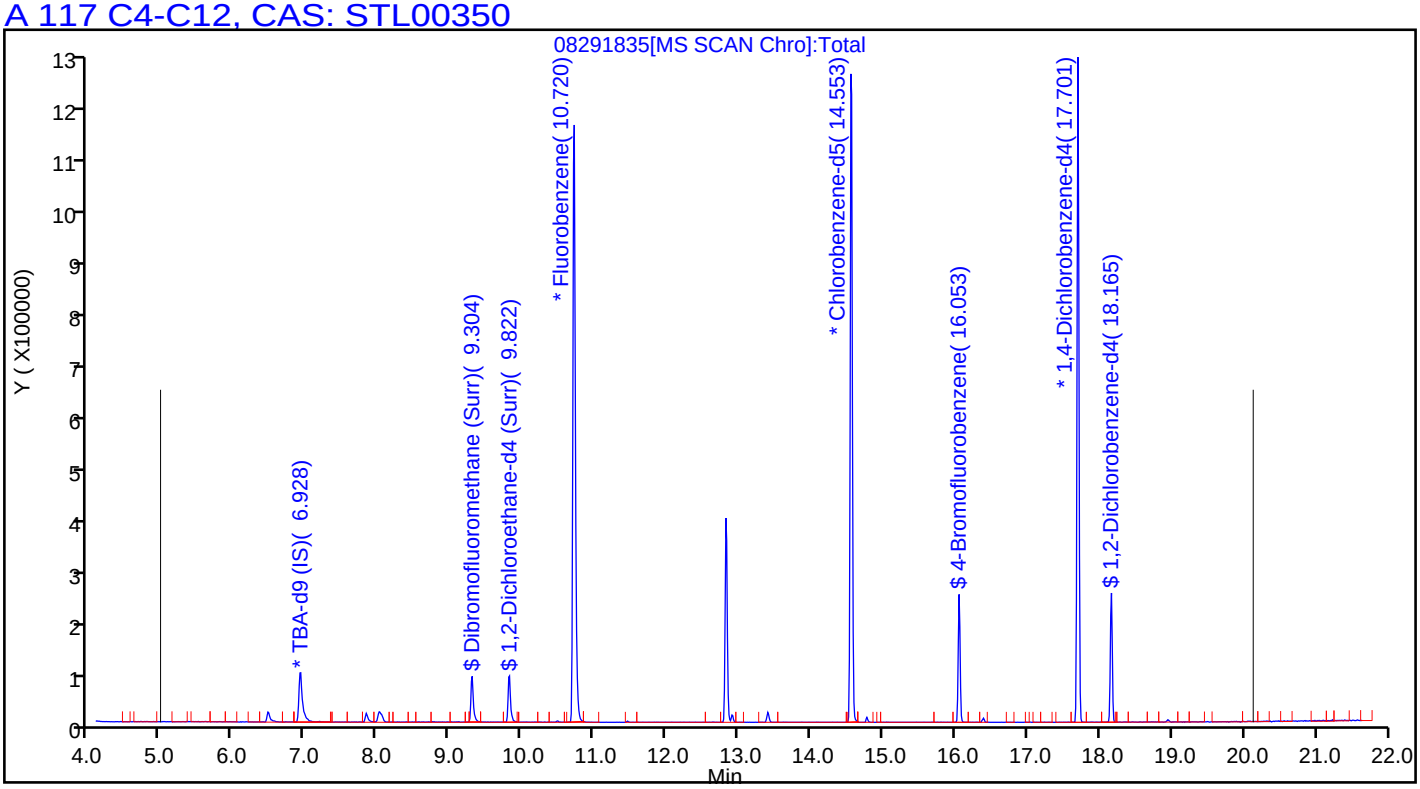
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.26	110.10
$ 10 Toluene-d8 (Surr)	7.50	7.15	95.33
$ 11 4-Bromofluorobenzene	7.50	6.91	92.16
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 31-Aug-2018 09:10:20 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291835.D				
Injection Date:	29-Aug-2018 22:21:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-A-1-A	Lab Sample ID:	720-88239-1		
Client ID:	DG-C7S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-C7S-3.5-4
Lab Sample ID: 720-88239-2
Matrix: Solid
Lab File ID: 08291836.D
Analysis Method: 8260B
Date Collected: 08/24/2018 08:00
Sample wt/vol: 7.035(g)
Date Analyzed: 08/29/2018 22:49
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250528
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		3.6	0.85
67-64-1	Acetone	43		36	27
71-43-2	Benzene	ND		3.6	0.46
75-27-4	Dichlorobromomethane	ND		3.6	0.51
108-86-1	Bromobenzene	ND		3.6	0.56
74-97-5	Chlorobromomethane	ND		14	0.51
75-25-2	Bromoform	ND		3.6	1.4
74-83-9	Bromomethane	ND		7.1	0.56
78-93-3	2-Butanone (MEK)	ND		36	15
104-51-8	n-Butylbenzene	ND		3.6	0.71
135-98-8	sec-Butylbenzene	ND		3.6	0.51
98-06-6	tert-Butylbenzene	ND		3.6	0.52
75-15-0	Carbon disulfide	ND		3.6	1.4
56-23-5	Carbon tetrachloride	ND		3.6	0.44
108-90-7	Chlorobenzene	ND		3.6	0.49
75-00-3	Chloroethane	ND		7.1	0.40
67-66-3	Chloroform	ND		3.6	0.47
74-87-3	Chloromethane	ND		7.1	0.56
95-49-8	2-Chlorotoluene	ND		3.6	0.46
106-43-4	4-Chlorotoluene	ND		3.6	0.48
124-48-1	Chlorodibromomethane	ND		3.6	0.50
95-50-1	1,2-Dichlorobenzene	ND		3.6	0.48
541-73-1	1,3-Dichlorobenzene	ND		3.6	0.51
106-46-7	1,4-Dichlorobenzene	ND		3.6	0.50
142-28-9	1,3-Dichloropropane	ND		3.6	0.52
563-58-6	1,1-Dichloropropene	ND		3.6	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	ND		7.1	1.2
106-93-4	Ethylene Dibromide	ND		3.6	1.0
74-95-3	Dibromomethane	ND		7.1	0.61
75-71-8	Dichlorodifluoromethane	ND		7.1	0.56
75-34-3	1,1-Dichloroethane	ND		3.6	0.48
107-06-2	1,2-Dichloroethane	ND		3.6	0.54
75-35-4	1,1-Dichloroethene	ND	*	3.6	0.44
156-59-2	cis-1,2-Dichloroethene	ND		3.6	0.48
156-60-5	trans-1,2-Dichloroethene	ND		3.6	0.53
78-87-5	1,2-Dichloropropane	ND		3.6	0.45

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-C7S-3.5-4
Lab Sample ID: 720-88239-2
Matrix: Solid
Lab File ID: 08291836.D
Analysis Method: 8260B
Date Collected: 08/24/2018 08:00
Sample wt/vol: 7.035(g)
Date Analyzed: 08/29/2018 22:49
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250528
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		3.6	0.49
10061-02-6	trans-1,3-Dichloropropene	ND		3.6	0.48
100-41-4	Ethylbenzene	ND		3.6	0.53
87-68-3	Hexachlorobutadiene	ND		3.6	0.64
591-78-6	2-Hexanone	ND		36	7.1
98-82-8	Isopropylbenzene	ND		3.6	0.48
99-87-6	4-Isopropyltoluene	ND		3.6	1.8
75-09-2	Methylene Chloride	ND		7.1	4.0
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		36	7.1
91-20-3	Naphthalene	ND		7.1	1.1
103-65-1	N-Propylbenzene	ND		3.6	0.47
100-42-5	Styrene	ND		3.6	0.45
630-20-6	1,1,1,2-Tetrachloroethane	ND		3.6	0.54
79-34-5	1,1,2,2-Tetrachloroethane	ND		3.6	0.53
127-18-4	Tetrachloroethene	ND		3.6	0.48
108-88-3	Toluene	ND		3.6	0.50
87-61-6	1,2,3-Trichlorobenzene	ND		3.6	0.53
120-82-1	1,2,4-Trichlorobenzene	ND		3.6	0.50
71-55-6	1,1,1-Trichloroethane	ND		3.6	0.43
79-00-5	1,1,2-Trichloroethane	ND		3.6	0.50
79-01-6	Trichloroethene	ND		3.6	0.45
75-69-4	Trichlorofluoromethane	ND		3.6	0.40
96-18-4	1,2,3-Trichloropropane	ND		3.6	0.55
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.6	1.5
95-63-6	1,2,4-Trimethylbenzene	ND		3.6	1.2
108-67-8	1,3,5-Trimethylbenzene	ND		3.6	0.46
108-05-4	Vinyl acetate	ND		14	3.6
75-01-4	Vinyl chloride	ND		3.6	0.52
1330-20-7	Xylenes, Total	ND		3.6	0.87
594-20-7	2,2-Dichloropropane	ND		3.6	1.4
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		180	71

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-C7S-3.5-4 Lab Sample ID: 720-88239-2

Matrix: Solid Lab File ID: 08291836.D

Analysis Method: 8260B Date Collected: 08/24/2018 08:00

Sample wt/vol: 7.035(g) Date Analyzed: 08/29/2018 22:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250528 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	89		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		60-140
2037-26-5	Toluene-d8 (Surr)	95		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291836.D
Lims ID: 720-88239-A-2-A
Client ID: DG-C7S--3.5-4
Sample Type: Client
Inject. Date: 29-Aug-2018 22:49:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-A-2
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 09:10:00 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: sanjumnair Date: 31-Aug-2018 08:50:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	148792	250.0	
* 2 Fluorobenzene	96	10.720	10.709	0.011	98	982623	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.554	0.010	86	784192	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	337154	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.305	9.294	0.011	93	65347	7.85	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.812	0.010	0	72329	8.09	
$ 10 Toluene-d8 (Surr)	98	12.822	12.822	0.000	95	277078	7.10	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	90	81171	6.65	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	84	69675	5.91	
28 Acetone	58	6.474	6.474	0.000	97	22811	30.2	
148 Methyl acetate	43	7.235	7.224	0.011	99	72118	10.6	
144 Ethyl acetate	43	9.115	9.104	0.011	98	105137	10.1	
59 Benzene	78	10.488	10.488	0.000	94	2845	0.0803	
75 Toluene	92	12.906	12.906	0.000	97	8094	0.3210	
131 Butyl Ether	87	14.775	14.775	0.000	93	1329	0.1997	
124 Butane	43	5.017	4.996	0.021	1	272	NR	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	809237	10.7	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	255589	3.37	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	289008	3.81	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	851819	11.2	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	302423	3.99	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	302423	NC	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	790157	10.4	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	343579	4.53	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	79652	1.05	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	128939	1.70	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

NC - Not Calibrated

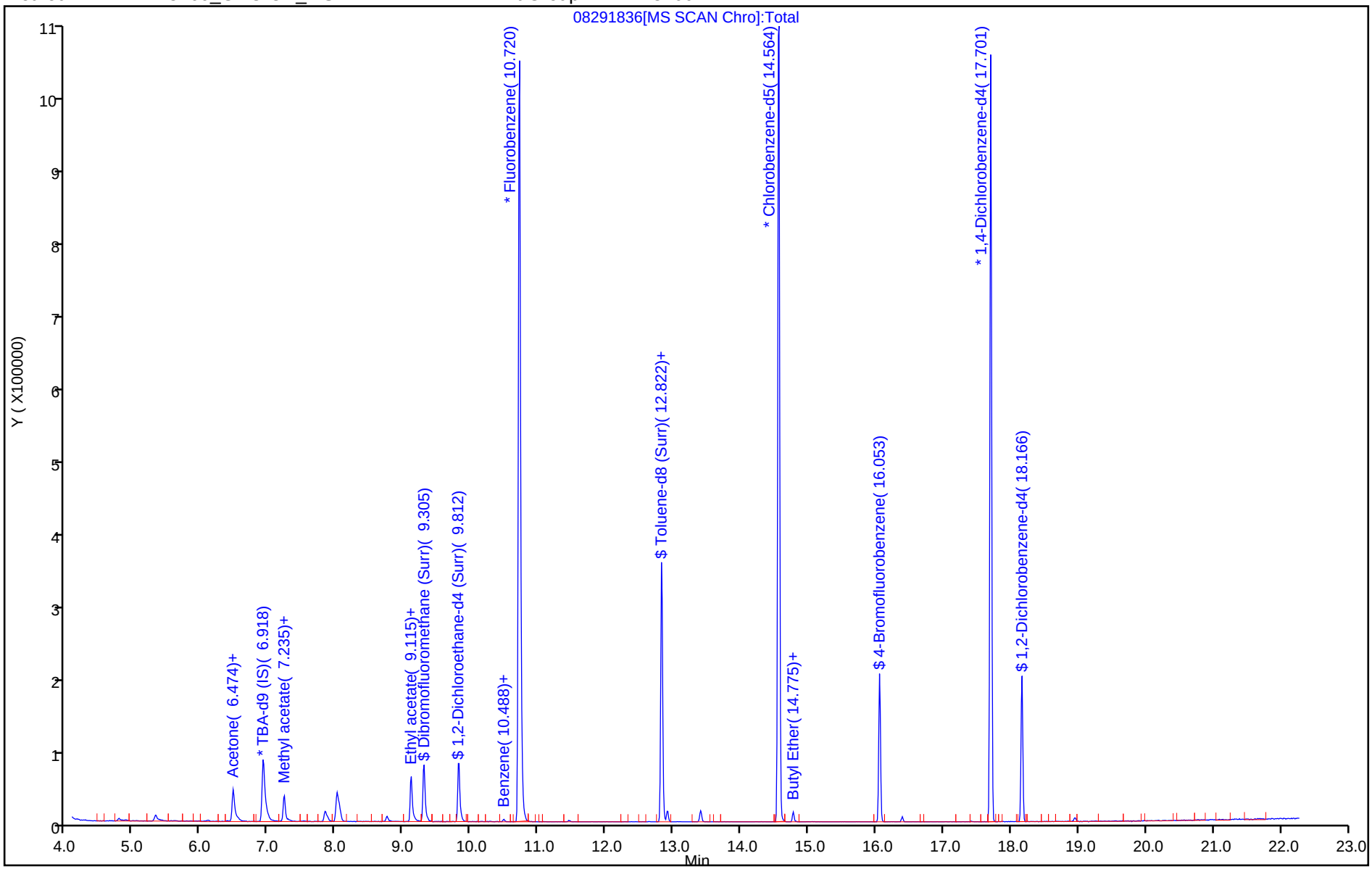
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 09:10:22 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291836.D				
Injection Date:	29-Aug-2018 22:49:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88239-A-2-A	Lab Sample ID:	720-88239-2	Worklist Smp#:	12
Client ID:	DG-C7S--3.5-4				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291836.D
Lims ID: 720-88239-A-2-A
Client ID: DG-C7S--3.5-4
Sample Type: Client
Inject. Date: 29-Aug-2018 22:49:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-A-2
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 09:10:00 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: sanjumnair Date: 31-Aug-2018 08:50:53

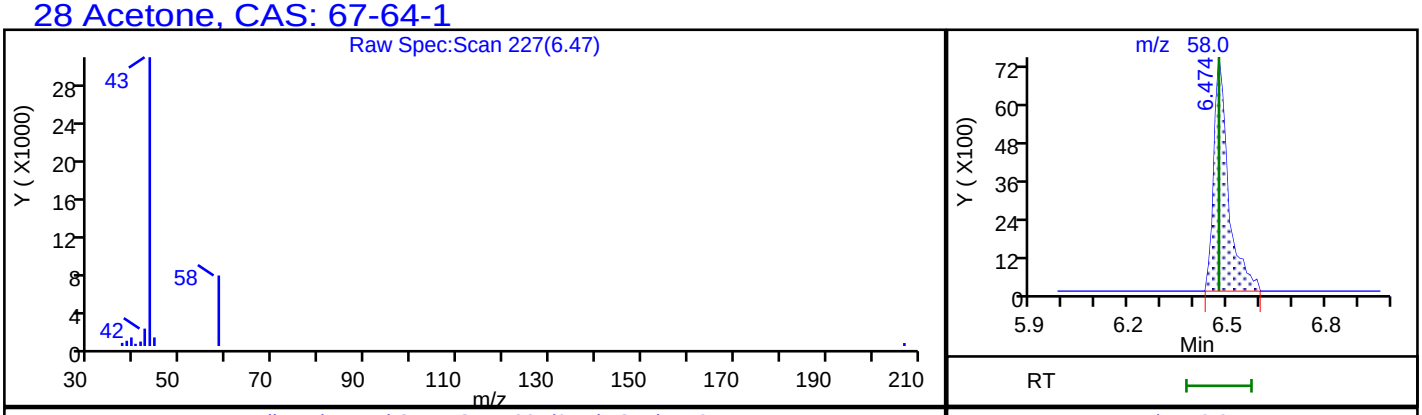
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.09	107.85
$ 10 Toluene-d8 (Surr)	7.50	7.10	94.69
$ 11 4-Bromofluorobenzene	7.50	6.65	88.63
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

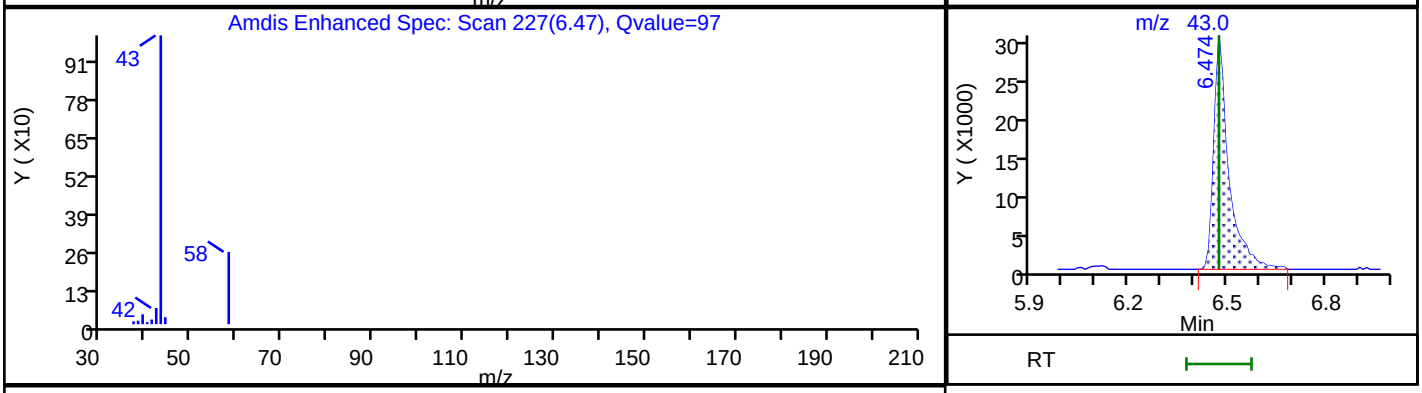
Report Date: 31-Aug-2018 09:10:22 Chrom Revision: 2.3 19-Jul-2018 15:14:50

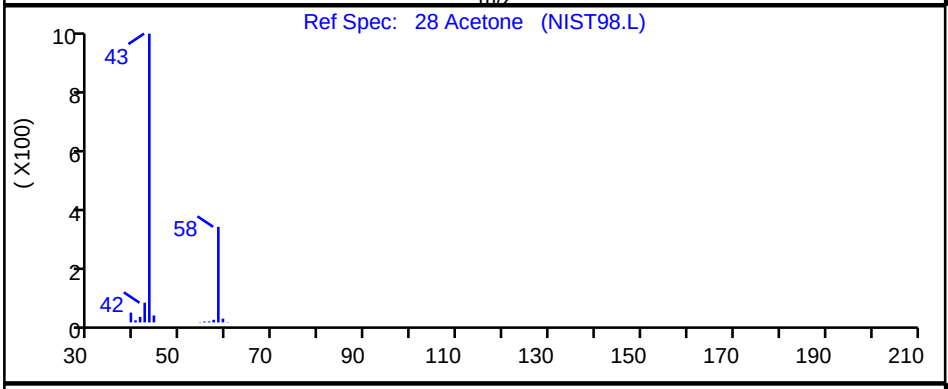
TestAmerica Pleasanton

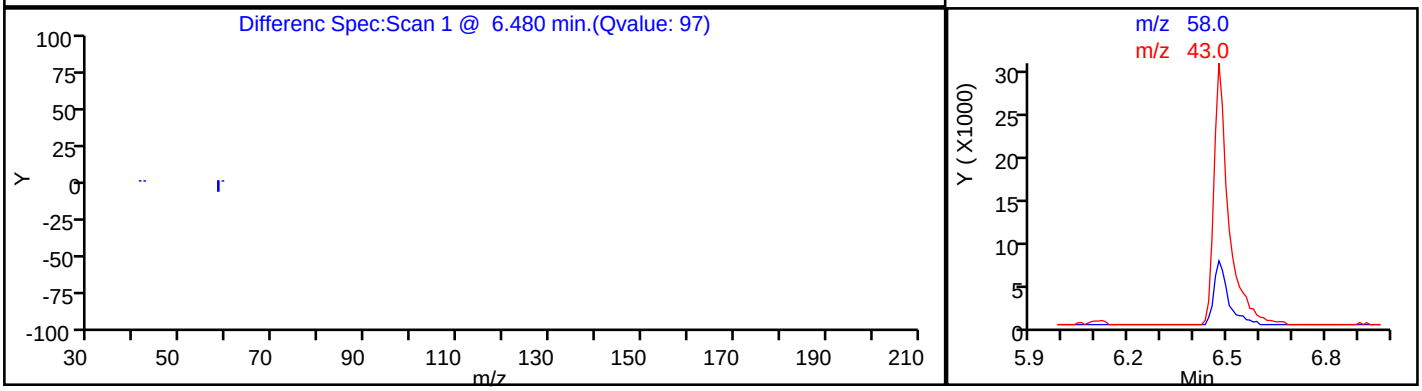
Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291836.D				
Injection Date:	29-Aug-2018 22:49:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-A-2-A	Lab Sample ID:	720-88239-2		
Client ID:	DG-C7S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1







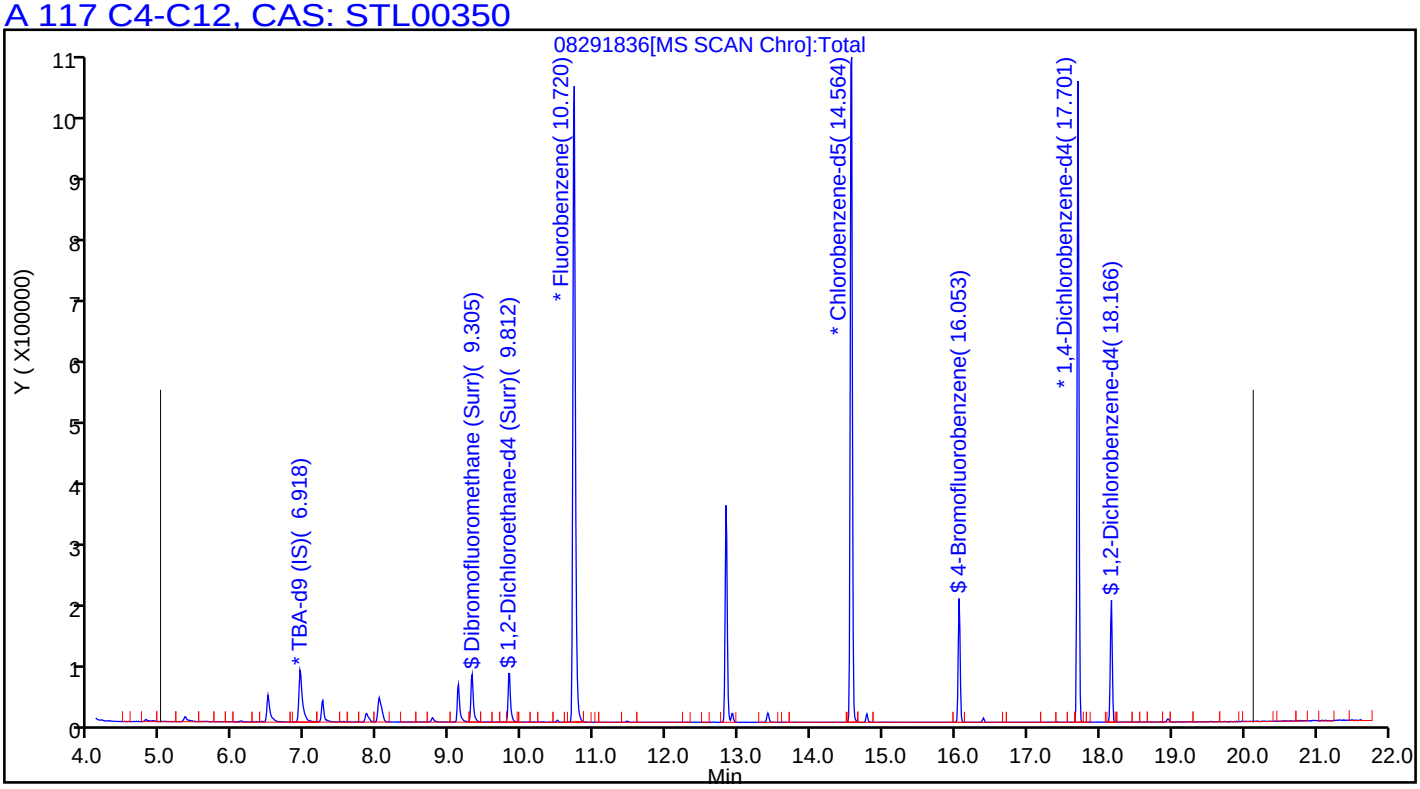


Report Date: 31-Aug-2018 09:10:23 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291836.D				
Injection Date:	29-Aug-2018 22:49:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-A-2-A	Lab Sample ID:	720-88239-2		
Client ID:	DG-C7S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-C7S-9.5-10
Lab Sample ID: 720-88239-3
Matrix: Solid
Lab File ID: 09041811.D
Analysis Method: 8260B
Date Collected: 08/24/2018 08:05
Sample wt/vol: 5.30(g)
Date Analyzed: 09/04/2018 12:22
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250755
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.7	1.1
67-64-1	Acetone	ND		47	36
71-43-2	Benzene	ND		4.7	0.61
75-27-4	Dichlorobromomethane	ND		4.7	0.68
108-86-1	Bromobenzene	ND		4.7	0.75
74-97-5	Chlorobromomethane	ND		19	0.68
75-25-2	Bromoform	ND		4.7	1.9
74-83-9	Bromomethane	ND		9.4	0.75
78-93-3	2-Butanone (MEK)	ND		47	20
104-51-8	n-Butylbenzene	ND		4.7	0.94
135-98-8	sec-Butylbenzene	ND		4.7	0.68
98-06-6	tert-Butylbenzene	ND		4.7	0.69
75-15-0	Carbon disulfide	ND		4.7	1.9
56-23-5	Carbon tetrachloride	ND		4.7	0.58
108-90-7	Chlorobenzene	ND		4.7	0.65
75-00-3	Chloroethane	ND		9.4	0.53
67-66-3	Chloroform	ND		4.7	0.62
74-87-3	Chloromethane	ND		9.4	0.75
95-49-8	2-Chlorotoluene	ND		4.7	0.61
106-43-4	4-Chlorotoluene	ND		4.7	0.64
124-48-1	Chlorodibromomethane	ND		4.7	0.67
95-50-1	1,2-Dichlorobenzene	ND		4.7	0.64
541-73-1	1,3-Dichlorobenzene	ND		4.7	0.68
106-46-7	1,4-Dichlorobenzene	ND		4.7	0.67
142-28-9	1,3-Dichloropropane	ND		4.7	0.69
563-58-6	1,1-Dichloropropene	ND		4.7	0.65
96-12-8	1,2-Dibromo-3-Chloropropane	ND		9.4	1.6
106-93-4	Ethylene Dibromide	ND		4.7	1.3
74-95-3	Dibromomethane	ND		9.4	0.81
75-71-8	Dichlorodifluoromethane	ND	F1	9.4	0.75
75-34-3	1,1-Dichloroethane	ND		4.7	0.64
107-06-2	1,2-Dichloroethane	ND		4.7	0.72
75-35-4	1,1-Dichloroethene	ND	*	4.7	0.58
156-59-2	cis-1,2-Dichloroethene	ND		4.7	0.64
156-60-5	trans-1,2-Dichloroethene	ND		4.7	0.71
78-87-5	1,2-Dichloropropane	ND		4.7	0.59

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-C7S-9.5-10
Lab Sample ID: 720-88239-3
Matrix: Solid
Lab File ID: 09041811.D
Analysis Method: 8260B
Date Collected: 08/24/2018 08:05
Sample wt/vol: 5.30(g)
Date Analyzed: 09/04/2018 12:22
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250755
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.7	0.65
10061-02-6	trans-1,3-Dichloropropene	ND		4.7	0.63
100-41-4	Ethylbenzene	ND		4.7	0.71
87-68-3	Hexachlorobutadiene	ND		4.7	0.85
591-78-6	2-Hexanone	ND		47	9.4
98-82-8	Isopropylbenzene	ND		4.7	0.64
99-87-6	4-Isopropyltoluene	ND		4.7	2.4
75-09-2	Methylene Chloride	ND		9.4	5.3
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		47	9.4
91-20-3	Naphthalene	ND		9.4	1.4
103-65-1	N-Propylbenzene	ND		4.7	0.62
100-42-5	Styrene	ND		4.7	0.59
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.7	0.72
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.7	0.71
127-18-4	Tetrachloroethene	ND		4.7	0.63
108-88-3	Toluene	ND		4.7	0.67
87-61-6	1,2,3-Trichlorobenzene	ND		4.7	0.70
120-82-1	1,2,4-Trichlorobenzene	ND		4.7	0.67
71-55-6	1,1,1-Trichloroethane	ND		4.7	0.58
79-00-5	1,1,2-Trichloroethane	ND		4.7	0.66
79-01-6	Trichloroethene	ND		4.7	0.59
75-69-4	Trichlorofluoromethane	ND		4.7	0.53
96-18-4	1,2,3-Trichloropropane	ND		4.7	0.73
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	F1	4.7	2.0
95-63-6	1,2,4-Trimethylbenzene	ND		4.7	1.5
108-67-8	1,3,5-Trimethylbenzene	ND		4.7	0.61
108-05-4	Vinyl acetate	ND		19	4.7
75-01-4	Vinyl chloride	ND		4.7	0.69
1330-20-7	Xylenes, Total	ND		4.7	1.2
594-20-7	2,2-Dichloropropane	ND		4.7	1.9
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		240	94

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-C7S-9.5-10 Lab Sample ID: 720-88239-3

Matrix: Solid Lab File ID: 09041811.D

Analysis Method: 8260B Date Collected: 08/24/2018 08:05

Sample wt/vol: 5.30(g) Date Analyzed: 09/04/2018 12:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250755 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	91		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		60-140
2037-26-5	Toluene-d8 (Surr)	94		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\09041811.D
Lims ID: 720-88239-D-3-G RR
Client ID:
Sample Type: Client
Inject. Date: 04-Sep-2018 12:22:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-D-3 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 04-Sep-2018 12:47:12 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: medinaj Date: 04-Sep-2018 12:57:51

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	168829	250.0	
* 2 Fluorobenzene	96	10.709	10.709	0.000	99	1194954	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.564	0.000	84	950970	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	414912	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.305	9.305	0.001	92	76579	7.57	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.812	9.812	0.001	0	78077	7.18	
$ 10 Toluene-d8 (Surr)	98	12.822	12.822	0.001	94	335875	7.08	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	92	100708	6.80	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	83	91407	6.30	
28 Acetone	58	6.485	6.474	0.011	98	3846	4.19	
34 Methylene Chloride	84	7.192	7.192	0.000	89	7247	0.8033	
59 Benzene	78	10.488	10.488	0.001	1	487	0.0113	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	285568	3.10	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	127669	1.38	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	140263	1.52	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	361446	3.92	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	146421	NC	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	146421	1.59	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	308267	3.34	
A 120 C6-C12	1	14.400	(8.671-20.130)		0	220249	2.39	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	31403	0.3405	
A 121 C7-C12	1	15.567	(11.005-20.130)		0	115775	1.26	

QC Flag Legend

Processing Flags
NC - Not Calibrated

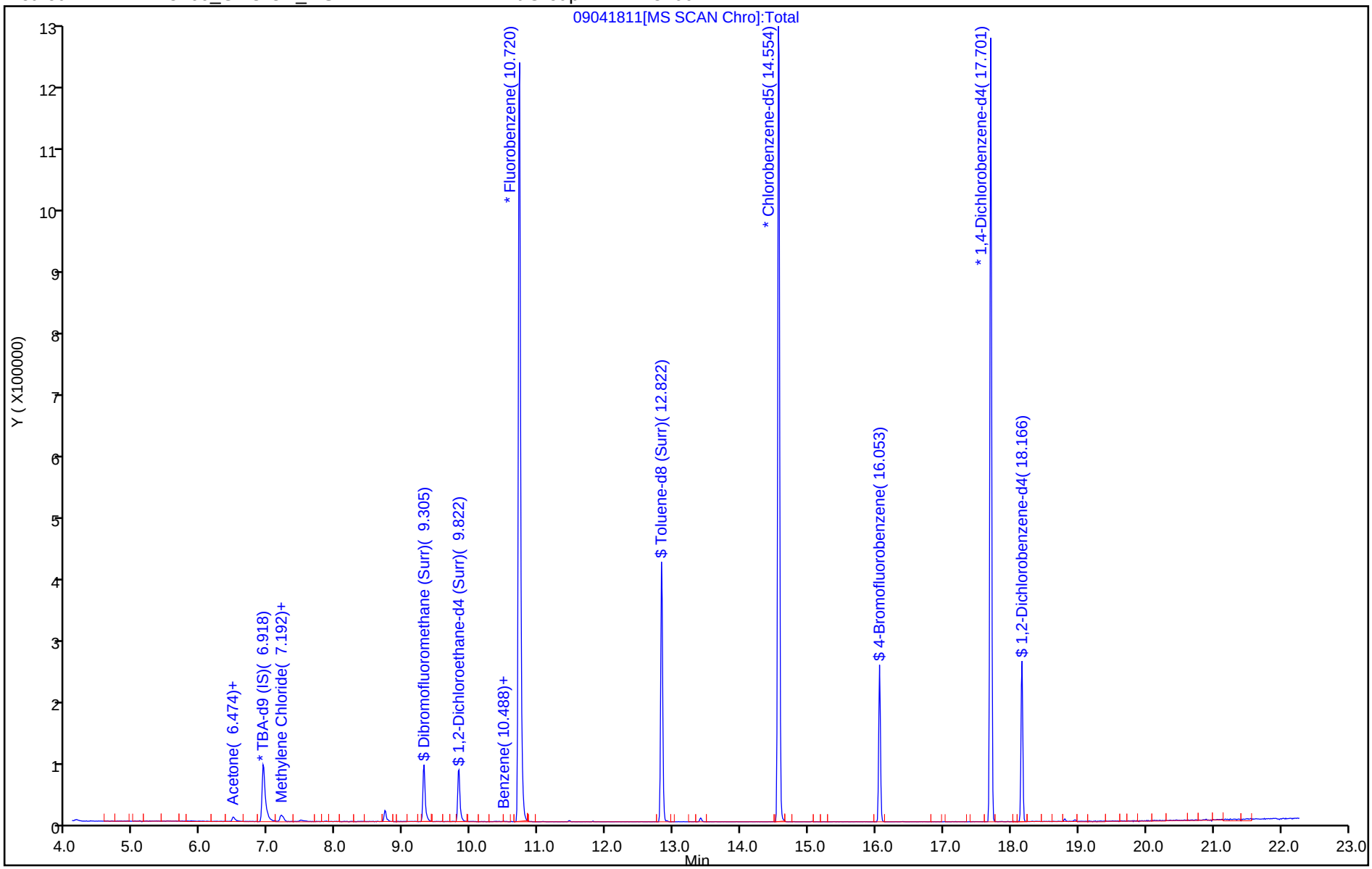
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 04-Sep-2018 12:57:52 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\09041811.D				
Injection Date:	04-Sep-2018 12:22:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88239-D-3-G RR	Lab Sample ID:	Client 720-250755/11-A	Worklist Smp#:	11
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\09041811.D
Lims ID: 720-88239-D-3-G RR
Client ID:
Sample Type: Client
Inject. Date: 04-Sep-2018 12:22:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-D-3 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 04-Sep-2018 12:47:12 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: medinaj Date: 04-Sep-2018 12:57:51

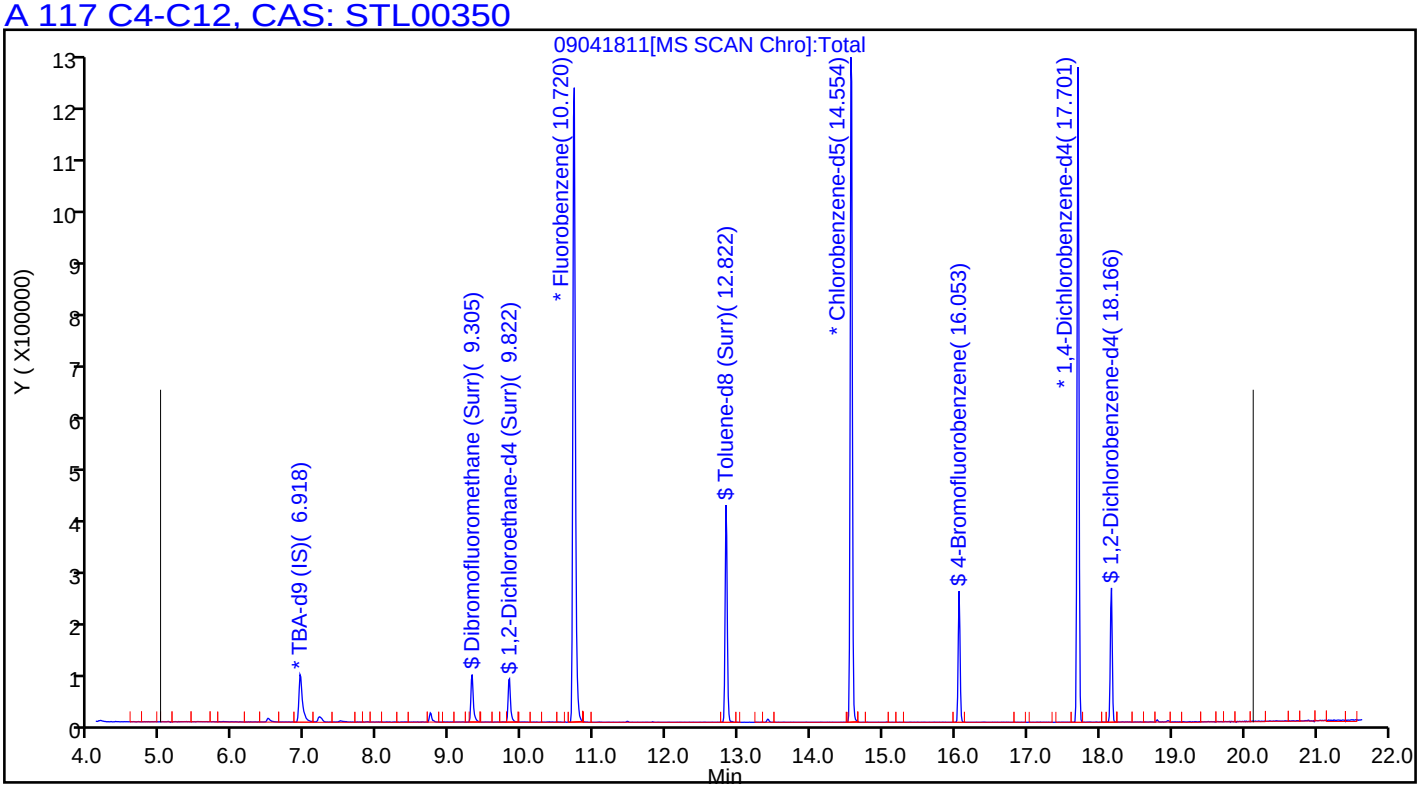
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	7.50	7.57	100.87
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.18	95.73
$ 10 Toluene-d8 (Surr)	7.50	7.08	94.39
$ 11 4-Bromofluorobenzene	7.50	6.80	90.68
$ 12 1,2-Dichlorobenzene-d4	6.00	6.30	104.94

Report Date: 04-Sep-2018 12:57:52 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\09041811.D				
Injection Date:	04-Sep-2018 12:22:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-D-3-G RR	Lab Sample ID:	Client 720-250755/11-A		
Client ID:					
Operator ID:	VOA	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-E7S-0.5-1 Lab Sample ID: 720-88239-4

Matrix: Solid Lab File ID: 08291838.D

Analysis Method: 8260B Date Collected: 08/24/2018 08:25

Sample wt/vol: 4.674(g) Date Analyzed: 08/29/2018 23:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250528 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		5.3	1.3
67-64-1	Acetone	ND		53	41
71-43-2	Benzene	ND		5.3	0.70
75-27-4	Dichlorobromomethane	ND		5.3	0.77
108-86-1	Bromobenzene	ND		5.3	0.85
74-97-5	Chlorobromomethane	ND		21	0.77
75-25-2	Bromoform	ND		5.3	2.1
74-83-9	Bromomethane	ND		11	0.85
78-93-3	2-Butanone (MEK)	ND		53	22
104-51-8	n-Butylbenzene	ND		5.3	1.1
135-98-8	sec-Butylbenzene	ND		5.3	0.77
98-06-6	tert-Butylbenzene	ND		5.3	0.78
75-15-0	Carbon disulfide	ND		5.3	2.1
56-23-5	Carbon tetrachloride	ND		5.3	0.66
108-90-7	Chlorobenzene	ND		5.3	0.74
75-00-3	Chloroethane	ND		11	0.60
67-66-3	Chloroform	ND		5.3	0.71
74-87-3	Chloromethane	ND		11	0.85
95-49-8	2-Chlorotoluene	ND		5.3	0.70
106-43-4	4-Chlorotoluene	ND		5.3	0.73
124-48-1	Chlorodibromomethane	ND		5.3	0.76
95-50-1	1,2-Dichlorobenzene	ND		5.3	0.73
541-73-1	1,3-Dichlorobenzene	ND		5.3	0.77
106-46-7	1,4-Dichlorobenzene	ND		5.3	0.76
142-28-9	1,3-Dichloropropane	ND		5.3	0.78
563-58-6	1,1-Dichloropropene	ND		5.3	0.74
96-12-8	1,2-Dibromo-3-Chloropropane	ND		11	1.8
106-93-4	Ethylene Dibromide	ND		5.3	1.5
74-95-3	Dibromomethane	ND		11	0.92
75-71-8	Dichlorodifluoromethane	ND		11	0.85
75-34-3	1,1-Dichloroethane	ND		5.3	0.73
107-06-2	1,2-Dichloroethane	ND		5.3	0.81
75-35-4	1,1-Dichloroethene	ND	*	5.3	0.66
156-59-2	cis-1,2-Dichloroethene	ND		5.3	0.73
156-60-5	trans-1,2-Dichloroethene	ND		5.3	0.80
78-87-5	1,2-Dichloropropane	ND		5.3	0.67

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-E7S-0.5-1
Lab Sample ID: 720-88239-4
Matrix: Solid
Lab File ID: 08291838.D
Analysis Method: 8260B
Date Collected: 08/24/2018 08:25
Sample wt/vol: 4.674(g)
Date Analyzed: 08/29/2018 23:46
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250528
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		5.3	0.74
10061-02-6	trans-1,3-Dichloropropene	ND		5.3	0.72
100-41-4	Ethylbenzene	ND		5.3	0.80
87-68-3	Hexachlorobutadiene	ND		5.3	0.96
591-78-6	2-Hexanone	ND		53	11
98-82-8	Isopropylbenzene	ND		5.3	0.73
99-87-6	4-Isopropyltoluene	ND		5.3	2.7
75-09-2	Methylene Chloride	ND		11	6.0
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		53	11
91-20-3	Naphthalene	ND		11	1.6
103-65-1	N-Propylbenzene	ND		5.3	0.71
100-42-5	Styrene	ND		5.3	0.67
630-20-6	1,1,1,2-Tetrachloroethane	ND		5.3	0.81
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.3	0.80
127-18-4	Tetrachloroethene	ND		5.3	0.72
108-88-3	Toluene	ND		5.3	0.76
87-61-6	1,2,3-Trichlorobenzene	ND		5.3	0.79
120-82-1	1,2,4-Trichlorobenzene	ND		5.3	0.76
71-55-6	1,1,1-Trichloroethane	ND		5.3	0.65
79-00-5	1,1,2-Trichloroethane	ND		5.3	0.75
79-01-6	Trichloroethene	ND		5.3	0.67
75-69-4	Trichlorofluoromethane	ND		5.3	0.60
96-18-4	1,2,3-Trichloropropane	ND		5.3	0.82
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.3	2.2
95-63-6	1,2,4-Trimethylbenzene	ND		5.3	1.8
108-67-8	1,3,5-Trimethylbenzene	ND		5.3	0.70
108-05-4	Vinyl acetate	ND		21	5.3
75-01-4	Vinyl chloride	ND		5.3	0.78
1330-20-7	Xylenes, Total	ND		5.3	1.3
594-20-7	2,2-Dichloropropane	ND		5.3	2.1
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		270	110

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-E7S-0.5-1 Lab Sample ID: 720-88239-4

Matrix: Solid Lab File ID: 08291838.D

Analysis Method: 8260B Date Collected: 08/24/2018 08:25

Sample wt/vol: 4.674(g) Date Analyzed: 08/29/2018 23:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250528 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	93		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	110		60-140
2037-26-5	Toluene-d8 (Surr)	93		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291838.D
Lims ID: 720-88239-A-4-A
Client ID: DG-E7S--0.5-1
Sample Type: Client
Inject. Date: 29-Aug-2018 23:46:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-A-4
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 09:10:00 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: sanjumnair Date: 31-Aug-2018 08:52:40

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	164577	250.0	
* 2 Fluorobenzene	96	10.709	10.709	0.000	98	1048690	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.554	0.010	85	862116	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	400620	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.305	9.294	0.011	92	68667	7.73	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.812	9.812	0.000	0	78442	8.22	
$ 10 Toluene-d8 (Surr)	98	12.822	12.822	0.000	95	291246	6.99	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	91	93284	6.95	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	84	83226	5.94	
28 Acetone	58	6.474	6.474	0.000	97	11094	13.8	
148 Methyl acetate	43	7.235	7.224	0.011	99	30090	4.15	
59 Benzene	78	10.487	10.488	-0.001	93	2754	0.0728	
75 Toluene	92	12.906	12.906	0.000	94	7480	0.2698	
131 Butyl Ether	87	14.775	14.775	0.000	92	688	0.0940	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	517412	6.39	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	119412	1.48	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	136328	1.68	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	581234	7.18	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	158001	1.95	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	158001	NC	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	489515	6.05	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	219622	2.71	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	78777	0.9734	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	149939	1.85	

QC Flag Legend

Processing Flags

NC - Not Calibrated

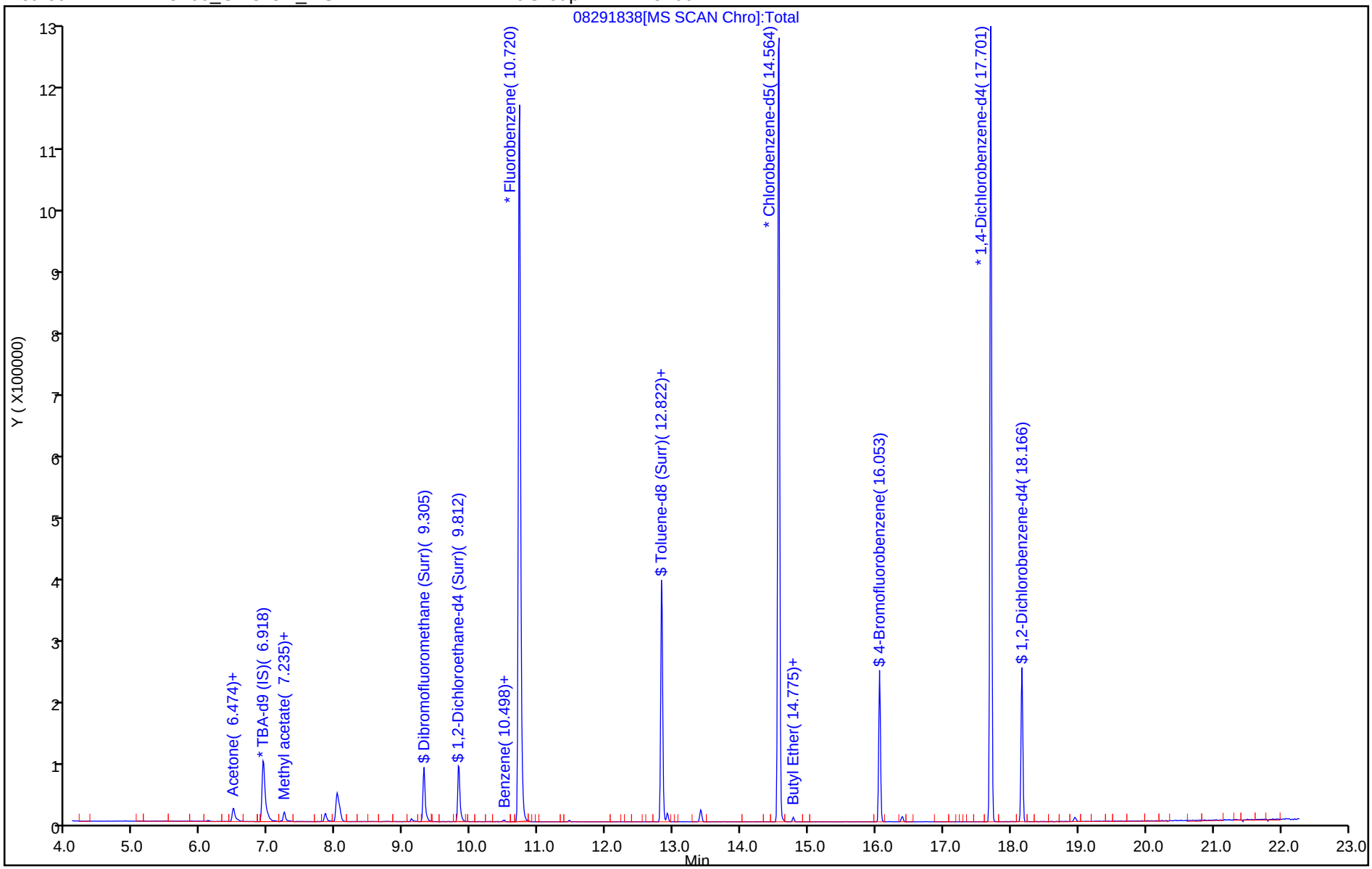
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 09:10:27 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291838.D				
Injection Date:	29-Aug-2018 23:46:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88239-A-4-A	Lab Sample ID:	720-88239-4	Worklist Smp#:	14
Client ID:	DG-E7S--0.5-1				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291838.D
Lims ID: 720-88239-A-4-A
Client ID: DG-E7S--0.5-1
Sample Type: Client
Inject. Date: 29-Aug-2018 23:46:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-A-4
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 09:10:00 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: sanjumnair Date: 31-Aug-2018 08:52:40

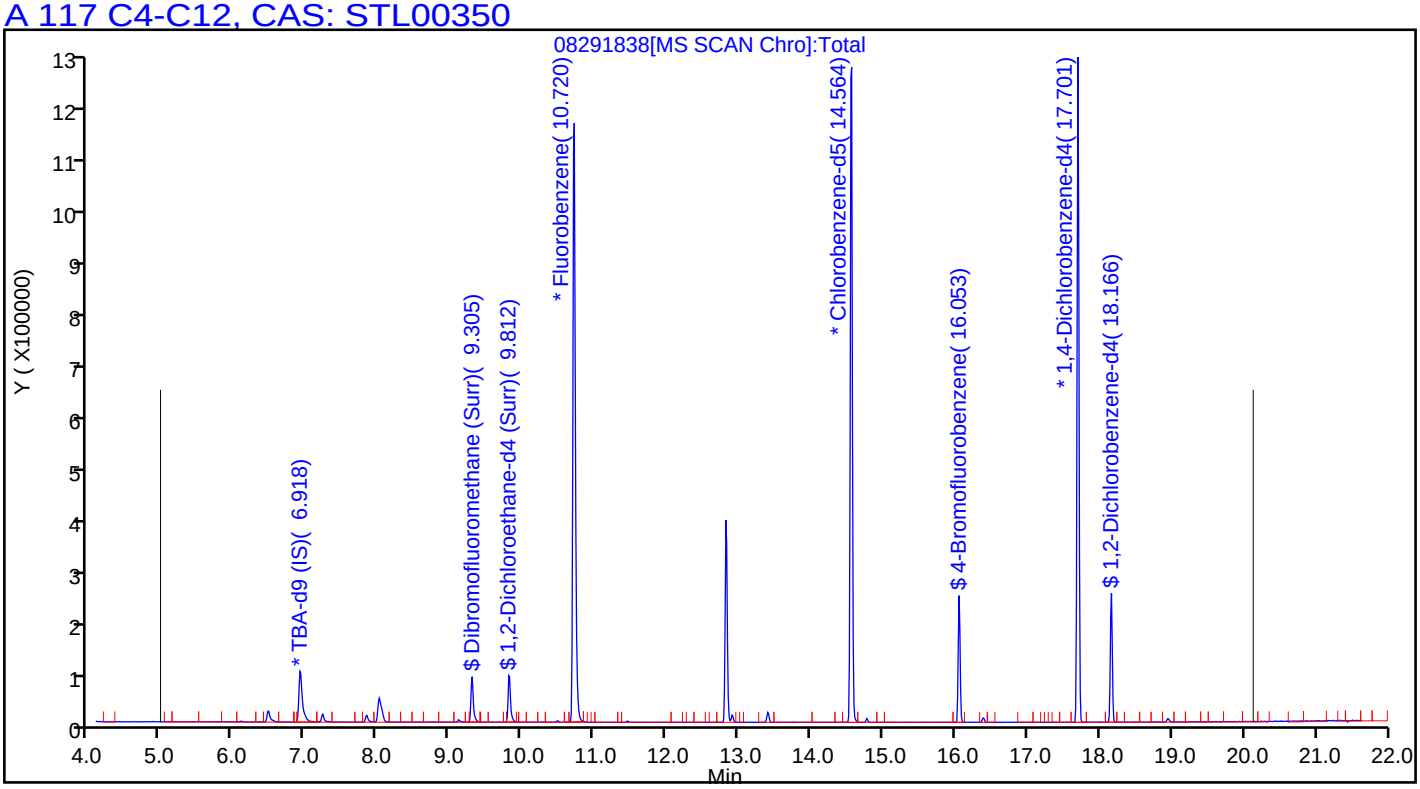
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.22	109.59
$ 10 Toluene-d8 (Surr)	7.50	6.99	93.26
$ 11 4-Bromofluorobenzene	7.50	6.95	92.65
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 31-Aug-2018 09:10:27 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291838.D				
Injection Date:	29-Aug-2018 23:46:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-A-4-A	Lab Sample ID:	720-88239-4		
Client ID:	DG-E7S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-E7S-3.5-4
Lab Sample ID: 720-88239-5
Matrix: Solid
Lab File ID: 09041809.D
Analysis Method: 8260B
Date Collected: 08/24/2018 08:25
Sample wt/vol: 5.27(g)
Date Analyzed: 09/04/2018 11:25
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250755
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.7	1.1
67-64-1	Acetone	ND		47	36
71-43-2	Benzene	ND		4.7	0.62
75-27-4	Dichlorobromomethane	ND		4.7	0.68
108-86-1	Bromobenzene	ND		4.7	0.75
74-97-5	Chlorobromomethane	ND		19	0.68
75-25-2	Bromoform	ND		4.7	1.9
74-83-9	Bromomethane	ND		9.5	0.75
78-93-3	2-Butanone (MEK)	ND		47	20
104-51-8	n-Butylbenzene	ND		4.7	0.95
135-98-8	sec-Butylbenzene	ND		4.7	0.68
98-06-6	tert-Butylbenzene	ND		4.7	0.69
75-15-0	Carbon disulfide	ND		4.7	1.9
56-23-5	Carbon tetrachloride	ND		4.7	0.59
108-90-7	Chlorobenzene	ND		4.7	0.65
75-00-3	Chloroethane	ND		9.5	0.53
67-66-3	Chloroform	ND		4.7	0.63
74-87-3	Chloromethane	ND		9.5	0.75
95-49-8	2-Chlorotoluene	ND		4.7	0.62
106-43-4	4-Chlorotoluene	ND		4.7	0.65
124-48-1	Chlorodibromomethane	ND		4.7	0.67
95-50-1	1,2-Dichlorobenzene	ND		4.7	0.65
541-73-1	1,3-Dichlorobenzene	ND		4.7	0.68
106-46-7	1,4-Dichlorobenzene	ND		4.7	0.67
142-28-9	1,3-Dichloropropane	ND		4.7	0.69
563-58-6	1,1-Dichloropropene	ND		4.7	0.65
96-12-8	1,2-Dibromo-3-Chloropropane	ND		9.5	1.6
106-93-4	Ethylene Dibromide	ND		4.7	1.4
74-95-3	Dibromomethane	ND		9.5	0.82
75-71-8	Dichlorodifluoromethane	ND		9.5	0.75
75-34-3	1,1-Dichloroethane	ND		4.7	0.65
107-06-2	1,2-Dichloroethane	ND		4.7	0.72
75-35-4	1,1-Dichloroethene	ND	*	4.7	0.59
156-59-2	cis-1,2-Dichloroethene	ND		4.7	0.65
156-60-5	trans-1,2-Dichloroethene	ND		4.7	0.71
78-87-5	1,2-Dichloropropane	ND		4.7	0.60

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-E7S-3.5-4
Lab Sample ID: 720-88239-5
Matrix: Solid
Lab File ID: 09041809.D
Analysis Method: 8260B
Date Collected: 08/24/2018 08:25
Sample wt/vol: 5.27(g)
Date Analyzed: 09/04/2018 11:25
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250755
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.7	0.65
10061-02-6	trans-1,3-Dichloropropene	ND		4.7	0.64
100-41-4	Ethylbenzene	ND		4.7	0.71
87-68-3	Hexachlorobutadiene	ND		4.7	0.85
591-78-6	2-Hexanone	ND		47	9.5
98-82-8	Isopropylbenzene	ND		4.7	0.65
99-87-6	4-Isopropyltoluene	ND		4.7	2.4
75-09-2	Methylene Chloride	ND		9.5	5.3
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		47	9.5
91-20-3	Naphthalene	ND		9.5	1.4
103-65-1	N-Propylbenzene	ND		4.7	0.63
100-42-5	Styrene	ND		4.7	0.60
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.7	0.72
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.7	0.71
127-18-4	Tetrachloroethene	ND		4.7	0.64
108-88-3	Toluene	ND		4.7	0.67
87-61-6	1,2,3-Trichlorobenzene	ND		4.7	0.70
120-82-1	1,2,4-Trichlorobenzene	ND		4.7	0.67
71-55-6	1,1,1-Trichloroethane	ND		4.7	0.58
79-00-5	1,1,2-Trichloroethane	ND		4.7	0.66
79-01-6	Trichloroethene	ND		4.7	0.60
75-69-4	Trichlorofluoromethane	ND		4.7	0.53
96-18-4	1,2,3-Trichloropropane	ND		4.7	0.73
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.7	2.0
95-63-6	1,2,4-Trimethylbenzene	ND		4.7	1.6
108-67-8	1,3,5-Trimethylbenzene	ND		4.7	0.62
108-05-4	Vinyl acetate	ND		19	4.7
75-01-4	Vinyl chloride	ND		4.7	0.69
1330-20-7	Xylenes, Total	ND		4.7	1.2
594-20-7	2,2-Dichloropropane	ND		4.7	1.9
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		240	95

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-E7S-3.5-4 Lab Sample ID: 720-88239-5

Matrix: Solid Lab File ID: 09041809.D

Analysis Method: 8260B Date Collected: 08/24/2018 08:25

Sample wt/vol: 5.27(g) Date Analyzed: 09/04/2018 11:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250755 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	91		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		60-140
2037-26-5	Toluene-d8 (Surr)	95		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\09041809.D
Lims ID: 720-88239-D-5-G SLEEVE
Client ID:
Sample Type: Client
Inject. Date: 04-Sep-2018 11:25:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-D-5 SLEEVE
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 04-Sep-2018 14:52:21 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: medinaj Date: 04-Sep-2018 14:53:16

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.917	6.918	-0.001	0	189608	250.0	
* 2 Fluorobenzene	96	10.709	10.709	0.000	99	1287952	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.564	0.000	85	1065454	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	481787	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.304	9.305	0.000	93	80911	7.42	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.812	0.011	0	85521	7.30	
$ 10 Toluene-d8 (Surr)	98	12.821	12.822	0.000	94	363656	7.11	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	92	112792	6.80	
$ 12 1,2-Dichlorobenzene-d4	152	18.165	18.166	-0.001	83	95854	5.69	
28 Acetone	58	6.474	6.474	0.000	97	7896	7.98	
34 Methylene Chloride	84	7.181	7.192	-0.011	91	16539	1.70	
59 Benzene	78	10.487	10.488	0.000	1	315	0.006780	7
107 n-Butylbenzene	91	18.292	18.282	0.010	1	1403	0.0251	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	324267	3.26	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	93223	0.9379	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	109970	1.11	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	491404	4.94	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	118505	NC	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	118505	1.19	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	452432	4.55	
A 120 C6-C12	1	14.400	(8.671-20.130)		0	285642	2.87	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	49720	0.5002	
A 121 C7-C12	1	15.567	(11.005-20.130)		0	225473	2.27	

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

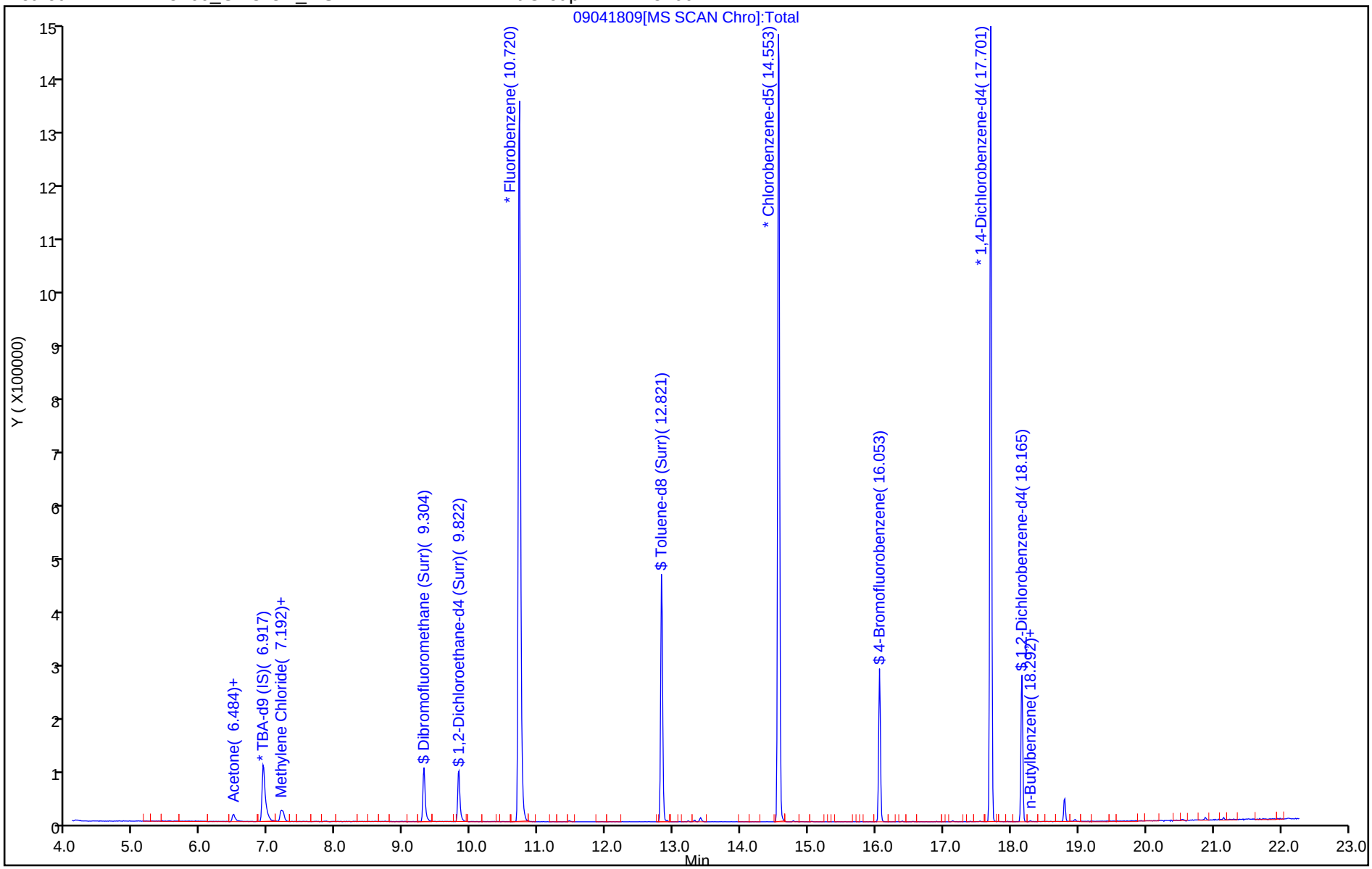
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 04-Sep-2018 14:53:17 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\09041809.D				
Injection Date:	04-Sep-2018 11:25:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88239-D-5-G SLEEVE	Lab Sample ID:	Client 720-250755/9-A	Worklist Smp#:	9
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\09041809.D
Lims ID: 720-88239-D-5-G SLEEVE
Client ID:
Sample Type: Client
Inject. Date: 04-Sep-2018 11:25:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-D-5 SLEEVE
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 04-Sep-2018 14:52:21 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: medinaj Date: 04-Sep-2018 14:53:16

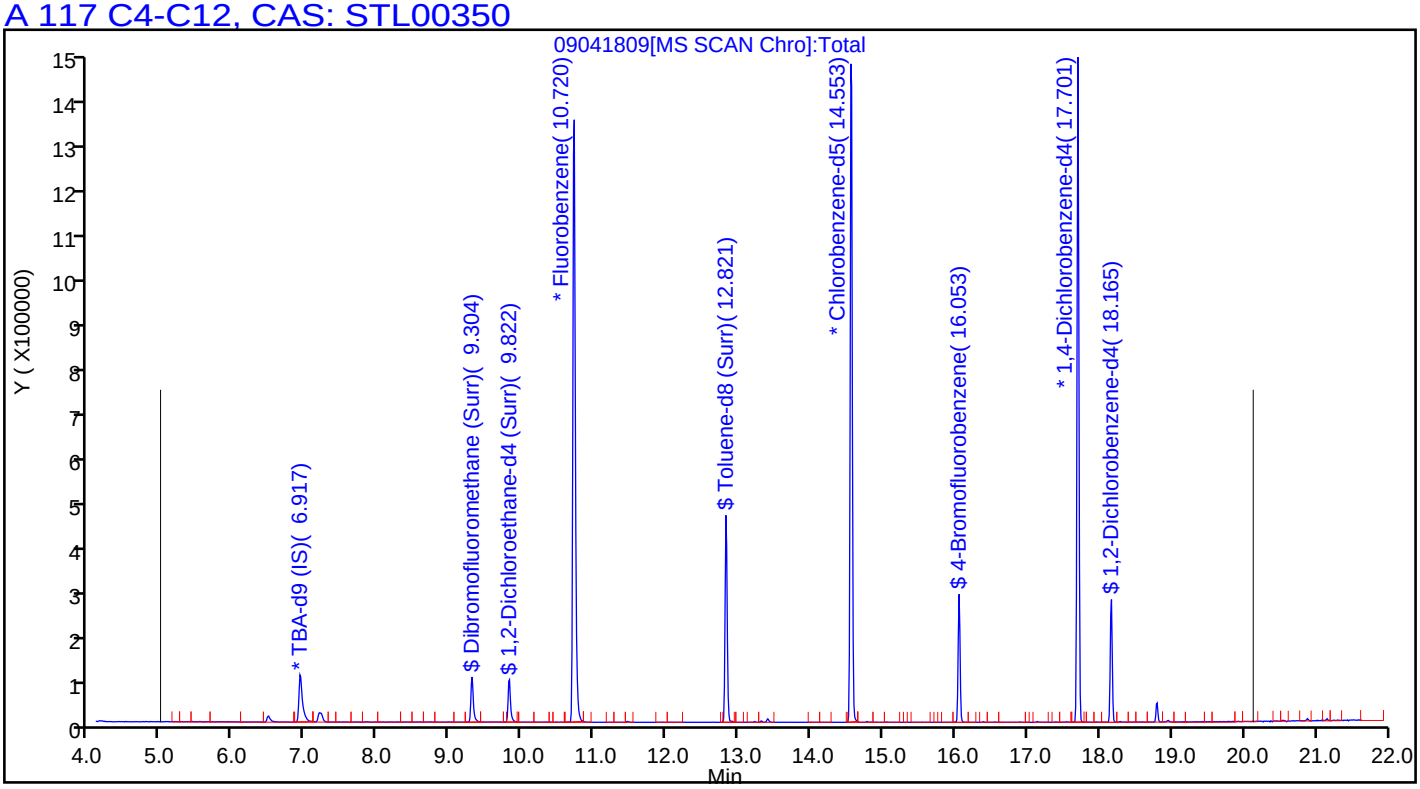
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	7.50	7.42	98.88
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.30	97.29
$ 10 Toluene-d8 (Surr)	7.50	7.11	94.81
$ 11 4-Bromofluorobenzene	7.50	6.80	90.65
$ 12 1,2-Dichlorobenzene-d4	6.00	5.69	94.77

Report Date: 04-Sep-2018 14:53:18 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\09041809.D				
Injection Date:	04-Sep-2018 11:25:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-D-5-G SLEEVE	Lab Sample ID:	Client 720-250755/9-A		
Client ID:					
Operator ID:	VOA	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-E7S-9.5-10 Lab Sample ID: 720-88239-6

Matrix: Solid Lab File ID: 08291840.D

Analysis Method: 8260B Date Collected: 08/24/2018 08:25

Sample wt/vol: 5.483(g) Date Analyzed: 08/30/2018 00:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250528 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.6	1.1
67-64-1	Acetone	ND		46	35
71-43-2	Benzene	ND		4.6	0.59
75-27-4	Dichlorobromomethane	ND		4.6	0.66
108-86-1	Bromobenzene	ND		4.6	0.72
74-97-5	Chlorobromomethane	ND		18	0.66
75-25-2	Bromoform	ND		4.6	1.8
74-83-9	Bromomethane	ND		9.1	0.72
78-93-3	2-Butanone (MEK)	ND		46	19
104-51-8	n-Butylbenzene	ND		4.6	0.91
135-98-8	sec-Butylbenzene	ND		4.6	0.66
98-06-6	tert-Butylbenzene	ND		4.6	0.67
75-15-0	Carbon disulfide	ND		4.6	1.8
56-23-5	Carbon tetrachloride	ND		4.6	0.57
108-90-7	Chlorobenzene	ND		4.6	0.63
75-00-3	Chloroethane	ND		9.1	0.51
67-66-3	Chloroform	ND		4.6	0.60
74-87-3	Chloromethane	ND		9.1	0.72
95-49-8	2-Chlorotoluene	ND		4.6	0.59
106-43-4	4-Chlorotoluene	ND		4.6	0.62
124-48-1	Chlorodibromomethane	ND		4.6	0.65
95-50-1	1,2-Dichlorobenzene	ND		4.6	0.62
541-73-1	1,3-Dichlorobenzene	ND		4.6	0.66
106-46-7	1,4-Dichlorobenzene	ND		4.6	0.65
142-28-9	1,3-Dichloropropane	ND		4.6	0.67
563-58-6	1,1-Dichloropropene	ND		4.6	0.63
96-12-8	1,2-Dibromo-3-Chloropropane	ND		9.1	1.6
106-93-4	Ethylene Dibromide	ND		4.6	1.3
74-95-3	Dibromomethane	ND		9.1	0.78
75-71-8	Dichlorodifluoromethane	ND		9.1	0.72
75-34-3	1,1-Dichloroethane	ND		4.6	0.62
107-06-2	1,2-Dichloroethane	ND		4.6	0.69
75-35-4	1,1-Dichloroethene	ND	*	4.6	0.57
156-59-2	cis-1,2-Dichloroethene	ND		4.6	0.62
156-60-5	trans-1,2-Dichloroethene	ND		4.6	0.68
78-87-5	1,2-Dichloropropane	ND		4.6	0.57

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-E7S-9.5-10 Lab Sample ID: 720-88239-6

Matrix: Solid Lab File ID: 08291840.D

Analysis Method: 8260B Date Collected: 08/24/2018 08:25

Sample wt/vol: 5.483(g) Date Analyzed: 08/30/2018 00:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250528 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.6	0.63
10061-02-6	trans-1,3-Dichloropropene	ND		4.6	0.61
100-41-4	Ethylbenzene	ND		4.6	0.68
87-68-3	Hexachlorobutadiene	ND		4.6	0.82
591-78-6	2-Hexanone	ND		46	9.1
98-82-8	Isopropylbenzene	ND		4.6	0.62
99-87-6	4-Isopropyltoluene	ND		4.6	2.3
75-09-2	Methylene Chloride	ND		9.1	5.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		46	9.1
91-20-3	Naphthalene	ND		9.1	1.4
103-65-1	N-Propylbenzene	ND		4.6	0.60
100-42-5	Styrene	ND		4.6	0.57
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.6	0.69
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.6	0.68
127-18-4	Tetrachloroethene	ND		4.6	0.61
108-88-3	Toluene	0.75	J	4.6	0.65
87-61-6	1,2,3-Trichlorobenzene	ND		4.6	0.67
120-82-1	1,2,4-Trichlorobenzene	ND		4.6	0.65
71-55-6	1,1,1-Trichloroethane	ND		4.6	0.56
79-00-5	1,1,2-Trichloroethane	ND		4.6	0.64
79-01-6	Trichloroethene	ND		4.6	0.57
75-69-4	Trichlorofluoromethane	ND		4.6	0.51
96-18-4	1,2,3-Trichloropropane	ND		4.6	0.70
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.6	1.9
95-63-6	1,2,4-Trimethylbenzene	ND		4.6	1.5
108-67-8	1,3,5-Trimethylbenzene	ND		4.6	0.59
108-05-4	Vinyl acetate	ND		18	4.6
75-01-4	Vinyl chloride	ND		4.6	0.67
1330-20-7	Xylenes, Total	ND		4.6	1.1
594-20-7	2,2-Dichloropropane	ND		4.6	1.8
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		230	91

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-E7S-9.5-10 Lab Sample ID: 720-88239-6

Matrix: Solid Lab File ID: 08291840.D

Analysis Method: 8260B Date Collected: 08/24/2018 08:25

Sample wt/vol: 5.483(g) Date Analyzed: 08/30/2018 00:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250528 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	92		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	113		60-140
2037-26-5	Toluene-d8 (Surr)	93		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291840.D
Lims ID: 720-88239-A-6-A
Client ID: DG-E7S--9.5-10
Sample Type: Client
Inject. Date: 30-Aug-2018 00:43:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-A-6
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 09:10:00 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: sanjumnair Date: 31-Aug-2018 08:53:57

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	177973	250.0	
* 2 Fluorobenzene	96	10.709	10.709	0.000	98	1032381	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.554	0.010	86	841559	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	95	396152	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.305	9.294	0.011	92	69711	7.97	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.812	9.812	0.000	0	79796	8.49	
$ 10 Toluene-d8 (Surr)	98	12.822	12.822	0.000	94	285381	6.96	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	91	90829	6.93	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	84	82515	5.95	
28 Acetone	58	6.474	6.474	0.000	97	14155	17.8	
148 Methyl acetate	43	7.224	7.224	0.000	97	14807	2.08	
144 Ethyl acetate	43	9.115	9.104	0.011	98	315472	28.8	
59 Benzene	78	10.488	10.488	0.000	91	3095	0.0831	
75 Toluene	92	12.906	12.906	0.000	98	11104	0.4103	
131 Butyl Ether	87	14.775	14.775	0.000	93	1930	0.2702	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	940727	11.8	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	521965	6.55	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	568487	7.14	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	1020691	12.8	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	587516	7.37	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	587516	NC	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	987052	12.4	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	667480	8.38	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	102336	1.28	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	187918	2.36	

QC Flag Legend

Processing Flags

NC - Not Calibrated

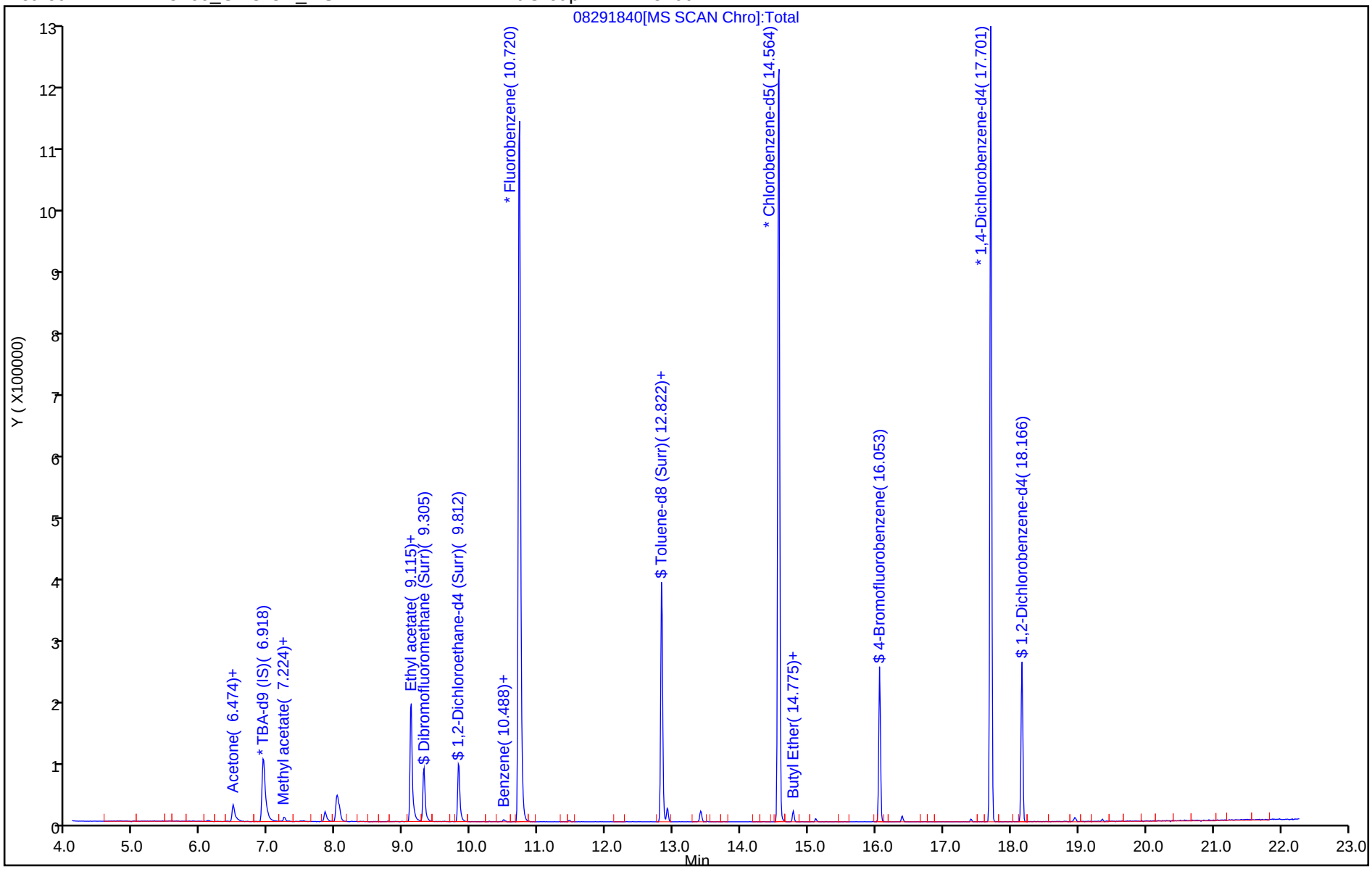
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 09:10:32 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291840.D				
Injection Date:	30-Aug-2018 00:43:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88239-A-6-A	Lab Sample ID:	720-88239-6	Worklist Smp#:	16
Client ID:	DG-E7S--9.5-10				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291840.D
Lims ID: 720-88239-A-6-A
Client ID: DG-E7S--9.5-10
Sample Type: Client
Inject. Date: 30-Aug-2018 00:43:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-A-6
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 09:10:00 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: sanjumnair Date: 31-Aug-2018 08:53:57

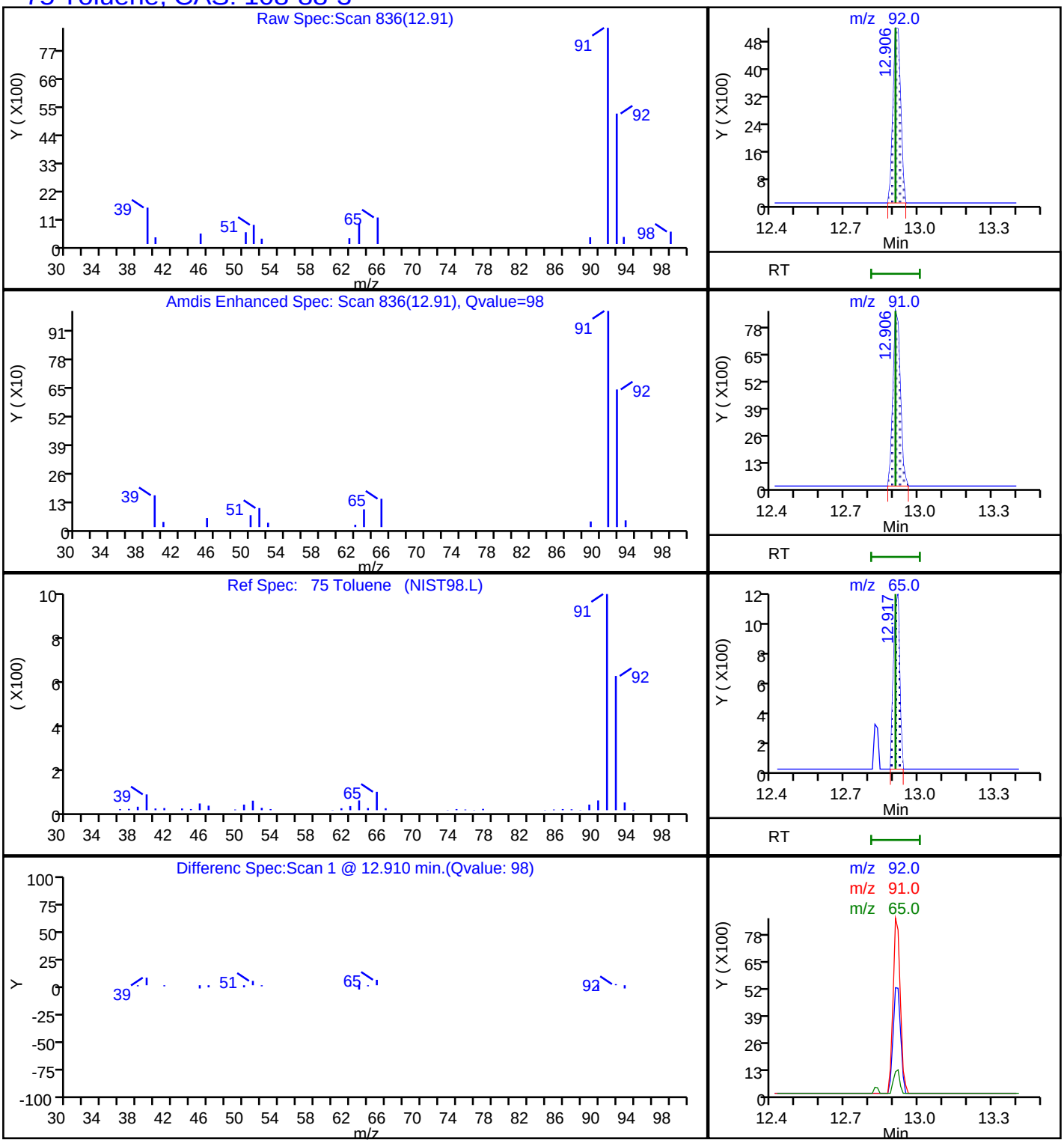
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.49	113.25
$ 10 Toluene-d8 (Surr)	7.50	6.96	92.82
$ 11 4-Bromofluorobenzene	7.50	6.93	92.42
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 31-Aug-2018 09:10:32 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291840.D				
Injection Date:	30-Aug-2018 00:43:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-A-6-A	Lab Sample ID:	720-88239-6		
Client ID:	DG-E7S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

75 Toluene, CAS: 108-88-3

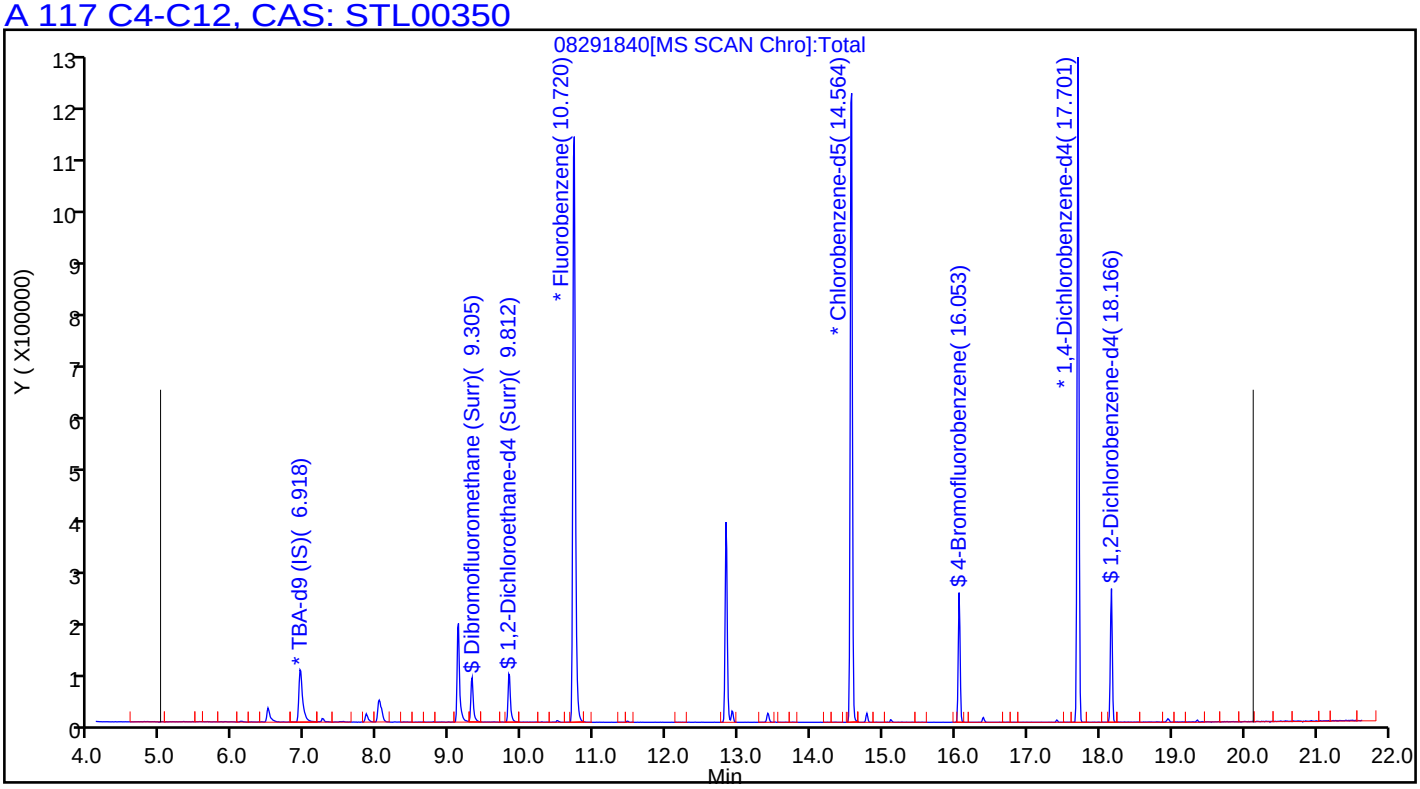


Report Date: 31-Aug-2018 09:10:32 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291840.D				
Injection Date:	30-Aug-2018 00:43:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-A-6-A	Lab Sample ID:	720-88239-6		
Client ID:	DG-E7S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-G7S-0.5-1
Lab Sample ID: 720-88239-7
Matrix: Solid
Lab File ID: 08291841.D
Analysis Method: 8260B
Date Collected: 08/24/2018 08:50
Sample wt/vol: 5.969(g)
Date Analyzed: 08/30/2018 01:12
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250528
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.2	1.0
67-64-1	Acetone	ND		42	32
71-43-2	Benzene	ND		4.2	0.54
75-27-4	Dichlorobromomethane	ND		4.2	0.60
108-86-1	Bromobenzene	ND		4.2	0.66
74-97-5	Chlorobromomethane	ND		17	0.60
75-25-2	Bromoform	ND		4.2	1.7
74-83-9	Bromomethane	ND		8.4	0.66
78-93-3	2-Butanone (MEK)	ND		42	18
104-51-8	n-Butylbenzene	ND		4.2	0.84
135-98-8	sec-Butylbenzene	ND		4.2	0.60
98-06-6	tert-Butylbenzene	ND		4.2	0.61
75-15-0	Carbon disulfide	ND		4.2	1.7
56-23-5	Carbon tetrachloride	ND		4.2	0.52
108-90-7	Chlorobenzene	ND		4.2	0.58
75-00-3	Chloroethane	ND		8.4	0.47
67-66-3	Chloroform	ND		4.2	0.55
74-87-3	Chloromethane	ND		8.4	0.66
95-49-8	2-Chlorotoluene	ND		4.2	0.54
106-43-4	4-Chlorotoluene	ND		4.2	0.57
124-48-1	Chlorodibromomethane	ND		4.2	0.59
95-50-1	1,2-Dichlorobenzene	ND		4.2	0.57
541-73-1	1,3-Dichlorobenzene	ND		4.2	0.60
106-46-7	1,4-Dichlorobenzene	ND		4.2	0.59
142-28-9	1,3-Dichloropropane	ND		4.2	0.61
563-58-6	1,1-Dichloropropene	ND		4.2	0.58
96-12-8	1,2-Dibromo-3-Chloropropane	ND		8.4	1.4
106-93-4	Ethylene Dibromide	ND		4.2	1.2
74-95-3	Dibromomethane	ND		8.4	0.72
75-71-8	Dichlorodifluoromethane	ND		8.4	0.66
75-34-3	1,1-Dichloroethane	ND		4.2	0.57
107-06-2	1,2-Dichloroethane	ND		4.2	0.64
75-35-4	1,1-Dichloroethene	ND	*	4.2	0.52
156-59-2	cis-1,2-Dichloroethene	ND		4.2	0.57
156-60-5	trans-1,2-Dichloroethene	ND		4.2	0.63
78-87-5	1,2-Dichloropropane	ND		4.2	0.53

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-G7S-0.5-1 Lab Sample ID: 720-88239-7

Matrix: Solid Lab File ID: 08291841.D

Analysis Method: 8260B Date Collected: 08/24/2018 08:50

Sample wt/vol: 5.969(g) Date Analyzed: 08/30/2018 01:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250528 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.2	0.58
10061-02-6	trans-1,3-Dichloropropene	ND		4.2	0.56
100-41-4	Ethylbenzene	ND		4.2	0.63
87-68-3	Hexachlorobutadiene	ND		4.2	0.75
591-78-6	2-Hexanone	ND		42	8.4
98-82-8	Isopropylbenzene	ND		4.2	0.57
99-87-6	4-Isopropyltoluene	ND		4.2	2.1
75-09-2	Methylene Chloride	ND		8.4	4.7
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		42	8.4
91-20-3	Naphthalene	ND		8.4	1.3
103-65-1	N-Propylbenzene	ND		4.2	0.55
100-42-5	Styrene	ND		4.2	0.53
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.2	0.64
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.2	0.63
127-18-4	Tetrachloroethene	ND		4.2	0.56
108-88-3	Toluene	0.81	J	4.2	0.59
87-61-6	1,2,3-Trichlorobenzene	ND		4.2	0.62
120-82-1	1,2,4-Trichlorobenzene	ND		4.2	0.59
71-55-6	1,1,1-Trichloroethane	ND		4.2	0.51
79-00-5	1,1,2-Trichloroethane	ND		4.2	0.59
79-01-6	Trichloroethene	ND		4.2	0.53
75-69-4	Trichlorofluoromethane	ND		4.2	0.47
96-18-4	1,2,3-Trichloropropane	ND		4.2	0.64
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.2	1.7
95-63-6	1,2,4-Trimethylbenzene	ND		4.2	1.4
108-67-8	1,3,5-Trimethylbenzene	ND		4.2	0.54
108-05-4	Vinyl acetate	ND		17	4.2
75-01-4	Vinyl chloride	ND		4.2	0.61
1330-20-7	Xylenes, Total	ND		4.2	1.0
594-20-7	2,2-Dichloropropane	ND		4.2	1.7
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		210	84

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-G7S-0.5-1 Lab Sample ID: 720-88239-7

Matrix: Solid Lab File ID: 08291841.D

Analysis Method: 8260B Date Collected: 08/24/2018 08:50

Sample wt/vol: 5.969(g) Date Analyzed: 08/30/2018 01:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250528 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	95		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	118		60-140
2037-26-5	Toluene-d8 (Surr)	93		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291841.D
Lims ID: 720-88239-A-7-A
Client ID: DG-G7S--0.5-1
Sample Type: Client
Inject. Date: 30-Aug-2018 01:12:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-A-7
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 09:10:00 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: sanjumnair Date: 31-Aug-2018 08:55:15

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	190722	250.0	
* 2 Fluorobenzene	96	10.720	10.709	0.011	98	942095	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.554	0.010	86	760572	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	95	355392	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.304	9.294	0.010	92	62986	7.89	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.811	9.812	-0.001	0	76186	8.89	
$ 10 Toluene-d8 (Surr)	98	12.821	12.822	-0.001	95	260961	6.98	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	88	84498	7.13	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	84	75068	6.04	
28 Acetone	58	6.474	6.474	0.000	97	12958	17.9	
148 Methyl acetate	43	7.234	7.224	0.010	99	35936	5.52	
144 Ethyl acetate	43	9.114	9.104	0.010	97	40348	4.04	
59 Benzene	78	10.487	10.488	-0.001	93	4536	0.1335	
75 Toluene	92	12.916	12.906	0.010	97	11804	0.4826	
131 Butyl Ether	87	14.775	14.775	0.000	92	2092	0.3241	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	758370	10.4	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	154158	2.12	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	204658	2.81	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	820565	11.3	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	220894	3.04	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	220894	NC	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	777431	10.7	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	282002	3.88	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	102334	1.41	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	172309	2.37	

QC Flag Legend

Processing Flags

NC - Not Calibrated

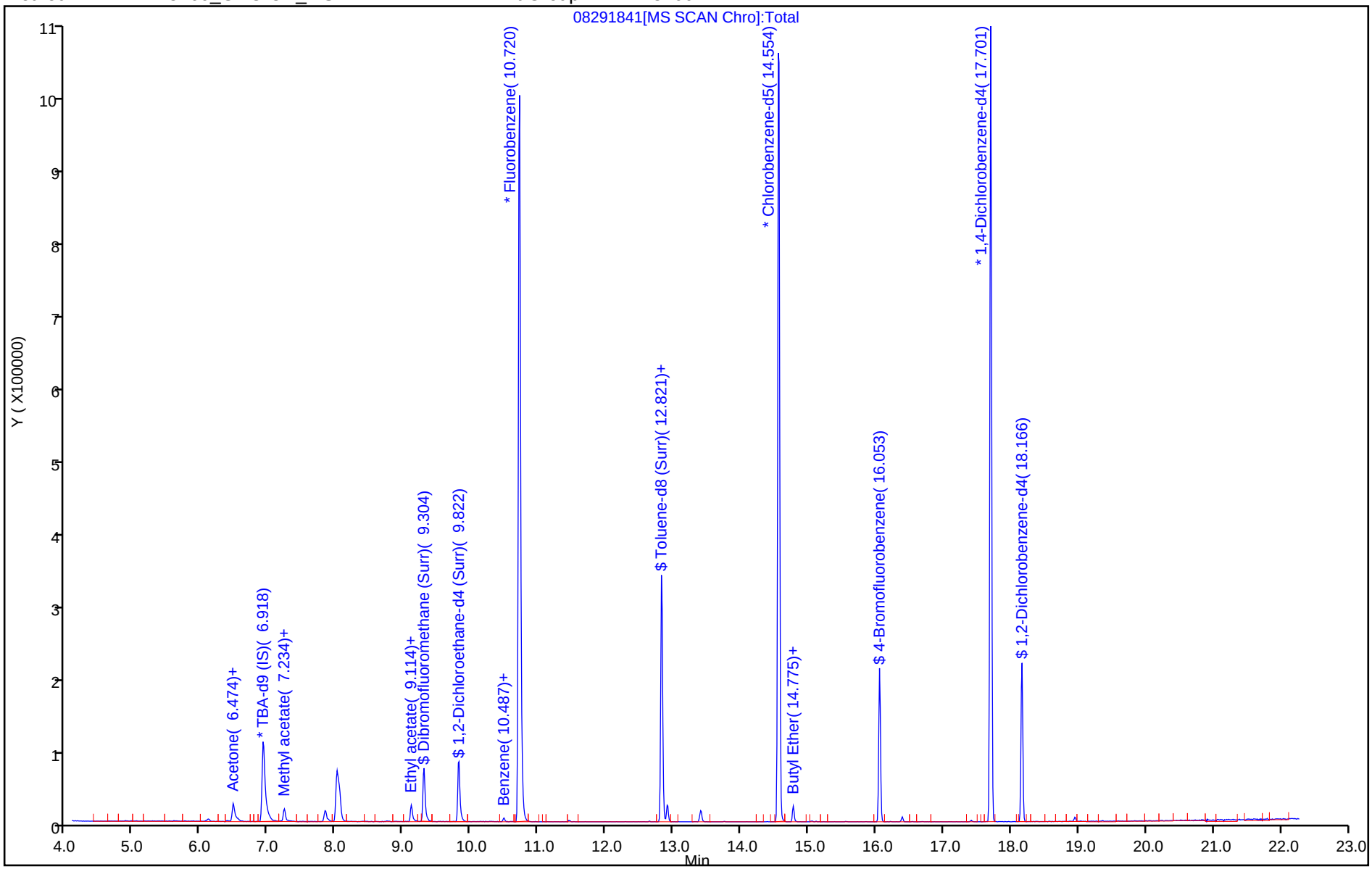
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 09:10:35 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291841.D				
Injection Date:	30-Aug-2018 01:12:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88239-A-7-A	Lab Sample ID:	720-88239-7	Worklist Smp#:	17
Client ID:	DG-G7S--0.5-1				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291841.D
Lims ID: 720-88239-A-7-A
Client ID: DG-G7S--0.5-1
Sample Type: Client
Inject. Date: 30-Aug-2018 01:12:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-A-7
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 09:10:00 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: sanjumnair Date: 31-Aug-2018 08:55:15

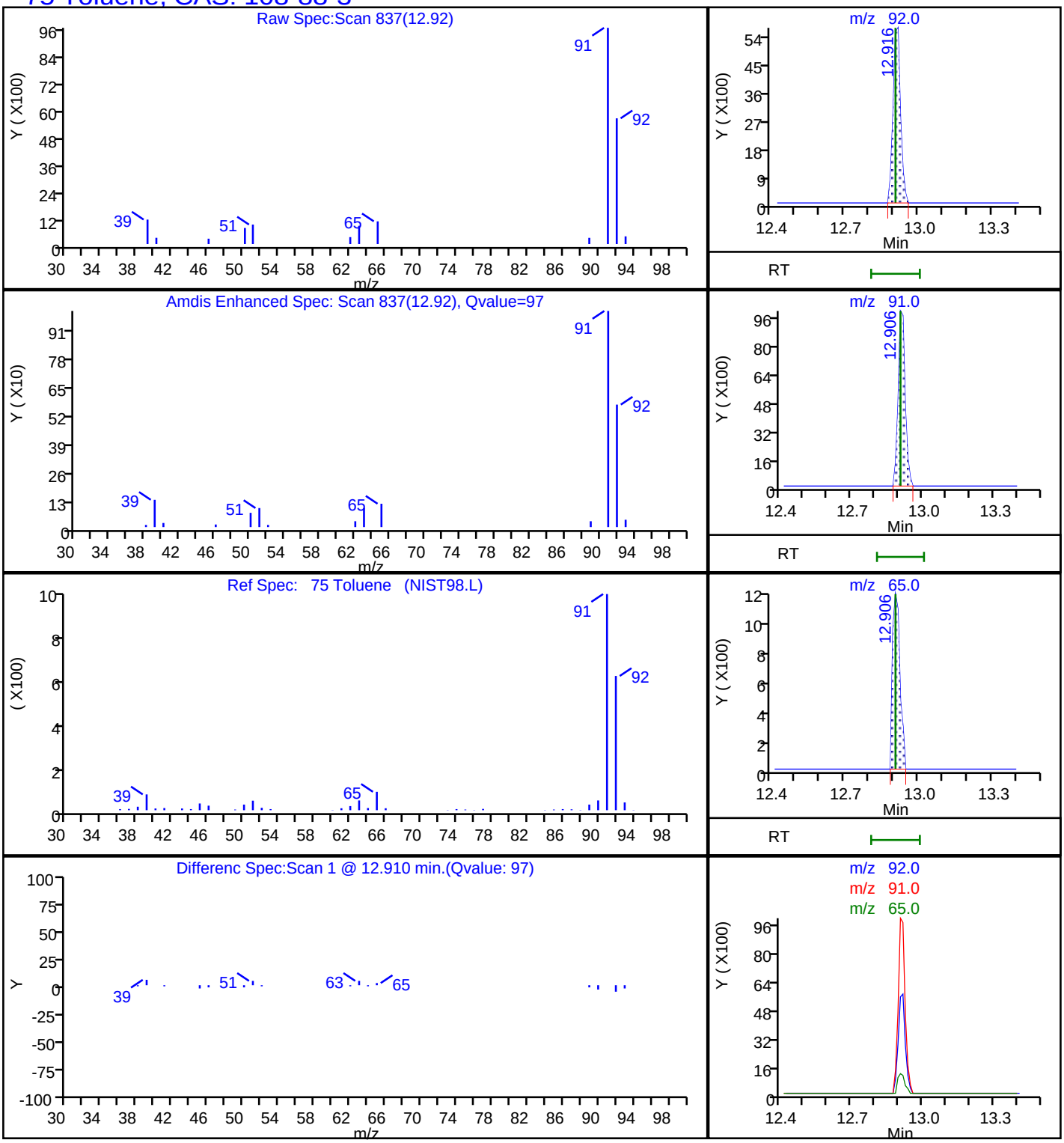
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.89	118.49
$ 10 Toluene-d8 (Surr)	7.50	6.98	93.02
$ 11 4-Bromofluorobenzene	7.50	7.13	95.13
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 31-Aug-2018 09:10:35 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291841.D				
Injection Date:	30-Aug-2018 01:12:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-A-7-A	Lab Sample ID:	720-88239-7		
Client ID:	DG-G7S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

75 Toluene, CAS: 108-88-3

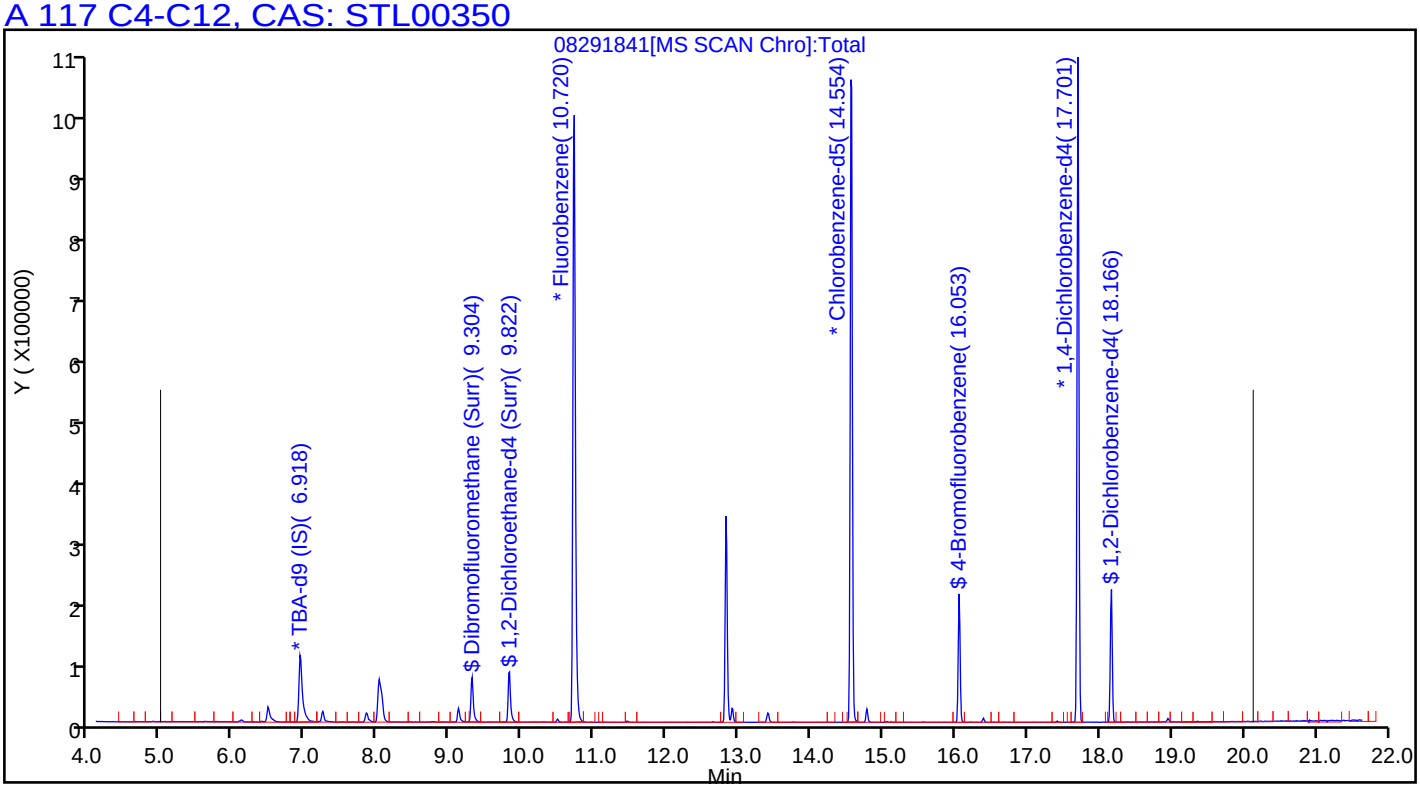


Report Date: 31-Aug-2018 09:10:35 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291841.D				
Injection Date:	30-Aug-2018 01:12:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-A-7-A	Lab Sample ID:	720-88239-7		
Client ID:	DG-G7S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton | Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-G7S-3.5-4 | Lab Sample ID: 720-88239-8
Matrix: Solid | Lab File ID: 08301814.D
Analysis Method: 8260B | Date Collected: 08/24/2018 08:50
Sample wt/vol: 7.156(g) | Date Analyzed: 08/30/2018 13:49
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: DB-VRX ID: 250(um)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 250555 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		3.5	0.84
67-64-1	Acetone	ND		35	27
71-43-2	Benzene	ND		3.5	0.45
75-27-4	Dichlorobromomethane	ND		3.5	0.50
108-86-1	Bromobenzene	ND		3.5	0.55
74-97-5	Chlorobromomethane	ND		14	0.50
75-25-2	Bromoform	ND		3.5	1.4
74-83-9	Bromomethane	ND		7.0	0.55
78-93-3	2-Butanone (MEK)	ND		35	15
104-51-8	n-Butylbenzene	ND		3.5	0.70
135-98-8	sec-Butylbenzene	ND		3.5	0.50
98-06-6	tert-Butylbenzene	ND		3.5	0.51
75-15-0	Carbon disulfide	ND		3.5	1.4
56-23-5	Carbon tetrachloride	ND		3.5	0.43
108-90-7	Chlorobenzene	ND		3.5	0.48
75-00-3	Chloroethane	ND		7.0	0.39
67-66-3	Chloroform	ND		3.5	0.46
74-87-3	Chloromethane	ND		7.0	0.55
95-49-8	2-Chlorotoluene	ND		3.5	0.45
106-43-4	4-Chlorotoluene	ND		3.5	0.48
124-48-1	Chlorodibromomethane	ND		3.5	0.50
95-50-1	1,2-Dichlorobenzene	ND		3.5	0.48
541-73-1	1,3-Dichlorobenzene	ND		3.5	0.50
106-46-7	1,4-Dichlorobenzene	ND		3.5	0.50
142-28-9	1,3-Dichloropropane	ND		3.5	0.51
563-58-6	1,1-Dichloropropene	ND		3.5	0.48
96-12-8	1,2-Dibromo-3-Chloropropane	ND		7.0	1.2
106-93-4	Ethylene Dibromide	ND		3.5	1.0
74-95-3	Dibromomethane	ND		7.0	0.60
75-71-8	Dichlorodifluoromethane	ND		7.0	0.55
75-34-3	1,1-Dichloroethane	ND		3.5	0.48
107-06-2	1,2-Dichloroethane	ND		3.5	0.53
75-35-4	1,1-Dichloroethene	ND	*	3.5	0.43
156-59-2	cis-1,2-Dichloroethene	2.8	J	3.5	0.48
156-60-5	trans-1,2-Dichloroethene	ND		3.5	0.52
78-87-5	1,2-Dichloropropane	ND		3.5	0.44

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-G7S-3.5-4 Lab Sample ID: 720-88239-8

Matrix: Solid Lab File ID: 08301814.D

Analysis Method: 8260B Date Collected: 08/24/2018 08:50

Sample wt/vol: 7.156(g) Date Analyzed: 08/30/2018 13:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250555 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		3.5	0.48
10061-02-6	trans-1,3-Dichloropropene	ND		3.5	0.47
100-41-4	Ethylbenzene	ND		3.5	0.52
87-68-3	Hexachlorobutadiene	ND		3.5	0.63
591-78-6	2-Hexanone	ND		35	7.0
98-82-8	Isopropylbenzene	ND		3.5	0.48
99-87-6	4-Isopropyltoluene	ND		3.5	1.7
75-09-2	Methylene Chloride	ND		7.0	3.9
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		35	7.0
91-20-3	Naphthalene	ND		7.0	1.0
103-65-1	N-Propylbenzene	ND		3.5	0.46
100-42-5	Styrene	ND		3.5	0.44
630-20-6	1,1,1,2-Tetrachloroethane	ND		3.5	0.53
79-34-5	1,1,2,2-Tetrachloroethane	ND		3.5	0.52
127-18-4	Tetrachloroethene	1.8	J	3.5	0.47
108-88-3	Toluene	ND		3.5	0.50
87-61-6	1,2,3-Trichlorobenzene	ND		3.5	0.52
120-82-1	1,2,4-Trichlorobenzene	ND		3.5	0.50
71-55-6	1,1,1-Trichloroethane	ND		3.5	0.43
79-00-5	1,1,2-Trichloroethane	ND		3.5	0.49
79-01-6	Trichloroethene	31		3.5	0.44
75-69-4	Trichlorofluoromethane	ND		3.5	0.39
96-18-4	1,2,3-Trichloropropane	ND		3.5	0.54
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	3.5	1.5
95-63-6	1,2,4-Trimethylbenzene	ND		3.5	1.1
108-67-8	1,3,5-Trimethylbenzene	ND		3.5	0.45
108-05-4	Vinyl acetate	ND		14	3.5
75-01-4	Vinyl chloride	ND		3.5	0.51
1330-20-7	Xylenes, Total	ND		3.5	0.85
594-20-7	2,2-Dichloropropane	ND		3.5	1.4
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		170	70

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-G7S-3.5-4 Lab Sample ID: 720-88239-8

Matrix: Solid Lab File ID: 08301814.D

Analysis Method: 8260B Date Collected: 08/24/2018 08:50

Sample wt/vol: 7.156(g) Date Analyzed: 08/30/2018 13:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250555 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	88		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		60-140
2037-26-5	Toluene-d8 (Surr)	93		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\08301814.D
Lims ID: 720-88239-B-8-A RR
Client ID:
Sample Type: Client
Inject. Date: 30-Aug-2018 13:49:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-B-8 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:44:08 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: sanjumnair Date: 31-Aug-2018 08:22:45

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	170060	250.0	
* 2 Fluorobenzene	96	10.709	10.709	0.000	98	999608	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.564	0.000	86	774692	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	316405	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.305	9.294	0.010	93	69069	8.16	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.812	0.010	0	75408	8.29	
$ 10 Toluene-d8 (Surr)	98	12.821	12.822	-0.001	95	275758	6.95	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	90	79301	6.57	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.176	0.000	84	68473	6.18	
28 Acetone	58	6.474	6.474	0.000	97	12523	16.3	
148 Methyl acetate	43	7.234	7.224	0.010	99	69981	10.1	
48 cis-1,2-Dichloroethene	61	8.924	8.924	0.000	84	31603	1.97	
144 Ethyl acetate	43	9.114	9.104	0.010	98	101128	9.55	
59 Benzene	78	10.487	10.488	-0.001	89	2925	0.0811	
65 Trichloroethene	132	11.206	11.206	0.000	93	245750	22.1	
75 Toluene	92	12.906	12.906	0.000	98	5647	0.2267	
81 Tetrachloroethene	164	13.783	13.793	-0.010	92	11087	1.28	
131 Butyl Ether	87	14.775	14.776	0.000	94	717	0.1090	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	2145359	27.8	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	1567313	20.3	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	1678567	21.8	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	2229626	28.9	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	1693486	NC	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	1693486	22.0	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	2152695	27.9	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	1777753	23.0	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	153264	1.99	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	1499011	19.4	

QC Flag Legend

Processing Flags

NC - Not Calibrated

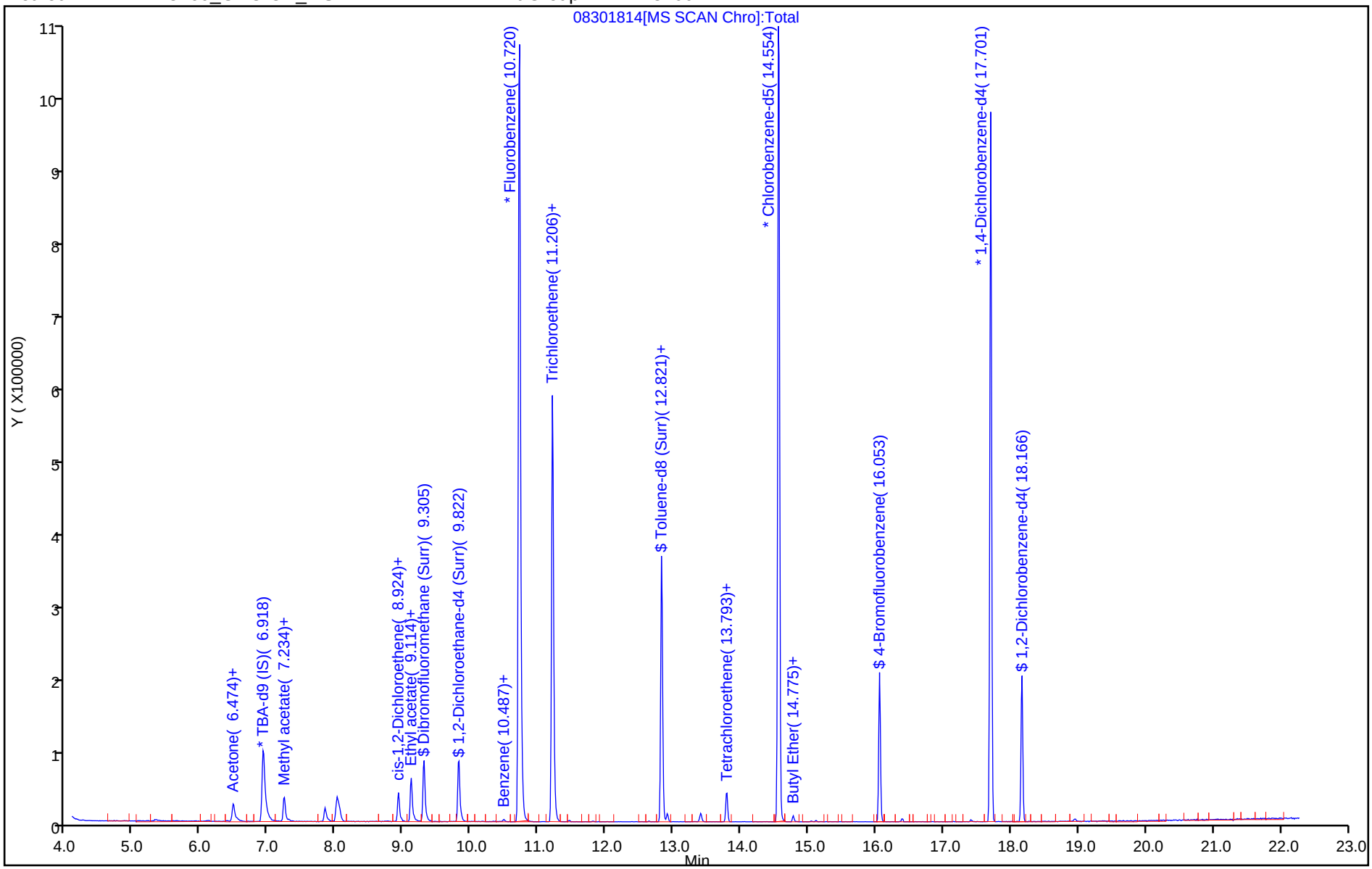
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 09:29:01 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\08301814.D				
Injection Date:	30-Aug-2018 13:49:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88239-B-8-A RR	Lab Sample ID:	Client 720-250555/14-A	Worklist Smp#:	14
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\08301814.D
Lims ID: 720-88239-B-8-A RR
Client ID:
Sample Type: Client
Inject. Date: 30-Aug-2018 13:49:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-B-8 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:44:08 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: sanjumnair Date: 31-Aug-2018 08:22:45

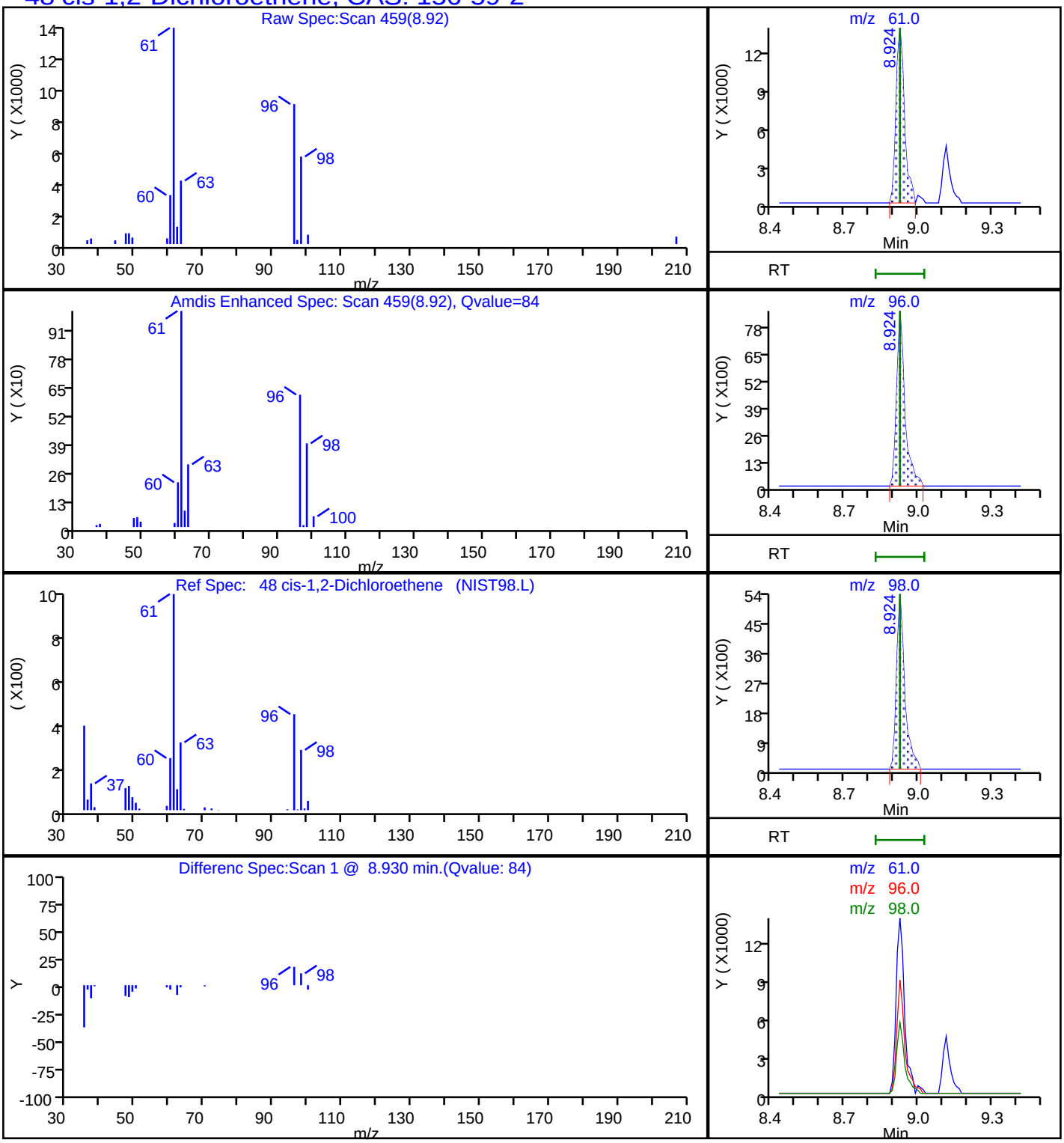
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	7.50	8.16	108.76
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.29	110.53
$ 10 Toluene-d8 (Surr)	7.50	6.95	92.64
$ 11 4-Bromofluorobenzene	7.50	6.57	87.65
$ 12 1,2-Dichlorobenzene-d4	6.00	6.18	103.08

Report Date: 31-Aug-2018 09:29:03 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\08301814.D				
Injection Date:	30-Aug-2018 13:49:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-B-8-A RR	Lab Sample ID:	Client 720-250555/14-A		
Client ID:					
Operator ID:	VOA	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

48 cis-1,2-Dichloroethene, CAS: 156-59-2

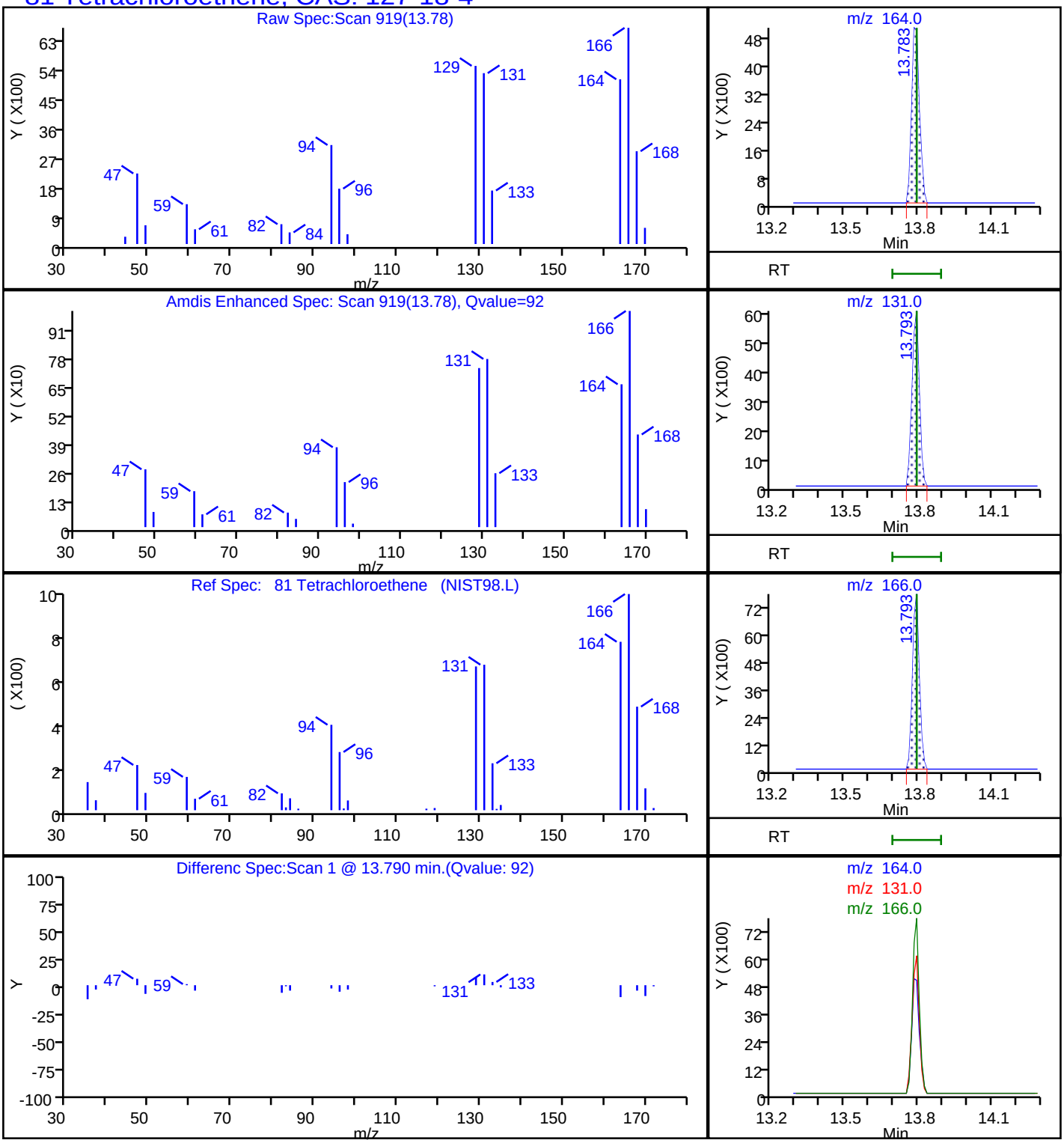


Report Date: 31-Aug-2018 09:29:05 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\08301814.D				
Injection Date:	30-Aug-2018 13:49:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-B-8-A RR	Lab Sample ID:	Client 720-250555/14-A		
Client ID:					
Operator ID:	VOA	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

81 Tetrachloroethene, CAS: 127-18-4

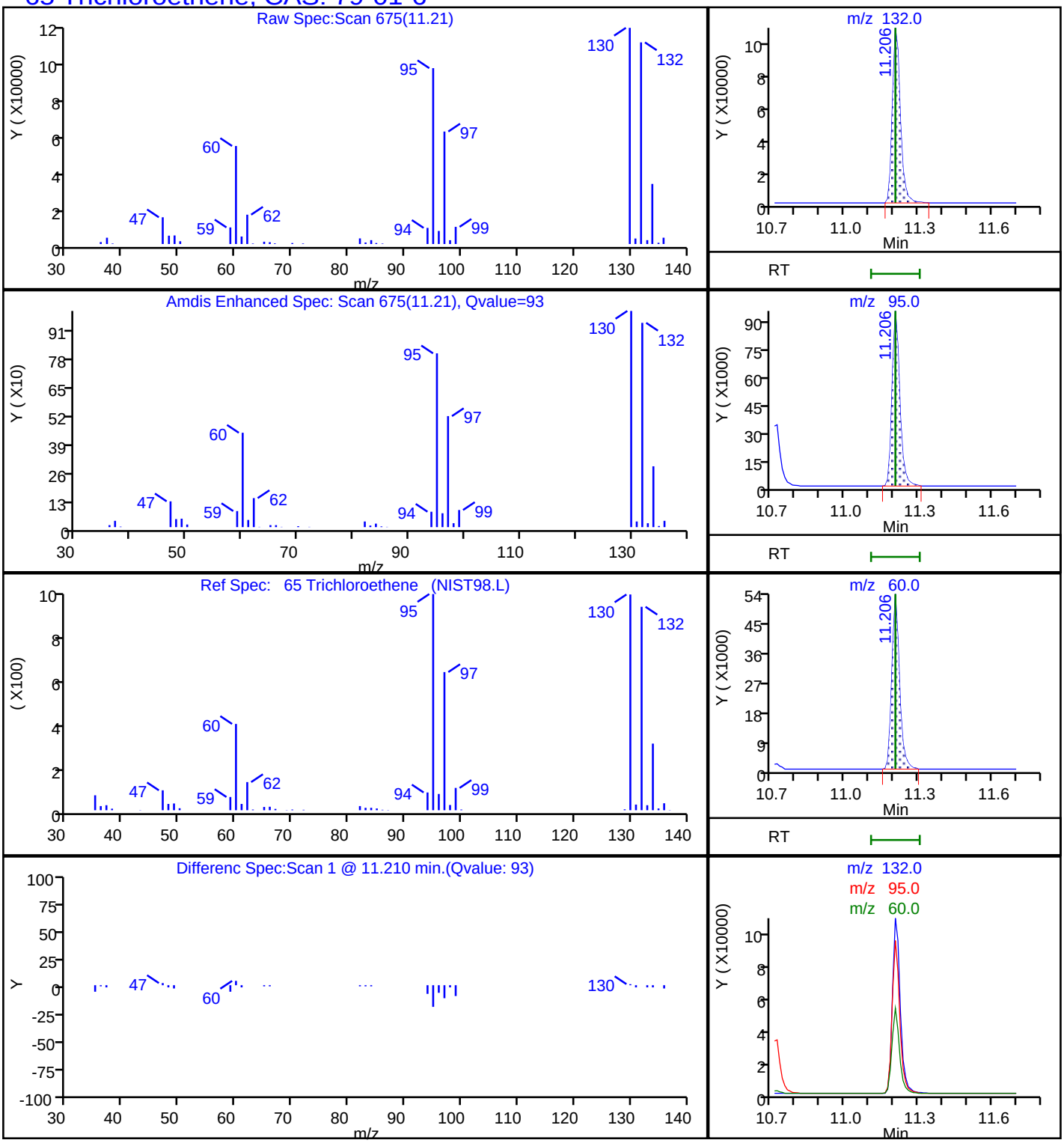


Report Date: 31-Aug-2018 09:29:04 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\08301814.D				
Injection Date:	30-Aug-2018 13:49:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-B-8-A RR	Lab Sample ID:	Client 720-250555/14-A		
Client ID:					
Operator ID:	VOA	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

65 Trichloroethene, CAS: 79-01-6

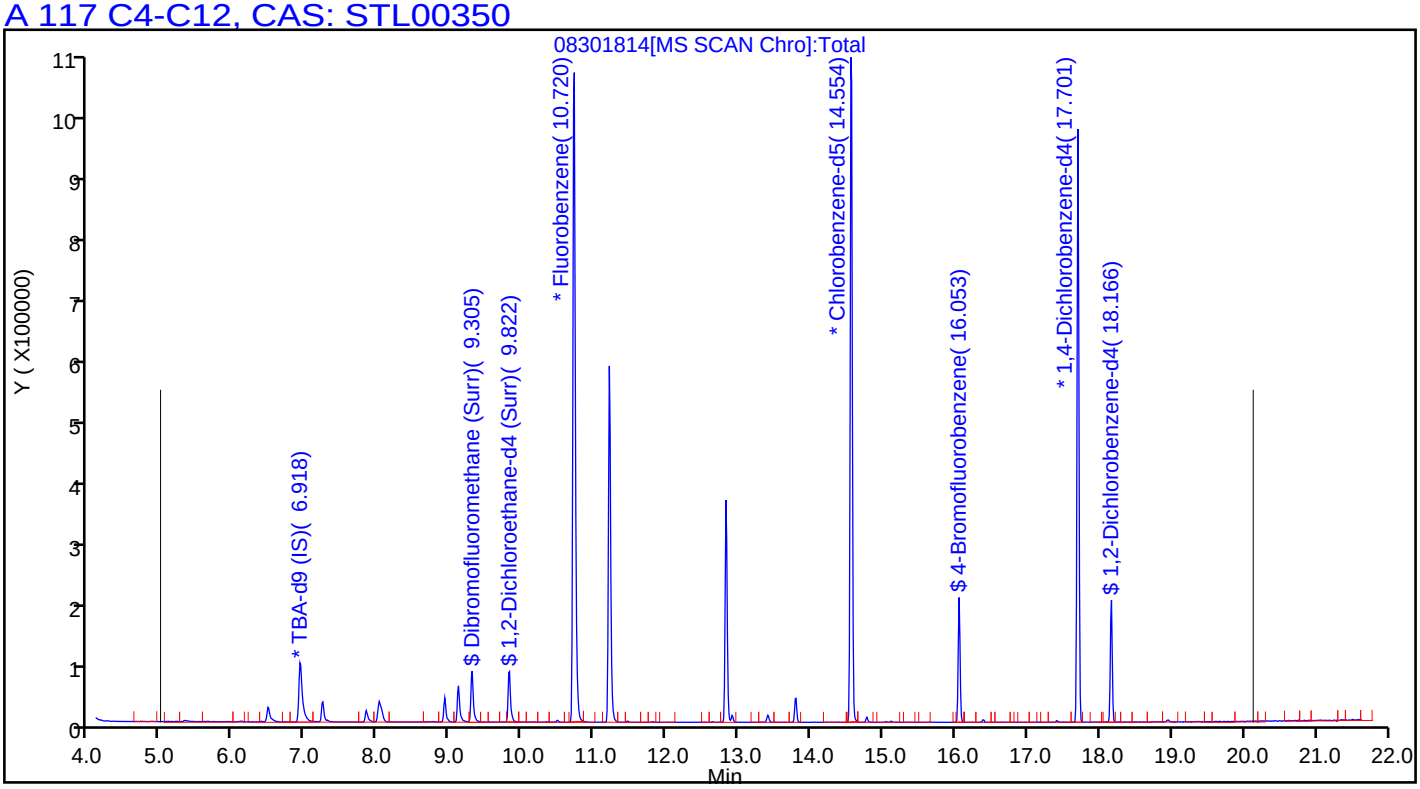


Report Date: 31-Aug-2018 09:29:05 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\08301814.D				
Injection Date:	30-Aug-2018 13:49:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-B-8-A RR	Lab Sample ID:	Client 720-250555/14-A		
Client ID:					
Operator ID:	VOA	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



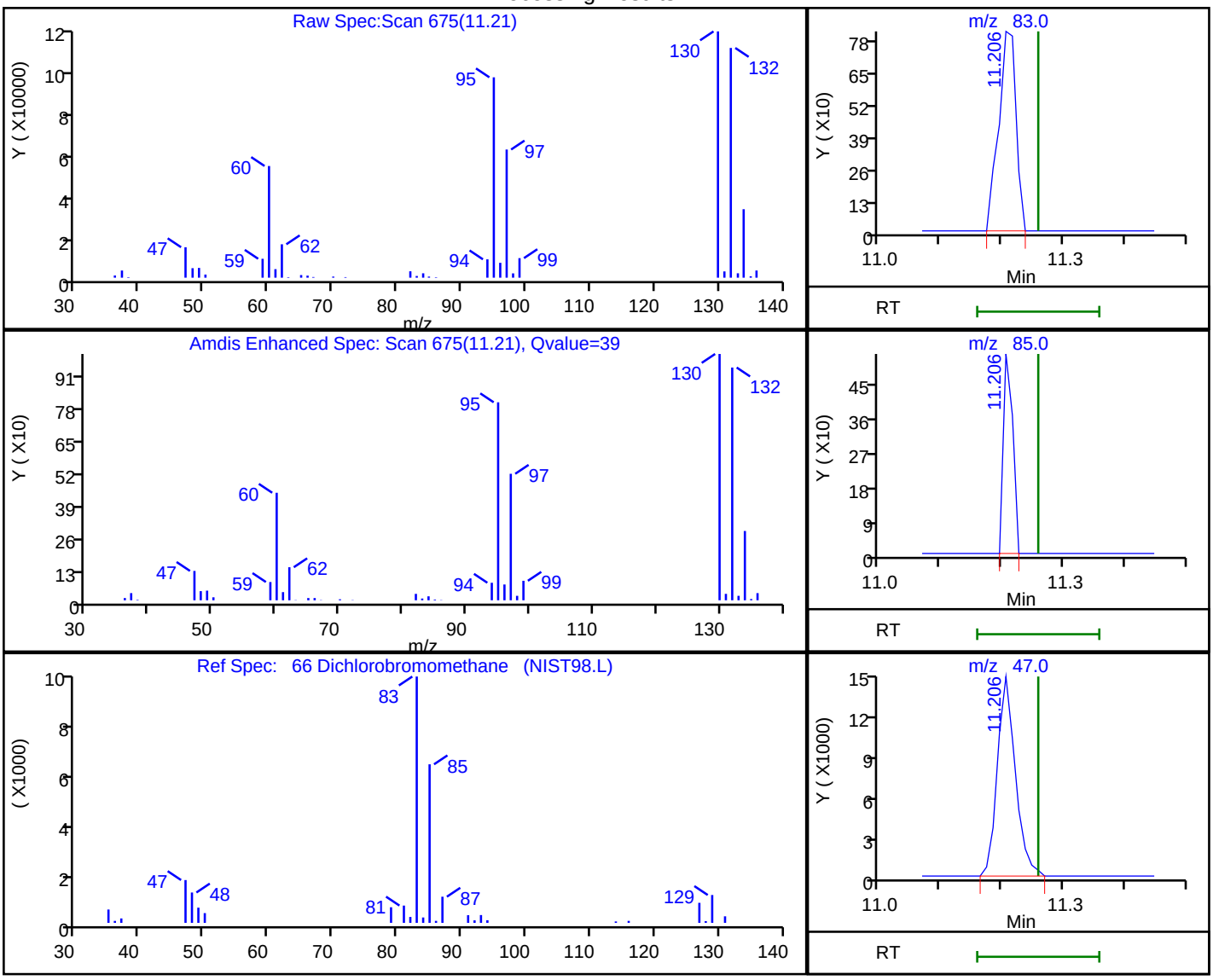
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\08301814.D				
Injection Date:	30-Aug-2018 13:49:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-B-8-A RR	Lab Sample ID:	Client 720-250555/14-A		
Client ID:					
Operator ID:	VOA	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

66 Dichlorobromomethane, CAS: 75-27-4

Processing Results



RT	Mass	Response	Amount
11.21	83.00	1612	0.146489
11.21	85.00	561	
11.21	47.00	29897	

Reviewer: sanjumnair, 31-Aug-2018 08:21:48

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton | Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-B10S-0.5-1 | Lab Sample ID: 720-88239-9
Matrix: Solid | Lab File ID: 08301815.D
Analysis Method: 8260B | Date Collected: 08/24/2018 10:40
Sample wt/vol: 5.341(g) | Date Analyzed: 08/30/2018 14:18
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: DB-VRX ID: 250(um)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 250555 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.7	1.1
67-64-1	Acetone	ND		47	36
71-43-2	Benzene	ND		4.7	0.61
75-27-4	Dichlorobromomethane	ND		4.7	0.67
108-86-1	Bromobenzene	ND	*	4.7	0.74
74-97-5	Chlorobromomethane	ND		19	0.67
75-25-2	Bromoform	ND	*	4.7	1.9
74-83-9	Bromomethane	ND		9.4	0.74
78-93-3	2-Butanone (MEK)	ND		47	20
104-51-8	n-Butylbenzene	ND	*	4.7	0.94
135-98-8	sec-Butylbenzene	ND	*	4.7	0.67
98-06-6	tert-Butylbenzene	ND	*	4.7	0.68
75-15-0	Carbon disulfide	ND		4.7	1.9
56-23-5	Carbon tetrachloride	ND		4.7	0.58
108-90-7	Chlorobenzene	ND	*	4.7	0.65
75-00-3	Chloroethane	ND		9.4	0.52
67-66-3	Chloroform	ND		4.7	0.62
74-87-3	Chloromethane	ND		9.4	0.74
95-49-8	2-Chlorotoluene	ND	*	4.7	0.61
106-43-4	4-Chlorotoluene	ND	*	4.7	0.64
124-48-1	Chlorodibromomethane	ND		4.7	0.66
95-50-1	1,2-Dichlorobenzene	ND	*	4.7	0.64
541-73-1	1,3-Dichlorobenzene	ND	*	4.7	0.67
106-46-7	1,4-Dichlorobenzene	ND	*	4.7	0.66
142-28-9	1,3-Dichloropropane	ND		4.7	0.68
563-58-6	1,1-Dichloropropene	ND		4.7	0.65
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	9.4	1.6
106-93-4	Ethylene Dibromide	ND		4.7	1.3
74-95-3	Dibromomethane	ND		9.4	0.81
75-71-8	Dichlorodifluoromethane	ND		9.4	0.74
75-34-3	1,1-Dichloroethane	ND		4.7	0.64
107-06-2	1,2-Dichloroethane	ND		4.7	0.71
75-35-4	1,1-Dichloroethene	ND	*	4.7	0.58
156-59-2	cis-1,2-Dichloroethene	ND		4.7	0.64
156-60-5	trans-1,2-Dichloroethene	ND		4.7	0.70
78-87-5	1,2-Dichloropropane	ND		4.7	0.59

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-B10S-0.5-1 Lab Sample ID: 720-88239-9

Matrix: Solid Lab File ID: 08301815.D

Analysis Method: 8260B Date Collected: 08/24/2018 10:40

Sample wt/vol: 5.341(g) Date Analyzed: 08/30/2018 14:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250555 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.7	0.65
10061-02-6	trans-1,3-Dichloropropene	ND		4.7	0.63
100-41-4	Ethylbenzene	ND	*	4.7	0.70
87-68-3	Hexachlorobutadiene	ND	*	4.7	0.84
591-78-6	2-Hexanone	ND		47	9.4
98-82-8	Isopropylbenzene	ND	*	4.7	0.64
99-87-6	4-Isopropyltoluene	ND	*	4.7	2.3
75-09-2	Methylene Chloride	ND		9.4	5.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		47	9.4
91-20-3	Naphthalene	ND	*	9.4	1.4
103-65-1	N-Propylbenzene	ND	*	4.7	0.62
100-42-5	Styrene	ND	*	4.7	0.59
630-20-6	1,1,1,2-Tetrachloroethane	ND	*	4.7	0.71
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	4.7	0.70
127-18-4	Tetrachloroethene	ND		4.7	0.63
108-88-3	Toluene	ND	*	4.7	0.66
87-61-6	1,2,3-Trichlorobenzene	ND	*	4.7	0.69
120-82-1	1,2,4-Trichlorobenzene	ND	*	4.7	0.66
71-55-6	1,1,1-Trichloroethane	ND		4.7	0.57
79-00-5	1,1,2-Trichloroethane	ND		4.7	0.66
79-01-6	Trichloroethene	ND		4.7	0.59
75-69-4	Trichlorofluoromethane	ND		4.7	0.52
96-18-4	1,2,3-Trichloropropane	ND	*	4.7	0.72
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.7	1.9
95-63-6	1,2,4-Trimethylbenzene	ND	*	4.7	1.5
108-67-8	1,3,5-Trimethylbenzene	ND	*	4.7	0.61
108-05-4	Vinyl acetate	ND		19	4.7
75-01-4	Vinyl chloride	ND		4.7	0.68
1330-20-7	Xylenes, Total	ND		4.7	1.1
594-20-7	2,2-Dichloropropane	ND		4.7	1.9
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		230	94

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-B10S-0.5-1 Lab Sample ID: 720-88239-9

Matrix: Solid Lab File ID: 08301815.D

Analysis Method: 8260B Date Collected: 08/24/2018 10:40

Sample wt/vol: 5.341(g) Date Analyzed: 08/30/2018 14:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250555 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	68	*	45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	123		60-140
2037-26-5	Toluene-d8 (Surr)	85		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\08301815.D
Lims ID: 720-88239-B-9-A RR
Client ID:
Sample Type: Client
Inject. Date: 30-Aug-2018 14:18:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-B-9 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:44:08 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: sanjumnair Date: 31-Aug-2018 08:24:16

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	168956	250.0	
* 2 Fluorobenzene	96	10.720	10.709	0.011	98	858950	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.564	0.000	86	511849	25.0	s
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	95	124437	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.305	9.294	0.011	91	62387	8.57	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.812	0.010	0	71990	9.21	
$ 10 Toluene-d8 (Surr)	98	12.822	12.822	0.000	94	216456	6.35	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	91	40480	5.08	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.176	0.000	82	26702	6.13	
28 Acetone	58	6.474	6.474	0.000	97	7717	11.7	
59 Benzene	78	10.487	10.488	-0.001	92	5609	0.1810	
75 Toluene	92	12.906	12.906	0.000	98	4780	0.2904	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	529135	7.98	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	91759	1.38	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	107969	1.63	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	591599	8.92	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	156857	NC	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	156857	2.37	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	549878	8.29	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	219321	3.31	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	95483	1.44	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	168164	2.54	

QC Flag Legend

Processing Flags

NC - Not Calibrated

s - Failed ISTD Recovery Test

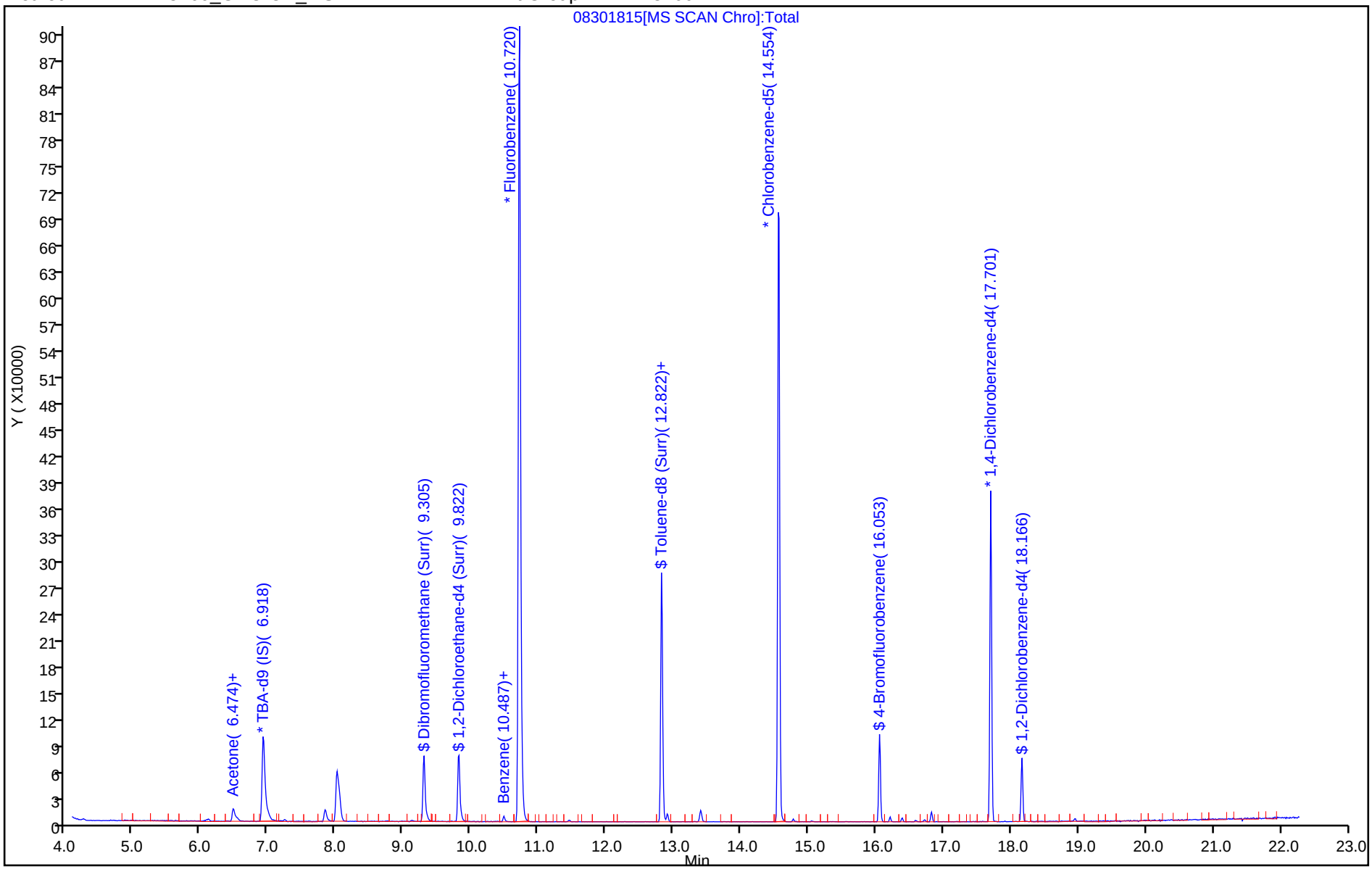
Reagents:

I_IS/SS_00092	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 31-Aug-2018 09:29:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\08301815.D				
Injection Date:	30-Aug-2018 14:18:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88239-B-9-A RR	Lab Sample ID:	Client 720-250555/15-A	Worklist Smp#:	15
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\08301815.D
Lims ID: 720-88239-B-9-A RR
Client ID:
Sample Type: Client
Inject. Date: 30-Aug-2018 14:18:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-B-9 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:44:08 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: sanjumnair Date: 31-Aug-2018 08:24:16

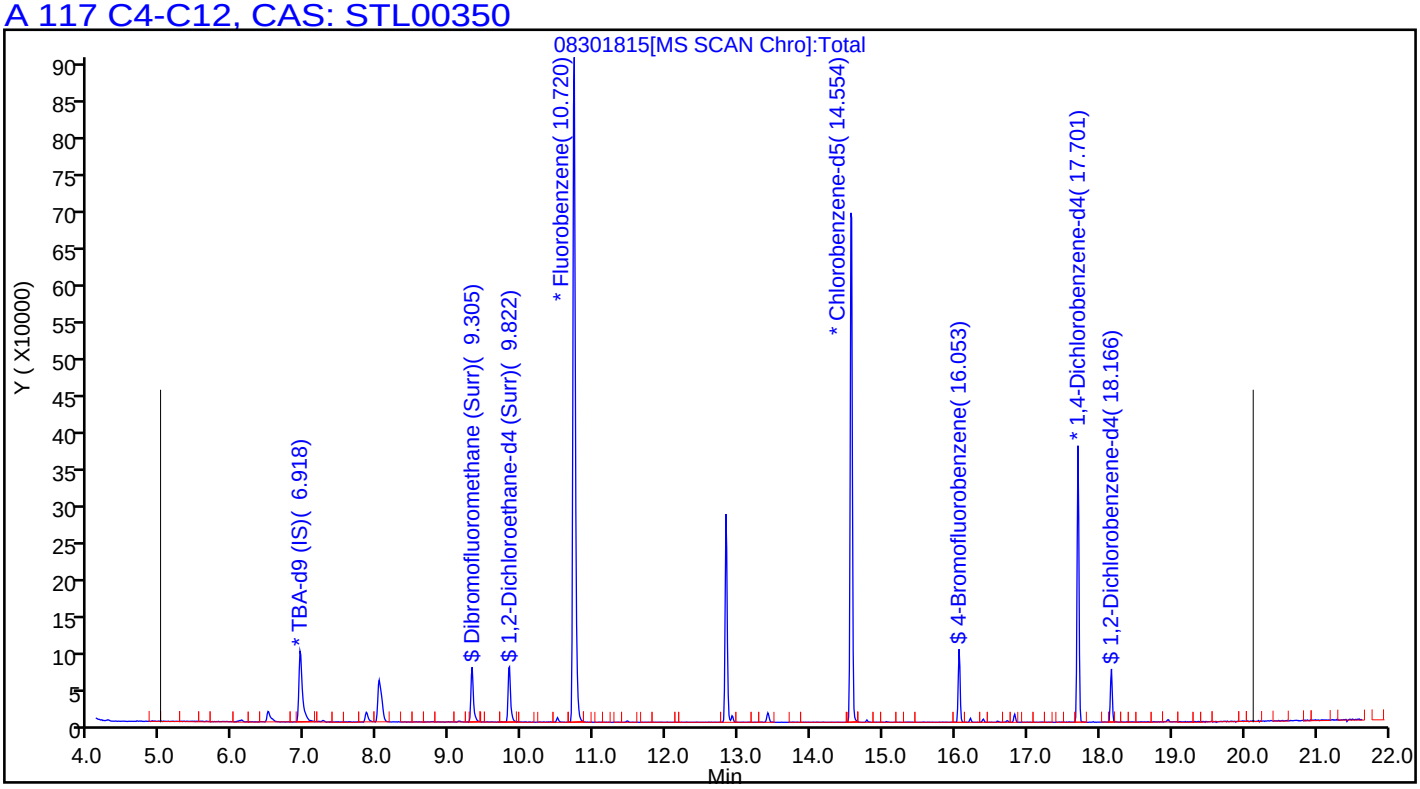
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	7.50	8.57	114.33
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	9.21	122.80
$ 10 Toluene-d8 (Surr)	7.50	6.35	84.62
$ 11 4-Bromofluorobenzene	7.50	5.08	67.72
$ 12 1,2-Dichlorobenzene-d4	6.00	6.13	102.21

Report Date: 31-Aug-2018 09:29:31 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\08301815.D				
Injection Date:	30-Aug-2018 14:18:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-B-9-A RR	Lab Sample ID:	Client 720-250555/15-A		
Client ID:					
Operator ID:	VOA	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-B10S-3.5-4 Lab Sample ID: 720-88239-10

Matrix: Solid Lab File ID: 08291844.D

Analysis Method: 8260B Date Collected: 08/24/2018 10:40

Sample wt/vol: 6.187(g) Date Analyzed: 08/30/2018 02:38

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250528 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.0	0.97
67-64-1	Acetone	52		40	31
71-43-2	Benzene	ND		4.0	0.53
75-27-4	Dichlorobromomethane	ND		4.0	0.58
108-86-1	Bromobenzene	ND		4.0	0.64
74-97-5	Chlorobromomethane	ND		16	0.58
75-25-2	Bromoform	ND		4.0	1.6
74-83-9	Bromomethane	ND		8.1	0.64
78-93-3	2-Butanone (MEK)	ND		40	17
104-51-8	n-Butylbenzene	0.86	J	4.0	0.81
135-98-8	sec-Butylbenzene	1.1	J	4.0	0.58
98-06-6	tert-Butylbenzene	ND		4.0	0.59
75-15-0	Carbon disulfide	ND		4.0	1.6
56-23-5	Carbon tetrachloride	ND		4.0	0.50
108-90-7	Chlorobenzene	ND		4.0	0.56
75-00-3	Chloroethane	ND		8.1	0.45
67-66-3	Chloroform	ND		4.0	0.53
74-87-3	Chloromethane	ND		8.1	0.64
95-49-8	2-Chlorotoluene	ND		4.0	0.53
106-43-4	4-Chlorotoluene	ND		4.0	0.55
124-48-1	Chlorodibromomethane	ND		4.0	0.57
95-50-1	1,2-Dichlorobenzene	ND		4.0	0.55
541-73-1	1,3-Dichlorobenzene	ND		4.0	0.58
106-46-7	1,4-Dichlorobenzene	ND		4.0	0.57
142-28-9	1,3-Dichloropropane	ND		4.0	0.59
563-58-6	1,1-Dichloropropene	ND		4.0	0.56
96-12-8	1,2-Dibromo-3-Chloropropane	ND		8.1	1.4
106-93-4	Ethylene Dibromide	ND		4.0	1.2
74-95-3	Dibromomethane	ND		8.1	0.70
75-71-8	Dichlorodifluoromethane	ND		8.1	0.64
75-34-3	1,1-Dichloroethane	ND		4.0	0.55
107-06-2	1,2-Dichloroethane	ND		4.0	0.61
75-35-4	1,1-Dichloroethene	ND	*	4.0	0.50
156-59-2	cis-1,2-Dichloroethene	ND		4.0	0.55
156-60-5	trans-1,2-Dichloroethene	ND		4.0	0.61
78-87-5	1,2-Dichloropropane	ND		4.0	0.51

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-B10S-3.5-4
Lab Sample ID: 720-88239-10
Matrix: Solid
Lab File ID: 08291844.D
Analysis Method: 8260B
Date Collected: 08/24/2018 10:40
Sample wt/vol: 6.187(g)
Date Analyzed: 08/30/2018 02:38
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250528
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.0	0.56
10061-02-6	trans-1,3-Dichloropropene	ND		4.0	0.54
100-41-4	Ethylbenzene	ND		4.0	0.61
87-68-3	Hexachlorobutadiene	ND		4.0	0.73
591-78-6	2-Hexanone	ND		40	8.1
98-82-8	Isopropylbenzene	1.9	J	4.0	0.55
99-87-6	4-Isopropyltoluene	ND		4.0	2.0
75-09-2	Methylene Chloride	ND		8.1	4.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		40	8.1
91-20-3	Naphthalene	ND		8.1	1.2
103-65-1	N-Propylbenzene	1.6	J	4.0	0.53
100-42-5	Styrene	ND		4.0	0.51
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.0	0.61
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.0	0.61
127-18-4	Tetrachloroethene	ND		4.0	0.54
108-88-3	Toluene	ND		4.0	0.57
87-61-6	1,2,3-Trichlorobenzene	ND		4.0	0.60
120-82-1	1,2,4-Trichlorobenzene	ND		4.0	0.57
71-55-6	1,1,1-Trichloroethane	ND		4.0	0.49
79-00-5	1,1,2-Trichloroethane	ND		4.0	0.57
79-01-6	Trichloroethene	ND		4.0	0.51
75-69-4	Trichlorofluoromethane	ND		4.0	0.45
96-18-4	1,2,3-Trichloropropane	ND		4.0	0.62
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.7
95-63-6	1,2,4-Trimethylbenzene	ND		4.0	1.3
108-67-8	1,3,5-Trimethylbenzene	ND		4.0	0.53
108-05-4	Vinyl acetate	ND		16	4.0
75-01-4	Vinyl chloride	ND		4.0	0.59
1330-20-7	Xylenes, Total	1.1	J	4.0	0.99
594-20-7	2,2-Dichloropropane	ND		4.0	1.6
STL00350	Gasoline Range Organics (GRO)-C4-C12	880		200	81

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-B10S-3.5-4 Lab Sample ID: 720-88239-10

Matrix: Solid Lab File ID: 08291844.D

Analysis Method: 8260B Date Collected: 08/24/2018 10:40

Sample wt/vol: 6.187(g) Date Analyzed: 08/30/2018 02:38

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250528 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	104		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		60-140
2037-26-5	Toluene-d8 (Surr)	94		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291844.D
Lims ID: 720-88239-A-10-A
Client ID: DG-B10S--3.5-4
Sample Type: Client
Inject. Date: 30-Aug-2018 02:38:30 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-A-10
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 09:10:00 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: sanjumnair Date: 31-Aug-2018 09:00:09

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	151308	250.0	
* 2 Fluorobenzene	96	10.720	10.709	0.011	98	953902	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.554	0.010	86	759920	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	339119	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.305	9.294	0.011	93	63600	7.87	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.812	0.010	0	73060	8.42	
$ 10 Toluene-d8 (Surr)	98	12.822	12.822	0.000	95	268009	7.08	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	93	92074	7.78	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	83	72508	6.11	
28 Acetone	58	6.474	6.474	0.000	97	23501	32.1	
46 Hexane	86	8.724	8.724	0.000	96	6595	3.34	
144 Ethyl acetate	43	9.115	9.104	0.010	97	22692	2.25	
59 Benzene	78	10.487	10.488	-0.001	92	3189	0.0927	
128 n-Heptane	71	11.058	11.058	0.000	87	4655	0.5775	
149 Methylcyclohexane	83	11.808	11.808	0.000	92	552198	31.9	
75 Toluene	92	12.917	12.906	0.011	52	5129	0.2099	
131 Butyl Ether	87	14.775	14.775	0.000	82	1221	0.1893	
84 Ethylbenzene	91	14.818	14.818	0.000	54	6367	0.1353	
85 m-Xylene & p-Xylene	91	15.050	15.050	0.000	83	17520	0.5029	
89 o-Xylene	91	15.546	15.546	0.000	92	7095	0.2031	
92 Isopropylbenzene	105	15.990	16.001	-0.011	93	61705	1.20	
94 N-Propylbenzene	91	16.539	16.539	0.000	98	53774	0.9849	
98 1,3,5-Trimethylbenzene	105	16.898	16.898	0.000	68	2024	0.0498	
100 tert-Butylbenzene	119	17.268	17.268	0.000	6	2428	0.0615	
101 1,2,4-Trimethylbenzene	105	17.405	17.405	0.000	1	1975	0.0493	
102 sec-Butylbenzene	105	17.543	17.543	0.000	73	39183	0.6873	
105 4-Isopropyltoluene	119	17.764	17.764	0.000	93	6268	0.1245	
107 n-Butylbenzene	91	18.282	18.282	0.000	95	20956	0.5322	
124 Butane	43	5.017	4.996	0.021	96	35044	NR	
135 n-Octane	43	13.265	13.255	0.010	42	26243	NR	
138 n-Nonane	43	15.187	15.198	-0.011	0	1573	NR	

Report Date: 31-Aug-2018 09:10:43 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291844.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
A 116 C4-C10	1	11.000	(4.985-17.014)		0	35216464	478.4	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	16696966	226.8	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	25812294	350.6	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	40273663	547.1	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	29603596	402.1	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	29603596	NC	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	36961541	502.1	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	34660795	470.8	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	14617944	198.6	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	32286778	438.6	
S 122 Xylenes, Total	1				0		0.7060	
T 156 Paraldehyde TIC	45	12.822	12.727	0.107	0	791	1.07	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

NC - Not Calibrated

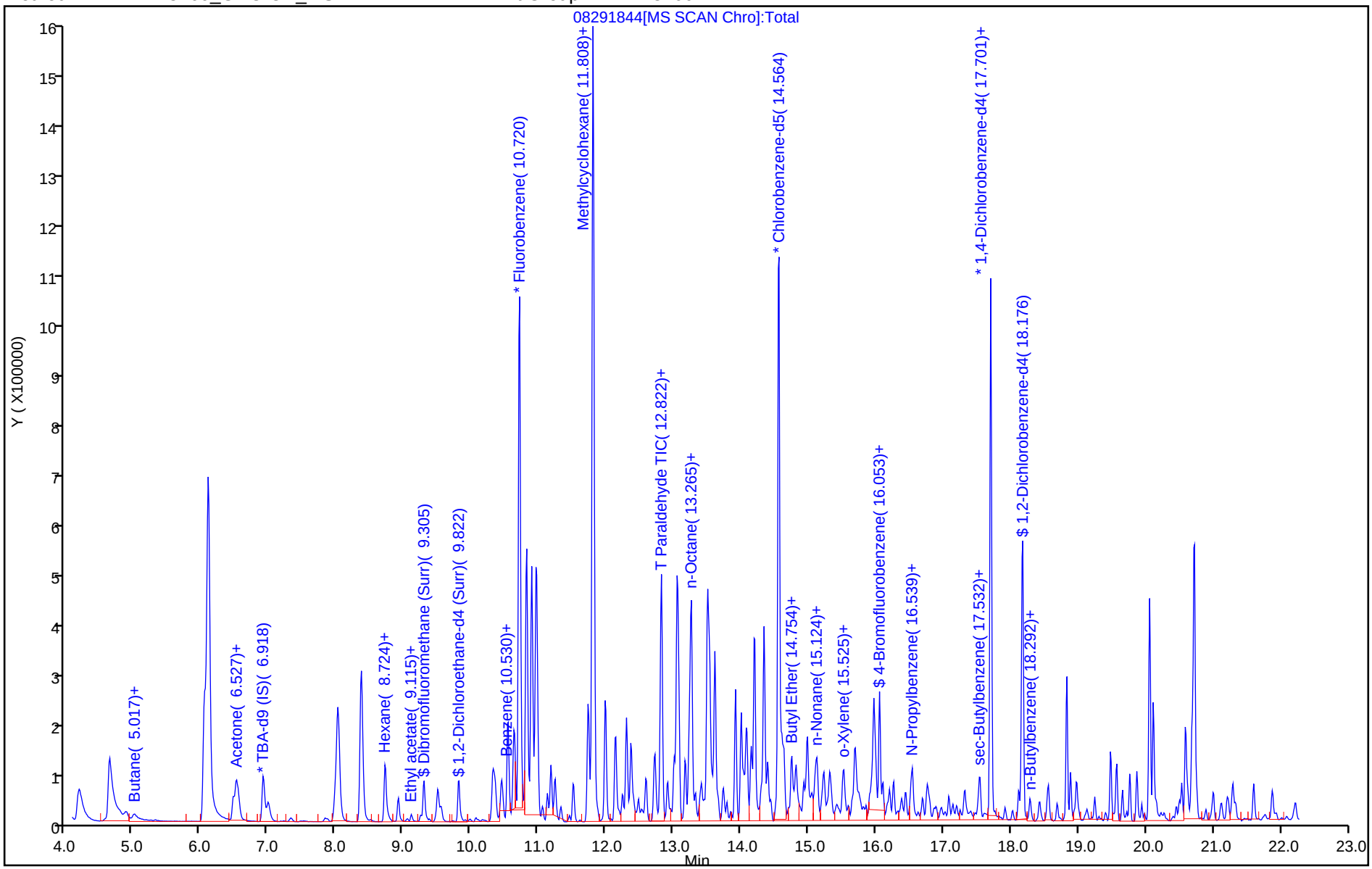
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 09:10:43 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291844.D				
Injection Date:	30-Aug-2018 02:38:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88239-A-10-A	Lab Sample ID:	720-88239-10	Worklist Smp#:	20
Client ID:	DG-B10S--3.5-4				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291844.D
Lims ID: 720-88239-A-10-A
Client ID: DG-B10S--3.5-4
Sample Type: Client
Inject. Date: 30-Aug-2018 02:38:30 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-A-10
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 09:10:00 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: sanjumnair Date: 31-Aug-2018 09:00:09

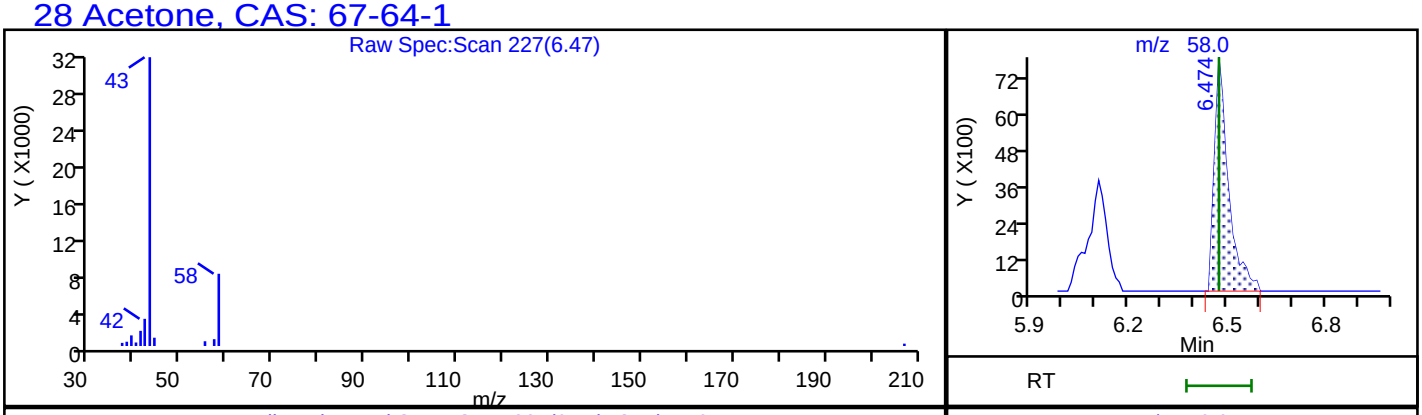
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.42	112.22
$ 10 Toluene-d8 (Surr)	7.50	7.08	94.35
$ 11 4-Bromofluorobenzene	7.50	7.78	103.75
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

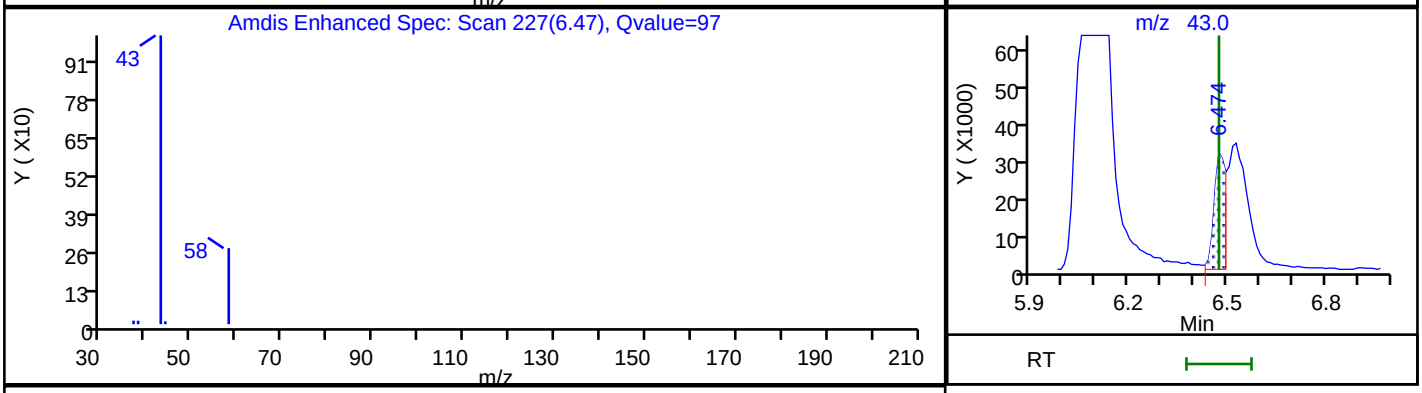
Report Date: 31-Aug-2018 09:10:43 Chrom Revision: 2.3 19-Jul-2018 15:14:50

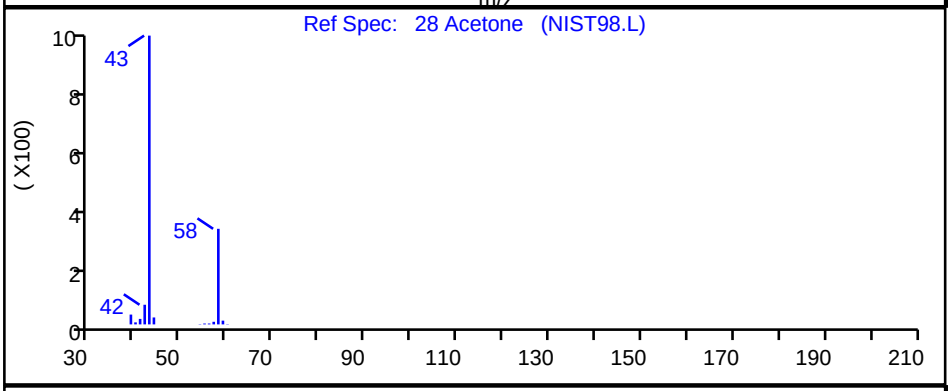
TestAmerica Pleasanton

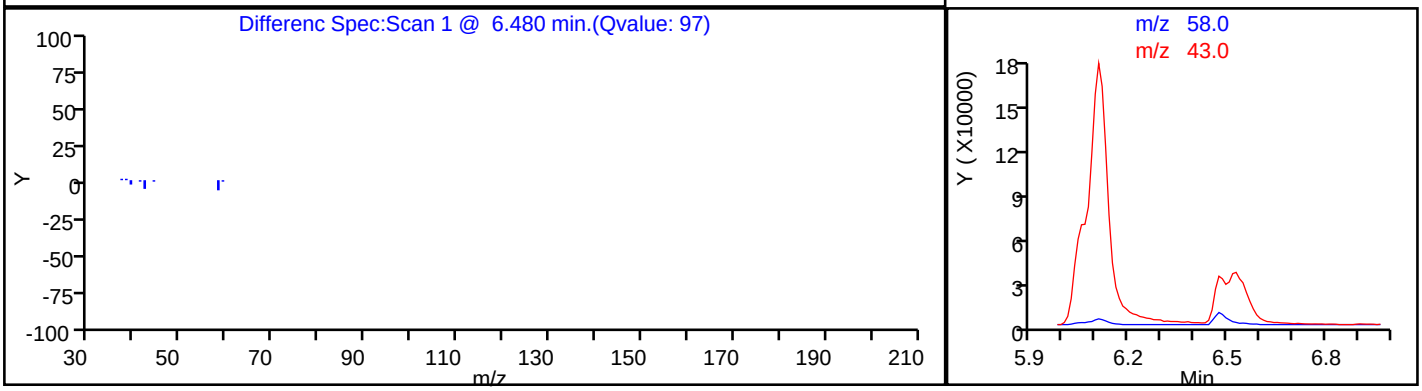
Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291844.D				
Injection Date:	30-Aug-2018 02:38:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-A-10-A	Lab Sample ID:	720-88239-10		
Client ID:	DG-B10S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1







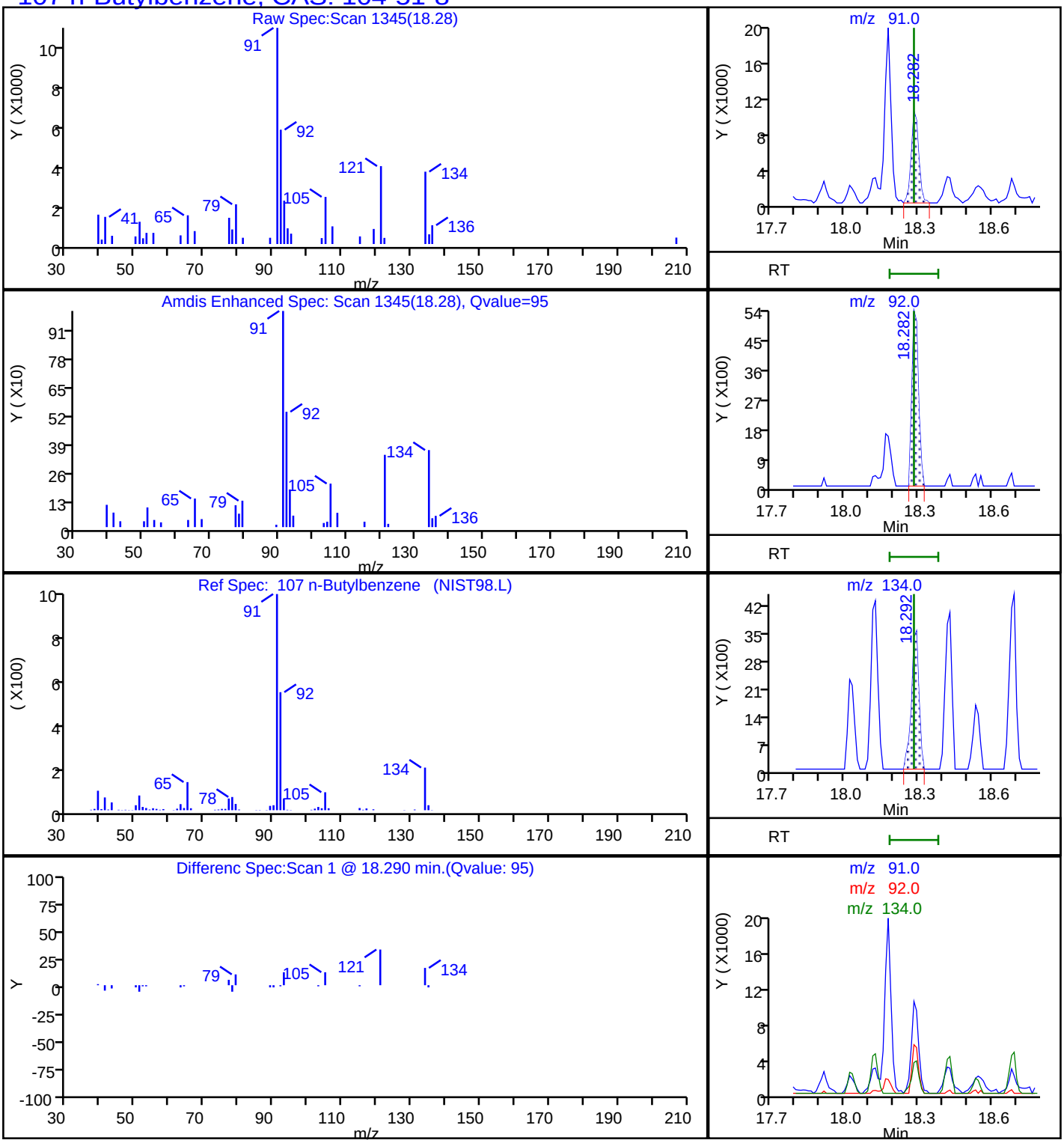


Report Date: 31-Aug-2018 09:10:44 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291844.D				
Injection Date:	30-Aug-2018 02:38:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-A-10-A	Lab Sample ID:	720-88239-10		
Client ID:	DG-B10S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

107 n-Butylbenzene, CAS: 104-51-8

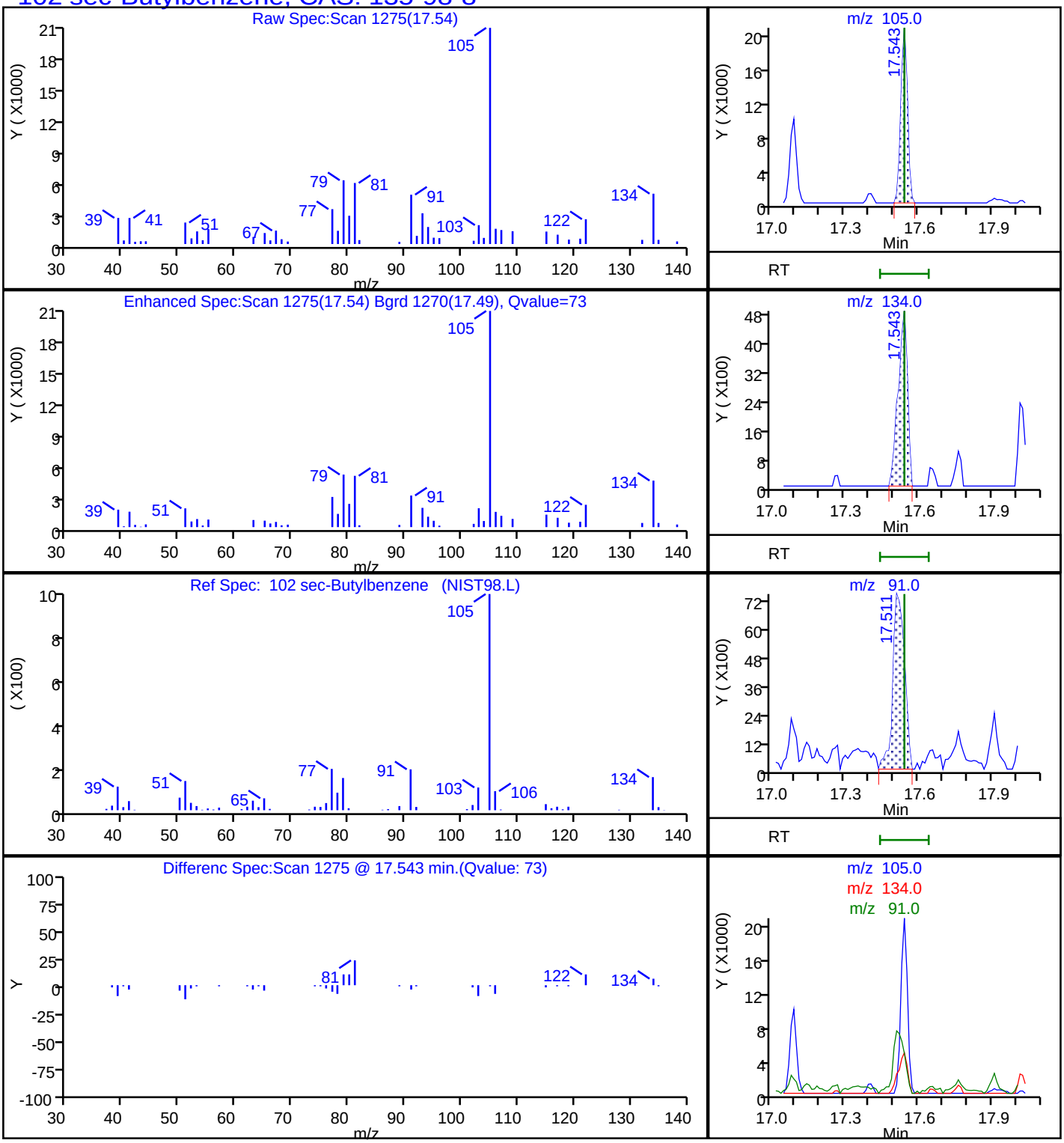


Report Date: 31-Aug-2018 09:10:44 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291844.D				
Injection Date:	30-Aug-2018 02:38:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-A-10-A	Lab Sample ID:	720-88239-10		
Client ID:	DG-B10S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

102 sec-Butylbenzene, CAS: 135-98-8

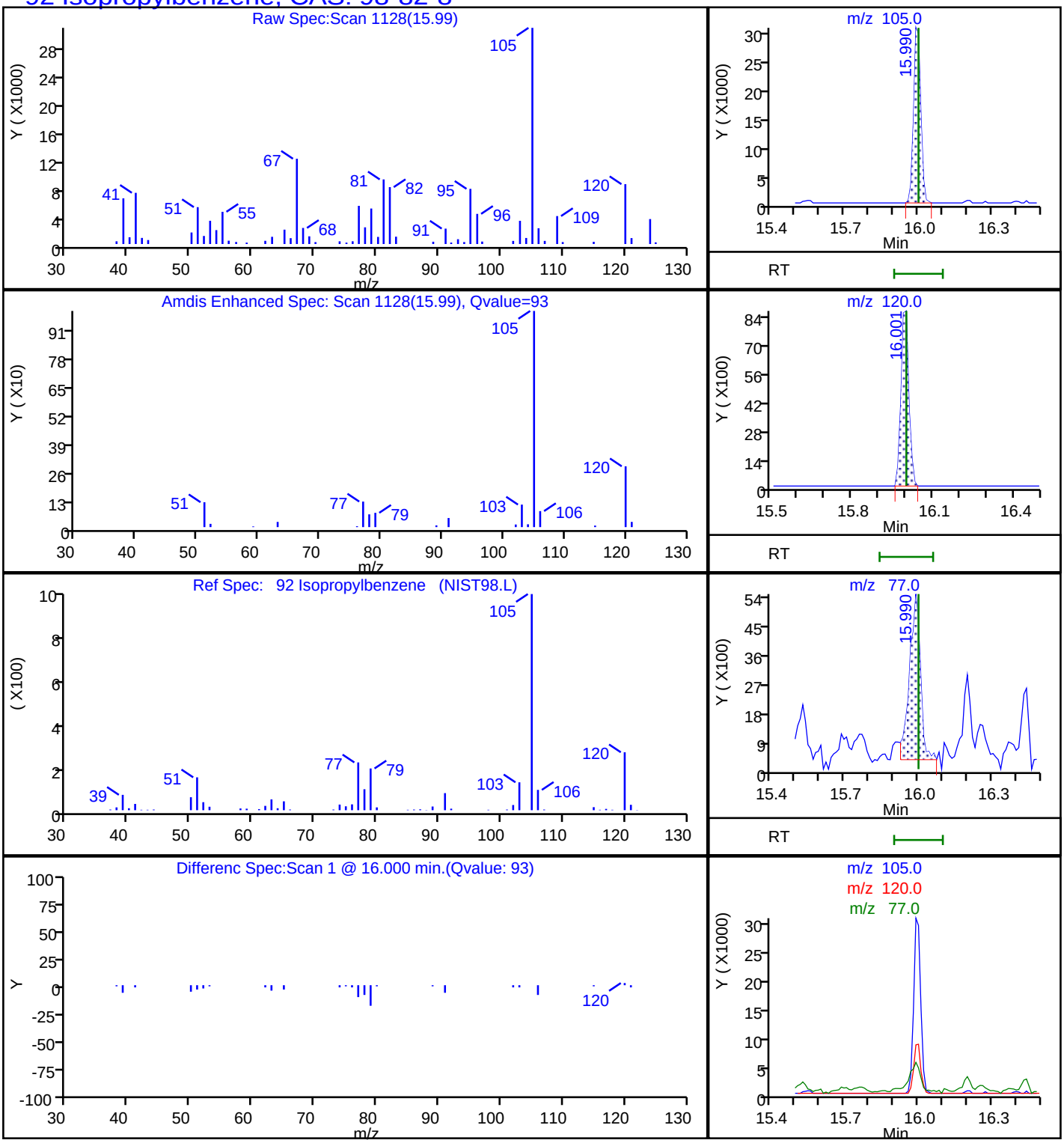


Report Date: 31-Aug-2018 09:10:44 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291844.D				
Injection Date:	30-Aug-2018 02:38:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-A-10-A	Lab Sample ID:	720-88239-10		
Client ID:	DG-B10S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

92 Isopropylbenzene, CAS: 98-82-8

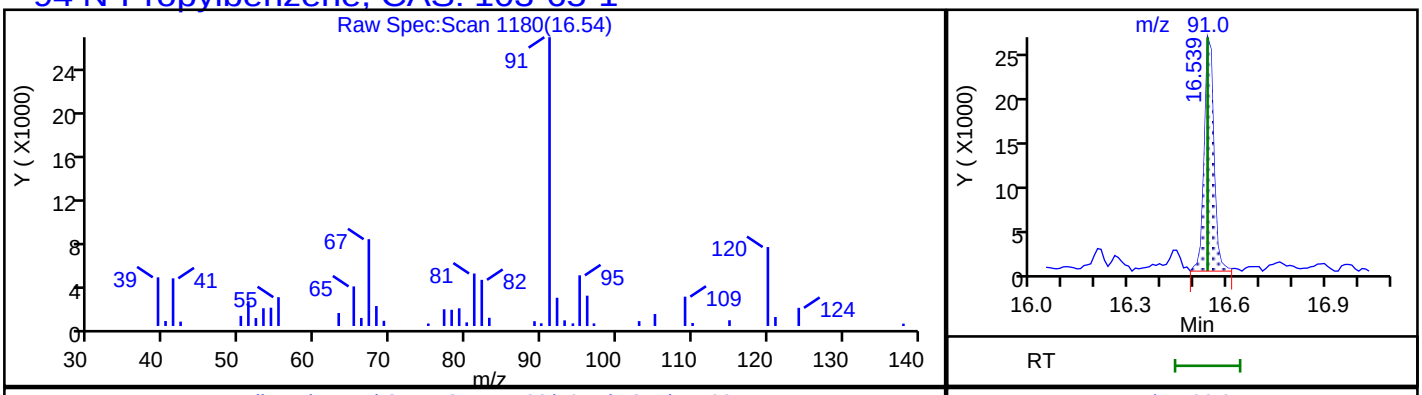


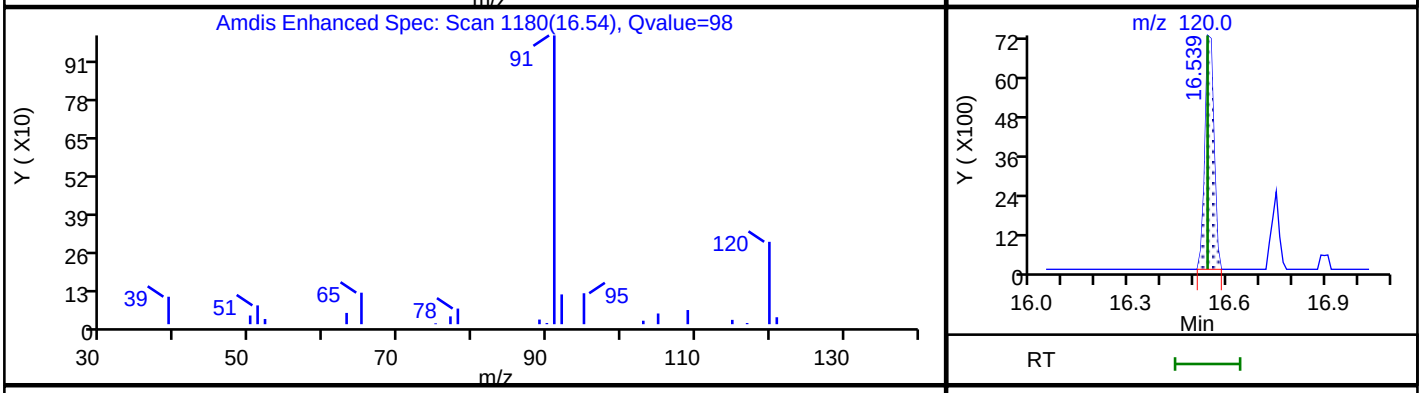
Report Date: 31-Aug-2018 09:10:44 Chrom Revision: 2.3 19-Jul-2018 15:14:50

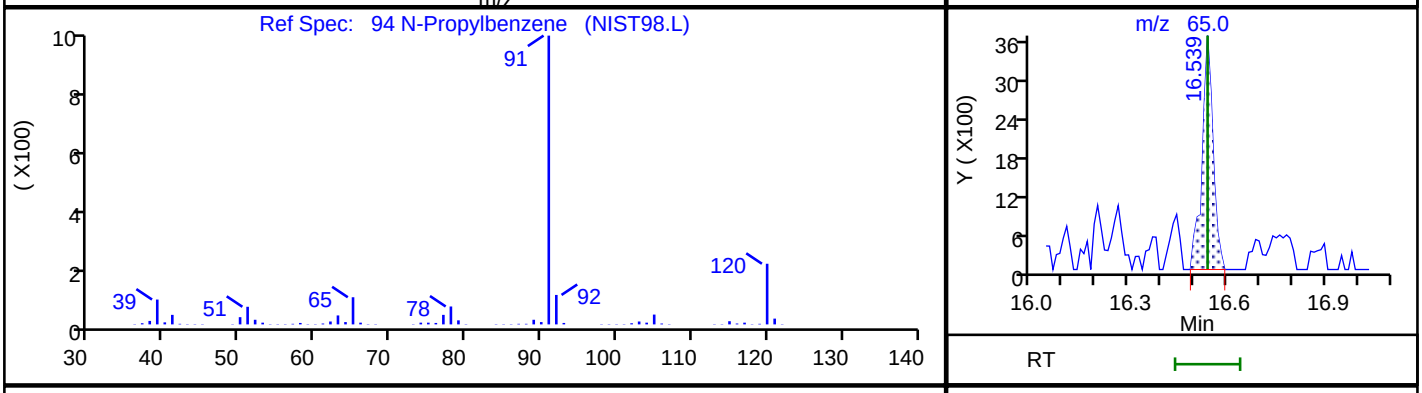
TestAmerica Pleasanton

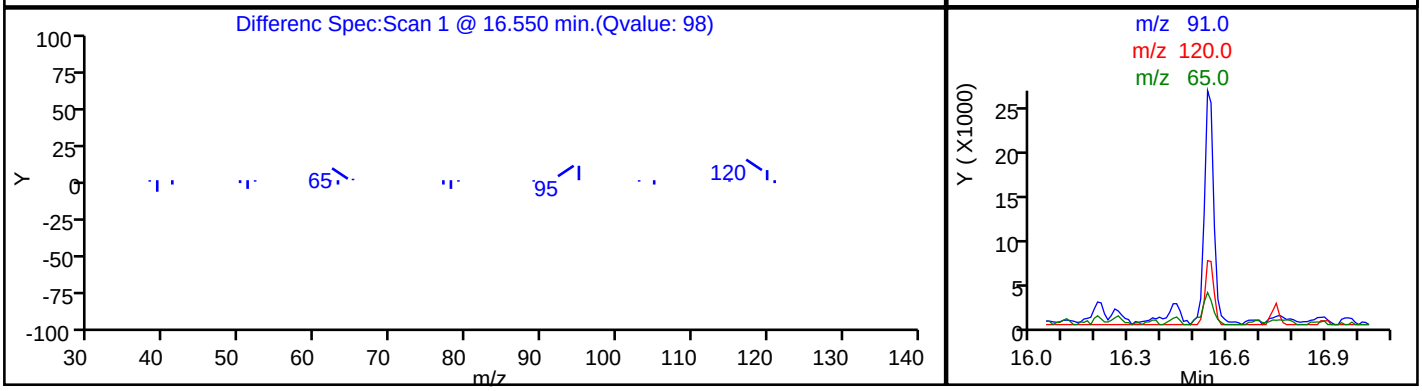
Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291844.D				
Injection Date:	30-Aug-2018 02:38:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-A-10-A	Lab Sample ID:	720-88239-10		
Client ID:	DG-B10S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

94 N-Propylbenzene, CAS: 103-65-1







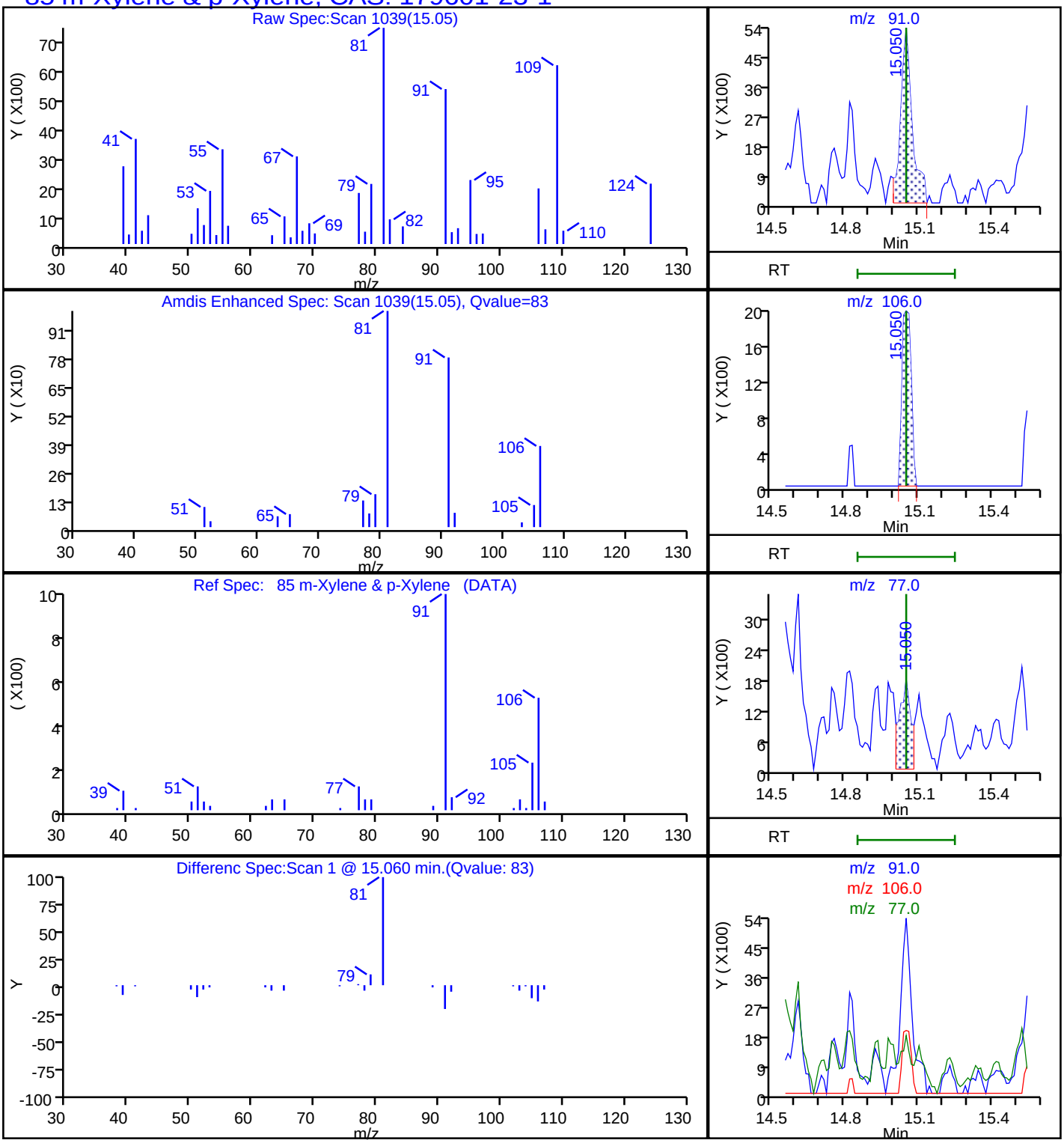


Report Date: 31-Aug-2018 09:10:44 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291844.D				
Injection Date:	30-Aug-2018 02:38:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-A-10-A	Lab Sample ID:	720-88239-10		
Client ID:	DG-B10S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

85 m-Xylene & p-Xylene, CAS: 179601-23-1

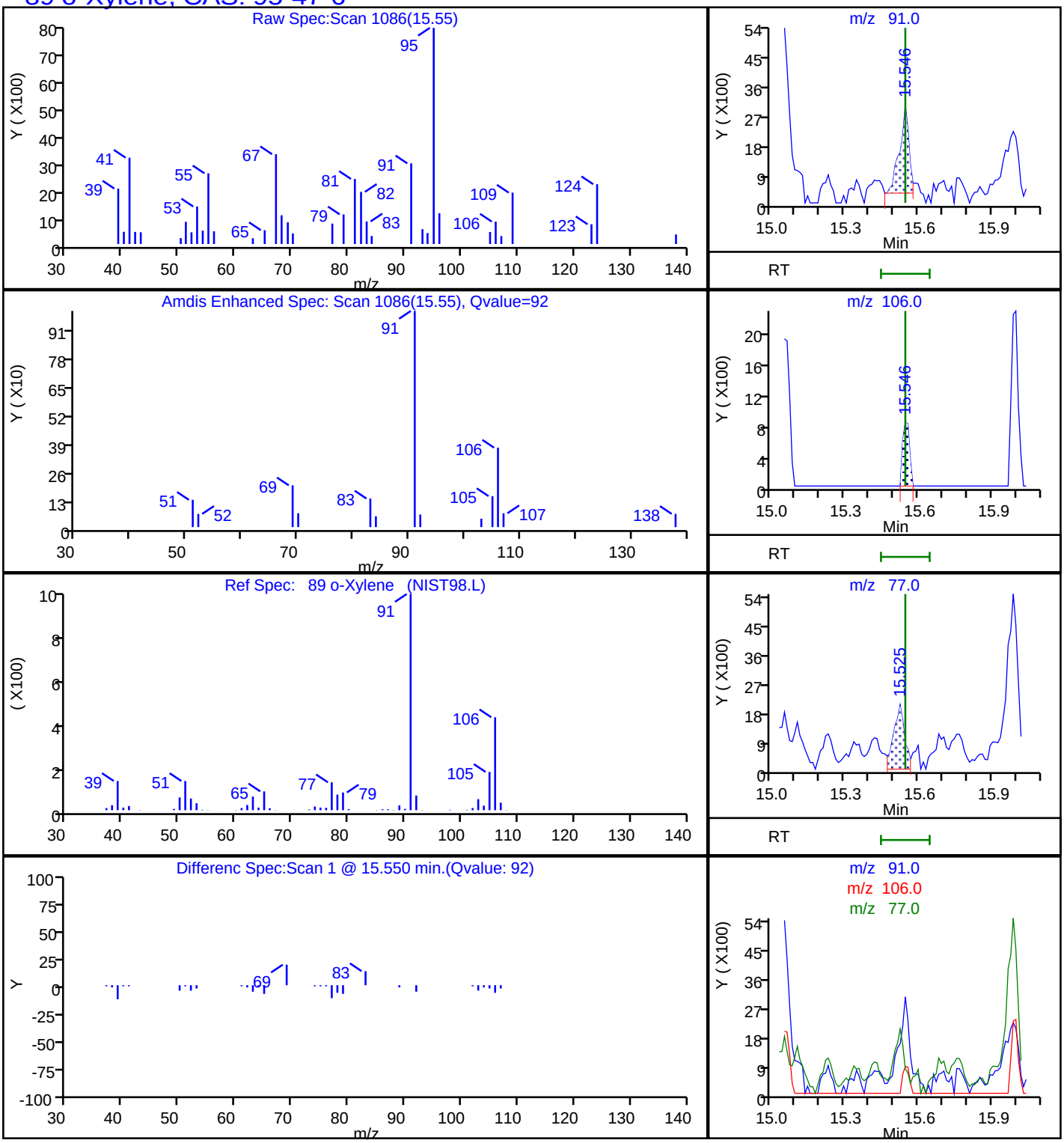


Report Date: 31-Aug-2018 09:10:44 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291844.D				
Injection Date:	30-Aug-2018 02:38:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-A-10-A	Lab Sample ID:	720-88239-10		
Client ID:	DG-B10S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

89 o-Xylene, CAS: 95-47-6

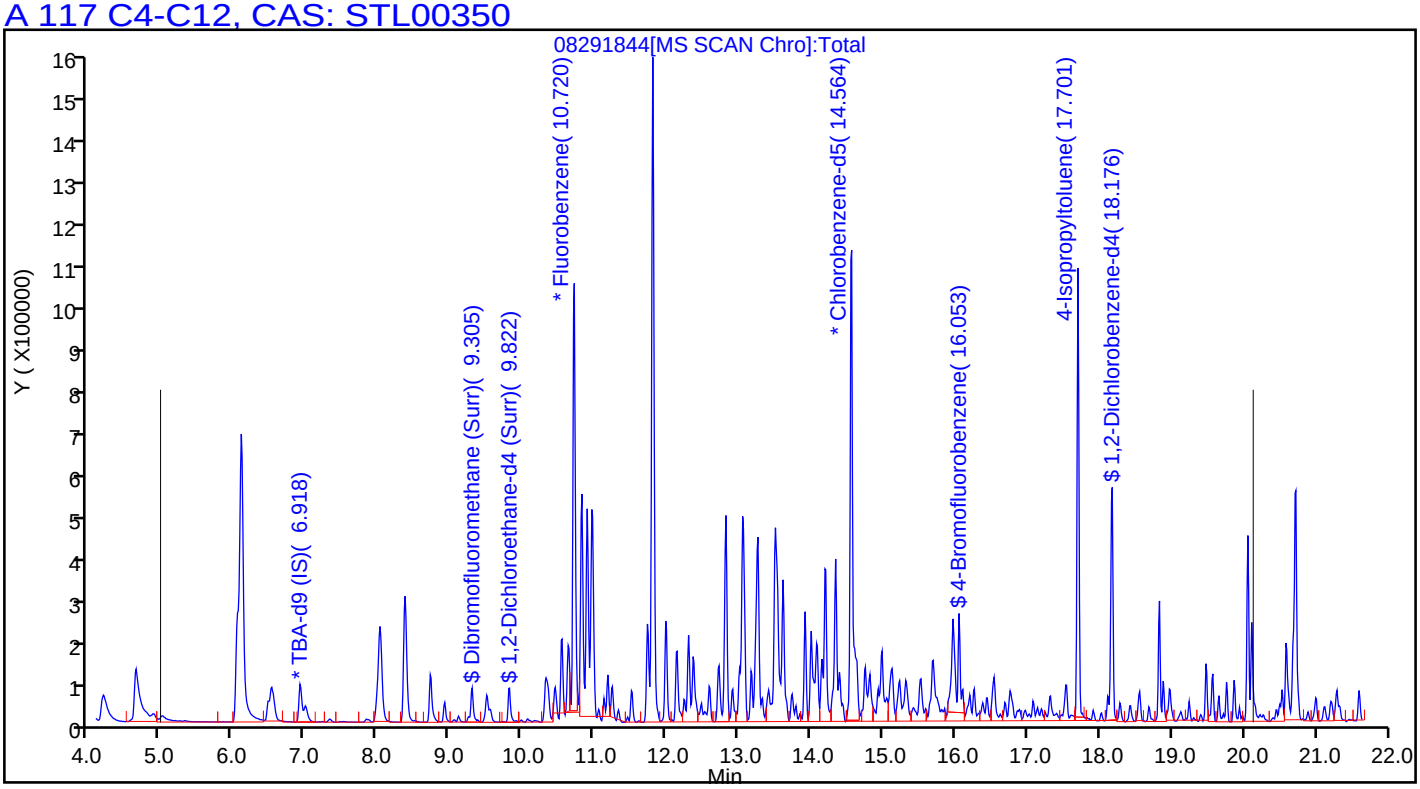


Report Date: 31-Aug-2018 09:10:44 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291844.D				
Injection Date:	30-Aug-2018 02:38:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-A-10-A	Lab Sample ID:	720-88239-10		
Client ID:	DG-B10S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



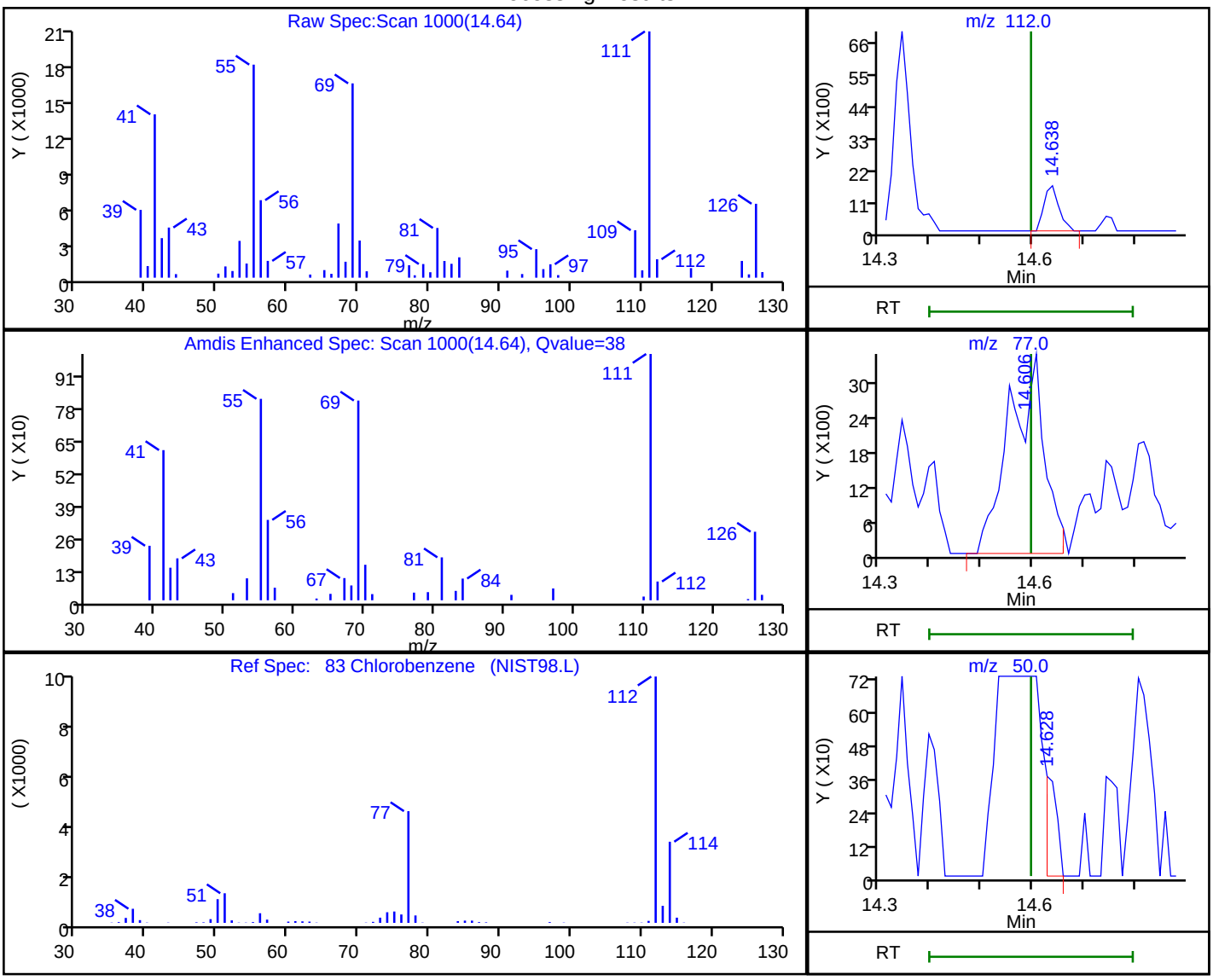
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291844.D				
Injection Date:	30-Aug-2018 02:38:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-A-10-A	Lab Sample ID:	720-88239-10		
Client ID:	DG-B10S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

83 Chlorobenzene, CAS: 108-90-7

Processing Results



RT	Mass	Response	Amount
14.64	112.00	3199	0.119135
14.61	77.00	16281	
14.63	50.00	580	

Reviewer: sanjumnair, 31-Aug-2018 08:59:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

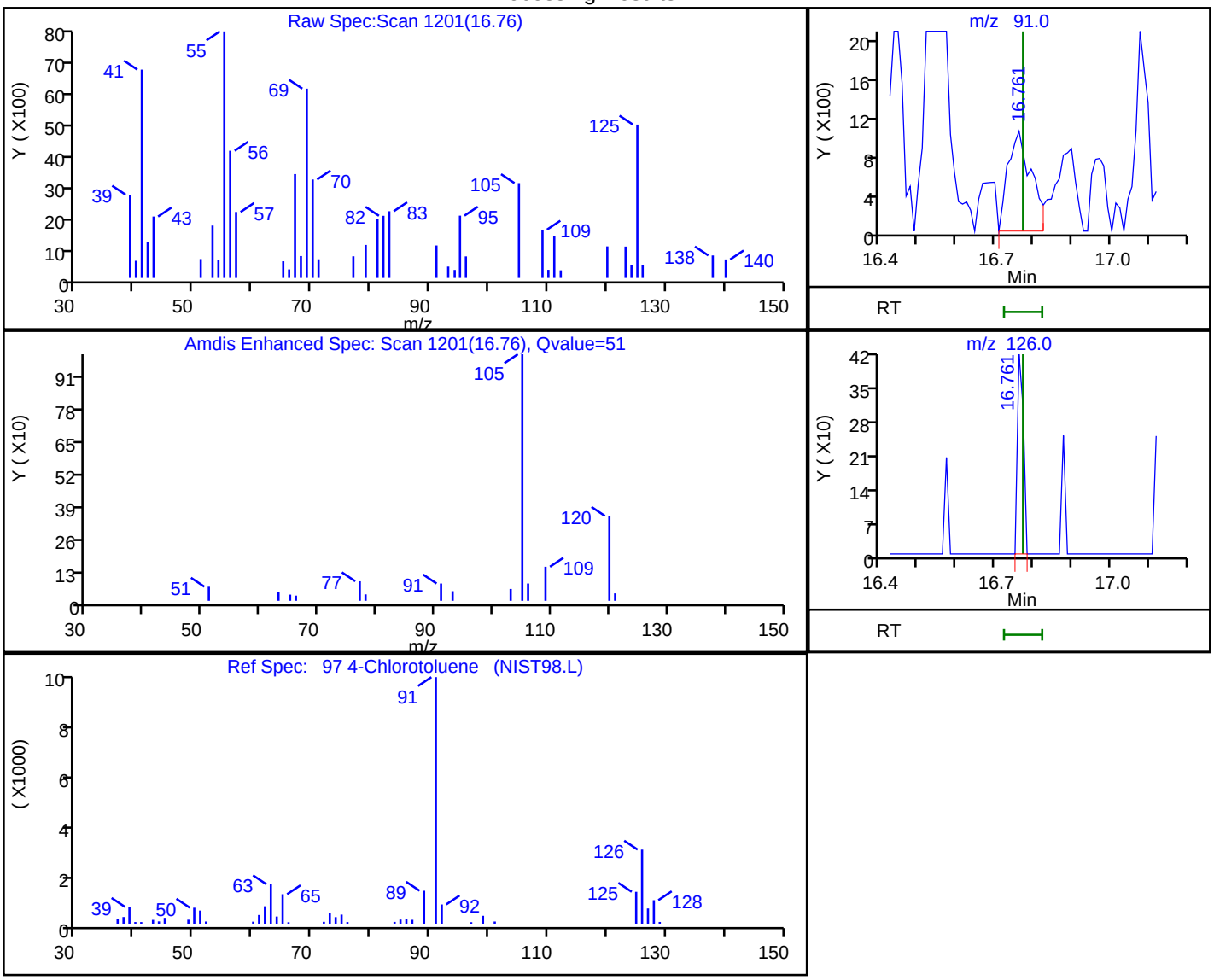
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291844.D				
Injection Date:	30-Aug-2018 02:38:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-A-10-A	Lab Sample ID:	720-88239-10		
Client ID:	DG-B10S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

97 4-Chlorotoluene, CAS: 106-43-4

Processing Results



RT	Mass	Response	Amount
16.76	91.00	4412	0.143779
16.76	126.00	462	

Reviewer: sanjumnair, 31-Aug-2018 08:59:35

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

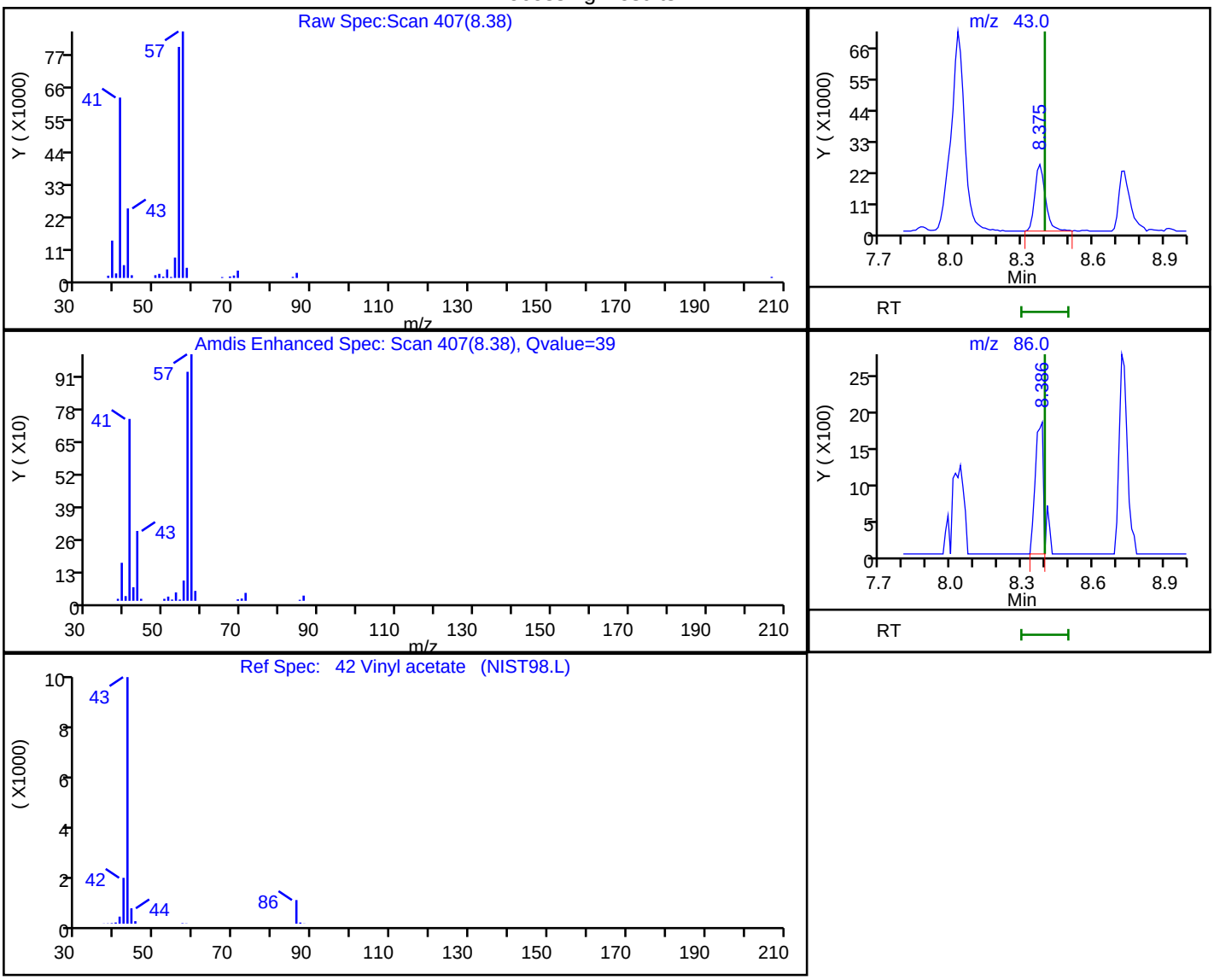
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291844.D				
Injection Date:	30-Aug-2018 02:38:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-A-10-A	Lab Sample ID:	720-88239-10		
Client ID:	DG-B10S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

42 Vinyl acetate, CAS: 108-05-4

Processing Results



RT	Mass	Response	Amount
8.38	43.00	74557	2.940230
8.39	86.00	4186	

Reviewer: sanjumnair, 31-Aug-2018 08:57:14

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-I7S-0.5-1
Lab Sample ID: 720-88239-11
Matrix: Solid
Lab File ID: 08291845.D
Analysis Method: 8260B
Date Collected: 08/24/2018 09:25
Sample wt/vol: 5.647(g)
Date Analyzed: 08/30/2018 03:06
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250528
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.4	1.1
67-64-1	Acetone	37	J	44	34
71-43-2	Benzene	ND		4.4	0.58
75-27-4	Dichlorobromomethane	ND		4.4	0.64
108-86-1	Bromobenzene	ND		4.4	0.70
74-97-5	Chlorobromomethane	ND		18	0.64
75-25-2	Bromoform	ND		4.4	1.8
74-83-9	Bromomethane	ND		8.9	0.70
78-93-3	2-Butanone (MEK)	ND		44	19
104-51-8	n-Butylbenzene	ND		4.4	0.89
135-98-8	sec-Butylbenzene	ND		4.4	0.64
98-06-6	tert-Butylbenzene	ND		4.4	0.65
75-15-0	Carbon disulfide	ND		4.4	1.8
56-23-5	Carbon tetrachloride	ND		4.4	0.55
108-90-7	Chlorobenzene	ND		4.4	0.61
75-00-3	Chloroethane	ND		8.9	0.50
67-66-3	Chloroform	ND		4.4	0.58
74-87-3	Chloromethane	ND		8.9	0.70
95-49-8	2-Chlorotoluene	ND		4.4	0.58
106-43-4	4-Chlorotoluene	ND		4.4	0.60
124-48-1	Chlorodibromomethane	ND		4.4	0.63
95-50-1	1,2-Dichlorobenzene	ND		4.4	0.60
541-73-1	1,3-Dichlorobenzene	ND		4.4	0.64
106-46-7	1,4-Dichlorobenzene	ND		4.4	0.63
142-28-9	1,3-Dichloropropane	ND		4.4	0.65
563-58-6	1,1-Dichloropropene	ND		4.4	0.61
96-12-8	1,2-Dibromo-3-Chloropropane	ND		8.9	1.5
106-93-4	Ethylene Dibromide	ND		4.4	1.3
74-95-3	Dibromomethane	ND		8.9	0.76
75-71-8	Dichlorodifluoromethane	ND		8.9	0.70
75-34-3	1,1-Dichloroethane	ND		4.4	0.60
107-06-2	1,2-Dichloroethane	ND		4.4	0.67
75-35-4	1,1-Dichloroethene	ND	*	4.4	0.55
156-59-2	cis-1,2-Dichloroethene	ND		4.4	0.60
156-60-5	trans-1,2-Dichloroethene	ND		4.4	0.66
78-87-5	1,2-Dichloropropane	ND		4.4	0.56

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-I7S-0.5-1
Lab Sample ID: 720-88239-11
Matrix: Solid
Lab File ID: 08291845.D
Analysis Method: 8260B
Date Collected: 08/24/2018 09:25
Sample wt/vol: 5.647(g)
Date Analyzed: 08/30/2018 03:06
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250528
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.4	0.61
10061-02-6	trans-1,3-Dichloropropene	ND		4.4	0.59
100-41-4	Ethylbenzene	ND		4.4	0.66
87-68-3	Hexachlorobutadiene	ND		4.4	0.80
591-78-6	2-Hexanone	ND		44	8.9
98-82-8	Isopropylbenzene	ND		4.4	0.60
99-87-6	4-Isopropyltoluene	ND		4.4	2.2
75-09-2	Methylene Chloride	ND		8.9	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		44	8.9
91-20-3	Naphthalene	ND		8.9	1.3
103-65-1	N-Propylbenzene	ND		4.4	0.58
100-42-5	Styrene	ND		4.4	0.56
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.4	0.67
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.4	0.66
127-18-4	Tetrachloroethene	ND		4.4	0.59
108-88-3	Toluene	ND		4.4	0.63
87-61-6	1,2,3-Trichlorobenzene	ND		4.4	0.66
120-82-1	1,2,4-Trichlorobenzene	ND		4.4	0.63
71-55-6	1,1,1-Trichloroethane	ND		4.4	0.54
79-00-5	1,1,2-Trichloroethane	ND		4.4	0.62
79-01-6	Trichloroethene	ND		4.4	0.56
75-69-4	Trichlorofluoromethane	ND		4.4	0.50
96-18-4	1,2,3-Trichloropropane	ND		4.4	0.68
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.4	1.8
95-63-6	1,2,4-Trimethylbenzene	ND		4.4	1.5
108-67-8	1,3,5-Trimethylbenzene	ND		4.4	0.58
108-05-4	Vinyl acetate	ND		18	4.4
75-01-4	Vinyl chloride	ND		4.4	0.65
1330-20-7	Xylenes, Total	ND		4.4	1.1
594-20-7	2,2-Dichloropropane	ND		4.4	1.8
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		220	89

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-I7S-0.5-1 Lab Sample ID: 720-88239-11

Matrix: Solid Lab File ID: 08291845.D

Analysis Method: 8260B Date Collected: 08/24/2018 09:25

Sample wt/vol: 5.647(g) Date Analyzed: 08/30/2018 03:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250528 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	88		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	120		60-140
2037-26-5	Toluene-d8 (Surr)	91		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291845.D				
Lims ID:	720-88239-A-11-A				
Client ID:	DG-I7S--0.5-1				
Sample Type:	Client				
Inject. Date:	30-Aug-2018 03:06:30	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	88239-A-11				
Misc. Info.:	CHMSV2				
Operator ID:	VOA	Instrument ID:	CHMSV2		
Method:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\8260_GRO CH_MSV2.m				
Limit Group:	8260B				
Last Update:	31-Aug-2018 09:10:00	Calib Date:	25-Aug-2018 14:37:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK004				
First Level Reviewer: sanjumnair		Date:	31-Aug-2018 09:01:11		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	167161	250.0	
* 2 Fluorobenzene	96	10.720	10.709	0.011	98	875562	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.554	0.010	86	677432	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	279143	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.305	9.294	0.011	91	60171	8.11	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.812	0.010	0	71901	9.02	
$ 10 Toluene-d8 (Surr)	98	12.821	12.822	-0.001	95	236454	6.80	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	91	69414	6.58	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	83	60570	6.20	
28 Acetone	58	6.474	6.474	0.000	97	14170	21.1	
59 Benzene	78	10.487	10.488	-0.001	82	1613	0.0511	
65 Trichloroethene	132	11.206	11.206	0.000	82	2314	0.2379	
75 Toluene	92	12.906	12.906	0.000	98	4213	0.1934	
131 Butyl Ether	87	14.775	14.775	0.000	94	1344	0.2338	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	397924	5.89	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	98076	1.45	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	138396	2.05	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	468627	6.94	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	156008	2.31	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	156008	NC	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	353699	5.23	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	225341	3.33	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	87475	1.29	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	176193	2.61	

QC Flag Legend

Processing Flags

NC - Not Calibrated

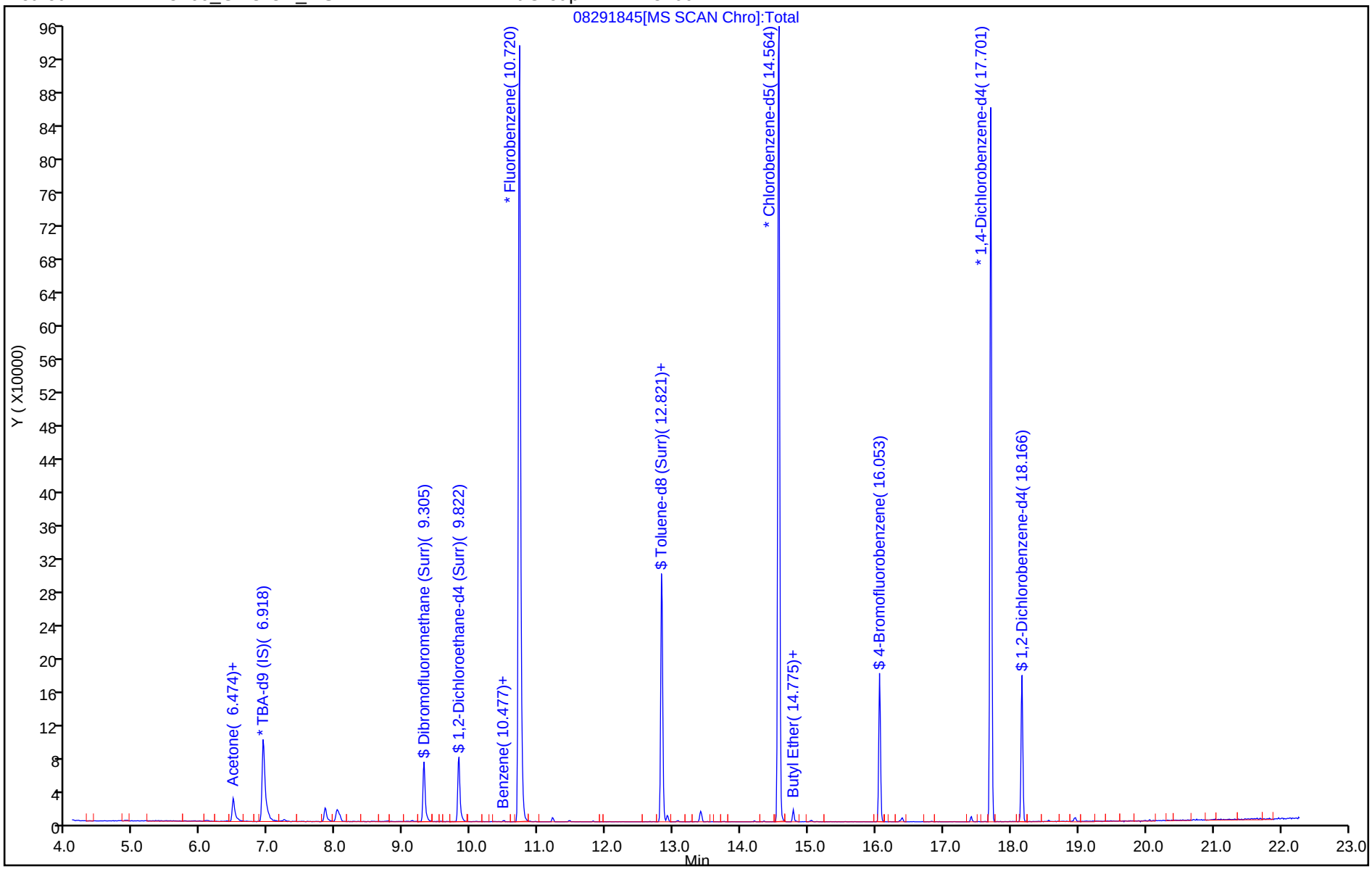
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 09:10:46 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291845.D				
Injection Date:	30-Aug-2018 03:06:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88239-A-11-A	Lab Sample ID:	720-88239-11	Worklist Smp#:	21
Client ID:	DG-I7S--0.5-1				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291845.D
Lims ID: 720-88239-A-11-A
Client ID: DG-I7S--0.5-1
Sample Type: Client
Inject. Date: 30-Aug-2018 03:06:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-A-11
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 09:10:00 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: sanjumnair Date: 31-Aug-2018 09:01:11

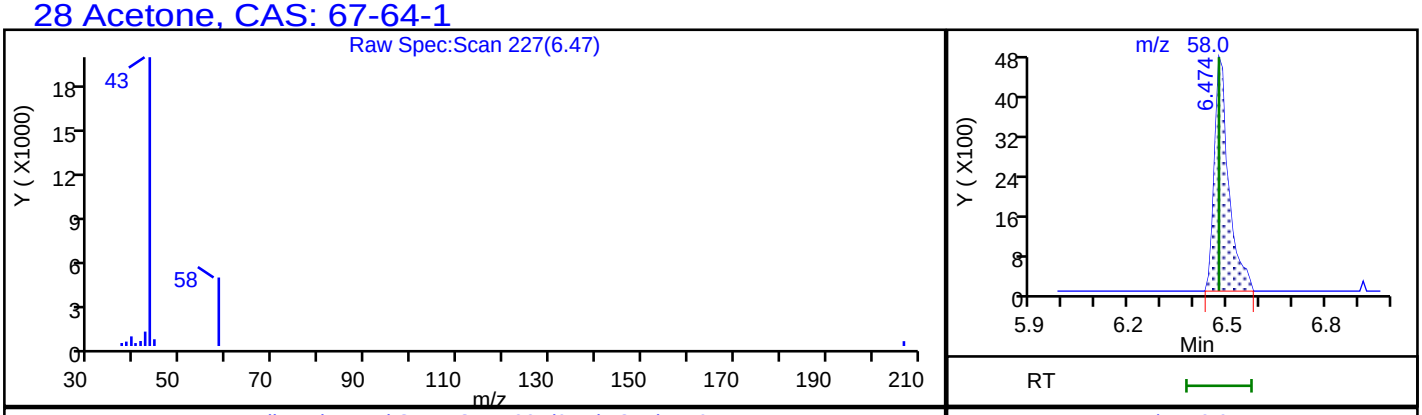
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	9.02	120.32
$ 10 Toluene-d8 (Surr)	7.50	6.80	90.69
$ 11 4-Bromofluorobenzene	7.50	6.58	87.74
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

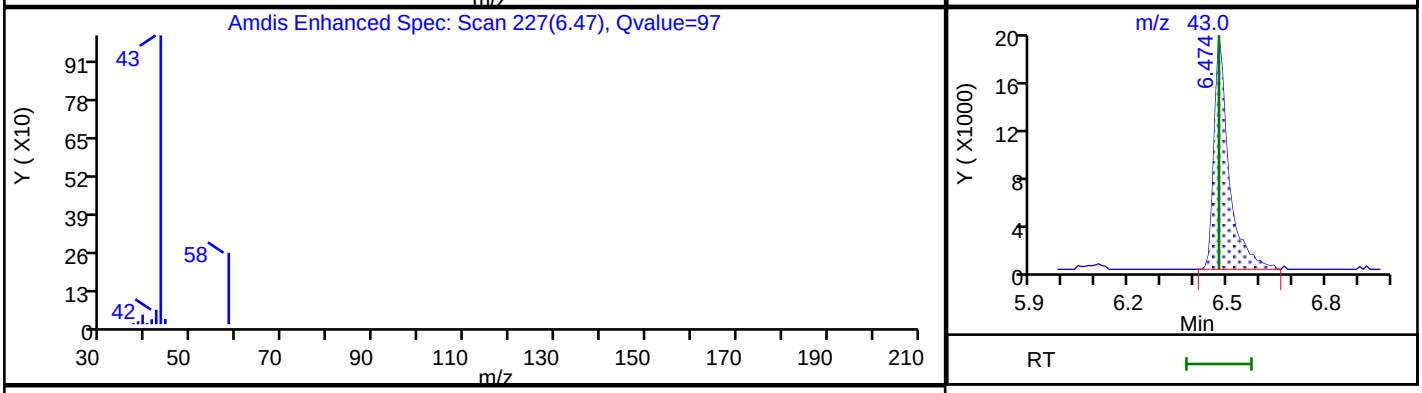
Report Date: 31-Aug-2018 09:10:47 Chrom Revision: 2.3 19-Jul-2018 15:14:50

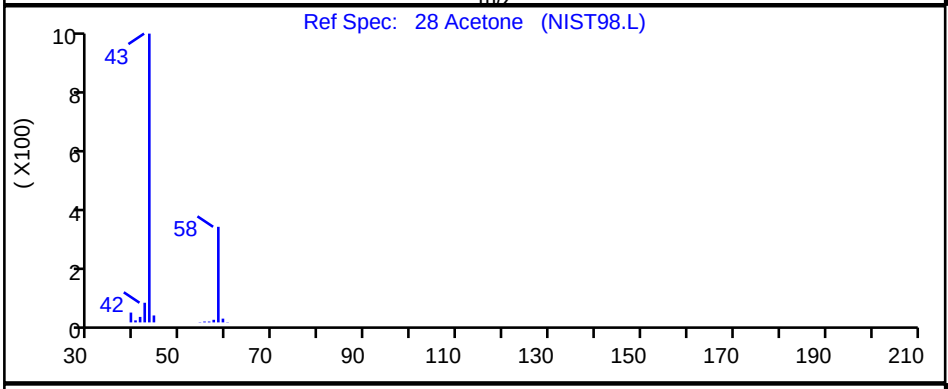
TestAmerica Pleasanton

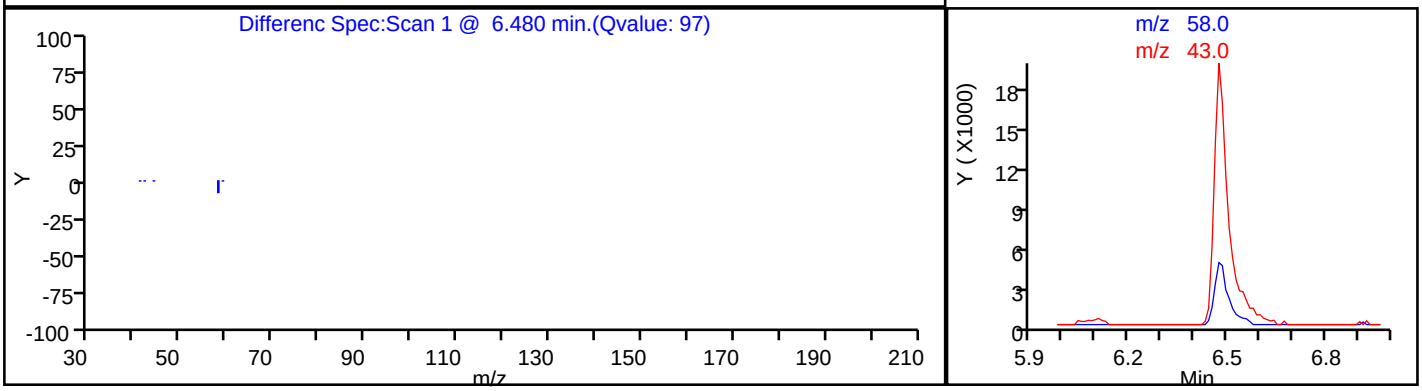
Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291845.D				
Injection Date:	30-Aug-2018 03:06:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-A-11-A	Lab Sample ID:	720-88239-11		
Client ID:	DG-I7S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1







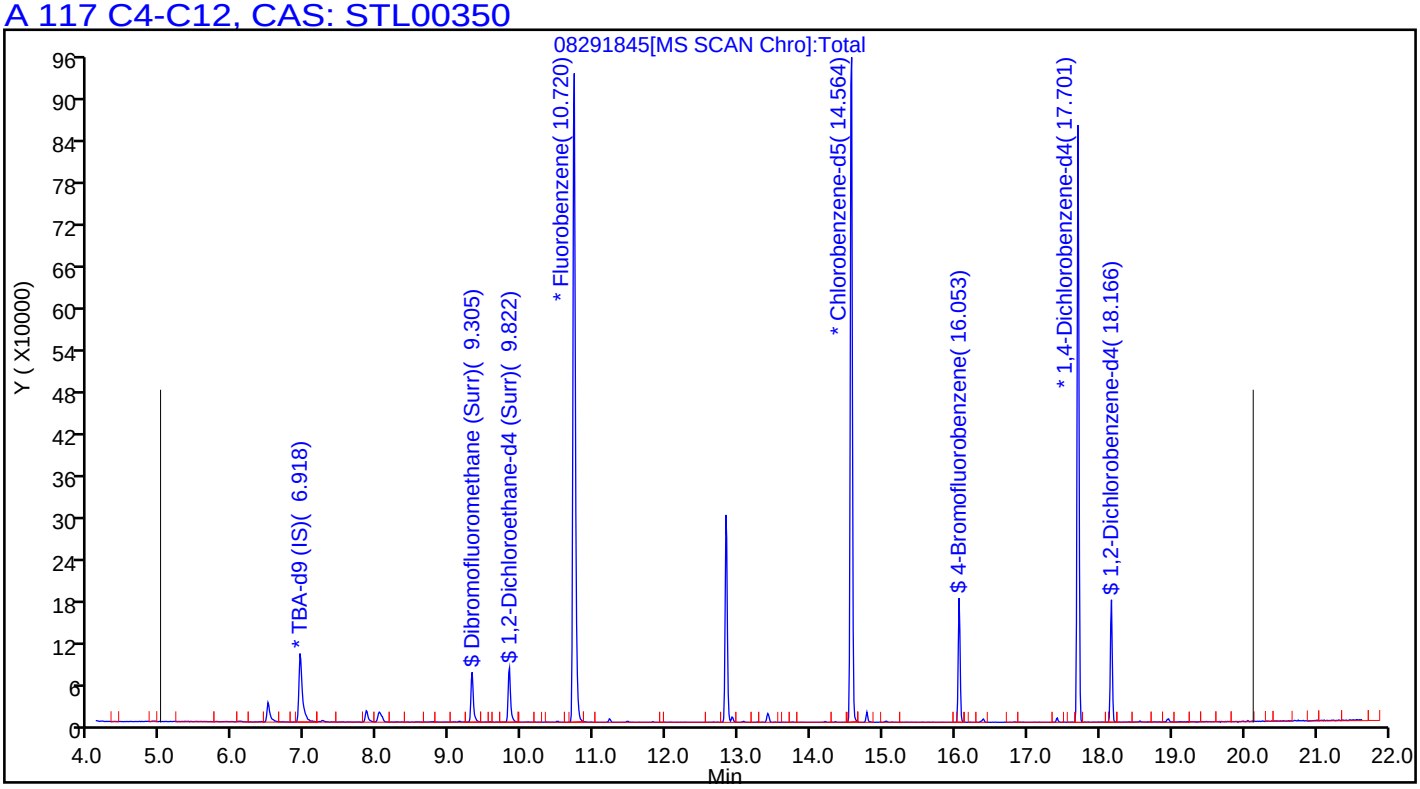


Report Date: 31-Aug-2018 09:10:47 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291845.D				
Injection Date:	30-Aug-2018 03:06:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-A-11-A	Lab Sample ID:	720-88239-11		
Client ID:	DG-I7S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-I7S-3.5-4
Lab Sample ID: 720-88239-12
Matrix: Solid
Lab File ID: 08291846.D
Analysis Method: 8260B
Date Collected: 08/24/2018 09:25
Sample wt/vol: 6.137(g)
Date Analyzed: 08/30/2018 03:35
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250528
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.1	0.98
67-64-1	Acetone	ND		41	31
71-43-2	Benzene	ND		4.1	0.53
75-27-4	Dichlorobromomethane	ND		4.1	0.59
108-86-1	Bromobenzene	ND		4.1	0.64
74-97-5	Chlorobromomethane	ND		16	0.59
75-25-2	Bromoform	ND		4.1	1.6
74-83-9	Bromomethane	ND		8.1	0.64
78-93-3	2-Butanone (MEK)	ND		41	17
104-51-8	n-Butylbenzene	ND		4.1	0.81
135-98-8	sec-Butylbenzene	ND		4.1	0.59
98-06-6	tert-Butylbenzene	ND		4.1	0.59
75-15-0	Carbon disulfide	ND		4.1	1.6
56-23-5	Carbon tetrachloride	ND		4.1	0.51
108-90-7	Chlorobenzene	ND		4.1	0.56
75-00-3	Chloroethane	ND		8.1	0.46
67-66-3	Chloroform	ND		4.1	0.54
74-87-3	Chloromethane	ND		8.1	0.64
95-49-8	2-Chlorotoluene	ND		4.1	0.53
106-43-4	4-Chlorotoluene	ND		4.1	0.55
124-48-1	Chlorodibromomethane	ND		4.1	0.58
95-50-1	1,2-Dichlorobenzene	ND		4.1	0.55
541-73-1	1,3-Dichlorobenzene	ND		4.1	0.59
106-46-7	1,4-Dichlorobenzene	ND		4.1	0.58
142-28-9	1,3-Dichloropropane	ND		4.1	0.59
563-58-6	1,1-Dichloropropene	ND		4.1	0.56
96-12-8	1,2-Dibromo-3-Chloropropane	ND		8.1	1.4
106-93-4	Ethylene Dibromide	ND		4.1	1.2
74-95-3	Dibromomethane	ND		8.1	0.70
75-71-8	Dichlorodifluoromethane	ND		8.1	0.64
75-34-3	1,1-Dichloroethane	ND		4.1	0.55
107-06-2	1,2-Dichloroethane	ND		4.1	0.62
75-35-4	1,1-Dichloroethene	ND	*	4.1	0.51
156-59-2	cis-1,2-Dichloroethene	ND		4.1	0.55
156-60-5	trans-1,2-Dichloroethene	ND		4.1	0.61
78-87-5	1,2-Dichloropropane	ND		4.1	0.51

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-I7S-3.5-4
Lab Sample ID: 720-88239-12
Matrix: Solid
Lab File ID: 08291846.D
Analysis Method: 8260B
Date Collected: 08/24/2018 09:25
Sample wt/vol: 6.137(g)
Date Analyzed: 08/30/2018 03:35
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250528
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.1	0.56
10061-02-6	trans-1,3-Dichloropropene	ND		4.1	0.55
100-41-4	Ethylbenzene	ND		4.1	0.61
87-68-3	Hexachlorobutadiene	ND		4.1	0.73
591-78-6	2-Hexanone	ND		41	8.1
98-82-8	Isopropylbenzene	ND		4.1	0.55
99-87-6	4-Isopropyltoluene	ND		4.1	2.0
75-09-2	Methylene Chloride	ND		8.1	4.6
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		41	8.1
91-20-3	Naphthalene	ND		8.1	1.2
103-65-1	N-Propylbenzene	ND		4.1	0.54
100-42-5	Styrene	ND		4.1	0.51
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.1	0.62
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.1	0.61
127-18-4	Tetrachloroethene	ND		4.1	0.55
108-88-3	Toluene	ND		4.1	0.58
87-61-6	1,2,3-Trichlorobenzene	ND		4.1	0.60
120-82-1	1,2,4-Trichlorobenzene	ND		4.1	0.58
71-55-6	1,1,1-Trichloroethane	ND		4.1	0.50
79-00-5	1,1,2-Trichloroethane	ND		4.1	0.57
79-01-6	Trichloroethene	0.97	J	4.1	0.51
75-69-4	Trichlorofluoromethane	ND		4.1	0.46
96-18-4	1,2,3-Trichloropropane	ND		4.1	0.63
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.1	1.7
95-63-6	1,2,4-Trimethylbenzene	ND		4.1	1.3
108-67-8	1,3,5-Trimethylbenzene	ND		4.1	0.53
108-05-4	Vinyl acetate	ND		16	4.1
75-01-4	Vinyl chloride	ND		4.1	0.59
1330-20-7	Xylenes, Total	ND		4.1	0.99
594-20-7	2,2-Dichloropropane	ND		4.1	1.6
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		200	81

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-I7S-3.5-4 Lab Sample ID: 720-88239-12

Matrix: Solid Lab File ID: 08291846.D

Analysis Method: 8260B Date Collected: 08/24/2018 09:25

Sample wt/vol: 6.137(g) Date Analyzed: 08/30/2018 03:35

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250528 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	94		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		60-140
2037-26-5	Toluene-d8 (Surr)	95		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291846.D
Lims ID: 720-88239-A-12-A
Client ID: DG-I7S--3.5-4
Sample Type: Client
Inject. Date: 30-Aug-2018 03:35:30 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-A-12
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 09:10:00 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: sanjumnair Date: 31-Aug-2018 09:02:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	166302	250.0	
* 2 Fluorobenzene	96	10.720	10.709	0.011	98	998441	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.554	0.010	86	827102	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	95	388239	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.305	9.294	0.011	93	65685	7.77	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.812	0.010	0	75572	8.32	
$ 10 Toluene-d8 (Surr)	98	12.822	12.822	0.000	95	281783	7.11	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	91	90918	7.06	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	84	80882	5.95	
28 Acetone	58	6.474	6.474	0.000	98	6035	7.87	
148 Methyl acetate	43	7.235	7.224	0.011	80	10993	1.59	
48 cis-1,2-Dichloroethene	61	8.924	8.924	0.000	1	2021	0.1262	
144 Ethyl acetate	43	9.114	9.104	0.010	98	69145	6.54	
59 Benzene	78	10.487	10.488	-0.001	91	2248	0.0624	
65 Trichloroethene	132	11.206	11.206	0.000	90	6594	0.5944	
75 Toluene	92	12.906	12.906	0.000	97	6548	0.2462	
131 Butyl Ether	87	14.775	14.775	0.000	93	1694	0.2413	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	437199	5.67	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	206739	2.68	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	250376	3.25	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	506597	6.57	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	258955	3.36	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	258955	NC	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	497391	6.45	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	328353	4.26	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	78974	1.02	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	185937	2.41	

QC Flag Legend

Processing Flags

NC - Not Calibrated

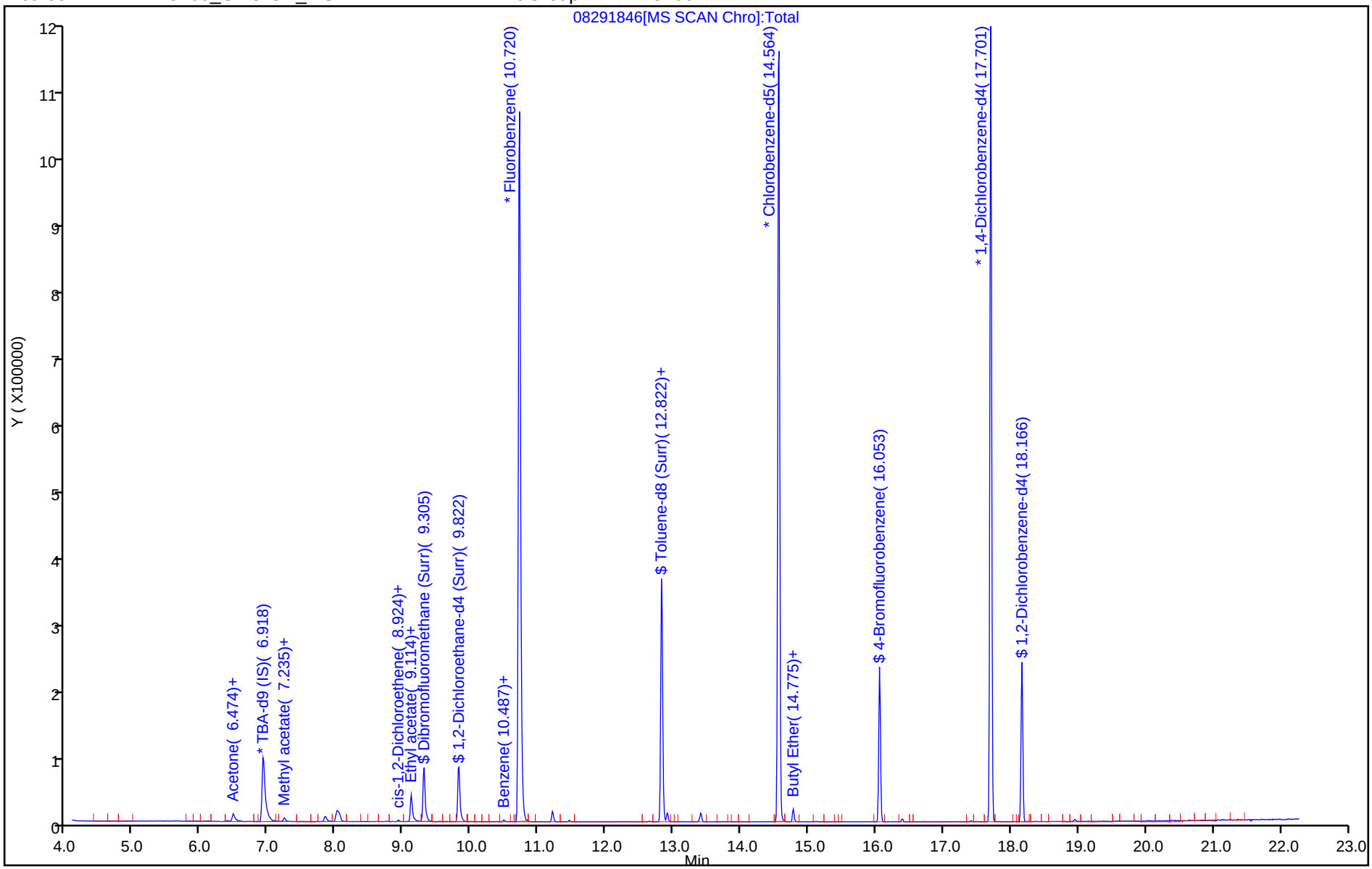
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 09:10:49 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291846.D				
Injection Date:	30-Aug-2018 03:35:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88239-A-12-A	Lab Sample ID:	720-88239-12	Worklist Smp#:	22
Client ID:	DG-I7S--3.5-4				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291846.D
Lims ID: 720-88239-A-12-A
Client ID: DG-I7S--3.5-4
Sample Type: Client
Inject. Date: 30-Aug-2018 03:35:30 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-A-12
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 09:10:00 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: sanjumnair Date: 31-Aug-2018 09:02:25

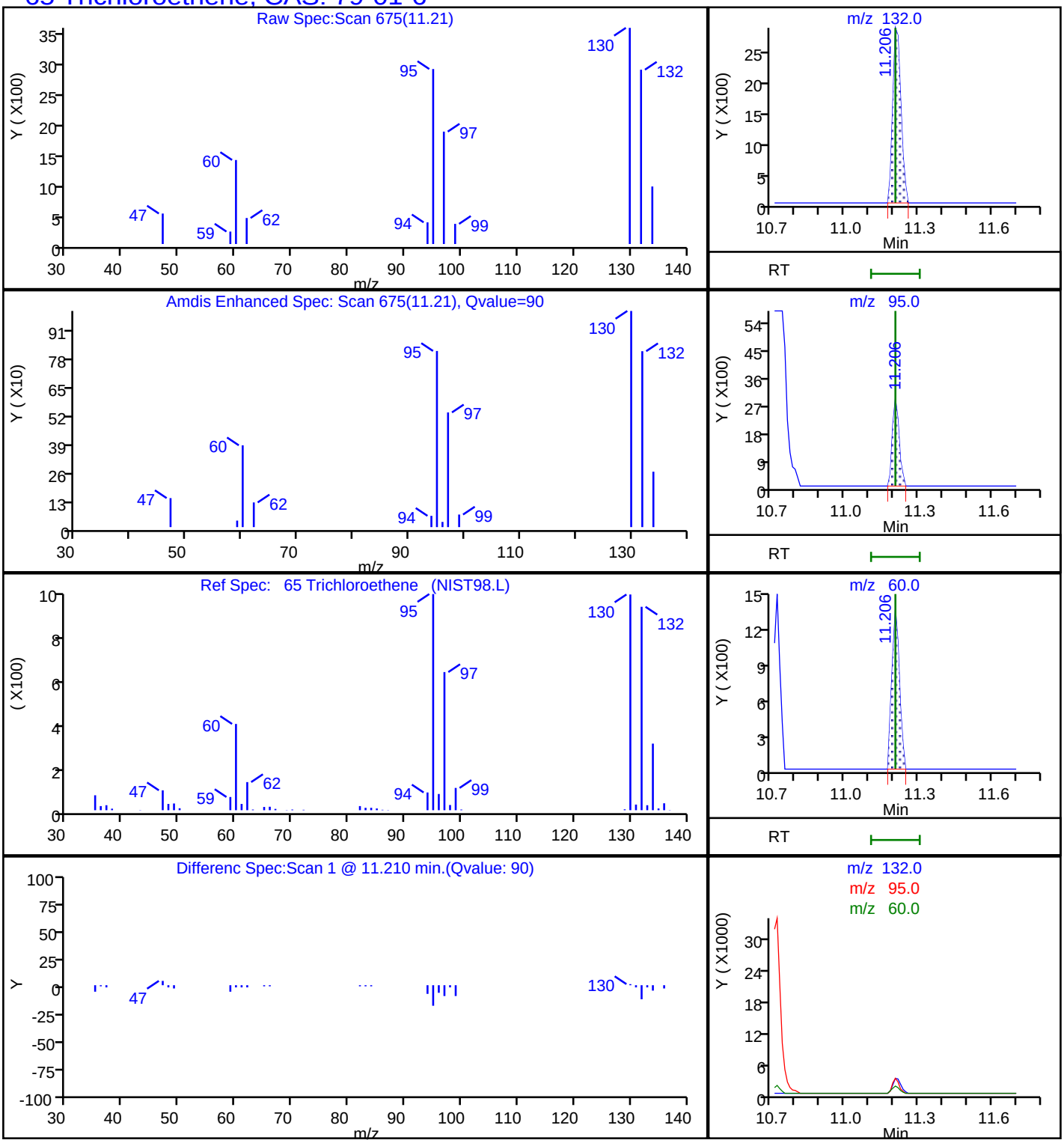
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.32	110.90
$ 10 Toluene-d8 (Surr)	7.50	7.11	94.77
$ 11 4-Bromofluorobenzene	7.50	7.06	94.12
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 31-Aug-2018 09:10:49 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291846.D				
Injection Date:	30-Aug-2018 03:35:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-A-12-A	Lab Sample ID:	720-88239-12		
Client ID:	DG-I7S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

65 Trichloroethene, CAS: 79-01-6

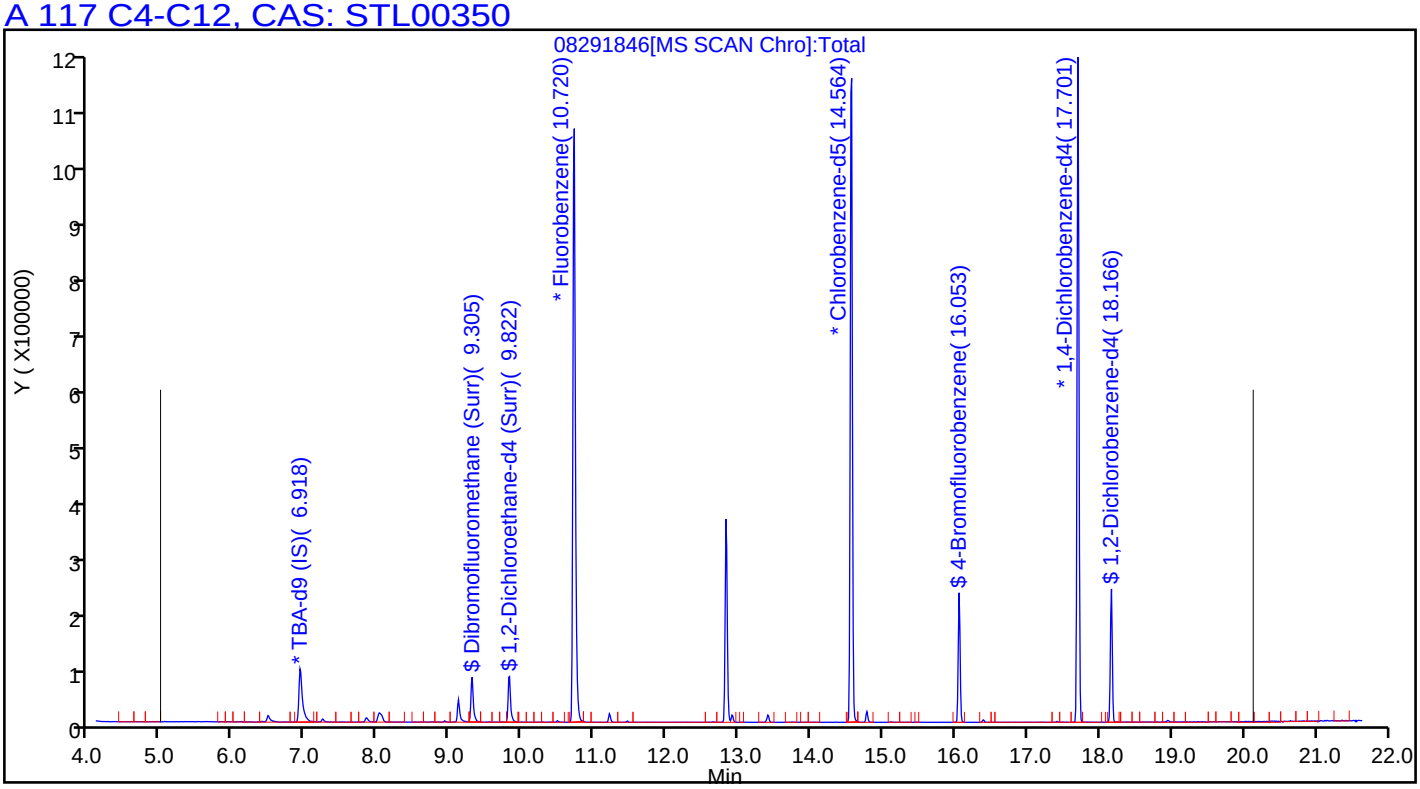


Report Date: 31-Aug-2018 09:10:49 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291846.D				
Injection Date:	30-Aug-2018 03:35:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-A-12-A	Lab Sample ID:	720-88239-12		
Client ID:	DG-I7S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-M7S-0.5-1
Lab Sample ID: 720-88239-13
Matrix: Solid
Lab File ID: 08301816.D
Analysis Method: 8260B
Date Collected: 08/24/2018 09:55
Sample wt/vol: 6.038(g)
Date Analyzed: 08/30/2018 14:46
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250555
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.1	0.99
67-64-1	Acetone	ND		41	31
71-43-2	Benzene	ND		4.1	0.54
75-27-4	Dichlorobromomethane	ND		4.1	0.60
108-86-1	Bromobenzene	ND	*	4.1	0.65
74-97-5	Chlorobromomethane	ND		17	0.60
75-25-2	Bromoform	ND		4.1	1.7
74-83-9	Bromomethane	ND		8.3	0.65
78-93-3	2-Butanone (MEK)	ND		41	17
104-51-8	n-Butylbenzene	ND	*	4.1	0.83
135-98-8	sec-Butylbenzene	ND	*	4.1	0.60
98-06-6	tert-Butylbenzene	ND	*	4.1	0.60
75-15-0	Carbon disulfide	ND		4.1	1.7
56-23-5	Carbon tetrachloride	ND		4.1	0.51
108-90-7	Chlorobenzene	ND		4.1	0.57
75-00-3	Chloroethane	ND		8.3	0.46
67-66-3	Chloroform	ND		4.1	0.55
74-87-3	Chloromethane	ND		8.3	0.65
95-49-8	2-Chlorotoluene	ND	*	4.1	0.54
106-43-4	4-Chlorotoluene	ND	*	4.1	0.56
124-48-1	Chlorodibromomethane	ND		4.1	0.59
95-50-1	1,2-Dichlorobenzene	ND	*	4.1	0.56
541-73-1	1,3-Dichlorobenzene	ND	*	4.1	0.60
106-46-7	1,4-Dichlorobenzene	ND	*	4.1	0.59
142-28-9	1,3-Dichloropropane	ND		4.1	0.60
563-58-6	1,1-Dichloropropene	ND		4.1	0.57
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	8.3	1.4
106-93-4	Ethylene Dibromide	ND		4.1	1.2
74-95-3	Dibromomethane	ND		8.3	0.71
75-71-8	Dichlorodifluoromethane	ND		8.3	0.65
75-34-3	1,1-Dichloroethane	ND		4.1	0.56
107-06-2	1,2-Dichloroethane	ND		4.1	0.63
75-35-4	1,1-Dichloroethene	ND	*	4.1	0.51
156-59-2	cis-1,2-Dichloroethene	ND		4.1	0.56
156-60-5	trans-1,2-Dichloroethene	ND		4.1	0.62
78-87-5	1,2-Dichloropropane	ND		4.1	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-M7S-0.5-1
Lab Sample ID: 720-88239-13
Matrix: Solid
Lab File ID: 08301816.D
Analysis Method: 8260B
Date Collected: 08/24/2018 09:55
Sample wt/vol: 6.038(g)
Date Analyzed: 08/30/2018 14:46
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250555
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.1	0.57
10061-02-6	trans-1,3-Dichloropropene	ND		4.1	0.55
100-41-4	Ethylbenzene	ND		4.1	0.62
87-68-3	Hexachlorobutadiene	ND	*	4.1	0.75
591-78-6	2-Hexanone	ND		41	8.3
98-82-8	Isopropylbenzene	ND		4.1	0.56
99-87-6	4-Isopropyltoluene	ND	*	4.1	2.1
75-09-2	Methylene Chloride	ND		8.3	4.6
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		41	8.3
91-20-3	Naphthalene	ND	*	8.3	1.2
103-65-1	N-Propylbenzene	ND	*	4.1	0.55
100-42-5	Styrene	ND		4.1	0.52
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.1	0.63
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	4.1	0.62
127-18-4	Tetrachloroethene	ND		4.1	0.55
108-88-3	Toluene	0.71	J	4.1	0.59
87-61-6	1,2,3-Trichlorobenzene	ND	*	4.1	0.61
120-82-1	1,2,4-Trichlorobenzene	ND	*	4.1	0.59
71-55-6	1,1,1-Trichloroethane	ND		4.1	0.51
79-00-5	1,1,2-Trichloroethane	ND		4.1	0.58
79-01-6	Trichloroethene	ND		4.1	0.52
75-69-4	Trichlorofluoromethane	ND		4.1	0.46
96-18-4	1,2,3-Trichloropropane	ND	*	4.1	0.64
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.1	1.7
95-63-6	1,2,4-Trimethylbenzene	ND	*	4.1	1.4
108-67-8	1,3,5-Trimethylbenzene	ND	*	4.1	0.54
108-05-4	Vinyl acetate	ND		17	4.1
75-01-4	Vinyl chloride	ND		4.1	0.60
1330-20-7	Xylenes, Total	ND		4.1	1.0
594-20-7	2,2-Dichloropropane	ND		4.1	1.7
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		210	83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-M7S-0.5-1 Lab Sample ID: 720-88239-13

Matrix: Solid Lab File ID: 08301816.D

Analysis Method: 8260B Date Collected: 08/24/2018 09:55

Sample wt/vol: 6.038(g) Date Analyzed: 08/30/2018 14:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250555 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	81		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	122		60-140
2037-26-5	Toluene-d8 (Surr)	90		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\08301816.D
Lims ID: 720-88239-B-13-A RR
Client ID:
Sample Type: Client
Inject. Date: 30-Aug-2018 14:46:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-B-13 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:44:08 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: sanjumnair Date: 31-Aug-2018 08:31:13

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.928	6.918	0.010	0	162593	250.0	
* 2 Fluorobenzene	96	10.709	10.709	0.000	98	909848	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.564	0.000	85	674777	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	234447	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.305	9.294	0.010	93	64072	8.31	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.811	9.812	-0.001	0	75543	9.12	
$ 10 Toluene-d8 (Surr)	98	12.821	12.822	-0.001	95	243711	6.75	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	90	64192	6.11	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.176	0.000	84	46290	5.64	
28 Acetone	58	6.485	6.474	0.011	96	7274	10.4	
148 Methyl acetate	43	7.224	7.224	0.000	99	123383	19.6	
59 Benzene	78	10.487	10.488	-0.001	96	3713	0.1131	
75 Toluene	92	12.906	12.906	0.000	98	9292	0.4282	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	696074	9.91	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	93067	1.33	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	106219	1.51	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	788141	11.2	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	120185	NC	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	120185	1.71	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	694028	9.88	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	212252	3.02	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	55745	0.7939	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	157972	2.25	

QC Flag Legend

Processing Flags

NC - Not Calibrated

s - Failed ISTD Recovery Test

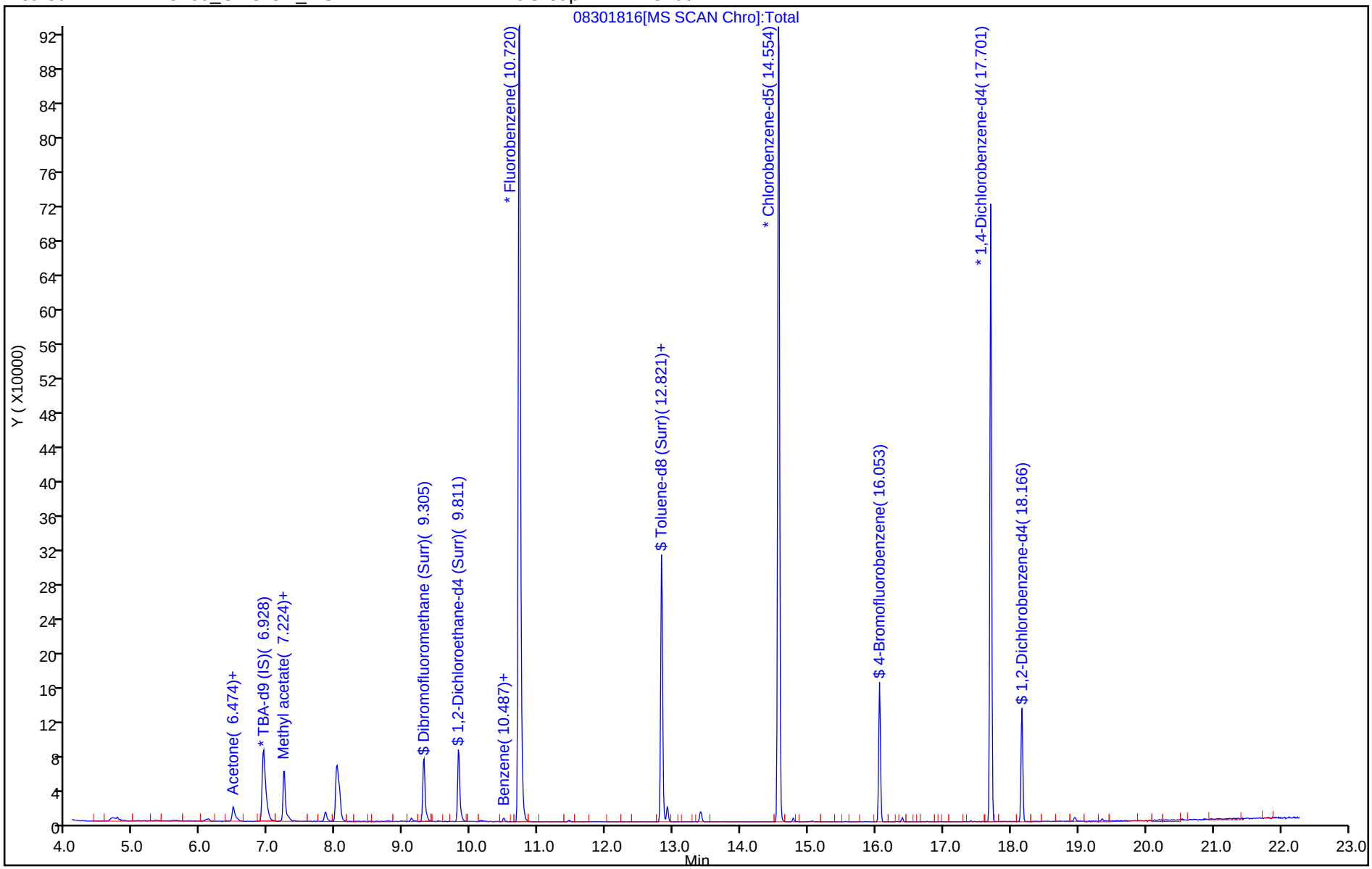
Reagents:

I_IS/SS_00092	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 31-Aug-2018 09:29:40 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\08301816.D				
Injection Date:	30-Aug-2018 14:46:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88239-B-13-A RR	Lab Sample ID:	Client 720-250555/16-A	Worklist Smp#:	16
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\08301816.D
Lims ID: 720-88239-B-13-A RR
Client ID:
Sample Type: Client
Inject. Date: 30-Aug-2018 14:46:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-B-13 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:44:08 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: sanjumnair Date: 31-Aug-2018 08:31:13

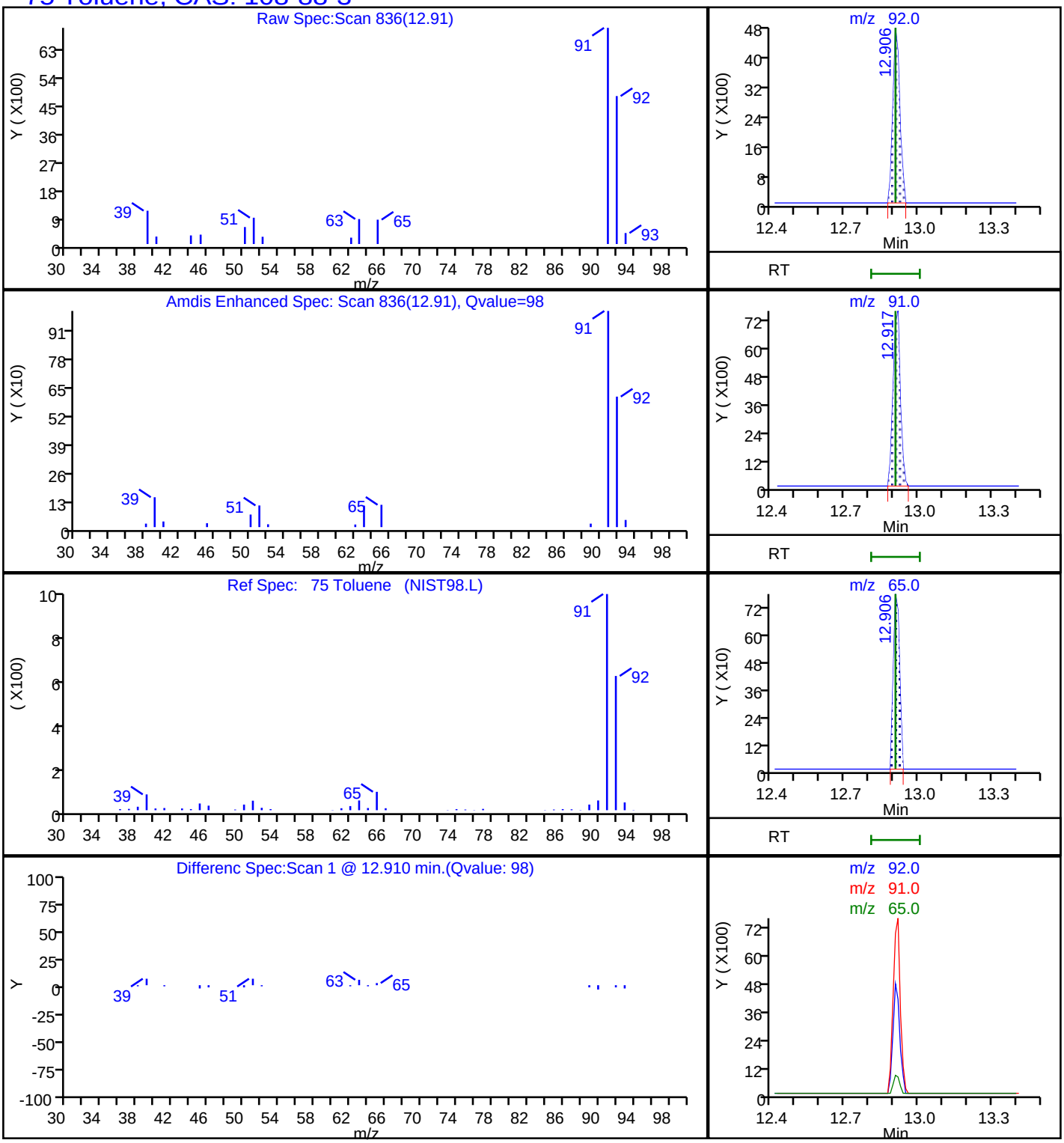
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	7.50	8.31	110.85
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	9.12	121.65
$ 10 Toluene-d8 (Surr)	7.50	6.75	89.95
$ 11 4-Bromofluorobenzene	7.50	6.11	81.46
$ 12 1,2-Dichlorobenzene-d4	6.00	5.64	94.05

Report Date: 31-Aug-2018 09:29:41 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\08301816.D				
Injection Date:	30-Aug-2018 14:46:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-B-13-A RR	Lab Sample ID:	Client 720-250555/16-A		
Client ID:					
Operator ID:	VOA	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

75 Toluene, CAS: 108-88-3

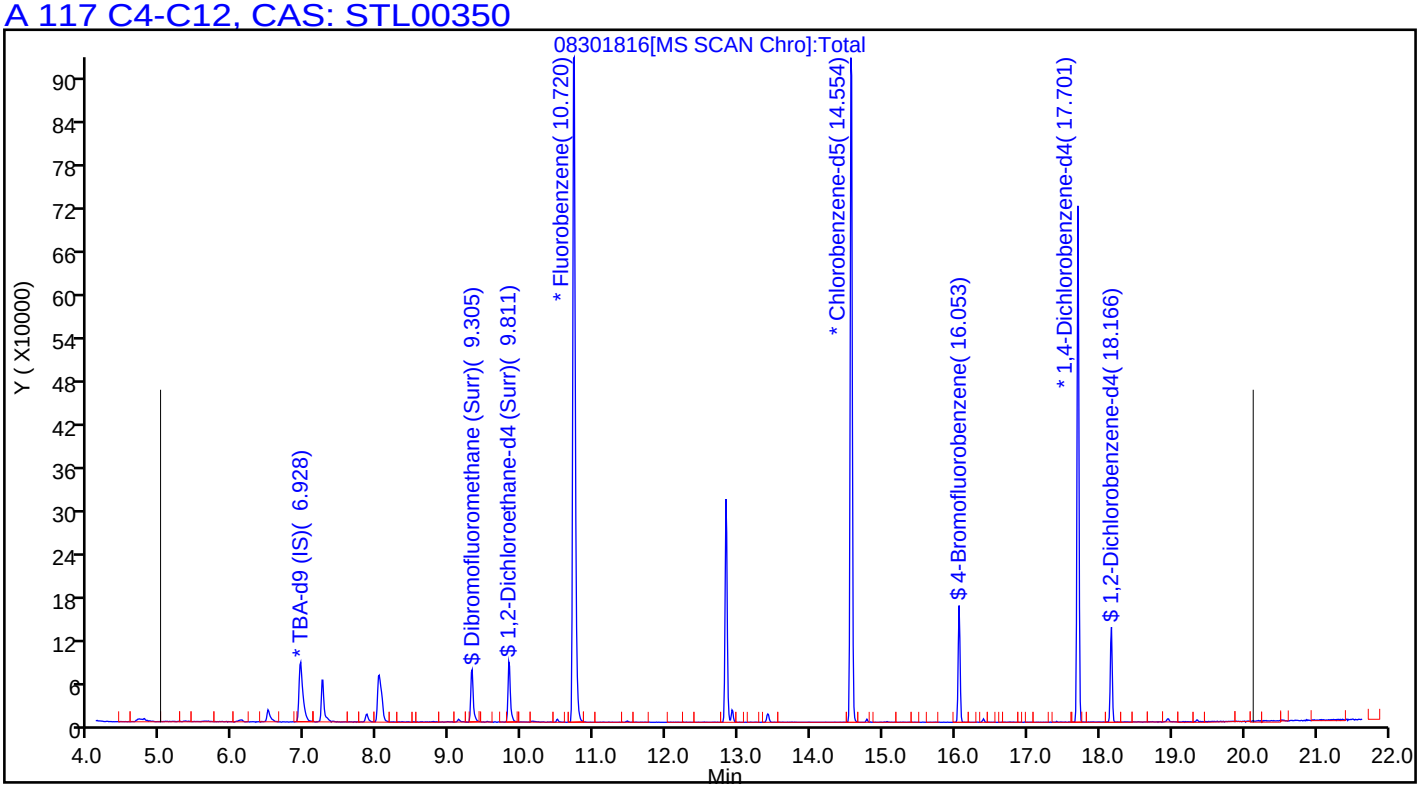


Report Date: 31-Aug-2018 09:29:41 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\08301816.D				
Injection Date:	30-Aug-2018 14:46:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-B-13-A RR	Lab Sample ID:	Client 720-250555/16-A		
Client ID:					
Operator ID:	VOA	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-M7S-3.5-4
Lab Sample ID: 720-88239-14
Matrix: Solid
Lab File ID: 08291848.D
Analysis Method: 8260B
Date Collected: 08/24/2018 09:55
Sample wt/vol: 6.673(g)
Date Analyzed: 08/30/2018 04:32
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250528
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		3.7	0.90
67-64-1	Acetone	45		37	28
71-43-2	Benzene	ND		3.7	0.49
75-27-4	Dichlorobromomethane	ND		3.7	0.54
108-86-1	Bromobenzene	ND		3.7	0.59
74-97-5	Chlorobromomethane	ND		15	0.54
75-25-2	Bromoform	ND		3.7	1.5
74-83-9	Bromomethane	ND		7.5	0.59
78-93-3	2-Butanone (MEK)	ND		37	16
104-51-8	n-Butylbenzene	ND		3.7	0.75
135-98-8	sec-Butylbenzene	ND		3.7	0.54
98-06-6	tert-Butylbenzene	ND		3.7	0.55
75-15-0	Carbon disulfide	ND		3.7	1.5
56-23-5	Carbon tetrachloride	ND		3.7	0.46
108-90-7	Chlorobenzene	ND		3.7	0.52
75-00-3	Chloroethane	ND		7.5	0.42
67-66-3	Chloroform	ND		3.7	0.49
74-87-3	Chloromethane	ND		7.5	0.59
95-49-8	2-Chlorotoluene	ND		3.7	0.49
106-43-4	4-Chlorotoluene	ND		3.7	0.51
124-48-1	Chlorodibromomethane	ND		3.7	0.53
95-50-1	1,2-Dichlorobenzene	ND		3.7	0.51
541-73-1	1,3-Dichlorobenzene	ND		3.7	0.54
106-46-7	1,4-Dichlorobenzene	ND		3.7	0.53
142-28-9	1,3-Dichloropropane	ND		3.7	0.55
563-58-6	1,1-Dichloropropene	ND		3.7	0.52
96-12-8	1,2-Dibromo-3-Chloropropane	ND		7.5	1.3
106-93-4	Ethylene Dibromide	ND		3.7	1.1
74-95-3	Dibromomethane	ND		7.5	0.64
75-71-8	Dichlorodifluoromethane	ND		7.5	0.59
75-34-3	1,1-Dichloroethane	ND		3.7	0.51
107-06-2	1,2-Dichloroethane	ND		3.7	0.57
75-35-4	1,1-Dichloroethene	ND	*	3.7	0.46
156-59-2	cis-1,2-Dichloroethene	ND		3.7	0.51
156-60-5	trans-1,2-Dichloroethene	ND		3.7	0.56
78-87-5	1,2-Dichloropropane	ND		3.7	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-M7S-3.5-4
Lab Sample ID: 720-88239-14
Matrix: Solid
Lab File ID: 08291848.D
Analysis Method: 8260B
Date Collected: 08/24/2018 09:55
Sample wt/vol: 6.673(g)
Date Analyzed: 08/30/2018 04:32
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250528
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		3.7	0.52
10061-02-6	trans-1,3-Dichloropropene	ND		3.7	0.50
100-41-4	Ethylbenzene	ND		3.7	0.56
87-68-3	Hexachlorobutadiene	ND		3.7	0.67
591-78-6	2-Hexanone	ND		37	7.5
98-82-8	Isopropylbenzene	ND		3.7	0.51
99-87-6	4-Isopropyltoluene	ND		3.7	1.9
75-09-2	Methylene Chloride	ND		7.5	4.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		37	7.5
91-20-3	Naphthalene	ND		7.5	1.1
103-65-1	N-Propylbenzene	ND		3.7	0.49
100-42-5	Styrene	ND		3.7	0.47
630-20-6	1,1,1,2-Tetrachloroethane	ND		3.7	0.57
79-34-5	1,1,2,2-Tetrachloroethane	ND		3.7	0.56
127-18-4	Tetrachloroethene	ND		3.7	0.50
108-88-3	Toluene	ND		3.7	0.53
87-61-6	1,2,3-Trichlorobenzene	ND		3.7	0.55
120-82-1	1,2,4-Trichlorobenzene	ND		3.7	0.53
71-55-6	1,1,1-Trichloroethane	ND		3.7	0.46
79-00-5	1,1,2-Trichloroethane	ND		3.7	0.52
79-01-6	Trichloroethene	ND		3.7	0.47
75-69-4	Trichlorofluoromethane	ND		3.7	0.42
96-18-4	1,2,3-Trichloropropane	ND		3.7	0.58
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.7	1.6
95-63-6	1,2,4-Trimethylbenzene	ND		3.7	1.2
108-67-8	1,3,5-Trimethylbenzene	ND		3.7	0.49
108-05-4	Vinyl acetate	ND		15	3.7
75-01-4	Vinyl chloride	ND		3.7	0.55
1330-20-7	Xylenes, Total	ND		3.7	0.91
594-20-7	2,2-Dichloropropane	ND		3.7	1.5
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		190	75

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-M7S-3.5-4 Lab Sample ID: 720-88239-14

Matrix: Solid Lab File ID: 08291848.D

Analysis Method: 8260B Date Collected: 08/24/2018 09:55

Sample wt/vol: 6.673(g) Date Analyzed: 08/30/2018 04:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250528 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	87		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	116		60-140
2037-26-5	Toluene-d8 (Surr)	91		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291848.D
Lims ID: 720-88239-A-14-A
Client ID: DG-M7S--3.5-4
Sample Type: Client
Inject. Date: 30-Aug-2018 04:32:30 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-A-14
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 09:10:00 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: sanjumnair Date: 31-Aug-2018 09:04:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	162802	250.0	
* 2 Fluorobenzene	96	10.720	10.709	0.011	98	923409	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.554	0.010	86	721084	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	307079	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.305	9.294	0.011	92	62949	8.05	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.812	0.010	0	73077	8.70	
$ 10 Toluene-d8 (Surr)	98	12.822	12.822	0.000	95	249894	6.82	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	91	72974	6.50	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	84	63239	5.89	
28 Acetone	58	6.474	6.474	0.000	97	21310	30.0	
148 Methyl acetate	43	7.235	7.224	0.011	99	24442	3.83	
144 Ethyl acetate	43	9.115	9.104	0.011	98	92724	9.48	
59 Benzene	78	10.488	10.488	0.000	89	1841	0.0553	
75 Toluene	92	12.906	12.906	0.000	95	5998	0.2587	
131 Butyl Ether	87	14.775	14.775	0.000	93	1323	0.2162	
85 m-Xylene & p-Xylene	91	15.050	15.050	0.000	1	1692	0.0512	
124 Butane	43	4.996	4.996	0.000	1	551	NR	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	653990	9.18	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	233219	3.27	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	274239	3.85	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	707136	9.92	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	283693	3.98	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	283693	NC	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	623331	8.75	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	336839	4.73	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	77193	1.08	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	141099	1.98	
S 122 Xylenes, Total	1				0		0.0512	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

NC - Not Calibrated

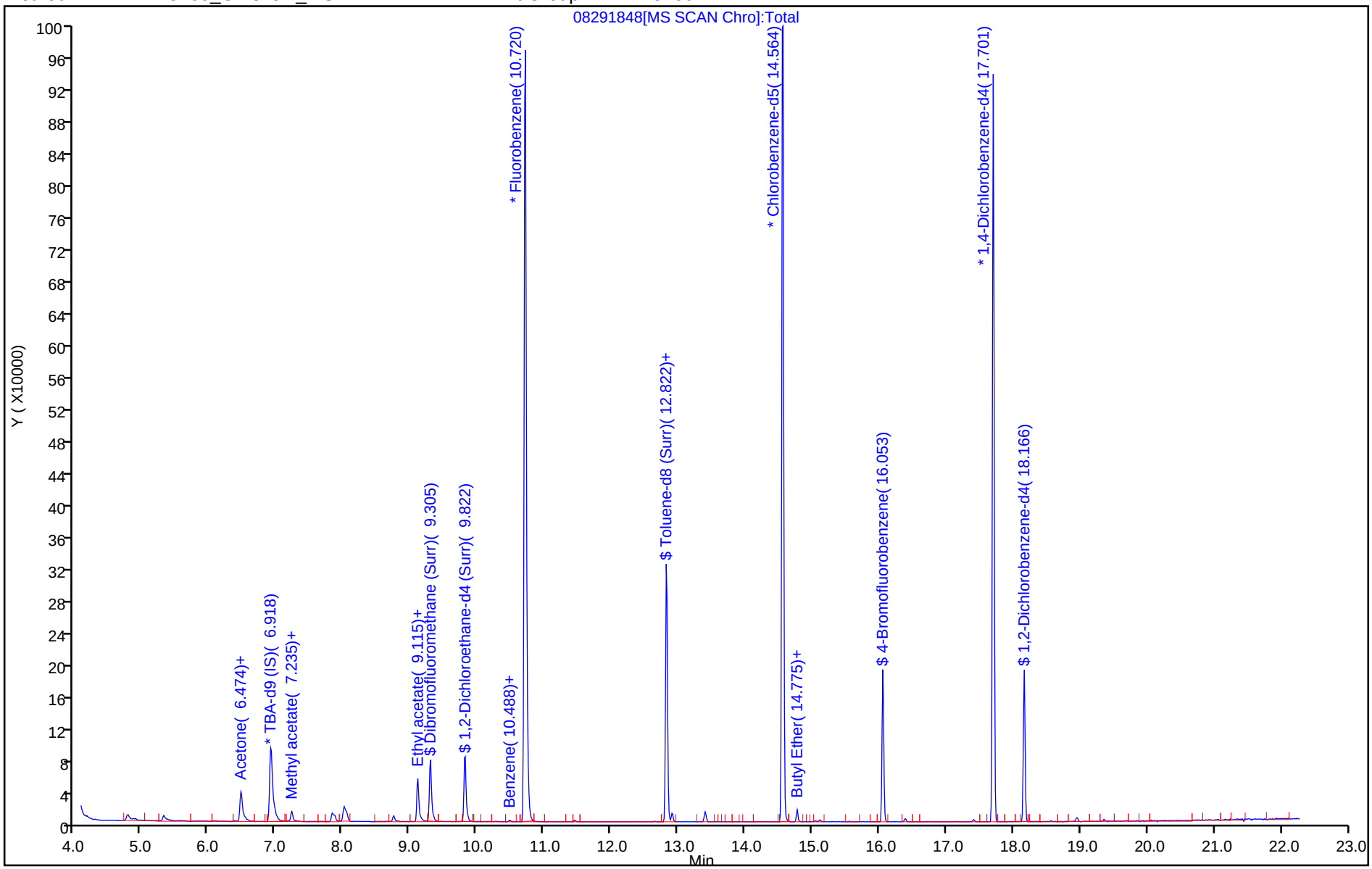
Reagents:

I_IS/SS_00092	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 31-Aug-2018 09:10:54 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291848.D				
Injection Date:	30-Aug-2018 04:32:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88239-A-14-A	Lab Sample ID:	720-88239-14	Worklist Smp#:	24
Client ID:	DG-M7S--3.5-4				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291848.D
Lims ID: 720-88239-A-14-A
Client ID: DG-M7S--3.5-4
Sample Type: Client
Inject. Date: 30-Aug-2018 04:32:30 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-A-14
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 09:10:00 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: sanjumnair Date: 31-Aug-2018 09:04:34

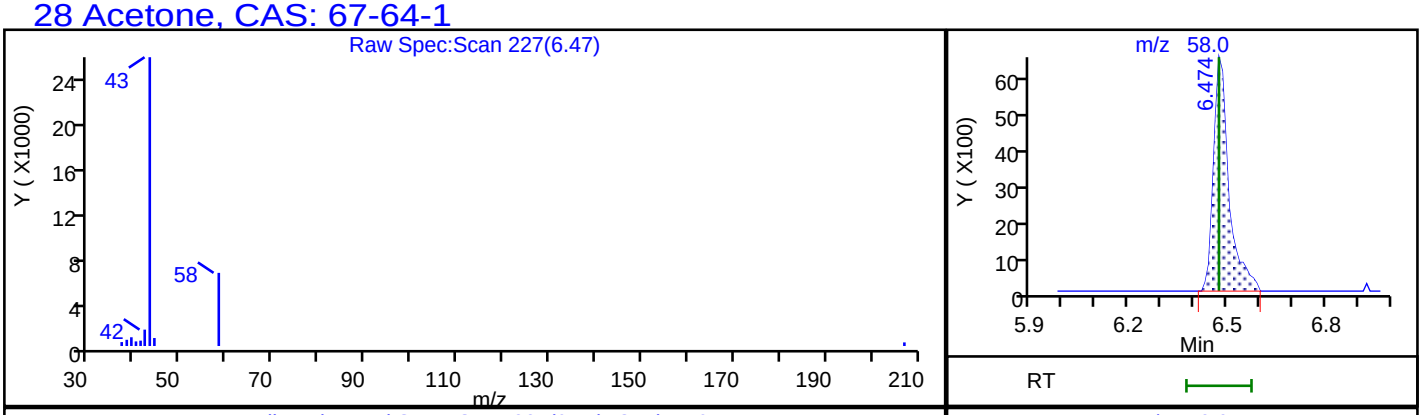
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.70	115.95
$ 10 Toluene-d8 (Surr)	7.50	6.82	90.87
$ 11 4-Bromofluorobenzene	7.50	6.50	86.65
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

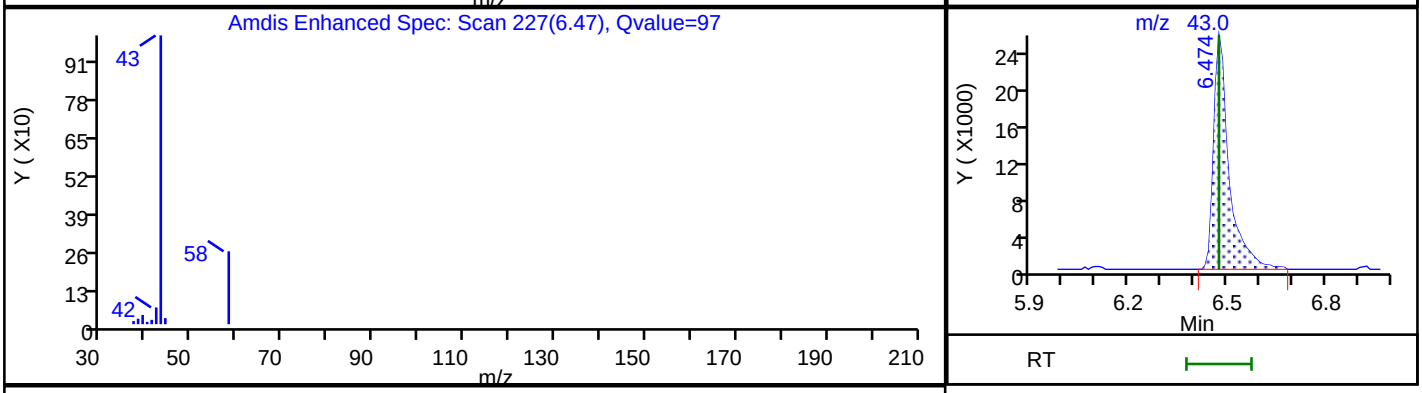
Report Date: 31-Aug-2018 09:10:54 Chrom Revision: 2.3 19-Jul-2018 15:14:50

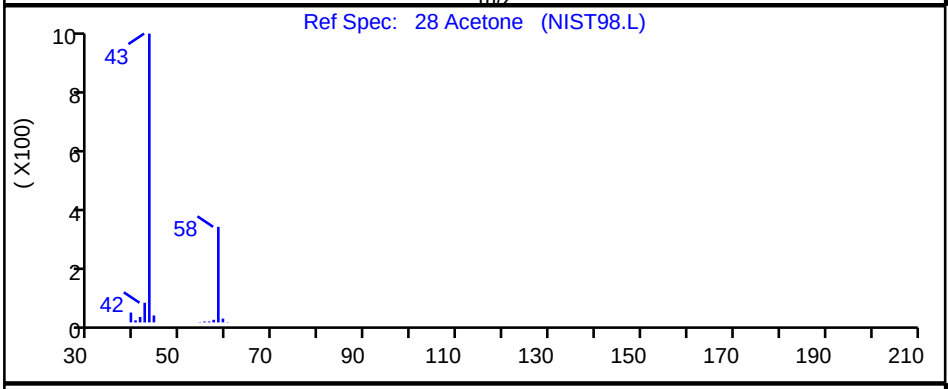
TestAmerica Pleasanton

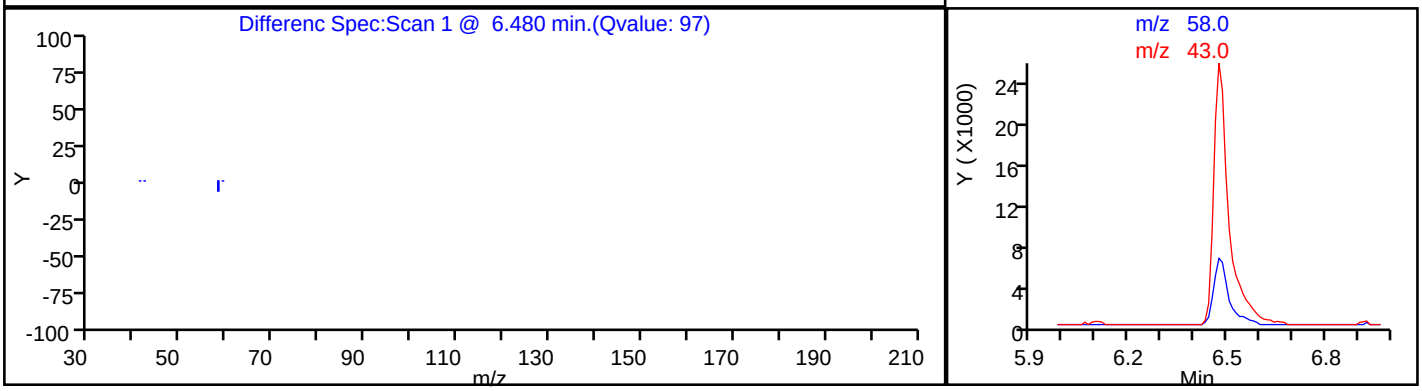
Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291848.D				
Injection Date:	30-Aug-2018 04:32:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-A-14-A	Lab Sample ID:	720-88239-14		
Client ID:	DG-M7S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1







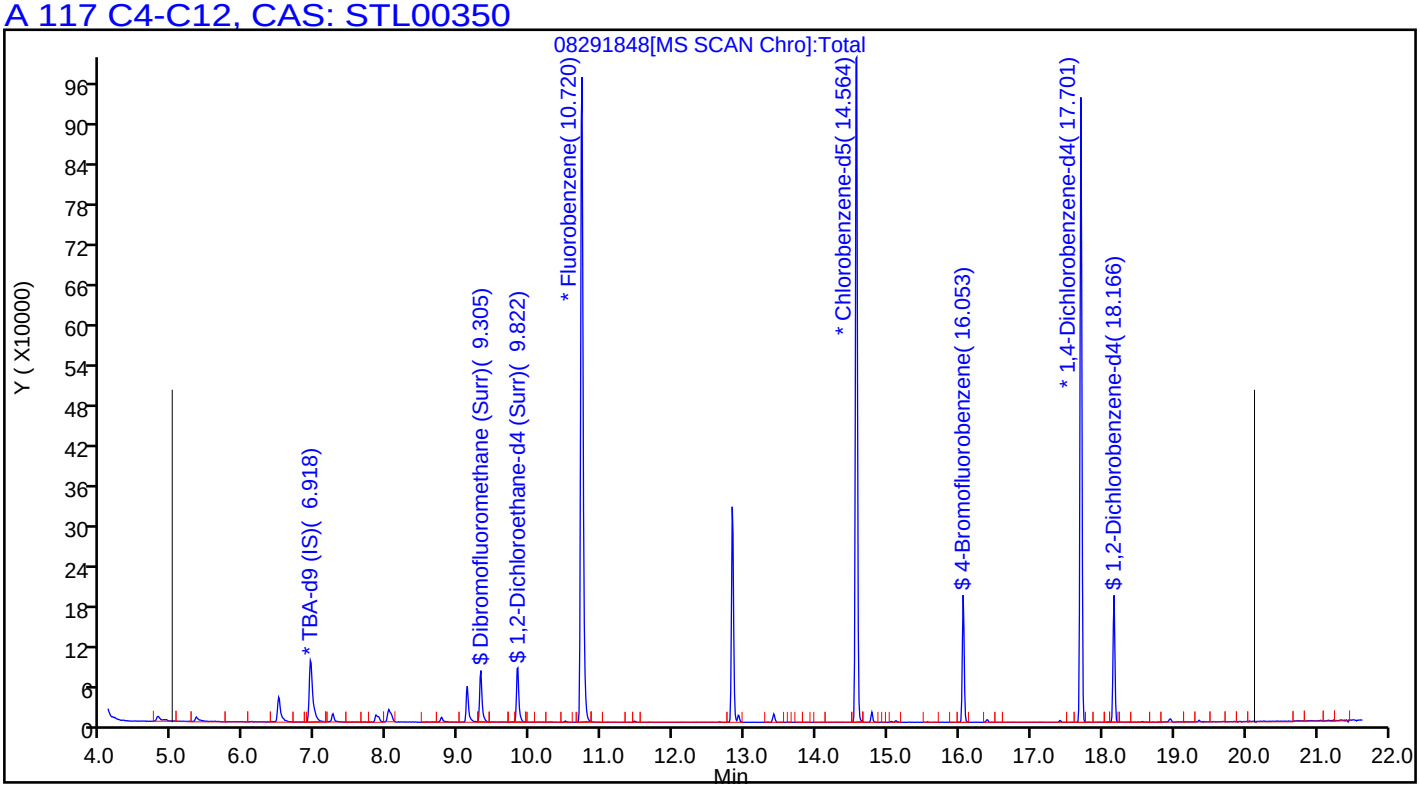


Report Date: 31-Aug-2018 09:10:54 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291848.D				
Injection Date:	30-Aug-2018 04:32:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-A-14-A	Lab Sample ID:	720-88239-14		
Client ID:	DG-M7S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-B9S-0.5-1
Lab Sample ID: 720-88239-15
Matrix: Solid
Lab File ID: 09041812.D
Analysis Method: 8260B
Date Collected: 08/24/2018 10:20
Sample wt/vol: 5.25(g)
Date Analyzed: 09/04/2018 12:51
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250755
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.8	1.1
67-64-1	Acetone	ND		48	36
71-43-2	Benzene	ND		4.8	0.62
75-27-4	Dichlorobromomethane	ND		4.8	0.69
108-86-1	Bromobenzene	ND		4.8	0.75
74-97-5	Chlorobromomethane	ND		19	0.69
75-25-2	Bromoform	ND		4.8	1.9
74-83-9	Bromomethane	ND		9.5	0.75
78-93-3	2-Butanone (MEK)	ND		48	20
104-51-8	n-Butylbenzene	ND		4.8	0.95
135-98-8	sec-Butylbenzene	ND		4.8	0.69
98-06-6	tert-Butylbenzene	ND		4.8	0.70
75-15-0	Carbon disulfide	ND		4.8	1.9
56-23-5	Carbon tetrachloride	ND		4.8	0.59
108-90-7	Chlorobenzene	ND		4.8	0.66
75-00-3	Chloroethane	ND		9.5	0.53
67-66-3	Chloroform	ND		4.8	0.63
74-87-3	Chloromethane	ND		9.5	0.75
95-49-8	2-Chlorotoluene	ND		4.8	0.62
106-43-4	4-Chlorotoluene	ND		4.8	0.65
124-48-1	Chlorodibromomethane	ND		4.8	0.68
95-50-1	1,2-Dichlorobenzene	ND		4.8	0.65
541-73-1	1,3-Dichlorobenzene	ND		4.8	0.69
106-46-7	1,4-Dichlorobenzene	ND		4.8	0.68
142-28-9	1,3-Dichloropropane	ND		4.8	0.70
563-58-6	1,1-Dichloropropene	ND		4.8	0.66
96-12-8	1,2-Dibromo-3-Chloropropane	ND		9.5	1.6
106-93-4	Ethylene Dibromide	ND		4.8	1.4
74-95-3	Dibromomethane	ND		9.5	0.82
75-71-8	Dichlorodifluoromethane	ND		9.5	0.75
75-34-3	1,1-Dichloroethane	ND		4.8	0.65
107-06-2	1,2-Dichloroethane	ND		4.8	0.72
75-35-4	1,1-Dichloroethene	ND	*	4.8	0.59
156-59-2	cis-1,2-Dichloroethene	ND		4.8	0.65
156-60-5	trans-1,2-Dichloroethene	ND		4.8	0.71
78-87-5	1,2-Dichloropropane	ND		4.8	0.60

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-B9S-0.5-1
Lab Sample ID: 720-88239-15
Matrix: Solid
Lab File ID: 09041812.D
Analysis Method: 8260B
Date Collected: 08/24/2018 10:20
Sample wt/vol: 5.25(g)
Date Analyzed: 09/04/2018 12:51
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250755
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.8	0.66
10061-02-6	trans-1,3-Dichloropropene	ND		4.8	0.64
100-41-4	Ethylbenzene	ND		4.8	0.71
87-68-3	Hexachlorobutadiene	ND		4.8	0.86
591-78-6	2-Hexanone	ND		48	9.5
98-82-8	Isopropylbenzene	ND		4.8	0.65
99-87-6	4-Isopropyltoluene	ND		4.8	2.4
75-09-2	Methylene Chloride	ND		9.5	5.3
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		48	9.5
91-20-3	Naphthalene	ND		9.5	1.4
103-65-1	N-Propylbenzene	ND		4.8	0.63
100-42-5	Styrene	ND		4.8	0.60
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.8	0.72
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.8	0.71
127-18-4	Tetrachloroethene	ND		4.8	0.64
108-88-3	Toluene	ND		4.8	0.68
87-61-6	1,2,3-Trichlorobenzene	ND		4.8	0.70
120-82-1	1,2,4-Trichlorobenzene	ND		4.8	0.68
71-55-6	1,1,1-Trichloroethane	ND		4.8	0.58
79-00-5	1,1,2-Trichloroethane	ND		4.8	0.67
79-01-6	Trichloroethene	ND		4.8	0.60
75-69-4	Trichlorofluoromethane	ND		4.8	0.53
96-18-4	1,2,3-Trichloropropane	ND		4.8	0.73
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.8	2.0
95-63-6	1,2,4-Trimethylbenzene	ND		4.8	1.6
108-67-8	1,3,5-Trimethylbenzene	ND		4.8	0.62
108-05-4	Vinyl acetate	ND		19	4.8
75-01-4	Vinyl chloride	ND		4.8	0.70
1330-20-7	Xylenes, Total	ND		4.8	1.2
594-20-7	2,2-Dichloropropane	ND		4.8	1.9
STL00504	C4-C10	ND		240	95
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		240	95

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-B9S-0.5-1 Lab Sample ID: 720-88239-15

Matrix: Solid Lab File ID: 09041812.D

Analysis Method: 8260B Date Collected: 08/24/2018 10:20

Sample wt/vol: 5.25(g) Date Analyzed: 09/04/2018 12:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250755 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	78		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		60-140
2037-26-5	Toluene-d8 (Surr)	88		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\09041812.D
Lims ID: 720-88239-D-15-C RR
Client ID:
Sample Type: Client
Inject. Date: 04-Sep-2018 12:51:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-D-15 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 04-Sep-2018 14:23:47 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: medinaj Date: 04-Sep-2018 14:51:56

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	181378	250.0	
* 2 Fluorobenzene	96	10.709	10.709	0.000	98	1078921	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.564	0.000	84	772423	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	251554	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.305	9.314	0.001	93	72167	7.90	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.812	9.821	0.001	0	75942	7.73	
$ 10 Toluene-d8 (Surr)	98	12.822	12.834	0.001	94	283405	6.62	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	94	70787	5.89	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	83	55411	6.30	
34 Methylene Chloride	84	7.192	7.199	0.000	87	4569	0.5609	
46 Hexane	86	8.734	8.732	0.010	95	1122	0.6713	
48 cis-1,2-Dichloroethene	61	8.924	8.933	0.000	82	2279	0.1317	
59 Benzene	78	10.488	10.498	0.001	95	7114	0.1828	
75 Toluene	92	12.917	12.906	0.011	98	4366	0.1758	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	236135	2.84	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	119871	1.44	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	130967	1.57	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	307180	3.69	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	138604	NC	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	138604	1.66	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	273604	3.29	
A 120 C6-C12	1	14.400	(8.671-20.130)		0	209649	2.52	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	30118	0.3617	
A 121 C7-C12	1	15.567	(11.005-20.130)		0	111598	1.34	

QC Flag Legend

Processing Flags

NC - Not Calibrated

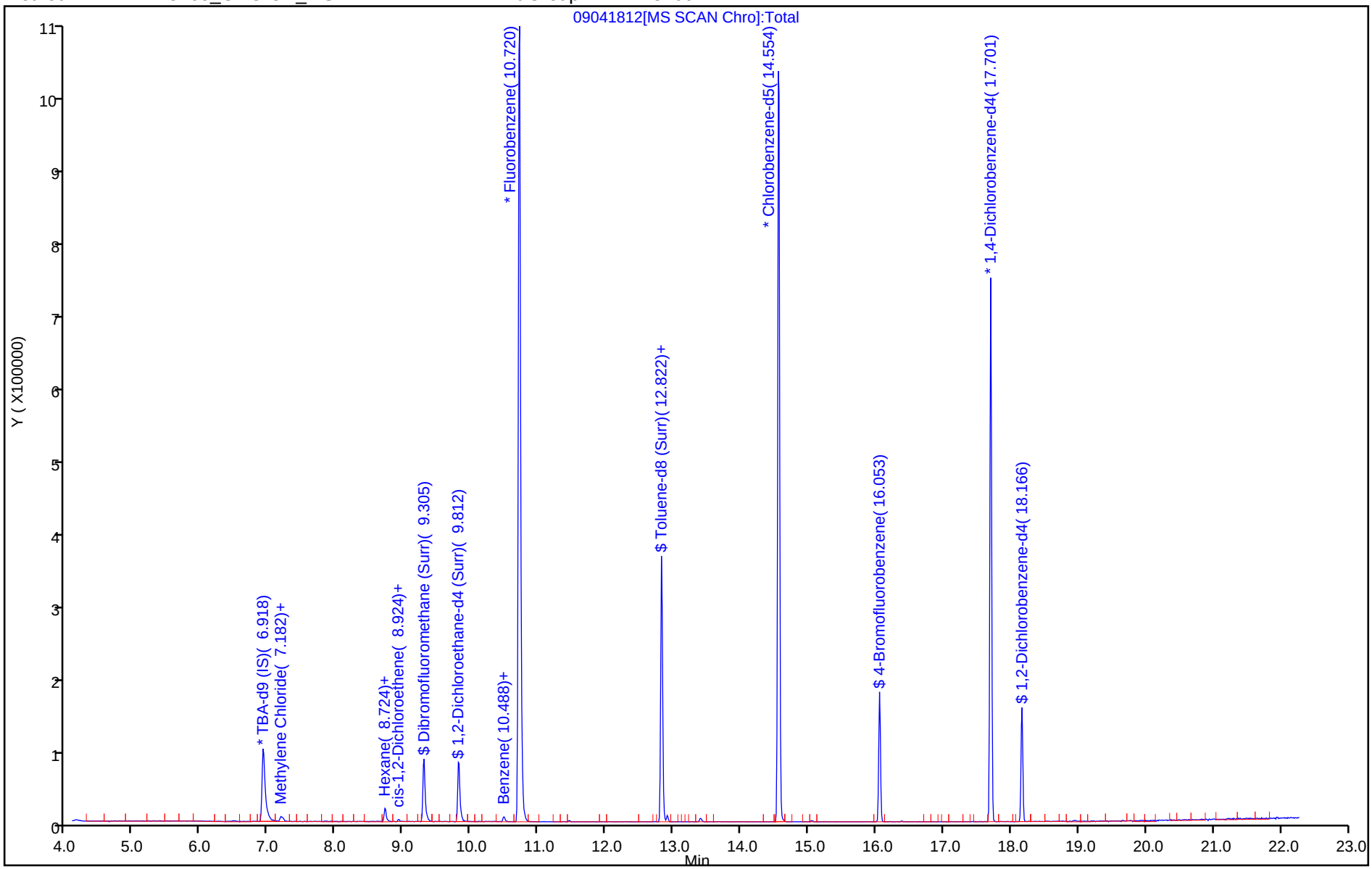
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 04-Sep-2018 14:51:57 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\09041812.D				
Injection Date:	04-Sep-2018 12:51:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88239-D-15-C RR	Lab Sample ID:	Client 720-250755/12-A	Worklist Smp#:	12
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\09041812.D
Lims ID: 720-88239-D-15-C RR
Client ID:
Sample Type: Client
Inject. Date: 04-Sep-2018 12:51:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-D-15 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 04-Sep-2018 14:23:47 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: medinaj Date: 04-Sep-2018 14:51:56

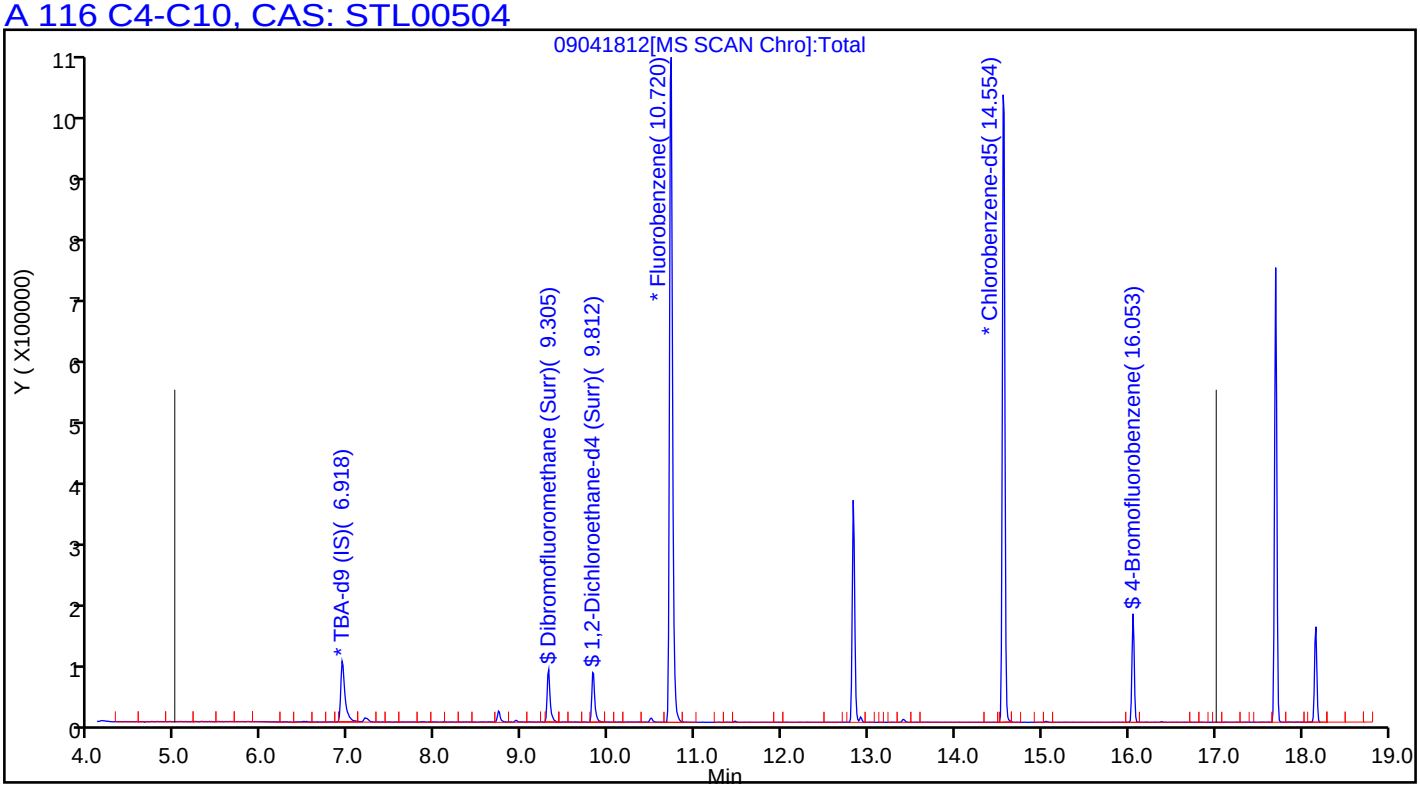
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	7.50	7.90	105.29
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.73	103.13
$ 10 Toluene-d8 (Surr)	7.50	6.62	88.21
$ 11 4-Bromofluorobenzene	7.50	5.89	78.47
$ 12 1,2-Dichlorobenzene-d4	6.00	6.30	104.92

Report Date: 04-Sep-2018 14:51:57 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\09041812.D				
Injection Date:	04-Sep-2018 12:51:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-D-15-C RR	Lab Sample ID:	Client 720-250755/12-A		
Client ID:					
Operator ID:	VOA	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 116 C4-C10, CAS: STL00504

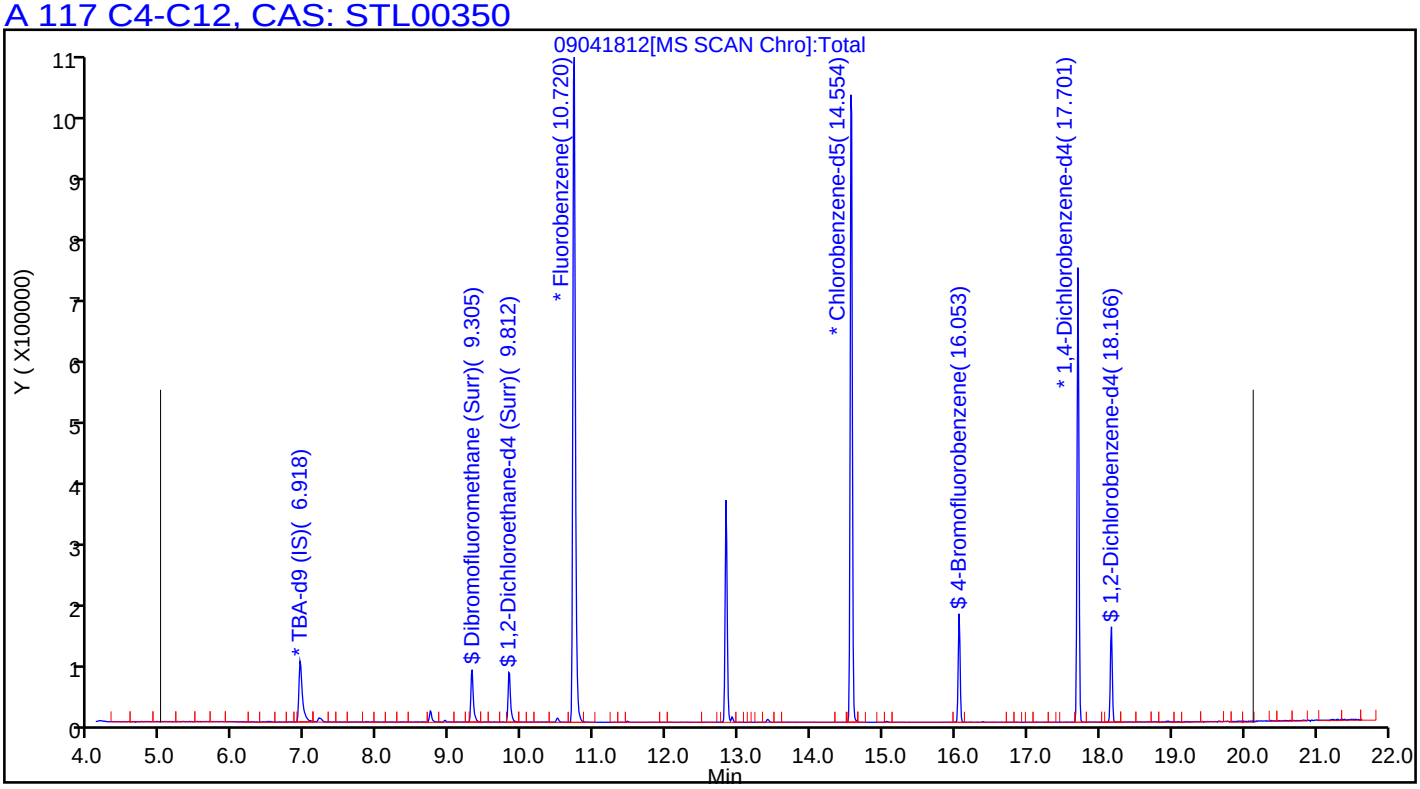


Report Date: 04-Sep-2018 14:51:57 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\09041812.D				
Injection Date:	04-Sep-2018 12:51:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-D-15-C RR	Lab Sample ID:	Client 720-250755/12-A		
Client ID:					
Operator ID:	VOA	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-B9S-3.5-4
Lab Sample ID: 720-88239-16
Matrix: Solid
Lab File ID: 09041813.D
Analysis Method: 8260B
Date Collected: 08/24/2018 10:20
Sample wt/vol: 5.10(g)
Date Analyzed: 09/04/2018 13:20
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250755
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.9	1.2
67-64-1	Acetone	ND		49	37
71-43-2	Benzene	ND		4.9	0.64
75-27-4	Dichlorobromomethane	ND		4.9	0.71
108-86-1	Bromobenzene	ND		4.9	0.77
74-97-5	Chlorobromomethane	ND		20	0.71
75-25-2	Bromoform	ND		4.9	2.0
74-83-9	Bromomethane	ND		9.8	0.77
78-93-3	2-Butanone (MEK)	ND		49	21
104-51-8	n-Butylbenzene	ND		4.9	0.98
135-98-8	sec-Butylbenzene	ND		4.9	0.71
98-06-6	tert-Butylbenzene	ND		4.9	0.72
75-15-0	Carbon disulfide	ND		4.9	2.0
56-23-5	Carbon tetrachloride	ND		4.9	0.61
108-90-7	Chlorobenzene	ND		4.9	0.68
75-00-3	Chloroethane	ND		9.8	0.55
67-66-3	Chloroform	ND		4.9	0.65
74-87-3	Chloromethane	ND		9.8	0.77
95-49-8	2-Chlorotoluene	ND		4.9	0.64
106-43-4	4-Chlorotoluene	ND		4.9	0.67
124-48-1	Chlorodibromomethane	ND		4.9	0.70
95-50-1	1,2-Dichlorobenzene	ND		4.9	0.67
541-73-1	1,3-Dichlorobenzene	ND		4.9	0.71
106-46-7	1,4-Dichlorobenzene	ND		4.9	0.70
142-28-9	1,3-Dichloropropane	ND		4.9	0.72
563-58-6	1,1-Dichloropropene	ND		4.9	0.68
96-12-8	1,2-Dibromo-3-Chloropropane	ND		9.8	1.7
106-93-4	Ethylene Dibromide	ND		4.9	1.4
74-95-3	Dibromomethane	ND		9.8	0.84
75-71-8	Dichlorodifluoromethane	ND		9.8	0.77
75-34-3	1,1-Dichloroethane	ND		4.9	0.67
107-06-2	1,2-Dichloroethane	ND		4.9	0.75
75-35-4	1,1-Dichloroethene	ND	*	4.9	0.61
156-59-2	cis-1,2-Dichloroethene	ND		4.9	0.67
156-60-5	trans-1,2-Dichloroethene	ND		4.9	0.74
78-87-5	1,2-Dichloropropane	ND		4.9	0.62

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-B9S-3.5-4
Lab Sample ID: 720-88239-16
Matrix: Solid
Lab File ID: 09041813.D
Analysis Method: 8260B
Date Collected: 08/24/2018 10:20
Sample wt/vol: 5.10(g)
Date Analyzed: 09/04/2018 13:20
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250755
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.9	0.68
10061-02-6	trans-1,3-Dichloropropene	ND		4.9	0.66
100-41-4	Ethylbenzene	ND		4.9	0.74
87-68-3	Hexachlorobutadiene	ND		4.9	0.88
591-78-6	2-Hexanone	ND		49	9.8
98-82-8	Isopropylbenzene	ND		4.9	0.67
99-87-6	4-Isopropyltoluene	ND		4.9	2.5
75-09-2	Methylene Chloride	ND		9.8	5.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		49	9.8
91-20-3	Naphthalene	ND		9.8	1.5
103-65-1	N-Propylbenzene	ND		4.9	0.65
100-42-5	Styrene	ND		4.9	0.62
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.9	0.75
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.9	0.74
127-18-4	Tetrachloroethene	ND		4.9	0.66
108-88-3	Toluene	ND		4.9	0.70
87-61-6	1,2,3-Trichlorobenzene	ND		4.9	0.73
120-82-1	1,2,4-Trichlorobenzene	ND		4.9	0.70
71-55-6	1,1,1-Trichloroethane	ND		4.9	0.60
79-00-5	1,1,2-Trichloroethane	ND		4.9	0.69
79-01-6	Trichloroethene	ND		4.9	0.62
75-69-4	Trichlorofluoromethane	ND		4.9	0.55
96-18-4	1,2,3-Trichloropropane	ND		4.9	0.75
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.9	2.0
95-63-6	1,2,4-Trimethylbenzene	ND		4.9	1.6
108-67-8	1,3,5-Trimethylbenzene	ND		4.9	0.64
108-05-4	Vinyl acetate	ND		20	4.9
75-01-4	Vinyl chloride	ND		4.9	0.72
1330-20-7	Xylenes, Total	ND		4.9	1.2
594-20-7	2,2-Dichloropropane	ND		4.9	2.0
STL00504	C4-C10	ND		250	98
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		250	98

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-B9S-3.5-4 Lab Sample ID: 720-88239-16

Matrix: Solid Lab File ID: 09041813.D

Analysis Method: 8260B Date Collected: 08/24/2018 10:20

Sample wt/vol: 5.10(g) Date Analyzed: 09/04/2018 13:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250755 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	85		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		60-140
2037-26-5	Toluene-d8 (Surr)	94		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\09041813.D
Lims ID: 720-88239-D-16-C RR
Client ID:
Sample Type: Client
Inject. Date: 04-Sep-2018 13:20:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-D-16 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 04-Sep-2018 14:23:47 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: medinaj Date: 04-Sep-2018 14:51:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.928	6.918	0.010	0	171209	250.0	
* 2 Fluorobenzene	96	10.709	10.709	0.000	98	1222168	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.564	0.000	85	990108	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	407178	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.305	9.314	0.001	92	77478	7.48	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.811	9.821	0.000	0	82542	7.42	
$ 10 Toluene-d8 (Surr)	98	12.821	12.834	0.000	94	342999	7.07	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	92	98738	6.40	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	83	87053	6.11	
34 Methylene Chloride	84	7.182	7.199	-0.010	89	4979	0.5396	
46 Hexane	86	8.724	8.732	0.000	93	1046	0.5878	
59 Benzene	78	10.487	10.498	0.000	1	1553	0.0352	
75 Toluene	92	12.917	12.906	0.011	97	5118	0.1607	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	215608	2.29	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	117965	1.25	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	133889	1.42	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	299328	3.17	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	138379	NC	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	138379	1.47	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	270687	2.87	
A 120 C6-C12	1	14.400	(8.671-20.130)		0	209661	2.22	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	33312	0.3532	
A 121 C7-C12	1	15.567	(11.005-20.130)		0	113877	1.21	

QC Flag Legend

Processing Flags

NC - Not Calibrated

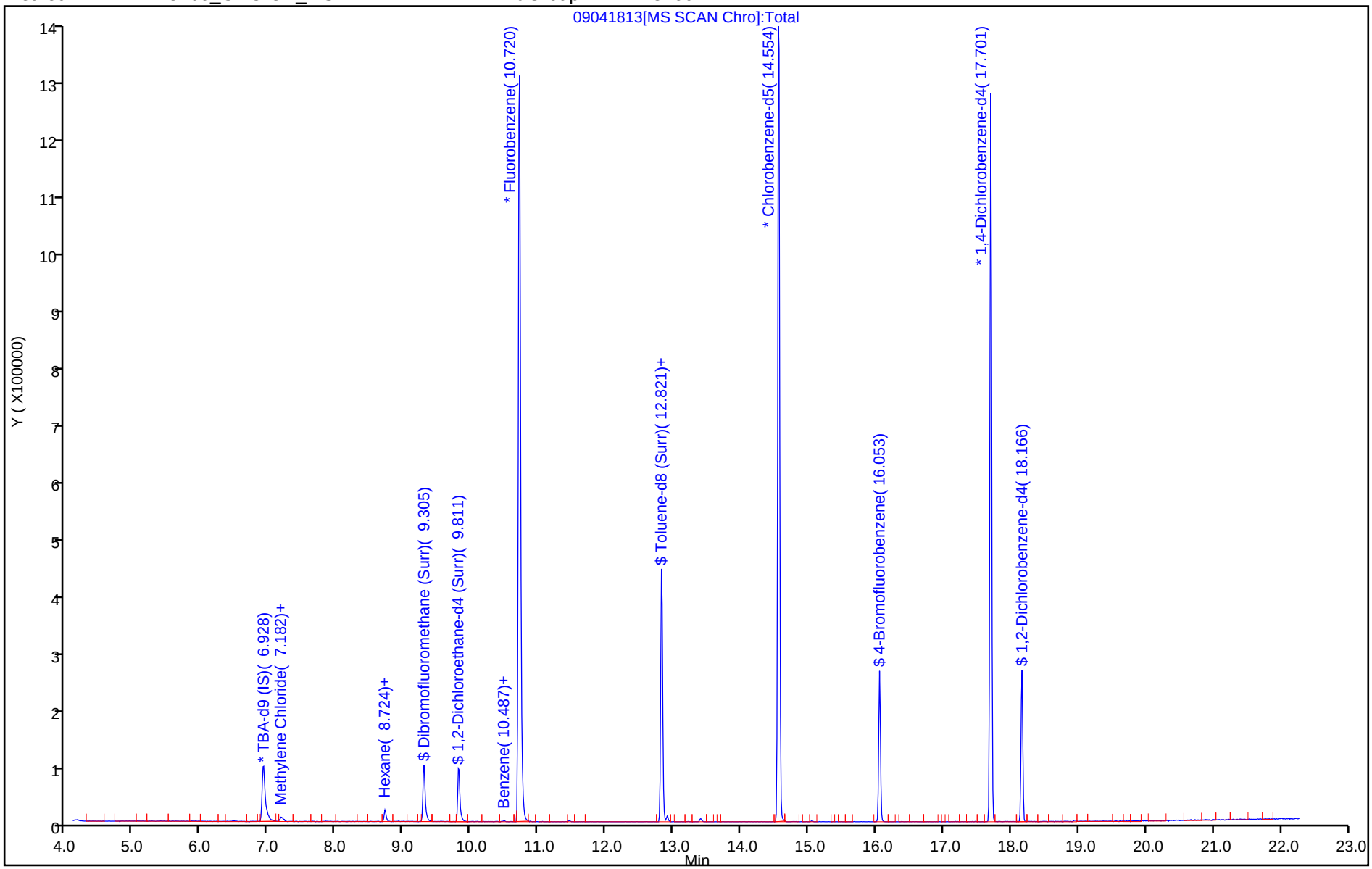
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 04-Sep-2018 14:51:59 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\09041813.D				
Injection Date:	04-Sep-2018 13:20:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88239-D-16-C RR	Lab Sample ID:	Client 720-250755/13-A	Worklist Smp#:	13
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\09041813.D
Lims ID: 720-88239-D-16-C RR
Client ID:
Sample Type: Client
Inject. Date: 04-Sep-2018 13:20:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-D-16 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 04-Sep-2018 14:23:47 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: medinaj Date: 04-Sep-2018 14:51:59

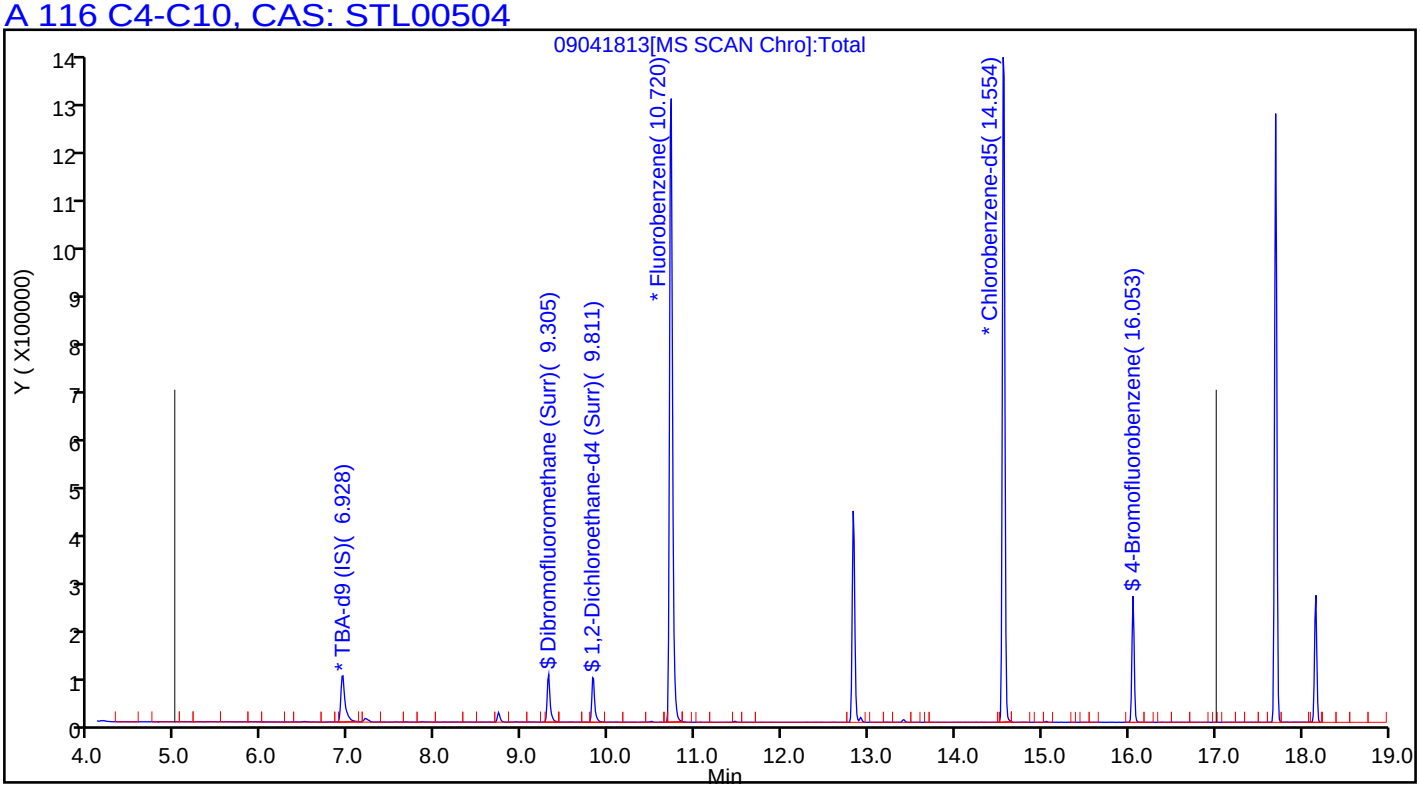
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	7.50	7.48	99.79
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.42	98.95
$ 10 Toluene-d8 (Surr)	7.50	7.07	94.24
$ 11 4-Bromofluorobenzene	7.50	6.40	85.39
$ 12 1,2-Dichlorobenzene-d4	6.00	6.11	101.84

Report Date: 04-Sep-2018 14:51:59 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\09041813.D				
Injection Date:	04-Sep-2018 13:20:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-D-16-C RR	Lab Sample ID:	Client 720-250755/13-A		
Client ID:					
Operator ID:	VOA	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 116 C4-C10, CAS: STL00504

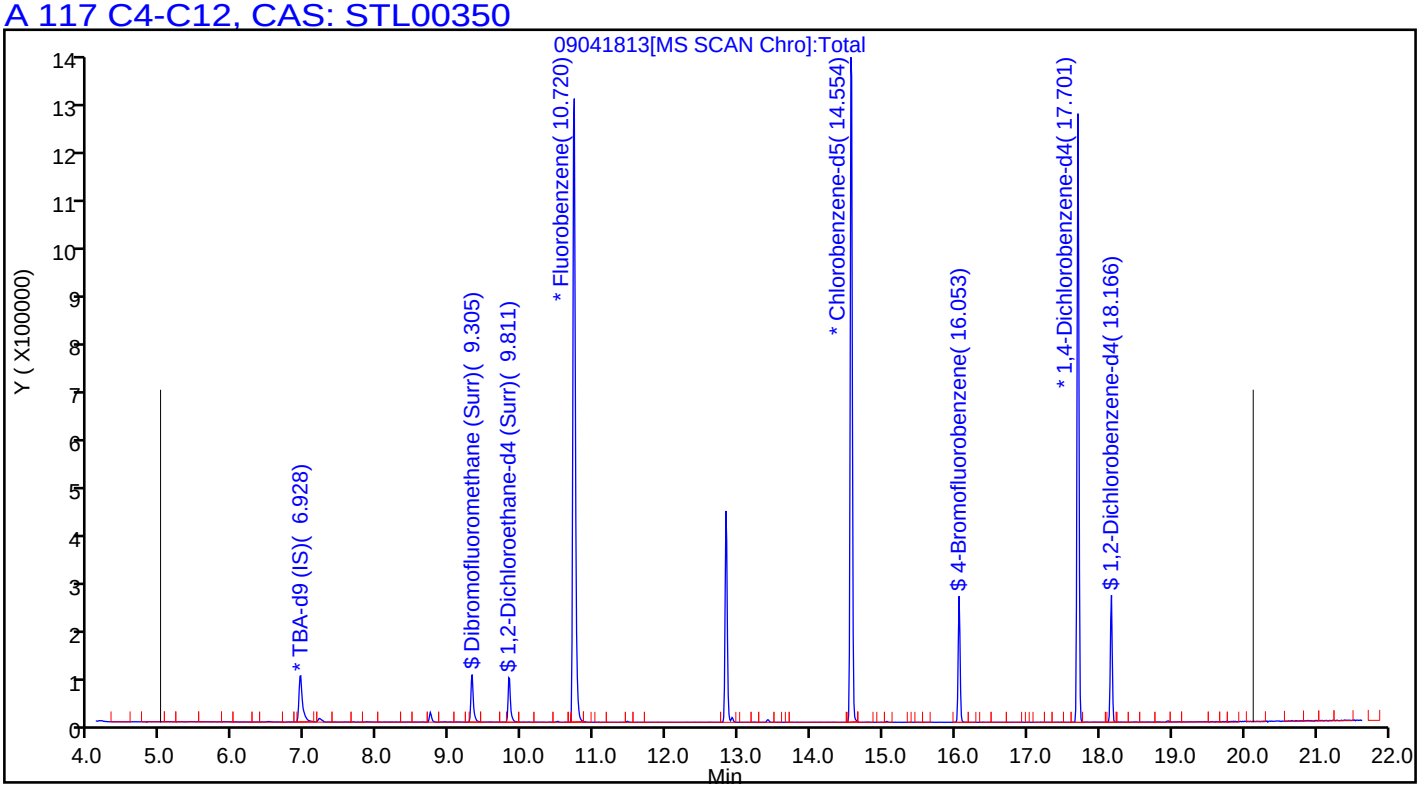


Report Date: 04-Sep-2018 14:51:59 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\09041813.D				
Injection Date:	04-Sep-2018 13:20:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-D-16-C RR	Lab Sample ID:	Client 720-250755/13-A		
Client ID:					
Operator ID:	VOA	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-DE89-0.5-1 Lab Sample ID: 720-88239-17

Matrix: Solid Lab File ID: 08291849.D

Analysis Method: 8260B Date Collected: 08/24/2018 11:20

Sample wt/vol: 7.246(g) Date Analyzed: 08/30/2018 05:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250528 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		3.5	0.83
67-64-1	Acetone	29	J	35	26
71-43-2	Benzene	ND		3.5	0.45
75-27-4	Dichlorobromomethane	ND		3.5	0.50
108-86-1	Bromobenzene	ND		3.5	0.55
74-97-5	Chlorobromomethane	ND		14	0.50
75-25-2	Bromoform	ND		3.5	1.4
74-83-9	Bromomethane	ND		6.9	0.55
78-93-3	2-Butanone (MEK)	ND		35	14
104-51-8	n-Butylbenzene	ND		3.5	0.69
135-98-8	sec-Butylbenzene	ND		3.5	0.50
98-06-6	tert-Butylbenzene	ND		3.5	0.50
75-15-0	Carbon disulfide	ND		3.5	1.4
56-23-5	Carbon tetrachloride	ND		3.5	0.43
108-90-7	Chlorobenzene	ND		3.5	0.48
75-00-3	Chloroethane	ND		6.9	0.39
67-66-3	Chloroform	ND		3.5	0.46
74-87-3	Chloromethane	ND		6.9	0.55
95-49-8	2-Chlorotoluene	ND		3.5	0.45
106-43-4	4-Chlorotoluene	ND		3.5	0.47
124-48-1	Chlorodibromomethane	ND		3.5	0.49
95-50-1	1,2-Dichlorobenzene	ND		3.5	0.47
541-73-1	1,3-Dichlorobenzene	ND		3.5	0.50
106-46-7	1,4-Dichlorobenzene	ND		3.5	0.49
142-28-9	1,3-Dichloropropane	ND		3.5	0.50
563-58-6	1,1-Dichloropropene	ND		3.5	0.48
96-12-8	1,2-Dibromo-3-Chloropropane	ND		6.9	1.2
106-93-4	Ethylene Dibromide	ND		3.5	0.99
74-95-3	Dibromomethane	ND		6.9	0.59
75-71-8	Dichlorodifluoromethane	ND		6.9	0.55
75-34-3	1,1-Dichloroethane	ND		3.5	0.47
107-06-2	1,2-Dichloroethane	ND		3.5	0.52
75-35-4	1,1-Dichloroethene	ND	*	3.5	0.43
156-59-2	cis-1,2-Dichloroethene	ND		3.5	0.47
156-60-5	trans-1,2-Dichloroethene	ND		3.5	0.52
78-87-5	1,2-Dichloropropane	ND		3.5	0.43

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-DE89-0.5-1 Lab Sample ID: 720-88239-17

Matrix: Solid Lab File ID: 08291849.D

Analysis Method: 8260B Date Collected: 08/24/2018 11:20

Sample wt/vol: 7.246(g) Date Analyzed: 08/30/2018 05:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250528 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		3.5	0.48
10061-02-6	trans-1,3-Dichloropropene	ND		3.5	0.46
100-41-4	Ethylbenzene	ND		3.5	0.52
87-68-3	Hexachlorobutadiene	ND		3.5	0.62
591-78-6	2-Hexanone	ND		35	6.9
98-82-8	Isopropylbenzene	ND		3.5	0.47
99-87-6	4-Isopropyltoluene	ND		3.5	1.7
75-09-2	Methylene Chloride	ND		6.9	3.9
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		35	6.9
91-20-3	Naphthalene	ND		6.9	1.0
103-65-1	N-Propylbenzene	ND		3.5	0.46
100-42-5	Styrene	ND		3.5	0.43
630-20-6	1,1,1,2-Tetrachloroethane	ND		3.5	0.52
79-34-5	1,1,2,2-Tetrachloroethane	ND		3.5	0.52
127-18-4	Tetrachloroethene	ND		3.5	0.46
108-88-3	Toluene	0.49	J	3.5	0.49
87-61-6	1,2,3-Trichlorobenzene	ND		3.5	0.51
120-82-1	1,2,4-Trichlorobenzene	ND		3.5	0.49
71-55-6	1,1,1-Trichloroethane	ND		3.5	0.42
79-00-5	1,1,2-Trichloroethane	ND		3.5	0.48
79-01-6	Trichloroethene	ND		3.5	0.43
75-69-4	Trichlorofluoromethane	ND		3.5	0.39
96-18-4	1,2,3-Trichloropropane	ND		3.5	0.53
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.5	1.4
95-63-6	1,2,4-Trimethylbenzene	ND		3.5	1.1
108-67-8	1,3,5-Trimethylbenzene	ND		3.5	0.45
108-05-4	Vinyl acetate	ND		14	3.5
75-01-4	Vinyl chloride	ND		3.5	0.50
1330-20-7	Xylenes, Total	ND		3.5	0.84
594-20-7	2,2-Dichloropropane	ND		3.5	1.4
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		170	69

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-DE89-0.5-1 Lab Sample ID: 720-88239-17

Matrix: Solid Lab File ID: 08291849.D

Analysis Method: 8260B Date Collected: 08/24/2018 11:20

Sample wt/vol: 7.246(g) Date Analyzed: 08/30/2018 05:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250528 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	89		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	118		60-140
2037-26-5	Toluene-d8 (Surr)	90		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291849.D
Lims ID: 720-88239-A-17-A
Client ID: DG-DE89--0.5-1
Sample Type: Client
Inject. Date: 30-Aug-2018 05:00:30 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-A-17
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 09:10:00 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: sanjumnair Date: 31-Aug-2018 09:05:15

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	174075	250.0	
* 2 Fluorobenzene	96	10.720	10.709	0.011	98	895774	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.554	0.010	86	713437	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	315738	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.305	9.294	0.011	93	61549	8.11	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.812	0.010	0	72219	8.86	
$ 10 Toluene-d8 (Surr)	98	12.822	12.822	0.000	95	240267	6.76	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	91	74326	6.69	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	84	68702	6.22	
28 Acetone	58	6.474	6.474	0.000	96	14387	20.9	
148 Methyl acetate	43	7.235	7.224	0.010	98	17025	2.75	
59 Benzene	78	10.487	10.488	-0.001	94	3491	0.1080	
75 Toluene	92	12.917	12.906	0.011	98	8219	0.3582	
131 Butyl Ether	87	14.775	14.775	0.000	93	1577	0.2604	
85 m-Xylene & p-Xylene	91	15.050	15.050	0.000	88	1847	0.0565	a
A 116 C4-C10	1	11.000	(4.985-17.014)		0	535307	7.74	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	66991	0.9690	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	104453	1.51	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	599105	8.67	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	115910	1.68	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	115910	NC	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	575401	8.32	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	179708	2.60	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	76287	1.10	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	146575	2.12	
S 122 Xylenes, Total	1				0		0.0565	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

a - User Assigned ID

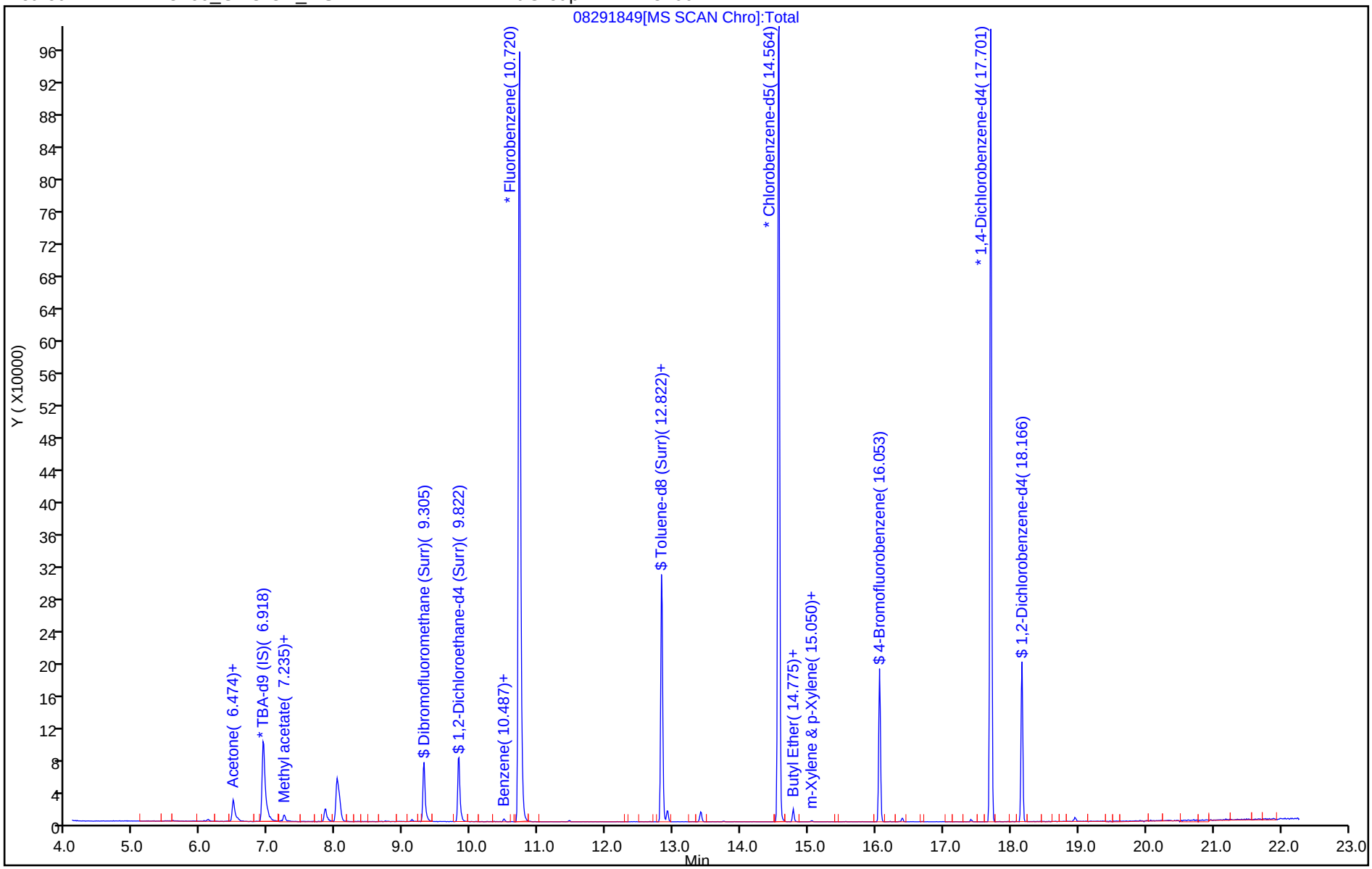
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 09:10:56 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291849.D				
Injection Date:	30-Aug-2018 05:00:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88239-A-17-A	Lab Sample ID:	720-88239-17	Worklist Smp#:	25
Client ID:	DG-DE89--0.5-1				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291849.D
Lims ID: 720-88239-A-17-A
Client ID: DG-DE89--0.5-1
Sample Type: Client
Inject. Date: 30-Aug-2018 05:00:30 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-A-17
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 09:10:00 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: sanjumnair Date: 31-Aug-2018 09:05:15

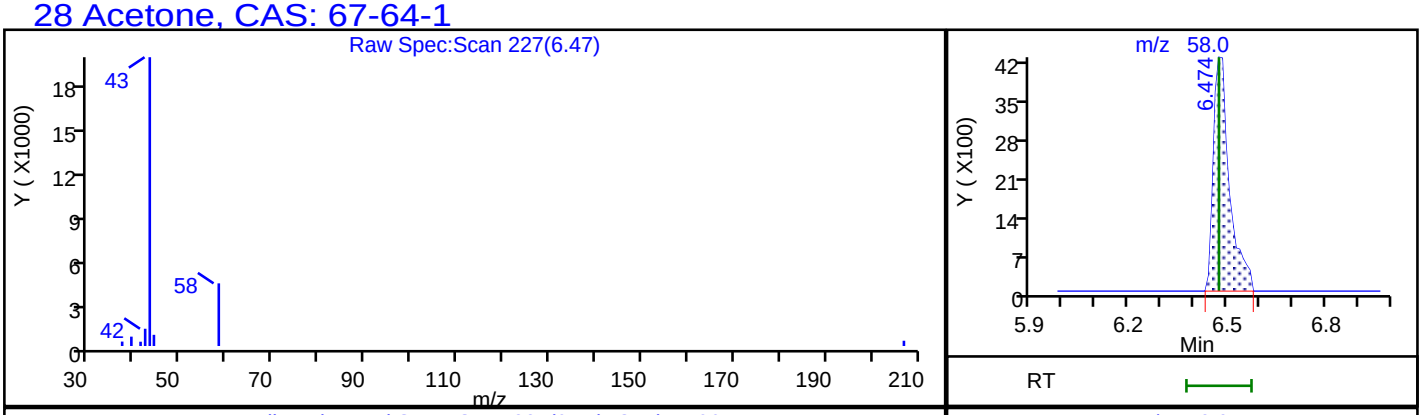
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.86	118.12
$ 10 Toluene-d8 (Surr)	7.50	6.76	90.07
$ 11 4-Bromofluorobenzene	7.50	6.69	89.20
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

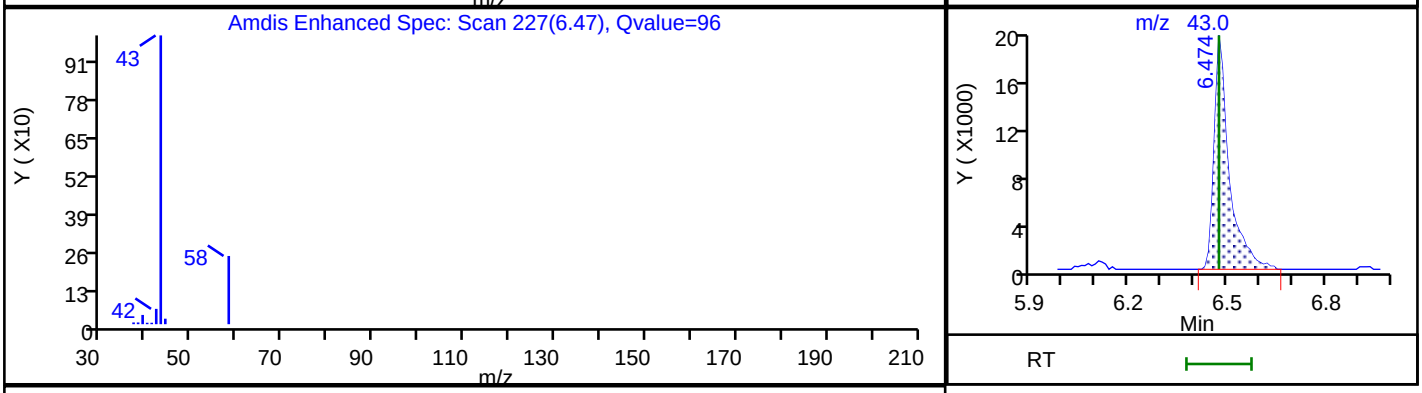
Report Date: 31-Aug-2018 09:10:56 Chrom Revision: 2.3 19-Jul-2018 15:14:50

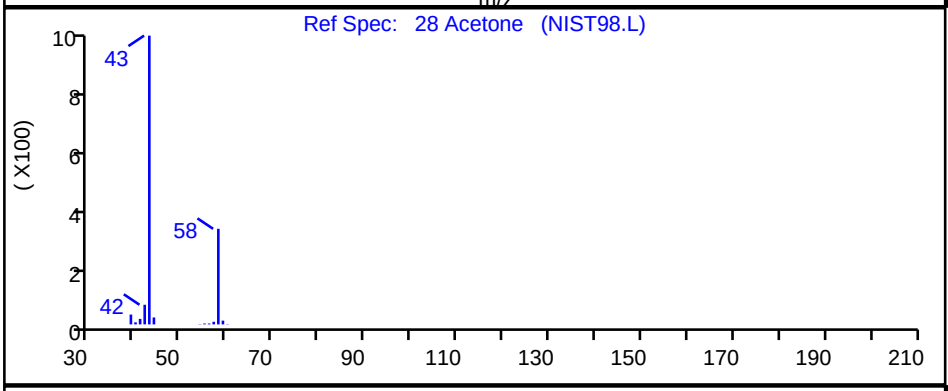
TestAmerica Pleasanton

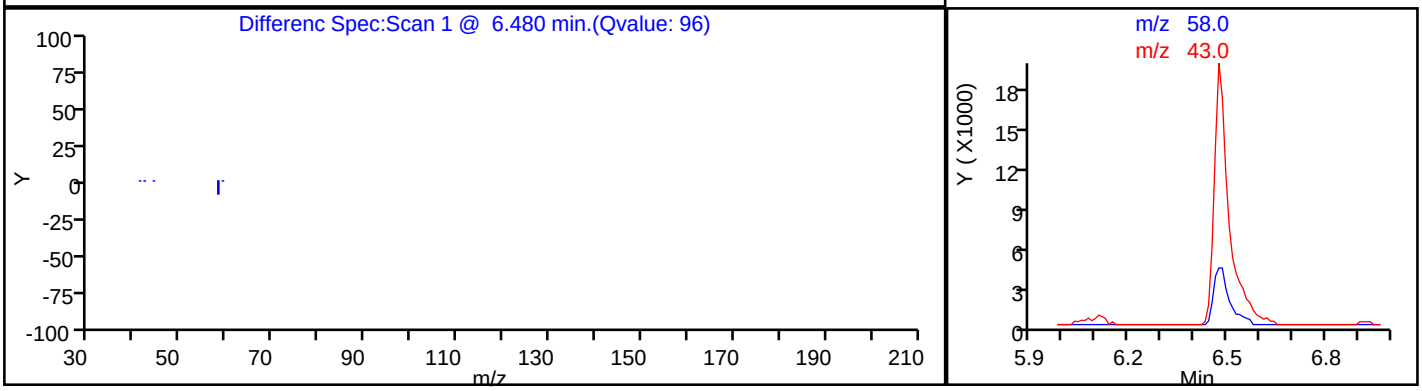
Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291849.D				
Injection Date:	30-Aug-2018 05:00:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-A-17-A	Lab Sample ID:	720-88239-17		
Client ID:	DG-DE89--0.5-1				
Operator ID:	VOA	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1







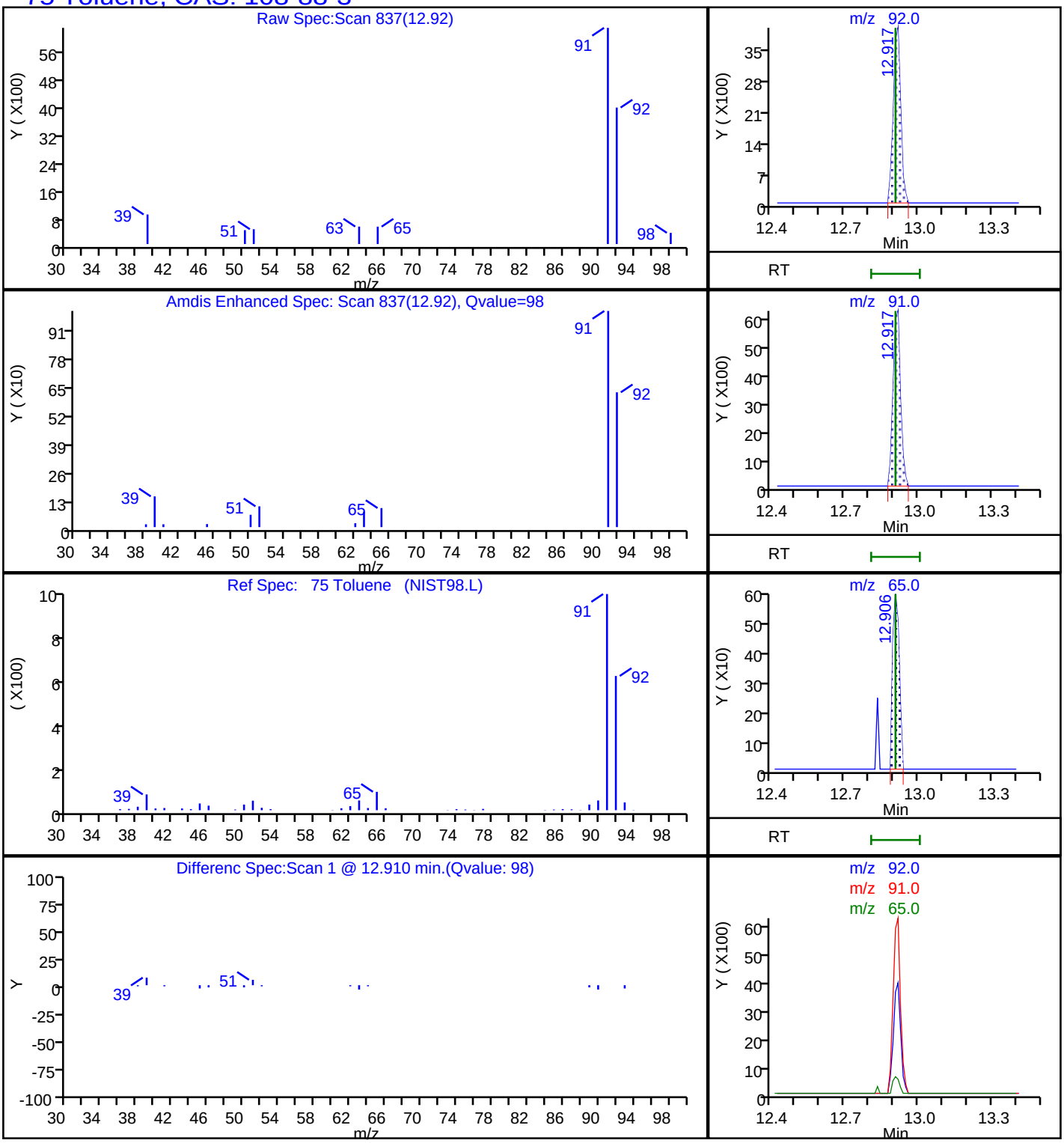


Report Date: 31-Aug-2018 09:10:56 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291849.D				
Injection Date:	30-Aug-2018 05:00:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-A-17-A	Lab Sample ID:	720-88239-17		
Client ID:	DG-DE89--0.5-1				
Operator ID:	VOA	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

75 Toluene, CAS: 108-88-3

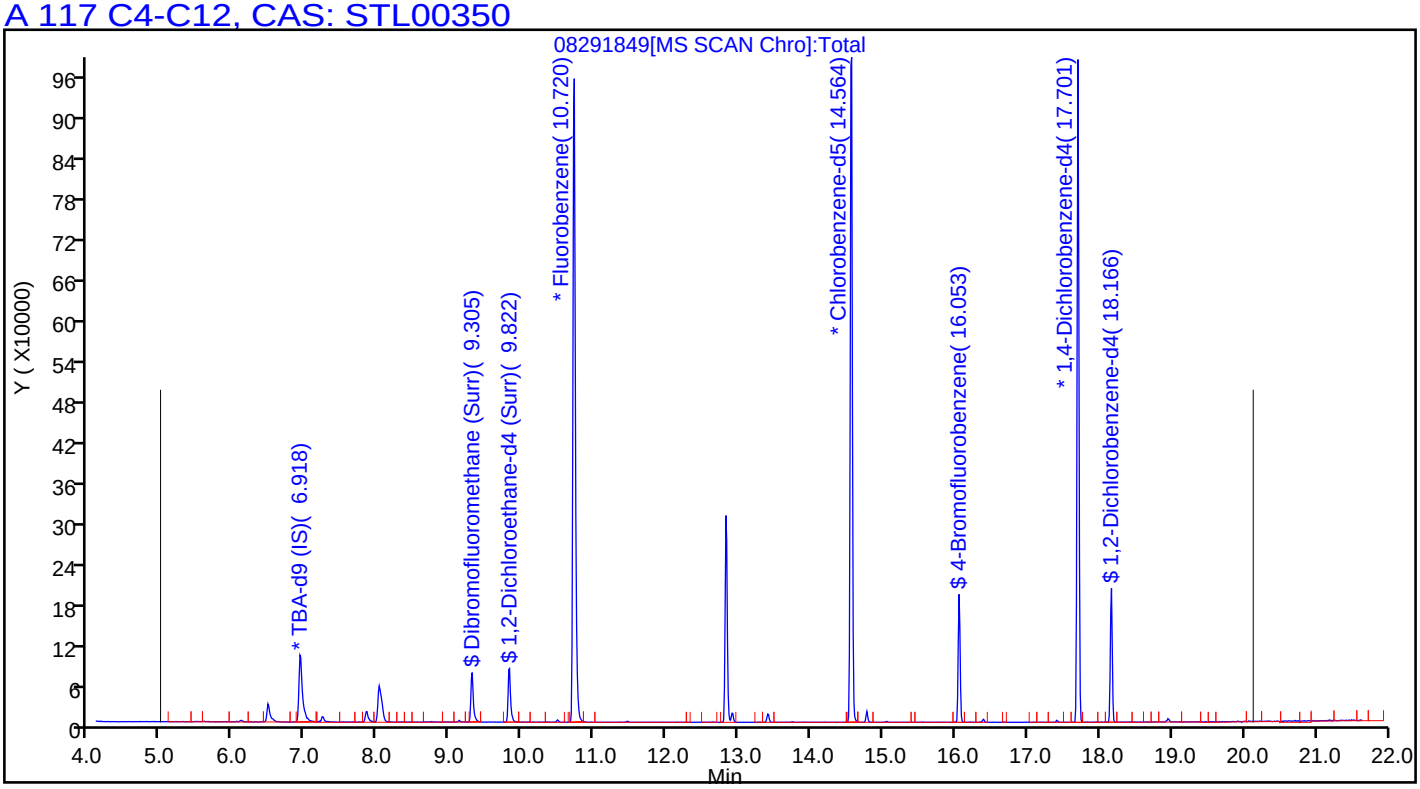


Report Date: 31-Aug-2018 09:10:56 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291849.D				
Injection Date:	30-Aug-2018 05:00:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-A-17-A	Lab Sample ID:	720-88239-17		
Client ID:	DG-DE89--0.5-1				
Operator ID:	VOA	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

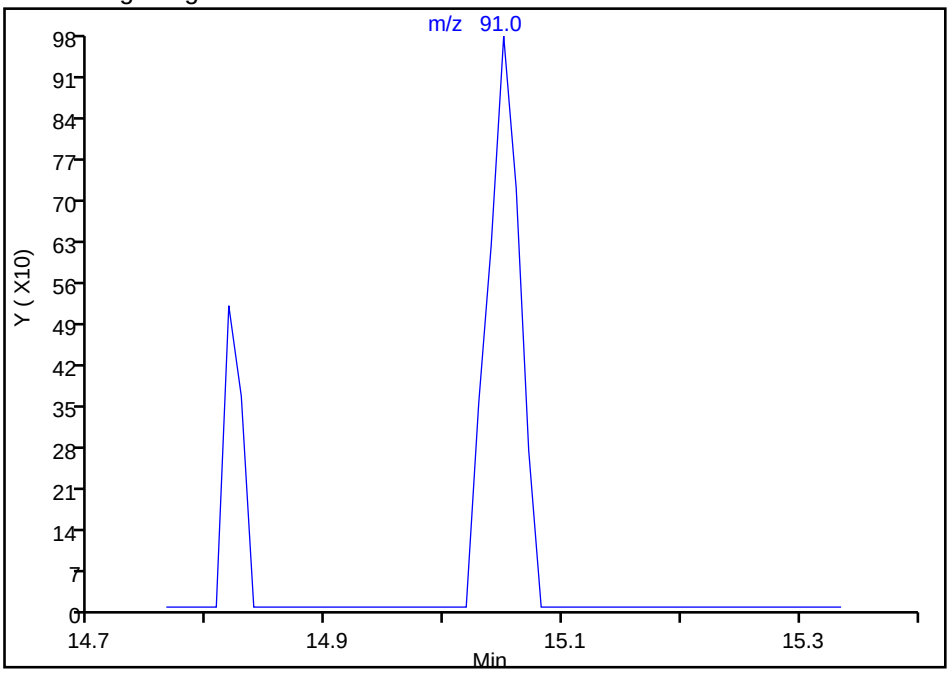
Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53556.b\08291849.D				
Injection Date:	30-Aug-2018 05:00:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-A-17-A	Lab Sample ID:	720-88239-17		
Client ID:	DG-DE89--0.5-1				
Operator ID:	VOA	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

85 m-Xylene & p-Xylene, CAS: 179601-23-1

Signal: 1

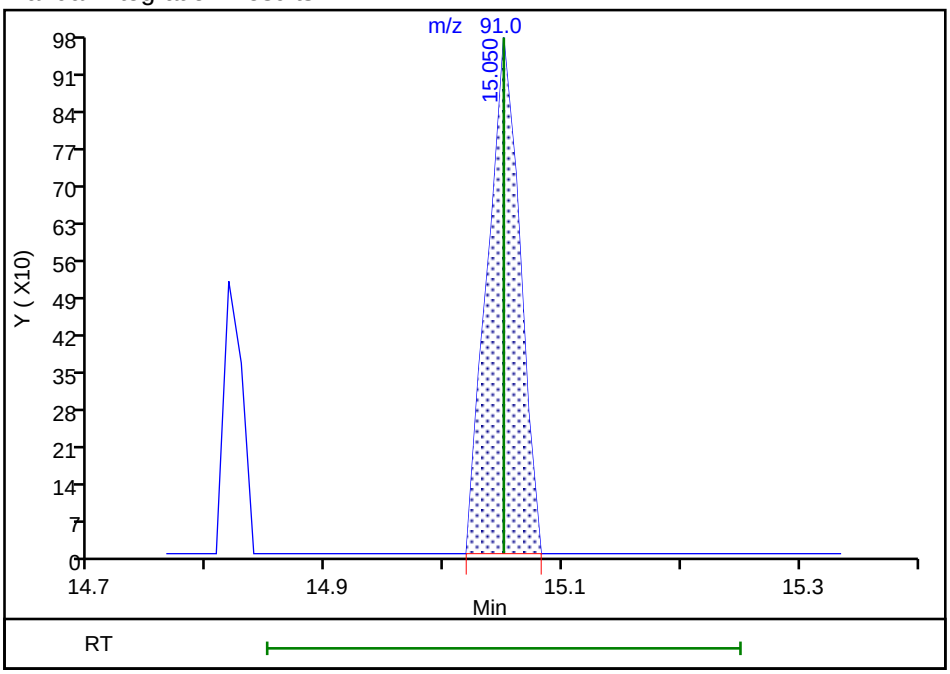
Not Detected
Expected RT: 15.05

Processing Integration Results



Manual Integration Results

RT: 15.05
Area: 1847
Amount: 0.056472
Amount Units: ug/L



Reviewer: sanjumnair, 31-Aug-2018 09:04:49
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-DE89-3.5-4
Lab Sample ID: 720-88239-18
Matrix: Solid
Lab File ID: 09041810.D
Analysis Method: 8260B
Date Collected: 08/24/2018 11:20
Sample wt/vol: 5.39(g)
Date Analyzed: 09/04/2018 11:54
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250755
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.6	1.1
67-64-1	Acetone	ND		46	35
71-43-2	Benzene	ND		4.6	0.60
75-27-4	Dichlorobromomethane	ND		4.6	0.67
108-86-1	Bromobenzene	ND		4.6	0.73
74-97-5	Chlorobromomethane	ND		19	0.67
75-25-2	Bromoform	ND		4.6	1.9
74-83-9	Bromomethane	ND		9.3	0.73
78-93-3	2-Butanone (MEK)	ND		46	19
104-51-8	n-Butylbenzene	ND		4.6	0.93
135-98-8	sec-Butylbenzene	ND		4.6	0.67
98-06-6	tert-Butylbenzene	ND		4.6	0.68
75-15-0	Carbon disulfide	ND		4.6	1.9
56-23-5	Carbon tetrachloride	ND		4.6	0.58
108-90-7	Chlorobenzene	ND		4.6	0.64
75-00-3	Chloroethane	ND		9.3	0.52
67-66-3	Chloroform	ND		4.6	0.61
74-87-3	Chloromethane	ND		9.3	0.73
95-49-8	2-Chlorotoluene	ND		4.6	0.60
106-43-4	4-Chlorotoluene	ND		4.6	0.63
124-48-1	Chlorodibromomethane	ND		4.6	0.66
95-50-1	1,2-Dichlorobenzene	ND		4.6	0.63
541-73-1	1,3-Dichlorobenzene	ND		4.6	0.67
106-46-7	1,4-Dichlorobenzene	ND		4.6	0.66
142-28-9	1,3-Dichloropropane	ND		4.6	0.68
563-58-6	1,1-Dichloropropene	ND		4.6	0.64
96-12-8	1,2-Dibromo-3-Chloropropane	ND		9.3	1.6
106-93-4	Ethylene Dibromide	ND		4.6	1.3
74-95-3	Dibromomethane	ND		9.3	0.80
75-71-8	Dichlorodifluoromethane	ND		9.3	0.73
75-34-3	1,1-Dichloroethane	ND		4.6	0.63
107-06-2	1,2-Dichloroethane	ND		4.6	0.71
75-35-4	1,1-Dichloroethene	ND	*	4.6	0.58
156-59-2	cis-1,2-Dichloroethene	ND		4.6	0.63
156-60-5	trans-1,2-Dichloroethene	ND		4.6	0.70
78-87-5	1,2-Dichloropropane	ND		4.6	0.58

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-DE89-3.5-4 Lab Sample ID: 720-88239-18

Matrix: Solid Lab File ID: 09041810.D

Analysis Method: 8260B Date Collected: 08/24/2018 11:20

Sample wt/vol: 5.39(g) Date Analyzed: 09/04/2018 11:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250755 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.6	0.64
10061-02-6	trans-1,3-Dichloropropene	ND		4.6	0.62
100-41-4	Ethylbenzene	ND		4.6	0.70
87-68-3	Hexachlorobutadiene	ND		4.6	0.83
591-78-6	2-Hexanone	ND		46	9.3
98-82-8	Isopropylbenzene	ND		4.6	0.63
99-87-6	4-Isopropyltoluene	ND		4.6	2.3
75-09-2	Methylene Chloride	ND		9.3	5.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		46	9.3
91-20-3	Naphthalene	ND		9.3	1.4
103-65-1	N-Propylbenzene	ND		4.6	0.61
100-42-5	Styrene	ND		4.6	0.58
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.6	0.71
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.6	0.70
127-18-4	Tetrachloroethene	ND		4.6	0.62
108-88-3	Toluene	ND		4.6	0.66
87-61-6	1,2,3-Trichlorobenzene	ND		4.6	0.69
120-82-1	1,2,4-Trichlorobenzene	ND		4.6	0.66
71-55-6	1,1,1-Trichloroethane	ND		4.6	0.57
79-00-5	1,1,2-Trichloroethane	ND		4.6	0.65
79-01-6	Trichloroethene	ND		4.6	0.58
75-69-4	Trichlorofluoromethane	ND		4.6	0.52
96-18-4	1,2,3-Trichloropropane	ND		4.6	0.71
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.6	1.9
95-63-6	1,2,4-Trimethylbenzene	ND		4.6	1.5
108-67-8	1,3,5-Trimethylbenzene	ND		4.6	0.60
108-05-4	Vinyl acetate	ND		19	4.6
75-01-4	Vinyl chloride	ND		4.6	0.68
1330-20-7	Xylenes, Total	ND		4.6	1.1
594-20-7	2,2-Dichloropropane	ND		4.6	1.9
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		230	93

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-DE89-3.5-4 Lab Sample ID: 720-88239-18

Matrix: Solid Lab File ID: 09041810.D

Analysis Method: 8260B Date Collected: 08/24/2018 11:20

Sample wt/vol: 5.39(g) Date Analyzed: 09/04/2018 11:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250755 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	89		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		60-140
2037-26-5	Toluene-d8 (Surr)	94		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\09041810.D
Lims ID: 720-88239-D-18-F SLEEVE
Client ID:
Sample Type: Client
Inject. Date: 04-Sep-2018 11:54:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-D-18 SLEEVE
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 04-Sep-2018 14:52:21 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: medinaj Date: 04-Sep-2018 14:51:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	204426	250.0	
* 2 Fluorobenzene	96	10.720	10.709	0.011	98	1237987	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.564	0.000	85	1010910	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	444851	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.305	9.305	0.001	93	79487	7.58	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.812	0.011	0	84895	7.54	
$ 10 Toluene-d8 (Surr)	98	12.822	12.822	0.001	94	348379	7.09	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	93	104912	6.66	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	83	93488	6.01	
28 Acetone	58	6.474	6.474	0.000	97	9983	10.5	
34 Methylene Chloride	84	7.203	7.192	0.011	91	14835	1.59	
59 Benzene	78	10.488	10.488	0.001	1	421	0.009427	7
135 n-Octane	43	13.223	13.255	-0.032	91	3760	NR	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	331602	3.47	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	91408	0.9567	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	105072	1.10	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	597486	6.25	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	112330	NC	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	112330	1.18	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	558152	5.84	
A 120 C6-C12	1	14.400	(8.671-20.130)		0	378214	3.96	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	50887	0.5326	
A 121 C7-C12	1	15.567	(11.005-20.130)		0	328569	3.44	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard
NC - Not Calibrated
7 - Failed Limit of Detection

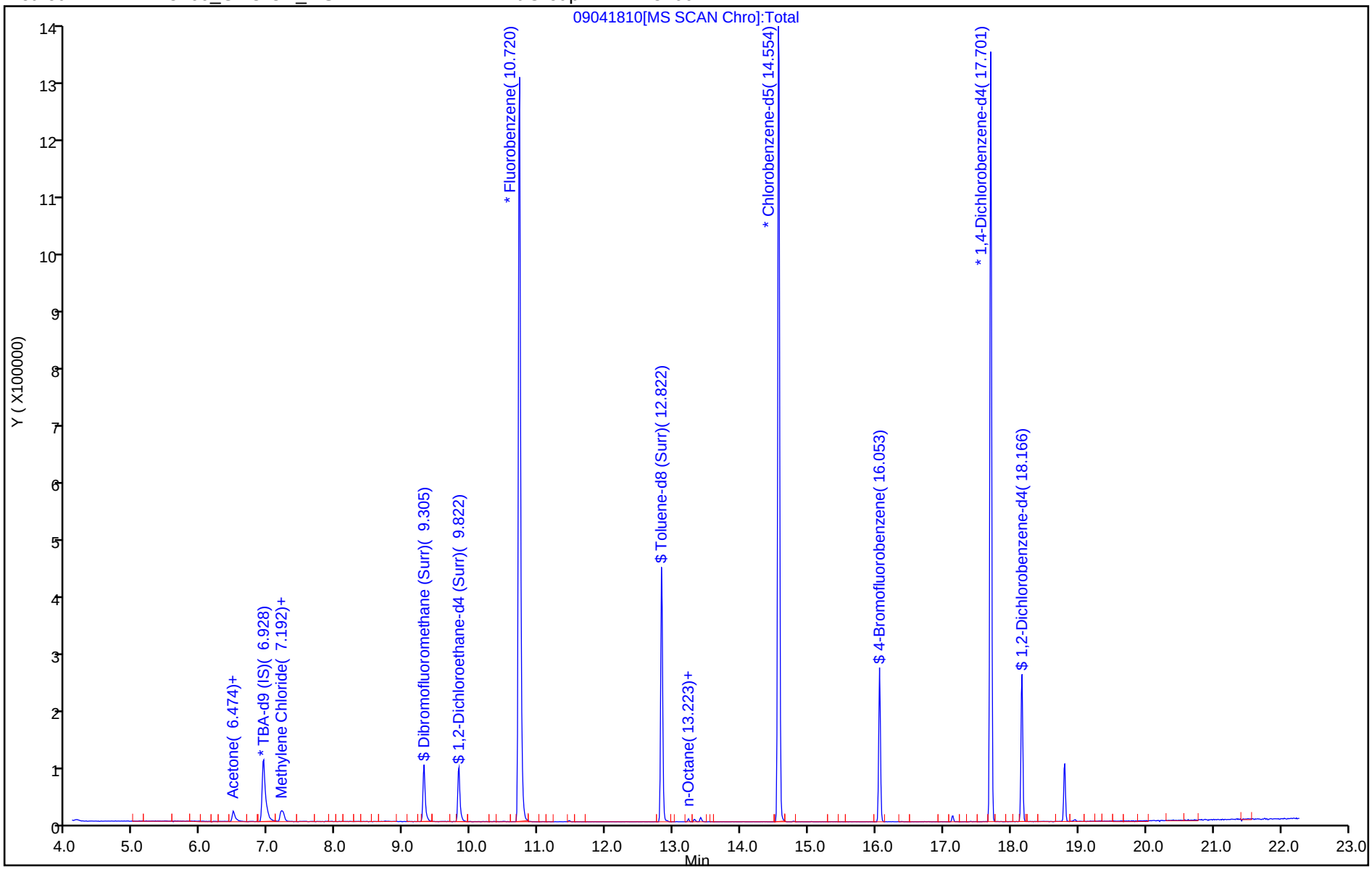
Reagents:

I_IS/SS_00092	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 04-Sep-2018 14:53:21 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\09041810.D				
Injection Date:	04-Sep-2018 11:54:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88239-D-18-F SLEEVE	Lab Sample ID:	Client 720-250755/10-A	Worklist Smp#:	10
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\09041810.D
Lims ID: 720-88239-D-18-F SLEEVE
Client ID:
Sample Type: Client
Inject. Date: 04-Sep-2018 11:54:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-D-18 SLEEVE
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 04-Sep-2018 14:52:21 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: medinaj Date: 04-Sep-2018 14:51:52

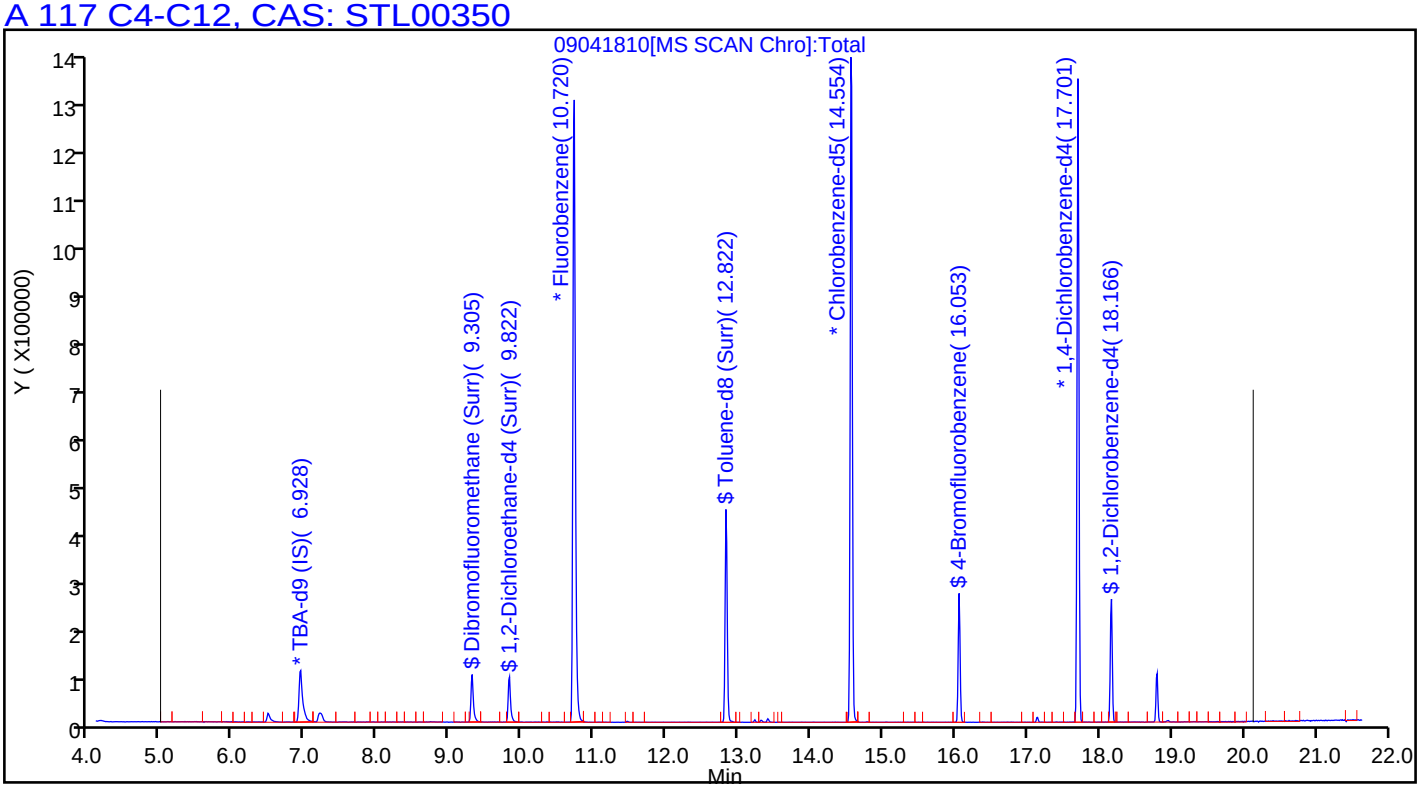
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	7.50	7.58	101.06
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.54	100.47
$ 10 Toluene-d8 (Surr)	7.50	7.09	94.50
$ 11 4-Bromofluorobenzene	7.50	6.66	88.86
$ 12 1,2-Dichlorobenzene-d4	6.00	6.01	100.10

Report Date: 04-Sep-2018 14:53:21 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\09041810.D				
Injection Date:	04-Sep-2018 11:54:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-D-18-F SLEEVE	Lab Sample ID:	Client 720-250755/10-A		
Client ID:					
Operator ID:	VOA	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-DE89-9.5-10 Lab Sample ID: 720-88239-19

Matrix: Solid Lab File ID: 08301817.D

Analysis Method: 8260B Date Collected: 08/24/2018 11:20

Sample wt/vol: 6.851(g) Date Analyzed: 08/30/2018 15:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250555 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		3.6	0.88
67-64-1	Acetone	ND		36	28
71-43-2	Benzene	ND		3.6	0.47
75-27-4	Dichlorobromomethane	ND		3.6	0.53
108-86-1	Bromobenzene	ND	*	3.6	0.58
74-97-5	Chlorobromomethane	ND		15	0.53
75-25-2	Bromoform	ND	*	3.6	1.5
74-83-9	Bromomethane	ND		7.3	0.58
78-93-3	2-Butanone (MEK)	ND		36	15
104-51-8	n-Butylbenzene	ND	*	3.6	0.73
135-98-8	sec-Butylbenzene	ND	*	3.6	0.53
98-06-6	tert-Butylbenzene	ND	*	3.6	0.53
75-15-0	Carbon disulfide	ND		3.6	1.5
56-23-5	Carbon tetrachloride	ND		3.6	0.45
108-90-7	Chlorobenzene	ND	*	3.6	0.50
75-00-3	Chloroethane	ND		7.3	0.41
67-66-3	Chloroform	ND		3.6	0.48
74-87-3	Chloromethane	ND		7.3	0.58
95-49-8	2-Chlorotoluene	ND	*	3.6	0.47
106-43-4	4-Chlorotoluene	ND	*	3.6	0.50
124-48-1	Chlorodibromomethane	ND		3.6	0.52
95-50-1	1,2-Dichlorobenzene	ND	*	3.6	0.50
541-73-1	1,3-Dichlorobenzene	ND	*	3.6	0.53
106-46-7	1,4-Dichlorobenzene	ND	*	3.6	0.52
142-28-9	1,3-Dichloropropane	ND		3.6	0.53
563-58-6	1,1-Dichloropropene	ND		3.6	0.50
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	7.3	1.2
106-93-4	Ethylene Dibromide	ND		3.6	1.0
74-95-3	Dibromomethane	ND		7.3	0.63
75-71-8	Dichlorodifluoromethane	ND		7.3	0.58
75-34-3	1,1-Dichloroethane	ND		3.6	0.50
107-06-2	1,2-Dichloroethane	ND		3.6	0.55
75-35-4	1,1-Dichloroethene	ND	*	3.6	0.45
156-59-2	cis-1,2-Dichloroethene	ND		3.6	0.50
156-60-5	trans-1,2-Dichloroethene	ND		3.6	0.55
78-87-5	1,2-Dichloropropane	ND		3.6	0.46

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-DE89-9.5-10 Lab Sample ID: 720-88239-19

Matrix: Solid Lab File ID: 08301817.D

Analysis Method: 8260B Date Collected: 08/24/2018 11:20

Sample wt/vol: 6.851(g) Date Analyzed: 08/30/2018 15:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250555 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		3.6	0.50
10061-02-6	trans-1,3-Dichloropropene	ND		3.6	0.49
100-41-4	Ethylbenzene	ND	*	3.6	0.55
87-68-3	Hexachlorobutadiene	ND	*	3.6	0.66
591-78-6	2-Hexanone	ND		36	7.3
98-82-8	Isopropylbenzene	ND	*	3.6	0.50
99-87-6	4-Isopropyltoluene	ND	*	3.6	1.8
75-09-2	Methylene Chloride	ND		7.3	4.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		36	7.3
91-20-3	Naphthalene	ND	*	7.3	1.1
103-65-1	N-Propylbenzene	ND	*	3.6	0.48
100-42-5	Styrene	ND	*	3.6	0.46
630-20-6	1,1,1,2-Tetrachloroethane	ND	*	3.6	0.55
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	3.6	0.55
127-18-4	Tetrachloroethene	ND		3.6	0.49
108-88-3	Toluene	ND	*	3.6	0.52
87-61-6	1,2,3-Trichlorobenzene	ND	*	3.6	0.54
120-82-1	1,2,4-Trichlorobenzene	ND	*	3.6	0.52
71-55-6	1,1,1-Trichloroethane	ND		3.6	0.45
79-00-5	1,1,2-Trichloroethane	ND		3.6	0.51
79-01-6	Trichloroethene	ND		3.6	0.46
75-69-4	Trichlorofluoromethane	ND		3.6	0.41
96-18-4	1,2,3-Trichloropropane	ND	*	3.6	0.56
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	3.6	1.5
95-63-6	1,2,4-Trimethylbenzene	ND	*	3.6	1.2
108-67-8	1,3,5-Trimethylbenzene	ND	*	3.6	0.47
108-05-4	Vinyl acetate	ND		15	3.6
75-01-4	Vinyl chloride	ND		3.6	0.53
1330-20-7	Xylenes, Total	ND		3.6	0.89
594-20-7	2,2-Dichloropropane	ND		3.6	1.5
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		180	73

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-DE89-9.5-10 Lab Sample ID: 720-88239-19

Matrix: Solid Lab File ID: 08301817.D

Analysis Method: 8260B Date Collected: 08/24/2018 11:20

Sample wt/vol: 6.851(g) Date Analyzed: 08/30/2018 15:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250555 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	64	*	45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		60-140
2037-26-5	Toluene-d8 (Surr)	81		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\08301817.D
Lims ID: 720-88239-B-19-A RR
Client ID:
Sample Type: Client
Inject. Date: 30-Aug-2018 15:15:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-B-19 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:44:08 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: sanjumnair Date: 31-Aug-2018 08:32:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	166529	250.0	
* 2 Fluorobenzene	96	10.720	10.709	0.011	98	767941	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.564	0.000	86	391408	25.0	s
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	70013	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.305	9.294	0.010	92	53081	8.16	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.812	0.010	0	55457	7.94	
$ 10 Toluene-d8 (Surr)	98	12.821	12.822	-0.001	95	185557	6.09	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	91	29246	4.80	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.176	0.000	84	26152	10.7	
28 Acetone	58	6.474	6.474	0.000	97	7175	12.2	
144 Ethyl acetate	43	9.114	9.104	0.010	97	29338	3.61	
59 Benzene	78	10.487	10.488	-0.001	1	879	0.0317	
149 Methylcyclohexane	83	11.808	11.808	0.000	90	4149	0.2976	
124 Butane	43	5.017	4.996	0.021	92	5992	NR	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	640756	10.8	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	196199	3.31	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	214397	3.62	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	692322	11.7	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	234353	NC	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	234353	3.95	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	652433	11.0	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	284479	4.80	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	77530	1.31	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	171697	2.90	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard
NC - Not Calibrated
s - Failed ISTD Recovery Test

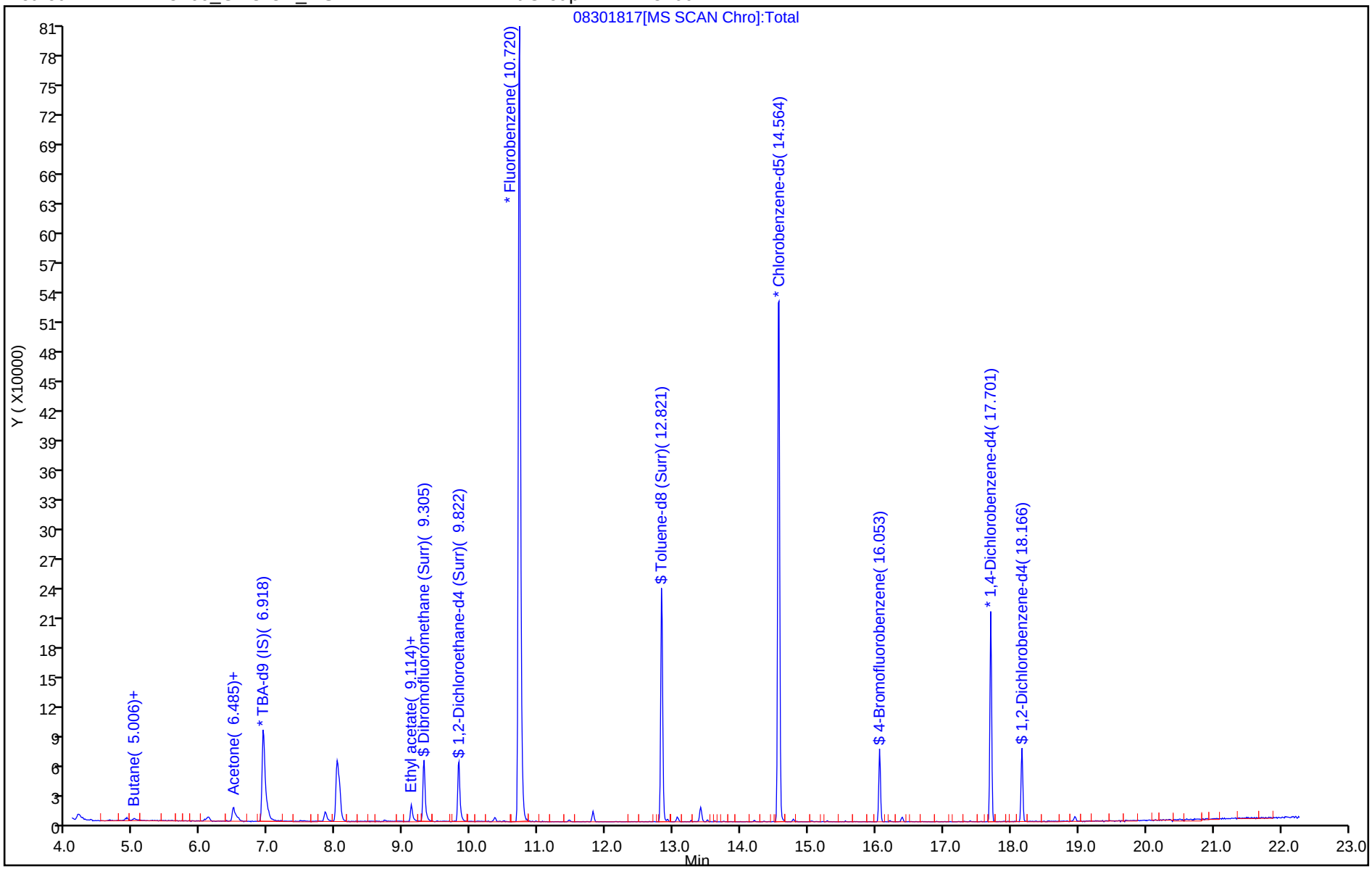
Reagents:

I_IS/SS_00092	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 31-Aug-2018 09:29:55 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\08301817.D				
Injection Date:	30-Aug-2018 15:15:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88239-B-19-A RR	Lab Sample ID:	Client 720-250555/17-A	Worklist Smp#:	17
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\08301817.D
Lims ID: 720-88239-B-19-A RR
Client ID:
Sample Type: Client
Inject. Date: 30-Aug-2018 15:15:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-B-19 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:44:08 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: sanjumnair Date: 31-Aug-2018 08:32:55

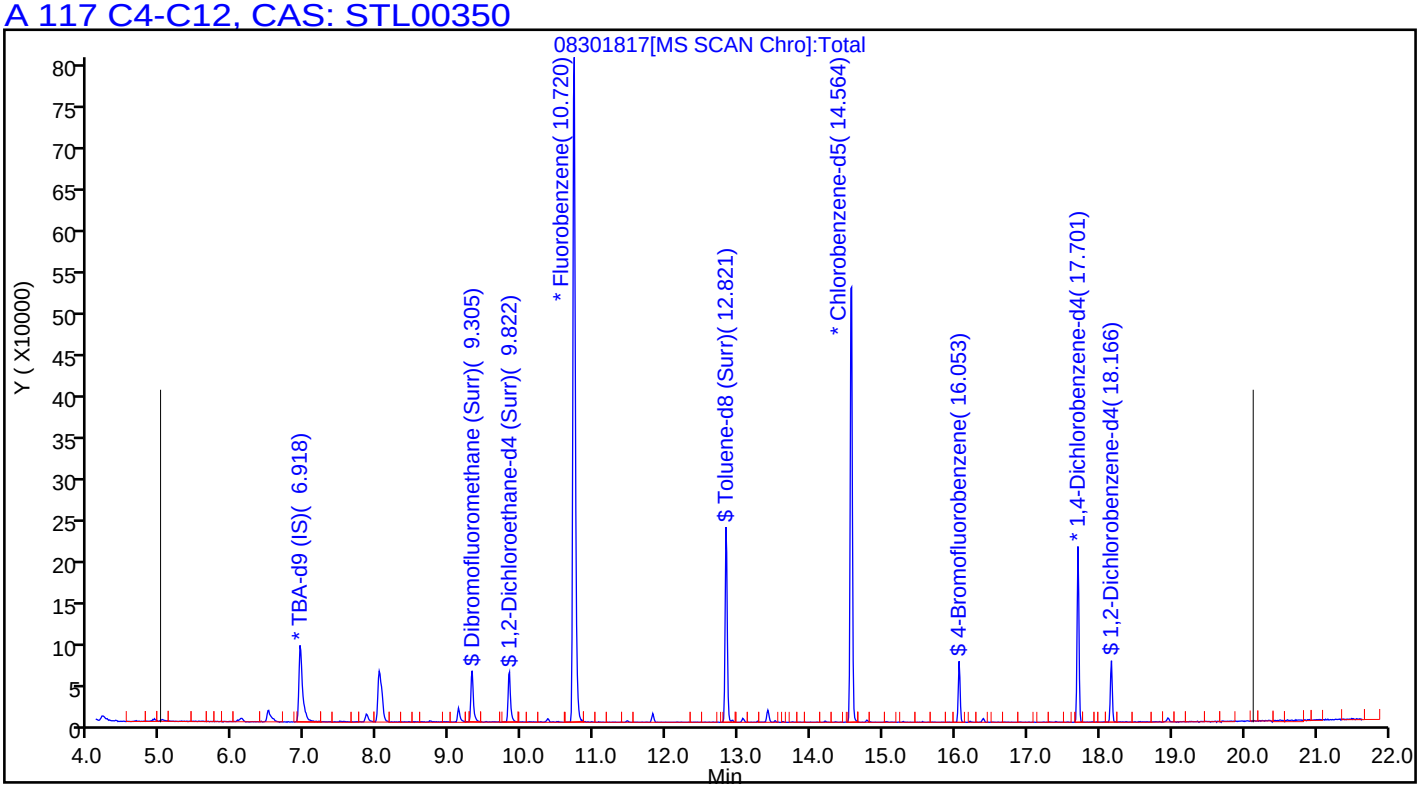
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	7.50	8.16	108.80
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.94	105.81
$ 10 Toluene-d8 (Surr)	7.50	6.09	81.14
$ 11 4-Bromofluorobenzene	7.50	4.80	63.98
$ 12 1,2-Dichlorobenzene-d4	6.00	10.7	177.93

Report Date: 31-Aug-2018 09:29:59 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\08301817.D				
Injection Date:	30-Aug-2018 15:15:30	Instrument ID:	CHMSV2		
Lims ID:	720-88239-B-19-A RR	Lab Sample ID:	Client 720-250555/17-A		
Client ID:					
Operator ID:	VOA	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-B9S-9.5-10
Lab Sample ID: 720-88239-20
Matrix: Solid
Lab File ID: 08291833.D
Analysis Method: 8260B
Date Collected: 08/24/2018 10:20
Sample wt/vol: 6.214(g)
Date Analyzed: 08/29/2018 22:12
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250532
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.0	0.97
67-64-1	Acetone	79		40	31
71-43-2	Benzene	ND		4.0	0.52
75-27-4	Dichlorobromomethane	ND		4.0	0.58
108-86-1	Bromobenzene	ND		4.0	0.64
74-97-5	Chlorobromomethane	ND		16	0.58
75-25-2	Bromoform	ND		4.0	1.6
74-83-9	Bromomethane	ND		8.0	0.64
78-93-3	2-Butanone (MEK)	ND		40	17
104-51-8	n-Butylbenzene	ND		4.0	0.80
135-98-8	sec-Butylbenzene	ND		4.0	0.58
98-06-6	tert-Butylbenzene	ND		4.0	0.59
75-15-0	Carbon disulfide	ND	*	4.0	1.6
56-23-5	Carbon tetrachloride	ND		4.0	0.50
108-90-7	Chlorobenzene	ND		4.0	0.56
75-00-3	Chloroethane	ND		8.0	0.45
67-66-3	Chloroform	ND		4.0	0.53
74-87-3	Chloromethane	ND		8.0	0.64
95-49-8	2-Chlorotoluene	ND		4.0	0.52
106-43-4	4-Chlorotoluene	ND		4.0	0.55
124-48-1	Chlorodibromomethane	ND		4.0	0.57
95-50-1	1,2-Dichlorobenzene	ND		4.0	0.55
541-73-1	1,3-Dichlorobenzene	ND		4.0	0.58
106-46-7	1,4-Dichlorobenzene	ND		4.0	0.57
142-28-9	1,3-Dichloropropane	ND		4.0	0.59
563-58-6	1,1-Dichloropropene	ND		4.0	0.56
96-12-8	1,2-Dibromo-3-Chloropropane	ND		8.0	1.4
106-93-4	Ethylene Dibromide	ND		4.0	1.2
74-95-3	Dibromomethane	ND		8.0	0.69
75-71-8	Dichlorodifluoromethane	ND		8.0	0.64
75-34-3	1,1-Dichloroethane	ND		4.0	0.55
107-06-2	1,2-Dichloroethane	ND		4.0	0.61
75-35-4	1,1-Dichloroethene	ND	*	4.0	0.50
156-59-2	cis-1,2-Dichloroethene	ND		4.0	0.55
156-60-5	trans-1,2-Dichloroethene	ND		4.0	0.60
78-87-5	1,2-Dichloropropane	ND		4.0	0.51

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88239-1
SDG No.:
Client Sample ID: DG-B9S-9.5-10
Lab Sample ID: 720-88239-20
Matrix: Solid
Lab File ID: 08291833.D
Analysis Method: 8260B
Date Collected: 08/24/2018 10:20
Sample wt/vol: 6.214(g)
Date Analyzed: 08/29/2018 22:12
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250532
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.0	0.56
10061-02-6	trans-1,3-Dichloropropene	ND		4.0	0.54
100-41-4	Ethylbenzene	ND		4.0	0.60
87-68-3	Hexachlorobutadiene	ND		4.0	0.72
591-78-6	2-Hexanone	ND		40	8.0
98-82-8	Isopropylbenzene	ND		4.0	0.55
99-87-6	4-Isopropyltoluene	ND		4.0	2.0
75-09-2	Methylene Chloride	ND		8.0	4.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		40	8.0
91-20-3	Naphthalene	ND		8.0	1.2
103-65-1	N-Propylbenzene	ND		4.0	0.53
100-42-5	Styrene	ND		4.0	0.51
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.0	0.61
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.0	0.60
127-18-4	Tetrachloroethene	ND		4.0	0.54
108-88-3	Toluene	ND		4.0	0.57
87-61-6	1,2,3-Trichlorobenzene	ND		4.0	0.60
120-82-1	1,2,4-Trichlorobenzene	ND		4.0	0.57
71-55-6	1,1,1-Trichloroethane	ND		4.0	0.49
79-00-5	1,1,2-Trichloroethane	ND		4.0	0.56
79-01-6	Trichloroethene	ND		4.0	0.51
75-69-4	Trichlorofluoromethane	ND		4.0	0.45
96-18-4	1,2,3-Trichloropropane	ND		4.0	0.62
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.7
95-63-6	1,2,4-Trimethylbenzene	ND		4.0	1.3
108-67-8	1,3,5-Trimethylbenzene	ND		4.0	0.52
108-05-4	Vinyl acetate	ND		16	4.0
75-01-4	Vinyl chloride	ND		4.0	0.59
1330-20-7	Xylenes, Total	ND		4.0	0.98
594-20-7	2,2-Dichloropropane	ND		4.0	1.6
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		200	80

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88239-1

SDG No.:

Client Sample ID: DG-B9S-9.5-10 Lab Sample ID: 720-88239-20

Matrix: Solid Lab File ID: 08291833.D

Analysis Method: 8260B Date Collected: 08/24/2018 10:20

Sample wt/vol: 6.214(g) Date Analyzed: 08/29/2018 22:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250532 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	87		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		60-140
2037-26-5	Toluene-d8 (Surr)	96		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180829-53559.b\08291833.D
Lims ID: 720-88239-A-20-A
Client ID: DG-B9S--9.5-10
Sample Type: Client
Inject. Date: 29-Aug-2018 22:12:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-A-20
Operator ID: SF Instrument ID: HP9

Method: \\ChromNA\Pleasanton\ChromData\HP9\20180829-53559.b\HP9_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 06:53:35 Calib Date: 23-Aug-2018 18:09:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP9\20180823-53445.b\08231828.D

Column 1 : Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: medinaj Date: 30-Aug-2018 09:46:16

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.159	7.159	0.000	0	61429	250.0	
* 2 Fluorobenzene	96	10.936	10.936	0.000	99	745593	25.0	
* 4 Chlorobenzene-d5	117	14.763	14.764	-0.001	82	560688	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.903	17.903	0.000	92	264279	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.528	9.528	0.000	54	53514	7.07	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.045	10.045	0.000	0	35915	6.89	
$ 10 Toluene-d8 (Surr)	98	13.032	13.032	0.000	92	196453	7.20	
$ 11 4-Bromofluorobenzene	95	16.252	16.252	0.000	86	59575	6.56	
$ 12 1,2-Dichlorobenzene-d4	152	18.358	18.358	0.000	77	57649	5.66	
28 Acetone	58	6.713	6.713	0.000	94	17303	49.0	
143 Methyl acetate	43	7.462	7.463	-0.001	94	18603	7.94	
44 2-Butanone (MEK)	72	8.971	8.971	0.000	83	1760	5.42	
139 Ethyl acetate	43	9.326	9.326	0.000	96	38195	15.1	
59 Benzene	78	10.713	10.703	0.010	50	5536	0.1828	
147 Ethyl acrylate	55	11.179	11.260	-0.081	1	663	0.1208	
144 Methylcyclohexane	83	12.029	12.029	-0.001	50	4978	0.2361	
127 Butyl Ether	87	14.966	14.966	0.000	82	2079	0.3506	
A 116 C4-C10	1	11.189	(5.123-17.255)		0	1712043	24.4	
A 153 C6-C8	1	11.194	(8.890-13.498)		0	452999	6.47	
A 154 C6-C9	1	12.161	(8.890-15.432)		0	594569	8.49	
A 117 C4-C12	1	12.738	(5.123-20.353)		0	1936428	27.6	
A 123 Aviation Gas	1	12.991	(8.890-17.093)		0	722879	NC	
A 119 C6-C10	1	13.072	(8.890-17.255)		0	723306	10.3	
A 118 C5-C12	1	13.528	(6.703-20.353)		0	1666868	23.8	
A 120 C6-C12	1	14.622	(8.890-20.353)		0	944412	13.5	
A 155 C8-C10	1	15.336	(13.417-17.255)		0	290222	4.14	
A 121 C7-C12	1	15.786	(11.219-20.353)		0	697874	9.96	

QC Flag Legend

Processing Flags

NC - Not Calibrated

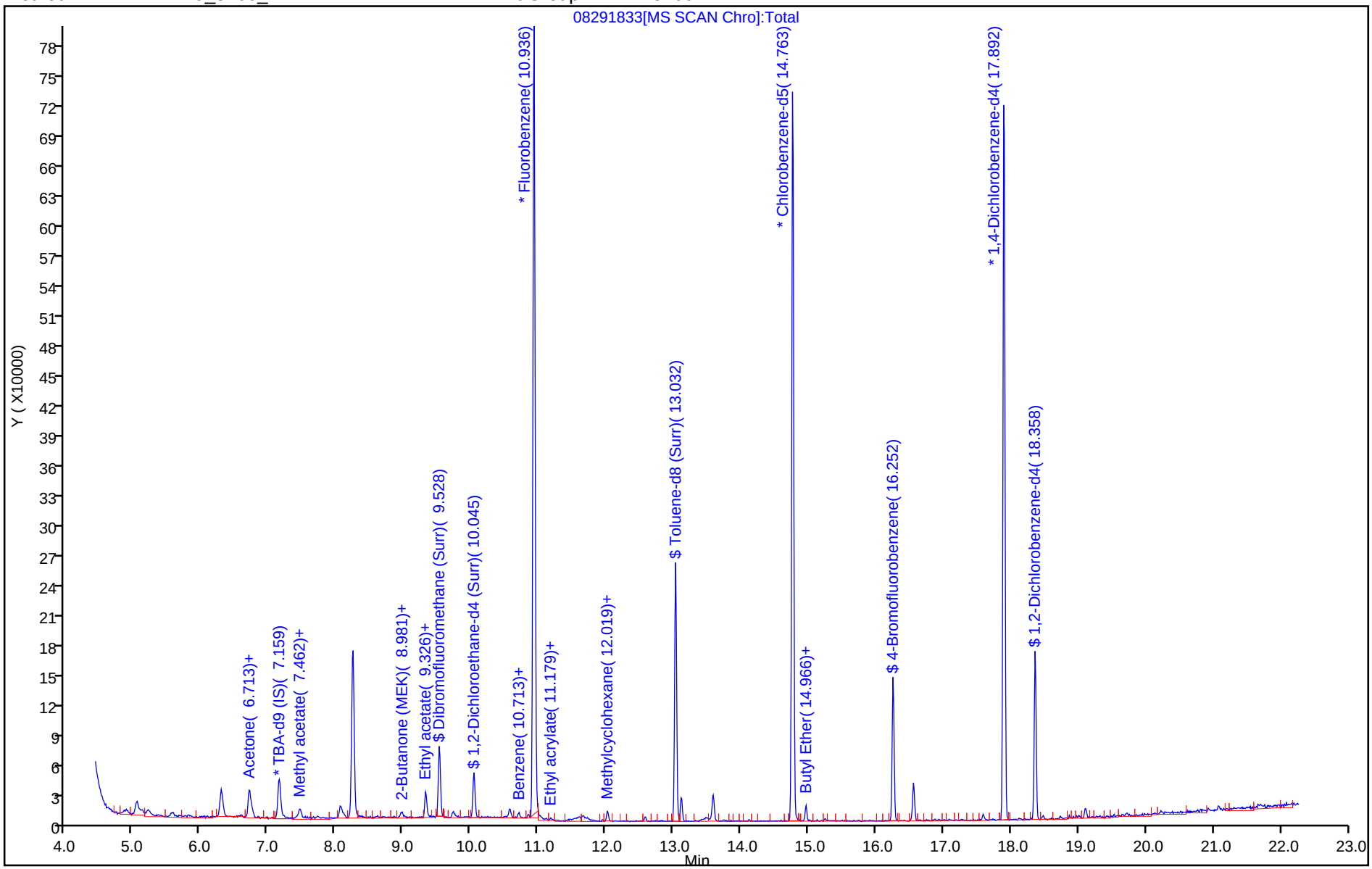
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 30-Aug-2018 09:46:17 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180829-53559.b\08291833.D				
Injection Date:	29-Aug-2018 22:12:30	Instrument ID:	HP9	Operator ID:	SF
Lims ID:	720-88239-A-20-A	Lab Sample ID:	720-88239-20	Worklist Smp#:	9
Client ID:	DG-B9S--9.5-10				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	HP9_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180829-53559.b\08291833.D
Lims ID: 720-88239-A-20-A
Client ID: DG-B9S--9.5-10
Sample Type: Client
Inject. Date: 29-Aug-2018 22:12:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88239-A-20
Operator ID: SF Instrument ID: HP9

Method: \\ChromNA\Pleasanton\ChromData\HP9\20180829-53559.b\HP9_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 06:53:35 Calib Date: 23-Aug-2018 18:09:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP9\20180823-53445.b\08231828.D

Column 1 : Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: medinaj Date: 30-Aug-2018 09:46:16

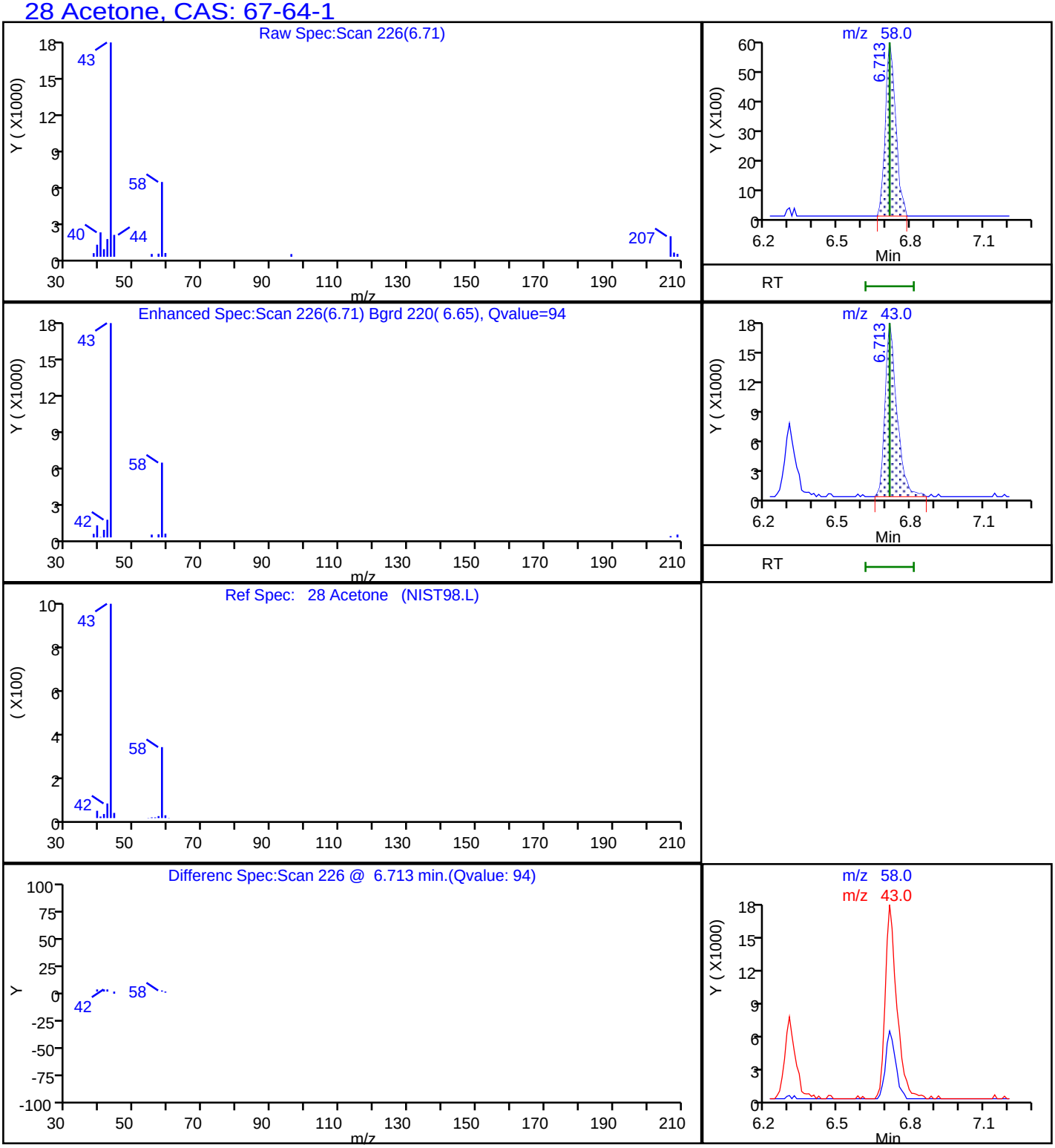
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	6.89	91.80
$ 10 Toluene-d8 (Surr)	7.50	7.20	96.04
$ 11 4-Bromofluorobenzene	7.50	6.56	87.41
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 30-Aug-2018 09:46:17 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180829-53559.b\08291833.D				
Injection Date:	29-Aug-2018 22:12:30	Instrument ID:	HP9		
Lims ID:	720-88239-A-20-A	Lab Sample ID:	720-88239-20		
Client ID:	DG-B9S--9.5-10				
Operator ID:	SF	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1

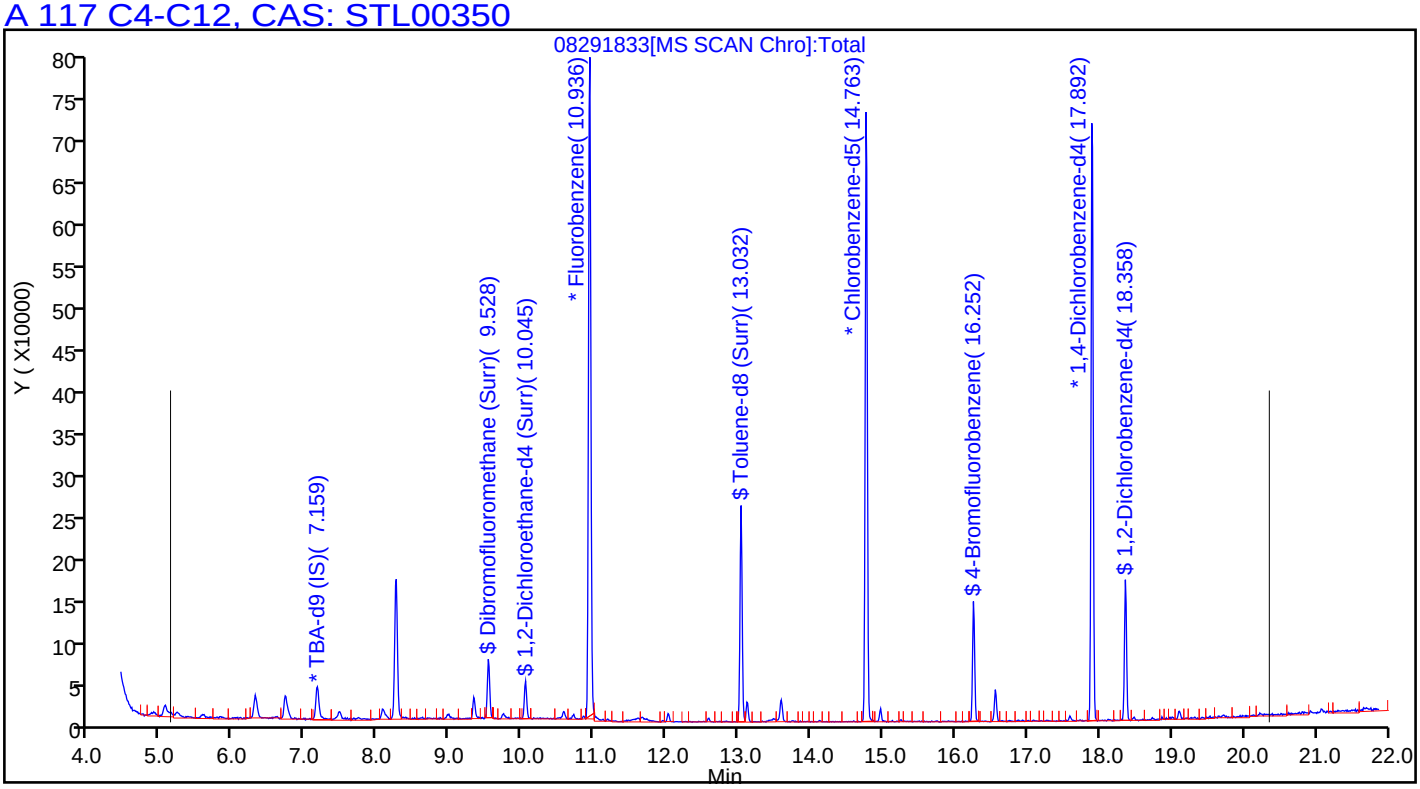


Report Date: 30-Aug-2018 09:46:18 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180829-53559.b\08291833.D				
Injection Date:	29-Aug-2018 22:12:30	Instrument ID:	HP9		
Lims ID:	720-88239-A-20-A	Lab Sample ID:	720-88239-20		
Client ID:	DG-B9S--9.5-10				
Operator ID:	SF	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



Surrogate Summary

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

TestAmerica Job ID: 720-88239-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DCA	TOL
Lab Sample ID	Client Sample ID	(45-131)	(60-140)	(58-140)
720-88239-1	DG-C7S-0.5-1	92	110	95
720-88239-2	DG-C7S-3.5-4	89	108	95
720-88239-3	DG-C7S-9.5-10	91	96	94
720-88239-3 MS	DG-C7S-9.5-10	91	93	96
720-88239-3 MSD	DG-C7S-9.5-10	91	94	97
720-88239-4	DG-E7S-0.5-1	93	110	93
720-88239-5	DG-E7S-3.5-4	91	97	95
720-88239-6	DG-E7S-9.5-10	92	113	93
720-88239-7	DG-G7S-0.5-1	95	118	93
720-88239-8	DG-G7S-3.5-4	88	111	93
720-88239-9	DG-B10S-0.5-1	68 *	123	85
720-88239-10	DG-B10S-3.5-4	104	112	94
720-88239-11	DG-I7S-0.5-1	88	120	91
720-88239-12	DG-I7S-3.5-4	94	111	95
720-88239-13	DG-M7S-0.5-1	81	122	90
720-88239-14	DG-M7S-3.5-4	87	116	91
720-88239-15	DG-B9S-0.5-1	78	103	88
720-88239-16	DG-B9S-3.5-4	85	99	94
720-88239-17	DG-DE89-0.5-1	89	118	90
720-88239-18	DG-DE89-3.5-4	89	100	94
720-88239-19	DG-DE89-9.5-10	64 *	106	81
720-88239-20	DG-B9S-9.5-10	87	92	96
LCS 720-250528/5	Lab Control Sample	98	98	96
LCS 720-250528/7	Lab Control Sample	98	102	97
LCS 720-250532/5	Lab Control Sample	95	85	96
LCS 720-250532/7	Lab Control Sample	97	83	101
LCS 720-250555/5	Lab Control Sample	94	99	98
LCS 720-250555/7	Lab Control Sample	98	101	96
LCS 720-250755/5	Lab Control Sample	96	96	94
LCS 720-250755/7	Lab Control Sample	95	95	98
LCSD 720-250528/6	Lab Control Sample Dup	93	100	97
LCSD 720-250528/8	Lab Control Sample Dup	95	103	96
LCSD 720-250532/6	Lab Control Sample Dup	97	85	100
LCSD 720-250532/8	Lab Control Sample Dup	99	88	104
LCSD 720-250555/6	Lab Control Sample Dup	95	101	98
LCSD 720-250555/8	Lab Control Sample Dup	98	100	97
LCSD 720-250755/6	Lab Control Sample Dup	95	97	97
LCSD 720-250755/8	Lab Control Sample Dup	95	101	98
MB 720-250528/4	Method Blank	94	105	97
MB 720-250532/4	Method Blank	97	91	101
MB 720-250555/4	Method Blank	92	100	96
MB 720-250755/4	Method Blank	94	96	94

Surrogate Legend

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

Surrogate Summary

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

TestAmerica Job ID: 720-88239-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		FBP	TPHL
Lab Sample ID	Client Sample ID	(33-120)	(35-146)
720-88239-1	DG-C7S-0.5-1	70	84
720-88239-2	DG-C7S-3.5-4	71	86
720-88239-3	DG-C7S-9.5-10	63	83
720-88239-4	DG-E7S-0.5-1	70	87
720-88239-5	DG-E7S-3.5-4	56	71
720-88239-6	DG-E7S-9.5-10	56	79
720-88239-7	DG-G7S-0.5-1	59	79
720-88239-8	DG-G7S-3.5-4	57	78
720-88239-9	DG-B10S-0.5-1	60	77
720-88239-10	DG-B10S-3.5-4	53	69
720-88239-11	DG-I7S-0.5-1	56	73
720-88239-12	DG-I7S-3.5-4	59	80
720-88239-13	DG-M7S-0.5-1	65	78
720-88239-14	DG-M7S-3.5-4	54	80
720-88239-15	DG-B9S-0.5-1	68	80
720-88239-16	DG-B9S-3.5-4	53	76
720-88239-17	DG-DE89-0.5-1	54	70
720-88239-18	DG-DE89-3.5-4	42	54
720-88239-19	DG-DE89-9.5-10	65	85
720-88239-20	DG-B9S-9.5-10	44	69
720-88241-D-1-F MS	Matrix Spike	62	91
720-88241-D-1-G MSD	Matrix Spike Duplicate	62	90
720-88242-D-2-B MS	Matrix Spike	57	79
720-88242-D-2-C MSD	Matrix Spike Duplicate	56	76
720-88242-D-13-H MS	Matrix Spike	39	55
720-88242-D-13-I MSD	Matrix Spike Duplicate	37	54
LCS 720-250520/2-A	Lab Control Sample	63	76
LCS 720-250580/2-A	Lab Control Sample	75	90
LCS 720-250853/2-A	Lab Control Sample	74	90
MB 720-250520/1-A	Method Blank	74	86
MB 720-250580/1-A	Method Blank	79	93
MB 720-250853/1-A	Method Blank	81	89

Surrogate Legend

FBP = 2-Fluorobiphenyl

TPHL = Terphenyl-d14

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

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

		Percent Surrogate Recovery (Acceptance Limits)
		TPH1
Lab Sample ID	Client Sample ID	(40-130)
720-88239-1	DG-C7S-0.5-1	76
720-88239-2	DG-C7S-3.5-4	111
720-88239-3	DG-C7S-9.5-10	104
720-88239-4	DG-E7S-0.5-1	98
720-88239-5	DG-E7S-3.5-4	78
720-88239-6	DG-E7S-9.5-10	104

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

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

Lab Sample ID	Client Sample ID	TPH1 (40-130)
720-88239-7	DG-G7S-0.5-1	79
720-88239-7 MS	DG-G7S-0.5-1	83
720-88239-7 MSD	DG-G7S-0.5-1	79
720-88239-8	DG-G7S-3.5-4	95
720-88239-9	DG-B10S-0.5-1	74
720-88239-10	DG-B10S-3.5-4	101
720-88239-11	DG-I7S-0.5-1	89
720-88239-12	DG-I7S-3.5-4	85
720-88239-12 MS	DG-I7S-3.5-4	92
720-88239-12 MSD	DG-I7S-3.5-4	86
720-88239-13	DG-M7S-0.5-1	0 D X
720-88239-14	DG-M7S-3.5-4	82
720-88239-15	DG-B9S-0.5-1	0 D X
720-88239-16	DG-B9S-3.5-4	90
720-88239-17	DG-DE89-0.5-1	104
720-88239-18	DG-DE89-3.5-4	0 D X
720-88239-19	DG-DE89-9.5-10	102
720-88239-20	DG-B9S-9.5-10	100
720-88240-D-3-G MS	Matrix Spike	0 X D
720-88240-D-3-H MSD	Matrix Spike Duplicate	0 X D
LCS 720-250382/2-A	Lab Control Sample	81
LCS 720-250461/2-A	Lab Control Sample	86
LCS 720-250498/2-A	Lab Control Sample	88
MB 720-250382/1-A	Method Blank	101
MB 720-250461/1-A	Method Blank	96
MB 720-250498/1-A	Method Blank	91

Percent Surrogate Recovery (Acceptance Limits)

Surrogate Legend

TPH = p-Terphenyl

Method: 8081A - Organochlorine Pesticides (GC)

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

Lab Sample ID	Client Sample ID	DCBP2 (21-136)	TCX2 (21-145)
720-88216-A-9-S MS	Matrix Spike	90	76
720-88216-A-9-T MSD	Matrix Spike Duplicate	100	82
720-88239-5	DG-E7S-3.5-4	88	76
720-88239-13 MS	DG-M7S-0.5-1	80	93
LCS 720-250393/2-A	Lab Control Sample	95	84
LCS 720-250531/2-A	Lab Control Sample	98	83
MB 720-250393/1-A	Method Blank	98	84
MB 720-250531/1-A	Method Blank	87	83

Percent Surrogate Recovery (Acceptance Limits)

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Surrogate Summary

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

TestAmerica Job ID: 720-88239-1

Method: 8081A - Organochlorine Pesticides (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		DCBP1	TCX2
Lab Sample ID	Client Sample ID	(21-136)	(21-145)
720-88239-1	DG-C7S-0.5-1	87	80
720-88239-7	DG-G7S-0.5-1	100	82
720-88239-9	DG-B10S-0.5-1	112	88
720-88239-10	DG-B10S-3.5-4	96	78
720-88239-11	DG-I7S-0.5-1	86	85
720-88239-13	DG-M7S-0.5-1	101	79

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		DCBP1	TCX1
Lab Sample ID	Client Sample ID	(21-136)	(21-145)
720-88239-2	DG-C7S-3.5-4	73	68
720-88239-3	DG-C7S-9.5-10	89	76
720-88239-6	DG-E7S-9.5-10	103	82
720-88239-8	DG-G7S-3.5-4	86	93
720-88239-12	DG-I7S-3.5-4	106	82
720-88239-13 MSD	DG-M7S-0.5-1	105	94
720-88239-14	DG-M7S-3.5-4	109	82
720-88239-15	DG-B9S-0.5-1	77	93
720-88239-16	DG-B9S-3.5-4	85	73
720-88239-20	DG-B9S-9.5-10	86	72

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		DCBP2	TCX1
Lab Sample ID	Client Sample ID	(21-136)	(21-145)
720-88239-4	DG-E7S-0.5-1	109	76

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Surrogate Summary

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

TestAmerica Job ID: 720-88239-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	TCX2 (14-128)	DCBP2 (10-132)						
720-88218-F-21-B MS	Matrix Spike	86	76						
720-88218-F-21-C MSD	Matrix Spike Duplicate	71	72						
720-88239-1	DG-C7S-0.5-1	56	71						
720-88239-2	DG-C7S-3.5-4	86	107						
720-88239-3	DG-C7S-9.5-10	87	111						
720-88239-4	DG-E7S-0.5-1	85	106						
720-88239-5	DG-E7S-3.5-4	64	78						
720-88239-6	DG-E7S-9.5-10	72	84						
720-88239-7	DG-G7S-0.5-1	78	0 X						
720-88239-8	DG-G7S-3.5-4	142 X	881 X						
720-88239-9	DG-B10S-0.5-1	80	93						
720-88239-10	DG-B10S-3.5-4	81	98						
720-88239-11	DG-I7S-0.5-1	70	87						
720-88239-12	DG-I7S-3.5-4	71	88						
720-88239-13	DG-M7S-0.5-1	86	72						
720-88239-14	DG-M7S-3.5-4	62	51						
720-88239-15	DG-B9S-0.5-1	96	78						
720-88239-16	DG-B9S-3.5-4	91	79						
720-88239-17	DG-DE89-0.5-1	71	63						
720-88239-18	DG-DE89-3.5-4	65	55						
720-88239-19	DG-DE89-9.5-10	71	69						
720-88239-20	DG-B9S-9.5-10	80	73						
720-88291-F-10-B MS	Matrix Spike	86	75						
720-88291-F-10-C MSD	Matrix Spike Duplicate	82	71						
LCS 240-343096/24-A	Lab Control Sample	84	90						
LCS 240-343472/8-A	Lab Control Sample	83	85						
MB 240-343096/23-A	Method Blank	94	96						
MB 240-343472/7-A	Method Blank	84	87						

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

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

Lab Sample ID: MB 720-250528/4
Matrix: Solid
Analysis Batch: 250528

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/29/18 19:01	1
Acetone	ND		50	38	ug/Kg			08/29/18 19:01	1
Benzene	ND		5.0	0.65	ug/Kg			08/29/18 19:01	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/29/18 19:01	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/29/18 19:01	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/29/18 19:01	1
Bromoform	ND		5.0	2.0	ug/Kg			08/29/18 19:01	1
Bromomethane	ND		10	0.79	ug/Kg			08/29/18 19:01	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/29/18 19:01	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/29/18 19:01	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/29/18 19:01	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/29/18 19:01	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/29/18 19:01	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/29/18 19:01	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/29/18 19:01	1
Chloroethane	ND		10	0.56	ug/Kg			08/29/18 19:01	1
Chloroform	ND		5.0	0.66	ug/Kg			08/29/18 19:01	1
Chloromethane	ND		10	0.79	ug/Kg			08/29/18 19:01	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/29/18 19:01	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/29/18 19:01	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/29/18 19:01	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/29/18 19:01	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/29/18 19:01	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/29/18 19:01	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/29/18 19:01	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/29/18 19:01	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/29/18 19:01	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/29/18 19:01	1
Dibromomethane	ND		10	0.86	ug/Kg			08/29/18 19:01	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/29/18 19:01	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/29/18 19:01	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/29/18 19:01	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/29/18 19:01	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/29/18 19:01	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/29/18 19:01	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/29/18 19:01	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/29/18 19:01	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/29/18 19:01	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/29/18 19:01	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/29/18 19:01	1
2-Hexanone	ND		50	10	ug/Kg			08/29/18 19:01	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/29/18 19:01	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/29/18 19:01	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/29/18 19:01	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/29/18 19:01	1
Naphthalene	ND		10	1.5	ug/Kg			08/29/18 19:01	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/29/18 19:01	1
Styrene	ND		5.0	0.63	ug/Kg			08/29/18 19:01	1

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

Lab Sample ID: MB 720-250528/4
Matrix: Solid
Analysis Batch: 250528

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/29/18 19:01	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/29/18 19:01	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/29/18 19:01	1
Toluene	ND		5.0	0.71	ug/Kg			08/29/18 19:01	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/29/18 19:01	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/29/18 19:01	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/29/18 19:01	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/29/18 19:01	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/29/18 19:01	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/29/18 19:01	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/29/18 19:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/29/18 19:01	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/29/18 19:01	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/29/18 19:01	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/29/18 19:01	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/29/18 19:01	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/29/18 19:01	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/29/18 19:01	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/29/18 19:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*45 - 131*		*08/29/18 19:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*60 - 140*		*08/29/18 19:01*	*1*
Toluene-d8 (Surr)	*97*		*58 - 140*		*08/29/18 19:01*	*1*

Lab Sample ID: LCS 720-250528/5
Matrix: Solid
Analysis Batch: 250528

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	53.0		ug/Kg		106	70 - 144
Acetone	250	195		ug/Kg		78	30 - 162
Benzene	50.0	50.4		ug/Kg		101	70 - 130
Dichlorobromomethane	50.0	54.1		ug/Kg		108	70 - 140
Bromobenzene	50.0	48.6		ug/Kg		97	70 - 130
Chlorobromomethane	50.0	54.3		ug/Kg		109	70 - 130
Bromoform	50.0	49.4		ug/Kg		99	59 - 158
Bromomethane	50.0	54.0		ug/Kg		108	59 - 132
2-Butanone (MEK)	250	209		ug/Kg		84	59 - 159
n-Butylbenzene	50.0	48.8		ug/Kg		98	70 - 142
sec-Butylbenzene	50.0	48.6		ug/Kg		97	70 - 136
tert-Butylbenzene	50.0	48.8		ug/Kg		98	70 - 130
Carbon disulfide	50.0	67.6		ug/Kg		135	60 - 140
Carbon tetrachloride	50.0	59.3		ug/Kg		119	70 - 142
Chlorobenzene	50.0	52.0		ug/Kg		104	70 - 130
Chloroethane	50.0	47.9		ug/Kg		96	65 - 130
Chloroform	50.0	53.3		ug/Kg		107	77 - 127

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

Lab Sample ID: LCS 720-250528/5
Matrix: Solid
Analysis Batch: 250528

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	50.0	48.2		ug/Kg		96	55 - 140
2-Chlorotoluene	50.0	48.6		ug/Kg		97	70 - 138
4-Chlorotoluene	50.0	48.9		ug/Kg		98	70 - 136
Chlorodibromomethane	50.0	53.0		ug/Kg		106	70 - 146
1,2-Dichlorobenzene	50.0	49.7		ug/Kg		99	70 - 130
1,3-Dichlorobenzene	50.0	51.6		ug/Kg		103	70 - 131
1,4-Dichlorobenzene	50.0	49.3		ug/Kg		99	70 - 130
1,3-Dichloropropane	50.0	48.3		ug/Kg		97	70 - 140
1,1-Dichloropropene	50.0	53.8		ug/Kg		108	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	44.5		ug/Kg		89	60 - 145
Ethylene Dibromide	50.0	52.6		ug/Kg		105	70 - 140
Dibromomethane	50.0	51.3		ug/Kg		103	70 - 139
Dichlorodifluoromethane	50.0	61.1		ug/Kg		122	37 - 158
1,1-Dichloroethane	50.0	52.6		ug/Kg		105	70 - 130
1,2-Dichloroethane	50.0	53.6		ug/Kg		107	70 - 130
1,1-Dichloroethene	50.0	65.0	*	ug/Kg		130	74 - 122
cis-1,2-Dichloroethene	50.0	52.6		ug/Kg		105	70 - 138
trans-1,2-Dichloroethene	50.0	58.3		ug/Kg		117	67 - 130
1,2-Dichloropropane	50.0	50.2		ug/Kg		100	73 - 127
cis-1,3-Dichloropropene	50.0	52.1		ug/Kg		104	68 - 147
trans-1,3-Dichloropropene	50.0	50.2		ug/Kg		100	70 - 155
Ethylbenzene	50.0	50.6		ug/Kg		101	80 - 137
Hexachlorobutadiene	50.0	52.7		ug/Kg		105	70 - 132
2-Hexanone	250	208		ug/Kg		83	62 - 158
Isopropylbenzene	50.0	53.1		ug/Kg		106	70 - 130
4-Isopropyltoluene	50.0	50.1		ug/Kg		100	70 - 133
Methylene Chloride	50.0	50.2		ug/Kg		100	70 - 134
4-Methyl-2-pentanone (MIBK)	250	208		ug/Kg		83	60 - 160
Naphthalene	50.0	46.8		ug/Kg		94	60 - 147
N-Propylbenzene	50.0	48.1		ug/Kg		96	70 - 130
Styrene	50.0	48.1		ug/Kg		96	70 - 130
1,1,1,2-Tetrachloroethane	50.0	55.1		ug/Kg		110	70 - 130
1,1,2,2-Tetrachloroethane	50.0	42.9		ug/Kg		86	70 - 146
Tetrachloroethene	50.0	56.4		ug/Kg		113	70 - 132
Toluene	50.0	49.4		ug/Kg		99	75 - 120
1,2,3-Trichlorobenzene	50.0	50.3		ug/Kg		101	60 - 140
1,2,4-Trichlorobenzene	50.0	52.3		ug/Kg		105	60 - 140
1,1,1-Trichloroethane	50.0	58.3		ug/Kg		117	70 - 130
1,1,2-Trichloroethane	50.0	49.3		ug/Kg		99	70 - 130
Trichloroethene	50.0	55.3		ug/Kg		111	70 - 133
Trichlorofluoromethane	50.0	56.6		ug/Kg		113	60 - 140
1,2,3-Trichloropropane	50.0	46.1		ug/Kg		92	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	68.3		ug/Kg		137	60 - 140
1,2,4-Trimethylbenzene	50.0	50.3		ug/Kg		101	70 - 130
1,3,5-Trimethylbenzene	50.0	50.3		ug/Kg		101	70 - 131
Vinyl acetate	50.0	45.4		ug/Kg		91	38 - 176
Vinyl chloride	50.0	51.4		ug/Kg		103	58 - 125

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

Lab Sample ID: LCS 720-250528/5
Matrix: Solid
Analysis Batch: 250528

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
m-Xylene & p-Xylene	50.0	52.4		ug/Kg		105	70 - 146
o-Xylene	50.0	52.7		ug/Kg		105	70 - 140
2,2-Dichloropropane	50.0	64.3		ug/Kg		129	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*98*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCS 720-250528/7
Matrix: Solid
Analysis Batch: 250528

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	1030		ug/Kg		103	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*102*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: LCSD 720-250528/6
Matrix: Solid
Analysis Batch: 250528

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	55.2		ug/Kg		110	70 - 144	4	20
Acetone	250	198		ug/Kg		79	30 - 162	2	30
Benzene	50.0	51.2		ug/Kg		102	70 - 130	2	20
Dichlorobromomethane	50.0	55.6		ug/Kg		111	70 - 140	3	20
Bromobenzene	50.0	51.2		ug/Kg		102	70 - 130	5	20
Chlorobromomethane	50.0	55.9		ug/Kg		112	70 - 130	3	20
Bromoform	50.0	50.9		ug/Kg		102	59 - 158	3	20
Bromomethane	50.0	56.0		ug/Kg		112	59 - 132	4	20
2-Butanone (MEK)	250	210		ug/Kg		84	59 - 159	0	20
n-Butylbenzene	50.0	48.7		ug/Kg		97	70 - 142	0	20
sec-Butylbenzene	50.0	49.2		ug/Kg		98	70 - 136	1	20
tert-Butylbenzene	50.0	50.0		ug/Kg		100	70 - 130	3	20
Carbon disulfide	50.0	69.3		ug/Kg		139	60 - 140	2	20
Carbon tetrachloride	50.0	59.7		ug/Kg		119	70 - 142	1	20
Chlorobenzene	50.0	51.2		ug/Kg		102	70 - 130	1	20
Chloroethane	50.0	48.9		ug/Kg		98	65 - 130	2	20
Chloroform	50.0	54.4		ug/Kg		109	77 - 127	2	20
Chloromethane	50.0	49.2		ug/Kg		98	55 - 140	2	20
2-Chlorotoluene	50.0	50.6		ug/Kg		101	70 - 138	4	20
4-Chlorotoluene	50.0	50.2		ug/Kg		100	70 - 136	3	20
Chlorodibromomethane	50.0	53.6		ug/Kg		107	70 - 146	1	20

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

Lab Sample ID: LCSD 720-250528/6
Matrix: Solid
Analysis Batch: 250528

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene	50.0	50.9		ug/Kg		102	70 - 130	2	20
1,3-Dichlorobenzene	50.0	52.3		ug/Kg		105	70 - 131	1	20
1,4-Dichlorobenzene	50.0	51.1		ug/Kg		102	70 - 130	4	20
1,3-Dichloropropane	50.0	50.6		ug/Kg		101	70 - 140	5	20
1,1-Dichloropropene	50.0	54.1		ug/Kg		108	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	50.0	47.8		ug/Kg		96	60 - 145	7	20
Ethylene Dibromide	50.0	53.6		ug/Kg		107	70 - 140	2	20
Dibromomethane	50.0	52.1		ug/Kg		104	70 - 139	2	20
Dichlorodifluoromethane	50.0	61.8		ug/Kg		124	37 - 158	1	20
1,1-Dichloroethane	50.0	54.1		ug/Kg		108	70 - 130	3	20
1,2-Dichloroethane	50.0	55.7		ug/Kg		111	70 - 130	4	20
1,1-Dichloroethene	50.0	66.3	*	ug/Kg		133	74 - 122	2	20
cis-1,2-Dichloroethene	50.0	53.4		ug/Kg		107	70 - 138	1	20
trans-1,2-Dichloroethene	50.0	59.3		ug/Kg		119	67 - 130	2	20
1,2-Dichloropropane	50.0	50.8		ug/Kg		102	73 - 127	1	20
cis-1,3-Dichloropropene	50.0	53.1		ug/Kg		106	68 - 147	2	20
trans-1,3-Dichloropropene	50.0	50.7		ug/Kg		101	70 - 155	1	20
Ethylbenzene	50.0	50.3		ug/Kg		101	80 - 137	1	20
Hexachlorobutadiene	50.0	53.2		ug/Kg		106	70 - 132	1	20
2-Hexanone	250	213		ug/Kg		85	62 - 158	2	20
Isopropylbenzene	50.0	52.7		ug/Kg		105	70 - 130	1	20
4-Isopropyltoluene	50.0	50.9		ug/Kg		102	70 - 133	1	20
Methylene Chloride	50.0	51.4		ug/Kg		103	70 - 134	2	20
4-Methyl-2-pentanone (MIBK)	250	213		ug/Kg		85	60 - 160	2	20
Naphthalene	50.0	48.7		ug/Kg		97	60 - 147	4	20
N-Propylbenzene	50.0	49.3		ug/Kg		99	70 - 130	2	20
Styrene	50.0	48.2		ug/Kg		96	70 - 130	0	20
1,1,1,2-Tetrachloroethane	50.0	55.6		ug/Kg		111	70 - 130	1	20
1,1,2,2-Tetrachloroethane	50.0	46.6		ug/Kg		93	70 - 146	8	20
Tetrachloroethene	50.0	55.6		ug/Kg		111	70 - 132	1	20
Toluene	50.0	49.4		ug/Kg		99	75 - 120	0	20
1,2,3-Trichlorobenzene	50.0	51.2		ug/Kg		102	60 - 140	2	20
1,2,4-Trichlorobenzene	50.0	51.8		ug/Kg		104	60 - 140	1	20
1,1,1-Trichloroethane	50.0	59.3		ug/Kg		119	70 - 130	2	20
1,1,2-Trichloroethane	50.0	51.7		ug/Kg		103	70 - 130	5	20
Trichloroethene	50.0	55.9		ug/Kg		112	70 - 133	1	20
Trichlorofluoromethane	50.0	57.4		ug/Kg		115	60 - 140	1	20
1,2,3-Trichloropropane	50.0	48.6		ug/Kg		97	70 - 146	5	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	69.8		ug/Kg		140	60 - 140	2	20
1,2,4-Trimethylbenzene	50.0	51.2		ug/Kg		102	70 - 130	2	20
1,3,5-Trimethylbenzene	50.0	51.3		ug/Kg		103	70 - 131	2	20
Vinyl acetate	50.0	46.9		ug/Kg		94	38 - 176	3	20
Vinyl chloride	50.0	52.2		ug/Kg		104	58 - 125	1	20
m-Xylene & p-Xylene	50.0	52.2		ug/Kg		104	70 - 146	0	20
o-Xylene	50.0	52.2		ug/Kg		104	70 - 140	1	20
2,2-Dichloropropane	50.0	64.5		ug/Kg		129	70 - 162	0	20

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

Lab Sample ID: LCSD 720-250528/6
Matrix: Solid
Analysis Batch: 250528

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	93		45 - 131
1,2-Dichloroethane-d4 (Surr)	100		60 - 140
Toluene-d8 (Surr)	97		58 - 140

Lab Sample ID: LCSD 720-250528/8
Matrix: Solid
Analysis Batch: 250528

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	1040		ug/Kg		104	70 - 122	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	95		45 - 131
1,2-Dichloroethane-d4 (Surr)	103		60 - 140
Toluene-d8 (Surr)	96		58 - 140

Lab Sample ID: MB 720-250532/4
Matrix: Solid
Analysis Batch: 250532

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/29/18 19:48	1
Acetone	ND		50	38	ug/Kg			08/29/18 19:48	1
Benzene	ND		5.0	0.65	ug/Kg			08/29/18 19:48	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/29/18 19:48	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/29/18 19:48	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/29/18 19:48	1
Bromoform	ND		5.0	2.0	ug/Kg			08/29/18 19:48	1
Bromomethane	ND		10	0.79	ug/Kg			08/29/18 19:48	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/29/18 19:48	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/29/18 19:48	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/29/18 19:48	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/29/18 19:48	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/29/18 19:48	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/29/18 19:48	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/29/18 19:48	1
Chloroethane	ND		10	0.56	ug/Kg			08/29/18 19:48	1
Chloroform	ND		5.0	0.66	ug/Kg			08/29/18 19:48	1
Chloromethane	ND		10	0.79	ug/Kg			08/29/18 19:48	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/29/18 19:48	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/29/18 19:48	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/29/18 19:48	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/29/18 19:48	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/29/18 19:48	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/29/18 19:48	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/29/18 19:48	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/29/18 19:48	1

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

Lab Sample ID: MB 720-250532/4
Matrix: Solid
Analysis Batch: 250532

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/29/18 19:48	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/29/18 19:48	1
Dibromomethane	ND		10	0.86	ug/Kg			08/29/18 19:48	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/29/18 19:48	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/29/18 19:48	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/29/18 19:48	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/29/18 19:48	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/29/18 19:48	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/29/18 19:48	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/29/18 19:48	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/29/18 19:48	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/29/18 19:48	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/29/18 19:48	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/29/18 19:48	1
2-Hexanone	ND		50	10	ug/Kg			08/29/18 19:48	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/29/18 19:48	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/29/18 19:48	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/29/18 19:48	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/29/18 19:48	1
Naphthalene	ND		10	1.5	ug/Kg			08/29/18 19:48	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/29/18 19:48	1
Styrene	ND		5.0	0.63	ug/Kg			08/29/18 19:48	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/29/18 19:48	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/29/18 19:48	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/29/18 19:48	1
Toluene	ND		5.0	0.71	ug/Kg			08/29/18 19:48	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/29/18 19:48	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/29/18 19:48	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/29/18 19:48	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/29/18 19:48	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/29/18 19:48	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/29/18 19:48	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/29/18 19:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/29/18 19:48	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/29/18 19:48	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/29/18 19:48	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/29/18 19:48	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/29/18 19:48	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/29/18 19:48	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/29/18 19:48	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/29/18 19:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*45 - 131*		*08/29/18 19:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*60 - 140*		*08/29/18 19:48*	*1*
Toluene-d8 (Surr)	*101*		*58 - 140*		*08/29/18 19:48*	*1*

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

Lab Sample ID: LCS 720-250532/5
Matrix: Solid
Analysis Batch: 250532

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	48.2		ug/Kg		96	70 - 144
Acetone	250	245		ug/Kg		98	30 - 162
Benzene	50.0	50.8		ug/Kg		102	70 - 130
Dichlorobromomethane	50.0	46.7		ug/Kg		93	70 - 140
Bromobenzene	50.0	52.5		ug/Kg		105	70 - 130
Chlorobromomethane	50.0	50.9		ug/Kg		102	70 - 130
Bromoform	50.0	45.0		ug/Kg		90	59 - 158
Bromomethane	50.0	49.1		ug/Kg		98	59 - 132
2-Butanone (MEK)	250	197		ug/Kg		79	59 - 159
n-Butylbenzene	50.0	51.8		ug/Kg		104	70 - 142
sec-Butylbenzene	50.0	53.7		ug/Kg		107	70 - 136
tert-Butylbenzene	50.0	52.9		ug/Kg		106	70 - 130
Carbon disulfide	50.0	72.2	*	ug/Kg		144	60 - 140
Carbon tetrachloride	50.0	50.9		ug/Kg		102	70 - 142
Chlorobenzene	50.0	48.5		ug/Kg		97	70 - 130
Chloroethane	50.0	47.3		ug/Kg		95	65 - 130
Chloroform	50.0	48.0		ug/Kg		96	77 - 127
Chloromethane	50.0	46.7		ug/Kg		93	55 - 140
2-Chlorotoluene	50.0	53.4		ug/Kg		107	70 - 138
4-Chlorotoluene	50.0	53.0		ug/Kg		106	70 - 136
Chlorodibromomethane	50.0	47.9		ug/Kg		96	70 - 146
1,2-Dichlorobenzene	50.0	49.3		ug/Kg		99	70 - 130
1,3-Dichlorobenzene	50.0	49.7		ug/Kg		99	70 - 131
1,4-Dichlorobenzene	50.0	49.7		ug/Kg		99	70 - 130
1,3-Dichloropropane	50.0	46.8		ug/Kg		94	70 - 140
1,1-Dichloropropene	50.0	51.9		ug/Kg		104	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	46.5		ug/Kg		93	60 - 145
Ethylene Dibromide	50.0	45.8		ug/Kg		92	70 - 140
Dibromomethane	50.0	44.7		ug/Kg		89	70 - 139
Dichlorodifluoromethane	50.0	39.6		ug/Kg		79	37 - 158
1,1-Dichloroethane	50.0	54.0		ug/Kg		108	70 - 130
1,2-Dichloroethane	50.0	44.6		ug/Kg		89	70 - 130
1,1-Dichloroethene	50.0	62.7	*	ug/Kg		125	74 - 122
cis-1,2-Dichloroethene	50.0	51.7		ug/Kg		103	70 - 138
trans-1,2-Dichloroethene	50.0	61.1		ug/Kg		122	67 - 130
1,2-Dichloropropane	50.0	51.5		ug/Kg		103	73 - 127
cis-1,3-Dichloropropene	50.0	52.5		ug/Kg		105	68 - 147
trans-1,3-Dichloropropene	50.0	49.3		ug/Kg		99	70 - 155
Ethylbenzene	50.0	50.4		ug/Kg		101	80 - 137
Hexachlorobutadiene	50.0	48.8		ug/Kg		98	70 - 132
2-Hexanone	250	226		ug/Kg		90	62 - 158
Isopropylbenzene	50.0	53.1		ug/Kg		106	70 - 130
4-Isopropyltoluene	50.0	53.5		ug/Kg		107	70 - 133
Methylene Chloride	50.0	54.5		ug/Kg		109	70 - 134
4-Methyl-2-pentanone (MIBK)	250	220		ug/Kg		88	60 - 160
Naphthalene	50.0	48.6		ug/Kg		97	60 - 147
N-Propylbenzene	50.0	53.8		ug/Kg		108	70 - 130
Styrene	50.0	49.6		ug/Kg		99	70 - 130

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

Lab Sample ID: LCS 720-250532/5
Matrix: Solid
Analysis Batch: 250532

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	48.7		ug/Kg		97	70 - 130
1,1,2,2-Tetrachloroethane	50.0	44.0		ug/Kg		88	70 - 146
Tetrachloroethene	50.0	52.7		ug/Kg		105	70 - 132
Toluene	50.0	49.5		ug/Kg		99	75 - 120
1,2,3-Trichlorobenzene	50.0	50.0		ug/Kg		100	60 - 140
1,2,4-Trichlorobenzene	50.0	53.2		ug/Kg		106	60 - 140
1,1,1-Trichloroethane	50.0	51.5		ug/Kg		103	70 - 130
1,1,2-Trichloroethane	50.0	48.7		ug/Kg		97	70 - 130
Trichloroethene	50.0	49.3		ug/Kg		99	70 - 133
Trichlorofluoromethane	50.0	47.9		ug/Kg		96	60 - 140
1,2,3-Trichloropropane	50.0	44.7		ug/Kg		89	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	65.5		ug/Kg		131	60 - 140
1,2,4-Trimethylbenzene	50.0	54.1		ug/Kg		108	70 - 130
1,3,5-Trimethylbenzene	50.0	53.9		ug/Kg		108	70 - 131
Vinyl acetate	50.0	49.2		ug/Kg		98	38 - 176
Vinyl chloride	50.0	43.7		ug/Kg		87	58 - 125
m-Xylene & p-Xylene	50.0	51.0		ug/Kg		102	70 - 146
o-Xylene	50.0	51.6		ug/Kg		103	70 - 140
2,2-Dichloropropane	50.0	56.8		ug/Kg		114	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*85*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCS 720-250532/7
Matrix: Solid
Analysis Batch: 250532

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	1120		ug/Kg		112	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*83*		*60 - 140*
Toluene-d8 (Surr)	*101*		*58 - 140*

Lab Sample ID: LCSD 720-250532/6
Matrix: Solid
Analysis Batch: 250532

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	49.9		ug/Kg		100	70 - 144	3	20
Acetone	250	238		ug/Kg		95	30 - 162	3	30
Benzene	50.0	49.9		ug/Kg		100	70 - 130	2	20
Dichlorobromomethane	50.0	48.0		ug/Kg		96	70 - 140	3	20

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

Lab Sample ID: LCSD 720-250532/6
Matrix: Solid
Analysis Batch: 250532

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromobenzene	50.0	50.5		ug/Kg		101	70 - 130	4	20
Chlorobromomethane	50.0	49.9		ug/Kg		100	70 - 130	2	20
Bromoform	50.0	44.9		ug/Kg		90	59 - 158	0	20
Bromomethane	50.0	49.9		ug/Kg		100	59 - 132	2	20
2-Butanone (MEK)	250	209		ug/Kg		84	59 - 159	6	20
n-Butylbenzene	50.0	52.3		ug/Kg		105	70 - 142	1	20
sec-Butylbenzene	50.0	52.5		ug/Kg		105	70 - 136	2	20
tert-Butylbenzene	50.0	51.0		ug/Kg		102	70 - 130	4	20
Carbon disulfide	50.0	72.2	*	ug/Kg		144	60 - 140	0	20
Carbon tetrachloride	50.0	50.7		ug/Kg		101	70 - 142	0	20
Chlorobenzene	50.0	48.6		ug/Kg		97	70 - 130	0	20
Chloroethane	50.0	47.3		ug/Kg		95	65 - 130	0	20
Chloroform	50.0	47.5		ug/Kg		95	77 - 127	1	20
Chloromethane	50.0	47.8		ug/Kg		96	55 - 140	2	20
2-Chlorotoluene	50.0	52.3		ug/Kg		105	70 - 138	2	20
4-Chlorotoluene	50.0	52.4		ug/Kg		105	70 - 136	1	20
Chlorodibromomethane	50.0	50.0		ug/Kg		100	70 - 146	4	20
1,2-Dichlorobenzene	50.0	49.8		ug/Kg		100	70 - 130	1	20
1,3-Dichlorobenzene	50.0	49.9		ug/Kg		100	70 - 131	0	20
1,4-Dichlorobenzene	50.0	48.8		ug/Kg		98	70 - 130	2	20
1,3-Dichloropropane	50.0	47.4		ug/Kg		95	70 - 140	1	20
1,1-Dichloropropene	50.0	51.7		ug/Kg		103	70 - 130	0	20
1,2-Dibromo-3-Chloropropane	50.0	48.4		ug/Kg		97	60 - 145	4	20
Ethylene Dibromide	50.0	48.3		ug/Kg		97	70 - 140	5	20
Dibromomethane	50.0	46.6		ug/Kg		93	70 - 139	4	20
Dichlorodifluoromethane	50.0	40.7		ug/Kg		81	37 - 158	3	20
1,1-Dichloroethane	50.0	53.7		ug/Kg		107	70 - 130	1	20
1,2-Dichloroethane	50.0	45.2		ug/Kg		90	70 - 130	1	20
1,1-Dichloroethene	50.0	60.1		ug/Kg		120	74 - 122	4	20
cis-1,2-Dichloroethene	50.0	52.0		ug/Kg		104	70 - 138	1	20
trans-1,2-Dichloroethene	50.0	60.3		ug/Kg		121	67 - 130	1	20
1,2-Dichloropropane	50.0	52.0		ug/Kg		104	73 - 127	1	20
cis-1,3-Dichloropropene	50.0	54.6		ug/Kg		109	68 - 147	4	20
trans-1,3-Dichloropropene	50.0	50.6		ug/Kg		101	70 - 155	3	20
Ethylbenzene	50.0	50.3		ug/Kg		101	80 - 137	0	20
Hexachlorobutadiene	50.0	50.3		ug/Kg		101	70 - 132	3	20
2-Hexanone	250	237		ug/Kg		95	62 - 158	5	20
Isopropylbenzene	50.0	53.7		ug/Kg		107	70 - 130	1	20
4-Isopropyltoluene	50.0	52.7		ug/Kg		105	70 - 133	1	20
Methylene Chloride	50.0	54.3		ug/Kg		109	70 - 134	1	20
4-Methyl-2-pentanone (MIBK)	250	232		ug/Kg		93	60 - 160	5	20
Naphthalene	50.0	50.7		ug/Kg		101	60 - 147	4	20
N-Propylbenzene	50.0	53.1		ug/Kg		106	70 - 130	1	20
Styrene	50.0	49.8		ug/Kg		100	70 - 130	1	20
1,1,1,2-Tetrachloroethane	50.0	47.8		ug/Kg		96	70 - 130	2	20
1,1,2,2-Tetrachloroethane	50.0	43.9		ug/Kg		88	70 - 146	0	20
Tetrachloroethene	50.0	54.1		ug/Kg		108	70 - 132	3	20
Toluene	50.0	49.6		ug/Kg		99	75 - 120	0	20

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

Lab Sample ID: LCSD 720-250532/6
Matrix: Solid
Analysis Batch: 250532

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichlorobenzene			50.0	52.9		ug/Kg		106	60 - 140	6	20
1,2,4-Trichlorobenzene			50.0	54.4		ug/Kg		109	60 - 140	2	20
1,1,1-Trichloroethane			50.0	51.4		ug/Kg		103	70 - 130	0	20
1,1,2-Trichloroethane			50.0	50.9		ug/Kg		102	70 - 130	4	20
Trichloroethene			50.0	50.2		ug/Kg		100	70 - 133	2	20
Trichlorofluoromethane			50.0	48.9		ug/Kg		98	60 - 140	2	20
1,2,3-Trichloropropane			50.0	44.2		ug/Kg		88	70 - 146	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	65.6		ug/Kg		131	60 - 140	0	20
1,2,4-Trimethylbenzene			50.0	53.8		ug/Kg		108	70 - 130	1	20
1,3,5-Trimethylbenzene			50.0	52.9		ug/Kg		106	70 - 131	2	20
Vinyl acetate			50.0	49.2		ug/Kg		98	38 - 176	0	20
Vinyl chloride			50.0	44.4		ug/Kg		89	58 - 125	2	20
m-Xylene & p-Xylene			50.0	51.5		ug/Kg		103	70 - 146	1	20
o-Xylene			50.0	51.7		ug/Kg		103	70 - 140	0	20
2,2-Dichloropropane			50.0	56.7		ug/Kg		113	70 - 162	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*85*		*60 - 140*
Toluene-d8 (Surr)	*100*		*58 - 140*

Lab Sample ID: LCSD 720-250532/8
Matrix: Solid
Analysis Batch: 250532

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	1180		ug/Kg		118	70 - 122	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*88*		*60 - 140*
Toluene-d8 (Surr)	*104*		*58 - 140*

Lab Sample ID: MB 720-250555/4
Matrix: Solid
Analysis Batch: 250555

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/30/18 09:03	1
Acetone	ND		50	38	ug/Kg			08/30/18 09:03	1
Benzene	ND		5.0	0.65	ug/Kg			08/30/18 09:03	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/30/18 09:03	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/30/18 09:03	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/30/18 09:03	1
Bromoform	ND		5.0	2.0	ug/Kg			08/30/18 09:03	1
Bromomethane	ND		10	0.79	ug/Kg			08/30/18 09:03	1

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

Lab Sample ID: MB 720-250555/4
Matrix: Solid
Analysis Batch: 250555

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		50	21	ug/Kg			08/30/18 09:03	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/30/18 09:03	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/30/18 09:03	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/30/18 09:03	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/30/18 09:03	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/30/18 09:03	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/30/18 09:03	1
Chloroethane	ND		10	0.56	ug/Kg			08/30/18 09:03	1
Chloroform	ND		5.0	0.66	ug/Kg			08/30/18 09:03	1
Chloromethane	ND		10	0.79	ug/Kg			08/30/18 09:03	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/30/18 09:03	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/30/18 09:03	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/30/18 09:03	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/30/18 09:03	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/30/18 09:03	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/30/18 09:03	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/30/18 09:03	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/30/18 09:03	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/30/18 09:03	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/30/18 09:03	1
Dibromomethane	ND		10	0.86	ug/Kg			08/30/18 09:03	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/30/18 09:03	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/30/18 09:03	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/30/18 09:03	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/30/18 09:03	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/30/18 09:03	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/30/18 09:03	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/30/18 09:03	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/30/18 09:03	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/30/18 09:03	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/30/18 09:03	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/30/18 09:03	1
2-Hexanone	ND		50	10	ug/Kg			08/30/18 09:03	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/30/18 09:03	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/30/18 09:03	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/30/18 09:03	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/30/18 09:03	1
Naphthalene	ND		10	1.5	ug/Kg			08/30/18 09:03	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/30/18 09:03	1
Styrene	ND		5.0	0.63	ug/Kg			08/30/18 09:03	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/30/18 09:03	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/30/18 09:03	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/30/18 09:03	1
Toluene	ND		5.0	0.71	ug/Kg			08/30/18 09:03	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/30/18 09:03	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/30/18 09:03	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/30/18 09:03	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/30/18 09:03	1

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

Lab Sample ID: MB 720-250555/4
Matrix: Solid
Analysis Batch: 250555

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		5.0	0.63	ug/Kg			08/30/18 09:03	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/30/18 09:03	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/30/18 09:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/30/18 09:03	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/30/18 09:03	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/30/18 09:03	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/30/18 09:03	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/30/18 09:03	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/30/18 09:03	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/30/18 09:03	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/30/18 09:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*45 - 131*		*08/30/18 09:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*60 - 140*		*08/30/18 09:03*	*1*
Toluene-d8 (Surr)	*96*		*58 - 140*		*08/30/18 09:03*	*1*

Lab Sample ID: LCS 720-250555/5
Matrix: Solid
Analysis Batch: 250555

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	54.1		ug/Kg		108	70 - 144
Acetone	250	194		ug/Kg		78	30 - 162
Benzene	50.0	51.4		ug/Kg		103	70 - 130
Dichlorobromomethane	50.0	54.9		ug/Kg		110	70 - 140
Bromobenzene	50.0	49.7		ug/Kg		99	70 - 130
Chlorobromomethane	50.0	56.7		ug/Kg		113	70 - 130
Bromoform	50.0	50.8		ug/Kg		102	59 - 158
Bromomethane	50.0	53.8		ug/Kg		108	59 - 132
2-Butanone (MEK)	250	211		ug/Kg		85	59 - 159
n-Butylbenzene	50.0	49.1		ug/Kg		98	70 - 142
sec-Butylbenzene	50.0	49.4		ug/Kg		99	70 - 136
tert-Butylbenzene	50.0	49.4		ug/Kg		99	70 - 130
Carbon disulfide	50.0	69.3		ug/Kg		139	60 - 140
Carbon tetrachloride	50.0	61.5		ug/Kg		123	70 - 142
Chlorobenzene	50.0	52.2		ug/Kg		104	70 - 130
Chloroethane	50.0	47.4		ug/Kg		95	65 - 130
Chloroform	50.0	54.7		ug/Kg		109	77 - 127
Chloromethane	50.0	45.1		ug/Kg		90	55 - 140
2-Chlorotoluene	50.0	49.2		ug/Kg		98	70 - 138
4-Chlorotoluene	50.0	49.7		ug/Kg		99	70 - 136
Chlorodibromomethane	50.0	54.4		ug/Kg		109	70 - 146
1,2-Dichlorobenzene	50.0	50.7		ug/Kg		101	70 - 130
1,3-Dichlorobenzene	50.0	52.3		ug/Kg		105	70 - 131
1,4-Dichlorobenzene	50.0	50.9		ug/Kg		102	70 - 130
1,3-Dichloropropane	50.0	49.7		ug/Kg		99	70 - 140

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

Lab Sample ID: LCS 720-250555/5
Matrix: Solid
Analysis Batch: 250555

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloropropene	50.0	55.8		ug/Kg		112	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	44.6		ug/Kg		89	60 - 145
Ethylene Dibromide	50.0	53.2		ug/Kg		106	70 - 140
Dibromomethane	50.0	51.7		ug/Kg		103	70 - 139
Dichlorodifluoromethane	50.0	51.6		ug/Kg		103	37 - 158
1,1-Dichloroethane	50.0	53.8		ug/Kg		108	70 - 130
1,2-Dichloroethane	50.0	56.0		ug/Kg		112	70 - 130
1,1-Dichloroethene	50.0	66.5	*	ug/Kg		133	74 - 122
cis-1,2-Dichloroethene	50.0	53.7		ug/Kg		107	70 - 138
trans-1,2-Dichloroethene	50.0	60.7		ug/Kg		121	67 - 130
1,2-Dichloropropane	50.0	50.9		ug/Kg		102	73 - 127
cis-1,3-Dichloropropene	50.0	52.9		ug/Kg		106	68 - 147
trans-1,3-Dichloropropene	50.0	50.9		ug/Kg		102	70 - 155
Ethylbenzene	50.0	50.9		ug/Kg		102	80 - 137
Hexachlorobutadiene	50.0	53.8		ug/Kg		108	70 - 132
2-Hexanone	250	209		ug/Kg		84	62 - 158
Isopropylbenzene	50.0	54.2		ug/Kg		108	70 - 130
4-Isopropyltoluene	50.0	51.3		ug/Kg		103	70 - 133
Methylene Chloride	50.0	51.5		ug/Kg		103	70 - 134
4-Methyl-2-pentanone (MIBK)	250	210		ug/Kg		84	60 - 160
Naphthalene	50.0	48.1		ug/Kg		96	60 - 147
N-Propylbenzene	50.0	48.5		ug/Kg		97	70 - 130
Styrene	50.0	48.4		ug/Kg		97	70 - 130
1,1,1,2-Tetrachloroethane	50.0	55.2		ug/Kg		110	70 - 130
1,1,2,2-Tetrachloroethane	50.0	43.8		ug/Kg		88	70 - 146
Tetrachloroethene	50.0	58.8		ug/Kg		118	70 - 132
Toluene	50.0	50.5		ug/Kg		101	75 - 120
1,2,3-Trichlorobenzene	50.0	51.8		ug/Kg		104	60 - 140
1,2,4-Trichlorobenzene	50.0	52.9		ug/Kg		106	60 - 140
1,1,1-Trichloroethane	50.0	60.2		ug/Kg		120	70 - 130
1,1,2-Trichloroethane	50.0	51.1		ug/Kg		102	70 - 130
Trichloroethene	50.0	56.8		ug/Kg		114	70 - 133
Trichlorofluoromethane	50.0	57.7		ug/Kg		115	60 - 140
1,2,3-Trichloropropane	50.0	47.5		ug/Kg		95	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	70.7	*	ug/Kg		141	60 - 140
1,2,4-Trimethylbenzene	50.0	50.9		ug/Kg		102	70 - 130
1,3,5-Trimethylbenzene	50.0	50.5		ug/Kg		101	70 - 131
Vinyl acetate	50.0	45.6		ug/Kg		91	38 - 176
Vinyl chloride	50.0	49.4		ug/Kg		99	58 - 125
m-Xylene & p-Xylene	50.0	53.0		ug/Kg		106	70 - 146
o-Xylene	50.0	53.3		ug/Kg		107	70 - 140
2,2-Dichloropropane	50.0	66.0		ug/Kg		132	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*99*		*60 - 140*
Toluene-d8 (Surr)	*98*		*58 - 140*

Lab Sample ID: LCS 720-250555/7
Matrix: Solid
Analysis Batch: 250555

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	1050		ug/Kg		105	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*101*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCSD 720-250555/6
Matrix: Solid
Analysis Batch: 250555

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	58.6		ug/Kg		117	70 - 144	8	20
Acetone	250	225		ug/Kg		90	30 - 162	15	30
Benzene	50.0	51.3		ug/Kg		103	70 - 130	0	20
Dichlorobromomethane	50.0	55.8		ug/Kg		112	70 - 140	2	20
Bromobenzene	50.0	49.8		ug/Kg		100	70 - 130	0	20
Chlorobromomethane	50.0	58.0		ug/Kg		116	70 - 130	2	20
Bromoform	50.0	54.5		ug/Kg		109	59 - 158	7	20
Bromomethane	50.0	54.4		ug/Kg		109	59 - 132	1	20
2-Butanone (MEK)	250	254		ug/Kg		102	59 - 159	18	20
n-Butylbenzene	50.0	48.2		ug/Kg		96	70 - 142	2	20
sec-Butylbenzene	50.0	47.8		ug/Kg		96	70 - 136	3	20
tert-Butylbenzene	50.0	48.1		ug/Kg		96	70 - 130	3	20
Carbon disulfide	50.0	67.7		ug/Kg		135	60 - 140	2	20
Carbon tetrachloride	50.0	60.1		ug/Kg		120	70 - 142	2	20
Chlorobenzene	50.0	51.2		ug/Kg		102	70 - 130	2	20
Chloroethane	50.0	47.0		ug/Kg		94	65 - 130	1	20
Chloroform	50.0	54.8		ug/Kg		110	77 - 127	0	20
Chloromethane	50.0	46.0		ug/Kg		92	55 - 140	2	20
2-Chlorotoluene	50.0	49.0		ug/Kg		98	70 - 138	0	20
4-Chlorotoluene	50.0	48.8		ug/Kg		98	70 - 136	2	20
Chlorodibromomethane	50.0	56.8		ug/Kg		114	70 - 146	4	20
1,2-Dichlorobenzene	50.0	51.4		ug/Kg		103	70 - 130	1	20
1,3-Dichlorobenzene	50.0	52.0		ug/Kg		104	70 - 131	1	20
1,4-Dichlorobenzene	50.0	51.1		ug/Kg		102	70 - 130	0	20
1,3-Dichloropropane	50.0	52.0		ug/Kg		104	70 - 140	4	20
1,1-Dichloropropene	50.0	53.9		ug/Kg		108	70 - 130	4	20
1,2-Dibromo-3-Chloropropane	50.0	52.8		ug/Kg		106	60 - 145	17	20
Ethylene Dibromide	50.0	57.7		ug/Kg		115	70 - 140	8	20
Dibromomethane	50.0	54.2		ug/Kg		108	70 - 139	5	20
Dichlorodifluoromethane	50.0	52.6		ug/Kg		105	37 - 158	2	20
1,1-Dichloroethane	50.0	53.0		ug/Kg		106	70 - 130	2	20
1,2-Dichloroethane	50.0	57.0		ug/Kg		114	70 - 130	2	20
1,1-Dichloroethene	50.0	64.9	*	ug/Kg		130	74 - 122	2	20
cis-1,2-Dichloroethene	50.0	53.0		ug/Kg		106	70 - 138	1	20
trans-1,2-Dichloroethene	50.0	59.3		ug/Kg		119	67 - 130	2	20
1,2-Dichloropropane	50.0	51.6		ug/Kg		103	73 - 127	1	20
cis-1,3-Dichloropropene	50.0	53.6		ug/Kg		107	68 - 147	1	20

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

Lab Sample ID: LCSD 720-250555/6
Matrix: Solid
Analysis Batch: 250555

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,3-Dichloropropene	50.0	53.3		ug/Kg		107	70 - 155	5	20
Ethylbenzene	50.0	50.1		ug/Kg		100	80 - 137	2	20
Hexachlorobutadiene	50.0	53.0		ug/Kg		106	70 - 132	1	20
2-Hexanone	250	253		ug/Kg		101	62 - 158	19	20
Isopropylbenzene	50.0	52.7		ug/Kg		105	70 - 130	3	20
4-Isopropyltoluene	50.0	49.8		ug/Kg		100	70 - 133	3	20
Methylene Chloride	50.0	51.7		ug/Kg		103	70 - 134	0	20
4-Methyl-2-pentanone (MIBK)	250	246		ug/Kg		98	60 - 160	16	20
Naphthalene	50.0	52.8		ug/Kg		106	60 - 147	9	20
N-Propylbenzene	50.0	47.5		ug/Kg		95	70 - 130	2	20
Styrene	50.0	48.4		ug/Kg		97	70 - 130	0	20
1,1,1,2-Tetrachloroethane	50.0	55.2		ug/Kg		110	70 - 130	0	20
1,1,2,2-Tetrachloroethane	50.0	47.8		ug/Kg		96	70 - 146	9	20
Tetrachloroethene	50.0	56.8		ug/Kg		114	70 - 132	4	20
Toluene	50.0	49.1		ug/Kg		98	75 - 120	3	20
1,2,3-Trichlorobenzene	50.0	53.8		ug/Kg		108	60 - 140	4	20
1,2,4-Trichlorobenzene	50.0	54.6		ug/Kg		109	60 - 140	3	20
1,1,1-Trichloroethane	50.0	59.6		ug/Kg		119	70 - 130	1	20
1,1,2-Trichloroethane	50.0	54.6		ug/Kg		109	70 - 130	7	20
Trichloroethene	50.0	56.2		ug/Kg		112	70 - 133	1	20
Trichlorofluoromethane	50.0	56.2		ug/Kg		112	60 - 140	3	20
1,2,3-Trichloropropane	50.0	51.2		ug/Kg		102	70 - 146	8	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	70.1		ug/Kg		140	60 - 140	1	20
1,2,4-Trimethylbenzene	50.0	50.4		ug/Kg		101	70 - 130	1	20
1,3,5-Trimethylbenzene	50.0	49.8		ug/Kg		100	70 - 131	1	20
Vinyl acetate	50.0	49.6		ug/Kg		99	38 - 176	8	20
Vinyl chloride	50.0	49.5		ug/Kg		99	58 - 125	0	20
m-Xylene & p-Xylene	50.0	51.8		ug/Kg		104	70 - 146	2	20
o-Xylene	50.0	52.1		ug/Kg		104	70 - 140	2	20
2,2-Dichloropropane	50.0	63.6		ug/Kg		127	70 - 162	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*101*		*60 - 140*
Toluene-d8 (Surr)	*98*		*58 - 140*

Lab Sample ID: LCSD 720-250555/8
Matrix: Solid
Analysis Batch: 250555

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12	1000	1040		ug/Kg		104	70 - 122	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*100*		*60 - 140*

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

Lab Sample ID: LCSD 720-250555/8
Matrix: Solid
Analysis Batch: 250555

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

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: MB 720-250755/4
Matrix: Solid
Analysis Batch: 250755

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			09/04/18 09:02	1
Acetone	ND		50	38	ug/Kg			09/04/18 09:02	1
Benzene	ND		5.0	0.65	ug/Kg			09/04/18 09:02	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			09/04/18 09:02	1
Bromobenzene	ND		5.0	0.79	ug/Kg			09/04/18 09:02	1
Chlorobromomethane	ND		20	0.72	ug/Kg			09/04/18 09:02	1
Bromoform	ND		5.0	2.0	ug/Kg			09/04/18 09:02	1
Bromomethane	ND		10	0.79	ug/Kg			09/04/18 09:02	1
2-Butanone (MEK)	ND		50	21	ug/Kg			09/04/18 09:02	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			09/04/18 09:02	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			09/04/18 09:02	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			09/04/18 09:02	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			09/04/18 09:02	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			09/04/18 09:02	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			09/04/18 09:02	1
Chloroethane	ND		10	0.56	ug/Kg			09/04/18 09:02	1
Chloroform	ND		5.0	0.66	ug/Kg			09/04/18 09:02	1
Chloromethane	ND		10	0.79	ug/Kg			09/04/18 09:02	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			09/04/18 09:02	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			09/04/18 09:02	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			09/04/18 09:02	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			09/04/18 09:02	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			09/04/18 09:02	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			09/04/18 09:02	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			09/04/18 09:02	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			09/04/18 09:02	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			09/04/18 09:02	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			09/04/18 09:02	1
Dibromomethane	ND		10	0.86	ug/Kg			09/04/18 09:02	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			09/04/18 09:02	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			09/04/18 09:02	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			09/04/18 09:02	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			09/04/18 09:02	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			09/04/18 09:02	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			09/04/18 09:02	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			09/04/18 09:02	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			09/04/18 09:02	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			09/04/18 09:02	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			09/04/18 09:02	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			09/04/18 09:02	1
2-Hexanone	ND		50	10	ug/Kg			09/04/18 09:02	1

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

Lab Sample ID: MB 720-250755/4
Matrix: Solid
Analysis Batch: 250755

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		5.0	0.68	ug/Kg			09/04/18 09:02	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			09/04/18 09:02	1
Methylene Chloride	ND		10	5.6	ug/Kg			09/04/18 09:02	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			09/04/18 09:02	1
Naphthalene	ND		10	1.5	ug/Kg			09/04/18 09:02	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			09/04/18 09:02	1
Styrene	ND		5.0	0.63	ug/Kg			09/04/18 09:02	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			09/04/18 09:02	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			09/04/18 09:02	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			09/04/18 09:02	1
Toluene	ND		5.0	0.71	ug/Kg			09/04/18 09:02	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			09/04/18 09:02	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			09/04/18 09:02	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			09/04/18 09:02	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			09/04/18 09:02	1
Trichloroethene	ND		5.0	0.63	ug/Kg			09/04/18 09:02	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			09/04/18 09:02	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			09/04/18 09:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			09/04/18 09:02	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			09/04/18 09:02	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			09/04/18 09:02	1
Vinyl acetate	ND		20	5.0	ug/Kg			09/04/18 09:02	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			09/04/18 09:02	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			09/04/18 09:02	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			09/04/18 09:02	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			09/04/18 09:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*45 - 131*		*09/04/18 09:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*60 - 140*		*09/04/18 09:02*	*1*
Toluene-d8 (Surr)	*94*		*58 - 140*		*09/04/18 09:02*	*1*

Lab Sample ID: LCS 720-250755/5
Matrix: Solid
Analysis Batch: 250755

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	992		ug/Kg		99	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*96*		*60 - 140*
Toluene-d8 (Surr)	*94*		*58 - 140*

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

Lab Sample ID: LCS 720-250755/7
Matrix: Solid
Analysis Batch: 250755

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	52.4		ug/Kg		105	70 - 144
Acetone	250	199		ug/Kg		80	30 - 162
Benzene	50.0	48.3		ug/Kg		97	70 - 130
Dichlorobromomethane	50.0	52.5		ug/Kg		105	70 - 140
Bromobenzene	50.0	48.9		ug/Kg		98	70 - 130
Chlorobromomethane	50.0	55.5		ug/Kg		111	70 - 130
Bromoform	50.0	50.4		ug/Kg		101	59 - 158
Bromomethane	50.0	58.1		ug/Kg		116	59 - 132
2-Butanone (MEK)	250	218		ug/Kg		87	59 - 159
n-Butylbenzene	50.0	46.9		ug/Kg		94	70 - 142
sec-Butylbenzene	50.0	47.1		ug/Kg		94	70 - 136
tert-Butylbenzene	50.0	47.5		ug/Kg		95	70 - 130
Carbon disulfide	50.0	61.8		ug/Kg		124	60 - 140
Carbon tetrachloride	50.0	55.8		ug/Kg		112	70 - 142
Chlorobenzene	50.0	50.1		ug/Kg		100	70 - 130
Chloroethane	50.0	49.8		ug/Kg		100	65 - 130
Chloroform	50.0	50.8		ug/Kg		102	77 - 127
Chloromethane	50.0	44.9		ug/Kg		90	55 - 140
2-Chlorotoluene	50.0	47.6		ug/Kg		95	70 - 138
4-Chlorotoluene	50.0	47.3		ug/Kg		95	70 - 136
Chlorodibromomethane	50.0	53.0		ug/Kg		106	70 - 146
1,2-Dichlorobenzene	50.0	49.9		ug/Kg		100	70 - 130
1,3-Dichlorobenzene	50.0	51.3		ug/Kg		103	70 - 131
1,4-Dichlorobenzene	50.0	50.0		ug/Kg		100	70 - 130
1,3-Dichloropropane	50.0	48.1		ug/Kg		96	70 - 140
1,1-Dichloropropene	50.0	52.6		ug/Kg		105	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	46.5		ug/Kg		93	60 - 145
Ethylene Dibromide	50.0	52.5		ug/Kg		105	70 - 140
Dibromomethane	50.0	49.7		ug/Kg		99	70 - 139
Dichlorodifluoromethane	50.0	64.3		ug/Kg		129	37 - 158
1,1-Dichloroethane	50.0	49.8		ug/Kg		100	70 - 130
1,2-Dichloroethane	50.0	51.1		ug/Kg		102	70 - 130
1,1-Dichloroethene	50.0	61.6	*	ug/Kg		123	74 - 122
cis-1,2-Dichloroethene	50.0	49.2		ug/Kg		98	70 - 138
trans-1,2-Dichloroethene	50.0	56.7		ug/Kg		113	67 - 130
1,2-Dichloropropane	50.0	47.7		ug/Kg		95	73 - 127
cis-1,3-Dichloropropene	50.0	50.3		ug/Kg		101	68 - 147
trans-1,3-Dichloropropene	50.0	49.6		ug/Kg		99	70 - 155
Ethylbenzene	50.0	48.9		ug/Kg		98	80 - 137
Hexachlorobutadiene	50.0	52.8		ug/Kg		106	70 - 132
2-Hexanone	250	194		ug/Kg		77	62 - 158
Isopropylbenzene	50.0	51.2		ug/Kg		102	70 - 130
4-Isopropyltoluene	50.0	49.1		ug/Kg		98	70 - 133
Methylene Chloride	50.0	48.8		ug/Kg		98	70 - 134
4-Methyl-2-pentanone (MIBK)	250	194		ug/Kg		78	60 - 160
Naphthalene	50.0	47.2		ug/Kg		94	60 - 147
N-Propylbenzene	50.0	46.5		ug/Kg		93	70 - 130
Styrene	50.0	46.7		ug/Kg		93	70 - 130

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

Lab Sample ID: LCS 720-250755/7
Matrix: Solid
Analysis Batch: 250755

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	53.9		ug/Kg		108	70 - 130
1,1,2,2-Tetrachloroethane	50.0	43.0		ug/Kg		86	70 - 146
Tetrachloroethene	50.0	56.6		ug/Kg		113	70 - 132
Toluene	50.0	47.3		ug/Kg		95	75 - 120
1,2,3-Trichlorobenzene	50.0	50.5		ug/Kg		101	60 - 140
1,2,4-Trichlorobenzene	50.0	52.2		ug/Kg		104	60 - 140
1,1,1-Trichloroethane	50.0	55.9		ug/Kg		112	70 - 130
1,1,2-Trichloroethane	50.0	49.8		ug/Kg		100	70 - 130
Trichloroethene	50.0	54.8		ug/Kg		110	70 - 133
Trichlorofluoromethane	50.0	59.3		ug/Kg		119	60 - 140
1,2,3-Trichloropropane	50.0	46.2		ug/Kg		92	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	68.6		ug/Kg		137	60 - 140
1,2,4-Trimethylbenzene	50.0	48.8		ug/Kg		98	70 - 130
1,3,5-Trimethylbenzene	50.0	49.1		ug/Kg		98	70 - 131
Vinyl acetate	50.0	43.4		ug/Kg		87	38 - 176
Vinyl chloride	50.0	52.4		ug/Kg		105	58 - 125
m-Xylene & p-Xylene	50.0	50.3		ug/Kg		101	70 - 146
o-Xylene	50.0	50.1		ug/Kg		100	70 - 140
2,2-Dichloropropane	50.0	61.1		ug/Kg		122	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*98*		*58 - 140*

Lab Sample ID: LCSD 720-250755/6
Matrix: Solid
Analysis Batch: 250755

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12	1000	993		ug/Kg		99	70 - 122	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*97*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: LCSD 720-250755/8
Matrix: Solid
Analysis Batch: 250755

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	55.5		ug/Kg		111	70 - 144	6	20
Acetone	250	218		ug/Kg		87	30 - 162	9	30
Benzene	50.0	49.0		ug/Kg		98	70 - 130	1	20
Dichlorobromomethane	50.0	53.6		ug/Kg		107	70 - 140	2	20

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

Lab Sample ID: LCSD 720-250755/8
Matrix: Solid
Analysis Batch: 250755

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromobenzene	50.0	48.7		ug/Kg		97	70 - 130	0	20
Chlorobromomethane	50.0	56.9		ug/Kg		114	70 - 130	3	20
Bromoform	50.0	53.4		ug/Kg		107	59 - 158	6	20
Bromomethane	50.0	58.3		ug/Kg		117	59 - 132	0	20
2-Butanone (MEK)	250	241		ug/Kg		97	59 - 159	10	20
n-Butylbenzene	50.0	45.3		ug/Kg		91	70 - 142	3	20
sec-Butylbenzene	50.0	45.9		ug/Kg		92	70 - 136	3	20
tert-Butylbenzene	50.0	46.6		ug/Kg		93	70 - 130	2	20
Carbon disulfide	50.0	60.0		ug/Kg		120	60 - 140	3	20
Carbon tetrachloride	50.0	55.0		ug/Kg		110	70 - 142	1	20
Chlorobenzene	50.0	49.2		ug/Kg		98	70 - 130	2	20
Chloroethane	50.0	50.3		ug/Kg		101	65 - 130	1	20
Chloroform	50.0	51.5		ug/Kg		103	77 - 127	1	20
Chloromethane	50.0	44.8		ug/Kg		90	55 - 140	0	20
2-Chlorotoluene	50.0	47.1		ug/Kg		94	70 - 138	1	20
4-Chlorotoluene	50.0	46.9		ug/Kg		94	70 - 136	1	20
Chlorodibromomethane	50.0	55.2		ug/Kg		110	70 - 146	4	20
1,2-Dichlorobenzene	50.0	50.4		ug/Kg		101	70 - 130	1	20
1,3-Dichlorobenzene	50.0	51.1		ug/Kg		102	70 - 131	0	20
1,4-Dichlorobenzene	50.0	49.7		ug/Kg		99	70 - 130	1	20
1,3-Dichloropropane	50.0	50.4		ug/Kg		101	70 - 140	5	20
1,1-Dichloropropene	50.0	51.8		ug/Kg		104	70 - 130	2	20
1,2-Dibromo-3-Chloropropane	50.0	49.9		ug/Kg		100	60 - 145	7	20
Ethylene Dibromide	50.0	55.1		ug/Kg		110	70 - 140	5	20
Dibromomethane	50.0	52.2		ug/Kg		104	70 - 139	5	20
Dichlorodifluoromethane	50.0	63.3		ug/Kg		127	37 - 158	2	20
1,1-Dichloroethane	50.0	49.7		ug/Kg		99	70 - 130	0	20
1,2-Dichloroethane	50.0	52.5		ug/Kg		105	70 - 130	3	20
1,1-Dichloroethene	50.0	60.6		ug/Kg		121	74 - 122	2	20
cis-1,2-Dichloroethene	50.0	48.6		ug/Kg		97	70 - 138	1	20
trans-1,2-Dichloroethene	50.0	56.0		ug/Kg		112	67 - 130	1	20
1,2-Dichloropropane	50.0	48.1		ug/Kg		96	73 - 127	1	20
cis-1,3-Dichloropropene	50.0	51.7		ug/Kg		103	68 - 147	3	20
trans-1,3-Dichloropropene	50.0	51.0		ug/Kg		102	70 - 155	3	20
Ethylbenzene	50.0	47.5		ug/Kg		95	80 - 137	3	20
Hexachlorobutadiene	50.0	49.7		ug/Kg		99	70 - 132	6	20
2-Hexanone	250	214		ug/Kg		85	62 - 158	10	20
Isopropylbenzene	50.0	50.0		ug/Kg		100	70 - 130	2	20
4-Isopropyltoluene	50.0	48.4		ug/Kg		97	70 - 133	1	20
Methylene Chloride	50.0	49.8		ug/Kg		100	70 - 134	2	20
4-Methyl-2-pentanone (MIBK)	250	213		ug/Kg		85	60 - 160	9	20
Naphthalene	50.0	49.6		ug/Kg		99	60 - 147	5	20
N-Propylbenzene	50.0	45.6		ug/Kg		91	70 - 130	2	20
Styrene	50.0	46.7		ug/Kg		93	70 - 130	0	20
1,1,1,2-Tetrachloroethane	50.0	54.1		ug/Kg		108	70 - 130	0	20
1,1,2,2-Tetrachloroethane	50.0	45.8		ug/Kg		92	70 - 146	6	20
Tetrachloroethene	50.0	54.6		ug/Kg		109	70 - 132	4	20
Toluene	50.0	46.5		ug/Kg		93	75 - 120	2	20

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

Lab Sample ID: LCSD 720-250755/8
Matrix: Solid
Analysis Batch: 250755

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichlorobenzene			50.0	51.9		ug/Kg		104	60 - 140	3	20
1,2,4-Trichlorobenzene			50.0	52.2		ug/Kg		104	60 - 140	0	20
1,1,1-Trichloroethane			50.0	55.0		ug/Kg		110	70 - 130	1	20
1,1,2-Trichloroethane			50.0	51.3		ug/Kg		103	70 - 130	3	20
Trichloroethene			50.0	54.6		ug/Kg		109	70 - 133	0	20
Trichlorofluoromethane			50.0	58.2		ug/Kg		116	60 - 140	2	20
1,2,3-Trichloropropane			50.0	49.5		ug/Kg		99	70 - 146	7	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	65.9		ug/Kg		132	60 - 140	4	20
1,2,4-Trimethylbenzene			50.0	48.8		ug/Kg		98	70 - 130	0	20
1,3,5-Trimethylbenzene			50.0	47.8		ug/Kg		96	70 - 131	3	20
Vinyl acetate			50.0	46.6		ug/Kg		93	38 - 176	7	20
Vinyl chloride			50.0	52.8		ug/Kg		106	58 - 125	1	20
m-Xylene & p-Xylene			50.0	49.4		ug/Kg		99	70 - 146	2	20
o-Xylene			50.0	49.6		ug/Kg		99	70 - 140	1	20
2,2-Dichloropropane			50.0	60.0		ug/Kg		120	70 - 162	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*101*		*60 - 140*
Toluene-d8 (Surr)	*98*		*58 - 140*

Lab Sample ID: 720-88239-3 MS
Matrix: Solid
Analysis Batch: 250755

Client Sample ID: DG-C7S-9.5-10
Prep Type: Total/NA
Prep Batch: 250812

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methyl tert-butyl ether	ND		47.2	60.6		ug/Kg		128	69 - 130		
Acetone	ND		236	258		ug/Kg		109	37 - 150		
Benzene	ND		47.2	48.8		ug/Kg		104	70 - 130		
Dichlorobromomethane	ND		47.2	52.6		ug/Kg		111	64 - 135		
Bromobenzene	ND		47.2	53.3		ug/Kg		113	70 - 130		
Chlorobromomethane	ND		47.2	53.7		ug/Kg		114	65 - 130		
Bromoform	ND		47.2	54.6		ug/Kg		116	58 - 132		
Bromomethane	ND		47.2	57.4		ug/Kg		122	56 - 130		
2-Butanone (MEK)	ND		236	262		ug/Kg		111	41 - 150		
n-Butylbenzene	ND		47.2	47.5		ug/Kg		101	60 - 145		
sec-Butylbenzene	ND		47.2	54.9		ug/Kg		116	64 - 137		
tert-Butylbenzene	ND		47.2	58.2		ug/Kg		123	63 - 134		
Carbon disulfide	ND		47.2	53.1		ug/Kg		113	10 - 150		
Carbon tetrachloride	ND		47.2	55.9		ug/Kg		119	54 - 130		
Chlorobenzene	ND		47.2	48.5		ug/Kg		103	70 - 130		
Chloroethane	ND		47.2	49.8		ug/Kg		106	61 - 130		
Chloroform	ND		47.2	51.9		ug/Kg		110	67 - 130		
Chloromethane	ND		47.2	44.0		ug/Kg		93	50 - 131		
2-Chlorotoluene	ND		47.2	54.7		ug/Kg		116	70 - 130		
4-Chlorotoluene	ND		47.2	50.4		ug/Kg		107	70 - 130		
Chlorodibromomethane	ND		47.2	53.9		ug/Kg		114	60 - 141		

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

Lab Sample ID: 720-88239-3 MS
Matrix: Solid
Analysis Batch: 250755

Client Sample ID: DG-C7S-9.5-10
Prep Type: Total/NA
Prep Batch: 250812

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	ND		47.2	54.5		ug/Kg		115	70 - 130
1,3-Dichlorobenzene	ND		47.2	51.1		ug/Kg		108	70 - 130
1,4-Dichlorobenzene	ND		47.2	48.9		ug/Kg		104	70 - 130
1,3-Dichloropropane	ND		47.2	48.6		ug/Kg		103	70 - 130
1,1-Dichloropropene	ND		47.2	47.9		ug/Kg		102	67 - 130
1,2-Dibromo-3-Chloropropane	ND		47.2	60.8		ug/Kg		129	57 - 130
Ethylene Dibromide	ND		47.2	49.8		ug/Kg		106	66 - 135
Dibromomethane	ND		47.2	47.8		ug/Kg		101	65 - 131
Dichlorodifluoromethane	ND	F1	47.2	60.6		ug/Kg		128	38 - 130
1,1-Dichloroethane	ND		47.2	51.1		ug/Kg		108	67 - 130
1,2-Dichloroethane	ND		47.2	49.9		ug/Kg		106	70 - 130
1,1-Dichloroethene	ND	*	47.2	58.4		ug/Kg		124	64 - 130
cis-1,2-Dichloroethene	ND		47.2	45.5		ug/Kg		97	68 - 131
trans-1,2-Dichloroethene	ND		47.2	49.8		ug/Kg		106	70 - 130
1,2-Dichloropropane	ND		47.2	49.4		ug/Kg		105	65 - 133
cis-1,3-Dichloropropene	ND		47.2	46.8		ug/Kg		99	46 - 139
trans-1,3-Dichloropropene	ND		47.2	42.7		ug/Kg		90	55 - 131
Ethylbenzene	ND		47.2	49.3		ug/Kg		105	65 - 130
Hexachlorobutadiene	ND		47.2	50.9		ug/Kg		108	58 - 132
2-Hexanone	ND		236	228		ug/Kg		97	44 - 150
Isopropylbenzene	ND		47.2	53.5		ug/Kg		113	65 - 130
4-Isopropyltoluene	ND		47.2	56.1		ug/Kg		119	69 - 134
Methylene Chloride	ND		47.2	51.7		ug/Kg		110	63 - 130
4-Methyl-2-pentanone (MIBK)	ND		236	232		ug/Kg		98	51 - 140
Naphthalene	ND		47.2	51.6		ug/Kg		109	45 - 146
N-Propylbenzene	ND		47.2	52.1		ug/Kg		110	70 - 130
Styrene	ND		47.2	44.9		ug/Kg		95	58 - 135
1,1,1,2-Tetrachloroethane	ND		47.2	58.8		ug/Kg		125	64 - 133
1,1,2,2-Tetrachloroethane	ND		47.2	57.8		ug/Kg		122	70 - 131
Tetrachloroethene	ND		47.2	52.8		ug/Kg		112	67 - 130
Toluene	ND		47.2	48.8		ug/Kg		103	70 - 130
1,2,3-Trichlorobenzene	ND		47.2	47.0		ug/Kg		100	58 - 138
1,2,4-Trichlorobenzene	ND		47.2	43.5		ug/Kg		92	49 - 144
1,1,1-Trichloroethane	ND		47.2	57.0		ug/Kg		121	57 - 133
1,1,2-Trichloroethane	ND		47.2	53.0		ug/Kg		112	68 - 132
Trichloroethene	ND		47.2	51.1		ug/Kg		108	66 - 130
Trichlorofluoromethane	ND		47.2	58.9		ug/Kg		125	61 - 130
1,2,3-Trichloropropane	ND		47.2	60.8		ug/Kg		129	62 - 150
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	F1	47.2	68.9	F1	ug/Kg		146	52 - 130
1,2,4-Trimethylbenzene	ND		47.2	57.5		ug/Kg		122	64 - 140
1,3,5-Trimethylbenzene	ND		47.2	58.0		ug/Kg		123	67 - 134
Vinyl acetate	ND		47.2	36.2		ug/Kg		77	52 - 150
Vinyl chloride	ND		47.2	51.7		ug/Kg		110	62 - 130
m-Xylene & p-Xylene	ND		47.2	51.0		ug/Kg		108	70 - 130
o-Xylene	ND		47.2	53.0		ug/Kg		112	68 - 130
2,2-Dichloropropane	ND		47.2	59.8		ug/Kg		127	63 - 130

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

Lab Sample ID: 720-88239-3 MS
Matrix: Solid
Analysis Batch: 250755

Client Sample ID: DG-C7S-9.5-10
Prep Type: Total/NA
Prep Batch: 250812

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene	91		45 - 131
1,2-Dichloroethane-d4 (Surr)	93		60 - 140
Toluene-d8 (Surr)	96		58 - 140

Lab Sample ID: 720-88239-3 MSD
Matrix: Solid
Analysis Batch: 250755

Client Sample ID: DG-C7S-9.5-10
Prep Type: Total/NA
Prep Batch: 250812

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	ND		46.7	56.1		ug/Kg		120	69 - 130	8	20
Acetone	ND		234	237		ug/Kg		101	37 - 150	9	20
Benzene	ND		46.7	48.5		ug/Kg		104	70 - 130	1	20
Dichlorobromomethane	ND		46.7	52.7		ug/Kg		113	64 - 135	0	20
Bromobenzene	ND		46.7	50.6		ug/Kg		108	70 - 130	5	20
Chlorobromomethane	ND		46.7	54.4		ug/Kg		117	65 - 130	1	20
Bromoform	ND		46.7	50.5		ug/Kg		108	58 - 132	8	20
Bromomethane	ND		46.7	58.4		ug/Kg		125	56 - 130	2	20
2-Butanone (MEK)	ND		234	241		ug/Kg		103	41 - 150	8	20
n-Butylbenzene	ND		46.7	46.0		ug/Kg		99	60 - 145	3	20
sec-Butylbenzene	ND		46.7	50.1		ug/Kg		107	64 - 137	9	20
tert-Butylbenzene	ND		46.7	52.8		ug/Kg		113	63 - 134	10	20
Carbon disulfide	ND		46.7	56.6		ug/Kg		121	10 - 150	6	20
Carbon tetrachloride	ND		46.7	54.7		ug/Kg		117	54 - 130	2	20
Chlorobenzene	ND		46.7	48.7		ug/Kg		104	70 - 130	0	20
Chloroethane	ND		46.7	50.7		ug/Kg		109	61 - 130	2	20
Chloroform	ND		46.7	51.8		ug/Kg		111	67 - 130	0	20
Chloromethane	ND		46.7	44.4		ug/Kg		95	50 - 131	1	20
2-Chlorotoluene	ND		46.7	50.6		ug/Kg		108	70 - 130	8	20
4-Chlorotoluene	ND		46.7	48.3		ug/Kg		103	70 - 130	4	20
Chlorodibromomethane	ND		46.7	53.3		ug/Kg		114	60 - 141	1	20
1,2-Dichlorobenzene	ND		46.7	51.7		ug/Kg		111	70 - 130	5	20
1,3-Dichlorobenzene	ND		46.7	50.2		ug/Kg		107	70 - 130	2	20
1,4-Dichlorobenzene	ND		46.7	48.9		ug/Kg		105	70 - 130	0	20
1,3-Dichloropropane	ND		46.7	47.9		ug/Kg		103	70 - 130	1	20
1,1-Dichloropropene	ND		46.7	49.0		ug/Kg		105	67 - 130	2	20
1,2-Dibromo-3-Chloropropane	ND		46.7	51.5		ug/Kg		110	57 - 130	17	20
Ethylene Dibromide	ND		46.7	49.7		ug/Kg		106	66 - 135	0	20
Dibromomethane	ND		46.7	47.6		ug/Kg		102	65 - 131	1	20
Dichlorodifluoromethane	ND	F1	46.7	61.0	F1	ug/Kg		131	38 - 130	1	20
1,1-Dichloroethane	ND		46.7	50.4		ug/Kg		108	67 - 130	1	20
1,2-Dichloroethane	ND		46.7	49.3		ug/Kg		106	70 - 130	1	20
1,1-Dichloroethene	ND	*	46.7	59.0		ug/Kg		126	64 - 130	1	20
cis-1,2-Dichloroethene	ND		46.7	46.7		ug/Kg		100	68 - 131	3	20
trans-1,2-Dichloroethene	ND		46.7	52.4		ug/Kg		112	70 - 130	5	20
1,2-Dichloropropane	ND		46.7	49.3		ug/Kg		105	65 - 133	0	20
cis-1,3-Dichloropropene	ND		46.7	47.8		ug/Kg		102	46 - 139	2	20
trans-1,3-Dichloropropene	ND		46.7	44.6		ug/Kg		95	55 - 131	4	20
Ethylbenzene	ND		46.7	47.9		ug/Kg		102	65 - 130	3	20

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

Lab Sample ID: 720-88239-3 MSD
Matrix: Solid
Analysis Batch: 250755

Client Sample ID: DG-C7S-9.5-10
Prep Type: Total/NA
Prep Batch: 250812

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hexachlorobutadiene	ND		46.7	51.4		ug/Kg		110	58 - 132	1	20
2-Hexanone	ND		234	210		ug/Kg		90	44 - 150	8	20
Isopropylbenzene	ND		46.7	51.9		ug/Kg		111	65 - 130	3	20
4-Isopropyltoluene	ND		46.7	52.3		ug/Kg		112	69 - 134	7	20
Methylene Chloride	ND		46.7	51.3		ug/Kg		110	63 - 130	1	20
4-Methyl-2-pentanone (MIBK)	ND		234	212		ug/Kg		91	51 - 140	9	20
Naphthalene	ND		46.7	48.4		ug/Kg		104	45 - 146	7	20
N-Propylbenzene	ND		46.7	48.4		ug/Kg		104	70 - 130	7	20
Styrene	ND		46.7	45.2		ug/Kg		97	58 - 135	1	20
1,1,1,2-Tetrachloroethane	ND		46.7	55.6		ug/Kg		119	64 - 133	6	20
1,1,2,2-Tetrachloroethane	ND		46.7	47.9		ug/Kg		103	70 - 131	19	20
Tetrachloroethene	ND		46.7	53.7		ug/Kg		115	67 - 130	2	20
Toluene	ND		46.7	47.1		ug/Kg		101	70 - 130	3	20
1,2,3-Trichlorobenzene	ND		46.7	46.7		ug/Kg		100	58 - 138	1	20
1,2,4-Trichlorobenzene	ND		46.7	46.4		ug/Kg		99	49 - 144	7	20
1,1,1-Trichloroethane	ND		46.7	55.5		ug/Kg		119	57 - 133	3	20
1,1,2-Trichloroethane	ND		46.7	50.5		ug/Kg		108	68 - 132	5	20
Trichloroethene	ND		46.7	53.0		ug/Kg		113	66 - 130	4	20
Trichlorofluoromethane	ND		46.7	58.6		ug/Kg		125	61 - 130	1	20
1,2,3-Trichloropropane	ND		46.7	52.0		ug/Kg		111	62 - 150	16	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	F1	46.7	66.5	F1	ug/Kg		142	52 - 130	4	20
1,2,4-Trimethylbenzene	ND		46.7	53.0		ug/Kg		113	64 - 140	8	20
1,3,5-Trimethylbenzene	ND		46.7	52.5		ug/Kg		112	67 - 134	10	20
Vinyl acetate	ND		46.7	31.4		ug/Kg		67	52 - 150	14	20
Vinyl chloride	ND		46.7	52.0		ug/Kg		111	62 - 130	1	20
m-Xylene & p-Xylene	ND		46.7	49.9		ug/Kg		107	70 - 130	2	20
o-Xylene	ND		46.7	50.8		ug/Kg		109	68 - 130	4	20
2,2-Dichloropropane	ND		46.7	58.8		ug/Kg		126	63 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*91*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

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

Lab Sample ID: MB 720-250520/1-A
Matrix: Solid
Analysis Batch: 250578

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250520

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		10	5.0	ug/Kg		08/29/18 15:27	08/30/18 11:28	1
Acenaphthene	ND		5.0	2.8	ug/Kg		08/29/18 15:27	08/30/18 11:28	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		08/29/18 15:27	08/30/18 11:28	1
Anthracene	ND		5.0	2.0	ug/Kg		08/29/18 15:27	08/30/18 11:28	1
Benzo[a]anthracene	ND		5.0	1.5	ug/Kg		08/29/18 15:27	08/30/18 11:28	1
Benzo[a]pyrene	ND		5.0	1.9	ug/Kg		08/29/18 15:27	08/30/18 11:28	1

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

Lab Sample ID: MB 720-250520/1-A
Matrix: Solid
Analysis Batch: 250578

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250520

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	ND		5.0	2.1	ug/Kg		08/29/18 15:27	08/30/18 11:28	1
Benzo[g,h,i]perylene	ND		5.0	4.3	ug/Kg		08/29/18 15:27	08/30/18 11:28	1
Benzo[k]fluoranthene	ND		5.0	2.1	ug/Kg		08/29/18 15:27	08/30/18 11:28	1
Chrysene	ND		5.0	1.4	ug/Kg		08/29/18 15:27	08/30/18 11:28	1
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		08/29/18 15:27	08/30/18 11:28	1
Fluoranthene	ND		5.0	1.4	ug/Kg		08/29/18 15:27	08/30/18 11:28	1
Fluorene	ND		5.0	2.2	ug/Kg		08/29/18 15:27	08/30/18 11:28	1
Indeno[1,2,3-cd]pyrene	ND		5.0	4.2	ug/Kg		08/29/18 15:27	08/30/18 11:28	1
Naphthalene	ND		5.0	3.5	ug/Kg		08/29/18 15:27	08/30/18 11:28	1
Phenanthrene	ND		5.0	1.8	ug/Kg		08/29/18 15:27	08/30/18 11:28	1
Pyrene	ND		5.0	1.7	ug/Kg		08/29/18 15:27	08/30/18 11:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*33 - 120*	*08/29/18 15:27*	*08/30/18 11:28*	*1*
Terphenyl-d14	*86*		*35 - 146*	*08/29/18 15:27*	*08/30/18 11:28*	*1*

Lab Sample ID: LCS 720-250520/2-A
Matrix: Solid
Analysis Batch: 250578

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250520

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	667	390		ug/Kg		59	46 - 110
Acenaphthene	667	415		ug/Kg		62	46 - 106
Acenaphthylene	667	426		ug/Kg		64	46 - 108
Anthracene	667	437		ug/Kg		66	55 - 103
Benzo[a]anthracene	667	496		ug/Kg		74	54 - 110
Benzo[a]pyrene	667	504		ug/Kg		76	62 - 111
Benzo[b]fluoranthene	667	499		ug/Kg		75	60 - 109
Benzo[g,h,i]perylene	667	493		ug/Kg		74	52 - 114
Benzo[k]fluoranthene	667	472		ug/Kg		71	58 - 109
Chrysene	667	474		ug/Kg		71	54 - 108
Dibenz(a,h)anthracene	667	516		ug/Kg		77	58 - 112
Fluoranthene	667	455		ug/Kg		68	59 - 109
Fluorene	667	431		ug/Kg		65	52 - 106
Indeno[1,2,3-cd]pyrene	667	526		ug/Kg		79	55 - 120
Naphthalene	667	402		ug/Kg		60	49 - 110
Phenanthrene	667	433		ug/Kg		65	57 - 110
Pyrene	667	505		ug/Kg		76	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*63*		*33 - 120*
Terphenyl-d14	*76*		*35 - 146*

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

Lab Sample ID: 720-88242-D-2-B MS
Matrix: Solid
Analysis Batch: 250578

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250520

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	280		649	774		ug/Kg		76	46 - 110
Acenaphthene	36	J	649	529		ug/Kg		76	46 - 106
Acenaphthylene	500	F1	649	1620	F1	ug/Kg		173	46 - 108
Anthracene	650	F1	649	2600	F1	ug/Kg		300	55 - 103
Benzo[a]anthracene	2400	F1	649	4430	F1	ug/Kg		310	54 - 110
Benzo[a]pyrene	1900	F1	649	3240	F1	ug/Kg		213	62 - 111
Benzo[b]fluoranthene	2500	F1	649	4240	F1	ug/Kg		273	60 - 109
Benzo[g,h,i]perylene	870	F1	649	1600		ug/Kg		112	52 - 114
Benzo[k]fluoranthene	1100	F1	649	1850	F1	ug/Kg		113	58 - 109
Chrysene	2600	F1	649	4690	F1	ug/Kg		323	54 - 108
Dibenz(a,h)anthracene	350		649	891		ug/Kg		84	58 - 112
Fluoranthene	3500		649	6550	4	ug/Kg		463	59 - 109
Fluorene	160	F1	649	1230	F1	ug/Kg		164	52 - 106
Indeno[1,2,3-cd]pyrene	880	F1	649	1580		ug/Kg		108	55 - 120
Naphthalene	640	F1	649	883	F1	ug/Kg		38	49 - 110
Phenanthrene	3000		649	10900	4	ug/Kg		1220	57 - 110
Pyrene	5500		649	10400	4	ug/Kg		746	50 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*57*		*33 - 120*
Terphenyl-d14	*79*		*35 - 146*

Lab Sample ID: 720-88242-D-2-C MSD
Matrix: Solid
Analysis Batch: 250578

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250520

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	280		650	839		ug/Kg		86	46 - 110	8	35
Acenaphthene	36	J	650	620		ug/Kg		90	46 - 106	16	35
Acenaphthylene	500	F1	650	1190		ug/Kg		106	46 - 108	31	35
Anthracene	650	F1	650	2450	F1	ug/Kg		277	55 - 103	6	35
Benzo[a]anthracene	2400	F1	650	5100	F1	ug/Kg		413	54 - 110	14	35
Benzo[a]pyrene	1900	F1	650	3980	F1	ug/Kg		327	62 - 111	21	35
Benzo[b]fluoranthene	2500	F1	650	5110	F1	ug/Kg		406	60 - 109	19	35
Benzo[g,h,i]perylene	870	F1	650	2020	F1	ug/Kg		177	52 - 114	23	35
Benzo[k]fluoranthene	1100	F1	650	1980	F1	ug/Kg		134	58 - 109	7	35
Chrysene	2600	F1	650	5340	F1	ug/Kg		422	54 - 108	13	35
Dibenz(a,h)anthracene	350		650	1010		ug/Kg		102	58 - 112	12	35
Fluoranthene	3500		650	8360	4	ug/Kg		742	59 - 109	24	35
Fluorene	160	F1	650	1410	F1	ug/Kg		193	52 - 106	14	35
Indeno[1,2,3-cd]pyrene	880	F1	650	1940	F1	ug/Kg		164	55 - 120	21	35
Naphthalene	640	F1	650	1200		ug/Kg		86	49 - 110	30	35
Phenanthrene	3000		650	13300	E 4	ug/Kg		1578	57 - 110	19	35
Pyrene	5500		650	13100	E 4	ug/Kg		1164	50 - 120	23	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*56*		*33 - 120*

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

Lab Sample ID: 720-88242-D-2-C MSD
Matrix: Solid
Analysis Batch: 250578

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250520

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*76*		*35 - 146*

Lab Sample ID: MB 720-250580/1-A
Matrix: Solid
Analysis Batch: 250742

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250580

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		10	5.0	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Acenaphthene	ND		5.0	2.8	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Anthracene	ND		5.0	2.0	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Benzo[a]anthracene	ND		5.0	1.5	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Benzo[a]pyrene	ND		5.0	1.9	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Benzo[b]fluoranthene	ND		5.0	2.1	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Benzo[g,h,i]perylene	ND		5.0	4.3	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Benzo[k]fluoranthene	ND		5.0	2.1	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Chrysene	ND		5.0	1.4	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Fluoranthene	ND		5.0	1.4	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Fluorene	ND		5.0	2.2	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Indeno[1,2,3-cd]pyrene	ND		5.0	4.2	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Naphthalene	ND		5.0	3.5	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Phenanthrene	ND		5.0	1.8	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Pyrene	ND		5.0	1.7	ug/Kg		08/30/18 10:18	09/01/18 14:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*79*		*33 - 120*	*08/30/18 10:18*	*09/01/18 14:14*	*1*
Terphenyl-d14	*93*		*35 - 146*	*08/30/18 10:18*	*09/01/18 14:14*	*1*

Lab Sample ID: LCS 720-250580/2-A
Matrix: Solid
Analysis Batch: 250742

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250580

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	667	478		ug/Kg		72	46 - 110
Acenaphthene	667	535		ug/Kg		80	46 - 106
Acenaphthylene	667	523		ug/Kg		78	46 - 108
Anthracene	667	518		ug/Kg		78	55 - 103
Benzo[a]anthracene	667	594		ug/Kg		89	54 - 110
Benzo[a]pyrene	667	559		ug/Kg		84	62 - 111
Benzo[b]fluoranthene	667	578		ug/Kg		87	60 - 109
Benzo[g,h,i]perylene	667	572		ug/Kg		86	52 - 114
Benzo[k]fluoranthene	667	539		ug/Kg		81	58 - 109
Chrysene	667	562		ug/Kg		84	54 - 108
Dibenz(a,h)anthracene	667	599		ug/Kg		90	58 - 112
Fluoranthene	667	521		ug/Kg		78	59 - 109
Fluorene	667	549		ug/Kg		82	52 - 106
Indeno[1,2,3-cd]pyrene	667	603		ug/Kg		90	55 - 120

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

Lab Sample ID: LCS 720-250580/2-A
Matrix: Solid
Analysis Batch: 250742

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250580

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	667	480		ug/Kg		72	49 - 110
Phenanthrene	667	520		ug/Kg		78	57 - 110
Pyrene	667	579		ug/Kg		87	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*75*		*33 - 120*
Terphenyl-d14	*90*		*35 - 146*

Lab Sample ID: 720-88242-D-13-H MS
Matrix: Solid
Analysis Batch: 250745

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250580

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	ND	F1	637	233	F1	ug/Kg		37	46 - 110
Acenaphthene	ND	F1	637	278	F1	ug/Kg		44	46 - 106
Acenaphthylene	8.4	F1	637	276	F1	ug/Kg		42	46 - 108
Anthracene	14	F1	637	327	F1	ug/Kg		49	55 - 103
Benzo[a]anthracene	110		637	473		ug/Kg		57	54 - 110
Benzo[a]pyrene	180	F1	637	554	F1	ug/Kg		59	62 - 111
Benzo[b]fluoranthene	200	F1	637	537	F1	ug/Kg		52	60 - 109
Benzo[g,h,i]perylene	100	F1	637	399	F1	ug/Kg		47	52 - 114
Benzo[k]fluoranthene	86		637	460		ug/Kg		59	58 - 109
Chrysene	120	F1	637	460	F1	ug/Kg		53	54 - 108
Dibenz(a,h)anthracene	32	F1	637	371	F1	ug/Kg		53	58 - 112
Fluoranthene	130	F1	637	459	F1	ug/Kg		52	59 - 109
Fluorene	ND	F1	637	295	F1	ug/Kg		46	52 - 106
Indeno[1,2,3-cd]pyrene	94	F1	637	442		ug/Kg		55	55 - 120
Naphthalene	ND	F1	637	228	F1	ug/Kg		36	49 - 110
Phenanthrene	37	F1	637	331	F1	ug/Kg		46	57 - 110
Pyrene	150		637	497		ug/Kg		54	50 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*39*		*33 - 120*
Terphenyl-d14	*55*		*35 - 146*

Lab Sample ID: 720-88242-D-13-I MSD
Matrix: Solid
Analysis Batch: 250745

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250580

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	ND	F1	637	207	F1	ug/Kg		33	46 - 110	12	35
Acenaphthene	ND	F1	637	271	F1	ug/Kg		42	46 - 106	3	35
Acenaphthylene	8.4	F1	637	258	F1	ug/Kg		39	46 - 108	7	35
Anthracene	14	F1	637	338	F1	ug/Kg		51	55 - 103	3	35
Benzo[a]anthracene	110		637	471		ug/Kg		56	54 - 110	0	35
Benzo[a]pyrene	180	F1	637	535	F1	ug/Kg		56	62 - 111	4	35
Benzo[b]fluoranthene	200	F1	637	531	F1	ug/Kg		51	60 - 109	1	35
Benzo[g,h,i]perylene	100	F1	637	356	F1	ug/Kg		40	52 - 114	11	35

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

Lab Sample ID: 720-88242-D-13-I MSD
Matrix: Solid
Analysis Batch: 250745

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250580

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[k]fluoranthene	86		637	467		ug/Kg		60	58 - 109	2	35
Chrysene	120	F1	637	440	F1	ug/Kg		50	54 - 108	5	35
Dibenz(a,h)anthracene	32	F1	637	348	F1	ug/Kg		50	58 - 112	6	35
Fluoranthene	130	F1	637	447	F1	ug/Kg		50	59 - 109	3	35
Fluorene	ND	F1	637	294	F1	ug/Kg		46	52 - 106	0	35
Indeno[1,2,3-cd]pyrene	94	F1	637	408	F1	ug/Kg		49	55 - 120	8	35
Naphthalene	ND	F1	637	201	F1	ug/Kg		32	49 - 110	13	35
Phenanthrene	37	F1	637	342	F1	ug/Kg		48	57 - 110	3	35
Pyrene	150		637	487		ug/Kg		52	50 - 120	2	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*37*		*33 - 120*
Terphenyl-d14	*54*		*35 - 146*

Lab Sample ID: MB 720-250853/1-A
Matrix: Solid
Analysis Batch: 250960

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250853

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		10	5.0	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Acenaphthene	ND		5.0	2.8	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Anthracene	ND		5.0	2.0	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Benzo[a]anthracene	ND		5.0	1.5	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Benzo[a]pyrene	ND		5.0	1.9	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Benzo[b]fluoranthene	ND		5.0	2.1	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Benzo[g,h,i]perylene	ND		5.0	4.3	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Benzo[k]fluoranthene	ND		5.0	2.1	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Chrysene	ND		5.0	1.4	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Fluoranthene	ND		5.0	1.4	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Fluorene	ND		5.0	2.2	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Indeno[1,2,3-cd]pyrene	ND		5.0	4.2	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Naphthalene	ND		5.0	3.5	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Phenanthrene	ND		5.0	1.8	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Pyrene	ND		5.0	1.7	ug/Kg		09/04/18 17:46	09/06/18 02:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*33 - 120*	*09/04/18 17:46*	*09/06/18 02:11*	*1*
Terphenyl-d14	*89*		*35 - 146*	*09/04/18 17:46*	*09/06/18 02:11*	*1*

Lab Sample ID: LCS 720-250853/2-A
Matrix: Solid
Analysis Batch: 250960

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250853

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	667	496		ug/Kg		74	46 - 110
Acenaphthene	667	471		ug/Kg		71	46 - 106

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

Lab Sample ID: LCS 720-250853/2-A
Matrix: Solid
Analysis Batch: 250960

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250853

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthylene	667	463		ug/Kg		69	46 - 108
Anthracene	667	511		ug/Kg		77	55 - 103
Benzo[a]anthracene	667	566		ug/Kg		85	54 - 110
Benzo[a]pyrene	667	566		ug/Kg		85	62 - 111
Benzo[b]fluoranthene	667	547		ug/Kg		82	60 - 109
Benzo[g,h,i]perylene	667	587		ug/Kg		88	52 - 114
Benzo[k]fluoranthene	667	535		ug/Kg		80	58 - 109
Chrysene	667	544		ug/Kg		82	54 - 108
Dibenz(a,h)anthracene	667	582		ug/Kg		87	58 - 112
Fluoranthene	667	547		ug/Kg		82	59 - 109
Fluorene	667	495		ug/Kg		74	52 - 106
Indeno[1,2,3-cd]pyrene	667	593		ug/Kg		89	55 - 120
Naphthalene	667	465		ug/Kg		70	49 - 110
Phenanthrene	667	507		ug/Kg		76	57 - 110
Pyrene	667	580		ug/Kg		87	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*74*		*33 - 120*
Terphenyl-d14	*90*		*35 - 146*

Lab Sample ID: 720-88241-D-1-F MS
Matrix: Solid
Analysis Batch: 250960

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250853

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	38		649	418		ug/Kg		58	46 - 110
Acenaphthene	ND		649	413		ug/Kg		64	46 - 106
Acenaphthylene	4.5	J	649	397		ug/Kg		60	46 - 108
Anthracene	10		649	511		ug/Kg		77	55 - 103
Benzo[a]anthracene	24		649	560		ug/Kg		83	54 - 110
Benzo[a]pyrene	25		649	559		ug/Kg		82	62 - 111
Benzo[b]fluoranthene	49		649	547		ug/Kg		77	60 - 109
Benzo[g,h,i]perylene	21		649	471		ug/Kg		69	52 - 114
Benzo[k]fluoranthene	10		649	535		ug/Kg		81	58 - 109
Chrysene	75		649	597		ug/Kg		80	54 - 108
Dibenz(a,h)anthracene	9.1		649	479		ug/Kg		72	58 - 112
Fluoranthene	28		649	523		ug/Kg		76	59 - 109
Fluorene	3.2	J	649	457		ug/Kg		70	52 - 106
Indeno[1,2,3-cd]pyrene	13		649	480		ug/Kg		72	55 - 120
Naphthalene	16		649	357		ug/Kg		52	49 - 110
Phenanthrene	63		649	544		ug/Kg		74	57 - 110
Pyrene	57		649	654		ug/Kg		92	50 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*62*		*33 - 120*
Terphenyl-d14	*91*		*35 - 146*

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

Lab Sample ID: 720-88241-D-1-G MSD
Matrix: Solid
Analysis Batch: 250960

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250853

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	38		654	426		ug/Kg		59	46 - 110	2	35
Acenaphthene	ND		654	414		ug/Kg		63	46 - 106	0	35
Acenaphthylene	4.5	J	654	402		ug/Kg		61	46 - 108	1	35
Anthracene	10		654	508		ug/Kg		76	55 - 103	1	35
Benzo[a]anthracene	24		654	559		ug/Kg		82	54 - 110	0	35
Benzo[a]pyrene	25		654	562		ug/Kg		82	62 - 111	1	35
Benzo[b]fluoranthene	49		654	548		ug/Kg		76	60 - 109	0	35
Benzo[g,h,i]perylene	21		654	429		ug/Kg		63	52 - 114	9	35
Benzo[k]fluoranthene	10		654	543		ug/Kg		82	58 - 109	2	35
Chrysene	75		654	594		ug/Kg		79	54 - 108	0	35
Dibenz(a,h)anthracene	9.1		654	449		ug/Kg		67	58 - 112	7	35
Fluoranthene	28		654	521		ug/Kg		76	59 - 109	0	35
Fluorene	3.2	J	654	461		ug/Kg		70	52 - 106	1	35
Indeno[1,2,3-cd]pyrene	13		654	449		ug/Kg		67	55 - 120	7	35
Naphthalene	16		654	350		ug/Kg		51	49 - 110	2	35
Phenanthrene	63		654	538		ug/Kg		73	57 - 110	1	35
Pyrene	57		654	649		ug/Kg		91	50 - 120	1	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*62*		*33 - 120*
Terphenyl-d14	*90*		*35 - 146*

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

Lab Sample ID: MB 720-250382/1-A
Matrix: Solid
Analysis Batch: 250456

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250382

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		2000	750	ug/Kg		08/28/18 11:24	08/29/18 23:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*101*		*40 - 130*	*08/28/18 11:24*	*08/29/18 23:58*	*1*

Lab Sample ID: LCS 720-250382/2-A
Matrix: Solid
Analysis Batch: 250456

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250382

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			167000	163000		ug/Kg		98	50 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*81*		*40 - 130*

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

Lab Sample ID: 720-88239-7 MS — **Client Sample ID: DG-G7S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250456 — **Prep Batch: 250382**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]	11000		161000	157000		ug/Kg		91	50 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
p-Terphenyl	*83*		*40 - 130*

Lab Sample ID: 720-88239-7 MSD — **Client Sample ID: DG-G7S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250456 — **Prep Batch: 250382**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	11000		161000	156000		ug/Kg		89	50 - 150	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
p-Terphenyl	*79*		*40 - 130*

Lab Sample ID: MB 720-250461/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250456 — **Prep Batch: 250461**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		2000	750	ug/Kg		08/29/18 09:03	08/29/18 23:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*96*		*40 - 130*	*08/29/18 09:03*	*08/29/18 23:29*	*1*

Lab Sample ID: LCS 720-250461/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250456 — **Prep Batch: 250461**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			167000	168000		ug/Kg		101	50 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*86*		*40 - 130*

Lab Sample ID: 720-88240-D-3-G MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250456 — **Prep Batch: 250461**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]	430000		164000	566000		ug/Kg		84	50 - 150		

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

Lab Sample ID: 720-88240-D-3-G MS
Matrix: Solid
Analysis Batch: 250456

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250461

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
p-Terphenyl	*0*	*X D*	*40 - 130*

Lab Sample ID: 720-88240-D-3-H MSD
Matrix: Solid
Analysis Batch: 250456

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250461

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	430000		164000	602000		ug/Kg		105	50 - 150	6	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
p-Terphenyl	*0*	*X D*	*40 - 130*

Lab Sample ID: MB 720-250498/1-A
Matrix: Solid
Analysis Batch: 250653

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250498

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		2000	750	ug/Kg		08/29/18 13:41	08/31/18 13:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*91*		*40 - 130*	*08/29/18 13:41*	*08/31/18 13:52*	*1*

Lab Sample ID: LCS 720-250498/2-A
Matrix: Solid
Analysis Batch: 250653

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250498

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	167000	150000		ug/Kg		90	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*88*		*40 - 130*

Lab Sample ID: 720-88239-12 MS
Matrix: Solid
Analysis Batch: 250653

Client Sample ID: DG-I7S-3.5-4
Prep Type: Total/NA
Prep Batch: 250498

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	10000		164000	157000		ug/Kg		90	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
p-Terphenyl	*92*		*40 - 130*

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

Lab Sample ID: 720-88239-12 MSD — **Client Sample ID: DG-I7S-3.5-4**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250653 — **Prep Batch: 250498**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	10000		164000	156000		ug/Kg		89	50 - 150	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
p-Terphenyl	*86*		*40 - 130*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 720-250393/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250609 — **Prep Batch: 250393**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.61	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Aldrin	ND		2.0	0.50	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
alpha-BHC	ND		2.0	0.55	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Dieldrin	ND		2.0	0.59	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Endrin	ND		2.0	0.46	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Endrin aldehyde	ND		2.0	0.63	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Methoxychlor	ND		2.0	0.68	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Toxaphene	ND		40	6.8	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/28/18 13:36	08/30/18 23:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*98*		*21 - 136*	*08/28/18 13:36*	*08/30/18 23:31*	*1*
Tetrachloro-m-xylene	*84*		*21 - 145*	*08/28/18 13:36*	*08/30/18 23:31*	*1*

Lab Sample ID: LCS 720-250393/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250609 — **Prep Batch: 250393**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	16.2		ug/Kg		97	75 - 128
4,4'-DDE	16.7	15.4		ug/Kg		92	76 - 126

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 720-250393/2-A
Matrix: Solid
Analysis Batch: 250609

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250393

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDT	16.7	14.2		ug/Kg		85	63 - 127
Aldrin	16.7	13.7		ug/Kg		82	65 - 120
alpha-BHC	16.7	11.2		ug/Kg		67	46 - 122
beta-BHC	16.7	16.6		ug/Kg		99	78 - 136
cis-Chlordane	16.7	15.0		ug/Kg		90	70 - 120
delta-BHC	16.7	13.6		ug/Kg		81	43 - 125
Dieldrin	16.7	15.0		ug/Kg		90	72 - 120
Endosulfan I	16.7	15.3		ug/Kg		92	62 - 120
Endosulfan II	16.7	15.6		ug/Kg		94	65 - 120
Endosulfan sulfate	16.7	15.0		ug/Kg		90	72 - 121
Endrin	16.7	15.7		ug/Kg		94	68 - 120
Endrin aldehyde	16.7	16.7		ug/Kg		100	68 - 120
Endrin ketone	16.7	15.5		ug/Kg		93	75 - 136
gamma-BHC (Lindane)	16.7	14.6		ug/Kg		88	72 - 120
Heptachlor	16.7	15.1		ug/Kg		91	69 - 120
Heptachlor epoxide	16.7	15.5		ug/Kg		93	68 - 120
Methoxychlor	16.7	15.9		ug/Kg		96	71 - 132
trans-Chlordane	16.7	15.1		ug/Kg		91	68 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*95*		*21 - 136*
Tetrachloro-m-xylene	*84*		*21 - 145*

Lab Sample ID: 720-88216-A-9-S MS
Matrix: Solid
Analysis Batch: 250609

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250393

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	0.90	J p	15.9	13.9		ug/Kg		82	40 - 120
4,4'-DDE	0.76	J	15.9	13.9		ug/Kg		82	40 - 120
4,4'-DDT	ND		15.9	14.2		ug/Kg		89	17 - 144
Aldrin	ND		15.9	12.2		ug/Kg		77	53 - 120
alpha-BHC	ND		15.9	10.4		ug/Kg		65	40 - 120
beta-BHC	ND		15.9	15.2		ug/Kg		95	40 - 120
cis-Chlordane	ND		15.9	12.8		ug/Kg		80	40 - 120
delta-BHC	ND		15.9	12.0		ug/Kg		75	40 - 120
Dieldrin	ND		15.9	13.6		ug/Kg		85	46 - 130
Endosulfan I	ND		15.9	13.2		ug/Kg		83	40 - 120
Endosulfan II	ND		15.9	13.4		ug/Kg		84	40 - 120
Endosulfan sulfate	ND	F2	15.9	14.3		ug/Kg		90	40 - 120
Endrin	ND		15.9	14.7		ug/Kg		92	32 - 143
Endrin aldehyde	ND		15.9	12.9		ug/Kg		81	40 - 120
Endrin ketone	ND		15.9	13.5		ug/Kg		84	40 - 120
gamma-BHC (Lindane)	ND		15.9	13.0		ug/Kg		82	58 - 120
Heptachlor	ND		15.9	13.2		ug/Kg		83	52 - 120
Heptachlor epoxide	ND		15.9	13.1		ug/Kg		82	40 - 120
Methoxychlor	ND		15.9	15.2		ug/Kg		95	40 - 120
trans-Chlordane	ND		15.9	13.1		ug/Kg		82	40 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl	90		21 - 136
Tetrachloro-m-xylene	76		21 - 145

Lab Sample ID: 720-88216-A-9-T MSD
Matrix: Solid
Analysis Batch: 250609

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250393

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	0.90	J p	15.9	15.8		ug/Kg		94	40 - 120	13	20
4,4'-DDE	0.76	J	15.9	15.7		ug/Kg		94	40 - 120	12	20
4,4'-DDT	ND		15.9	15.9		ug/Kg		100	17 - 144	12	20
Aldrin	ND		15.9	13.8		ug/Kg		87	53 - 120	12	20
alpha-BHC	ND		15.9	11.8		ug/Kg		74	40 - 120	12	20
beta-BHC	ND		15.9	17.0		ug/Kg		107	40 - 120	11	20
cis-Chlordane	ND		15.9	14.5		ug/Kg		91	40 - 120	12	20
delta-BHC	ND		15.9	13.7		ug/Kg		86	40 - 120	13	20
Dieldrin	ND		15.9	15.3		ug/Kg		96	46 - 130	12	20
Endosulfan I	ND		15.9	14.9		ug/Kg		93	40 - 120	12	20
Endosulfan II	ND		15.9	15.3		ug/Kg		96	40 - 120	13	30
Endosulfan sulfate	ND	F2	15.9	16.5		ug/Kg		104	40 - 120	15	20
Endrin	ND		15.9	16.7		ug/Kg		105	32 - 143	12	20
Endrin aldehyde	ND		15.9	14.3		ug/Kg		90	40 - 120	10	20
Endrin ketone	ND		15.9	15.2		ug/Kg		96	40 - 120	12	20
gamma-BHC (Lindane)	ND		15.9	14.9		ug/Kg		93	58 - 120	14	20
Heptachlor	ND		15.9	15.1		ug/Kg		95	52 - 120	13	20
Heptachlor epoxide	ND		15.9	14.9		ug/Kg		93	40 - 120	13	20
Methoxychlor	ND		15.9	16.2		ug/Kg		102	40 - 120	7	20
trans-Chlordane	ND		15.9	14.8		ug/Kg		93	40 - 120	12	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
DCB Decachlorobiphenyl	100		21 - 136
Tetrachloro-m-xylene	82		21 - 145

Lab Sample ID: MB 720-250531/1-A
Matrix: Solid
Analysis Batch: 250746

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250531

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.61	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Aldrin	ND		2.0	0.50	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
alpha-BHC	ND		2.0	0.55	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Dieldrin	ND		2.0	0.59	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Endrin	ND		2.0	0.46	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Endrin aldehyde	ND		2.0	0.63	ug/Kg		08/29/18 17:11	09/03/18 14:01	1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 720-250531/1-A
Matrix: Solid
Analysis Batch: 250746

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250531

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endrin ketone	ND		2.0	0.33	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Methoxychlor	ND		2.0	0.68	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Toxaphene	ND		40	6.8	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/29/18 17:11	09/03/18 14:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*87*		*21 - 136*	*08/29/18 17:11*	*09/03/18 14:01*	*1*
Tetrachloro-m-xylene	*83*		*21 - 145*	*08/29/18 17:11*	*09/03/18 14:01*	*1*

Lab Sample ID: LCS 720-250531/2-A
Matrix: Solid
Analysis Batch: 250746

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250531

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	16.5		ug/Kg		99	75 - 128
4,4'-DDE	16.7	15.3		ug/Kg		92	76 - 126
4,4'-DDT	16.7	14.9		ug/Kg		89	63 - 127
Aldrin	16.7	13.7		ug/Kg		82	65 - 120
alpha-BHC	16.7	11.0		ug/Kg		66	46 - 122
beta-BHC	16.7	15.9		ug/Kg		95	78 - 136
cis-Chlordane	16.7	15.1		ug/Kg		90	70 - 120
delta-BHC	16.7	13.9		ug/Kg		83	43 - 125
Dieldrin	16.7	14.9		ug/Kg		89	72 - 120
Endosulfan I	16.7	14.9		ug/Kg		89	62 - 120
Endosulfan II	16.7	15.9		ug/Kg		95	65 - 120
Endosulfan sulfate	16.7	15.3		ug/Kg		92	72 - 121
Endrin	16.7	15.6		ug/Kg		94	68 - 120
Endrin aldehyde	16.7	16.0		ug/Kg		96	68 - 120
Endrin ketone	16.7	16.0		ug/Kg		96	75 - 136
gamma-BHC (Lindane)	16.7	14.1		ug/Kg		84	72 - 120
Heptachlor	16.7	14.6		ug/Kg		87	69 - 120
Heptachlor epoxide	16.7	15.1		ug/Kg		91	68 - 120
Methoxychlor	16.7	17.2		ug/Kg		103	71 - 132
trans-Chlordane	16.7	15.1		ug/Kg		91	68 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*98*		*21 - 136*
Tetrachloro-m-xylene	*83*		*21 - 145*

Lab Sample ID: 720-88239-13 MS
Matrix: Solid
Analysis Batch: 250746

Client Sample ID: DG-M7S-0.5-1
Prep Type: Total/NA
Prep Batch: 250531

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		15.8	14.2		ug/Kg		89	40 - 120

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 720-88239-13 MS
Matrix: Solid
Analysis Batch: 250746

Client Sample ID: DG-M7S-0.5-1
Prep Type: Total/NA
Prep Batch: 250531

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDE	ND		15.8	14.4		ug/Kg		91	40 - 120
4,4'-DDT	ND		15.8	14.8		ug/Kg		94	17 - 144
Aldrin	ND	F2	15.8	12.8		ug/Kg		81	53 - 120
alpha-BHC	ND		15.8	10.8		ug/Kg		68	40 - 120
beta-BHC	ND		15.8	9.48	J	ug/Kg		60	40 - 120
cis-Chlordane	ND		15.8	13.8		ug/Kg		87	40 - 120
delta-BHC	ND	F2	15.8	11.1		ug/Kg		70	40 - 120
Dieldrin	ND		15.8	13.7		ug/Kg		86	46 - 130
Endosulfan I	ND		15.8	14.7		ug/Kg		93	40 - 120
Endosulfan II	ND		15.8	14.0		ug/Kg		88	40 - 120
Endosulfan sulfate	ND		15.8	11.1		ug/Kg		70	40 - 120
Endrin	ND		15.8	15.5		ug/Kg		98	32 - 143
Endrin aldehyde	ND	F2	15.8	9.82	p	ug/Kg		62	40 - 120
Endrin ketone	ND		15.8	12.5		ug/Kg		79	40 - 120
gamma-BHC (Lindane)	ND		15.8	12.6		ug/Kg		80	58 - 120
Heptachlor	ND		15.8	14.1		ug/Kg		89	52 - 120
Heptachlor epoxide	ND		15.8	14.3		ug/Kg		90	40 - 120
Methoxychlor	ND	F2	15.8	16.5		ug/Kg		104	40 - 120
trans-Chlordane	ND	F1	15.8	14.9		ug/Kg		94	40 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*80*		*21 - 136*
Tetrachloro-m-xylene	*93*		*21 - 145*

Lab Sample ID: 720-88239-13 MSD
Matrix: Solid
Analysis Batch: 250746

Client Sample ID: DG-M7S-0.5-1
Prep Type: Total/NA
Prep Batch: 250531

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		15.8	14.0		ug/Kg		89	40 - 120	1	20
4,4'-DDE	ND		15.8	14.5		ug/Kg		92	40 - 120	0	20
4,4'-DDT	ND		15.8	17.4		ug/Kg		110	17 - 144	16	20
Aldrin	ND	F2	15.8	15.8	F2	ug/Kg		100	53 - 120	21	20
alpha-BHC	ND		15.8	11.6		ug/Kg		73	40 - 120	8	20
beta-BHC	ND		15.8	11.6		ug/Kg		74	40 - 120	20	20
cis-Chlordane	ND		15.8	15.4		ug/Kg		97	40 - 120	11	20
delta-BHC	ND	F2	15.8	13.9	F2	ug/Kg		88	40 - 120	23	20
Dieldrin	ND		15.8	16.4		ug/Kg		104	46 - 130	18	20
Endosulfan I	ND		15.8	15.0		ug/Kg		95	40 - 120	2	20
Endosulfan II	ND		15.8	16.3		ug/Kg		103	40 - 120	15	30
Endosulfan sulfate	ND		15.8	13.2		ug/Kg		84	40 - 120	18	20
Endrin	ND		15.8	18.4		ug/Kg		117	32 - 143	17	20
Endrin aldehyde	ND	F2	15.8	13.0	F2	ug/Kg		82	40 - 120	28	20
Endrin ketone	ND		15.8	14.8		ug/Kg		94	40 - 120	17	20
gamma-BHC (Lindane)	ND		15.8	13.6		ug/Kg		86	58 - 120	8	20
Heptachlor	ND		15.8	14.2		ug/Kg		90	52 - 120	0	20
Heptachlor epoxide	ND		15.8	15.6		ug/Kg		99	40 - 120	9	20
Methoxychlor	ND	F2	15.8	13.4	F2	ug/Kg		84	40 - 120	21	20

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 720-88239-13 MSD — **Client Sample ID: DG-M7S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250746 — **Prep Batch: 250531**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-Chlordane	ND	F1	15.8	15.6		ug/Kg		99	40 - 120	5	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*105*		*21 - 136*
Tetrachloro-m-xylene	*94*		*21 - 145*

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

Lab Sample ID: MB 240-343096/23-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 343330 — **Prep Batch: 343096**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/29/18 14:18	08/31/18 07:57	1
Aroclor-1221	ND		50	24	ug/Kg		08/29/18 14:18	08/31/18 07:57	1
Aroclor-1232	ND		50	23	ug/Kg		08/29/18 14:18	08/31/18 07:57	1
Aroclor-1242	ND		50	19	ug/Kg		08/29/18 14:18	08/31/18 07:57	1
Aroclor-1248	ND		50	24	ug/Kg		08/29/18 14:18	08/31/18 07:57	1
Aroclor-1254	ND		50	23	ug/Kg		08/29/18 14:18	08/31/18 07:57	1
Aroclor-1260	ND		50	22	ug/Kg		08/29/18 14:18	08/31/18 07:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*94*		*14 - 128*	*08/29/18 14:18*	*08/31/18 07:57*	*1*
DCB Decachlorobiphenyl	*96*		*10 - 132*	*08/29/18 14:18*	*08/31/18 07:57*	*1*

Lab Sample ID: LCS 240-343096/24-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 343330 — **Prep Batch: 343096**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	1000	811		ug/Kg		81	47 - 120
Aroclor-1260	1000	883		ug/Kg		88	46 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*84*		*14 - 128*
DCB Decachlorobiphenyl	*90*		*10 - 132*

Lab Sample ID: 720-88218-F-21-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 343330 — **Prep Batch: 343096**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	ND		998	742		ug/Kg		74	31 - 120
Aroclor-1260	ND		998	739		ug/Kg		74	21 - 122

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*86*		*14 - 128*

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

Lab Sample ID: 720-88218-F-21-B MS
Matrix: Solid
Analysis Batch: 343330

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 343096

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*76*		*10 - 132*

Lab Sample ID: 720-88218-F-21-C MSD
Matrix: Solid
Analysis Batch: 343330

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 343096

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	ND		979	669		ug/Kg		68	31 - 120	10	30
Aroclor-1260	ND		979	715		ug/Kg		73	21 - 122	3	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*71*		*14 - 128*
DCB Decachlorobiphenyl	*72*		*10 - 132*

Lab Sample ID: MB 240-343472/7-A
Matrix: Solid
Analysis Batch: 343587

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 343472

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/31/18 12:59	09/02/18 15:39	1
Aroclor-1221	ND		50	24	ug/Kg		08/31/18 12:59	09/02/18 15:39	1
Aroclor-1232	ND		50	23	ug/Kg		08/31/18 12:59	09/02/18 15:39	1
Aroclor-1242	ND		50	19	ug/Kg		08/31/18 12:59	09/02/18 15:39	1
Aroclor-1248	ND		50	24	ug/Kg		08/31/18 12:59	09/02/18 15:39	1
Aroclor-1254	ND		50	23	ug/Kg		08/31/18 12:59	09/02/18 15:39	1
Aroclor-1260	ND		50	22	ug/Kg		08/31/18 12:59	09/02/18 15:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*84*		*14 - 128*	*08/31/18 12:59*	*09/02/18 15:39*	*1*
DCB Decachlorobiphenyl	*87*		*10 - 132*	*08/31/18 12:59*	*09/02/18 15:39*	*1*

Lab Sample ID: LCS 240-343472/8-A
Matrix: Solid
Analysis Batch: 343587

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 343472

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	1000	761		ug/Kg		76	47 - 120
Aroclor-1260	1000	803		ug/Kg		80	46 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*83*		*14 - 128*
DCB Decachlorobiphenyl	*85*		*10 - 132*

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

Lab Sample ID: 720-88291-F-10-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 343587 — **Prep Batch: 343472**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	ND		975	788		ug/Kg		81	31 - 120
Aroclor-1260	ND		975	794		ug/Kg		81	21 - 122

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*86*		*14 - 128*
DCB Decachlorobiphenyl	*75*		*10 - 132*

Lab Sample ID: 720-88291-F-10-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 343587 — **Prep Batch: 343472**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	ND		986	747		ug/Kg		76	31 - 120	5	30
Aroclor-1260	ND		986	756		ug/Kg		77	21 - 122	5	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*82*		*14 - 128*
DCB Decachlorobiphenyl	*71*		*10 - 132*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-250365/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250585 — **Prep Batch: 250365**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.105	J	0.50	0.083	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Arsenic	ND		1.0	0.085	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Barium	0.0888	J	0.50	0.071	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Beryllium	ND		0.10	0.033	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Cadmium	ND		0.13	0.012	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Chromium	ND		0.50	0.053	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Cobalt	ND		0.20	0.020	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Copper	ND		1.5	0.71	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Lead	ND		0.50	0.11	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Nickel	ND		0.50	0.051	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Selenium	ND		1.0	0.15	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Silver	ND		0.25	0.051	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Thallium	ND		0.50	0.15	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Vanadium	ND		0.50	0.068	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Zinc	ND		1.5	0.64	mg/Kg		08/28/18 10:26	08/29/18 20:06	1

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

Lab Sample ID: LCS 720-250365/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250585 — **Prep Batch: 250365**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	47.1		mg/Kg		94	80 - 120
Arsenic	50.0	47.7		mg/Kg		95	80 - 120
Barium	50.0	49.3		mg/Kg		99	80 - 120
Beryllium	50.0	48.6		mg/Kg		97	80 - 120
Cadmium	50.0	48.2		mg/Kg		96	80 - 120
Chromium	50.0	48.2		mg/Kg		96	80 - 120
Cobalt	50.0	49.6		mg/Kg		99	80 - 120
Copper	50.0	47.8		mg/Kg		96	80 - 120
Lead	50.0	49.1		mg/Kg		98	80 - 120
Molybdenum	50.0	48.6		mg/Kg		97	80 - 120
Nickel	50.0	48.4		mg/Kg		97	80 - 120
Selenium	50.0	46.1		mg/Kg		92	80 - 120
Silver	25.0	24.5		mg/Kg		98	80 - 120
Thallium	50.0	48.5		mg/Kg		97	80 - 120
Vanadium	50.0	48.4		mg/Kg		97	80 - 120
Zinc	50.0	48.6		mg/Kg		97	80 - 120

Lab Sample ID: 720-88216-A-17-Y MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250585 — **Prep Batch: 250365**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.85	J B F1	45.5	12.2	F1	mg/Kg		25	75 - 125
Arsenic	2.0	J	45.5	43.5		mg/Kg		91	75 - 125
Barium	55	B	45.5	105		mg/Kg		109	75 - 125
Beryllium	ND		45.5	43.8		mg/Kg		96	75 - 125
Cadmium	0.064	J	45.5	43.5		mg/Kg		96	75 - 125
Chromium	63		45.5	115		mg/Kg		114	75 - 125
Cobalt	13		45.5	58.8		mg/Kg		101	75 - 125
Copper	29		45.5	74.8		mg/Kg		102	75 - 125
Lead	25		45.5	65.7		mg/Kg		89	75 - 125
Molybdenum	ND		45.5	40.7		mg/Kg		90	75 - 125
Nickel	35		45.5	80.9		mg/Kg		100	75 - 125
Selenium	ND		45.5	38.9		mg/Kg		86	75 - 125
Silver	ND		22.7	23.3		mg/Kg		103	75 - 125
Thallium	0.69	J	45.5	42.6		mg/Kg		92	75 - 125
Vanadium	79		45.5	136		mg/Kg		124	75 - 125
Zinc	37		45.5	84.5		mg/Kg		105	75 - 125

Lab Sample ID: 720-88216-A-17-Z MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250585 — **Prep Batch: 250365**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.85	J B F1	44.6	12.0	F1	mg/Kg		25	75 - 125	2	20
Arsenic	2.0	J	44.6	41.3		mg/Kg		88	75 - 125	5	20
Barium	55	B	44.6	104		mg/Kg		110	75 - 125	0	20
Beryllium	ND		44.6	42.1		mg/Kg		94	75 - 125	4	20

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

Lab Sample ID: 720-88216-A-17-Z MSD
Matrix: Solid
Analysis Batch: 250585

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250365

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	0.064	J	44.6	41.7		mg/Kg		93	75 - 125	4	20
Chromium	63		44.6	110		mg/Kg		105	75 - 125	4	20
Cobalt	13		44.6	56.2		mg/Kg		96	75 - 125	5	20
Copper	29		44.6	74.5		mg/Kg		103	75 - 125	0	20
Lead	25		44.6	62.1		mg/Kg		82	75 - 125	6	20
Molybdenum	ND		44.6	38.4		mg/Kg		86	75 - 125	6	20
Nickel	35		44.6	83.6		mg/Kg		108	75 - 125	3	20
Selenium	ND		44.6	37.4		mg/Kg		84	75 - 125	4	20
Silver	ND		22.3	22.5		mg/Kg		101	75 - 125	4	20
Thallium	0.69	J	44.6	41.0		mg/Kg		90	75 - 125	4	20
Vanadium	79		44.6	130		mg/Kg		113	75 - 125	5	20
Zinc	37		44.6	81.0		mg/Kg		99	75 - 125	4	20

Lab Sample ID: MB 720-250470/1-A
Matrix: Solid
Analysis Batch: 250593

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250470

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Arsenic	ND		1.0	0.085	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Barium	ND		0.50	0.071	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Beryllium	ND		0.10	0.033	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Cadmium	ND		0.13	0.012	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Chromium	ND		0.50	0.053	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Cobalt	ND		0.20	0.020	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Copper	ND		1.5	0.71	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Lead	ND		0.50	0.11	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Nickel	ND		0.50	0.051	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Selenium	ND		1.0	0.15	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Silver	ND		0.25	0.051	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Thallium	ND		0.50	0.15	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Vanadium	ND		0.50	0.068	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Zinc	ND		1.5	0.64	mg/Kg		08/29/18 09:32	08/30/18 09:42	1

Lab Sample ID: LCS 720-250470/2-A
Matrix: Solid
Analysis Batch: 250593

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250470

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	47.3		mg/Kg		95	80 - 120
Arsenic	50.0	47.2		mg/Kg		94	80 - 120
Barium	50.0	49.1		mg/Kg		98	80 - 120
Beryllium	50.0	50.0		mg/Kg		100	80 - 120
Cadmium	50.0	48.1		mg/Kg		96	80 - 120
Chromium	50.0	48.9		mg/Kg		98	80 - 120
Cobalt	50.0	48.8		mg/Kg		98	80 - 120
Copper	50.0	48.8		mg/Kg		98	80 - 120
Lead	50.0	48.5		mg/Kg		97	80 - 120

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

Lab Sample ID: LCS 720-250470/2-A
Matrix: Solid
Analysis Batch: 250593

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250470

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Molybdenum	50.0	48.7		mg/Kg		97	80 - 120
Nickel	50.0	48.8		mg/Kg		98	80 - 120
Selenium	50.0	46.1		mg/Kg		92	80 - 120
Silver	25.0	24.0		mg/Kg		96	80 - 120
Thallium	50.0	48.4		mg/Kg		97	80 - 120
Vanadium	50.0	48.9		mg/Kg		98	80 - 120
Zinc	50.0	47.8		mg/Kg		96	80 - 120

Lab Sample ID: 720-88237-A-9-A MS
Matrix: Solid
Analysis Batch: 250593

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250470

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.4	J F1	46.3	19.4	F1	mg/Kg		39	75 - 125
Arsenic	4.3		46.3	55.2		mg/Kg		110	75 - 125
Barium	90		46.3	126		mg/Kg		79	75 - 125
Beryllium	ND	F1	46.3	54.8		mg/Kg		118	75 - 125
Cadmium	0.20	J	46.3	50.8		mg/Kg		109	75 - 125
Chromium	45	F1	46.3	110	F1	mg/Kg		140	75 - 125
Cobalt	9.1		46.3	61.2		mg/Kg		113	75 - 125
Copper	31	F1	46.3	91.0	F1	mg/Kg		129	75 - 125
Lead	100	F1 F2	46.3	108	F1	mg/Kg		13	75 - 125
Molybdenum	0.36	J	46.3	49.6		mg/Kg		106	75 - 125
Nickel	60	F1	46.3	108		mg/Kg		104	75 - 125
Selenium	ND		46.3	48.2		mg/Kg		104	75 - 125
Silver	ND	F1	23.1	27.4		mg/Kg		118	75 - 125
Thallium	ND		46.3	49.8		mg/Kg		108	75 - 125
Vanadium	26	F1	46.3	90.4	F1	mg/Kg		140	75 - 125
Zinc	86	F1	46.3	108	F1	mg/Kg		48	75 - 125

Lab Sample ID: 720-88237-A-9-B MSD
Matrix: Solid
Analysis Batch: 250593

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250470

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	1.4	J F1	47.2	19.9	F1	mg/Kg		39	75 - 125	3	20
Arsenic	4.3		47.2	60.3		mg/Kg		119	75 - 125	9	20
Barium	90		47.2	139		mg/Kg		105	75 - 125	10	20
Beryllium	ND	F1	47.2	59.8	F1	mg/Kg		127	75 - 125	9	20
Cadmium	0.20	J	47.2	56.4		mg/Kg		119	75 - 125	11	20
Chromium	45	F1	47.2	128	F1	mg/Kg		175	75 - 125	15	20
Cobalt	9.1		47.2	67.9		mg/Kg		125	75 - 125	10	20
Copper	31	F1	47.2	107	F1	mg/Kg		161	75 - 125	16	20
Lead	100	F1 F2	47.2	133	F1 F2	mg/Kg		66	75 - 125	21	20
Molybdenum	0.36	J	47.2	54.6		mg/Kg		115	75 - 125	10	20
Nickel	60	F1	47.2	120	F1	mg/Kg		126	75 - 125	10	20
Selenium	ND		47.2	53.5		mg/Kg		113	75 - 125	10	20
Silver	ND	F1	23.6	30.9	F1	mg/Kg		131	75 - 125	12	20
Thallium	ND		47.2	55.4		mg/Kg		118	75 - 125	11	20

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

Lab Sample ID: 720-88237-A-9-B MSD
Matrix: Solid
Analysis Batch: 250593

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250470

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vanadium	26	F1	47.2	104	F1	mg/Kg		166	75 - 125	14	20
Zinc	86	F1	47.2	118	F1	mg/Kg		67	75 - 125	8	20

Lab Sample ID: MB 720-250513/1-A
Matrix: Solid
Analysis Batch: 250635

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250513

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Arsenic	ND		1.0	0.085	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Barium	ND		0.50	0.071	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Beryllium	ND		0.10	0.033	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Cadmium	ND		0.13	0.012	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Chromium	ND		0.50	0.053	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Cobalt	ND		0.20	0.020	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Copper	ND		1.5	0.71	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Lead	ND		0.50	0.11	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Nickel	ND		0.50	0.051	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Selenium	ND		1.0	0.15	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Silver	ND		0.25	0.051	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Thallium	ND		0.50	0.15	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Vanadium	ND		0.50	0.068	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Zinc	ND		1.5	0.64	mg/Kg		08/29/18 15:55	08/30/18 15:54	1

Lab Sample ID: LCS 720-250513/2-A
Matrix: Solid
Analysis Batch: 250635

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250513

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	46.9		mg/Kg		94	80 - 120
Arsenic	50.0	47.0		mg/Kg		94	80 - 120
Barium	50.0	52.1		mg/Kg		104	80 - 120
Beryllium	50.0	51.6		mg/Kg		103	80 - 120
Cadmium	50.0	47.1		mg/Kg		94	80 - 120
Chromium	50.0	47.6		mg/Kg		95	80 - 120
Cobalt	50.0	48.7		mg/Kg		97	80 - 120
Copper	50.0	47.1		mg/Kg		94	80 - 120
Lead	50.0	48.0		mg/Kg		96	80 - 120
Molybdenum	50.0	48.1		mg/Kg		96	80 - 120
Nickel	50.0	47.6		mg/Kg		95	80 - 120
Selenium	50.0	45.8		mg/Kg		92	80 - 120
Silver	25.0	23.8		mg/Kg		95	80 - 120
Thallium	50.0	47.9		mg/Kg		96	80 - 120
Vanadium	50.0	47.3		mg/Kg		95	80 - 120
Zinc	50.0	47.3		mg/Kg		95	80 - 120

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

Lab Sample ID: 720-88260-A-2-A MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250635 — **Prep Batch: 250513**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.2	J F1	48.1	10.9	F1	mg/Kg		20	75 - 125
Arsenic	1.6	J	48.1	57.1		mg/Kg		115	75 - 125
Barium	27	F1	48.1	85.1		mg/Kg		120	75 - 125
Beryllium	ND	F1	48.1	57.4		mg/Kg		119	75 - 125
Cadmium	0.19	J	48.1	54.3		mg/Kg		113	75 - 125
Chromium	9.9		48.1	67.8		mg/Kg		120	75 - 125
Cobalt	17		48.1	75.3		mg/Kg		120	75 - 125
Copper	120	F1	48.1	201	F1	mg/Kg		175	75 - 125
Lead	120	F1	48.1	237	F1	mg/Kg		239	75 - 125
Molybdenum	ND		48.1	53.2		mg/Kg		111	75 - 125
Nickel	5.8		48.1	60.7		mg/Kg		114	75 - 125
Selenium	ND		48.1	52.4		mg/Kg		109	75 - 125
Silver	0.24	J F1	24.0	30.4		mg/Kg		125	75 - 125
Thallium	1.1	J	48.1	52.4		mg/Kg		107	75 - 125
Vanadium	120	F1	48.1	192	F1	mg/Kg		157	75 - 125
Zinc	100	F1	48.1	181	F1	mg/Kg		163	75 - 125

Lab Sample ID: 720-88260-A-2-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250635 — **Prep Batch: 250513**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	1.2	J F1	48.5	9.31	F1	mg/Kg		17	75 - 125	15	20
Arsenic	1.6	J	48.5	57.7		mg/Kg		116	75 - 125	1	20
Barium	27	F1	48.5	104	F1	mg/Kg		158	75 - 125	20	20
Beryllium	ND	F1	48.5	63.4	F1	mg/Kg		131	75 - 125	10	20
Cadmium	0.19	J	48.5	55.7		mg/Kg		114	75 - 125	3	20
Chromium	9.9		48.5	70.4		mg/Kg		125	75 - 125	4	20
Cobalt	17		48.5	75.6		mg/Kg		120	75 - 125	0	20
Copper	120	F1	48.5	201	F1	mg/Kg		172	75 - 125	0	20
Lead	120	F1	48.5	258	F1	mg/Kg		280	75 - 125	9	20
Molybdenum	ND		48.5	54.1		mg/Kg		112	75 - 125	2	20
Nickel	5.8		48.5	61.0		mg/Kg		114	75 - 125	0	20
Selenium	ND		48.5	54.0		mg/Kg		111	75 - 125	3	20
Silver	0.24	J F1	24.3	32.1	F1	mg/Kg		131	75 - 125	5	20
Thallium	1.1	J	48.5	54.4		mg/Kg		110	75 - 125	4	20
Vanadium	120	F1	48.5	200	F1	mg/Kg		171	75 - 125	4	20
Zinc	100	F1	48.5	163		mg/Kg		123	75 - 125	11	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-250416/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250599 — **Prep Batch: 250416**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/28/18 15:53	08/30/18 12:05	1

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 720-250416/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250599 — **Prep Batch: 250416**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.814		mg/Kg		98	80 - 120

Lab Sample ID: 720-88215-A-21-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250599 — **Prep Batch: 250416**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.52	F1	0.833	1.43		mg/Kg		109	75 - 125

Lab Sample ID: 720-88215-A-21-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250599 — **Prep Batch: 250416**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.52	F1	0.833	1.61	F1	mg/Kg		131	75 - 125	12	20

Lab Sample ID: MB 720-250521/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250677 — **Prep Batch: 250521**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/29/18 15:39	08/30/18 18:10	1

Lab Sample ID: LCS 720-250521/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250677 — **Prep Batch: 250521**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.826		mg/Kg		99	80 - 120

Lab Sample ID: 720-88237-A-9-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250677 — **Prep Batch: 250521**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.12		0.769	0.801		mg/Kg		88	75 - 125

Lab Sample ID: 720-88237-A-9-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250677 — **Prep Batch: 250521**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.12		0.781	0.844		mg/Kg		93	75 - 125	5	20

Lab Sample ID: MB 720-250548/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250679 — **Prep Batch: 250548**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/29/18 21:54	08/30/18 21:21	1

QC Sample Results

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

TestAmerica Job ID: 720-88239-1

Lab Sample ID: LCS 720-250548/2-A
Matrix: Solid
Analysis Batch: 250679

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250548

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.833	0.820		mg/Kg		98	80 - 120		

Lab Sample ID: 720-88259-B-1-G MS
Matrix: Solid
Analysis Batch: 250679

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250548

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.12		0.781	0.907		mg/Kg		101	75 - 125		

Lab Sample ID: 720-88259-B-1-H MSD
Matrix: Solid
Analysis Batch: 250679

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250548

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.12		0.806	0.941		mg/Kg		102	75 - 125	4	20

QC Association Summary

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

TestAmerica Job ID: 720-88239-1

GC/MS VOA

Prep Batch: 250473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-1	DG-C7S-0.5-1	Total/NA	Solid	5035	
720-88239-2	DG-C7S-3.5-4	Total/NA	Solid	5035	
720-88239-4	DG-E7S-0.5-1	Total/NA	Solid	5035	
720-88239-6	DG-E7S-9.5-10	Total/NA	Solid	5035	

Analysis Batch: 250528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-1	DG-C7S-0.5-1	Total/NA	Solid	8260B	250473
720-88239-2	DG-C7S-3.5-4	Total/NA	Solid	8260B	250473
720-88239-4	DG-E7S-0.5-1	Total/NA	Solid	8260B	250473
720-88239-6	DG-E7S-9.5-10	Total/NA	Solid	8260B	250473
720-88239-7	DG-G7S-0.5-1	Total/NA	Solid	8260B	250544
720-88239-10	DG-B10S-3.5-4	Total/NA	Solid	8260B	250544
720-88239-11	DG-I7S-0.5-1	Total/NA	Solid	8260B	250544
720-88239-12	DG-I7S-3.5-4	Total/NA	Solid	8260B	250544
720-88239-14	DG-M7S-3.5-4	Total/NA	Solid	8260B	250544
720-88239-17	DG-DE89-0.5-1	Total/NA	Solid	8260B	250544
MB 720-250528/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250528/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250528/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250528/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250528/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 250532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-20	DG-B9S-9.5-10	Total/NA	Solid	8260B	250544
MB 720-250532/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250532/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250532/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250532/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250532/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 250544

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-7	DG-G7S-0.5-1	Total/NA	Solid	5035	
720-88239-10	DG-B10S-3.5-4	Total/NA	Solid	5035	
720-88239-11	DG-I7S-0.5-1	Total/NA	Solid	5035	
720-88239-12	DG-I7S-3.5-4	Total/NA	Solid	5035	
720-88239-14	DG-M7S-3.5-4	Total/NA	Solid	5035	
720-88239-17	DG-DE89-0.5-1	Total/NA	Solid	5035	
720-88239-20	DG-B9S-9.5-10	Total/NA	Solid	5035	

Analysis Batch: 250555

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-8	DG-G7S-3.5-4	Total/NA	Solid	8260B	250589
720-88239-9	DG-B10S-0.5-1	Total/NA	Solid	8260B	250589
720-88239-13	DG-M7S-0.5-1	Total/NA	Solid	8260B	250589
720-88239-19	DG-DE89-9.5-10	Total/NA	Solid	8260B	250589
MB 720-250555/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250555/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250555/7	Lab Control Sample	Total/NA	Solid	8260B	

GC/MS VOA (Continued)

Analysis Batch: 250555 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 720-250555/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250555/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 250589

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-8	DG-G7S-3.5-4	Total/NA	Solid	5035	
720-88239-9	DG-B10S-0.5-1	Total/NA	Solid	5035	
720-88239-13	DG-M7S-0.5-1	Total/NA	Solid	5035	
720-88239-19	DG-DE89-9.5-10	Total/NA	Solid	5035	

Analysis Batch: 250755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-3	DG-C7S-9.5-10	Total/NA	Solid	8260B	250800
720-88239-5	DG-E7S-3.5-4	Total/NA	Solid	8260B	250789
720-88239-15	DG-B9S-0.5-1	Total/NA	Solid	8260B	250800
720-88239-16	DG-B9S-3.5-4	Total/NA	Solid	8260B	250800
720-88239-18	DG-DE89-3.5-4	Total/NA	Solid	8260B	250789
MB 720-250755/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250755/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250755/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250755/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250755/8	Lab Control Sample Dup	Total/NA	Solid	8260B	
720-88239-3 MS	DG-C7S-9.5-10	Total/NA	Solid	8260B	250812
720-88239-3 MSD	DG-C7S-9.5-10	Total/NA	Solid	8260B	250812

Prep Batch: 250789

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-5	DG-E7S-3.5-4	Total/NA	Solid	5030B	
720-88239-18	DG-DE89-3.5-4	Total/NA	Solid	5030B	

Prep Batch: 250800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-3	DG-C7S-9.5-10	Total/NA	Solid	5030B	
720-88239-15	DG-B9S-0.5-1	Total/NA	Solid	5030B	
720-88239-16	DG-B9S-3.5-4	Total/NA	Solid	5030B	

Prep Batch: 250812

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-3 MS	DG-C7S-9.5-10	Total/NA	Solid	5030B	
720-88239-3 MSD	DG-C7S-9.5-10	Total/NA	Solid	5030B	

GC/MS Semi VOA

Prep Batch: 250520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-5	DG-E7S-3.5-4	Total/NA	Solid	3546	
720-88239-6	DG-E7S-9.5-10	Total/NA	Solid	3546	
720-88239-7	DG-G7S-0.5-1	Total/NA	Solid	3546	
720-88239-8	DG-G7S-3.5-4	Total/NA	Solid	3546	
720-88239-9	DG-B10S-0.5-1	Total/NA	Solid	3546	

GC/MS Semi VOA (Continued)

Prep Batch: 250520 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-10	DG-B10S-3.5-4	Total/NA	Solid	3546	
720-88239-11	DG-I7S-0.5-1	Total/NA	Solid	3546	
720-88239-12	DG-I7S-3.5-4	Total/NA	Solid	3546	
720-88239-13	DG-M7S-0.5-1	Total/NA	Solid	3546	
720-88239-14	DG-M7S-3.5-4	Total/NA	Solid	3546	
720-88239-15	DG-B9S-0.5-1	Total/NA	Solid	3546	
720-88239-16	DG-B9S-3.5-4	Total/NA	Solid	3546	
720-88239-17	DG-DE89-0.5-1	Total/NA	Solid	3546	
MB 720-250520/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250520/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88242-D-2-B MS	Matrix Spike	Total/NA	Solid	3546	
720-88242-D-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 250578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250520/1-A	Method Blank	Total/NA	Solid	8270C SIM	250520
LCS 720-250520/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	250520
720-88242-D-2-B MS	Matrix Spike	Total/NA	Solid	8270C SIM	250520
720-88242-D-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8270C SIM	250520

Prep Batch: 250580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-18	DG-DE89-3.5-4	Total/NA	Solid	3546	
720-88239-20	DG-B9S-9.5-10	Total/NA	Solid	3546	
MB 720-250580/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250580/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88242-D-13-H MS	Matrix Spike	Total/NA	Solid	3546	
720-88242-D-13-I MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 250742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-5	DG-E7S-3.5-4	Total/NA	Solid	8270C SIM	250520
720-88239-6	DG-E7S-9.5-10	Total/NA	Solid	8270C SIM	250520
720-88239-7	DG-G7S-0.5-1	Total/NA	Solid	8270C SIM	250520
720-88239-8	DG-G7S-3.5-4	Total/NA	Solid	8270C SIM	250520
720-88239-10	DG-B10S-3.5-4	Total/NA	Solid	8270C SIM	250520
720-88239-11	DG-I7S-0.5-1	Total/NA	Solid	8270C SIM	250520
720-88239-12	DG-I7S-3.5-4	Total/NA	Solid	8270C SIM	250520
720-88239-13	DG-M7S-0.5-1	Total/NA	Solid	8270C SIM	250520
720-88239-14	DG-M7S-3.5-4	Total/NA	Solid	8270C SIM	250520
720-88239-15	DG-B9S-0.5-1	Total/NA	Solid	8270C SIM	250520
720-88239-16	DG-B9S-3.5-4	Total/NA	Solid	8270C SIM	250520
720-88239-17	DG-DE89-0.5-1	Total/NA	Solid	8270C SIM	250520
720-88239-20	DG-B9S-9.5-10	Total/NA	Solid	8270C SIM	250580
MB 720-250580/1-A	Method Blank	Total/NA	Solid	8270C SIM	250580
LCS 720-250580/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	250580

Analysis Batch: 250745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-18	DG-DE89-3.5-4	Total/NA	Solid	8270C SIM	250580
720-88242-D-13-H MS	Matrix Spike	Total/NA	Solid	8270C SIM	250580

GC/MS Semi VOA (Continued)

Analysis Batch: 250745 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88242-D-13-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8270C SIM	250580

Analysis Batch: 250799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-9	DG-B10S-0.5-1	Total/NA	Solid	8270C SIM	250520

Prep Batch: 250853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-1	DG-C7S-0.5-1	Total/NA	Solid	3546	
720-88239-2	DG-C7S-3.5-4	Total/NA	Solid	3546	
720-88239-3	DG-C7S-9.5-10	Total/NA	Solid	3546	
720-88239-4	DG-E7S-0.5-1	Total/NA	Solid	3546	
720-88239-19	DG-DE89-9.5-10	Total/NA	Solid	3546	
MB 720-250853/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250853/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88241-D-1-F MS	Matrix Spike	Total/NA	Solid	3546	
720-88241-D-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 250960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-1	DG-C7S-0.5-1	Total/NA	Solid	8270C SIM	250853
720-88239-2	DG-C7S-3.5-4	Total/NA	Solid	8270C SIM	250853
720-88239-3	DG-C7S-9.5-10	Total/NA	Solid	8270C SIM	250853
720-88239-4	DG-E7S-0.5-1	Total/NA	Solid	8270C SIM	250853
720-88239-19	DG-DE89-9.5-10	Total/NA	Solid	8270C SIM	250853
MB 720-250853/1-A	Method Blank	Total/NA	Solid	8270C SIM	250853
LCS 720-250853/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	250853
720-88241-D-1-F MS	Matrix Spike	Total/NA	Solid	8270C SIM	250853
720-88241-D-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8270C SIM	250853

GC Semi VOA

Prep Batch: 250382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-1	DG-C7S-0.5-1	Total/NA	Solid	3546	
720-88239-2	DG-C7S-3.5-4	Total/NA	Solid	3546	
720-88239-3	DG-C7S-9.5-10	Total/NA	Solid	3546	
720-88239-4	DG-E7S-0.5-1	Total/NA	Solid	3546	
720-88239-5	DG-E7S-3.5-4	Total/NA	Solid	3546	
720-88239-6	DG-E7S-9.5-10	Total/NA	Solid	3546	
720-88239-7	DG-G7S-0.5-1	Total/NA	Solid	3546	
720-88239-8	DG-G7S-3.5-4	Total/NA	Solid	3546	
MB 720-250382/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250382/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88239-7 MS	DG-G7S-0.5-1	Total/NA	Solid	3546	
720-88239-7 MSD	DG-G7S-0.5-1	Total/NA	Solid	3546	

Prep Batch: 250393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-1	DG-C7S-0.5-1	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 250393 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-2	DG-C7S-3.5-4	Total/NA	Solid	3546	
720-88239-3	DG-C7S-9.5-10	Total/NA	Solid	3546	
720-88239-4	DG-E7S-0.5-1	Total/NA	Solid	3546	
720-88239-5	DG-E7S-3.5-4	Total/NA	Solid	3546	
720-88239-6	DG-E7S-9.5-10	Total/NA	Solid	3546	
720-88239-7	DG-G7S-0.5-1	Total/NA	Solid	3546	
720-88239-8	DG-G7S-3.5-4	Total/NA	Solid	3546	
720-88239-9	DG-B10S-0.5-1	Total/NA	Solid	3546	
MB 720-250393/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250393/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88216-A-9-S MS	Matrix Spike	Total/NA	Solid	3546	
720-88216-A-9-T MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 250456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-7	DG-G7S-0.5-1	Total/NA	Solid	8015B	250382
MB 720-250382/1-A	Method Blank	Total/NA	Solid	8015B	250382
MB 720-250461/1-A	Method Blank	Total/NA	Solid	8015B	250461
LCS 720-250382/2-A	Lab Control Sample	Total/NA	Solid	8015B	250382
LCS 720-250461/2-A	Lab Control Sample	Total/NA	Solid	8015B	250461
720-88239-7 MS	DG-G7S-0.5-1	Total/NA	Solid	8015B	250382
720-88239-7 MSD	DG-G7S-0.5-1	Total/NA	Solid	8015B	250382
720-88240-D-3-G MS	Matrix Spike	Total/NA	Solid	8015B	250461
720-88240-D-3-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	250461

Prep Batch: 250461

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-19	DG-DE89-9.5-10	Total/NA	Solid	3546	
MB 720-250461/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250461/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88240-D-3-G MS	Matrix Spike	Total/NA	Solid	3546	
720-88240-D-3-H MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Prep Batch: 250498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-9	DG-B10S-0.5-1	Total/NA	Solid	3546	
720-88239-10	DG-B10S-3.5-4	Total/NA	Solid	3546	
720-88239-11	DG-I7S-0.5-1	Total/NA	Solid	3546	
720-88239-12	DG-I7S-3.5-4	Total/NA	Solid	3546	
720-88239-13	DG-M7S-0.5-1	Total/NA	Solid	3546	
720-88239-14	DG-M7S-3.5-4	Total/NA	Solid	3546	
720-88239-15	DG-B9S-0.5-1	Total/NA	Solid	3546	
720-88239-16	DG-B9S-3.5-4	Total/NA	Solid	3546	
720-88239-17	DG-DE89-0.5-1	Total/NA	Solid	3546	
720-88239-18	DG-DE89-3.5-4	Total/NA	Solid	3546	
720-88239-20	DG-B9S-9.5-10	Total/NA	Solid	3546	
MB 720-250498/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250498/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88239-12 MS	DG-I7S-3.5-4	Total/NA	Solid	3546	
720-88239-12 MSD	DG-I7S-3.5-4	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 250531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-10	DG-B10S-3.5-4	Total/NA	Solid	3546	
720-88239-11	DG-I7S-0.5-1	Total/NA	Solid	3546	
720-88239-12	DG-I7S-3.5-4	Total/NA	Solid	3546	
720-88239-13	DG-M7S-0.5-1	Total/NA	Solid	3546	
720-88239-14	DG-M7S-3.5-4	Total/NA	Solid	3546	
720-88239-15	DG-B9S-0.5-1	Total/NA	Solid	3546	
720-88239-16	DG-B9S-3.5-4	Total/NA	Solid	3546	
720-88239-20	DG-B9S-9.5-10	Total/NA	Solid	3546	
MB 720-250531/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250531/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88239-13 MS	DG-M7S-0.5-1	Total/NA	Solid	3546	
720-88239-13 MSD	DG-M7S-0.5-1	Total/NA	Solid	3546	

Analysis Batch: 250569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-1	DG-C7S-0.5-1	Total/NA	Solid	8015B	250382
720-88239-2	DG-C7S-3.5-4	Total/NA	Solid	8015B	250382
720-88239-3	DG-C7S-9.5-10	Total/NA	Solid	8015B	250382
720-88239-4	DG-E7S-0.5-1	Total/NA	Solid	8015B	250382
720-88239-5	DG-E7S-3.5-4	Total/NA	Solid	8015B	250382
720-88239-6	DG-E7S-9.5-10	Total/NA	Solid	8015B	250382
720-88239-8	DG-G7S-3.5-4	Total/NA	Solid	8015B	250382

Analysis Batch: 250609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250393/1-A	Method Blank	Total/NA	Solid	8081A	250393
LCS 720-250393/2-A	Lab Control Sample	Total/NA	Solid	8081A	250393
720-88216-A-9-S MS	Matrix Spike	Total/NA	Solid	8081A	250393
720-88216-A-9-T MSD	Matrix Spike Duplicate	Total/NA	Solid	8081A	250393

Analysis Batch: 250653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-12	DG-I7S-3.5-4	Total/NA	Solid	8015B	250498
720-88239-14	DG-M7S-3.5-4	Total/NA	Solid	8015B	250498
720-88239-16	DG-B9S-3.5-4	Total/NA	Solid	8015B	250498
720-88239-19	DG-DE89-9.5-10	Total/NA	Solid	8015B	250461
MB 720-250498/1-A	Method Blank	Total/NA	Solid	8015B	250498
LCS 720-250498/2-A	Lab Control Sample	Total/NA	Solid	8015B	250498
720-88239-12 MS	DG-I7S-3.5-4	Total/NA	Solid	8015B	250498
720-88239-12 MSD	DG-I7S-3.5-4	Total/NA	Solid	8015B	250498

Analysis Batch: 250656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-9	DG-B10S-0.5-1	Total/NA	Solid	8015B	250498
720-88239-10	DG-B10S-3.5-4	Total/NA	Solid	8015B	250498
720-88239-11	DG-I7S-0.5-1	Total/NA	Solid	8015B	250498
720-88239-13	DG-M7S-0.5-1	Total/NA	Solid	8015B	250498
720-88239-15	DG-B9S-0.5-1	Total/NA	Solid	8015B	250498
720-88239-17	DG-DE89-0.5-1	Total/NA	Solid	8015B	250498
720-88239-18	DG-DE89-3.5-4	Total/NA	Solid	8015B	250498
720-88239-20	DG-B9S-9.5-10	Total/NA	Solid	8015B	250498

QC Association Summary

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

TestAmerica Job ID: 720-88239-1

Analysis Batch: 250737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-1	DG-C7S-0.5-1	Total/NA	Solid	8081A	250393
720-88239-2	DG-C7S-3.5-4	Total/NA	Solid	8081A	250393
720-88239-3	DG-C7S-9.5-10	Total/NA	Solid	8081A	250393
720-88239-4	DG-E7S-0.5-1	Total/NA	Solid	8081A	250393
720-88239-5	DG-E7S-3.5-4	Total/NA	Solid	8081A	250393
720-88239-6	DG-E7S-9.5-10	Total/NA	Solid	8081A	250393
720-88239-7	DG-G7S-0.5-1	Total/NA	Solid	8081A	250393
720-88239-8	DG-G7S-3.5-4	Total/NA	Solid	8081A	250393
720-88239-9	DG-B10S-0.5-1	Total/NA	Solid	8081A	250393

Analysis Batch: 250746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-10	DG-B10S-3.5-4	Total/NA	Solid	8081A	250531
720-88239-11	DG-I7S-0.5-1	Total/NA	Solid	8081A	250531
720-88239-12	DG-I7S-3.5-4	Total/NA	Solid	8081A	250531
720-88239-13	DG-M7S-0.5-1	Total/NA	Solid	8081A	250531
720-88239-14	DG-M7S-3.5-4	Total/NA	Solid	8081A	250531
720-88239-15	DG-B9S-0.5-1	Total/NA	Solid	8081A	250531
720-88239-16	DG-B9S-3.5-4	Total/NA	Solid	8081A	250531
720-88239-20	DG-B9S-9.5-10	Total/NA	Solid	8081A	250531
MB 720-250531/1-A	Method Blank	Total/NA	Solid	8081A	250531
LCS 720-250531/2-A	Lab Control Sample	Total/NA	Solid	8081A	250531
720-88239-13 MS	DG-M7S-0.5-1	Total/NA	Solid	8081A	250531
720-88239-13 MSD	DG-M7S-0.5-1	Total/NA	Solid	8081A	250531

Prep Batch: 343096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-1	DG-C7S-0.5-1	Total/NA	Solid	3540C	
720-88239-2	DG-C7S-3.5-4	Total/NA	Solid	3540C	
720-88239-3	DG-C7S-9.5-10	Total/NA	Solid	3540C	
720-88239-4	DG-E7S-0.5-1	Total/NA	Solid	3540C	
720-88239-5	DG-E7S-3.5-4	Total/NA	Solid	3540C	
720-88239-6	DG-E7S-9.5-10	Total/NA	Solid	3540C	
720-88239-7	DG-G7S-0.5-1	Total/NA	Solid	3540C	
720-88239-8	DG-G7S-3.5-4	Total/NA	Solid	3540C	
720-88239-9	DG-B10S-0.5-1	Total/NA	Solid	3540C	
720-88239-10	DG-B10S-3.5-4	Total/NA	Solid	3540C	
720-88239-11	DG-I7S-0.5-1	Total/NA	Solid	3540C	
720-88239-12	DG-I7S-3.5-4	Total/NA	Solid	3540C	
720-88239-13	DG-M7S-0.5-1	Total/NA	Solid	3540C	
720-88239-14	DG-M7S-3.5-4	Total/NA	Solid	3540C	
720-88239-15	DG-B9S-0.5-1	Total/NA	Solid	3540C	
720-88239-16	DG-B9S-3.5-4	Total/NA	Solid	3540C	
720-88239-17	DG-DE89-0.5-1	Total/NA	Solid	3540C	
720-88239-18	DG-DE89-3.5-4	Total/NA	Solid	3540C	
720-88239-19	DG-DE89-9.5-10	Total/NA	Solid	3540C	
MB 240-343096/23-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-343096/24-A	Lab Control Sample	Total/NA	Solid	3540C	
720-88218-F-21-B MS	Matrix Spike	Total/NA	Solid	3540C	
720-88218-F-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3540C	

GC Semi VOA (Continued)

Analysis Batch: 343327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-1	DG-C7S-0.5-1	Total/NA	Solid	8082	343096
720-88239-2	DG-C7S-3.5-4	Total/NA	Solid	8082	343096
720-88239-3	DG-C7S-9.5-10	Total/NA	Solid	8082	343096
720-88239-4	DG-E7S-0.5-1	Total/NA	Solid	8082	343096
720-88239-5	DG-E7S-3.5-4	Total/NA	Solid	8082	343096
720-88239-6	DG-E7S-9.5-10	Total/NA	Solid	8082	343096
720-88239-7	DG-G7S-0.5-1	Total/NA	Solid	8082	343096
720-88239-8	DG-G7S-3.5-4	Total/NA	Solid	8082	343096
720-88239-9	DG-B10S-0.5-1	Total/NA	Solid	8082	343096
720-88239-10	DG-B10S-3.5-4	Total/NA	Solid	8082	343096
720-88239-11	DG-I7S-0.5-1	Total/NA	Solid	8082	343096
720-88239-12	DG-I7S-3.5-4	Total/NA	Solid	8082	343096

Analysis Batch: 343330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-13	DG-M7S-0.5-1	Total/NA	Solid	8082	343096
720-88239-14	DG-M7S-3.5-4	Total/NA	Solid	8082	343096
720-88239-15	DG-B9S-0.5-1	Total/NA	Solid	8082	343096
720-88239-16	DG-B9S-3.5-4	Total/NA	Solid	8082	343096
720-88239-17	DG-DE89-0.5-1	Total/NA	Solid	8082	343096
720-88239-18	DG-DE89-3.5-4	Total/NA	Solid	8082	343096
720-88239-19	DG-DE89-9.5-10	Total/NA	Solid	8082	343096
MB 240-343096/23-A	Method Blank	Total/NA	Solid	8082	343096
LCS 240-343096/24-A	Lab Control Sample	Total/NA	Solid	8082	343096
720-88218-F-21-B MS	Matrix Spike	Total/NA	Solid	8082	343096
720-88218-F-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8082	343096

Prep Batch: 343472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-20	DG-B9S-9.5-10	Total/NA	Solid	3540C	
MB 240-343472/7-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-343472/8-A	Lab Control Sample	Total/NA	Solid	3540C	
720-88291-F-10-B MS	Matrix Spike	Total/NA	Solid	3540C	
720-88291-F-10-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3540C	

Analysis Batch: 343587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-20	DG-B9S-9.5-10	Total/NA	Solid	8082	343472
MB 240-343472/7-A	Method Blank	Total/NA	Solid	8082	343472
LCS 240-343472/8-A	Lab Control Sample	Total/NA	Solid	8082	343472
720-88291-F-10-B MS	Matrix Spike	Total/NA	Solid	8082	343472
720-88291-F-10-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8082	343472

Metals

Prep Batch: 250365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-10	DG-B10S-3.5-4	Total/NA	Solid	3050B	
720-88239-11	DG-I7S-0.5-1	Total/NA	Solid	3050B	
720-88239-12	DG-I7S-3.5-4	Total/NA	Solid	3050B	

Metals (Continued)

Prep Batch: 250365 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-13	DG-M7S-0.5-1	Total/NA	Solid	3050B	
720-88239-14	DG-M7S-3.5-4	Total/NA	Solid	3050B	
720-88239-15	DG-B9S-0.5-1	Total/NA	Solid	3050B	
720-88239-16	DG-B9S-3.5-4	Total/NA	Solid	3050B	
720-88239-17	DG-DE89-0.5-1	Total/NA	Solid	3050B	
720-88239-18	DG-DE89-3.5-4	Total/NA	Solid	3050B	
720-88239-19	DG-DE89-9.5-10	Total/NA	Solid	3050B	
MB 720-250365/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250365/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88216-A-17-Y MS	Matrix Spike	Total/NA	Solid	3050B	
720-88216-A-17-Z MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Prep Batch: 250416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-10	DG-B10S-3.5-4	Total/NA	Solid	7471A	
720-88239-11	DG-I7S-0.5-1	Total/NA	Solid	7471A	
720-88239-12	DG-I7S-3.5-4	Total/NA	Solid	7471A	
720-88239-13	DG-M7S-0.5-1	Total/NA	Solid	7471A	
720-88239-14	DG-M7S-3.5-4	Total/NA	Solid	7471A	
720-88239-15	DG-B9S-0.5-1	Total/NA	Solid	7471A	
720-88239-16	DG-B9S-3.5-4	Total/NA	Solid	7471A	
720-88239-17	DG-DE89-0.5-1	Total/NA	Solid	7471A	
MB 720-250416/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250416/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88215-A-21-B MS	Matrix Spike	Total/NA	Solid	7471A	
720-88215-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	

Prep Batch: 250470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-1	DG-C7S-0.5-1	Total/NA	Solid	3050B	
720-88239-2	DG-C7S-3.5-4	Total/NA	Solid	3050B	
720-88239-3	DG-C7S-9.5-10	Total/NA	Solid	3050B	
720-88239-4	DG-E7S-0.5-1	Total/NA	Solid	3050B	
720-88239-5	DG-E7S-3.5-4	Total/NA	Solid	3050B	
720-88239-6	DG-E7S-9.5-10	Total/NA	Solid	3050B	
720-88239-7	DG-G7S-0.5-1	Total/NA	Solid	3050B	
720-88239-8	DG-G7S-3.5-4	Total/NA	Solid	3050B	
720-88239-9	DG-B10S-0.5-1	Total/NA	Solid	3050B	
MB 720-250470/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250470/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88237-A-9-A MS	Matrix Spike	Total/NA	Solid	3050B	
720-88237-A-9-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Prep Batch: 250513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-20	DG-B9S-9.5-10	Total/NA	Solid	3050B	
MB 720-250513/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250513/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88260-A-2-A MS	Matrix Spike	Total/NA	Solid	3050B	
720-88260-A-2-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Metals (Continued)

Prep Batch: 250521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-1	DG-C7S-0.5-1	Total/NA	Solid	7471A	
720-88239-2	DG-C7S-3.5-4	Total/NA	Solid	7471A	
720-88239-3	DG-C7S-9.5-10	Total/NA	Solid	7471A	
720-88239-4	DG-E7S-0.5-1	Total/NA	Solid	7471A	
720-88239-5	DG-E7S-3.5-4	Total/NA	Solid	7471A	
MB 720-250521/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250521/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88237-A-9-D MS	Matrix Spike	Total/NA	Solid	7471A	
720-88237-A-9-E MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	

Prep Batch: 250548

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-6	DG-E7S-9.5-10	Total/NA	Solid	7471A	
720-88239-7	DG-G7S-0.5-1	Total/NA	Solid	7471A	
720-88239-8	DG-G7S-3.5-4	Total/NA	Solid	7471A	
720-88239-9	DG-B10S-0.5-1	Total/NA	Solid	7471A	
720-88239-18	DG-DE89-3.5-4	Total/NA	Solid	7471A	
720-88239-19	DG-DE89-9.5-10	Total/NA	Solid	7471A	
720-88239-20	DG-B9S-9.5-10	Total/NA	Solid	7471A	
MB 720-250548/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250548/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88259-B-1-G MS	Matrix Spike	Total/NA	Solid	7471A	
720-88259-B-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	

Analysis Batch: 250585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-10	DG-B10S-3.5-4	Total/NA	Solid	6010B	250365
720-88239-11	DG-I7S-0.5-1	Total/NA	Solid	6010B	250365
720-88239-12	DG-I7S-3.5-4	Total/NA	Solid	6010B	250365
720-88239-13	DG-M7S-0.5-1	Total/NA	Solid	6010B	250365
720-88239-14	DG-M7S-3.5-4	Total/NA	Solid	6010B	250365
720-88239-15	DG-B9S-0.5-1	Total/NA	Solid	6010B	250365
720-88239-16	DG-B9S-3.5-4	Total/NA	Solid	6010B	250365
720-88239-17	DG-DE89-0.5-1	Total/NA	Solid	6010B	250365
720-88239-18	DG-DE89-3.5-4	Total/NA	Solid	6010B	250365
720-88239-19	DG-DE89-9.5-10	Total/NA	Solid	6010B	250365
MB 720-250365/1-A	Method Blank	Total/NA	Solid	6010B	250365
LCS 720-250365/2-A	Lab Control Sample	Total/NA	Solid	6010B	250365
720-88216-A-17-Y MS	Matrix Spike	Total/NA	Solid	6010B	250365
720-88216-A-17-Z MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250365

Analysis Batch: 250593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-1	DG-C7S-0.5-1	Total/NA	Solid	6010B	250470
720-88239-2	DG-C7S-3.5-4	Total/NA	Solid	6010B	250470
720-88239-3	DG-C7S-9.5-10	Total/NA	Solid	6010B	250470
720-88239-4	DG-E7S-0.5-1	Total/NA	Solid	6010B	250470
720-88239-5	DG-E7S-3.5-4	Total/NA	Solid	6010B	250470
720-88239-6	DG-E7S-9.5-10	Total/NA	Solid	6010B	250470
720-88239-7	DG-G7S-0.5-1	Total/NA	Solid	6010B	250470
720-88239-8	DG-G7S-3.5-4	Total/NA	Solid	6010B	250470

Metals (Continued)

Analysis Batch: 250593 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-9	DG-B10S-0.5-1	Total/NA	Solid	6010B	250470
MB 720-250470/1-A	Method Blank	Total/NA	Solid	6010B	250470
LCS 720-250470/2-A	Lab Control Sample	Total/NA	Solid	6010B	250470
720-88237-A-9-A MS	Matrix Spike	Total/NA	Solid	6010B	250470
720-88237-A-9-B MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250470

Analysis Batch: 250599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-10	DG-B10S-3.5-4	Total/NA	Solid	7471A	250416
720-88239-11	DG-I7S-0.5-1	Total/NA	Solid	7471A	250416
720-88239-12	DG-I7S-3.5-4	Total/NA	Solid	7471A	250416
720-88239-13	DG-M7S-0.5-1	Total/NA	Solid	7471A	250416
720-88239-14	DG-M7S-3.5-4	Total/NA	Solid	7471A	250416
720-88239-15	DG-B9S-0.5-1	Total/NA	Solid	7471A	250416
720-88239-16	DG-B9S-3.5-4	Total/NA	Solid	7471A	250416
720-88239-17	DG-DE89-0.5-1	Total/NA	Solid	7471A	250416
MB 720-250416/1-A	Method Blank	Total/NA	Solid	7471A	250416
LCS 720-250416/2-A	Lab Control Sample	Total/NA	Solid	7471A	250416
720-88215-A-21-B MS	Matrix Spike	Total/NA	Solid	7471A	250416
720-88215-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	250416

Analysis Batch: 250635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-20	DG-B9S-9.5-10	Total/NA	Solid	6010B	250513
MB 720-250513/1-A	Method Blank	Total/NA	Solid	6010B	250513
LCS 720-250513/2-A	Lab Control Sample	Total/NA	Solid	6010B	250513
720-88260-A-2-A MS	Matrix Spike	Total/NA	Solid	6010B	250513
720-88260-A-2-B MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250513

Analysis Batch: 250677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-1	DG-C7S-0.5-1	Total/NA	Solid	7471A	250521
720-88239-2	DG-C7S-3.5-4	Total/NA	Solid	7471A	250521
720-88239-3	DG-C7S-9.5-10	Total/NA	Solid	7471A	250521
720-88239-4	DG-E7S-0.5-1	Total/NA	Solid	7471A	250521
720-88239-5	DG-E7S-3.5-4	Total/NA	Solid	7471A	250521
MB 720-250521/1-A	Method Blank	Total/NA	Solid	7471A	250521
LCS 720-250521/2-A	Lab Control Sample	Total/NA	Solid	7471A	250521
720-88237-A-9-D MS	Matrix Spike	Total/NA	Solid	7471A	250521
720-88237-A-9-E MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	250521

Analysis Batch: 250679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-6	DG-E7S-9.5-10	Total/NA	Solid	7471A	250548
720-88239-7	DG-G7S-0.5-1	Total/NA	Solid	7471A	250548
720-88239-8	DG-G7S-3.5-4	Total/NA	Solid	7471A	250548
720-88239-9	DG-B10S-0.5-1	Total/NA	Solid	7471A	250548
720-88239-18	DG-DE89-3.5-4	Total/NA	Solid	7471A	250548
720-88239-19	DG-DE89-9.5-10	Total/NA	Solid	7471A	250548
720-88239-20	DG-B9S-9.5-10	Total/NA	Solid	7471A	250548
MB 720-250548/1-A	Method Blank	Total/NA	Solid	7471A	250548

Metals (Continued)

Analysis Batch: 250679 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-250548/2-A	Lab Control Sample	Total/NA	Solid	7471A	250548
720-88259-B-1-G MS	Matrix Spike	Total/NA	Solid	7471A	250548
720-88259-B-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	250548

Lab Chronicle

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-C7S-0.5-1

Lab Sample ID: 720-88239-1
Date Collected: 08/24/18 07:50
Matrix: Solid
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250473	08/25/18 03:05	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250528	08/29/18 22:21	A1C	TAL PLS
Total/NA	Prep	3546			250853	09/04/18 17:46	WGR	TAL PLS
Total/NA	Analysis	8270C SIM		1	250960	09/06/18 04:32	LPL	TAL PLS
Total/NA	Prep	3546			250382	08/28/18 11:24	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250569	08/30/18 23:43	JXL	TAL PLS
Total/NA	Prep	3546			250393	08/28/18 13:36	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250737	09/01/18 06:15	JZT	TAL PLS
Total/NA	Prep	3540C			343096	08/29/18 14:18	AMT	TAL CAN
Total/NA	Analysis	8082		1	343327	08/31/18 08:21	KMG	TAL CAN
Total/NA	Prep	3050B			250470	08/29/18 09:32	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250593	08/30/18 11:55	BKR	TAL PLS
Total/NA	Prep	7471A			250521	08/29/18 15:39	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250677	08/30/18 19:04	OBI	TAL PLS

Client Sample ID: DG-C7S-3.5-4

Lab Sample ID: 720-88239-2
Date Collected: 08/24/18 08:00
Matrix: Solid
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250473	08/25/18 03:05	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250528	08/29/18 22:49	A1C	TAL PLS
Total/NA	Prep	3546			250853	09/04/18 17:46	WGR	TAL PLS
Total/NA	Analysis	8270C SIM		1	250960	09/06/18 04:56	LPL	TAL PLS
Total/NA	Prep	3546			250382	08/28/18 11:24	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250569	08/30/18 22:30	JXL	TAL PLS
Total/NA	Prep	3546			250393	08/28/18 13:36	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250737	09/01/18 06:31	JZT	TAL PLS
Total/NA	Prep	3540C			343096	08/29/18 14:18	AMT	TAL CAN
Total/NA	Analysis	8082		1	343327	08/31/18 08:43	KMG	TAL CAN
Total/NA	Prep	3050B			250470	08/29/18 09:32	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250593	08/30/18 11:59	BKR	TAL PLS
Total/NA	Prep	7471A			250521	08/29/18 15:39	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250677	08/30/18 19:06	OBI	TAL PLS

Client Sample ID: DG-C7S-9.5-10

Lab Sample ID: 720-88239-3
Date Collected: 08/24/18 08:05
Matrix: Solid
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			250800	09/04/18 11:29	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250755	09/04/18 12:22	JRM	TAL PLS
Total/NA	Prep	3546			250853	09/04/18 20:14	WGR	TAL PLS

Lab Chronicle

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-C7S-9.5-10 — Lab Sample ID: 720-88239-3

Date Collected: 08/24/18 08:05 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C SIM		1	250960	09/06/18 05:43	LPL	TAL PLS
Total/NA	Prep	3546			250382	08/28/18 11:24	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250569	08/30/18 22:54	JXL	TAL PLS
Total/NA	Prep	3546			250393	08/28/18 13:36	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250737	09/01/18 06:48	JZT	TAL PLS
Total/NA	Prep	3540C			343096	08/29/18 14:18	AMT	TAL CAN
Total/NA	Analysis	8082		1	343327	08/31/18 09:04	KMG	TAL CAN
Total/NA	Prep	3050B			250470	08/29/18 09:32	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250593	08/30/18 10:53	BKR	TAL PLS
Total/NA	Prep	7471A			250521	08/29/18 15:39	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250677	08/30/18 19:09	OBI	TAL PLS

Client Sample ID: DG-E7S-0.5-1 — Lab Sample ID: 720-88239-4

Date Collected: 08/24/18 08:25 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250473	08/25/18 03:05	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250528	08/29/18 23:46	A1C	TAL PLS
Total/NA	Prep	3546			250853	09/04/18 17:46	WGR	TAL PLS
Total/NA	Analysis	8270C SIM		1	250960	09/06/18 05:19	LPL	TAL PLS
Total/NA	Prep	3546			250382	08/28/18 11:24	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250569	08/30/18 23:18	JXL	TAL PLS
Total/NA	Prep	3546			250393	08/28/18 13:36	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250737	09/01/18 07:04	JZT	TAL PLS
Total/NA	Prep	3540C			343096	08/29/18 14:18	AMT	TAL CAN
Total/NA	Analysis	8082		1	343327	08/31/18 09:26	KMG	TAL CAN
Total/NA	Prep	3050B			250470	08/29/18 09:32	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250593	08/30/18 10:58	BKR	TAL PLS
Total/NA	Prep	7471A			250521	08/29/18 15:39	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250677	08/30/18 19:11	OBI	TAL PLS

Client Sample ID: DG-E7S-3.5-4 — Lab Sample ID: 720-88239-5

Date Collected: 08/24/18 08:25 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			250789	09/04/18 10:40	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250755	09/04/18 11:25	JRM	TAL PLS
Total/NA	Prep	3546			250520	08/29/18 15:27	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250742	09/01/18 16:13	MQL	TAL PLS
Total/NA	Prep	3546			250382	08/28/18 11:24	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250569	08/30/18 20:03	JXL	TAL PLS

Lab Chronicle

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-E7S-3.5-4

Lab Sample ID: 720-88239-5
Date Collected: 08/24/18 08:25
Matrix: Solid
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			250393	08/28/18 13:36	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250737	09/01/18 07:20	JZT	TAL PLS
Total/NA	Prep	3540C			343096	08/29/18 14:18	AMT	TAL CAN
Total/NA	Analysis	8082		1	343327	08/31/18 09:48	KMG	TAL CAN
Total/NA	Prep	3050B			250470	08/29/18 09:32	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250593	08/30/18 11:03	BKR	TAL PLS
Total/NA	Prep	7471A			250521	08/29/18 15:39	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250677	08/30/18 19:13	OBI	TAL PLS

Client Sample ID: DG-E7S-9.5-10

Lab Sample ID: 720-88239-6
Date Collected: 08/24/18 08:25
Matrix: Solid
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250473	08/25/18 03:05	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250528	08/30/18 00:43	A1C	TAL PLS
Total/NA	Prep	3546			250520	08/29/18 15:27	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250742	09/01/18 19:00	MQL	TAL PLS
Total/NA	Prep	3546			250382	08/28/18 11:24	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250569	08/31/18 04:34	JXL	TAL PLS
Total/NA	Prep	3546			250393	08/28/18 13:36	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250737	09/01/18 07:36	JZT	TAL PLS
Total/NA	Prep	3540C			343096	08/29/18 14:18	AMT	TAL CAN
Total/NA	Analysis	8082		1	343327	08/31/18 10:10	KMG	TAL CAN
Total/NA	Prep	3050B			250470	08/29/18 09:32	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250593	08/30/18 11:07	BKR	TAL PLS
Total/NA	Prep	7471A			250548	08/29/18 21:54	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250679	08/30/18 21:59	MAG	TAL PLS

Client Sample ID: DG-G7S-0.5-1

Lab Sample ID: 720-88239-7
Date Collected: 08/24/18 08:50
Matrix: Solid
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250544	08/25/18 03:05	MJK	TAL PLS
Total/NA	Analysis	8260B		1	250528	08/30/18 01:12	A1C	TAL PLS
Total/NA	Prep	3546			250520	08/29/18 15:27	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250742	09/01/18 19:24	MQL	TAL PLS
Total/NA	Prep	3546			250382	08/28/18 11:24	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250456	08/30/18 00:57	JXL	TAL PLS
Total/NA	Prep	3546			250393	08/28/18 13:36	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250737	09/01/18 07:53	JZT	TAL PLS
Total/NA	Prep	3540C			343096	08/29/18 14:18	AMT	TAL CAN

Client Sample ID: DG-G7S-0.5-1 — Lab Sample ID: 720-88239-7

Date Collected: 08/24/18 08:50 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082		20	343327	08/31/18 10:32	KMG	TAL CAN
Total/NA	Prep	3050B			250470	08/29/18 09:32	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250593	08/30/18 11:12	BKR	TAL PLS
Total/NA	Prep	7471A			250548	08/29/18 21:54	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250679	08/30/18 22:01	MAG	TAL PLS

Client Sample ID: DG-G7S-3.5-4 — Lab Sample ID: 720-88239-8

Date Collected: 08/24/18 08:50 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250589	08/25/18 03:05	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250555	08/30/18 13:49	AJS	TAL PLS
Total/NA	Prep	3546			250520	08/29/18 15:27	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		2	250742	09/01/18 19:47	MQL	TAL PLS
Total/NA	Prep	3546			250382	08/28/18 11:24	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250569	08/31/18 04:59	JXL	TAL PLS
Total/NA	Prep	3546			250393	08/28/18 13:36	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250737	09/01/18 08:09	JZT	TAL PLS
Total/NA	Prep	3540C			343096	08/29/18 14:18	AMT	TAL CAN
Total/NA	Analysis	8082		5	343327	08/31/18 12:44	KMG	TAL CAN
Total/NA	Prep	3050B			250470	08/29/18 09:32	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250593	08/30/18 11:17	BKR	TAL PLS
Total/NA	Prep	7471A			250548	08/29/18 21:54	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250679	08/30/18 22:03	MAG	TAL PLS

Client Sample ID: DG-B10S-0.5-1 — Lab Sample ID: 720-88239-9

Date Collected: 08/24/18 10:40 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250589	08/25/18 03:05	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250555	08/30/18 14:18	AJS	TAL PLS
Total/NA	Prep	3546			250520	08/29/18 15:27	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		2	250799	09/04/18 15:56	LPL	TAL PLS
Total/NA	Prep	3546			250498	08/29/18 13:41	MAB	TAL PLS
Total/NA	Analysis	8015B		3	250656	08/31/18 12:14	JXL	TAL PLS
Total/NA	Prep	3546			250393	08/28/18 13:36	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250737	09/01/18 08:26	JZT	TAL PLS
Total/NA	Prep	3540C			343096	08/29/18 14:18	AMT	TAL CAN
Total/NA	Analysis	8082		1	343327	08/31/18 11:15	KMG	TAL CAN
Total/NA	Prep	3050B			250470	08/29/18 09:32	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250593	08/30/18 11:21	BKR	TAL PLS

Lab Chronicle

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-B10S-0.5-1 — Lab Sample ID: 720-88239-9

Date Collected: 08/24/18 10:40
Date Received: 08/24/18 15:00
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			250548	08/29/18 21:54	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250679	08/30/18 22:06	MAG	TAL PLS

Client Sample ID: DG-B10S-3.5-4 — Lab Sample ID: 720-88239-10

Date Collected: 08/24/18 10:40
Date Received: 08/24/18 15:00
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250544	08/25/18 03:05	MJK	TAL PLS
Total/NA	Analysis	8260B		1	250528	08/30/18 02:38	A1C	TAL PLS
Total/NA	Prep	3546			250520	08/29/18 15:27	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250742	09/01/18 16:37	MQL	TAL PLS
Total/NA	Prep	3546			250498	08/29/18 13:41	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250656	08/31/18 22:41	JXL	TAL PLS
Total/NA	Prep	3546			250531	08/29/18 17:11	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250746	09/03/18 17:38	JZT	TAL PLS
Total/NA	Prep	3540C			343096	08/29/18 14:18	AMT	TAL CAN
Total/NA	Analysis	8082		1	343327	08/31/18 11:37	KMG	TAL CAN
Total/NA	Prep	3050B			250365	08/28/18 10:26	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250585	08/29/18 21:41	OBI	TAL PLS
Total/NA	Prep	7471A			250416	08/28/18 15:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250599	08/30/18 12:45	OBI	TAL PLS

Client Sample ID: DG-I7S-0.5-1 — Lab Sample ID: 720-88239-11

Date Collected: 08/24/18 09:25
Date Received: 08/24/18 15:00
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250544	08/25/18 03:05	MJK	TAL PLS
Total/NA	Analysis	8260B		1	250528	08/30/18 03:06	A1C	TAL PLS
Total/NA	Prep	3546			250520	08/29/18 15:27	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		2	250742	09/01/18 17:01	MQL	TAL PLS
Total/NA	Prep	3546			250498	08/29/18 13:41	MAB	TAL PLS
Total/NA	Analysis	8015B		2	250656	08/31/18 23:54	JXL	TAL PLS
Total/NA	Prep	3546			250531	08/29/18 17:11	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250746	09/03/18 17:55	JZT	TAL PLS
Total/NA	Prep	3540C			343096	08/29/18 14:18	AMT	TAL CAN
Total/NA	Analysis	8082		1	343327	08/31/18 12:00	KMG	TAL CAN
Total/NA	Prep	3050B			250365	08/28/18 10:26	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250585	08/29/18 21:45	OBI	TAL PLS
Total/NA	Prep	7471A			250416	08/28/18 15:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250599	08/30/18 12:48	OBI	TAL PLS

Lab Chronicle

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-I7S-3.5-4 — Lab Sample ID: 720-88239-12

Date Collected: 08/24/18 09:25 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250544	08/25/18 03:05	MJK	TAL PLS
Total/NA	Analysis	8260B		1	250528	08/30/18 03:35	A1C	TAL PLS
Total/NA	Prep	3546			250520	08/29/18 15:27	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250742	09/01/18 20:35	MQL	TAL PLS
Total/NA	Prep	3546			250498	08/29/18 13:41	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250653	08/31/18 14:16	JXL	TAL PLS
Total/NA	Prep	3546			250531	08/29/18 17:11	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250746	09/03/18 15:24	JZT	TAL PLS
Total/NA	Prep	3540C			343096	08/29/18 14:18	AMT	TAL CAN
Total/NA	Analysis	8082		1	343327	08/31/18 12:22	KMG	TAL CAN
Total/NA	Prep	3050B			250365	08/28/18 10:26	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250585	08/29/18 21:50	OBI	TAL PLS
Total/NA	Prep	7471A			250416	08/28/18 15:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250599	08/30/18 12:50	OBI	TAL PLS

Client Sample ID: DG-M7S-0.5-1 — Lab Sample ID: 720-88239-13

Date Collected: 08/24/18 09:55 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250589	08/25/18 03:05	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250555	08/30/18 14:46	AJS	TAL PLS
Total/NA	Prep	3546			250520	08/29/18 15:27	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		20	250742	09/01/18 17:25	MQL	TAL PLS
Total/NA	Prep	3546			250498	08/29/18 13:41	MAB	TAL PLS
Total/NA	Analysis	8015B		20	250656	08/31/18 12:39	JXL	TAL PLS
Total/NA	Prep	3546			250531	08/29/18 17:11	MAB	TAL PLS
Total/NA	Analysis	8081A		5	250746	09/03/18 15:07	JZT	TAL PLS
Total/NA	Prep	3540C			343096	08/29/18 14:18	AMT	TAL CAN
Total/NA	Analysis	8082		1	343330	08/31/18 08:36	KMG	TAL CAN
Total/NA	Prep	3050B			250365	08/28/18 10:26	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250585	08/29/18 21:55	OBI	TAL PLS
Total/NA	Prep	7471A			250416	08/28/18 15:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250599	08/30/18 12:52	OBI	TAL PLS

Client Sample ID: DG-M7S-3.5-4 — Lab Sample ID: 720-88239-14

Date Collected: 08/24/18 09:55 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250544	08/25/18 03:05	MJK	TAL PLS
Total/NA	Analysis	8260B		1	250528	08/30/18 04:32	A1C	TAL PLS
Total/NA	Prep	3546			250520	08/29/18 15:27	MAB	TAL PLS

Lab Chronicle

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-M7S-3.5-4 — Lab Sample ID: 720-88239-14

Date Collected: 08/24/18 09:55 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C SIM		1	250742	09/01/18 20:59	MQL	TAL PLS
Total/NA	Prep	3546			250498	08/29/18 13:41	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250653	08/31/18 14:41	JXL	TAL PLS
Total/NA	Prep	3546			250531	08/29/18 17:11	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250746	09/03/18 15:41	JZT	TAL PLS
Total/NA	Prep	3540C			343096	08/29/18 14:18	AMT	TAL CAN
Total/NA	Analysis	8082		1	343330	08/31/18 08:55	KMG	TAL CAN
Total/NA	Prep	3050B			250365	08/28/18 10:26	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250585	08/29/18 22:00	OBI	TAL PLS
Total/NA	Prep	7471A			250416	08/28/18 15:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250599	08/30/18 12:55	OBI	TAL PLS

Client Sample ID: DG-B9S-0.5-1 — Lab Sample ID: 720-88239-15

Date Collected: 08/24/18 10:20 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			250800	09/04/18 11:29	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250755	09/04/18 12:51	JRM	TAL PLS
Total/NA	Prep	3546			250520	08/29/18 15:27	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		10	250742	09/01/18 17:49	MQL	TAL PLS
Total/NA	Prep	3546			250498	08/29/18 13:41	MAB	TAL PLS
Total/NA	Analysis	8015B		10	250656	08/31/18 13:03	JXL	TAL PLS
Total/NA	Prep	3546			250531	08/29/18 17:11	MAB	TAL PLS
Total/NA	Analysis	8081A		2	250746	09/03/18 15:58	JZT	TAL PLS
Total/NA	Prep	3540C			343096	08/29/18 14:18	AMT	TAL CAN
Total/NA	Analysis	8082		1	343330	08/31/18 09:14	KMG	TAL CAN
Total/NA	Prep	3050B			250365	08/28/18 10:26	SUN	TAL PLS
Total/NA	Analysis	6010B		10	250585	08/29/18 22:04	OBI	TAL PLS
Total/NA	Prep	7471A			250416	08/28/18 15:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250599	08/30/18 13:02	OBI	TAL PLS

Client Sample ID: DG-B9S-3.5-4 — Lab Sample ID: 720-88239-16

Date Collected: 08/24/18 10:20 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			250800	09/04/18 11:29	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250755	09/04/18 13:20	JRM	TAL PLS
Total/NA	Prep	3546			250520	08/29/18 15:27	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250742	09/01/18 21:22	MQL	TAL PLS
Total/NA	Prep	3546			250498	08/29/18 13:41	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250653	08/31/18 15:05	JXL	TAL PLS

Lab Chronicle

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-B9S-3.5-4

Lab Sample ID: 720-88239-16
Date Collected: 08/24/18 10:20
Matrix: Solid
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			250531	08/29/18 17:11	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250746	09/03/18 16:14	JZT	TAL PLS
Total/NA	Prep	3540C			343096	08/29/18 14:18	AMT	TAL CAN
Total/NA	Analysis	8082		1	343330	08/31/18 09:33	KMG	TAL CAN
Total/NA	Prep	3050B			250365	08/28/18 10:26	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250585	08/29/18 22:09	OBI	TAL PLS
Total/NA	Prep	7471A			250416	08/28/18 15:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250599	08/30/18 13:04	OBI	TAL PLS

Client Sample ID: DG-DE89-0.5-1

Lab Sample ID: 720-88239-17
Date Collected: 08/24/18 11:20
Matrix: Solid
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250544	08/25/18 03:05	MJK	TAL PLS
Total/NA	Analysis	8260B		1	250528	08/30/18 05:00	A1C	TAL PLS
Total/NA	Prep	3546			250520	08/29/18 15:27	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250742	09/01/18 18:12	MQL	TAL PLS
Total/NA	Prep	3546			250498	08/29/18 13:41	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250656	08/31/18 20:14	JXL	TAL PLS
Total/NA	Prep	3540C			343096	08/29/18 14:18	AMT	TAL CAN
Total/NA	Analysis	8082		1	343330	08/31/18 09:52	KMG	TAL CAN
Total/NA	Prep	3050B			250365	08/28/18 10:26	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250585	08/29/18 22:14	OBI	TAL PLS
Total/NA	Prep	7471A			250416	08/28/18 15:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250599	08/30/18 13:06	OBI	TAL PLS

Client Sample ID: DG-DE89-3.5-4

Lab Sample ID: 720-88239-18
Date Collected: 08/24/18 11:20
Matrix: Solid
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			250789	09/04/18 10:40	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250755	09/04/18 11:54	JRM	TAL PLS
Total/NA	Prep	3546			250580	08/30/18 10:18	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		5	250745	09/02/18 17:15	LPL	TAL PLS
Total/NA	Prep	3546			250498	08/29/18 13:41	MAB	TAL PLS
Total/NA	Analysis	8015B		10	250656	08/31/18 15:30	JXL	TAL PLS
Total/NA	Prep	3540C			343096	08/29/18 14:18	AMT	TAL CAN
Total/NA	Analysis	8082		1	343330	08/31/18 10:11	KMG	TAL CAN
Total/NA	Prep	3050B			250365	08/28/18 10:26	SUN	TAL PLS
Total/NA	Analysis	6010B		10	250585	08/29/18 22:28	OBI	TAL PLS
Total/NA	Prep	7471A			250548	08/29/18 21:54	MAG	TAL PLS

Lab Chronicle

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

TestAmerica Job ID: 720-88239-1

Client Sample ID: DG-DE89-3.5-4 — Lab Sample ID: 720-88239-18

Date Collected: 08/24/18 11:20 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1	250679	08/30/18 22:08	MAG	TAL PLS

Client Sample ID: DG-DE89-9.5-10 — Lab Sample ID: 720-88239-19

Date Collected: 08/24/18 11:20 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250589	08/25/18 03:05	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250555	08/30/18 15:15	AJS	TAL PLS
Total/NA	Prep	3546			250853	09/04/18 20:14	WGR	TAL PLS
Total/NA	Analysis	8270C SIM		1	250960	09/06/18 06:07	LPL	TAL PLS
Total/NA	Prep	3546			250461	08/29/18 09:03	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250653	08/31/18 21:03	JXL	TAL PLS
Total/NA	Prep	3540C			343096	08/29/18 14:18	AMT	TAL CAN
Total/NA	Analysis	8082		1	343330	08/31/18 10:30	KMG	TAL CAN
Total/NA	Prep	3050B			250365	08/28/18 10:26	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250585	08/29/18 22:33	OBI	TAL PLS
Total/NA	Prep	7471A			250548	08/29/18 21:54	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250679	08/30/18 22:11	MAG	TAL PLS

Client Sample ID: DG-B9S-9.5-10 — Lab Sample ID: 720-88239-20

Date Collected: 08/24/18 10:20 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250544	08/25/18 03:05	MJK	TAL PLS
Total/NA	Analysis	8260B		1	250532	08/29/18 22:12	JRM	TAL PLS
Total/NA	Prep	3546			250580	08/30/18 10:18	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250742	09/02/18 00:55	MQL	TAL PLS
Total/NA	Prep	3546			250498	08/29/18 13:41	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250656	08/31/18 20:38	JXL	TAL PLS
Total/NA	Prep	3546			250531	08/29/18 17:11	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250746	09/03/18 16:48	JZT	TAL PLS
Total/NA	Prep	3540C			343472	09/01/18 08:09	AMT	TAL CAN
Total/NA	Analysis	8082		1	343587	09/02/18 18:48	LSH	TAL CAN
Total/NA	Prep	3050B			250513	08/29/18 15:55	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250635	08/30/18 16:37	OBI	TAL PLS
Total/NA	Prep	7471A			250548	08/29/18 21:54	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250679	08/30/18 22:18	MAG	TAL PLS

Laboratory References:

= Asbestos TEM Laboratories, Inc., 630 BANCROFT WAY, Berkeley, CA 94710
TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396
TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

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

TestAmerica Job ID: 720-88239-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

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

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Laboratory: TestAmerica Canton

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

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-19
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19
Illinois	NELAP	5	200004	07-31-19
Kansas	NELAP	7	E-10336	01-31-19
Kentucky (UST)	State Program	4	58	02-23-19
Kentucky (WW)	State Program	4	98016	12-31-18 *
Minnesota	NELAP	5	039-999-348	12-31-18 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19
New York	NELAP	2	10975	03-31-19
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-19
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-18-10	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19
Washington	State Program	10	C971	01-12-19
West Virginia DEP	State Program	3	210	12-31-18 *

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

Method Summary

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

TestAmerica Job ID: 720-88239-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PLS
8270C SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
8081A	Organochlorine Pesticides (GC)	SW846	TAL PLS
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS
Subcontract	Asbestos - CARB 435	None	
3050B	Preparation, Metals	SW846	TAL PLS
3540C	Soxhlet Extraction	SW846	TAL CAN
3546	Microwave Extraction	SW846	TAL PLS
5030B	Purge and Trap	SW846	TAL PLS
5035	Closed System Purge and Trap	SW846	TAL PLS
7471A	Preparation, Mercury	SW846	TAL PLS

Protocol References:

None = None

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

Laboratory References:

= Asbestos TEM Laboratories, Inc., 630 BANCROFT WAY, Berkeley, CA 94710

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

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

TestAmerica Job ID: 720-88239-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-88239-1	DG-C7S-0.5-1	Solid	08/24/18 07:50	08/24/18 15:00
720-88239-2	DG-C7S-3.5-4	Solid	08/24/18 08:00	08/24/18 15:00
720-88239-3	DG-C7S-9.5-10	Solid	08/24/18 08:05	08/24/18 15:00
720-88239-4	DG-E7S-0.5-1	Solid	08/24/18 08:25	08/24/18 15:00
720-88239-5	DG-E7S-3.5-4	Solid	08/24/18 08:25	08/24/18 15:00
720-88239-6	DG-E7S-9.5-10	Solid	08/24/18 08:25	08/24/18 15:00
720-88239-7	DG-G7S-0.5-1	Solid	08/24/18 08:50	08/24/18 15:00
720-88239-8	DG-G7S-3.5-4	Solid	08/24/18 08:50	08/24/18 15:00
720-88239-9	DG-B10S-0.5-1	Solid	08/24/18 10:40	08/24/18 15:00
720-88239-10	DG-B10S-3.5-4	Solid	08/24/18 10:40	08/24/18 15:00
720-88239-11	DG-I7S-0.5-1	Solid	08/24/18 09:25	08/24/18 15:00
720-88239-12	DG-I7S-3.5-4	Solid	08/24/18 09:25	08/24/18 15:00
720-88239-13	DG-M7S-0.5-1	Solid	08/24/18 09:55	08/24/18 15:00
720-88239-14	DG-M7S-3.5-4	Solid	08/24/18 09:55	08/24/18 15:00
720-88239-15	DG-B9S-0.5-1	Solid	08/24/18 10:20	08/24/18 15:00
720-88239-16	DG-B9S-3.5-4	Solid	08/24/18 10:20	08/24/18 15:00
720-88239-17	DG-DE89-0.5-1	Solid	08/24/18 11:20	08/24/18 15:00
720-88239-18	DG-DE89-3.5-4	Solid	08/24/18 11:20	08/24/18 15:00
720-88239-19	DG-DE89-9.5-10	Solid	08/24/18 11:20	08/24/18 15:00
720-88239-20	DG-B9S-9.5-10	Solid	08/24/18 10:20	08/24/18 15:00

ASBESTOS TEM LABORATORIES, INC.

CARB Method 435
Polarized Light Microscopy
Analytical Report

Laboratory Job # 1283-01203

630 Bancroft Way
Berkeley, CA 94710
(510) 704-8930
FAX (510) 704-8429

ASBESTOS TEM LABORATORIES, INC

CA DPH ELAP
Lab No. 1866

NVLAP Lab Code: 101891-0
Berkeley, CA

Aug/31/2018

Micah Smith
TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

RE: LABORATORY JOB # 1283-01203
Polarized light microscopy analytical results for 19 bulk sample(s).
Job Site: 720-88239-1
Job No.: UPC-OU-SM

Enclosed please find the bulk material analytical results for one or more samples submitted for asbestos analysis. The analyses were performed in accordance with the California Air Resources Board (ARB) Method 435 for the determination of asbestos in serpentine aggregate samples.

Prior to analysis, samples are logged-in and all data pertinent to the sample recorded. The samples are checked for damage or disruption of any chain-of-custody seals. A unique laboratory ID number is assigned to each sample. A hard copy log-in sheet containing all pertinent information concerning the sample is generated. This and all other relevant paper work are kept with the sample throughout the analytical procedures to assure proper analysis.

Sample preparation follows a standard CARB 435 prep method. The entire sample is dried at 135-150 C and then crushed to ~3/8" gravel size using a Bico Chipmunk crusher. If the submitted sample is >1 pint, the sample was split using a 1/2" riffle splitter following ASTM Method C-702-98 to obtain a 1 pint aliquot. The entire 1 pint aliquot, or entire original sample, is then pulverized in a Bico Braun disc pulverizer calibrated to produce a nominal 200 mesh final product. If necessary, additional homogenization steps are undertaken using a 3/8" riffle splitter. Small aliquots are collected from throughout the pulverized material to create three separate microsope slide mounts containing the appropriate refractive index oil. The prepared slides are placed under a polarizing light microscope where standard mineralogical techniques are used to analyze the various materials present, including asbestos. If asbestos is identified and of less than 10% concentration by visual area estimate then an additional five sample mounts are prepared. Quantification of asbestos concentration is obtained using the standard CAL ARB Method 435 point count protocol. For samples observed to contain visible asbestos of less than 10% concentration, a point counting techinique is used with 50 points counted on each of eight sample mounts for a total of 400 points. The data is then compiled into standard report format and subjected to a thorough quality assurance check before the information is released to the client.

While the CARB 435 method has much to commend it, there are a number of situations where it fails to provide sufficient accuracy to make a definitive determination of the presence/absence of asbestos and/or an accurate count of the asbestos concentration present in a given sample. These problems include, but are not limited to, 1) statistical uncertainty with samples containing <1% asbestos when too few particles are counted, 2) definitive identification and discrimination between various fibrous amphibole minerals such as tremolite/actinolite/hornblende and the "Libby amphiboles" such as tremolite/winchite/richterite/arfvedsonite, and C) small asbestiform fibers which are near or below the resolution limit of the PLM microscope such as those found in various California coast range serpentine bodies. In these cases, further analysis by transmission electron microscopy is recommended to obtain a more accurate result.

Sincerely Yours,

Lab Manager
ASBESTOS TEM LABORATORIES, INC.

--- These results relate only to the samples tested and must not be reproduced, except in full, without the approval of the laboratory. ---

630 BANCROFT WAY ▪ BERKELEY, CA 94710 ▪ PH. (510) 704-8930 ▪ FAX (510) 704-8429
With Branch Offices Located At: 1350 FREEPORT BLVD. UNIT 104, SPARKS, NV 89431

POLARIZED LIGHT MICROSCOPY
CARB 435 ANALYTICAL REPORT

Contact: Micah Smith

Address: TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

Samples Submitted: 19
Samples Analyzed: 19
Job Site / No. UPC-OU-SM
720-88239-1

Report No. **359881**
Date Submitted: Aug-27-18
Date Reported: Aug-31-18

SAMPLE ID	POINTS COUNTED	ASBESTOS %	ASBESTOS TYPE	LOCATION / DESCRIPTION
DG-C7S-0.5-1 Lab ID # 1283-01203-001	**400** - Total Points	**<0.25%**	**None Detected**	720-88239-1 No Asbestos Detected
DG-C7S-3.5-4 Lab ID # 1283-01203-002	**400** - Total Points	**<0.25%**	**None Detected**	720-88239-2 No Asbestos Detected
DG-C7S-9.5-10 Lab ID # 1283-01203-003	**400** - Total Points	**<0.25%**	**None Detected**	720-88239-3 No Asbestos Detected
DG-E7S-0.5-1 Lab ID # 1283-01203-004	**400** - Total Points	**<0.25%**	**None Detected**	720-88239-4 No Asbestos Detected
DG-E7S-3.5-4 Lab ID # 1283-01203-005	**400** - Total Points	**<0.25%**	**None Detected**	720-88239-5 No Asbestos Detected
DG-E7S-9.5-10 Lab ID # 1283-01203-006	**400** - Total Points	**<0.25%**	**None Detected**	720-88239-6 No Asbestos Detected
DG-G7S-0.5-1 Lab ID # 1283-01203-007	**400** - Total Points	**<0.25%**	**None Detected**	720-88239-7 No Asbestos Detected
DG-G7S-3.5-4 Lab ID # 1283-01203-008	**400** - Total Points	**<0.25%**	**None Detected**	720-88239-8 No Asbestos Detected
DG-B10S-0.5-1 Lab ID # 1283-01203-009	**400** - Total Points	**<0.25%**	**None Detected**	720-88239-9 No Asbestos Detected
DG-B10S-3.5-4 Lab ID # 1283-01203-010	**400** - Total Points	**<0.25%**	**None Detected**	720-88239-10 No Asbestos Detected

QC Reviewer _____ **Analys** _____

POLARIZED LIGHT MICROSCOPY
CARB 435 ANALYTICAL REPORT

Contact: Micah Smith

Address: TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

Samples Submitted 19
Samples Analyzed: 19
Job Site / No. UPC-OU-SM
720-88239-1

Report No. **359881**
Date Submitted: Aug-27-18
Date Reported: Aug-31-18

SAMPLE ID	POINTS COUNTED	ASBESTOS %	ASBESTOS TYPE	LOCATION / DESCRIPTION
DG-I7S-0.5-1		<0.25%	None Detected	720-88239-11
Lab ID # 1283-01203-011	400 - Total Points			No Asbestos Detected
DG-I7S-3.5-4		<0.25%	None Detected	720-88239-12
Lab ID # 1283-01203-012	400 - Total Points			No Asbestos Detected
DG-M7S-0.5-1		<0.25%	None Detected	720-88239-13
Lab ID # 1283-01203-013	400 - Total Points			No Asbestos Detected
DG-M7S-3.5-4		<0.25%	None Detected	720-88239-14
Lab ID # 1283-01203-014	400 - Total Points			No Asbestos Detected
DG-B9S-0.5-1		<0.25%	None Detected	720-88239-15
Lab ID # 1283-01203-015	400 - Total Points			No Asbestos Detected
DG-B9S-3.5-4		<0.25%	None Detected	720-88239-16
Lab ID # 1283-01203-016	400 - Total Points			No Asbestos Detected
DG-DE89S-0.5-1		<0.25%	None Detected	720-88239-17
Lab ID # 1283-01203-017	400 - Total Points			No Asbestos Detected
DG-DE89S-3.5-4		<0.25%	None Detected	720-88239-18
Lab ID # 1283-01203-018	400 - Total Points			No Asbestos Detected
DG-DE89S-9.5-10		<0.25%	None Detected	720-88239-19
Lab ID # 1283-01203-019	400 - Total Points			No Asbestos Detected
Lab ID #	- Total Points			

QC Reviewer _____ **Analys** _____

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

Chain of Custody Record

#359881

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39418.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 3
Company: Asbestos TEM Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88239-1
Address: 630 BANCROFT WAY.	Due Date Requested: 8/31/2018			
City: Berkeley	TAT Requested (days):			
State, Zip: CA, 94710				
Phone:	PO #:			
Email:	WO #:			
Project Name: UPC-OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Asbestos - CARB 435)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-C7S--0.5-1 (720-88239-1)	8/24/18	07:50 Pacific		Solid			X	1	
DG-C7S--3.5-4 (720-88239-2)	8/24/18	08:00 Pacific		Solid			X	1	
DG-C7S--9.5-10 (720-88239-3)	8/24/18	08:05 Pacific		Solid			X	1	
DG-E7S--0.5-1 (720-88239-4)	8/24/18	08:25 Pacific		Solid			X	1	
DG-E7S--3.5-4 (720-88239-5)	8/24/18	08:25 Pacific		Solid			X	1	
DG-E7S--9.5-10 (720-88239-6)	8/24/18	08:25 Pacific		Solid			X	1	
DG-G7S--0.5-1 (720-88239-7)	8/24/18	08:50 Pacific		Solid			X	1	
DG-G7S--3.5-4 (720-88239-8)	8/24/18	08:50 Pacific		Solid			X	1	
DG-B10S--0.5-1 (720-88239-9)	8/24/18	10:40 Pacific		Solid			X	1	

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

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	8-27-18 10:35	TA720			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

AUG27 '18 10:39AM

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

AUG27 '18 10:39AM
6.5°C

Ver: 09/20/2016

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39418.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 2 of 3
Company: Asbestos TEM Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88239-1
Address: 630 BANCROFT WAY, .	Due Date Requested: 8/31/2018			
City: Berkeley	TAT Requested (days):			
State, Zip: CA, 94710				
Phone:	PO #:			
Email:	WO #:			
Project Name: UPC-CU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

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

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Asbestos - CARB 435)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-B10S--3.5-4 (720-88239-10)	8/24/18	10:40 Pacific		Solid			X	1	
DG-I7S--0.5-1 (720-88239-11)	8/24/18	09:25 Pacific		Solid			X	1	
DG-I7S--3.5-4 (720-88239-12)	8/24/18	09:25 Pacific		Solid			X	1	
DG-M7S--0.5-1 (720-88239-13)	8/24/18	09:55 Pacific		Solid			X	1	
DG-M7S--3.5-4 (720-88239-14)	8/24/18	09:55 Pacific		Solid			X	1	
DG-B9S--0.5-1 (720-88239-15)	8/24/18	10:20 Pacific		Solid			X	1	
DG-B9S--3.5-4 (720-88239-16)	8/24/18	10:20 Pacific		Solid			X	1	
DG-DE89--0.5-1 (720-88239-17)	8/24/18	11:20 Pacific		Solid			X	1	
DG-DE89--3.5-4 (720-88239-18)	8/24/18	11:20 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody.

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

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 8-27-18 10:35	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:	AUG27 '18 10:39AM	

Ver: 09/20/2016

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sample:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39418.3
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 3 of 3
Company: Asbestos TEM Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88239-1
Address: 630 BANCROFT WAY,	Due Date Requested: 8/31/2018			
City: Berkeley	TAT Requested (days):			
State, Zip: CA, 94710				
Phone:	PO #:			
Email:	WO #:			
Project Name: UPC-OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Asbestos - CARB 435)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-DE89--9.5-10 (720-88239-19)	8/24/18	11:20 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. I

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

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	8-27-18 14:35				
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 09/20/2016

ASBESTOS TEM LABORATORIES, INC.

CARB Method 435
Polarized Light Microscopy
Analytical Report

Laboratory Job # 1283-01211

630 Bancroft Way
Berkeley, CA 94710
(510) 704-8930
FAX (510) 704-8429

ASBESTOS TEM LABORATORIES, INC

CA DPH ELAP
Lab No. 1866

NVLAP Lab Code: 101891-0
Berkeley, CA

Aug/31/2018

Micah Smith
TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

RE: LABORATORY JOB # 1283-01211
Polarized light microscopy analytical results for 1 bulk sample(s).
Job Site: 720-88239-1
Job No.: UPC-OU-SM

Enclosed please find the bulk material analytical results for one or more samples submitted for asbestos analysis. The analyses were performed in accordance with the California Air Resources Board (ARB) Method 435 for the determination of asbestos in serpentine aggregate samples.

Prior to analysis, samples are logged-in and all data pertinent to the sample recorded. The samples are checked for damage or disruption of any chain-of-custody seals. A unique laboratory ID number is assigned to each sample. A hard copy log-in sheet containing all pertinent information concerning the sample is generated. This and all other relevant paper work are kept with the sample throughout the analytical procedures to assure proper analysis.

Sample preparation follows a standard CARB 435 prep method. The entire sample is dried at 135-150 C and then crushed to ~3/8" gravel size using a Bico Chipmunk crusher. If the submitted sample is >1 pint, the sample was split using a 1/2" riffle splitter following ASTM Method C-702-98 to obtain a 1 pint aliquot. The entire 1 pint aliquot, or entire original sample, is then pulverized in a Bico Braun disc pulverizer calibrated to produce a nominal 200 mesh final product. If necessary, additional homogenization steps are undertaken using a 3/8" riffle splitter. Small aliquots are collected from throughout the pulverized material to create three separate microsope slide mounts containing the appropriate refractive index oil. The prepared slides are placed under a polarizing light microscope where standard mineralogical techniques are used to analyze the various materials present, including asbestos. If asbestos is identified and of less than 10% concentration by visual area estimate then an additional five sample mounts are prepared. Quantification of asbestos concentration is obtained using the standard CAL ARB Method 435 point count protocol. For samples observed to contain visible asbestos of less than 10% concentration, a point counting techinique is used with 50 points counted on each of eight sample mounts for a total of 400 points. The data is then compiled into standard report format and subjected to a thorough quality assurance check before the information is released to the client.

While the CARB 435 method has much to commend it, there are a number of situations where it fails to provide sufficient accuracy to make a definitive determination of the presence/absence of asbestos and/or an accurate count of the asbestos concentration present in a given sample. These problems include, but are not limited to, 1) statistical uncertainty with samples containing <1% asbestos when too few particles are counted, 2) definitive identification and discrimination between various fibrous amphibole minerals such as tremolite/actinolite/hornblende and the "Libby amphiboles" such as tremolite/winchite/richterite/arfvedsonite, and C) small asbestiform fibers which are near or below the resolution limit of the PLM microscope such as those found in various California coast range serpentine bodies. In these cases, further analysis by transmission electron microscopy is recommended to obtain a more accurate result.

Sincerely Yours,

Lab Manager
ASBESTOS TEM LABORATORIES, INC.

--- These results relate only to the samples tested and must not be reproduced, except in full, without the approval of the laboratory. ---

630 BANCROFT WAY ▪ BERKELEY, CA 94710 ▪ PH. (510) 704-8930 ▪ FAX (510) 704-8429
With Branch Offices Located At: 1350 FREEPORT BLVD. UNIT 104, SPARKS, NV 89431

POLARIZED LIGHT MICROSCOPY
CARB 435 ANALYTICAL REPORT

Contact: Micah Smith

Address: TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

Samples Submitted: 1

Samples Analyzed: 1

Job Site / No. UPC-OU-SM
720-88239-1

Report No. **359959**
Date Submitted: Aug-29-18
Date Reported: Aug-31-18

SAMPLE ID	POINTS COUNTED	ASBESTOS %	ASBESTOS TYPE	LOCATION / DESCRIPTION
DG-B9S-9.5-10		**<0.25%**	**None Detected**	720-88239-20
Lab ID # 1283-01211-001	**400** - Total Points			No Asbestos Detected
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			

QC Reviewer _____ **Analys** _____

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

Chain of Custody Record

359921

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39434.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: Asbestos TEM Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88240-1
Address: 630 BANCROFT WAY, ,	Due Date Requested: 8/31/2018			
City: Berkeley	TAT Requested (days):			
State, Zip: CA, 94710				
Phone:	PO #:			
Email:	WO #:			
Project Name: UPC OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Wwater, Swater, Sowaste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Asbestos - CARB 435)	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X		X	
DUP-36 (720-88240-19)	8/24/18	Pacific		Solid			X	1	
DUP-13 (720-88240-20)	8/24/18	Pacific		Solid			X	1	

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

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

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment			
Relinquished by:	Date/Time: 8/28/18 1245	Company: TA	Received by: MB	Date/Time: AUG28 '18 12:45PM	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:			

Ver: 09/20/2016

Smith, Micah

From: Miranda Kahrilas <MKahrilas@Geosyntec.com>
Sent: Friday, August 31, 2018 1:50 PM
To: Smith, Micah
Subject: Brisbane: Cancel OCP Analysis
Attachments: COC 720-88239 (201808250532).pdf; COC 720-88263 (201808280054).pdf; Std_Tal_Login_Ack for 720-88239-1.pdf; Std_Tal_Login_Ack for 720-88263-1.pdf

-External Email-

Hi Micah,

Going through the logins and I noticed a few samples had added analysis that we did not request, please cancel the following if that is still possible.

Cancel OCP analysis for the following samples:
720-88239
DG-DE89-0.5-1DG-DE89-3.5-4DG-DE89-9.5-10
720-88263
DG-FG910-0.5-1DG-FG910-3.5-4

I have attached the COCs and sample logins for reference.

Miranda Kahrilas
Staff Engineer

1111 Broadway, 6th Floor

Oakland, California 94607

Phone: 847.530.7602

Direct: 510.285.2685

www.geosyntec.com

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

720-88239

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

Reference #: 185110

Date 8/24 Page 1 of 2

Report To
Name: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: mkahrilas@geosyntec.com
To: GEOSYNTEC
Sampled By: M. KAHRILAS
Phone: 847-530-7608
A SMITH

Analysis Request

Sample ID	Date	Time	# of Containers	Preserv.	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B ☒ EPA 8260B + 6B	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☐ Motor Oil ☐ Other ___	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☒ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☒ EPA 8081 PCBs ☒ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: ___	Metals: ☐ 6020 ☐ 200.8 (ICP-MS): ___	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	Arsenic (EPA 6020)	
DG-C7S--0.5-1	8/24	750	5		X			X		X		X	X									X	
DG-C7S-3.5-4	↓	300	↓		X			X		X		X	X									X	
DG-C7S--9.5-10		805			X			X		X		X	X									X	
DG-E7S--0.5-1		825			X			X		X		X	X									X	
DG-E7S--3.5-4		825			X			X		X		X	X									X	
DG-E7S-9.5-10		825			X			X		X		X	X									X	
DG-G7S--0.5-1		850			X			X		X		X	X									X	
DG-G7S--3.5-4		850			X			X		X		X	X									X	
DG-B9S--0.5-1		1040			X			X		X		X	X									X	
DG-B9S--3.5-4	↓	1040	↓		X			X		X		X	X									X	

Project Info.
Project Name/ #: JPC OU-SM
#: NG2565/02
Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt
# of Containers:
Head Space:
Temp:

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

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

1.0°C

Terms and Conditions on reverse

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

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

3) Relinquished by:
720-88239 Chain of Custody

1) Received by:
Signature: [illegible] Time: 1315
Printed Name: Robert Date: 8/24/18
Company: TA

2) Received by:
Signature: [illegible] Time: 1500
Printed Name: T. Bullock Date: 8/24/18
Company: TA-720

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

720-88739

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

Reference #: 185110

Date 8/24 Page 2 of 2

Report To

In: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: mkahrilas@geosyntec.com
To: GEOSYNTEC
Sampled By: M. KAHRILAS
In: A SMITH
Phone: 847-530-7602

Analysis Request

Sample ID	Date	Time	Cont. #	Preserv.	Volatile Organics GC/MS (VOCs) ☑ EPA 8260B ☐ EPA	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☑ Diesel ☐ Motor Oil ☐ Other	Semi Volatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☑ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☑ EPA 8081 PCBs ☑ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Metals: ☐ 6020 ☐ 200.8 (ICP-MS):	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	Asbestos (CARB 435)	
DG-I75-0.5-1	8/24	925	5	Y	X			X		X		X	X										X	
DG-I75-3.5-4	8/24	925			X			X		X		X	X										X	
~~DG-E75~~ DG-M75-0.5		955			X			X		X		X	X										X	
DG-M75-3.5-4		955			X			X		X		X	X										X	
DG-B95-0.5-1		1020			X			X		X		X	X										X	
DG-B9-3.5-4		1020			X			X		X		X	X										X	
DG-DE89-0.5-1		1120			X			X		X		X	X										X	
DG-DE89-3.5-4		1120			X			X		X		X	X										X	
DG-DE89-9.5-10		1120			X			X		X		X	X										X	

Project Info.

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

Sample Receipt

# of Containers:
Head Space:
Temp:

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

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

Terms and Conditions on reverse

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

1) Received by:	2) Received by:	3) Received by:
Signature: [signature] Time: 1315	Signature: [signature] Time: 1500	Signature: Time:
Printed Name: Robert Date: 8/24/18	Printed Name: J. Bullock Date: 8/25/18	Printed Name: Date:
Company: TA	Company: TA-720	Company:

11/21/2018 (Rev. 1)

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39419.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 3
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88239-1
Address: 4101 Shuffel Street NW, ,	Due Date Requested: 8/31/2018			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: UPC-OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

C207

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8082/3540C (MOD) PCB 7 Aroclors	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-C7S--0.5-1 (720-88239-1)	8/24/18	07:50 Pacific		Solid			X	1	
DG-C7S--3.5-4 (720-88239-2)	8/24/18	08:00 Pacific		Solid			X	1	
DG-C7S--9.5-10 (720-88239-3)	8/24/18	08:05 Pacific		Solid			X	1	
DG-E7S--0.5-1 (720-88239-4)	8/24/18	08:25 Pacific		Solid			X	1	
DG-E7S--3.5-4 (720-88239-5)	8/24/18	08:25 Pacific		Solid			X	1	
DG-E7S--9.5-10 (720-88239-6)	8/24/18	08:25 Pacific		Solid			X	1	
DG-G7S--0.5-1 (720-88239-7)	8/24/18	08:50 Pacific		Solid			X	1	
DG-G7S--3.5-4 (720-88239-8)	8/24/18	08:50 Pacific		Solid			X	1	
DG-B10S--0.5-1 (720-88239-9)	8/24/18	10:40 Pacific		Solid			X	1	

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

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

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

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	8-27-18 1600	Pres	[signature]	8/29/18 935	TAL

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

Ver: 09/20/2016

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39419.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 2 of 3
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88239-1
Address: 4101 Shuffel Street NW, ,	Due Date Requested: 8/31/2018			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: UPC-OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8082/3540C (MOD) PCB 7 Aroclors	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-B10S--3.5-4 (720-88239-10)	8/24/18	10:40 Pacific		Solid			X	1	
DG-I7S--0.5-1 (720-88239-11)	8/24/18	09:25 Pacific		Solid			X	1	
DG-I7S--3.5-4 (720-88239-12)	8/24/18	09:25 Pacific		Solid			X	1	
DG-M7S--0.5-1 (720-88239-13)	8/24/18	09:55 Pacific		Solid			X	1	
DG-M7S--3.5-4 (720-88239-14)	8/24/18	09:55 Pacific		Solid			X	1	
DG-B9S--0.5-1 (720-88239-15)	8/24/18	10:20 Pacific		Solid			X	1	
DG-B9S--3.5-4 (720-88239-16)	8/24/18	10:20 Pacific		Solid			X	1	
DG-DE89--0.5-1 (720-88239-17)	8/24/18	11:20 Pacific		Solid			X	1	
DG-DE89--3.5-4 (720-88239-18)	8/24/18	11:20 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. I

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

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

Relinquished by: Dawn Mullen	Date/Time: 8-27-18 1600	Company: Frey	Received by:	Date/Time: 8/29/18 935	Company: TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 09/20/2016

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39419.3
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 3 of 3
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88239-1
Address: 4101 Shuffel Street NW, ,	Due Date Requested: 8/31/2018			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: UPC-OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8082/3540C (MOD) PCB 7 Aroclors	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-DE89--9.5-10 (720-88239-19)	8/24/18	11:20 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. I

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

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:			
Relinquished by: [signature]	Date/Time: 8-27-18 / 1600	Company: Pleas	Received by: [signature]	Date/Time: 8/29/18 935	Company: TAK	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:			

Ver: 09/20/2016

TestAmerica Canton Sample Receipt Form/Narrative **Login # :**_____
Canton Facility

Client TA Pleasanton Site Name_____ Cooler unpacked by: SBC
Cooler Received on 8/29/18 Opened on 8/29/18
FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other_____

Receipt After-hours: Drop-off Date/Time_____ Storage Location_____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other_____
Packing material used: Bubble Wrap Foam Plastic Bag None Other_____
COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF +0 °C) Observed Cooler Temp. 1.4 °C Corrected Cooler Temp. 1.4 °C
   IR GUN #36 (CF -0.3°C) Observed Cooler Temp._____ °C Corrected Cooler Temp._____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   -Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
   -Were tamper/custody seals intact and uncompromised? Yes No NA
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No
    If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC849151**
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____ Yes No
16. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s):_____.

WI-NC-099

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

178/178

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39470.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88239-1
Address: 4101 Shuffel Street NW, ,	Due Date Requested: 8/31/2018			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: UPC-OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8082/3540C (MOD) PCB 7 Aroclors	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-B9S--9.5-10 (720-88239-20)	8/24/18	10:20 Pacific		Solid			X	1	Geosyntec WANTS overlapping Aroclors to be reported when they are identified.

C221

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

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

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 8/29/18 13:01	Company TA720	Received by:	Date/Time: 8-31-18 930	Company TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		

Ver: 09/20/2016

TestAmerica Canton Sample Receipt Form/Narrative **Login # :**_____
Canton Facility

Client Pleasanton Site Name_____ Cooler unpacked by:

Cooler Received on 8-31-18 Opened on 8-31-18

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other_____

Receipt After-hours: Drop-off Date/Time_____ Storage Location_____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF +0 °C) Observed Cooler Temp. 17.8 °C Corrected Cooler Temp. 17.8 °C
   IR GUN #36 (CF -0.3°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   -Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
   -Were tamper/custody seals intact and uncompromised? Yes No NA
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No
    If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC849151**
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____ Yes No
16. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s):_____.

WI-NC-099

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88239-1

Login Number: 88239
List Number: 1
Creator: Bullock, Tracy

List Source: TestAmerica Pleasanton

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 720-88240-1
Client Project/Site: UPC OU-SM
Revision: 1

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

Attn: Mr. Krys Jesionek

Authorized for release by:
11/21/2018 6:49:03 PM

Micah Smith, Project Manager II
(925)484-1919
micah.smith@testamericainc.com

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

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

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 5
Detection Summary 9
Client Sample Results 18
Surrogate Summary 168
QC Sample Results 172
QC Association Summary 212
Lab Chronicle 220
Certification Summary 227
Method Summary 228
Sample Summary 229
Subcontract Data 230
Chain of Custody 238
Receipt Checklists 246

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	ISTD response or retention time outside acceptable limits
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
X	Surrogate is outside control limits
F1	MS and/or MSD Recovery is outside acceptance limits.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
X	Surrogate is outside control limits
F2	MS/MSD RPD exceeds control limits
F1	MS and/or MSD Recovery is outside acceptance limits.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Glossary (Continued)

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

Job ID: 720-88240-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-88240-1

Comments
This report was revised on 11/21/18 to change the units for the metals data to report in mg/Kg, as requested.

Receipt
The samples were received on 8/24/2018 3:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.4º C.

Receipt Exceptions
Insufficient sample volume was provided for the following sample for the MS/MSD VOC + Gas analysis on Terra core: DG-L13S-0.5-1 (720-88240-3). Logged all analyses excluding CARB 435 Asbestos and VOCs +Gas for MS/MSD on this sample.
Received 3 Terra cores 4x 8oz , 4x 4oz.

The container label for the following samples did not match the information listed on the Chain-of-Custody (COC): DG-L13S-3.5-1 (09:40). The container labels list DG-L13S-3.5-4, while the COC lists DG-L13S-3.5-1. In this case for consistency in the project the sample ID on the sample container labels was used for log-in DG-L13S-3.5-4

The following sample was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): DUP-13 . Received 7 containers 3-Terra Cores, 2x9oz and 2x4oz jars. On 8/27/18, the laboratory received a COC with this sample DUP-13 , requesting analyses VOC+Gas,DRO, PNA-SIM 8270, 8081/8082 CAM 17 Metals, and Carb 435 Asbestos.

DUP-36 received 7 containers (3-Terra cores, 2x8oz and 2 x 4oz jars) , COC only lists CAM 17 Metals. On 8/27/18 the laboratory received a COC with this sample DUP-36 , requesting analyses VOC+Gas,DRO, PNA-SIM 8270, 8081/8082 CAM 17 Metals, and Carb 435 Asbestos.

Sample containers were not received full.

The following samples were duplicated on this 720-88262 Chain of Custody (COC) and on 8/24/18 720-88240 COC; however, the samples were received 8/24/18 : DUP-36, DUP-34, DUP-33. See 720-88240 (#17 -#20) #20 DUP-13 was received Friday 8/24/18 but was not listed on that COC. Logged 720-88240 (#19 & #20) for all analyses requested on this COC.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) and/or laboratory control sample duplicate (LCSD) for analytical batches 720-250532 and 720-250622 recovered outside control limits for the following analytes: Carbon disulfide and 1,1-Dichloroethene. These analytes were biased high in the LCS/LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250555 recovered outside control limits for the following analytes: 1,1-Dichloroethene and 1,1,2-Trichloro-1,2,2-trifluoroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250726 recovered outside control limits for the following analytes: Carbon disulfide, 1,1-Dichloroethene and 1,1,2-Trichloro-1,2,2-trifluoroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250582 and analytical batch 720-250726 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected .

Method(s) 8260B:Insufficient sample volume was available to perform a matrix spike / matrix spike duplicate (MS/MSD) in analytical batches 720-250555 and 720-250622.

Method(s) 8260B: Internal standard (ISTD) response for the following samples were outside control limits: DG-K7S-0.5-1 (720-88240-1) and DG-L13S-3.5-4 (720-88240-4). The samples were re-extracted and/or re-analyzed with concurring results, and the second set of data has been reported.

Job ID: 720-88240-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

Method(s) 8260B: Internal standard (ISTD) response for the following sample was outside control limits: DUP-36 (720-88240-19). The sample was re-extracted and/or re-analyzed with concurring results, and the original set of data has been reported for all analytes except tetrachloroethene, which is reported from the re-analysis.

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

GC/MS Semi VOA
Method(s) 8270C SIM: The following samples were diluted due to the abundance of non-target analytes: DG-K7S-0.5-1 (720-88240-1), DG-L13S-0.5-1 (720-88240-3), DG-L13S-3.5-4 (720-88240-4), and DUP-36 (720-88240-19). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation may not provide useful information. Elevated reporting limits (RLs) are provided.

Method(s) 8270C SIM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250487 and analytical batch 720-250745 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8270C SIM: The method blank for preparation batch 720-250487 and analytical batch 720-250730 contained Naphthalene above the reporting limit (RL). None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

Method(s) 8270C SIM: The method blank for preparation batch 720-250487 and analytical batch 720-250730 contained Fluoranthene and Phenanthrene above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

GC Semi VOA
Method(s) 8015B: The following samples required a dilution due to the nature of the sample matrix: DG-K7S-0.5-1 (720-88240-1), DG-L13S-3.5-4 (720-88240-4). DUP-36 (720-88240-19), DG-L13S-0.5-1 (720-88240-3), DG-L13S-0.5-1 (720-88240-3[MS]) and DG-L13S-0.5-1 (720-88240-3[MSD]). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation may not provide useful information. Elevated reporting limits (RLs) are provided.

Method(s) 8081A: The %RPD between the primary and confirmation column / detector exceeded 40% for cis-Chlordane for the following sample: DG-L13S-0.5-1 (720-88240-3). The lower value has been reported and qualified in accordance with the laboratory's SOP.

Method(s) 8081A: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 720-250479 and analytical batch 720-250736 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) was within acceptance limits. Endrin Ketone is flagged as having out of control recoveries. This analyte was out of control on the confirmation column only, which is not reported.

Method(s) 8081A: The following samples were diluted due to color: DG-K7S-0.5-1 (720-88240-1), DG-L13S-0.5-1 (720-88240-3), DG-L13S-3.5-4 (720-88240-4) and DUP-36 (720-88240-19). Elevated reporting limits (RL) are provided.

Method(s) 8082: Surrogate recovery for the following samples was outside control limits: DG-L13S-0.5-1 (720-88240-3[MSD]), DG-L13S-3.5-4 (720-88240-4) and DUP-36 (720-88240-19). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8082: The continuing calibration verification (CCV) associated with batch 240-343339 recovered above the upper control limit for PCB-1254. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: DG-K7S-3.5-4 (720-88240-2), DG-L13S-0.5-1 (720-88240-3), DG-L13S-0.5-1 (720-88240-3[MS]), DG-L13S-0.5-1 (720-88240-3[MSD]), DG-L13S-3.5-4 (720-88240-4), DUP-36 (720-88240-19), DUP-13 (720-88240-20), (LCS 240-343154/10-A) and (MB 240-343154/9-A).

Job ID: 720-88240-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

Method(s) 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: DG-K7S-3.5-4 (720-88240-2), DG-L13S-0.5-1 (720-88240-3), DG-L13S-0.5-1 (720-88240-3[MS]), DG-L13S-0.5-1 (720-88240-3[MSD]), DG-L13S-3.5-4 (720-88240-4) and DUP-36 (720-88240-19).

Method(s) 8082: The Aroclors in the continuing calibration verification (CCV) met criteria; however, the Decachlorobiphenyl surrogate failed to meet criteria at -19.6%. Surrogate recoveries for all samples were within control limits. After careful evaluation the data is reported. (CCVIS 240-343339/29)

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

Metals
Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 720-250470 and analytical batch 720-250593 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) precision was within acceptance limits.

Method(s) 6010B: The following samples were diluted due to the abundance of non-target analytes: DG-K7S-0.5-1 (720-88240-1), DG-K7S-3.5-4 (720-88240-2), DG-L13S-0.5-1 (720-88240-3), DG-L13S-3.5-4 (720-88240-4), DG-K13S-0.5-1 (720-88240-5), DG-K13S-3.5-4 (720-88240-6), DG-M14S-0.5-1 (720-88240-7), DG-M14S-3.5-4 (720-88240-8), DG-J12S-0.5-1 (720-88240-9), DG-J12S-3.5-4 (720-88240-10), DG-K12S-0.5-1 (720-88240-11), DG-K12S-3.5-4 (720-88240-12), DG-I12S-0.5-1 (720-88240-13), DG-I12S-3.5-4 (720-88240-14), DG-H12S-0.5-1 (720-88240-15), DG-H12S-3.5-4 (720-88240-16), DUP-33 (720-88240-17), DUP-34 (720-88240-18), DUP-36 (720-88240-19) and DUP-13 (720-88240-20). Elevated reporting limits (RLs) are provided.

Method(s) 6010B: The method blank for preparation batch 720-250385 and analytical batch 720-250634 contained Cr above the 6010 method detection limit (MDL) and the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 720-250385 and analytical batch 720-250634 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) precision was within acceptance limits.

Method(s) 6010B: The post digestion spike % recovery associated with batch 720-250593 was outside of the 75-125% control limits.

Analyte	Recovery
Silver	145%
Arsenic	131%
Barium	175%
Beryllium	157%
Cadmium	128%
Cobalt	130%
Chromium	149%
Copper	148%
Molybdenum	131%
Nickel	133%
Lead	138%
Antimony	128%
Selenium	128%
Vanadium	148%
Zinc	138%

Method(s) 6010B: The serial dilution performed for the following sample associated with batch 720-250593 was outside of the 10% control limits: (720-88237-A-9-C SD)

Analyte	Recovery

Job ID: 720-88240-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

Barium	37%
Cobalt	33%
Chromium	35%
Nickel	31%
Lead	34%
Vanadium	33%

Method(s) 6010B: The serial dilution performed for the following sample associated with batch 720-250634 was outside control limits: (720-88240-D-3-C SD)

Analyte	Recovery
Arsenic	21%
Barium	24%
Cobalt	23%
Chromium	29%
Nickel	25%
Lead	27%
Vanadium	30%
Zinc	25%

Method(s) 6010B: The post digestion spike % recovery associated with batch 720-250634 was outside of the 75-125% control limits.

Analyte	Recovery
Silver	129%
Barium	141%
Chromium	130%
Copper	133%
Vanadium	128%

Method(s) 6010B: Internal standard responses were outside of acceptance limits for the ICSAB but recoveries met criteria: (ICSAB 720-250701/8).

Method(s) 6010B: The method blank for preparation batch 720-250385 and analytical batch 720-250634 contained chromium above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

Organic Prep
Method(s) 3546: Due to sample viscosity, these samples were brought up to a volume of 2ml.
DG-L13S-3.5-4 (720-88240-4) and DUP-36 (720-88240-19)

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

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

Detection Summary

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

TestAmerica Job ID: 720-88240-1

Client Sample ID: DG-K7S-0.5-1 — Lab Sample ID: 720-88240-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	89	J	190	74	ug/Kg	20		8270C SIM	Total/NA
Benzo[b]fluoranthene	170	J	190	81	ug/Kg	20		8270C SIM	Total/NA
Fluoranthene	57	J B	190	54	ug/Kg	20		8270C SIM	Total/NA
Phenanthrene	71	J B	190	70	ug/Kg	20		8270C SIM	Total/NA
Pyrene	110	J	190	66	ug/Kg	20		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	1700000		94000	35000	ug/Kg	50		8015B	Total/NA
4,4'-DDT	5.1	J	9.9	2.0	ug/Kg	5		8081A	Total/NA
Aroclor-1260	38	J	50	22	ug/Kg	1		8082	Total/NA
Antimony	12		2.0	0.33	mg/Kg	4		6010B	Total/NA
Arsenic	6.0		3.9	0.33	mg/Kg	4		6010B	Total/NA
Barium	630		2.0	0.28	mg/Kg	4		6010B	Total/NA
Cadmium	8.4		0.49	0.049	mg/Kg	4		6010B	Total/NA
Chromium	130	B	2.0	0.21	mg/Kg	4		6010B	Total/NA
Cobalt	16		0.78	0.078	mg/Kg	4		6010B	Total/NA
Copper	590		5.9	2.8	mg/Kg	4		6010B	Total/NA
Lead	3100		2.0	0.41	mg/Kg	4		6010B	Total/NA
Molybdenum	1.1	J	2.0	0.25	mg/Kg	4		6010B	Total/NA
Nickel	18		2.0	0.20	mg/Kg	4		6010B	Total/NA
Selenium	1.6	J	3.9	0.59	mg/Kg	4		6010B	Total/NA
Vanadium	120		2.0	0.27	mg/Kg	4		6010B	Total/NA
Zinc	830		5.9	2.5	mg/Kg	4		6010B	Total/NA
Mercury	0.11		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-K7S-3.5-4 — Lab Sample ID: 720-88240-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	80		36	27	ug/Kg	1		8260B	Total/NA
Benzo[a]pyrene	2.4	J	4.9	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	3.6	J	4.9	2.1	ug/Kg	1		8270C SIM	Total/NA
Chrysene	2.4	J	4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	3.1	J B	4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	3.5	J B	4.9	1.8	ug/Kg	1		8270C SIM	Total/NA
Pyrene	3.8	J	4.9	1.7	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	15000		1900	730	ug/Kg	1		8015B	Total/NA
Barium	130		1.0	0.14	mg/Kg	4		6010B	Total/NA
Beryllium	0.26		0.20	0.065	mg/Kg	4		6010B	Total/NA
Chromium	80	B	1.3	0.13	mg/Kg	5		6010B	Total/NA
Cobalt	25		0.50	0.050	mg/Kg	5		6010B	Total/NA
Copper	24		3.8	1.8	mg/Kg	5		6010B	Total/NA
Lead	11		1.3	0.26	mg/Kg	5		6010B	Total/NA
Molybdenum	1.3		1.0	0.13	mg/Kg	4		6010B	Total/NA
Nickel	41		1.3	0.13	mg/Kg	5		6010B	Total/NA
Selenium	0.86	J	2.5	0.38	mg/Kg	5		6010B	Total/NA
Vanadium	130		1.3	0.17	mg/Kg	5		6010B	Total/NA
Zinc	54		3.8	1.6	mg/Kg	5		6010B	Total/NA
Mercury	0.27		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-L13S-0.5-1 — Lab Sample ID: 720-88240-3

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-L13S-0.5-1 (Continued) — Lab Sample ID: 720-88240-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	34	J	50	24	ug/Kg	10		8270C SIM	Total/NA
Anthracene	20	J	50	20	ug/Kg	10		8270C SIM	Total/NA
Benzo[a]pyrene	37	J	50	19	ug/Kg	10		8270C SIM	Total/NA
Benzo[b]fluoranthene	49	J	50	21	ug/Kg	10		8270C SIM	Total/NA
Benzo[g,h,i]perylene	50	F1	50	43	ug/Kg	10		8270C SIM	Total/NA
Benzo[k]fluoranthene	28	J F1	50	21	ug/Kg	10		8270C SIM	Total/NA
Chrysene	29	J	50	14	ug/Kg	10		8270C SIM	Total/NA
Fluoranthene	32	J B	50	14	ug/Kg	10		8270C SIM	Total/NA
Phenanthrene	19	J B	50	18	ug/Kg	10		8270C SIM	Total/NA
Pyrene	45	J	50	17	ug/Kg	10		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	430000		9800	3700	ug/Kg	5		8015B	Total/NA
cis-Chlordane	3.5	J p	3.8	0.77	ug/Kg	2		8081A	Total/NA
trans-Chlordane	3.6	J	3.8	0.88	ug/Kg	2		8081A	Total/NA
Antimony	1.4	J F1	1.9	0.32	mg/Kg	4		6010B	Total/NA
Arsenic	38	F1 F2	3.8	0.32	mg/Kg	4		6010B	Total/NA
Barium	90	F1 F2	1.9	0.27	mg/Kg	4		6010B	Total/NA
Cadmium	0.12	J	0.48	0.047	mg/Kg	4		6010B	Total/NA
Chromium	51	B F1	1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	9.5		0.76	0.076	mg/Kg	4		6010B	Total/NA
Copper	55	F1	5.7	2.7	mg/Kg	4		6010B	Total/NA
Lead	120	F1	1.9	0.40	mg/Kg	4		6010B	Total/NA
Molybdenum	0.90	J	1.9	0.24	mg/Kg	4		6010B	Total/NA
Nickel	52	F1	1.9	0.19	mg/Kg	4		6010B	Total/NA
Selenium	1.6	J	3.8	0.57	mg/Kg	4		6010B	Total/NA
Vanadium	43	F1	1.9	0.26	mg/Kg	4		6010B	Total/NA
Zinc	130	F1 F2	5.7	2.4	mg/Kg	4		6010B	Total/NA
Mercury	0.066		0.015	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-L13S-3.5-4 — Lab Sample ID: 720-88240-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	140	J	200	100	ug/Kg	10		8270C SIM	Total/NA
Acenaphthene	150		100	56	ug/Kg	10		8270C SIM	Total/NA
Acenaphthylene	90	J	100	48	ug/Kg	10		8270C SIM	Total/NA
Anthracene	310		100	40	ug/Kg	10		8270C SIM	Total/NA
Benzo[a]anthracene	300		100	30	ug/Kg	10		8270C SIM	Total/NA
Benzo[a]pyrene	280		100	38	ug/Kg	10		8270C SIM	Total/NA
Benzo[b]fluoranthene	250		100	42	ug/Kg	10		8270C SIM	Total/NA
Benzo[k]fluoranthene	100		100	42	ug/Kg	10		8270C SIM	Total/NA
Chrysene	460		100	28	ug/Kg	10		8270C SIM	Total/NA
Fluoranthene	390		100	28	ug/Kg	10		8270C SIM	Total/NA
Fluorene	160		100	44	ug/Kg	10		8270C SIM	Total/NA
Naphthalene	100		100	70	ug/Kg	10		8270C SIM	Total/NA
Phenanthrene	140		100	36	ug/Kg	10		8270C SIM	Total/NA
Pyrene	990		100	34	ug/Kg	10		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	7000000		96000	36000	ug/Kg	50		8015B	Total/NA
Antimony	0.59	J	1.8	0.29	mg/Kg	4		6010B	Total/NA
Arsenic	33		3.5	0.30	mg/Kg	4		6010B	Total/NA
Barium	210		1.8	0.25	mg/Kg	4		6010B	Total/NA
Beryllium	0.52		0.35	0.11	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-L13S-3.5-4 (Continued) — Lab Sample ID: 720-88240-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	180	B	1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	23		0.70	0.070	mg/Kg	4		6010B	Total/NA
Copper	37		5.3	2.5	mg/Kg	4		6010B	Total/NA
Lead	11		1.8	0.37	mg/Kg	4		6010B	Total/NA
Molybdenum	1.1	J	1.8	0.22	mg/Kg	4		6010B	Total/NA
Nickel	140		1.8	0.18	mg/Kg	4		6010B	Total/NA
Selenium	1.5	J	3.5	0.53	mg/Kg	4		6010B	Total/NA
Vanadium	99		1.8	0.24	mg/Kg	4		6010B	Total/NA
Zinc	71		5.3	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.085		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-K13S-0.5-1 — Lab Sample ID: 720-88240-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	6.4		3.8	0.33	mg/Kg	4		6010B	Total/NA
Barium	140		1.9	0.27	mg/Kg	4		6010B	Total/NA
Beryllium	0.31	J	0.38	0.13	mg/Kg	4		6010B	Total/NA
Chromium	100	B	1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	19		0.77	0.077	mg/Kg	4		6010B	Total/NA
Copper	68		5.8	2.7	mg/Kg	4		6010B	Total/NA
Lead	100		1.9	0.40	mg/Kg	4		6010B	Total/NA
Molybdenum	0.97	J	1.9	0.25	mg/Kg	4		6010B	Total/NA
Nickel	120		1.9	0.20	mg/Kg	4		6010B	Total/NA
Selenium	2.0	J	3.8	0.58	mg/Kg	4		6010B	Total/NA
Vanadium	94		1.9	0.26	mg/Kg	4		6010B	Total/NA
Zinc	140		5.8	2.4	mg/Kg	4		6010B	Total/NA
Mercury	0.35		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-K13S-3.5-4 — Lab Sample ID: 720-88240-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.0	J	1.2	0.20	mg/Kg	4		6010B	Total/NA
Arsenic	2.1	J	2.5	0.21	mg/Kg	4		6010B	Total/NA
Barium	78		1.2	0.18	mg/Kg	4		6010B	Total/NA
Beryllium	0.27		0.25	0.080	mg/Kg	4		6010B	Total/NA
Cadmium	0.50		0.31	0.031	mg/Kg	4		6010B	Total/NA
Chromium	280	B	1.2	0.13	mg/Kg	4		6010B	Total/NA
Cobalt	24		0.49	0.049	mg/Kg	4		6010B	Total/NA
Copper	26		3.7	1.8	mg/Kg	4		6010B	Total/NA
Lead	11		1.2	0.26	mg/Kg	4		6010B	Total/NA
Molybdenum	0.63	J	1.2	0.16	mg/Kg	4		6010B	Total/NA
Nickel	310		1.2	0.13	mg/Kg	4		6010B	Total/NA
Selenium	0.97	J	2.5	0.37	mg/Kg	4		6010B	Total/NA
Vanadium	65		1.2	0.17	mg/Kg	4		6010B	Total/NA
Zinc	710		3.7	1.6	mg/Kg	4		6010B	Total/NA
Mercury	0.073		0.015	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-M14S-0.5-1 — Lab Sample ID: 720-88240-7

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-M14S-0.5-1 (Continued) — Lab Sample ID: 720-88240-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	4.2		2.0	0.33	mg/Kg	4		6010B	Total/NA
Arsenic	94		4.0	0.34	mg/Kg	4		6010B	Total/NA
Barium	200		2.0	0.28	mg/Kg	4		6010B	Total/NA
Beryllium	0.24	J	0.40	0.13	mg/Kg	4		6010B	Total/NA
Cadmium	1.5		0.50	0.050	mg/Kg	4		6010B	Total/NA
Chromium	590	B	2.0	0.21	mg/Kg	4		6010B	Total/NA
Cobalt	28		0.80	0.080	mg/Kg	4		6010B	Total/NA
Copper	120		6.0	2.8	mg/Kg	4		6010B	Total/NA
Lead	1200		2.0	0.42	mg/Kg	4		6010B	Total/NA
Molybdenum	1.8	J	2.0	0.26	mg/Kg	4		6010B	Total/NA
Nickel	96		2.0	0.20	mg/Kg	4		6010B	Total/NA
Selenium	2.0	J	4.0	0.60	mg/Kg	4		6010B	Total/NA
Vanadium	74		2.0	0.27	mg/Kg	4		6010B	Total/NA
Zinc	1100		6.0	2.5	mg/Kg	4		6010B	Total/NA
Mercury	0.56		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-M14S-3.5-4 — Lab Sample ID: 720-88240-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.2		1.2	0.20	mg/Kg	4		6010B	Total/NA
Arsenic	25		2.4	0.20	mg/Kg	4		6010B	Total/NA
Barium	100		1.2	0.17	mg/Kg	4		6010B	Total/NA
Beryllium	0.25		0.24	0.077	mg/Kg	4		6010B	Total/NA
Cadmium	0.37		0.30	0.029	mg/Kg	4		6010B	Total/NA
Chromium	220	B	1.2	0.13	mg/Kg	4		6010B	Total/NA
Cobalt	21		0.47	0.047	mg/Kg	4		6010B	Total/NA
Copper	56		3.6	1.7	mg/Kg	4		6010B	Total/NA
Lead	270		1.2	0.25	mg/Kg	4		6010B	Total/NA
Molybdenum	0.70	J	1.2	0.15	mg/Kg	4		6010B	Total/NA
Nickel	230		1.2	0.12	mg/Kg	4		6010B	Total/NA
Selenium	1.4	J	2.4	0.36	mg/Kg	4		6010B	Total/NA
Vanadium	61		1.2	0.16	mg/Kg	4		6010B	Total/NA
Zinc	190		3.6	1.5	mg/Kg	4		6010B	Total/NA
Mercury	0.22		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-J12S-0.5-1 — Lab Sample ID: 720-88240-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	21		1.6	0.27	mg/Kg	4		6010B	Total/NA
Arsenic	11		3.3	0.28	mg/Kg	4		6010B	Total/NA
Barium	140		1.6	0.23	mg/Kg	4		6010B	Total/NA
Beryllium	0.20	J	0.33	0.11	mg/Kg	4		6010B	Total/NA
Cadmium	0.36	J	0.41	0.041	mg/Kg	4		6010B	Total/NA
Chromium	39	B	1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	16		0.66	0.066	mg/Kg	4		6010B	Total/NA
Copper	270		4.9	2.3	mg/Kg	4		6010B	Total/NA
Lead	1500		1.6	0.34	mg/Kg	4		6010B	Total/NA
Molybdenum	1.6		1.6	0.21	mg/Kg	4		6010B	Total/NA
Nickel	33		1.6	0.17	mg/Kg	4		6010B	Total/NA
Selenium	2.3	J	3.3	0.49	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-J12S-0.5-1 (Continued) — Lab Sample ID: 720-88240-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	90		1.6	0.22	mg/Kg	4		6010B	Total/NA
Zinc	330		4.9	2.1	mg/Kg	4		6010B	Total/NA
Mercury	0.16		0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-J12S-3.5-4 — Lab Sample ID: 720-88240-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.5		1.3	0.21	mg/Kg	4		6010B	Total/NA
Arsenic	2.3	J	2.6	0.22	mg/Kg	4		6010B	Total/NA
Barium	52		1.3	0.18	mg/Kg	4		6010B	Total/NA
Beryllium	0.15	J	0.26	0.083	mg/Kg	4		6010B	Total/NA
Chromium	57	B	1.3	0.14	mg/Kg	4		6010B	Total/NA
Cobalt	6.9		0.51	0.051	mg/Kg	4		6010B	Total/NA
Copper	24		3.8	1.8	mg/Kg	4		6010B	Total/NA
Lead	52		1.3	0.27	mg/Kg	4		6010B	Total/NA
Molybdenum	0.58	J	1.3	0.16	mg/Kg	4		6010B	Total/NA
Nickel	33		1.3	0.13	mg/Kg	4		6010B	Total/NA
Selenium	0.74	J	2.6	0.38	mg/Kg	4		6010B	Total/NA
Vanadium	50		1.3	0.17	mg/Kg	4		6010B	Total/NA
Zinc	36		3.8	1.6	mg/Kg	4		6010B	Total/NA
Mercury	0.053		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-K12S-0.5-1 — Lab Sample ID: 720-88240-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.36	J	1.9	0.31	mg/Kg	4		6010B	Total/NA
Arsenic	170		3.7	0.32	mg/Kg	4		6010B	Total/NA
Barium	170		1.9	0.27	mg/Kg	4		6010B	Total/NA
Beryllium	0.34	J	0.37	0.12	mg/Kg	4		6010B	Total/NA
Chromium	130	B	1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	37		0.75	0.075	mg/Kg	4		6010B	Total/NA
Copper	97		5.6	2.7	mg/Kg	4		6010B	Total/NA
Lead	74		1.9	0.39	mg/Kg	4		6010B	Total/NA
Molybdenum	1.4	J	1.9	0.24	mg/Kg	4		6010B	Total/NA
Nickel	57		1.9	0.19	mg/Kg	4		6010B	Total/NA
Selenium	2.0	J	3.7	0.56	mg/Kg	4		6010B	Total/NA
Vanadium	240		1.9	0.25	mg/Kg	4		6010B	Total/NA
Zinc	160		5.6	2.4	mg/Kg	4		6010B	Total/NA
Mercury	0.064		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-K12S-3.5-4 — Lab Sample ID: 720-88240-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	40		2.8	0.24	mg/Kg	4		6010B	Total/NA
Barium	430		1.4	0.20	mg/Kg	4		6010B	Total/NA
Beryllium	0.51		0.28	0.092	mg/Kg	4		6010B	Total/NA
Chromium	68	B	1.4	0.15	mg/Kg	4		6010B	Total/NA
Cobalt	24		0.57	0.057	mg/Kg	4		6010B	Total/NA
Copper	43		4.3	2.0	mg/Kg	4		6010B	Total/NA
Lead	21		1.4	0.30	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-K12S-3.5-4 (Continued) — Lab Sample ID: 720-88240-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Molybdenum	1.8		1.4	0.18	mg/Kg	4		6010B	Total/NA
Nickel	170		1.4	0.14	mg/Kg	4		6010B	Total/NA
Selenium	1.8	J	2.8	0.43	mg/Kg	4		6010B	Total/NA
Vanadium	70		1.4	0.19	mg/Kg	4		6010B	Total/NA
Zinc	82		4.3	1.8	mg/Kg	4		6010B	Total/NA
Mercury	0.10		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-I12S-0.5-1 — Lab Sample ID: 720-88240-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.58	J	1.4	0.24	mg/Kg	4		6010B	Total/NA
Arsenic	33		2.9	0.24	mg/Kg	4		6010B	Total/NA
Barium	32		1.4	0.20	mg/Kg	4		6010B	Total/NA
Cadmium	0.41		0.36	0.035	mg/Kg	4		6010B	Total/NA
Chromium	29	B	1.4	0.15	mg/Kg	4		6010B	Total/NA
Cobalt	15		0.57	0.057	mg/Kg	4		6010B	Total/NA
Copper	260		4.3	2.0	mg/Kg	4		6010B	Total/NA
Lead	160		1.4	0.30	mg/Kg	4		6010B	Total/NA
Molybdenum	1.6		1.4	0.18	mg/Kg	4		6010B	Total/NA
Nickel	25		1.4	0.15	mg/Kg	4		6010B	Total/NA
Selenium	1.4	J	2.9	0.43	mg/Kg	4		6010B	Total/NA
Vanadium	100		1.4	0.19	mg/Kg	4		6010B	Total/NA
Zinc	230		4.3	1.8	mg/Kg	4		6010B	Total/NA
Mercury	0.099		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-I12S-3.5-4 — Lab Sample ID: 720-88240-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	44		2.4	0.20	mg/Kg	4		6010B	Total/NA
Barium	63		1.2	0.17	mg/Kg	4		6010B	Total/NA
Beryllium	0.18	J	0.24	0.078	mg/Kg	4		6010B	Total/NA
Chromium	50	B	1.2	0.13	mg/Kg	4		6010B	Total/NA
Cobalt	6.8		0.48	0.048	mg/Kg	4		6010B	Total/NA
Copper	14		3.6	1.7	mg/Kg	4		6010B	Total/NA
Lead	19		1.2	0.25	mg/Kg	4		6010B	Total/NA
Molybdenum	0.56	J	1.2	0.15	mg/Kg	4		6010B	Total/NA
Nickel	34		1.2	0.12	mg/Kg	4		6010B	Total/NA
Selenium	0.38	J	2.4	0.36	mg/Kg	4		6010B	Total/NA
Vanadium	46		1.2	0.16	mg/Kg	4		6010B	Total/NA
Zinc	35		3.6	1.5	mg/Kg	4		6010B	Total/NA
Mercury	0.072		0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-H12S-0.5-1 — Lab Sample ID: 720-88240-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.3		1.7	0.29	mg/Kg	4		6010B	Total/NA
Arsenic	340		3.5	0.30	mg/Kg	4		6010B	Total/NA
Barium	27		1.7	0.25	mg/Kg	4		6010B	Total/NA
Beryllium	0.17	J	0.35	0.11	mg/Kg	4		6010B	Total/NA
Cadmium	5.5		0.43	0.043	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-H12S-0.5-1 (Continued) — Lab Sample ID: 720-88240-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	15	B	1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	12		0.70	0.070	mg/Kg	4		6010B	Total/NA
Copper	84		5.2	2.5	mg/Kg	4		6010B	Total/NA
Lead	190		1.7	0.37	mg/Kg	4		6010B	Total/NA
Molybdenum	0.96	J	1.7	0.22	mg/Kg	4		6010B	Total/NA
Nickel	14		1.7	0.18	mg/Kg	4		6010B	Total/NA
Selenium	1.5	J	3.5	0.52	mg/Kg	4		6010B	Total/NA
Vanadium	92		1.7	0.24	mg/Kg	4		6010B	Total/NA
Zinc	100		5.2	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.42		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-H12S-3.5-4 — Lab Sample ID: 720-88240-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.1		1.7	0.28	mg/Kg	4		6010B	Total/NA
Arsenic	72		3.3	0.28	mg/Kg	4		6010B	Total/NA
Barium	30		1.7	0.24	mg/Kg	4		6010B	Total/NA
Beryllium	0.26	J	0.33	0.11	mg/Kg	4		6010B	Total/NA
Chromium	500	B	1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	32		0.67	0.067	mg/Kg	4		6010B	Total/NA
Copper	44		5.0	2.4	mg/Kg	4		6010B	Total/NA
Lead	6.5		1.7	0.35	mg/Kg	4		6010B	Total/NA
Molybdenum	0.79	J	1.7	0.21	mg/Kg	4		6010B	Total/NA
Nickel	360		1.7	0.17	mg/Kg	4		6010B	Total/NA
Selenium	1.4	J	3.3	0.50	mg/Kg	4		6010B	Total/NA
Vanadium	79		1.7	0.23	mg/Kg	4		6010B	Total/NA
Zinc	65		5.0	2.1	mg/Kg	4		6010B	Total/NA
Mercury	0.087		0.015	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DUP-33 — Lab Sample ID: 720-88240-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.4		1.3	0.22	mg/Kg	4		6010B	Total/NA
Arsenic	230		2.6	0.22	mg/Kg	4		6010B	Total/NA
Barium	120		1.3	0.19	mg/Kg	4		6010B	Total/NA
Cadmium	0.096	J	0.33	0.032	mg/Kg	4		6010B	Total/NA
Chromium	110		1.3	0.14	mg/Kg	4		6010B	Total/NA
Cobalt	15		0.52	0.052	mg/Kg	4		6010B	Total/NA
Copper	24		3.9	1.9	mg/Kg	4		6010B	Total/NA
Lead	43		1.3	0.27	mg/Kg	4		6010B	Total/NA
Molybdenum	0.18	J	1.3	0.17	mg/Kg	4		6010B	Total/NA
Nickel	120		1.3	0.13	mg/Kg	4		6010B	Total/NA
Silver	0.23	J	0.65	0.13	mg/Kg	4		6010B	Total/NA
Thallium	0.88	J	1.3	0.38	mg/Kg	4		6010B	Total/NA
Vanadium	79		1.3	0.18	mg/Kg	4		6010B	Total/NA
Zinc	49		3.9	1.7	mg/Kg	4		6010B	Total/NA
Mercury	0.12		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DUP-34 — Lab Sample ID: 720-88240-18

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP-34 (Continued) — Lab Sample ID: 720-88240-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	4.4		1.7	0.27	mg/Kg	4		6010B	Total/NA
Arsenic	210		3.3	0.28	mg/Kg	4		6010B	Total/NA
Barium	170		1.7	0.23	mg/Kg	4		6010B	Total/NA
Cadmium	0.54		0.41	0.041	mg/Kg	4		6010B	Total/NA
Chromium	130		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	38		0.66	0.066	mg/Kg	4		6010B	Total/NA
Copper	120		5.0	2.4	mg/Kg	4		6010B	Total/NA
Lead	86		1.7	0.35	mg/Kg	4		6010B	Total/NA
Molybdenum	0.31	J	1.7	0.21	mg/Kg	4		6010B	Total/NA
Nickel	58		1.7	0.17	mg/Kg	4		6010B	Total/NA
Silver	1.4		0.83	0.17	mg/Kg	4		6010B	Total/NA
Thallium	3.9		1.7	0.48	mg/Kg	4		6010B	Total/NA
Vanadium	250		1.7	0.22	mg/Kg	4		6010B	Total/NA
Zinc	190		5.0	2.1	mg/Kg	4		6010B	Total/NA
Mercury	0.042		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DUP-36 — Lab Sample ID: 720-88240-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	50		45	35	ug/Kg	1		8260B	Total/NA
Gasoline Range Organics (GRO) -C4-C12	180	J	230	91	ug/Kg	1		8260B	Total/NA
Acenaphthylene	100	J	190	92	ug/Kg	20		8270C SIM	Total/NA
Anthracene	82	J	190	77	ug/Kg	20		8270C SIM	Total/NA
Benzo[a]pyrene	150	J	190	73	ug/Kg	20		8270C SIM	Total/NA
Benzo[b]fluoranthene	120	J	190	81	ug/Kg	20		8270C SIM	Total/NA
Chrysene	96	J	190	54	ug/Kg	20		8270C SIM	Total/NA
Fluoranthene	100	J	190	54	ug/Kg	20		8270C SIM	Total/NA
Pyrene	300		190	65	ug/Kg	20		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	2200000		95000	36000	ug/Kg	50		8015B	Total/NA
Antimony	5.2		1.4	0.23	mg/Kg	4		6010B	Total/NA
Arsenic	61		2.8	0.24	mg/Kg	4		6010B	Total/NA
Barium	110		1.4	0.20	mg/Kg	4		6010B	Total/NA
Cadmium	0.052	J	0.35	0.034	mg/Kg	4		6010B	Total/NA
Chromium	600		1.4	0.15	mg/Kg	4		6010B	Total/NA
Cobalt	40		0.56	0.056	mg/Kg	4		6010B	Total/NA
Copper	50		4.2	2.0	mg/Kg	4		6010B	Total/NA
Lead	2.2		1.4	0.29	mg/Kg	4		6010B	Total/NA
Molybdenum	0.21	J	1.4	0.18	mg/Kg	4		6010B	Total/NA
Nickel	360		1.4	0.14	mg/Kg	4		6010B	Total/NA
Silver	0.59	J	0.69	0.14	mg/Kg	4		6010B	Total/NA
Thallium	1.8		1.4	0.40	mg/Kg	4		6010B	Total/NA
Vanadium	130		1.4	0.19	mg/Kg	4		6010B	Total/NA
Zinc	92		4.2	1.8	mg/Kg	4		6010B	Total/NA
Mercury	0.055		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DUP-13 — Lab Sample ID: 720-88240-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	68		36	27	ug/Kg	1		8260B	Total/NA
n-Butylbenzene	0.73	J	3.6	0.72	ug/Kg	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP-13 (Continued) — Lab Sample ID: 720-88240-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
sec-Butylbenzene	0.80	J	3.6	0.52	ug/Kg	1		8260B	Total/NA
tert-Butylbenzene	0.67	J	3.6	0.52	ug/Kg	1		8260B	Total/NA
4-Isopropyltoluene	5.0		3.6	1.8	ug/Kg	1		8260B	Total/NA
N-Propylbenzene	0.63	J	3.6	0.47	ug/Kg	1		8260B	Total/NA
Toluene	0.52	J	3.6	0.51	ug/Kg	1		8260B	Total/NA
1,3,5-Trimethylbenzene	0.59	J	3.6	0.47	ug/Kg	1		8260B	Total/NA
Acenaphthylene	2.7	J	4.8	2.3	ug/Kg	1		8270C SIM	Total/NA
Anthracene	1.9	J	4.8	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	5.0		4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	6.1		4.8	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	6.6		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	3.3	J	4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	4.9		4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	7.0	B	4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	6.6	B	4.8	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	9.6		4.8	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	50000		2000	740	ug/Kg	1		8015B	Total/NA
Arsenic	3.2		2.6	0.22	mg/Kg	4		6010B	Total/NA
Barium	120		1.3	0.18	mg/Kg	4		6010B	Total/NA
Chromium	86		1.3	0.14	mg/Kg	4		6010B	Total/NA
Cobalt	22		0.52	0.052	mg/Kg	4		6010B	Total/NA
Copper	32		3.9	1.8	mg/Kg	4		6010B	Total/NA
Lead	12		1.3	0.27	mg/Kg	4		6010B	Total/NA
Nickel	38		1.3	0.13	mg/Kg	4		6010B	Total/NA
Silver	0.45	J	0.65	0.13	mg/Kg	4		6010B	Total/NA
Thallium	2.2		1.3	0.37	mg/Kg	4		6010B	Total/NA
Vanadium	150		1.3	0.18	mg/Kg	4		6010B	Total/NA
Zinc	53		3.9	1.6	mg/Kg	4		6010B	Total/NA
Mercury	0.37		0.016	0.0023	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

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

TestAmerica Job ID: 720-88240-1

Client Sample ID: DG-K7S-0.5-1

Date Collected: 08/24/18 07:52
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88240-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.4	1.0	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
Acetone	ND		44	33	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
Benzene	ND		4.4	0.57	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
Dichlorobromomethane	ND		4.4	0.63	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
Bromobenzene	ND	*	4.4	0.69	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
Chlorobromomethane	ND		17	0.63	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
Bromoform	ND	*	4.4	1.7	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
Bromomethane	ND		8.7	0.69	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
2-Butanone (MEK)	ND		44	18	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
n-Butylbenzene	ND	*	4.4	0.87	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
sec-Butylbenzene	ND	*	4.4	0.63	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
tert-Butylbenzene	ND	*	4.4	0.64	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
Carbon disulfide	ND		4.4	1.7	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
Carbon tetrachloride	ND		4.4	0.54	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
Chlorobenzene	ND	*	4.4	0.60	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
Chloroethane	ND		8.7	0.49	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
Chloroform	ND		4.4	0.57	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
Chloromethane	ND		8.7	0.69	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
2-Chlorotoluene	ND	*	4.4	0.57	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
4-Chlorotoluene	ND	*	4.4	0.59	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
Chlorodibromomethane	ND		4.4	0.62	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
1,2-Dichlorobenzene	ND	*	4.4	0.59	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
1,3-Dichlorobenzene	ND	*	4.4	0.63	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
1,4-Dichlorobenzene	ND	*	4.4	0.62	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
1,3-Dichloropropane	ND		4.4	0.64	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
1,1-Dichloropropene	ND		4.4	0.60	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
1,2-Dibromo-3-Chloropropane	ND	*	8.7	1.5	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
Ethylene Dibromide	ND		4.4	1.2	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
Dibromomethane	ND		8.7	0.75	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
Dichlorodifluoromethane	ND		8.7	0.69	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
1,1-Dichloroethane	ND		4.4	0.59	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
1,2-Dichloroethane	ND		4.4	0.66	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
1,1-Dichloroethene	ND	*	4.4	0.54	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
cis-1,2-Dichloroethene	ND		4.4	0.59	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
trans-1,2-Dichloroethene	ND		4.4	0.65	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
1,2-Dichloropropane	ND		4.4	0.55	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
cis-1,3-Dichloropropene	ND		4.4	0.60	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
trans-1,3-Dichloropropene	ND		4.4	0.58	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
Ethylbenzene	ND	*	4.4	0.65	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
Hexachlorobutadiene	ND	*	4.4	0.78	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
2-Hexanone	ND		44	8.7	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
Isopropylbenzene	ND	*	4.4	0.59	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
4-Isopropyltoluene	ND	*	4.4	2.2	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
Methylene Chloride	ND		8.7	4.9	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
4-Methyl-2-pentanone (MIBK)	ND		44	8.7	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
Naphthalene	ND	*	8.7	1.3	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
N-Propylbenzene	ND	*	4.4	0.57	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
Styrene	ND	*	4.4	0.55	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
1,1,1,2-Tetrachloroethane	ND	*	4.4	0.66	ug/Kg		08/25/18 03:05	08/30/18 16:12	1

Client Sample ID: DG-K7S-0.5-1

Lab Sample ID: 720-88240-1

Date Collected: 08/24/18 07:52

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	4.4	0.65	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
Tetrachloroethene	ND		4.4	0.58	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
Toluene	ND	*	4.4	0.62	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
1,2,3-Trichlorobenzene	ND	*	4.4	0.64	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
1,2,4-Trichlorobenzene	ND	*	4.4	0.62	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
1,1,1-Trichloroethane	ND		4.4	0.53	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
1,1,2-Trichloroethane	ND		4.4	0.61	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
Trichloroethene	ND		4.4	0.55	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
Trichlorofluoromethane	ND		4.4	0.49	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
1,2,3-Trichloropropane	ND	*	4.4	0.67	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.4	1.8	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
1,2,4-Trimethylbenzene	ND	*	4.4	1.4	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
1,3,5-Trimethylbenzene	ND	*	4.4	0.57	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
Vinyl acetate	ND		17	4.4	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
Vinyl chloride	ND		4.4	0.64	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
Xylenes, Total	ND		4.4	1.1	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
2,2-Dichloropropane	ND		4.4	1.7	ug/Kg		08/25/18 03:05	08/30/18 16:12	1
Gasoline Range Organics (GRO) -C4-C12	ND		220	87	ug/Kg		08/25/18 03:05	08/30/18 16:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*71*	*	*45 - 131*	*08/25/18 03:05*	*08/30/18 16:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*126*		*60 - 140*	*08/25/18 03:05*	*08/30/18 16:12*	*1*
Toluene-d8 (Surr)	*80*		*58 - 140*	*08/25/18 03:05*	*08/30/18 16:12*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		390	190	ug/Kg		08/29/18 11:45	09/04/18 15:32	20
Acenaphthene	ND		190	110	ug/Kg		08/29/18 11:45	09/04/18 15:32	20
Acenaphthylene	ND		190	93	ug/Kg		08/29/18 11:45	09/04/18 15:32	20
Anthracene	ND		190	78	ug/Kg		08/29/18 11:45	09/04/18 15:32	20
Benzo[a]anthracene	ND		190	58	ug/Kg		08/29/18 11:45	09/04/18 15:32	20
Benzo[a]pyrene	**89**	**J**	190	74	ug/Kg		08/29/18 11:45	09/04/18 15:32	20
Benzo[b]fluoranthene	**170**	**J**	190	81	ug/Kg		08/29/18 11:45	09/04/18 15:32	20
Benzo[g,h,i]perylene	ND		190	170	ug/Kg		08/29/18 11:45	09/04/18 15:32	20
Benzo[k]fluoranthene	ND		190	81	ug/Kg		08/29/18 11:45	09/04/18 15:32	20
Chrysene	ND		190	54	ug/Kg		08/29/18 11:45	09/04/18 15:32	20
Dibenz(a,h)anthracene	ND		190	140	ug/Kg		08/29/18 11:45	09/04/18 15:32	20
Fluoranthene	**57**	**J B**	190	54	ug/Kg		08/29/18 11:45	09/04/18 15:32	20
Fluorene	ND		190	85	ug/Kg		08/29/18 11:45	09/04/18 15:32	20
Indeno[1,2,3-cd]pyrene	ND		190	160	ug/Kg		08/29/18 11:45	09/04/18 15:32	20
Naphthalene	ND		190	140	ug/Kg		08/29/18 11:45	09/04/18 15:32	20
Phenanthrene	**71**	**J B**	190	70	ug/Kg		08/29/18 11:45	09/04/18 15:32	20
Pyrene	**110**	**J**	190	66	ug/Kg		08/29/18 11:45	09/04/18 15:32	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*33 - 120*	*08/29/18 11:45*	*09/04/18 15:32*	*20*
Terphenyl-d14	*96*		*35 - 146*	*08/29/18 11:45*	*09/04/18 15:32*	*20*

Client Sample Results

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

TestAmerica Job ID: 720-88240-1

Client Sample ID: DG-K7S-0.5-1

Date Collected: 08/24/18 07:52
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88240-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**1700000**		94000	35000	ug/Kg		08/29/18 09:03	09/04/18 14:11	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*0*	*X D*	*40 - 130*	*08/29/18 09:03*	*09/04/18 14:11*	*50*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		9.9	3.0	ug/Kg		08/29/18 10:43	09/01/18 11:57	5
4,4'-DDE	ND		9.9	2.1	ug/Kg		08/29/18 10:43	09/01/18 11:57	5
4,4'-DDT	**5.1**	**J**	9.9	2.0	ug/Kg		08/29/18 10:43	09/01/18 11:57	5
Aldrin	ND		9.9	2.5	ug/Kg		08/29/18 10:43	09/01/18 11:57	5
alpha-BHC	ND		9.9	2.7	ug/Kg		08/29/18 10:43	09/01/18 11:57	5
beta-BHC	ND		9.9	1.8	ug/Kg		08/29/18 10:43	09/01/18 11:57	5
Chlordane (technical)	ND		200	16	ug/Kg		08/29/18 10:43	09/01/18 11:57	5
cis-Chlordane	ND		9.9	2.0	ug/Kg		08/29/18 10:43	09/01/18 11:57	5
delta-BHC	ND		9.9	2.2	ug/Kg		08/29/18 10:43	09/01/18 11:57	5
Dieldrin	ND		9.9	2.9	ug/Kg		08/29/18 10:43	09/01/18 11:57	5
Endosulfan I	ND		9.9	1.6	ug/Kg		08/29/18 10:43	09/01/18 11:57	5
Endosulfan II	ND		9.9	2.4	ug/Kg		08/29/18 10:43	09/01/18 11:57	5
Endosulfan sulfate	ND		9.9	1.9	ug/Kg		08/29/18 10:43	09/01/18 11:57	5
Endrin	ND		9.9	2.3	ug/Kg		08/29/18 10:43	09/01/18 11:57	5
Endrin aldehyde	ND		9.9	3.1	ug/Kg		08/29/18 10:43	09/01/18 11:57	5
Endrin ketone	ND		9.9	1.6	ug/Kg		08/29/18 10:43	09/01/18 11:57	5
gamma-BHC (Lindane)	ND		9.9	3.1	ug/Kg		08/29/18 10:43	09/01/18 11:57	5
Heptachlor	ND		9.9	2.3	ug/Kg		08/29/18 10:43	09/01/18 11:57	5
Heptachlor epoxide	ND		9.9	1.7	ug/Kg		08/29/18 10:43	09/01/18 11:57	5
Methoxychlor	ND		9.9	3.4	ug/Kg		08/29/18 10:43	09/01/18 11:57	5
Toxaphene	ND		200	34	ug/Kg		08/29/18 10:43	09/01/18 11:57	5
trans-Chlordane	ND		9.9	2.3	ug/Kg		08/29/18 10:43	09/01/18 11:57	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*84*		*21 - 136*	*08/29/18 10:43*	*09/01/18 11:57*	*5*
Tetrachloro-m-xylene	*53*		*21 - 145*	*08/29/18 10:43*	*09/01/18 11:57*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/29/18 14:50	08/31/18 15:38	1
Aroclor-1221	ND		50	24	ug/Kg		08/29/18 14:50	08/31/18 15:38	1
Aroclor-1232	ND		50	23	ug/Kg		08/29/18 14:50	08/31/18 15:38	1
Aroclor-1242	ND		50	19	ug/Kg		08/29/18 14:50	08/31/18 15:38	1
Aroclor-1248	ND		50	24	ug/Kg		08/29/18 14:50	08/31/18 15:38	1
Aroclor-1254	ND		50	23	ug/Kg		08/29/18 14:50	08/31/18 15:38	1
Aroclor-1260	**38**	**J**	50	22	ug/Kg		08/29/18 14:50	08/31/18 15:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*74*		*14 - 128*	*08/29/18 14:50*	*08/31/18 15:38*	*1*
DCB Decachlorobiphenyl	*81*		*10 - 132*	*08/29/18 14:50*	*08/31/18 15:38*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**12**		2.0	0.33	mg/Kg		08/28/18 12:45	08/30/18 14:50	4

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

TestAmerica Job ID: 720-88240-1

Client Sample ID: DG-K7S-0.5-1

Date Collected: 08/24/18 07:52
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88240-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.0		3.9	0.33	mg/Kg		08/28/18 12:45	08/30/18 14:50	4
Barium	630		2.0	0.28	mg/Kg		08/28/18 12:45	08/30/18 14:50	4
Beryllium	ND		0.39	0.13	mg/Kg		08/28/18 12:45	08/30/18 14:50	4
Cadmium	8.4		0.49	0.049	mg/Kg		08/28/18 12:45	08/30/18 14:50	4
Chromium	130	B	2.0	0.21	mg/Kg		08/28/18 12:45	08/30/18 14:50	4
Cobalt	16		0.78	0.078	mg/Kg		08/28/18 12:45	08/30/18 14:50	4
Copper	590		5.9	2.8	mg/Kg		08/28/18 12:45	08/30/18 14:50	4
Lead	3100		2.0	0.41	mg/Kg		08/28/18 12:45	08/30/18 14:50	4
Molybdenum	1.1	J	2.0	0.25	mg/Kg		08/28/18 12:45	08/30/18 14:50	4
Nickel	18		2.0	0.20	mg/Kg		08/28/18 12:45	08/30/18 14:50	4
Selenium	1.6	J	3.9	0.59	mg/Kg		08/28/18 12:45	08/30/18 14:50	4
Silver	ND		0.98	0.20	mg/Kg		08/28/18 12:45	08/30/18 14:50	4
Thallium	ND		2.0	0.57	mg/Kg		08/28/18 12:45	08/30/18 14:50	4
Vanadium	120		2.0	0.27	mg/Kg		08/28/18 12:45	08/30/18 14:50	4
Zinc	830		5.9	2.5	mg/Kg		08/28/18 12:45	08/30/18 14:50	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.11		0.015	0.0022	mg/Kg		08/29/18 19:12	08/31/18 13:12	1

Client Sample Results

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

TestAmerica Job ID: 720-88240-1

Client Sample ID: DG-K7S-3.5-4

Date Collected: 08/24/18 07:52
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88240-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.6	0.86	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
Acetone	**80**		36	27	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
Benzene	ND		3.6	0.46	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
Dichlorobromomethane	ND		3.6	0.51	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
Bromobenzene	ND		3.6	0.56	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
Chlorobromomethane	ND		14	0.51	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
Bromoform	ND		3.6	1.4	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
Bromomethane	ND		7.1	0.56	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
2-Butanone (MEK)	ND		36	15	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
n-Butylbenzene	ND		3.6	0.71	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
sec-Butylbenzene	ND		3.6	0.51	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
tert-Butylbenzene	ND		3.6	0.52	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
Carbon disulfide	ND	*	3.6	1.4	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
Carbon tetrachloride	ND		3.6	0.44	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
Chlorobenzene	ND		3.6	0.49	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
Chloroethane	ND		7.1	0.40	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
Chloroform	ND		3.6	0.47	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
Chloromethane	ND		7.1	0.56	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
2-Chlorotoluene	ND		3.6	0.46	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
4-Chlorotoluene	ND		3.6	0.49	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
Chlorodibromomethane	ND		3.6	0.51	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
1,2-Dichlorobenzene	ND		3.6	0.49	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
1,3-Dichlorobenzene	ND		3.6	0.51	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
1,4-Dichlorobenzene	ND		3.6	0.51	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
1,3-Dichloropropane	ND		3.6	0.52	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
1,1-Dichloropropene	ND		3.6	0.49	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
1,2-Dibromo-3-Chloropropane	ND		7.1	1.2	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
Ethylene Dibromide	ND		3.6	1.0	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
Dibromomethane	ND		7.1	0.61	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
Dichlorodifluoromethane	ND		7.1	0.56	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
1,1-Dichloroethane	ND		3.6	0.49	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
1,2-Dichloroethane	ND		3.6	0.54	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
1,1-Dichloroethene	ND	*	3.6	0.44	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
cis-1,2-Dichloroethene	ND		3.6	0.49	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
trans-1,2-Dichloroethene	ND		3.6	0.54	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
1,2-Dichloropropane	ND		3.6	0.45	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
cis-1,3-Dichloropropene	ND		3.6	0.49	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
trans-1,3-Dichloropropene	ND		3.6	0.48	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
Ethylbenzene	ND		3.6	0.54	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
Hexachlorobutadiene	ND		3.6	0.64	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
2-Hexanone	ND		36	7.1	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
Isopropylbenzene	ND		3.6	0.49	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
4-Isopropyltoluene	ND		3.6	1.8	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
Methylene Chloride	ND		7.1	4.0	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
4-Methyl-2-pentanone (MIBK)	ND		36	7.1	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
Naphthalene	ND		7.1	1.1	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
N-Propylbenzene	ND		3.6	0.47	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
Styrene	ND		3.6	0.45	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
1,1,1,2-Tetrachloroethane	ND		3.6	0.54	ug/Kg		08/25/18 03:05	08/29/18 23:38	1

Client Sample ID: DG-K7S-3.5-4

Date Collected: 08/24/18 07:52
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88240-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		3.6	0.54	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
Tetrachloroethene	ND		4.1	0.55	ug/Kg		08/25/18 03:05	08/30/18 16:40	1
Toluene	ND		3.6	0.51	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
1,2,3-Trichlorobenzene	ND		3.6	0.53	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
1,2,4-Trichlorobenzene	ND		3.6	0.51	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
1,1,1-Trichloroethane	ND		3.6	0.44	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
1,1,2-Trichloroethane	ND		3.6	0.50	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
Trichloroethene	ND		3.6	0.45	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
Trichlorofluoromethane	ND		3.6	0.40	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
1,2,3-Trichloropropane	ND		3.6	0.55	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.6	1.5	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
1,2,4-Trimethylbenzene	ND		3.6	1.2	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
1,3,5-Trimethylbenzene	ND		3.6	0.46	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
Vinyl acetate	ND		14	3.6	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
Vinyl chloride	ND		3.6	0.52	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
Xylenes, Total	ND		3.6	0.87	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
2,2-Dichloropropane	ND		3.6	1.4	ug/Kg		08/25/18 03:05	08/29/18 23:38	1
Gasoline Range Organics (GRO) -C4-C12	ND		180	71	ug/Kg		08/25/18 03:05	08/29/18 23:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*45 - 131*	*08/25/18 03:05*	*08/29/18 23:38*	*1*
4-Bromofluorobenzene	*83*		*45 - 131*	*08/25/18 03:05*	*08/30/18 16:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*60 - 140*	*08/25/18 03:05*	*08/29/18 23:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*117*		*60 - 140*	*08/25/18 03:05*	*08/30/18 16:40*	*1*
Toluene-d8 (Surr)	*94*		*58 - 140*	*08/25/18 03:05*	*08/29/18 23:38*	*1*
Toluene-d8 (Surr)	*89*		*58 - 140*	*08/25/18 03:05*	*08/30/18 16:40*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.8	4.9	ug/Kg		08/29/18 11:45	09/01/18 22:33	1
Acenaphthene	ND		4.9	2.7	ug/Kg		08/29/18 11:45	09/01/18 22:33	1
Acenaphthylene	ND		4.9	2.4	ug/Kg		08/29/18 11:45	09/01/18 22:33	1
Anthracene	ND		4.9	2.0	ug/Kg		08/29/18 11:45	09/01/18 22:33	1
Benzo[a]anthracene	ND		4.9	1.5	ug/Kg		08/29/18 11:45	09/01/18 22:33	1
Benzo[a]pyrene	**2.4**	**J**	4.9	1.9	ug/Kg		08/29/18 11:45	09/01/18 22:33	1
Benzo[b]fluoranthene	**3.6**	**J**	4.9	2.1	ug/Kg		08/29/18 11:45	09/01/18 22:33	1
Benzo[g,h,i]perylene	ND		4.9	4.2	ug/Kg		08/29/18 11:45	09/01/18 22:33	1
Benzo[k]fluoranthene	ND		4.9	2.1	ug/Kg		08/29/18 11:45	09/01/18 22:33	1
Chrysene	**2.4**	**J**	4.9	1.4	ug/Kg		08/29/18 11:45	09/01/18 22:33	1
Dibenz(a,h)anthracene	ND		4.9	3.4	ug/Kg		08/29/18 11:45	09/01/18 22:33	1
Fluoranthene	**3.1**	**J B**	4.9	1.4	ug/Kg		08/29/18 11:45	09/01/18 22:33	1
Fluorene	ND		4.9	2.2	ug/Kg		08/29/18 11:45	09/01/18 22:33	1
Indeno[1,2,3-cd]pyrene	ND		4.9	4.1	ug/Kg		08/29/18 11:45	09/01/18 22:33	1
Naphthalene	ND		4.9	3.4	ug/Kg		08/29/18 11:45	09/01/18 22:33	1
Phenanthrene	**3.5**	**J B**	4.9	1.8	ug/Kg		08/29/18 11:45	09/01/18 22:33	1
Pyrene	**3.8**	**J**	4.9	1.7	ug/Kg		08/29/18 11:45	09/01/18 22:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*33 - 120*	*08/29/18 11:45*	*09/01/18 22:33*	*1*

Client Sample ID: DG-K7S-3.5-4

Lab Sample ID: 720-88240-2

Date Collected: 08/24/18 07:52

Matrix: Solid

Date Received: 08/24/18 15:00

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	78		35 - 146	08/29/18 11:45	09/01/18 22:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	15000		1900	730	ug/Kg		08/29/18 09:03	09/01/18 15:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	91		40 - 130	08/29/18 09:03	09/01/18 15:39	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/29/18 10:43	09/01/18 12:15	1
4,4'-DDE	ND		1.9	0.41	ug/Kg		08/29/18 10:43	09/01/18 12:15	1
4,4'-DDT	ND		1.9	0.40	ug/Kg		08/29/18 10:43	09/01/18 12:15	1
Aldrin	ND		1.9	0.48	ug/Kg		08/29/18 10:43	09/01/18 12:15	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/29/18 10:43	09/01/18 12:15	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/29/18 10:43	09/01/18 12:15	1
Chlordane (technical)	ND		39	3.1	ug/Kg		08/29/18 10:43	09/01/18 12:15	1
cis-Chlordane	ND		1.9	0.39	ug/Kg		08/29/18 10:43	09/01/18 12:15	1
delta-BHC	ND		1.9	0.43	ug/Kg		08/29/18 10:43	09/01/18 12:15	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/29/18 10:43	09/01/18 12:15	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/29/18 10:43	09/01/18 12:15	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/29/18 10:43	09/01/18 12:15	1
Endosulfan sulfate	ND		1.9	0.37	ug/Kg		08/29/18 10:43	09/01/18 12:15	1
Endrin	ND		1.9	0.45	ug/Kg		08/29/18 10:43	09/01/18 12:15	1
Endrin aldehyde	ND		1.9	0.61	ug/Kg		08/29/18 10:43	09/01/18 12:15	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/29/18 10:43	09/01/18 12:15	1
gamma-BHC (Lindane)	ND		1.9	0.61	ug/Kg		08/29/18 10:43	09/01/18 12:15	1
Heptachlor	ND		1.9	0.45	ug/Kg		08/29/18 10:43	09/01/18 12:15	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/29/18 10:43	09/01/18 12:15	1
Methoxychlor	ND		1.9	0.66	ug/Kg		08/29/18 10:43	09/01/18 12:15	1
Toxaphene	ND		39	6.6	ug/Kg		08/29/18 10:43	09/01/18 12:15	1
trans-Chlordane	ND		1.9	0.45	ug/Kg		08/29/18 10:43	09/01/18 12:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	77		21 - 136	08/29/18 10:43	09/01/18 12:15	1
Tetrachloro-m-xylene	85		21 - 145	08/29/18 10:43	09/01/18 12:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		51	22	ug/Kg		08/29/18 14:50	08/31/18 09:39	1
Aroclor-1221	ND		51	24	ug/Kg		08/29/18 14:50	08/31/18 09:39	1
Aroclor-1232	ND		51	23	ug/Kg		08/29/18 14:50	08/31/18 09:39	1
Aroclor-1242	ND		51	19	ug/Kg		08/29/18 14:50	08/31/18 09:39	1
Aroclor-1248	ND		51	24	ug/Kg		08/29/18 14:50	08/31/18 09:39	1
Aroclor-1254	ND		51	23	ug/Kg		08/29/18 14:50	08/31/18 09:39	1
Aroclor-1260	ND		51	22	ug/Kg		08/29/18 14:50	08/31/18 09:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	82		14 - 128	08/29/18 14:50	08/31/18 09:39	1

Client Sample ID: DG-K7S-3.5-4

Lab Sample ID: 720-88240-2

Date Collected: 08/24/18 07:52

Matrix: Solid

Date Received: 08/24/18 15:00

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*114*		*10 - 132*	*08/29/18 14:50*	*08/31/18 09:39*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.3	0.21	mg/Kg		08/28/18 12:45	08/30/18 22:58	5
Arsenic	ND		2.5	0.21	mg/Kg		08/28/18 12:45	08/30/18 22:58	5
Barium	**130**		1.0	0.14	mg/Kg		08/28/18 12:45	08/30/18 14:55	4
Beryllium	**0.26**		0.20	0.065	mg/Kg		08/28/18 12:45	08/30/18 14:55	4
Cadmium	ND		0.31	0.031	mg/Kg		08/28/18 12:45	08/30/18 22:58	5
Chromium	**80**	**B**	1.3	0.13	mg/Kg		08/28/18 12:45	08/31/18 11:40	5
Cobalt	**25**		0.50	0.050	mg/Kg		08/28/18 12:45	08/30/18 22:58	5
Copper	**24**		3.8	1.8	mg/Kg		08/28/18 12:45	08/31/18 11:40	5
Lead	**11**		1.3	0.26	mg/Kg		08/28/18 12:45	08/30/18 22:58	5
Molybdenum	**1.3**		1.0	0.13	mg/Kg		08/28/18 12:45	08/30/18 14:55	4
Nickel	**41**		1.3	0.13	mg/Kg		08/28/18 12:45	08/30/18 22:58	5
Selenium	**0.86**	**J**	2.5	0.38	mg/Kg		08/28/18 12:45	08/30/18 22:58	5
Silver	ND		0.63	0.13	mg/Kg		08/28/18 12:45	08/31/18 11:40	5
Thallium	ND		1.3	0.36	mg/Kg		08/28/18 12:45	08/30/18 22:58	5
Vanadium	**130**		1.3	0.17	mg/Kg		08/28/18 12:45	08/31/18 11:40	5
Zinc	**54**		3.8	1.6	mg/Kg		08/28/18 12:45	08/30/18 22:58	5

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.27**		0.015	0.0022	mg/Kg		08/29/18 19:12	08/31/18 13:14	1

Client Sample Results

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

TestAmerica Job ID: 720-88240-1

Client Sample ID: DG-L13S-0.5-1

Date Collected: 08/24/18 09:40
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88240-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
Acetone	ND		50	38	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
Benzene	ND		5.0	0.64	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
Dichlorobromomethane	ND		5.0	0.71	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
Bromobenzene	ND		5.0	0.78	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
Chlorobromomethane	ND		20	0.71	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
Bromoform	ND		5.0	2.0	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
Bromomethane	ND		9.9	0.78	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
2-Butanone (MEK)	ND		50	21	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
n-Butylbenzene	ND		5.0	0.99	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
sec-Butylbenzene	ND		5.0	0.71	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
tert-Butylbenzene	ND		5.0	0.72	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
Carbon disulfide	ND	*	5.0	2.0	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
Chlorobenzene	ND		5.0	0.68	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
Chloroethane	ND		9.9	0.56	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
Chloroform	ND		5.0	0.65	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
Chloromethane	ND		9.9	0.78	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
2-Chlorotoluene	ND		5.0	0.64	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
4-Chlorotoluene	ND		5.0	0.67	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
Chlorodibromomethane	ND		5.0	0.70	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
1,2-Dichlorobenzene	ND		5.0	0.67	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
1,3-Dichlorobenzene	ND		5.0	0.71	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
1,3-Dichloropropane	ND		5.0	0.72	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
1,1-Dichloropropene	ND		5.0	0.68	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
1,2-Dibromo-3-Chloropropane	ND		9.9	1.7	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
Dibromomethane	ND		9.9	0.85	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
Dichlorodifluoromethane	ND		9.9	0.78	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
1,1-Dichloroethane	ND		5.0	0.67	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
1,2-Dichloroethane	ND		5.0	0.75	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
1,1-Dichloroethene	ND	*	5.0	0.62	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
cis-1,2-Dichloroethene	ND		5.0	0.67	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
trans-1,2-Dichloroethene	ND		5.0	0.74	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
1,2-Dichloropropane	ND		5.0	0.62	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
cis-1,3-Dichloropropene	ND		5.0	0.68	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
trans-1,3-Dichloropropene	ND		5.0	0.66	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
Ethylbenzene	ND		5.0	0.74	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
Hexachlorobutadiene	ND		5.0	0.89	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
2-Hexanone	ND		50	9.9	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
Isopropylbenzene	ND		5.0	0.67	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
Methylene Chloride	ND		9.9	5.6	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
4-Methyl-2-pentanone (MIBK)	ND		50	9.9	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
Naphthalene	ND		9.9	1.5	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
N-Propylbenzene	ND		5.0	0.65	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
Styrene	ND		5.0	0.62	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg		08/28/18 21:21	08/31/18 22:13	1

Client Sample ID: DG-L13S-0.5-1

Lab Sample ID: 720-88240-3

Date Collected: 08/24/18 09:40

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		5.0	0.74	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
Tetrachloroethene	ND		5.0	0.66	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
Toluene	ND		5.0	0.70	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
1,2,3-Trichlorobenzene	ND		5.0	0.73	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
1,2,4-Trichlorobenzene	ND		5.0	0.70	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
1,1,2-Trichloroethane	ND		5.0	0.69	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
Trichloroethene	ND		5.0	0.62	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
1,2,3-Trichloropropane	ND		5.0	0.76	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	5.0	2.1	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
1,3,5-Trimethylbenzene	ND		5.0	0.64	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
Vinyl acetate	ND		20	5.0	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
Vinyl chloride	ND		5.0	0.72	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
Xylenes, Total	ND		5.0	1.2	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
C4-C10	ND		250	99	ug/Kg		08/28/18 21:21	08/31/18 22:13	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	99	ug/Kg		08/28/18 21:21	08/31/18 22:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*45 - 131*	*08/28/18 21:21*	*08/31/18 22:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*60 - 140*	*08/28/18 21:21*	*08/31/18 22:13*	*1*
Toluene-d8 (Surr)	*89*		*58 - 140*	*08/28/18 21:21*	*08/31/18 22:13*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		99	50	ug/Kg		08/29/18 11:45	09/02/18 18:50	10
Acenaphthene	ND		50	28	ug/Kg		08/29/18 11:45	09/02/18 18:50	10
Acenaphthylene	**34**	**J**	50	24	ug/Kg		08/29/18 11:45	09/02/18 18:50	10
Anthracene	**20**	**J**	50	20	ug/Kg		08/29/18 11:45	09/02/18 18:50	10
Benzo[a]anthracene	ND		50	15	ug/Kg		08/29/18 11:45	09/02/18 18:50	10
Benzo[a]pyrene	**37**	**J**	50	19	ug/Kg		08/29/18 11:45	09/02/18 18:50	10
Benzo[b]fluoranthene	**49**	**J**	50	21	ug/Kg		08/29/18 11:45	09/02/18 18:50	10
Benzo[g,h,i]perylene	**50**	**F1**	50	43	ug/Kg		08/29/18 11:45	09/02/18 18:50	10
Benzo[k]fluoranthene	**28**	**J F1**	50	21	ug/Kg		08/29/18 11:45	09/02/18 18:50	10
Chrysene	**29**	**J**	50	14	ug/Kg		08/29/18 11:45	09/02/18 18:50	10
Dibenz(a,h)anthracene	ND	F1	50	35	ug/Kg		08/29/18 11:45	09/02/18 18:50	10
Fluoranthene	**32**	**J B**	50	14	ug/Kg		08/29/18 11:45	09/02/18 18:50	10
Fluorene	ND		50	22	ug/Kg		08/29/18 11:45	09/02/18 18:50	10
Indeno[1,2,3-cd]pyrene	ND	F1	50	42	ug/Kg		08/29/18 11:45	09/02/18 18:50	10
Naphthalene	ND		50	35	ug/Kg		08/29/18 11:45	09/02/18 18:50	10
Phenanthrene	**19**	**J B**	50	18	ug/Kg		08/29/18 11:45	09/02/18 18:50	10
Pyrene	**45**	**J**	50	17	ug/Kg		08/29/18 11:45	09/02/18 18:50	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*71*		*33 - 120*	*08/29/18 11:45*	*09/02/18 18:50*	*10*
Terphenyl-d14	*92*		*35 - 146*	*08/29/18 11:45*	*09/02/18 18:50*	*10*

Client Sample Results

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

TestAmerica Job ID: 720-88240-1

Client Sample ID: DG-L13S-0.5-1

Date Collected: 08/24/18 09:40
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88240-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	430000		9800	3700	ug/Kg		08/29/18 09:03	08/30/18 05:21	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*0*	*X D*	*40 - 130*	*08/29/18 09:03*	*08/30/18 05:21*	*5*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.8	1.2	ug/Kg		08/29/18 10:43	09/01/18 11:04	2
4,4'-DDE	ND		3.8	0.80	ug/Kg		08/29/18 10:43	09/01/18 11:04	2
4,4'-DDT	ND		3.8	0.78	ug/Kg		08/29/18 10:43	09/01/18 11:04	2
Aldrin	ND		3.8	0.96	ug/Kg		08/29/18 10:43	09/01/18 11:04	2
alpha-BHC	ND		3.8	1.1	ug/Kg		08/29/18 10:43	09/01/18 11:04	2
beta-BHC	ND		3.8	0.69	ug/Kg		08/29/18 10:43	09/01/18 11:04	2
Chlordane (technical)	ND		77	6.1	ug/Kg		08/29/18 10:43	09/01/18 11:04	2
cis-Chlordane	3.5	J p	3.8	0.77	ug/Kg		08/29/18 10:43	09/01/18 11:04	2
delta-BHC	ND	F2	3.8	0.84	ug/Kg		08/29/18 10:43	09/01/18 11:04	2
Dieldrin	ND	F2	3.8	1.1	ug/Kg		08/29/18 10:43	09/01/18 11:04	2
Endosulfan I	ND		3.8	0.61	ug/Kg		08/29/18 10:43	09/01/18 11:04	2
Endosulfan II	ND		3.8	0.94	ug/Kg		08/29/18 10:43	09/01/18 11:04	2
Endosulfan sulfate	ND		3.8	0.73	ug/Kg		08/29/18 10:43	09/01/18 11:04	2
Endrin	ND		3.8	0.88	ug/Kg		08/29/18 10:43	09/01/18 11:04	2
Endrin aldehyde	ND		3.8	1.2	ug/Kg		08/29/18 10:43	09/01/18 11:04	2
Endrin ketone	ND	F1	3.8	0.63	ug/Kg		08/29/18 10:43	09/01/18 11:04	2
gamma-BHC (Lindane)	ND		3.8	1.2	ug/Kg		08/29/18 10:43	09/01/18 11:04	2
Heptachlor	ND		3.8	0.88	ug/Kg		08/29/18 10:43	09/01/18 11:04	2
Heptachlor epoxide	ND		3.8	0.67	ug/Kg		08/29/18 10:43	09/01/18 11:04	2
Methoxychlor	ND		3.8	1.3	ug/Kg		08/29/18 10:43	09/01/18 11:04	2
Toxaphene	ND		77	13	ug/Kg		08/29/18 10:43	09/01/18 11:04	2
trans-Chlordane	3.6	J	3.8	0.88	ug/Kg		08/29/18 10:43	09/01/18 11:04	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*98*		*21 - 136*	*08/29/18 10:43*	*09/01/18 11:04*	*2*
Tetrachloro-m-xylene	*73*		*21 - 145*	*08/29/18 10:43*	*09/01/18 11:04*	*2*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/29/18 14:50	08/31/18 10:08	1
Aroclor-1221	ND		50	24	ug/Kg		08/29/18 14:50	08/31/18 10:08	1
Aroclor-1232	ND		50	23	ug/Kg		08/29/18 14:50	08/31/18 10:08	1
Aroclor-1242	ND		50	19	ug/Kg		08/29/18 14:50	08/31/18 10:08	1
Aroclor-1248	ND		50	24	ug/Kg		08/29/18 14:50	08/31/18 10:08	1
Aroclor-1254	ND		50	23	ug/Kg		08/29/18 14:50	08/31/18 10:08	1
Aroclor-1260	ND		50	22	ug/Kg		08/29/18 14:50	08/31/18 10:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*77*		*14 - 128*	*08/29/18 14:50*	*08/31/18 10:08*	*1*
DCB Decachlorobiphenyl	*95*		*10 - 132*	*08/29/18 14:50*	*08/31/18 10:08*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.4	J F1	1.9	0.32	mg/Kg		08/28/18 12:45	08/30/18 14:46	4

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

TestAmerica Job ID: 720-88240-1

Client Sample ID: DG-L13S-0.5-1

Lab Sample ID: 720-88240-3

Date Collected: 08/24/18 09:40

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	38	F1 F2	3.8	0.32	mg/Kg		08/28/18 12:45	08/30/18 14:46	4
Barium	90	F1 F2	1.9	0.27	mg/Kg		08/28/18 12:45	08/30/18 14:46	4
Beryllium	ND		0.38	0.12	mg/Kg		08/28/18 12:45	08/30/18 14:46	4
Cadmium	0.12	J	0.48	0.047	mg/Kg		08/28/18 12:45	08/30/18 14:46	4
Chromium	51	B F1	1.9	0.20	mg/Kg		08/28/18 12:45	08/30/18 14:46	4
Cobalt	9.5		0.76	0.076	mg/Kg		08/28/18 12:45	08/30/18 14:46	4
Copper	55	F1	5.7	2.7	mg/Kg		08/28/18 12:45	08/30/18 14:46	4
Lead	120	F1	1.9	0.40	mg/Kg		08/28/18 12:45	08/30/18 14:46	4
Molybdenum	0.90	J	1.9	0.24	mg/Kg		08/28/18 12:45	08/30/18 14:46	4
Nickel	52	F1	1.9	0.19	mg/Kg		08/28/18 12:45	08/30/18 14:46	4
Selenium	1.6	J	3.8	0.57	mg/Kg		08/28/18 12:45	08/30/18 14:46	4
Silver	ND	F1	0.95	0.19	mg/Kg		08/28/18 12:45	08/30/18 14:46	4
Thallium	ND		1.9	0.55	mg/Kg		08/28/18 12:45	08/30/18 14:46	4
Vanadium	43	F1	1.9	0.26	mg/Kg		08/28/18 12:45	08/30/18 14:46	4
Zinc	130	F1 F2	5.7	2.4	mg/Kg		08/28/18 12:45	08/30/18 14:46	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.066		0.015	0.0021	mg/Kg		08/29/18 19:12	08/31/18 13:09	1

Client Sample Results

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

TestAmerica Job ID: 720-88240-1

Client Sample ID: DG-L13S-3.5-4

Date Collected: 08/24/18 09:40
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88240-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.2	1.0	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
Acetone	ND		42	32	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
Benzene	ND		4.2	0.54	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
Dichlorobromomethane	ND		4.2	0.60	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
Bromobenzene	ND	*	4.2	0.66	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
Chlorobromomethane	ND		17	0.60	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
Bromoform	ND	*	4.2	1.7	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
Bromomethane	ND		8.3	0.66	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
2-Butanone (MEK)	ND		42	17	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
n-Butylbenzene	ND	*	4.2	0.83	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
sec-Butylbenzene	ND	*	4.2	0.60	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
tert-Butylbenzene	ND	*	4.2	0.61	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
Carbon disulfide	ND		4.2	1.7	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
Carbon tetrachloride	ND		4.2	0.52	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
Chlorobenzene	ND	*	4.2	0.57	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
Chloroethane	ND		8.3	0.47	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
Chloroform	ND		4.2	0.55	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
Chloromethane	ND		8.3	0.66	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
2-Chlorotoluene	ND	*	4.2	0.54	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
4-Chlorotoluene	ND	*	4.2	0.57	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
Chlorodibromomethane	ND		4.2	0.59	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
1,2-Dichlorobenzene	ND	*	4.2	0.57	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
1,3-Dichlorobenzene	ND	*	4.2	0.60	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
1,4-Dichlorobenzene	ND	*	4.2	0.59	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
1,3-Dichloropropane	ND		4.2	0.61	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
1,1-Dichloropropene	ND		4.2	0.57	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
1,2-Dibromo-3-Chloropropane	ND	*	8.3	1.4	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
Ethylene Dibromide	ND		4.2	1.2	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
Dibromomethane	ND		8.3	0.71	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
Dichlorodifluoromethane	ND		8.3	0.66	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
1,1-Dichloroethane	ND		4.2	0.57	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
1,2-Dichloroethane	ND		4.2	0.63	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
1,1-Dichloroethene	ND	*	4.2	0.52	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
cis-1,2-Dichloroethene	ND		4.2	0.57	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
trans-1,2-Dichloroethene	ND		4.2	0.62	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
1,2-Dichloropropane	ND		4.2	0.52	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
cis-1,3-Dichloropropene	ND		4.2	0.57	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
trans-1,3-Dichloropropene	ND		4.2	0.56	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
Ethylbenzene	ND	*	4.2	0.62	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
Hexachlorobutadiene	ND	*	4.2	0.75	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
2-Hexanone	ND		42	8.3	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
Isopropylbenzene	ND	*	4.2	0.57	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
4-Isopropyltoluene	ND	*	4.2	2.1	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
Methylene Chloride	ND		8.3	4.7	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
4-Methyl-2-pentanone (MIBK)	ND		42	8.3	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
Naphthalene	ND	*	8.3	1.2	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
N-Propylbenzene	ND	*	4.2	0.55	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
Styrene	ND	*	4.2	0.52	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
1,1,1,2-Tetrachloroethane	ND	*	4.2	0.63	ug/Kg		08/25/18 03:05	08/30/18 17:09	1

Client Sample ID: DG-L13S-3.5-4

Lab Sample ID: 720-88240-4

Date Collected: 08/24/18 09:40

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	4.2	0.62	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
Tetrachloroethene	ND		4.2	0.56	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
Toluene	ND	*	4.2	0.59	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
1,2,3-Trichlorobenzene	ND	*	4.2	0.62	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
1,2,4-Trichlorobenzene	ND	*	4.2	0.59	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
1,1,1-Trichloroethane	ND		4.2	0.51	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
1,1,2-Trichloroethane	ND		4.2	0.58	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
Trichloroethene	ND		4.2	0.52	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
Trichlorofluoromethane	ND		4.2	0.47	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
1,2,3-Trichloropropane	ND	*	4.2	0.64	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.2	1.7	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
1,2,4-Trimethylbenzene	ND	*	4.2	1.4	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
1,3,5-Trimethylbenzene	ND	*	4.2	0.54	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
Vinyl acetate	ND		17	4.2	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
Vinyl chloride	ND		4.2	0.61	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
Xylenes, Total	ND		4.2	1.0	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
2,2-Dichloropropane	ND		4.2	1.7	ug/Kg		08/25/18 03:05	08/30/18 17:09	1
Gasoline Range Organics (GRO) -C4-C12	ND		210	83	ug/Kg		08/25/18 03:05	08/30/18 17:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*76*	*	*45 - 131*	*08/25/18 03:05*	*08/30/18 17:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*130*		*60 - 140*	*08/25/18 03:05*	*08/30/18 17:09*	*1*
Toluene-d8 (Surr)	*79*		*58 - 140*	*08/25/18 03:05*	*08/30/18 17:09*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**140**	**J**	200	100	ug/Kg		09/04/18 17:46	09/06/18 09:39	10
Acenaphthene	**150**		100	56	ug/Kg		09/04/18 17:46	09/06/18 09:39	10
Acenaphthylene	**90**	**J**	100	48	ug/Kg		09/04/18 17:46	09/06/18 09:39	10
Anthracene	**310**		100	40	ug/Kg		09/04/18 17:46	09/06/18 09:39	10
Benzo[a]anthracene	**300**		100	30	ug/Kg		09/04/18 17:46	09/06/18 09:39	10
Benzo[a]pyrene	**280**		100	38	ug/Kg		09/04/18 17:46	09/06/18 09:39	10
Benzo[b]fluoranthene	**250**		100	42	ug/Kg		09/04/18 17:46	09/06/18 09:39	10
Benzo[g,h,i]perylene	ND		100	86	ug/Kg		09/04/18 17:46	09/06/18 09:39	10
Benzo[k]fluoranthene	**100**		100	42	ug/Kg		09/04/18 17:46	09/06/18 09:39	10
Chrysene	**460**		100	28	ug/Kg		09/04/18 17:46	09/06/18 09:39	10
Dibenz(a,h)anthracene	ND		100	70	ug/Kg		09/04/18 17:46	09/06/18 09:39	10
Fluoranthene	**390**		100	28	ug/Kg		09/04/18 17:46	09/06/18 09:39	10
Fluorene	**160**		100	44	ug/Kg		09/04/18 17:46	09/06/18 09:39	10
Indeno[1,2,3-cd]pyrene	ND		100	84	ug/Kg		09/04/18 17:46	09/06/18 09:39	10
Naphthalene	**100**		100	70	ug/Kg		09/04/18 17:46	09/06/18 09:39	10
Phenanthrene	**140**		100	36	ug/Kg		09/04/18 17:46	09/06/18 09:39	10
Pyrene	**990**		100	34	ug/Kg		09/04/18 17:46	09/06/18 09:39	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*0*	*X*	*33 - 120*	*09/04/18 17:46*	*09/06/18 09:39*	*10*
Terphenyl-d14	*0*	*X*	*35 - 146*	*09/04/18 17:46*	*09/06/18 09:39*	*10*

Client Sample Results

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

TestAmerica Job ID: 720-88240-1

Client Sample ID: DG-L13S-3.5-4

Date Collected: 08/24/18 09:40
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88240-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	7000000		96000	36000	ug/Kg		08/29/18 09:03	09/04/18 14:35	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*0*	*X D*	*40 - 130*	*08/29/18 09:03*	*09/04/18 14:35*	*50*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		9.8	3.0	ug/Kg		08/29/18 10:43	09/01/18 12:32	5
4,4'-DDE	ND		9.8	2.1	ug/Kg		08/29/18 10:43	09/01/18 12:32	5
4,4'-DDT	ND		9.8	2.0	ug/Kg		08/29/18 10:43	09/01/18 12:32	5
Aldrin	ND		9.8	2.5	ug/Kg		08/29/18 10:43	09/01/18 12:32	5
alpha-BHC	ND		9.8	2.7	ug/Kg		08/29/18 10:43	09/01/18 12:32	5
beta-BHC	ND		9.8	1.8	ug/Kg		08/29/18 10:43	09/01/18 12:32	5
Chlordane (technical)	ND		200	16	ug/Kg		08/29/18 10:43	09/01/18 12:32	5
cis-Chlordane	ND		9.8	2.0	ug/Kg		08/29/18 10:43	09/01/18 12:32	5
delta-BHC	ND		9.8	2.2	ug/Kg		08/29/18 10:43	09/01/18 12:32	5
Dieldrin	ND		9.8	2.9	ug/Kg		08/29/18 10:43	09/01/18 12:32	5
Endosulfan I	ND		9.8	1.6	ug/Kg		08/29/18 10:43	09/01/18 12:32	5
Endosulfan II	ND		9.8	2.4	ug/Kg		08/29/18 10:43	09/01/18 12:32	5
Endosulfan sulfate	ND		9.8	1.9	ug/Kg		08/29/18 10:43	09/01/18 12:32	5
Endrin	ND		9.8	2.3	ug/Kg		08/29/18 10:43	09/01/18 12:32	5
Endrin aldehyde	ND		9.8	3.1	ug/Kg		08/29/18 10:43	09/01/18 12:32	5
Endrin ketone	ND		9.8	1.6	ug/Kg		08/29/18 10:43	09/01/18 12:32	5
gamma-BHC (Lindane)	ND		9.8	3.1	ug/Kg		08/29/18 10:43	09/01/18 12:32	5
Heptachlor	ND		9.8	2.3	ug/Kg		08/29/18 10:43	09/01/18 12:32	5
Heptachlor epoxide	ND		9.8	1.7	ug/Kg		08/29/18 10:43	09/01/18 12:32	5
Methoxychlor	ND		9.8	3.3	ug/Kg		08/29/18 10:43	09/01/18 12:32	5
Toxaphene	ND		200	34	ug/Kg		08/29/18 10:43	09/01/18 12:32	5
trans-Chlordane	ND		9.8	2.3	ug/Kg		08/29/18 10:43	09/01/18 12:32	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*62*	*p*	*21 - 136*	*08/29/18 10:43*	*09/01/18 12:32*	*5*
Tetrachloro-m-xylene	*59*		*21 - 145*	*08/29/18 10:43*	*09/01/18 12:32*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		49	22	ug/Kg		08/29/18 14:50	08/31/18 09:54	1
Aroclor-1221	ND		49	24	ug/Kg		08/29/18 14:50	08/31/18 09:54	1
Aroclor-1232	ND		49	23	ug/Kg		08/29/18 14:50	08/31/18 09:54	1
Aroclor-1242	ND		49	19	ug/Kg		08/29/18 14:50	08/31/18 09:54	1
Aroclor-1248	ND		49	24	ug/Kg		08/29/18 14:50	08/31/18 09:54	1
Aroclor-1254	ND		49	23	ug/Kg		08/29/18 14:50	08/31/18 09:54	1
Aroclor-1260	ND		49	22	ug/Kg		08/29/18 14:50	08/31/18 09:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*79*		*14 - 128*	*08/29/18 14:50*	*08/31/18 09:54*	*1*
DCB Decachlorobiphenyl	*225*	*X*	*10 - 132*	*08/29/18 14:50*	*08/31/18 09:54*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.59	J	1.8	0.29	mg/Kg		08/28/18 12:45	08/30/18 15:00	4

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

TestAmerica Job ID: 720-88240-1

Client Sample ID: DG-L13S-3.5-4

Lab Sample ID: 720-88240-4

Date Collected: 08/24/18 09:40
Matrix: Solid
Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	33		3.5	0.30	mg/Kg		08/28/18 12:45	08/30/18 15:00	4
Barium	210		1.8	0.25	mg/Kg		08/28/18 12:45	08/30/18 15:00	4
Beryllium	0.52		0.35	0.11	mg/Kg		08/28/18 12:45	08/30/18 15:00	4
Cadmium	ND		0.44	0.044	mg/Kg		08/28/18 12:45	08/30/18 15:00	4
Chromium	180	B	1.8	0.19	mg/Kg		08/28/18 12:45	08/30/18 15:00	4
Cobalt	23		0.70	0.070	mg/Kg		08/28/18 12:45	08/30/18 15:00	4
Copper	37		5.3	2.5	mg/Kg		08/28/18 12:45	08/30/18 15:00	4
Lead	11		1.8	0.37	mg/Kg		08/28/18 12:45	08/30/18 15:00	4
Molybdenum	1.1	J	1.8	0.22	mg/Kg		08/28/18 12:45	08/30/18 15:00	4
Nickel	140		1.8	0.18	mg/Kg		08/28/18 12:45	08/30/18 15:00	4
Selenium	1.5	J	3.5	0.53	mg/Kg		08/28/18 12:45	08/30/18 15:00	4
Silver	ND		0.88	0.18	mg/Kg		08/28/18 12:45	08/30/18 15:00	4
Thallium	ND		1.8	0.51	mg/Kg		08/28/18 12:45	08/30/18 15:00	4
Vanadium	99		1.8	0.24	mg/Kg		08/28/18 12:45	08/30/18 15:00	4
Zinc	71		5.3	2.2	mg/Kg		08/28/18 12:45	08/30/18 15:00	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.085		0.016	0.0024	mg/Kg		08/29/18 19:12	08/31/18 13:16	1

Client Sample Results

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

TestAmerica Job ID: 720-88240-1

Client Sample ID: DG-K13S-0.5-1

Date Collected: 08/24/18 10:20
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88240-5

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.9	0.32	mg/Kg		08/28/18 12:45	08/30/18 15:14	4
Arsenic	**6.4**		3.8	0.33	mg/Kg		08/28/18 12:45	08/30/18 15:14	4
Barium	**140**		1.9	0.27	mg/Kg		08/28/18 12:45	08/30/18 15:14	4
Beryllium	**0.31**	**J**	0.38	0.13	mg/Kg		08/28/18 12:45	08/30/18 23:07	4
Cadmium	ND		0.48	0.048	mg/Kg		08/28/18 12:45	08/30/18 15:14	4
Chromium	**100**	**B**	1.9	0.20	mg/Kg		08/28/18 12:45	08/30/18 15:14	4
Cobalt	**19**		0.77	0.077	mg/Kg		08/28/18 12:45	08/30/18 15:14	4
Copper	**68**		5.8	2.7	mg/Kg		08/28/18 12:45	08/30/18 15:14	4
Lead	**100**		1.9	0.40	mg/Kg		08/28/18 12:45	08/30/18 15:14	4
Molybdenum	**0.97**	**J**	1.9	0.25	mg/Kg		08/28/18 12:45	08/30/18 15:14	4
Nickel	**120**		1.9	0.20	mg/Kg		08/28/18 12:45	08/30/18 15:14	4
Selenium	**2.0**	**J**	3.8	0.58	mg/Kg		08/28/18 12:45	08/30/18 15:14	4
Silver	ND		0.96	0.19	mg/Kg		08/28/18 12:45	08/30/18 15:14	4
Thallium	ND		1.9	0.56	mg/Kg		08/28/18 12:45	08/30/18 15:14	4
Vanadium	**94**		1.9	0.26	mg/Kg		08/28/18 12:45	08/30/18 15:14	4
Zinc	**140**		5.8	2.4	mg/Kg		08/28/18 12:45	08/30/18 15:14	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.35**		0.015	0.0022	mg/Kg		08/29/18 19:12	08/31/18 13:19	1

Client Sample Results

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

TestAmerica Job ID: 720-88240-1

Client Sample ID: DG-K13S-3.5-4

Lab Sample ID: 720-88240-6

Date Collected: 08/24/18 10:20
Matrix: Solid
Date Received: 08/24/18 15:00

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.0	J	1.2	0.20	mg/Kg		08/28/18 12:45	08/30/18 15:19	4
Arsenic	2.1	J	2.5	0.21	mg/Kg		08/28/18 12:45	08/30/18 15:19	4
Barium	78		1.2	0.18	mg/Kg		08/28/18 12:45	08/30/18 15:19	4
Beryllium	0.27		0.25	0.080	mg/Kg		08/28/18 12:45	08/30/18 23:12	4
Cadmium	0.50		0.31	0.031	mg/Kg		08/28/18 12:45	08/30/18 15:19	4
Chromium	280	B	1.2	0.13	mg/Kg		08/28/18 12:45	08/30/18 15:19	4
Cobalt	24		0.49	0.049	mg/Kg		08/28/18 12:45	08/30/18 15:19	4
Copper	26		3.7	1.8	mg/Kg		08/28/18 12:45	08/30/18 15:19	4
Lead	11		1.2	0.26	mg/Kg		08/28/18 12:45	08/30/18 15:19	4
Molybdenum	0.63	J	1.2	0.16	mg/Kg		08/28/18 12:45	08/30/18 15:19	4
Nickel	310		1.2	0.13	mg/Kg		08/28/18 12:45	08/30/18 15:19	4
Selenium	0.97	J	2.5	0.37	mg/Kg		08/28/18 12:45	08/30/18 15:19	4
Silver	ND		0.62	0.12	mg/Kg		08/28/18 12:45	08/30/18 15:19	4
Thallium	ND		1.2	0.36	mg/Kg		08/28/18 12:45	08/30/18 15:19	4
Vanadium	65		1.2	0.17	mg/Kg		08/28/18 12:45	08/30/18 15:19	4
Zinc	710		3.7	1.6	mg/Kg		08/28/18 12:45	08/30/18 15:19	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.073		0.015	0.0023	mg/Kg		08/29/18 19:12	08/31/18 13:21	1

Client Sample Results

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

TestAmerica Job ID: 720-88240-1

Client Sample ID: DG-M14S-0.5-1

Date Collected: 08/24/18 11:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88240-7

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	4.2		2.0	0.33	mg/Kg		08/28/18 12:45	08/30/18 15:24	4
Arsenic	94		4.0	0.34	mg/Kg		08/28/18 12:45	08/30/18 15:24	4
Barium	200		2.0	0.28	mg/Kg		08/28/18 12:45	08/30/18 15:24	4
Beryllium	0.24	J	0.40	0.13	mg/Kg		08/28/18 12:45	08/30/18 23:27	4
Cadmium	1.5		0.50	0.050	mg/Kg		08/28/18 12:45	08/30/18 15:24	4
Chromium	590	B	2.0	0.21	mg/Kg		08/28/18 12:45	08/30/18 15:24	4
Cobalt	28		0.80	0.080	mg/Kg		08/28/18 12:45	08/30/18 15:24	4
Copper	120		6.0	2.8	mg/Kg		08/28/18 12:45	08/30/18 15:24	4
Lead	1200		2.0	0.42	mg/Kg		08/28/18 12:45	08/30/18 15:24	4
Molybdenum	1.8	J	2.0	0.26	mg/Kg		08/28/18 12:45	08/30/18 15:24	4
Nickel	96		2.0	0.20	mg/Kg		08/28/18 12:45	08/30/18 15:24	4
Selenium	2.0	J	4.0	0.60	mg/Kg		08/28/18 12:45	08/30/18 15:24	4
Silver	ND		1.0	0.20	mg/Kg		08/28/18 12:45	08/30/18 15:24	4
Thallium	ND		2.0	0.58	mg/Kg		08/28/18 12:45	08/30/18 15:24	4
Vanadium	74		2.0	0.27	mg/Kg		08/28/18 12:45	08/30/18 15:24	4
Zinc	1100		6.0	2.5	mg/Kg		08/28/18 12:45	08/30/18 15:24	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.56		0.016	0.0023	mg/Kg		08/29/18 19:12	08/31/18 13:28	1

Client Sample Results

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

TestAmerica Job ID: 720-88240-1

Client Sample ID: DG-M14S-3.5-4

Date Collected: 08/24/18 11:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88240-8

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.2		1.2	0.20	mg/Kg		08/28/18 12:45	08/30/18 23:31	4
Arsenic	25		2.4	0.20	mg/Kg		08/28/18 12:45	08/30/18 15:29	4
Barium	100		1.2	0.17	mg/Kg		08/28/18 12:45	08/30/18 15:29	4
Beryllium	0.25		0.24	0.077	mg/Kg		08/28/18 12:45	08/30/18 23:31	4
Cadmium	0.37		0.30	0.029	mg/Kg		08/28/18 12:45	08/30/18 15:29	4
Chromium	220	B	1.2	0.13	mg/Kg		08/28/18 12:45	08/30/18 15:29	4
Cobalt	21		0.47	0.047	mg/Kg		08/28/18 12:45	08/30/18 15:29	4
Copper	56		3.6	1.7	mg/Kg		08/28/18 12:45	08/30/18 15:29	4
Lead	270		1.2	0.25	mg/Kg		08/28/18 12:45	08/30/18 15:29	4
Molybdenum	0.70	J	1.2	0.15	mg/Kg		08/28/18 12:45	08/30/18 15:29	4
Nickel	230		1.2	0.12	mg/Kg		08/28/18 12:45	08/30/18 15:29	4
Selenium	1.4	J	2.4	0.36	mg/Kg		08/28/18 12:45	08/30/18 15:29	4
Silver	ND		0.59	0.12	mg/Kg		08/28/18 12:45	08/30/18 15:29	4
Thallium	ND		1.2	0.34	mg/Kg		08/28/18 12:45	08/30/18 15:29	4
Vanadium	61		1.2	0.16	mg/Kg		08/28/18 12:45	08/30/18 15:29	4
Zinc	190		3.6	1.5	mg/Kg		08/28/18 12:45	08/30/18 15:29	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.22		0.015	0.0022	mg/Kg		08/29/18 19:12	08/31/18 13:31	1

Client Sample Results

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

TestAmerica Job ID: 720-88240-1

Client Sample ID: DG-J12S-0.5-1

Lab Sample ID: 720-88240-9

Date Collected: 08/24/18 11:30
Matrix: Solid
Date Received: 08/24/18 15:00

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	21		1.6	0.27	mg/Kg		08/28/18 12:45	08/30/18 15:34	4
Arsenic	11		3.3	0.28	mg/Kg		08/28/18 12:45	08/30/18 15:34	4
Barium	140		1.6	0.23	mg/Kg		08/28/18 12:45	08/30/18 15:34	4
Beryllium	0.20	J	0.33	0.11	mg/Kg		08/28/18 12:45	08/30/18 23:36	4
Cadmium	0.36	J	0.41	0.041	mg/Kg		08/28/18 12:45	08/30/18 15:34	4
Chromium	39	B	1.6	0.17	mg/Kg		08/28/18 12:45	08/30/18 15:34	4
Cobalt	16		0.66	0.066	mg/Kg		08/28/18 12:45	08/30/18 15:34	4
Copper	270		4.9	2.3	mg/Kg		08/28/18 12:45	08/30/18 15:34	4
Lead	1500		1.6	0.34	mg/Kg		08/28/18 12:45	08/30/18 15:34	4
Molybdenum	1.6		1.6	0.21	mg/Kg		08/28/18 12:45	08/30/18 15:34	4
Nickel	33		1.6	0.17	mg/Kg		08/28/18 12:45	08/30/18 15:34	4
Selenium	2.3	J	3.3	0.49	mg/Kg		08/28/18 12:45	08/30/18 15:34	4
Silver	ND		0.82	0.17	mg/Kg		08/28/18 12:45	08/30/18 15:34	4
Thallium	ND		1.6	0.48	mg/Kg		08/28/18 12:45	08/30/18 15:34	4
Vanadium	90		1.6	0.22	mg/Kg		08/28/18 12:45	08/30/18 15:34	4
Zinc	330		4.9	2.1	mg/Kg		08/28/18 12:45	08/30/18 15:34	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.16		0.014	0.0021	mg/Kg		08/29/18 19:12	08/31/18 13:33	1

Client Sample Results

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

TestAmerica Job ID: 720-88240-1

Client Sample ID: DG-J12S-3.5-4

Lab Sample ID: 720-88240-10

Date Collected: 08/24/18 11:30
Matrix: Solid
Date Received: 08/24/18 15:00

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.5		1.3	0.21	mg/Kg		08/28/18 12:45	08/30/18 15:38	4
Arsenic	2.3	J	2.6	0.22	mg/Kg		08/28/18 12:45	08/30/18 15:38	4
Barium	52		1.3	0.18	mg/Kg		08/28/18 12:45	08/30/18 15:38	4
Beryllium	0.15	J	0.26	0.083	mg/Kg		08/28/18 12:45	08/30/18 23:41	4
Cadmium	ND		0.32	0.032	mg/Kg		08/28/18 12:45	08/30/18 15:38	4
Chromium	57	B	1.3	0.14	mg/Kg		08/28/18 12:45	08/30/18 15:38	4
Cobalt	6.9		0.51	0.051	mg/Kg		08/28/18 12:45	08/30/18 15:38	4
Copper	24		3.8	1.8	mg/Kg		08/28/18 12:45	08/30/18 15:38	4
Lead	52		1.3	0.27	mg/Kg		08/28/18 12:45	08/30/18 15:38	4
Molybdenum	0.58	J	1.3	0.16	mg/Kg		08/28/18 12:45	08/30/18 15:38	4
Nickel	33		1.3	0.13	mg/Kg		08/28/18 12:45	08/30/18 15:38	4
Selenium	0.74	J	2.6	0.38	mg/Kg		08/28/18 12:45	08/30/18 15:38	4
Silver	ND		0.64	0.13	mg/Kg		08/28/18 12:45	08/30/18 15:38	4
Thallium	ND		1.3	0.37	mg/Kg		08/28/18 12:45	08/30/18 15:38	4
Vanadium	50		1.3	0.17	mg/Kg		08/28/18 12:45	08/30/18 15:38	4
Zinc	36		3.8	1.6	mg/Kg		08/28/18 12:45	08/30/18 15:38	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.053		0.017	0.0025	mg/Kg		08/29/18 19:12	08/31/18 13:35	1

Client Sample Results

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

TestAmerica Job ID: 720-88240-1

Client Sample ID: DG-K12S-0.5-1

Lab Sample ID: 720-88240-11

Date Collected: 08/24/18 11:45
Matrix: Solid
Date Received: 08/24/18 15:00

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.36	J	1.9	0.31	mg/Kg		08/28/18 12:45	08/30/18 15:43	4
Arsenic	170		3.7	0.32	mg/Kg		08/28/18 12:45	08/30/18 15:43	4
Barium	170		1.9	0.27	mg/Kg		08/28/18 12:45	08/30/18 15:43	4
Beryllium	0.34	J	0.37	0.12	mg/Kg		08/28/18 12:45	08/30/18 23:46	4
Cadmium	ND		0.47	0.046	mg/Kg		08/28/18 12:45	08/30/18 15:43	4
Chromium	130	B	1.9	0.20	mg/Kg		08/28/18 12:45	08/30/18 15:43	4
Cobalt	37		0.75	0.075	mg/Kg		08/28/18 12:45	08/30/18 15:43	4
Copper	97		5.6	2.7	mg/Kg		08/28/18 12:45	08/30/18 15:43	4
Lead	74		1.9	0.39	mg/Kg		08/28/18 12:45	08/30/18 15:43	4
Molybdenum	1.4	J	1.9	0.24	mg/Kg		08/28/18 12:45	08/30/18 15:43	4
Nickel	57		1.9	0.19	mg/Kg		08/28/18 12:45	08/30/18 15:43	4
Selenium	2.0	J	3.7	0.56	mg/Kg		08/28/18 12:45	08/30/18 15:43	4
Silver	ND		0.93	0.19	mg/Kg		08/28/18 12:45	08/30/18 15:43	4
Thallium	ND		1.9	0.54	mg/Kg		08/28/18 12:45	08/30/18 15:43	4
Vanadium	240		1.9	0.25	mg/Kg		08/28/18 12:45	08/30/18 15:43	4
Zinc	160		5.6	2.4	mg/Kg		08/28/18 12:45	08/30/18 15:43	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.064		0.016	0.0024	mg/Kg		08/29/18 19:12	08/31/18 13:38	1

Client Sample Results

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

TestAmerica Job ID: 720-88240-1

Client Sample ID: DG-K12S-3.5-4

Lab Sample ID: 720-88240-12

Date Collected: 08/24/18 11:45
Matrix: Solid
Date Received: 08/24/18 15:00

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.4	0.24	mg/Kg		08/28/18 12:45	08/30/18 15:48	4
Arsenic	**40**		2.8	0.24	mg/Kg		08/28/18 12:45	08/30/18 15:48	4
Barium	**430**		1.4	0.20	mg/Kg		08/28/18 12:45	08/30/18 15:48	4
Beryllium	**0.51**		0.28	0.092	mg/Kg		08/28/18 12:45	08/31/18 11:45	4
Cadmium	ND		0.35	0.035	mg/Kg		08/28/18 12:45	08/30/18 15:48	4
Chromium	**68**	**B**	1.4	0.15	mg/Kg		08/28/18 12:45	08/30/18 15:48	4
Cobalt	**24**		0.57	0.057	mg/Kg		08/28/18 12:45	08/30/18 15:48	4
Copper	**43**		4.3	2.0	mg/Kg		08/28/18 12:45	08/30/18 15:48	4
Lead	**21**		1.4	0.30	mg/Kg		08/28/18 12:45	08/30/18 15:48	4
Molybdenum	**1.8**		1.4	0.18	mg/Kg		08/28/18 12:45	08/30/18 15:48	4
Nickel	**170**		1.4	0.14	mg/Kg		08/28/18 12:45	08/30/18 15:48	4
Selenium	**1.8**	**J**	2.8	0.43	mg/Kg		08/28/18 12:45	08/30/18 15:48	4
Silver	ND		0.71	0.14	mg/Kg		08/28/18 12:45	08/30/18 15:48	4
Thallium	ND		1.4	0.41	mg/Kg		08/28/18 12:45	08/30/18 15:48	4
Vanadium	**70**		1.4	0.19	mg/Kg		08/28/18 12:45	08/30/18 15:48	4
Zinc	**82**		4.3	1.8	mg/Kg		08/28/18 12:45	08/30/18 15:48	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.10**		0.016	0.0023	mg/Kg		08/29/18 19:12	08/31/18 13:40	1

Client Sample Results

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

TestAmerica Job ID: 720-88240-1

Client Sample ID: DG-I12S-0.5-1

Date Collected: 08/24/18 11:55
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88240-13

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.58	J	1.4	0.24	mg/Kg		08/28/18 12:45	08/30/18 15:53	4
Arsenic	33		2.9	0.24	mg/Kg		08/28/18 12:45	08/30/18 15:53	4
Barium	32		1.4	0.20	mg/Kg		08/28/18 12:45	08/30/18 15:53	4
Beryllium	ND		0.29	0.093	mg/Kg		08/28/18 12:45	08/30/18 23:56	4
Cadmium	0.41		0.36	0.035	mg/Kg		08/28/18 12:45	08/30/18 15:53	4
Chromium	29	B	1.4	0.15	mg/Kg		08/28/18 12:45	08/30/18 15:53	4
Cobalt	15		0.57	0.057	mg/Kg		08/28/18 12:45	08/30/18 15:53	4
Copper	260		4.3	2.0	mg/Kg		08/28/18 12:45	08/30/18 15:53	4
Lead	160		1.4	0.30	mg/Kg		08/28/18 12:45	08/30/18 15:53	4
Molybdenum	1.6		1.4	0.18	mg/Kg		08/28/18 12:45	08/30/18 15:53	4
Nickel	25		1.4	0.15	mg/Kg		08/28/18 12:45	08/30/18 15:53	4
Selenium	1.4	J	2.9	0.43	mg/Kg		08/28/18 12:45	08/30/18 15:53	4
Silver	ND		0.71	0.14	mg/Kg		08/28/18 12:45	08/30/18 15:53	4
Thallium	ND		1.4	0.41	mg/Kg		08/28/18 12:45	08/30/18 15:53	4
Vanadium	100		1.4	0.19	mg/Kg		08/28/18 12:45	08/30/18 15:53	4
Zinc	230		4.3	1.8	mg/Kg		08/28/18 12:45	08/30/18 15:53	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.099		0.016	0.0024	mg/Kg		08/29/18 19:12	08/31/18 13:42	1

Client Sample Results

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

TestAmerica Job ID: 720-88240-1

Client Sample ID: DG-I12S-3.5-4

Date Collected: 08/24/18 11:55
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88240-14

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.2	0.20	mg/Kg		08/28/18 12:45	08/30/18 15:58	4
Arsenic	**44**		2.4	0.20	mg/Kg		08/28/18 12:45	08/30/18 15:58	4
Barium	**63**		1.2	0.17	mg/Kg		08/28/18 12:45	08/30/18 15:58	4
Beryllium	**0.18**	**J**	0.24	0.078	mg/Kg		08/28/18 12:45	08/31/18 00:00	4
Cadmium	ND		0.30	0.030	mg/Kg		08/28/18 12:45	08/30/18 15:58	4
Chromium	**50**	**B**	1.2	0.13	mg/Kg		08/28/18 12:45	08/30/18 15:58	4
Cobalt	**6.8**		0.48	0.048	mg/Kg		08/28/18 12:45	08/30/18 15:58	4
Copper	**14**		3.6	1.7	mg/Kg		08/28/18 12:45	08/30/18 15:58	4
Lead	**19**		1.2	0.25	mg/Kg		08/28/18 12:45	08/30/18 15:58	4
Molybdenum	**0.56**	**J**	1.2	0.15	mg/Kg		08/28/18 12:45	08/30/18 15:58	4
Nickel	**34**		1.2	0.12	mg/Kg		08/28/18 12:45	08/30/18 15:58	4
Selenium	**0.38**	**J**	2.4	0.36	mg/Kg		08/28/18 12:45	08/30/18 15:58	4
Silver	ND		0.60	0.12	mg/Kg		08/28/18 12:45	08/30/18 15:58	4
Thallium	ND		1.2	0.35	mg/Kg		08/28/18 12:45	08/30/18 15:58	4
Vanadium	**46**		1.2	0.16	mg/Kg		08/28/18 12:45	08/30/18 15:58	4
Zinc	**35**		3.6	1.5	mg/Kg		08/28/18 12:45	08/30/18 15:58	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.072**		0.014	0.0021	mg/Kg		08/29/18 19:12	08/31/18 13:45	1

Client Sample Results

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

TestAmerica Job ID: 720-88240-1

Client Sample ID: DG-H12S-0.5-1

Lab Sample ID: 720-88240-15

Date Collected: 08/24/18 12:02
Matrix: Solid
Date Received: 08/24/18 15:00

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3		1.7	0.29	mg/Kg		08/28/18 12:45	08/31/18 00:05	4
Arsenic	340		3.5	0.30	mg/Kg		08/28/18 12:45	08/31/18 00:05	4
Barium	27		1.7	0.25	mg/Kg		08/28/18 12:45	08/31/18 00:05	4
Beryllium	0.17	J	0.35	0.11	mg/Kg		08/28/18 12:45	08/31/18 00:05	4
Cadmium	5.5		0.43	0.043	mg/Kg		08/28/18 12:45	08/31/18 00:05	4
Chromium	15	B	1.7	0.18	mg/Kg		08/28/18 12:45	08/31/18 11:50	4
Cobalt	12		0.70	0.070	mg/Kg		08/28/18 12:45	08/31/18 00:05	4
Copper	84		5.2	2.5	mg/Kg		08/28/18 12:45	08/31/18 11:50	4
Lead	190		1.7	0.37	mg/Kg		08/28/18 12:45	08/31/18 00:05	4
Molybdenum	0.96	J	1.7	0.22	mg/Kg		08/28/18 12:45	08/31/18 00:05	4
Nickel	14		1.7	0.18	mg/Kg		08/28/18 12:45	08/31/18 00:05	4
Selenium	1.5	J	3.5	0.52	mg/Kg		08/28/18 12:45	08/31/18 00:05	4
Silver	ND		0.87	0.18	mg/Kg		08/28/18 12:45	08/31/18 11:50	4
Thallium	ND		1.7	0.50	mg/Kg		08/28/18 12:45	08/31/18 00:05	4
Vanadium	92		1.7	0.24	mg/Kg		08/28/18 12:45	08/31/18 11:50	4
Zinc	100		5.2	2.2	mg/Kg		08/28/18 12:45	08/31/18 00:05	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.42		0.017	0.0025	mg/Kg		08/29/18 19:12	08/31/18 13:47	1

Client Sample Results

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

TestAmerica Job ID: 720-88240-1

Client Sample ID: DG-H12S-3.5-4

Lab Sample ID: 720-88240-16

Date Collected: 08/24/18 12:02
Matrix: Solid
Date Received: 08/24/18 15:00

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.1		1.7	0.28	mg/Kg		08/28/18 12:45	08/31/18 00:10	4
Arsenic	72		3.3	0.28	mg/Kg		08/28/18 12:45	08/31/18 00:10	4
Barium	30		1.7	0.24	mg/Kg		08/28/18 12:45	08/31/18 00:10	4
Beryllium	0.26	J	0.33	0.11	mg/Kg		08/28/18 12:45	08/31/18 11:55	4
Cadmium	ND		0.42	0.041	mg/Kg		08/28/18 12:45	08/31/18 00:10	4
Chromium	500	B	1.7	0.18	mg/Kg		08/28/18 12:45	08/31/18 11:55	4
Cobalt	32		0.67	0.067	mg/Kg		08/28/18 12:45	08/31/18 00:10	4
Copper	44		5.0	2.4	mg/Kg		08/28/18 12:45	08/31/18 11:55	4
Lead	6.5		1.7	0.35	mg/Kg		08/28/18 12:45	08/31/18 00:10	4
Molybdenum	0.79	J	1.7	0.21	mg/Kg		08/28/18 12:45	08/31/18 00:10	4
Nickel	360		1.7	0.17	mg/Kg		08/28/18 12:45	08/31/18 00:10	4
Selenium	1.4	J	3.3	0.50	mg/Kg		08/28/18 12:45	08/31/18 00:10	4
Silver	ND		0.83	0.17	mg/Kg		08/28/18 12:45	08/31/18 11:55	4
Thallium	ND		1.7	0.48	mg/Kg		08/28/18 12:45	08/31/18 00:10	4
Vanadium	79		1.7	0.23	mg/Kg		08/28/18 12:45	08/31/18 11:55	4
Zinc	65		5.0	2.1	mg/Kg		08/28/18 12:45	08/31/18 00:10	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.087		0.015	0.0023	mg/Kg		08/29/18 19:12	08/31/18 13:49	1

Client Sample Results

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

TestAmerica Job ID: 720-88240-1

Client Sample ID: DUP-33

Date Collected: 08/24/18 00:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88240-17

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.4		1.3	0.22	mg/Kg		08/29/18 09:32	08/30/18 11:36	4
Arsenic	230		2.6	0.22	mg/Kg		08/29/18 09:32	08/30/18 11:36	4
Barium	120		1.3	0.19	mg/Kg		08/29/18 09:32	08/30/18 11:36	4
Beryllium	ND		0.26	0.085	mg/Kg		08/29/18 09:32	08/30/18 11:36	4
Cadmium	0.096	J	0.33	0.032	mg/Kg		08/29/18 09:32	08/30/18 11:36	4
Chromium	110		1.3	0.14	mg/Kg		08/29/18 09:32	08/30/18 11:36	4
Cobalt	15		0.52	0.052	mg/Kg		08/29/18 09:32	08/30/18 11:36	4
Copper	24		3.9	1.9	mg/Kg		08/29/18 09:32	08/30/18 11:36	4
Lead	43		1.3	0.27	mg/Kg		08/29/18 09:32	08/30/18 11:36	4
Molybdenum	0.18	J	1.3	0.17	mg/Kg		08/29/18 09:32	08/30/18 11:36	4
Nickel	120		1.3	0.13	mg/Kg		08/29/18 09:32	08/30/18 11:36	4
Selenium	ND		2.6	0.39	mg/Kg		08/29/18 09:32	08/30/18 11:36	4
Silver	0.23	J	0.65	0.13	mg/Kg		08/29/18 09:32	08/30/18 11:36	4
Thallium	0.88	J	1.3	0.38	mg/Kg		08/29/18 09:32	08/30/18 11:36	4
Vanadium	79		1.3	0.18	mg/Kg		08/29/18 09:32	08/30/18 11:36	4
Zinc	49		3.9	1.7	mg/Kg		08/29/18 09:32	08/30/18 11:36	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12		0.015	0.0022	mg/Kg		08/29/18 19:12	08/31/18 13:56	1

Client Sample Results

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

TestAmerica Job ID: 720-88240-1

Client Sample ID: DUP-34

Date Collected: 08/24/18 00:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88240-18

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	4.4		1.7	0.27	mg/Kg		08/29/18 09:32	08/30/18 11:40	4
Arsenic	210		3.3	0.28	mg/Kg		08/29/18 09:32	08/30/18 11:40	4
Barium	170		1.7	0.23	mg/Kg		08/29/18 09:32	08/30/18 11:40	4
Beryllium	ND		0.33	0.11	mg/Kg		08/29/18 09:32	08/30/18 11:40	4
Cadmium	0.54		0.41	0.041	mg/Kg		08/29/18 09:32	08/30/18 11:40	4
Chromium	130		1.7	0.18	mg/Kg		08/29/18 09:32	08/30/18 11:40	4
Cobalt	38		0.66	0.066	mg/Kg		08/29/18 09:32	08/30/18 11:40	4
Copper	120		5.0	2.4	mg/Kg		08/29/18 09:32	08/30/18 11:40	4
Lead	86		1.7	0.35	mg/Kg		08/29/18 09:32	08/30/18 11:40	4
Molybdenum	0.31	J	1.7	0.21	mg/Kg		08/29/18 09:32	08/30/18 11:40	4
Nickel	58		1.7	0.17	mg/Kg		08/29/18 09:32	08/30/18 11:40	4
Selenium	ND		3.3	0.50	mg/Kg		08/29/18 09:32	08/30/18 11:40	4
Silver	1.4		0.83	0.17	mg/Kg		08/29/18 09:32	08/30/18 11:40	4
Thallium	3.9		1.7	0.48	mg/Kg		08/29/18 09:32	08/30/18 11:40	4
Vanadium	250		1.7	0.22	mg/Kg		08/29/18 09:32	08/30/18 11:40	4
Zinc	190		5.0	2.1	mg/Kg		08/29/18 09:32	08/30/18 11:40	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.042		0.017	0.0025	mg/Kg		08/29/18 19:12	08/31/18 13:59	1

Client Sample Results

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

TestAmerica Job ID: 720-88240-1

Client Sample ID: DUP-36

Date Collected: 08/24/18 00:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88240-19

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.5	1.1	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
Acetone	**50**		45	35	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
Benzene	ND		4.5	0.59	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
Dichlorobromomethane	ND		4.5	0.66	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
Bromobenzene	ND	*	4.5	0.72	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
Chlorobromomethane	ND		18	0.66	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
Bromoform	ND		4.5	1.8	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
Bromomethane	ND		9.1	0.72	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
2-Butanone (MEK)	ND		45	19	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
n-Butylbenzene	ND	*	4.5	0.91	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
sec-Butylbenzene	ND	*	4.5	0.66	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
tert-Butylbenzene	ND	*	4.5	0.66	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
Carbon disulfide	ND	*	4.5	1.8	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
Carbon tetrachloride	ND		4.5	0.56	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
Chlorobenzene	ND		4.5	0.63	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
Chloroethane	ND		9.1	0.51	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
Chloroform	ND		4.5	0.60	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
Chloromethane	ND		9.1	0.72	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
2-Chlorotoluene	ND	*	4.5	0.59	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
4-Chlorotoluene	ND	*	4.5	0.62	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
Chlorodibromomethane	ND		4.5	0.65	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
1,2-Dichlorobenzene	ND	*	4.5	0.62	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
1,3-Dichlorobenzene	ND	*	4.5	0.66	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
1,4-Dichlorobenzene	ND	*	4.5	0.65	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
1,3-Dichloropropane	ND		4.5	0.66	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
1,1-Dichloropropene	ND		4.5	0.63	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
1,2-Dibromo-3-Chloropropane	ND	*	9.1	1.5	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
Ethylene Dibromide	ND		4.5	1.3	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
Dibromomethane	ND		9.1	0.78	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
Dichlorodifluoromethane	ND		9.1	0.72	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
1,1-Dichloroethane	ND		4.5	0.62	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
1,2-Dichloroethane	ND		4.5	0.69	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
1,1-Dichloroethene	ND	*	4.5	0.56	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
cis-1,2-Dichloroethene	ND		4.5	0.62	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
trans-1,2-Dichloroethene	ND		4.5	0.68	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
1,2-Dichloropropane	ND		4.5	0.57	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
cis-1,3-Dichloropropene	ND		4.5	0.63	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
trans-1,3-Dichloropropene	ND		4.5	0.61	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
Ethylbenzene	ND		4.5	0.68	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
Hexachlorobutadiene	ND	*	4.5	0.82	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
2-Hexanone	ND		45	9.1	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
Isopropylbenzene	ND		4.5	0.62	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
4-Isopropyltoluene	ND	*	4.5	2.3	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
Methylene Chloride	ND		9.1	5.1	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
4-Methyl-2-pentanone (MIBK)	ND		45	9.1	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
Naphthalene	ND	*	9.1	1.4	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
N-Propylbenzene	ND	*	4.5	0.60	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
Styrene	ND		4.5	0.57	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
1,1,1,2-Tetrachloroethane	ND		4.5	0.69	ug/Kg		08/25/18 03:05	08/30/18 00:35	1

Client Sample ID: DUP-36

Date Collected: 08/24/18 00:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88240-19

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	4.5	0.68	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
Toluene	ND		4.5	0.65	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
1,2,3-Trichlorobenzene	ND	*	4.5	0.67	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
1,2,4-Trichlorobenzene	ND	*	4.5	0.65	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
1,1,1-Trichloroethane	ND		4.5	0.56	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
1,1,2-Trichloroethane	ND		4.5	0.64	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
Trichloroethene	ND		4.5	0.57	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
Trichlorofluoromethane	ND		4.5	0.51	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
1,2,3-Trichloropropane	ND	*	4.5	0.70	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.5	1.9	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
1,2,4-Trimethylbenzene	ND	*	4.5	1.5	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
1,3,5-Trimethylbenzene	ND	*	4.5	0.59	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
Vinyl acetate	ND		18	4.5	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
Vinyl chloride	ND		4.5	0.66	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
Xylenes, Total	ND		4.5	1.1	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
2,2-Dichloropropane	ND		4.5	1.8	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
Gasoline Range Organics (GRO) -C4-C12	**180**	**J**	230	91	ug/Kg		08/25/18 03:05	08/30/18 00:35	1
Tetrachloroethene	ND		5.0	0.66	ug/Kg		09/04/18 13:59	09/04/18 15:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*123*		*45 - 131*	*08/25/18 03:05*	*08/30/18 00:35*	*1*
4-Bromofluorobenzene	*74*		*45 - 131*	*09/04/18 13:59*	*09/04/18 15:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*60 - 140*	*08/25/18 03:05*	*08/30/18 00:35*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*60 - 140*	*09/04/18 13:59*	*09/04/18 15:13*	*1*
Toluene-d8 (Surr)	*85*		*58 - 140*	*08/25/18 03:05*	*08/30/18 00:35*	*1*
Toluene-d8 (Surr)	*84*		*58 - 140*	*09/04/18 13:59*	*09/04/18 15:13*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		380	190	ug/Kg		09/04/18 17:46	09/06/18 10:02	20
Acenaphthene	ND		190	110	ug/Kg		09/04/18 17:46	09/06/18 10:02	20
Acenaphthylene	**100**	**J**	190	92	ug/Kg		09/04/18 17:46	09/06/18 10:02	20
Anthracene	**82**	**J**	190	77	ug/Kg		09/04/18 17:46	09/06/18 10:02	20
Benzo[a]anthracene	ND		190	58	ug/Kg		09/04/18 17:46	09/06/18 10:02	20
Benzo[a]pyrene	**150**	**J**	190	73	ug/Kg		09/04/18 17:46	09/06/18 10:02	20
Benzo[b]fluoranthene	**120**	**J**	190	81	ug/Kg		09/04/18 17:46	09/06/18 10:02	20
Benzo[g,h,i]perylene	ND		190	170	ug/Kg		09/04/18 17:46	09/06/18 10:02	20
Benzo[k]fluoranthene	ND		190	81	ug/Kg		09/04/18 17:46	09/06/18 10:02	20
Chrysene	**96**	**J**	190	54	ug/Kg		09/04/18 17:46	09/06/18 10:02	20
Dibenz(a,h)anthracene	ND		190	130	ug/Kg		09/04/18 17:46	09/06/18 10:02	20
Fluoranthene	**100**	**J**	190	54	ug/Kg		09/04/18 17:46	09/06/18 10:02	20
Fluorene	ND		190	85	ug/Kg		09/04/18 17:46	09/06/18 10:02	20
Indeno[1,2,3-cd]pyrene	ND		190	160	ug/Kg		09/04/18 17:46	09/06/18 10:02	20
Naphthalene	ND		190	130	ug/Kg		09/04/18 17:46	09/06/18 10:02	20
Phenanthrene	ND		190	69	ug/Kg		09/04/18 17:46	09/06/18 10:02	20
Pyrene	**300**		190	65	ug/Kg		09/04/18 17:46	09/06/18 10:02	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*0*	*X*	*33 - 120*	*09/04/18 17:46*	*09/06/18 10:02*	*20*

Client Sample ID: DUP-36

Date Collected: 08/24/18 00:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88240-19

Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	0	X	35 - 146	09/04/18 17:46	09/06/18 10:02	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2200000		95000	36000	ug/Kg		08/29/18 09:03	09/04/18 14:59	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	0	X D	40 - 130	08/29/18 09:03	09/04/18 14:59	50

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		9.5	2.9	ug/Kg		08/29/18 10:43	09/01/18 12:50	5
4,4'-DDE	ND		9.5	2.0	ug/Kg		08/29/18 10:43	09/01/18 12:50	5
4,4'-DDT	ND		9.5	1.9	ug/Kg		08/29/18 10:43	09/01/18 12:50	5
Aldrin	ND		9.5	2.4	ug/Kg		08/29/18 10:43	09/01/18 12:50	5
alpha-BHC	ND		9.5	2.6	ug/Kg		08/29/18 10:43	09/01/18 12:50	5
beta-BHC	ND		9.5	1.7	ug/Kg		08/29/18 10:43	09/01/18 12:50	5
Chlordane (technical)	ND		190	15	ug/Kg		08/29/18 10:43	09/01/18 12:50	5
cis-Chlordane	ND		9.5	1.9	ug/Kg		08/29/18 10:43	09/01/18 12:50	5
delta-BHC	ND		9.5	2.1	ug/Kg		08/29/18 10:43	09/01/18 12:50	5
Dieldrin	ND		9.5	2.8	ug/Kg		08/29/18 10:43	09/01/18 12:50	5
Endosulfan I	ND		9.5	1.5	ug/Kg		08/29/18 10:43	09/01/18 12:50	5
Endosulfan II	ND		9.5	2.3	ug/Kg		08/29/18 10:43	09/01/18 12:50	5
Endosulfan sulfate	ND		9.5	1.8	ug/Kg		08/29/18 10:43	09/01/18 12:50	5
Endrin	ND		9.5	2.2	ug/Kg		08/29/18 10:43	09/01/18 12:50	5
Endrin aldehyde	ND		9.5	3.0	ug/Kg		08/29/18 10:43	09/01/18 12:50	5
Endrin ketone	ND		9.5	1.6	ug/Kg		08/29/18 10:43	09/01/18 12:50	5
gamma-BHC (Lindane)	ND		9.5	3.0	ug/Kg		08/29/18 10:43	09/01/18 12:50	5
Heptachlor	ND		9.5	2.2	ug/Kg		08/29/18 10:43	09/01/18 12:50	5
Heptachlor epoxide	ND		9.5	1.7	ug/Kg		08/29/18 10:43	09/01/18 12:50	5
Methoxychlor	ND		9.5	3.2	ug/Kg		08/29/18 10:43	09/01/18 12:50	5
Toxaphene	ND		190	32	ug/Kg		08/29/18 10:43	09/01/18 12:50	5
trans-Chlordane	ND		9.5	2.2	ug/Kg		08/29/18 10:43	09/01/18 12:50	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	75		21 - 136	08/29/18 10:43	09/01/18 12:50	5
Tetrachloro-m-xylene	62		21 - 145	08/29/18 10:43	09/01/18 12:50	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/30/18 06:23	08/31/18 12:57	1
Aroclor-1221	ND		50	24	ug/Kg		08/30/18 06:23	08/31/18 12:57	1
Aroclor-1232	ND		50	23	ug/Kg		08/30/18 06:23	08/31/18 12:57	1
Aroclor-1242	ND		50	19	ug/Kg		08/30/18 06:23	08/31/18 12:57	1
Aroclor-1248	ND		50	24	ug/Kg		08/30/18 06:23	08/31/18 12:57	1
Aroclor-1254	ND		50	23	ug/Kg		08/30/18 06:23	08/31/18 12:57	1
Aroclor-1260	ND		50	22	ug/Kg		08/30/18 06:23	08/31/18 12:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	79		14 - 128	08/30/18 06:23	08/31/18 12:57	1

Client Sample ID: DUP-36

Lab Sample ID: 720-88240-19

Date Collected: 08/24/18 00:00

Matrix: Solid

Date Received: 08/24/18 15:00

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*167*	*X*	*10 - 132*	*08/30/18 06:23*	*08/31/18 12:57*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**5.2**		1.4	0.23	mg/Kg		08/29/18 09:32	08/30/18 11:45	4
Arsenic	**61**		2.8	0.24	mg/Kg		08/29/18 09:32	08/30/18 11:45	4
Barium	**110**		1.4	0.20	mg/Kg		08/29/18 09:32	08/30/18 11:45	4
Beryllium	ND		0.28	0.090	mg/Kg		08/29/18 09:32	08/30/18 11:45	4
Cadmium	**0.052**	**J**	0.35	0.034	mg/Kg		08/29/18 09:32	08/30/18 11:45	4
Chromium	**600**		1.4	0.15	mg/Kg		08/29/18 09:32	08/30/18 11:45	4
Cobalt	**40**		0.56	0.056	mg/Kg		08/29/18 09:32	08/30/18 11:45	4
Copper	**50**		4.2	2.0	mg/Kg		08/29/18 09:32	08/30/18 11:45	4
Lead	**2.2**		1.4	0.29	mg/Kg		08/29/18 09:32	08/30/18 11:45	4
Molybdenum	**0.21**	**J**	1.4	0.18	mg/Kg		08/29/18 09:32	08/30/18 11:45	4
Nickel	**360**		1.4	0.14	mg/Kg		08/29/18 09:32	08/30/18 11:45	4
Selenium	ND		2.8	0.42	mg/Kg		08/29/18 09:32	08/30/18 11:45	4
Silver	**0.59**	**J**	0.69	0.14	mg/Kg		08/29/18 09:32	08/30/18 11:45	4
Thallium	**1.8**		1.4	0.40	mg/Kg		08/29/18 09:32	08/30/18 11:45	4
Vanadium	**130**		1.4	0.19	mg/Kg		08/29/18 09:32	08/30/18 11:45	4
Zinc	**92**		4.2	1.8	mg/Kg		08/29/18 09:32	08/30/18 11:45	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.055**		0.015	0.0022	mg/Kg		08/29/18 19:12	08/31/18 14:01	1

Client Sample Results

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

TestAmerica Job ID: 720-88240-1

Client Sample ID: DUP-13

Date Collected: 08/24/18 00:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88240-20

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.6	0.86	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
Acetone	**68**		36	27	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
Benzene	ND		3.6	0.47	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
Dichlorobromomethane	ND		3.6	0.52	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
Bromobenzene	ND		3.6	0.57	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
Chlorobromomethane	ND		14	0.52	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
Bromoform	ND		3.6	1.4	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
Bromomethane	ND		7.2	0.57	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
2-Butanone (MEK)	ND		36	15	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
n-Butylbenzene	**0.73**	**J**	3.6	0.72	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
sec-Butylbenzene	**0.80**	**J**	3.6	0.52	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
tert-Butylbenzene	**0.67**	**J**	3.6	0.52	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
Carbon disulfide	ND	*	3.6	1.4	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
Carbon tetrachloride	ND		3.6	0.45	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
Chlorobenzene	ND		3.6	0.50	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
Chloroethane	ND		7.2	0.40	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
Chloroform	ND		3.6	0.47	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
Chloromethane	ND		7.2	0.57	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
2-Chlorotoluene	ND		3.6	0.47	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
4-Chlorotoluene	ND		3.6	0.49	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
Chlorodibromomethane	ND		3.6	0.51	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
1,2-Dichlorobenzene	ND		3.6	0.49	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
1,3-Dichlorobenzene	ND		3.6	0.52	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
1,4-Dichlorobenzene	ND		3.6	0.51	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
1,3-Dichloropropane	ND		3.6	0.52	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
1,1-Dichloropropene	ND		3.6	0.50	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
1,2-Dibromo-3-Chloropropane	ND		7.2	1.2	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
Ethylene Dibromide	ND		3.6	1.0	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
Dibromomethane	ND		7.2	0.62	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
Dichlorodifluoromethane	ND		7.2	0.57	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
1,1-Dichloroethane	ND		3.6	0.49	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
1,2-Dichloroethane	ND		3.6	0.55	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
1,1-Dichloroethene	ND	*	3.6	0.45	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
cis-1,2-Dichloroethene	ND		3.6	0.49	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
trans-1,2-Dichloroethene	ND		3.6	0.54	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
1,2-Dichloropropane	ND		3.6	0.45	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
cis-1,3-Dichloropropene	ND		3.6	0.50	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
trans-1,3-Dichloropropene	ND		3.6	0.48	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
Ethylbenzene	ND		3.6	0.54	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
Hexachlorobutadiene	ND		3.6	0.65	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
2-Hexanone	ND		36	7.2	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
Isopropylbenzene	ND		3.6	0.49	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
4-Isopropyltoluene	**5.0**		3.6	1.8	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
Methylene Chloride	ND		7.2	4.0	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
4-Methyl-2-pentanone (MIBK)	ND		36	7.2	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
Naphthalene	ND		7.2	1.1	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
N-Propylbenzene	**0.63**	**J**	3.6	0.47	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
Styrene	ND		3.6	0.45	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
1,1,1,2-Tetrachloroethane	ND		3.6	0.55	ug/Kg		08/25/18 03:05	08/30/18 20:45	1

Client Sample ID: DUP-13

Lab Sample ID: 720-88240-20

Date Collected: 08/24/18 00:00

Matrix: Solid

Date Received: 08/24/18 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		3.6	0.54	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
Tetrachloroethene	ND		3.6	0.48	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
Toluene	**0.52**	**J**	3.6	0.51	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
1,2,3-Trichlorobenzene	ND		3.6	0.53	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
1,2,4-Trichlorobenzene	ND		3.6	0.51	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
1,1,1-Trichloroethane	ND		3.6	0.44	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
1,1,2-Trichloroethane	ND		3.6	0.50	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
Trichloroethene	ND		3.6	0.45	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
Trichlorofluoromethane	ND		3.6	0.40	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
1,2,3-Trichloropropane	ND		3.6	0.55	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.6	1.5	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
1,2,4-Trimethylbenzene	ND		3.6	1.2	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
1,3,5-Trimethylbenzene	**0.59**	**J**	3.6	0.47	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
Vinyl acetate	ND		14	3.6	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
Vinyl chloride	ND		3.6	0.52	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
Xylenes, Total	ND		3.6	0.88	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
2,2-Dichloropropane	ND		3.6	1.4	ug/Kg		08/25/18 03:05	08/30/18 20:45	1
Gasoline Range Organics (GRO) -C4-C12	ND		180	72	ug/Kg		08/25/18 03:05	08/30/18 20:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*45 - 131*	*08/25/18 03:05*	*08/30/18 20:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*60 - 140*	*08/25/18 03:05*	*08/30/18 20:45*	*1*
Toluene-d8 (Surr)	*97*		*58 - 140*	*08/25/18 03:05*	*08/30/18 20:45*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.7	4.8	ug/Kg		08/29/18 11:45	08/31/18 22:48	1
Acenaphthene	ND		4.8	2.7	ug/Kg		08/29/18 11:45	08/31/18 22:48	1
Acenaphthylene	**2.7**	**J**	4.8	2.3	ug/Kg		08/29/18 11:45	08/31/18 22:48	1
Anthracene	**1.9**	**J**	4.8	1.9	ug/Kg		08/29/18 11:45	08/31/18 22:48	1
Benzo[a]anthracene	**5.0**		4.8	1.4	ug/Kg		08/29/18 11:45	08/31/18 22:48	1
Benzo[a]pyrene	**6.1**		4.8	1.8	ug/Kg		08/29/18 11:45	08/31/18 22:48	1
Benzo[b]fluoranthene	**6.6**		4.8	2.0	ug/Kg		08/29/18 11:45	08/31/18 22:48	1
Benzo[g,h,i]perylene	ND		4.8	4.2	ug/Kg		08/29/18 11:45	08/31/18 22:48	1
Benzo[k]fluoranthene	**3.3**	**J**	4.8	2.0	ug/Kg		08/29/18 11:45	08/31/18 22:48	1
Chrysene	**4.9**		4.8	1.4	ug/Kg		08/29/18 11:45	08/31/18 22:48	1
Dibenz(a,h)anthracene	ND		4.8	3.4	ug/Kg		08/29/18 11:45	08/31/18 22:48	1
Fluoranthene	**7.0**	**B**	4.8	1.4	ug/Kg		08/29/18 11:45	08/31/18 22:48	1
Fluorene	ND		4.8	2.1	ug/Kg		08/29/18 11:45	08/31/18 22:48	1
Indeno[1,2,3-cd]pyrene	ND		4.8	4.1	ug/Kg		08/29/18 11:45	08/31/18 22:48	1
Naphthalene	ND		4.8	3.4	ug/Kg		08/29/18 11:45	08/31/18 22:48	1
Phenanthrene	**6.6**	**B**	4.8	1.7	ug/Kg		08/29/18 11:45	08/31/18 22:48	1
Pyrene	**9.6**		4.8	1.6	ug/Kg		08/29/18 11:45	08/31/18 22:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*71*		*33 - 120*	*08/29/18 11:45*	*08/31/18 22:48*	*1*
Terphenyl-d14	*87*		*35 - 146*	*08/29/18 11:45*	*08/31/18 22:48*	*1*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88240-1

Client Sample ID: DUP-13

Date Collected: 08/24/18 00:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88240-20

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	50000		2000	740	ug/Kg		08/29/18 09:03	09/01/18 16:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*96*		*40 - 130*	*08/29/18 09:03*	*09/01/18 16:03*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.61	ug/Kg		08/29/18 10:43	09/01/18 13:08	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/29/18 10:43	09/01/18 13:08	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/29/18 10:43	09/01/18 13:08	1
Aldrin	ND		2.0	0.50	ug/Kg		08/29/18 10:43	09/01/18 13:08	1
alpha-BHC	ND		2.0	0.55	ug/Kg		08/29/18 10:43	09/01/18 13:08	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/29/18 10:43	09/01/18 13:08	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/29/18 10:43	09/01/18 13:08	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/29/18 10:43	09/01/18 13:08	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/29/18 10:43	09/01/18 13:08	1
Dieldrin	ND		2.0	0.59	ug/Kg		08/29/18 10:43	09/01/18 13:08	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/29/18 10:43	09/01/18 13:08	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/29/18 10:43	09/01/18 13:08	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/29/18 10:43	09/01/18 13:08	1
Endrin	ND		2.0	0.46	ug/Kg		08/29/18 10:43	09/01/18 13:08	1
Endrin aldehyde	ND		2.0	0.63	ug/Kg		08/29/18 10:43	09/01/18 13:08	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/29/18 10:43	09/01/18 13:08	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		08/29/18 10:43	09/01/18 13:08	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/29/18 10:43	09/01/18 13:08	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/29/18 10:43	09/01/18 13:08	1
Methoxychlor	ND		2.0	0.68	ug/Kg		08/29/18 10:43	09/01/18 13:08	1
Toxaphene	ND		40	6.8	ug/Kg		08/29/18 10:43	09/01/18 13:08	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/29/18 10:43	09/01/18 13:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*79*		*21 - 136*	*08/29/18 10:43*	*09/01/18 13:08*	*1*
Tetrachloro-m-xylene	*79*		*21 - 145*	*08/29/18 10:43*	*09/01/18 13:08*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		49	21	ug/Kg		08/30/18 06:23	08/31/18 13:11	1
Aroclor-1221	ND		49	23	ug/Kg		08/30/18 06:23	08/31/18 13:11	1
Aroclor-1232	ND		49	22	ug/Kg		08/30/18 06:23	08/31/18 13:11	1
Aroclor-1242	ND		49	19	ug/Kg		08/30/18 06:23	08/31/18 13:11	1
Aroclor-1248	ND		49	23	ug/Kg		08/30/18 06:23	08/31/18 13:11	1
Aroclor-1254	ND		49	22	ug/Kg		08/30/18 06:23	08/31/18 13:11	1
Aroclor-1260	ND		49	21	ug/Kg		08/30/18 06:23	08/31/18 13:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*90*		*14 - 128*	*08/30/18 06:23*	*08/31/18 13:11*	*1*
DCB Decachlorobiphenyl	*99*		*10 - 132*	*08/30/18 06:23*	*08/31/18 13:11*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.3	0.21	mg/Kg		08/29/18 09:32	08/30/18 22:53	4

Client Sample ID: DUP-13

Lab Sample ID: 720-88240-20

Date Collected: 08/24/18 00:00

Matrix: Solid

Date Received: 08/24/18 15:00

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.2		2.6	0.22	mg/Kg		08/29/18 09:32	08/30/18 11:50	4
Barium	120		1.3	0.18	mg/Kg		08/29/18 09:32	08/30/18 11:50	4
Beryllium	ND		0.26	0.084	mg/Kg		08/29/18 09:32	08/30/18 11:50	4
Cadmium	ND		0.32	0.032	mg/Kg		08/29/18 09:32	08/30/18 11:50	4
Chromium	86		1.3	0.14	mg/Kg		08/29/18 09:32	08/30/18 11:50	4
Cobalt	22		0.52	0.052	mg/Kg		08/29/18 09:32	08/30/18 11:50	4
Copper	32		3.9	1.8	mg/Kg		08/29/18 09:32	08/30/18 11:50	4
Lead	12		1.3	0.27	mg/Kg		08/29/18 09:32	08/30/18 11:50	4
Molybdenum	ND		1.3	0.17	mg/Kg		08/29/18 09:32	08/30/18 11:50	4
Nickel	38		1.3	0.13	mg/Kg		08/29/18 09:32	08/30/18 11:50	4
Selenium	ND		2.6	0.39	mg/Kg		08/29/18 09:32	08/30/18 11:50	4
Silver	0.45	J	0.65	0.13	mg/Kg		08/29/18 09:32	08/30/18 11:50	4
Thallium	2.2		1.3	0.37	mg/Kg		08/29/18 09:32	08/30/18 11:50	4
Vanadium	150		1.3	0.18	mg/Kg		08/29/18 09:32	08/30/18 11:50	4
Zinc	53		3.9	1.6	mg/Kg		08/29/18 09:32	08/30/18 11:50	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.37		0.016	0.0023	mg/Kg		08/29/18 19:12	08/31/18 14:03	1

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88240-1
SDG No.:
Client Sample ID: DG-K7S-0.5-1
Lab Sample ID: 720-88240-1
Matrix: Solid
Lab File ID: FID1000012.D
Analysis Method: 8015B
Date Collected: 08/24/2018 07:52
Extraction Method: 3546
Date Extracted: 08/29/2018 09:03
Sample wt/vol: 15.92(g)
Date Analyzed: 09/04/2018 14:11
Con. Extract Vol.: 2(mL)
Dilution Factor: 50
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250762
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	1700000		94000	35000

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	0	X D	40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000012.D
Lims ID: 720-88240-E-1-A
Client ID: DG-K7S-0.5-1
Sample Type: Client
Inject. Date: 04-Sep-2018 14:11:11 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 50.0000
Sample Info: 720-0053635-012
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\DRO6_A.m
Limit Group: DRO
Last Update: 04-Sep-2018 14:45:24 Calib Date: 04-Sep-2018 09:05:17
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK017

First Level Reviewer: luj Date: 04-Sep-2018 14:45:24

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane	1.310	1.227	0.083	144194	NC	M
23 n-Decane	2.100	2.116	-0.016	24735	NC	M
A 1 C9-C13	2.734	(1.227-4.241)		6946291	3.91	M
A 21 Stoddard Solvent	2.734	(1.227-4.241)		6946291	3.90	M
A 57 C10-C12	2.864	(2.116-3.613)		3900215	2.53	M
24 Dodecane	3.599	3.613	-0.014	124764	NC	M
A 3 C9 - C17	3.780	(1.227-6.332)		30820664	15.8	M
A 60 C10-C16	3.983	(2.116-5.851)		22256648	12.7	M
A 47 C9 - C18	4.005	(1.227-6.784)		46852574	29.0	M
A 15 Kerosene	4.220	(1.227-7.214)		58100134	36.0	M
A 25 C9-C19	4.220	(1.227-7.214)		58100134	29.6	M
26 C13	4.278	4.241	0.037	496119	NC	M
$ 27 n-Decanoic Acid (Surr)		4.611			ND	U
A 59 C12-C16	4.732	(3.613-5.851)		18481197	12.0	M
A 62 C10-C20	4.871	(2.116-7.627)		82468147	53.5	M
A 28 C9-C24	5.172	(1.227-9.117)		217627539	141.1	M
A 29 C9-C25	5.341	(1.227-9.456)		250316053	162.3	M
A 54 C10-C23	5.441	(2.116-8.766)		181659067	117.8	M
A 4 C10-C24	5.616	(2.116-9.117)		217033089	140.7	M
A 16 C10-C25	5.786	(2.116-9.456)		249721603	161.9	M
45 Hexadecane	5.858	5.851	0.007	1545798	NC	M
A 14 C10-C26	5.949	(2.116-9.783)		284742816	184.6	M
A 67 C12-C22	6.007	(3.613-8.402)		141657397	91.8	M
A 32 C10-C28	6.260	(2.116-10.404)		428383720	277.7	M
A 5 Diesel	6.260	(2.116-10.404)		428383720	277.7	M
A 12 Unknown Hydrocarbons	6.260	(2.116-10.404)		428383720	NC	M
A 30 C13-C22	6.321	(4.241-8.402)		139081007	90.2	M
44 Heptadecane	6.377	6.332	0.045	4880094	NC	M
A 31 C12-C24	6.365	(3.613-9.117)		213257638	138.3	M
51 n-Octadecane	6.737	6.784	-0.047	2101147	NC	M
A 9 Crude Oil Range Organics (	6.883	(1.227-12.538)		930907035	NC	M
A 11 Bunker Range Organics (C9-	6.883	(1.227-12.538)		930907035	NC	M

Report Date: 04-Sep-2018 14:45:25 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000012.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.883	(1.227-12.538)		930907035	525.8	M
33 C19	7.275	7.214	0.061	13100885	NC	M
A 64 C13-C28	7.322	(4.241-10.404)		422031879	273.6	M
A 17 C10-C36	7.327	(2.116-12.538)		930312585	603.2	M
A 68 Crude Oil Range Organics (	7.394	(1.227-13.561)		1284229634	NC	M
A 13 C9-C40	7.394	(1.227-13.561)		1284229634	952.4	M
A 58 C16-C24	7.484	(5.851-9.117)		194776441	126.3	M
61 icosane	7.629	7.627	0.002	8452391	NC	M
A 6 C10-C40	7.838	(2.116-13.561)		1283635184	952.6	M
$ 34 p-Terphenyl		8.109			ND	U
35 n-Docosane	8.473	8.402	0.071	12564302	NC	M
A 18 C12-C40	8.587	(3.613-13.561)		1279859733	952.4	M
36 Tricosane	8.731	8.766	-0.035	1651757	NC	M
A 66 C13-C40	8.901	(4.241-13.561)		1277283343	951.6	M
37 n-Tetracosane	9.140	9.117	0.023	10988265	NC	M
A 2 C16-C36 ORO	9.195	(5.851-12.538)		1042854924	914.3	
38 C25		9.456			ND	
A 19 C16-C40	9.706	(5.851-13.561)		1261378536	943.4	M
46 n-Hexacosane	9.844	9.783	0.061	40959439	NC	M
A 20 C19-C36	9.876	(7.214-12.538)		978738512	736.4	
A 55 C23-C32	10.150	(8.766-11.534)		538397901	775.5	M
39 n-Octacosane	10.342	10.404	-0.062	28647885	NC	M
65 C29	10.733	10.700	0.033	24047893	NC	M
A 40 C24-C36	10.828	(9.117-12.538)		718917337	807.3	M
A 7 Motor Oil	10.828	(9.117-12.538)		598090075	671.6	
A 10 C22-C40	10.982	(8.402-13.561)		838523565	674.3	
A 49 C25-C36	10.997	(9.456-12.538)		680590982	760.3	M
A 41 C23-C40	11.164	(8.766-13.561)		1101976117	862.2	M
A 8 C24-C40	11.339	(9.117-13.561)		1066602095	876.2	M
56 Dotriacontane	11.473	11.534	-0.061	49508291	NC	M
A 50 C28-C40	11.983	(10.404-13.561)		855251464	901.0	M
A 63 C29-C40	12.130	(10.700-13.561)		782624753	903.1	M
42 n-Hexatriacontane	12.481	12.538	-0.057	28101250	NC	M
43 C40		13.561			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

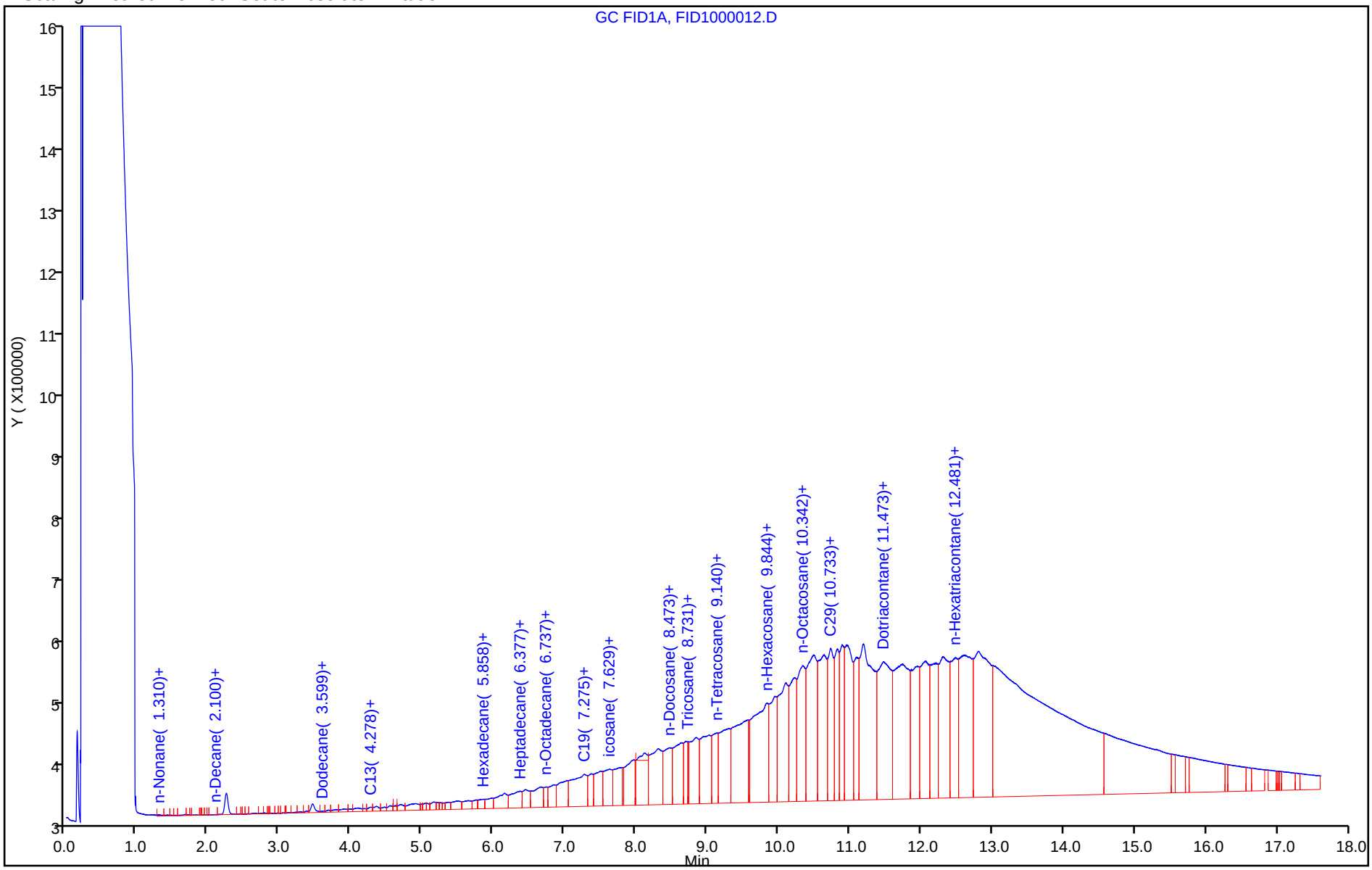
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 04-Sep-2018 14:45:25 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000012.D				
Injection Date:	04-Sep-2018 14:11:11	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88240-E-1-A	Lab Sample ID:	720-88240-1	Worklist Smp#:	12
Client ID:	DG-K7S-0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	50.0000	ALS Bottle#:	12
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value

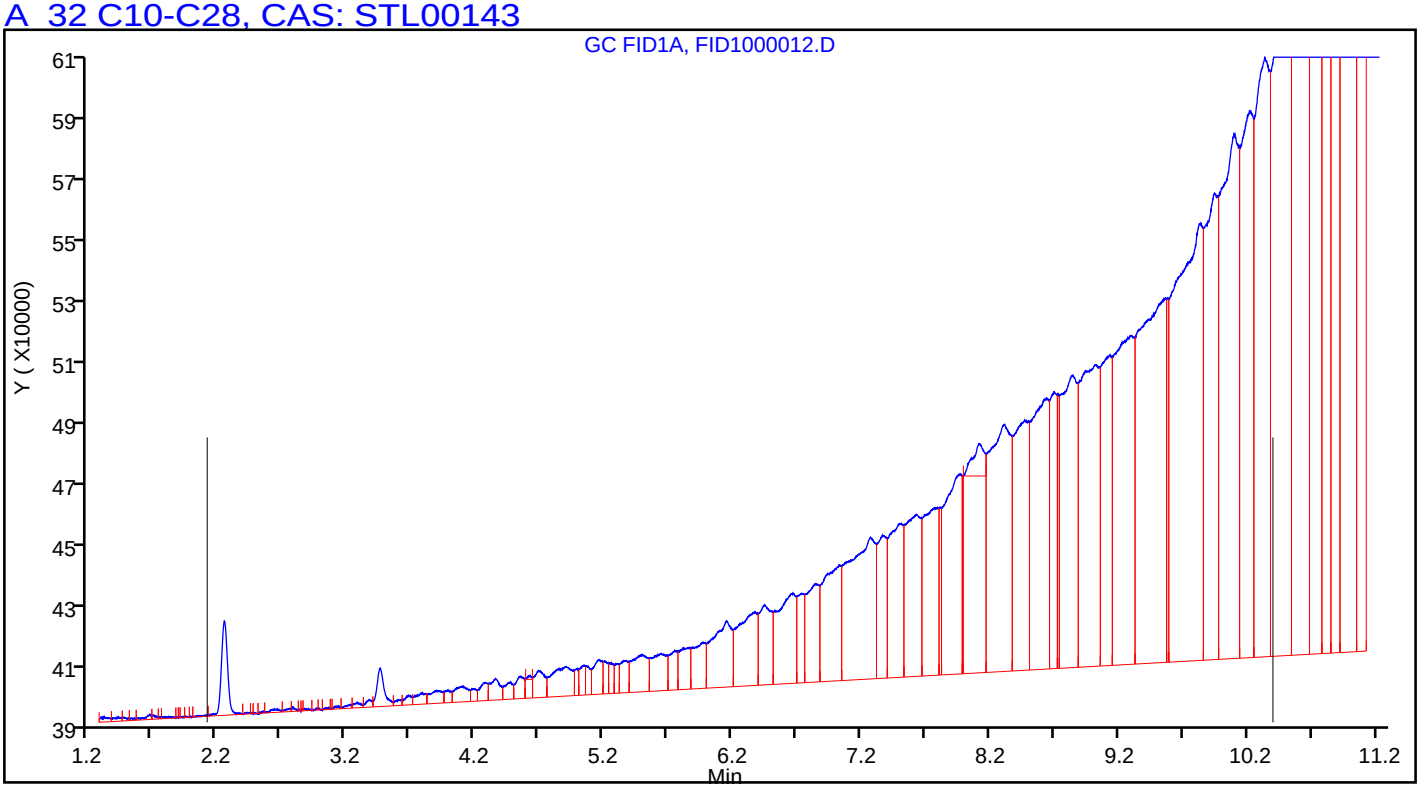


Report Date: 04-Sep-2018 14:45:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000012.D				
Injection Date:	04-Sep-2018 14:11:11	Instrument ID:	CHDRO6		
Lims ID:	720-88240-E-1-A	Lab Sample ID:	720-88240-1		
Client ID:	DG-K7S-0.5-1				
Operator ID:	DCH	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

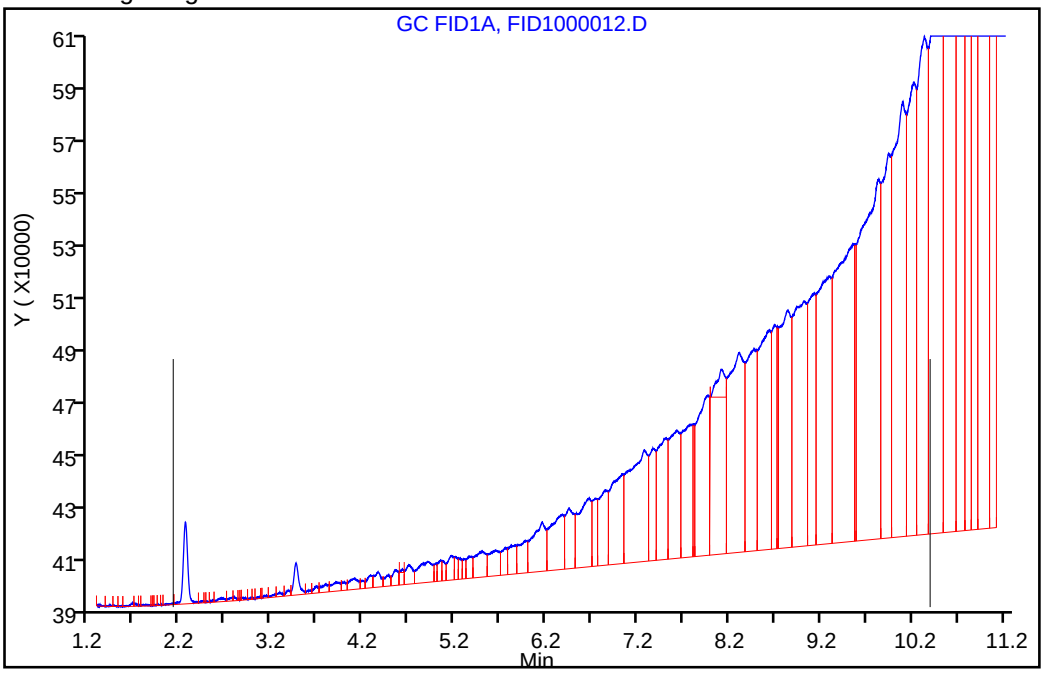
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000012.D				
Injection Date:	04-Sep-2018 14:11:11	Instrument ID:	CHDRO6		
Lims ID:	720-88240-E-1-A	Lab Sample ID:	720-88240-1		
Client ID:	DG-K7S-0.5-1				
Operator ID:	DCH	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.260, CAS: STL00143

Signal: 1

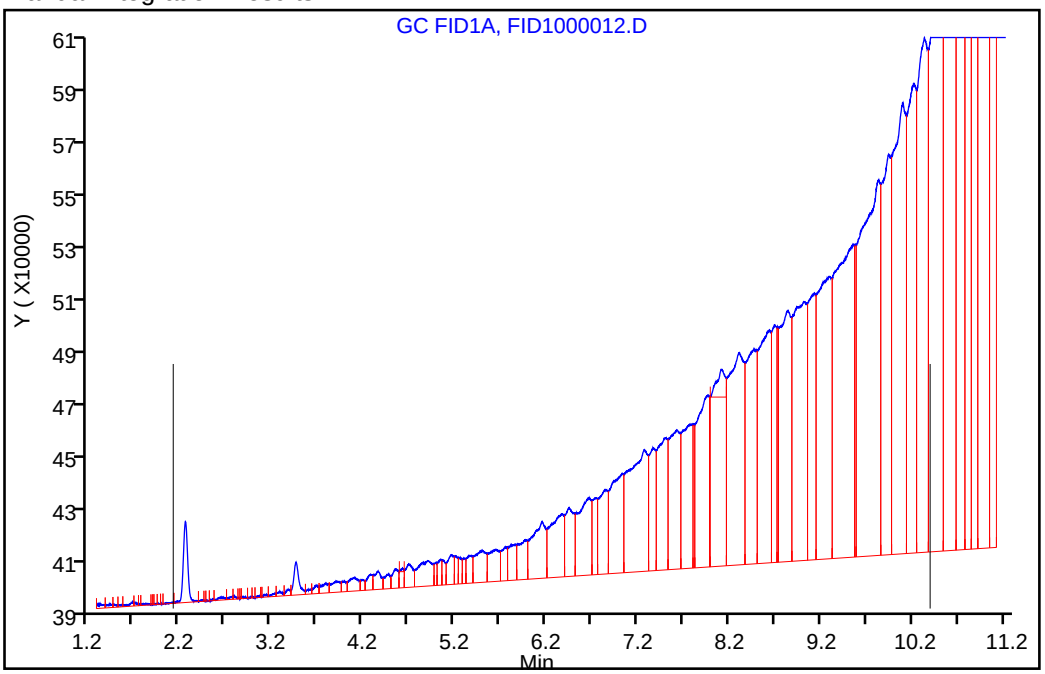
Processing Integration Results

RT: 6.26
Response: 394962876
Amount: 256.0689



Manual Integration Results

RT: 6.26
Response: 428383720
Amount: 277.7369



Reviewer: luj, 04-Sep-2018 14:45:10

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

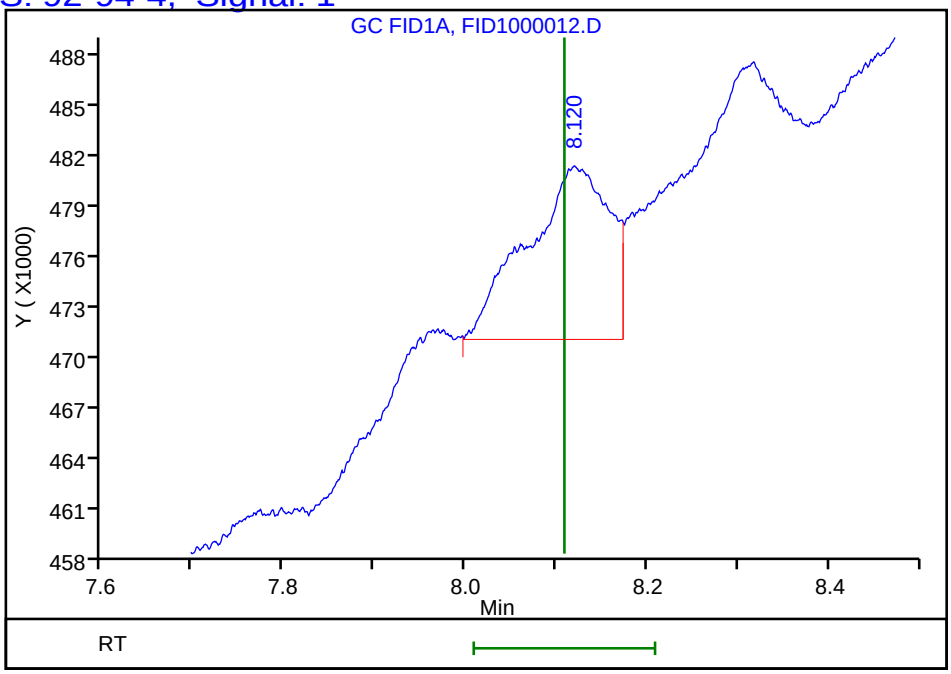
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000012.D				
Injection Date:	04-Sep-2018 14:11:11	Instrument ID:	CHDRO6		
Lims ID:	720-88240-E-1-A	Lab Sample ID:	720-88240-1		
Client ID:	DG-K7S-0.5-1				
Operator ID:	DCH	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4, Signal: 1

RT: 8.12
Response: 1296136
Amount: 0.674944



Reviewer: luj, 04-Sep-2018 14:45:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88240-1
SDG No.:
Client Sample ID: DG-K7S-3.5-4
Lab Sample ID: 720-88240-2
Matrix: Solid
Lab File ID: FID1000008.D
Analysis Method: 8015B
Date Collected: 08/24/2018 07:52
Extraction Method: 3546
Date Extracted: 08/29/2018 09:03
Sample wt/vol: 15.42(g)
Date Analyzed: 09/01/2018 15:39
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250738
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	15000		1900	730

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	91		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180901-53619.b\FID1000008.D
Lims ID: 720-88240-D-2-B
Client ID: DG-K7S-3.5-4
Sample Type: Client
Inject. Date: 01-Sep-2018 15:39:20 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053619-008
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180901-53619.b\DRO6_A.m
Limit Group: DRO
Last Update: 04-Sep-2018 13:29:21 Calib Date: 01-Sep-2018 13:36:32
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180901-53619.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK017

First Level Reviewer: luj Date: 04-Sep-2018 13:29:21

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane	1.322	1.232	0.090	8693	NC	
23 n-Decane	2.120	2.121	-0.001	21452	NC	
A 21 Stoddard Solvent	2.739	(1.232-4.246)		2961498	1.66	
A 1 C9-C13	2.739	(1.232-4.246)		2961498	1.67	
A 57 C10-C12	2.869	(2.121-3.618)		1281312	0.8307	
24 Dodecane	3.590	3.618	-0.028	68514	NC	
A 3 C9 - C17	3.785	(1.232-6.338)		22707446	11.6	
A 60 C10-C16	3.989	(2.121-5.856)		13132426	7.52	
A 47 C9 - C18	4.011	(1.232-6.789)		28261956	17.5	
A 25 C9-C19	4.226	(1.232-7.219)		40543715	20.7	
A 15 Kerosene	4.226	(1.232-7.219)		40543715	25.1	
26 C13	4.269	4.246	0.023	327579	NC	
$ 27 n-Decanoic Acid (Surr)		4.608			ND	U
A 59 C12-C16	4.737	(3.618-5.856)		11919628	7.73	
A 62 C10-C20	4.877	(2.121-7.633)		55072333	35.7	
A 28 C9-C24	5.180	(1.232-9.128)		109497775	71.0	
A 29 C9-C25	5.350	(1.232-9.468)		133269194	86.4	
A 54 C10-C23	5.448	(2.121-8.776)		103043295	66.8	
A 4 C10-C24	5.625	(2.121-9.128)		109297067	70.9	
A 16 C10-C25	5.795	(2.121-9.468)		133068486	86.3	
45 Hexadecane	5.857	5.856	0.001	2042040	NC	
A 14 C10-C26	5.959	(2.121-9.796)		140386006	91.0	
A 67 C12-C22	6.014	(3.618-8.410)		81466042	52.8	
A 12 Unknown Hydrocarbons	6.270	(2.121-10.419)		182864733	NC	
A 5 Diesel	6.270	(2.121-10.419)		182864733	118.6	
A 32 C10-C28	6.270	(2.121-10.419)		182864733	118.6	
A 30 C13-C22	6.328	(4.246-8.410)		79918050	51.8	
44 Heptadecane	6.333	6.338	-0.005	3392836	NC	
A 31 C12-C24	6.373	(3.618-9.128)		108084269	70.1	
51 n-Octadecane	6.795	6.789	0.006	2179096	NC	
A 52 Mineral oil	6.895	(1.232-12.557)		368962641	208.4	
A 11 Bunker Range Organics (C9-	6.895	(1.232-12.557)		368962641	NC	

Report Date: 04-Sep-2018 13:29:22 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180901-53619.b\FID1000008.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 9 Crude Oil Range Organics (	6.895	(1.232-12.557)		368962641	NC	
33 C19	7.215	7.219	-0.004	2976804	NC	
A 64 C13-C28	7.333	(4.246-10.419)		180103943	116.8	
A 17 C10-C36	7.339	(2.121-12.557)		368761933	239.1	
A 13 C9-C40	7.410	(1.232-13.588)		449169661	333.1	
A 68 Crude Oil Range Organics (	7.410	(1.232-13.588)		449169661	NC	
A 58 C16-C24	7.492	(5.856-9.128)		96164641	62.3	
61 icosane	7.626	7.633	-0.007	3516787	NC	
A 6 C10-C40	7.855	(2.121-13.588)		448968953	333.2	
$ 34 p-Terphenyl	8.097	8.128	-0.031	43554165	22.7	
35 n-Docosane	8.411	8.410	0.001	6234495	NC	
A 18 C12-C40	8.603	(3.618-13.588)		447756155	333.2	
36 Tricosane	8.773	8.776	-0.003	6935785	NC	
A 66 C13-C40	8.917	(4.246-13.588)		446208163	332.4	
37 n-Tetracosane	9.133	9.128	0.005	8124254	NC	
A 2 C16-C36 ORO	9.207	(5.856-12.557)		426863182	374.2	
38 C25	9.459	9.468	-0.009	11972815	NC	
A 19 C16-C40	9.722	(5.856-13.588)		435836527	326.0	
46 n-Hexacosane	9.797	9.796	0.001	9429731	NC	
A 20 C19-C36	9.888	(7.219-12.557)		392369038	295.2	
A 55 C23-C32	10.163	(8.776-11.551)		184518670	265.8	
39 n-Octacosane	10.423	10.419	0.004	12483344	NC	
65 C29	10.710	10.716	-0.006	17692530	NC	
A 7 Motor Oil	10.843	(9.128-12.557)		220619172	247.8	
A 40 C24-C36	10.843	(9.128-12.557)		220619172	247.8	
A 10 C22-C40	10.999	(8.410-13.588)		295737600	237.8	
A 49 C25-C36	11.013	(9.468-12.557)		247666262	276.7	
A 41 C23-C40	11.182	(8.776-13.588)		352861443	276.1	
A 8 C24-C40	11.358	(9.128-13.588)		339671886	279.0	
56 Dotriacontane	11.602	11.551	0.051	11754630	NC	
A 50 C28-C40	12.004	(10.419-13.588)		266104220	280.3	
A 63 C29-C40	12.152	(10.716-13.588)		246586315	284.5	
42 n-Hexatriacontane	12.560	12.557	0.003	3886873	NC	
43 C40		13.588		ND		
$ 69 Stearic Acid (Surr)		0.000		ND		

QC Flag Legend

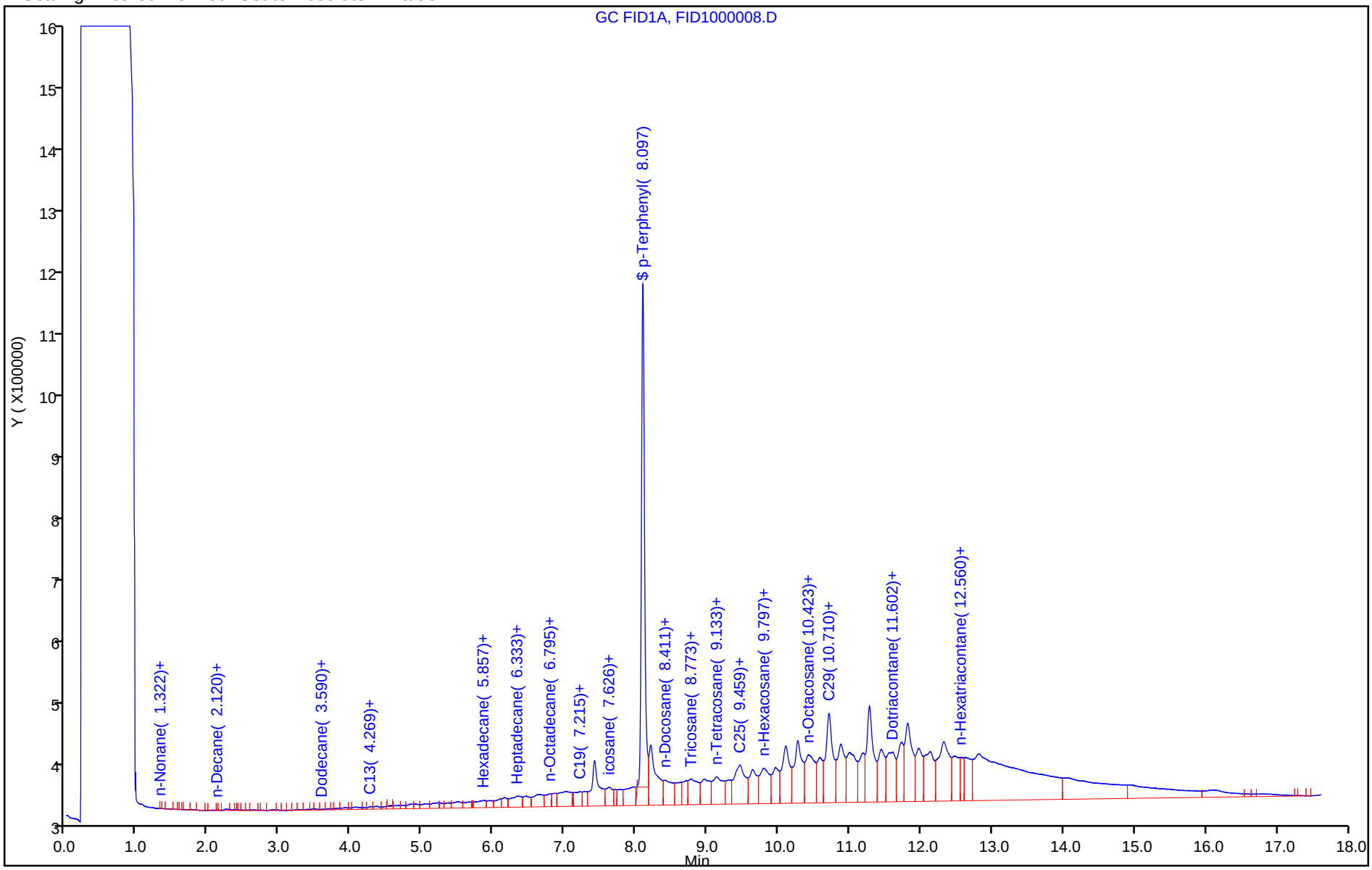
Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

Report Date: 04-Sep-2018 13:29:22 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180901-53619.b\FID1000008.D				
Injection Date:	01-Sep-2018 15:39:20	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88240-D-2-B	Lab Sample ID:	720-88240-2	Worklist Smp#:	8
Client ID:	DG-K7S-3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180901-53619.b\FID1000008.D
Lims ID: 720-88240-D-2-B
Client ID: DG-K7S-3.5-4
Sample Type: Client
Inject. Date: 01-Sep-2018 15:39:20 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053619-008
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180901-53619.b\DRO6_A.m
Limit Group: DRO
Last Update: 04-Sep-2018 13:29:21 Calib Date: 01-Sep-2018 13:36:32
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180901-53619.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK017

First Level Reviewer: luj Date: 04-Sep-2018 13:29:21

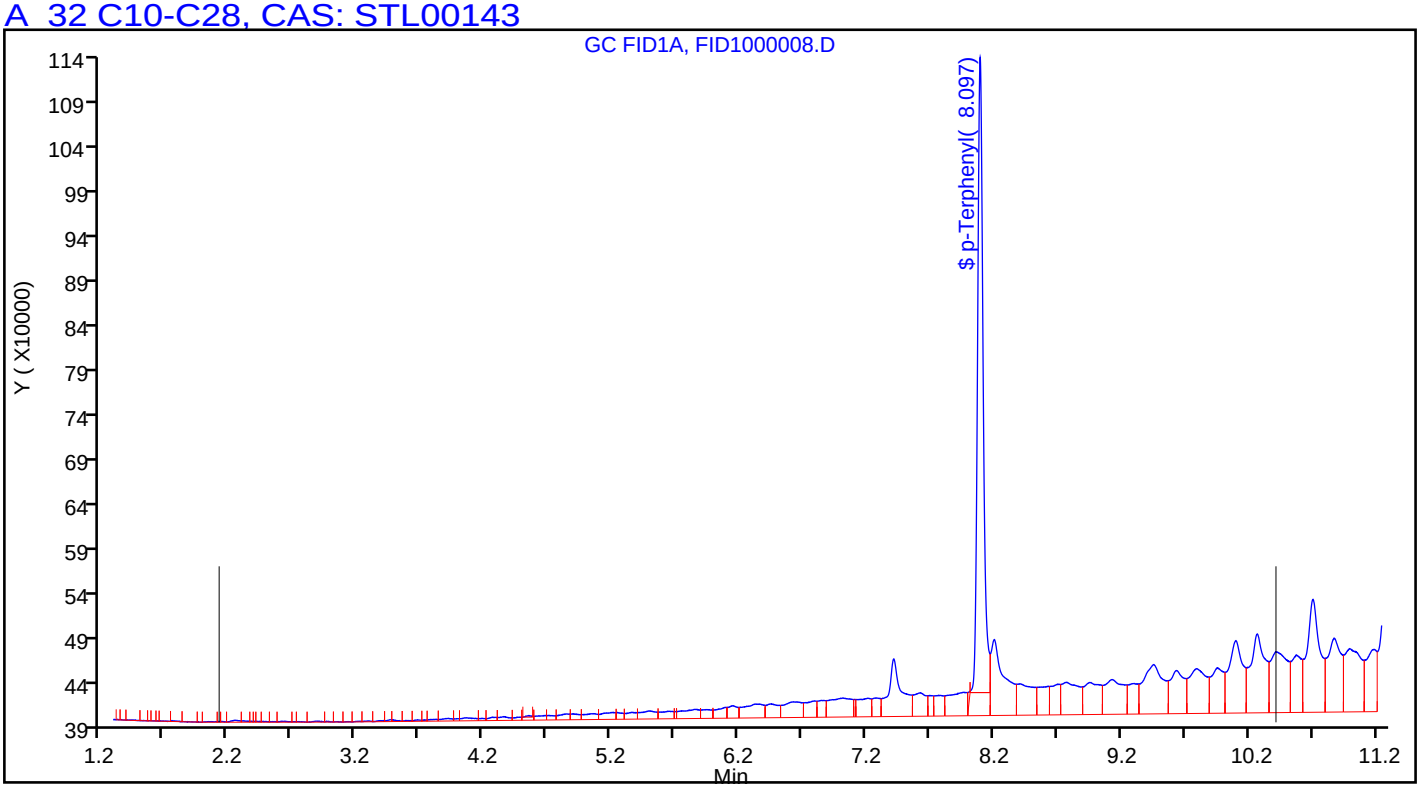
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	22.7	90.72

Report Date: 04-Sep-2018 13:29:23 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180901-53619.b\FID1000008.D				
Injection Date:	01-Sep-2018 15:39:20	Instrument ID:	CHDRO6		
Lims ID:	720-88240-D-2-B	Lab Sample ID:	720-88240-2		
Client ID:	DG-K7S-3.5-4				
Operator ID:	DCH	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88240-1

SDG No.:

Client Sample ID: DG-L13S-0.5-1 Lab Sample ID: 720-88240-3

Matrix: Solid Lab File ID: 5a082918_033.d

Analysis Method: 8015B Date Collected: 08/24/2018 09:40

Extraction Method: 3546 Date Extracted: 08/29/2018 09:03

Sample wt/vol: 15.25(g) Date Analyzed: 08/30/2018 05:21

Con. Extract Vol.: 2(mL) Dilution Factor: 5

Injection Volume: 1(uL) GC Column: ZB-5 ID: 320(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250456 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	430000		9800	3700

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	0	X D	40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_033.d
Lims ID: 720-88240-D-3-I
Client ID: DG-L13S-0.5-1
Sample Type: Client
Inject. Date: 30-Aug-2018 05:21:24 ALS Bottle#: 0 Worklist Smp#: 33
Injection Vol: 1.0 ul Dil. Factor: 5.0000
Sample Info: #: 011 Name: 720-0053542-033
Operator ID: manager Instrument ID: CHDRO5

Method: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\DRO5A.m
Limit Group: DRO
Last Update: 30-Aug-2018 14:37:22 Calib Date: 29-Aug-2018 09:16:57
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_003.d

Column 1 : Det: GC FID1A
Process Host: XAWRK001

First Level Reviewer: luj Date: 30-Aug-2018 14:37:22

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		2.353			ND	
23 n-Decane		3.631			ND	
A 21 Stoddard Solvent	4.369	(2.353-6.384)		153274	14.7	
A 1 C9-C13	4.369	(2.353-6.384)		153274	13.7	
A 57 C10-C12	4.604	(3.631-5.578)		11417	1.17	
24 Dodecane		5.578			ND	
A 3 C9 - C17	5.727	(2.353-9.102)		238198	18.9	
A 47 C9 - C18	6.024	(2.353-9.695)		238198	22.5	
A 60 C10-C16	6.050	(3.631-8.469)		98023	8.71	
A 25 C9-C19	6.296	(2.353-10.239)		238198	18.7	
A 15 Kerosene	6.296	(2.353-10.239)		238198	22.4	
26 C13	6.474	6.384	0.090	19047	NC	
A 59 C12-C16	7.023	(5.578-8.469)		86606	8.85	
$ 27 n-Decanoic Acid (Surr)		7.115			ND	
A 62 C10-C20	7.203	(3.631-10.776)		888120	90.7	
A 28 C9-C24	7.529	(2.353-12.705)		2500094	255.3	M
A 29 C9-C25	7.747	(2.353-13.140)		2500094	255.3	M
A 54 C10-C23	7.941	(3.631-12.251)		2359919	241.0	M
A 4 C10-C24	8.168	(3.631-12.705)		2359919	241.0	M
A 16 C10-C25	8.386	(3.631-13.140)		2359919	241.0	M
45 Hexadecane	8.422	8.469	-0.047	47913	NC	
A 14 C10-C26	8.596	(3.631-13.561)		2359919	241.0	M
A 67 C12-C22	8.678	(5.578-11.779)		918421	93.8	
A 5 Diesel	8.995	(3.631-14.360)		6407508	654.4	M
A 32 C10-C28	8.995	(3.631-14.360)		6407508	654.4	M
A 12 Unknown Hydrocarbons	8.995	(3.631-14.360)		6407508	NC	M
A 30 C13-C22	9.082	(6.384-11.779)		916739	93.6	
44 Heptadecane		9.102			ND	
A 31 C12-C24	9.141	(5.578-12.705)		2348502	239.9	M
49 n-Octadecane		9.695			ND	
A 11 Bunker Range Organics (C9-	9.723	(2.353-17.094)		14918123	NC	M
A 52 Mineral oil	9.723	(2.353-17.094)		15474174	1375.3	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 9 Crude Oil Range Organics (	9.723	(2.353-17.094)		15474174	NC	
33 C19		10.239			ND	
A 17 C10-C36	10.362	(3.631-17.094)		14777948	1509.3	M
A 64 C13-C28	10.372	(6.384-14.360)		6394409	653.1	M
A 68 Crude Oil Range Organics (	10.450	(2.353-18.548)		18860437	NC	
A 13 C9-C40	10.450	(2.353-18.548)		18860437	2053.1	
A 58 C16-C24	10.587	(8.469-12.705)		2309809	235.9	M
61 icosane		10.776			ND	
A 6 C10-C40	11.089	(3.631-18.548)		18857917	2053.0	
35 n-Docosane		11.779			ND	
$ 34 p-Terphenyl		11.823			ND	U
A 18 C12-C40	12.063	(5.578-18.548)		18829836	2050.3	
36 Tricosane		12.251			ND	
A 66 C13-C40	12.466	(6.384-18.548)		18814116	2048.9	
37 n-Tetracosane		12.705			ND	
A 2 C16-C36 ORO	12.781	(8.469-17.094)		15294943	1895.3	
38 C25		13.140			ND	
A 19 C16-C40	13.508	(8.469-18.548)		18681206	2037.0	
46 n-Hexacosane		13.561			ND	
A 20 C19-C36	13.666	(10.239-17.094)		14269623	1833.8	
A 55 C23-C32	14.029	(12.251-15.807)		8800697	1803.7	
39 n-Octacosane		14.360			ND	
65 C29		14.738			ND	
A 40 C24-C36	14.899	(12.705-17.094)		11672030	1838.5	
A 7 Motor Oil	14.899	(12.705-17.094)		11672030	1838.5	
A 50 C25-C36	15.117	(13.140-17.094)		11005872	1835.2	
A 10 C22-C40	15.163	(11.779-18.548)		16244906	1772.3	
A 41 C23-C40	15.399	(12.251-18.548)		15579813	1741.3	
A 8 C24-C40	15.626	(12.705-18.548)		14953653	1728.8	
56 Dotriacontane		15.807			ND	
A 51 C28-C40	16.454	(14.360-18.548)		11726586	1700.1	
A 63 C29-C40	16.643	(14.738-18.548)		10568598	1666.8	
42 n-Hexatriacontane		17.094			ND	
43 C40		18.548			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

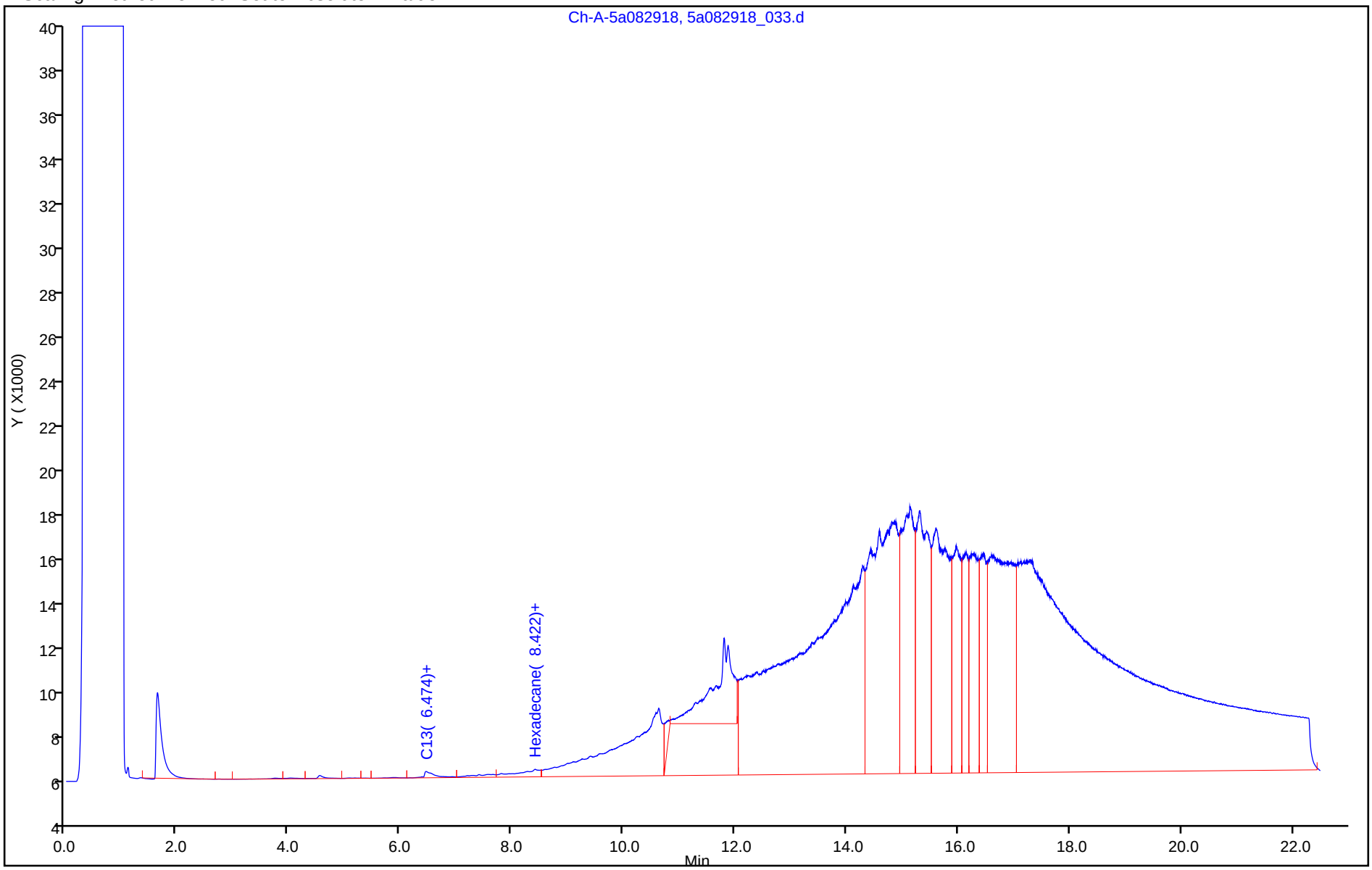
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 30-Aug-2018 14:37:22 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_033.d				
Injection Date:	30-Aug-2018 05:21:24	Instrument ID:	CHDRO5	Operator ID:	manager
Lims ID:	720-88240-D-3-I	Lab Sample ID:	720-88240-3	Worklist Smp#:	33
Client ID:	DG-L13S-0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	DRO5A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value

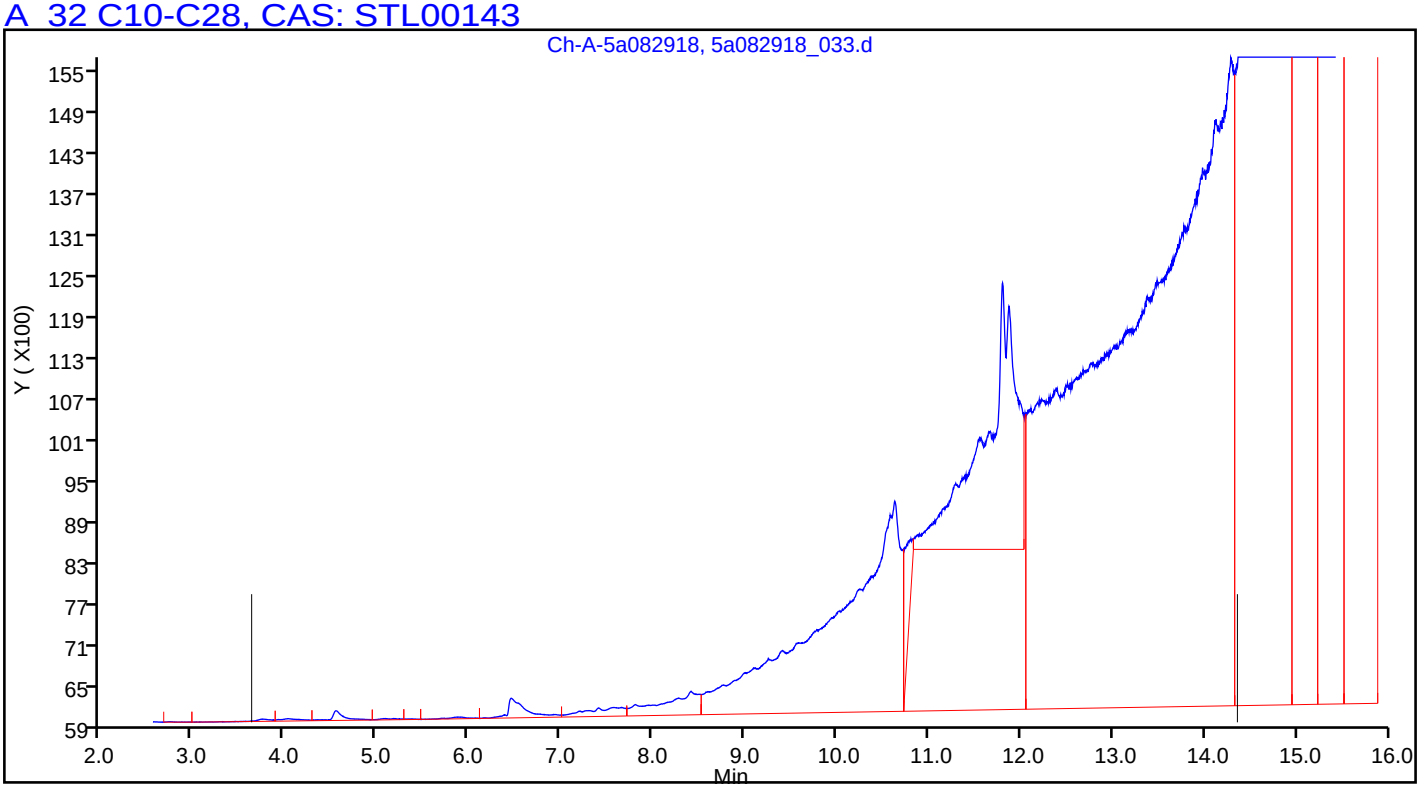


Report Date: 30-Aug-2018 14:37:24 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_033.d				
Injection Date:	30-Aug-2018 05:21:24	Instrument ID:	CHDRO5		
Lims ID:	720-88240-D-3-I	Lab Sample ID:	720-88240-3		
Client ID:	DG-L13S-0.5-1				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	33
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	DRO5A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

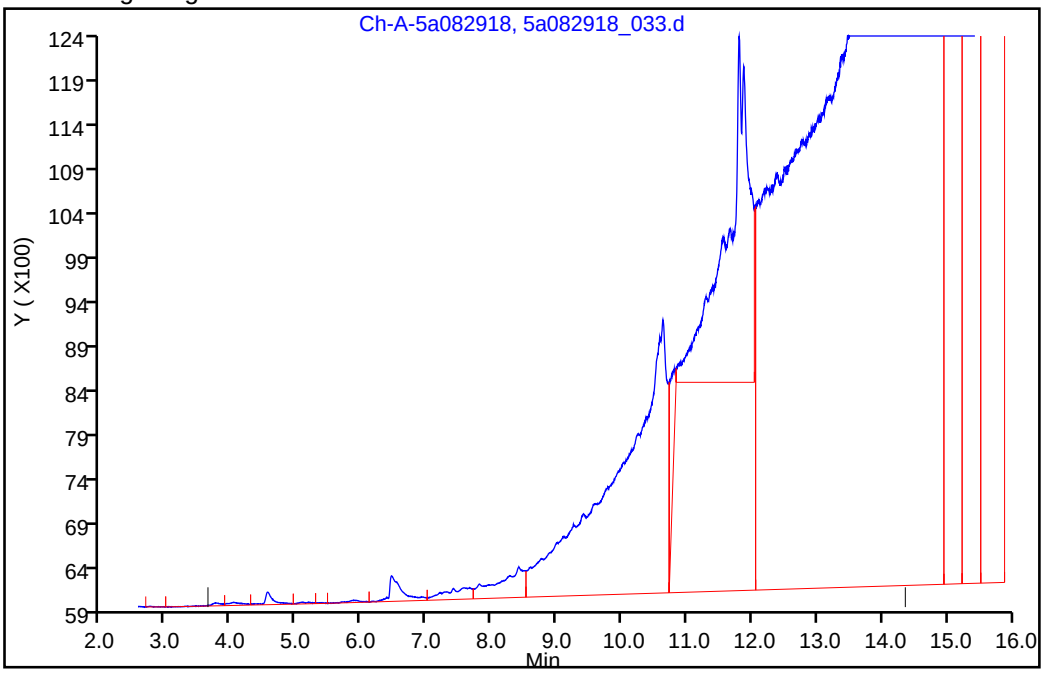
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_033.d				
Injection Date:	30-Aug-2018 05:21:24	Instrument ID:	CHDRO5		
Lims ID:	720-88240-D-3-I	Lab Sample ID:	720-88240-3		
Client ID:	DG-L13S-0.5-1				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	33
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	DRO5A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 8.995, CAS: STL00143

Signal: 1

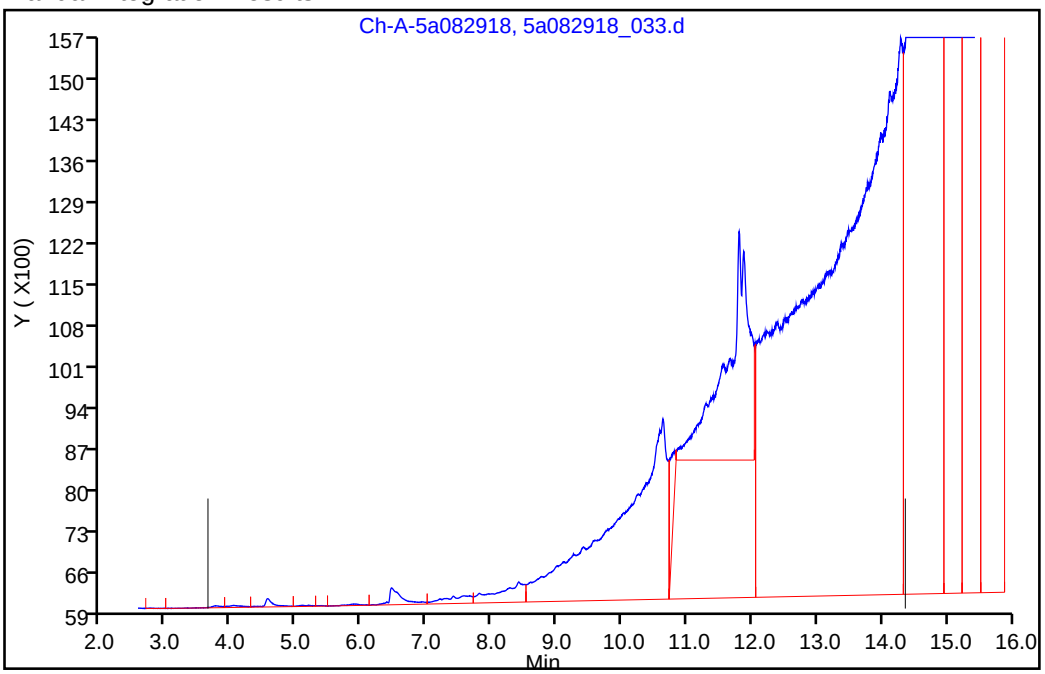
Processing Integration Results

RT: 9.00
Response: 1879479
Amount: 191.9565



Manual Integration Results

RT: 9.00
Response: 6407508
Amount: 654.4170



Reviewer: luj, 30-Aug-2018 14:37:12

Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

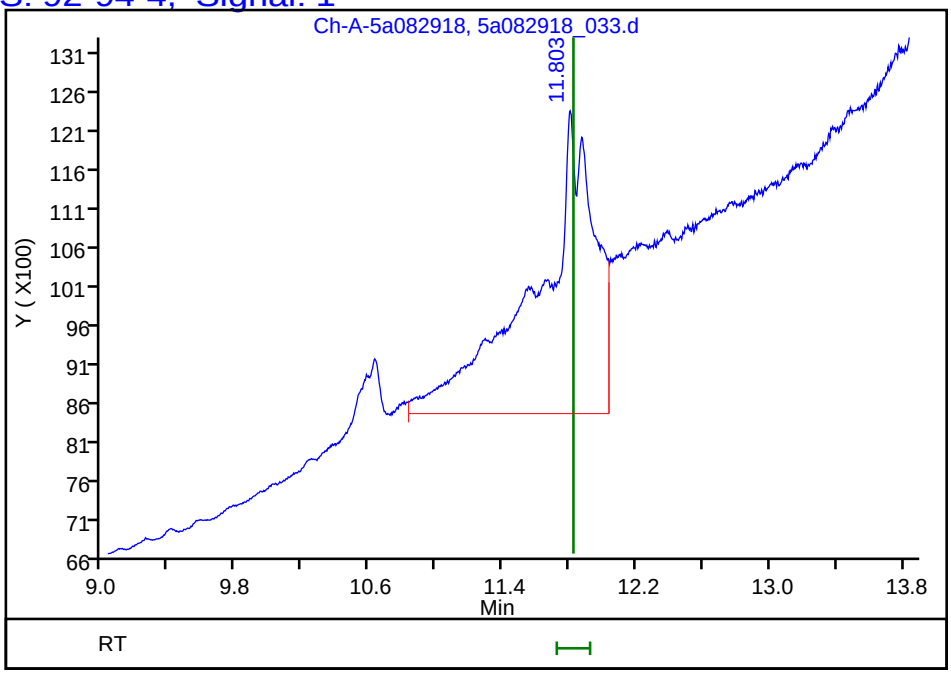
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_033.d				
Injection Date:	30-Aug-2018 05:21:24	Instrument ID:	CHDRO5		
Lims ID:	720-88240-D-3-I	Lab Sample ID:	720-88240-3		
Client ID:	DG-L13S-0.5-1				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	33
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	DRO5A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4, Signal: 1

RT: 11.80
Response: 480440
Amount: 36.830928



Reviewer: luj, 30-Aug-2018 14:37:22
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88240-1
SDG No.:
Client Sample ID: DG-L13S-3.5-4
Lab Sample ID: 720-88240-4
Matrix: Solid
Lab File ID: FID1000013.D
Analysis Method: 8015B
Date Collected: 08/24/2018 09:40
Extraction Method: 3546
Date Extracted: 08/29/2018 09:03
Sample wt/vol: 15.68(g)
Date Analyzed: 09/04/2018 14:35
Con. Extract Vol.: 2(mL)
Dilution Factor: 50
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250762
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	7000000		96000	36000

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	0	X D	40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000013.D
Lims ID: 720-88240-D-4-A
Client ID: DG-L13S-3.5-4
Sample Type: Client
Inject. Date: 04-Sep-2018 14:35:10 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 50.0000
Sample Info: 720-0053635-013
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\DRO6_A.m
Limit Group: DRO
Last Update: 04-Sep-2018 15:11:57 Calib Date: 04-Sep-2018 09:05:17
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK017

First Level Reviewer: luj Date: 04-Sep-2018 15:11:57

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane	1.362	1.227	0.135	165483	NC	M
23 n-Decane	2.087	2.116	-0.029	20389	NC	M
A 1 C9-C13	2.734	(1.227-4.241)		40553938	22.8	M
A 21 Stoddard Solvent	2.734	(1.227-4.241)		40553938	22.8	M
A 57 C10-C12	2.864	(2.116-3.613)		13398218	8.69	M
24 Dodecane	3.678	3.613	0.065	3640449	NC	M
A 3 C9 - C17	3.780	(1.227-6.332)		333309546	170.8	M
A 60 C10-C16	3.983	(2.116-5.851)		237201399	135.8	M
A 47 C9 - C18	4.005	(1.227-6.784)		461386777	285.7	M
A 15 Kerosene	4.220	(1.227-7.214)		593924961	367.7	M
A 25 C9-C19	4.220	(1.227-7.214)		593924961	302.8	M
26 C13	4.270	4.241	0.029	5855164	NC	M
$ 27 n-Decanoic Acid (Surr)		4.611			ND	U
A 59 C12-C16	4.732	(3.613-5.851)		223803181	145.1	M
A 62 C10-C20	4.871	(2.116-7.627)		733957463	475.9	M
A 28 C9-C24	5.172	(1.227-9.117)		1238591577	803.0	M
A 29 C9-C25	5.341	(1.227-9.456)		1321638692	856.9	M
A 54 C10-C23	5.441	(2.116-8.766)		1098561820	712.2	M
A 4 C10-C24	5.616	(2.116-9.117)		1237260108	802.2	M
A 16 C10-C25	5.786	(2.116-9.456)		1320307223	856.0	M
45 Hexadecane	5.852	5.851	0.001	8180877	NC	M
A 14 C10-C26	5.949	(2.116-9.783)		1401179323	908.4	M
A 67 C12-C22	6.007	(3.613-8.402)		945568515	613.0	M
A 32 C10-C28	6.260	(2.116-10.404)		1686067961	1093.1	M
A 5 Diesel	6.260	(2.116-10.404)		1686067961	1093.1	M
A 12 Unknown Hydrocarbons	6.260	(2.116-10.404)		1686067961	NC	M
A 30 C13-C22	6.321	(4.241-8.402)		919744264	596.3	M
44 Heptadecane	6.370	6.332	0.038	32412615	NC	M
A 31 C12-C24	6.365	(3.613-9.117)		1223861890	793.5	M
51 n-Octadecane	6.732	6.784	-0.052	19965415	NC	M
A 9 Crude Oil Range Organics (	6.883	(1.227-12.538)		2572728293	NC	M
A 11 Bunker Range Organics (C9-	6.883	(1.227-12.538)		2572728293	NC	M

Report Date: 04-Sep-2018 15:11:58 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000013.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.883	(1.227-12.538)		2572728293	1453.0	M
33 C19	7.190	7.214	-0.024	25176906	NC	M
A 64 C13-C28	7.322	(4.241-10.404)		1646845492	1067.7	M
A 17 C10-C36	7.327	(2.116-12.538)		2571396824	1667.1	M
A 68 Crude Oil Range Organics (	7.394	(1.227-13.561)		3248585138	NC	M
A 13 C9-C40	7.394	(1.227-13.561)		3248585138	2409.2	M
A 58 C16-C24	7.484	(5.851-9.117)		1000058709	648.4	M
61 icosane	7.573	7.627	-0.054	43921436	NC	M
A 6 C10-C40	7.838	(2.116-13.561)		3247253669	2409.9	M
$ 34 p-Terphenyl		8.109			ND	U
35 n-Docosane	8.474	8.402	0.072	42308822	NC	M
A 18 C12-C40	8.587	(3.613-13.561)		3233855451	2406.5	M
36 Tricosane	8.701	8.766	-0.065	46018083	NC	M
A 66 C13-C40	8.901	(4.241-13.561)		3208031200	2390.0	M
37 n-Tetracosane	9.116	9.117	-0.001	50498549	NC	M
A 2 C16-C36 ORO	9.195	(5.851-12.538)		2451523622	2149.2	
38 C25	9.425	9.456	-0.031	44691060	NC	M
A 19 C16-C40	9.706	(5.851-13.561)		3010052270	2251.3	M
46 n-Hexacosane	9.837	9.783	0.054	67152222	NC	M
A 20 C19-C36	9.876	(7.214-12.538)		2083261645	1567.4	
A 55 C23-C32	10.150	(8.766-11.534)		1170897093	1686.5	M
39 n-Octacosane	10.338	10.404	-0.066	58496755	NC	M
65 C29	10.730	10.700	0.030	40779532	NC	M
A 40 C24-C36	10.828	(9.117-12.538)		1358924792	1526.0	M
A 7 Motor Oil	10.828	(9.117-12.538)		822005755	923.1	
A 10 C22-C40	10.982	(8.402-13.561)		1140387400	917.1	
A 49 C25-C36	10.997	(9.456-12.538)		1251089601	1397.6	M
A 41 C23-C40	11.164	(8.766-13.561)		2194709932	1717.1	M
A 8 C24-C40	11.339	(9.117-13.561)		2060492110	1692.6	M
56 Dotriacontane	11.465	11.534	-0.069	88892681	NC	M
A 50 C28-C40	11.983	(10.404-13.561)		1561185708	1644.7	M
A 63 C29-C40	12.130	(10.700-13.561)		1421331049	1640.1	M
42 n-Hexatriacontane	12.491	12.538	-0.047	49008820	NC	M
43 C40		13.561			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

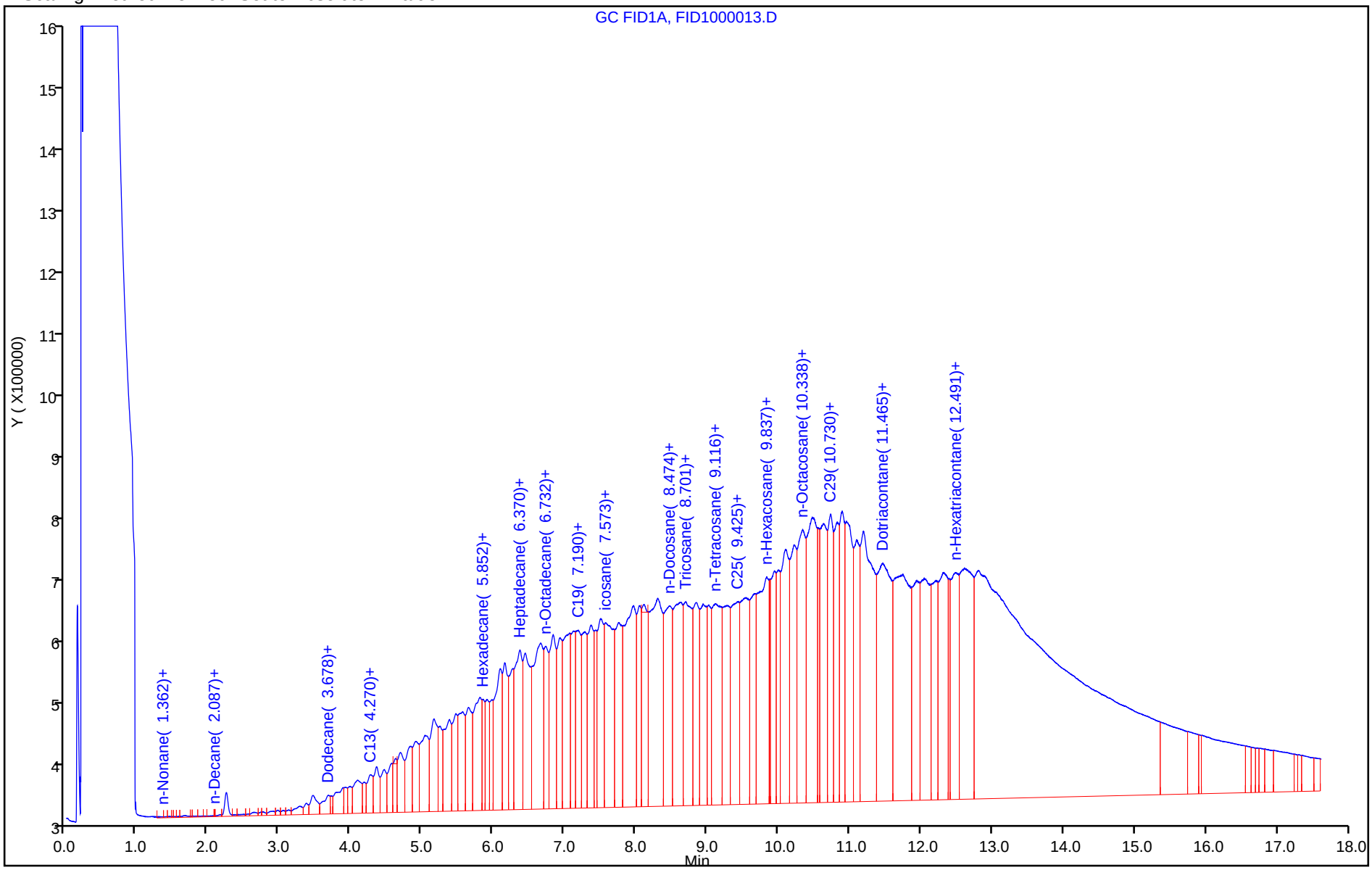
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 04-Sep-2018 15:11:58 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000013.D				
Injection Date:	04-Sep-2018 14:35:10	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88240-D-4-A	Lab Sample ID:	720-88240-4	Worklist Smp#:	13
Client ID:	DG-L13S-3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	50.0000	ALS Bottle#:	13
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value

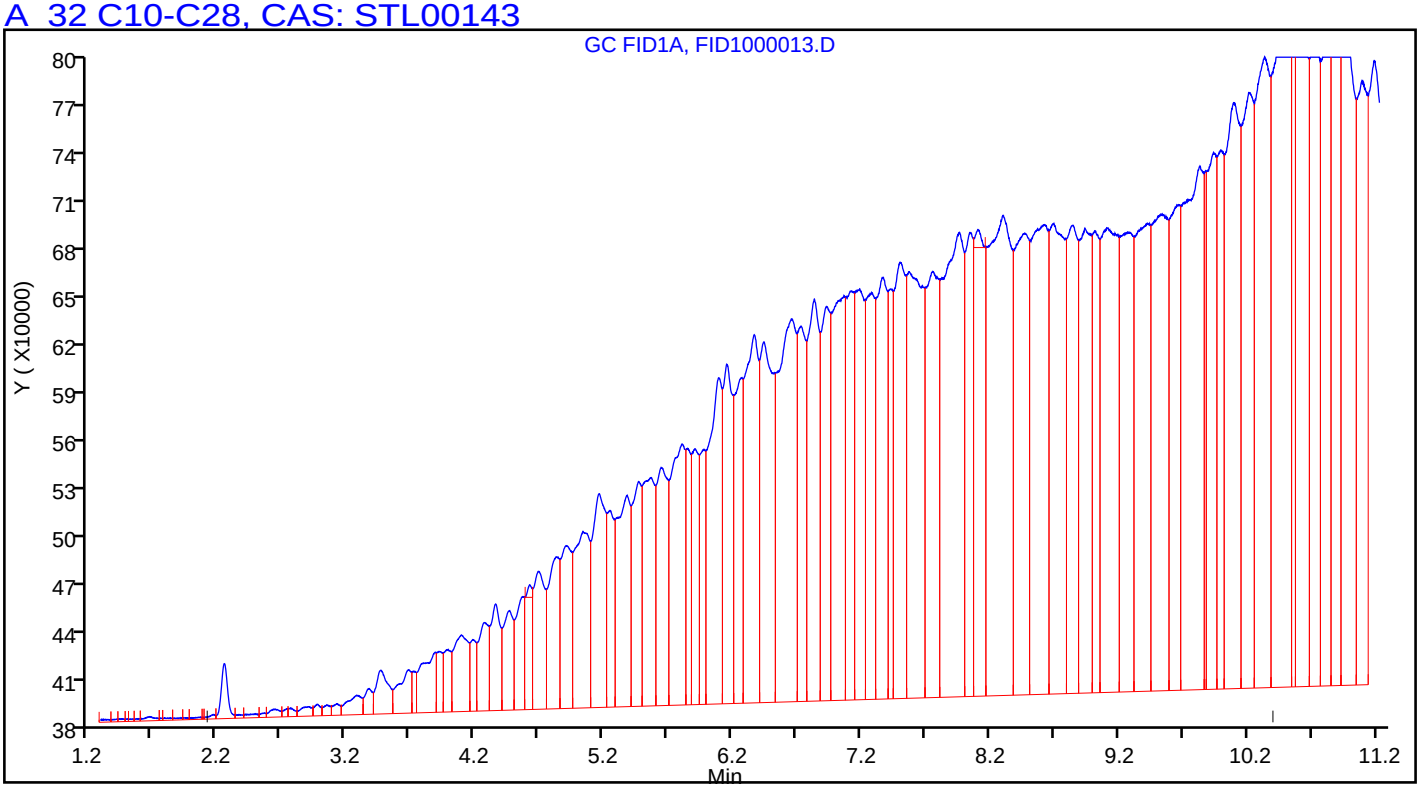


Report Date: 04-Sep-2018 15:12:01 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000013.D				
Injection Date:	04-Sep-2018 14:35:10	Instrument ID:	CHDRO6		
Lims ID:	720-88240-D-4-A	Lab Sample ID:	720-88240-4		
Client ID:	DG-L13S-3.5-4				
Operator ID:	DCH	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

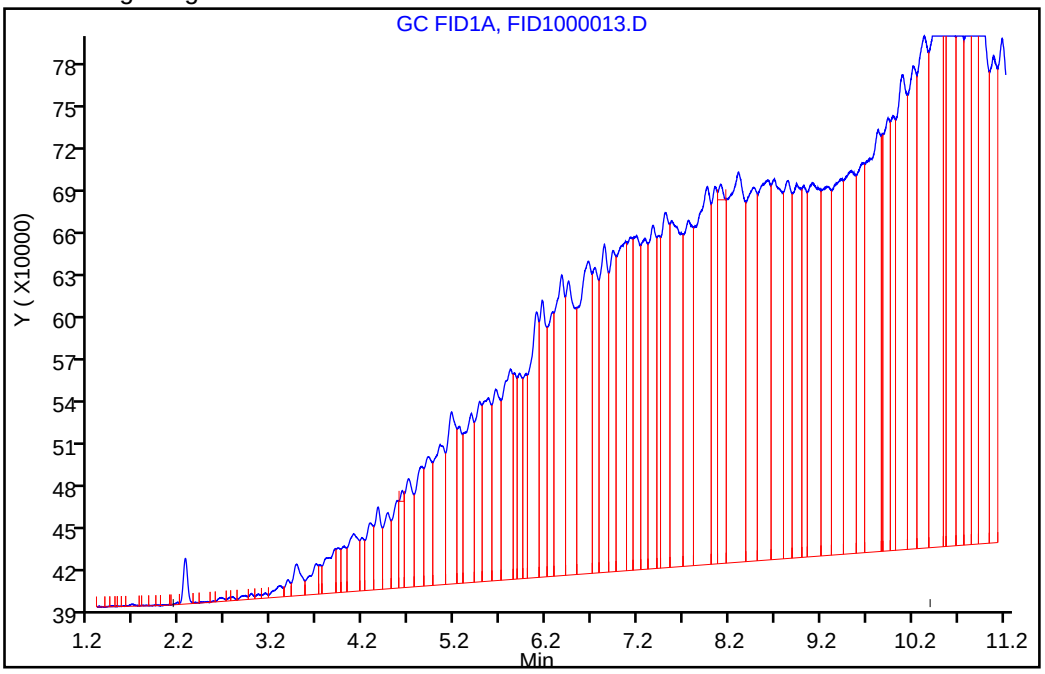
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000013.D				
Injection Date:	04-Sep-2018 14:35:10	Instrument ID:	CHDRO6		
Lims ID:	720-88240-D-4-A	Lab Sample ID:	720-88240-4		
Client ID:	DG-L13S-3.5-4				
Operator ID:	DCH	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.260, CAS: STL00143

Signal: 1

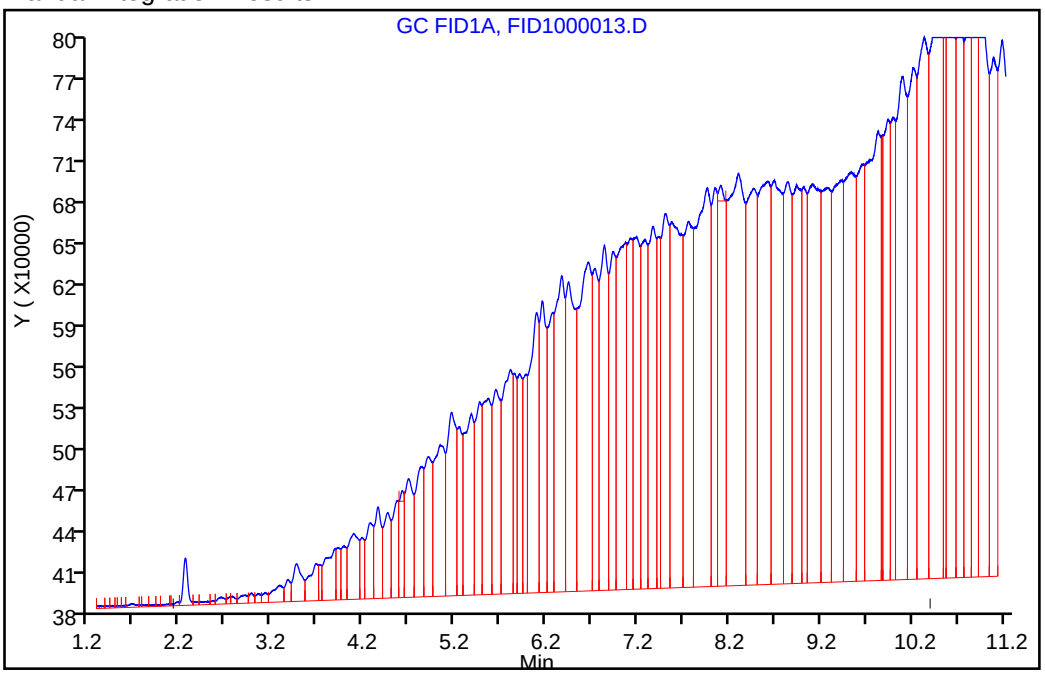
Processing Integration Results

RT: 6.26
Response: 1558895348
Amount: 1010.6890



Manual Integration Results

RT: 6.26
Response: 1686067961
Amount: 1093.1397



Reviewer: luj, 04-Sep-2018 15:11:35

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

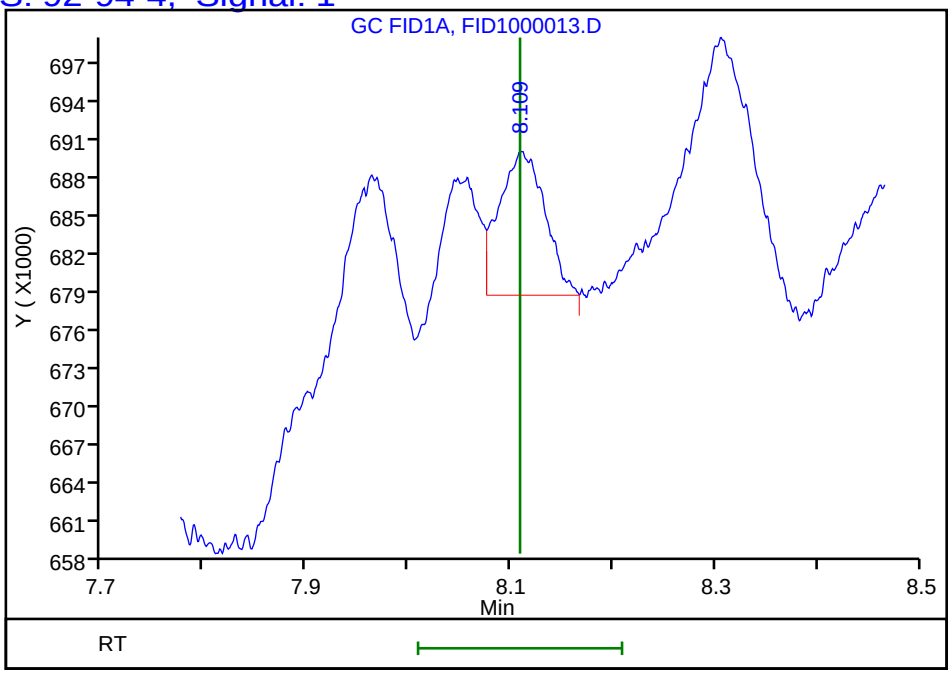
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000013.D				
Injection Date:	04-Sep-2018 14:35:10	Instrument ID:	CHDRO6		
Lims ID:	720-88240-D-4-A	Lab Sample ID:	720-88240-4		
Client ID:	DG-L13S-3.5-4				
Operator ID:	DCH	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4, Signal: 1

RT: 8.11
Response: 680376
Amount: 0.354296



Reviewer: luj, 04-Sep-2018 15:11:57
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88240-1

SDG No.:

Client Sample ID: DUP-36 Lab Sample ID: 720-88240-19

Matrix: Solid Lab File ID: FID1000014.D

Analysis Method: 8015B Date Collected: 08/24/2018 00:00

Extraction Method: 3546 Date Extracted: 08/29/2018 09:03

Sample wt/vol: 15.76(g) Date Analyzed: 09/04/2018 14:59

Con. Extract Vol.: 2(mL) Dilution Factor: 50

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250762 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	2200000		95000	36000

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	0	X D	40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000014.D
Lims ID: 720-88240-D-19-A
Client ID: DUP-36
Sample Type: Client
Inject. Date: 04-Sep-2018 14:59:31 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 50.0000
Sample Info: 720-0053635-014
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\DRO6_A.m
Limit Group: DRO
Last Update: 04-Sep-2018 15:20:26 Calib Date: 04-Sep-2018 09:05:17
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK017

First Level Reviewer: luj Date: 04-Sep-2018 15:20:26

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane	1.201	1.227	-0.026	29179	NC	
23 n-Decane	2.123	2.116	0.007	11002	NC	
A 1 C9-C13	2.734	(1.227-4.241)		6855151	3.86	M
A 21 Stoddard Solvent	2.734	(1.227-4.241)		6855151	3.85	M
A 57 C10-C12	2.864	(2.116-3.613)		4675758	3.03	M
24 Dodecane	3.595	3.613	-0.018	51141	NC	M
A 3 C9 - C17	3.780	(1.227-6.332)		47391080	24.3	M
A 60 C10-C16	3.983	(2.116-5.851)		31619058	18.1	M
A 47 C9 - C18	4.005	(1.227-6.784)		80156176	49.6	M
A 15 Kerosene	4.220	(1.227-7.214)		113781682	70.4	M
A 25 C9-C19	4.220	(1.227-7.214)		113781682	58.0	M
26 C13	4.278	4.241	0.037	350238	NC	M
$ 27 n-Decanoic Acid (Surr)		4.611			ND	U
A 59 C12-C16	4.732	(3.613-5.851)		26943300	17.5	M
A 62 C10-C20	4.871	(2.116-7.627)		137927020	89.4	M
A 28 C9-C24	5.172	(1.227-9.117)		309616740	200.7	M
A 29 C9-C25	5.341	(1.227-9.456)		345668306	224.1	M
A 54 C10-C23	5.441	(2.116-8.766)		271035416	175.7	M
A 4 C10-C24	5.616	(2.116-9.117)		309303564	200.5	M
A 16 C10-C25	5.786	(2.116-9.456)		345355130	223.9	M
45 Hexadecane	5.859	5.851	0.008	2867062	NC	M
A 14 C10-C26	5.949	(2.116-9.783)		345355130	223.9	M
A 67 C12-C22	6.007	(3.613-8.402)		218178103	141.5	M
A 32 C10-C28	6.260	(2.116-10.404)		542156789	351.5	M
A 5 Diesel	6.260	(2.116-10.404)		542156789	351.5	M
A 12 Unknown Hydrocarbons	6.260	(2.116-10.404)		542156789	NC	M
A 30 C13-C22	6.321	(4.241-8.402)		216311886	140.2	M
44 Heptadecane	6.353	6.332	0.021	9896076	NC	M
A 31 C12-C24	6.365	(3.613-9.117)		304627806	197.5	M
51 n-Octadecane	6.742	6.784	-0.042	12964308	NC	M
A 9 Crude Oil Range Organics (	6.883	(1.227-12.538)		1088751305	NC	M
A 11 Bunker Range Organics (C9-	6.883	(1.227-12.538)		1088751305	NC	M

Report Date: 04-Sep-2018 15:20:27 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000014.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.883	(1.227-12.538)		1088751305	614.9	M
33 C19	7.212	7.214	-0.002	8519798	NC	M
A 64 C13-C28	7.322	(4.241-10.404)		535614814	347.3	M
A 17 C10-C36	7.327	(2.116-12.538)		1088438129	705.7	M
A 68 Crude Oil Range Organics (	7.394	(1.227-13.561)		1479668559	NC	M
A 13 C9-C40	7.394	(1.227-13.561)		1479668559	1097.3	M
A 58 C16-C24	7.484	(5.851-9.117)		277684506	180.0	M
61 icosane	7.633	7.627	0.006	10730971	NC	M
A 6 C10-C40	7.838	(2.116-13.561)		1479355383	1097.9	M
$ 34 p-Terphenyl		8.109			ND	U
35 n-Docosane	8.459	8.402	0.057	15704296	NC	M
A 18 C12-C40	8.587	(3.613-13.561)		1474679625	1097.4	M
36 Tricosane	8.698	8.766	-0.068	14925596	NC	M
A 66 C13-C40	8.901	(4.241-13.561)		1472813408	1097.2	M
37 n-Tetracosane	9.126	9.117	0.009	15062821	NC	M
A 2 C16-C36 ORO	9.195	(5.851-12.538)		1195480166	1048.1	
38 C25		9.456			ND	
A 19 C16-C40	9.706	(5.851-13.561)		1447736325	1082.8	M
46 n-Hexacosane		9.783			ND	
A 20 C19-C36	9.876	(7.214-12.538)		1097420371	825.7	
A 55 C23-C32	10.150	(8.766-11.534)		604043682	870.1	M
39 n-Octacosane	10.350	10.404	-0.054	34707365	NC	M
65 C29	10.729	10.700	0.029	30590308	NC	M
A 40 C24-C36	10.828	(9.117-12.538)		772517005	867.5	M
A 7 Motor Oil	10.828	(9.117-12.538)		566909055	636.6	
A 10 C22-C40	10.982	(8.402-13.561)		810342106	651.6	
A 49 C25-C36	10.997	(9.456-12.538)		743082999	830.1	M
A 41 C23-C40	11.164	(8.766-13.561)		1223245563	957.0	M
A 8 C24-C40	11.339	(9.117-13.561)		1170051819	961.1	M
56 Dotriacontane	11.474	11.534	-0.060	50354963	NC	M
A 50 C28-C40	11.983	(10.404-13.561)		937198594	987.4	M
A 63 C29-C40	12.130	(10.700-13.561)		865099927	998.3	M
42 n-Hexatriacontane	12.472	12.538	-0.066	31820122	NC	M
43 C40		13.561			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

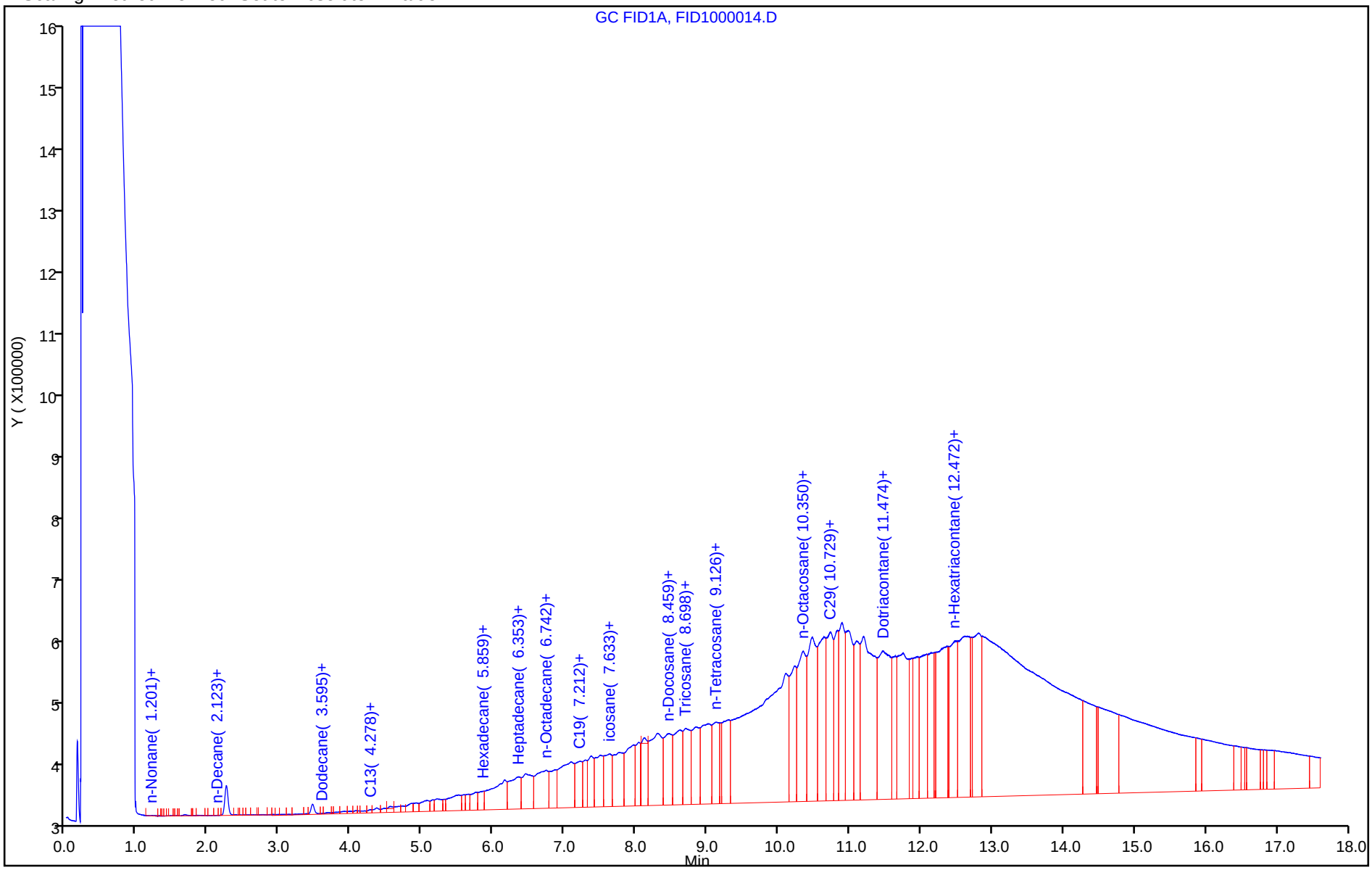
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 04-Sep-2018 15:20:27 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000014.D				
Injection Date:	04-Sep-2018 14:59:31	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88240-D-19-A	Lab Sample ID:	720-88240-19	Worklist Smp#:	14
Client ID:	DUP-36				
Injection Vol:	1.0 ul	Dil. Factor:	50.0000	ALS Bottle#:	14
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value

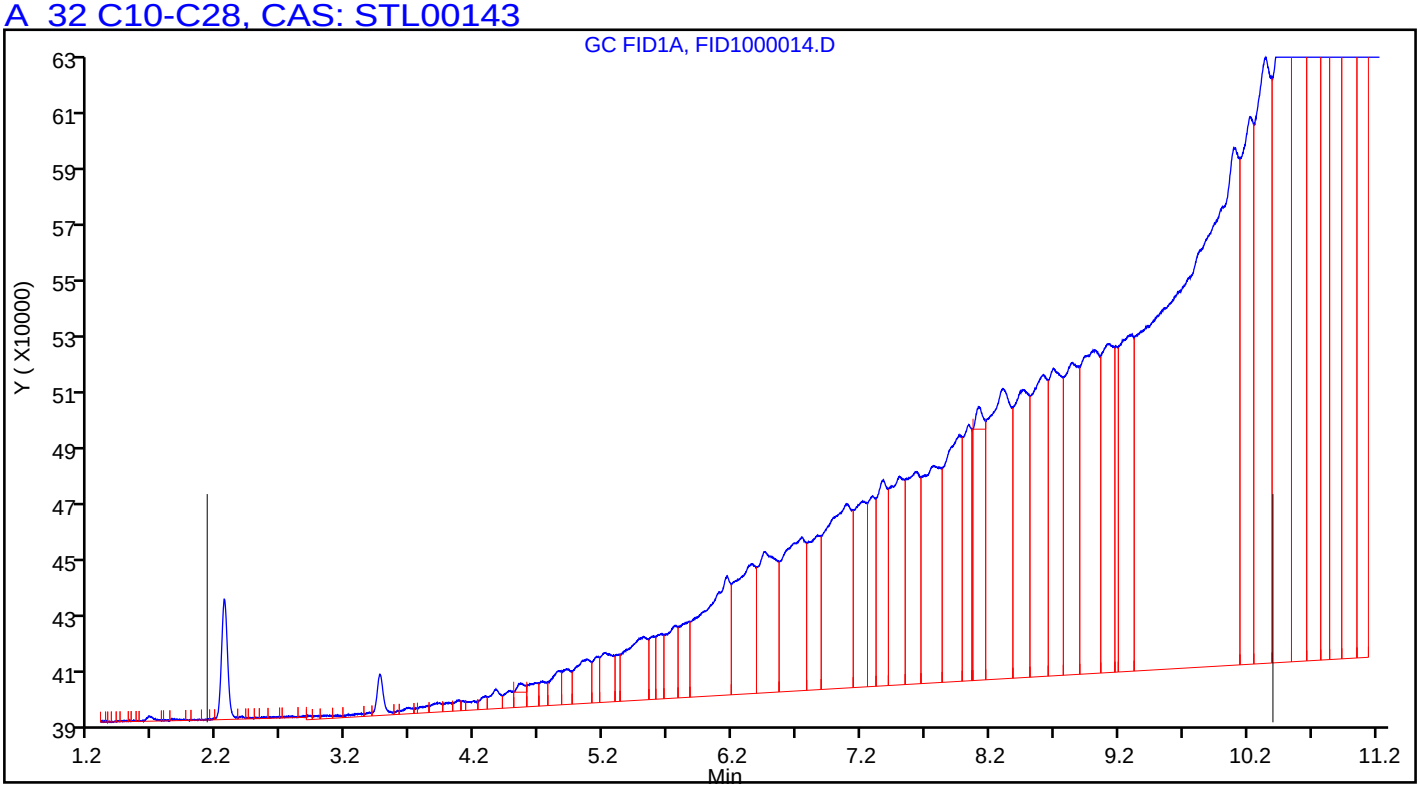


Report Date: 04-Sep-2018 15:20:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000014.D				
Injection Date:	04-Sep-2018 14:59:31	Instrument ID:	CHDRO6		
Lims ID:	720-88240-D-19-A	Lab Sample ID:	720-88240-19		
Client ID:	DUP-36				
Operator ID:	DCH	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

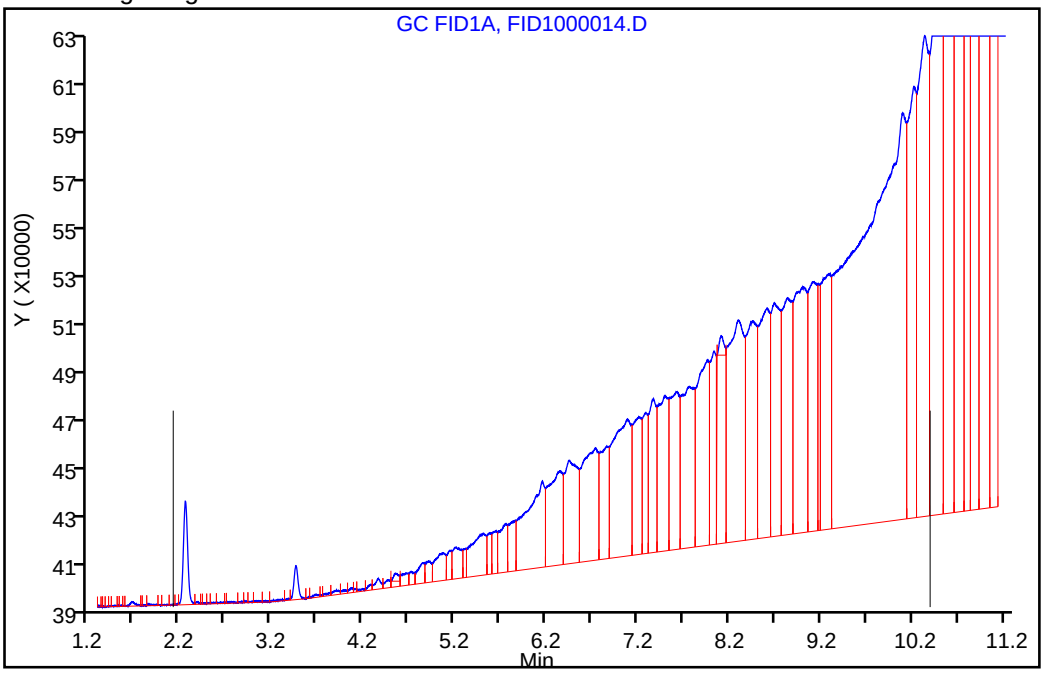
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000014.D				
Injection Date:	04-Sep-2018 14:59:31	Instrument ID:	CHDRO6		
Lims ID:	720-88240-D-19-A	Lab Sample ID:	720-88240-19		
Client ID:	DUP-36				
Operator ID:	DCH	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.260, CAS: STL00143

Signal: 1

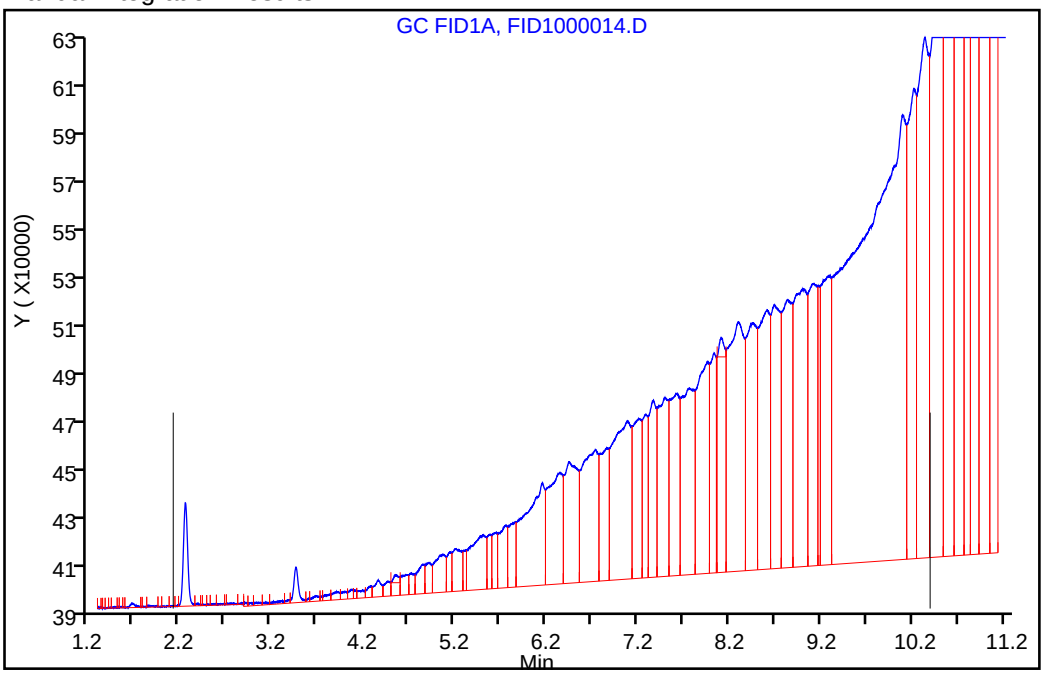
Processing Integration Results

RT: 6.26
Response: 468716922
Amount: 303.8864



Manual Integration Results

RT: 6.26
Response: 542156789
Amount: 351.5001



Reviewer: luj, 04-Sep-2018 15:20:06

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

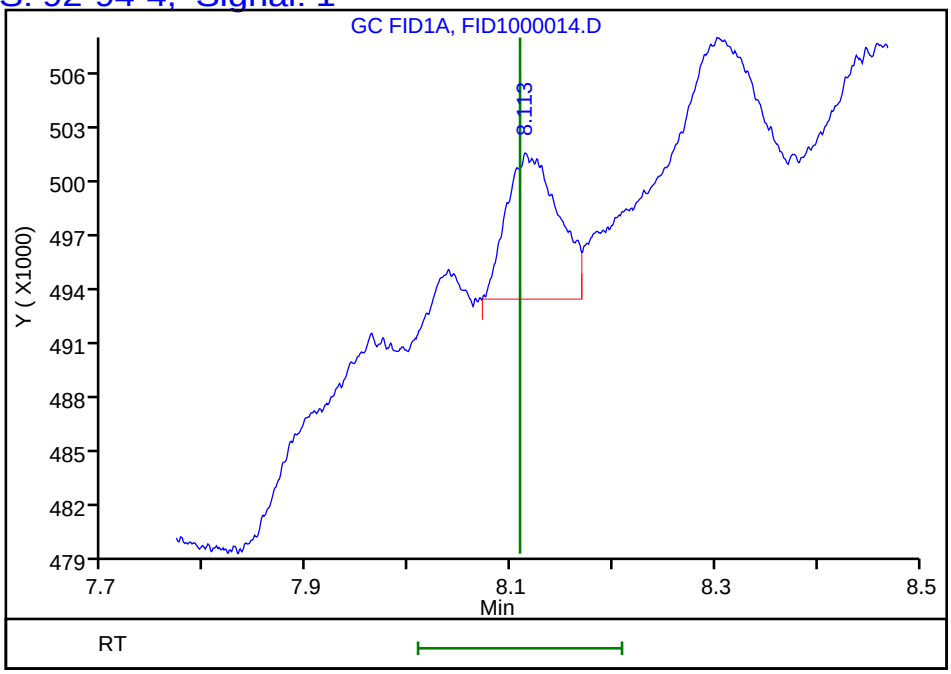
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000014.D				
Injection Date:	04-Sep-2018 14:59:31	Instrument ID:	CHDRO6		
Lims ID:	720-88240-D-19-A	Lab Sample ID:	720-88240-19		
Client ID:	DUP-36				
Operator ID:	DCH	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4, Signal: 1

RT: 8.11
Response: 560694
Amount: 0.291973



Reviewer: luj, 04-Sep-2018 15:20:26
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88240-1

SDG No.:

Client Sample ID: DUP-13 Lab Sample ID: 720-88240-20

Matrix: Solid Lab File ID: FID1000009.D

Analysis Method: 8015B Date Collected: 08/24/2018 00:00

Extraction Method: 3546 Date Extracted: 08/29/2018 09:03

Sample wt/vol: 15.27(g) Date Analyzed: 09/01/2018 16:03

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250738 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	50000		2000	740

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	96		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180901-53619.b\FID1000009.D
Lims ID: 720-88240-E-20-A
Client ID: DUP-13
Sample Type: Client
Inject. Date: 01-Sep-2018 16:03:50 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053619-009
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180901-53619.b\DRO6_A.m
Limit Group: DRO
Last Update: 04-Sep-2018 13:30:35 Calib Date: 01-Sep-2018 13:36:32
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180901-53619.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK017

First Level Reviewer: luj Date: 04-Sep-2018 13:30:35

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane	1.208	1.232	-0.024	15208	NC	
23 n-Decane	2.123	2.121	0.002	177303	NC	M
A 21 Stoddard Solvent	2.739	(1.232-4.246)		9219062	5.18	M
A 1 C9-C13	2.739	(1.232-4.246)		9219062	5.19	M
A 57 C10-C12	2.869	(2.121-3.618)		3383907	2.19	M
24 Dodecane	3.601	3.618	-0.017	389039	NC	M
A 3 C9 - C17	3.785	(1.232-6.338)		62744741	32.2	M
A 60 C10-C16	3.989	(2.121-5.856)		43952096	25.2	M
A 47 C9 - C18	4.011	(1.232-6.789)		77477578	48.0	M
A 25 C9-C19	4.226	(1.232-7.219)		110923744	56.6	M
A 15 Kerosene	4.226	(1.232-7.219)		110923744	68.7	M
26 C13	4.259	4.246	0.013	1160888	NC	M
$ 27 n-Decanoic Acid (Surr)		4.608			ND	U
A 59 C12-C16	4.737	(3.618-5.856)		40957228	26.6	M
A 62 C10-C20	4.877	(2.121-7.633)		147206940	95.4	M
A 28 C9-C24	5.180	(1.232-9.128)		331889933	215.2	M
A 29 C9-C25	5.350	(1.232-9.468)		412449980	267.4	M
A 54 C10-C23	5.448	(2.121-8.776)		283345857	183.7	M
A 4 C10-C24	5.625	(2.121-9.128)		331658803	215.0	M
A 16 C10-C25	5.795	(2.121-9.468)		412218850	267.3	M
45 Hexadecane	5.852	5.856	-0.004	3312785	NC	M
A 14 C10-C26	5.959	(2.121-9.796)		437647655	283.7	M
A 67 C12-C22	6.014	(3.618-8.410)		229180726	148.6	M
A 12 Unknown Hydrocarbons	6.270	(2.121-10.419)		584889924	NC	M
A 5 Diesel	6.270	(2.121-10.419)		584889924	379.2	M
A 32 C10-C28	6.270	(2.121-10.419)		584889924	379.2	M
A 30 C13-C22	6.328	(4.246-8.410)		223187662	144.7	M
44 Heptadecane	6.333	6.338	-0.005	8180013	NC	M
A 31 C12-C24	6.373	(3.618-9.128)		328663935	213.1	M
51 n-Octadecane	6.848	6.789	0.059	9503593	NC	M
A 52 Mineral oil	6.895	(1.232-12.557)		1068647091	603.6	M
A 11 Bunker Range Organics (C9-	6.895	(1.232-12.557)		1068647091	NC	M

Report Date: 04-Sep-2018 13:30:36 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180901-53619.b\FID1000009.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 9 Crude Oil Range Organics (	6.895	(1.232-12.557)		1068647091	NC	M
33 C19	7.217	7.219	-0.002	9119001	NC	M
A 64 C13-C28	7.333	(4.246-10.419)		575901992	373.4	M
A 17 C10-C36	7.339	(2.121-12.557)		1068415961	692.7	M
A 13 C9-C40	7.410	(1.232-13.588)		1358688529	1007.6	M
A 68 Crude Oil Range Organics (	7.410	(1.232-13.588)		1358688529	NC	M
A 58 C16-C24	7.492	(5.856-9.128)		291019492	188.7	M
61 icosane	7.626	7.633	-0.007	12269171	NC	M
A 6 C10-C40	7.855	(2.121-13.588)		1358457399	1008.1	M
$ 34 p-Terphenyl	8.094	8.128	-0.034	45915834	23.9	M
35 n-Docosane	8.453	8.410	0.043	18886886	NC	M
A 18 C12-C40	8.603	(3.618-13.588)		1355462531	1008.7	M
36 Tricosane	8.836	8.776	0.060	20777905	NC	M
A 66 C13-C40	8.917	(4.246-13.588)		1349469467	1005.3	M
37 n-Tetracosane	9.138	9.128	0.010	20711201	NC	M
A 2 C16-C36 ORO	9.207	(5.856-12.557)		1168180147	1024.1	
38 C25	9.452	9.468	-0.016	37593968	NC	M
A 19 C16-C40	9.722	(5.856-13.588)		1317818088	985.7	M
46 n-Hexacosane	9.832	9.796	0.036	33084679	NC	M
A 20 C19-C36	9.888	(7.219-12.557)		1079470756	812.2	
A 55 C23-C32	10.163	(8.776-11.551)		610888320	879.9	M
39 n-Octacosane	10.492	10.419	0.073	41358778	NC	M
65 C29	10.708	10.716	-0.008	36528426	NC	M
A 7 Motor Oil	10.843	(9.128-12.557)		594256356	667.3	
A 40 C24-C36	10.843	(9.128-12.557)		740259108	831.3	M
A 10 C22-C40	10.999	(8.410-13.588)		806060025	648.2	
A 49 C25-C36	11.013	(9.468-12.557)		693791079	775.0	M
A 41 C23-C40	11.182	(8.776-13.588)		1075111542	841.2	M
A 8 C24-C40	11.358	(9.128-13.588)		1026798596	843.5	M
56 Dotriacontane		11.551			ND	
A 50 C28-C40	12.004	(10.419-13.588)		773567475	815.0	M
A 63 C29-C40	12.152	(10.716-13.588)		704122781	812.5	M
42 n-Hexatriacontane	12.622	12.557	0.065	35849685	NC	M
43 C40		13.588			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

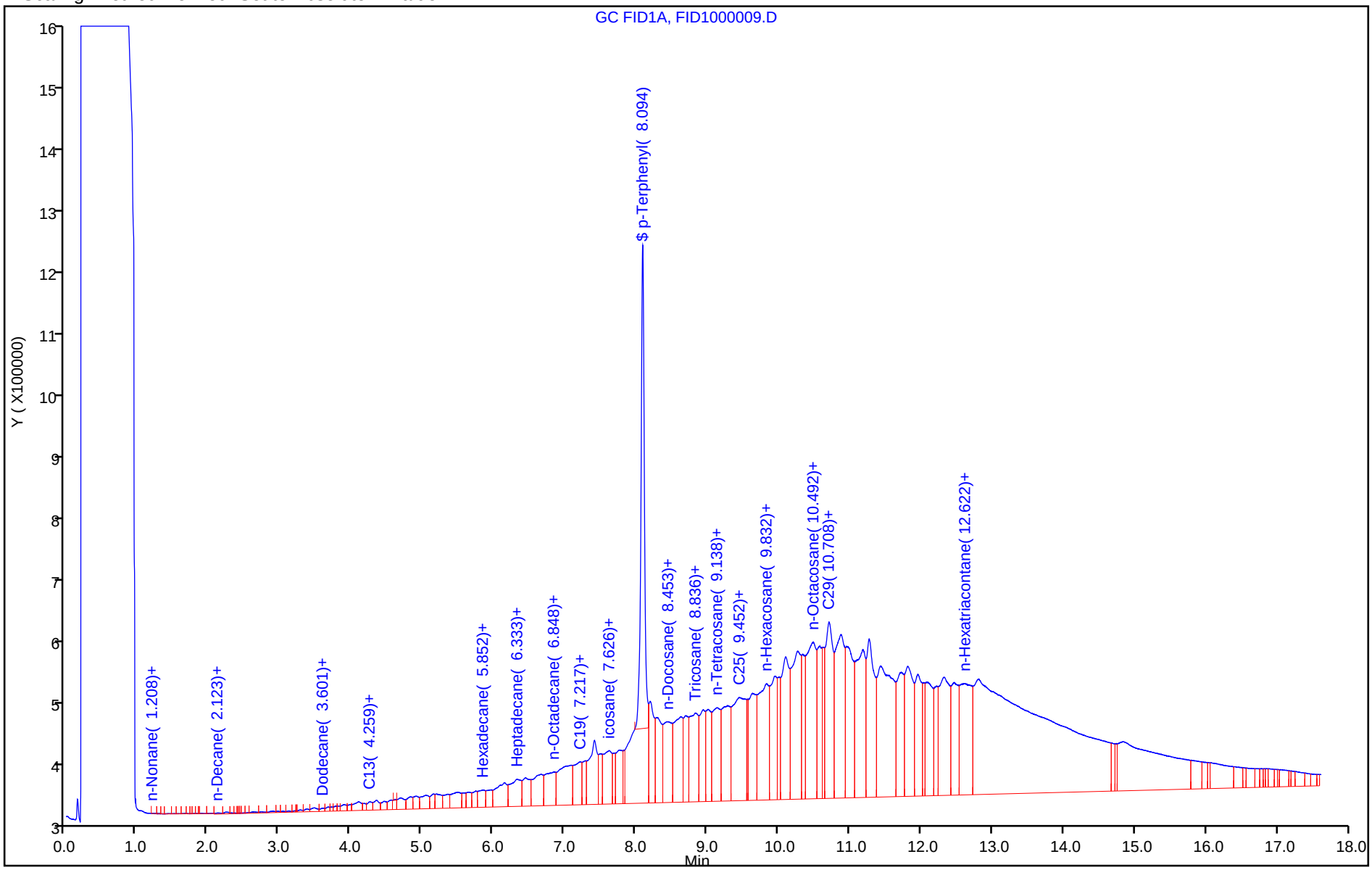
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 04-Sep-2018 13:30:36 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180901-53619.b\FID1000009.D				
Injection Date:	01-Sep-2018 16:03:50	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88240-E-20-A	Lab Sample ID:	720-88240-20	Worklist Smp#:	9
Client ID:	DUP-13				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180901-53619.b\FID1000009.D
Lims ID: 720-88240-E-20-A
Client ID: DUP-13
Sample Type: Client
Inject. Date: 01-Sep-2018 16:03:50 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053619-009
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180901-53619.b\DRO6_A.m
Limit Group: DRO
Last Update: 04-Sep-2018 13:30:35 Calib Date: 01-Sep-2018 13:36:32
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180901-53619.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK017

First Level Reviewer: luj Date: 04-Sep-2018 13:30:35

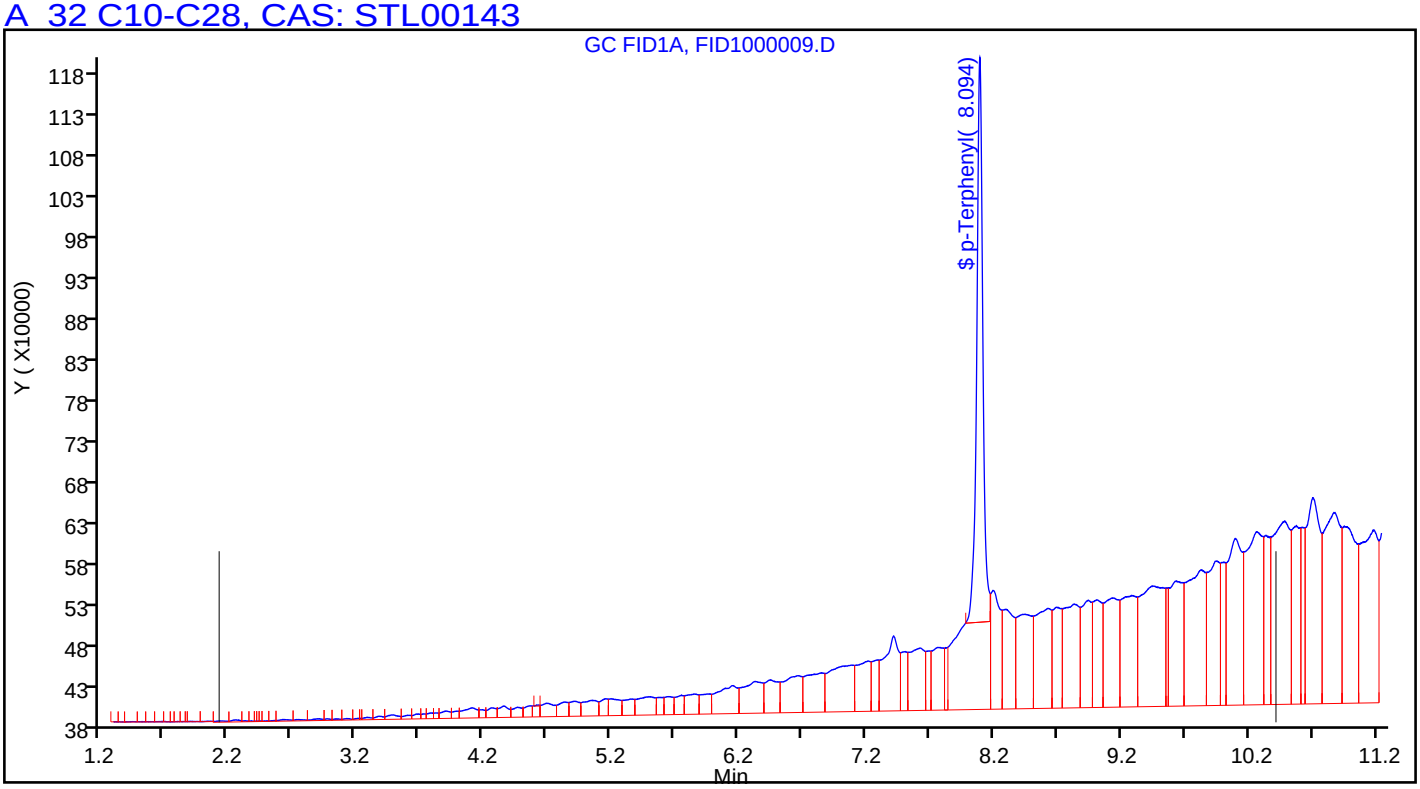
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	23.9	95.64

Report Date: 04-Sep-2018 13:30:41 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180901-53619.b\FID1000009.D				
Injection Date:	01-Sep-2018 16:03:50	Instrument ID:	CHDRO6		
Lims ID:	720-88240-E-20-A	Lab Sample ID:	720-88240-20		
Client ID:	DUP-13				
Operator ID:	DCH	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

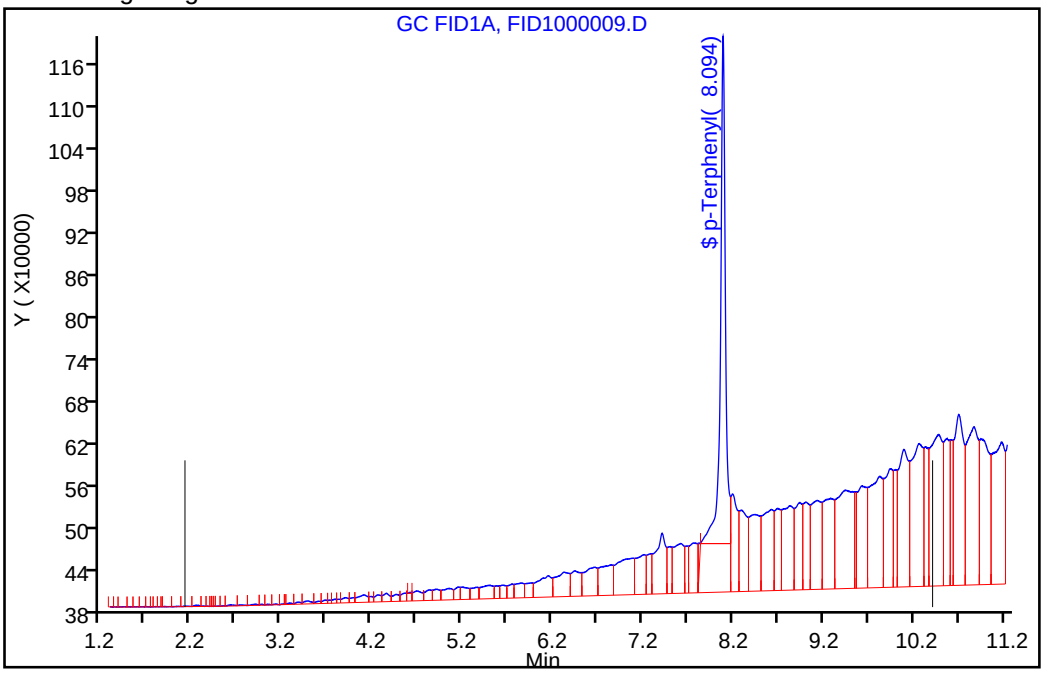
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180901-53619.b\FID1000009.D				
Injection Date:	01-Sep-2018 16:03:50	Instrument ID:	CHDRO6		
Lims ID:	720-88240-E-20-A	Lab Sample ID:	720-88240-20		
Client ID:	DUP-13				
Operator ID:	DCH	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.270, CAS: STL00143

Signal: 1

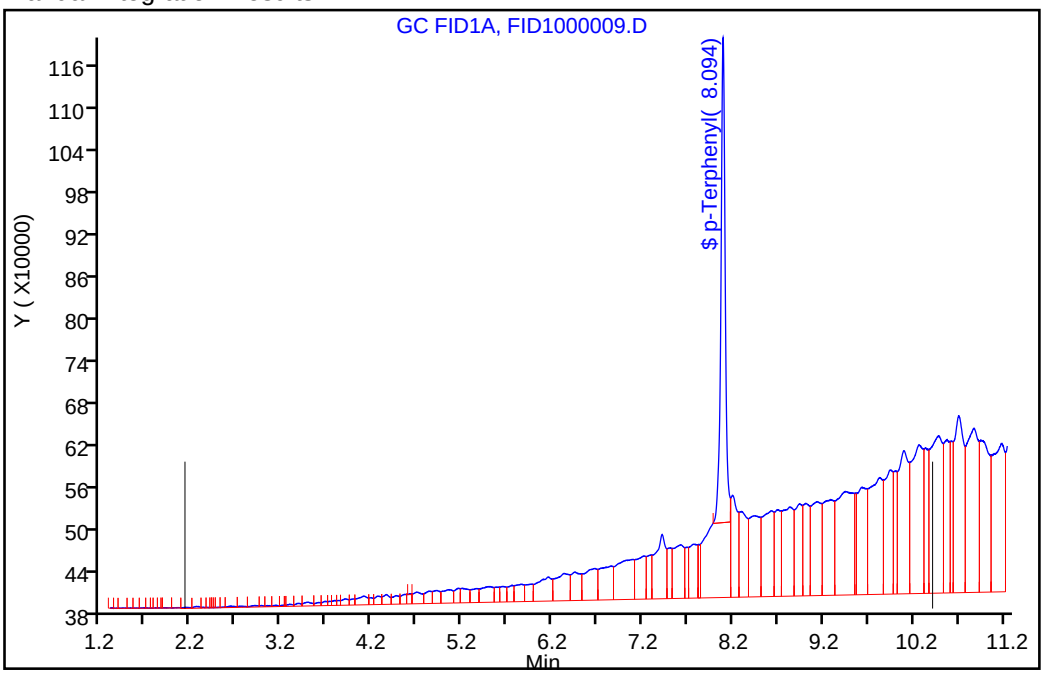
Processing Integration Results

RT: 6.27
Response: 532280778
Amount: 345.0971



Manual Integration Results

RT: 6.27
Response: 584889924
Amount: 379.2056



Reviewer: luj, 04-Sep-2018 13:29:53

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

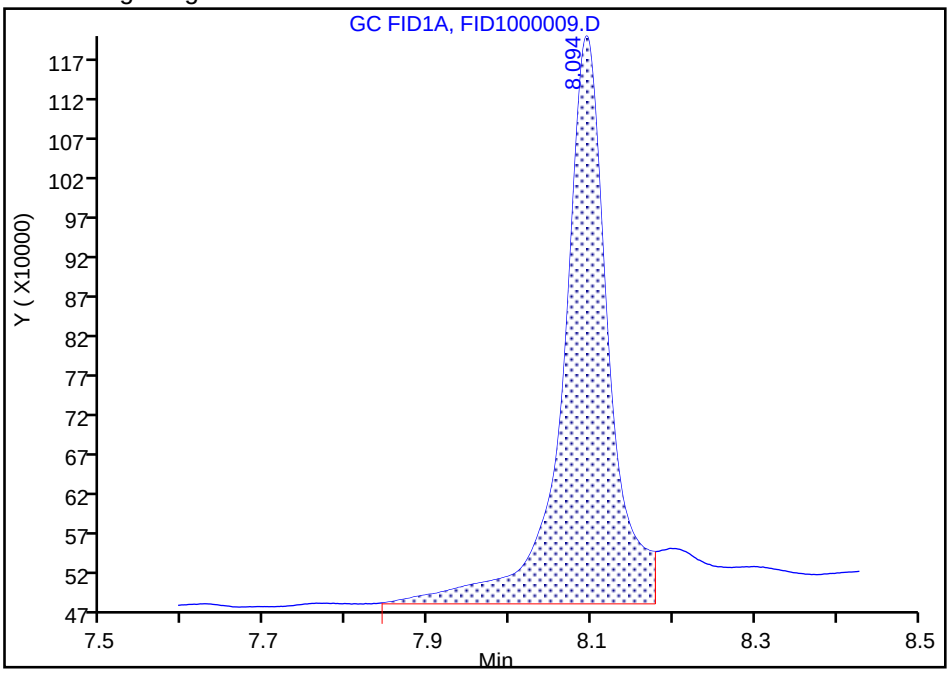
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180901-53619.b\FID1000009.D				
Injection Date:	01-Sep-2018 16:03:50	Instrument ID:	CHDRO6		
Lims ID:	720-88240-E-20-A	Lab Sample ID:	720-88240-20		
Client ID:	DUP-13				
Operator ID:	DCH	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

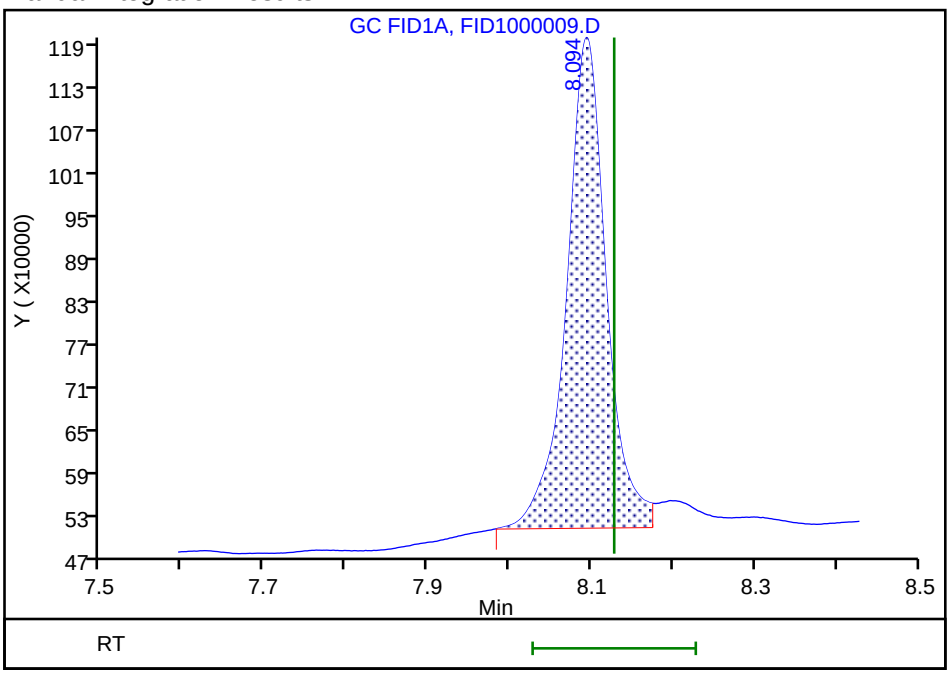
Processing Integration Results

RT: 8.09
Area: 55888565
Amount: 29.103169
Amount Units: mg/L



Manual Integration Results

RT: 8.09
Area: 45915834
Amount: 23.910013
Amount Units: mg/L



Reviewer: luj, 04-Sep-2018 13:30:17

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88240-1
SDG No.:
Client Sample ID: DG-K7S-0.5-1
Lab Sample ID: 720-88240-1
Matrix: Solid
Lab File ID: 08301819.D
Analysis Method: 8260B
Date Collected: 08/24/2018 07:52
Sample wt/vol: 5.742(g)
Date Analyzed: 08/30/2018 16:12
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250555
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.4	1.0
67-64-1	Acetone	ND		44	33
71-43-2	Benzene	ND		4.4	0.57
75-27-4	Dichlorobromomethane	ND		4.4	0.63
108-86-1	Bromobenzene	ND	*	4.4	0.69
74-97-5	Chlorobromomethane	ND		17	0.63
75-25-2	Bromoform	ND	*	4.4	1.7
74-83-9	Bromomethane	ND		8.7	0.69
78-93-3	2-Butanone (MEK)	ND		44	18
104-51-8	n-Butylbenzene	ND	*	4.4	0.87
135-98-8	sec-Butylbenzene	ND	*	4.4	0.63
98-06-6	tert-Butylbenzene	ND	*	4.4	0.64
75-15-0	Carbon disulfide	ND		4.4	1.7
56-23-5	Carbon tetrachloride	ND		4.4	0.54
108-90-7	Chlorobenzene	ND	*	4.4	0.60
75-00-3	Chloroethane	ND		8.7	0.49
67-66-3	Chloroform	ND		4.4	0.57
74-87-3	Chloromethane	ND		8.7	0.69
95-49-8	2-Chlorotoluene	ND	*	4.4	0.57
106-43-4	4-Chlorotoluene	ND	*	4.4	0.59
124-48-1	Chlorodibromomethane	ND		4.4	0.62
95-50-1	1,2-Dichlorobenzene	ND	*	4.4	0.59
541-73-1	1,3-Dichlorobenzene	ND	*	4.4	0.63
106-46-7	1,4-Dichlorobenzene	ND	*	4.4	0.62
142-28-9	1,3-Dichloropropane	ND		4.4	0.64
563-58-6	1,1-Dichloropropene	ND		4.4	0.60
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	8.7	1.5
106-93-4	Ethylene Dibromide	ND		4.4	1.2
74-95-3	Dibromomethane	ND		8.7	0.75
75-71-8	Dichlorodifluoromethane	ND		8.7	0.69
75-34-3	1,1-Dichloroethane	ND		4.4	0.59
107-06-2	1,2-Dichloroethane	ND		4.4	0.66
75-35-4	1,1-Dichloroethene	ND	*	4.4	0.54
156-59-2	cis-1,2-Dichloroethene	ND		4.4	0.59
156-60-5	trans-1,2-Dichloroethene	ND		4.4	0.65
78-87-5	1,2-Dichloropropane	ND		4.4	0.55

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88240-1
SDG No.:
Client Sample ID: DG-K7S-0.5-1
Lab Sample ID: 720-88240-1
Matrix: Solid
Lab File ID: 08301819.D
Analysis Method: 8260B
Date Collected: 08/24/2018 07:52
Sample wt/vol: 5.742(g)
Date Analyzed: 08/30/2018 16:12
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250555
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.4	0.60
10061-02-6	trans-1,3-Dichloropropene	ND		4.4	0.58
100-41-4	Ethylbenzene	ND	*	4.4	0.65
87-68-3	Hexachlorobutadiene	ND	*	4.4	0.78
591-78-6	2-Hexanone	ND		44	8.7
98-82-8	Isopropylbenzene	ND	*	4.4	0.59
99-87-6	4-Isopropyltoluene	ND	*	4.4	2.2
75-09-2	Methylene Chloride	ND		8.7	4.9
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		44	8.7
91-20-3	Naphthalene	ND	*	8.7	1.3
103-65-1	N-Propylbenzene	ND	*	4.4	0.57
100-42-5	Styrene	ND	*	4.4	0.55
630-20-6	1,1,1,2-Tetrachloroethane	ND	*	4.4	0.66
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	4.4	0.65
127-18-4	Tetrachloroethene	ND		4.4	0.58
108-88-3	Toluene	ND	*	4.4	0.62
87-61-6	1,2,3-Trichlorobenzene	ND	*	4.4	0.64
120-82-1	1,2,4-Trichlorobenzene	ND	*	4.4	0.62
71-55-6	1,1,1-Trichloroethane	ND		4.4	0.53
79-00-5	1,1,2-Trichloroethane	ND		4.4	0.61
79-01-6	Trichloroethene	ND		4.4	0.55
75-69-4	Trichlorofluoromethane	ND		4.4	0.49
96-18-4	1,2,3-Trichloropropane	ND	*	4.4	0.67
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.4	1.8
95-63-6	1,2,4-Trimethylbenzene	ND	*	4.4	1.4
108-67-8	1,3,5-Trimethylbenzene	ND	*	4.4	0.57
108-05-4	Vinyl acetate	ND		17	4.4
75-01-4	Vinyl chloride	ND		4.4	0.64
1330-20-7	Xylenes, Total	ND		4.4	1.1
594-20-7	2,2-Dichloropropane	ND		4.4	1.7
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		220	87

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88240-1

SDG No.:

Client Sample ID: DG-K7S-0.5-1 Lab Sample ID: 720-88240-1

Matrix: Solid Lab File ID: 08301819.D

Analysis Method: 8260B Date Collected: 08/24/2018 07:52

Sample wt/vol: 5.742(g) Date Analyzed: 08/30/2018 16:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250555 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	71	*	45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	126		60-140
2037-26-5	Toluene-d8 (Surr)	80		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\08301819.D
Lims ID: 720-88240-B-1-A RR
Client ID:
Sample Type: Client
Inject. Date: 30-Aug-2018 16:12:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88240-B-1 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:44:08 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: sanjumnair Date: 31-Aug-2018 08:37:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	154061	250.0	
* 2 Fluorobenzene	96	10.720	10.709	0.011	98	776313	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.564	0.000	86	437954	25.0	s
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	107675	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.305	9.294	0.011	92	55734	8.48	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.812	0.010	0	66551	9.42	
$ 10 Toluene-d8 (Surr)	98	12.822	12.822	0.000	94	184835	6.00	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	90	36559	5.36	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.176	0.000	84	22338	5.93	
28 Acetone	58	6.485	6.474	0.011	96	7554	12.7	
124 Butane	43	4.995	4.996	-0.001	1	299	NR	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	806100	13.5	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	76332	1.27	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	94147	1.57	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	860533	14.4	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	105670	NC	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	105670	1.76	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	809204	13.5	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	156404	2.61	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	59781	1.00	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	122664	2.05	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard
NC - Not Calibrated
s - Failed ISTD Recovery Test

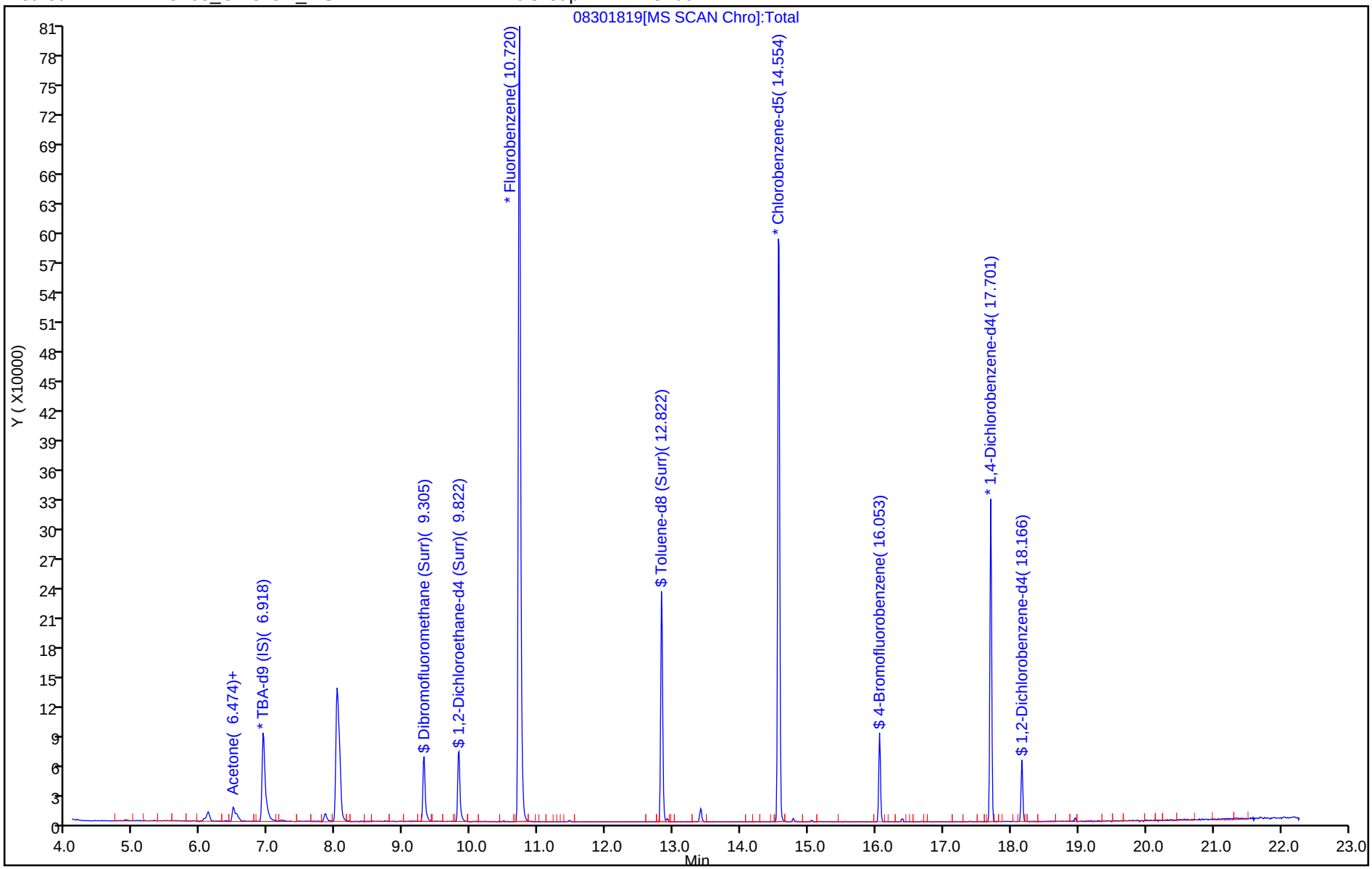
Reagents:

I_IS/SS_00092	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 31-Aug-2018 09:30:37 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\08301819.D				
Injection Date:	30-Aug-2018 16:12:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88240-B-1-A RR	Lab Sample ID:	Client 720-250555/19-A	Worklist Smp#:	19
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\08301819.D
Lims ID: 720-88240-B-1-A RR
Client ID:
Sample Type: Client
Inject. Date: 30-Aug-2018 16:12:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88240-B-1 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:44:08 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: sanjumnair Date: 31-Aug-2018 08:37:34

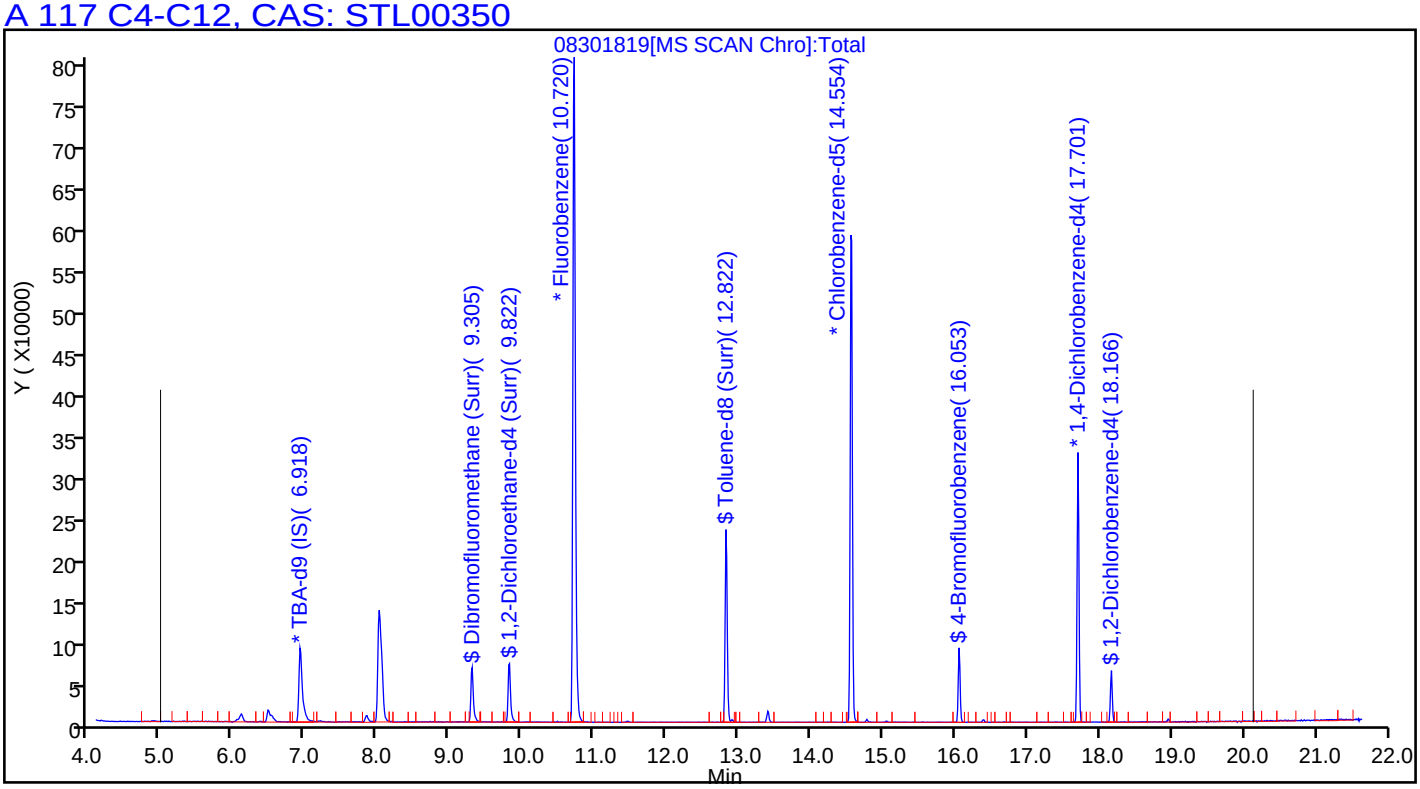
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	7.50	8.48	113.01
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	9.42	125.60
$ 10 Toluene-d8 (Surr)	7.50	6.00	79.95
$ 11 4-Bromofluorobenzene	7.50	5.36	71.48
$ 12 1,2-Dichlorobenzene-d4	6.00	5.93	98.82

Report Date: 31-Aug-2018 09:30:38 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\08301819.D				
Injection Date:	30-Aug-2018 16:12:30	Instrument ID:	CHMSV2		
Lims ID:	720-88240-B-1-A RR	Lab Sample ID:	Client 720-250555/19-A		
Client ID:					
Operator ID:	VOA	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88240-1
SDG No.:
Client Sample ID: DG-K7S-3.5-4
Lab Sample ID: 720-88240-2
Matrix: Solid
Lab File ID: 08291836.D
Analysis Method: 8260B
Date Collected: 08/24/2018 07:52
Sample wt/vol: 7.006(g)
Date Analyzed: 08/29/2018 23:38
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250532
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		3.6	0.86
67-64-1	Acetone	80		36	27
71-43-2	Benzene	ND		3.6	0.46
75-27-4	Dichlorobromomethane	ND		3.6	0.51
108-86-1	Bromobenzene	ND		3.6	0.56
74-97-5	Chlorobromomethane	ND		14	0.51
75-25-2	Bromoform	ND		3.6	1.4
74-83-9	Bromomethane	ND		7.1	0.56
78-93-3	2-Butanone (MEK)	ND		36	15
104-51-8	n-Butylbenzene	ND		3.6	0.71
135-98-8	sec-Butylbenzene	ND		3.6	0.51
98-06-6	tert-Butylbenzene	ND		3.6	0.52
75-15-0	Carbon disulfide	ND	*	3.6	1.4
56-23-5	Carbon tetrachloride	ND		3.6	0.44
108-90-7	Chlorobenzene	ND		3.6	0.49
75-00-3	Chloroethane	ND		7.1	0.40
67-66-3	Chloroform	ND		3.6	0.47
74-87-3	Chloromethane	ND		7.1	0.56
95-49-8	2-Chlorotoluene	ND		3.6	0.46
106-43-4	4-Chlorotoluene	ND		3.6	0.49
124-48-1	Chlorodibromomethane	ND		3.6	0.51
95-50-1	1,2-Dichlorobenzene	ND		3.6	0.49
541-73-1	1,3-Dichlorobenzene	ND		3.6	0.51
106-46-7	1,4-Dichlorobenzene	ND		3.6	0.51
142-28-9	1,3-Dichloropropane	ND		3.6	0.52
563-58-6	1,1-Dichloropropene	ND		3.6	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	ND		7.1	1.2
106-93-4	Ethylene Dibromide	ND		3.6	1.0
74-95-3	Dibromomethane	ND		7.1	0.61
75-71-8	Dichlorodifluoromethane	ND		7.1	0.56
75-34-3	1,1-Dichloroethane	ND		3.6	0.49
107-06-2	1,2-Dichloroethane	ND		3.6	0.54
75-35-4	1,1-Dichloroethene	ND	*	3.6	0.44
156-59-2	cis-1,2-Dichloroethene	ND		3.6	0.49
156-60-5	trans-1,2-Dichloroethene	ND		3.6	0.54
78-87-5	1,2-Dichloropropane	ND		3.6	0.45

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88240-1
SDG No.:
Client Sample ID: DG-K7S-3.5-4
Lab Sample ID: 720-88240-2
Matrix: Solid
Lab File ID: 08291836.D
Analysis Method: 8260B
Date Collected: 08/24/2018 07:52
Sample wt/vol: 7.006(g)
Date Analyzed: 08/29/2018 23:38
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250532
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		3.6	0.49
10061-02-6	trans-1,3-Dichloropropene	ND		3.6	0.48
100-41-4	Ethylbenzene	ND		3.6	0.54
87-68-3	Hexachlorobutadiene	ND		3.6	0.64
591-78-6	2-Hexanone	ND		36	7.1
98-82-8	Isopropylbenzene	ND		3.6	0.49
99-87-6	4-Isopropyltoluene	ND		3.6	1.8
75-09-2	Methylene Chloride	ND		7.1	4.0
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		36	7.1
91-20-3	Naphthalene	ND		7.1	1.1
103-65-1	N-Propylbenzene	ND		3.6	0.47
100-42-5	Styrene	ND		3.6	0.45
630-20-6	1,1,1,2-Tetrachloroethane	ND		3.6	0.54
79-34-5	1,1,2,2-Tetrachloroethane	ND		3.6	0.54
108-88-3	Toluene	ND		3.6	0.51
87-61-6	1,2,3-Trichlorobenzene	ND		3.6	0.53
120-82-1	1,2,4-Trichlorobenzene	ND		3.6	0.51
71-55-6	1,1,1-Trichloroethane	ND		3.6	0.44
79-00-5	1,1,2-Trichloroethane	ND		3.6	0.50
79-01-6	Trichloroethene	ND		3.6	0.45
75-69-4	Trichlorofluoromethane	ND		3.6	0.40
96-18-4	1,2,3-Trichloropropane	ND		3.6	0.55
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.6	1.5
95-63-6	1,2,4-Trimethylbenzene	ND		3.6	1.2
108-67-8	1,3,5-Trimethylbenzene	ND		3.6	0.46
108-05-4	Vinyl acetate	ND		14	3.6
75-01-4	Vinyl chloride	ND		3.6	0.52
1330-20-7	Xylenes, Total	ND		3.6	0.87
594-20-7	2,2-Dichloropropane	ND		3.6	1.4
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		180	71

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88240-1

SDG No.:

Client Sample ID: DG-K7S-3.5-4 Lab Sample ID: 720-88240-2

Matrix: Solid Lab File ID: 08291836.D

Analysis Method: 8260B Date Collected: 08/24/2018 07:52

Sample wt/vol: 7.006(g) Date Analyzed: 08/29/2018 23:38

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250532 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	92		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		60-140
2037-26-5	Toluene-d8 (Surr)	94		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180829-53559.b\08291836.D
Lims ID: 720-88240-A-2-A
Client ID: DG-K7S-3.5-4
Sample Type: Client
Inject. Date: 29-Aug-2018 23:38:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88240-A-2
Operator ID: SF Instrument ID: HP9

Method: \\ChromNA\Pleasanton\ChromData\HP9\20180829-53559.b\HP9_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 09:47:11 Calib Date: 23-Aug-2018 18:09:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP9\20180823-53445.b\08231828.D

Column 1 : Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: medinaj Date: 30-Aug-2018 09:47:29

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.159	7.159	0.000	0	70543	250.0	
* 2 Fluorobenzene	96	10.936	10.936	0.000	99	679335	25.0	
* 4 Chlorobenzene-d5	117	14.763	14.764	-0.001	82	508773	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.903	17.903	0.000	92	257215	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.528	9.528	0.000	56	51350	7.45	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.045	10.045	0.000	0	34379	7.23	
$ 10 Toluene-d8 (Surr)	98	13.032	13.032	0.000	91	175110	7.05	
$ 11 4-Bromofluorobenzene	95	16.252	16.252	0.000	87	56838	6.89	
$ 12 1,2-Dichlorobenzene-d4	152	18.358	18.358	0.000	75	59247	5.97	
19 Vinyl chloride	62	5.022	5.093	-0.071	1	1850	0.0874	
28 Acetone	58	6.713	6.713	0.000	96	17979	55.9	
139 Ethyl acetate	43	9.316	9.326	-0.010	5	1456	0.6304	
81 Tetrachloroethene	164	14.004	14.014	0.000	87	55313	7.96	
127 Butyl Ether	87	14.966	14.966	0.000	77	1212	0.2243	
A 116 C4-C10	1	11.189	(5.123-17.255)		0	1526376	23.9	
A 153 C6-C8	1	11.194	(8.890-13.498)		0	227976	3.57	
A 154 C6-C9	1	12.161	(8.890-15.432)		0	703279	11.0	
A 117 C4-C12	1	12.738	(5.123-20.353)		0	1710023	26.8	
A 123 Aviation Gas	1	12.991	(8.890-17.093)		0	793527	NC	
A 119 C6-C10	1	13.072	(8.890-17.255)		0	795877	12.5	
A 118 C5-C12	1	13.528	(6.703-20.353)		0	1396189	21.9	
A 120 C6-C12	1	14.622	(8.890-20.353)		0	979524	15.3	
A 155 C8-C10	1	15.336	(13.417-17.255)		0	572643	8.97	
A 121 C7-C12	1	15.786	(11.219-20.353)		0	833734	13.1	

QC Flag Legend

Processing Flags

NC - Not Calibrated

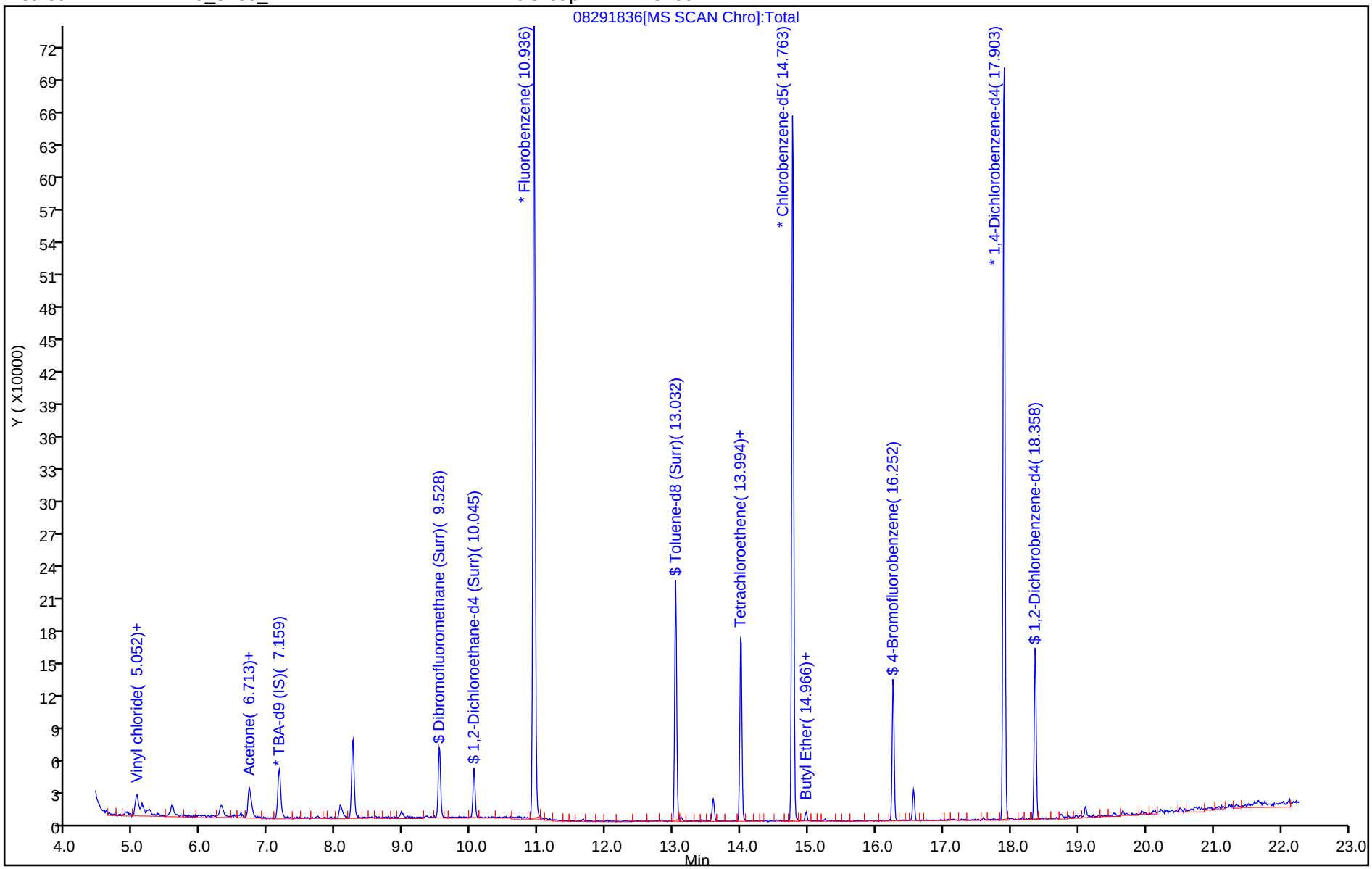
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 30-Aug-2018 09:47:29 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180829-53559.b\08291836.D				
Injection Date:	29-Aug-2018 23:38:30	Instrument ID:	HP9	Operator ID:	SF
Lims ID:	720-88240-A-2-A	Lab Sample ID:	720-88240-2	Worklist Smp#:	12
Client ID:	DG-K7S-3.5-4				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	HP9_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180829-53559.b\08291836.D
Lims ID: 720-88240-A-2-A
Client ID: DG-K7S-3.5-4
Sample Type: Client
Inject. Date: 29-Aug-2018 23:38:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88240-A-2
Operator ID: SF Instrument ID: HP9

Method: \\ChromNA\Pleasanton\ChromData\HP9\20180829-53559.b\HP9_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 09:47:11 Calib Date: 23-Aug-2018 18:09:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP9\20180823-53445.b\08231828.D

Column 1 : Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: medinaj Date: 30-Aug-2018 09:47:29

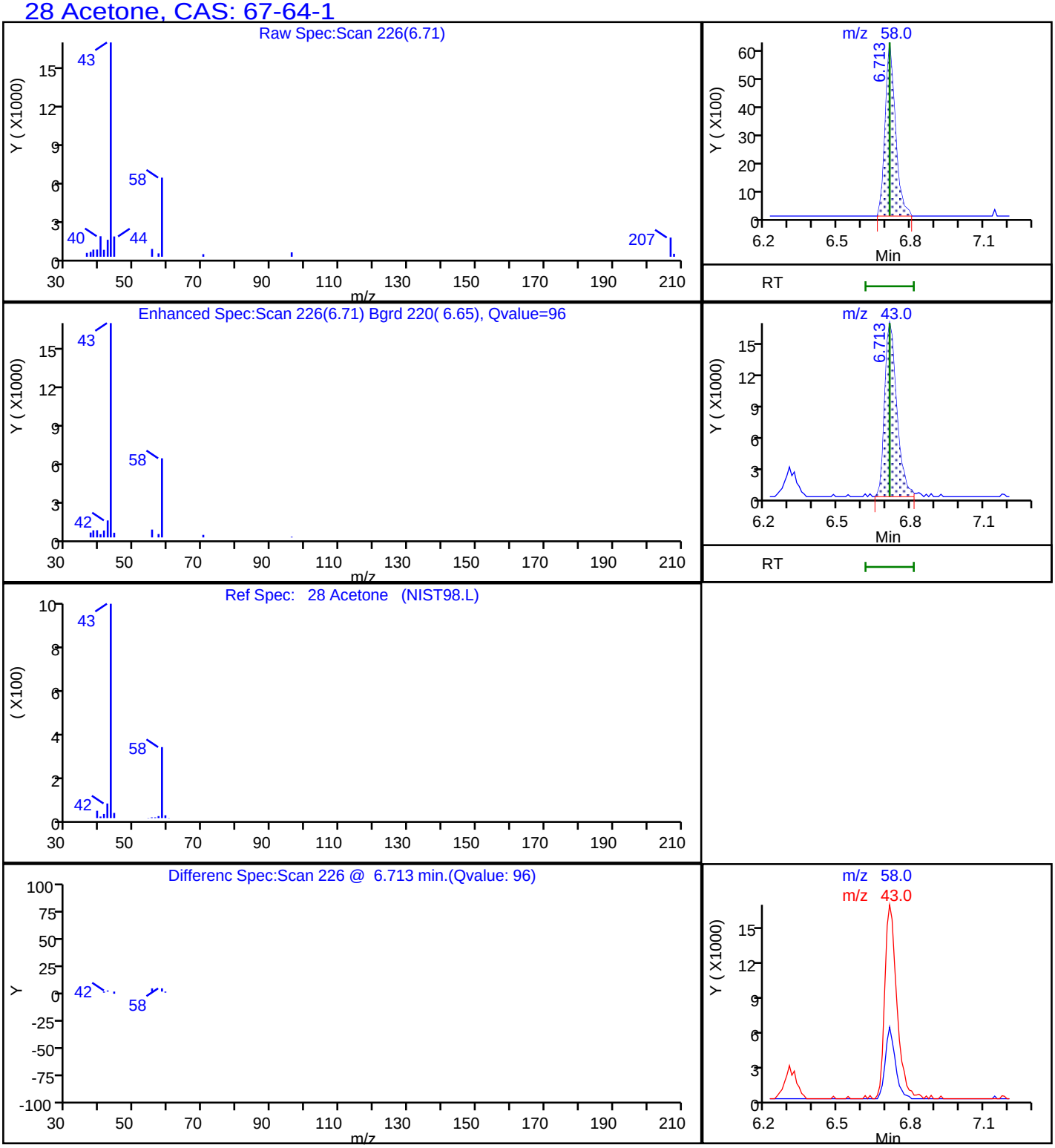
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.23	96.45
$ 10 Toluene-d8 (Surr)	7.50	7.05	93.95
$ 11 4-Bromofluorobenzene	7.50	6.89	91.91
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 30-Aug-2018 09:47:29 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180829-53559.b\08291836.D				
Injection Date:	29-Aug-2018 23:38:30	Instrument ID:	HP9		
Lims ID:	720-88240-A-2-A	Lab Sample ID:	720-88240-2		
Client ID:	DG-K7S-3.5-4				
Operator ID:	SF	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1

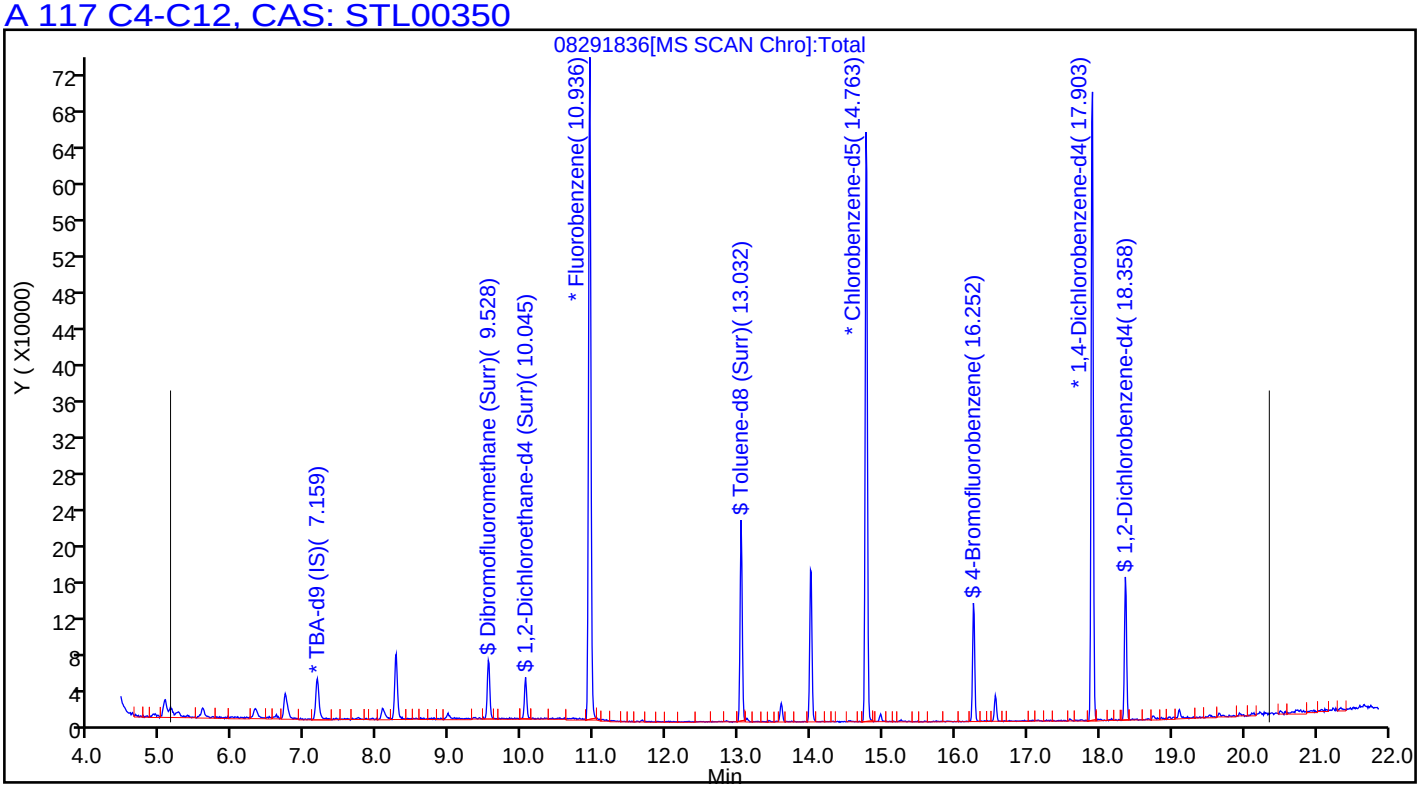


Report Date: 30-Aug-2018 09:47:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180829-53559.b\08291836.D				
Injection Date:	29-Aug-2018 23:38:30	Instrument ID:	HP9		
Lims ID:	720-88240-A-2-A	Lab Sample ID:	720-88240-2		
Client ID:	DG-K7S-3.5-4				
Operator ID:	SF	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88240-1

SDG No.:

Client Sample ID: DG-K7S-3.5-4 Lab Sample ID: 720-88240-2

Matrix: Solid Lab File ID: 08301820.D

Analysis Method: 8260B Date Collected: 08/24/2018 07:52

Sample wt/vol: 6.059(g) Date Analyzed: 08/30/2018 16:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250555 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	ND		4.1	0.55

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	83		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	117		60-140
2037-26-5	Toluene-d8 (Surr)	89		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\08301820.D
Lims ID: 720-88240-B-2-A RR
Client ID:
Sample Type: Client
Inject. Date: 30-Aug-2018 16:40:30 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88240-B-2 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:44:08 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 30-Aug-2018 17:53:19

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	150769	250.0	
* 2 Fluorobenzene	96	10.720	10.709	0.011	98	910492	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.564	0.000	86	683114	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	260251	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.305	9.294	0.011	92	62107	8.05	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.812	9.812	0.000	0	72872	8.79	
$ 10 Toluene-d8 (Surr)	98	12.822	12.822	0.000	95	240285	6.65	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	92	66436	6.25	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.176	0.000	84	54181	5.95	
28 Acetone	58	6.474	6.474	0.000	97	36741	52.5	
44 2-Butanone (MEK)	72	8.755	8.745	0.010	95	2969	5.32	a
59 Benzene	78	10.488	10.488	0.000	1	385	0.0117	
131 Butyl Ether	87	14.765	14.776	-0.010	53	302	0.0521	
85 m-Xylene & p-Xylene	91	15.050	15.050	0.000	1	1671	0.0534	a
124 Butane	43	4.996	4.996	0.000	1	2137	NR	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	676098	9.62	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	121644	1.73	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	151345	2.15	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	749968	10.7	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	163799	NC	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	163799	2.33	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	436095	6.21	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	237669	3.38	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	69664	0.99	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	155655	2.22	
S 122 Xylenes, Total	1				0		0.0534	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

NC - Not Calibrated

Review Flags

a - User Assigned ID

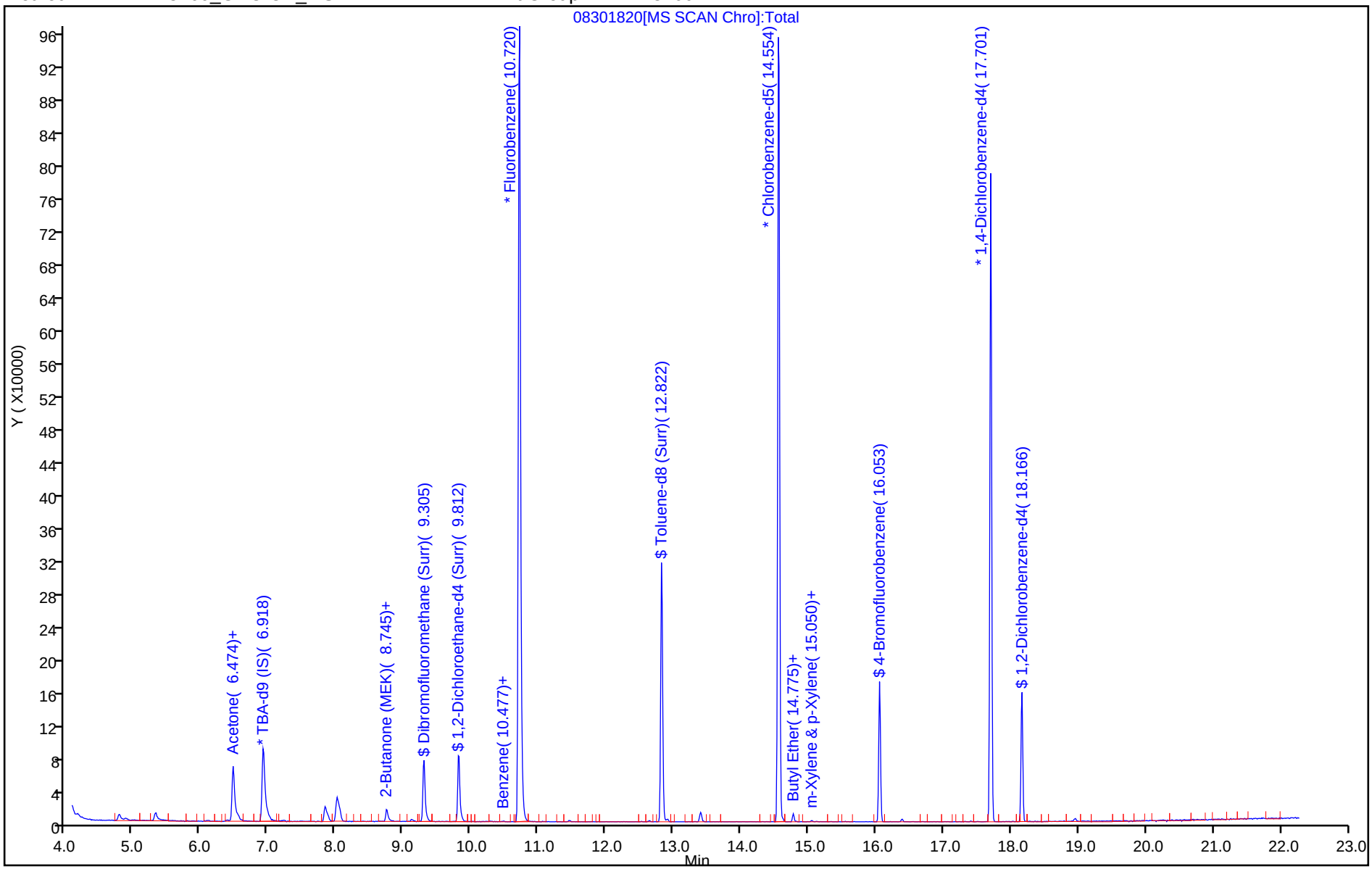
Reagents:

I_IS/SS_00092	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 31-Aug-2018 09:30:50 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\08301820.D				
Injection Date:	30-Aug-2018 16:40:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88240-B-2-A RR	Lab Sample ID:	Client 720-250555/20-A	Worklist Smp#:	20
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\08301820.D
Lims ID: 720-88240-B-2-A RR
Client ID:
Sample Type: Client
Inject. Date: 30-Aug-2018 16:40:30 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88240-B-2 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:44:08 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 30-Aug-2018 17:53:19

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	7.50	8.05	107.37
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.79	117.27
$ 10 Toluene-d8 (Surr)	7.50	6.65	88.62
$ 11 4-Bromofluorobenzene	7.50	6.25	83.27
$ 12 1,2-Dichlorobenzene-d4	6.00	5.95	99.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88240-1

SDG No.:

Client Sample ID: DG-L13S-0.5-1 Lab Sample ID: 720-88240-3

Matrix: Solid Lab File ID: 08311834.D

Analysis Method: 8260B Date Collected: 08/24/2018 09:40

Sample wt/vol: 5.04(g) Date Analyzed: 08/31/2018 22:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250726 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		5.0	1.2
67-64-1	Acetone	ND		50	38
71-43-2	Benzene	ND		5.0	0.64
75-27-4	Dichlorobromomethane	ND		5.0	0.71
108-86-1	Bromobenzene	ND		5.0	0.78
74-97-5	Chlorobromomethane	ND		20	0.71
75-25-2	Bromoform	ND		5.0	2.0
74-83-9	Bromomethane	ND		9.9	0.78
78-93-3	2-Butanone (MEK)	ND		50	21
104-51-8	n-Butylbenzene	ND		5.0	0.99
135-98-8	sec-Butylbenzene	ND		5.0	0.71
98-06-6	tert-Butylbenzene	ND		5.0	0.72
75-15-0	Carbon disulfide	ND	*	5.0	2.0
56-23-5	Carbon tetrachloride	ND		5.0	0.62
108-90-7	Chlorobenzene	ND		5.0	0.68
75-00-3	Chloroethane	ND		9.9	0.56
67-66-3	Chloroform	ND		5.0	0.65
74-87-3	Chloromethane	ND		9.9	0.78
95-49-8	2-Chlorotoluene	ND		5.0	0.64
106-43-4	4-Chlorotoluene	ND		5.0	0.67
124-48-1	Chlorodibromomethane	ND		5.0	0.70
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.67
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.71
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.70
142-28-9	1,3-Dichloropropane	ND		5.0	0.72
563-58-6	1,1-Dichloropropene	ND		5.0	0.68
96-12-8	1,2-Dibromo-3-Chloropropane	ND		9.9	1.7
106-93-4	Ethylene Dibromide	ND		5.0	1.4
74-95-3	Dibromomethane	ND		9.9	0.85
75-71-8	Dichlorodifluoromethane	ND		9.9	0.78
75-34-3	1,1-Dichloroethane	ND		5.0	0.67
107-06-2	1,2-Dichloroethane	ND		5.0	0.75
75-35-4	1,1-Dichloroethene	ND	*	5.0	0.62
156-59-2	cis-1,2-Dichloroethene	ND		5.0	0.67
156-60-5	trans-1,2-Dichloroethene	ND		5.0	0.74
78-87-5	1,2-Dichloropropane	ND		5.0	0.62

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88240-1

SDG No.:

Client Sample ID: DG-L13S-0.5-1 Lab Sample ID: 720-88240-3

Matrix: Solid Lab File ID: 08311834.D

Analysis Method: 8260B Date Collected: 08/24/2018 09:40

Sample wt/vol: 5.04(g) Date Analyzed: 08/31/2018 22:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250726 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	0.68
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	0.66
100-41-4	Ethylbenzene	ND		5.0	0.74
87-68-3	Hexachlorobutadiene	ND		5.0	0.89
591-78-6	2-Hexanone	ND		50	9.9
98-82-8	Isopropylbenzene	ND		5.0	0.67
99-87-6	4-Isopropyltoluene	ND		5.0	2.5
75-09-2	Methylene Chloride	ND		9.9	5.6
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	9.9
91-20-3	Naphthalene	ND		9.9	1.5
103-65-1	N-Propylbenzene	ND		5.0	0.65
100-42-5	Styrene	ND		5.0	0.62
630-20-6	1,1,1,2-Tetrachloroethane	ND		5.0	0.75
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.74
127-18-4	Tetrachloroethene	ND		5.0	0.66
108-88-3	Toluene	ND		5.0	0.70
87-61-6	1,2,3-Trichlorobenzene	ND		5.0	0.73
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	0.70
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.61
79-00-5	1,1,2-Trichloroethane	ND		5.0	0.69
79-01-6	Trichloroethene	ND		5.0	0.62
75-69-4	Trichlorofluoromethane	ND		5.0	0.56
96-18-4	1,2,3-Trichloropropane	ND		5.0	0.76
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	5.0	2.1
95-63-6	1,2,4-Trimethylbenzene	ND		5.0	1.6
108-67-8	1,3,5-Trimethylbenzene	ND		5.0	0.64
108-05-4	Vinyl acetate	ND		20	5.0
75-01-4	Vinyl chloride	ND		5.0	0.72
1330-20-7	Xylenes, Total	ND		5.0	1.2
594-20-7	2,2-Dichloropropane	ND		5.0	2.0
STL00504	C4-C10	ND		250	99
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		250	99

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88240-1

SDG No.:

Client Sample ID: DG-L13S-0.5-1 Lab Sample ID: 720-88240-3

Matrix: Solid Lab File ID: 08311834.D

Analysis Method: 8260B Date Collected: 08/24/2018 09:40

Sample wt/vol: 5.04(g) Date Analyzed: 08/31/2018 22:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250726 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	89		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		60-140
2037-26-5	Toluene-d8 (Surr)	89		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53613.b\08311834.D				
Lims ID:	720-88240-E-3-A				
Client ID:	DG-L13S-0.5-1				
Sample Type:	Client				
Inject. Date:	31-Aug-2018 22:13:30	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	88240-E-3				
Misc. Info.:	HP13				
Operator ID:	VOA	Instrument ID:	HP13		
Method:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53613.b\HP13_8260_LL.m				
Limit Group:	8260B				
Last Update:	03-Sep-2018 13:15:31	Calib Date:	25-Aug-2018 20:24:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK012				
First Level Reviewer: phanthasena		Date:	03-Sep-2018 13:15:31		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.819	6.819	0.000	0	251835	250.0	
* 2 Fluorobenzene	96	10.599	10.599	0.000	98	686407	25.0	
* 4 Chlorobenzene-d5	117	14.439	14.439	0.000	87	471775	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.579	0.000	95	189456	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.190	9.190	0.000	94	60368	7.84	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.708	9.702	0.006	0	80017	8.29	
$ 10 Toluene-d8 (Surr)	98	12.708	12.708	0.000	93	185915	6.70	
$ 11 4-Bromofluorobenzene	95	15.933	15.933	0.000	93	61481	6.70	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.036	0.006	84	43921	5.99	
28 Acetone	58	6.380	6.374	0.006	100	2133	2.65	
34 Methylene Chloride	84	7.075	7.075	0.000	96	2430	0.3272	
44 Hexane	57	8.611	8.617	-0.006	93	3422	0.2799	
75 Toluene	92	12.793	12.787	0.006	96	1266	0.0816	
128 Butyl Ether	87	14.665	14.659	0.006	94	276	0.0588	
84 Ethylbenzene	91	14.714	14.701	0.013	89	891	0.0295	
85 m-Xylene & p-Xylene	91	14.933	14.933	0.000	0	2403	0.1009	
88 o-Xylene	91	15.433	15.427	0.006	1	1019	0.0412	
98 1,3,5-Trimethylbenzene	105	16.786	16.774	0.012	1	1184	0.0601	
101 1,2,4-Trimethylbenzene	105	17.286	17.280	0.006	96	4933	0.2416	
105 4-Isopropyltoluene	119	17.646	17.640	0.006	97	20428	0.9694	
136 1,2,3-Trimethylbenzene	105	17.835	17.829	0.006	89	1809	0.0845	
107 n-Butylbenzene	91	18.170	18.164	0.006	88	2687	0.1449	
142 1,3,5-Trichlorobenzene	180	19.725	19.719	0.006	1	697	0.0763	
111 1,2,4-Trichlorobenzene	180	20.414	20.408	0.006	89	1341	0.1608	
112 Naphthalene	128	20.749	20.743	0.006	97	10093	0.5175	
113 Hexachlorobutadiene	225	20.798	20.798	0.000	62	990	0.2019	
114 1,2,3-Trichlorobenzene	180	21.011	21.011	0.000	90	1573	0.2000	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	499689	7.94	
A 154 C6-C8	1	10.855	(8.556-13.153)		0	222859	3.54	
A 155 C6-C9	1	11.845	(8.556-15.134)		0	278670	4.43	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	887634	14.1	

Report Date: 03-Sep-2018 13:15:33 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180831-53613.b\08311834.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
A 119 C6-C10	1	12.735	(8.556-16.914)		0	412057	6.55	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	861676	13.7	
A 120 C6-C12	1	14.281	(8.556-20.005)		0	800002	12.7	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	197619	3.14	
A 121 C7-C12	1	15.451	(10.897-20.005)		0	625405	9.94	
S 122 Xylenes, Total	1				0		0.1421	

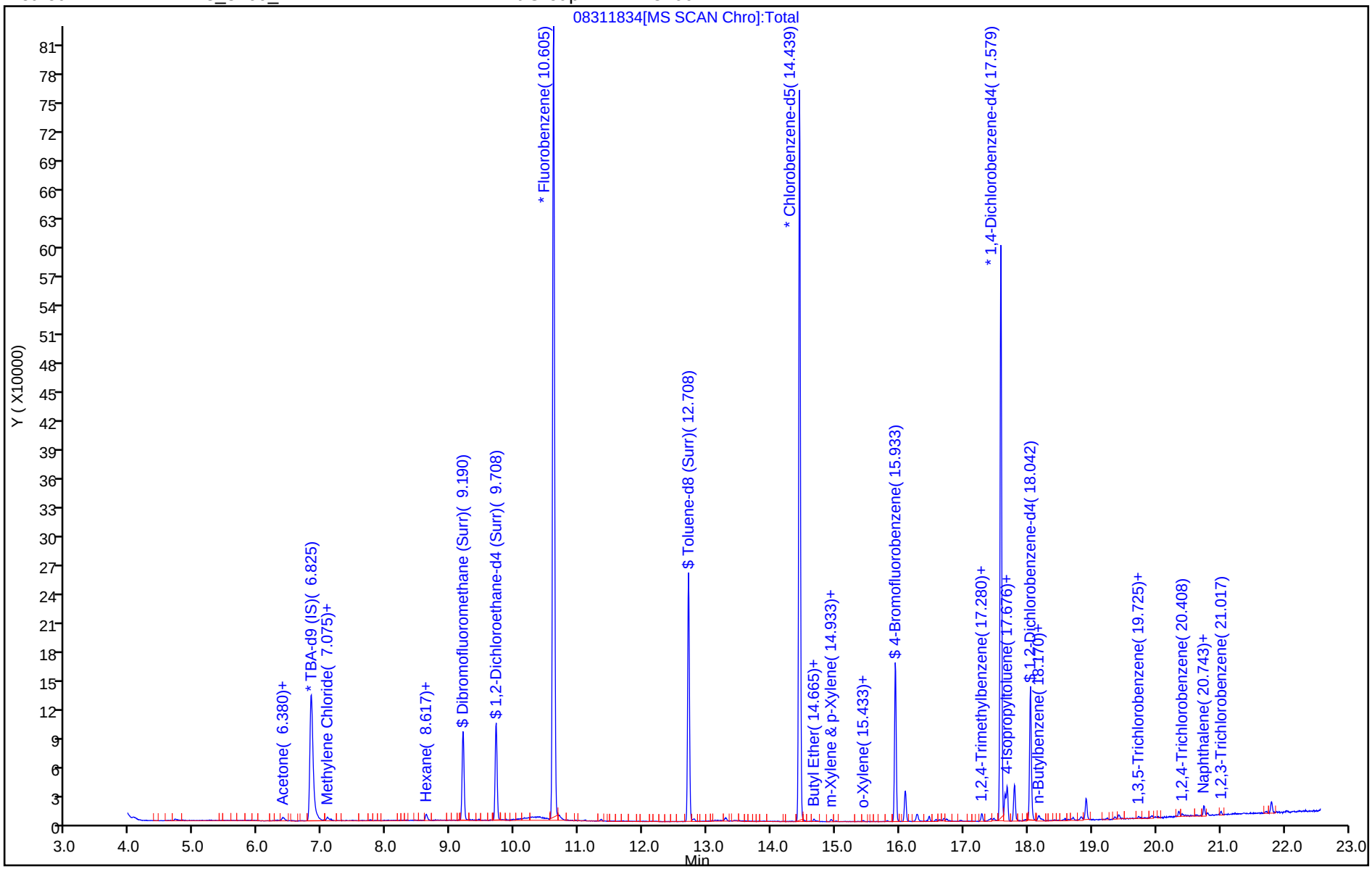
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 03-Sep-2018 13:15:33 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53613.b\08311834.D				
Injection Date:	31-Aug-2018 22:13:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88240-E-3-A	Lab Sample ID:	720-88240-3	Worklist Smp#:	9
Client ID:	DG-L13S-0.5-1				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180831-53613.b\08311834.D
Lims ID: 720-88240-E-3-A
Client ID: DG-L13S-0.5-1
Sample Type: Client
Inject. Date: 31-Aug-2018 22:13:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88240-E-3
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180831-53613.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 03-Sep-2018 13:15:31 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: phanthasena Date: 03-Sep-2018 13:15:31

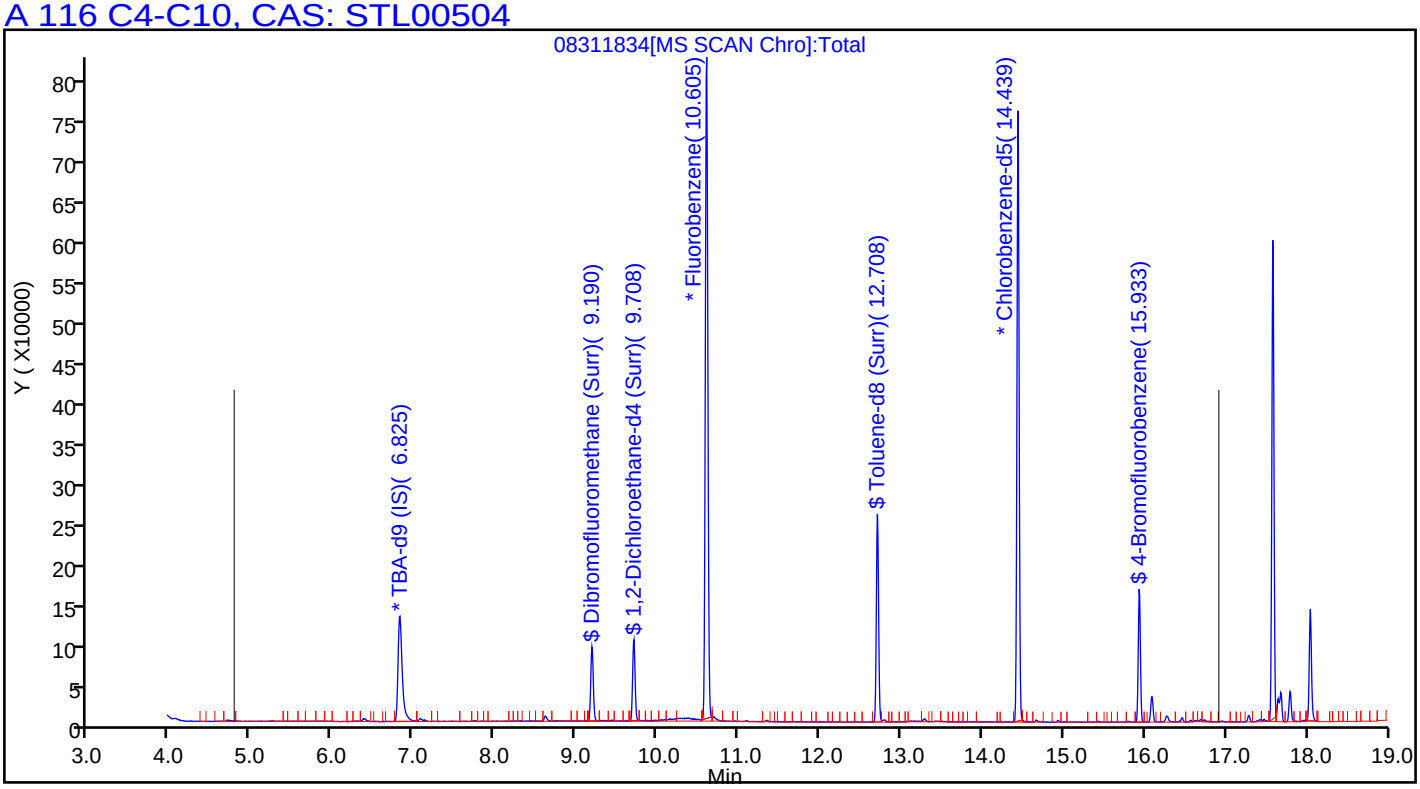
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.29	110.54
$ 10 Toluene-d8 (Surr)	7.50	6.70	89.30
$ 11 4-Bromofluorobenzene	7.50	6.70	89.35
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 03-Sep-2018 13:15:34 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53613.b\08311834.D				
Injection Date:	31-Aug-2018 22:13:30	Instrument ID:	HP13		
Lims ID:	720-88240-E-3-A	Lab Sample ID:	720-88240-3		
Client ID:	DG-L13S-0.5-1				
Operator ID:	VOA	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 116 C4-C10, CAS: STL00504

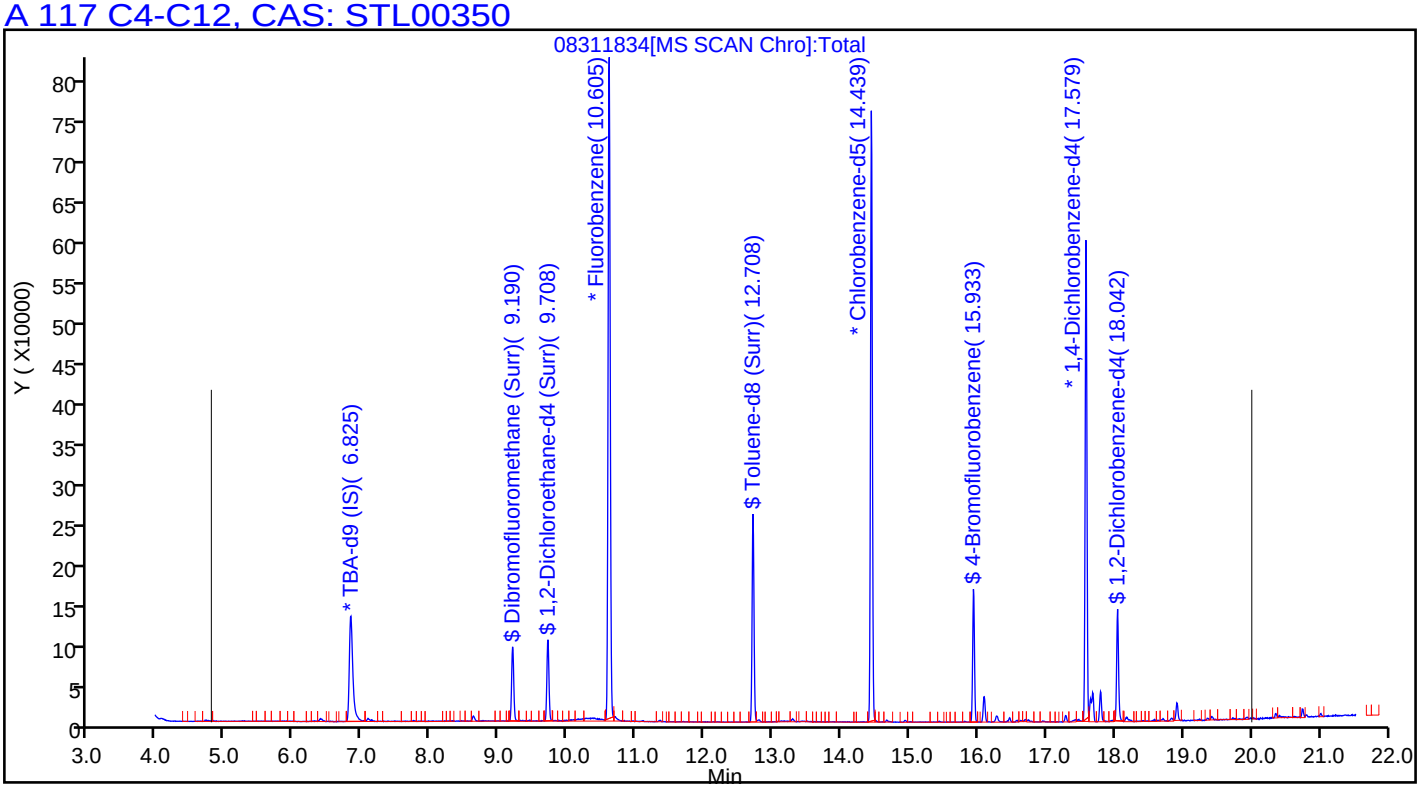


Report Date: 03-Sep-2018 13:15:34 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53613.b\08311834.D				
Injection Date:	31-Aug-2018 22:13:30	Instrument ID:	HP13		
Lims ID:	720-88240-E-3-A	Lab Sample ID:	720-88240-3		
Client ID:	DG-L13S-0.5-1				
Operator ID:	VOA	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



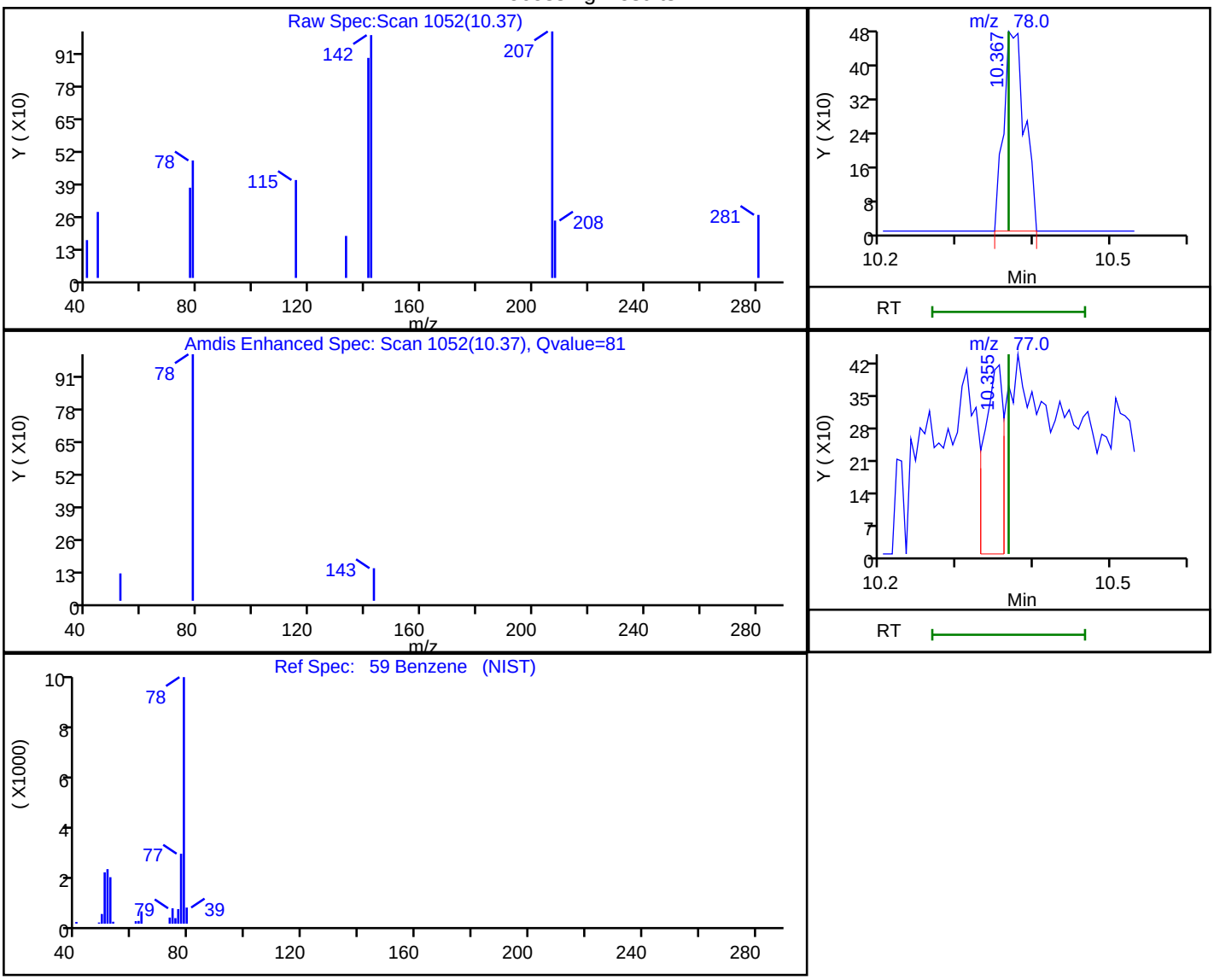
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53613.b\08311834.D				
Injection Date:	31-Aug-2018 22:13:30	Instrument ID:	HP13		
Lims ID:	720-88240-E-3-A	Lab Sample ID:	720-88240-3		
Client ID:	DG-L13S-0.5-1				
Operator ID:	VOA	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

59 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
10.37	78.00	905	0.030984
10.35	77.00	703	

Reviewer: phanthasena, 03-Sep-2018 13:14:45

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88240-1
SDG No.:
Client Sample ID: DG-L13S-3.5-4
Lab Sample ID: 720-88240-4
Matrix: Solid
Lab File ID: 08301821.D
Analysis Method: 8260B
Date Collected: 08/24/2018 09:40
Sample wt/vol: 6.015(g)
Date Analyzed: 08/30/2018 17:09
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250555
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.2	1.0
67-64-1	Acetone	ND		42	32
71-43-2	Benzene	ND		4.2	0.54
75-27-4	Dichlorobromomethane	ND		4.2	0.60
108-86-1	Bromobenzene	ND	*	4.2	0.66
74-97-5	Chlorobromomethane	ND		17	0.60
75-25-2	Bromoform	ND	*	4.2	1.7
74-83-9	Bromomethane	ND		8.3	0.66
78-93-3	2-Butanone (MEK)	ND		42	17
104-51-8	n-Butylbenzene	ND	*	4.2	0.83
135-98-8	sec-Butylbenzene	ND	*	4.2	0.60
98-06-6	tert-Butylbenzene	ND	*	4.2	0.61
75-15-0	Carbon disulfide	ND		4.2	1.7
56-23-5	Carbon tetrachloride	ND		4.2	0.52
108-90-7	Chlorobenzene	ND	*	4.2	0.57
75-00-3	Chloroethane	ND		8.3	0.47
67-66-3	Chloroform	ND		4.2	0.55
74-87-3	Chloromethane	ND		8.3	0.66
95-49-8	2-Chlorotoluene	ND	*	4.2	0.54
106-43-4	4-Chlorotoluene	ND	*	4.2	0.57
124-48-1	Chlorodibromomethane	ND		4.2	0.59
95-50-1	1,2-Dichlorobenzene	ND	*	4.2	0.57
541-73-1	1,3-Dichlorobenzene	ND	*	4.2	0.60
106-46-7	1,4-Dichlorobenzene	ND	*	4.2	0.59
142-28-9	1,3-Dichloropropane	ND		4.2	0.61
563-58-6	1,1-Dichloropropene	ND		4.2	0.57
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	8.3	1.4
106-93-4	Ethylene Dibromide	ND		4.2	1.2
74-95-3	Dibromomethane	ND		8.3	0.71
75-71-8	Dichlorodifluoromethane	ND		8.3	0.66
75-34-3	1,1-Dichloroethane	ND		4.2	0.57
107-06-2	1,2-Dichloroethane	ND		4.2	0.63
75-35-4	1,1-Dichloroethene	ND	*	4.2	0.52
156-59-2	cis-1,2-Dichloroethene	ND		4.2	0.57
156-60-5	trans-1,2-Dichloroethene	ND		4.2	0.62
78-87-5	1,2-Dichloropropane	ND		4.2	0.52

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88240-1
SDG No.:
Client Sample ID: DG-L13S-3.5-4
Lab Sample ID: 720-88240-4
Matrix: Solid
Lab File ID: 08301821.D
Analysis Method: 8260B
Date Collected: 08/24/2018 09:40
Sample wt/vol: 6.015(g)
Date Analyzed: 08/30/2018 17:09
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250555
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.2	0.57
10061-02-6	trans-1,3-Dichloropropene	ND		4.2	0.56
100-41-4	Ethylbenzene	ND	*	4.2	0.62
87-68-3	Hexachlorobutadiene	ND	*	4.2	0.75
591-78-6	2-Hexanone	ND		42	8.3
98-82-8	Isopropylbenzene	ND	*	4.2	0.57
99-87-6	4-Isopropyltoluene	ND	*	4.2	2.1
75-09-2	Methylene Chloride	ND		8.3	4.7
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		42	8.3
91-20-3	Naphthalene	ND	*	8.3	1.2
103-65-1	N-Propylbenzene	ND	*	4.2	0.55
100-42-5	Styrene	ND	*	4.2	0.52
630-20-6	1,1,1,2-Tetrachloroethane	ND	*	4.2	0.63
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	4.2	0.62
127-18-4	Tetrachloroethene	ND		4.2	0.56
108-88-3	Toluene	ND	*	4.2	0.59
87-61-6	1,2,3-Trichlorobenzene	ND	*	4.2	0.62
120-82-1	1,2,4-Trichlorobenzene	ND	*	4.2	0.59
71-55-6	1,1,1-Trichloroethane	ND		4.2	0.51
79-00-5	1,1,2-Trichloroethane	ND		4.2	0.58
79-01-6	Trichloroethene	ND		4.2	0.52
75-69-4	Trichlorofluoromethane	ND		4.2	0.47
96-18-4	1,2,3-Trichloropropane	ND	*	4.2	0.64
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.2	1.7
95-63-6	1,2,4-Trimethylbenzene	ND	*	4.2	1.4
108-67-8	1,3,5-Trimethylbenzene	ND	*	4.2	0.54
108-05-4	Vinyl acetate	ND		17	4.2
75-01-4	Vinyl chloride	ND		4.2	0.61
1330-20-7	Xylenes, Total	ND		4.2	1.0
594-20-7	2,2-Dichloropropane	ND		4.2	1.7
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		210	83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88240-1

SDG No.:

Client Sample ID: DG-L13S-3.5-4 Lab Sample ID: 720-88240-4

Matrix: Solid Lab File ID: 08301821.D

Analysis Method: 8260B Date Collected: 08/24/2018 09:40

Sample wt/vol: 6.015(g) Date Analyzed: 08/30/2018 17:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250555 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	76	*	45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	130		60-140
2037-26-5	Toluene-d8 (Surr)	79		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\08301821.D
Lims ID: 720-88240-B-4-A RR
Client ID:
Sample Type: Client
Inject. Date: 30-Aug-2018 17:09:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88240-B-4 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:44:08 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: sanjumnair Date: 31-Aug-2018 08:42:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	151911	250.0	
* 2 Fluorobenzene	96	10.720	10.709	0.011	98	739931	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.564	0.000	86	433263	25.0	s
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	132241	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.305	9.294	0.011	93	53256	8.50	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.812	9.812	0.000	0	65881	9.78	
$ 10 Toluene-d8 (Surr)	98	12.822	12.822	0.000	95	174078	5.93	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	91	38282	5.67	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.176	0.000	85	26478	5.72	
28 Acetone	58	6.474	6.474	0.000	96	8231	14.5	
59 Benzene	78	10.477	10.488	-0.011	1	780	0.0292	
124 Butane	43	5.006	4.996	0.010	1	2921	NR	
126 Dodecane	57	20.120	20.088	0.032	13	476	NR	
125 C13	43	21.588	21.556	0.032	44	5202	NR	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	370764	6.49	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	73159	1.28	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	92499	1.62	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	1252460	21.9	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	169902	NC	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	169902	2.98	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	1217870	21.3	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	1047820	18.3	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	123115	2.16	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	1013030	17.7	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard
NC - Not Calibrated
s - Failed ISTD Recovery Test

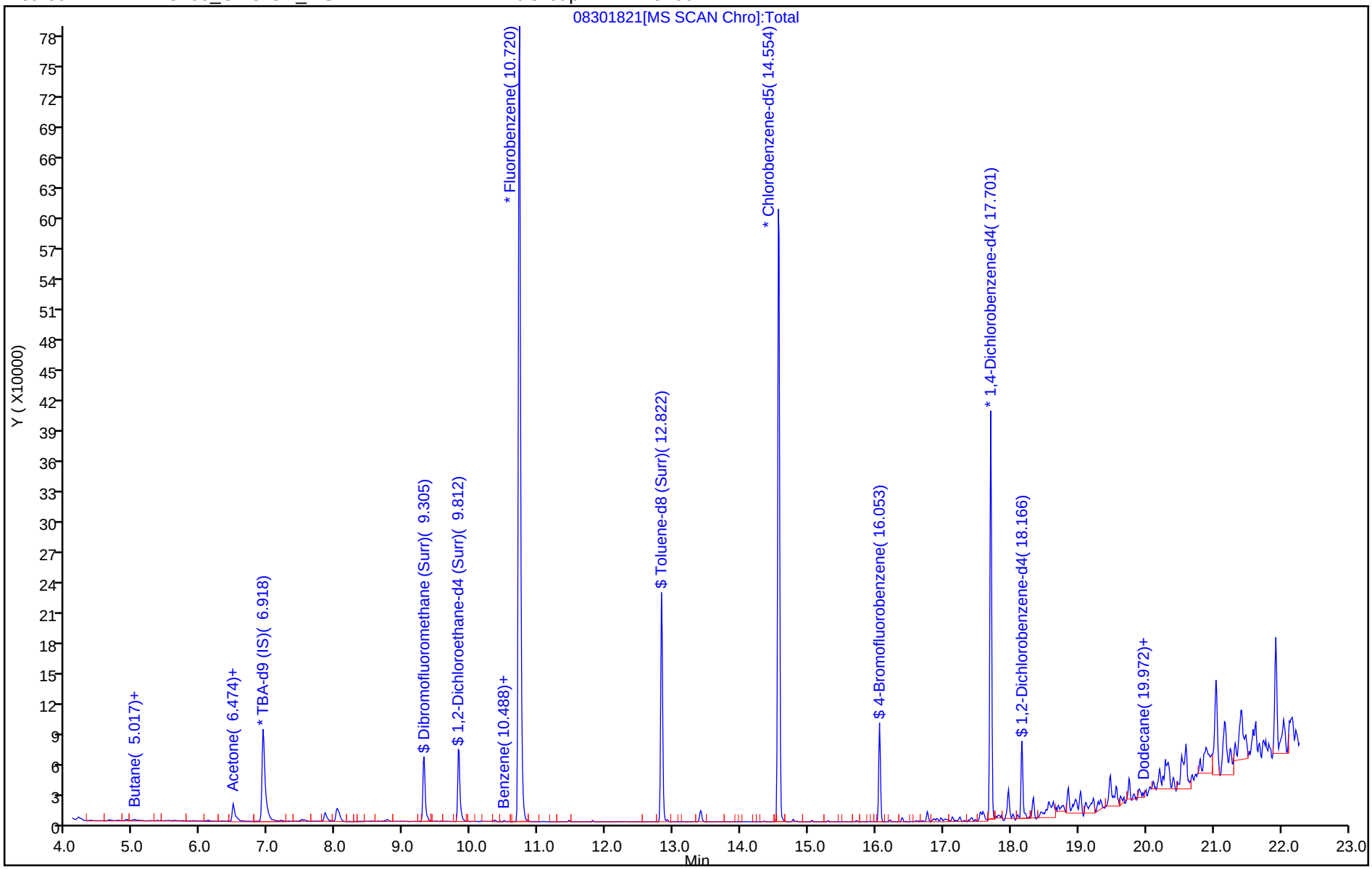
Reagents:

I_IS/SS_00092	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 31-Aug-2018 09:31:07 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\08301821.D				
Injection Date:	30-Aug-2018 17:09:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88240-B-4-A RR	Lab Sample ID:	Client 720-250555/21-A	Worklist Smp#:	21
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\08301821.D
Lims ID: 720-88240-B-4-A RR
Client ID:
Sample Type: Client
Inject. Date: 30-Aug-2018 17:09:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88240-B-4 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:44:08 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: sanjumnair Date: 31-Aug-2018 08:42:25

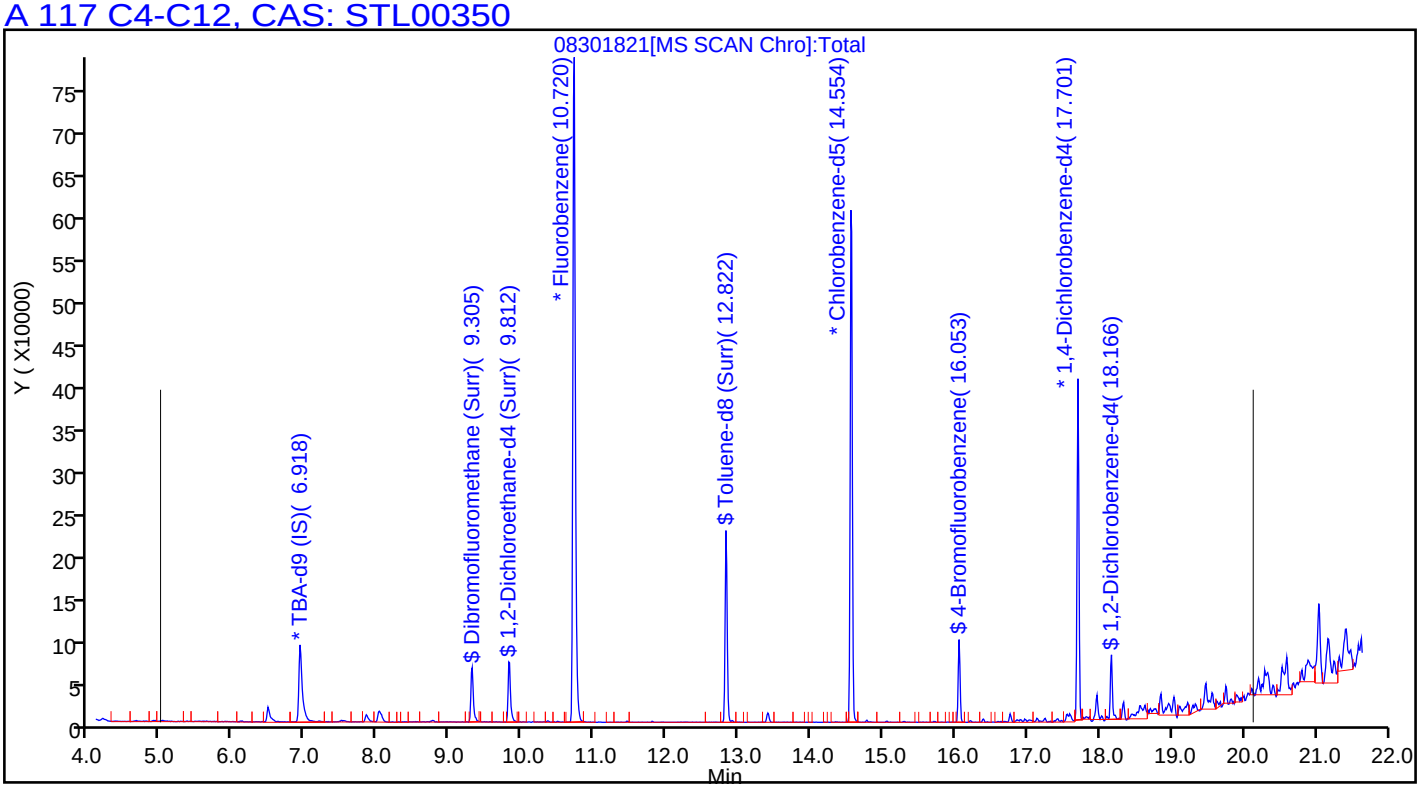
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	7.50	8.50	113.29
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	9.78	130.45
$ 10 Toluene-d8 (Surr)	7.50	5.93	79.00
$ 11 4-Bromofluorobenzene	7.50	5.67	75.66
$ 12 1,2-Dichlorobenzene-d4	6.00	5.72	95.37

Report Date: 31-Aug-2018 09:31:10 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53571.b\08301821.D				
Injection Date:	30-Aug-2018 17:09:30	Instrument ID:	CHMSV2		
Lims ID:	720-88240-B-4-A RR	Lab Sample ID:	Client 720-250555/21-A		
Client ID:					
Operator ID:	VOA	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88240-1
SDG No.:
Client Sample ID: DUP-36
Lab Sample ID: 720-88240-19
Matrix: Solid
Lab File ID: 08291838.D
Analysis Method: 8260B
Date Collected: 08/24/2018 00:00
Sample wt/vol: 5.495(g)
Date Analyzed: 08/30/2018 00:35
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250532
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.5	1.1
67-64-1	Acetone	50		45	35
71-43-2	Benzene	ND		4.5	0.59
75-27-4	Dichlorobromomethane	ND		4.5	0.66
108-86-1	Bromobenzene	ND	*	4.5	0.72
74-97-5	Chlorobromomethane	ND		18	0.66
75-25-2	Bromoform	ND		4.5	1.8
74-83-9	Bromomethane	ND		9.1	0.72
78-93-3	2-Butanone (MEK)	ND		45	19
104-51-8	n-Butylbenzene	ND	*	4.5	0.91
135-98-8	sec-Butylbenzene	ND	*	4.5	0.66
98-06-6	tert-Butylbenzene	ND	*	4.5	0.66
75-15-0	Carbon disulfide	ND	*	4.5	1.8
56-23-5	Carbon tetrachloride	ND		4.5	0.56
108-90-7	Chlorobenzene	ND		4.5	0.63
75-00-3	Chloroethane	ND		9.1	0.51
67-66-3	Chloroform	ND		4.5	0.60
74-87-3	Chloromethane	ND		9.1	0.72
95-49-8	2-Chlorotoluene	ND	*	4.5	0.59
106-43-4	4-Chlorotoluene	ND	*	4.5	0.62
124-48-1	Chlorodibromomethane	ND		4.5	0.65
95-50-1	1,2-Dichlorobenzene	ND	*	4.5	0.62
541-73-1	1,3-Dichlorobenzene	ND	*	4.5	0.66
106-46-7	1,4-Dichlorobenzene	ND	*	4.5	0.65
142-28-9	1,3-Dichloropropane	ND		4.5	0.66
563-58-6	1,1-Dichloropropene	ND		4.5	0.63
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	9.1	1.5
106-93-4	Ethylene Dibromide	ND		4.5	1.3
74-95-3	Dibromomethane	ND		9.1	0.78
75-71-8	Dichlorodifluoromethane	ND		9.1	0.72
75-34-3	1,1-Dichloroethane	ND		4.5	0.62
107-06-2	1,2-Dichloroethane	ND		4.5	0.69
75-35-4	1,1-Dichloroethene	ND	*	4.5	0.56
156-59-2	cis-1,2-Dichloroethene	ND		4.5	0.62
156-60-5	trans-1,2-Dichloroethene	ND		4.5	0.68
78-87-5	1,2-Dichloropropane	ND		4.5	0.57

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88240-1

SDG No.:

Client Sample ID: DUP-36 Lab Sample ID: 720-88240-19

Matrix: Solid Lab File ID: 08291838.D

Analysis Method: 8260B Date Collected: 08/24/2018 00:00

Sample wt/vol: 5.495(g) Date Analyzed: 08/30/2018 00:35

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250532 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.5	0.63
10061-02-6	trans-1,3-Dichloropropene	ND		4.5	0.61
100-41-4	Ethylbenzene	ND		4.5	0.68
87-68-3	Hexachlorobutadiene	ND	*	4.5	0.82
591-78-6	2-Hexanone	ND		45	9.1
98-82-8	Isopropylbenzene	ND		4.5	0.62
99-87-6	4-Isopropyltoluene	ND	*	4.5	2.3
75-09-2	Methylene Chloride	ND		9.1	5.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		45	9.1
91-20-3	Naphthalene	ND	*	9.1	1.4
103-65-1	N-Propylbenzene	ND	*	4.5	0.60
100-42-5	Styrene	ND		4.5	0.57
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.5	0.69
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	4.5	0.68
108-88-3	Toluene	ND		4.5	0.65
87-61-6	1,2,3-Trichlorobenzene	ND	*	4.5	0.67
120-82-1	1,2,4-Trichlorobenzene	ND	*	4.5	0.65
71-55-6	1,1,1-Trichloroethane	ND		4.5	0.56
79-00-5	1,1,2-Trichloroethane	ND		4.5	0.64
79-01-6	Trichloroethene	ND		4.5	0.57
75-69-4	Trichlorofluoromethane	ND		4.5	0.51
96-18-4	1,2,3-Trichloropropane	ND	*	4.5	0.70
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.5	1.9
95-63-6	1,2,4-Trimethylbenzene	ND	*	4.5	1.5
108-67-8	1,3,5-Trimethylbenzene	ND	*	4.5	0.59
108-05-4	Vinyl acetate	ND		18	4.5
75-01-4	Vinyl chloride	ND		4.5	0.66
1330-20-7	Xylenes, Total	ND		4.5	1.1
594-20-7	2,2-Dichloropropane	ND		4.5	1.8
STL00350	Gasoline Range Organics (GRO)-C4-C12	180	J	230	91

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88240-1

SDG No.:

Client Sample ID: DUP-36 Lab Sample ID: 720-88240-19

Matrix: Solid Lab File ID: 08291838.D

Analysis Method: 8260B Date Collected: 08/24/2018 00:00

Sample wt/vol: 5.495(g) Date Analyzed: 08/30/2018 00:35

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250532 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	123		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		60-140
2037-26-5	Toluene-d8 (Surr)	85		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180829-53559.b\08291838.D
Lims ID: 720-88240-A-19-A
Client ID: DUP-36
Sample Type: Client
Inject. Date: 30-Aug-2018 00:35:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88240-A-19
Operator ID: SF Instrument ID: HP9

Method: \\ChromNA\Pleasanton\ChromData\HP9\20180829-53559.b\HP9_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 09:47:11 Calib Date: 23-Aug-2018 18:09:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP9\20180823-53445.b\08231828.D

Column 1 : Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: medinaj Date: 30-Aug-2018 09:47:51

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.159	7.159	0.000	0	59315	250.0	
* 2 Fluorobenzene	96	10.936	10.936	0.000	99	571775	25.0	
* 4 Chlorobenzene-d5	117	14.763	14.764	-0.001	81	335694	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.903	17.903	0.000	90	100645	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.528	9.528	0.000	61	46737	8.06	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.045	10.045	0.000	0	33409	8.35	
$ 10 Toluene-d8 (Surr)	98	13.032	13.032	0.000	91	133695	6.39	
$ 11 4-Bromofluorobenzene	95	16.252	16.252	0.000	85	50202	9.23	
$ 12 1,2-Dichlorobenzene-d4	152	18.358	18.358	0.000	59	22458	5.79	
19 Vinyl chloride	62	5.052	5.093	-0.041	1	1652	0.0927	
28 Acetone	58	6.723	6.713	0.010	94	7451	27.5	
147 Ethyl acrylate	55	11.179	11.260	-0.081	1	580	0.1378	
64 2-Nitropropane	43	11.331	11.412	-0.081	1	164	0.2449	
144 Methylcyclohexane	83	12.019	12.029	-0.011	1	575	0.0356	
80 Ethylene Dibromide	107	13.801	13.812	-0.011	15	262	0.0923	
81 Tetrachloroethene	164	13.994	14.014	-0.010	82	24249	4.14	
148 1-Chlorohexane	55	14.652	14.672	-0.020	0	231	0.0331	
127 Butyl Ether	87	14.966	14.966	0.000	52	673	0.1480	
85 m-Xylene & p-Xylene	91	15.239	15.250	-0.011	18	3258	0.1901	
A 116 C4-C10	1	11.189	(5.123-17.255)		0	2033325	37.8	
A 153 C6-C8	1	11.194	(8.890-13.498)		0	523800	9.75	
A 154 C6-C9	1	12.161	(8.890-15.432)		0	1017875	18.9	
A 117 C4-C12	1	12.738	(5.123-20.353)		0	5261652	97.9	
A 123 Aviation Gas	1	12.991	(8.890-17.093)		0	1604545	NC	
A 119 C6-C10	1	13.072	(8.890-17.255)		0	1648047	30.7	
A 118 C5-C12	1	13.528	(6.703-20.353)		0	5068334	94.3	
A 120 C6-C12	1	14.622	(8.890-20.353)		0	4865207	90.5	
A 155 C8-C10	1	15.336	(13.417-17.255)		0	1124247	20.9	
A 121 C7-C12	1	15.786	(11.219-20.353)		0	4531491	84.3	
S 122 Xylenes, Total	1				0		0.1901	

QC Flag Legend

Processing Flags

NC - Not Calibrated

s - Failed ISTD Recovery Test

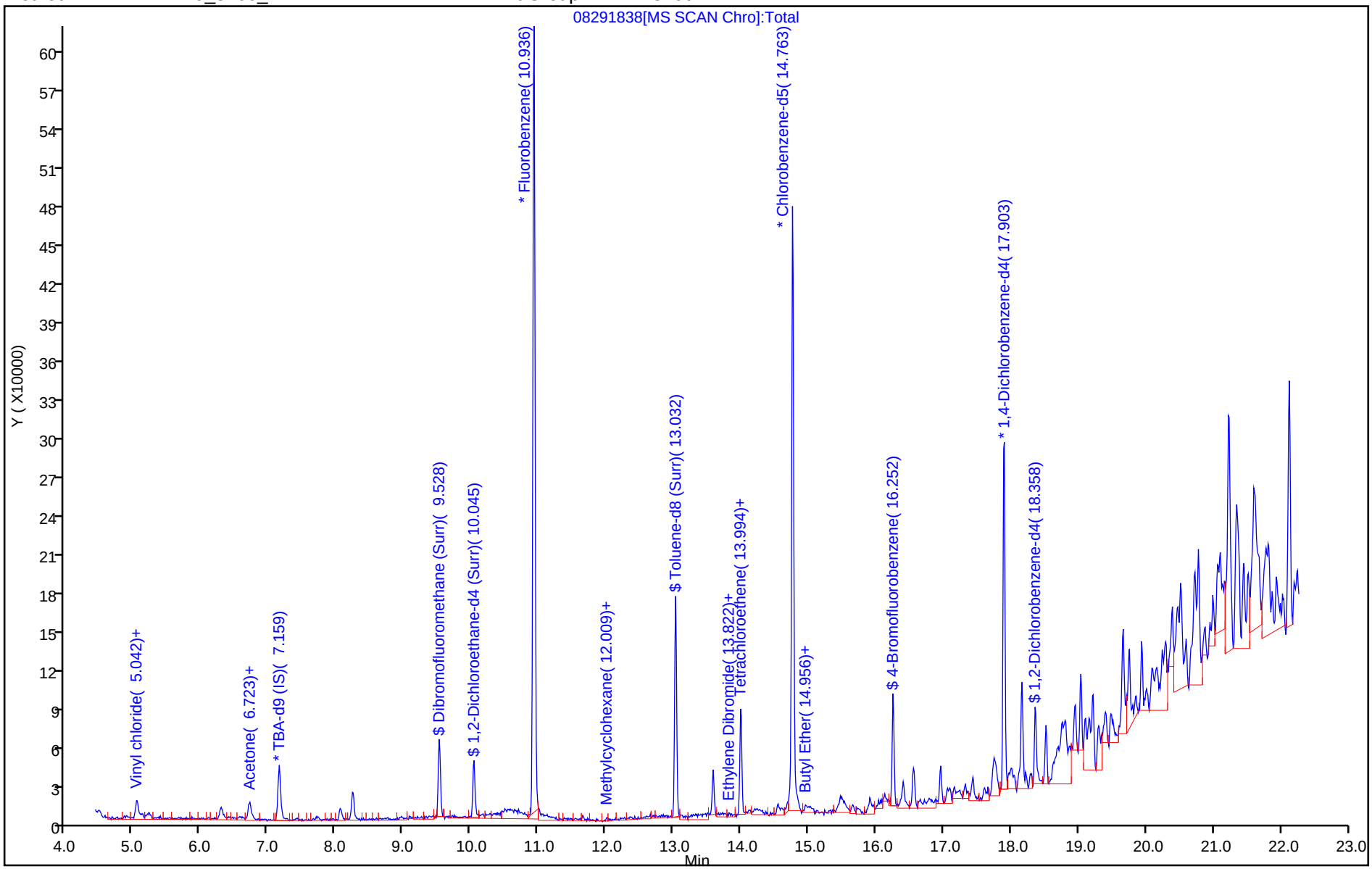
Reagents:

I_IS/SS_00092	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 30-Aug-2018 09:47:52 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180829-53559.b\08291838.D				
Injection Date:	30-Aug-2018 00:35:30	Instrument ID:	HP9	Operator ID:	SF
Lims ID:	720-88240-A-19-A	Lab Sample ID:	720-88240-19	Worklist Smp#:	14
Client ID:	DUP-36				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	HP9_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180829-53559.b\08291838.D
Lims ID: 720-88240-A-19-A
Client ID: DUP-36
Sample Type: Client
Inject. Date: 30-Aug-2018 00:35:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88240-A-19
Operator ID: SF Instrument ID: HP9

Method: \\ChromNA\Pleasanton\ChromData\HP9\20180829-53559.b\HP9_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 09:47:11 Calib Date: 23-Aug-2018 18:09:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP9\20180823-53445.b\08231828.D

Column 1 : Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: medinaj Date: 30-Aug-2018 09:47:51

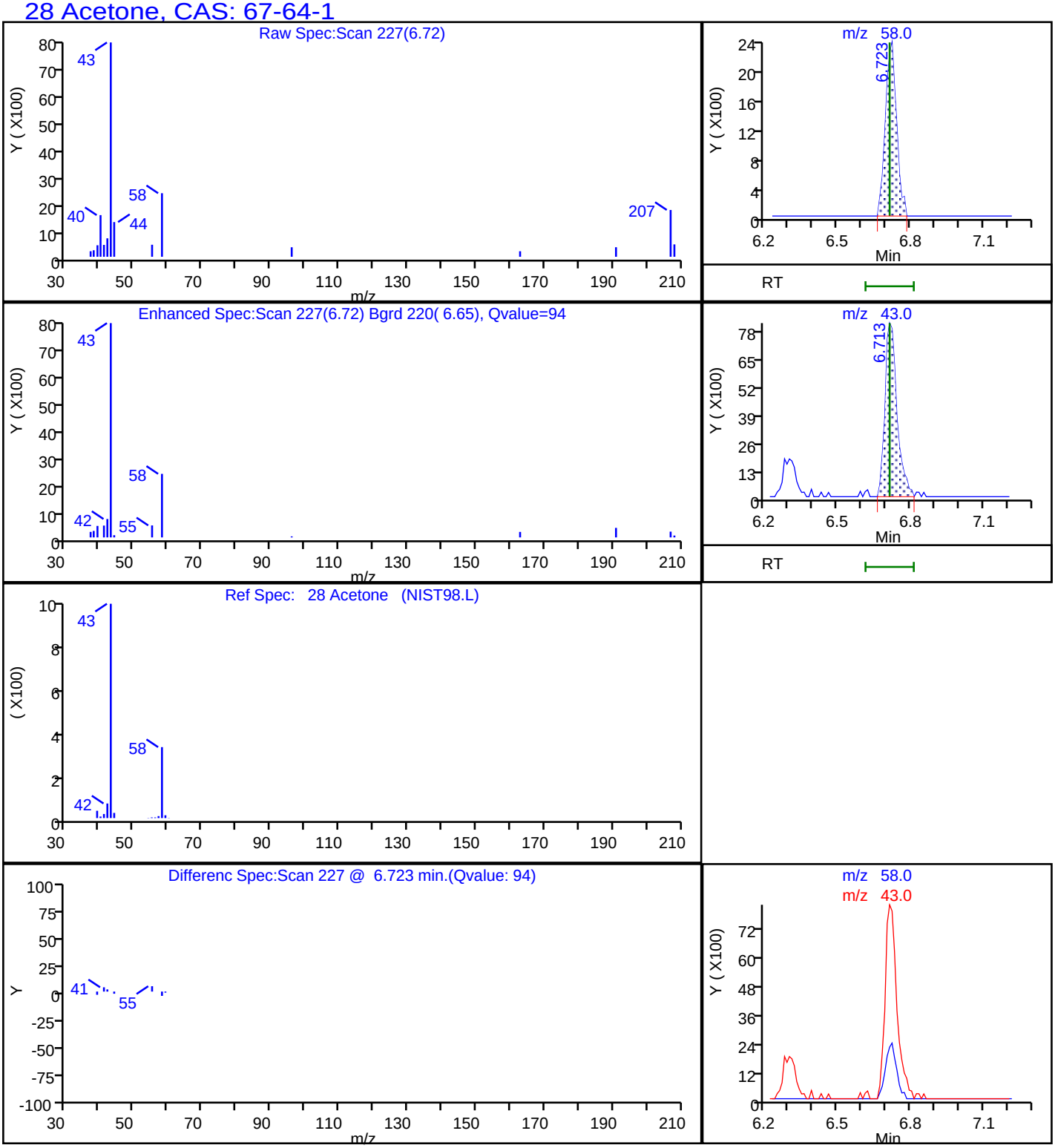
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.35	111.36
$ 10 Toluene-d8 (Surr)	7.50	6.39	85.23
$ 11 4-Bromofluorobenzene	7.50	9.23	123.03
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 30-Aug-2018 09:47:52 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180829-53559.b\08291838.D				
Injection Date:	30-Aug-2018 00:35:30	Instrument ID:	HP9		
Lims ID:	720-88240-A-19-A	Lab Sample ID:	720-88240-19		
Client ID:	DUP-36				
Operator ID:	SF	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1

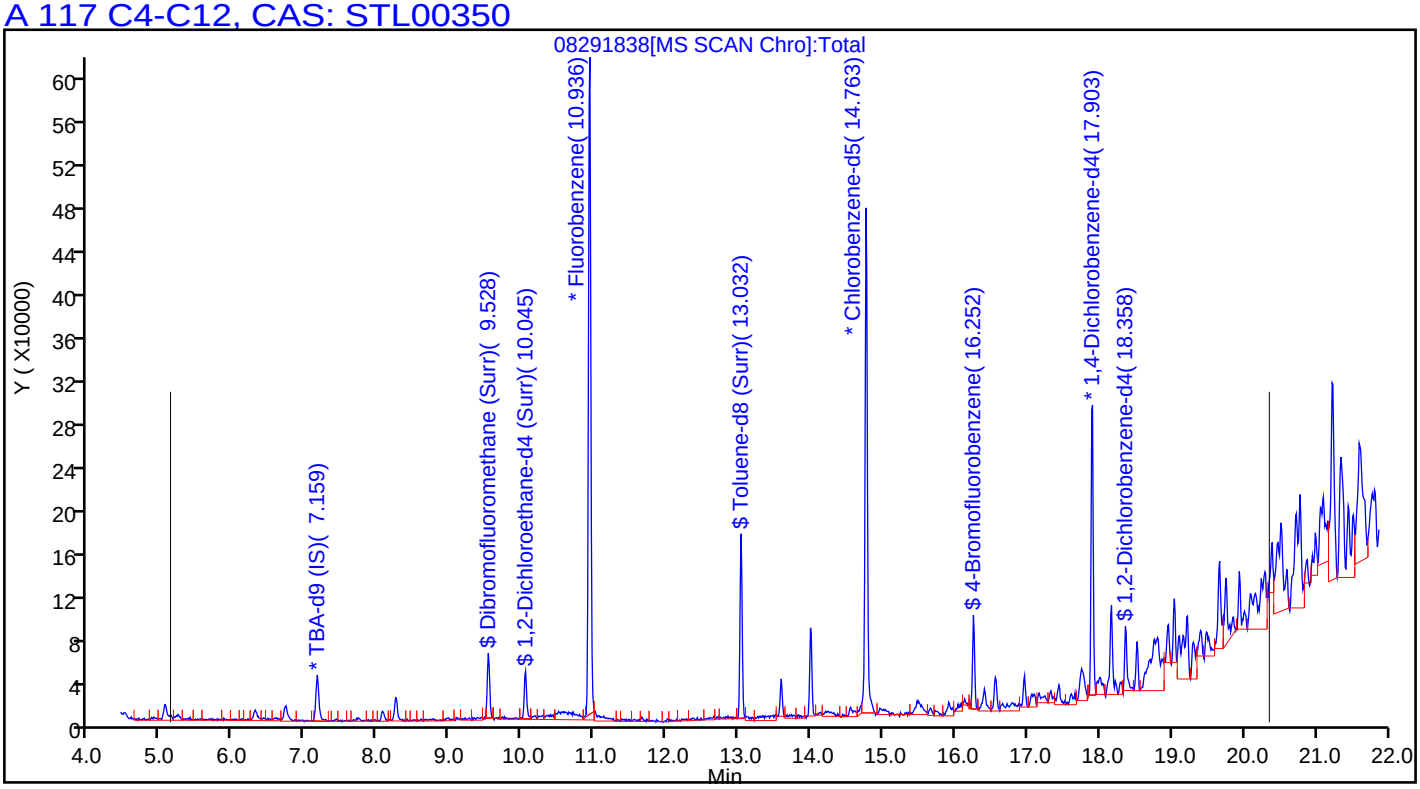


Report Date: 30-Aug-2018 09:47:53 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180829-53559.b\08291838.D				
Injection Date:	30-Aug-2018 00:35:30	Instrument ID:	HP9		
Lims ID:	720-88240-A-19-A	Lab Sample ID:	720-88240-19		
Client ID:	DUP-36				
Operator ID:	SF	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88240-1

SDG No.:

Client Sample ID: DUP-36 Lab Sample ID: 720-88240-19

Matrix: Solid Lab File ID: 09041817.D

Analysis Method: 8260B Date Collected: 08/24/2018 00:00

Sample wt/vol: 5.04(g) Date Analyzed: 09/04/2018 15:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250755 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	ND		5.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	74		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		60-140
2037-26-5	Toluene-d8 (Surr)	84		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\09041817.D
Lims ID: 720-88240-D-19-E RR SLEEVE
Client ID:
Sample Type: Client
Inject. Date: 04-Sep-2018 15:13:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88241-D-19 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 04-Sep-2018 15:42:00 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: medinaj Date: 04-Sep-2018 15:42:23

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	206102	250.0	
* 2 Fluorobenzene	96	10.720	10.709	0.011	98	1035464	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.564	0.000	85	655612	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	179914	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.305	9.314	0.001	92	69256	7.90	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.821	0.011	0	78416	8.32	
$ 10 Toluene-d8 (Surr)	98	12.821	12.834	0.000	94	257981	6.27	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	91	56663	5.55	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	83	35471	5.63	
28 Acetone	58	6.474	6.480	0.000	97	4055	5.10	
34 Methylene Chloride	84	7.182	7.199	-0.010	91	14565	1.86	
37 Carbon disulfide	76	7.477	7.485	0.000	97	17427	0.8841	
59 Benzene	78	10.487	10.498	0.000	1	770	0.0206	
147 Benzyl chloride	126	17.701	17.648	0.053	45	560	0.1601	
142 1,2,3-Trimethylbenzene	105	17.954	17.954	0.000	50	2124	0.0978	
111 1,2,4-Trichlorobenzene	180	20.510	20.542	-0.032	40	2556	0.4150	
126 Dodecane	57	19.993	20.088	-0.095	34	11330	NR	
125 C13	43	21.482	21.556	-0.074	50	8814	NR	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	510318	6.39	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	70853	0.8866	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	97522	1.22	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	6944873	86.9	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	306290	NC	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	306290	3.83	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	6920702	86.6	
A 120 C6-C12	1	14.400	(8.671-20.130)		0	6740845	84.4	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	250576	3.14	
A 121 C7-C12	1	15.567	(11.005-20.130)		0	6698963	83.8	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard
NC - Not Calibrated
s - Failed ISTD Recovery Test

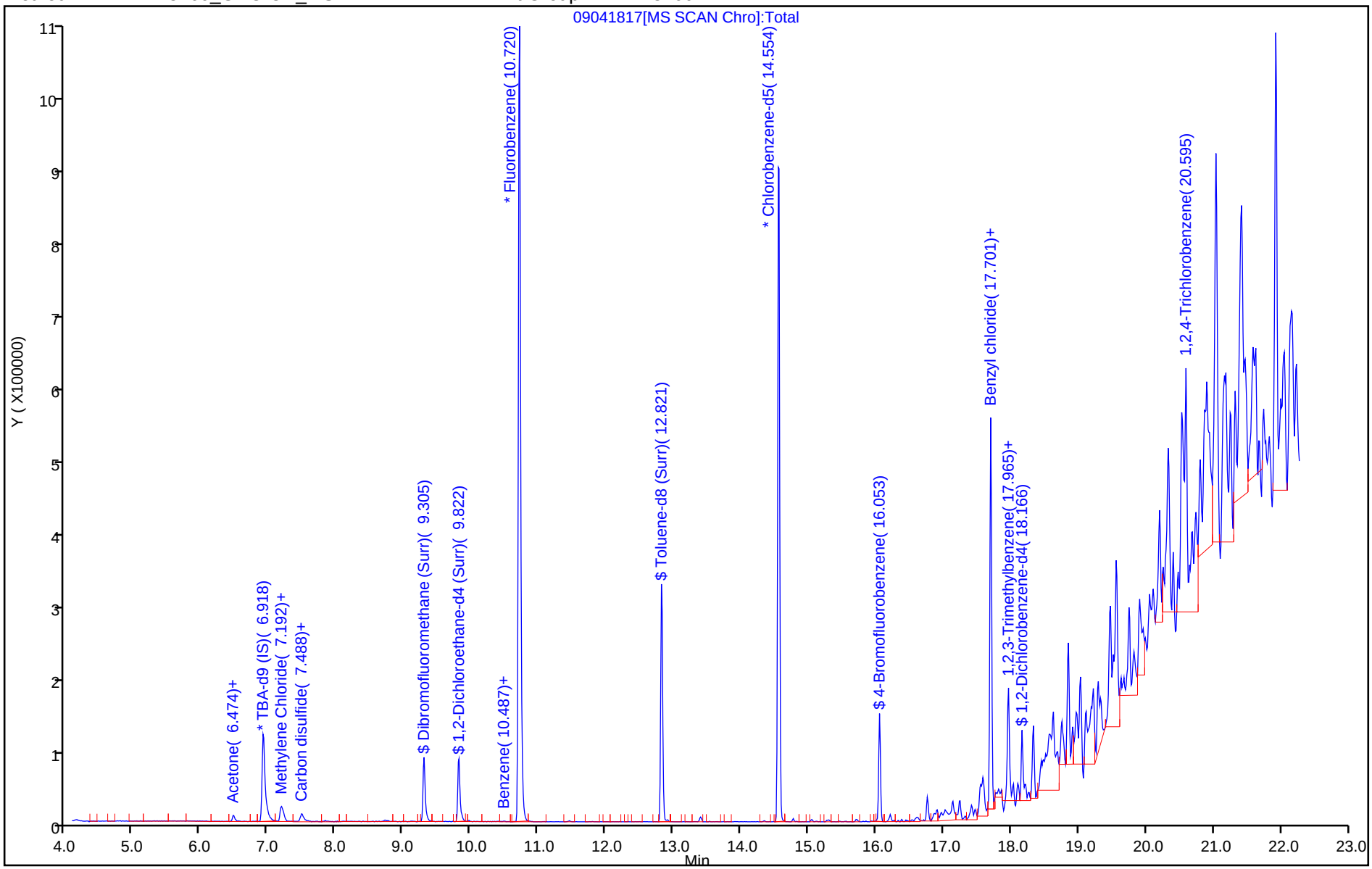
Reagents:

I_IS/SS_00092	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 04-Sep-2018 15:42:23 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\09041817.D				
Injection Date:	04-Sep-2018 15:13:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88240-D-19-E RR SLEEVE	Lab Sample ID:	Client 720-250755/17-A	Worklist Smp#:	17
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\09041817.D
Lims ID: 720-88240-D-19-E RR SLEEVE
Client ID:
Sample Type: Client
Inject. Date: 04-Sep-2018 15:13:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88241-D-19 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180904-53634.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 04-Sep-2018 15:42:00 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: medinaj Date: 04-Sep-2018 15:42:23

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	7.50	7.90	105.28
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.32	110.96
$ 10 Toluene-d8 (Surr)	7.50	6.27	83.66
$ 11 4-Bromofluorobenzene	7.50	5.55	74.00
$ 12 1,2-Dichlorobenzene-d4	6.00	5.63	93.91

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88240-1

SDG No.:

Client Sample ID: DUP-13 Lab Sample ID: 720-88240-20

Matrix: Solid Lab File ID: 08301827.D

Analysis Method: 8260B Date Collected: 08/24/2018 00:00

Sample wt/vol: 6.957(g) Date Analyzed: 08/30/2018 20:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250622 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		3.6	0.86
67-64-1	Acetone	68		36	27
71-43-2	Benzene	ND		3.6	0.47
75-27-4	Dichlorobromomethane	ND		3.6	0.52
108-86-1	Bromobenzene	ND		3.6	0.57
74-97-5	Chlorobromomethane	ND		14	0.52
75-25-2	Bromoform	ND		3.6	1.4
74-83-9	Bromomethane	ND		7.2	0.57
78-93-3	2-Butanone (MEK)	ND		36	15
104-51-8	n-Butylbenzene	0.73	J	3.6	0.72
135-98-8	sec-Butylbenzene	0.80	J	3.6	0.52
98-06-6	tert-Butylbenzene	0.67	J	3.6	0.52
75-15-0	Carbon disulfide	ND	*	3.6	1.4
56-23-5	Carbon tetrachloride	ND		3.6	0.45
108-90-7	Chlorobenzene	ND		3.6	0.50
75-00-3	Chloroethane	ND		7.2	0.40
67-66-3	Chloroform	ND		3.6	0.47
74-87-3	Chloromethane	ND		7.2	0.57
95-49-8	2-Chlorotoluene	ND		3.6	0.47
106-43-4	4-Chlorotoluene	ND		3.6	0.49
124-48-1	Chlorodibromomethane	ND		3.6	0.51
95-50-1	1,2-Dichlorobenzene	ND		3.6	0.49
541-73-1	1,3-Dichlorobenzene	ND		3.6	0.52
106-46-7	1,4-Dichlorobenzene	ND		3.6	0.51
142-28-9	1,3-Dichloropropane	ND		3.6	0.52
563-58-6	1,1-Dichloropropene	ND		3.6	0.50
96-12-8	1,2-Dibromo-3-Chloropropane	ND		7.2	1.2
106-93-4	Ethylene Dibromide	ND		3.6	1.0
74-95-3	Dibromomethane	ND		7.2	0.62
75-71-8	Dichlorodifluoromethane	ND		7.2	0.57
75-34-3	1,1-Dichloroethane	ND		3.6	0.49
107-06-2	1,2-Dichloroethane	ND		3.6	0.55
75-35-4	1,1-Dichloroethene	ND	*	3.6	0.45
156-59-2	cis-1,2-Dichloroethene	ND		3.6	0.49
156-60-5	trans-1,2-Dichloroethene	ND		3.6	0.54
78-87-5	1,2-Dichloropropane	ND		3.6	0.45

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton | Job No.: 720-88240-1

SDG No.:

Client Sample ID: DUP-13 | Lab Sample ID: 720-88240-20

Matrix: Solid | Lab File ID: 08301827.D

Analysis Method: 8260B | Date Collected: 08/24/2018 00:00

Sample wt/vol: 6.957(g) | Date Analyzed: 08/30/2018 20:45

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-VRX ID: 250(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 250622 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		3.6	0.50
10061-02-6	trans-1,3-Dichloropropene	ND		3.6	0.48
100-41-4	Ethylbenzene	ND		3.6	0.54
87-68-3	Hexachlorobutadiene	ND		3.6	0.65
591-78-6	2-Hexanone	ND		36	7.2
98-82-8	Isopropylbenzene	ND		3.6	0.49
99-87-6	4-Isopropyltoluene	5.0		3.6	1.8
75-09-2	Methylene Chloride	ND		7.2	4.0
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		36	7.2
91-20-3	Naphthalene	ND		7.2	1.1
103-65-1	N-Propylbenzene	0.63	J	3.6	0.47
100-42-5	Styrene	ND		3.6	0.45
630-20-6	1,1,1,2-Tetrachloroethane	ND		3.6	0.55
79-34-5	1,1,2,2-Tetrachloroethane	ND		3.6	0.54
127-18-4	Tetrachloroethene	ND		3.6	0.48
108-88-3	Toluene	0.52	J	3.6	0.51
87-61-6	1,2,3-Trichlorobenzene	ND		3.6	0.53
120-82-1	1,2,4-Trichlorobenzene	ND		3.6	0.51
71-55-6	1,1,1-Trichloroethane	ND		3.6	0.44
79-00-5	1,1,2-Trichloroethane	ND		3.6	0.50
79-01-6	Trichloroethene	ND		3.6	0.45
75-69-4	Trichlorofluoromethane	ND		3.6	0.40
96-18-4	1,2,3-Trichloropropane	ND		3.6	0.55
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.6	1.5
95-63-6	1,2,4-Trimethylbenzene	ND		3.6	1.2
108-67-8	1,3,5-Trimethylbenzene	0.59	J	3.6	0.47
108-05-4	Vinyl acetate	ND		14	3.6
75-01-4	Vinyl chloride	ND		3.6	0.52
1330-20-7	Xylenes, Total	ND		3.6	0.88
594-20-7	2,2-Dichloropropane	ND		3.6	1.4
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		180	72

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88240-1

SDG No.:

Client Sample ID: DUP-13 Lab Sample ID: 720-88240-20

Matrix: Solid Lab File ID: 08301827.D

Analysis Method: 8260B Date Collected: 08/24/2018 00:00

Sample wt/vol: 6.957(g) Date Analyzed: 08/30/2018 20:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250622 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	93		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		60-140
2037-26-5	Toluene-d8 (Surr)	97		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\08301827.D
Lims ID: 720-88240-A-20-A
Client ID: DUP-13
Sample Type: Client
Inject. Date: 30-Aug-2018 20:45:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88240-A-20
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 31-Aug-2018 06:08:09 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 08:59:29

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.092	7.095	-0.003	98	180924	250.0	
* 2 Fluorobenzene	96	10.900	10.902	-0.002	98	945106	25.0	
* 4 Chlorobenzene-d5	117	14.748	14.740	0.008	85	601069	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.877	17.879	-0.002	96	248952	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.482	9.483	-0.002	54	65073	7.58	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.009	10.000	0.008	97	67213	7.99	
$ 10 Toluene-d8 (Surr)	98	13.006	13.007	-0.002	92	246773	7.26	
$ 11 4-Bromofluorobenzene	95	16.236	16.248	-0.002	92	75945	6.95	
$ 12 1,2-Dichlorobenzene-d4	152	18.343	18.344	-0.002	78	55692	6.06	
28 Acetone	58	6.647	6.638	0.008	100	27863	47.6	
34 Methylene Chloride	84	7.356	7.357	-0.002	39	762	0.0898	
44 2-Butanone (MEK)	72	8.935	8.927	0.008	75	3907	5.30	
59 Benzene	78	10.677	10.668	0.008	1	2476	0.0672	
144 Methylcyclohexane	83	11.994	11.994	-0.002	26	2993	0.1648	
75 Toluene	92	13.097	13.097	0.008	59	7810	0.3589	
148 1-Chlorohexane	55	14.647	14.647	-0.002	67	4462	0.4291	
126 Butyl Ether	87	14.950	14.951	0.008	74	3280	0.5019	
84 Ethylbenzene	91	15.011	15.012	0.008	1	5300	0.1334	
85 m-Xylene & p-Xylene	91	15.224	15.235	-0.002	0	10124	0.3232	
92 Isopropylbenzene	105	16.176	16.177	0.008	49	10739	0.2566	
94 N-Propylbenzene	91	16.712	16.713	-0.002	66	16325	0.4402	
97 4-Chlorotoluene	91	16.955	16.946	0.008	1	3178	0.1427	
98 1,3,5-Trimethylbenzene	105	17.067	17.068	-0.002	56	11248	0.4122	
100 tert-Butylbenzene	119	17.441	17.432	0.008	49	11340	0.4673	
101 1,2,4-Trimethylbenzene	105	17.573	17.574	-0.002	72	19790	0.7275	
102 sec-Butylbenzene	105	17.715	17.716	-0.002	50	20357	0.5585	
103 1,3-Dichlorobenzene	146	17.836	17.827	0.008	1	1245	0.0800	
104 1,4-Dichlorobenzene	146	17.917	17.918	-0.002	1	1686	0.1076	
105 4-Isopropyltoluene	119	17.938	17.928	0.008	45	107331	3.49	
136 1,2,3-Trimethylbenzene	105	18.120	18.121	-0.002	46	10507	0.3773	
107 n-Butylbenzene	91	18.454	18.455	-0.002	70	14129	0.5097	
141 1,3,5-Trichlorobenzene	180	20.024	20.014	0.008	1	1954	0.1567	

Report Date: 31-Aug-2018 08:59:29 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\08301827.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
130 n-Octane	43	13.391	13.388	0.003	41	1842	NR	
132 n-Nonane	57	15.345	15.343	0.002	53	3815	NR	
99 n-Decane	57	17.107	17.105	0.002	54	4223	NR	
A 116 C4-C10	1	11.085	(5.035-17.135)		0	1580570	20.1	
A 153 C6-C8	1	11.148	(8.836-13.459)		0	381812	4.85	
A 154 C6-C9	1	12.105	(8.836-15.373)		0	630171	8.01	
A 117 C4-C12	1	12.645	(5.035-20.255)		0	2236733	28.4	
A 119 C6-C10	1	12.986	(8.836-17.135)		0	871873	11.1	
A 118 C5-C12	1	13.429	(6.604-20.255)		0	2083067	26.5	
A 120 C6-C12	1	14.546	(8.836-20.255)		0	1501768	19.1	
A 155 C8-C10	1	15.241	(13.348-17.135)		0	501931	6.38	
A 121 C7-C12	1	15.720	(11.186-20.255)		0	1322513	16.8	
S 122 Xylenes, Total	1				0		0.3232	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

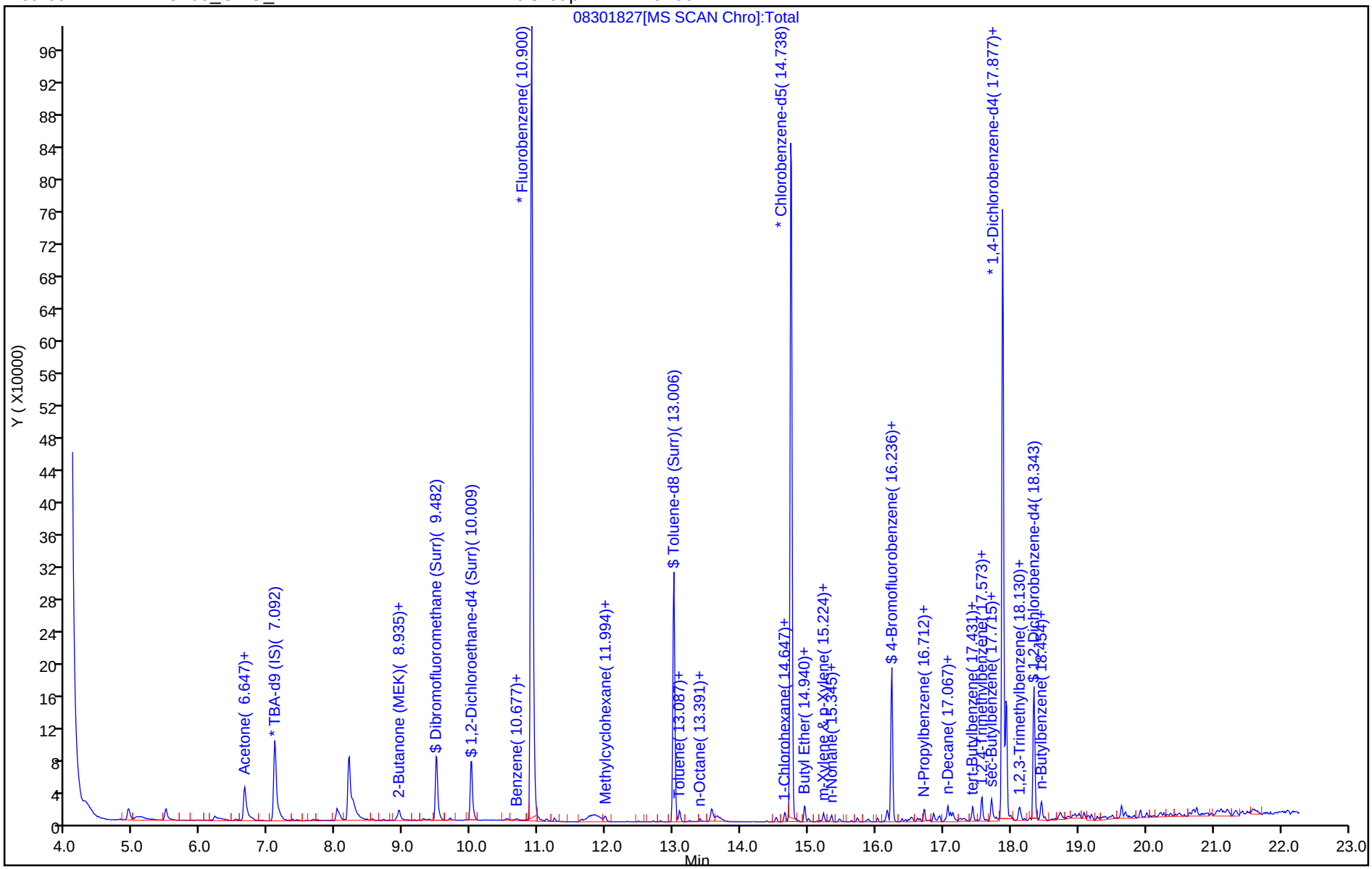
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 08:59:29 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\08301827.D				
Injection Date:	30-Aug-2018 20:45:30	Instrument ID:	HP7	Operator ID:	SF
Lims ID:	720-88240-A-20-A	Lab Sample ID:	720-88240-20	Worklist Smp#:	9
Client ID:	DUP-13				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260_GRO_HP7	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\08301827.D
Lims ID: 720-88240-A-20-A
Client ID: DUP-13
Sample Type: Client
Inject. Date: 30-Aug-2018 20:45:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88240-A-20
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 31-Aug-2018 06:08:09 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 08:59:29

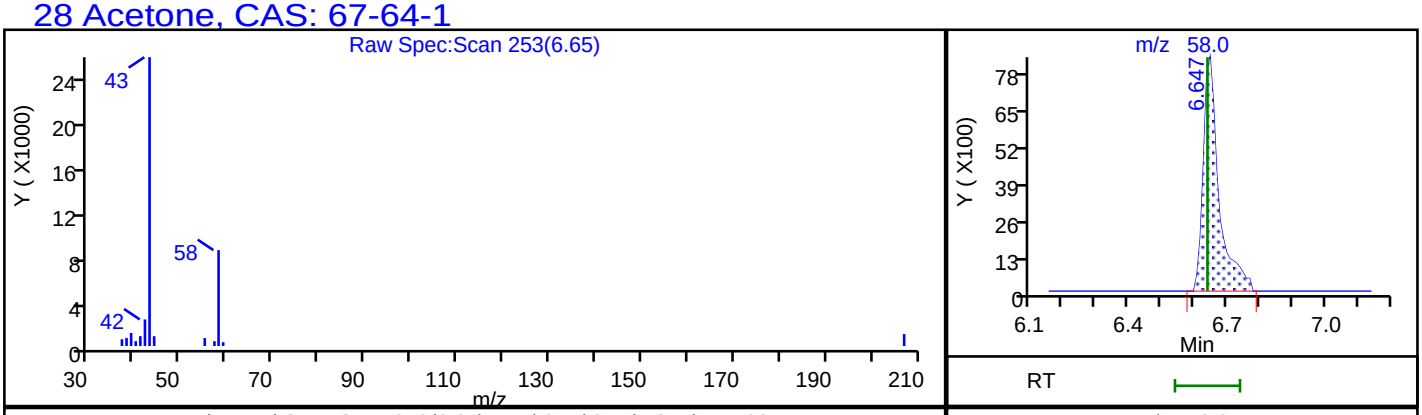
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.99	106.48
$ 10 Toluene-d8 (Surr)	7.50	7.26	96.74
$ 11 4-Bromofluorobenzene	7.50	6.95	92.66
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

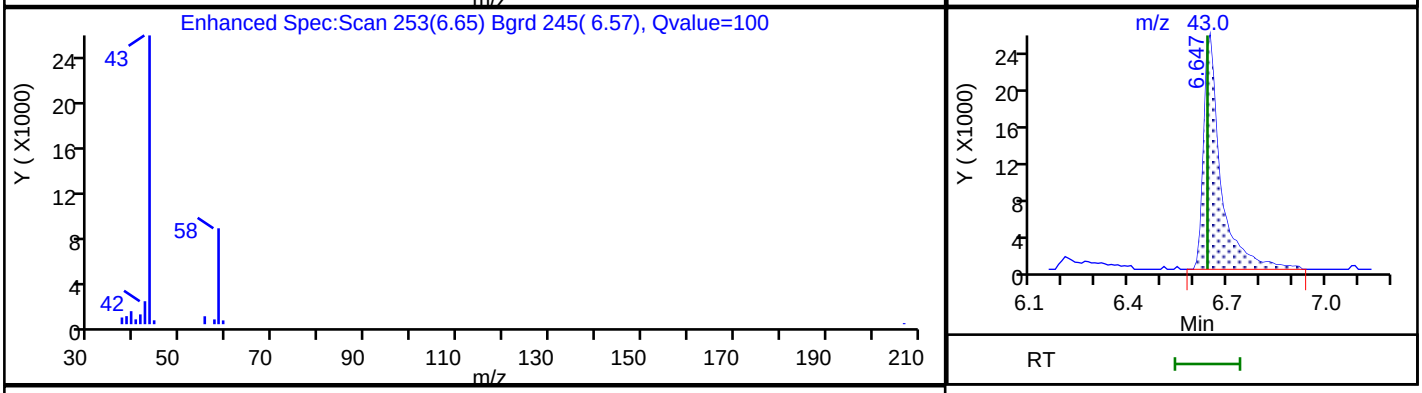
Report Date: 31-Aug-2018 08:59:29 Chrom Revision: 2.3 19-Jul-2018 15:14:50

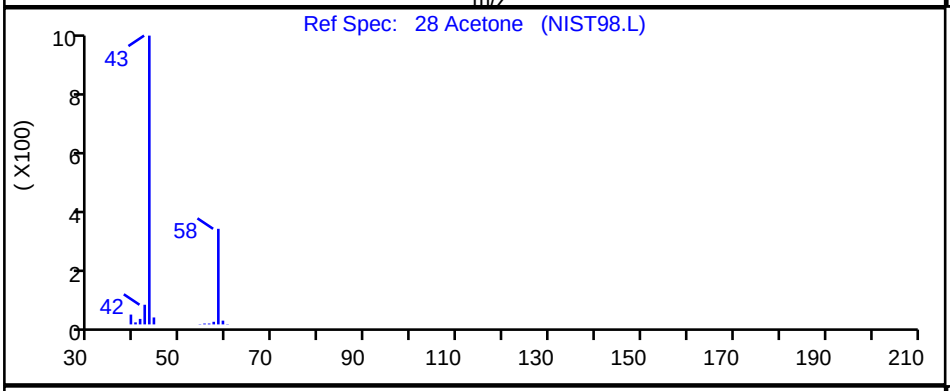
TestAmerica Pleasanton

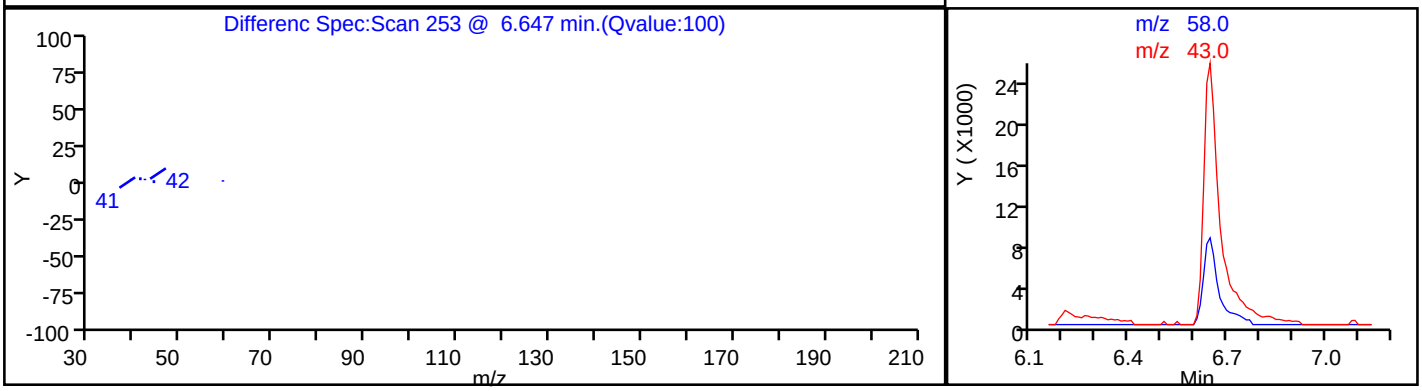
Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\08301827.D				
Injection Date:	30-Aug-2018 20:45:30	Instrument ID:	HP7		
Lims ID:	720-88240-A-20-A	Lab Sample ID:	720-88240-20		
Client ID:	DUP-13				
Operator ID:	SF	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1







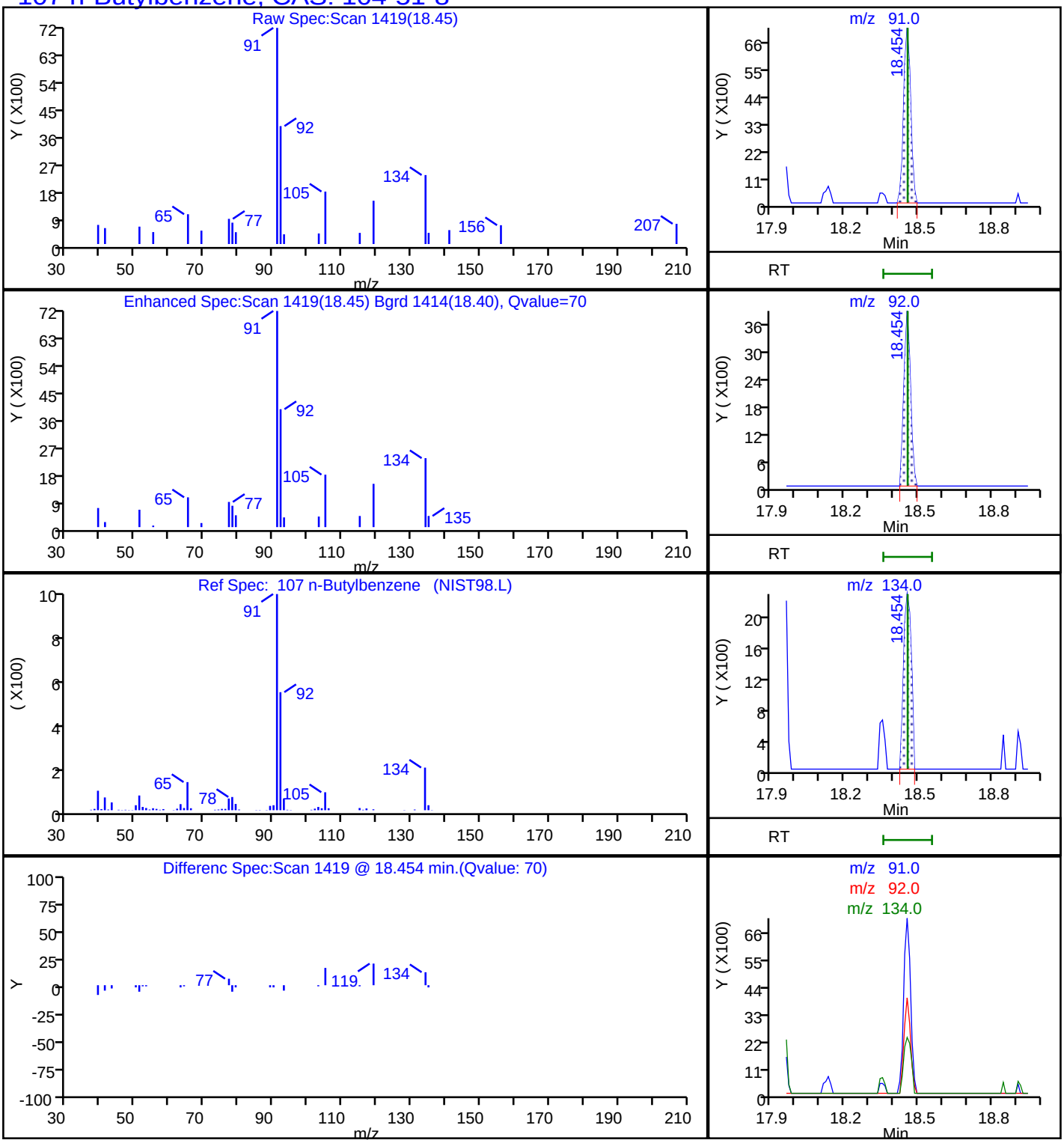


Report Date: 31-Aug-2018 08:59:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\08301827.D				
Injection Date:	30-Aug-2018 20:45:30	Instrument ID:	HP7		
Lims ID:	720-88240-A-20-A	Lab Sample ID:	720-88240-20		
Client ID:	DUP-13				
Operator ID:	SF	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

107 n-Butylbenzene, CAS: 104-51-8

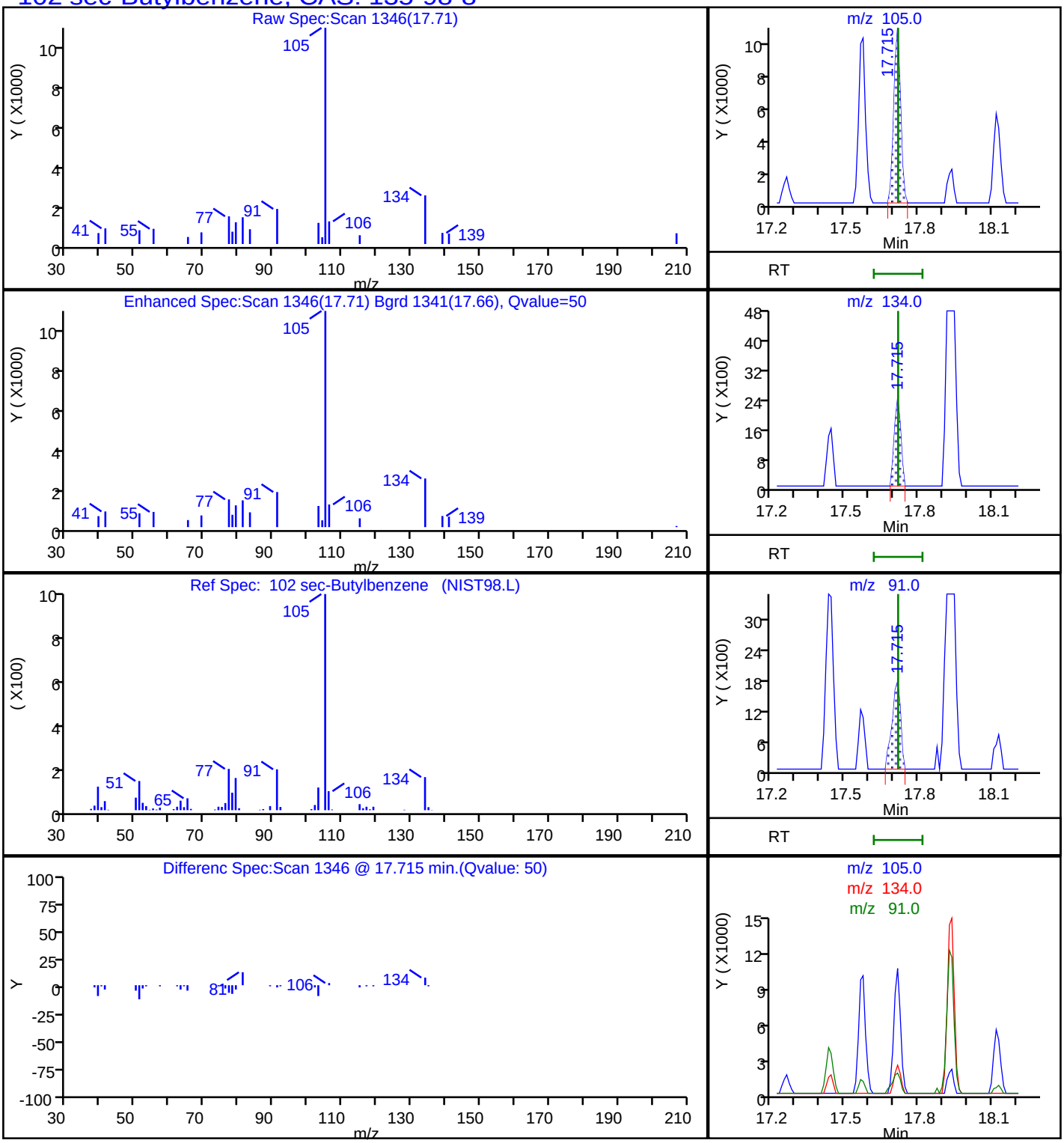


Report Date: 31-Aug-2018 08:59:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\08301827.D				
Injection Date:	30-Aug-2018 20:45:30	Instrument ID:	HP7		
Lims ID:	720-88240-A-20-A	Lab Sample ID:	720-88240-20		
Client ID:	DUP-13				
Operator ID:	SF	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

102 sec-Butylbenzene, CAS: 135-98-8

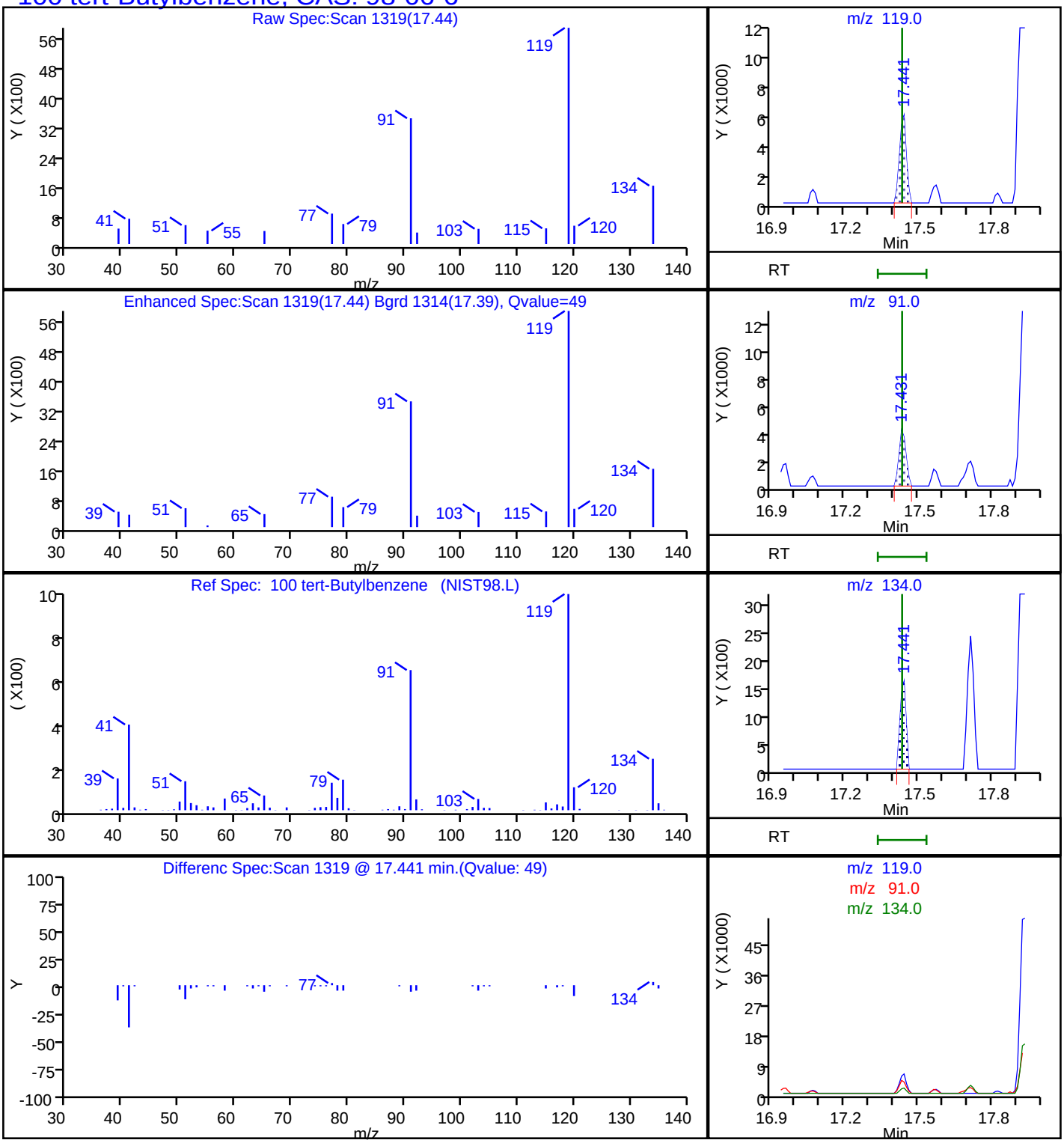


Report Date: 31-Aug-2018 08:59:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\08301827.D				
Injection Date:	30-Aug-2018 20:45:30	Instrument ID:	HP7		
Lims ID:	720-88240-A-20-A	Lab Sample ID:	720-88240-20		
Client ID:	DUP-13				
Operator ID:	SF	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

100 tert-Butylbenzene, CAS: 98-06-6

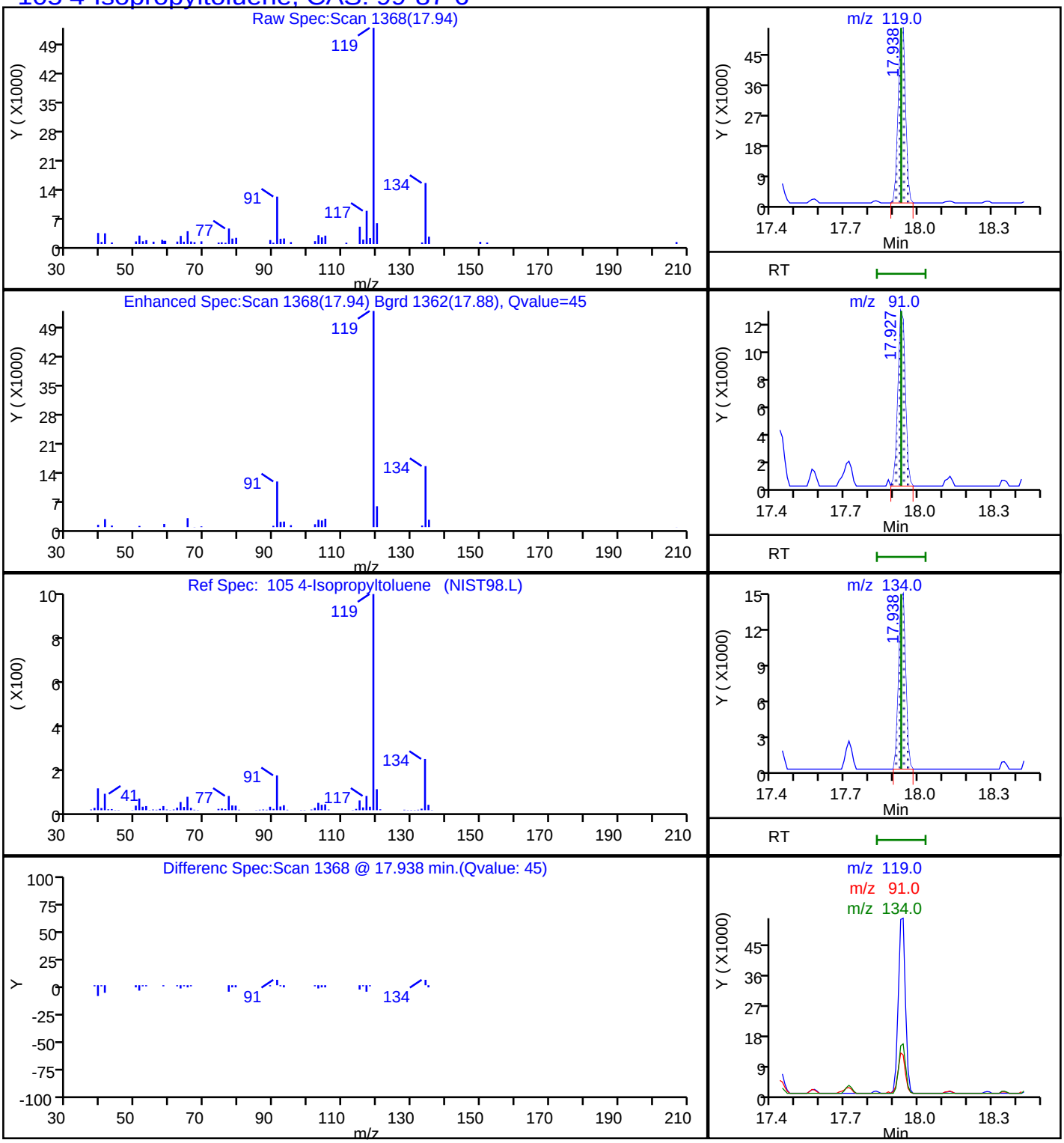


Report Date: 31-Aug-2018 08:59:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\08301827.D				
Injection Date:	30-Aug-2018 20:45:30	Instrument ID:	HP7		
Lims ID:	720-88240-A-20-A	Lab Sample ID:	720-88240-20		
Client ID:	DUP-13				
Operator ID:	SF	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

105 4-Isopropyltoluene, CAS: 99-87-6

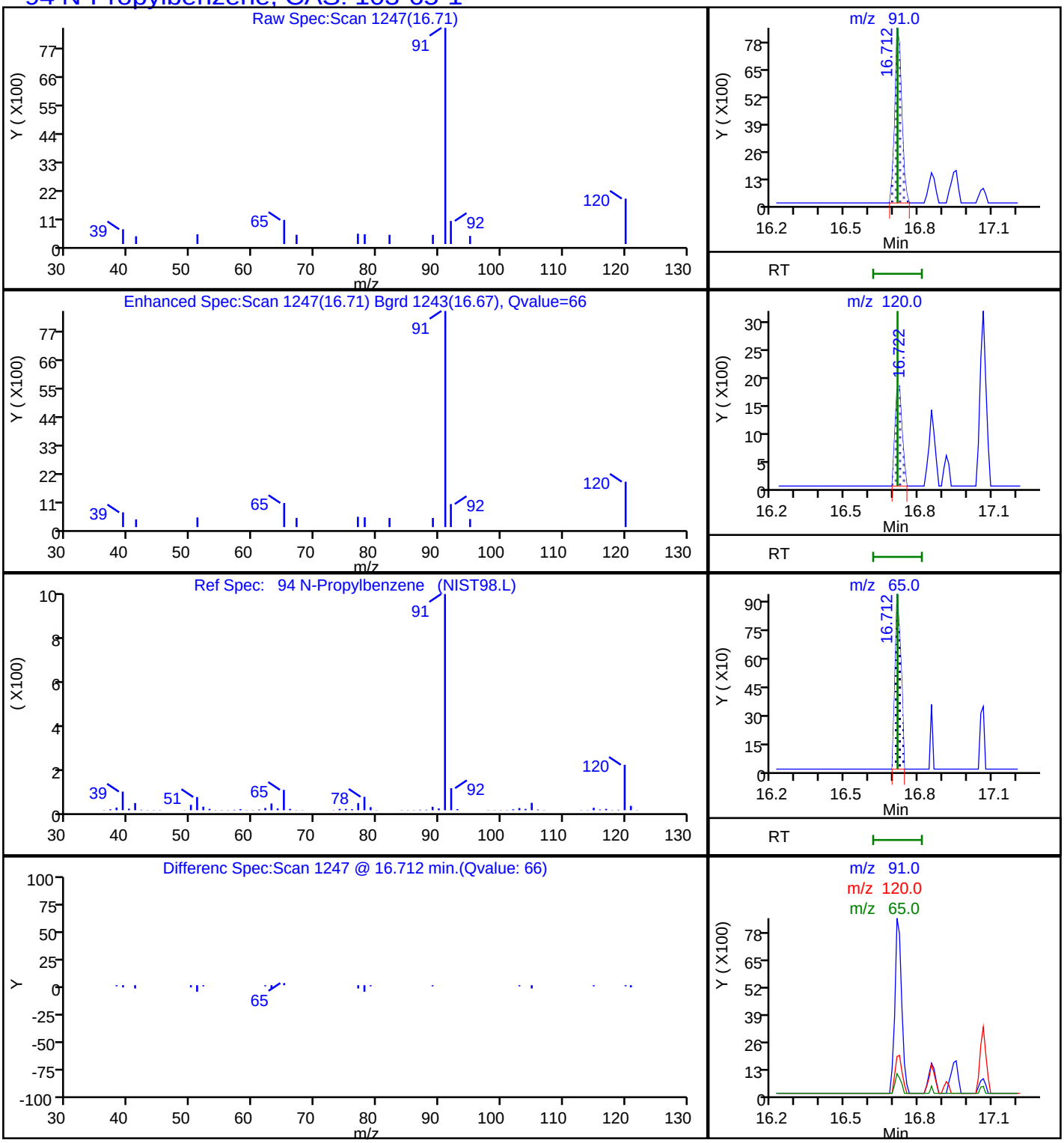


Report Date: 31-Aug-2018 08:59:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\08301827.D				
Injection Date:	30-Aug-2018 20:45:30	Instrument ID:	HP7		
Lims ID:	720-88240-A-20-A	Lab Sample ID:	720-88240-20		
Client ID:	DUP-13				
Operator ID:	SF	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

94 N-Propylbenzene, CAS: 103-65-1

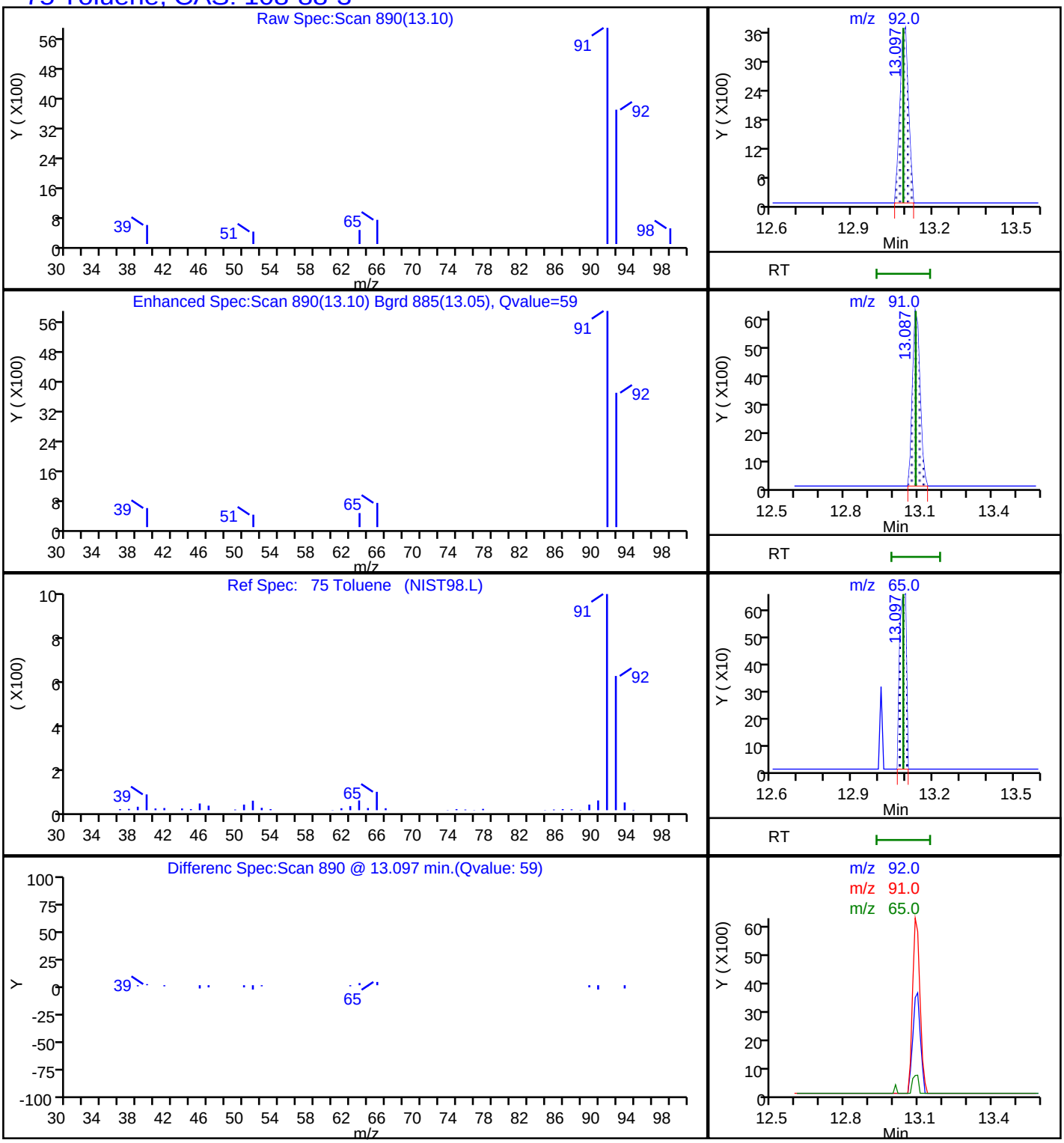


Report Date: 31-Aug-2018 08:59:29 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\08301827.D				
Injection Date:	30-Aug-2018 20:45:30	Instrument ID:	HP7		
Lims ID:	720-88240-A-20-A	Lab Sample ID:	720-88240-20		
Client ID:	DUP-13				
Operator ID:	SF	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

75 Toluene, CAS: 108-88-3

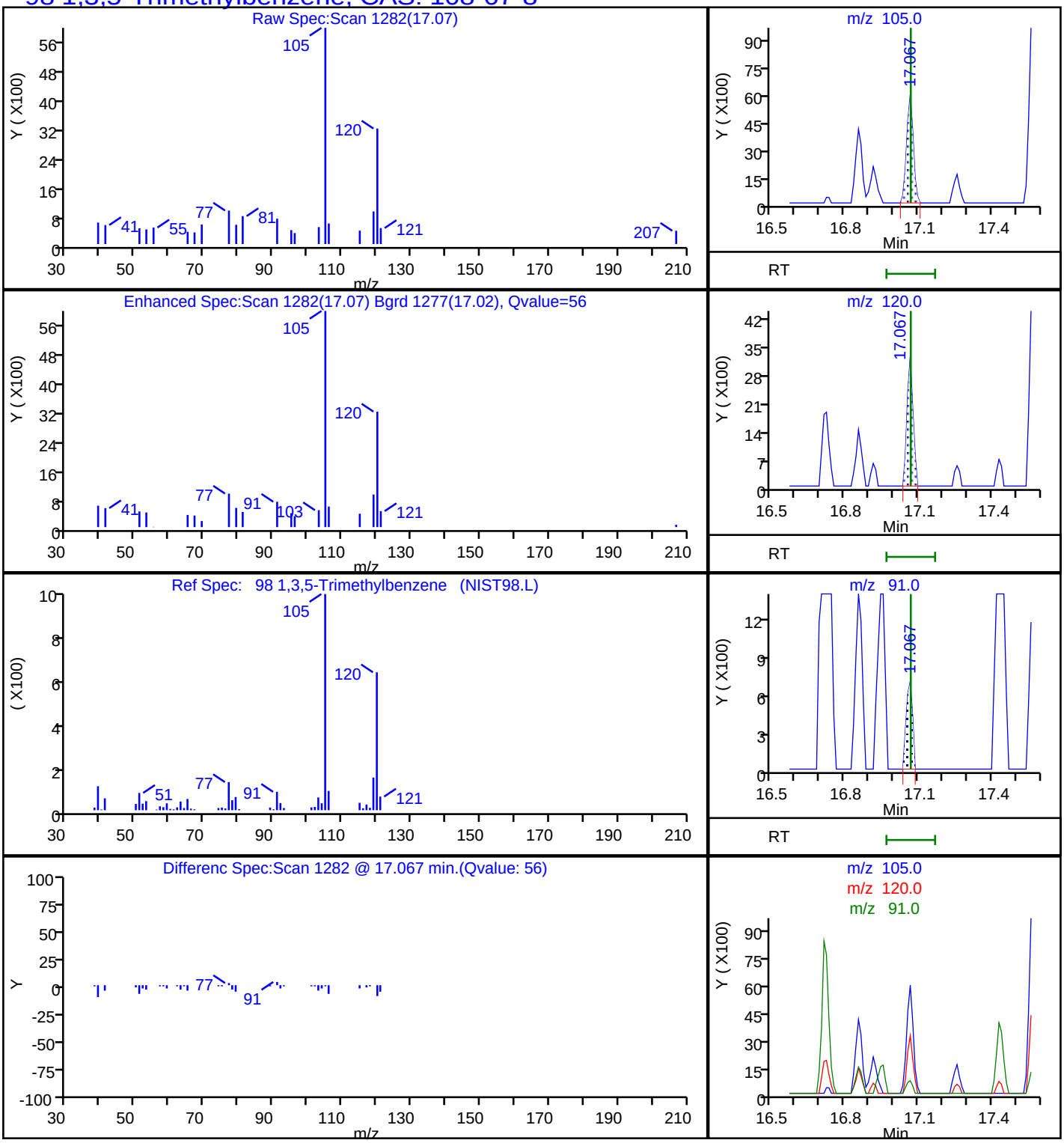


Report Date: 31-Aug-2018 08:59:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\08301827.D				
Injection Date:	30-Aug-2018 20:45:30	Instrument ID:	HP7		
Lims ID:	720-88240-A-20-A	Lab Sample ID:	720-88240-20		
Client ID:	DUP-13				
Operator ID:	SF	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

98 1,3,5-Trimethylbenzene, CAS: 108-67-8

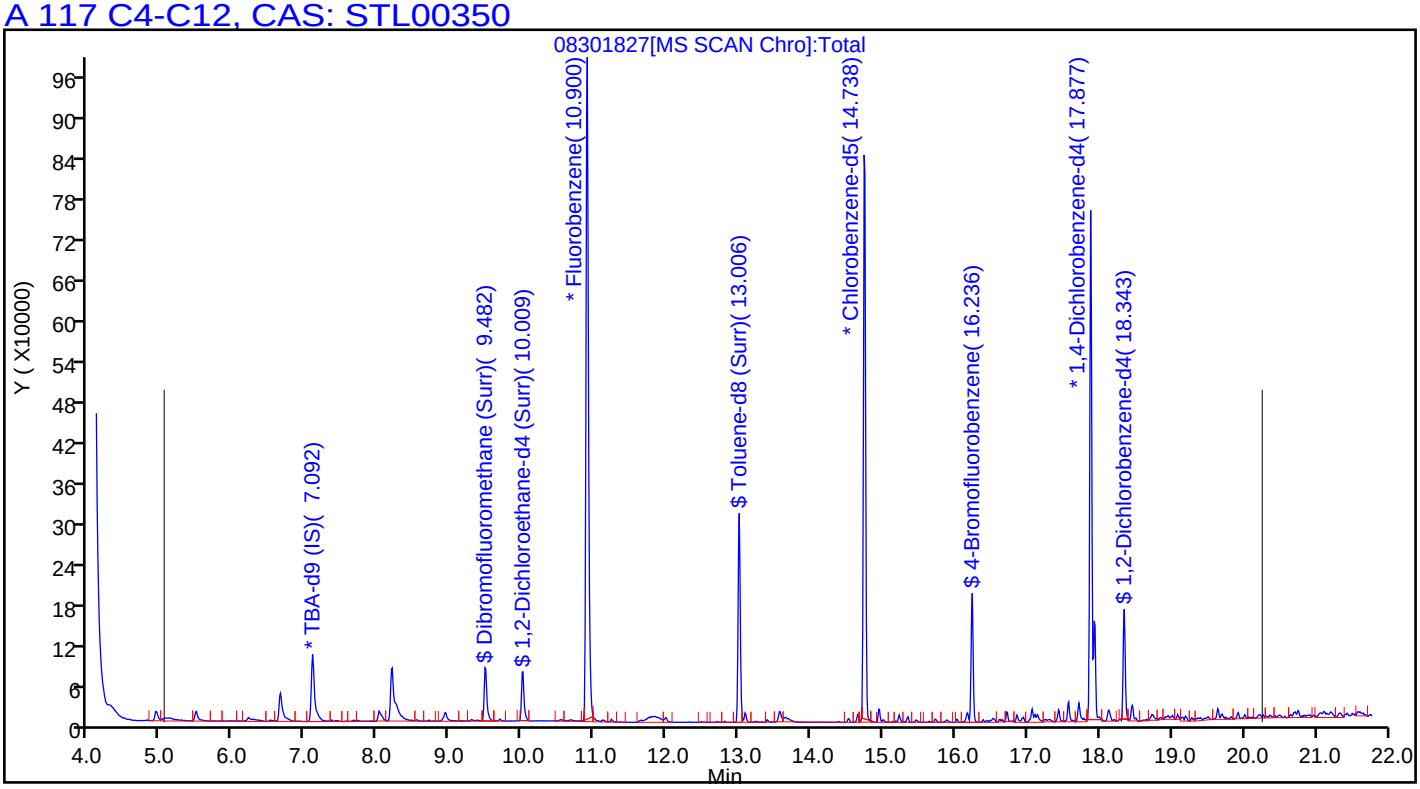


Report Date: 31-Aug-2018 08:59:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\08301827.D				
Injection Date:	30-Aug-2018 20:45:30	Instrument ID:	HP7		
Lims ID:	720-88240-A-20-A	Lab Sample ID:	720-88240-20		
Client ID:	DUP-13				
Operator ID:	SF	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88240-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DCA	TOL
Lab Sample ID	Client Sample ID	(45-131)	(60-140)	(58-140)
720-88239-D-3-H MS	Matrix Spike	91	93	96
720-88239-D-3-I MSD	Matrix Spike Duplicate	91	94	97
720-88240-1	DG-K7S-0.5-1	71 *	126	80
720-88240-2	DG-K7S-3.5-4	92	96	94
720-88240-2	DG-K7S-3.5-4	83	117	89
720-88240-3	DG-L13S-0.5-1	89	111	89
720-88240-4	DG-L13S-3.5-4	76 *	130	79
720-88240-19	DUP-36	123	111	85
720-88240-19	DUP-36	74	111	84
720-88240-20	DUP-13	93	106	97
720-88304-A-1-K MS	Matrix Spike	99	107	100
720-88304-A-1-L MSD	Matrix Spike Duplicate	98	105	99
LCS 720-250532/5	Lab Control Sample	95	85	96
LCS 720-250532/7	Lab Control Sample	97	83	101
LCS 720-250555/5	Lab Control Sample	94	99	98
LCS 720-250555/7	Lab Control Sample	98	101	96
LCS 720-250622/5	Lab Control Sample	100	92	100
LCS 720-250622/7	Lab Control Sample	103	100	103
LCS 720-250726/5	Lab Control Sample	99	103	98
LCS 720-250726/7	Lab Control Sample	99	101	98
LCS 720-250755/7	Lab Control Sample	95	95	98
LCSD 720-250532/6	Lab Control Sample Dup	97	85	100
LCSD 720-250532/8	Lab Control Sample Dup	99	88	104
LCSD 720-250555/6	Lab Control Sample Dup	95	101	98
LCSD 720-250555/8	Lab Control Sample Dup	98	100	97
LCSD 720-250622/6	Lab Control Sample Dup	98	92	101
LCSD 720-250622/8	Lab Control Sample Dup	102	100	102
LCSD 720-250726/6	Lab Control Sample Dup	98	98	97
LCSD 720-250726/8	Lab Control Sample Dup	100	99	96
LCSD 720-250755/8	Lab Control Sample Dup	95	101	98
MB 720-250532/4	Method Blank	97	91	101
MB 720-250555/4	Method Blank	92	100	96
MB 720-250622/4	Method Blank	98	96	101
MB 720-250726/4	Method Blank	101	107	97
MB 720-250755/4	Method Blank	94	96	94

Surrogate Legend

BFB = 4-Bromofluorobenzene
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		FBP	TPHL
Lab Sample ID	Client Sample ID	(33-120)	(35-146)
720-88240-1	DG-K7S-0.5-1	75	96
720-88240-2	DG-K7S-3.5-4	58	78

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	FBP (33-120)	TPHL (35-146)
720-88240-3	DG-L13S-0.5-1	71	92
720-88240-3 MS	DG-L13S-0.5-1	73	89
720-88240-3 MSD	DG-L13S-0.5-1	67	80
720-88240-4	DG-L13S-3.5-4	0 X	0 X
720-88240-19	DUP-36	0 X	0 X
720-88240-20	DUP-13	71	87
720-88241-D-1-F MS	Matrix Spike	62	91
720-88241-D-1-G MSD	Matrix Spike Duplicate	62	90
LCS 720-250487/2-A	Lab Control Sample	68	89
LCS 720-250853/2-A	Lab Control Sample	74	90
MB 720-250487/1-A	Method Blank	71	90
MB 720-250853/1-A	Method Blank	81	89

Surrogate Legend

FBP = 2-Fluorobiphenyl

TPHL = Terphenyl-d14

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	TPH1 (40-130)
720-88240-1	DG-K7S-0.5-1	0 X D
720-88240-2	DG-K7S-3.5-4	91
720-88240-3	DG-L13S-0.5-1	0 X D
720-88240-3 MS	DG-L13S-0.5-1	0 X D
720-88240-3 MSD	DG-L13S-0.5-1	0 X D
720-88240-4	DG-L13S-3.5-4	0 X D
720-88240-19	DUP-36	0 X D
720-88240-20	DUP-13	96
LCS 720-250461/2-A	Lab Control Sample	86
MB 720-250461/1-A	Method Blank	96

Surrogate Legend

TPH = p-Terphenyl

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCBP2 (21-136)	TCX1 (21-145)
720-88240-1	DG-K7S-0.5-1	84	53
720-88240-3 MSD	DG-L13S-0.5-1	93	80
720-88240-19	DUP-36	75	62

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88240-1

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCBP1	TCX2
Lab Sample ID	Client Sample ID	(21-136)	(21-145)
720-88240-2	DG-K7S-3.5-4	77	85
720-88240-20	DUP-13	79	79
MB 720-250479/1-A	Method Blank	96	72

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCBP1	TCX1
Lab Sample ID	Client Sample ID	(21-136)	(21-145)
720-88240-3	DG-L13S-0.5-1	98	73
720-88240-3 MS	DG-L13S-0.5-1	79	77
720-88240-4	DG-L13S-3.5-4	62 p	59

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCBP2	TCX2
Lab Sample ID	Client Sample ID	(21-136)	(21-145)
LCS 720-250479/2-A	Lab Control Sample	110	81

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX2	DCBP2
Lab Sample ID	Client Sample ID	(14-128)	(10-132)
720-88240-1	DG-K7S-0.5-1	74	81
720-88240-2	DG-K7S-3.5-4	82	114
720-88240-3	DG-L13S-0.5-1	77	95
720-88240-3 MS	DG-L13S-0.5-1	88	110
720-88240-3 MSD	DG-L13S-0.5-1	97	151 X
720-88240-4	DG-L13S-3.5-4	79	225 X
720-88240-19	DUP-36	79	167 X
720-88240-20	DUP-13	90	99
LCS 240-343099/24-A	Lab Control Sample	87	101
LCS 240-343154/10-A	Lab Control Sample	59	56

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88240-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	**Client Sample ID**	**TCX2 (14-128)**	**DCBP2 (10-132)**						
MB 240-343099/23-A	Method Blank	88	106						
MB 240-343154/9-A	Method Blank	85	84						

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 720-250532/4
Matrix: Solid
Analysis Batch: 250532

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/29/18 19:48	1
Acetone	ND		50	38	ug/Kg			08/29/18 19:48	1
Benzene	ND		5.0	0.65	ug/Kg			08/29/18 19:48	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/29/18 19:48	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/29/18 19:48	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/29/18 19:48	1
Bromoform	ND		5.0	2.0	ug/Kg			08/29/18 19:48	1
Bromomethane	ND		10	0.79	ug/Kg			08/29/18 19:48	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/29/18 19:48	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/29/18 19:48	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/29/18 19:48	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/29/18 19:48	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/29/18 19:48	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/29/18 19:48	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/29/18 19:48	1
Chloroethane	ND		10	0.56	ug/Kg			08/29/18 19:48	1
Chloroform	ND		5.0	0.66	ug/Kg			08/29/18 19:48	1
Chloromethane	ND		10	0.79	ug/Kg			08/29/18 19:48	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/29/18 19:48	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/29/18 19:48	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/29/18 19:48	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/29/18 19:48	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/29/18 19:48	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/29/18 19:48	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/29/18 19:48	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/29/18 19:48	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/29/18 19:48	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/29/18 19:48	1
Dibromomethane	ND		10	0.86	ug/Kg			08/29/18 19:48	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/29/18 19:48	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/29/18 19:48	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/29/18 19:48	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/29/18 19:48	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/29/18 19:48	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/29/18 19:48	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/29/18 19:48	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/29/18 19:48	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/29/18 19:48	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/29/18 19:48	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/29/18 19:48	1
2-Hexanone	ND		50	10	ug/Kg			08/29/18 19:48	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/29/18 19:48	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/29/18 19:48	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/29/18 19:48	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/29/18 19:48	1
Naphthalene	ND		10	1.5	ug/Kg			08/29/18 19:48	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/29/18 19:48	1
Styrene	ND		5.0	0.63	ug/Kg			08/29/18 19:48	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250532/4
Matrix: Solid
Analysis Batch: 250532

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/29/18 19:48	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/29/18 19:48	1
Toluene	ND		5.0	0.71	ug/Kg			08/29/18 19:48	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/29/18 19:48	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/29/18 19:48	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/29/18 19:48	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/29/18 19:48	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/29/18 19:48	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/29/18 19:48	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/29/18 19:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/29/18 19:48	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/29/18 19:48	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/29/18 19:48	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/29/18 19:48	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/29/18 19:48	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/29/18 19:48	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/29/18 19:48	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/29/18 19:48	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/29/18 19:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*45 - 131*		*08/29/18 19:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*60 - 140*		*08/29/18 19:48*	*1*
Toluene-d8 (Surr)	*101*		*58 - 140*		*08/29/18 19:48*	*1*

Lab Sample ID: LCS 720-250532/5
Matrix: Solid
Analysis Batch: 250532

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	48.2		ug/Kg		96	70 - 144
Acetone	250	245		ug/Kg		98	30 - 162
Benzene	50.0	50.8		ug/Kg		102	70 - 130
Dichlorobromomethane	50.0	46.7		ug/Kg		93	70 - 140
Bromobenzene	50.0	52.5		ug/Kg		105	70 - 130
Chlorobromomethane	50.0	50.9		ug/Kg		102	70 - 130
Bromoform	50.0	45.0		ug/Kg		90	59 - 158
Bromomethane	50.0	49.1		ug/Kg		98	59 - 132
2-Butanone (MEK)	250	197		ug/Kg		79	59 - 159
n-Butylbenzene	50.0	51.8		ug/Kg		104	70 - 142
sec-Butylbenzene	50.0	53.7		ug/Kg		107	70 - 136
tert-Butylbenzene	50.0	52.9		ug/Kg		106	70 - 130
Carbon disulfide	50.0	72.2	*	ug/Kg		144	60 - 140
Carbon tetrachloride	50.0	50.9		ug/Kg		102	70 - 142
Chlorobenzene	50.0	48.5		ug/Kg		97	70 - 130
Chloroethane	50.0	47.3		ug/Kg		95	65 - 130
Chloroform	50.0	48.0		ug/Kg		96	77 - 127

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250532/5
Matrix: Solid
Analysis Batch: 250532

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	50.0	46.7		ug/Kg		93	55 - 140
2-Chlorotoluene	50.0	53.4		ug/Kg		107	70 - 138
4-Chlorotoluene	50.0	53.0		ug/Kg		106	70 - 136
Chlorodibromomethane	50.0	47.9		ug/Kg		96	70 - 146
1,2-Dichlorobenzene	50.0	49.3		ug/Kg		99	70 - 130
1,3-Dichlorobenzene	50.0	49.7		ug/Kg		99	70 - 131
1,4-Dichlorobenzene	50.0	49.7		ug/Kg		99	70 - 130
1,3-Dichloropropane	50.0	46.8		ug/Kg		94	70 - 140
1,1-Dichloropropene	50.0	51.9		ug/Kg		104	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	46.5		ug/Kg		93	60 - 145
Ethylene Dibromide	50.0	45.8		ug/Kg		92	70 - 140
Dibromomethane	50.0	44.7		ug/Kg		89	70 - 139
Dichlorodifluoromethane	50.0	39.6		ug/Kg		79	37 - 158
1,1-Dichloroethane	50.0	54.0		ug/Kg		108	70 - 130
1,2-Dichloroethane	50.0	44.6		ug/Kg		89	70 - 130
1,1-Dichloroethene	50.0	62.7	*	ug/Kg		125	74 - 122
cis-1,2-Dichloroethene	50.0	51.7		ug/Kg		103	70 - 138
trans-1,2-Dichloroethene	50.0	61.1		ug/Kg		122	67 - 130
1,2-Dichloropropane	50.0	51.5		ug/Kg		103	73 - 127
cis-1,3-Dichloropropene	50.0	52.5		ug/Kg		105	68 - 147
trans-1,3-Dichloropropene	50.0	49.3		ug/Kg		99	70 - 155
Ethylbenzene	50.0	50.4		ug/Kg		101	80 - 137
Hexachlorobutadiene	50.0	48.8		ug/Kg		98	70 - 132
2-Hexanone	250	226		ug/Kg		90	62 - 158
Isopropylbenzene	50.0	53.1		ug/Kg		106	70 - 130
4-Isopropyltoluene	50.0	53.5		ug/Kg		107	70 - 133
Methylene Chloride	50.0	54.5		ug/Kg		109	70 - 134
4-Methyl-2-pentanone (MIBK)	250	220		ug/Kg		88	60 - 160
Naphthalene	50.0	48.6		ug/Kg		97	60 - 147
N-Propylbenzene	50.0	53.8		ug/Kg		108	70 - 130
Styrene	50.0	49.6		ug/Kg		99	70 - 130
1,1,1,2-Tetrachloroethane	50.0	48.7		ug/Kg		97	70 - 130
1,1,2,2-Tetrachloroethane	50.0	44.0		ug/Kg		88	70 - 146
Toluene	50.0	49.5		ug/Kg		99	75 - 120
1,2,3-Trichlorobenzene	50.0	50.0		ug/Kg		100	60 - 140
1,2,4-Trichlorobenzene	50.0	53.2		ug/Kg		106	60 - 140
1,1,1-Trichloroethane	50.0	51.5		ug/Kg		103	70 - 130
1,1,2-Trichloroethane	50.0	48.7		ug/Kg		97	70 - 130
Trichloroethene	50.0	49.3		ug/Kg		99	70 - 133
Trichlorofluoromethane	50.0	47.9		ug/Kg		96	60 - 140
1,2,3-Trichloropropane	50.0	44.7		ug/Kg		89	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroetha ne	50.0	65.5		ug/Kg		131	60 - 140
1,2,4-Trimethylbenzene	50.0	54.1		ug/Kg		108	70 - 130
1,3,5-Trimethylbenzene	50.0	53.9		ug/Kg		108	70 - 131
Vinyl acetate	50.0	49.2		ug/Kg		98	38 - 176
Vinyl chloride	50.0	43.7		ug/Kg		87	58 - 125
m-Xylene & p-Xylene	50.0	51.0		ug/Kg		102	70 - 146

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250532/5
Matrix: Solid
Analysis Batch: 250532

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
o-Xylene	50.0	51.6		ug/Kg		103	70 - 140
2,2-Dichloropropane	50.0	56.8		ug/Kg		114	70 - 162
Tetrachloroethene	50.0	52.7		ug/Kg		105	70 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*85*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCS 720-250532/7
Matrix: Solid
Analysis Batch: 250532

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	1120		ug/Kg		112	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*83*		*60 - 140*
Toluene-d8 (Surr)	*101*		*58 - 140*

Lab Sample ID: LCSD 720-250532/6
Matrix: Solid
Analysis Batch: 250532

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	49.9		ug/Kg		100	70 - 144	3	20
Acetone	250	238		ug/Kg		95	30 - 162	3	30
Benzene	50.0	49.9		ug/Kg		100	70 - 130	2	20
Dichlorobromomethane	50.0	48.0		ug/Kg		96	70 - 140	3	20
Bromobenzene	50.0	50.5		ug/Kg		101	70 - 130	4	20
Chlorobromomethane	50.0	49.9		ug/Kg		100	70 - 130	2	20
Bromoform	50.0	44.9		ug/Kg		90	59 - 158	0	20
Bromomethane	50.0	49.9		ug/Kg		100	59 - 132	2	20
2-Butanone (MEK)	250	209		ug/Kg		84	59 - 159	6	20
n-Butylbenzene	50.0	52.3		ug/Kg		105	70 - 142	1	20
sec-Butylbenzene	50.0	52.5		ug/Kg		105	70 - 136	2	20
tert-Butylbenzene	50.0	51.0		ug/Kg		102	70 - 130	4	20
Carbon disulfide	50.0	72.2	*	ug/Kg		144	60 - 140	0	20
Carbon tetrachloride	50.0	50.7		ug/Kg		101	70 - 142	0	20
Chlorobenzene	50.0	48.6		ug/Kg		97	70 - 130	0	20
Chloroethane	50.0	47.3		ug/Kg		95	65 - 130	0	20
Chloroform	50.0	47.5		ug/Kg		95	77 - 127	1	20
Chloromethane	50.0	47.8		ug/Kg		96	55 - 140	2	20
2-Chlorotoluene	50.0	52.3		ug/Kg		105	70 - 138	2	20
4-Chlorotoluene	50.0	52.4		ug/Kg		105	70 - 136	1	20
Chlorodibromomethane	50.0	50.0		ug/Kg		100	70 - 146	4	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250532/6
Matrix: Solid
Analysis Batch: 250532

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene	50.0	49.8		ug/Kg		100	70 - 130	1	20
1,3-Dichlorobenzene	50.0	49.9		ug/Kg		100	70 - 131	0	20
1,4-Dichlorobenzene	50.0	48.8		ug/Kg		98	70 - 130	2	20
1,3-Dichloropropane	50.0	47.4		ug/Kg		95	70 - 140	1	20
1,1-Dichloropropene	50.0	51.7		ug/Kg		103	70 - 130	0	20
1,2-Dibromo-3-Chloropropane	50.0	48.4		ug/Kg		97	60 - 145	4	20
Ethylene Dibromide	50.0	48.3		ug/Kg		97	70 - 140	5	20
Dibromomethane	50.0	46.6		ug/Kg		93	70 - 139	4	20
Dichlorodifluoromethane	50.0	40.7		ug/Kg		81	37 - 158	3	20
1,1-Dichloroethane	50.0	53.7		ug/Kg		107	70 - 130	1	20
1,2-Dichloroethane	50.0	45.2		ug/Kg		90	70 - 130	1	20
1,1-Dichloroethene	50.0	60.1		ug/Kg		120	74 - 122	4	20
cis-1,2-Dichloroethene	50.0	52.0		ug/Kg		104	70 - 138	1	20
trans-1,2-Dichloroethene	50.0	60.3		ug/Kg		121	67 - 130	1	20
1,2-Dichloropropane	50.0	52.0		ug/Kg		104	73 - 127	1	20
cis-1,3-Dichloropropene	50.0	54.6		ug/Kg		109	68 - 147	4	20
trans-1,3-Dichloropropene	50.0	50.6		ug/Kg		101	70 - 155	3	20
Ethylbenzene	50.0	50.3		ug/Kg		101	80 - 137	0	20
Hexachlorobutadiene	50.0	50.3		ug/Kg		101	70 - 132	3	20
2-Hexanone	250	237		ug/Kg		95	62 - 158	5	20
Isopropylbenzene	50.0	53.7		ug/Kg		107	70 - 130	1	20
4-Isopropyltoluene	50.0	52.7		ug/Kg		105	70 - 133	1	20
Methylene Chloride	50.0	54.3		ug/Kg		109	70 - 134	1	20
4-Methyl-2-pentanone (MIBK)	250	232		ug/Kg		93	60 - 160	5	20
Naphthalene	50.0	50.7		ug/Kg		101	60 - 147	4	20
N-Propylbenzene	50.0	53.1		ug/Kg		106	70 - 130	1	20
Styrene	50.0	49.8		ug/Kg		100	70 - 130	1	20
1,1,1,2-Tetrachloroethane	50.0	47.8		ug/Kg		96	70 - 130	2	20
1,1,2,2-Tetrachloroethane	50.0	43.9		ug/Kg		88	70 - 146	0	20
Toluene	50.0	49.6		ug/Kg		99	75 - 120	0	20
1,2,3-Trichlorobenzene	50.0	52.9		ug/Kg		106	60 - 140	6	20
1,2,4-Trichlorobenzene	50.0	54.4		ug/Kg		109	60 - 140	2	20
1,1,1-Trichloroethane	50.0	51.4		ug/Kg		103	70 - 130	0	20
1,1,2-Trichloroethane	50.0	50.9		ug/Kg		102	70 - 130	4	20
Trichloroethene	50.0	50.2		ug/Kg		100	70 - 133	2	20
Trichlorofluoromethane	50.0	48.9		ug/Kg		98	60 - 140	2	20
1,2,3-Trichloropropane	50.0	44.2		ug/Kg		88	70 - 146	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	65.6		ug/Kg		131	60 - 140	0	20
1,2,4-Trimethylbenzene	50.0	53.8		ug/Kg		108	70 - 130	1	20
1,3,5-Trimethylbenzene	50.0	52.9		ug/Kg		106	70 - 131	2	20
Vinyl acetate	50.0	49.2		ug/Kg		98	38 - 176	0	20
Vinyl chloride	50.0	44.4		ug/Kg		89	58 - 125	2	20
m-Xylene & p-Xylene	50.0	51.5		ug/Kg		103	70 - 146	1	20
o-Xylene	50.0	51.7		ug/Kg		103	70 - 140	0	20
2,2-Dichloropropane	50.0	56.7		ug/Kg		113	70 - 162	0	20
Tetrachloroethene	50.0	54.1		ug/Kg		108	70 - 132	3	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250532/6
Matrix: Solid
Analysis Batch: 250532

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*85*		*60 - 140*
Toluene-d8 (Surr)	*100*		*58 - 140*

Lab Sample ID: LCSD 720-250532/8
Matrix: Solid
Analysis Batch: 250532

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	1180		ug/Kg		118	70 - 122	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*88*		*60 - 140*
Toluene-d8 (Surr)	*104*		*58 - 140*

Lab Sample ID: MB 720-250555/4
Matrix: Solid
Analysis Batch: 250555

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/30/18 09:03	1
Acetone	ND		50	38	ug/Kg			08/30/18 09:03	1
Benzene	ND		5.0	0.65	ug/Kg			08/30/18 09:03	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/30/18 09:03	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/30/18 09:03	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/30/18 09:03	1
Bromoform	ND		5.0	2.0	ug/Kg			08/30/18 09:03	1
Bromomethane	ND		10	0.79	ug/Kg			08/30/18 09:03	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/30/18 09:03	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/30/18 09:03	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/30/18 09:03	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/30/18 09:03	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/30/18 09:03	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/30/18 09:03	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/30/18 09:03	1
Chloroethane	ND		10	0.56	ug/Kg			08/30/18 09:03	1
Chloroform	ND		5.0	0.66	ug/Kg			08/30/18 09:03	1
Chloromethane	ND		10	0.79	ug/Kg			08/30/18 09:03	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/30/18 09:03	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/30/18 09:03	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/30/18 09:03	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/30/18 09:03	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/30/18 09:03	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/30/18 09:03	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/30/18 09:03	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/30/18 09:03	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250555/4
Matrix: Solid
Analysis Batch: 250555

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/30/18 09:03	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/30/18 09:03	1
Dibromomethane	ND		10	0.86	ug/Kg			08/30/18 09:03	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/30/18 09:03	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/30/18 09:03	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/30/18 09:03	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/30/18 09:03	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/30/18 09:03	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/30/18 09:03	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/30/18 09:03	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/30/18 09:03	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/30/18 09:03	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/30/18 09:03	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/30/18 09:03	1
2-Hexanone	ND		50	10	ug/Kg			08/30/18 09:03	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/30/18 09:03	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/30/18 09:03	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/30/18 09:03	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/30/18 09:03	1
Naphthalene	ND		10	1.5	ug/Kg			08/30/18 09:03	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/30/18 09:03	1
Styrene	ND		5.0	0.63	ug/Kg			08/30/18 09:03	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/30/18 09:03	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/30/18 09:03	1
Toluene	ND		5.0	0.71	ug/Kg			08/30/18 09:03	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/30/18 09:03	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/30/18 09:03	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/30/18 09:03	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/30/18 09:03	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/30/18 09:03	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/30/18 09:03	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/30/18 09:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/30/18 09:03	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/30/18 09:03	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/30/18 09:03	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/30/18 09:03	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/30/18 09:03	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/30/18 09:03	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/30/18 09:03	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/30/18 09:03	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/30/18 09:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*45 - 131*		*08/30/18 09:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*60 - 140*		*08/30/18 09:03*	*1*
Toluene-d8 (Surr)	*96*		*58 - 140*		*08/30/18 09:03*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250555/5
Matrix: Solid
Analysis Batch: 250555

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	54.1		ug/Kg		108	70 - 144
Acetone	250	194		ug/Kg		78	30 - 162
Benzene	50.0	51.4		ug/Kg		103	70 - 130
Dichlorobromomethane	50.0	54.9		ug/Kg		110	70 - 140
Bromobenzene	50.0	49.7		ug/Kg		99	70 - 130
Chlorobromomethane	50.0	56.7		ug/Kg		113	70 - 130
Bromoform	50.0	50.8		ug/Kg		102	59 - 158
Bromomethane	50.0	53.8		ug/Kg		108	59 - 132
2-Butanone (MEK)	250	211		ug/Kg		85	59 - 159
n-Butylbenzene	50.0	49.1		ug/Kg		98	70 - 142
sec-Butylbenzene	50.0	49.4		ug/Kg		99	70 - 136
tert-Butylbenzene	50.0	49.4		ug/Kg		99	70 - 130
Carbon disulfide	50.0	69.3		ug/Kg		139	60 - 140
Carbon tetrachloride	50.0	61.5		ug/Kg		123	70 - 142
Chlorobenzene	50.0	52.2		ug/Kg		104	70 - 130
Chloroethane	50.0	47.4		ug/Kg		95	65 - 130
Chloroform	50.0	54.7		ug/Kg		109	77 - 127
Chloromethane	50.0	45.1		ug/Kg		90	55 - 140
2-Chlorotoluene	50.0	49.2		ug/Kg		98	70 - 138
4-Chlorotoluene	50.0	49.7		ug/Kg		99	70 - 136
Chlorodibromomethane	50.0	54.4		ug/Kg		109	70 - 146
1,2-Dichlorobenzene	50.0	50.7		ug/Kg		101	70 - 130
1,3-Dichlorobenzene	50.0	52.3		ug/Kg		105	70 - 131
1,4-Dichlorobenzene	50.0	50.9		ug/Kg		102	70 - 130
1,3-Dichloropropane	50.0	49.7		ug/Kg		99	70 - 140
1,1-Dichloropropene	50.0	55.8		ug/Kg		112	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	44.6		ug/Kg		89	60 - 145
Ethylene Dibromide	50.0	53.2		ug/Kg		106	70 - 140
Dibromomethane	50.0	51.7		ug/Kg		103	70 - 139
Dichlorodifluoromethane	50.0	51.6		ug/Kg		103	37 - 158
1,1-Dichloroethane	50.0	53.8		ug/Kg		108	70 - 130
1,2-Dichloroethane	50.0	56.0		ug/Kg		112	70 - 130
1,1-Dichloroethene	50.0	66.5	*	ug/Kg		133	74 - 122
cis-1,2-Dichloroethene	50.0	53.7		ug/Kg		107	70 - 138
trans-1,2-Dichloroethene	50.0	60.7		ug/Kg		121	67 - 130
1,2-Dichloropropane	50.0	50.9		ug/Kg		102	73 - 127
cis-1,3-Dichloropropene	50.0	52.9		ug/Kg		106	68 - 147
trans-1,3-Dichloropropene	50.0	50.9		ug/Kg		102	70 - 155
Ethylbenzene	50.0	50.9		ug/Kg		102	80 - 137
Hexachlorobutadiene	50.0	53.8		ug/Kg		108	70 - 132
2-Hexanone	250	209		ug/Kg		84	62 - 158
Isopropylbenzene	50.0	54.2		ug/Kg		108	70 - 130
4-Isopropyltoluene	50.0	51.3		ug/Kg		103	70 - 133
Methylene Chloride	50.0	51.5		ug/Kg		103	70 - 134
4-Methyl-2-pentanone (MIBK)	250	210		ug/Kg		84	60 - 160
Naphthalene	50.0	48.1		ug/Kg		96	60 - 147
N-Propylbenzene	50.0	48.5		ug/Kg		97	70 - 130
Styrene	50.0	48.4		ug/Kg		97	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250555/5
Matrix: Solid
Analysis Batch: 250555

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	55.2		ug/Kg		110	70 - 130
1,1,2,2-Tetrachloroethane	50.0	43.8		ug/Kg		88	70 - 146
Toluene	50.0	50.5		ug/Kg		101	75 - 120
1,2,3-Trichlorobenzene	50.0	51.8		ug/Kg		104	60 - 140
1,2,4-Trichlorobenzene	50.0	52.9		ug/Kg		106	60 - 140
1,1,1-Trichloroethane	50.0	60.2		ug/Kg		120	70 - 130
1,1,2-Trichloroethane	50.0	51.1		ug/Kg		102	70 - 130
Trichloroethene	50.0	56.8		ug/Kg		114	70 - 133
Trichlorofluoromethane	50.0	57.7		ug/Kg		115	60 - 140
1,2,3-Trichloropropane	50.0	47.5		ug/Kg		95	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	70.7	*	ug/Kg		141	60 - 140
1,2,4-Trimethylbenzene	50.0	50.9		ug/Kg		102	70 - 130
1,3,5-Trimethylbenzene	50.0	50.5		ug/Kg		101	70 - 131
Vinyl acetate	50.0	45.6		ug/Kg		91	38 - 176
Vinyl chloride	50.0	49.4		ug/Kg		99	58 - 125
m-Xylene & p-Xylene	50.0	53.0		ug/Kg		106	70 - 146
o-Xylene	50.0	53.3		ug/Kg		107	70 - 140
2,2-Dichloropropane	50.0	66.0		ug/Kg		132	70 - 162
Tetrachloroethene	50.0	58.8		ug/Kg		118	70 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*99*		*60 - 140*
Toluene-d8 (Surr)	*98*		*58 - 140*

Lab Sample ID: LCS 720-250555/7
Matrix: Solid
Analysis Batch: 250555

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	1050		ug/Kg		105	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*101*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCSD 720-250555/6
Matrix: Solid
Analysis Batch: 250555

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	58.6		ug/Kg		117	70 - 144	8	20
Acetone	250	225		ug/Kg		90	30 - 162	15	30
Benzene	50.0	51.3		ug/Kg		103	70 - 130	0	20
Dichlorobromomethane	50.0	55.8		ug/Kg		112	70 - 140	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250555/6
Matrix: Solid
Analysis Batch: 250555

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromobenzene	50.0	49.8		ug/Kg		100	70 - 130	0	20
Chlorobromomethane	50.0	58.0		ug/Kg		116	70 - 130	2	20
Bromoform	50.0	54.5		ug/Kg		109	59 - 158	7	20
Bromomethane	50.0	54.4		ug/Kg		109	59 - 132	1	20
2-Butanone (MEK)	250	254		ug/Kg		102	59 - 159	18	20
n-Butylbenzene	50.0	48.2		ug/Kg		96	70 - 142	2	20
sec-Butylbenzene	50.0	47.8		ug/Kg		96	70 - 136	3	20
tert-Butylbenzene	50.0	48.1		ug/Kg		96	70 - 130	3	20
Carbon disulfide	50.0	67.7		ug/Kg		135	60 - 140	2	20
Carbon tetrachloride	50.0	60.1		ug/Kg		120	70 - 142	2	20
Chlorobenzene	50.0	51.2		ug/Kg		102	70 - 130	2	20
Chloroethane	50.0	47.0		ug/Kg		94	65 - 130	1	20
Chloroform	50.0	54.8		ug/Kg		110	77 - 127	0	20
Chloromethane	50.0	46.0		ug/Kg		92	55 - 140	2	20
2-Chlorotoluene	50.0	49.0		ug/Kg		98	70 - 138	0	20
4-Chlorotoluene	50.0	48.8		ug/Kg		98	70 - 136	2	20
Chlorodibromomethane	50.0	56.8		ug/Kg		114	70 - 146	4	20
1,2-Dichlorobenzene	50.0	51.4		ug/Kg		103	70 - 130	1	20
1,3-Dichlorobenzene	50.0	52.0		ug/Kg		104	70 - 131	1	20
1,4-Dichlorobenzene	50.0	51.1		ug/Kg		102	70 - 130	0	20
1,3-Dichloropropane	50.0	52.0		ug/Kg		104	70 - 140	4	20
1,1-Dichloropropene	50.0	53.9		ug/Kg		108	70 - 130	4	20
1,2-Dibromo-3-Chloropropane	50.0	52.8		ug/Kg		106	60 - 145	17	20
Ethylene Dibromide	50.0	57.7		ug/Kg		115	70 - 140	8	20
Dibromomethane	50.0	54.2		ug/Kg		108	70 - 139	5	20
Dichlorodifluoromethane	50.0	52.6		ug/Kg		105	37 - 158	2	20
1,1-Dichloroethane	50.0	53.0		ug/Kg		106	70 - 130	2	20
1,2-Dichloroethane	50.0	57.0		ug/Kg		114	70 - 130	2	20
1,1-Dichloroethene	50.0	64.9	*	ug/Kg		130	74 - 122	2	20
cis-1,2-Dichloroethene	50.0	53.0		ug/Kg		106	70 - 138	1	20
trans-1,2-Dichloroethene	50.0	59.3		ug/Kg		119	67 - 130	2	20
1,2-Dichloropropane	50.0	51.6		ug/Kg		103	73 - 127	1	20
cis-1,3-Dichloropropene	50.0	53.6		ug/Kg		107	68 - 147	1	20
trans-1,3-Dichloropropene	50.0	53.3		ug/Kg		107	70 - 155	5	20
Ethylbenzene	50.0	50.1		ug/Kg		100	80 - 137	2	20
Hexachlorobutadiene	50.0	53.0		ug/Kg		106	70 - 132	1	20
2-Hexanone	250	253		ug/Kg		101	62 - 158	19	20
Isopropylbenzene	50.0	52.7		ug/Kg		105	70 - 130	3	20
4-Isopropyltoluene	50.0	49.8		ug/Kg		100	70 - 133	3	20
Methylene Chloride	50.0	51.7		ug/Kg		103	70 - 134	0	20
4-Methyl-2-pentanone (MIBK)	250	246		ug/Kg		98	60 - 160	16	20
Naphthalene	50.0	52.8		ug/Kg		106	60 - 147	9	20
N-Propylbenzene	50.0	47.5		ug/Kg		95	70 - 130	2	20
Styrene	50.0	48.4		ug/Kg		97	70 - 130	0	20
1,1,1,2-Tetrachloroethane	50.0	55.2		ug/Kg		110	70 - 130	0	20
1,1,2,2-Tetrachloroethane	50.0	47.8		ug/Kg		96	70 - 146	9	20
Toluene	50.0	49.1		ug/Kg		98	75 - 120	3	20
1,2,3-Trichlorobenzene	50.0	53.8		ug/Kg		108	60 - 140	4	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250555/6
Matrix: Solid
Analysis Batch: 250555

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene			50.0	54.6		ug/Kg		109	60 - 140	3	20
1,1,1-Trichloroethane			50.0	59.6		ug/Kg		119	70 - 130	1	20
1,1,2-Trichloroethane			50.0	54.6		ug/Kg		109	70 - 130	7	20
Trichloroethene			50.0	56.2		ug/Kg		112	70 - 133	1	20
Trichlorofluoromethane			50.0	56.2		ug/Kg		112	60 - 140	3	20
1,2,3-Trichloropropane			50.0	51.2		ug/Kg		102	70 - 146	8	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	70.1		ug/Kg		140	60 - 140	1	20
1,2,4-Trimethylbenzene			50.0	50.4		ug/Kg		101	70 - 130	1	20
1,3,5-Trimethylbenzene			50.0	49.8		ug/Kg		100	70 - 131	1	20
Vinyl acetate			50.0	49.6		ug/Kg		99	38 - 176	8	20
Vinyl chloride			50.0	49.5		ug/Kg		99	58 - 125	0	20
m-Xylene & p-Xylene			50.0	51.8		ug/Kg		104	70 - 146	2	20
o-Xylene			50.0	52.1		ug/Kg		104	70 - 140	2	20
2,2-Dichloropropane			50.0	63.6		ug/Kg		127	70 - 162	4	20
Tetrachloroethene			50.0	56.8		ug/Kg		114	70 - 132	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*101*		*60 - 140*
Toluene-d8 (Surr)	*98*		*58 - 140*

Lab Sample ID: LCSD 720-250555/8
Matrix: Solid
Analysis Batch: 250555

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	1040		ug/Kg		104	70 - 122	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*100*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: 720-88304-A-1-K MS
Matrix: Solid
Analysis Batch: 250726

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250582

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methyl tert-butyl ether	ND		50.0	56.1		ug/Kg		112	69 - 130		
Acetone	ND		250	278		ug/Kg		111	37 - 150		
Benzene	ND		50.0	51.9		ug/Kg		104	70 - 130		
Dichlorobromomethane	ND		50.0	55.5		ug/Kg		111	64 - 135		
Bromobenzene	ND		50.0	51.6		ug/Kg		103	70 - 130		
Chlorobromomethane	ND		50.0	57.9		ug/Kg		116	65 - 130		
Bromoform	ND		50.0	60.1		ug/Kg		120	58 - 132		
Bromomethane	ND		50.0	42.2		ug/Kg		84	56 - 130		

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88304-A-1-K MS
Matrix: Solid
Analysis Batch: 250726

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250582

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Butanone (MEK)	ND		250	265		ug/Kg		106	41 - 150
n-Butylbenzene	ND		50.0	49.2		ug/Kg		98	60 - 145
sec-Butylbenzene	ND		50.0	49.2		ug/Kg		98	64 - 137
tert-Butylbenzene	ND		50.0	49.7		ug/Kg		99	63 - 134
Carbon disulfide	ND	*	50.0	66.6		ug/Kg		133	10 - 150
Carbon tetrachloride	ND		50.0	58.8		ug/Kg		118	54 - 130
Chlorobenzene	ND		50.0	53.0		ug/Kg		106	70 - 130
Chloroethane	ND		50.0	40.2		ug/Kg		80	61 - 130
Chloroform	ND		50.0	55.1		ug/Kg		110	67 - 130
Chloromethane	ND		50.0	35.4		ug/Kg		71	50 - 131
2-Chlorotoluene	ND		50.0	48.9		ug/Kg		98	70 - 130
4-Chlorotoluene	ND		50.0	48.9		ug/Kg		98	70 - 130
Chlorodibromomethane	ND		50.0	61.0		ug/Kg		122	60 - 141
1,2-Dichlorobenzene	ND		50.0	53.4		ug/Kg		107	70 - 130
1,3-Dichlorobenzene	ND		50.0	51.0		ug/Kg		102	70 - 130
1,4-Dichlorobenzene	ND		50.0	51.7		ug/Kg		103	70 - 130
1,3-Dichloropropane	ND		50.0	55.9		ug/Kg		112	70 - 130
1,1-Dichloropropene	ND		50.0	53.7		ug/Kg		107	67 - 130
1,2-Dibromo-3-Chloropropane	ND		50.0	60.3		ug/Kg		121	57 - 130
Ethylene Dibromide	ND		50.0	58.1		ug/Kg		116	66 - 135
Dibromomethane	ND		50.0	56.4		ug/Kg		113	65 - 131
Dichlorodifluoromethane	ND		50.0	21.5		ug/Kg		43	38 - 130
1,1-Dichloroethane	ND		50.0	56.6		ug/Kg		113	67 - 130
1,2-Dichloroethane	ND		50.0	60.5		ug/Kg		121	70 - 130
1,1-Dichloroethene	ND	*	50.0	61.8		ug/Kg		124	64 - 130
cis-1,2-Dichloroethene	ND		50.0	55.4		ug/Kg		111	68 - 131
trans-1,2-Dichloroethene	ND		50.0	55.8		ug/Kg		112	70 - 130
1,2-Dichloropropane	ND		50.0	55.1		ug/Kg		110	65 - 133
cis-1,3-Dichloropropene	ND		50.0	55.6		ug/Kg		111	46 - 139
trans-1,3-Dichloropropene	ND		50.0	55.6		ug/Kg		111	55 - 131
Ethylbenzene	ND		50.0	51.1		ug/Kg		102	65 - 130
Hexachlorobutadiene	ND		50.0	49.6		ug/Kg		99	58 - 132
2-Hexanone	ND		250	290		ug/Kg		116	44 - 150
Isopropylbenzene	ND		50.0	52.2		ug/Kg		104	65 - 130
4-Isopropyltoluene	ND		50.0	50.4		ug/Kg		101	69 - 134
Methylene Chloride	ND		50.0	54.9		ug/Kg		110	63 - 130
4-Methyl-2-pentanone (MIBK)	ND		250	278		ug/Kg		111	51 - 140
Naphthalene	ND		50.0	53.8		ug/Kg		108	45 - 146
N-Propylbenzene	ND		50.0	48.9		ug/Kg		98	70 - 130
Styrene	ND		50.0	50.9		ug/Kg		102	58 - 135
1,1,1,2-Tetrachloroethane	ND		50.0	56.0		ug/Kg		112	64 - 133
1,1,2,2-Tetrachloroethane	ND		50.0	41.0		ug/Kg		82	70 - 131
Toluene	ND		50.0	51.1		ug/Kg		102	70 - 130
1,2,3-Trichlorobenzene	ND		50.0	53.7		ug/Kg		107	58 - 138
1,2,4-Trichlorobenzene	ND		50.0	51.9		ug/Kg		104	49 - 144
1,1,1-Trichloroethane	ND		50.0	57.0		ug/Kg		114	57 - 133
1,1,2-Trichloroethane	ND		50.0	56.9		ug/Kg		114	68 - 132
Trichloroethene	ND	F1	50.0	64.9		ug/Kg		130	66 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88304-A-1-K MS
Matrix: Solid
Analysis Batch: 250726

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250582

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichlorofluoromethane	ND		50.0	47.7		ug/Kg		95	61 - 130
1,2,3-Trichloropropane	ND		50.0	55.8		ug/Kg		112	62 - 150
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	* F1	50.0	68.2	F1	ug/Kg		136	52 - 130
1,2,4-Trimethylbenzene	ND		50.0	49.1		ug/Kg		98	64 - 140
1,3,5-Trimethylbenzene	ND		50.0	48.9		ug/Kg		98	67 - 134
Vinyl acetate	ND	F1	50.0	9.57	J F1	ug/Kg		19	52 - 150
Vinyl chloride	ND		50.0	36.6		ug/Kg		73	62 - 130
m-Xylene & p-Xylene	ND		50.0	50.5		ug/Kg		101	70 - 130
o-Xylene	ND		50.0	52.1		ug/Kg		104	68 - 130
2,2-Dichloropropane	ND		50.0	52.0		ug/Kg		104	63 - 130
Tetrachloroethene	ND		50.0	56.0		ug/Kg		112	67 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*107*		*60 - 140*
Toluene-d8 (Surr)	*100*		*58 - 140*

Lab Sample ID: 720-88304-A-1-L MSD
Matrix: Solid
Analysis Batch: 250726

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250582

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	ND		50.2	57.0		ug/Kg		114	69 - 130	2	20
Acetone	ND		251	252		ug/Kg		100	37 - 150	10	20
Benzene	ND		50.2	52.5		ug/Kg		104	70 - 130	1	20
Dichlorobromomethane	ND		50.2	56.3		ug/Kg		112	64 - 135	1	20
Bromobenzene	ND		50.2	51.3		ug/Kg		102	70 - 130	1	20
Chlorobromomethane	ND		50.2	58.5		ug/Kg		117	65 - 130	1	20
Bromoform	ND		50.2	59.8		ug/Kg		119	58 - 132	1	20
Bromomethane	ND		50.2	41.7		ug/Kg		83	56 - 130	1	20
2-Butanone (MEK)	ND		251	260		ug/Kg		103	41 - 150	2	20
n-Butylbenzene	ND		50.2	49.6		ug/Kg		99	60 - 145	1	20
sec-Butylbenzene	ND		50.2	48.5		ug/Kg		97	64 - 137	2	20
tert-Butylbenzene	ND		50.2	49.4		ug/Kg		98	63 - 134	1	20
Carbon disulfide	ND	*	50.2	67.0		ug/Kg		134	10 - 150	1	20
Carbon tetrachloride	ND		50.2	57.3		ug/Kg		114	54 - 130	3	20
Chlorobenzene	ND		50.2	52.7		ug/Kg		105	70 - 130	1	20
Chloroethane	ND		50.2	39.8		ug/Kg		79	61 - 130	1	20
Chloroform	ND		50.2	55.6		ug/Kg		111	67 - 130	1	20
Chloromethane	ND		50.2	36.3		ug/Kg		72	50 - 131	2	20
2-Chlorotoluene	ND		50.2	48.5		ug/Kg		97	70 - 130	1	20
4-Chlorotoluene	ND		50.2	48.6		ug/Kg		97	70 - 130	0	20
Chlorodibromomethane	ND		50.2	59.8		ug/Kg		119	60 - 141	2	20
1,2-Dichlorobenzene	ND		50.2	52.6		ug/Kg		105	70 - 130	1	20
1,3-Dichlorobenzene	ND		50.2	50.6		ug/Kg		101	70 - 130	1	20
1,4-Dichlorobenzene	ND		50.2	51.3		ug/Kg		102	70 - 130	1	20
1,3-Dichloropropane	ND		50.2	55.7		ug/Kg		111	70 - 130	0	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88304-A-1-L MSD
Matrix: Solid
Analysis Batch: 250726

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250582

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloropropene	ND		50.2	53.4		ug/Kg		106	67 - 130	1	20
1,2-Dibromo-3-Chloropropane	ND		50.2	60.2		ug/Kg		120	57 - 130	0	20
Ethylene Dibromide	ND		50.2	57.8		ug/Kg		115	66 - 135	1	20
Dibromomethane	ND		50.2	56.0		ug/Kg		112	65 - 131	1	20
Dichlorodifluoromethane	ND		50.2	21.6		ug/Kg		43	38 - 130	0	20
1,1-Dichloroethane	ND		50.2	56.7		ug/Kg		113	67 - 130	0	20
1,2-Dichloroethane	ND		50.2	59.5		ug/Kg		118	70 - 130	2	20
1,1-Dichloroethene	ND	*	50.2	62.4		ug/Kg		124	64 - 130	1	20
cis-1,2-Dichloroethene	ND		50.2	56.0		ug/Kg		112	68 - 131	1	20
trans-1,2-Dichloroethene	ND		50.2	57.0		ug/Kg		113	70 - 130	2	20
1,2-Dichloropropane	ND		50.2	55.1		ug/Kg		110	65 - 133	0	20
cis-1,3-Dichloropropene	ND		50.2	56.4		ug/Kg		112	46 - 139	1	20
trans-1,3-Dichloropropene	ND		50.2	55.1		ug/Kg		110	55 - 131	1	20
Ethylbenzene	ND		50.2	50.5		ug/Kg		101	65 - 130	1	20
Hexachlorobutadiene	ND		50.2	50.6		ug/Kg		101	58 - 132	2	20
2-Hexanone	ND		251	295		ug/Kg		117	44 - 150	2	20
Isopropylbenzene	ND		50.2	51.8		ug/Kg		103	65 - 130	1	20
4-Isopropyltoluene	ND		50.2	50.3		ug/Kg		100	69 - 134	0	20
Methylene Chloride	ND		50.2	55.3		ug/Kg		110	63 - 130	1	20
4-Methyl-2-pentanone (MIBK)	ND		251	283		ug/Kg		113	51 - 140	2	20
Naphthalene	ND		50.2	56.6		ug/Kg		113	45 - 146	5	20
N-Propylbenzene	ND		50.2	48.4		ug/Kg		96	70 - 130	1	20
Styrene	ND		50.2	50.7		ug/Kg		101	58 - 135	0	20
1,1,1,2-Tetrachloroethane	ND		50.2	55.9		ug/Kg		111	64 - 133	0	20
1,1,2,2-Tetrachloroethane	ND		50.2	39.8		ug/Kg		79	70 - 131	3	20
Toluene	ND		50.2	51.1		ug/Kg		102	70 - 130	0	20
1,2,3-Trichlorobenzene	ND		50.2	55.0		ug/Kg		110	58 - 138	2	20
1,2,4-Trichlorobenzene	ND		50.2	53.2		ug/Kg		106	49 - 144	2	20
1,1,1-Trichloroethane	ND		50.2	56.2		ug/Kg		112	57 - 133	1	20
1,1,2-Trichloroethane	ND		50.2	56.1		ug/Kg		112	68 - 132	1	20
Trichloroethene	ND	F1	50.2	65.6	F1	ug/Kg		131	66 - 130	1	20
Trichlorofluoromethane	ND		50.2	45.9		ug/Kg		91	61 - 130	4	20
1,2,3-Trichloropropane	ND		50.2	55.4		ug/Kg		110	62 - 150	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	* F1	50.2	68.0	F1	ug/Kg		135	52 - 130	0	20
1,2,4-Trimethylbenzene	ND		50.2	48.9		ug/Kg		97	64 - 140	0	20
1,3,5-Trimethylbenzene	ND		50.2	48.9		ug/Kg		97	67 - 134	0	20
Vinyl acetate	ND	F1	50.2	7.92	J F1	ug/Kg		16	52 - 150	19	20
Vinyl chloride	ND		50.2	37.4		ug/Kg		75	62 - 130	2	20
m-Xylene & p-Xylene	ND		50.2	50.5		ug/Kg		101	70 - 130	0	20
o-Xylene	ND		50.2	51.8		ug/Kg		103	68 - 130	0	20
2,2-Dichloropropane	ND		50.2	52.7		ug/Kg		105	63 - 130	1	20
Tetrachloroethene	ND		50.2	55.3		ug/Kg		110	67 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*105*		*60 - 140*
Toluene-d8 (Surr)	*99*		*58 - 140*

Lab Sample ID: MB 720-250622/4
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/30/18 18:12	1
Acetone	ND		50	38	ug/Kg			08/30/18 18:12	1
Benzene	ND		5.0	0.65	ug/Kg			08/30/18 18:12	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/30/18 18:12	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/30/18 18:12	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/30/18 18:12	1
Bromoform	ND		5.0	2.0	ug/Kg			08/30/18 18:12	1
Bromomethane	ND		10	0.79	ug/Kg			08/30/18 18:12	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/30/18 18:12	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/30/18 18:12	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/30/18 18:12	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/30/18 18:12	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/30/18 18:12	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/30/18 18:12	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/30/18 18:12	1
Chloroethane	ND		10	0.56	ug/Kg			08/30/18 18:12	1
Chloroform	ND		5.0	0.66	ug/Kg			08/30/18 18:12	1
Chloromethane	ND		10	0.79	ug/Kg			08/30/18 18:12	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/30/18 18:12	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/30/18 18:12	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/30/18 18:12	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/30/18 18:12	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/30/18 18:12	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/30/18 18:12	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/30/18 18:12	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/30/18 18:12	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/30/18 18:12	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/30/18 18:12	1
Dibromomethane	ND		10	0.86	ug/Kg			08/30/18 18:12	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/30/18 18:12	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/30/18 18:12	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/30/18 18:12	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/30/18 18:12	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/30/18 18:12	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/30/18 18:12	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/30/18 18:12	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/30/18 18:12	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/30/18 18:12	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/30/18 18:12	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/30/18 18:12	1
2-Hexanone	ND		50	10	ug/Kg			08/30/18 18:12	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/30/18 18:12	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/30/18 18:12	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/30/18 18:12	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/30/18 18:12	1
Naphthalene	ND		10	1.5	ug/Kg			08/30/18 18:12	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/30/18 18:12	1
Styrene	ND		5.0	0.63	ug/Kg			08/30/18 18:12	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/30/18 18:12	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/30/18 18:12	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250622/4
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		5.0	0.71	ug/Kg			08/30/18 18:12	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/30/18 18:12	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/30/18 18:12	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/30/18 18:12	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/30/18 18:12	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/30/18 18:12	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/30/18 18:12	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/30/18 18:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/30/18 18:12	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/30/18 18:12	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/30/18 18:12	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/30/18 18:12	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/30/18 18:12	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/30/18 18:12	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/30/18 18:12	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/30/18 18:12	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/30/18 18:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*45 - 131*		*08/30/18 18:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*60 - 140*		*08/30/18 18:12*	*1*
Toluene-d8 (Surr)	*101*		*58 - 140*		*08/30/18 18:12*	*1*

Lab Sample ID: LCS 720-250622/5
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	51.5		ug/Kg		103	70 - 144
Acetone	250	200		ug/Kg		80	30 - 162
Benzene	50.0	53.2		ug/Kg		106	70 - 130
Dichlorobromomethane	50.0	51.7		ug/Kg		103	70 - 140
Bromobenzene	50.0	49.4		ug/Kg		99	70 - 130
Chlorobromomethane	50.0	51.8		ug/Kg		104	70 - 130
Bromoform	50.0	49.6		ug/Kg		99	59 - 158
Bromomethane	50.0	49.2		ug/Kg		98	59 - 132
2-Butanone (MEK)	250	217		ug/Kg		87	59 - 159
n-Butylbenzene	50.0	54.4		ug/Kg		109	70 - 142
sec-Butylbenzene	50.0	55.2		ug/Kg		110	70 - 136
tert-Butylbenzene	50.0	53.7		ug/Kg		107	70 - 130
Carbon disulfide	50.0	72.6	*	ug/Kg		145	60 - 140
Carbon tetrachloride	50.0	57.1		ug/Kg		114	70 - 142
Chlorobenzene	50.0	51.0		ug/Kg		102	70 - 130
Chloroethane	50.0	47.4		ug/Kg		95	65 - 130
Chloroform	50.0	52.8		ug/Kg		106	77 - 127
Chloromethane	50.0	47.2		ug/Kg		94	55 - 140
2-Chlorotoluene	50.0	53.1		ug/Kg		106	70 - 138

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250622/5
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chlorotoluene	50.0	53.3		ug/Kg		107	70 - 136
Chlorodibromomethane	50.0	50.8		ug/Kg		102	70 - 146
1,2-Dichlorobenzene	50.0	49.7		ug/Kg		99	70 - 130
1,3-Dichlorobenzene	50.0	50.9		ug/Kg		102	70 - 131
1,4-Dichlorobenzene	50.0	50.5		ug/Kg		101	70 - 130
1,3-Dichloropropane	50.0	48.7		ug/Kg		97	70 - 140
1,1-Dichloropropene	50.0	56.5		ug/Kg		113	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	48.0		ug/Kg		96	60 - 145
Ethylene Dibromide	50.0	49.6		ug/Kg		99	70 - 140
Dibromomethane	50.0	49.5		ug/Kg		99	70 - 139
Dichlorodifluoromethane	50.0	42.1		ug/Kg		84	37 - 158
1,1-Dichloroethane	50.0	55.6		ug/Kg		111	70 - 130
1,2-Dichloroethane	50.0	49.7		ug/Kg		99	70 - 130
1,1-Dichloroethene	50.0	63.6	*	ug/Kg		127	74 - 122
cis-1,2-Dichloroethene	50.0	54.6		ug/Kg		109	70 - 138
trans-1,2-Dichloroethene	50.0	58.7		ug/Kg		117	67 - 130
1,2-Dichloropropane	50.0	53.7		ug/Kg		107	73 - 127
cis-1,3-Dichloropropene	50.0	54.8		ug/Kg		110	68 - 147
trans-1,3-Dichloropropene	50.0	51.7		ug/Kg		103	70 - 155
Ethylbenzene	50.0	54.0		ug/Kg		108	80 - 137
Hexachlorobutadiene	50.0	50.4		ug/Kg		101	70 - 132
2-Hexanone	250	230		ug/Kg		92	62 - 158
Isopropylbenzene	50.0	53.0		ug/Kg		106	70 - 130
4-Isopropyltoluene	50.0	55.2		ug/Kg		110	70 - 133
Methylene Chloride	50.0	52.7		ug/Kg		105	70 - 134
4-Methyl-2-pentanone (MIBK)	250	234		ug/Kg		94	60 - 160
Naphthalene	50.0	46.8		ug/Kg		94	60 - 147
N-Propylbenzene	50.0	56.0		ug/Kg		112	70 - 130
Styrene	50.0	51.3		ug/Kg		103	70 - 130
1,1,1,2-Tetrachloroethane	50.0	51.8		ug/Kg		104	70 - 130
1,1,2,2-Tetrachloroethane	50.0	48.0		ug/Kg		96	70 - 146
Toluene	50.0	52.0		ug/Kg		104	75 - 120
1,2,3-Trichlorobenzene	50.0	47.4		ug/Kg		95	60 - 140
1,2,4-Trichlorobenzene	50.0	49.0		ug/Kg		98	60 - 140
1,1,1-Trichloroethane	50.0	55.2		ug/Kg		110	70 - 130
1,1,2-Trichloroethane	50.0	50.3		ug/Kg		101	70 - 130
Trichloroethene	50.0	51.3		ug/Kg		103	70 - 133
Trichlorofluoromethane	50.0	53.6		ug/Kg		107	60 - 140
1,2,3-Trichloropropane	50.0	47.8		ug/Kg		96	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	68.5		ug/Kg		137	60 - 140
1,2,4-Trimethylbenzene	50.0	53.2		ug/Kg		106	70 - 130
1,3,5-Trimethylbenzene	50.0	53.8		ug/Kg		108	70 - 131
Vinyl acetate	50.0	48.2		ug/Kg		96	38 - 176
Vinyl chloride	50.0	48.4		ug/Kg		97	58 - 125
m-Xylene & p-Xylene	50.0	53.1		ug/Kg		106	70 - 146
o-Xylene	50.0	53.0		ug/Kg		106	70 - 140
2,2-Dichloropropane	50.0	58.1		ug/Kg		116	70 - 162

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250622/5
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Tetrachloroethene			50.0	53.2		ug/Kg		106	70 - 132		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*92*		*60 - 140*
Toluene-d8 (Surr)	*100*		*58 - 140*

Lab Sample ID: LCS 720-250622/7
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C4-C12			1000	1020		ug/Kg		102	70 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*100*		*60 - 140*
Toluene-d8 (Surr)	*103*		*58 - 140*

Lab Sample ID: LCSD 720-250622/6
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether			50.0	51.0		ug/Kg		102	70 - 144	1	20
Acetone			250	192		ug/Kg		77	30 - 162	4	30
Benzene			50.0	53.0		ug/Kg		106	70 - 130	0	20
Dichlorobromomethane			50.0	51.5		ug/Kg		103	70 - 140	0	20
Bromobenzene			50.0	50.0		ug/Kg		100	70 - 130	1	20
Chlorobromomethane			50.0	51.4		ug/Kg		103	70 - 130	1	20
Bromoform			50.0	47.7		ug/Kg		95	59 - 158	4	20
Bromomethane			50.0	49.0		ug/Kg		98	59 - 132	0	20
2-Butanone (MEK)			250	211		ug/Kg		84	59 - 159	3	20
n-Butylbenzene			50.0	54.3		ug/Kg		109	70 - 142	0	20
sec-Butylbenzene			50.0	55.1		ug/Kg		110	70 - 136	0	20
tert-Butylbenzene			50.0	53.8		ug/Kg		108	70 - 130	0	20
Carbon disulfide			50.0	71.9	*	ug/Kg		144	60 - 140	1	20
Carbon tetrachloride			50.0	57.0		ug/Kg		114	70 - 142	0	20
Chlorobenzene			50.0	50.3		ug/Kg		101	70 - 130	1	20
Chloroethane			50.0	47.4		ug/Kg		95	65 - 130	0	20
Chloroform			50.0	53.2		ug/Kg		106	77 - 127	1	20
Chloromethane			50.0	47.0		ug/Kg		94	55 - 140	0	20
2-Chlorotoluene			50.0	53.0		ug/Kg		106	70 - 138	0	20
4-Chlorotoluene			50.0	53.5		ug/Kg		107	70 - 136	0	20
Chlorodibromomethane			50.0	50.0		ug/Kg		100	70 - 146	2	20
1,2-Dichlorobenzene			50.0	50.0		ug/Kg		100	70 - 130	1	20
1,3-Dichlorobenzene			50.0	51.2		ug/Kg		102	70 - 131	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250622/6
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dichlorobenzene	50.0	50.4		ug/Kg		101	70 - 130	0	20
1,3-Dichloropropane	50.0	48.0		ug/Kg		96	70 - 140	1	20
1,1-Dichloropropene	50.0	55.8		ug/Kg		112	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	50.0	47.4		ug/Kg		95	60 - 145	1	20
Ethylene Dibromide	50.0	48.9		ug/Kg		98	70 - 140	1	20
Dibromomethane	50.0	48.2		ug/Kg		96	70 - 139	3	20
Dichlorodifluoromethane	50.0	40.6		ug/Kg		81	37 - 158	4	20
1,1-Dichloroethane	50.0	55.5		ug/Kg		111	70 - 130	0	20
1,2-Dichloroethane	50.0	49.2		ug/Kg		98	70 - 130	1	20
1,1-Dichloroethene	50.0	63.0	*	ug/Kg		126	74 - 122	1	20
cis-1,2-Dichloroethene	50.0	54.1		ug/Kg		108	70 - 138	1	20
trans-1,2-Dichloroethene	50.0	58.7		ug/Kg		117	67 - 130	0	20
1,2-Dichloropropane	50.0	53.9		ug/Kg		108	73 - 127	0	20
cis-1,3-Dichloropropene	50.0	54.5		ug/Kg		109	68 - 147	0	20
trans-1,3-Dichloropropene	50.0	51.0		ug/Kg		102	70 - 155	1	20
Ethylbenzene	50.0	52.8		ug/Kg		106	80 - 137	2	20
Hexachlorobutadiene	50.0	50.6		ug/Kg		101	70 - 132	0	20
2-Hexanone	250	219		ug/Kg		88	62 - 158	5	20
Isopropylbenzene	50.0	51.5		ug/Kg		103	70 - 130	3	20
4-Isopropyltoluene	50.0	54.8		ug/Kg		110	70 - 133	1	20
Methylene Chloride	50.0	53.1		ug/Kg		106	70 - 134	1	20
4-Methyl-2-pentanone (MIBK)	250	228		ug/Kg		91	60 - 160	3	20
Naphthalene	50.0	46.7		ug/Kg		93	60 - 147	0	20
N-Propylbenzene	50.0	55.6		ug/Kg		111	70 - 130	1	20
Styrene	50.0	50.7		ug/Kg		101	70 - 130	1	20
1,1,1,2-Tetrachloroethane	50.0	51.4		ug/Kg		103	70 - 130	1	20
1,1,2,2-Tetrachloroethane	50.0	47.1		ug/Kg		94	70 - 146	2	20
Toluene	50.0	50.9		ug/Kg		102	75 - 120	2	20
1,2,3-Trichlorobenzene	50.0	48.3		ug/Kg		97	60 - 140	2	20
1,2,4-Trichlorobenzene	50.0	49.5		ug/Kg		99	60 - 140	1	20
1,1,1-Trichloroethane	50.0	55.0		ug/Kg		110	70 - 130	0	20
1,1,2-Trichloroethane	50.0	50.1		ug/Kg		100	70 - 130	0	20
Trichloroethene	50.0	50.8		ug/Kg		102	70 - 133	1	20
Trichlorofluoromethane	50.0	53.2		ug/Kg		106	60 - 140	1	20
1,2,3-Trichloropropane	50.0	47.6		ug/Kg		95	70 - 146	0	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	68.5		ug/Kg		137	60 - 140	0	20
1,2,4-Trimethylbenzene	50.0	53.5		ug/Kg		107	70 - 130	1	20
1,3,5-Trimethylbenzene	50.0	54.0		ug/Kg		108	70 - 131	0	20
Vinyl acetate	50.0	47.4		ug/Kg		95	38 - 176	2	20
Vinyl chloride	50.0	47.7		ug/Kg		95	58 - 125	1	20
m-Xylene & p-Xylene	50.0	52.1		ug/Kg		104	70 - 146	2	20
o-Xylene	50.0	51.9		ug/Kg		104	70 - 140	2	20
2,2-Dichloropropane	50.0	58.6		ug/Kg		117	70 - 162	1	20
Tetrachloroethene	50.0	51.9		ug/Kg		104	70 - 132	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250622/6
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	92		60 - 140
Toluene-d8 (Surr)	101		58 - 140

Lab Sample ID: LCSD 720-250622/8
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	1000		ug/Kg		100	70 - 122	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	102		45 - 131
1,2-Dichloroethane-d4 (Surr)	100		60 - 140
Toluene-d8 (Surr)	102		58 - 140

Lab Sample ID: MB 720-250726/4
Matrix: Solid
Analysis Batch: 250726

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/31/18 19:58	1
Acetone	ND		50	38	ug/Kg			08/31/18 19:58	1
Benzene	ND		5.0	0.65	ug/Kg			08/31/18 19:58	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/31/18 19:58	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/31/18 19:58	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/31/18 19:58	1
Bromoform	ND		5.0	2.0	ug/Kg			08/31/18 19:58	1
Bromomethane	ND		10	0.79	ug/Kg			08/31/18 19:58	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/31/18 19:58	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/31/18 19:58	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/31/18 19:58	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/31/18 19:58	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/31/18 19:58	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/31/18 19:58	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/31/18 19:58	1
Chloroethane	ND		10	0.56	ug/Kg			08/31/18 19:58	1
Chloroform	ND		5.0	0.66	ug/Kg			08/31/18 19:58	1
Chloromethane	ND		10	0.79	ug/Kg			08/31/18 19:58	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/31/18 19:58	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/31/18 19:58	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/31/18 19:58	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/31/18 19:58	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/31/18 19:58	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/31/18 19:58	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/31/18 19:58	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/31/18 19:58	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/31/18 19:58	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250726/4
Matrix: Solid
Analysis Batch: 250726

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/31/18 19:58	1
Dibromomethane	ND		10	0.86	ug/Kg			08/31/18 19:58	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/31/18 19:58	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/31/18 19:58	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/31/18 19:58	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/31/18 19:58	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/31/18 19:58	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/31/18 19:58	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/31/18 19:58	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/31/18 19:58	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/31/18 19:58	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/31/18 19:58	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/31/18 19:58	1
2-Hexanone	ND		50	10	ug/Kg			08/31/18 19:58	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/31/18 19:58	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/31/18 19:58	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/31/18 19:58	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/31/18 19:58	1
Naphthalene	ND		10	1.5	ug/Kg			08/31/18 19:58	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/31/18 19:58	1
Styrene	ND		5.0	0.63	ug/Kg			08/31/18 19:58	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/31/18 19:58	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/31/18 19:58	1
Toluene	ND		5.0	0.71	ug/Kg			08/31/18 19:58	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/31/18 19:58	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/31/18 19:58	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/31/18 19:58	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/31/18 19:58	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/31/18 19:58	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/31/18 19:58	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/31/18 19:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/31/18 19:58	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/31/18 19:58	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/31/18 19:58	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/31/18 19:58	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/31/18 19:58	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/31/18 19:58	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/31/18 19:58	1
C4-C10	ND		250	100	ug/Kg			08/31/18 19:58	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/31/18 19:58	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/31/18 19:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*45 - 131*		*08/31/18 19:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*60 - 140*		*08/31/18 19:58*	*1*
Toluene-d8 (Surr)	*97*		*58 - 140*		*08/31/18 19:58*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250726/5
Matrix: Solid
Analysis Batch: 250726

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	55.1		ug/Kg		110	70 - 144
Acetone	250	248		ug/Kg		99	30 - 162
Benzene	50.0	53.1		ug/Kg		106	70 - 130
Dichlorobromomethane	50.0	55.5		ug/Kg		111	70 - 140
Bromobenzene	50.0	51.7		ug/Kg		103	70 - 130
Chlorobromomethane	50.0	58.8		ug/Kg		118	70 - 130
Bromoform	50.0	58.2		ug/Kg		116	59 - 158
Bromomethane	50.0	49.2		ug/Kg		98	59 - 132
2-Butanone (MEK)	250	250		ug/Kg		100	59 - 159
n-Butylbenzene	50.0	52.2		ug/Kg		104	70 - 142
sec-Butylbenzene	50.0	51.1		ug/Kg		102	70 - 136
tert-Butylbenzene	50.0	51.3		ug/Kg		103	70 - 130
Carbon disulfide	50.0	70.3	*	ug/Kg		141	60 - 140
Carbon tetrachloride	50.0	60.2		ug/Kg		120	70 - 142
Chlorobenzene	50.0	53.3		ug/Kg		107	70 - 130
Chloroethane	50.0	46.9		ug/Kg		94	65 - 130
Chloroform	50.0	55.7		ug/Kg		111	77 - 127
Chloromethane	50.0	46.1		ug/Kg		92	55 - 140
2-Chlorotoluene	50.0	49.0		ug/Kg		98	70 - 138
4-Chlorotoluene	50.0	49.0		ug/Kg		98	70 - 136
Chlorodibromomethane	50.0	58.9		ug/Kg		118	70 - 146
1,2-Dichlorobenzene	50.0	53.4		ug/Kg		107	70 - 130
1,3-Dichlorobenzene	50.0	51.5		ug/Kg		103	70 - 131
1,4-Dichlorobenzene	50.0	51.7		ug/Kg		103	70 - 130
1,3-Dichloropropane	50.0	54.2		ug/Kg		108	70 - 140
1,1-Dichloropropene	50.0	55.1		ug/Kg		110	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	56.3		ug/Kg		113	60 - 145
Ethylene Dibromide	50.0	56.0		ug/Kg		112	70 - 140
Dibromomethane	50.0	55.3		ug/Kg		111	70 - 139
Dichlorodifluoromethane	50.0	34.9		ug/Kg		70	37 - 158
1,1-Dichloroethane	50.0	56.7		ug/Kg		113	70 - 130
1,2-Dichloroethane	50.0	59.1		ug/Kg		118	70 - 130
1,1-Dichloroethene	50.0	65.4	*	ug/Kg		131	74 - 122
cis-1,2-Dichloroethene	50.0	56.5		ug/Kg		113	70 - 138
trans-1,2-Dichloroethene	50.0	57.9		ug/Kg		116	67 - 130
1,2-Dichloropropane	50.0	55.1		ug/Kg		110	73 - 127
cis-1,3-Dichloropropene	50.0	56.6		ug/Kg		113	68 - 147
trans-1,3-Dichloropropene	50.0	54.4		ug/Kg		109	70 - 155
Ethylbenzene	50.0	51.7		ug/Kg		103	80 - 137
Hexachlorobutadiene	50.0	57.0		ug/Kg		114	70 - 132
2-Hexanone	250	258		ug/Kg		103	62 - 158
Isopropylbenzene	50.0	53.6		ug/Kg		107	70 - 130
4-Isopropyltoluene	50.0	52.4		ug/Kg		105	70 - 133
Methylene Chloride	50.0	56.4		ug/Kg		113	70 - 134
4-Methyl-2-pentanone (MIBK)	250	258		ug/Kg		103	60 - 160
Naphthalene	50.0	53.3		ug/Kg		107	60 - 147
N-Propylbenzene	50.0	49.9		ug/Kg		100	70 - 130
Styrene	50.0	51.2		ug/Kg		102	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250726/5
Matrix: Solid
Analysis Batch: 250726

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	56.5		ug/Kg		113	70 - 130
1,1,2,2-Tetrachloroethane	50.0	49.5		ug/Kg		99	70 - 146
Toluene	50.0	52.0		ug/Kg		104	75 - 120
1,2,3-Trichlorobenzene	50.0	55.3		ug/Kg		111	60 - 140
1,2,4-Trichlorobenzene	50.0	54.1		ug/Kg		108	60 - 140
1,1,1-Trichloroethane	50.0	59.0		ug/Kg		118	70 - 130
1,1,2-Trichloroethane	50.0	54.6		ug/Kg		109	70 - 130
Trichloroethene	50.0	56.7		ug/Kg		113	70 - 133
Trichlorofluoromethane	50.0	54.0		ug/Kg		108	60 - 140
1,2,3-Trichloropropane	50.0	53.0		ug/Kg		106	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	71.4	*	ug/Kg		143	60 - 140
1,2,4-Trimethylbenzene	50.0	49.9		ug/Kg		100	70 - 130
1,3,5-Trimethylbenzene	50.0	49.8		ug/Kg		100	70 - 131
Vinyl acetate	50.0	47.6		ug/Kg		95	38 - 176
Vinyl chloride	50.0	45.5		ug/Kg		91	58 - 125
m-Xylene & p-Xylene	50.0	51.1		ug/Kg		102	70 - 146
o-Xylene	50.0	52.6		ug/Kg		105	70 - 140
2,2-Dichloropropane	50.0	57.8		ug/Kg		116	70 - 162
Tetrachloroethene	50.0	56.4		ug/Kg		113	70 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*
Toluene-d8 (Surr)	*98*		*58 - 140*

Lab Sample ID: LCS 720-250726/7
Matrix: Solid
Analysis Batch: 250726

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	1010		ug/Kg		101	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*101*		*60 - 140*
Toluene-d8 (Surr)	*98*		*58 - 140*

Lab Sample ID: LCSD 720-250726/6
Matrix: Solid
Analysis Batch: 250726

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	54.2		ug/Kg		108	70 - 144	2	20
Acetone	250	252		ug/Kg		101	30 - 162	2	30
Benzene	50.0	52.4		ug/Kg		105	70 - 130	1	20
Dichlorobromomethane	50.0	55.3		ug/Kg		111	70 - 140	0	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250726/6
Matrix: Solid
Analysis Batch: 250726

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromobenzene	50.0	50.7		ug/Kg		101	70 - 130	2	20
Chlorobromomethane	50.0	57.2		ug/Kg		114	70 - 130	3	20
Bromoform	50.0	57.7		ug/Kg		115	59 - 158	1	20
Bromomethane	50.0	48.7		ug/Kg		97	59 - 132	1	20
2-Butanone (MEK)	250	246		ug/Kg		98	59 - 159	2	20
n-Butylbenzene	50.0	54.8		ug/Kg		110	70 - 142	5	20
sec-Butylbenzene	50.0	51.8		ug/Kg		104	70 - 136	1	20
tert-Butylbenzene	50.0	51.3		ug/Kg		103	70 - 130	0	20
Carbon disulfide	50.0	70.1		ug/Kg		140	60 - 140	0	20
Carbon tetrachloride	50.0	60.1		ug/Kg		120	70 - 142	0	20
Chlorobenzene	50.0	53.3		ug/Kg		107	70 - 130	0	20
Chloroethane	50.0	46.2		ug/Kg		92	65 - 130	1	20
Chloroform	50.0	54.8		ug/Kg		110	77 - 127	2	20
Chloromethane	50.0	43.1		ug/Kg		86	55 - 140	7	20
2-Chlorotoluene	50.0	49.1		ug/Kg		98	70 - 138	0	20
4-Chlorotoluene	50.0	49.2		ug/Kg		98	70 - 136	0	20
Chlorodibromomethane	50.0	57.7		ug/Kg		115	70 - 146	2	20
1,2-Dichlorobenzene	50.0	52.9		ug/Kg		106	70 - 130	1	20
1,3-Dichlorobenzene	50.0	51.4		ug/Kg		103	70 - 131	0	20
1,4-Dichlorobenzene	50.0	52.3		ug/Kg		105	70 - 130	1	20
1,3-Dichloropropane	50.0	52.6		ug/Kg		105	70 - 140	3	20
1,1-Dichloropropene	50.0	55.5		ug/Kg		111	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	50.0	55.3		ug/Kg		111	60 - 145	2	20
Ethylene Dibromide	50.0	54.0		ug/Kg		108	70 - 140	4	20
Dibromomethane	50.0	54.1		ug/Kg		108	70 - 139	2	20
Dichlorodifluoromethane	50.0	32.1		ug/Kg		64	37 - 158	8	20
1,1-Dichloroethane	50.0	56.4		ug/Kg		113	70 - 130	1	20
1,2-Dichloroethane	50.0	56.5		ug/Kg		113	70 - 130	5	20
1,1-Dichloroethene	50.0	65.3	*	ug/Kg		131	74 - 122	0	20
cis-1,2-Dichloroethene	50.0	55.1		ug/Kg		110	70 - 138	3	20
trans-1,2-Dichloroethene	50.0	58.2		ug/Kg		116	67 - 130	0	20
1,2-Dichloropropane	50.0	54.1		ug/Kg		108	73 - 127	2	20
cis-1,3-Dichloropropene	50.0	55.9		ug/Kg		112	68 - 147	1	20
trans-1,3-Dichloropropene	50.0	53.6		ug/Kg		107	70 - 155	1	20
Ethylbenzene	50.0	52.0		ug/Kg		104	80 - 137	1	20
Hexachlorobutadiene	50.0	58.2		ug/Kg		116	70 - 132	2	20
2-Hexanone	250	255		ug/Kg		102	62 - 158	1	20
Isopropylbenzene	50.0	54.6		ug/Kg		109	70 - 130	2	20
4-Isopropyltoluene	50.0	53.5		ug/Kg		107	70 - 133	2	20
Methylene Chloride	50.0	55.6		ug/Kg		111	70 - 134	1	20
4-Methyl-2-pentanone (MIBK)	250	250		ug/Kg		100	60 - 160	3	20
Naphthalene	50.0	53.3		ug/Kg		107	60 - 147	0	20
N-Propylbenzene	50.0	50.7		ug/Kg		101	70 - 130	2	20
Styrene	50.0	51.1		ug/Kg		102	70 - 130	0	20
1,1,1,2-Tetrachloroethane	50.0	56.0		ug/Kg		112	70 - 130	1	20
1,1,2,2-Tetrachloroethane	50.0	48.7		ug/Kg		97	70 - 146	2	20
Toluene	50.0	51.9		ug/Kg		104	75 - 120	0	20
1,2,3-Trichlorobenzene	50.0	56.7		ug/Kg		113	60 - 140	3	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250726/6
Matrix: Solid
Analysis Batch: 250726

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	50.0	57.1		ug/Kg		114	60 - 140	5	20
1,1,1-Trichloroethane	50.0	58.6		ug/Kg		117	70 - 130	1	20
1,1,2-Trichloroethane	50.0	53.3		ug/Kg		107	70 - 130	2	20
Trichloroethene	50.0	56.6		ug/Kg		113	70 - 133	0	20
Trichlorofluoromethane	50.0	52.8		ug/Kg		106	60 - 140	2	20
1,2,3-Trichloropropane	50.0	50.8		ug/Kg		102	70 - 146	4	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	73.1	*	ug/Kg		146	60 - 140	2	20
1,2,4-Trimethylbenzene	50.0	50.4		ug/Kg		101	70 - 130	1	20
1,3,5-Trimethylbenzene	50.0	50.2		ug/Kg		100	70 - 131	1	20
Vinyl acetate	50.0	47.0		ug/Kg		94	38 - 176	1	20
Vinyl chloride	50.0	42.7		ug/Kg		85	58 - 125	6	20
m-Xylene & p-Xylene	50.0	52.0		ug/Kg		104	70 - 146	2	20
o-Xylene	50.0	52.9		ug/Kg		106	70 - 140	1	20
2,2-Dichloropropane	50.0	59.7		ug/Kg		119	70 - 162	3	20
Tetrachloroethene	50.0	57.4		ug/Kg		115	70 - 132	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*98*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: LCSD 720-250726/8
Matrix: Solid
Analysis Batch: 250726

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12	1000	1020		ug/Kg		102	70 - 122	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*99*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: MB 720-250755/4
Matrix: Solid
Analysis Batch: 250755

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		5.0	0.67	ug/Kg			09/04/18 09:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*45 - 131*		*09/04/18 09:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*60 - 140*		*09/04/18 09:02*	*1*
Toluene-d8 (Surr)	*94*		*58 - 140*		*09/04/18 09:02*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250755/7
Matrix: Solid
Analysis Batch: 250755

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Tetrachloroethene			50.0	56.6		ug/Kg		113	70 - 132		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*98*		*58 - 140*

Lab Sample ID: LCSD 720-250755/8
Matrix: Solid
Analysis Batch: 250755

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Tetrachloroethene			50.0	54.6		ug/Kg		109	70 - 132	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*101*		*60 - 140*
Toluene-d8 (Surr)	*98*		*58 - 140*

Lab Sample ID: 720-88239-D-3-H MS
Matrix: Solid
Analysis Batch: 250755

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250812

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Tetrachloroethene	ND		47.2	52.8		ug/Kg		112	67 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*91*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*93*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: 720-88239-D-3-I MSD
Matrix: Solid
Analysis Batch: 250755

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250812

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Tetrachloroethene	ND		46.7	53.7		ug/Kg		115	67 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*91*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 720-250487/1-A
Matrix: Solid
Analysis Batch: 250730

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250487

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		10	5.0	ug/Kg		08/29/18 11:45	08/31/18 18:03	1
Acenaphthene	ND		5.0	2.8	ug/Kg		08/29/18 11:45	08/31/18 18:03	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		08/29/18 11:45	08/31/18 18:03	1
Anthracene	ND		5.0	2.0	ug/Kg		08/29/18 11:45	08/31/18 18:03	1
Benzo[a]anthracene	ND		5.0	1.5	ug/Kg		08/29/18 11:45	08/31/18 18:03	1
Benzo[a]pyrene	ND		5.0	1.9	ug/Kg		08/29/18 11:45	08/31/18 18:03	1
Benzo[b]fluoranthene	ND		5.0	2.1	ug/Kg		08/29/18 11:45	08/31/18 18:03	1
Benzo[g,h,i]perylene	ND		5.0	4.3	ug/Kg		08/29/18 11:45	08/31/18 18:03	1
Benzo[k]fluoranthene	ND		5.0	2.1	ug/Kg		08/29/18 11:45	08/31/18 18:03	1
Chrysene	ND		5.0	1.4	ug/Kg		08/29/18 11:45	08/31/18 18:03	1
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		08/29/18 11:45	08/31/18 18:03	1
Fluoranthene	1.70	J	5.0	1.4	ug/Kg		08/29/18 11:45	08/31/18 18:03	1
Fluorene	ND		5.0	2.2	ug/Kg		08/29/18 11:45	08/31/18 18:03	1
Indeno[1,2,3-cd]pyrene	ND		5.0	4.2	ug/Kg		08/29/18 11:45	08/31/18 18:03	1
Naphthalene	5.62		5.0	3.5	ug/Kg		08/29/18 11:45	08/31/18 18:03	1
Phenanthrene	2.28	J	5.0	1.8	ug/Kg		08/29/18 11:45	08/31/18 18:03	1
Pyrene	ND		5.0	1.7	ug/Kg		08/29/18 11:45	08/31/18 18:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*71*		*33 - 120*	*08/29/18 11:45*	*08/31/18 18:03*	*1*
Terphenyl-d14	*90*		*35 - 146*	*08/29/18 11:45*	*08/31/18 18:03*	*1*

Lab Sample ID: LCS 720-250487/2-A
Matrix: Solid
Analysis Batch: 250730

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250487

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	667	429		ug/Kg		64	46 - 110
Acenaphthene	667	471		ug/Kg		71	46 - 106
Acenaphthylene	667	466		ug/Kg		70	46 - 108
Anthracene	667	501		ug/Kg		75	55 - 103
Benzo[a]anthracene	667	582		ug/Kg		87	54 - 110
Benzo[a]pyrene	667	561		ug/Kg		84	62 - 111
Benzo[b]fluoranthene	667	555		ug/Kg		83	60 - 109
Benzo[g,h,i]perylene	667	547		ug/Kg		82	52 - 114
Benzo[k]fluoranthene	667	533		ug/Kg		80	58 - 109
Chrysene	667	555		ug/Kg		83	54 - 108
Dibenz(a,h)anthracene	667	571		ug/Kg		86	58 - 112
Fluoranthene	667	493		ug/Kg		74	59 - 109
Fluorene	667	491		ug/Kg		74	52 - 106
Indeno[1,2,3-cd]pyrene	667	578		ug/Kg		87	55 - 120
Naphthalene	667	422		ug/Kg		63	49 - 110
Phenanthrene	667	481		ug/Kg		72	57 - 110
Pyrene	667	557		ug/Kg		83	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*68*		*33 - 120*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 720-250487/2-A
Matrix: Solid
Analysis Batch: 250730

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250487

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*89*		*35 - 146*

Lab Sample ID: 720-88240-3 MS
Matrix: Solid
Analysis Batch: 250745

Client Sample ID: DG-L13S-0.5-1
Prep Type: Total/NA
Prep Batch: 250487

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	ND		661	464		ug/Kg		70	46 - 110
Acenaphthene	ND		661	543		ug/Kg		82	46 - 106
Acenaphthylene	34	J	661	590		ug/Kg		84	46 - 108
Anthracene	20	J	661	588		ug/Kg		89	55 - 103
Benzo[a]anthracene	ND		661	639		ug/Kg		97	54 - 110
Benzo[a]pyrene	37	J	661	660		ug/Kg		94	62 - 111
Benzo[b]fluoranthene	49	J	661	732		ug/Kg		103	60 - 109
Benzo[g,h,i]perylene	50	F1	661	307	F1	ug/Kg		39	52 - 114
Benzo[k]fluoranthene	28	J F1	661	760	F1	ug/Kg		111	58 - 109
Chrysene	29	J	661	600		ug/Kg		86	54 - 108
Dibenz(a,h)anthracene	ND	F1	661	355	F1	ug/Kg		54	58 - 112
Fluoranthene	32	J B	661	579		ug/Kg		83	59 - 109
Fluorene	ND		661	560		ug/Kg		85	52 - 106
Indeno[1,2,3-cd]pyrene	ND	F1	661	349	F1	ug/Kg		53	55 - 120
Naphthalene	ND		661	508		ug/Kg		77	49 - 110
Phenanthrene	19	J B	661	524		ug/Kg		76	57 - 110
Pyrene	45	J	661	656		ug/Kg		92	50 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*73*		*33 - 120*
Terphenyl-d14	*89*		*35 - 146*

Lab Sample ID: 720-88240-3 MSD
Matrix: Solid
Analysis Batch: 250745

Client Sample ID: DG-L13S-0.5-1
Prep Type: Total/NA
Prep Batch: 250487

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	ND		661	431		ug/Kg		65	46 - 110	7	35
Acenaphthene	ND		661	494		ug/Kg		75	46 - 106	9	35
Acenaphthylene	34	J	661	518		ug/Kg		73	46 - 108	13	35
Anthracene	20	J	661	540		ug/Kg		82	55 - 103	9	35
Benzo[a]anthracene	ND		661	560		ug/Kg		85	54 - 110	13	35
Benzo[a]pyrene	37	J	661	612		ug/Kg		87	62 - 111	8	35
Benzo[b]fluoranthene	49	J	661	700		ug/Kg		99	60 - 109	4	35
Benzo[g,h,i]perylene	50	F1	661	261	F1	ug/Kg		32	52 - 114	16	35
Benzo[k]fluoranthene	28	J F1	661	729		ug/Kg		106	58 - 109	4	35
Chrysene	29	J	661	531		ug/Kg		76	54 - 108	12	35
Dibenz(a,h)anthracene	ND	F1	661	296	F1	ug/Kg		45	58 - 112	18	35
Fluoranthene	32	J B	661	522		ug/Kg		74	59 - 109	10	35
Fluorene	ND		661	505		ug/Kg		76	52 - 106	10	35
Indeno[1,2,3-cd]pyrene	ND	F1	661	290	F1	ug/Kg		44	55 - 120	19	35

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 720-88240-3 MSD — **Client Sample ID: DG-L13S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250745 — **Prep Batch: 250487**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene	ND		661	472		ug/Kg		71	49 - 110	7	35
Phenanthrene	19	J B	661	482		ug/Kg		70	57 - 110	8	35
Pyrene	45	J	661	601		ug/Kg		84	50 - 120	9	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*67*		*33 - 120*
Terphenyl-d14	*80*		*35 - 146*

Lab Sample ID: MB 720-250853/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250960 — **Prep Batch: 250853**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		10	5.0	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Acenaphthene	ND		5.0	2.8	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Anthracene	ND		5.0	2.0	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Benzo[a]anthracene	ND		5.0	1.5	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Benzo[a]pyrene	ND		5.0	1.9	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Benzo[b]fluoranthene	ND		5.0	2.1	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Benzo[g,h,i]perylene	ND		5.0	4.3	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Benzo[k]fluoranthene	ND		5.0	2.1	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Chrysene	ND		5.0	1.4	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Fluoranthene	ND		5.0	1.4	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Fluorene	ND		5.0	2.2	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Indeno[1,2,3-cd]pyrene	ND		5.0	4.2	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Naphthalene	ND		5.0	3.5	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Phenanthrene	ND		5.0	1.8	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Pyrene	ND		5.0	1.7	ug/Kg		09/04/18 17:46	09/06/18 02:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*33 - 120*	*09/04/18 17:46*	*09/06/18 02:11*	*1*
Terphenyl-d14	*89*		*35 - 146*	*09/04/18 17:46*	*09/06/18 02:11*	*1*

Lab Sample ID: LCS 720-250853/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250960 — **Prep Batch: 250853**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	667	496		ug/Kg		74	46 - 110
Acenaphthene	667	471		ug/Kg		71	46 - 106
Acenaphthylene	667	463		ug/Kg		69	46 - 108
Anthracene	667	511		ug/Kg		77	55 - 103
Benzo[a]anthracene	667	566		ug/Kg		85	54 - 110
Benzo[a]pyrene	667	566		ug/Kg		85	62 - 111
Benzo[b]fluoranthene	667	547		ug/Kg		82	60 - 109
Benzo[g,h,i]perylene	667	587		ug/Kg		88	52 - 114

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 720-250853/2-A
Matrix: Solid
Analysis Batch: 250960

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250853

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[k]fluoranthene	667	535		ug/Kg		80	58 - 109
Chrysene	667	544		ug/Kg		82	54 - 108
Dibenz(a,h)anthracene	667	582		ug/Kg		87	58 - 112
Fluoranthene	667	547		ug/Kg		82	59 - 109
Fluorene	667	495		ug/Kg		74	52 - 106
Indeno[1,2,3-cd]pyrene	667	593		ug/Kg		89	55 - 120
Naphthalene	667	465		ug/Kg		70	49 - 110
Phenanthrene	667	507		ug/Kg		76	57 - 110
Pyrene	667	580		ug/Kg		87	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*74*		*33 - 120*
Terphenyl-d14	*90*		*35 - 146*

Lab Sample ID: 720-88241-D-1-F MS
Matrix: Solid
Analysis Batch: 250960

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250853

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	38		649	418		ug/Kg		58	46 - 110
Acenaphthene	ND		649	413		ug/Kg		64	46 - 106
Acenaphthylene	4.5	J	649	397		ug/Kg		60	46 - 108
Anthracene	10		649	511		ug/Kg		77	55 - 103
Benzo[a]anthracene	24		649	560		ug/Kg		83	54 - 110
Benzo[a]pyrene	25		649	559		ug/Kg		82	62 - 111
Benzo[b]fluoranthene	49		649	547		ug/Kg		77	60 - 109
Benzo[g,h,i]perylene	21		649	471		ug/Kg		69	52 - 114
Benzo[k]fluoranthene	10		649	535		ug/Kg		81	58 - 109
Chrysene	75		649	597		ug/Kg		80	54 - 108
Dibenz(a,h)anthracene	9.1		649	479		ug/Kg		72	58 - 112
Fluoranthene	28		649	523		ug/Kg		76	59 - 109
Fluorene	3.2	J	649	457		ug/Kg		70	52 - 106
Indeno[1,2,3-cd]pyrene	13		649	480		ug/Kg		72	55 - 120
Naphthalene	16		649	357		ug/Kg		52	49 - 110
Phenanthrene	63		649	544		ug/Kg		74	57 - 110
Pyrene	57		649	654		ug/Kg		92	50 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*62*		*33 - 120*
Terphenyl-d14	*91*		*35 - 146*

Lab Sample ID: 720-88241-D-1-G MSD
Matrix: Solid
Analysis Batch: 250960

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250853

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	38		654	426		ug/Kg		59	46 - 110	2	35
Acenaphthene	ND		654	414		ug/Kg		63	46 - 106	0	35

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 720-88241-D-1-G MSD
Matrix: Solid
Analysis Batch: 250960

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250853

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthylene	4.5	J	654	402		ug/Kg		61	46 - 108	1	35
Anthracene	10		654	508		ug/Kg		76	55 - 103	1	35
Benzo[a]anthracene	24		654	559		ug/Kg		82	54 - 110	0	35
Benzo[a]pyrene	25		654	562		ug/Kg		82	62 - 111	1	35
Benzo[b]fluoranthene	49		654	548		ug/Kg		76	60 - 109	0	35
Benzo[g,h,i]perylene	21		654	429		ug/Kg		63	52 - 114	9	35
Benzo[k]fluoranthene	10		654	543		ug/Kg		82	58 - 109	2	35
Chrysene	75		654	594		ug/Kg		79	54 - 108	0	35
Dibenz(a,h)anthracene	9.1		654	449		ug/Kg		67	58 - 112	7	35
Fluoranthene	28		654	521		ug/Kg		76	59 - 109	0	35
Fluorene	3.2	J	654	461		ug/Kg		70	52 - 106	1	35
Indeno[1,2,3-cd]pyrene	13		654	449		ug/Kg		67	55 - 120	7	35
Naphthalene	16		654	350		ug/Kg		51	49 - 110	2	35
Phenanthrene	63		654	538		ug/Kg		73	57 - 110	1	35
Pyrene	57		654	649		ug/Kg		91	50 - 120	1	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*62*		*33 - 120*
Terphenyl-d14	*90*		*35 - 146*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-250461/1-A
Matrix: Solid
Analysis Batch: 250456

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250461

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		2000	750	ug/Kg		08/29/18 09:03	08/29/18 23:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*96*		*40 - 130*	*08/29/18 09:03*	*08/29/18 23:29*	*1*

Lab Sample ID: LCS 720-250461/2-A
Matrix: Solid
Analysis Batch: 250456

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250461

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			167000	168000		ug/Kg		101	50 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*86*		*40 - 130*

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 720-88240-3 MS — **Client Sample ID: DG-L13S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250456 — **Prep Batch: 250461**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	430000		164000	566000		ug/Kg		84	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
p-Terphenyl	*0*	*X D*	*40 - 130*

Lab Sample ID: 720-88240-3 MSD — **Client Sample ID: DG-L13S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250456 — **Prep Batch: 250461**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	430000		164000	602000		ug/Kg		105	50 - 150	6	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
p-Terphenyl	*0*	*X D*	*40 - 130*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 720-250479/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250736 — **Prep Batch: 250479**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.61	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
Aldrin	ND		2.0	0.50	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
alpha-BHC	ND		2.0	0.55	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
Dieldrin	ND		2.0	0.59	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
Endrin	ND		2.0	0.46	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
Endrin aldehyde	ND		2.0	0.63	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
Methoxychlor	ND		2.0	0.68	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
Toxaphene	ND		40	6.8	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/29/18 10:43	09/01/18 09:10	1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 720-250479/1-A
Matrix: Solid
Analysis Batch: 250736

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250479

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	96		21 - 136	08/29/18 10:43	09/01/18 09:10	1
Tetrachloro-m-xylene	72		21 - 145	08/29/18 10:43	09/01/18 09:10	1

Lab Sample ID: LCS 720-250479/2-A
Matrix: Solid
Analysis Batch: 250736

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250479

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	16.3		ug/Kg		98	75 - 128
4,4'-DDE	16.7	15.1		ug/Kg		90	76 - 126
4,4'-DDT	16.7	16.0		ug/Kg		96	63 - 127
Aldrin	16.7	14.0		ug/Kg		84	65 - 120
alpha-BHC	16.7	12.2		ug/Kg		73	46 - 122
beta-BHC	16.7	15.4		ug/Kg		92	78 - 136
cis-Chlordane	16.7	15.1		ug/Kg		90	70 - 120
delta-BHC	16.7	13.7		ug/Kg		82	43 - 125
Dieldrin	16.7	14.9		ug/Kg		89	72 - 120
Endosulfan I	16.7	15.3		ug/Kg		92	62 - 120
Endosulfan II	16.7	17.0		ug/Kg		102	65 - 120
Endosulfan sulfate	16.7	16.5		ug/Kg		99	72 - 121
Endrin	16.7	15.8		ug/Kg		95	68 - 120
Endrin aldehyde	16.7	17.1		ug/Kg		102	68 - 120
Endrin ketone	16.7	17.3		ug/Kg		104	75 - 136
gamma-BHC (Lindane)	16.7	14.2		ug/Kg		85	72 - 120
Heptachlor	16.7	14.3		ug/Kg		86	69 - 120
Heptachlor epoxide	16.7	15.2		ug/Kg		91	68 - 120
Methoxychlor	16.7	18.0		ug/Kg		108	71 - 132
trans-Chlordane	16.7	14.9		ug/Kg		89	68 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	110		21 - 136
Tetrachloro-m-xylene	81		21 - 145

Lab Sample ID: 720-88240-3 MS
Matrix: Solid
Analysis Batch: 250736

Client Sample ID: DG-L13S-0.5-1
Prep Type: Total/NA
Prep Batch: 250479

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		16.0	12.0		ug/Kg		75	40 - 120
4,4'-DDE	ND		16.0	11.5		ug/Kg		72	40 - 120
4,4'-DDT	ND		16.0	14.4		ug/Kg		90	17 - 144
Aldrin	ND		16.0	11.5		ug/Kg		72	53 - 120
alpha-BHC	ND		16.0	11.4		ug/Kg		71	40 - 120
beta-BHC	ND		16.0	10.2		ug/Kg		64	40 - 120
cis-Chlordane	3.5	J p	16.0	15.5		ug/Kg		75	40 - 120
delta-BHC	ND	F2	16.0	9.34		ug/Kg		58	40 - 120
Dieldrin	ND	F2	16.0	13.1		ug/Kg		82	46 - 130
Endosulfan I	ND		16.0	11.4		ug/Kg		72	40 - 120

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 720-88240-3 MS — **Client Sample ID: DG-L13S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250736 — **Prep Batch: 250479**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Endosulfan II	ND		16.0	13.0		ug/Kg		81	40 - 120
Endosulfan sulfate	ND		16.0	11.3		ug/Kg		71	40 - 120
Endrin	ND		16.0	13.8		ug/Kg		87	32 - 143
Endrin aldehyde	ND		16.0	10.4		ug/Kg		65	40 - 120
Endrin ketone	ND	F1	16.0	11.5		ug/Kg		72	40 - 120
gamma-BHC (Lindane)	ND		16.0	11.5		ug/Kg		72	58 - 120
Heptachlor	ND		16.0	13.2		ug/Kg		82	52 - 120
Heptachlor epoxide	ND		16.0	12.2		ug/Kg		76	40 - 120
Methoxychlor	ND		16.0	13.0		ug/Kg		81	40 - 120
trans-Chlordane	3.6	J	16.0	17.5		ug/Kg		87	40 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*79*		*21 - 136*
Tetrachloro-m-xylene	*77*		*21 - 145*

Lab Sample ID: 720-88240-3 MSD — **Client Sample ID: DG-L13S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250736 — **Prep Batch: 250479**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		16.0	12.6		ug/Kg		79	40 - 120	5	20
4,4'-DDE	ND		16.0	13.0		ug/Kg		81	40 - 120	12	20
4,4'-DDT	ND		16.0	15.5		ug/Kg		97	17 - 144	8	20
Aldrin	ND		16.0	12.4		ug/Kg		78	53 - 120	8	20
alpha-BHC	ND		16.0	12.3		ug/Kg		77	40 - 120	7	20
beta-BHC	ND		16.0	11.9		ug/Kg		75	40 - 120	15	20
cis-Chlordane	3.5	J p	16.0	16.5		ug/Kg		82	40 - 120	6	20
delta-BHC	ND	F2	16.0	11.7	F2	ug/Kg		73	40 - 120	22	20
Dieldrin	ND	F2	16.0	18.3	F2	ug/Kg		115	46 - 130	33	20
Endosulfan I	ND		16.0	12.3		ug/Kg		77	40 - 120	8	20
Endosulfan II	ND		16.0	11.7		ug/Kg		73	40 - 120	10	30
Endosulfan sulfate	ND		16.0	12.3		ug/Kg		77	40 - 120	8	20
Endrin	ND		16.0	14.9		ug/Kg		94	32 - 143	8	20
Endrin aldehyde	ND		16.0	10.7		ug/Kg		67	40 - 120	3	20
Endrin ketone	ND	F1	16.0	12.4		ug/Kg		78	40 - 120	7	20
gamma-BHC (Lindane)	ND		16.0	11.3		ug/Kg		71	58 - 120	2	20
Heptachlor	ND		16.0	13.5		ug/Kg		84	52 - 120	2	20
Heptachlor epoxide	ND		16.0	13.8		ug/Kg		87	40 - 120	13	20
Methoxychlor	ND		16.0	12.8		ug/Kg		80	40 - 120	1	20
trans-Chlordane	3.6	J	16.0	16.6		ug/Kg		81	40 - 120	5	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*93*		*21 - 136*
Tetrachloro-m-xylene	*80*		*21 - 145*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-343099/23-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 343339 — **Prep Batch: 343099**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/29/18 14:50	08/31/18 08:41	1
Aroclor-1221	ND		50	24	ug/Kg		08/29/18 14:50	08/31/18 08:41	1
Aroclor-1232	ND		50	23	ug/Kg		08/29/18 14:50	08/31/18 08:41	1
Aroclor-1242	ND		50	19	ug/Kg		08/29/18 14:50	08/31/18 08:41	1
Aroclor-1248	ND		50	24	ug/Kg		08/29/18 14:50	08/31/18 08:41	1
Aroclor-1254	ND		50	23	ug/Kg		08/29/18 14:50	08/31/18 08:41	1
Aroclor-1260	ND		50	22	ug/Kg		08/29/18 14:50	08/31/18 08:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*88*		*14 - 128*	*08/29/18 14:50*	*08/31/18 08:41*	*1*
DCB Decachlorobiphenyl	*106*		*10 - 132*	*08/29/18 14:50*	*08/31/18 08:41*	*1*

Lab Sample ID: LCS 240-343099/24-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 343339 — **Prep Batch: 343099**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	1000	826		ug/Kg		83	47 - 120
Aroclor-1260	1000	986		ug/Kg		99	46 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*87*		*14 - 128*
DCB Decachlorobiphenyl	*101*		*10 - 132*

Lab Sample ID: 720-88240-3 MS — **Client Sample ID: DG-L13S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 343339 — **Prep Batch: 343099**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	ND		991	854		ug/Kg		86	31 - 120
Aroclor-1260	ND		991	968		ug/Kg		98	21 - 122

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*88*		*14 - 128*
DCB Decachlorobiphenyl	*110*		*10 - 132*

Lab Sample ID: 720-88240-3 MSD — **Client Sample ID: DG-L13S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 343339 — **Prep Batch: 343099**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	ND		997	944		ug/Kg		95	31 - 120	10	30
Aroclor-1260	ND		997	1150		ug/Kg		116	21 - 122	18	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*97*		*14 - 128*
DCB Decachlorobiphenyl	*151*	*X*	*10 - 132*

Lab Sample ID: MB 240-343154/9-A
Matrix: Solid
Analysis Batch: 343339

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 343154

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/30/18 06:23	08/31/18 13:26	1
Aroclor-1221	ND		50	24	ug/Kg		08/30/18 06:23	08/31/18 13:26	1
Aroclor-1232	ND		50	23	ug/Kg		08/30/18 06:23	08/31/18 13:26	1
Aroclor-1242	ND		50	19	ug/Kg		08/30/18 06:23	08/31/18 13:26	1
Aroclor-1248	ND		50	24	ug/Kg		08/30/18 06:23	08/31/18 13:26	1
Aroclor-1254	ND		50	23	ug/Kg		08/30/18 06:23	08/31/18 13:26	1
Aroclor-1260	ND		50	22	ug/Kg		08/30/18 06:23	08/31/18 13:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*85*		*14 - 128*	*08/30/18 06:23*	*08/31/18 13:26*	*1*
DCB Decachlorobiphenyl	*84*		*10 - 132*	*08/30/18 06:23*	*08/31/18 13:26*	*1*

Lab Sample ID: LCS 240-343154/10-A
Matrix: Solid
Analysis Batch: 343339

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 343154

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	1000	620		ug/Kg		62	47 - 120
Aroclor-1260	1000	621		ug/Kg		62	46 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*59*		*14 - 128*
DCB Decachlorobiphenyl	*56*		*10 - 132*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-250385/1-A
Matrix: Solid
Analysis Batch: 250634

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250385

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Arsenic	ND		1.0	0.085	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Barium	ND		0.50	0.071	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Beryllium	ND		0.10	0.033	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Cadmium	ND		0.13	0.012	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Chromium	0.0676	J	0.50	0.053	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Cobalt	ND		0.20	0.020	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Copper	ND		1.5	0.71	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Lead	ND		0.50	0.11	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Nickel	ND		0.50	0.051	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Selenium	ND		1.0	0.15	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Silver	ND		0.25	0.051	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Thallium	ND		0.50	0.15	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Vanadium	ND		0.50	0.068	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Zinc	ND		1.5	0.64	mg/Kg		08/28/18 12:45	08/30/18 14:17	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 720-250385/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250634 — **Prep Batch: 250385**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	49.5		mg/Kg		99	80 - 120
Arsenic	50.0	49.0		mg/Kg		98	80 - 120
Barium	50.0	48.9		mg/Kg		98	80 - 120
Beryllium	50.0	46.1		mg/Kg		92	80 - 120
Cadmium	50.0	49.1		mg/Kg		98	80 - 120
Chromium	50.0	50.3		mg/Kg		101	80 - 120
Cobalt	50.0	50.1		mg/Kg		100	80 - 120
Copper	50.0	50.9		mg/Kg		102	80 - 120
Lead	50.0	49.6		mg/Kg		99	80 - 120
Molybdenum	50.0	50.7		mg/Kg		101	80 - 120
Nickel	50.0	50.8		mg/Kg		102	80 - 120
Selenium	50.0	49.3		mg/Kg		99	80 - 120
Silver	25.0	25.3		mg/Kg		101	80 - 120
Thallium	50.0	50.1		mg/Kg		100	80 - 120
Vanadium	50.0	49.2		mg/Kg		98	80 - 120
Zinc	50.0	49.4		mg/Kg		99	80 - 120

Lab Sample ID: 720-88240-3 MS — **Client Sample ID: DG-L13S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250634 — **Prep Batch: 250385**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.4	J F1	43.1	12.0	F1	mg/Kg		25	75 - 125
Arsenic	38	F1 F2	43.1	169	F1	mg/Kg		303	75 - 125
Barium	90	F1 F2	43.1	256	F1	mg/Kg		387	75 - 125
Beryllium	ND		43.1	50.3		mg/Kg		117	75 - 125
Cadmium	0.12	J	43.1	46.5		mg/Kg		108	75 - 125
Chromium	51	B F1	43.1	135	F1	mg/Kg		194	75 - 125
Cobalt	9.5		43.1	61.4		mg/Kg		120	75 - 125
Copper	55	F1	43.1	119	F1	mg/Kg		147	75 - 125
Lead	120	F1	43.1	204	F1	mg/Kg		188	75 - 125
Molybdenum	0.90	J	43.1	48.5		mg/Kg		110	75 - 125
Nickel	52	F1	43.1	130	F1	mg/Kg		180	75 - 125
Selenium	1.6	J	43.1	50.5		mg/Kg		113	75 - 125
Silver	ND	F1	21.6	26.3		mg/Kg		122	75 - 125
Thallium	ND		43.1	44.7		mg/Kg		104	75 - 125
Vanadium	43	F1	43.1	98.6	F1	mg/Kg		129	75 - 125
Zinc	130	F1 F2	43.1	193	F1	mg/Kg		154	75 - 125

Lab Sample ID: 720-88240-3 MSD — **Client Sample ID: DG-L13S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250634 — **Prep Batch: 250385**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	1.4	J F1	42.7	12.6	F1	mg/Kg		26	75 - 125	5	20
Arsenic	38	F1 F2	42.7	121	F1 F2	mg/Kg		195	75 - 125	33	20
Barium	90	F1 F2	42.7	195	F1 F2	mg/Kg		247	75 - 125	27	20
Beryllium	ND		42.7	53.3		mg/Kg		125	75 - 125	6	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88240-3 MSD
Matrix: Solid
Analysis Batch: 250634

Client Sample ID: DG-L13S-0.5-1
Prep Type: Total/NA
Prep Batch: 250385

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	0.12	J	42.7	49.3		mg/Kg		115	75 - 125	6	20
Chromium	51	B F1	42.7	137	F1	mg/Kg		201	75 - 125	2	20
Cobalt	9.5		42.7	62.1		mg/Kg		123	75 - 125	1	20
Copper	55	F1	42.7	129	F1	mg/Kg		171	75 - 125	8	20
Lead	120	F1	42.7	249	F1	mg/Kg		293	75 - 125	20	20
Molybdenum	0.90	J	42.7	51.1		mg/Kg		117	75 - 125	5	20
Nickel	52	F1	42.7	123	F1	mg/Kg		166	75 - 125	5	20
Selenium	1.6	J	42.7	51.6		mg/Kg		117	75 - 125	2	20
Silver	ND	F1	21.4	27.6	F1	mg/Kg		129	75 - 125	5	20
Thallium	ND		42.7	45.9		mg/Kg		107	75 - 125	3	20
Vanadium	43	F1	42.7	106	F1	mg/Kg		149	75 - 125	8	20
Zinc	130	F1 F2	42.7	239	F1 F2	mg/Kg		264	75 - 125	22	20

Lab Sample ID: MB 720-250470/1-A
Matrix: Solid
Analysis Batch: 250593

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250470

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Arsenic	ND		1.0	0.085	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Barium	ND		0.50	0.071	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Beryllium	ND		0.10	0.033	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Cadmium	ND		0.13	0.012	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Chromium	ND		0.50	0.053	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Cobalt	ND		0.20	0.020	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Copper	ND		1.5	0.71	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Lead	ND		0.50	0.11	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Nickel	ND		0.50	0.051	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Selenium	ND		1.0	0.15	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Silver	ND		0.25	0.051	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Thallium	ND		0.50	0.15	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Vanadium	ND		0.50	0.068	mg/Kg		08/29/18 09:32	08/30/18 09:42	1
Zinc	ND		1.5	0.64	mg/Kg		08/29/18 09:32	08/30/18 09:42	1

Lab Sample ID: LCS 720-250470/2-A
Matrix: Solid
Analysis Batch: 250593

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250470

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	47.3		mg/Kg		95	80 - 120
Arsenic	50.0	47.2		mg/Kg		94	80 - 120
Barium	50.0	49.1		mg/Kg		98	80 - 120
Beryllium	50.0	50.0		mg/Kg		100	80 - 120
Cadmium	50.0	48.1		mg/Kg		96	80 - 120
Chromium	50.0	48.9		mg/Kg		98	80 - 120
Cobalt	50.0	48.8		mg/Kg		98	80 - 120
Copper	50.0	48.8		mg/Kg		98	80 - 120
Lead	50.0	48.5		mg/Kg		97	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 720-250470/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250593 — **Prep Batch: 250470**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Molybdenum	50.0	48.7		mg/Kg		97	80 - 120
Nickel	50.0	48.8		mg/Kg		98	80 - 120
Selenium	50.0	46.1		mg/Kg		92	80 - 120
Silver	25.0	24.0		mg/Kg		96	80 - 120
Thallium	50.0	48.4		mg/Kg		97	80 - 120
Vanadium	50.0	48.9		mg/Kg		98	80 - 120
Zinc	50.0	47.8		mg/Kg		96	80 - 120

Lab Sample ID: 720-88237-A-9-A MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250593 — **Prep Batch: 250470**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.4	J F1	46.3	19.4	F1	mg/Kg		39	75 - 125
Arsenic	4.3		46.3	55.2		mg/Kg		110	75 - 125
Barium	90		46.3	126		mg/Kg		79	75 - 125
Beryllium	ND	F1	46.3	54.8		mg/Kg		118	75 - 125
Cadmium	0.20	J	46.3	50.8		mg/Kg		109	75 - 125
Chromium	45	F1	46.3	110	F1	mg/Kg		140	75 - 125
Cobalt	9.1		46.3	61.2		mg/Kg		113	75 - 125
Copper	31	F1	46.3	91.0	F1	mg/Kg		129	75 - 125
Lead	100	F1 F2	46.3	108	F1	mg/Kg		13	75 - 125
Molybdenum	0.36	J	46.3	49.6		mg/Kg		106	75 - 125
Nickel	60	F1	46.3	108		mg/Kg		104	75 - 125
Selenium	ND		46.3	48.2		mg/Kg		104	75 - 125
Silver	ND	F1	23.1	27.4		mg/Kg		118	75 - 125
Thallium	ND		46.3	49.8		mg/Kg		108	75 - 125
Vanadium	26	F1	46.3	90.4	F1	mg/Kg		140	75 - 125
Zinc	86	F1	46.3	108	F1	mg/Kg		48	75 - 125

Lab Sample ID: 720-88237-A-9-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250593 — **Prep Batch: 250470**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	1.4	J F1	47.2	19.9	F1	mg/Kg		39	75 - 125	3	20
Arsenic	4.3		47.2	60.3		mg/Kg		119	75 - 125	9	20
Barium	90		47.2	139		mg/Kg		105	75 - 125	10	20
Beryllium	ND	F1	47.2	59.8	F1	mg/Kg		127	75 - 125	9	20
Cadmium	0.20	J	47.2	56.4		mg/Kg		119	75 - 125	11	20
Chromium	45	F1	47.2	128	F1	mg/Kg		175	75 - 125	15	20
Cobalt	9.1		47.2	67.9		mg/Kg		125	75 - 125	10	20
Copper	31	F1	47.2	107	F1	mg/Kg		161	75 - 125	16	20
Lead	100	F1 F2	47.2	133	F1 F2	mg/Kg		66	75 - 125	21	20
Molybdenum	0.36	J	47.2	54.6		mg/Kg		115	75 - 125	10	20
Nickel	60	F1	47.2	120	F1	mg/Kg		126	75 - 125	10	20
Selenium	ND		47.2	53.5		mg/Kg		113	75 - 125	10	20
Silver	ND	F1	23.6	30.9	F1	mg/Kg		131	75 - 125	12	20
Thallium	ND		47.2	55.4		mg/Kg		118	75 - 125	11	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88237-A-9-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250593 — **Prep Batch: 250470**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vanadium	26	F1	47.2	104	F1	mg/Kg		166	75 - 125	14	20
Zinc	86	F1	47.2	118	F1	mg/Kg		67	75 - 125	8	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-250541/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250768 — **Prep Batch: 250541**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/29/18 19:12	08/31/18 13:00	1

Lab Sample ID: LCS 720-250541/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250768 — **Prep Batch: 250541**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.816		mg/Kg		98	80 - 120

Lab Sample ID: 720-88240-3 MS — **Client Sample ID: DG-L13S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250768 — **Prep Batch: 250541**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.066		0.725	0.788		mg/Kg		100	75 - 125

Lab Sample ID: 720-88240-3 MSD — **Client Sample ID: DG-L13S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250768 — **Prep Batch: 250541**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.066		0.725	0.740		mg/Kg		93	75 - 125	6	20

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Prep Batch: 250440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-3	DG-L13S-0.5-1	Total/NA	Solid	5030B	

Analysis Batch: 250532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-2	DG-K7S-3.5-4	Total/NA	Solid	8260B	250544
720-88240-19	DUP-36	Total/NA	Solid	8260B	250544
MB 720-250532/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250532/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250532/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250532/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250532/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 250544

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-2	DG-K7S-3.5-4	Total/NA	Solid	5035	
720-88240-19	DUP-36	Total/NA	Solid	5035	

Analysis Batch: 250555

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-1	DG-K7S-0.5-1	Total/NA	Solid	8260B	250589
720-88240-2	DG-K7S-3.5-4	Total/NA	Solid	8260B	250589
720-88240-4	DG-L13S-3.5-4	Total/NA	Solid	8260B	250589
MB 720-250555/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250555/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250555/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250555/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250555/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 250573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-20	DUP-13	Total/NA	Solid	5035	

Prep Batch: 250582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88304-A-1-K MS	Matrix Spike	Total/NA	Solid	5030B	
720-88304-A-1-L MSD	Matrix Spike Duplicate	Total/NA	Solid	5030B	

Prep Batch: 250589

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-1	DG-K7S-0.5-1	Total/NA	Solid	5035	
720-88240-2	DG-K7S-3.5-4	Total/NA	Solid	5035	
720-88240-4	DG-L13S-3.5-4	Total/NA	Solid	5035	

Analysis Batch: 250622

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-20	DUP-13	Total/NA	Solid	8260B	250573
MB 720-250622/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250622/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250622/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250622/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250622/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88240-1

Analysis Batch: 250726

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-3	DG-L13S-0.5-1	Total/NA	Solid	8260B	250440
MB 720-250726/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250726/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250726/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250726/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250726/8	Lab Control Sample Dup	Total/NA	Solid	8260B	
720-88304-A-1-K MS	Matrix Spike	Total/NA	Solid	8260B	250582
720-88304-A-1-L MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	250582

Analysis Batch: 250755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-19	DUP-36	Total/NA	Solid	8260B	250814
MB 720-250755/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250755/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250755/8	Lab Control Sample Dup	Total/NA	Solid	8260B	
720-88239-D-3-H MS	Matrix Spike	Total/NA	Solid	8260B	250812
720-88239-D-3-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	250812

Prep Batch: 250812

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88239-D-3-H MS	Matrix Spike	Total/NA	Solid	5030B	
720-88239-D-3-I MSD	Matrix Spike Duplicate	Total/NA	Solid	5030B	

Prep Batch: 250814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-19	DUP-36	Total/NA	Solid	5030B	

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Prep Batch: 250487

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-1	DG-K7S-0.5-1	Total/NA	Solid	3546	
720-88240-2	DG-K7S-3.5-4	Total/NA	Solid	3546	
720-88240-3	DG-L13S-0.5-1	Total/NA	Solid	3546	
720-88240-20	DUP-13	Total/NA	Solid	3546	
MB 720-250487/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250487/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88240-3 MS	DG-L13S-0.5-1	Total/NA	Solid	3546	
720-88240-3 MSD	DG-L13S-0.5-1	Total/NA	Solid	3546	

Analysis Batch: 250730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-20	DUP-13	Total/NA	Solid	8270C SIM	250487
MB 720-250487/1-A	Method Blank	Total/NA	Solid	8270C SIM	250487
LCS 720-250487/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	250487

Analysis Batch: 250742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-2	DG-K7S-3.5-4	Total/NA	Solid	8270C SIM	250487

Analysis Batch: 250745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-3	DG-L13S-0.5-1	Total/NA	Solid	8270C SIM	250487

GC/MS Semi VOA (Continued)

Analysis Batch: 250745 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-3 MS	DG-L13S-0.5-1	Total/NA	Solid	8270C SIM	250487
720-88240-3 MSD	DG-L13S-0.5-1	Total/NA	Solid	8270C SIM	250487

Analysis Batch: 250799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-1	DG-K7S-0.5-1	Total/NA	Solid	8270C SIM	250487

Prep Batch: 250853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-4	DG-L13S-3.5-4	Total/NA	Solid	3546	
720-88240-19	DUP-36	Total/NA	Solid	3546	
MB 720-250853/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250853/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88241-D-1-F MS	Matrix Spike	Total/NA	Solid	3546	
720-88241-D-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 250960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-4	DG-L13S-3.5-4	Total/NA	Solid	8270C SIM	250853
720-88240-19	DUP-36	Total/NA	Solid	8270C SIM	250853
MB 720-250853/1-A	Method Blank	Total/NA	Solid	8270C SIM	250853
LCS 720-250853/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	250853
720-88241-D-1-F MS	Matrix Spike	Total/NA	Solid	8270C SIM	250853
720-88241-D-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8270C SIM	250853

GC Semi VOA

Analysis Batch: 250456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-3	DG-L13S-0.5-1	Total/NA	Solid	8015B	250461
MB 720-250461/1-A	Method Blank	Total/NA	Solid	8015B	250461
LCS 720-250461/2-A	Lab Control Sample	Total/NA	Solid	8015B	250461
720-88240-3 MS	DG-L13S-0.5-1	Total/NA	Solid	8015B	250461
720-88240-3 MSD	DG-L13S-0.5-1	Total/NA	Solid	8015B	250461

Prep Batch: 250461

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-1	DG-K7S-0.5-1	Total/NA	Solid	3546	
720-88240-2	DG-K7S-3.5-4	Total/NA	Solid	3546	
720-88240-3	DG-L13S-0.5-1	Total/NA	Solid	3546	
720-88240-4	DG-L13S-3.5-4	Total/NA	Solid	3546	
720-88240-19	DUP-36	Total/NA	Solid	3546	
720-88240-20	DUP-13	Total/NA	Solid	3546	
MB 720-250461/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250461/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88240-3 MS	DG-L13S-0.5-1	Total/NA	Solid	3546	
720-88240-3 MSD	DG-L13S-0.5-1	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 250479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-1	DG-K7S-0.5-1	Total/NA	Solid	3546	
720-88240-2	DG-K7S-3.5-4	Total/NA	Solid	3546	
720-88240-3	DG-L13S-0.5-1	Total/NA	Solid	3546	
720-88240-4	DG-L13S-3.5-4	Total/NA	Solid	3546	
720-88240-19	DUP-36	Total/NA	Solid	3546	
720-88240-20	DUP-13	Total/NA	Solid	3546	
MB 720-250479/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250479/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88240-3 MS	DG-L13S-0.5-1	Total/NA	Solid	3546	
720-88240-3 MSD	DG-L13S-0.5-1	Total/NA	Solid	3546	

Analysis Batch: 250736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-1	DG-K7S-0.5-1	Total/NA	Solid	8081A	250479
720-88240-2	DG-K7S-3.5-4	Total/NA	Solid	8081A	250479
720-88240-3	DG-L13S-0.5-1	Total/NA	Solid	8081A	250479
720-88240-4	DG-L13S-3.5-4	Total/NA	Solid	8081A	250479
720-88240-19	DUP-36	Total/NA	Solid	8081A	250479
720-88240-20	DUP-13	Total/NA	Solid	8081A	250479
MB 720-250479/1-A	Method Blank	Total/NA	Solid	8081A	250479
LCS 720-250479/2-A	Lab Control Sample	Total/NA	Solid	8081A	250479
720-88240-3 MS	DG-L13S-0.5-1	Total/NA	Solid	8081A	250479
720-88240-3 MSD	DG-L13S-0.5-1	Total/NA	Solid	8081A	250479

Analysis Batch: 250738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-2	DG-K7S-3.5-4	Total/NA	Solid	8015B	250461
720-88240-20	DUP-13	Total/NA	Solid	8015B	250461

Analysis Batch: 250762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-1	DG-K7S-0.5-1	Total/NA	Solid	8015B	250461
720-88240-4	DG-L13S-3.5-4	Total/NA	Solid	8015B	250461
720-88240-19	DUP-36	Total/NA	Solid	8015B	250461

Prep Batch: 343099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-1	DG-K7S-0.5-1	Total/NA	Solid	3540C	
720-88240-2	DG-K7S-3.5-4	Total/NA	Solid	3540C	
720-88240-3	DG-L13S-0.5-1	Total/NA	Solid	3540C	
720-88240-4	DG-L13S-3.5-4	Total/NA	Solid	3540C	
MB 240-343099/23-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-343099/24-A	Lab Control Sample	Total/NA	Solid	3540C	
720-88240-3 MS	DG-L13S-0.5-1	Total/NA	Solid	3540C	
720-88240-3 MSD	DG-L13S-0.5-1	Total/NA	Solid	3540C	

Prep Batch: 343154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-19	DUP-36	Total/NA	Solid	3540C	
720-88240-20	DUP-13	Total/NA	Solid	3540C	
MB 240-343154/9-A	Method Blank	Total/NA	Solid	3540C	

GC Semi VOA (Continued)

Prep Batch: 343154 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-343154/10-A	Lab Control Sample	Total/NA	Solid	3540C	

Analysis Batch: 343336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-1	DG-K7S-0.5-1	Total/NA	Solid	8082	343099

Analysis Batch: 343339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-2	DG-K7S-3.5-4	Total/NA	Solid	8082	343099
720-88240-3	DG-L13S-0.5-1	Total/NA	Solid	8082	343099
720-88240-4	DG-L13S-3.5-4	Total/NA	Solid	8082	343099
720-88240-19	DUP-36	Total/NA	Solid	8082	343154
720-88240-20	DUP-13	Total/NA	Solid	8082	343154
MB 240-343099/23-A	Method Blank	Total/NA	Solid	8082	343099
MB 240-343154/9-A	Method Blank	Total/NA	Solid	8082	343154
LCS 240-343099/24-A	Lab Control Sample	Total/NA	Solid	8082	343099
LCS 240-343154/10-A	Lab Control Sample	Total/NA	Solid	8082	343154
720-88240-3 MS	DG-L13S-0.5-1	Total/NA	Solid	8082	343099
720-88240-3 MSD	DG-L13S-0.5-1	Total/NA	Solid	8082	343099

Metals

Prep Batch: 250385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-1	DG-K7S-0.5-1	Total/NA	Solid	3050B	
720-88240-2	DG-K7S-3.5-4	Total/NA	Solid	3050B	
720-88240-3	DG-L13S-0.5-1	Total/NA	Solid	3050B	
720-88240-4	DG-L13S-3.5-4	Total/NA	Solid	3050B	
720-88240-5	DG-K13S-0.5-1	Total/NA	Solid	3050B	
720-88240-6	DG-K13S-3.5-4	Total/NA	Solid	3050B	
720-88240-7	DG-M14S-0.5-1	Total/NA	Solid	3050B	
720-88240-8	DG-M14S-3.5-4	Total/NA	Solid	3050B	
720-88240-9	DG-J12S-0.5-1	Total/NA	Solid	3050B	
720-88240-10	DG-J12S-3.5-4	Total/NA	Solid	3050B	
720-88240-11	DG-K12S-0.5-1	Total/NA	Solid	3050B	
720-88240-12	DG-K12S-3.5-4	Total/NA	Solid	3050B	
720-88240-13	DG-I12S-0.5-1	Total/NA	Solid	3050B	
720-88240-14	DG-I12S-3.5-4	Total/NA	Solid	3050B	
720-88240-15	DG-H12S-0.5-1	Total/NA	Solid	3050B	
720-88240-16	DG-H12S-3.5-4	Total/NA	Solid	3050B	
MB 720-250385/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250385/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88240-3 MS	DG-L13S-0.5-1	Total/NA	Solid	3050B	
720-88240-3 MSD	DG-L13S-0.5-1	Total/NA	Solid	3050B	

Prep Batch: 250470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-17	DUP-33	Total/NA	Solid	3050B	
720-88240-18	DUP-34	Total/NA	Solid	3050B	
720-88240-19	DUP-36	Total/NA	Solid	3050B	

Metals (Continued)

Prep Batch: 250470 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-20	DUP-13	Total/NA	Solid	3050B	
MB 720-250470/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250470/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88237-A-9-A MS	Matrix Spike	Total/NA	Solid	3050B	
720-88237-A-9-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Prep Batch: 250541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-1	DG-K7S-0.5-1	Total/NA	Solid	7471A	
720-88240-2	DG-K7S-3.5-4	Total/NA	Solid	7471A	
720-88240-3	DG-L13S-0.5-1	Total/NA	Solid	7471A	
720-88240-4	DG-L13S-3.5-4	Total/NA	Solid	7471A	
720-88240-5	DG-K13S-0.5-1	Total/NA	Solid	7471A	
720-88240-6	DG-K13S-3.5-4	Total/NA	Solid	7471A	
720-88240-7	DG-M14S-0.5-1	Total/NA	Solid	7471A	
720-88240-8	DG-M14S-3.5-4	Total/NA	Solid	7471A	
720-88240-9	DG-J12S-0.5-1	Total/NA	Solid	7471A	
720-88240-10	DG-J12S-3.5-4	Total/NA	Solid	7471A	
720-88240-11	DG-K12S-0.5-1	Total/NA	Solid	7471A	
720-88240-12	DG-K12S-3.5-4	Total/NA	Solid	7471A	
720-88240-13	DG-I12S-0.5-1	Total/NA	Solid	7471A	
720-88240-14	DG-I12S-3.5-4	Total/NA	Solid	7471A	
720-88240-15	DG-H12S-0.5-1	Total/NA	Solid	7471A	
720-88240-16	DG-H12S-3.5-4	Total/NA	Solid	7471A	
720-88240-17	DUP-33	Total/NA	Solid	7471A	
720-88240-18	DUP-34	Total/NA	Solid	7471A	
720-88240-19	DUP-36	Total/NA	Solid	7471A	
720-88240-20	DUP-13	Total/NA	Solid	7471A	
MB 720-250541/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250541/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88240-3 MS	DG-L13S-0.5-1	Total/NA	Solid	7471A	
720-88240-3 MSD	DG-L13S-0.5-1	Total/NA	Solid	7471A	

Analysis Batch: 250593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-17	DUP-33	Total/NA	Solid	6010B	250470
720-88240-18	DUP-34	Total/NA	Solid	6010B	250470
720-88240-19	DUP-36	Total/NA	Solid	6010B	250470
720-88240-20	DUP-13	Total/NA	Solid	6010B	250470
MB 720-250470/1-A	Method Blank	Total/NA	Solid	6010B	250470
LCS 720-250470/2-A	Lab Control Sample	Total/NA	Solid	6010B	250470
720-88237-A-9-A MS	Matrix Spike	Total/NA	Solid	6010B	250470
720-88237-A-9-B MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250470

Analysis Batch: 250634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-1	DG-K7S-0.5-1	Total/NA	Solid	6010B	250385
720-88240-2	DG-K7S-3.5-4	Total/NA	Solid	6010B	250385
720-88240-3	DG-L13S-0.5-1	Total/NA	Solid	6010B	250385
720-88240-4	DG-L13S-3.5-4	Total/NA	Solid	6010B	250385
720-88240-5	DG-K13S-0.5-1	Total/NA	Solid	6010B	250385

Metals (Continued)

Analysis Batch: 250634 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-6	DG-K13S-3.5-4	Total/NA	Solid	6010B	250385
720-88240-7	DG-M14S-0.5-1	Total/NA	Solid	6010B	250385
720-88240-8	DG-M14S-3.5-4	Total/NA	Solid	6010B	250385
720-88240-9	DG-J12S-0.5-1	Total/NA	Solid	6010B	250385
720-88240-10	DG-J12S-3.5-4	Total/NA	Solid	6010B	250385
720-88240-11	DG-K12S-0.5-1	Total/NA	Solid	6010B	250385
720-88240-12	DG-K12S-3.5-4	Total/NA	Solid	6010B	250385
720-88240-13	DG-I12S-0.5-1	Total/NA	Solid	6010B	250385
720-88240-14	DG-I12S-3.5-4	Total/NA	Solid	6010B	250385
MB 720-250385/1-A	Method Blank	Total/NA	Solid	6010B	250385
LCS 720-250385/2-A	Lab Control Sample	Total/NA	Solid	6010B	250385
720-88240-3 MS	DG-L13S-0.5-1	Total/NA	Solid	6010B	250385
720-88240-3 MSD	DG-L13S-0.5-1	Total/NA	Solid	6010B	250385

Analysis Batch: 250649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-20	DUP-13	Total/NA	Solid	6010B	250470

Analysis Batch: 250650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-2	DG-K7S-3.5-4	Total/NA	Solid	6010B	250385
720-88240-5	DG-K13S-0.5-1	Total/NA	Solid	6010B	250385
720-88240-6	DG-K13S-3.5-4	Total/NA	Solid	6010B	250385
720-88240-7	DG-M14S-0.5-1	Total/NA	Solid	6010B	250385
720-88240-8	DG-M14S-3.5-4	Total/NA	Solid	6010B	250385
720-88240-9	DG-J12S-0.5-1	Total/NA	Solid	6010B	250385
720-88240-10	DG-J12S-3.5-4	Total/NA	Solid	6010B	250385
720-88240-11	DG-K12S-0.5-1	Total/NA	Solid	6010B	250385
720-88240-13	DG-I12S-0.5-1	Total/NA	Solid	6010B	250385
720-88240-14	DG-I12S-3.5-4	Total/NA	Solid	6010B	250385
720-88240-15	DG-H12S-0.5-1	Total/NA	Solid	6010B	250385
720-88240-16	DG-H12S-3.5-4	Total/NA	Solid	6010B	250385

Analysis Batch: 250701

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-2	DG-K7S-3.5-4	Total/NA	Solid	6010B	250385
720-88240-12	DG-K12S-3.5-4	Total/NA	Solid	6010B	250385
720-88240-15	DG-H12S-0.5-1	Total/NA	Solid	6010B	250385
720-88240-16	DG-H12S-3.5-4	Total/NA	Solid	6010B	250385

Analysis Batch: 250768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-1	DG-K7S-0.5-1	Total/NA	Solid	7471A	250541
720-88240-2	DG-K7S-3.5-4	Total/NA	Solid	7471A	250541
720-88240-3	DG-L13S-0.5-1	Total/NA	Solid	7471A	250541
720-88240-4	DG-L13S-3.5-4	Total/NA	Solid	7471A	250541
720-88240-5	DG-K13S-0.5-1	Total/NA	Solid	7471A	250541
720-88240-6	DG-K13S-3.5-4	Total/NA	Solid	7471A	250541
720-88240-7	DG-M14S-0.5-1	Total/NA	Solid	7471A	250541
720-88240-8	DG-M14S-3.5-4	Total/NA	Solid	7471A	250541
720-88240-9	DG-J12S-0.5-1	Total/NA	Solid	7471A	250541

Metals (Continued)

Analysis Batch: 250768 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-10	DG-J12S-3.5-4	Total/NA	Solid	7471A	250541
720-88240-11	DG-K12S-0.5-1	Total/NA	Solid	7471A	250541
720-88240-12	DG-K12S-3.5-4	Total/NA	Solid	7471A	250541
720-88240-13	DG-I12S-0.5-1	Total/NA	Solid	7471A	250541
720-88240-14	DG-I12S-3.5-4	Total/NA	Solid	7471A	250541
720-88240-15	DG-H12S-0.5-1	Total/NA	Solid	7471A	250541
720-88240-16	DG-H12S-3.5-4	Total/NA	Solid	7471A	250541
720-88240-17	DUP-33	Total/NA	Solid	7471A	250541
720-88240-18	DUP-34	Total/NA	Solid	7471A	250541
720-88240-19	DUP-36	Total/NA	Solid	7471A	250541
720-88240-20	DUP-13	Total/NA	Solid	7471A	250541
MB 720-250541/1-A	Method Blank	Total/NA	Solid	7471A	250541
LCS 720-250541/2-A	Lab Control Sample	Total/NA	Solid	7471A	250541
720-88240-3 MS	DG-L13S-0.5-1	Total/NA	Solid	7471A	250541
720-88240-3 MSD	DG-L13S-0.5-1	Total/NA	Solid	7471A	250541

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88240-1

Client Sample ID: DG-K7S-0.5-1

Lab Sample ID: 720-88240-1

Date Collected: 08/24/18 07:52
Matrix: Solid
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250589	08/25/18 03:05	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250555	08/30/18 16:12	AJS	TAL PLS
Total/NA	Prep	3546			250487	08/29/18 11:45	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		20	250799	09/04/18 15:32	LPL	TAL PLS
Total/NA	Prep	3546			250461	08/29/18 09:03	MAB	TAL PLS
Total/NA	Analysis	8015B		50	250762	09/04/18 14:11	JXL	TAL PLS
Total/NA	Prep	3546			250479	08/29/18 10:43	MAB	TAL PLS
Total/NA	Analysis	8081A		5	250736	09/01/18 11:57	JZT	TAL PLS
Total/NA	Prep	3540C			343099	08/29/18 14:50	AMT	TAL CAN
Total/NA	Analysis	8082		1	343336	08/31/18 15:38	LSH	TAL CAN
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250634	08/30/18 14:50	OBI	TAL PLS
Total/NA	Prep	7471A			250541	08/29/18 19:12	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250768	08/31/18 13:12	MAG	TAL PLS

Client Sample ID: DG-K7S-3.5-4

Lab Sample ID: 720-88240-2

Date Collected: 08/24/18 07:52
Matrix: Solid
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250589	08/25/18 03:05	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250555	08/30/18 16:40	AJS	TAL PLS
Total/NA	Prep	5035			250544	08/25/18 03:05	MJK	TAL PLS
Total/NA	Analysis	8260B		1	250532	08/29/18 23:38	JRM	TAL PLS
Total/NA	Prep	3546			250487	08/29/18 11:45	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250742	09/01/18 22:33	MQL	TAL PLS
Total/NA	Prep	3546			250461	08/29/18 09:03	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250738	09/01/18 15:39	JXL	TAL PLS
Total/NA	Prep	3546			250479	08/29/18 10:43	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250736	09/01/18 12:15	JZT	TAL PLS
Total/NA	Prep	3540C			343099	08/29/18 14:50	AMT	TAL CAN
Total/NA	Analysis	8082		1	343339	08/31/18 09:39	LSH	TAL CAN
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250634	08/30/18 14:55	OBI	TAL PLS
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		5	250650	08/30/18 22:58	OBI	TAL PLS
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		5	250701	08/31/18 11:40	OBI	TAL PLS
Total/NA	Prep	7471A			250541	08/29/18 19:12	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250768	08/31/18 13:14	MAG	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88240-1

Client Sample ID: DG-L13S-0.5-1 — Lab Sample ID: 720-88240-3

Date Collected: 08/24/18 09:40
Date Received: 08/24/18 15:00
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			250440	08/28/18 21:21	GLL	TAL PLS
Total/NA	Analysis	8260B		1	250726	08/31/18 22:13	AP1	TAL PLS
Total/NA	Prep	3546			250487	08/29/18 11:45	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		10	250745	09/02/18 18:50	LPL	TAL PLS
Total/NA	Prep	3546			250461	08/29/18 09:03	MAB	TAL PLS
Total/NA	Analysis	8015B		5	250456	08/30/18 05:21	JXL	TAL PLS
Total/NA	Prep	3546			250479	08/29/18 10:43	MAB	TAL PLS
Total/NA	Analysis	8081A		2	250736	09/01/18 11:04	JZT	TAL PLS
Total/NA	Prep	3540C			343099	08/29/18 14:50	AMT	TAL CAN
Total/NA	Analysis	8082		1	343339	08/31/18 10:08	LSH	TAL CAN
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250634	08/30/18 14:46	OBI	TAL PLS
Total/NA	Prep	7471A			250541	08/29/18 19:12	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250768	08/31/18 13:09	MAG	TAL PLS

Client Sample ID: DG-L13S-3.5-4 — Lab Sample ID: 720-88240-4

Date Collected: 08/24/18 09:40
Date Received: 08/24/18 15:00
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250589	08/25/18 03:05	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250555	08/30/18 17:09	AJS	TAL PLS
Total/NA	Prep	3546			250853	09/04/18 17:46	WGR	TAL PLS
Total/NA	Analysis	8270C SIM		10	250960	09/06/18 09:39	LPL	TAL PLS
Total/NA	Prep	3546			250461	08/29/18 09:03	MAB	TAL PLS
Total/NA	Analysis	8015B		50	250762	09/04/18 14:35	JXL	TAL PLS
Total/NA	Prep	3546			250479	08/29/18 10:43	MAB	TAL PLS
Total/NA	Analysis	8081A		5	250736	09/01/18 12:32	JZT	TAL PLS
Total/NA	Prep	3540C			343099	08/29/18 14:50	AMT	TAL CAN
Total/NA	Analysis	8082		1	343339	08/31/18 09:54	LSH	TAL CAN
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250634	08/30/18 15:00	OBI	TAL PLS
Total/NA	Prep	7471A			250541	08/29/18 19:12	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250768	08/31/18 13:16	MAG	TAL PLS

Client Sample ID: DG-K13S-0.5-1 — Lab Sample ID: 720-88240-5

Date Collected: 08/24/18 10:20
Date Received: 08/24/18 15:00
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250634	08/30/18 15:14	OBI	TAL PLS
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88240-1

Client Sample ID: DG-K13S-0.5-1 — Lab Sample ID: 720-88240-5

Date Collected: 08/24/18 10:20
Date Received: 08/24/18 15:00
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		4	250650	08/30/18 23:07	OBI	TAL PLS
Total/NA	Prep	7471A			250541	08/29/18 19:12	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250768	08/31/18 13:19	MAG	TAL PLS

Client Sample ID: DG-K13S-3.5-4 — Lab Sample ID: 720-88240-6

Date Collected: 08/24/18 10:20
Date Received: 08/24/18 15:00
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250634	08/30/18 15:19	OBI	TAL PLS
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250650	08/30/18 23:12	OBI	TAL PLS
Total/NA	Prep	7471A			250541	08/29/18 19:12	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250768	08/31/18 13:21	MAG	TAL PLS

Client Sample ID: DG-M14S-0.5-1 — Lab Sample ID: 720-88240-7

Date Collected: 08/24/18 11:00
Date Received: 08/24/18 15:00
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250634	08/30/18 15:24	OBI	TAL PLS
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250650	08/30/18 23:27	OBI	TAL PLS
Total/NA	Prep	7471A			250541	08/29/18 19:12	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250768	08/31/18 13:28	MAG	TAL PLS

Client Sample ID: DG-M14S-3.5-4 — Lab Sample ID: 720-88240-8

Date Collected: 08/24/18 11:00
Date Received: 08/24/18 15:00
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250634	08/30/18 15:29	OBI	TAL PLS
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250650	08/30/18 23:31	OBI	TAL PLS
Total/NA	Prep	7471A			250541	08/29/18 19:12	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250768	08/31/18 13:31	MAG	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88240-1

Client Sample ID: DG-J12S-0.5-1 — Lab Sample ID: 720-88240-9

Date Collected: 08/24/18 11:30 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250634	08/30/18 15:34	OBI	TAL PLS
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250650	08/30/18 23:36	OBI	TAL PLS
Total/NA	Prep	7471A			250541	08/29/18 19:12	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250768	08/31/18 13:33	MAG	TAL PLS

Client Sample ID: DG-J12S-3.5-4 — Lab Sample ID: 720-88240-10

Date Collected: 08/24/18 11:30 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250634	08/30/18 15:38	OBI	TAL PLS
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250650	08/30/18 23:41	OBI	TAL PLS
Total/NA	Prep	7471A			250541	08/29/18 19:12	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250768	08/31/18 13:35	MAG	TAL PLS

Client Sample ID: DG-K12S-0.5-1 — Lab Sample ID: 720-88240-11

Date Collected: 08/24/18 11:45 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250634	08/30/18 15:43	OBI	TAL PLS
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250650	08/30/18 23:46	OBI	TAL PLS
Total/NA	Prep	7471A			250541	08/29/18 19:12	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250768	08/31/18 13:38	MAG	TAL PLS

Client Sample ID: DG-K12S-3.5-4 — Lab Sample ID: 720-88240-12

Date Collected: 08/24/18 11:45 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250634	08/30/18 15:48	OBI	TAL PLS
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250701	08/31/18 11:45	OBI	TAL PLS
Total/NA	Prep	7471A			250541	08/29/18 19:12	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250768	08/31/18 13:40	MAG	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88240-1

Client Sample ID: DG-I12S-0.5-1 — Lab Sample ID: 720-88240-13

Date Collected: 08/24/18 11:55 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250634	08/30/18 15:53	OBI	TAL PLS
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250650	08/30/18 23:56	OBI	TAL PLS
Total/NA	Prep	7471A			250541	08/29/18 19:12	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250768	08/31/18 13:42	MAG	TAL PLS

Client Sample ID: DG-I12S-3.5-4 — Lab Sample ID: 720-88240-14

Date Collected: 08/24/18 11:55 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250634	08/30/18 15:58	OBI	TAL PLS
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250650	08/31/18 00:00	OBI	TAL PLS
Total/NA	Prep	7471A			250541	08/29/18 19:12	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250768	08/31/18 13:45	MAG	TAL PLS

Client Sample ID: DG-H12S-0.5-1 — Lab Sample ID: 720-88240-15

Date Collected: 08/24/18 12:02 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250650	08/31/18 00:05	OBI	TAL PLS
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250701	08/31/18 11:50	OBI	TAL PLS
Total/NA	Prep	7471A			250541	08/29/18 19:12	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250768	08/31/18 13:47	MAG	TAL PLS

Client Sample ID: DG-H12S-3.5-4 — Lab Sample ID: 720-88240-16

Date Collected: 08/24/18 12:02 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250650	08/31/18 00:10	OBI	TAL PLS
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250701	08/31/18 11:55	OBI	TAL PLS
Total/NA	Prep	7471A			250541	08/29/18 19:12	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250768	08/31/18 13:49	MAG	TAL PLS

Client Sample ID: DUP-33 — Lab Sample ID: 720-88240-17

Date Collected: 08/24/18 00:00 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250470	08/29/18 09:32	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250593	08/30/18 11:36	BKR	TAL PLS
Total/NA	Prep	7471A			250541	08/29/18 19:12	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250768	08/31/18 13:56	MAG	TAL PLS

Client Sample ID: DUP-34 — Lab Sample ID: 720-88240-18

Date Collected: 08/24/18 00:00 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250470	08/29/18 09:32	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250593	08/30/18 11:40	BKR	TAL PLS
Total/NA	Prep	7471A			250541	08/29/18 19:12	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250768	08/31/18 13:59	MAG	TAL PLS

Client Sample ID: DUP-36 — Lab Sample ID: 720-88240-19

Date Collected: 08/24/18 00:00 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			250814	09/04/18 13:59	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250755	09/04/18 15:13	JRM	TAL PLS
Total/NA	Prep	5035			250544	08/25/18 03:05	MJK	TAL PLS
Total/NA	Analysis	8260B		1	250532	08/30/18 00:35	JRM	TAL PLS
Total/NA	Prep	3546			250853	09/04/18 17:46	WGR	TAL PLS
Total/NA	Analysis	8270C SIM		20	250960	09/06/18 10:02	LPL	TAL PLS
Total/NA	Prep	3546			250461	08/29/18 09:03	MAB	TAL PLS
Total/NA	Analysis	8015B		50	250762	09/04/18 14:59	JXL	TAL PLS
Total/NA	Prep	3546			250479	08/29/18 10:43	MAB	TAL PLS
Total/NA	Analysis	8081A		5	250736	09/01/18 12:50	JZT	TAL PLS
Total/NA	Prep	3540C			343154	08/30/18 06:23	DVT	TAL CAN
Total/NA	Analysis	8082		1	343339	08/31/18 12:57	LSH	TAL CAN
Total/NA	Prep	3050B			250470	08/29/18 09:32	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250593	08/30/18 11:45	BKR	TAL PLS
Total/NA	Prep	7471A			250541	08/29/18 19:12	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250768	08/31/18 14:01	MAG	TAL PLS

Client Sample ID: DUP-13 — Lab Sample ID: 720-88240-20

Date Collected: 08/24/18 00:00 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250573	08/25/18 03:05	DAID	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88240-1

Client Sample ID: DUP-13

Date Collected: 08/24/18 00:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88240-20

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250622	08/30/18 20:45	JRM	TAL PLS
Total/NA	Prep	3546			250487	08/29/18 11:45	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250730	08/31/18 22:48	MQL	TAL PLS
Total/NA	Prep	3546			250461	08/29/18 09:03	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250738	09/01/18 16:03	JXL	TAL PLS
Total/NA	Prep	3546			250479	08/29/18 10:43	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250736	09/01/18 13:08	JZT	TAL PLS
Total/NA	Prep	3540C			343154	08/30/18 06:23	DVT	TAL CAN
Total/NA	Analysis	8082		1	343339	08/31/18 13:11	LSH	TAL CAN
Total/NA	Prep	3050B			250470	08/29/18 09:32	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250649	08/30/18 22:53	OBI	TAL PLS
Total/NA	Prep	3050B			250470	08/29/18 09:32	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250593	08/30/18 11:50	BKR	TAL PLS
Total/NA	Prep	7471A			250541	08/29/18 19:12	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250768	08/31/18 14:03	MAG	TAL PLS

Laboratory References:

= Asbestos TEM Laboratories, Inc., 630 BANCROFT WAY, Berkeley, CA 94710

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88240-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Laboratory: TestAmerica Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-19
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19
Illinois	NELAP	5	200004	07-31-19
Kansas	NELAP	7	E-10336	01-31-19
Kentucky (UST)	State Program	4	58	02-23-19
Kentucky (WW)	State Program	4	98016	12-31-18 *
Minnesota	NELAP	5	039-999-348	12-31-18 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19
New York	NELAP	2	10975	03-31-19
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-19
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-18-10	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19
Washington	State Program	10	C971	01-12-19
West Virginia DEP	State Program	3	210	12-31-18 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88240-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PLS
8270C SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
8081A	Organochlorine Pesticides (GC)	SW846	TAL PLS
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS
Subcontract	Asbestos - CARB 435	None	
3050B	Preparation, Metals	SW846	TAL PLS
3540C	Soxhlet Extraction	SW846	TAL CAN
3546	Microwave Extraction	SW846	TAL PLS
5030B	Purge and Trap	SW846	TAL PLS
5035	Closed System Purge and Trap	SW846	TAL PLS
7471A	Preparation, Mercury	SW846	TAL PLS

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

= Asbestos TEM Laboratories, Inc., 630 BANCROFT WAY, Berkeley, CA 94710

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88240-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-88240-1	DG-K7S-0.5-1	Solid	08/24/18 07:52	08/24/18 15:00
720-88240-2	DG-K7S-3.5-4	Solid	08/24/18 07:52	08/24/18 15:00
720-88240-3	DG-L13S-0.5-1	Solid	08/24/18 09:40	08/24/18 15:00
720-88240-4	DG-L13S-3.5-4	Solid	08/24/18 09:40	08/24/18 15:00
720-88240-5	DG-K13S-0.5-1	Solid	08/24/18 10:20	08/24/18 15:00
720-88240-6	DG-K13S-3.5-4	Solid	08/24/18 10:20	08/24/18 15:00
720-88240-7	DG-M14S-0.5-1	Solid	08/24/18 11:00	08/24/18 15:00
720-88240-8	DG-M14S-3.5-4	Solid	08/24/18 11:00	08/24/18 15:00
720-88240-9	DG-J12S-0.5-1	Solid	08/24/18 11:30	08/24/18 15:00
720-88240-10	DG-J12S-3.5-4	Solid	08/24/18 11:30	08/24/18 15:00
720-88240-11	DG-K12S-0.5-1	Solid	08/24/18 11:45	08/24/18 15:00
720-88240-12	DG-K12S-3.5-4	Solid	08/24/18 11:45	08/24/18 15:00
720-88240-13	DG-I12S-0.5-1	Solid	08/24/18 11:55	08/24/18 15:00
720-88240-14	DG-I12S-3.5-4	Solid	08/24/18 11:55	08/24/18 15:00
720-88240-15	DG-H12S-0.5-1	Solid	08/24/18 12:02	08/24/18 15:00
720-88240-16	DG-H12S-3.5-4	Solid	08/24/18 12:02	08/24/18 15:00
720-88240-17	DUP-33	Solid	08/24/18 00:00	08/24/18 15:00
720-88240-18	DUP-34	Solid	08/24/18 00:00	08/24/18 15:00
720-88240-19	DUP-36	Solid	08/24/18 00:00	08/24/18 15:00
720-88240-20	DUP-13	Solid	08/24/18 00:00	08/24/18 15:00

ASBESTOS TEM LABORATORIES, INC.

CARB Method 435
Polarized Light Microscopy
Analytical Report

Laboratory Job # 1283-01204

630 Bancroft Way
Berkeley, CA 94710
(510) 704-8930
FAX (510) 704-8429

ASBESTOS TEM LABORATORIES, INC

CA DPH ELAP
Lab No. 1866

NVLAP Lab Code: 101891-0
Berkeley, CA

Aug/31/2018

Micah Smith
TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

RE: LABORATORY JOB # 1283-01204
Polarized light microscopy analytical results for 4 bulk sample(s).
Job Site: 72013717
Job No.: UPC OU-SM

Enclosed please find the bulk material analytical results for one or more samples submitted for asbestos analysis. The analyses were performed in accordance with the California Air Resources Board (ARB) Method 435 for the determination of asbestos in serpentine aggregate samples.

Prior to analysis, samples are logged-in and all data pertinent to the sample recorded. The samples are checked for damage or disruption of any chain-of-custody seals. A unique laboratory ID number is assigned to each sample. A hard copy log-in sheet containing all pertinent information concerning the sample is generated. This and all other relevant paper work are kept with the sample throughout the analytical procedures to assure proper analysis.

Sample preparation follows a standard CARB 435 prep method. The entire sample is dried at 135-150 C and then crushed to ~3/8" gravel size using a Bico Chipmunk crusher. If the submitted sample is >1 pint, the sample was split using a 1/2" riffle splitter following ASTM Method C-702-98 to obtain a 1 pint aliquot. The entire 1 pint aliquot, or entire original sample, is then pulverized in a Bico Braun disc pulverizer calibrated to produce a nominal 200 mesh final product. If necessary, additional homogenization steps are undertaken using a 3/8" riffle splitter. Small aliquots are collected from throughout the pulverized material to create three separate microsope slide mounts containing the appropriate refractive index oil. The prepared slides are placed under a polarizing light microscope where standard mineralogical techniques are used to analyze the various materials present, including asbestos. If asbestos is identified and of less than 10% concentration by visual area estimate then an additional five sample mounts are prepared. Quantification of asbestos concentration is obtained using the standard CAL ARB Method 435 point count protocol. For samples observed to contain visible asbestos of less than 10% concentration, a point counting techinique is used with 50 points counted on each of eight sample mounts for a total of 400 points. The data is then compiled into standard report format and subjected to a thorough quality assurance check before the information is released to the client.

While the CARB 435 method has much to commend it, there are a number of situations where it fails to provide sufficient accuracy to make a definitive determination of the presence/absence of asbestos and/or an accurate count of the asbestos concentration present in a given sample. These problems include, but are not limited to, 1) statistical uncertainty with samples containing <1% asbestos when too few particles are counted, 2) definitive identification and discrimination between various fibrous amphibole minerals such as tremolite/actinolite/hornblende and the "Libby amphiboles" such as tremolite/winchite/richterite/arfvedsonite, and C) small asbestiform fibers which are near or below the resolution limit of the PLM microscope such as those found in various California coast range serpentine bodies. In these cases, further analysis by transmission electron microscopy is recommended to obtain a more accurate result.

Sincerely Yours,

Lab Manager
ASBESTOS TEM LABORATORIES, INC.

--- These results relate only to the samples tested and must not be reproduced, except in full, without the approval of the laboratory. ---

630 BANCROFT WAY ▪ BERKELEY, CA 94710 ▪ PH. (510) 704-8930 ▪ FAX (510) 704-8429
With Branch Offices Located At: 1350 FREEPORT BLVD. UNIT 104, SPARKS, NV 89431

POLARIZED LIGHT MICROSCOPY
CARB 435 ANALYTICAL REPORT

Contact: Micah Smith

Address: TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

Samples Submitted: 4

Samples Analyzed: 4

Job Site / No. UPC OU-SM
72013717

Report No. **359886**
Date Submitted: Aug-27-18
Date Reported: Aug-31-18

SAMPLE ID	POINTS COUNTED	ASBESTOS %	ASBESTOS TYPE	LOCATION / DESCRIPTION
DG-K7S-0.5-1 (720-88240-1) Lab ID # 1283-01204-001	**400** - Total Points	**<0.25%**	**None Detected**	No Asbestos Detected
DG-K7S-3.5-4 (720-88240-2) Lab ID # 1283-01204-002	**400** - Total Points	**<0.25%**	**None Detected**	No Asbestos Detected
DG-K7S-0.5-1 (720-88240-3) Lab ID # 1283-01204-003	**400** - Total Points	**<0.25%**	**None Detected**	No Asbestos Detected
DG-K7S-3.5-4 (720-88240-4) Lab ID # 1283-01204-004	**400** - Total Points	**<0.25%**	**None Detected**	No Asbestos Detected
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			

QC Reviewer R. McBride

Analys Jo Ann Huerta

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

359886

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No.: 720-39418.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: Asbestos TEM Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88240-1
Address: 630 BANCROFT WAY, ,	Due Date Requested: 8/31/2018			
City: Berkeley	TAT Requested (days):			
State, Zip: CA, 94710				
Phone:	PO #:			
Email:	WO #:			
Project Name: UPC OU-SM	Project #: 72013717			
Site:	SSOW#			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Asbestos - CARB 435)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-K7S-0.5-1 (720-88240-1)	8/24/18	07:52 Pacific		Solid			X	1	
DG-K7S-3.5-4 (720-88240-2)	8/24/18	07:52 Pacific		Solid			X	1	
DG-L13S-0.5-1 (720-88240-3)	8/24/18	09:40 Pacific		Solid			X	1	
DG-L13S-3.5-4 (720-88240-4)	8/24/18	09:40 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 8-27-18 10:35	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: AUG27 '18 10:39AM

Ver: 09/20/2016

ASBESTOS TEM LABORATORIES, INC.

CARB Method 435
Polarized Light Microscopy
Analytical Report

Laboratory Job # 1283-01208

630 Bancroft Way
Berkeley, CA 94710
(510) 704-8930
FAX (510) 704-8429

ASBESTOS TEM LABORATORIES, INC

CA DPH ELAP
Lab No. 1866

NVLAP Lab Code: 101891-0
Berkeley, CA

Aug/31/2018

Micah Smith
TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

RE: LABORATORY JOB # 1283-01208
Polarized light microscopy analytical results for 2 bulk sample(s).
Job Site: 720-88240-1
Job No.: UPC OU-SM

Enclosed please find the bulk material analytical results for one or more samples submitted for asbestos analysis. The analyses were performed in accordance with the California Air Resources Board (ARB) Method 435 for the determination of asbestos in serpentine aggregate samples.

Prior to analysis, samples are logged-in and all data pertinent to the sample recorded. The samples are checked for damage or disruption of any chain-of-custody seals. A unique laboratory ID number is assigned to each sample. A hard copy log-in sheet containing all pertinent information concerning the sample is generated. This and all other relevant paper work are kept with the sample throughout the analytical procedures to assure proper analysis.

Sample preparation follows a standard CARB 435 prep method. The entire sample is dried at 135-150 C and then crushed to ~3/8" gravel size using a Bico Chipmunk crusher. If the submitted sample is >1 pint, the sample was split using a 1/2" riffle splitter following ASTM Method C-702-98 to obtain a 1 pint aliquot. The entire 1 pint aliquot, or entire original sample, is then pulverized in a Bico Braun disc pulverizer calibrated to produce a nominal 200 mesh final product. If necessary, additional homogenization steps are undertaken using a 3/8" riffle splitter. Small aliquots are collected from throughout the pulverized material to create three separate microsope slide mounts containing the appropriate refractive index oil. The prepared slides are placed under a polarizing light microscope where standard mineralogical techniques are used to analyze the various materials present, including asbestos. If asbestos is identified and of less than 10% concentration by visual area estimate then an additional five sample mounts are prepared. Quantification of asbestos concentration is obtained using the standard CAL ARB Method 435 point count protocol. For samples observed to contain visible asbestos of less than 10% concentration, a point counting techinique is used with 50 points counted on each of eight sample mounts for a total of 400 points. The data is then compiled into standard report format and subjected to a thorough quality assurance check before the information is released to the client.

While the CARB 435 method has much to commend it, there are a number of situations where it fails to provide sufficient accuracy to make a definitive determination of the presence/absence of asbestos and/or an accurate count of the asbestos concentration present in a given sample. These problems include, but are not limited to, 1) statistical uncertainty with samples containing <1% asbestos when too few particles are counted, 2) definitive identification and discrimination between various fibrous amphibole minerals such as tremolite/actinolite/hornblende and the "Libby amphiboles" such as tremolite/winchite/richterite/arfvedsonite, and C) small asbestiform fibers which are near or below the resolution limit of the PLM microscope such as those found in various California coast range serpentine bodies. In these cases, further analysis by transmission electron microscopy is recommended to obtain a more accurate result.

Sincerely Yours,

Lab Manager
ASBESTOS TEM LABORATORIES, INC.

--- These results relate only to the samples tested and must not be reproduced, except in full, without the approval of the laboratory. ---

630 BANCROFT WAY ▪ BERKELEY, CA 94710 ▪ PH. (510) 704-8930 ▪ FAX (510) 704-8429
With Branch Offices Located At: 1350 FREEPORT BLVD. UNIT 104, SPARKS, NV 89431

POLARIZED LIGHT MICROSCOPY
CARB 435 ANALYTICAL REPORT

Contact: Micah Smith

Address: TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

Samples Submitted: 2

Samples Analyzed: 2

Job Site / No. UPC OU-SM
720-88240-1

Report No. **359921**
Date Submitted: Aug-28-18
Date Reported: Aug-31-18

SAMPLE ID	POINTS COUNTED	ASBESTOS %	ASBESTOS TYPE	LOCATION / DESCRIPTION
DUP-36		**<0.25%**	**None Detected**	720-88240-19
Lab ID # 1283-01208-001	**400** - Total Points			No Asbestos Detected
DUP-13		**<0.25%**	**None Detected**	720-88240-20
Lab ID # 1283-01208-002	**400** - Total Points			No Asbestos Detected
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			

QC Reviewer _____ **Analys** _____

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

359921

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39434.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: Asbestos TEM Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88240-1
Address: 630 BANCROFT WAY, ,	Due Date Requested: 8/31/2018			
City: Berkeley	TAT Requested (days):			
State, Zip: CA, 94710				
Phone:	PO #:			
Email:	WO #:			
Project Name: UPC OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Asbestos - CARB 435)	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X		X	
DUP-36 (720-88240-19)	8/24/18	Pacific		Solid			X	1	
DUP-13 (720-88240-20)	8/24/18	Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment		
Relinquished by:	Date/Time: 8/28/18 1245	Company: TA	Received by: MB	Date/Time: AUG28 '18 12:45PM	Company:
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		

Ver: 09/20/2016

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

720-88240

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 185116

Date 8/24 Page 1 of 2

11/21/2018 (Rev. 1)

Report To

Attn: Miranda Kabelac
Company: Geosyntec
Address: 1111 Broadway 6th Floor
Email: mkabelac@geosyntec.com
Bill To: Geosyntec
Attn: L. Smith
Sampled By: R. Thomas / K. Belli
Phone:

Analysis Request

Sample ID	Date	Time	Bottle	Preserve	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B ☒	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☐ Motor Oil ☐ Other	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☒ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☒ EPA 8081 PCBs ☒ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Metals: ☐ 6020 ☐ 200.8 (ICP-MS):	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	[illegible]	Asbestos (CARB 435)
DG-K75-0.5-1	8/24	0752	5	N/A	X			X		X		X	X											X
DG-K75-3.5-4		0752			X			X		X		X	X											X
DG-L135-0.5-1		0940			X			X		X		X	X										X	X
DG-L135-3.5-1		0940			X			X		X		X	X										X	X
DG-K135-0.5-1		1020											X											
DG-K135-3.5-4		1020											X											
DG-M115-0.5-1		1100											X											
DG-M115-3.5-4		1100											X											
DG-J125-0.5-1		1130											X											
DG-J125-3.5-4		1130											X											

Project Info.

Project Name/ #: UPC-OU-SM
PO#: WG2565/02
Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt

# of Containers:
Head Space:
Temp:

10 Day	5 Day	4 Day	3 Day	2 Day	1 Day	Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID _____

4.4°

See Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: K. Belli — Time: 1315	Signature: [illegible] — Time: 1500	720-88240 Chain of Custody
Printed Name: Keaton Belli — Date: 8/24	Printed Name: Robert — Date: 8	
Company: Geosyntec	Company:	Company:

1) Received by:	2) Received by:	3) Received by:
Signature: [illegible] — Time: 1315	Signature: [illegible] — Time: 1500	Signature — Time
Printed Name: Robert — Date: 8/24/18	Printed Name: T. Buller — Date: 8/24/18	Printed Name — Date
Company: TA	Company: TA-720	Company

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-88240

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 185116

Date 8/24 Page 2 of 2

11/21/2018 (Rev. 1)

Report To

Attn: Miranda Kubinio
Company: Geosyntec
Address: 111 Broadway ch Floor
Email: M.Kubinio@geosyntec.com
Bill To: Geosyntec
Attn: Miranda
Sampled By: R Jaeger / K Bell
Phone:

Analysis Request

Sample ID	Date	Time	# of Cont.	Preserv.	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other ___	Semi-Volatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☐ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides PCBs ☐ EPA 8081 ☐ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: ___	Metals: ☐ 6020 ☐ 200.8 (ICP-MS): ___	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity		
DG-K25-0.5 1	8/24	1145	3	N/A									X										
DG-K25-3.5 4		1145	1										X										
DG-IP5-0.5-1		1155											X										
DG-IP5-3.5 4		1155											X										
DG-HP5-0.5 1		1201											X										
DG-HP5-3.5 4		1201											X										
DG-DUP-33		—											X										
DG-DUP-34		—											X										
DG-DUP-36		—											X										
[illegible]																							

Project Info.

Project Name/ #: UPC OU-SM
PO#: WG2565/02
Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt

# of Containers:
Head Space:
Temp:

10 Day	5 Day	4 Day	3 Day	2 Day	1 Day	Other:
	(5)					

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID ___

See Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [illegible] Time: 1318	Signature: [illegible] Time: 1500	Signature: Time:
Printed Name: Keaton Belli Date: 8/24	Printed Name: R.L. Date: 8/24/18	Printed Name: Date:
Company: Geosyntec	Company: TA	Company:

1) Received by:	2) Received by:	3) Received by:
Signature: [illegible] Time: 1315	Signature: [illegible] Time: 1500	Signature: Time:
Printed Name: R.L. Date: 8/24/18	Printed Name: T Bullock Date: 8/24/18	Printed Name: Date:
Company: TA	Company: TA-720	Company:

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

720-88240 Rev *

TESTAMERICA I
1220 Quarry Lane
Phone: (925) 48

720-88240-02 Chain of Custody

Reference #: 185 134

Date 8/27/18 Page 1 of 1

port To

: MIRANDA KAHRICAS
pany: GEOSYNTEC
ess: 1111 BROADWAY 6TH FLOOR
il: mkaholas@geosyntec.com
o: GEOSYNTEC
A. SMITH

Sampled By: R. Thomas / K. Belli
Phone: 4708810525

Analysis Request

					Volatile Organics GC/MS (VOCs) ☒ EPA 8260B +GRO	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☐ Motor Oil ☐ Other	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☒ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☒ EPA 8081 PCBs ☒ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Metals: ☐ 6020 ☐ 200.8 (ICP-MS):	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	Asbestos (CARB 435)	
DUP-13 *	8/24		5	N	X			X		X		X	X									X	
DUP-36 *	↓		5	N	X			X		X		X	X									X	
DUP-34 *			5	N									X										
DUP-33 *			5	N									X										
DUP-29			5	N									X										
DUP-21	↓		5	N									X										

Project Info

ct Name/#: PC OU-SM
WG2565/02
: Card
N: If yes, please call with payment information ASAP

Sample Receipt

# of Containers:
Head Space:
Temp:

10 Day	5 Day	4 Day	3 Day	2 Day	1 Day	Other:

t: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
al Instructions / Comments: ☐ Global ID

1.9°C

ts and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: K. Belli — Time: 615	Signature: K. T — Time: HGG 1300 (RT)	Signature: — Time: 1425
Printed Name: Keaton Belli — Date: 8/27	Printed Name: Rosemine K. Thomas — Date: 8/27	Printed Name: — Date: 8/27/18
Company: Geosyntec	Company: Geosyntec	Company: TA

1) Received by:	2) Received by:	3) Received by:
Signature: K. T — Time: 1100	Signature: — Time: 1300	Signature: — Time: 1425
Printed Name: Rosemine K. Thomas — Date: 8/27	Printed Name: — Date: 8/27/18	Printed Name: Dennis Arias — Date: 8/27/18
Company: Geosyntec	Company: TA	Company: M-TA

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

720-88262

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 185 134

Date 8/27/18 Page 1 of 1

Client Information

Client: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: mkaholas@geosyntec.com
To: GEOSYNTEC
A. SMITH
Sampled By: R. Thomas / K. Belli
Phone: 4726810525

Analysis Requested

Sample	Date	Time	# of Containers	Matrix	Volatile Organics GC/MS (VOCs) EPA 8260B + GRO	HVOCs by EPA 8260B	EPA 8260B: Gas BTEX 5 Oxygenates DCA, EDB Ethanol	TEPH EPA 8015B Silica Gel Diesel Motor Oil Other	Semi-Volatile Organics GC/MS EPA 8270C	PNA/PAH's by 8270C 8270C SIM	Oil and Grease (EPA 1664/9071) Petroleum Total	Pesticides EPA 8081 PCBs EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: 6010B 200.7 Lead LUFT RCRA Other	Metals: 6020 200.8 (ICP-MS):	W.E.T (STLC) W.E.T (DI) TCLP	Hex. Chrom by EPA 7196 or EPA 7199	pH 9040 SM4500	Spec. Cond. Alkalinity TSS SS TDS	Anions: Cl SO_4 NO_3 F Br NO_2 PO_4	Perchlorate by EPA 314.0	COD EPA 410.4 SM5220D Turbidity	Asbestos (CARB 435)
DUP-13 *	8/24		5	W	X			X		X		X	X										X
DUP-36 *			5	W	X			X		X		X	X										X
DUP-34 *			5	N									X										
DUP-33 *			5	N									X										
DUP-29			5	N									X										
DUP-21			5	N									X										

*= SAMPLES REC'D 8/24/18 720-88240 (#7-20)

720-88240-02 Chain of Custody

Project Name/#: IRC OU-SM
WG2565/02
Credit Card Y/N: If yes, please call with payment information ASAP
# of Containers:
Head Space:
Temp:

10 Day | 5 Day | 4 Day | 3 Day | 2 Day | 1 Day | Other:

Report: Routine Level 3 Level 4 EDD EDF
Special Instructions / Comments: Global ID
Terms and Conditions on reverse

1) Relinquished by: K. Belli 615
Signature Time
Keaton Belli 8/27
Printed Name Date
Geosyntec
Company

2) Relinquished by: 1300 (RT) 4GC
Signature Time
Rosemine K Thomas 8/27
Printed Name Date
Geosyntec
Company

3) Relinquished by: 1425
Signature Time
8/27/18
Printed Name Date
Company

1) Received by: 1100
Signature Time
Rosemine K Thomas 8/27
Printed Name Date
Geosyntec
Company

2) Received by: 1300
Signature Time
8/27/18
Printed Name Date
Company

3) Received by: 1425
Signature Time
8/27/18
Printed Name Date
Company

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39419.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88240-1
Address: 4101 Shuffel Street NW, ,	Due Date Requested: 8/31/2018			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: UPC OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

C207

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8082/3540C (MOD) PCB 7 Aroclors	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-K7S-0.5-1 (720-88240-1)	8/24/18	07:52 Pacific		Solid			X	1	
DG-K7S-3.5-4 (720-88240-2)	8/24/18	07:52 Pacific		Solid			X	1	
DG-L13S-0.5-1 (720-88240-3)	8/24/18	09:40 Pacific		Solid			X	1	
DG-L13S-0.5-1 (720-88240-3MS)	8/24/18	09:40 Pacific	MS	Solid			X	1	
DG-L13S-0.5-1 (720-88240-3MSD)	8/24/18	09:40 Pacific	MSD	Solid			X	1	
DG-L13S-3.5-4 (720-88240-4)	8/24/18	09:40 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	8-27-18 1600	PACE	[signature]	8/29/18 935	TAL

Custody Seals Intact:	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
Δ Yes Δ No		

Ver: 09/20/2016

TestAmerica Canton Sample Receipt Form/Narrative **Login # :**_____
Canton Facility

Client TA Pleasanton Site Name_____ Cooler unpacked by: SL
Cooler Received on 8/29/18 Opened on 8/29/18
FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other_____

Receipt After-hours: Drop-off Date/Time_____ Storage Location_____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other_____
Packing material used: Bubble Wrap Foam Plastic Bag None Other_____
COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF +0 °C) Observed Cooler Temp. 1.4 °C Corrected Cooler Temp. 1.4 °C
   IR GUN #36 (CF -0.3°C) Observed Cooler Temp._____ °C Corrected Cooler Temp._____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   -Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
   -Were tamper/custody seals intact and uncompromised? Yes No NA
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No
    If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC849151**
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____ Yes No
16. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____.

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

0.8/0.8

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39435.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88240-1
Address: 4101 Shuffel Street NW,	Due Date Requested: 8/31/2018			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: UPC OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

C209

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8082/3540C (MOD) PCB 7 Aroclors	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DUP-36 (720-88240-19)	8/24/18	Pacific		Solid			X	1	
DUP-13 (720-88240-20)	8/24/18	Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 8/28/18 1238	Company TAL	Received by:	Date/Time: 8/24/18 935	Company TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** _____
Canton Facility

Client TA Pleasanton Site Name _____ Cooler unpacked by:
Cooler Received on 8/29/18 Opened on 8/29/18
FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other _____
Packing material used: Bubble Wrap Foam Plastic Bag None Other _____
COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF +0 °C) Observed Cooler Temp. 0.8 °C Corrected Cooler Temp. 0.8 °C
   IR GUN #36 (CF -0.3°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   -Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
   -Were tamper/custody seals intact and uncompromised? Yes No NA
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No
    If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC849151**
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
16. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

WI-NC-099

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88240-1

Login Number: 88240
List Number: 1
Creator: Bullock, Tracy

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	False	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	False	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-88241-1
Client Project/Site: UPC OU-SM
Revision: 1

For:
Geosyntec Consultants, Inc.
201 N. Civic Drive
Suite 245
Walnut Creek, California 94596

Attn: Mr. Krys Jesionek

Authorized for release by:
11/21/2018 6:52:39 PM

Micah Smith, Project Manager II
(925)484-1919
micah.smith@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 6
Client Sample Results 10
Surrogate Summary 145
QC Sample Results 148
QC Association Summary 171
Lab Chronicle 176
Certification Summary 179
Method Summary 180
Sample Summary 181
Subcontract Data 182
Chain of Custody 186
Receipt Checklists 189

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	ISTD response or retention time outside acceptable limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

GC Semi VOA

Qualifier	Qualifier Description
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
X	Surrogate is outside control limits
F2	MS/MSD RPD exceeds control limits
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 720-88241-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-88241-1

Comments
This report was revised on 11/21/18 to change the units for the metals data to report in mg/Kg, as requested.

Receipt
The samples were received on 8/24/2018 3:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.4º C.

Receipt Exceptions
Sample containers were not received full.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250622 recovered outside control limits for the following analytes: Carbon disulfide and 1,1-Dichloroethene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample (LCS) for analytical batch 720-250645 recovered outside control limits for the following analytes: 1,1-Dichloroethene and 1,1,2-Trichloro-1,2,2-trifluoroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: Internal standard (ISTD) response for the following sample was outside control limits: DG-D9S-3.5-4 (720-88241-5). The sample(s) was re-extracted and/or re-analyzed with concurring results, and the second set of data has been reported.

Method(s) 8260B: Internal standard (ISTD) response for the following samples were outside control limits: DG-F9S-3.5-4 (720-88241-2) and DG-F9S-9.5-10 (720-88241-3). The sample(s) was re-extracted and/or re-analyzed, using the sample collected in the field container, with concurring results, and the original set of data has been reported. There was no reportable data in the low level analysis of the other terracore.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method(s) 8270C SIM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250487 and analytical batch 720-250745 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8270C SIM: The method blank for preparation batch 720-250487 and analytical batch 720-250730 contained Fluoranthene and Phenanthrene above the method detection limit. These target analyte concentrations were less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8015B: The following samples required a dilution due to the nature of the sample matrix: (720-88240-D-3-I), (720-88240-D-3-G MS) and (720-88240-D-3-H MSD). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method(s) 8081A: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 720-250479 and analytical batch 720-250736 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) was within acceptance limits.

Method(s) 8081A: The %RPD between the primary and confirmation column exceeded 40% for cis-Chlordane for the following sample: DG-D9S-0.5-1 (720-88241-4). The lower value(s) has been reported and qualified in accordance with the laboratory's SOP.

Job ID: 720-88241-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

Method(s) 8081A: The %RPD between the primary and confirmation column exceeded 40% for the surrogate DCB Decachlorobiphenyl in the following sample: DG-D9S-0.5-1 (720-88241-4). The lower value(s) has been reported and qualified in accordance with the laboratory's SOP.

Method(s) 8082: Surrogate recovery for the following samples was outside control limits: (720-88240-F-3-C MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8082: The following sample was diluted due to the nature of the sample matrix: DG-D9S-0.5-1 (720-88241-4). Elevated reporting limits (RLs) are provided.

Method(s) 8082: The following sample was diluted due to the nature of the sample matrix: DG-F9S-3.5-4 (720-88241-2). As such, surrogate recoveries may be below the calibration range, and elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250513 and analytical batch 720-250635 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 6010B: The following samples were diluted due to the abundance of non-target analytes: DG-F9S-0.5-1 (720-88241-1), DG-F9S-9.5-10 (720-88241-3), DG-D9S-0.5-1 (720-88241-4) and DG-D9S-3.5-4 (720-88241-5). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Subcontract Work
Method Asbestos - CARB 435: This method was subcontracted to ASBESTOS TEM LABORATORIES, INC. The subcontract laboratory certification is different from that of the facility issuing the final report.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88241-1

Client Sample ID: DG-F9S-0.5-1 — Lab Sample ID: 720-88241-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	38		9.7	4.8	ug/Kg	1		8270C SIM	Total/NA
Acenaphthylene	4.5	J	4.8	2.3	ug/Kg	1		8270C SIM	Total/NA
Anthracene	10		4.8	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	24		4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	25		4.8	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	49		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	21		4.8	4.2	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	10		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	75		4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Dibenz(a,h)anthracene	9.1		4.8	3.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	28		4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Fluorene	3.2	J	4.8	2.1	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	13		4.8	4.1	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	16		4.8	3.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	63		4.8	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	57		4.8	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	39000		1900	720	ug/Kg	1		8015B	Total/NA
Antimony	0.35	J	1.6	0.27	mg/Kg	4		6010B	Total/NA
Arsenic	1.4	J	3.3	0.28	mg/Kg	4		6010B	Total/NA
Barium	47		1.6	0.23	mg/Kg	4		6010B	Total/NA
Cadmium	0.045	J	0.41	0.041	mg/Kg	4		6010B	Total/NA
Chromium	10		1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.66	0.066	mg/Kg	4		6010B	Total/NA
Copper	120		4.9	2.3	mg/Kg	4		6010B	Total/NA
Lead	48		1.6	0.34	mg/Kg	4		6010B	Total/NA
Nickel	9.6		1.6	0.17	mg/Kg	4		6010B	Total/NA
Vanadium	81		1.6	0.22	mg/Kg	4		6010B	Total/NA
Zinc	59		4.9	2.1	mg/Kg	4		6010B	Total/NA
Mercury	0.083		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-F9S-3.5-4 — Lab Sample ID: 720-88241-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	1.8	J	4.8	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	2.3	J	4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	1.9	J	4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	2.2	J B	4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Pyrene	2.4	J	4.8	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	3500		2000	740	ug/Kg	1		8015B	Total/NA
Arsenic	2.4	J	3.7	0.32	mg/Kg	4		6010B	Total/NA
Barium	61		1.9	0.27	mg/Kg	4		6010B	Total/NA
Cadmium	0.26	J	0.47	0.046	mg/Kg	4		6010B	Total/NA
Chromium	35		1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	5.1		0.75	0.075	mg/Kg	4		6010B	Total/NA
Copper	13		5.6	2.7	mg/Kg	4		6010B	Total/NA
Lead	23		1.9	0.39	mg/Kg	4		6010B	Total/NA
Nickel	27		1.9	0.19	mg/Kg	4		6010B	Total/NA
Vanadium	24		1.9	0.25	mg/Kg	4		6010B	Total/NA
Zinc	81		5.6	2.4	mg/Kg	4		6010B	Total/NA
Mercury	0.025		0.016	0.0023	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88241-1

Client Sample ID: DG-F9S-9.5-10 — Lab Sample ID: 720-88241-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	160		52	39	ug/Kg	1		8260B	Total/NA
2-Butanone (MEK)	29	J	52	22	ug/Kg	1		8260B	Total/NA
2-Methylnaphthalene	97		10	5.0	ug/Kg	1		8270C SIM	Total/NA
Acenaphthene	4.5	J	5.0	2.8	ug/Kg	1		8270C SIM	Total/NA
Acenaphthylene	2.7	J	5.0	2.4	ug/Kg	1		8270C SIM	Total/NA
Anthracene	5.3		5.0	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	12		5.0	1.5	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	11		5.0	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	17		5.0	2.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	9.3		5.0	4.3	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	6.0		5.0	2.1	ug/Kg	1		8270C SIM	Total/NA
Chrysene	28		5.0	1.4	ug/Kg	1		8270C SIM	Total/NA
Dibenz(a,h)anthracene	3.8	J	5.0	3.5	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	23		5.0	1.4	ug/Kg	1		8270C SIM	Total/NA
Fluorene	50		5.0	2.2	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	4.2	J	5.0	4.2	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	28		5.0	3.5	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	99		5.0	1.8	ug/Kg	1		8270C SIM	Total/NA
Pyrene	38		5.0	1.7	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	36000		1900	720	ug/Kg	1		8015B	Total/NA
Antimony	0.94	J	1.8	0.30	mg/Kg	4		6010B	Total/NA
Arsenic	6.2		3.6	0.30	mg/Kg	4		6010B	Total/NA
Barium	210		1.8	0.25	mg/Kg	4		6010B	Total/NA
Beryllium	0.46		0.36	0.12	mg/Kg	4		6010B	Total/NA
Cadmium	0.074	J	0.45	0.044	mg/Kg	4		6010B	Total/NA
Chromium	110		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	15		0.71	0.071	mg/Kg	4		6010B	Total/NA
Copper	29		5.4	2.5	mg/Kg	4		6010B	Total/NA
Lead	18		1.8	0.38	mg/Kg	4		6010B	Total/NA
Molybdenum	0.54	J	1.8	0.23	mg/Kg	4		6010B	Total/NA
Nickel	78		1.8	0.18	mg/Kg	4		6010B	Total/NA
Silver	0.22	J	0.89	0.18	mg/Kg	4		6010B	Total/NA
Vanadium	71		1.8	0.24	mg/Kg	4		6010B	Total/NA
Zinc	84		5.4	2.3	mg/Kg	4		6010B	Total/NA
Mercury	0.14		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-D9S-0.5-1 — Lab Sample ID: 720-88241-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	49		38	29	ug/Kg	1		8260B	Total/NA
Anthracene	3.2	J	4.8	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	8.5		4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	8.5		4.8	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	11		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	4.3	J	4.8	4.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	5.3		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	7.2		4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	12	B	4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	4.4	J	4.8	4.0	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	6.3	B	4.8	1.7	ug/Kg	1		8270C SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-D9S-0.5-1 (Continued) — Lab Sample ID: 720-88241-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pyrene	11		4.8	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	14000		2000	740	ug/Kg	1		8015B	Total/NA
cis-Chlordane	0.59	J p	2.0	0.40	ug/Kg	1		8081A	Total/NA
Arsenic	0.74	J	3.0	0.26	mg/Kg	4		6010B	Total/NA
Barium	36		1.5	0.21	mg/Kg	4		6010B	Total/NA
Chromium	11		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.60	0.060	mg/Kg	4		6010B	Total/NA
Copper	130		4.5	2.1	mg/Kg	4		6010B	Total/NA
Lead	23		1.5	0.32	mg/Kg	4		6010B	Total/NA
Molybdenum	0.33	J	1.5	0.19	mg/Kg	4		6010B	Total/NA
Nickel	3.6		1.5	0.15	mg/Kg	4		6010B	Total/NA
Thallium	0.78	J	1.5	0.44	mg/Kg	4		6010B	Total/NA
Vanadium	110		1.5	0.20	mg/Kg	4		6010B	Total/NA
Zinc	49		4.5	1.9	mg/Kg	4		6010B	Total/NA
Mercury	0.099		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-D9S-3.5-4 — Lab Sample ID: 720-88241-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	55		42	32	ug/Kg	1		8260B	Total/NA
Gasoline Range Organics (GRO) -C4-C12	190	J	210	84	ug/Kg	1		8260B	Total/NA
2-Methylnaphthalene	15		9.4	4.7	ug/Kg	1		8270C SIM	Total/NA
Acenaphthene	8.5		4.7	2.6	ug/Kg	1		8270C SIM	Total/NA
Acenaphthylene	6.8		4.7	2.3	ug/Kg	1		8270C SIM	Total/NA
Anthracene	49		4.7	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	150		4.7	1.4	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	160		4.7	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	210		4.7	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	54		4.7	4.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	77		4.7	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	170		4.7	1.3	ug/Kg	1		8270C SIM	Total/NA
Dibenz(a,h)anthracene	19		4.7	3.3	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	280		4.7	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluorene	9.2		4.7	2.1	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	50		4.7	4.0	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	12		4.7	3.3	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	220		4.7	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	350		4.7	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	53000		1900	720	ug/Kg	1		8015B	Total/NA
Antimony	3.3		1.7	0.28	mg/Kg	4		6010B	Total/NA
Arsenic	5.8		3.4	0.29	mg/Kg	4		6010B	Total/NA
Barium	60		1.7	0.24	mg/Kg	4		6010B	Total/NA
Cadmium	0.14	J	0.42	0.042	mg/Kg	4		6010B	Total/NA
Chromium	16		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	12		0.67	0.067	mg/Kg	4		6010B	Total/NA
Copper	150		5.0	2.4	mg/Kg	4		6010B	Total/NA
Lead	150		1.7	0.35	mg/Kg	4		6010B	Total/NA
Molybdenum	0.38	J	1.7	0.22	mg/Kg	4		6010B	Total/NA
Nickel	13		1.7	0.17	mg/Kg	4		6010B	Total/NA
Silver	0.37	J	0.84	0.17	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-D9S-3.5-4 (Continued) — Lab Sample ID: 720-88241-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Thallium	0.78	J	1.7	0.49	mg/Kg	4		6010B	Total/NA
Vanadium	86		1.7	0.23	mg/Kg	4		6010B	Total/NA
Zinc	81		5.0	2.1	mg/Kg	4		6010B	Total/NA
Mercury	0.061		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-D9S-9.5-10 — Lab Sample ID: 720-88241-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	40	J	41	31	ug/Kg	1		8260B	Total/NA
Chrysene	1.3	J	4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	1.5	J B	4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	3.0	J B	4.8	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	1.7	J	4.8	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	840	J	1900	730	ug/Kg	1		8015B	Total/NA
Antimony	0.37	J	1.1	0.18	mg/Kg	4		6010B	Total/NA
Arsenic	1.7	J	2.1	0.18	mg/Kg	4		6010B	Total/NA
Barium	28		1.1	0.15	mg/Kg	4		6010B	Total/NA
Chromium	30		1.1	0.11	mg/Kg	4		6010B	Total/NA
Cobalt	5.3		0.43	0.043	mg/Kg	4		6010B	Total/NA
Copper	5.4		3.2	1.5	mg/Kg	4		6010B	Total/NA
Lead	3.2		1.1	0.22	mg/Kg	4		6010B	Total/NA
Molybdenum	0.17	J	1.1	0.14	mg/Kg	4		6010B	Total/NA
Nickel	34		1.1	0.11	mg/Kg	4		6010B	Total/NA
Vanadium	19		1.1	0.14	mg/Kg	4		6010B	Total/NA
Zinc	16		3.2	1.4	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88241-1

Client Sample ID: DG-F9S-0.5-1

Date Collected: 08/24/18 12:10
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88241-1

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.0	0.96	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
Acetone	ND		40	30	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
Benzene	ND		4.0	0.52	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
Dichlorobromomethane	ND		4.0	0.57	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
Bromobenzene	ND		4.0	0.63	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
Chlorobromomethane	ND		16	0.57	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
Bromoform	ND		4.0	1.6	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
Bromomethane	ND		8.0	0.63	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
2-Butanone (MEK)	ND		40	17	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
n-Butylbenzene	ND		4.0	0.80	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
sec-Butylbenzene	ND		4.0	0.57	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
tert-Butylbenzene	ND		4.0	0.58	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
Carbon disulfide	ND		4.0	1.6	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
Carbon tetrachloride	ND		4.0	0.49	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
Chlorobenzene	ND		4.0	0.55	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
Chloroethane	ND		8.0	0.45	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
Chloroform	ND		4.0	0.53	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
Chloromethane	ND		8.0	0.63	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
2-Chlorotoluene	ND		4.0	0.52	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
4-Chlorotoluene	ND		4.0	0.54	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
Chlorodibromomethane	ND		4.0	0.57	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
1,2-Dichlorobenzene	ND		4.0	0.54	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
1,3-Dichlorobenzene	ND		4.0	0.57	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
1,4-Dichlorobenzene	ND		4.0	0.57	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
1,3-Dichloropropane	ND		4.0	0.58	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
1,1-Dichloropropene	ND		4.0	0.55	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
1,2-Dibromo-3-Chloropropane	ND		8.0	1.4	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
Ethylene Dibromide	ND		4.0	1.1	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
Dibromomethane	ND		8.0	0.69	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
Dichlorodifluoromethane	ND		8.0	0.63	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
1,1-Dichloroethane	ND		4.0	0.54	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
1,2-Dichloroethane	ND		4.0	0.61	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
1,1-Dichloroethene	ND	*	4.0	0.49	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
cis-1,2-Dichloroethene	ND		4.0	0.54	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
trans-1,2-Dichloroethene	ND		4.0	0.60	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
1,2-Dichloropropane	ND		4.0	0.50	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
cis-1,3-Dichloropropene	ND		4.0	0.55	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
trans-1,3-Dichloropropene	ND		4.0	0.53	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
Ethylbenzene	ND		4.0	0.60	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
Hexachlorobutadiene	ND		4.0	0.72	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
2-Hexanone	ND		40	8.0	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
Isopropylbenzene	ND		4.0	0.54	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
4-Isopropyltoluene	ND		4.0	2.0	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
Methylene Chloride	ND		8.0	4.5	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
4-Methyl-2-pentanone (MIBK)	ND		40	8.0	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
Naphthalene	ND		8.0	1.2	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
N-Propylbenzene	ND		4.0	0.53	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
Styrene	ND		4.0	0.50	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
1,1,1,2-Tetrachloroethane	ND		4.0	0.61	ug/Kg		08/25/18 03:05	08/31/18 12:14	1

Client Sample ID: DG-F9S-0.5-1

Lab Sample ID: 720-88241-1

Date Collected: 08/24/18 12:10

Matrix: Solid

Date Received: 08/24/18 15:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.0	0.60	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
Tetrachloroethene	ND		4.0	0.53	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
Toluene	ND		4.0	0.57	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
1,2,3-Trichlorobenzene	ND		4.0	0.59	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
1,2,4-Trichlorobenzene	ND		4.0	0.57	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
1,1,1-Trichloroethane	ND		4.0	0.49	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
1,1,2-Trichloroethane	ND		4.0	0.56	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
Trichloroethene	ND		4.0	0.50	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
Trichlorofluoromethane	ND		4.0	0.45	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
1,2,3-Trichloropropane	ND		4.0	0.61	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.0	1.7	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
1,2,4-Trimethylbenzene	ND		4.0	1.3	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
1,3,5-Trimethylbenzene	ND		4.0	0.52	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
Vinyl acetate	ND		16	4.0	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
Vinyl chloride	ND		4.0	0.58	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
Xylenes, Total	ND		4.0	0.97	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
2,2-Dichloropropane	ND		4.0	1.6	ug/Kg		08/25/18 03:05	08/31/18 12:14	1
Gasoline Range Organics (GRO) -C4-C12	ND		200	80	ug/Kg		08/25/18 03:05	08/31/18 12:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*45 - 131*	*08/25/18 03:05*	*08/31/18 12:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*117*		*60 - 140*	*08/25/18 03:05*	*08/31/18 12:14*	*1*
Toluene-d8 (Surr)	*94*		*58 - 140*	*08/25/18 03:05*	*08/31/18 12:14*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**38**		9.7	4.8	ug/Kg		09/04/18 17:46	09/06/18 03:22	1
Acenaphthene	ND		4.8	2.7	ug/Kg		09/04/18 17:46	09/06/18 03:22	1
Acenaphthylene	**4.5**	**J**	4.8	2.3	ug/Kg		09/04/18 17:46	09/06/18 03:22	1
Anthracene	**10**		4.8	1.9	ug/Kg		09/04/18 17:46	09/06/18 03:22	1
Benzo[a]anthracene	**24**		4.8	1.4	ug/Kg		09/04/18 17:46	09/06/18 03:22	1
Benzo[a]pyrene	**25**		4.8	1.8	ug/Kg		09/04/18 17:46	09/06/18 03:22	1
Benzo[b]fluoranthene	**49**		4.8	2.0	ug/Kg		09/04/18 17:46	09/06/18 03:22	1
Benzo[g,h,i]perylene	**21**		4.8	4.2	ug/Kg		09/04/18 17:46	09/06/18 03:22	1
Benzo[k]fluoranthene	**10**		4.8	2.0	ug/Kg		09/04/18 17:46	09/06/18 03:22	1
Chrysene	**75**		4.8	1.4	ug/Kg		09/04/18 17:46	09/06/18 03:22	1
Dibenz(a,h)anthracene	**9.1**		4.8	3.4	ug/Kg		09/04/18 17:46	09/06/18 03:22	1
Fluoranthene	**28**		4.8	1.4	ug/Kg		09/04/18 17:46	09/06/18 03:22	1
Fluorene	**3.2**	**J**	4.8	2.1	ug/Kg		09/04/18 17:46	09/06/18 03:22	1
Indeno[1,2,3-cd]pyrene	**13**		4.8	4.1	ug/Kg		09/04/18 17:46	09/06/18 03:22	1
Naphthalene	**16**		4.8	3.4	ug/Kg		09/04/18 17:46	09/06/18 03:22	1
Phenanthrene	**63**		4.8	1.7	ug/Kg		09/04/18 17:46	09/06/18 03:22	1
Pyrene	**57**		4.8	1.6	ug/Kg		09/04/18 17:46	09/06/18 03:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*33 - 120*	*09/04/18 17:46*	*09/06/18 03:22*	*1*
Terphenyl-d14	*92*		*35 - 146*	*09/04/18 17:46*	*09/06/18 03:22*	*1*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88241-1

Client Sample ID: DG-F9S-0.5-1

Date Collected: 08/24/18 12:10
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88241-1

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	39000		1900	720	ug/Kg		08/29/18 09:03	08/31/18 23:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*95*		*40 - 130*	*08/29/18 09:03*	*08/31/18 23:05*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.57	ug/Kg		08/29/18 10:43	09/01/18 13:25	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/29/18 10:43	09/01/18 13:25	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/29/18 10:43	09/01/18 13:25	1
Aldrin	ND		1.9	0.47	ug/Kg		08/29/18 10:43	09/01/18 13:25	1
alpha-BHC	ND		1.9	0.52	ug/Kg		08/29/18 10:43	09/01/18 13:25	1
beta-BHC	ND		1.9	0.34	ug/Kg		08/29/18 10:43	09/01/18 13:25	1
Chlordane (technical)	ND		38	3.0	ug/Kg		08/29/18 10:43	09/01/18 13:25	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/29/18 10:43	09/01/18 13:25	1
delta-BHC	ND		1.9	0.41	ug/Kg		08/29/18 10:43	09/01/18 13:25	1
Dieldrin	ND		1.9	0.56	ug/Kg		08/29/18 10:43	09/01/18 13:25	1
Endosulfan I	ND		1.9	0.30	ug/Kg		08/29/18 10:43	09/01/18 13:25	1
Endosulfan II	ND		1.9	0.46	ug/Kg		08/29/18 10:43	09/01/18 13:25	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/29/18 10:43	09/01/18 13:25	1
Endrin	ND		1.9	0.43	ug/Kg		08/29/18 10:43	09/01/18 13:25	1
Endrin aldehyde	ND		1.9	0.59	ug/Kg		08/29/18 10:43	09/01/18 13:25	1
Endrin ketone	ND		1.9	0.31	ug/Kg		08/29/18 10:43	09/01/18 13:25	1
gamma-BHC (Lindane)	ND		1.9	0.59	ug/Kg		08/29/18 10:43	09/01/18 13:25	1
Heptachlor	ND		1.9	0.43	ug/Kg		08/29/18 10:43	09/01/18 13:25	1
Heptachlor epoxide	ND		1.9	0.33	ug/Kg		08/29/18 10:43	09/01/18 13:25	1
Methoxychlor	ND		1.9	0.64	ug/Kg		08/29/18 10:43	09/01/18 13:25	1
Toxaphene	ND		38	6.4	ug/Kg		08/29/18 10:43	09/01/18 13:25	1
trans-Chlordane	ND		1.9	0.43	ug/Kg		08/29/18 10:43	09/01/18 13:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*72*		*21 - 136*	*08/29/18 10:43*	*09/01/18 13:25*	*1*
Tetrachloro-m-xylene	*81*		*21 - 145*	*08/29/18 10:43*	*09/01/18 13:25*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/29/18 14:50	08/31/18 09:59	1
Aroclor-1221	ND		50	24	ug/Kg		08/29/18 14:50	08/31/18 09:59	1
Aroclor-1232	ND		50	23	ug/Kg		08/29/18 14:50	08/31/18 09:59	1
Aroclor-1242	ND		50	19	ug/Kg		08/29/18 14:50	08/31/18 09:59	1
Aroclor-1248	ND		50	24	ug/Kg		08/29/18 14:50	08/31/18 09:59	1
Aroclor-1254	ND		50	23	ug/Kg		08/29/18 14:50	08/31/18 09:59	1
Aroclor-1260	ND		50	22	ug/Kg		08/29/18 14:50	08/31/18 09:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*14 - 128*	*08/29/18 14:50*	*08/31/18 09:59*	*1*
DCB Decachlorobiphenyl	*80*		*10 - 132*	*08/29/18 14:50*	*08/31/18 09:59*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.35	J	1.6	0.27	mg/Kg		08/29/18 15:55	08/30/18 17:48	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88241-1

Client Sample ID: DG-F9S-0.5-1

Date Collected: 08/24/18 12:10
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88241-1

Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.4	J	3.3	0.28	mg/Kg		08/29/18 15:55	08/30/18 17:48	4
Barium	47		1.6	0.23	mg/Kg		08/29/18 15:55	08/30/18 17:48	4
Beryllium	ND		0.33	0.11	mg/Kg		08/29/18 15:55	08/30/18 17:48	4
Cadmium	0.045	J	0.41	0.041	mg/Kg		08/29/18 15:55	08/30/18 17:48	4
Chromium	10		1.6	0.17	mg/Kg		08/29/18 15:55	08/30/18 17:48	4
Cobalt	11		0.66	0.066	mg/Kg		08/29/18 15:55	08/30/18 17:48	4
Copper	120		4.9	2.3	mg/Kg		08/29/18 15:55	08/30/18 17:48	4
Lead	48		1.6	0.34	mg/Kg		08/29/18 15:55	08/30/18 17:48	4
Molybdenum	ND		1.6	0.21	mg/Kg		08/29/18 15:55	08/30/18 17:48	4
Nickel	9.6		1.6	0.17	mg/Kg		08/29/18 15:55	08/30/18 17:48	4
Selenium	ND		3.3	0.49	mg/Kg		08/29/18 15:55	08/30/18 17:48	4
Silver	ND		0.82	0.17	mg/Kg		08/29/18 15:55	08/30/18 17:48	4
Thallium	ND		1.6	0.48	mg/Kg		08/29/18 15:55	08/30/18 17:48	4
Vanadium	81		1.6	0.22	mg/Kg		08/29/18 15:55	08/30/18 17:48	4
Zinc	59		4.9	2.1	mg/Kg		08/29/18 15:55	08/30/18 17:48	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.083		0.015	0.0022	mg/Kg		08/29/18 21:54	08/30/18 21:40	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88241-1

Client Sample ID: DG-F9S-3.5-4

Date Collected: 08/24/18 12:10
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88241-2

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.5	1.1	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
Acetone	ND		45	34	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
Benzene	ND		4.5	0.58	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
Dichlorobromomethane	ND		4.5	0.65	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
Bromobenzene	ND	*	4.5	0.71	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
Chlorobromomethane	ND		18	0.65	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
Bromoform	ND		4.5	1.8	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
Bromomethane	ND		9.0	0.71	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
2-Butanone (MEK)	ND		45	19	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
n-Butylbenzene	ND	*	4.5	0.90	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
sec-Butylbenzene	ND	*	4.5	0.65	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
tert-Butylbenzene	ND	*	4.5	0.66	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
Carbon disulfide	ND		4.5	1.8	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
Carbon tetrachloride	ND		4.5	0.56	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
Chlorobenzene	ND		4.5	0.62	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
Chloroethane	ND		9.0	0.50	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
Chloroform	ND		4.5	0.59	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
Chloromethane	ND		9.0	0.71	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
2-Chlorotoluene	ND	*	4.5	0.58	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
4-Chlorotoluene	ND	*	4.5	0.61	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
Chlorodibromomethane	ND		4.5	0.64	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
1,2-Dichlorobenzene	ND	*	4.5	0.61	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
1,3-Dichlorobenzene	ND	*	4.5	0.65	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
1,4-Dichlorobenzene	ND	*	4.5	0.64	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
1,3-Dichloropropane	ND		4.5	0.66	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
1,1-Dichloropropene	ND		4.5	0.62	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
1,2-Dibromo-3-Chloropropane	ND	*	9.0	1.5	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
Ethylene Dibromide	ND		4.5	1.3	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
Dibromomethane	ND		9.0	0.77	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
Dichlorodifluoromethane	ND		9.0	0.71	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
1,1-Dichloroethane	ND		4.5	0.61	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
1,2-Dichloroethane	ND		4.5	0.68	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
1,1-Dichloroethene	ND	*	4.5	0.56	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
cis-1,2-Dichloroethene	ND		4.5	0.61	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
trans-1,2-Dichloroethene	ND		4.5	0.67	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
1,2-Dichloropropane	ND		4.5	0.57	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
cis-1,3-Dichloropropene	ND		4.5	0.62	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
trans-1,3-Dichloropropene	ND		4.5	0.60	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
Ethylbenzene	ND		4.5	0.67	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
Hexachlorobutadiene	ND	*	4.5	0.81	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
2-Hexanone	ND		45	9.0	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
Isopropylbenzene	ND		4.5	0.61	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
4-Isopropyltoluene	ND	*	4.5	2.2	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
Methylene Chloride	ND		9.0	5.0	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
4-Methyl-2-pentanone (MIBK)	ND		45	9.0	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
Naphthalene	ND	*	9.0	1.3	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
N-Propylbenzene	ND	*	4.5	0.59	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
Styrene	ND		4.5	0.57	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
1,1,1,2-Tetrachloroethane	ND		4.5	0.68	ug/Kg		08/25/18 03:05	08/31/18 12:43	1

Client Sample ID: DG-F9S-3.5-4

Lab Sample ID: 720-88241-2

Date Collected: 08/24/18 12:10

Matrix: Solid

Date Received: 08/24/18 15:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	4.5	0.67	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
Tetrachloroethene	ND		4.5	0.60	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
Toluene	ND		4.5	0.64	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
1,2,3-Trichlorobenzene	ND	*	4.5	0.66	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
1,2,4-Trichlorobenzene	ND	*	4.5	0.64	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
1,1,1-Trichloroethane	ND		4.5	0.55	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
1,1,2-Trichloroethane	ND		4.5	0.63	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
Trichloroethene	ND		4.5	0.57	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
Trichlorofluoromethane	ND		4.5	0.50	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
1,2,3-Trichloropropane	ND	*	4.5	0.69	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.5	1.9	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
1,2,4-Trimethylbenzene	ND	*	4.5	1.5	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
1,3,5-Trimethylbenzene	ND	*	4.5	0.58	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
Vinyl acetate	ND		18	4.5	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
Vinyl chloride	ND		4.5	0.66	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
Xylenes, Total	ND		4.5	1.1	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
2,2-Dichloropropane	ND		4.5	1.8	ug/Kg		08/25/18 03:05	08/31/18 12:43	1
Gasoline Range Organics (GRO) -C4-C12	ND		220	90	ug/Kg		08/25/18 03:05	08/31/18 12:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*		*45 - 131*	*08/25/18 03:05*	*08/31/18 12:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*60 - 140*	*08/25/18 03:05*	*08/31/18 12:43*	*1*
Toluene-d8 (Surr)	*92*		*58 - 140*	*08/25/18 03:05*	*08/31/18 12:43*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.6	4.8	ug/Kg		08/29/18 11:45	09/01/18 22:57	1
Acenaphthene	ND		4.8	2.7	ug/Kg		08/29/18 11:45	09/01/18 22:57	1
Acenaphthylene	ND		4.8	2.3	ug/Kg		08/29/18 11:45	09/01/18 22:57	1
Anthracene	ND		4.8	1.9	ug/Kg		08/29/18 11:45	09/01/18 22:57	1
Benzo[a]anthracene	ND		4.8	1.4	ug/Kg		08/29/18 11:45	09/01/18 22:57	1
Benzo[a]pyrene	**1.8**	**J**	4.8	1.8	ug/Kg		08/29/18 11:45	09/01/18 22:57	1
Benzo[b]fluoranthene	**2.3**	**J**	4.8	2.0	ug/Kg		08/29/18 11:45	09/01/18 22:57	1
Benzo[g,h,i]perylene	ND		4.8	4.1	ug/Kg		08/29/18 11:45	09/01/18 22:57	1
Benzo[k]fluoranthene	ND		4.8	2.0	ug/Kg		08/29/18 11:45	09/01/18 22:57	1
Chrysene	**1.9**	**J**	4.8	1.3	ug/Kg		08/29/18 11:45	09/01/18 22:57	1
Dibenz(a,h)anthracene	ND		4.8	3.4	ug/Kg		08/29/18 11:45	09/01/18 22:57	1
Fluoranthene	**2.2**	**J B**	4.8	1.3	ug/Kg		08/29/18 11:45	09/01/18 22:57	1
Fluorene	ND		4.8	2.1	ug/Kg		08/29/18 11:45	09/01/18 22:57	1
Indeno[1,2,3-cd]pyrene	ND		4.8	4.0	ug/Kg		08/29/18 11:45	09/01/18 22:57	1
Naphthalene	ND		4.8	3.4	ug/Kg		08/29/18 11:45	09/01/18 22:57	1
Phenanthrene	ND		4.8	1.7	ug/Kg		08/29/18 11:45	09/01/18 22:57	1
Pyrene	**2.4**	**J**	4.8	1.6	ug/Kg		08/29/18 11:45	09/01/18 22:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*55*		*33 - 120*	*08/29/18 11:45*	*09/01/18 22:57*	*1*
Terphenyl-d14	*82*		*35 - 146*	*08/29/18 11:45*	*09/01/18 22:57*	*1*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88241-1

Client Sample ID: DG-F9S-3.5-4

Date Collected: 08/24/18 12:10
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88241-2

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3500		2000	740	ug/Kg		08/29/18 09:03	08/31/18 21:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*116*		*40 - 130*	*08/29/18 09:03*	*08/31/18 21:27*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.60	ug/Kg		08/29/18 10:43	09/01/18 13:43	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/29/18 10:43	09/01/18 13:43	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/29/18 10:43	09/01/18 13:43	1
Aldrin	ND		2.0	0.50	ug/Kg		08/29/18 10:43	09/01/18 13:43	1
alpha-BHC	ND		2.0	0.54	ug/Kg		08/29/18 10:43	09/01/18 13:43	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/29/18 10:43	09/01/18 13:43	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/29/18 10:43	09/01/18 13:43	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/29/18 10:43	09/01/18 13:43	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/29/18 10:43	09/01/18 13:43	1
Dieldrin	ND		2.0	0.58	ug/Kg		08/29/18 10:43	09/01/18 13:43	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/29/18 10:43	09/01/18 13:43	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/29/18 10:43	09/01/18 13:43	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/29/18 10:43	09/01/18 13:43	1
Endrin	ND		2.0	0.46	ug/Kg		08/29/18 10:43	09/01/18 13:43	1
Endrin aldehyde	ND		2.0	0.62	ug/Kg		08/29/18 10:43	09/01/18 13:43	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/29/18 10:43	09/01/18 13:43	1
gamma-BHC (Lindane)	ND		2.0	0.62	ug/Kg		08/29/18 10:43	09/01/18 13:43	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/29/18 10:43	09/01/18 13:43	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/29/18 10:43	09/01/18 13:43	1
Methoxychlor	ND		2.0	0.67	ug/Kg		08/29/18 10:43	09/01/18 13:43	1
Toxaphene	ND		40	6.7	ug/Kg		08/29/18 10:43	09/01/18 13:43	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/29/18 10:43	09/01/18 13:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*80*		*21 - 136*	*08/29/18 10:43*	*09/01/18 13:43*	*1*
Tetrachloro-m-xylene	*75*		*21 - 145*	*08/29/18 10:43*	*09/01/18 13:43*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		750	330	ug/Kg		08/29/18 14:50	08/31/18 10:17	10
Aroclor-1221	ND		750	360	ug/Kg		08/29/18 14:50	08/31/18 10:17	10
Aroclor-1232	ND		750	340	ug/Kg		08/29/18 14:50	08/31/18 10:17	10
Aroclor-1242	ND		750	280	ug/Kg		08/29/18 14:50	08/31/18 10:17	10
Aroclor-1248	ND		750	360	ug/Kg		08/29/18 14:50	08/31/18 10:17	10
Aroclor-1254	ND		750	340	ug/Kg		08/29/18 14:50	08/31/18 10:17	10
Aroclor-1260	ND		750	330	ug/Kg		08/29/18 14:50	08/31/18 10:17	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*124*		*14 - 128*	*08/29/18 14:50*	*08/31/18 10:17*	*10*
DCB Decachlorobiphenyl	*0*	*X*	*10 - 132*	*08/29/18 14:50*	*08/31/18 10:17*	*10*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.9	0.31	mg/Kg		08/29/18 15:55	08/30/18 17:53	4

Client Sample ID: DG-F9S-3.5-4

Lab Sample ID: 720-88241-2

Date Collected: 08/24/18 12:10

Matrix: Solid

Date Received: 08/24/18 15:00

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.4	J	3.7	0.32	mg/Kg		08/29/18 15:55	08/30/18 17:53	4
Barium	61		1.9	0.27	mg/Kg		08/29/18 15:55	08/30/18 17:53	4
Beryllium	ND		0.37	0.12	mg/Kg		08/29/18 15:55	08/30/18 17:53	4
Cadmium	0.26	J	0.47	0.046	mg/Kg		08/29/18 15:55	08/30/18 17:53	4
Chromium	35		1.9	0.20	mg/Kg		08/29/18 15:55	08/30/18 17:53	4
Cobalt	5.1		0.75	0.075	mg/Kg		08/29/18 15:55	08/30/18 17:53	4
Copper	13		5.6	2.7	mg/Kg		08/29/18 15:55	08/30/18 17:53	4
Lead	23		1.9	0.39	mg/Kg		08/29/18 15:55	08/30/18 17:53	4
Molybdenum	ND		1.9	0.24	mg/Kg		08/29/18 15:55	08/30/18 17:53	4
Nickel	27		1.9	0.19	mg/Kg		08/29/18 15:55	08/30/18 17:53	4
Selenium	ND		3.7	0.56	mg/Kg		08/29/18 15:55	08/30/18 17:53	4
Silver	ND		0.93	0.19	mg/Kg		08/29/18 15:55	08/30/18 17:53	4
Thallium	ND		1.9	0.54	mg/Kg		08/29/18 15:55	08/30/18 17:53	4
Vanadium	24		1.9	0.25	mg/Kg		08/29/18 15:55	08/30/18 17:53	4
Zinc	81		5.6	2.4	mg/Kg		08/29/18 15:55	08/30/18 17:53	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.025		0.016	0.0023	mg/Kg		08/29/18 21:54	08/30/18 21:42	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88241-1

Client Sample ID: DG-F9S-9.5-10

Date Collected: 08/24/18 12:10
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88241-3

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.2	1.2	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
Acetone	**160**		52	39	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
Benzene	ND		5.2	0.67	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
Dichlorobromomethane	ND		5.2	0.74	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
Bromobenzene	ND	*	5.2	0.81	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
Chlorobromomethane	ND		21	0.74	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
Bromoform	ND	*	5.2	2.1	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
Bromomethane	ND		10	0.81	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
2-Butanone (MEK)	**29**	**J**	52	22	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
n-Butylbenzene	ND	*	5.2	1.0	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
sec-Butylbenzene	ND	*	5.2	0.74	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
tert-Butylbenzene	ND	*	5.2	0.75	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
Carbon disulfide	ND		5.2	2.1	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
Carbon tetrachloride	ND		5.2	0.64	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
Chlorobenzene	ND	*	5.2	0.71	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
Chloroethane	ND		10	0.58	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
Chloroform	ND		5.2	0.68	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
Chloromethane	ND		10	0.81	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
2-Chlorotoluene	ND	*	5.2	0.67	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
4-Chlorotoluene	ND	*	5.2	0.70	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
Chlorodibromomethane	ND		5.2	0.73	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
1,2-Dichlorobenzene	ND	*	5.2	0.70	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
1,3-Dichlorobenzene	ND	*	5.2	0.74	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
1,4-Dichlorobenzene	ND	*	5.2	0.73	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
1,3-Dichloropropane	ND		5.2	0.75	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
1,1-Dichloropropene	ND		5.2	0.71	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
1,2-Dibromo-3-Chloropropane	ND	*	10	1.8	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
Ethylene Dibromide	ND		5.2	1.5	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
Dibromomethane	ND		10	0.89	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
Dichlorodifluoromethane	ND		10	0.81	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
1,1-Dichloroethane	ND		5.2	0.70	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
1,2-Dichloroethane	ND		5.2	0.78	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
1,1-Dichloroethene	ND	*	5.2	0.64	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
cis-1,2-Dichloroethene	ND		5.2	0.70	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
trans-1,2-Dichloroethene	ND		5.2	0.77	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
1,2-Dichloropropane	ND		5.2	0.65	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
cis-1,3-Dichloropropene	ND		5.2	0.71	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
trans-1,3-Dichloropropene	ND		5.2	0.69	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
Ethylbenzene	ND	*	5.2	0.77	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
Hexachlorobutadiene	ND	*	5.2	0.93	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
2-Hexanone	ND		52	10	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
Isopropylbenzene	ND	*	5.2	0.70	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
4-Isopropyltoluene	ND	*	5.2	2.6	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
Methylene Chloride	ND		10	5.8	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
4-Methyl-2-pentanone (MIBK)	ND		52	10	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
Naphthalene	ND	*	10	1.5	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
N-Propylbenzene	ND	*	5.2	0.68	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
Styrene	ND	*	5.2	0.65	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
1,1,1,2-Tetrachloroethane	ND	*	5.2	0.78	ug/Kg		08/25/18 03:05	08/31/18 13:11	1

Client Sample ID: DG-F9S-9.5-10

Lab Sample ID: 720-88241-3

Date Collected: 08/24/18 12:10

Matrix: Solid

Date Received: 08/24/18 15:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	5.2	0.77	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
Tetrachloroethene	ND		5.2	0.69	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
Toluene	ND	*	5.2	0.73	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
1,2,3-Trichlorobenzene	ND	*	5.2	0.76	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
1,2,4-Trichlorobenzene	ND	*	5.2	0.73	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
1,1,1-Trichloroethane	ND		5.2	0.63	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
1,1,2-Trichloroethane	ND		5.2	0.72	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
Trichloroethene	ND		5.2	0.65	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
Trichlorofluoromethane	ND		5.2	0.58	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
1,2,3-Trichloropropane	ND	*	5.2	0.79	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	5.2	2.1	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
1,2,4-Trimethylbenzene	ND	*	5.2	1.7	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
1,3,5-Trimethylbenzene	ND	*	5.2	0.67	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
Vinyl acetate	ND		21	5.2	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
Vinyl chloride	ND		5.2	0.75	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
Xylenes, Total	ND		5.2	1.3	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
2,2-Dichloropropane	ND		5.2	2.1	ug/Kg		08/25/18 03:05	08/31/18 13:11	1
Gasoline Range Organics (GRO) -C4-C12	ND		260	100	ug/Kg		08/25/18 03:05	08/31/18 13:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*70*	*	*45 - 131*	*08/25/18 03:05*	*08/31/18 13:11*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*60 - 140*	*08/25/18 03:05*	*08/31/18 13:11*	*1*
Toluene-d8 (Surr)	*86*		*58 - 140*	*08/25/18 03:05*	*08/31/18 13:11*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**97**		10	5.0	ug/Kg		09/04/18 17:46	09/06/18 03:45	1
Acenaphthene	**4.5**	**J**	5.0	2.8	ug/Kg		09/04/18 17:46	09/06/18 03:45	1
Acenaphthylene	**2.7**	**J**	5.0	2.4	ug/Kg		09/04/18 17:46	09/06/18 03:45	1
Anthracene	**5.3**		5.0	2.0	ug/Kg		09/04/18 17:46	09/06/18 03:45	1
Benzo[a]anthracene	**12**		5.0	1.5	ug/Kg		09/04/18 17:46	09/06/18 03:45	1
Benzo[a]pyrene	**11**		5.0	1.9	ug/Kg		09/04/18 17:46	09/06/18 03:45	1
Benzo[b]fluoranthene	**17**		5.0	2.1	ug/Kg		09/04/18 17:46	09/06/18 03:45	1
Benzo[g,h,i]perylene	**9.3**		5.0	4.3	ug/Kg		09/04/18 17:46	09/06/18 03:45	1
Benzo[k]fluoranthene	**6.0**		5.0	2.1	ug/Kg		09/04/18 17:46	09/06/18 03:45	1
Chrysene	**28**		5.0	1.4	ug/Kg		09/04/18 17:46	09/06/18 03:45	1
Dibenz(a,h)anthracene	**3.8**	**J**	5.0	3.5	ug/Kg		09/04/18 17:46	09/06/18 03:45	1
Fluoranthene	**23**		5.0	1.4	ug/Kg		09/04/18 17:46	09/06/18 03:45	1
Fluorene	**50**		5.0	2.2	ug/Kg		09/04/18 17:46	09/06/18 03:45	1
Indeno[1,2,3-cd]pyrene	**4.2**	**J**	5.0	4.2	ug/Kg		09/04/18 17:46	09/06/18 03:45	1
Naphthalene	**28**		5.0	3.5	ug/Kg		09/04/18 17:46	09/06/18 03:45	1
Phenanthrene	**99**		5.0	1.8	ug/Kg		09/04/18 17:46	09/06/18 03:45	1
Pyrene	**38**		5.0	1.7	ug/Kg		09/04/18 17:46	09/06/18 03:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*33 - 120*	*09/04/18 17:46*	*09/06/18 03:45*	*1*
Terphenyl-d14	*90*		*35 - 146*	*09/04/18 17:46*	*09/06/18 03:45*	*1*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88241-1

Client Sample ID: DG-F9S-9.5-10

Date Collected: 08/24/18 12:10
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88241-3

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	36000		1900	720	ug/Kg		08/29/18 09:03	08/31/18 21:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*122*		*40 - 130*	*08/29/18 09:03*	*08/31/18 21:51*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.60	ug/Kg		08/29/18 10:43	09/01/18 14:01	1
4,4'-DDE	ND		2.0	0.41	ug/Kg		08/29/18 10:43	09/01/18 14:01	1
4,4'-DDT	ND		2.0	0.40	ug/Kg		08/29/18 10:43	09/01/18 14:01	1
Aldrin	ND		2.0	0.49	ug/Kg		08/29/18 10:43	09/01/18 14:01	1
alpha-BHC	ND		2.0	0.54	ug/Kg		08/29/18 10:43	09/01/18 14:01	1
beta-BHC	ND		2.0	0.35	ug/Kg		08/29/18 10:43	09/01/18 14:01	1
Chlordane (technical)	ND		39	3.1	ug/Kg		08/29/18 10:43	09/01/18 14:01	1
cis-Chlordane	ND		2.0	0.39	ug/Kg		08/29/18 10:43	09/01/18 14:01	1
delta-BHC	ND		2.0	0.43	ug/Kg		08/29/18 10:43	09/01/18 14:01	1
Dieldrin	ND		2.0	0.58	ug/Kg		08/29/18 10:43	09/01/18 14:01	1
Endosulfan I	ND		2.0	0.31	ug/Kg		08/29/18 10:43	09/01/18 14:01	1
Endosulfan II	ND		2.0	0.48	ug/Kg		08/29/18 10:43	09/01/18 14:01	1
Endosulfan sulfate	ND		2.0	0.37	ug/Kg		08/29/18 10:43	09/01/18 14:01	1
Endrin	ND		2.0	0.45	ug/Kg		08/29/18 10:43	09/01/18 14:01	1
Endrin aldehyde	ND		2.0	0.62	ug/Kg		08/29/18 10:43	09/01/18 14:01	1
Endrin ketone	ND		2.0	0.32	ug/Kg		08/29/18 10:43	09/01/18 14:01	1
gamma-BHC (Lindane)	ND		2.0	0.62	ug/Kg		08/29/18 10:43	09/01/18 14:01	1
Heptachlor	ND		2.0	0.45	ug/Kg		08/29/18 10:43	09/01/18 14:01	1
Heptachlor epoxide	ND		2.0	0.34	ug/Kg		08/29/18 10:43	09/01/18 14:01	1
Methoxychlor	ND		2.0	0.67	ug/Kg		08/29/18 10:43	09/01/18 14:01	1
Toxaphene	ND		39	6.7	ug/Kg		08/29/18 10:43	09/01/18 14:01	1
trans-Chlordane	ND		2.0	0.45	ug/Kg		08/29/18 10:43	09/01/18 14:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*67*		*21 - 136*	*08/29/18 10:43*	*09/01/18 14:01*	*1*
Tetrachloro-m-xylene	*91*		*21 - 145*	*08/29/18 10:43*	*09/01/18 14:01*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		52	23	ug/Kg		08/29/18 14:50	08/31/18 10:34	1
Aroclor-1221	ND		52	25	ug/Kg		08/29/18 14:50	08/31/18 10:34	1
Aroclor-1232	ND		52	24	ug/Kg		08/29/18 14:50	08/31/18 10:34	1
Aroclor-1242	ND		52	20	ug/Kg		08/29/18 14:50	08/31/18 10:34	1
Aroclor-1248	ND		52	25	ug/Kg		08/29/18 14:50	08/31/18 10:34	1
Aroclor-1254	ND		52	24	ug/Kg		08/29/18 14:50	08/31/18 10:34	1
Aroclor-1260	ND		52	23	ug/Kg		08/29/18 14:50	08/31/18 10:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*57*		*14 - 128*	*08/29/18 14:50*	*08/31/18 10:34*	*1*
DCB Decachlorobiphenyl	*64*		*10 - 132*	*08/29/18 14:50*	*08/31/18 10:34*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.94	J	1.8	0.30	mg/Kg		08/29/18 15:55	08/30/18 17:58	4

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88241-1

Client Sample ID: DG-F9S-9.5-10

Date Collected: 08/24/18 12:10
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88241-3

Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.2		3.6	0.30	mg/Kg		08/29/18 15:55	08/30/18 17:58	4
Barium	210		1.8	0.25	mg/Kg		08/29/18 15:55	08/30/18 17:58	4
Beryllium	0.46		0.36	0.12	mg/Kg		08/29/18 15:55	08/30/18 17:58	4
Cadmium	0.074	J	0.45	0.044	mg/Kg		08/29/18 15:55	08/30/18 17:58	4
Chromium	110		1.8	0.19	mg/Kg		08/29/18 15:55	08/30/18 17:58	4
Cobalt	15		0.71	0.071	mg/Kg		08/29/18 15:55	08/30/18 17:58	4
Copper	29		5.4	2.5	mg/Kg		08/29/18 15:55	08/30/18 17:58	4
Lead	18		1.8	0.38	mg/Kg		08/29/18 15:55	08/30/18 17:58	4
Molybdenum	0.54	J	1.8	0.23	mg/Kg		08/29/18 15:55	08/30/18 17:58	4
Nickel	78		1.8	0.18	mg/Kg		08/29/18 15:55	08/30/18 17:58	4
Selenium	ND		3.6	0.54	mg/Kg		08/29/18 15:55	08/30/18 17:58	4
Silver	0.22	J	0.89	0.18	mg/Kg		08/29/18 15:55	08/30/18 17:58	4
Thallium	ND		1.8	0.52	mg/Kg		08/29/18 15:55	08/30/18 17:58	4
Vanadium	71		1.8	0.24	mg/Kg		08/29/18 15:55	08/30/18 17:58	4
Zinc	84		5.4	2.3	mg/Kg		08/29/18 15:55	08/30/18 17:58	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.14		0.017	0.0025	mg/Kg		08/29/18 21:54	08/30/18 21:50	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88241-1

Client Sample ID: DG-D9S-0.5-1

Date Collected: 08/24/18 11:35
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88241-4

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.8	0.91	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
Acetone	**49**		38	29	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
Benzene	ND		3.8	0.49	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
Dichlorobromomethane	ND		3.8	0.55	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
Bromobenzene	ND		3.8	0.60	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
Chlorobromomethane	ND		15	0.55	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
Bromoform	ND		3.8	1.5	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
Bromomethane	ND		7.6	0.60	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
2-Butanone (MEK)	ND		38	16	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
n-Butylbenzene	ND		3.8	0.76	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
sec-Butylbenzene	ND		3.8	0.55	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
tert-Butylbenzene	ND		3.8	0.55	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
Carbon disulfide	ND	*	3.8	1.5	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
Carbon tetrachloride	ND		3.8	0.47	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
Chlorobenzene	ND		3.8	0.52	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
Chloroethane	ND		7.6	0.43	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
Chloroform	ND		3.8	0.50	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
Chloromethane	ND		7.6	0.60	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
2-Chlorotoluene	ND		3.8	0.49	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
4-Chlorotoluene	ND		3.8	0.52	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
Chlorodibromomethane	ND		3.8	0.54	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
1,2-Dichlorobenzene	ND		3.8	0.52	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
1,3-Dichlorobenzene	ND		3.8	0.55	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
1,4-Dichlorobenzene	ND		3.8	0.54	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
1,3-Dichloropropane	ND		3.8	0.55	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
1,1-Dichloropropene	ND		3.8	0.52	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
1,2-Dibromo-3-Chloropropane	ND		7.6	1.3	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
Ethylene Dibromide	ND		3.8	1.1	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
Dibromomethane	ND		7.6	0.65	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
Dichlorodifluoromethane	ND		7.6	0.60	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
1,1-Dichloroethane	ND		3.8	0.52	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
1,2-Dichloroethane	ND		3.8	0.58	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
1,1-Dichloroethene	ND	*	3.8	0.47	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
cis-1,2-Dichloroethene	ND		3.8	0.52	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
trans-1,2-Dichloroethene	ND		3.8	0.57	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
1,2-Dichloropropane	ND		3.8	0.48	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
cis-1,3-Dichloropropene	ND		3.8	0.52	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
trans-1,3-Dichloropropene	ND		3.8	0.51	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
Ethylbenzene	ND		3.8	0.57	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
Hexachlorobutadiene	ND		3.8	0.68	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
2-Hexanone	ND		38	7.6	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
Isopropylbenzene	ND		3.8	0.52	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
4-Isopropyltoluene	ND		3.8	1.9	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
Methylene Chloride	ND		7.6	4.3	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
4-Methyl-2-pentanone (MIBK)	ND		38	7.6	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
Naphthalene	ND		7.6	1.1	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
N-Propylbenzene	ND		3.8	0.50	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
Styrene	ND		3.8	0.48	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
1,1,1,2-Tetrachloroethane	ND		3.8	0.58	ug/Kg		08/25/18 03:05	08/30/18 22:47	1

Client Sample ID: DG-D9S-0.5-1

Lab Sample ID: 720-88241-4

Date Collected: 08/24/18 11:35

Matrix: Solid

Date Received: 08/24/18 15:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		3.8	0.57	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
Tetrachloroethene	ND		3.8	0.51	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
Toluene	ND		3.8	0.54	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
1,2,3-Trichlorobenzene	ND		3.8	0.56	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
1,2,4-Trichlorobenzene	ND		3.8	0.54	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
1,1,1-Trichloroethane	ND		3.8	0.46	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
1,1,2-Trichloroethane	ND		3.8	0.53	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
Trichloroethene	ND		3.8	0.48	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
Trichlorofluoromethane	ND		3.8	0.43	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
1,2,3-Trichloropropane	ND		3.8	0.58	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.8	1.6	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
1,2,4-Trimethylbenzene	ND		3.8	1.2	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
1,3,5-Trimethylbenzene	ND		3.8	0.49	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
Vinyl acetate	ND		15	3.8	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
Vinyl chloride	ND		3.8	0.55	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
Xylenes, Total	ND		3.8	0.93	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
2,2-Dichloropropane	ND		3.8	1.5	ug/Kg		08/25/18 03:05	08/30/18 22:47	1
Gasoline Range Organics (GRO) -C4-C12	ND		190	76	ug/Kg		08/25/18 03:05	08/30/18 22:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*45 - 131*	*08/25/18 03:05*	*08/30/18 22:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*60 - 140*	*08/25/18 03:05*	*08/30/18 22:47*	*1*
Toluene-d8 (Surr)	*96*		*58 - 140*	*08/25/18 03:05*	*08/30/18 22:47*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.6	4.8	ug/Kg		08/29/18 11:45	08/31/18 23:35	1
Acenaphthene	ND		4.8	2.7	ug/Kg		08/29/18 11:45	08/31/18 23:35	1
Acenaphthylene	ND		4.8	2.3	ug/Kg		08/29/18 11:45	08/31/18 23:35	1
Anthracene	**3.2**	**J**	4.8	1.9	ug/Kg		08/29/18 11:45	08/31/18 23:35	1
Benzo[a]anthracene	**8.5**		4.8	1.4	ug/Kg		08/29/18 11:45	08/31/18 23:35	1
Benzo[a]pyrene	**8.5**		4.8	1.8	ug/Kg		08/29/18 11:45	08/31/18 23:35	1
Benzo[b]fluoranthene	**11**		4.8	2.0	ug/Kg		08/29/18 11:45	08/31/18 23:35	1
Benzo[g,h,i]perylene	**4.3**	**J**	4.8	4.1	ug/Kg		08/29/18 11:45	08/31/18 23:35	1
Benzo[k]fluoranthene	**5.3**		4.8	2.0	ug/Kg		08/29/18 11:45	08/31/18 23:35	1
Chrysene	**7.2**		4.8	1.3	ug/Kg		08/29/18 11:45	08/31/18 23:35	1
Dibenz(a,h)anthracene	ND		4.8	3.4	ug/Kg		08/29/18 11:45	08/31/18 23:35	1
Fluoranthene	**12**	**B**	4.8	1.3	ug/Kg		08/29/18 11:45	08/31/18 23:35	1
Fluorene	ND		4.8	2.1	ug/Kg		08/29/18 11:45	08/31/18 23:35	1
Indeno[1,2,3-cd]pyrene	**4.4**	**J**	4.8	4.0	ug/Kg		08/29/18 11:45	08/31/18 23:35	1
Naphthalene	ND		4.8	3.4	ug/Kg		08/29/18 11:45	08/31/18 23:35	1
Phenanthrene	**6.3**	**B**	4.8	1.7	ug/Kg		08/29/18 11:45	08/31/18 23:35	1
Pyrene	**11**		4.8	1.6	ug/Kg		08/29/18 11:45	08/31/18 23:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*33 - 120*	*08/29/18 11:45*	*08/31/18 23:35*	*1*
Terphenyl-d14	*82*		*35 - 146*	*08/29/18 11:45*	*08/31/18 23:35*	*1*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88241-1

Client Sample ID: DG-D9S-0.5-1

Date Collected: 08/24/18 11:35
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88241-4

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	14000		2000	740	ug/Kg		08/29/18 09:03	08/31/18 22:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*117*		*40 - 130*	*08/29/18 09:03*	*08/31/18 22:16*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.61	ug/Kg		08/29/18 10:43	09/01/18 14:18	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/29/18 10:43	09/01/18 14:18	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/29/18 10:43	09/01/18 14:18	1
Aldrin	ND		2.0	0.50	ug/Kg		08/29/18 10:43	09/01/18 14:18	1
alpha-BHC	ND		2.0	0.55	ug/Kg		08/29/18 10:43	09/01/18 14:18	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/29/18 10:43	09/01/18 14:18	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/29/18 10:43	09/01/18 14:18	1
cis-Chlordane	0.59	J p	2.0	0.40	ug/Kg		08/29/18 10:43	09/01/18 14:18	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/29/18 10:43	09/01/18 14:18	1
Dieldrin	ND		2.0	0.59	ug/Kg		08/29/18 10:43	09/01/18 14:18	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/29/18 10:43	09/01/18 14:18	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/29/18 10:43	09/01/18 14:18	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/29/18 10:43	09/01/18 14:18	1
Endrin	ND		2.0	0.46	ug/Kg		08/29/18 10:43	09/01/18 14:18	1
Endrin aldehyde	ND		2.0	0.63	ug/Kg		08/29/18 10:43	09/01/18 14:18	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/29/18 10:43	09/01/18 14:18	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		08/29/18 10:43	09/01/18 14:18	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/29/18 10:43	09/01/18 14:18	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/29/18 10:43	09/01/18 14:18	1
Methoxychlor	ND		2.0	0.68	ug/Kg		08/29/18 10:43	09/01/18 14:18	1
Toxaphene	ND		40	6.8	ug/Kg		08/29/18 10:43	09/01/18 14:18	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/29/18 10:43	09/01/18 14:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*77*		*21 - 136*	*08/29/18 10:43*	*09/01/18 14:18*	*1*
Tetrachloro-m-xylene	*73*		*21 - 145*	*08/29/18 10:43*	*09/01/18 14:18*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		500	220	ug/Kg		08/29/18 14:50	08/31/18 10:52	10
Aroclor-1221	ND		500	240	ug/Kg		08/29/18 14:50	08/31/18 10:52	10
Aroclor-1232	ND		500	230	ug/Kg		08/29/18 14:50	08/31/18 10:52	10
Aroclor-1242	ND		500	190	ug/Kg		08/29/18 14:50	08/31/18 10:52	10
Aroclor-1248	ND		500	240	ug/Kg		08/29/18 14:50	08/31/18 10:52	10
Aroclor-1254	ND		500	230	ug/Kg		08/29/18 14:50	08/31/18 10:52	10
Aroclor-1260	ND		500	220	ug/Kg		08/29/18 14:50	08/31/18 10:52	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*89*		*14 - 128*	*08/29/18 14:50*	*08/31/18 10:52*	*10*
DCB Decachlorobiphenyl	*80*	*p*	*10 - 132*	*08/29/18 14:50*	*08/31/18 10:52*	*10*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.5	0.25	mg/Kg		08/29/18 15:55	08/30/18 18:03	4

Client Sample ID: DG-D9S-0.5-1

Lab Sample ID: 720-88241-4

Date Collected: 08/24/18 11:35

Matrix: Solid

Date Received: 08/24/18 15:00

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.74	J	3.0	0.26	mg/Kg		08/29/18 15:55	08/30/18 18:03	4
Barium	36		1.5	0.21	mg/Kg		08/29/18 15:55	08/30/18 18:03	4
Beryllium	ND		0.30	0.098	mg/Kg		08/29/18 15:55	08/30/18 18:03	4
Cadmium	ND		0.38	0.037	mg/Kg		08/29/18 15:55	08/30/18 18:03	4
Chromium	11		1.5	0.16	mg/Kg		08/29/18 15:55	08/30/18 18:03	4
Cobalt	11		0.60	0.060	mg/Kg		08/29/18 15:55	08/30/18 18:03	4
Copper	130		4.5	2.1	mg/Kg		08/29/18 15:55	08/30/18 18:03	4
Lead	23		1.5	0.32	mg/Kg		08/29/18 15:55	08/30/18 18:03	4
Molybdenum	0.33	J	1.5	0.19	mg/Kg		08/29/18 15:55	08/30/18 18:03	4
Nickel	3.6		1.5	0.15	mg/Kg		08/29/18 15:55	08/30/18 18:03	4
Selenium	ND		3.0	0.45	mg/Kg		08/29/18 15:55	08/30/18 18:03	4
Silver	ND		0.75	0.15	mg/Kg		08/29/18 15:55	08/30/18 18:03	4
Thallium	0.78	J	1.5	0.44	mg/Kg		08/29/18 15:55	08/30/18 18:03	4
Vanadium	110		1.5	0.20	mg/Kg		08/29/18 15:55	08/30/18 18:03	4
Zinc	49		4.5	1.9	mg/Kg		08/29/18 15:55	08/30/18 18:03	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.099		0.017	0.0025	mg/Kg		08/29/18 21:54	08/30/18 21:52	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88241-1

Client Sample ID: DG-D9S-3.5-4

Date Collected: 08/24/18 11:35
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88241-5

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.2	1.0	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
Acetone	**55**		42	32	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
Benzene	ND		4.2	0.55	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
Dichlorobromomethane	ND		4.2	0.61	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
Bromobenzene	ND	*	4.2	0.66	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
Chlorobromomethane	ND		17	0.61	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
Bromoform	ND		4.2	1.7	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
Bromomethane	ND		8.4	0.66	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
2-Butanone (MEK)	ND		42	18	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
n-Butylbenzene	ND	*	4.2	0.84	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
sec-Butylbenzene	ND	*	4.2	0.61	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
tert-Butylbenzene	ND	*	4.2	0.61	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
Carbon disulfide	ND		4.2	1.7	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
Carbon tetrachloride	ND		4.2	0.52	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
Chlorobenzene	ND		4.2	0.58	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
Chloroethane	ND		8.4	0.47	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
Chloroform	ND		4.2	0.55	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
Chloromethane	ND		8.4	0.66	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
2-Chlorotoluene	ND	*	4.2	0.55	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
4-Chlorotoluene	ND	*	4.2	0.57	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
Chlorodibromomethane	ND		4.2	0.60	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
1,2-Dichlorobenzene	ND	*	4.2	0.57	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
1,3-Dichlorobenzene	ND	*	4.2	0.61	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
1,4-Dichlorobenzene	ND	*	4.2	0.60	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
1,3-Dichloropropane	ND		4.2	0.61	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
1,1-Dichloropropene	ND		4.2	0.58	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
1,2-Dibromo-3-Chloropropane	ND	*	8.4	1.4	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
Ethylene Dibromide	ND		4.2	1.2	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
Dibromomethane	ND		8.4	0.72	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
Dichlorodifluoromethane	ND		8.4	0.66	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
1,1-Dichloroethane	ND		4.2	0.57	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
1,2-Dichloroethane	ND		4.2	0.64	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
1,1-Dichloroethene	ND	*	4.2	0.52	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
cis-1,2-Dichloroethene	ND		4.2	0.57	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
trans-1,2-Dichloroethene	ND		4.2	0.63	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
1,2-Dichloropropane	ND		4.2	0.53	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
cis-1,3-Dichloropropene	ND		4.2	0.58	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
trans-1,3-Dichloropropene	ND		4.2	0.56	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
Ethylbenzene	ND		4.2	0.63	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
Hexachlorobutadiene	ND	*	4.2	0.76	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
2-Hexanone	ND		42	8.4	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
Isopropylbenzene	ND		4.2	0.57	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
4-Isopropyltoluene	ND	*	4.2	2.1	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
Methylene Chloride	ND		8.4	4.7	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
4-Methyl-2-pentanone (MIBK)	ND		42	8.4	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
Naphthalene	ND	*	8.4	1.3	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
N-Propylbenzene	ND	*	4.2	0.55	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
Styrene	ND		4.2	0.53	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
1,1,1,2-Tetrachloroethane	ND		4.2	0.64	ug/Kg		08/25/18 03:05	08/31/18 13:40	1

Client Sample ID: DG-D9S-3.5-4

Lab Sample ID: 720-88241-5

Date Collected: 08/24/18 11:35

Matrix: Solid

Date Received: 08/24/18 15:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	4.2	0.63	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
Tetrachloroethene	ND		4.2	0.56	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
Toluene	ND		4.2	0.60	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
1,2,3-Trichlorobenzene	ND	*	4.2	0.62	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
1,2,4-Trichlorobenzene	ND	*	4.2	0.60	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
1,1,1-Trichloroethane	ND		4.2	0.51	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
1,1,2-Trichloroethane	ND		4.2	0.59	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
Trichloroethene	ND		4.2	0.53	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
Trichlorofluoromethane	ND		4.2	0.47	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
1,2,3-Trichloropropane	ND	*	4.2	0.65	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.2	1.7	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
1,2,4-Trimethylbenzene	ND	*	4.2	1.4	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
1,3,5-Trimethylbenzene	ND	*	4.2	0.55	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
Vinyl acetate	ND		17	4.2	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
Vinyl chloride	ND		4.2	0.61	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
Xylenes, Total	ND		4.2	1.0	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
2,2-Dichloropropane	ND		4.2	1.7	ug/Kg		08/25/18 03:05	08/31/18 13:40	1
Gasoline Range Organics (GRO) -C4-C12	**190**	**J**	210	84	ug/Kg		08/25/18 03:05	08/31/18 13:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*		*45 - 131*	*08/25/18 03:05*	*08/31/18 13:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*60 - 140*	*08/25/18 03:05*	*08/31/18 13:40*	*1*
Toluene-d8 (Surr)	*91*		*58 - 140*	*08/25/18 03:05*	*08/31/18 13:40*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**15**		9.4	4.7	ug/Kg		09/04/18 17:46	09/06/18 04:09	1
Acenaphthene	**8.5**		4.7	2.6	ug/Kg		09/04/18 17:46	09/06/18 04:09	1
Acenaphthylene	**6.8**		4.7	2.3	ug/Kg		09/04/18 17:46	09/06/18 04:09	1
Anthracene	**49**		4.7	1.9	ug/Kg		09/04/18 17:46	09/06/18 04:09	1
Benzo[a]anthracene	**150**		4.7	1.4	ug/Kg		09/04/18 17:46	09/06/18 04:09	1
Benzo[a]pyrene	**160**		4.7	1.8	ug/Kg		09/04/18 17:46	09/06/18 04:09	1
Benzo[b]fluoranthene	**210**		4.7	2.0	ug/Kg		09/04/18 17:46	09/06/18 04:09	1
Benzo[g,h,i]perylene	**54**		4.7	4.1	ug/Kg		09/04/18 17:46	09/06/18 04:09	1
Benzo[k]fluoranthene	**77**		4.7	2.0	ug/Kg		09/04/18 17:46	09/06/18 04:09	1
Chrysene	**170**		4.7	1.3	ug/Kg		09/04/18 17:46	09/06/18 04:09	1
Dibenz(a,h)anthracene	**19**		4.7	3.3	ug/Kg		09/04/18 17:46	09/06/18 04:09	1
Fluoranthene	**280**		4.7	1.3	ug/Kg		09/04/18 17:46	09/06/18 04:09	1
Fluorene	**9.2**		4.7	2.1	ug/Kg		09/04/18 17:46	09/06/18 04:09	1
Indeno[1,2,3-cd]pyrene	**50**		4.7	4.0	ug/Kg		09/04/18 17:46	09/06/18 04:09	1
Naphthalene	**12**		4.7	3.3	ug/Kg		09/04/18 17:46	09/06/18 04:09	1
Phenanthrene	**220**		4.7	1.7	ug/Kg		09/04/18 17:46	09/06/18 04:09	1
Pyrene	**350**		4.7	1.6	ug/Kg		09/04/18 17:46	09/06/18 04:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*71*		*33 - 120*	*09/04/18 17:46*	*09/06/18 04:09*	*1*
Terphenyl-d14	*91*		*35 - 146*	*09/04/18 17:46*	*09/06/18 04:09*	*1*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88241-1

Client Sample ID: DG-D9S-3.5-4

Date Collected: 08/24/18 11:35
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88241-5

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	53000		1900	720	ug/Kg		08/29/18 09:03	08/31/18 23:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*82*		*40 - 130*	*08/29/18 09:03*	*08/31/18 23:29*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/29/18 10:43	09/01/18 14:36	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/29/18 10:43	09/01/18 14:36	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/29/18 10:43	09/01/18 14:36	1
Aldrin	ND		1.9	0.48	ug/Kg		08/29/18 10:43	09/01/18 14:36	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/29/18 10:43	09/01/18 14:36	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/29/18 10:43	09/01/18 14:36	1
Chlordane (technical)	ND		38	3.1	ug/Kg		08/29/18 10:43	09/01/18 14:36	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/29/18 10:43	09/01/18 14:36	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/29/18 10:43	09/01/18 14:36	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/29/18 10:43	09/01/18 14:36	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/29/18 10:43	09/01/18 14:36	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/29/18 10:43	09/01/18 14:36	1
Endosulfan sulfate	ND		1.9	0.37	ug/Kg		08/29/18 10:43	09/01/18 14:36	1
Endrin	ND		1.9	0.44	ug/Kg		08/29/18 10:43	09/01/18 14:36	1
Endrin aldehyde	ND		1.9	0.61	ug/Kg		08/29/18 10:43	09/01/18 14:36	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/29/18 10:43	09/01/18 14:36	1
gamma-BHC (Lindane)	ND		1.9	0.61	ug/Kg		08/29/18 10:43	09/01/18 14:36	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/29/18 10:43	09/01/18 14:36	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/29/18 10:43	09/01/18 14:36	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/29/18 10:43	09/01/18 14:36	1
Toxaphene	ND		38	6.6	ug/Kg		08/29/18 10:43	09/01/18 14:36	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/29/18 10:43	09/01/18 14:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*75*		*21 - 136*	*08/29/18 10:43*	*09/01/18 14:36*	*1*
Tetrachloro-m-xylene	*81*		*21 - 145*	*08/29/18 10:43*	*09/01/18 14:36*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/29/18 14:50	08/31/18 11:09	1
Aroclor-1221	ND		50	24	ug/Kg		08/29/18 14:50	08/31/18 11:09	1
Aroclor-1232	ND		50	23	ug/Kg		08/29/18 14:50	08/31/18 11:09	1
Aroclor-1242	ND		50	19	ug/Kg		08/29/18 14:50	08/31/18 11:09	1
Aroclor-1248	ND		50	24	ug/Kg		08/29/18 14:50	08/31/18 11:09	1
Aroclor-1254	ND		50	23	ug/Kg		08/29/18 14:50	08/31/18 11:09	1
Aroclor-1260	ND		50	22	ug/Kg		08/29/18 14:50	08/31/18 11:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*69*		*14 - 128*	*08/29/18 14:50*	*08/31/18 11:09*	*1*
DCB Decachlorobiphenyl	*72*		*10 - 132*	*08/29/18 14:50*	*08/31/18 11:09*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.3		1.7	0.28	mg/Kg		08/29/18 15:55	08/30/18 18:07	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88241-1

Client Sample ID: DG-D9S-3.5-4

Lab Sample ID: 720-88241-5

Date Collected: 08/24/18 11:35

Matrix: Solid

Date Received: 08/24/18 15:00

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.8		3.4	0.29	mg/Kg		08/29/18 15:55	08/30/18 18:07	4
Barium	60		1.7	0.24	mg/Kg		08/29/18 15:55	08/30/18 18:07	4
Beryllium	ND		0.34	0.11	mg/Kg		08/29/18 15:55	08/30/18 18:07	4
Cadmium	0.14	J	0.42	0.042	mg/Kg		08/29/18 15:55	08/30/18 18:07	4
Chromium	16		1.7	0.18	mg/Kg		08/29/18 15:55	08/30/18 18:07	4
Cobalt	12		0.67	0.067	mg/Kg		08/29/18 15:55	08/30/18 18:07	4
Copper	150		5.0	2.4	mg/Kg		08/29/18 15:55	08/30/18 18:07	4
Lead	150		1.7	0.35	mg/Kg		08/29/18 15:55	08/30/18 18:07	4
Molybdenum	0.38	J	1.7	0.22	mg/Kg		08/29/18 15:55	08/30/18 18:07	4
Nickel	13		1.7	0.17	mg/Kg		08/29/18 15:55	08/30/18 18:07	4
Selenium	ND		3.4	0.50	mg/Kg		08/29/18 15:55	08/30/18 18:07	4
Silver	0.37	J	0.84	0.17	mg/Kg		08/29/18 15:55	08/30/18 18:07	4
Thallium	0.78	J	1.7	0.49	mg/Kg		08/29/18 15:55	08/30/18 18:07	4
Vanadium	86		1.7	0.23	mg/Kg		08/29/18 15:55	08/30/18 18:07	4
Zinc	81		5.0	2.1	mg/Kg		08/29/18 15:55	08/30/18 18:07	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.061		0.015	0.0022	mg/Kg		08/29/18 21:54	08/30/18 21:54	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88241-1

Client Sample ID: DG-D9S-9.5-10

Date Collected: 08/24/18 11:35
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88241-6

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.1	0.98	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
Acetone	**40**	**J**	41	31	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
Benzene	ND		4.1	0.53	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
Dichlorobromomethane	ND		4.1	0.59	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
Bromobenzene	ND		4.1	0.65	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
Chlorobromomethane	ND		16	0.59	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
Bromoform	ND		4.1	1.6	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
Bromomethane	ND		8.2	0.65	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
2-Butanone (MEK)	ND		41	17	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
n-Butylbenzene	ND		4.1	0.82	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
sec-Butylbenzene	ND		4.1	0.59	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
tert-Butylbenzene	ND		4.1	0.60	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
Carbon disulfide	ND	*	4.1	1.6	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
Carbon tetrachloride	ND		4.1	0.51	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
Chlorobenzene	ND		4.1	0.56	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
Chloroethane	ND		8.2	0.46	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
Chloroform	ND		4.1	0.54	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
Chloromethane	ND		8.2	0.65	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
2-Chlorotoluene	ND		4.1	0.53	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
4-Chlorotoluene	ND		4.1	0.56	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
Chlorodibromomethane	ND		4.1	0.58	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
1,2-Dichlorobenzene	ND		4.1	0.56	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
1,3-Dichlorobenzene	ND		4.1	0.59	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
1,4-Dichlorobenzene	ND		4.1	0.58	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
1,3-Dichloropropane	ND		4.1	0.60	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
1,1-Dichloropropene	ND		4.1	0.56	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
1,2-Dibromo-3-Chloropropane	ND		8.2	1.4	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
Ethylene Dibromide	ND		4.1	1.2	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
Dibromomethane	ND		8.2	0.70	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
Dichlorodifluoromethane	ND		8.2	0.65	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
1,1-Dichloroethane	ND		4.1	0.56	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
1,2-Dichloroethane	ND		4.1	0.62	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
1,1-Dichloroethene	ND	*	4.1	0.51	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
cis-1,2-Dichloroethene	ND		4.1	0.56	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
trans-1,2-Dichloroethene	ND		4.1	0.61	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
1,2-Dichloropropane	ND		4.1	0.52	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
cis-1,3-Dichloropropene	ND		4.1	0.56	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
trans-1,3-Dichloropropene	ND		4.1	0.55	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
Ethylbenzene	ND		4.1	0.61	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
Hexachlorobutadiene	ND		4.1	0.74	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
2-Hexanone	ND		41	8.2	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
Isopropylbenzene	ND		4.1	0.56	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
4-Isopropyltoluene	ND		4.1	2.0	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
Methylene Chloride	ND		8.2	4.6	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
4-Methyl-2-pentanone (MIBK)	ND		41	8.2	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
Naphthalene	ND		8.2	1.2	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
N-Propylbenzene	ND		4.1	0.54	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
Styrene	ND		4.1	0.52	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
1,1,1,2-Tetrachloroethane	ND		4.1	0.62	ug/Kg		08/25/18 03:05	08/30/18 23:48	1

Client Sample ID: DG-D9S-9.5-10

Lab Sample ID: 720-88241-6

Date Collected: 08/24/18 11:35

Matrix: Solid

Date Received: 08/24/18 15:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.1	0.61	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
Tetrachloroethene	ND		4.1	0.55	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
Toluene	ND		4.1	0.58	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
1,2,3-Trichlorobenzene	ND		4.1	0.61	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
1,2,4-Trichlorobenzene	ND		4.1	0.58	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
1,1,1-Trichloroethane	ND		4.1	0.50	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
1,1,2-Trichloroethane	ND		4.1	0.57	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
Trichloroethene	ND		4.1	0.52	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
Trichlorofluoromethane	ND		4.1	0.46	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
1,2,3-Trichloropropane	ND		4.1	0.63	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.1	1.7	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
1,2,4-Trimethylbenzene	ND		4.1	1.3	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
1,3,5-Trimethylbenzene	ND		4.1	0.53	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
Vinyl acetate	ND		16	4.1	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
Vinyl chloride	ND		4.1	0.60	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
Xylenes, Total	ND		4.1	1.0	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
2,2-Dichloropropane	ND		4.1	1.6	ug/Kg		08/25/18 03:05	08/30/18 23:48	1
Gasoline Range Organics (GRO) -C4-C12	ND		200	82	ug/Kg		08/25/18 03:05	08/30/18 23:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*45 - 131*	*08/25/18 03:05*	*08/30/18 23:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*	*08/25/18 03:05*	*08/30/18 23:48*	*1*
Toluene-d8 (Surr)	*99*		*58 - 140*	*08/25/18 03:05*	*08/30/18 23:48*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.6	4.8	ug/Kg		08/29/18 11:45	08/31/18 22:24	1
Acenaphthene	ND		4.8	2.7	ug/Kg		08/29/18 11:45	08/31/18 22:24	1
Acenaphthylene	ND		4.8	2.3	ug/Kg		08/29/18 11:45	08/31/18 22:24	1
Anthracene	ND		4.8	1.9	ug/Kg		08/29/18 11:45	08/31/18 22:24	1
Benzo[a]anthracene	ND		4.8	1.4	ug/Kg		08/29/18 11:45	08/31/18 22:24	1
Benzo[a]pyrene	ND		4.8	1.8	ug/Kg		08/29/18 11:45	08/31/18 22:24	1
Benzo[b]fluoranthene	ND		4.8	2.0	ug/Kg		08/29/18 11:45	08/31/18 22:24	1
Benzo[g,h,i]perylene	ND		4.8	4.1	ug/Kg		08/29/18 11:45	08/31/18 22:24	1
Benzo[k]fluoranthene	ND		4.8	2.0	ug/Kg		08/29/18 11:45	08/31/18 22:24	1
Chrysene	**1.3**	**J**	4.8	1.3	ug/Kg		08/29/18 11:45	08/31/18 22:24	1
Dibenz(a,h)anthracene	ND		4.8	3.4	ug/Kg		08/29/18 11:45	08/31/18 22:24	1
Fluoranthene	**1.5**	**J B**	4.8	1.3	ug/Kg		08/29/18 11:45	08/31/18 22:24	1
Fluorene	ND		4.8	2.1	ug/Kg		08/29/18 11:45	08/31/18 22:24	1
Indeno[1,2,3-cd]pyrene	ND		4.8	4.0	ug/Kg		08/29/18 11:45	08/31/18 22:24	1
Naphthalene	ND		4.8	3.4	ug/Kg		08/29/18 11:45	08/31/18 22:24	1
Phenanthrene	**3.0**	**J B**	4.8	1.7	ug/Kg		08/29/18 11:45	08/31/18 22:24	1
Pyrene	**1.7**	**J**	4.8	1.6	ug/Kg		08/29/18 11:45	08/31/18 22:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*50*		*33 - 120*	*08/29/18 11:45*	*08/31/18 22:24*	*1*
Terphenyl-d14	*73*		*35 - 146*	*08/29/18 11:45*	*08/31/18 22:24*	*1*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88241-1

Client Sample ID: DG-D9S-9.5-10

Date Collected: 08/24/18 11:35
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88241-6

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	840	J	1900	730	ug/Kg		08/29/18 09:03	09/04/18 13:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*94*		*40 - 130*	*08/29/18 09:03*	*09/04/18 13:21*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.58	ug/Kg		08/29/18 10:43	09/01/18 14:54	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/29/18 10:43	09/01/18 14:54	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/29/18 10:43	09/01/18 14:54	1
Aldrin	ND		1.9	0.48	ug/Kg		08/29/18 10:43	09/01/18 14:54	1
alpha-BHC	ND		1.9	0.52	ug/Kg		08/29/18 10:43	09/01/18 14:54	1
beta-BHC	ND		1.9	0.34	ug/Kg		08/29/18 10:43	09/01/18 14:54	1
Chlordane (technical)	ND		38	3.0	ug/Kg		08/29/18 10:43	09/01/18 14:54	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/29/18 10:43	09/01/18 14:54	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/29/18 10:43	09/01/18 14:54	1
Dieldrin	ND		1.9	0.56	ug/Kg		08/29/18 10:43	09/01/18 14:54	1
Endosulfan I	ND		1.9	0.30	ug/Kg		08/29/18 10:43	09/01/18 14:54	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/29/18 10:43	09/01/18 14:54	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/29/18 10:43	09/01/18 14:54	1
Endrin	ND		1.9	0.44	ug/Kg		08/29/18 10:43	09/01/18 14:54	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/29/18 10:43	09/01/18 14:54	1
Endrin ketone	ND		1.9	0.31	ug/Kg		08/29/18 10:43	09/01/18 14:54	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/29/18 10:43	09/01/18 14:54	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/29/18 10:43	09/01/18 14:54	1
Heptachlor epoxide	ND		1.9	0.33	ug/Kg		08/29/18 10:43	09/01/18 14:54	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/29/18 10:43	09/01/18 14:54	1
Toxaphene	ND		38	6.5	ug/Kg		08/29/18 10:43	09/01/18 14:54	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/29/18 10:43	09/01/18 14:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*79*		*21 - 136*	*08/29/18 10:43*	*09/01/18 14:54*	*1*
Tetrachloro-m-xylene	*59*		*21 - 145*	*08/29/18 10:43*	*09/01/18 14:54*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		49	21	ug/Kg		08/29/18 14:50	08/31/18 11:26	1
Aroclor-1221	ND		49	23	ug/Kg		08/29/18 14:50	08/31/18 11:26	1
Aroclor-1232	ND		49	22	ug/Kg		08/29/18 14:50	08/31/18 11:26	1
Aroclor-1242	ND		49	19	ug/Kg		08/29/18 14:50	08/31/18 11:26	1
Aroclor-1248	ND		49	23	ug/Kg		08/29/18 14:50	08/31/18 11:26	1
Aroclor-1254	ND		49	22	ug/Kg		08/29/18 14:50	08/31/18 11:26	1
Aroclor-1260	ND		49	21	ug/Kg		08/29/18 14:50	08/31/18 11:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*70*		*14 - 128*	*08/29/18 14:50*	*08/31/18 11:26*	*1*
DCB Decachlorobiphenyl	*78*		*10 - 132*	*08/29/18 14:50*	*08/31/18 11:26*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.37	J	1.1	0.18	mg/Kg		08/29/18 15:55	08/30/18 18:12	4

Client Sample ID: DG-D9S-9.5-10

Lab Sample ID: 720-88241-6

Date Collected: 08/24/18 11:35

Matrix: Solid

Date Received: 08/24/18 15:00

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.7	J	2.1	0.18	mg/Kg		08/29/18 15:55	08/30/18 18:12	4
Barium	28		1.1	0.15	mg/Kg		08/29/18 15:55	08/30/18 18:12	4
Beryllium	ND		0.21	0.069	mg/Kg		08/29/18 15:55	08/30/18 18:12	4
Cadmium	ND		0.27	0.026	mg/Kg		08/29/18 15:55	08/30/18 18:12	4
Chromium	30		1.1	0.11	mg/Kg		08/29/18 15:55	08/30/18 18:12	4
Cobalt	5.3		0.43	0.043	mg/Kg		08/29/18 15:55	08/30/18 18:12	4
Copper	5.4		3.2	1.5	mg/Kg		08/29/18 15:55	08/30/18 18:12	4
Lead	3.2		1.1	0.22	mg/Kg		08/29/18 15:55	08/30/18 18:12	4
Molybdenum	0.17	J	1.1	0.14	mg/Kg		08/29/18 15:55	08/30/18 18:12	4
Nickel	34		1.1	0.11	mg/Kg		08/29/18 15:55	08/30/18 18:12	4
Selenium	ND		2.1	0.32	mg/Kg		08/29/18 15:55	08/30/18 18:12	4
Silver	ND		0.53	0.11	mg/Kg		08/29/18 15:55	08/30/18 18:12	4
Thallium	ND		1.1	0.31	mg/Kg		08/29/18 15:55	08/30/18 18:12	4
Vanadium	19		1.1	0.14	mg/Kg		08/29/18 15:55	08/30/18 18:12	4
Zinc	16		3.2	1.4	mg/Kg		08/29/18 15:55	08/30/18 18:12	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.016	0.0024	mg/Kg		08/29/18 21:54	08/30/18 21:56	1

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88241-1
SDG No.:
Client Sample ID: DG-F9S-0.5-1
Lab Sample ID: 720-88241-1
Matrix: Solid
Lab File ID: FID2000031.D
Analysis Method: 8015B
Date Collected: 08/24/2018 12:10
Extraction Method: 3546
Date Extracted: 08/29/2018 09:03
Sample wt/vol: 15.58(g)
Date Analyzed: 08/31/2018 23:05
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250656
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	39000		1900	720

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	95		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000031.D
Lims ID: 720-88241-D-1-A
Client ID: DG-F9S--0.5-1
Sample Type: Client
Inject. Date: 31-Aug-2018 23:05:22 ALS Bottle#: 81 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053602-031
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\DRO6_B.m
Limit Group: DRO
Last Update: 04-Sep-2018 12:57:57 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK017

First Level Reviewer: luj Date: 04-Sep-2018 12:57:57

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.307			ND	
23 n-Decane	2.169	2.169	0.000	29799	NC	
A 1 C9-C13	2.775	(1.307-4.243)		4800507	2.20	M
A 21 Stoddard Solvent	2.775	(1.307-4.243)		4800507	NC	M
A 57 C10-C12	2.898	(2.169-3.628)		2900339	8.94	M
24 Dodecane		3.628			ND	
A 3 C9 - C17	3.806	(1.307-6.306)		20241244	8.87	M
A 60 C10-C16	4.000	(2.169-5.830)		12969438	6.40	M
A 47 C9 - C18	4.028	(1.307-6.750)		29012082	15.3	M
A 25 C9-C19	4.240	(1.307-7.174)		52023736	22.6	M
A 15 Kerosene	4.240	(1.307-7.174)		52023736	27.4	M
26 C13	4.228	4.243	-0.015	87835	NC	M
$ 27 n-Decanoic Acid (Surr)		4.632			ND	U
A 59 C12-C16	4.729	(3.628-5.830)		10069099	13.0	M
A 61 C10-C20	4.875	(2.169-7.581)		96179133	61.8	M
A 28 C9-C24	5.179	(1.307-9.051)		263389616	156.4	M
A 29 C9-C25	5.345	(1.307-9.384)		320103618	188.5	M
A 54 C10-C23	5.437	(2.169-8.705)		228739920	136.8	M
A 4 C10-C24	5.610	(2.169-9.051)		263138657	156.3	M
A 16 C10-C25	5.777	(2.169-9.384)		319852659	188.4	M
45 Hexadecane	5.842	5.830	0.012	3039870	NC	M
A 14 C10-C26	5.937	(2.169-9.705)		361735552	212.1	M
A 67 C12-C22	5.986	(3.628-8.345)		167665933	102.2	M
A 32 C10-C28	6.243	(2.169-10.317)		527459562	306.0	M
A 5 Diesel	6.243	(2.169-10.317)		527459562	306.0	M
A 12 Unknown Hydrocarbons	6.243	(2.169-10.317)		527459562	NC	M
A 30 C13-C22	6.294	(4.243-8.345)		166104559	101.4	M
44 Heptadecane	6.331	6.306	0.025	5577502	NC	M
A 31 C12-C24	6.339	(3.628-9.051)		260238318	154.7	M
49 n-Octadecane	6.752	6.750	0.002	10889220	NC	M
A 9 Crude Oil Range Organics (	6.859	(1.307-12.411)		1168191912	NC	M
A 11 Bunker Range Organics (C9-	6.859	(1.307-12.411)		1168191912	NC	M

Report Date: 04-Sep-2018 12:57:58 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000031.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.859	(1.307-12.411)		1168191912	553.4	M
33 C19	7.177	7.174	0.003	7306214	NC	M
A 64 C13-C28	7.280	(4.243-10.317)		522997849	303.4	M
A 17 C10-C36	7.290	(2.169-12.411)		1167940953	668.6	M
A 68 Crude Oil Range Organics (	7.349	(1.307-13.391)		1788100570	NC	M
A 13 C9-C40	7.349	(1.307-13.391)		1788100570	1144.5	M
A 58 C16-C24	7.441	(5.830-9.051)		250169219	149.0	M
62 icosane	7.576	7.581	-0.005	18371954	NC	M
A 6 C10-C40	7.780	(2.169-13.391)		1787849611	1145.6	M
$ 34 p-Terphenyl	8.062	8.077	-0.015	41243659	23.8	
35 n-Docosane	8.352	8.345	0.007	20190361	NC	M
A 18 C12-C40	8.509	(3.628-13.391)		1784949272	1147.0	M
36 Tricosane	8.700	8.705	-0.005	37983287	NC	M
A 66 C13-C40	8.817	(4.243-13.391)		1783387898	1147.2	M
37 n-Tetracosane	9.055	9.051	0.004	22059405	NC	M
A 2 C16-C36 ORO	9.120	(5.830-12.411)		1154971515	976.8	M
38 C25	9.397	9.384	0.013	26828564	NC	M
A 19 C16-C40	9.611	(5.830-13.391)		1774880173	1145.5	M
46 n-Hexacosane	9.707	9.705	0.002	32731263	NC	M
A 20 C19-C36	9.792	(7.174-12.411)		788970181	579.5	
A 55 C23-C32	10.065	(8.705-11.426)		692177512	894.4	M
39 n-Octacosane	10.372	10.317	0.055	50398716	NC	M
65 C29	10.636	10.607	0.029	31532398	NC	M
A 40 C24-C36	10.731	(9.051-12.411)		880955700	898.6	M
A 7 Motor Oil	10.731	(9.051-12.411)		713031662	727.3	
A 10 C22-C40	10.868	(8.345-13.391)		987658043	710.6	
A 50 C25-C36	10.898	(9.384-12.411)		652419146	708.2	
A 41 C23-C40	11.048	(8.705-13.391)		963015451	704.6	
A 8 C24-C40	11.221	(9.051-13.391)		944803851	704.4	
56 Dotriacontane	11.387	11.426	-0.039	48203719	NC	M
A 51 C28-C40	11.854	(10.317-13.391)		765715231	705.9	
A 63 C29-C40	11.999	(10.607-13.391)		698684990	699.1	
42 n-Hexatriacontane	12.459	12.411	0.048	31372326	NC	M
43 C40		13.391		ND		
$ 69 Stearic Acid (Surr)		0.000		ND		

QC Flag Legend

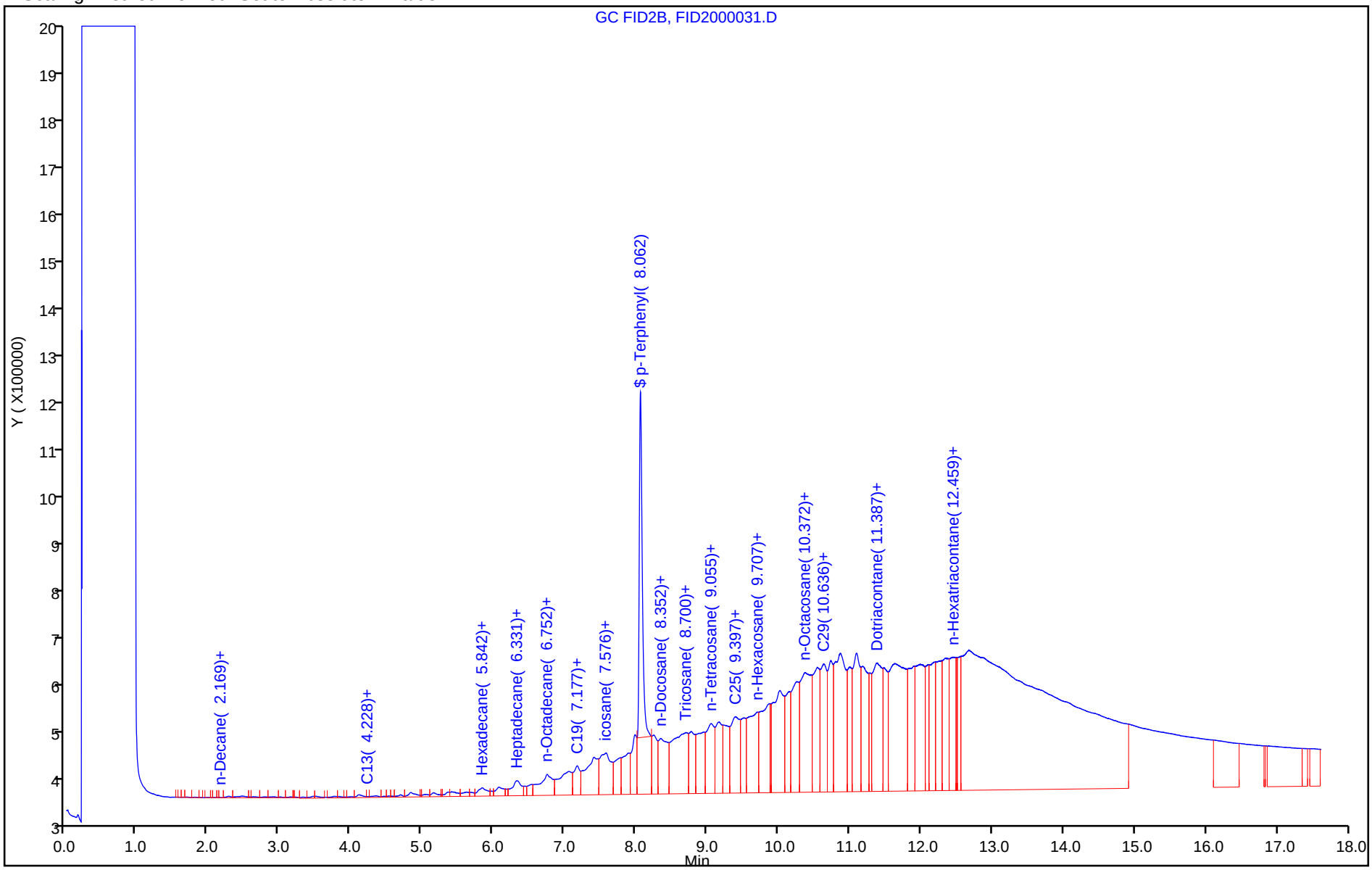
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 04-Sep-2018 12:57:58 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000031.D				
Injection Date:	31-Aug-2018 23:05:22	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88241-D-1-A	Lab Sample ID:	720-88241-1	Worklist Smp#:	31
Client ID:	DG-F9S--0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	81
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000031.D
Lims ID: 720-88241-D-1-A
Client ID: DG-F9S--0.5-1
Sample Type: Client
Inject. Date: 31-Aug-2018 23:05:22 ALS Bottle#: 81 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053602-031
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\DRO6_B.m
Limit Group: DRO
Last Update: 04-Sep-2018 12:57:57 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK017

First Level Reviewer: luj Date: 04-Sep-2018 12:57:57

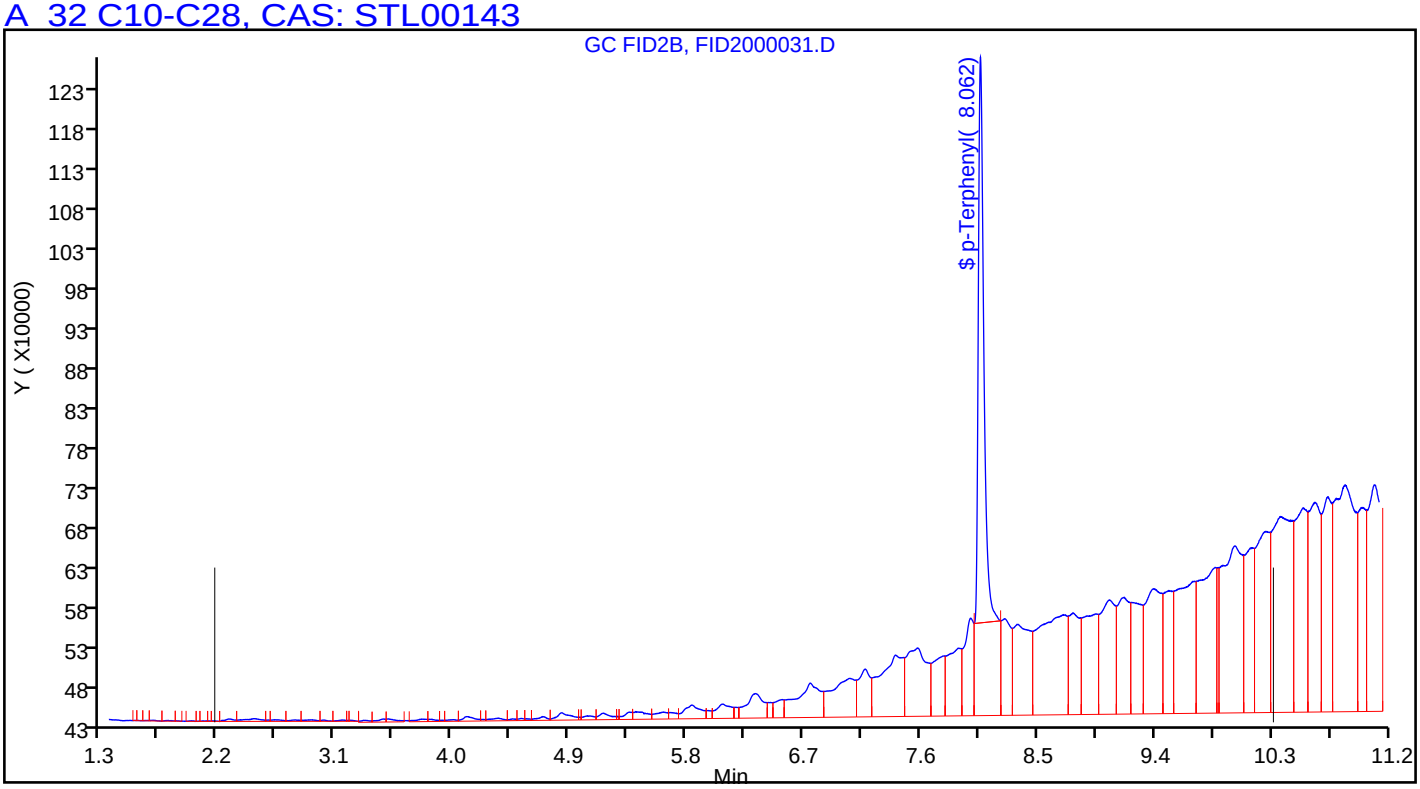
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	23.8	95.24

Report Date: 04-Sep-2018 12:58:01 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000031.D				
Injection Date:	31-Aug-2018 23:05:22	Instrument ID:	CHDRO6		
Lims ID:	720-88241-D-1-A	Lab Sample ID:	720-88241-1		
Client ID:	DG-F9S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	81	Worklist Smp#:	31
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

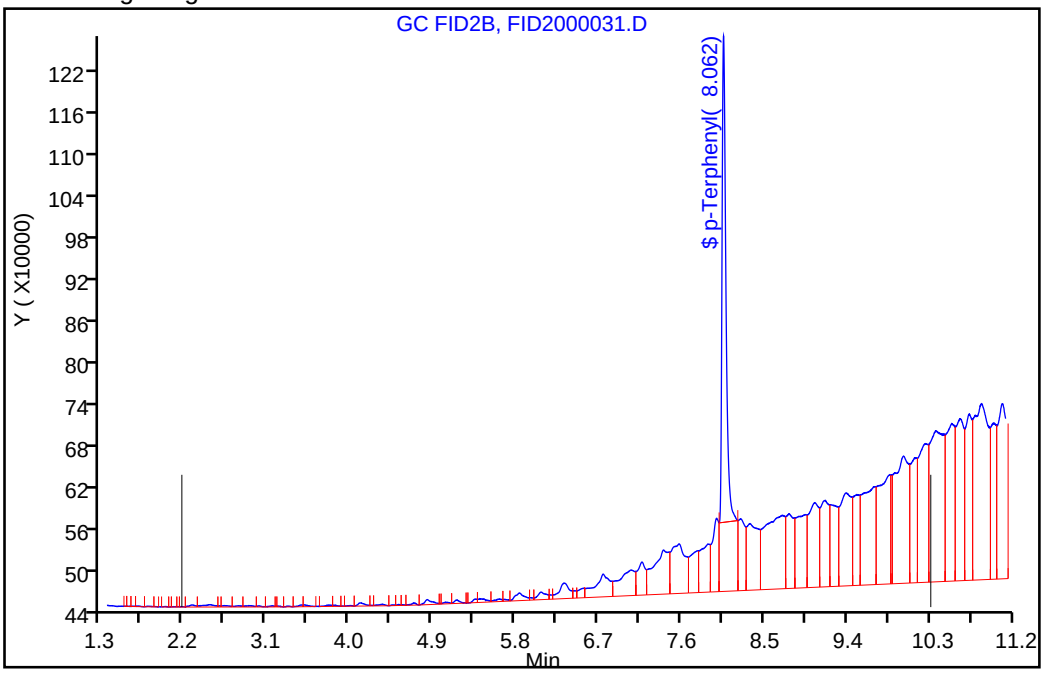
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000031.D				
Injection Date:	31-Aug-2018 23:05:22	Instrument ID:	CHDRO6		
Lims ID:	720-88241-D-1-A	Lab Sample ID:	720-88241-1		
Client ID:	DG-F9S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	81	Worklist Smp#:	31
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.243, CAS: STL00143

Signal: 1

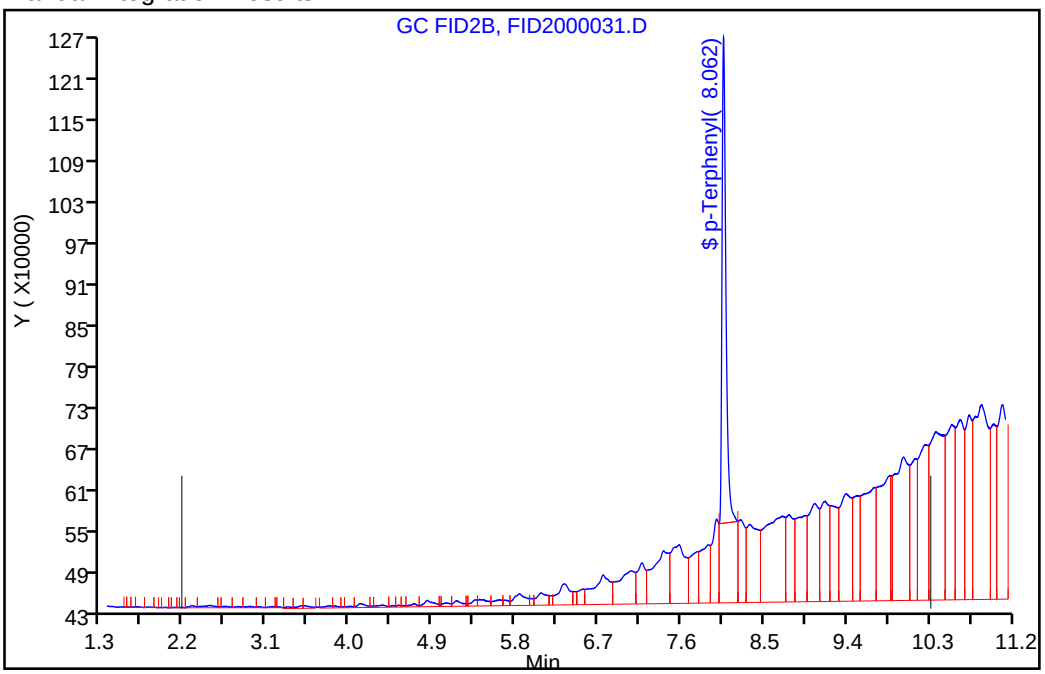
Processing Integration Results

RT: 6.24
Response: 435514251
Amount: 253.8964



Manual Integration Results

RT: 6.24
Response: 527459562
Amount: 305.9577



Reviewer: luj, 04-Sep-2018 12:57:46

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88241-1
SDG No.:
Client Sample ID: DG-F9S-3.5-4
Lab Sample ID: 720-88241-2
Matrix: Solid
Lab File ID: FID2000027.D
Analysis Method: 8015B
Date Collected: 08/24/2018 12:10
Extraction Method: 3546
Date Extracted: 08/29/2018 09:03
Sample wt/vol: 15.17(g)
Date Analyzed: 08/31/2018 21:27
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250656
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	3500		2000	740

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	116		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000027.D
Lims ID: 720-88241-D-2-A
Client ID: DG-F9S--3.5-4
Sample Type: Client
Inject. Date: 31-Aug-2018 21:27:35 ALS Bottle#: 77 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053602-027
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\DRO6_B.m
Limit Group: DRO
Last Update: 04-Sep-2018 12:43:33 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK017

First Level Reviewer: luj Date: 04-Sep-2018 12:43:33

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.307			ND	
23 n-Decane		2.169			ND	
A 1 C9-C13	2.775	(1.307-4.243)		3321488	1.52	
A 21 Stoddard Solvent	2.775	(1.307-4.243)		3321488	NC	
A 57 C10-C12	2.898	(2.169-3.628)		2834201	8.90	
24 Dodecane	3.601	3.628	-0.027	358227	NC	
A 3 C9 - C17	3.806	(1.307-6.306)		4141854	1.81	M
A 60 C10-C16	4.000	(2.169-5.830)		3760924	1.85	M
A 47 C9 - C18	4.028	(1.307-6.750)		4550316	2.40	M
A 25 C9-C19	4.240	(1.307-7.174)		5594409	2.43	M
A 15 Kerosene	4.240	(1.307-7.174)		5594409	2.95	M
26 C13		4.243			ND	
$ 27 n-Decanoic Acid (Surr)		4.632			ND	
A 59 C12-C16	4.729	(3.628-5.830)		1284950	8.03	M
A 61 C10-C20	4.875	(2.169-7.581)		6899402	11.2	M
A 28 C9-C24	5.179	(1.307-9.051)		17201425	17.0	M
A 29 C9-C25	5.345	(1.307-9.384)		20358100	18.8	M
A 54 C10-C23	5.437	(2.169-8.705)		13350960	14.9	M
A 4 C10-C24	5.610	(2.169-9.051)		17085665	17.0	M
A 16 C10-C25	5.777	(2.169-9.384)		20242340	18.8	M
45 Hexadecane	5.805	5.830	-0.025	27674	NC	M
A 14 C10-C26	5.937	(2.169-9.705)		24939226	21.4	M
A 67 C12-C22	5.986	(3.628-8.345)		7240212	11.4	M
A 32 C10-C28	6.243	(2.169-10.317)		33483080	26.3	M
A 5 Diesel	6.243	(2.169-10.317)		33483080	26.3	M
A 12 Unknown Hydrocarbons	6.243	(2.169-10.317)		33483080	NC	M
A 30 C13-C22	6.294	(4.243-8.345)		6763550	11.1	M
44 Heptadecane	6.365	6.306	0.059	187146	NC	M
A 31 C12-C24	6.339	(3.628-9.051)		14609691	15.6	M
49 n-Octadecane	6.818	6.750	0.068	168367	NC	M
A 9 Crude Oil Range Organics (	6.859	(1.307-12.411)		108847501	NC	M
A 11 Bunker Range Organics (C9-	6.859	(1.307-12.411)		108847501	NC	M

Report Date: 04-Sep-2018 12:43:33 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000027.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.859	(1.307-12.411)		108847501	51.6	M
33 C19	7.171	7.174	-0.003	423396	NC	M
A 64 C13-C28	7.280	(4.243-10.317)		30530444	24.6	M
A 17 C10-C36	7.290	(2.169-12.411)		108731741	68.9	M
A 68 Crude Oil Range Organics (	7.349	(1.307-13.391)		179019067	NC	M
A 13 C9-C40	7.349	(1.307-13.391)		179019067	114.6	M
A 58 C16-C24	7.441	(5.830-9.051)		13324741	14.8	M
62 icosane	7.599	7.581	0.018	595445	NC	M
A 6 C10-C40	7.780	(2.169-13.391)		178903307	114.6	M
$ 34 p-Terphenyl	8.065	8.077	-0.012	50386454	29.1	
35 n-Docosane		8.345			ND	
A 18 C12-C40	8.509	(3.628-13.391)		176427333	113.4	M
36 Tricosane	8.707	8.705	0.002	2313898	NC	M
A 66 C13-C40	8.817	(4.243-13.391)		175950671	113.2	M
37 n-Tetracosane	9.058	9.051	0.007	1126420	NC	M
A 2 C16-C36 ORO	9.120	(5.830-12.411)		104970817	88.8	M
38 C25	9.388	9.384	0.004	3388354	NC	M
A 19 C16-C40	9.611	(5.830-13.391)		175142383	113.0	M
46 n-Hexacosane	9.710	9.705	0.005	2102262	NC	M
A 20 C19-C36	9.792	(7.174-12.411)		14015732	10.3	
A 55 C23-C32	10.065	(8.705-11.426)		51238604	66.2	M
39 n-Octacosane	10.338	10.317	0.021	4616308	NC	M
65 C29	10.618	10.607	0.011	8538043	NC	M
A 40 C24-C36	10.731	(9.051-12.411)		74508197	76.0	M
A 7 Motor Oil	10.731	(9.051-12.411)		49798006	50.8	
A 10 C22-C40	10.868	(8.345-13.391)		41088468	29.6	
A 50 C25-C36	10.898	(9.384-12.411)		48980031	53.2	
A 41 C23-C40	11.048	(8.705-13.391)		95875776	70.2	
A 8 C24-C40	11.221	(9.051-13.391)		95897101	71.5	
56 Dotriacontane	11.439	11.426	0.013	4934330	NC	M
A 51 C28-C40	11.854	(10.317-13.391)		101687150	93.7	
A 63 C29-C40	11.999	(10.607-13.391)		99804623	99.9	
42 n-Hexatriacontane		12.411			ND	
43 C40	13.377	13.391	-0.014	9339148	NC	M
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

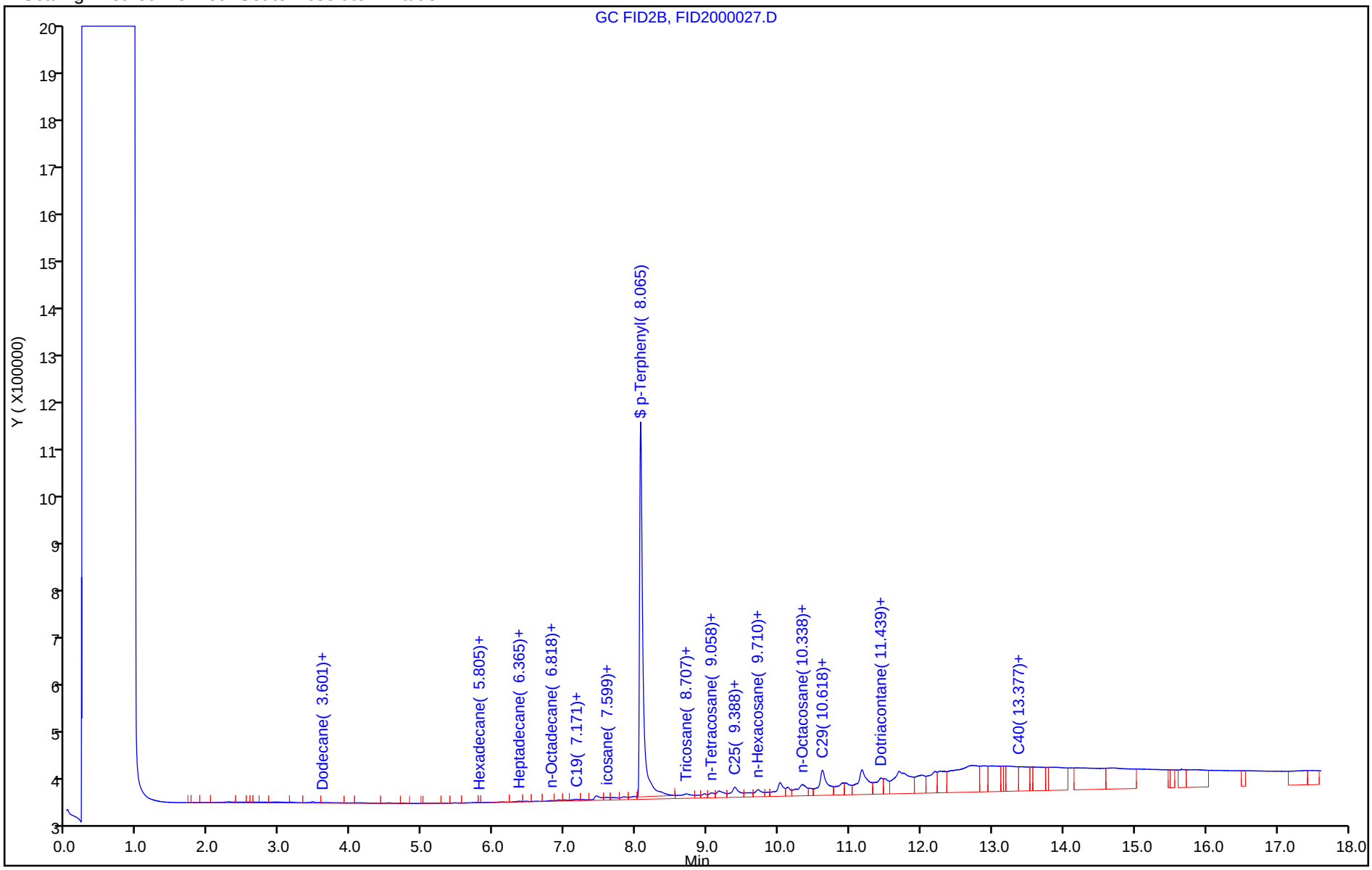
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 04-Sep-2018 12:43:33 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000027.D				
Injection Date:	31-Aug-2018 21:27:35	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88241-D-2-A	Lab Sample ID:	720-88241-2	Worklist Smp#:	27
Client ID:	DG-F9S--3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	77
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000027.D
Lims ID: 720-88241-D-2-A
Client ID: DG-F9S--3.5-4
Sample Type: Client
Inject. Date: 31-Aug-2018 21:27:35 ALS Bottle#: 77 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053602-027
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\DRO6_B.m
Limit Group: DRO
Last Update: 04-Sep-2018 12:43:33 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK017

First Level Reviewer: luj Date: 04-Sep-2018 12:43:33

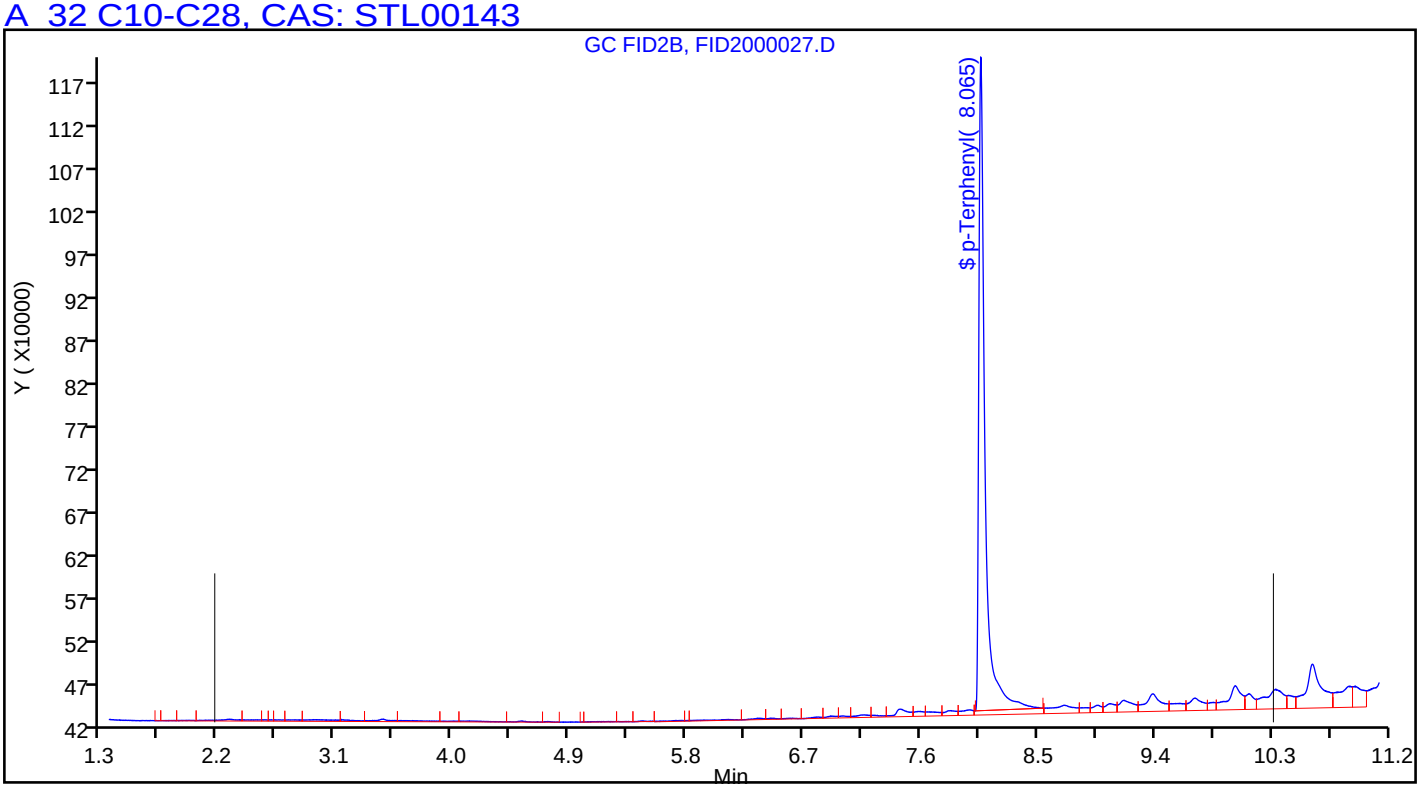
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	29.1	116.35

Report Date: 04-Sep-2018 12:43:36 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000027.D				
Injection Date:	31-Aug-2018 21:27:35	Instrument ID:	CHDRO6		
Lims ID:	720-88241-D-2-A	Lab Sample ID:	720-88241-2		
Client ID:	DG-F9S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	77	Worklist Smp#:	27
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

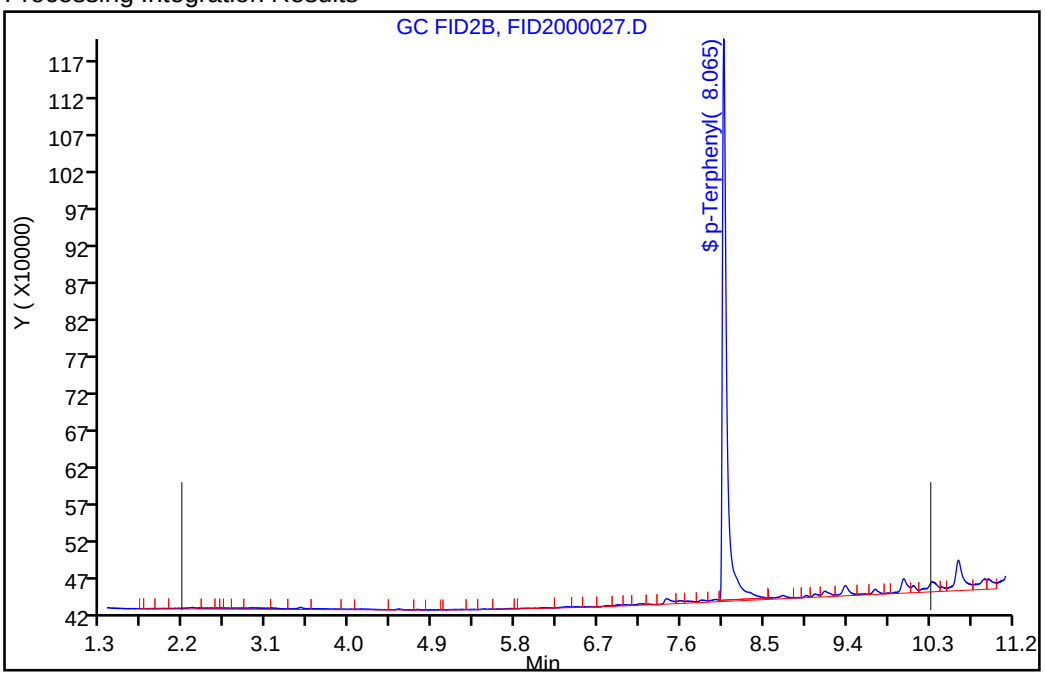
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000027.D				
Injection Date:	31-Aug-2018 21:27:35	Instrument ID:	CHDRO6		
Lims ID:	720-88241-D-2-A	Lab Sample ID:	720-88241-2		
Client ID:	DG-F9S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	77	Worklist Smp#:	27
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.243, CAS: STL00143

Signal: 1

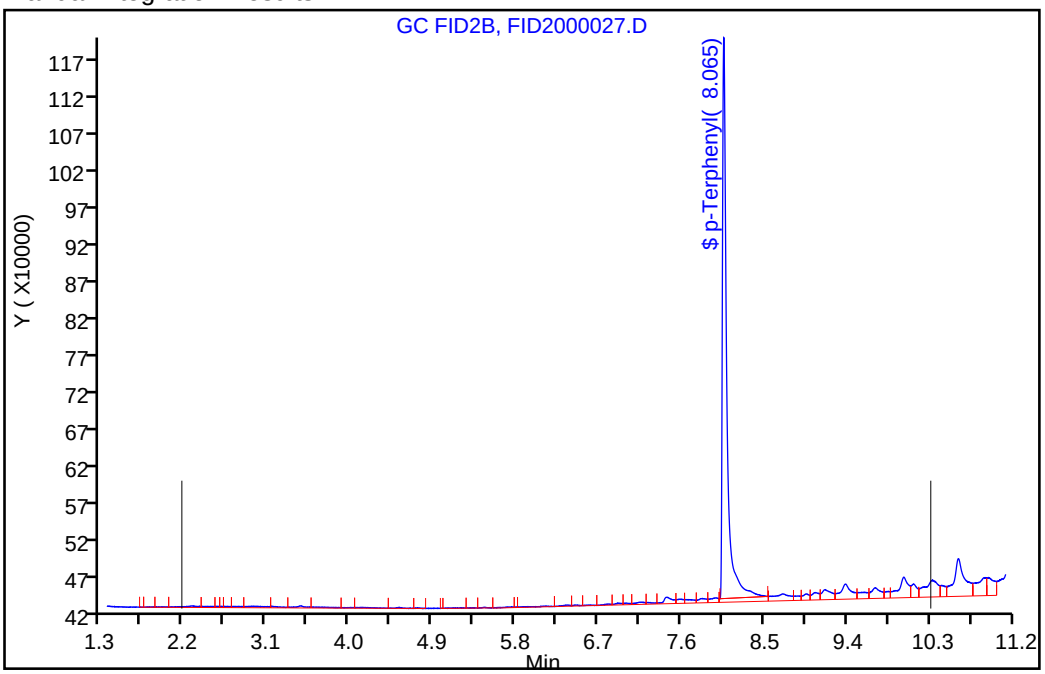
Processing Integration Results

RT: 6.24
Response: 15452760
Amount: 16.048968



Manual Integration Results

RT: 6.24
Response: 33483080
Amount: 26.258104



Reviewer: luj, 04-Sep-2018 12:43:17

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88241-1
SDG No.:
Client Sample ID: DG-F9S-9.5-10
Lab Sample ID: 720-88241-3
Matrix: Solid
Lab File ID: FID2000028.D
Analysis Method: 8015B
Date Collected: 08/24/2018 12:10
Extraction Method: 3546
Date Extracted: 08/29/2018 09:03
Sample wt/vol: 15.53(g)
Date Analyzed: 08/31/2018 21:51
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250656
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	36000		1900	720

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	122		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000028.D
Lims ID: 720-88241-D-3-A
Client ID: DG-F9S--9.5-10
Sample Type: Client
Inject. Date: 31-Aug-2018 21:51:53 ALS Bottle#: 78 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053602-028
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\DRO6_B.m
Limit Group: DRO
Last Update: 04-Sep-2018 12:53:59 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK017

First Level Reviewer: luj Date: 04-Sep-2018 12:53:59

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.307			ND	
23 n-Decane	2.154	2.169	-0.015	81234	NC	M
A 1 C9-C13	2.775	(1.307-4.243)		16803369	7.70	M
A 21 Stoddard Solvent	2.775	(1.307-4.243)		16803369	NC	M
A 57 C10-C12	2.898	(2.169-3.628)		7403925	11.5	M
24 Dodecane	3.679	3.628	0.051	588777	NC	M
A 3 C9 - C17	3.806	(1.307-6.306)		50144774	22.0	M
A 60 C10-C16	4.000	(2.169-5.830)		36606413	18.1	M
A 47 C9 - C18	4.028	(1.307-6.750)		62598501	33.1	M
A 25 C9-C19	4.240	(1.307-7.174)		81178071	35.3	M
A 15 Kerosene	4.240	(1.307-7.174)		81178071	42.8	M
26 C13		4.243			ND	
$ 27 n-Decanoic Acid (Surr)		4.632			ND	
A 59 C12-C16	4.729	(3.628-5.830)		29202488	23.8	M
A 61 C10-C20	4.875	(2.169-7.581)		104504349	66.5	M
A 28 C9-C24	5.179	(1.307-9.051)		228498864	136.7	M
A 29 C9-C25	5.345	(1.307-9.384)		299004180	176.6	M
A 54 C10-C23	5.437	(2.169-8.705)		213037737	127.9	M
A 4 C10-C24	5.610	(2.169-9.051)		226693233	135.7	M
A 16 C10-C25	5.777	(2.169-9.384)		297198549	175.6	M
45 Hexadecane	5.818	5.830	-0.012	1858495	NC	M
A 14 C10-C26	5.937	(2.169-9.705)		363062451	212.9	M
A 67 C12-C22	5.986	(3.628-8.345)		163813142	100.1	M
A 32 C10-C28	6.243	(2.169-10.317)		475822537	276.7	M
A 5 Diesel	6.243	(2.169-10.317)		475822537	276.7	M
A 12 Unknown Hydrocarbons	6.243	(2.169-10.317)		475822537	NC	M
A 30 C13-C22	6.294	(4.243-8.345)		161763621	98.9	M
44 Heptadecane	6.287	6.306	-0.019	2803328	NC	M
A 31 C12-C24	6.339	(3.628-9.051)		219289308	131.5	M
49 n-Octadecane	6.735	6.750	-0.015	4520208	NC	M
A 9 Crude Oil Range Organics (	6.859	(1.307-12.411)		1595764687	NC	M
A 11 Bunker Range Organics (C9-	6.859	(1.307-12.411)		1595764687	NC	M

Report Date: 04-Sep-2018 12:54:00 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000028.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.859	(1.307-12.411)		1595764687	755.9	M
33 C19	7.180	7.174	0.006	3678485	NC	M
A 64 C13-C28	7.280	(4.243-10.317)		466369091	271.4	M
A 17 C10-C36	7.290	(2.169-12.411)		1593959056	909.8	M
A 68 Crude Oil Range Organics (	7.349	(1.307-13.391)		1862144637	NC	M
A 13 C9-C40	7.349	(1.307-13.391)		1862144637	1191.9	M
A 58 C16-C24	7.441	(5.830-9.051)		191945315	116.0	M
62 icosane	7.584	7.581	0.003	5327509	NC	M
A 6 C10-C40	7.780	(2.169-13.391)		1860339006	1192.0	M
$ 34 p-Terphenyl	8.060	8.077	-0.017	52972037	30.6	M
35 n-Docosane	8.357	8.345	0.012	10550658	NC	M
A 18 C12-C40	8.509	(3.628-13.391)		1852935081	1190.6	M
36 Tricosane	8.663	8.705	-0.042	31270012	NC	M
A 66 C13-C40	8.817	(4.243-13.391)		1850885560	1190.7	M
37 n-Tetracosane	9.080	9.051	0.029	19480653	NC	M
A 2 C16-C36 ORO	9.120	(5.830-12.411)		1559211138	1318.6	M
38 C25	9.357	9.384	-0.027	51024663	NC	M
A 19 C16-C40	9.611	(5.830-13.391)		1825591088	1178.3	M
46 n-Hexacosane	9.735	9.705	0.030	20518320	NC	M
A 20 C19-C36	9.792	(7.174-12.411)		1173363805	861.9	
A 55 C23-C32	10.065	(8.705-11.426)		735544003	950.5	M
39 n-Octacosane	10.359	10.317	0.042	51195192	NC	M
65 C29	10.607	10.607	0.000	134704419	NC	M
A 40 C24-C36	10.731	(9.051-12.411)		1311179481	1337.4	M
A 7 Motor Oil	10.731	(9.051-12.411)		1142122170	1165.0	
A 10 C22-C40	10.868	(8.345-13.391)		1394279438	1003.1	
A 50 C25-C36	10.898	(9.384-12.411)		1107621054	1202.4	
A 41 C23-C40	11.048	(8.705-13.391)		1386476842	1014.5	
A 8 C24-C40	11.221	(9.051-13.391)		1380284532	1029.1	
56 Dotriacontane	11.499	11.426	0.073	142173302	NC	M
A 51 C28-C40	11.854	(10.317-13.391)		1192531085	1099.4	
A 63 C29-C40	11.999	(10.607-13.391)		1103040117	1103.8	
42 n-Hexatriacontane	12.396	12.411	-0.015	60335544	NC	M
43 C40	13.294	13.391	-0.097	59293236	NC	M
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

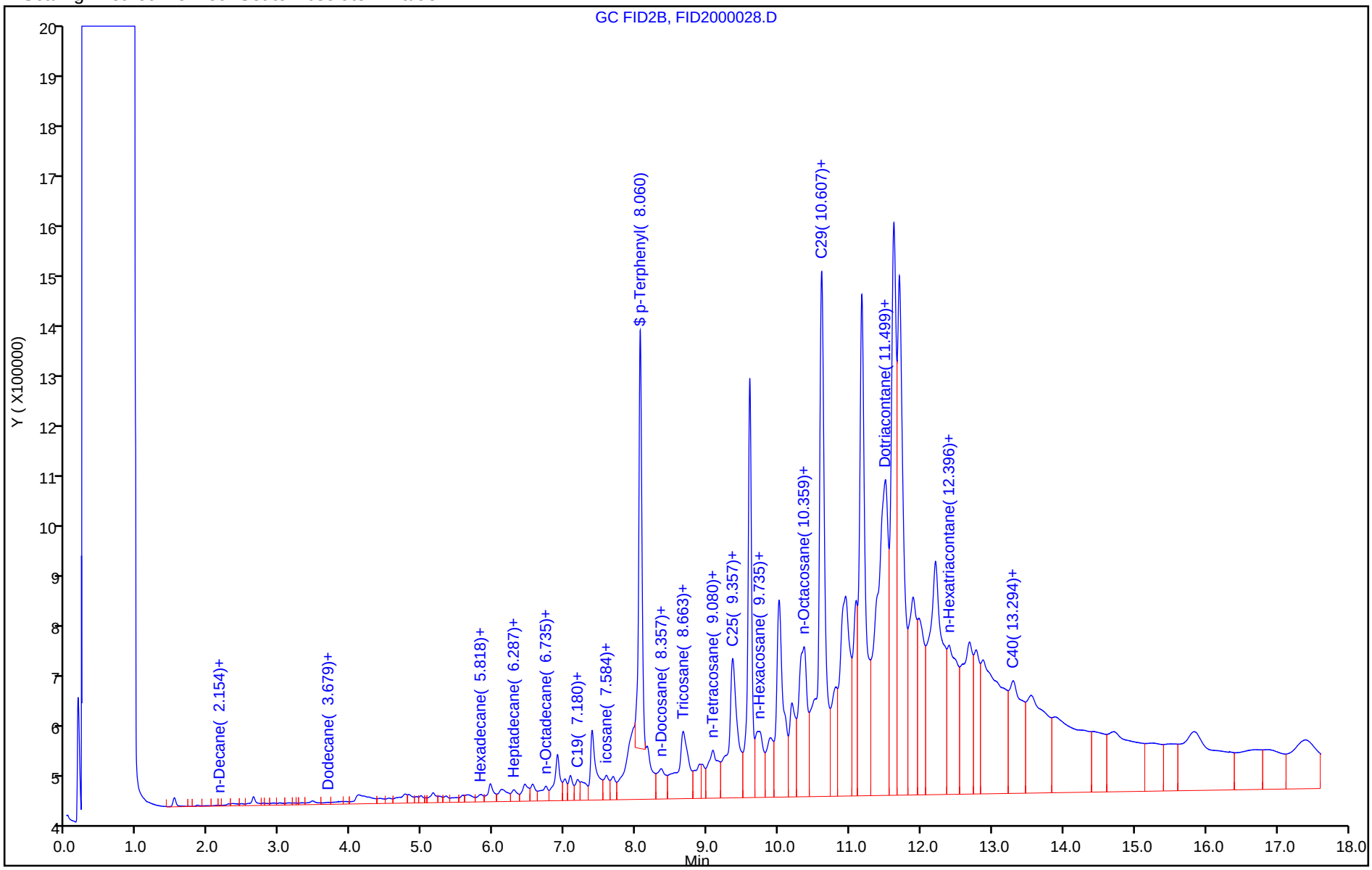
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 04-Sep-2018 12:54:00 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000028.D				
Injection Date:	31-Aug-2018 21:51:53	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88241-D-3-A	Lab Sample ID:	720-88241-3	Worklist Smp#:	28
Client ID:	DG-F9S--9.5-10				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	78
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000028.D
Lims ID: 720-88241-D-3-A
Client ID: DG-F9S--9.5-10
Sample Type: Client
Inject. Date: 31-Aug-2018 21:51:53 ALS Bottle#: 78 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053602-028
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\DRO6_B.m
Limit Group: DRO
Last Update: 04-Sep-2018 12:53:59 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK017

First Level Reviewer: luj Date: 04-Sep-2018 12:53:59

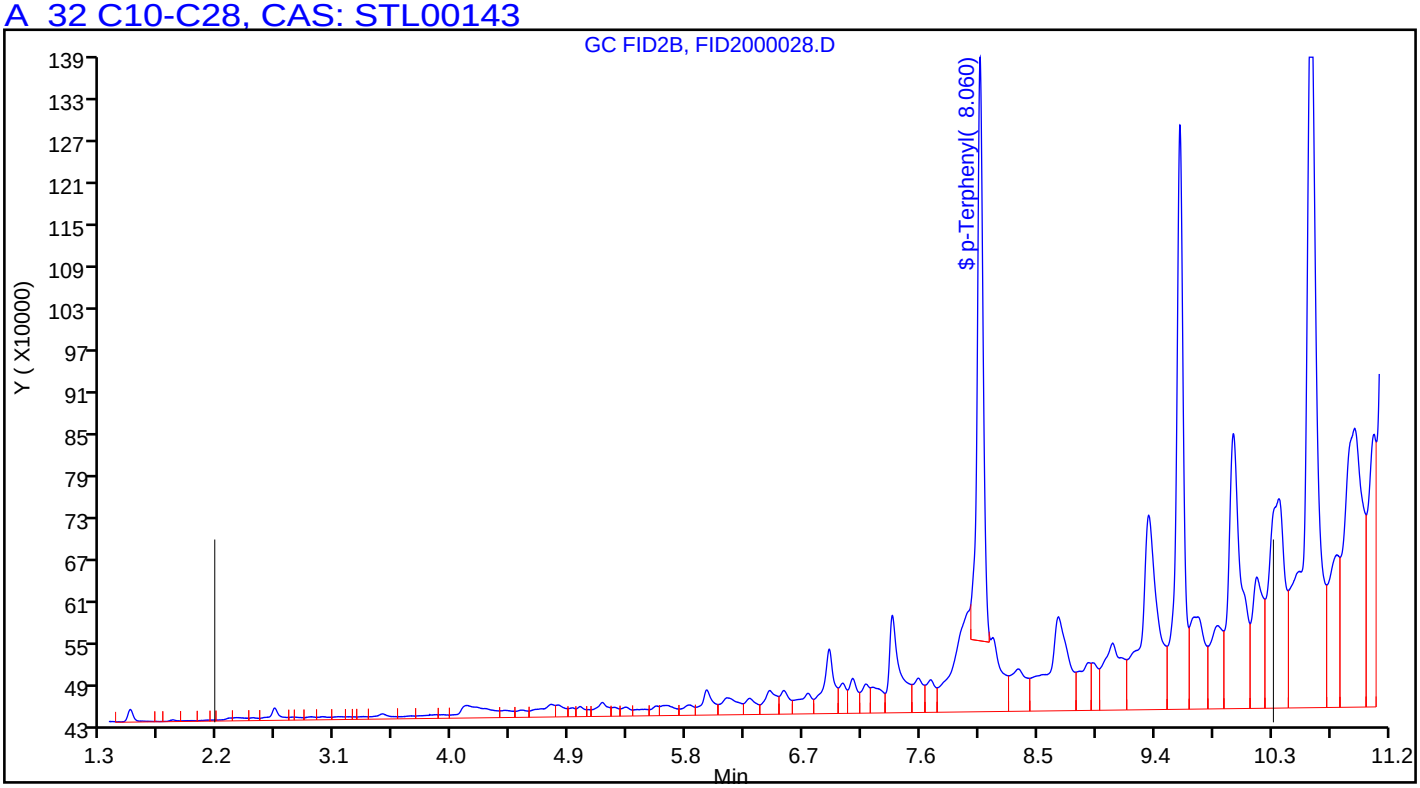
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	30.6	122.32

Report Date: 04-Sep-2018 12:54:03 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000028.D				
Injection Date:	31-Aug-2018 21:51:53	Instrument ID:	CHDRO6		
Lims ID:	720-88241-D-3-A	Lab Sample ID:	720-88241-3		
Client ID:	DG-F9S--9.5-10				
Operator ID:	DCH	ALS Bottle#:	78	Worklist Smp#:	28
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

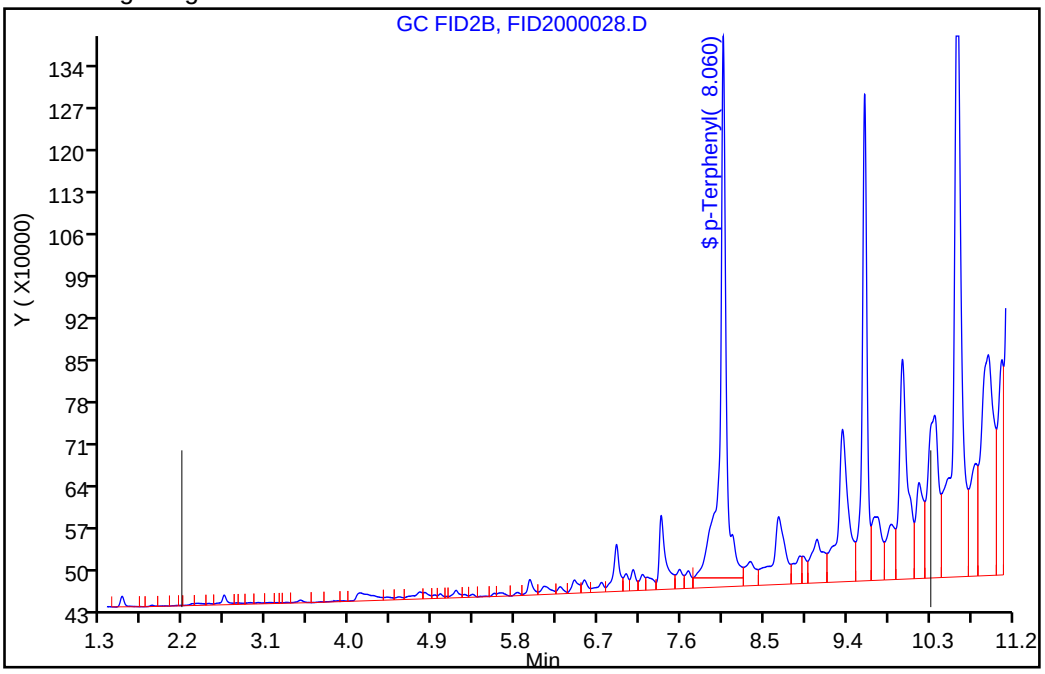
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000028.D				
Injection Date:	31-Aug-2018 21:51:53	Instrument ID:	CHDRO6		
Lims ID:	720-88241-D-3-A	Lab Sample ID:	720-88241-3		
Client ID:	DG-F9S--9.5-10				
Operator ID:	DCH	ALS Bottle#:	78	Worklist Smp#:	28
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.243, CAS: STL00143

Signal: 1

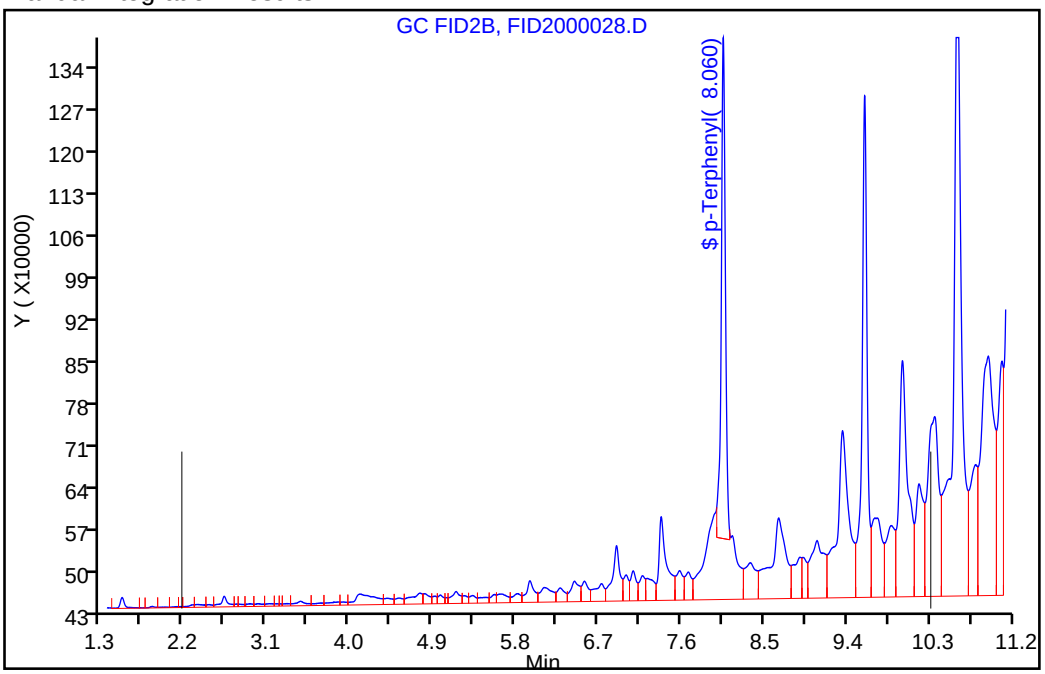
Processing Integration Results

RT: 6.24
Response: 318937656
Amount: 187.8883



Manual Integration Results

RT: 6.24
Response: 475822537
Amount: 276.7198



Reviewer: luj, 04-Sep-2018 12:53:05

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

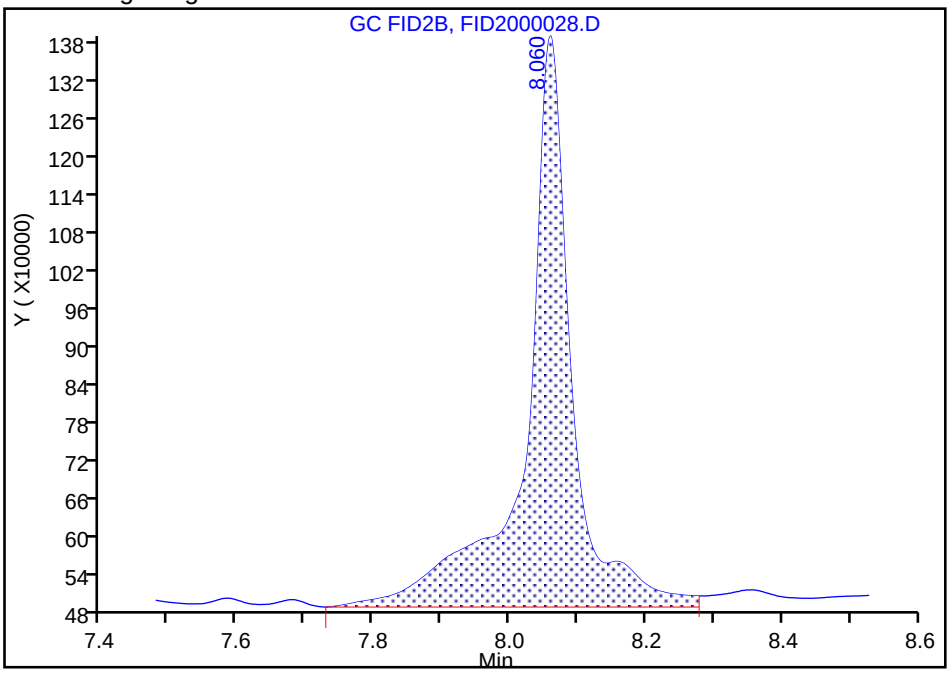
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000028.D				
Injection Date:	31-Aug-2018 21:51:53	Instrument ID:	CHDRO6		
Lims ID:	720-88241-D-3-A	Lab Sample ID:	720-88241-3		
Client ID:	DG-F9S--9.5-10				
Operator ID:	DCH	ALS Bottle#:	78	Worklist Smp#:	28
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

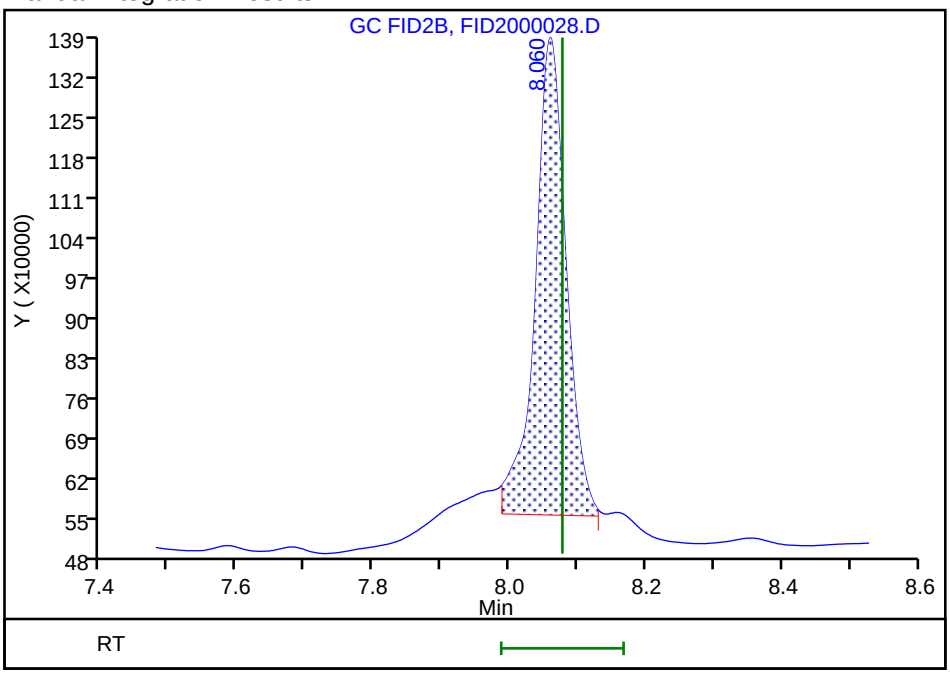
Processing Integration Results

RT: 8.06
Area: 86992234
Amount: 50.218303
Amount Units: mg/L



Manual Integration Results

RT: 8.06
Area: 52972037
Amount: 30.579348
Amount Units: mg/L



Reviewer: luj, 04-Sep-2018 12:53:18

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88241-1

SDG No.:

Client Sample ID: DG-D9S-0.5-1 Lab Sample ID: 720-88241-4

Matrix: Solid Lab File ID: FID2000029.D

Analysis Method: 8015B Date Collected: 08/24/2018 11:35

Extraction Method: 3546 Date Extracted: 08/29/2018 09:03

Sample wt/vol: 15.16(g) Date Analyzed: 08/31/2018 22:16

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250656 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	14000		2000	740

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	117		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000029.D
Lims ID: 720-88241-E-4-A
Client ID: DG-D9S--0.5-1
Sample Type: Client
Inject. Date: 31-Aug-2018 22:16:30 ALS Bottle#: 79 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053602-029
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\DRO6_B.m
Limit Group: DRO
Last Update: 04-Sep-2018 12:55:21 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK017

First Level Reviewer: luj Date: 04-Sep-2018 12:55:21

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.307			ND	
23 n-Decane	2.167	2.169	-0.002	6401	NC	
A 1 C9-C13	2.775	(1.307-4.243)		977345	0.4480	
A 21 Stoddard Solvent	2.775	(1.307-4.243)		977345	NC	
A 57 C10-C12	2.898	(2.169-3.628)		568666	7.62	
24 Dodecane	3.683	3.628	0.055	4911	NC	
A 3 C9 - C17	3.806	(1.307-6.306)		4246567	1.86	M
A 60 C10-C16	4.000	(2.169-5.830)		3237033	1.60	M
A 47 C9 - C18	4.028	(1.307-6.750)		5571476	2.94	M
A 25 C9-C19	4.240	(1.307-7.174)		8428883	3.66	M
A 15 Kerosene	4.240	(1.307-7.174)		8428883	4.44	M
26 C13	4.264	4.243	0.021	42060	NC	
$ 27 n-Decanoic Acid (Surr)		4.632			ND	U
A 59 C12-C16	4.729	(3.628-5.830)		2854837	8.92	M
A 61 C10-C20	4.875	(2.169-7.581)		21505060	19.5	M
A 28 C9-C24	5.179	(1.307-9.051)		86400628	56.2	M
A 29 C9-C25	5.345	(1.307-9.384)		131187022	81.6	M
A 54 C10-C23	5.437	(2.169-8.705)		86369902	56.2	M
A 4 C10-C24	5.610	(2.169-9.051)		86369902	56.2	M
A 16 C10-C25	5.777	(2.169-9.384)		131156296	81.6	M
45 Hexadecane	5.864	5.830	0.034	370700	NC	M
A 14 C10-C26	5.937	(2.169-9.705)		139421922	86.2	M
A 67 C12-C22	5.986	(3.628-8.345)		67323974	45.4	M
A 32 C10-C28	6.243	(2.169-10.317)		180138752	109.3	M
A 5 Diesel	6.243	(2.169-10.317)		180138752	109.3	M
A 12 Unknown Hydrocarbons	6.243	(2.169-10.317)		180138752	NC	M
A 30 C13-C22	6.294	(4.243-8.345)		66923798	45.2	M
44 Heptadecane	6.348	6.306	0.042	947769	NC	M
A 31 C12-C24	6.339	(3.628-9.051)		85987706	56.0	M
49 n-Octadecane	6.803	6.750	0.053	2857407	NC	M
A 9 Crude Oil Range Organics (	6.859	(1.307-12.411)		381217787	NC	M
A 11 Bunker Range Organics (C9-	6.859	(1.307-12.411)		381217787	NC	M

Report Date: 04-Sep-2018 12:55:22 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000029.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.859	(1.307-12.411)		381217787	180.6	M
33 C19	7.175	7.174	0.001	5454649	NC	M
A 64 C13-C28	7.280	(4.243-10.317)		179356380	108.9	M
A 17 C10-C36	7.290	(2.169-12.411)		381187061	223.1	M
A 68 Crude Oil Range Organics (	7.349	(1.307-13.391)		862634359	NC	M
A 13 C9-C40	7.349	(1.307-13.391)		862634359	552.2	M
A 58 C16-C24	7.441	(5.830-9.051)		83132869	54.4	M
62 icosane	7.592	7.581	0.011	3554044	NC	M
A 6 C10-C40	7.780	(2.169-13.391)		862603633	552.7	M
$ 34 p-Terphenyl	8.063	8.077	-0.014	50816335	29.3	M
35 n-Docosane		8.345			ND	
A 18 C12-C40	8.509	(3.628-13.391)		862221437	554.0	M
36 Tricosane	8.694	8.705	-0.011	18663732	NC	M
A 66 C13-C40	8.817	(4.243-13.391)		861821261	554.4	M
37 n-Tetracosane	9.077	9.051	0.026	17509963	NC	M
A 2 C16-C36 ORO	9.120	(5.830-12.411)		377950028	319.6	M
38 C25	9.373	9.384	-0.011	17674123	NC	M
A 19 C16-C40	9.611	(5.830-13.391)		859366600	554.6	M
46 n-Hexacosane	9.746	9.705	0.041	11557475	NC	M
A 20 C19-C36	9.792	(7.174-12.411)		190033269	139.6	
A 55 C23-C32	10.065	(8.705-11.426)		221305934	286.0	M
39 n-Octacosane	10.367	10.317	0.050	21634264	NC	M
65 C29	10.620	10.607	0.013	18995272	NC	M
A 40 C24-C36	10.731	(9.051-12.411)		313237900	319.5	M
A 7 Motor Oil	10.731	(9.051-12.411)		204316653	208.4	
A 10 C22-C40	10.868	(8.345-13.391)		284125832	204.4	
A 50 C25-C36	10.898	(9.384-12.411)		185160975	201.0	
A 41 C23-C40	11.048	(8.705-13.391)		340524901	249.2	
A 8 C24-C40	11.221	(9.051-13.391)		344091460	256.5	
56 Dotriacontane	11.489	11.426	0.063	29761130	NC	M
A 51 C28-C40	11.854	(10.317-13.391)		307381636	283.4	
A 63 C29-C40	11.999	(10.607-13.391)		292963264	293.2	
42 n-Hexatriacontane		12.411			ND	
43 C40		13.391			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

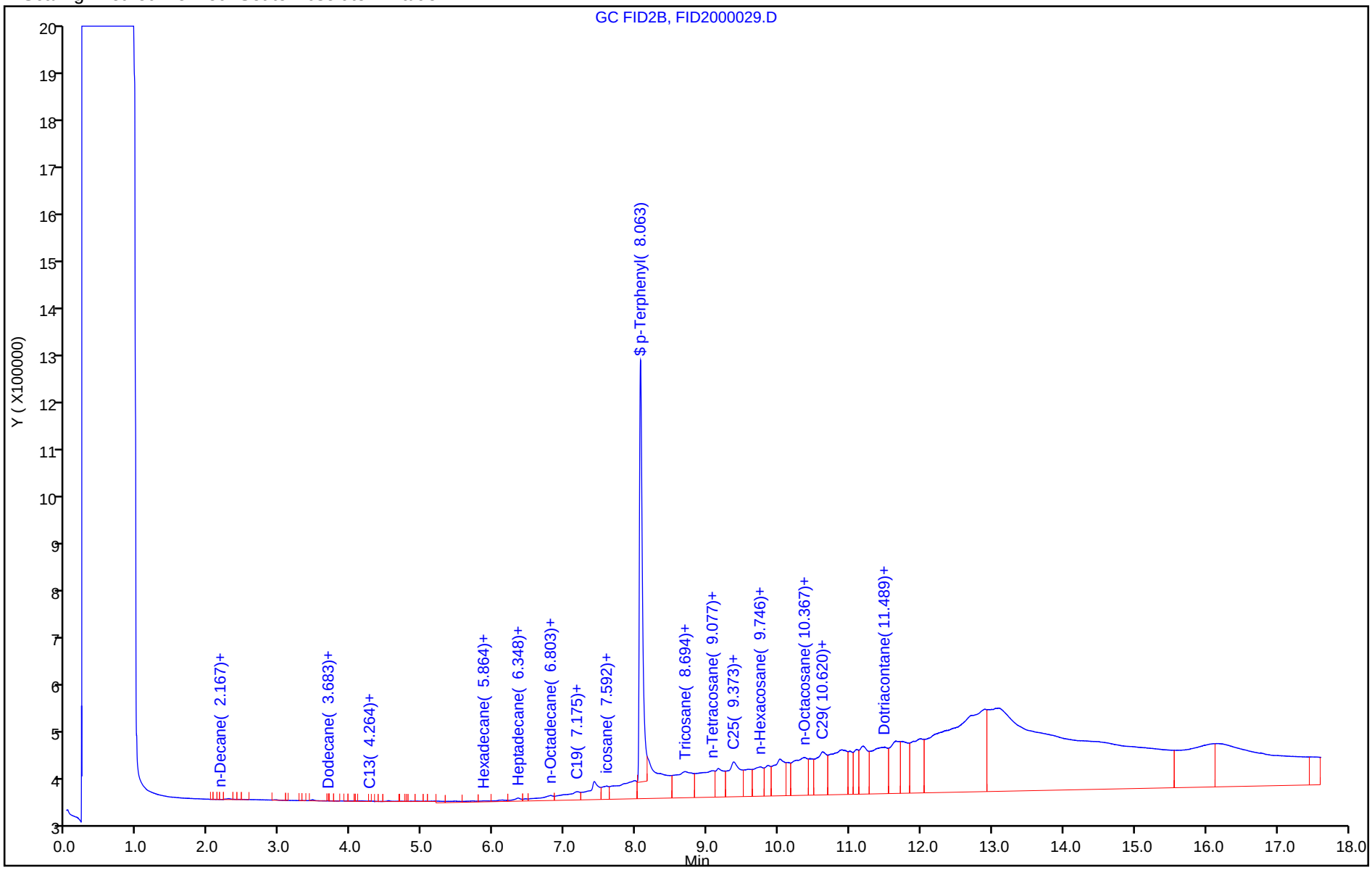
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 04-Sep-2018 12:55:22 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000029.D				
Injection Date:	31-Aug-2018 22:16:30	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88241-E-4-A	Lab Sample ID:	720-88241-4	Worklist Smp#:	29
Client ID:	DG-D9S--0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	79
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000029.D
Lims ID: 720-88241-E-4-A
Client ID: DG-D9S--0.5-1
Sample Type: Client
Inject. Date: 31-Aug-2018 22:16:30 ALS Bottle#: 79 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053602-029
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\DRO6_B.m
Limit Group: DRO
Last Update: 04-Sep-2018 12:55:21 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK017

First Level Reviewer: luj Date: 04-Sep-2018 12:55:21

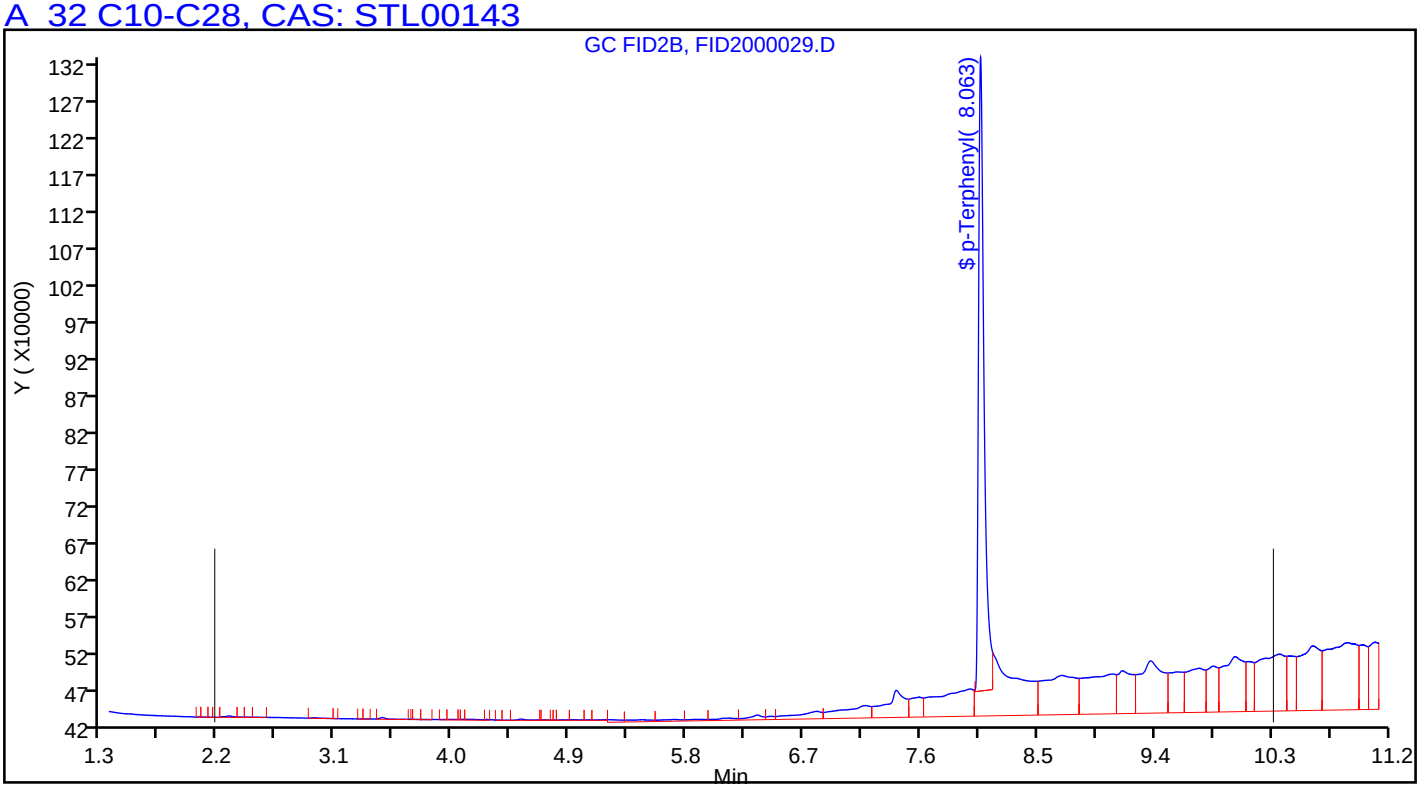
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	29.3	117.34

Report Date: 04-Sep-2018 12:55:25 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000029.D				
Injection Date:	31-Aug-2018 22:16:30	Instrument ID:	CHDRO6		
Lims ID:	720-88241-E-4-A	Lab Sample ID:	720-88241-4		
Client ID:	DG-D9S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	79	Worklist Smp#:	29
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

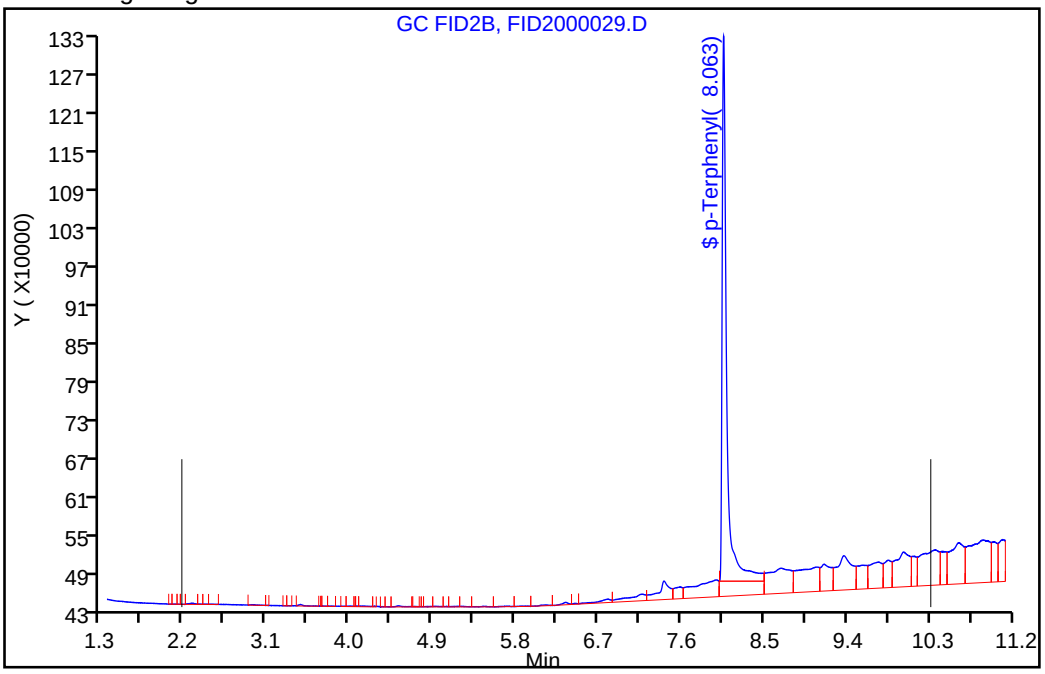
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000029.D				
Injection Date:	31-Aug-2018 22:16:30	Instrument ID:	CHDRO6		
Lims ID:	720-88241-E-4-A	Lab Sample ID:	720-88241-4		
Client ID:	DG-D9S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	79	Worklist Smp#:	29
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.243, CAS: STL00143

Signal: 1

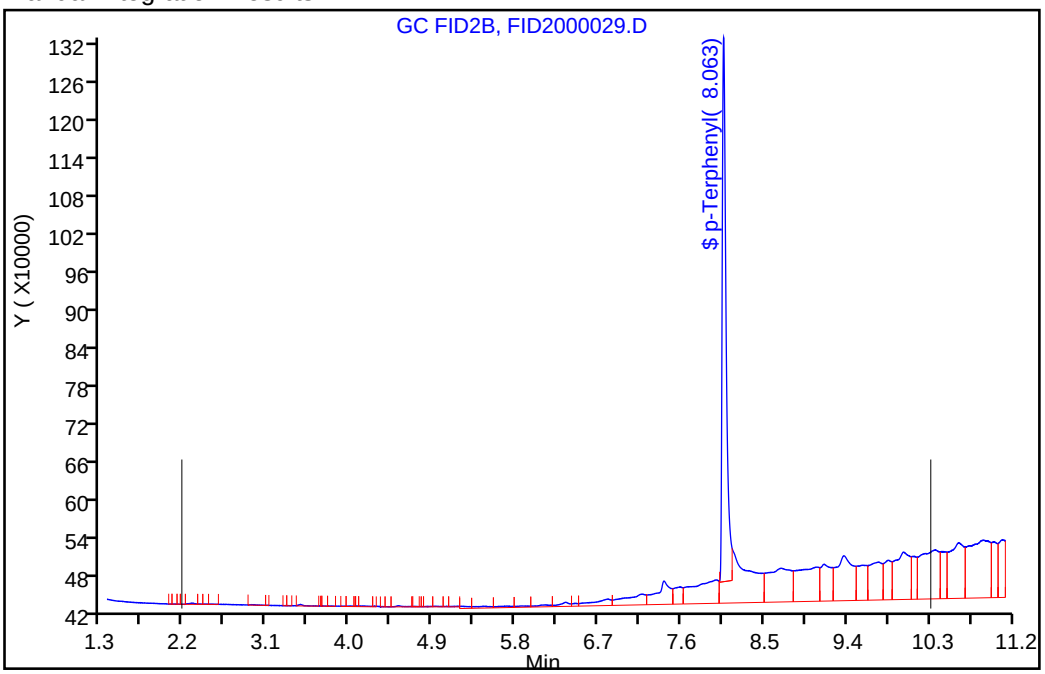
Processing Integration Results

RT: 6.24
Response: 115360373
Amount: 72.618703



Manual Integration Results

RT: 6.24
Response: 180138752
Amount: 109.2975



Reviewer: luj, 04-Sep-2018 12:55:13

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

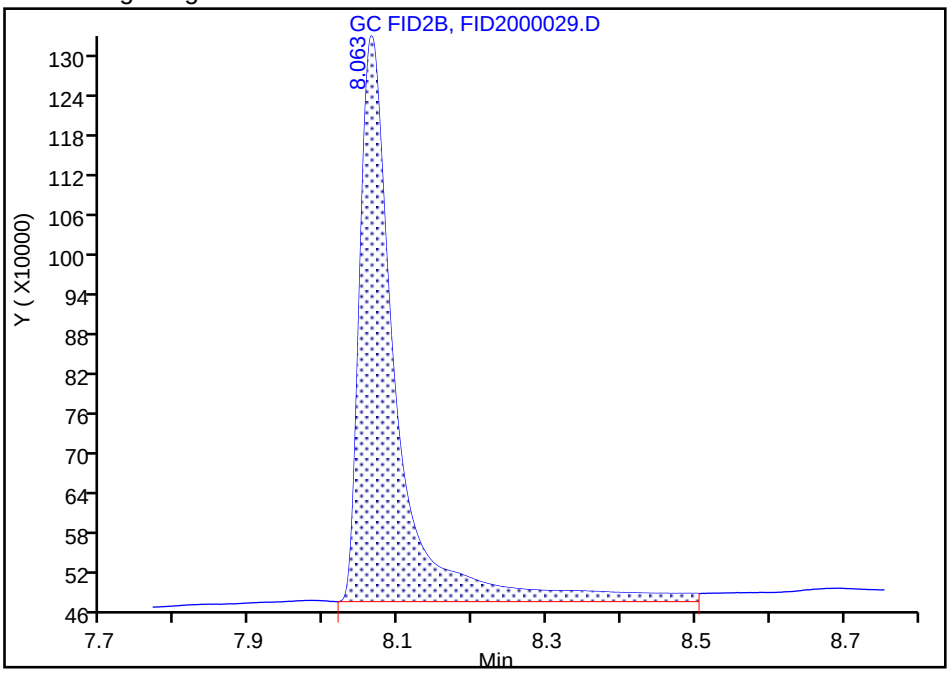
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000029.D				
Injection Date:	31-Aug-2018 22:16:30	Instrument ID:	CHDRO6		
Lims ID:	720-88241-E-4-A	Lab Sample ID:	720-88241-4		
Client ID:	DG-D9S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	79	Worklist Smp#:	29
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

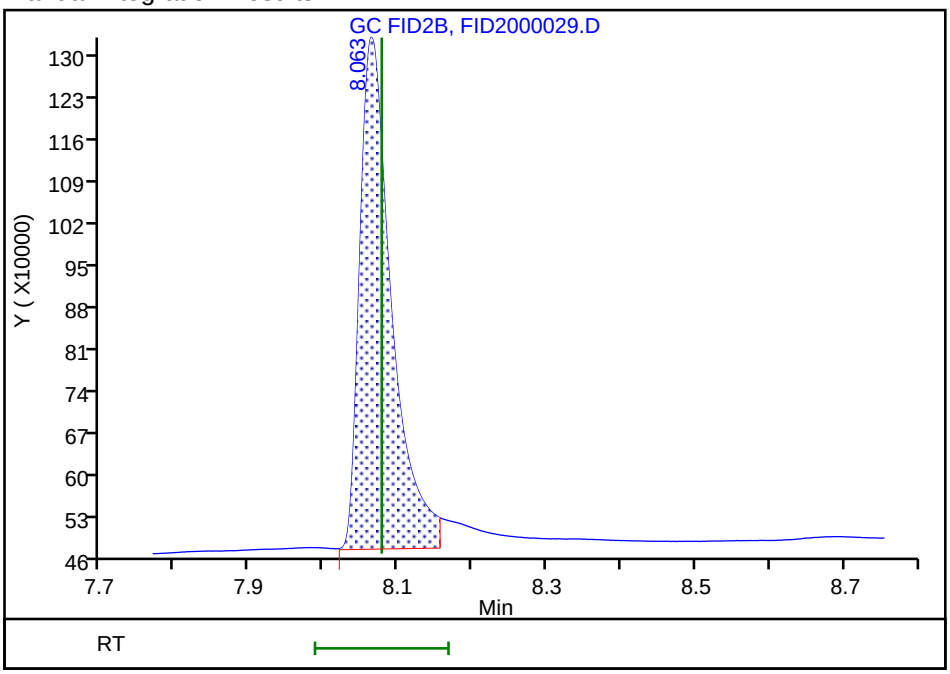
Processing Integration Results

RT: 8.06
Area: 59198466
Amount: 34.173700
Amount Units: mg/L



Manual Integration Results

RT: 8.06
Area: 50816335
Amount: 29.334918
Amount Units: mg/L



Reviewer: luj, 04-Sep-2018 12:54:42

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88241-1

SDG No.:

Client Sample ID: DG-D9S-3.5-4 Lab Sample ID: 720-88241-5

Matrix: Solid Lab File ID: FID2000032.D

Analysis Method: 8015B Date Collected: 08/24/2018 11:35

Extraction Method: 3546 Date Extracted: 08/29/2018 09:03

Sample wt/vol: 15.63(g) Date Analyzed: 08/31/2018 23:29

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250656 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	53000		1900	720

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	82		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000032.D
Lims ID: 720-88241-E-5-A
Client ID: DG-D9S--3.5-4
Sample Type: Client
Inject. Date: 31-Aug-2018 23:29:39 ALS Bottle#: 82 Worklist Smp#: 32
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053602-032
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\DRO6_B.m
Limit Group: DRO
Last Update: 04-Sep-2018 12:59:01 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK017

First Level Reviewer: luj Date: 04-Sep-2018 12:59:01

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.307			ND	
23 n-Decane	2.163	2.169	-0.006	81580	NC	
A 1 C9-C13	2.775	(1.307-4.243)		2330339	1.07	M
A 21 Stoddard Solvent	2.775	(1.307-4.243)		2330339	NC	M
A 57 C10-C12	2.898	(2.169-3.628)		1404022	8.09	
24 Dodecane	3.610	3.628	-0.018	23565	NC	
A 3 C9 - C17	3.806	(1.307-6.306)		12247408	5.36	M
A 60 C10-C16	4.000	(2.169-5.830)		7699206	3.80	M
A 47 C9 - C18	4.028	(1.307-6.750)		18254478	9.64	M
A 25 C9-C19	4.240	(1.307-7.174)		52367863	22.8	M
A 15 Kerosene	4.240	(1.307-7.174)		52367863	27.6	M
26 C13	4.343	4.243	0.100	440867	NC	M
$ 27 n-Decanoic Acid (Surr)		4.632			ND	U
A 59 C12-C16	4.729	(3.628-5.830)		6318749	10.9	M
A 61 C10-C20	4.875	(2.169-7.581)		73018886	48.6	M
A 28 C9-C24	5.179	(1.307-9.051)		325549958	191.6	M
A 29 C9-C25	5.345	(1.307-9.384)		390235083	228.3	M
A 54 C10-C23	5.437	(2.169-8.705)		266783288	158.4	M
A 4 C10-C24	5.610	(2.169-9.051)		325425942	191.6	M
A 16 C10-C25	5.777	(2.169-9.384)		390111067	228.2	M
45 Hexadecane	5.841	5.830	0.011	1279952	NC	M
A 14 C10-C26	5.937	(2.169-9.705)		428905705	250.2	M
A 67 C12-C22	5.986	(3.628-8.345)		188443614	114.0	M
A 32 C10-C28	6.243	(2.169-10.317)		714785260	412.0	M
A 5 Diesel	6.243	(2.169-10.317)		714785260	412.0	M
A 12 Unknown Hydrocarbons	6.243	(2.169-10.317)		714785260	NC	M
A 30 C13-C22	6.294	(4.243-8.345)		187617748	113.5	M
44 Heptadecane	6.335	6.306	0.029	4418697	NC	M
A 31 C12-C24	6.339	(3.628-9.051)		324045485	190.8	M
49 n-Octadecane	6.794	6.750	0.044	12436008	NC	M
A 9 Crude Oil Range Organics (	6.859	(1.307-12.411)		1699419776	NC	M
A 11 Bunker Range Organics (C9-	6.859	(1.307-12.411)		1699419776	NC	M

Report Date: 04-Sep-2018 12:59:02 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000032.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.859	(1.307-12.411)		1699419776	805.0	M
33 C19	7.173	7.174	-0.001	21677377	NC	M
A 64 C13-C28	7.280	(4.243-10.317)		712578937	410.8	M
A 17 C10-C36	7.290	(2.169-12.411)		1699295760	969.5	M
A 68 Crude Oil Range Organics (	7.349	(1.307-13.391)		3006774565	NC	M
A 13 C9-C40	7.349	(1.307-13.391)		3006774565	1924.6	M
A 58 C16-C24	7.441	(5.830-9.051)		317726736	187.2	M
62 icosane	7.592	7.581	0.011	18663393	NC	M
A 6 C10-C40	7.780	(2.169-13.391)		3006650549	1926.6	M
$ 34 p-Terphenyl	8.063	8.077	-0.014	35511176	20.5	
35 n-Docosane	8.396	8.345	0.051	25717054	NC	M
A 18 C12-C40	8.509	(3.628-13.391)		3005270092	1931.1	M
36 Tricosane	8.692	8.705	-0.013	22158905	NC	M
A 66 C13-C40	8.817	(4.243-13.391)		3004444226	1932.7	M
37 n-Tetracosane	9.054	9.051	0.003	26824280	NC	M
A 2 C16-C36 ORO	9.120	(5.830-12.411)		1691596554	1430.6	M
38 C25	9.395	9.384	0.011	38794638	NC	M
A 19 C16-C40	9.611	(5.830-13.391)		2998951343	1935.6	M
46 n-Hexacosane	9.751	9.705	0.046	95458616	NC	M
A 20 C19-C36	9.792	(7.174-12.411)		1225780098	900.4	
A 55 C23-C32	10.065	(8.705-11.426)		1067433840	1379.3	M
39 n-Octacosane	10.252	10.317	-0.065	96081216	NC	M
65 C29	10.639	10.607	0.032	48576775	NC	M
A 40 C24-C36	10.731	(9.051-12.411)		1352364087	1379.4	M
A 7 Motor Oil	10.731	(9.051-12.411)		1124094270	1146.6	
A 10 C22-C40	10.868	(8.345-13.391)		1525632605	1097.6	
A 50 C25-C36	10.898	(9.384-12.411)		1035079321	1123.6	
A 41 C23-C40	11.048	(8.705-13.391)		1489012598	1089.5	
A 8 C24-C40	11.221	(9.051-13.391)		1471640750	1097.2	
56 Dotriacontane	11.377	11.426	-0.049	96626002	NC	M
A 51 C28-C40	11.854	(10.317-13.391)		1186714371	1094.0	
A 63 C29-C40	11.999	(10.607-13.391)		1069075163	1069.8	
42 n-Hexatriacontane	12.362	12.411	-0.049	82567103	NC	M
43 C40		13.391			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

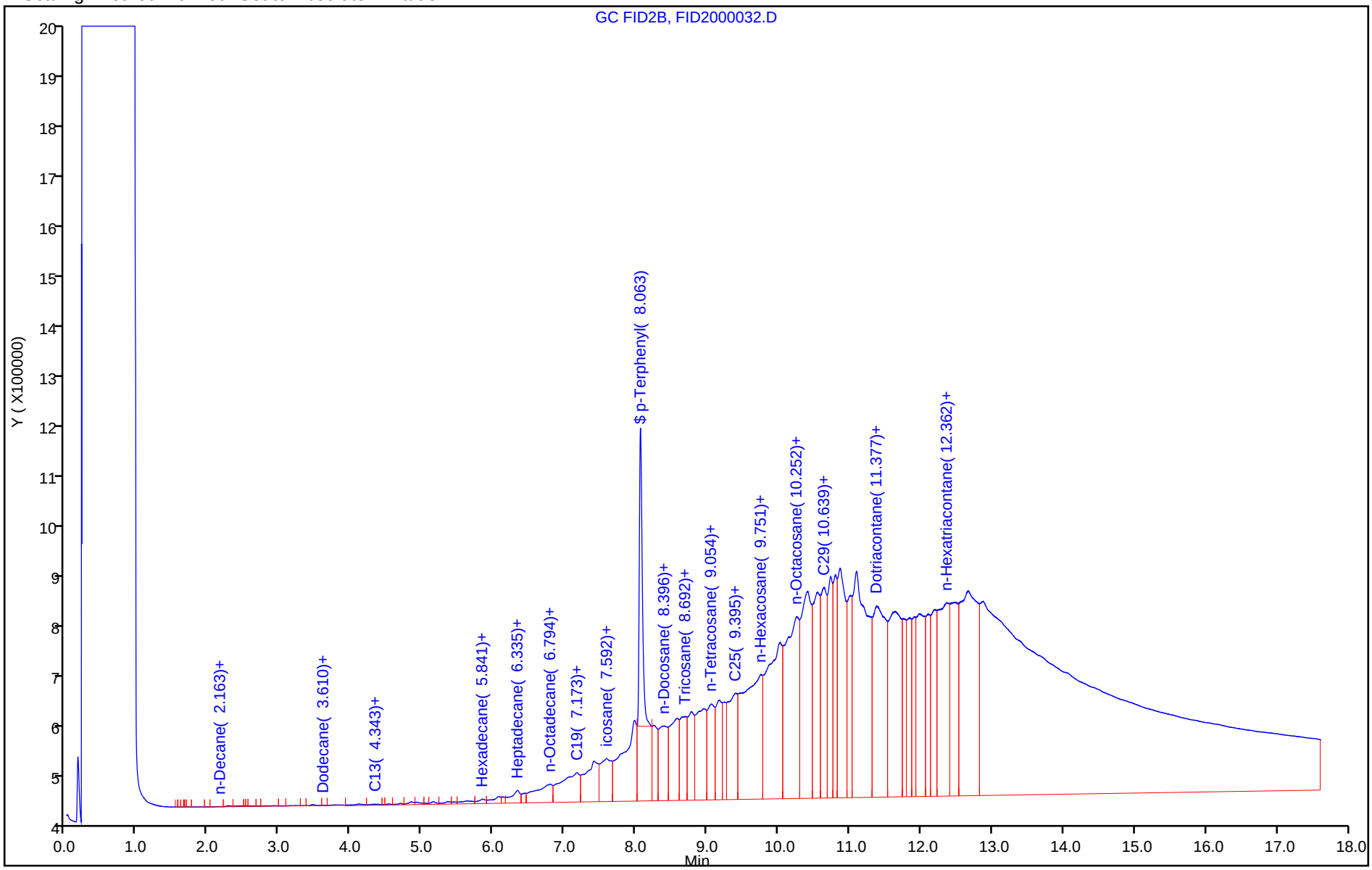
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 04-Sep-2018 12:59:02 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000032.D				
Injection Date:	31-Aug-2018 23:29:39	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88241-E-5-A	Lab Sample ID:	720-88241-5	Worklist Smp#:	32
Client ID:	DG-D9S--3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	82
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000032.D				
Lims ID:	720-88241-E-5-A				
Client ID:	DG-D9S--3.5-4				
Sample Type:	Client				
Inject. Date:	31-Aug-2018 23:29:39	ALS Bottle#:	82	Worklist Smp#:	32
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	720-0053602-032				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\DRO6_B.m				
Limit Group:	DRO				
Last Update:	04-Sep-2018 12:59:01	Calib Date:	31-Aug-2018 08:43:29		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000003.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK017				
First Level Reviewer: luj		Date:	04-Sep-2018 12:59:01		

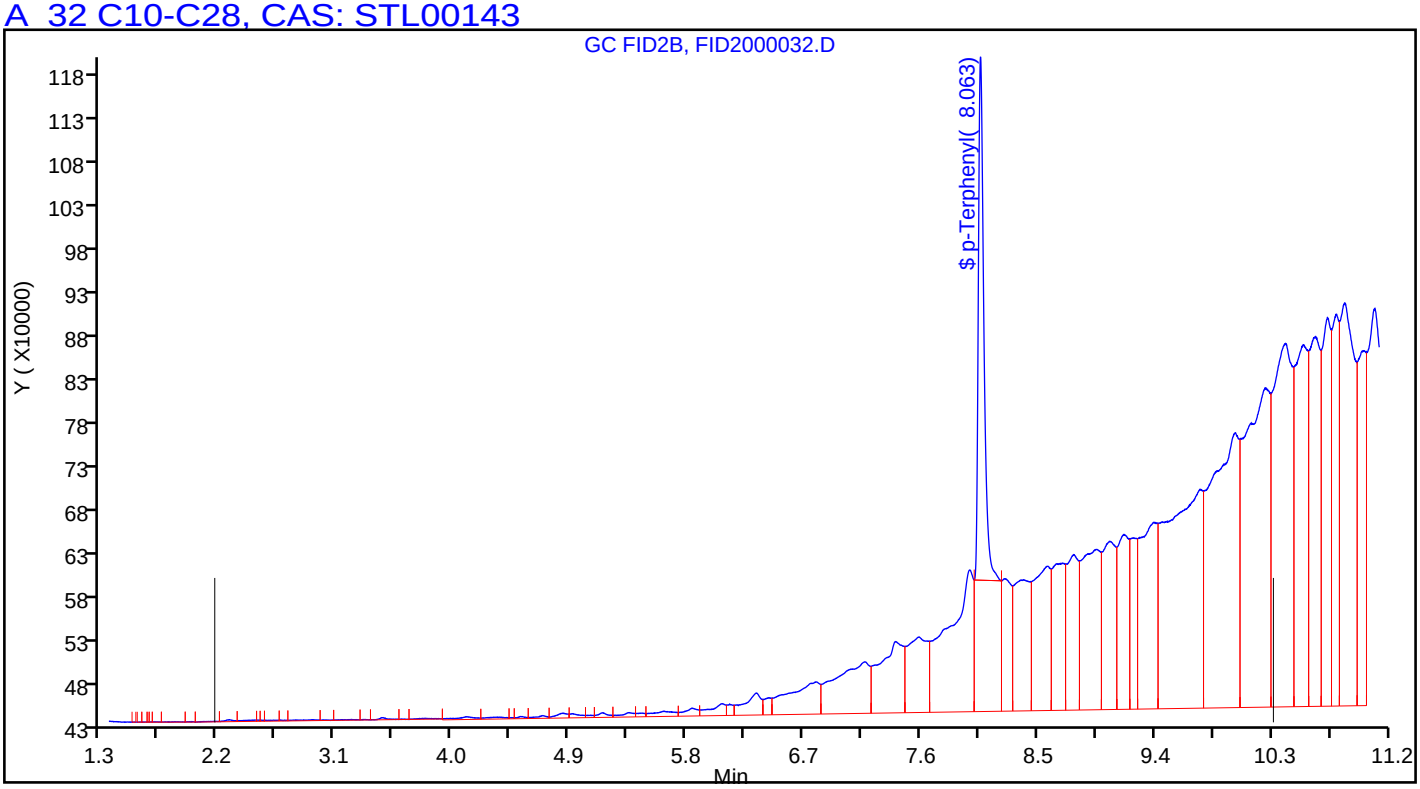
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	20.5	82.00

Report Date: 04-Sep-2018 12:59:05 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000032.D				
Injection Date:	31-Aug-2018 23:29:39	Instrument ID:	CHDRO6		
Lims ID:	720-88241-E-5-A	Lab Sample ID:	720-88241-5		
Client ID:	DG-D9S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	82	Worklist Smp#:	32
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

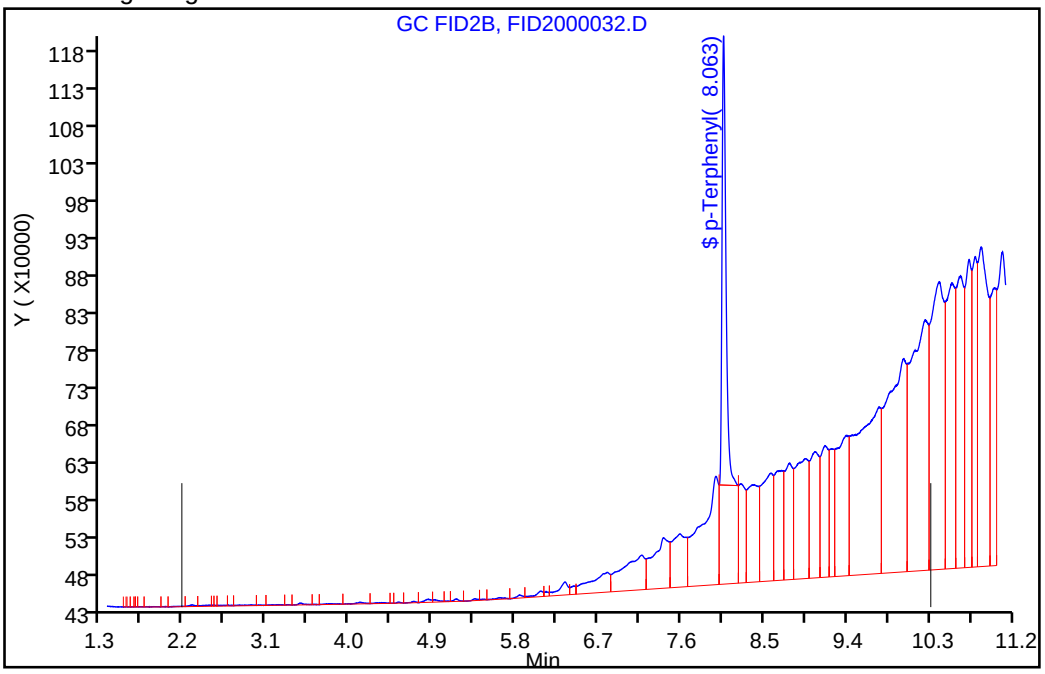
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000032.D				
Injection Date:	31-Aug-2018 23:29:39	Instrument ID:	CHDRO6		
Lims ID:	720-88241-E-5-A	Lab Sample ID:	720-88241-5		
Client ID:	DG-D9S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	82	Worklist Smp#:	32
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.243, CAS: STL00143

Signal: 1

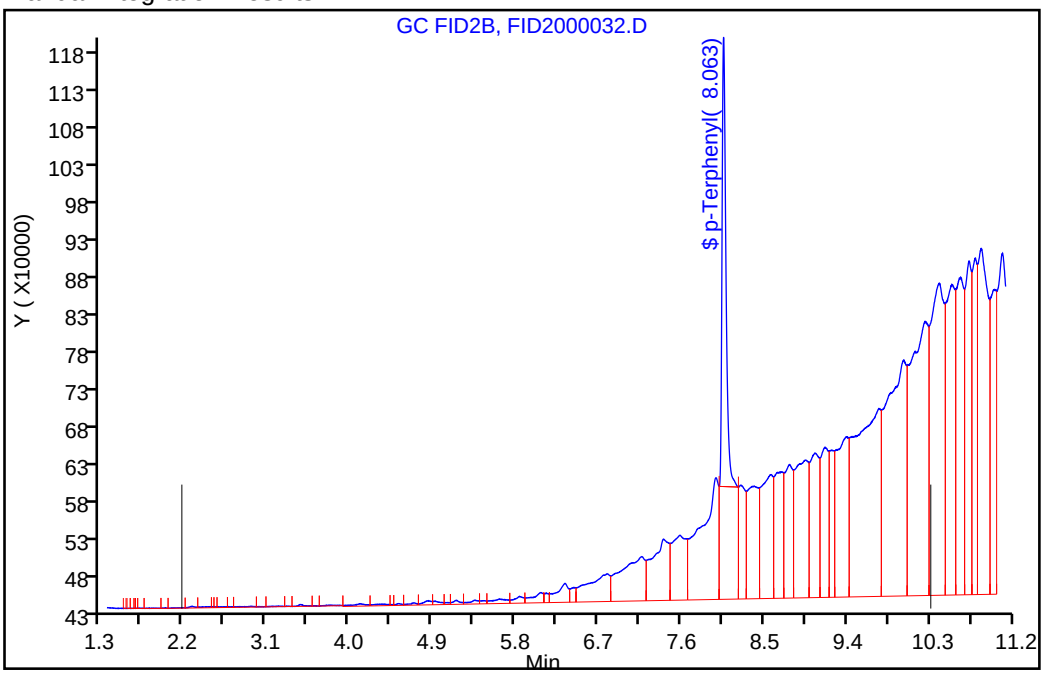
Processing Integration Results

RT: 6.24
Response: 609095871
Amount: 352.1819



Manual Integration Results

RT: 6.24
Response: 714785260
Amount: 412.0253



Reviewer: luj, 04-Sep-2018 12:58:49

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88241-1
SDG No.:
Client Sample ID: DG-D9S-9.5-10
Lab Sample ID: 720-88241-6
Matrix: Solid
Lab File ID: FID1000010.D
Analysis Method: 8015B
Date Collected: 08/24/2018 11:35
Extraction Method: 3546
Date Extracted: 08/29/2018 09:03
Sample wt/vol: 15.51(g)
Date Analyzed: 09/04/2018 13:21
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250762
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	840	J	1900	730

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	94		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000010.D
Lims ID: 720-88241-D-6-A
Client ID: DG-D9S--9.5-10
Sample Type: Client
Inject. Date: 04-Sep-2018 13:21:26 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053635-010
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\DRO6_A.m
Limit Group: DRO
Last Update: 04-Sep-2018 13:44:03 Calib Date: 04-Sep-2018 09:05:17
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK017

First Level Reviewer: luj Date: 04-Sep-2018 13:44:03

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.227			ND	
23 n-Decane	2.104	2.116	-0.012	18865	NC	
A 1 C9-C13	2.734	(1.227-4.241)		2115300	1.19	
A 21 Stoddard Solvent	2.734	(1.227-4.241)		2115300	1.19	
A 57 C10-C12	2.864	(2.116-3.613)		1570378	1.02	
24 Dodecane	3.581	3.613	-0.032	31364	NC	
A 3 C9 - C17	3.780	(1.227-6.332)		3173060	1.63	
A 60 C10-C16	3.983	(2.116-5.851)		2757088	1.58	
A 47 C9 - C18	4.005	(1.227-6.784)		3529072	2.19	
A 15 Kerosene	4.220	(1.227-7.214)		3963052	2.45	
A 25 C9-C19	4.220	(1.227-7.214)		3963052	2.02	
26 C13		4.241			ND	
$ 27 n-Decanoic Acid (Surr)		4.611			ND	U
A 59 C12-C16	4.732	(3.613-5.851)		1218074	0.7897	
A 62 C10-C20	4.871	(2.116-7.627)		5650586	3.66	
A 28 C9-C24	5.172	(1.227-9.117)		7971088	5.17	
A 29 C9-C25	5.341	(1.227-9.456)		8462888	5.49	
A 54 C10-C23	5.441	(2.116-8.766)		7730390	5.01	
A 4 C10-C24	5.616	(2.116-9.117)		7730390	5.01	
A 16 C10-C25	5.786	(2.116-9.456)		8222190	5.33	
45 Hexadecane	5.840	5.851	-0.011	69944	NC	
A 14 C10-C26	5.949	(2.116-9.783)		8836022	5.73	
A 67 C12-C22	6.007	(3.613-8.402)		4219834	2.74	
A 32 C10-C28	6.260	(2.116-10.404)		10068921	6.53	
A 5 Diesel	6.260	(2.116-10.404)		10068921	6.53	
A 12 Unknown Hydrocarbons	6.260	(2.116-10.404)		10068921	NC	
A 30 C13-C22	6.321	(4.241-8.402)		4066688	2.64	
44 Heptadecane	6.374	6.332	0.042	154956	NC	
A 31 C12-C24	6.365	(3.613-9.117)		6191376	4.01	
51 n-Octadecane	6.791	6.784	0.007	34653	NC	
A 9 Crude Oil Range Organics (	6.883	(1.227-12.538)		24709228	NC	
A 11 Bunker Range Organics (C9-	6.883	(1.227-12.538)		24709228	NC	

Report Date: 04-Sep-2018 13:44:04 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000010.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.883	(1.227-12.538)		24709228	14.0	
33 C19	7.216	7.214	0.002	31872	NC	
A 64 C13-C28	7.322	(4.241-10.404)		8376761	5.43	
A 17 C10-C36	7.327	(2.116-12.538)		24468530	15.9	
A 68 Crude Oil Range Organics (	7.394	(1.227-13.561)		33334337	NC	
A 13 C9-C40	7.394	(1.227-13.561)		33334337	24.7	
A 58 C16-C24	7.484	(5.851-9.117)		5043246	3.27	
61 icosane	7.616	7.627	-0.011	325324	NC	
A 6 C10-C40	7.838	(2.116-13.561)		33093639	24.6	
$ 34 p-Terphenyl	8.098	8.109	-0.011	45143883	23.5	
35 n-Docosane		8.402			ND	
A 18 C12-C40	8.587	(3.613-13.561)		31554625	23.5	
36 Tricosane	8.756	8.766	-0.010	783706	NC	
A 66 C13-C40	8.901	(4.241-13.561)		31401479	23.4	
37 n-Tetracosane	9.120	9.117	0.003	348066	NC	
A 2 C16-C36 ORO	9.195	(5.851-12.538)		43615085	38.2	
38 C25	9.472	9.456	0.016	613832	NC	
A 19 C16-C40	9.706	(5.851-13.561)		30406495	22.7	
46 n-Hexacosane	9.799	9.783	0.016	493347	NC	
A 20 C19-C36	9.876	(7.214-12.538)		41778113	31.4	
A 55 C23-C32	10.150	(8.766-11.534)		8598453	12.4	
39 n-Octacosane	10.431	10.404	0.027	1117997	NC	
65 C29	10.717	10.700	0.017	1384533	NC	
A 40 C24-C36	10.828	(9.117-12.538)		11903478	13.4	
A 7 Motor Oil	10.828	(9.117-12.538)		11903478	13.4	
A 10 C22-C40		(8.402-13.561)			ND	
A 49 C25-C36	10.997	(9.456-12.538)		16246340	18.1	
A 41 C23-C40	11.164	(8.766-13.561)		26146955	20.5	
A 8 C24-C40	11.339	(9.117-13.561)		25363249	20.8	
56 Dotriacontane	11.550	11.534	0.016	1092753	NC	
A 50 C28-C40	11.983	(10.404-13.561)		23024718	24.3	
A 63 C29-C40	12.130	(10.700-13.561)		21906721	25.3	
42 n-Hexatriacontane	12.606	12.538	0.068	1571364	NC	
43 C40	13.572	13.561	0.011	2291748	NC	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

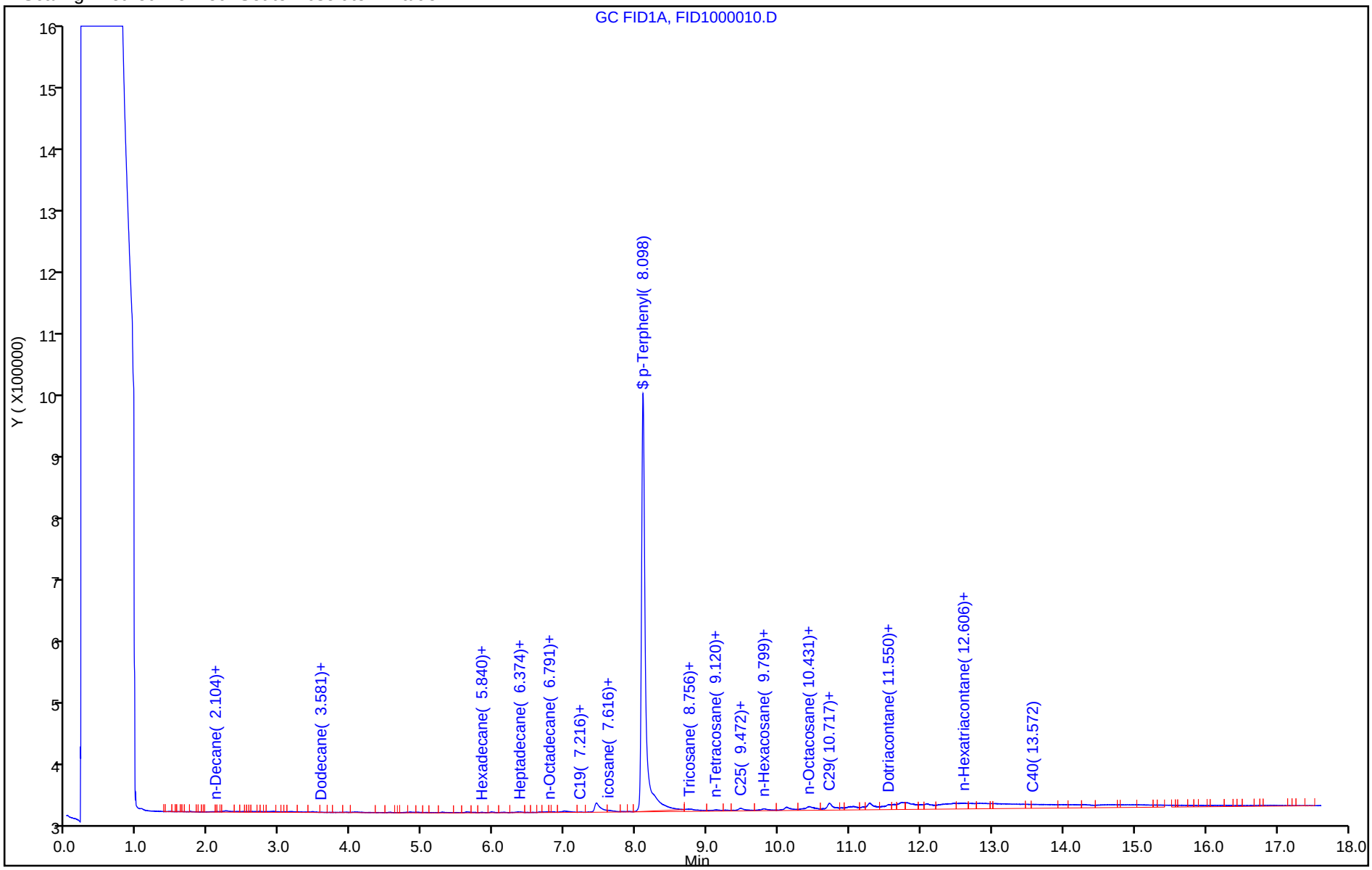
Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

Report Date: 04-Sep-2018 13:44:04 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000010.D				
Injection Date:	04-Sep-2018 13:21:26	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88241-D-6-A	Lab Sample ID:	720-88241-6	Worklist Smp#:	10
Client ID:	DG-D9S--9.5-10				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000010.D
Lims ID: 720-88241-D-6-A
Client ID: DG-D9S--9.5-10
Sample Type: Client
Inject. Date: 04-Sep-2018 13:21:26 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053635-010
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\DRO6_A.m
Limit Group: DRO
Last Update: 04-Sep-2018 13:44:03 Calib Date: 04-Sep-2018 09:05:17
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK017

First Level Reviewer: luj Date: 04-Sep-2018 13:44:03

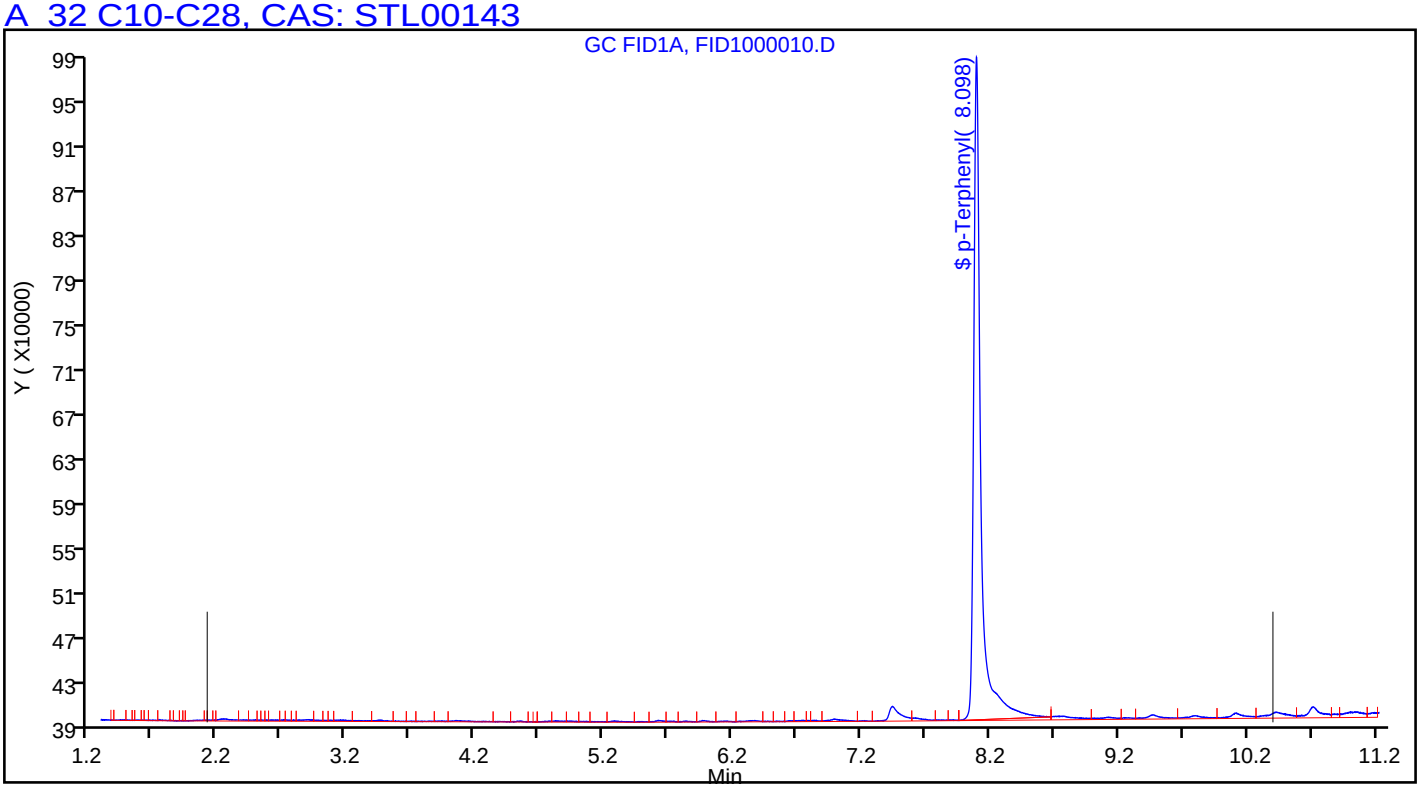
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	23.5	94.03

Report Date: 04-Sep-2018 13:44:05 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000010.D				
Injection Date:	04-Sep-2018 13:21:26	Instrument ID:	CHDRO6		
Lims ID:	720-88241-D-6-A	Lab Sample ID:	720-88241-6		
Client ID:	DG-D9S--9.5-10				
Operator ID:	DCH	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88241-1
SDG No.:
Client Sample ID: DG-F9S-0.5-1
Lab Sample ID: 720-88241-1
Matrix: Solid
Lab File ID: 08311813.D
Analysis Method: 8260B
Date Collected: 08/24/2018 12:10
Sample wt/vol: 6.274(g)
Date Analyzed: 08/31/2018 12:14
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250645
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.0	0.96
67-64-1	Acetone	ND		40	30
71-43-2	Benzene	ND		4.0	0.52
75-27-4	Dichlorobromomethane	ND		4.0	0.57
108-86-1	Bromobenzene	ND		4.0	0.63
74-97-5	Chlorobromomethane	ND		16	0.57
75-25-2	Bromoform	ND		4.0	1.6
74-83-9	Bromomethane	ND		8.0	0.63
78-93-3	2-Butanone (MEK)	ND		40	17
104-51-8	n-Butylbenzene	ND		4.0	0.80
135-98-8	sec-Butylbenzene	ND		4.0	0.57
98-06-6	tert-Butylbenzene	ND		4.0	0.58
75-15-0	Carbon disulfide	ND		4.0	1.6
56-23-5	Carbon tetrachloride	ND		4.0	0.49
108-90-7	Chlorobenzene	ND		4.0	0.55
75-00-3	Chloroethane	ND		8.0	0.45
67-66-3	Chloroform	ND		4.0	0.53
74-87-3	Chloromethane	ND		8.0	0.63
95-49-8	2-Chlorotoluene	ND		4.0	0.52
106-43-4	4-Chlorotoluene	ND		4.0	0.54
124-48-1	Chlorodibromomethane	ND		4.0	0.57
95-50-1	1,2-Dichlorobenzene	ND		4.0	0.54
541-73-1	1,3-Dichlorobenzene	ND		4.0	0.57
106-46-7	1,4-Dichlorobenzene	ND		4.0	0.57
142-28-9	1,3-Dichloropropane	ND		4.0	0.58
563-58-6	1,1-Dichloropropene	ND		4.0	0.55
96-12-8	1,2-Dibromo-3-Chloropropane	ND		8.0	1.4
106-93-4	Ethylene Dibromide	ND		4.0	1.1
74-95-3	Dibromomethane	ND		8.0	0.69
75-71-8	Dichlorodifluoromethane	ND		8.0	0.63
75-34-3	1,1-Dichloroethane	ND		4.0	0.54
107-06-2	1,2-Dichloroethane	ND		4.0	0.61
75-35-4	1,1-Dichloroethene	ND	*	4.0	0.49
156-59-2	cis-1,2-Dichloroethene	ND		4.0	0.54
156-60-5	trans-1,2-Dichloroethene	ND		4.0	0.60
78-87-5	1,2-Dichloropropane	ND		4.0	0.50

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88241-1
SDG No.:
Client Sample ID: DG-F9S-0.5-1
Lab Sample ID: 720-88241-1
Matrix: Solid
Lab File ID: 08311813.D
Analysis Method: 8260B
Date Collected: 08/24/2018 12:10
Sample wt/vol: 6.274(g)
Date Analyzed: 08/31/2018 12:14
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250645
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.0	0.55
10061-02-6	trans-1,3-Dichloropropene	ND		4.0	0.53
100-41-4	Ethylbenzene	ND		4.0	0.60
87-68-3	Hexachlorobutadiene	ND		4.0	0.72
591-78-6	2-Hexanone	ND		40	8.0
98-82-8	Isopropylbenzene	ND		4.0	0.54
99-87-6	4-Isopropyltoluene	ND		4.0	2.0
75-09-2	Methylene Chloride	ND		8.0	4.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		40	8.0
91-20-3	Naphthalene	ND		8.0	1.2
103-65-1	N-Propylbenzene	ND		4.0	0.53
100-42-5	Styrene	ND		4.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.0	0.61
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.0	0.60
127-18-4	Tetrachloroethene	ND		4.0	0.53
108-88-3	Toluene	ND		4.0	0.57
87-61-6	1,2,3-Trichlorobenzene	ND		4.0	0.59
120-82-1	1,2,4-Trichlorobenzene	ND		4.0	0.57
71-55-6	1,1,1-Trichloroethane	ND		4.0	0.49
79-00-5	1,1,2-Trichloroethane	ND		4.0	0.56
79-01-6	Trichloroethene	ND		4.0	0.50
75-69-4	Trichlorofluoromethane	ND		4.0	0.45
96-18-4	1,2,3-Trichloropropane	ND		4.0	0.61
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.0	1.7
95-63-6	1,2,4-Trimethylbenzene	ND		4.0	1.3
108-67-8	1,3,5-Trimethylbenzene	ND		4.0	0.52
108-05-4	Vinyl acetate	ND		16	4.0
75-01-4	Vinyl chloride	ND		4.0	0.58
1330-20-7	Xylenes, Total	ND		4.0	0.97
594-20-7	2,2-Dichloropropane	ND		4.0	1.6
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		200	80

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88241-1

SDG No.:

Client Sample ID: DG-F9S-0.5-1 Lab Sample ID: 720-88241-1

Matrix: Solid Lab File ID: 08311813.D

Analysis Method: 8260B Date Collected: 08/24/2018 12:10

Sample wt/vol: 6.274(g) Date Analyzed: 08/31/2018 12:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250645 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	89		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	117		60-140
2037-26-5	Toluene-d8 (Surr)	94		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311813.D
Lims ID: 720-88241-B-1-A
Client ID: DG-F9S--0.5-1
Sample Type: Client
Inject. Date: 31-Aug-2018 12:14:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88241-B-1 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 14:36:11 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: salgadoa Date: 31-Aug-2018 14:36:11

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	203937	250.0	
* 2 Fluorobenzene	96	10.709	10.709	0.000	98	1047890	25.0	
* 4 Chlorobenzene-d5	117	14.554	14.564	-0.010	85	854309	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	371699	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.304	9.314	0.000	92	69970	7.88	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.821	0.011	0	83362	8.74	
$ 10 Toluene-d8 (Surr)	98	12.821	12.834	0.000	95	294706	7.08	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	92	89110	6.70	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	84	78552	6.04	
28 Acetone	58	6.474	6.480	0.000	98	8681	10.8	
34 Methylene Chloride	84	7.203	7.203	0.000	77	1036	0.1310	a
144 Ethyl acetate	43	9.114	9.113	0.010	97	24842	2.24	
59 Benzene	78	10.487	10.498	0.000	92	2485	0.0657	
75 Toluene	92	12.916	12.906	0.010	97	4901	0.1784	
131 Butyl Ether	87	14.775	14.775	0.000	94	1790	0.2469	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	584148	7.22	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	117632	1.45	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	163782	2.03	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	682371	8.44	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	183630	NC	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	183630	2.27	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	648198	8.02	
A 120 C6-C12	1	14.400	(8.671-20.130)		0	281853	3.49	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	90070	1.11	
A 121 C7-C12	1	15.567	(11.005-20.130)		0	202016	2.50	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

a - User Assigned ID

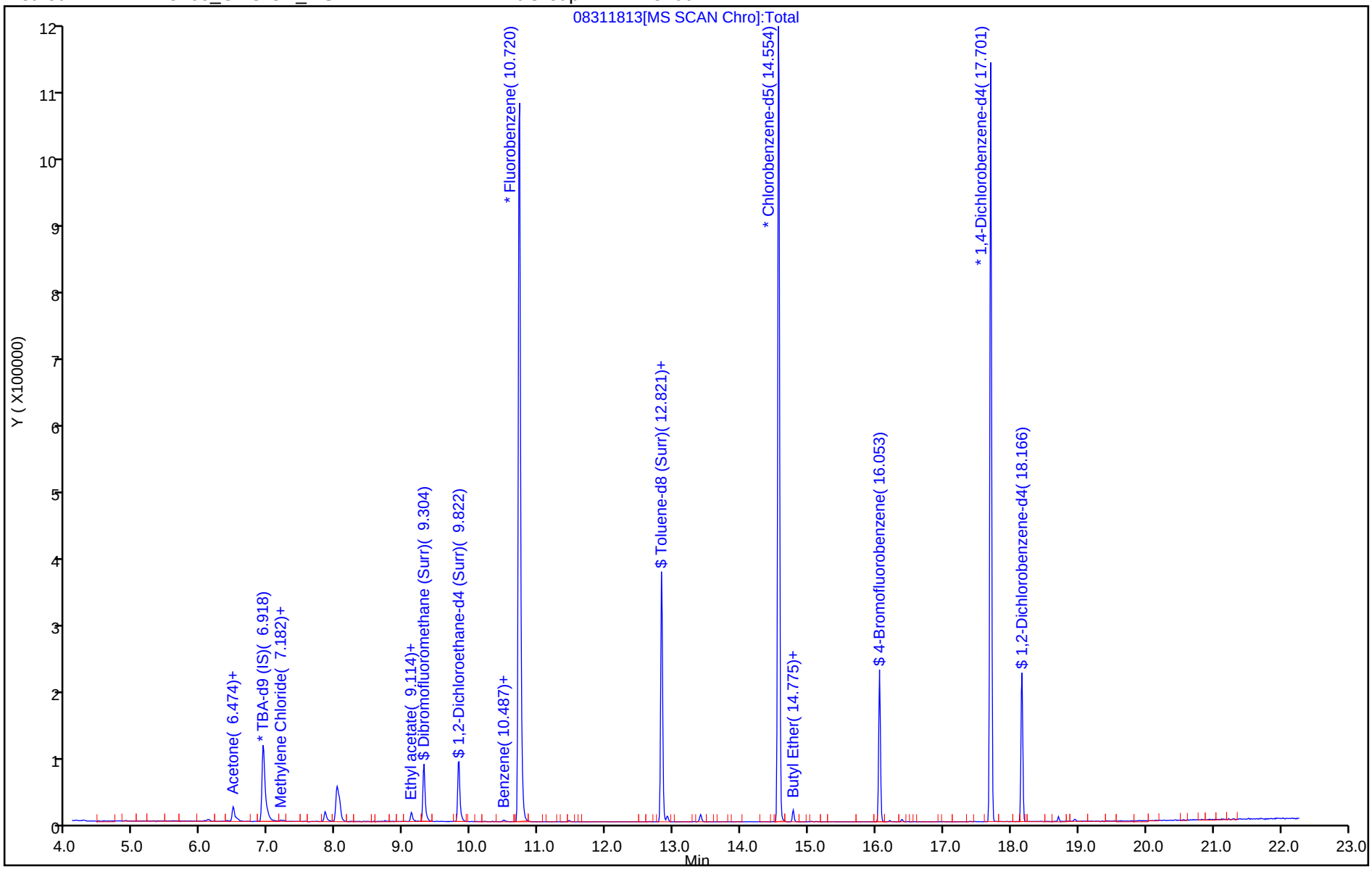
Reagents:

I_IS/SS_00092	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 31-Aug-2018 14:36:14 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311813.D				
Injection Date:	31-Aug-2018 12:14:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88241-B-1-A	Lab Sample ID:	720-88241-1	Worklist Smp#:	13
Client ID:	DG-F9S--0.5-1				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311813.D
Lims ID: 720-88241-B-1-A
Client ID: DG-F9S--0.5-1
Sample Type: Client
Inject. Date: 31-Aug-2018 12:14:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88241-B-1 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 14:36:11 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: salgadoa Date: 31-Aug-2018 14:36:11

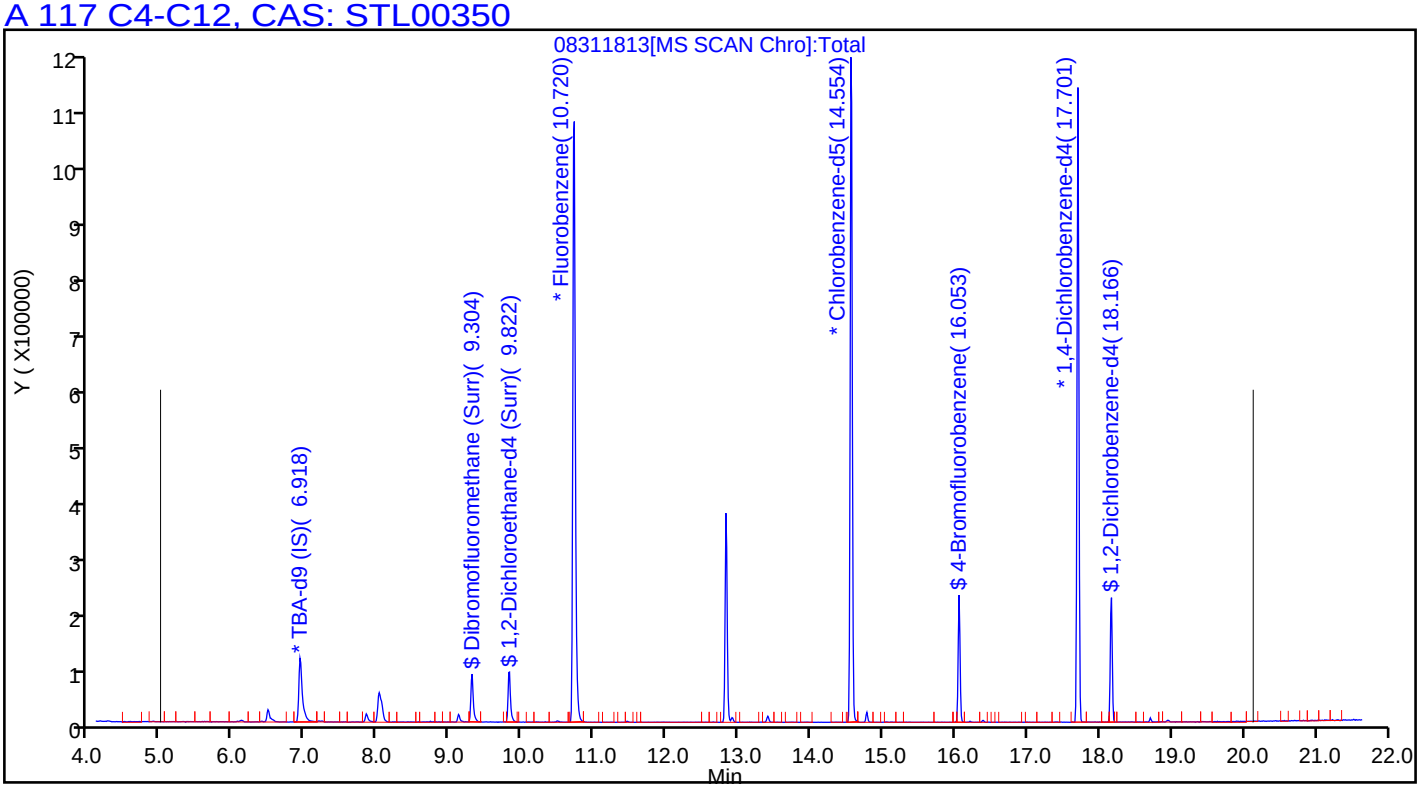
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.74	116.56
$ 10 Toluene-d8 (Surr)	7.50	7.08	94.44
$ 11 4-Bromofluorobenzene	7.50	6.70	89.31
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 31-Aug-2018 14:36:14 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311813.D				
Injection Date:	31-Aug-2018 12:14:30	Instrument ID:	CHMSV2		
Lims ID:	720-88241-B-1-A	Lab Sample ID:	720-88241-1		
Client ID:	DG-F9S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

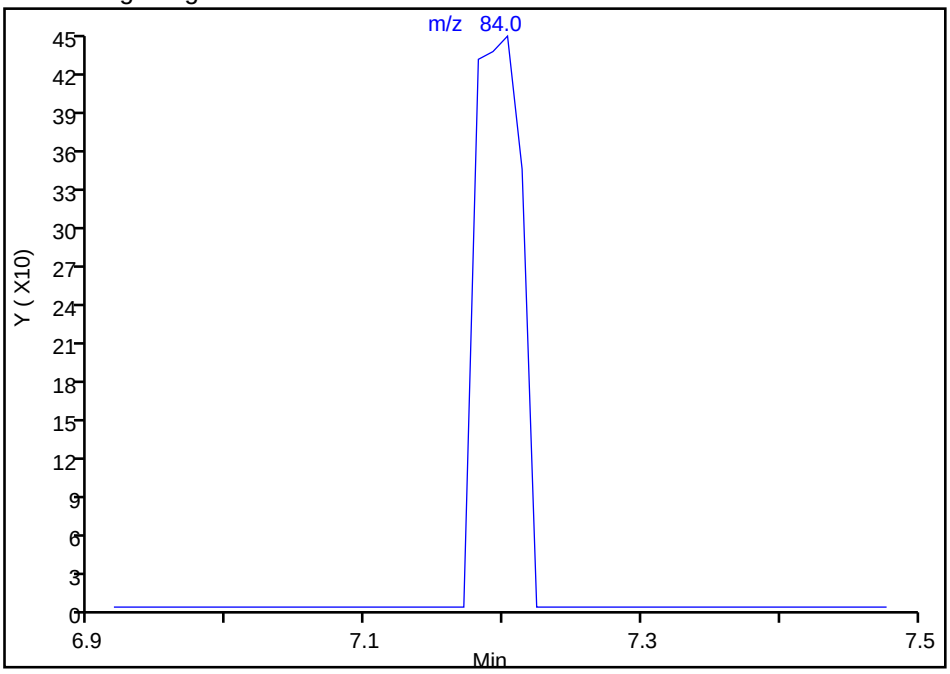
Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311813.D				
Injection Date:	31-Aug-2018 12:14:30	Instrument ID:	CHMSV2		
Lims ID:	720-88241-B-1-A	Lab Sample ID:	720-88241-1		
Client ID:	DG-F9S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

34 Methylene Chloride, CAS: 75-09-2

Signal: 1

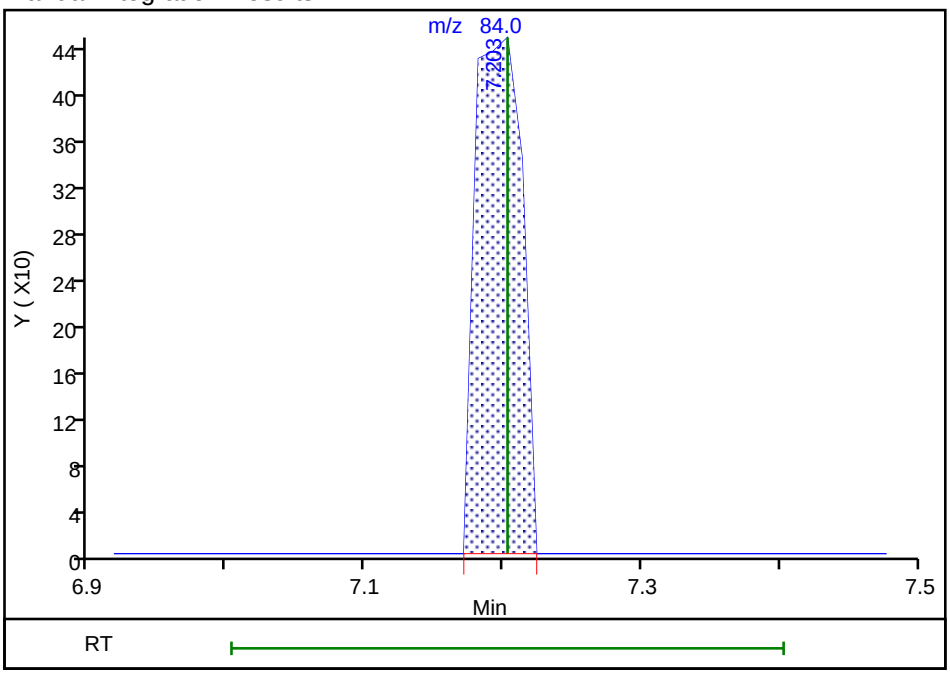
Not Detected
Expected RT: 7.20

Processing Integration Results



RT: 7.20
Area: 1036
Amount: 0.130955
Amount Units: ug/L

Manual Integration Results



Reviewer: salgadoa, 31-Aug-2018 14:35:21
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88241-1

SDG No.:

Client Sample ID: DG-F9S-3.5-4 Lab Sample ID: 720-88241-2

Matrix: Solid Lab File ID: 08311814.D

Analysis Method: 8260B Date Collected: 08/24/2018 12:10

Sample wt/vol: 5.566(g) Date Analyzed: 08/31/2018 12:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250645 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.5	1.1
67-64-1	Acetone	ND		45	34
71-43-2	Benzene	ND		4.5	0.58
75-27-4	Dichlorobromomethane	ND		4.5	0.65
108-86-1	Bromobenzene	ND	*	4.5	0.71
74-97-5	Chlorobromomethane	ND		18	0.65
75-25-2	Bromoform	ND		4.5	1.8
74-83-9	Bromomethane	ND		9.0	0.71
78-93-3	2-Butanone (MEK)	ND		45	19
104-51-8	n-Butylbenzene	ND	*	4.5	0.90
135-98-8	sec-Butylbenzene	ND	*	4.5	0.65
98-06-6	tert-Butylbenzene	ND	*	4.5	0.66
75-15-0	Carbon disulfide	ND		4.5	1.8
56-23-5	Carbon tetrachloride	ND		4.5	0.56
108-90-7	Chlorobenzene	ND		4.5	0.62
75-00-3	Chloroethane	ND		9.0	0.50
67-66-3	Chloroform	ND		4.5	0.59
74-87-3	Chloromethane	ND		9.0	0.71
95-49-8	2-Chlorotoluene	ND	*	4.5	0.58
106-43-4	4-Chlorotoluene	ND	*	4.5	0.61
124-48-1	Chlorodibromomethane	ND		4.5	0.64
95-50-1	1,2-Dichlorobenzene	ND	*	4.5	0.61
541-73-1	1,3-Dichlorobenzene	ND	*	4.5	0.65
106-46-7	1,4-Dichlorobenzene	ND	*	4.5	0.64
142-28-9	1,3-Dichloropropane	ND		4.5	0.66
563-58-6	1,1-Dichloropropene	ND		4.5	0.62
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	9.0	1.5
106-93-4	Ethylene Dibromide	ND		4.5	1.3
74-95-3	Dibromomethane	ND		9.0	0.77
75-71-8	Dichlorodifluoromethane	ND		9.0	0.71
75-34-3	1,1-Dichloroethane	ND		4.5	0.61
107-06-2	1,2-Dichloroethane	ND		4.5	0.68
75-35-4	1,1-Dichloroethene	ND	*	4.5	0.56
156-59-2	cis-1,2-Dichloroethene	ND		4.5	0.61
156-60-5	trans-1,2-Dichloroethene	ND		4.5	0.67
78-87-5	1,2-Dichloropropane	ND		4.5	0.57

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88241-1
SDG No.:
Client Sample ID: DG-F9S-3.5-4
Lab Sample ID: 720-88241-2
Matrix: Solid
Lab File ID: 08311814.D
Analysis Method: 8260B
Date Collected: 08/24/2018 12:10
Sample wt/vol: 5.566(g)
Date Analyzed: 08/31/2018 12:43
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250645
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.5	0.62
10061-02-6	trans-1,3-Dichloropropene	ND		4.5	0.60
100-41-4	Ethylbenzene	ND		4.5	0.67
87-68-3	Hexachlorobutadiene	ND	*	4.5	0.81
591-78-6	2-Hexanone	ND		45	9.0
98-82-8	Isopropylbenzene	ND		4.5	0.61
99-87-6	4-Isopropyltoluene	ND	*	4.5	2.2
75-09-2	Methylene Chloride	ND		9.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		45	9.0
91-20-3	Naphthalene	ND	*	9.0	1.3
103-65-1	N-Propylbenzene	ND	*	4.5	0.59
100-42-5	Styrene	ND		4.5	0.57
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.5	0.68
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	4.5	0.67
127-18-4	Tetrachloroethene	ND		4.5	0.60
108-88-3	Toluene	ND		4.5	0.64
87-61-6	1,2,3-Trichlorobenzene	ND	*	4.5	0.66
120-82-1	1,2,4-Trichlorobenzene	ND	*	4.5	0.64
71-55-6	1,1,1-Trichloroethane	ND		4.5	0.55
79-00-5	1,1,2-Trichloroethane	ND		4.5	0.63
79-01-6	Trichloroethene	ND		4.5	0.57
75-69-4	Trichlorofluoromethane	ND		4.5	0.50
96-18-4	1,2,3-Trichloropropane	ND	*	4.5	0.69
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.5	1.9
95-63-6	1,2,4-Trimethylbenzene	ND	*	4.5	1.5
108-67-8	1,3,5-Trimethylbenzene	ND	*	4.5	0.58
108-05-4	Vinyl acetate	ND		18	4.5
75-01-4	Vinyl chloride	ND		4.5	0.66
1330-20-7	Xylenes, Total	ND		4.5	1.1
594-20-7	2,2-Dichloropropane	ND		4.5	1.8
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		220	90

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88241-1

SDG No.:

Client Sample ID: DG-F9S-3.5-4 Lab Sample ID: 720-88241-2

Matrix: Solid Lab File ID: 08311814.D

Analysis Method: 8260B Date Collected: 08/24/2018 12:10

Sample wt/vol: 5.566(g) Date Analyzed: 08/31/2018 12:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250645 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	81		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		60-140
2037-26-5	Toluene-d8 (Surr)	92		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311814.D
Lims ID: 720-88241-B-2-A
Client ID: DG-F9S--3.5-4
Sample Type: Client
Inject. Date: 31-Aug-2018 12:43:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88241-B-2 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 14:36:56 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: salgadoa Date: 31-Aug-2018 14:36:56

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	142875	250.0	
* 2 Fluorobenzene	96	10.709	10.709	0.000	98	852581	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.564	0.000	85	651202	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	250821	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.305	9.314	0.001	93	57168	7.92	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.821	0.011	0	63226	8.15	
$ 10 Toluene-d8 (Surr)	98	12.822	12.834	0.001	94	233028	6.88	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	92	61587	6.07	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	83	51265	5.84	
28 Acetone	58	6.474	6.480	0.000	97	10428	15.9	
34 Methylene Chloride	84	7.182	7.203	-0.021	21	971	0.1509	
59 Benzene	78	10.488	10.498	0.001	92	2454	0.0798	
75 Toluene	92	12.917	12.906	0.011	98	6030	0.2879	
131 Butyl Ether	87	14.775	14.775	0.000	93	1737	0.3143	
85 m-Xylene & p-Xylene	91	15.040	15.040	-0.010	1	1007	0.0337	a
A 116 C4-C10	1	11.000	(4.985-17.014)		0	608962	9.25	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	96916	1.47	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	137312	2.09	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	698111	10.6	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	147714	NC	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	147714	2.24	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	650150	9.88	
A 120 C6-C12	1	14.400	(8.671-20.130)		0	236863	3.60	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	76540	1.16	
A 121 C7-C12	1	15.567	(11.005-20.130)		0	176325	2.68	
S 122 Xylenes, Total	1				0		0.0337	

QC Flag Legend

Processing Flags

NC - Not Calibrated

s - Failed ISTD Recovery Test

Review Flags

a - User Assigned ID

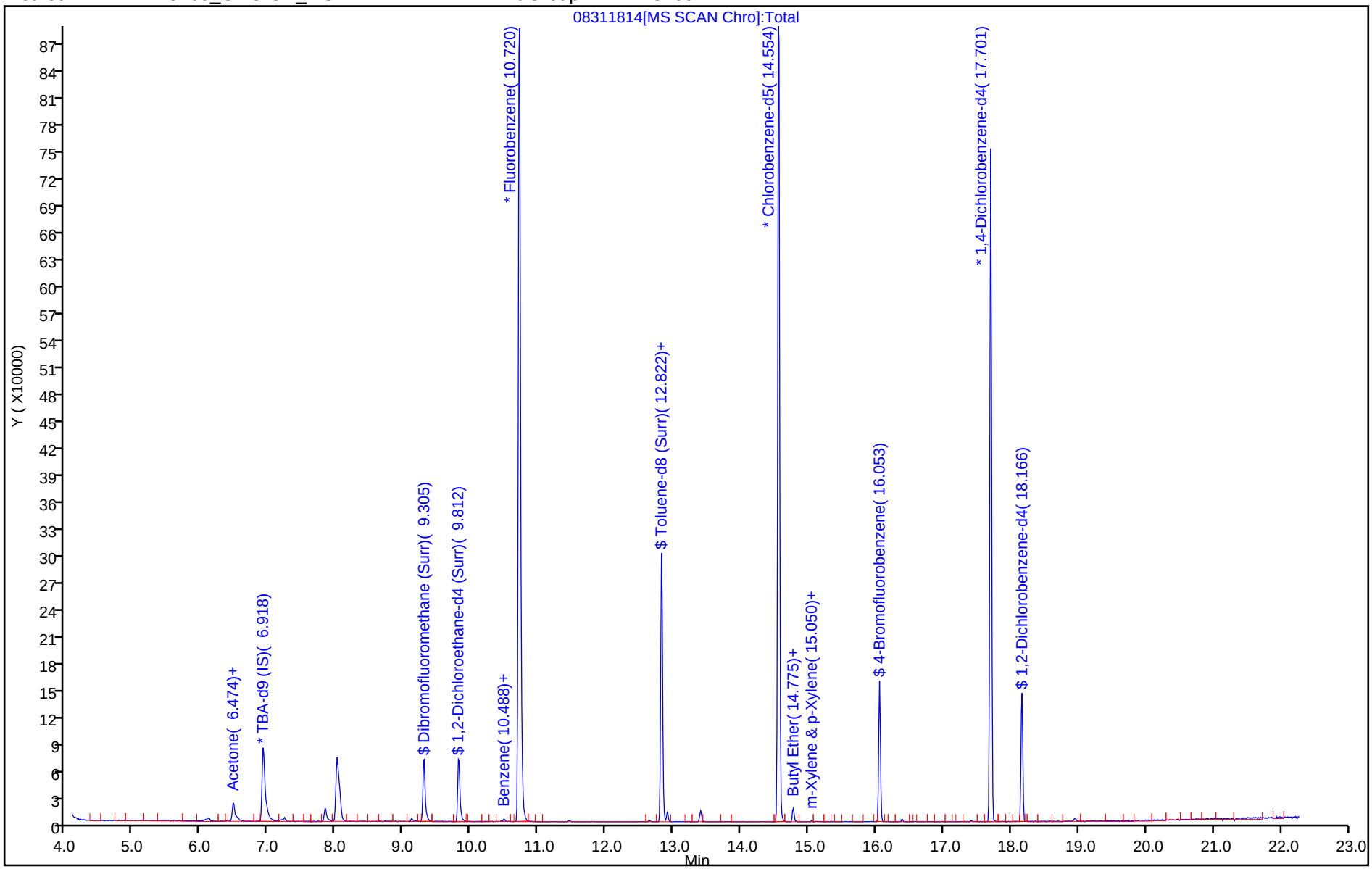
Reagents:

I_IS/SS_00092	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 31-Aug-2018 14:36:56 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311814.D				
Injection Date:	31-Aug-2018 12:43:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88241-B-2-A	Lab Sample ID:	720-88241-2	Worklist Smp#:	14
Client ID:	DG-F9S--3.5-4				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311814.D
Lims ID: 720-88241-B-2-A
Client ID: DG-F9S--3.5-4
Sample Type: Client
Inject. Date: 31-Aug-2018 12:43:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88241-B-2 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 14:36:56 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: salgadoa Date: 31-Aug-2018 14:36:56

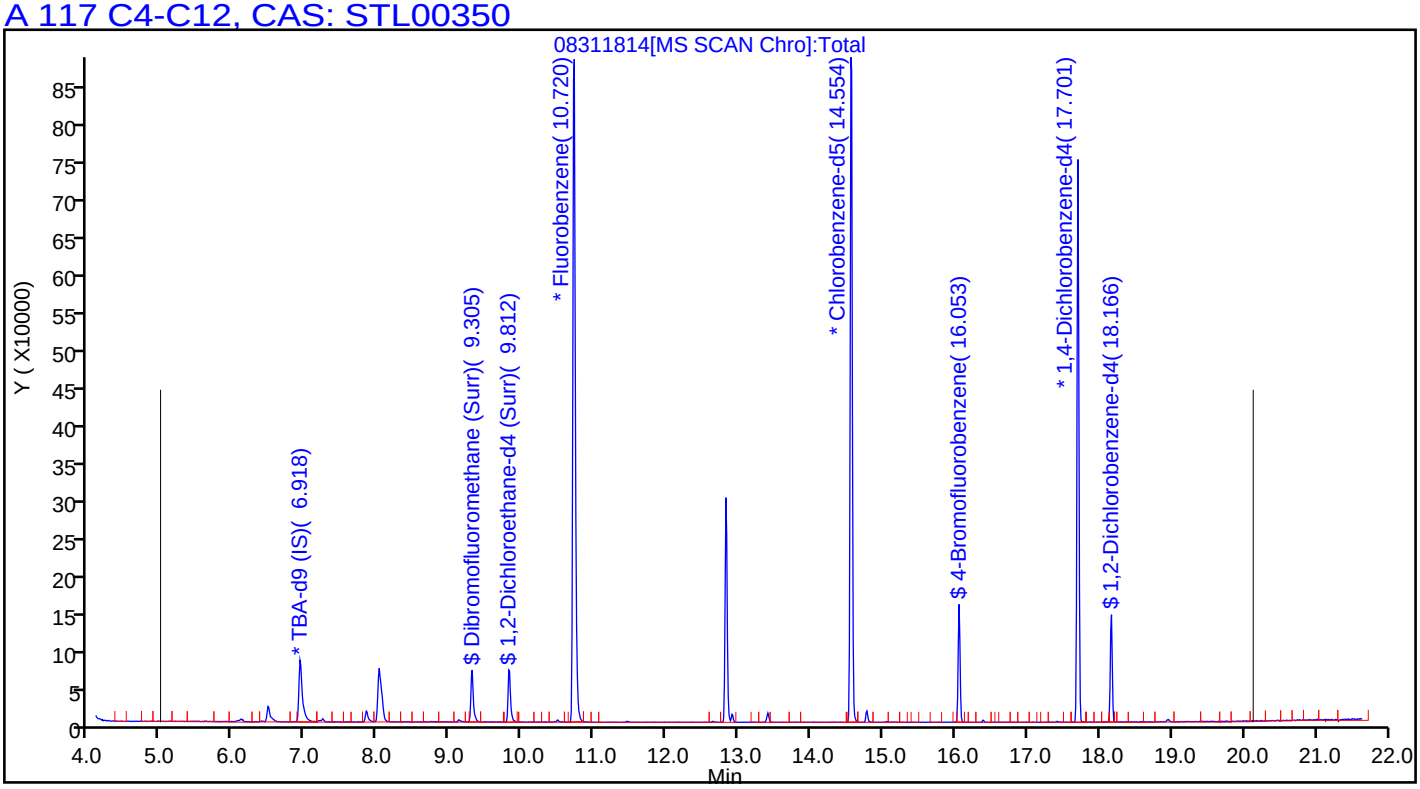
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.15	108.65
$ 10 Toluene-d8 (Surr)	7.50	6.88	91.78
$ 11 4-Bromofluorobenzene	7.50	6.07	80.98
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 31-Aug-2018 14:36:57 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311814.D				
Injection Date:	31-Aug-2018 12:43:30	Instrument ID:	CHMSV2		
Lims ID:	720-88241-B-2-A	Lab Sample ID:	720-88241-2		
Client ID:	DG-F9S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

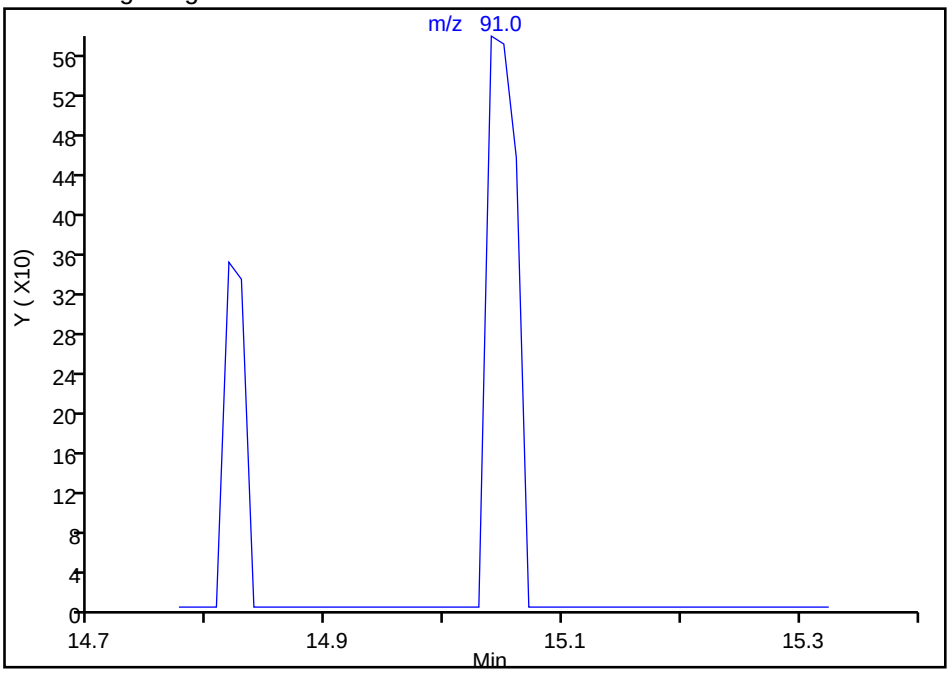
Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311814.D				
Injection Date:	31-Aug-2018 12:43:30	Instrument ID:	CHMSV2		
Lims ID:	720-88241-B-2-A	Lab Sample ID:	720-88241-2		
Client ID:	DG-F9S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

85 m-Xylene & p-Xylene, CAS: 179601-23-1

Signal: 1

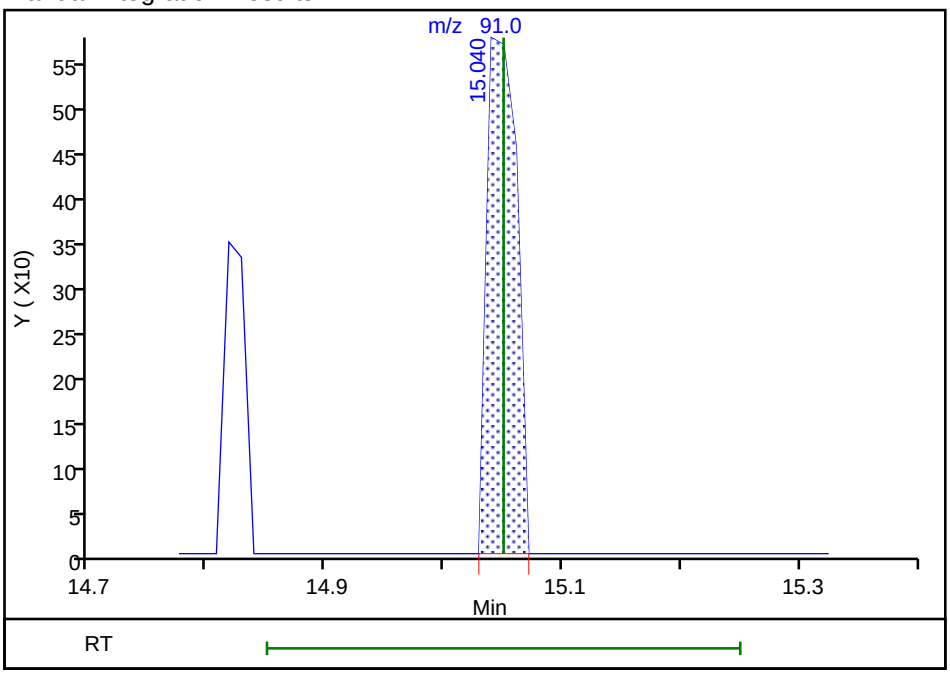
Not Detected
Expected RT: 15.05

Processing Integration Results



Manual Integration Results

RT: 15.04
Area: 1007
Amount: 0.033731
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 14:36:47
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88241-1

SDG No.:

Client Sample ID: DG-F9S-9.5-10 Lab Sample ID: 720-88241-3

Matrix: Solid Lab File ID: 08311815.D

Analysis Method: 8260B Date Collected: 08/24/2018 12:10

Sample wt/vol: 4.847(g) Date Analyzed: 08/31/2018 13:11

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250645 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		5.2	1.2
67-64-1	Acetone	160		52	39
71-43-2	Benzene	ND		5.2	0.67
75-27-4	Dichlorobromomethane	ND		5.2	0.74
108-86-1	Bromobenzene	ND	*	5.2	0.81
74-97-5	Chlorobromomethane	ND		21	0.74
75-25-2	Bromoform	ND	*	5.2	2.1
74-83-9	Bromomethane	ND		10	0.81
78-93-3	2-Butanone (MEK)	29	J	52	22
104-51-8	n-Butylbenzene	ND	*	5.2	1.0
135-98-8	sec-Butylbenzene	ND	*	5.2	0.74
98-06-6	tert-Butylbenzene	ND	*	5.2	0.75
75-15-0	Carbon disulfide	ND		5.2	2.1
56-23-5	Carbon tetrachloride	ND		5.2	0.64
108-90-7	Chlorobenzene	ND	*	5.2	0.71
75-00-3	Chloroethane	ND		10	0.58
67-66-3	Chloroform	ND		5.2	0.68
74-87-3	Chloromethane	ND		10	0.81
95-49-8	2-Chlorotoluene	ND	*	5.2	0.67
106-43-4	4-Chlorotoluene	ND	*	5.2	0.70
124-48-1	Chlorodibromomethane	ND		5.2	0.73
95-50-1	1,2-Dichlorobenzene	ND	*	5.2	0.70
541-73-1	1,3-Dichlorobenzene	ND	*	5.2	0.74
106-46-7	1,4-Dichlorobenzene	ND	*	5.2	0.73
142-28-9	1,3-Dichloropropane	ND		5.2	0.75
563-58-6	1,1-Dichloropropene	ND		5.2	0.71
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	10	1.8
106-93-4	Ethylene Dibromide	ND		5.2	1.5
74-95-3	Dibromomethane	ND		10	0.89
75-71-8	Dichlorodifluoromethane	ND		10	0.81
75-34-3	1,1-Dichloroethane	ND		5.2	0.70
107-06-2	1,2-Dichloroethane	ND		5.2	0.78
75-35-4	1,1-Dichloroethene	ND	*	5.2	0.64
156-59-2	cis-1,2-Dichloroethene	ND		5.2	0.70
156-60-5	trans-1,2-Dichloroethene	ND		5.2	0.77
78-87-5	1,2-Dichloropropane	ND		5.2	0.65

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88241-1
SDG No.:
Client Sample ID: DG-F9S-9.5-10
Lab Sample ID: 720-88241-3
Matrix: Solid
Lab File ID: 08311815.D
Analysis Method: 8260B
Date Collected: 08/24/2018 12:10
Sample wt/vol: 4.847(g)
Date Analyzed: 08/31/2018 13:11
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250645
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		5.2	0.71
10061-02-6	trans-1,3-Dichloropropene	ND		5.2	0.69
100-41-4	Ethylbenzene	ND	*	5.2	0.77
87-68-3	Hexachlorobutadiene	ND	*	5.2	0.93
591-78-6	2-Hexanone	ND		52	10
98-82-8	Isopropylbenzene	ND	*	5.2	0.70
99-87-6	4-Isopropyltoluene	ND	*	5.2	2.6
75-09-2	Methylene Chloride	ND		10	5.8
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		52	10
91-20-3	Naphthalene	ND	*	10	1.5
103-65-1	N-Propylbenzene	ND	*	5.2	0.68
100-42-5	Styrene	ND	*	5.2	0.65
630-20-6	1,1,1,2-Tetrachloroethane	ND	*	5.2	0.78
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	5.2	0.77
127-18-4	Tetrachloroethene	ND		5.2	0.69
108-88-3	Toluene	ND	*	5.2	0.73
87-61-6	1,2,3-Trichlorobenzene	ND	*	5.2	0.76
120-82-1	1,2,4-Trichlorobenzene	ND	*	5.2	0.73
71-55-6	1,1,1-Trichloroethane	ND		5.2	0.63
79-00-5	1,1,2-Trichloroethane	ND		5.2	0.72
79-01-6	Trichloroethene	ND		5.2	0.65
75-69-4	Trichlorofluoromethane	ND		5.2	0.58
96-18-4	1,2,3-Trichloropropane	ND	*	5.2	0.79
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	5.2	2.1
95-63-6	1,2,4-Trimethylbenzene	ND	*	5.2	1.7
108-67-8	1,3,5-Trimethylbenzene	ND	*	5.2	0.67
108-05-4	Vinyl acetate	ND		21	5.2
75-01-4	Vinyl chloride	ND		5.2	0.75
1330-20-7	Xylenes, Total	ND		5.2	1.3
594-20-7	2,2-Dichloropropane	ND		5.2	2.1
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		260	100

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88241-1

SDG No.:

Client Sample ID: DG-F9S-9.5-10 Lab Sample ID: 720-88241-3

Matrix: Solid Lab File ID: 08311815.D

Analysis Method: 8260B Date Collected: 08/24/2018 12:10

Sample wt/vol: 4.847(g) Date Analyzed: 08/31/2018 13:11

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250645 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	70	*	45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		60-140
2037-26-5	Toluene-d8 (Surr)	86		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311815.D
Lims ID: 720-88241-B-3-A
Client ID: DG-F9S--9.5-10
Sample Type: Client
Inject. Date: 31-Aug-2018 13:11:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88241-B-3 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 14:38:16 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: salgadoa Date: 31-Aug-2018 14:38:16

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	144354	250.0	
* 2 Fluorobenzene	96	10.709	10.709	0.000	98	783846	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.564	0.000	85	492963	25.0	s
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	130435	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.304	9.314	0.000	92	52009	7.83	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.821	0.011	0	59201	8.30	
$ 10 Toluene-d8 (Surr)	98	12.821	12.834	0.000	95	201898	6.49	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	92	40235	5.24	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	83	25956	5.69	
28 Acetone	58	6.474	6.480	0.000	98	45700	75.9	
34 Methylene Chloride	84	7.182	7.182	-0.021	23	406	0.0686	a
37 Carbon disulfide	76	7.530	7.530	0.000	96	12369	0.8289	a
44 2-Butanone (MEK)	72	8.755	8.753	0.010	95	6795	14.1	
59 Benzene	78	10.487	10.498	0.000	93	2284	0.0808	
149 Methylcyclohexane	83	11.808	11.808	0.000	1	480	0.0337	a
75 Toluene	92	12.916	12.906	0.010	96	5055	0.3189	
131 Butyl Ether	87	14.775	14.775	0.000	92	1226	0.2930	
85 m-Xylene & p-Xylene	91	15.039	15.039	-0.011	1	1565	0.0692	a
89 o-Xylene	91	15.546	15.546	0.000	1	632	0.0279	a
98 1,3,5-Trimethylbenzene	105	16.898	16.898	0.000	84	2192	0.1403	a
101 1,2,4-Trimethylbenzene	105	17.405	17.405	0.000	1	824	0.0535	a
124 Butane	43	4.995	4.996	-0.001	1	1525	NR	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	881332	14.6	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	162978	2.69	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	198871	3.29	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	951443	15.7	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	247270	NC	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	247270	4.09	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	899555	14.9	
A 120 C6-C12	1	14.400	(8.671-20.130)		0	317381	5.25	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	107786	1.78	

Report Date: 31-Aug-2018 14:38:16 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311815.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
A 121 C7-C12	1	15.567	(11.005-20.130)		0	200259	3.31	
S 122 Xylenes, Total	1				0		0.0971	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

NC - Not Calibrated

s - Failed ISTD Recovery Test

Review Flags

a - User Assigned ID

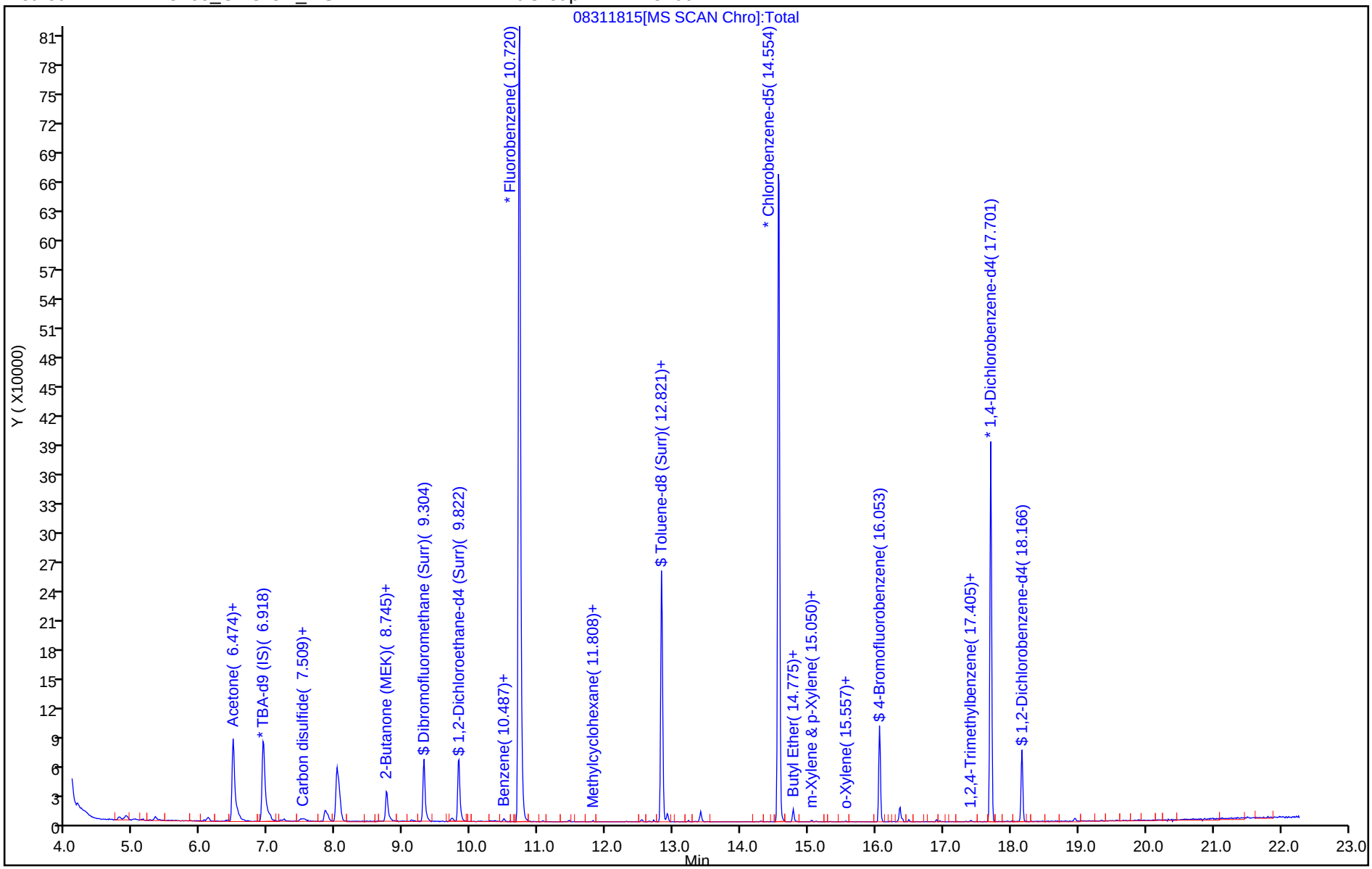
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 14:38:16 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311815.D				
Injection Date:	31-Aug-2018 13:11:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88241-B-3-A	Lab Sample ID:	720-88241-3	Worklist Smp#:	15
Client ID:	DG-F9S--9.5-10				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311815.D
Lims ID: 720-88241-B-3-A
Client ID: DG-F9S--9.5-10
Sample Type: Client
Inject. Date: 31-Aug-2018 13:11:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88241-B-3 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 14:38:16 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: salgadoa Date: 31-Aug-2018 14:38:16

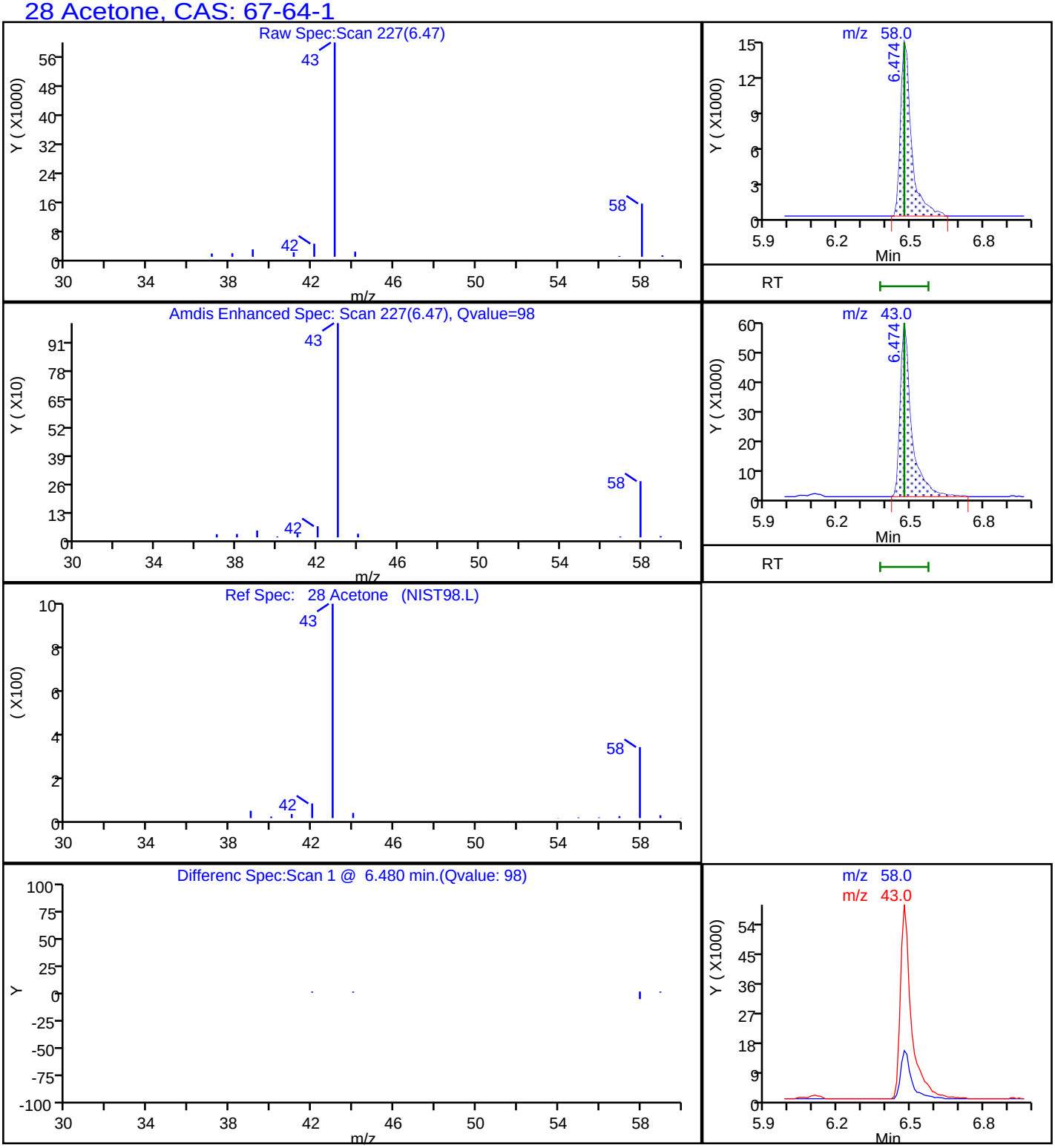
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.30	110.66
$ 10 Toluene-d8 (Surr)	7.50	6.49	86.49
$ 11 4-Bromofluorobenzene	7.50	5.24	69.89
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 31-Aug-2018 14:38:16 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311815.D				
Injection Date:	31-Aug-2018 13:11:30	Instrument ID:	CHMSV2		
Lims ID:	720-88241-B-3-A	Lab Sample ID:	720-88241-3		
Client ID:	DG-F9S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1

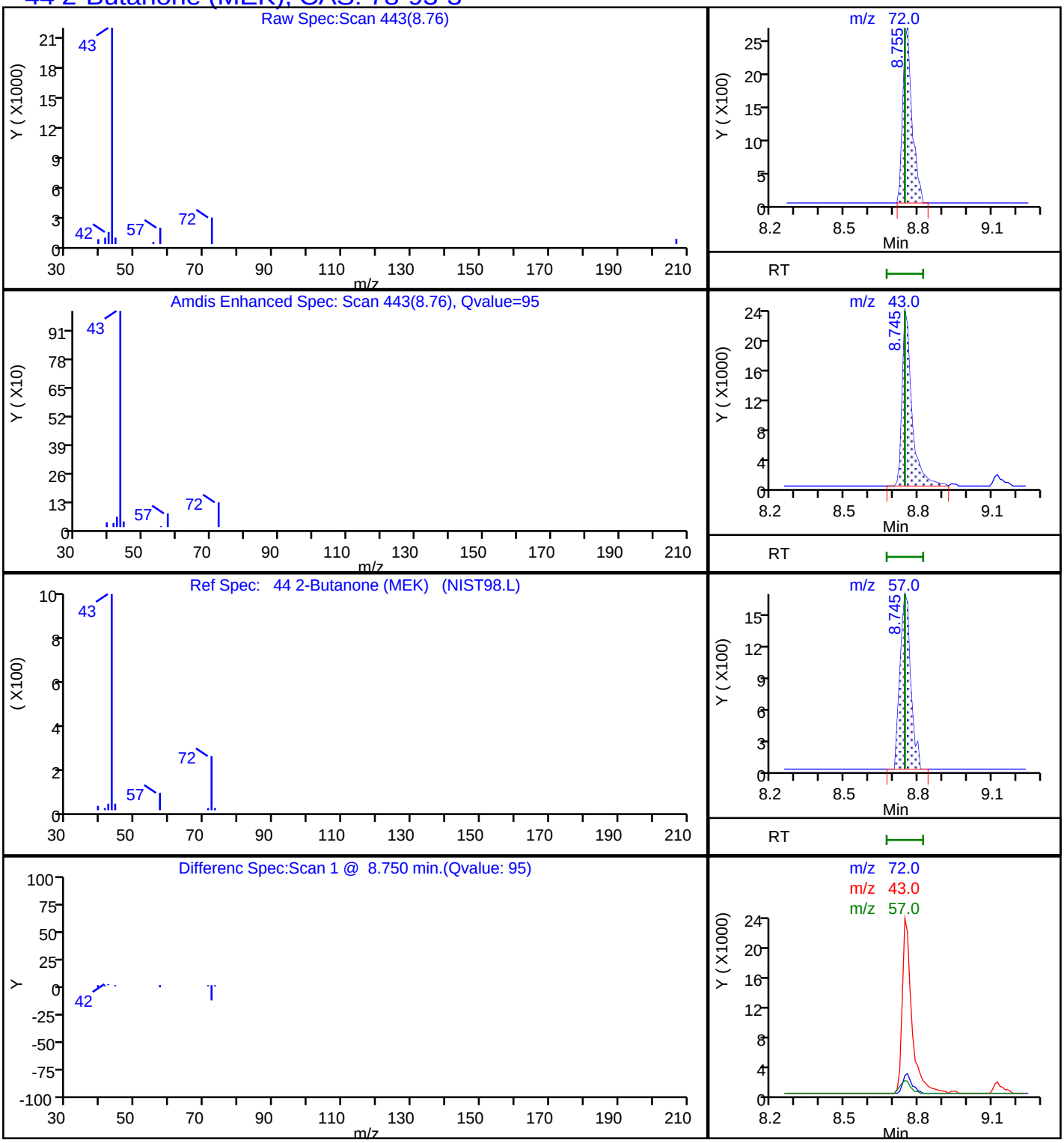


Report Date: 31-Aug-2018 14:38:16 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311815.D				
Injection Date:	31-Aug-2018 13:11:30	Instrument ID:	CHMSV2		
Lims ID:	720-88241-B-3-A	Lab Sample ID:	720-88241-3		
Client ID:	DG-F9S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

44 2-Butanone (MEK), CAS: 78-93-3

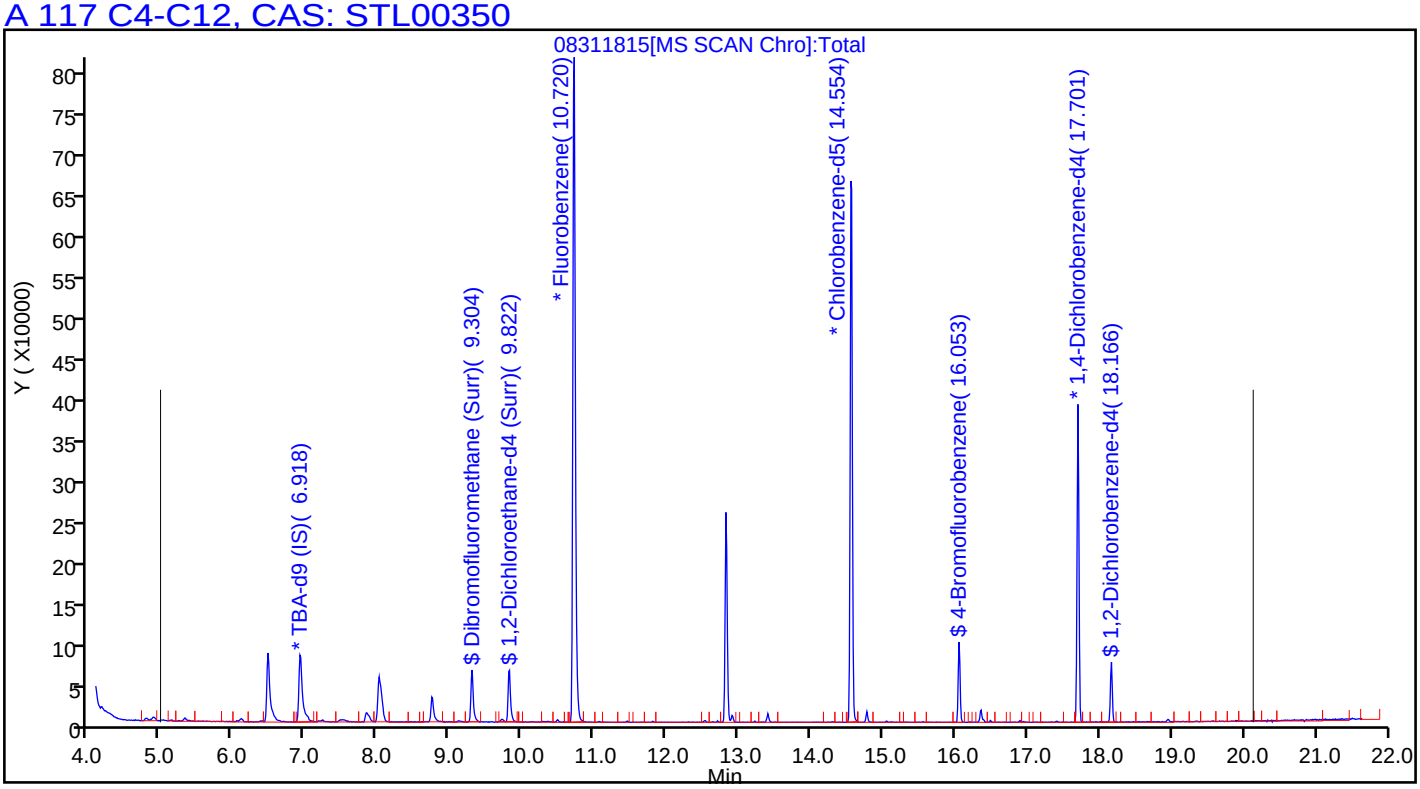


Report Date: 31-Aug-2018 14:38:17 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311815.D				
Injection Date:	31-Aug-2018 13:11:30	Instrument ID:	CHMSV2		
Lims ID:	720-88241-B-3-A	Lab Sample ID:	720-88241-3		
Client ID:	DG-F9S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

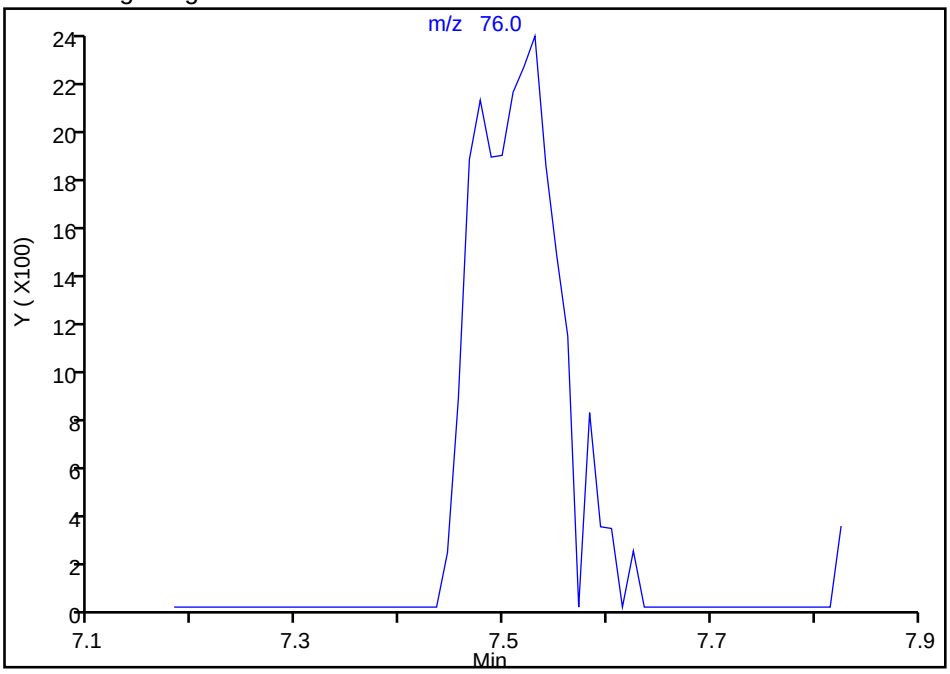
Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311815.D				
Injection Date:	31-Aug-2018 13:11:30	Instrument ID:	CHMSV2		
Lims ID:	720-88241-B-3-A	Lab Sample ID:	720-88241-3		
Client ID:	DG-F9S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

37 Carbon disulfide, CAS: 75-15-0

Signal: 1

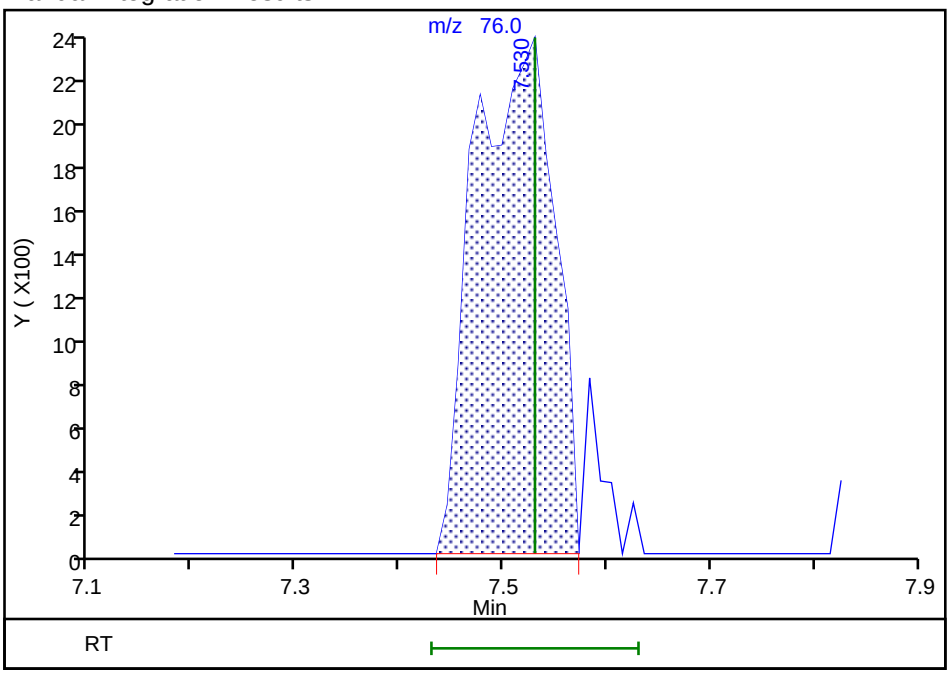
Not Detected
Expected RT: 7.53

Processing Integration Results



Manual Integration Results

RT: 7.53
Area: 12369
Amount: 0.828883
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 14:37:36
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

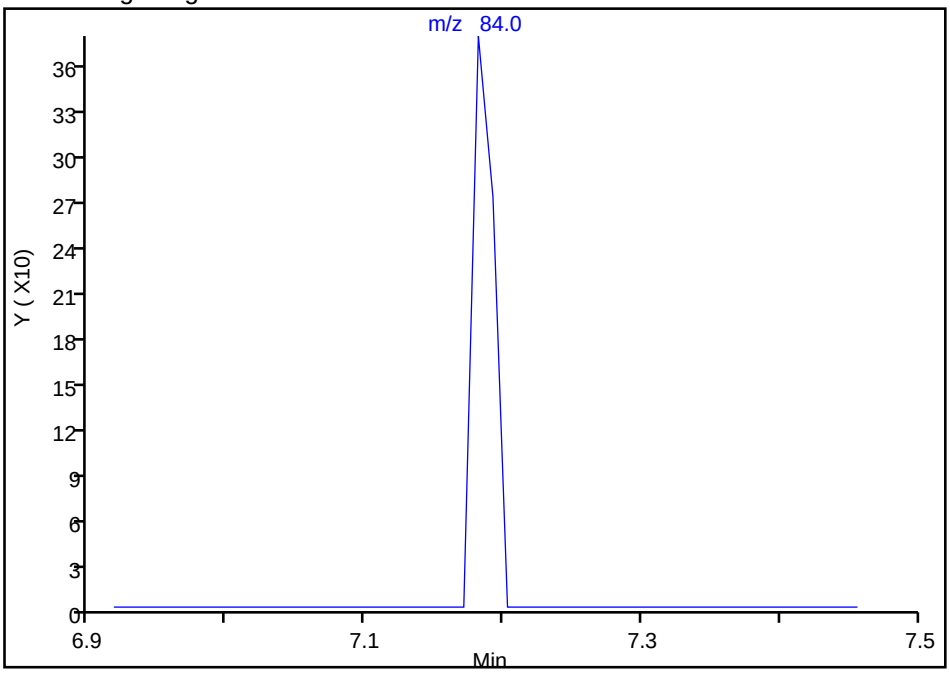
Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311815.D				
Injection Date:	31-Aug-2018 13:11:30	Instrument ID:	CHMSV2		
Lims ID:	720-88241-B-3-A	Lab Sample ID:	720-88241-3		
Client ID:	DG-F9S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

34 Methylene Chloride, CAS: 75-09-2

Signal: 1

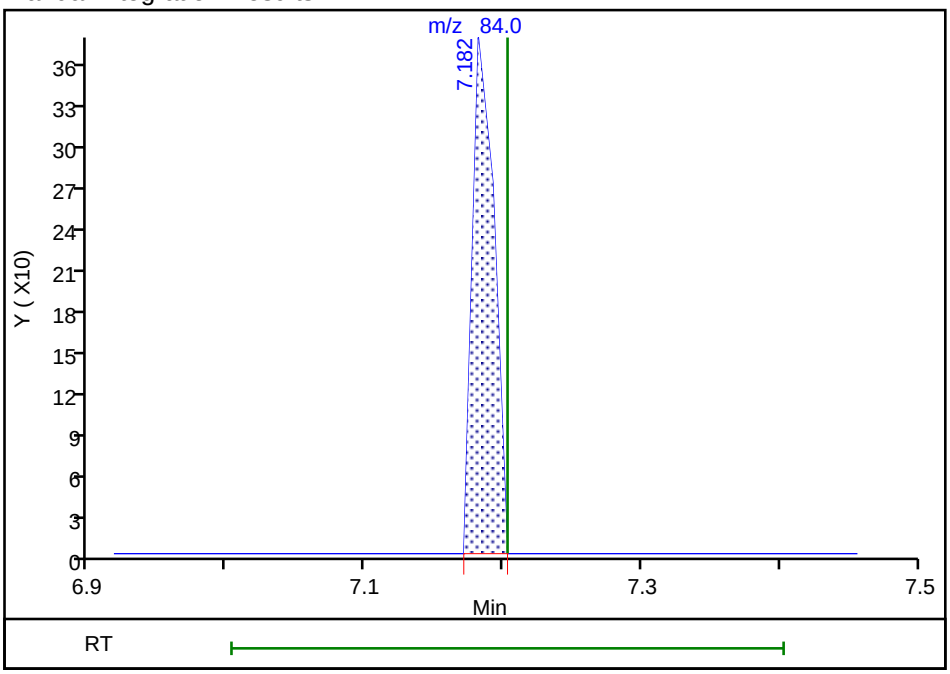
Not Detected
Expected RT: 7.20

Processing Integration Results



RT: 7.18
Area: 406
Amount: 0.068608
Amount Units: ug/L

Manual Integration Results



Reviewer: salgadoa, 31-Aug-2018 14:37:14
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

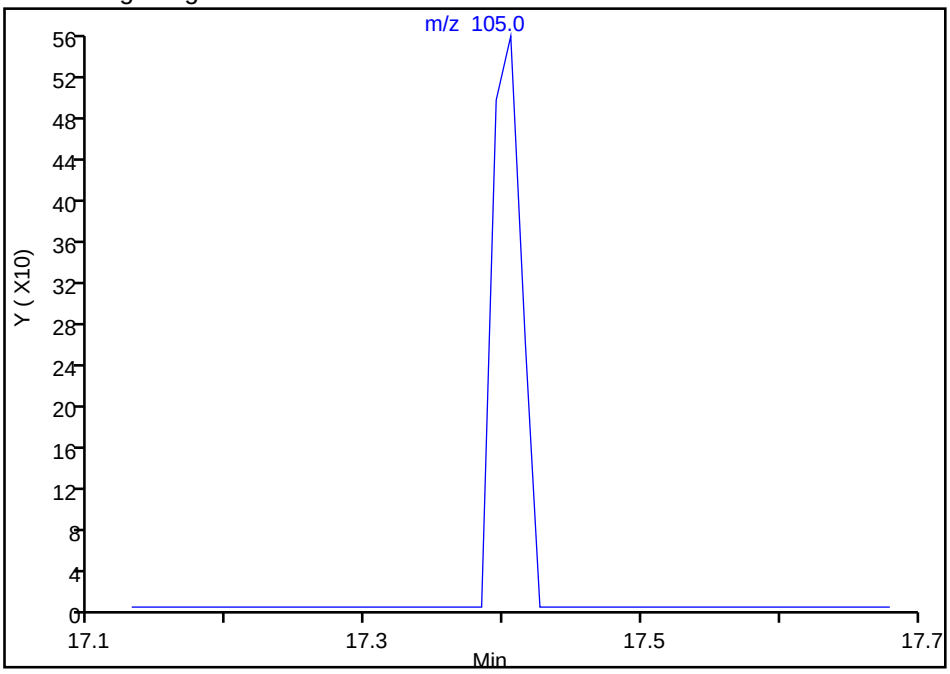
Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311815.D				
Injection Date:	31-Aug-2018 13:11:30	Instrument ID:	CHMSV2		
Lims ID:	720-88241-B-3-A	Lab Sample ID:	720-88241-3		
Client ID:	DG-F9S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

101 1,2,4-Trimethylbenzene, CAS: 95-63-6

Signal: 1

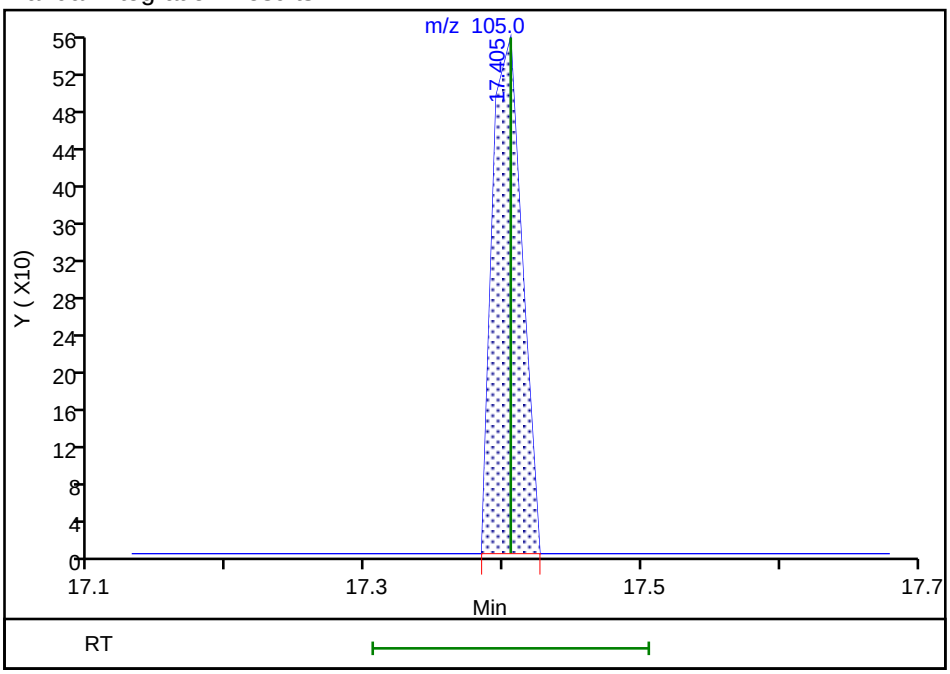
Not Detected
Expected RT: 17.41

Processing Integration Results



Manual Integration Results

RT: 17.41
Area: 824
Amount: 0.053476
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 14:38:07
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

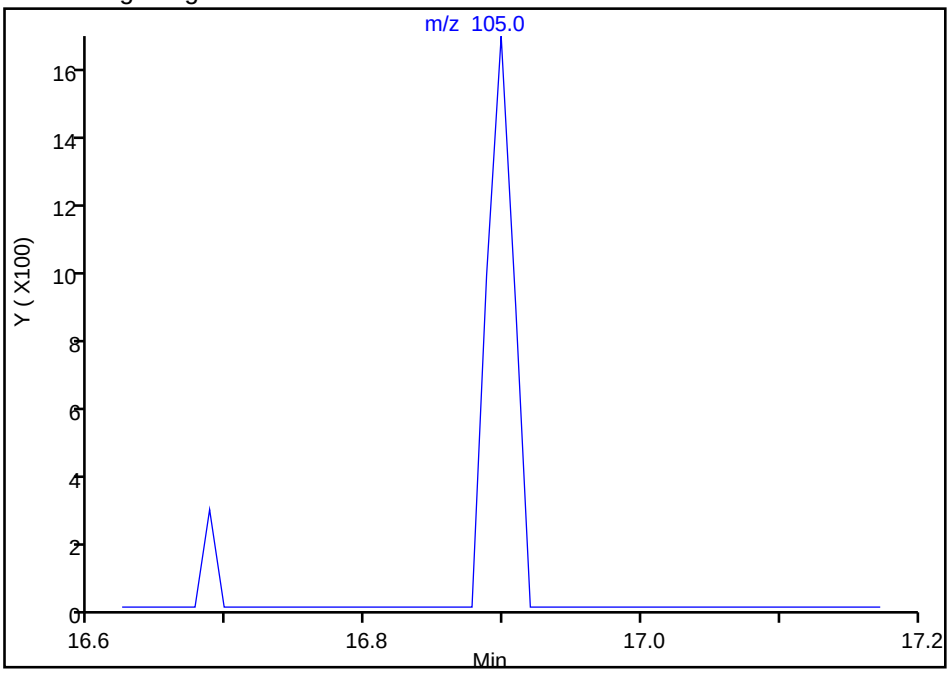
Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311815.D				
Injection Date:	31-Aug-2018 13:11:30	Instrument ID:	CHMSV2		
Lims ID:	720-88241-B-3-A	Lab Sample ID:	720-88241-3		
Client ID:	DG-F9S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

98 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

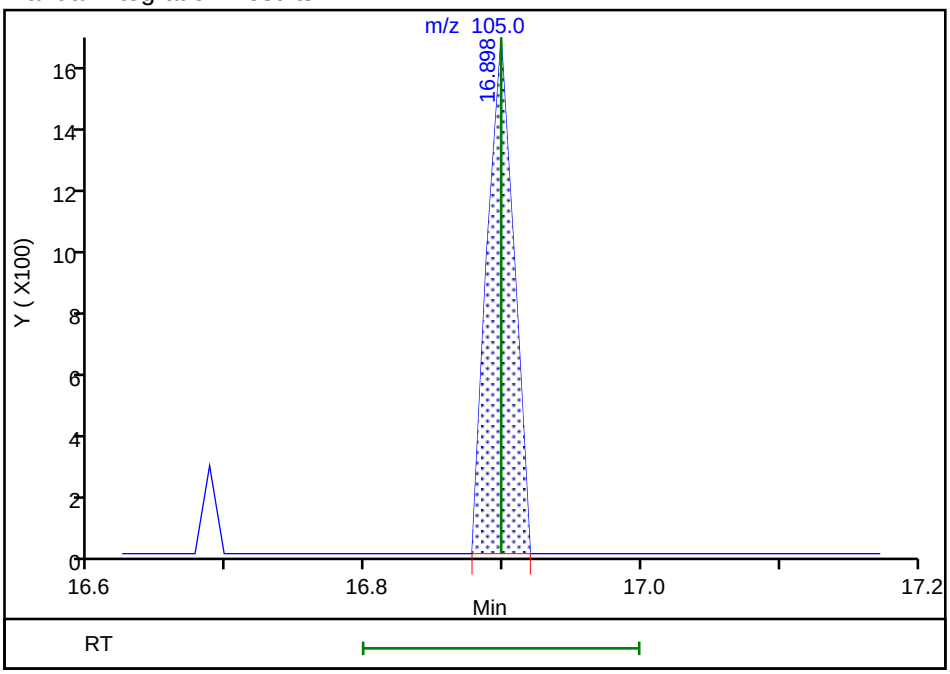
Processing Integration Results

Not Detected
Expected RT: 16.90



Manual Integration Results

RT: 16.90
Area: 2192
Amount: 0.140306
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 14:38:04
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

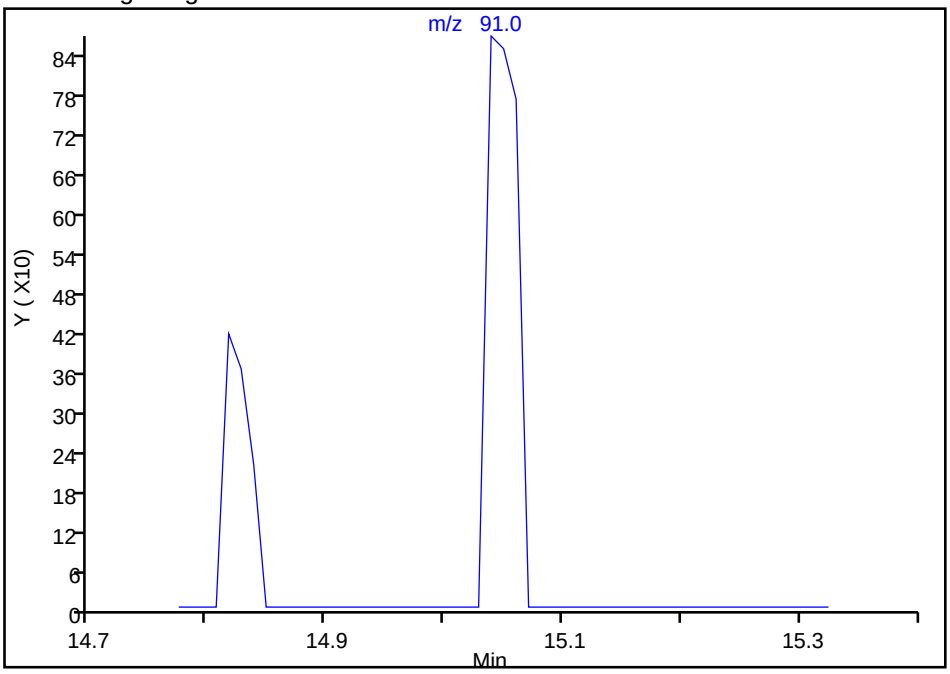
Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311815.D				
Injection Date:	31-Aug-2018 13:11:30	Instrument ID:	CHMSV2		
Lims ID:	720-88241-B-3-A	Lab Sample ID:	720-88241-3		
Client ID:	DG-F9S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

85 m-Xylene & p-Xylene, CAS: 179601-23-1

Signal: 1

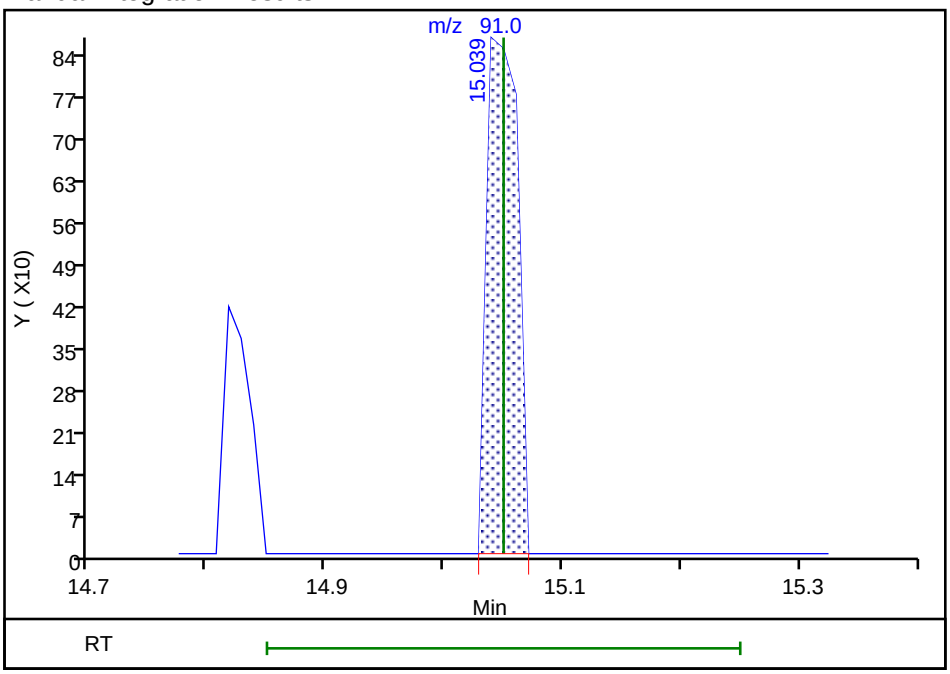
Not Detected
Expected RT: 15.05

Processing Integration Results



Manual Integration Results

RT: 15.04
Area: 1565
Amount: 0.069250
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 14:37:54
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

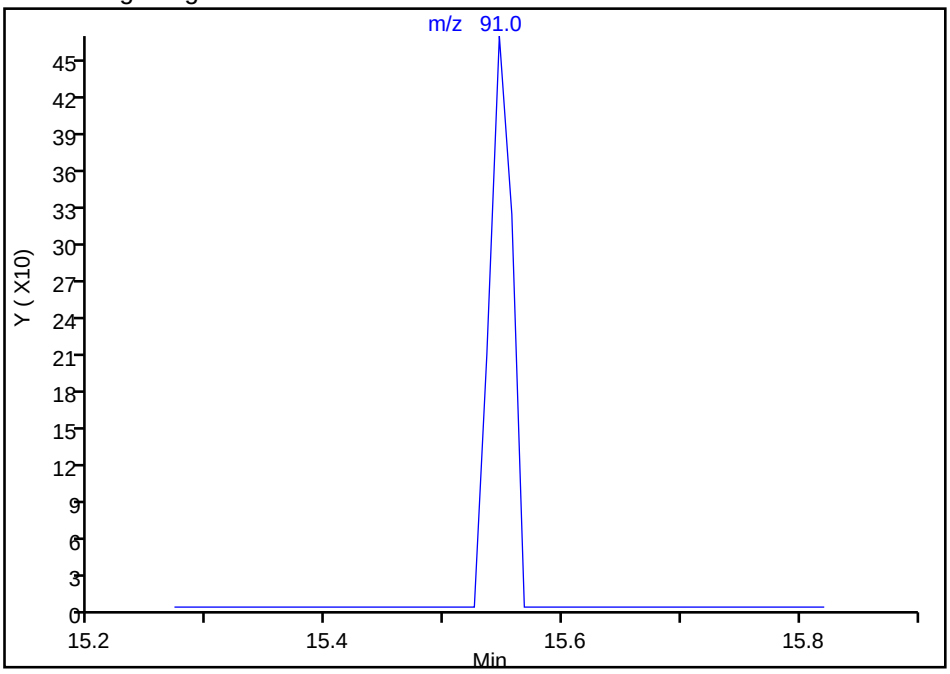
Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311815.D				
Injection Date:	31-Aug-2018 13:11:30	Instrument ID:	CHMSV2		
Lims ID:	720-88241-B-3-A	Lab Sample ID:	720-88241-3		
Client ID:	DG-F9S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

89 o-Xylene, CAS: 95-47-6

Signal: 1

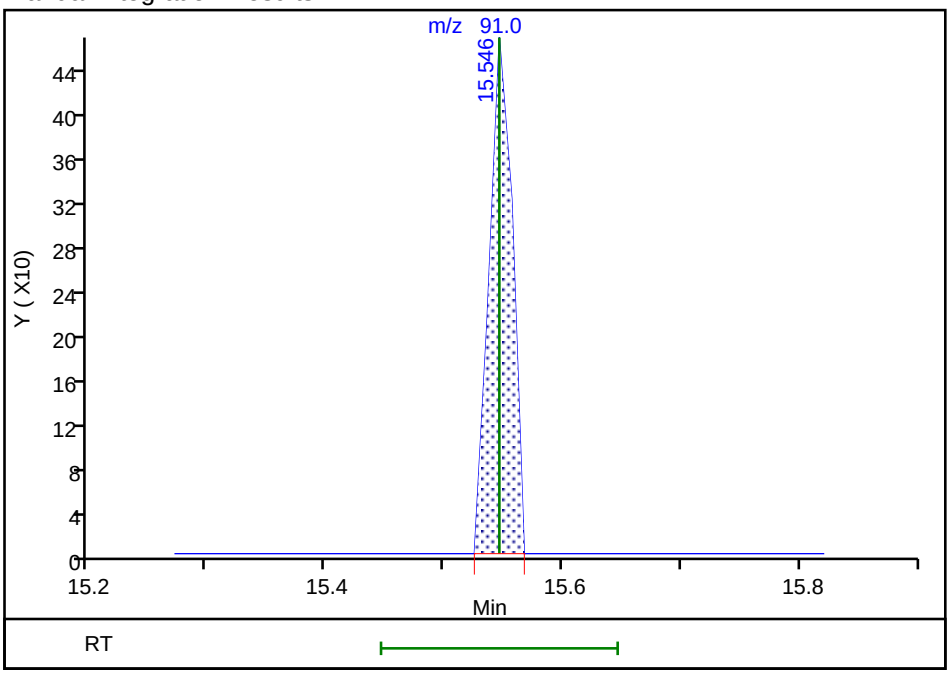
Not Detected
Expected RT: 15.55

Processing Integration Results



RT: 15.55
Area: 632
Amount: 0.027894
Amount Units: ug/L

Manual Integration Results



Reviewer: salgadoa, 31-Aug-2018 14:37:59
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88241-1

SDG No.:

Client Sample ID: DG-D9S-0.5-1 Lab Sample ID: 720-88241-4

Matrix: Solid Lab File ID: 08301831.D

Analysis Method: 8260B Date Collected: 08/24/2018 11:35

Sample wt/vol: 6.586(g) Date Analyzed: 08/30/2018 22:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250622 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		3.8	0.91
67-64-1	Acetone	49		38	29
71-43-2	Benzene	ND		3.8	0.49
75-27-4	Dichlorobromomethane	ND		3.8	0.55
108-86-1	Bromobenzene	ND		3.8	0.60
74-97-5	Chlorobromomethane	ND		15	0.55
75-25-2	Bromoform	ND		3.8	1.5
74-83-9	Bromomethane	ND		7.6	0.60
78-93-3	2-Butanone (MEK)	ND		38	16
104-51-8	n-Butylbenzene	ND		3.8	0.76
135-98-8	sec-Butylbenzene	ND		3.8	0.55
98-06-6	tert-Butylbenzene	ND		3.8	0.55
75-15-0	Carbon disulfide	ND	*	3.8	1.5
56-23-5	Carbon tetrachloride	ND		3.8	0.47
108-90-7	Chlorobenzene	ND		3.8	0.52
75-00-3	Chloroethane	ND		7.6	0.43
67-66-3	Chloroform	ND		3.8	0.50
74-87-3	Chloromethane	ND		7.6	0.60
95-49-8	2-Chlorotoluene	ND		3.8	0.49
106-43-4	4-Chlorotoluene	ND		3.8	0.52
124-48-1	Chlorodibromomethane	ND		3.8	0.54
95-50-1	1,2-Dichlorobenzene	ND		3.8	0.52
541-73-1	1,3-Dichlorobenzene	ND		3.8	0.55
106-46-7	1,4-Dichlorobenzene	ND		3.8	0.54
142-28-9	1,3-Dichloropropane	ND		3.8	0.55
563-58-6	1,1-Dichloropropene	ND		3.8	0.52
96-12-8	1,2-Dibromo-3-Chloropropane	ND		7.6	1.3
106-93-4	Ethylene Dibromide	ND		3.8	1.1
74-95-3	Dibromomethane	ND		7.6	0.65
75-71-8	Dichlorodifluoromethane	ND		7.6	0.60
75-34-3	1,1-Dichloroethane	ND		3.8	0.52
107-06-2	1,2-Dichloroethane	ND		3.8	0.58
75-35-4	1,1-Dichloroethene	ND	*	3.8	0.47
156-59-2	cis-1,2-Dichloroethene	ND		3.8	0.52
156-60-5	trans-1,2-Dichloroethene	ND		3.8	0.57
78-87-5	1,2-Dichloropropane	ND		3.8	0.48

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88241-1
SDG No.:
Client Sample ID: DG-D9S-0.5-1
Lab Sample ID: 720-88241-4
Matrix: Solid
Lab File ID: 08301831.D
Analysis Method: 8260B
Date Collected: 08/24/2018 11:35
Sample wt/vol: 6.586(g)
Date Analyzed: 08/30/2018 22:47
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250622
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		3.8	0.52
10061-02-6	trans-1,3-Dichloropropene	ND		3.8	0.51
100-41-4	Ethylbenzene	ND		3.8	0.57
87-68-3	Hexachlorobutadiene	ND		3.8	0.68
591-78-6	2-Hexanone	ND		38	7.6
98-82-8	Isopropylbenzene	ND		3.8	0.52
99-87-6	4-Isopropyltoluene	ND		3.8	1.9
75-09-2	Methylene Chloride	ND		7.6	4.3
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		38	7.6
91-20-3	Naphthalene	ND		7.6	1.1
103-65-1	N-Propylbenzene	ND		3.8	0.50
100-42-5	Styrene	ND		3.8	0.48
630-20-6	1,1,1,2-Tetrachloroethane	ND		3.8	0.58
79-34-5	1,1,2,2-Tetrachloroethane	ND		3.8	0.57
127-18-4	Tetrachloroethene	ND		3.8	0.51
108-88-3	Toluene	ND		3.8	0.54
87-61-6	1,2,3-Trichlorobenzene	ND		3.8	0.56
120-82-1	1,2,4-Trichlorobenzene	ND		3.8	0.54
71-55-6	1,1,1-Trichloroethane	ND		3.8	0.46
79-00-5	1,1,2-Trichloroethane	ND		3.8	0.53
79-01-6	Trichloroethene	ND		3.8	0.48
75-69-4	Trichlorofluoromethane	ND		3.8	0.43
96-18-4	1,2,3-Trichloropropane	ND		3.8	0.58
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.8	1.6
95-63-6	1,2,4-Trimethylbenzene	ND		3.8	1.2
108-67-8	1,3,5-Trimethylbenzene	ND		3.8	0.49
108-05-4	Vinyl acetate	ND		15	3.8
75-01-4	Vinyl chloride	ND		3.8	0.55
1330-20-7	Xylenes, Total	ND		3.8	0.93
594-20-7	2,2-Dichloropropane	ND		3.8	1.5
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		190	76

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88241-1

SDG No.:

Client Sample ID: DG-D9S-0.5-1 Lab Sample ID: 720-88241-4

Matrix: Solid Lab File ID: 08301831.D

Analysis Method: 8260B Date Collected: 08/24/2018 11:35

Sample wt/vol: 6.586(g) Date Analyzed: 08/30/2018 22:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250622 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	98		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	114		60-140
2037-26-5	Toluene-d8 (Surr)	96		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\08301831.D
Lims ID: 720-88241-A-4-A
Client ID: DG-D9S--0.5-1
Sample Type: Client
Inject. Date: 30-Aug-2018 22:47:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88241-A-4
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 31-Aug-2018 06:08:09 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 09:04:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.089	7.095	-0.006	98	175588	250.0	
* 2 Fluorobenzene	96	10.897	10.902	-0.005	98	849463	25.0	
* 4 Chlorobenzene-d5	117	14.745	14.740	0.005	86	572391	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.884	17.879	0.005	94	274138	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.489	9.483	0.005	52	59347	7.69	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.006	10.000	0.005	96	64612	8.54	
$ 10 Toluene-d8 (Surr)	98	13.003	13.007	-0.005	93	219732	7.19	
$ 11 4-Bromofluorobenzene	95	16.233	16.248	-0.005	87	76517	7.35	
$ 12 1,2-Dichlorobenzene-d4	152	18.340	18.344	-0.005	80	62452	6.17	
28 Acetone	58	6.644	6.638	0.005	95	16966	32.3	
34 Methylene Chloride	84	7.363	7.357	0.005	7	439	0.0575	
59 Benzene	78	10.664	10.668	-0.005	30	4631	0.1399	
75 Toluene	92	13.094	13.097	0.005	56	5815	0.2806	
126 Butyl Ether	87	14.947	14.951	0.005	80	3325	0.5343	
105 4-Isopropyltoluene	119	17.935	17.928	0.005	5	15253	0.4501	
107 n-Butylbenzene	91	18.461	18.455	0.005	0	1831	0.0600	
29 Pentane	43	6.644	6.675	-0.031	36	55993	NR	
132 n-Nonane	57	15.342	15.343	-0.001	1	845	NR	
A 116 C4-C10	1	11.085	(5.035-17.135)		0	592468	8.38	
A 153 C6-C8	1	11.148	(8.836-13.459)		0	126964	1.80	
A 154 C6-C9	1	12.105	(8.836-15.373)		0	229854	3.25	
A 117 C4-C12	1	12.645	(5.035-20.255)		0	662521	9.37	
A 119 C6-C10	1	12.986	(8.836-17.135)		0	256308	3.62	
A 118 C5-C12	1	13.429	(6.604-20.255)		0	634564	8.97	
A 120 C6-C12	1	14.546	(8.836-20.255)		0	318480	4.50	
A 155 C8-C10	1	15.241	(13.348-17.135)		0	131966	1.87	
A 121 C7-C12	1	15.720	(11.186-20.255)		0	248245	3.51	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

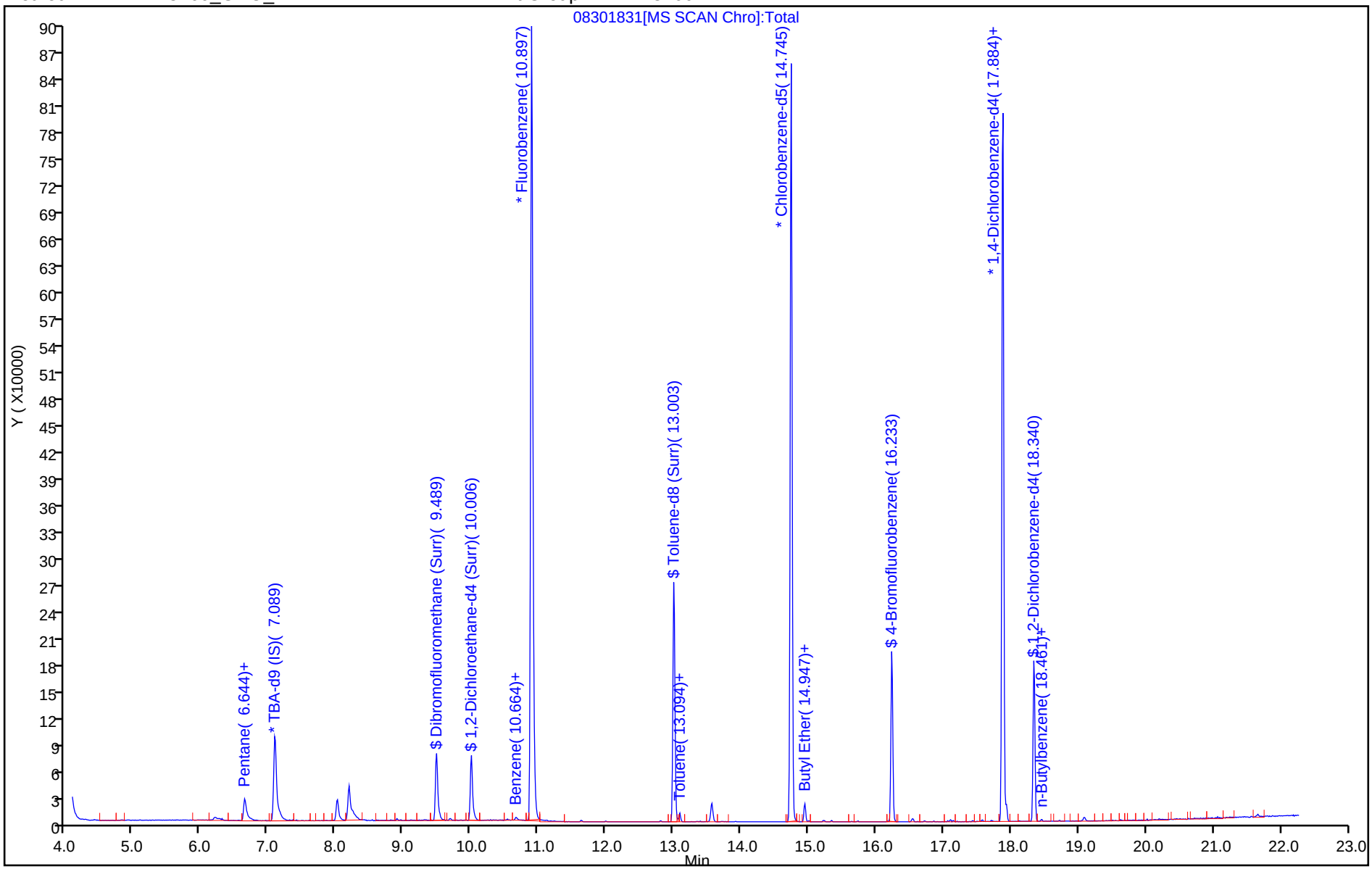
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 09:04:49 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\08301831.D				
Injection Date:	30-Aug-2018 22:47:30	Instrument ID:	HP7	Operator ID:	SF
Lims ID:	720-88241-A-4-A	Lab Sample ID:	720-88241-4	Worklist Smp#:	13
Client ID:	DG-D9S--0.5-1				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260_GRO_HP7	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\08301831.D
Lims ID: 720-88241-A-4-A
Client ID: DG-D9S--0.5-1
Sample Type: Client
Inject. Date: 30-Aug-2018 22:47:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88241-A-4
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 31-Aug-2018 06:08:09 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 09:04:48

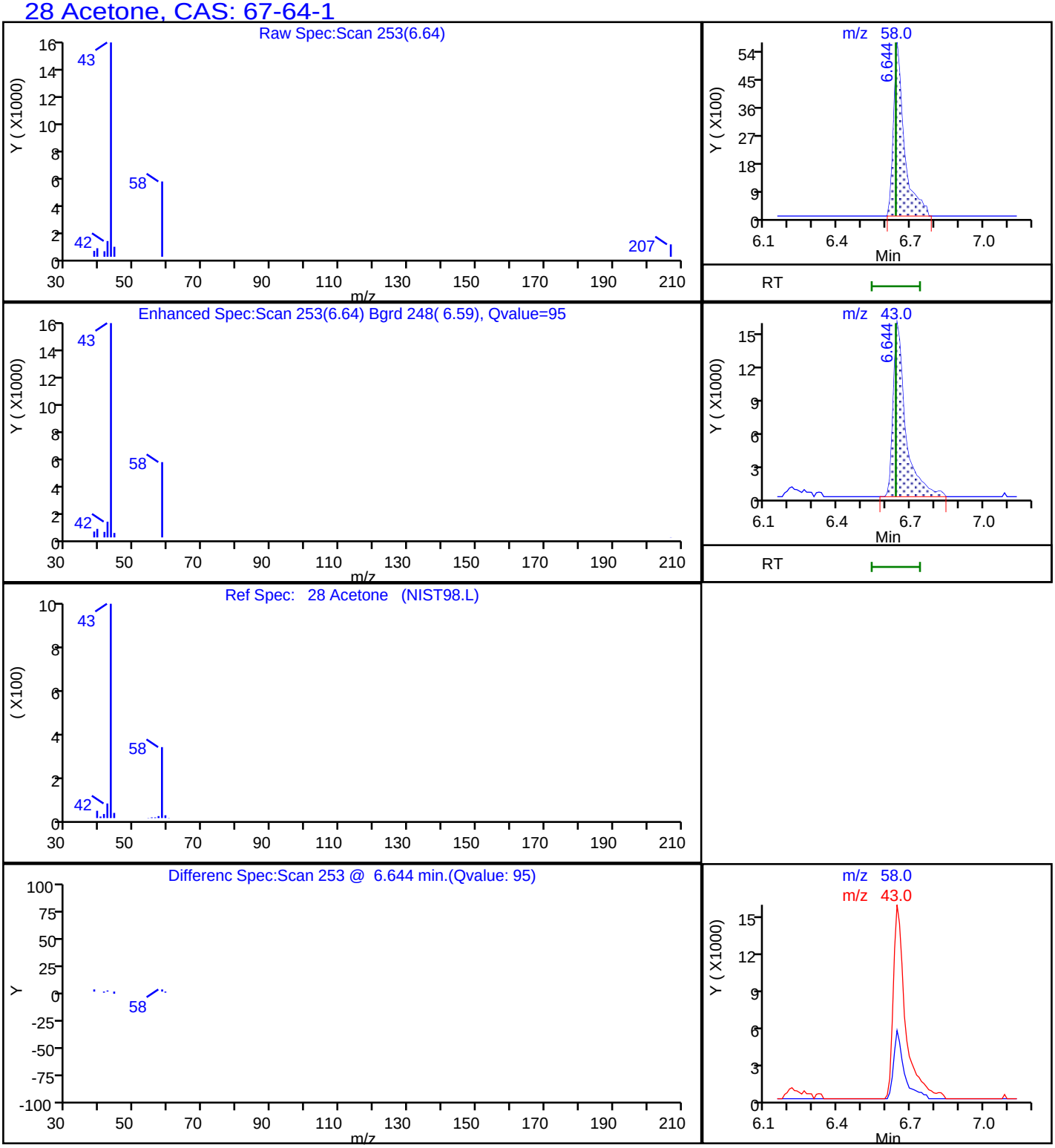
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.54	113.88
$ 10 Toluene-d8 (Surr)	7.50	7.19	95.83
$ 11 4-Bromofluorobenzene	7.50	7.35	98.04
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 31-Aug-2018 09:04:49 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\08301831.D				
Injection Date:	30-Aug-2018 22:47:30	Instrument ID:	HP7		
Lims ID:	720-88241-A-4-A	Lab Sample ID:	720-88241-4		
Client ID:	DG-D9S--0.5-1				
Operator ID:	SF	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1

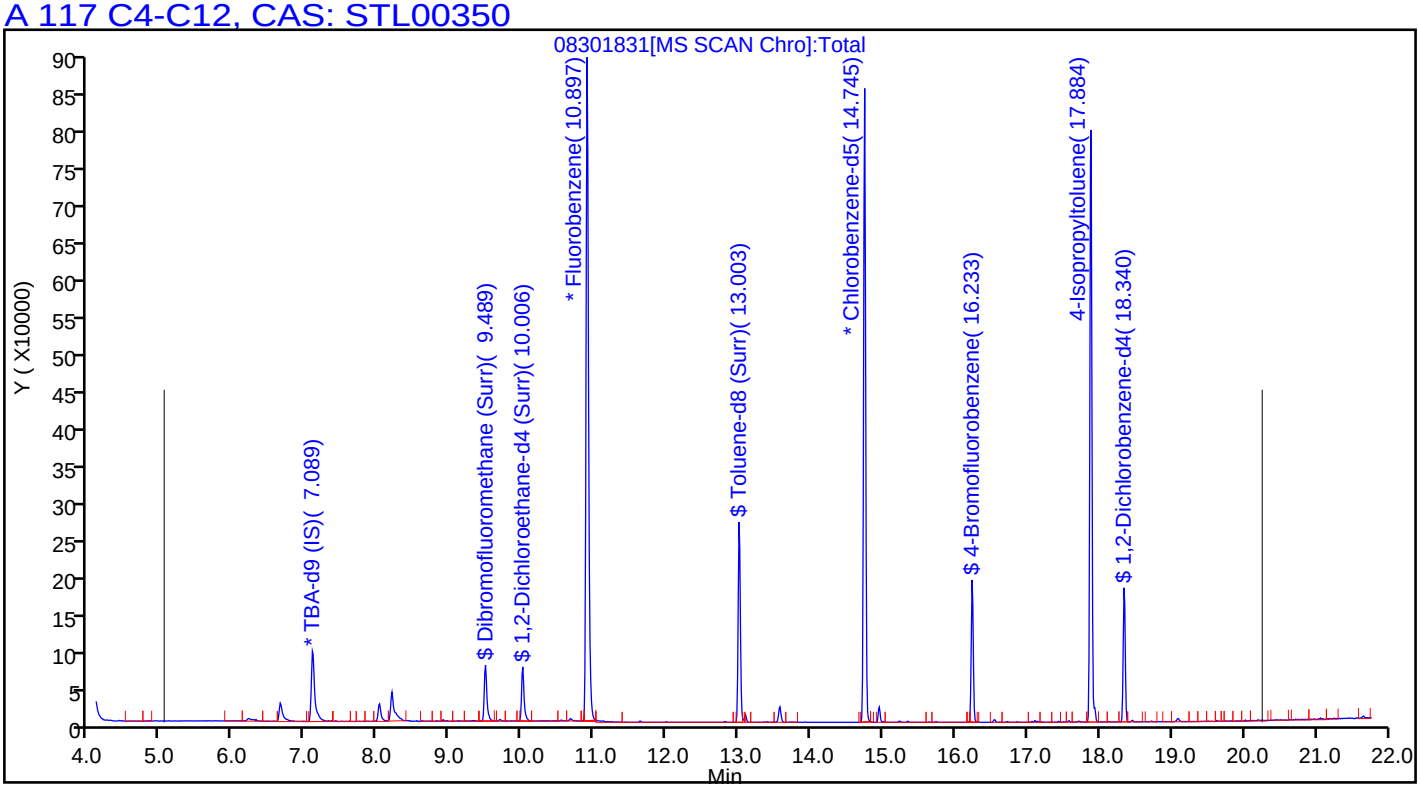


Report Date: 31-Aug-2018 09:04:50 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\08301831.D				
Injection Date:	30-Aug-2018 22:47:30	Instrument ID:	HP7		
Lims ID:	720-88241-A-4-A	Lab Sample ID:	720-88241-4		
Client ID:	DG-D9S--0.5-1				
Operator ID:	SF	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88241-1

SDG No.:

Client Sample ID: DG-D9S-3.5-4 Lab Sample ID: 720-88241-5

Matrix: Solid Lab File ID: 08311816.D

Analysis Method: 8260B Date Collected: 08/24/2018 11:35

Sample wt/vol: 5.948(g) Date Analyzed: 08/31/2018 13:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250645 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.2	1.0
67-64-1	Acetone	55		42	32
71-43-2	Benzene	ND		4.2	0.55
75-27-4	Dichlorobromomethane	ND		4.2	0.61
108-86-1	Bromobenzene	ND	*	4.2	0.66
74-97-5	Chlorobromomethane	ND		17	0.61
75-25-2	Bromoform	ND		4.2	1.7
74-83-9	Bromomethane	ND		8.4	0.66
78-93-3	2-Butanone (MEK)	ND		42	18
104-51-8	n-Butylbenzene	ND	*	4.2	0.84
135-98-8	sec-Butylbenzene	ND	*	4.2	0.61
98-06-6	tert-Butylbenzene	ND	*	4.2	0.61
75-15-0	Carbon disulfide	ND		4.2	1.7
56-23-5	Carbon tetrachloride	ND		4.2	0.52
108-90-7	Chlorobenzene	ND		4.2	0.58
75-00-3	Chloroethane	ND		8.4	0.47
67-66-3	Chloroform	ND		4.2	0.55
74-87-3	Chloromethane	ND		8.4	0.66
95-49-8	2-Chlorotoluene	ND	*	4.2	0.55
106-43-4	4-Chlorotoluene	ND	*	4.2	0.57
124-48-1	Chlorodibromomethane	ND		4.2	0.60
95-50-1	1,2-Dichlorobenzene	ND	*	4.2	0.57
541-73-1	1,3-Dichlorobenzene	ND	*	4.2	0.61
106-46-7	1,4-Dichlorobenzene	ND	*	4.2	0.60
142-28-9	1,3-Dichloropropane	ND		4.2	0.61
563-58-6	1,1-Dichloropropene	ND		4.2	0.58
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	8.4	1.4
106-93-4	Ethylene Dibromide	ND		4.2	1.2
74-95-3	Dibromomethane	ND		8.4	0.72
75-71-8	Dichlorodifluoromethane	ND		8.4	0.66
75-34-3	1,1-Dichloroethane	ND		4.2	0.57
107-06-2	1,2-Dichloroethane	ND		4.2	0.64
75-35-4	1,1-Dichloroethene	ND	*	4.2	0.52
156-59-2	cis-1,2-Dichloroethene	ND		4.2	0.57
156-60-5	trans-1,2-Dichloroethene	ND		4.2	0.63
78-87-5	1,2-Dichloropropane	ND		4.2	0.53

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88241-1

SDG No.:

Client Sample ID: DG-D9S-3.5-4 Lab Sample ID: 720-88241-5

Matrix: Solid Lab File ID: 08311816.D

Analysis Method: 8260B Date Collected: 08/24/2018 11:35

Sample wt/vol: 5.948(g) Date Analyzed: 08/31/2018 13:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250645 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.2	0.58
10061-02-6	trans-1,3-Dichloropropene	ND		4.2	0.56
100-41-4	Ethylbenzene	ND		4.2	0.63
87-68-3	Hexachlorobutadiene	ND	*	4.2	0.76
591-78-6	2-Hexanone	ND		42	8.4
98-82-8	Isopropylbenzene	ND		4.2	0.57
99-87-6	4-Isopropyltoluene	ND	*	4.2	2.1
75-09-2	Methylene Chloride	ND		8.4	4.7
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		42	8.4
91-20-3	Naphthalene	ND	*	8.4	1.3
103-65-1	N-Propylbenzene	ND	*	4.2	0.55
100-42-5	Styrene	ND		4.2	0.53
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.2	0.64
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	4.2	0.63
127-18-4	Tetrachloroethene	ND		4.2	0.56
108-88-3	Toluene	ND		4.2	0.60
87-61-6	1,2,3-Trichlorobenzene	ND	*	4.2	0.62
120-82-1	1,2,4-Trichlorobenzene	ND	*	4.2	0.60
71-55-6	1,1,1-Trichloroethane	ND		4.2	0.51
79-00-5	1,1,2-Trichloroethane	ND		4.2	0.59
79-01-6	Trichloroethene	ND		4.2	0.53
75-69-4	Trichlorofluoromethane	ND		4.2	0.47
96-18-4	1,2,3-Trichloropropane	ND	*	4.2	0.65
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.2	1.7
95-63-6	1,2,4-Trimethylbenzene	ND	*	4.2	1.4
108-67-8	1,3,5-Trimethylbenzene	ND	*	4.2	0.55
108-05-4	Vinyl acetate	ND		17	4.2
75-01-4	Vinyl chloride	ND		4.2	0.61
1330-20-7	Xylenes, Total	ND		4.2	1.0
594-20-7	2,2-Dichloropropane	ND		4.2	1.7
STL00350	Gasoline Range Organics (GRO)-C4-C12	190	J	210	84

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88241-1

SDG No.:

Client Sample ID: DG-D9S-3.5-4 Lab Sample ID: 720-88241-5

Matrix: Solid Lab File ID: 08311816.D

Analysis Method: 8260B Date Collected: 08/24/2018 11:35

Sample wt/vol: 5.948(g) Date Analyzed: 08/31/2018 13:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250645 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	81		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	114		60-140
2037-26-5	Toluene-d8 (Surr)	91		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311816.D
Lims ID: 720-88241-B-5-A
Client ID: DG-D9S--3.5-4
Sample Type: Client
Inject. Date: 31-Aug-2018 13:40:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88241-B-5 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 14:39:34 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: salgadoa Date: 31-Aug-2018 14:39:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	170317	250.0	
* 2 Fluorobenzene	96	10.720	10.709	0.011	98	891402	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.564	0.000	85	634295	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	198691	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.305	9.314	0.001	93	63180	8.37	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.821	0.011	0	69304	8.54	
$ 10 Toluene-d8 (Surr)	98	12.822	12.834	0.001	95	241371	6.82	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	96	59823	6.06	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	84	46939	6.75	
28 Acetone	58	6.474	6.474	0.000	78	22440	32.8	a
34 Methylene Chloride	84	7.192	7.192	-0.011	77	980	0.1456	a
46 Hexane	86	8.724	8.732	0.000	96	23865	12.3	
59 Benzene	78	10.487	10.498	0.000	87	3594	0.1118	
128 n-Heptane	71	11.058	11.069	0.000	94	41180	5.47	
64 2-Nitropropane	43	11.195	11.206	0.000	64	4241	1.79	
149 Methylcyclohexane	83	11.808	11.808	0.000	58	1424	0.0880	
75 Toluene	92	12.917	12.906	0.011	98	4795	0.2351	
131 Butyl Ether	87	14.775	14.775	0.000	94	967	0.1796	
84 Ethylbenzene	91	14.818	14.818	0.000	89	1495	0.0381	a
85 m-Xylene & p-Xylene	91	15.050	15.050	0.000	95	3386	0.1164	a
89 o-Xylene	91	15.546	15.546	0.000	1	1239	0.0425	a
101 1,2,4-Trimethylbenzene	105	17.395	17.395	-0.010	1	1018	0.0434	a
124 Butane	43	5.006	4.996	0.010	99	114594	NR	
135 n-Octane	43	13.223	13.255	-0.032	94	45857	NR	
138 n-Nonane	43	15.177	15.198	-0.021	93	6029	NR	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	7837643	113.9	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	4552088	66.2	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	4820731	70.1	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	7885285	114.6	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	4864094	NC	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	4864094	70.7	

Report Date: 31-Aug-2018 14:39:34 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311816.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
A 118 C5-C12	1	13.397	(6.664-20.130)		0	6288041	91.4	
A 120 C6-C12	1	14.400	(8.671-20.130)		0	4911736	71.4	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	575400	8.36	
A 121 C7-C12	1	15.567	(11.005-20.130)		0	2516340	36.6	
S 122 Xylenes, Total	1				0		0.1589	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

NC - Not Calibrated

s - Failed ISTD Recovery Test

Review Flags

a - User Assigned ID

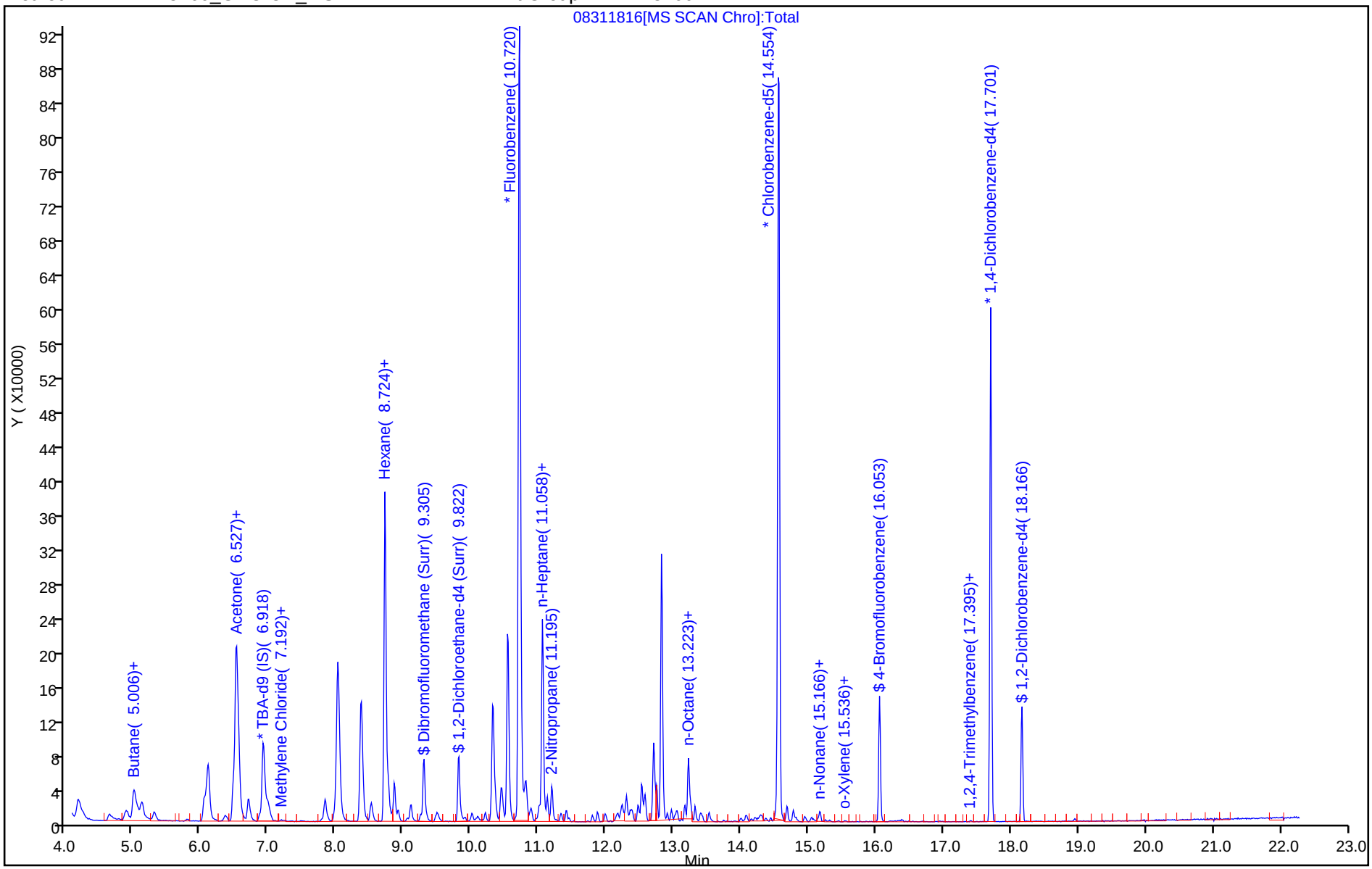
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 14:39:34 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311816.D				
Injection Date:	31-Aug-2018 13:40:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88241-B-5-A	Lab Sample ID:	720-88241-5	Worklist Smp#:	16
Client ID:	DG-D9S--3.5-4				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311816.D
Lims ID: 720-88241-B-5-A
Client ID: DG-D9S--3.5-4
Sample Type: Client
Inject. Date: 31-Aug-2018 13:40:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88241-B-5 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 14:39:34 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: salgadoa Date: 31-Aug-2018 14:39:34

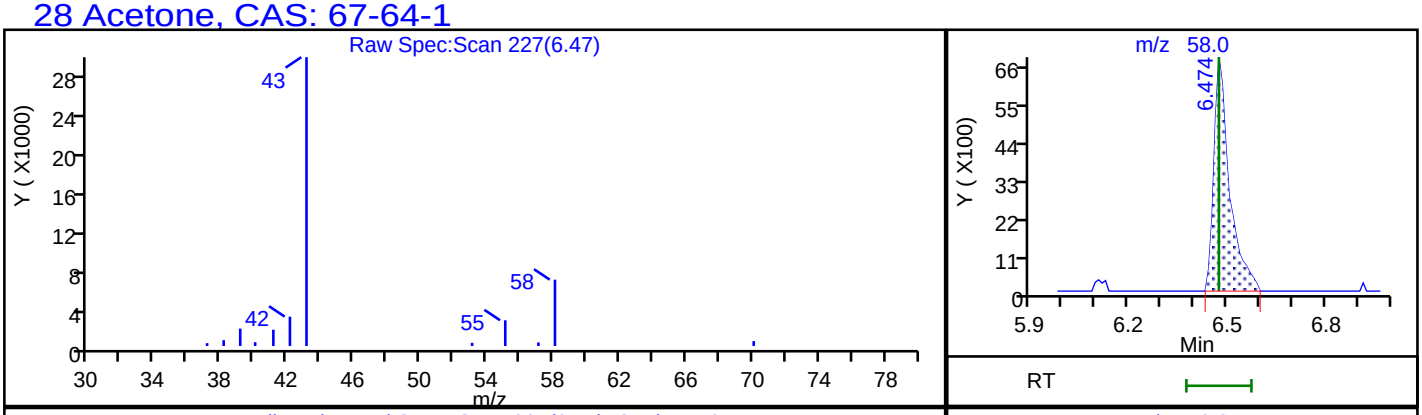
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.54	113.91
$ 10 Toluene-d8 (Surr)	7.50	6.82	90.93
$ 11 4-Bromofluorobenzene	7.50	6.06	80.76
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

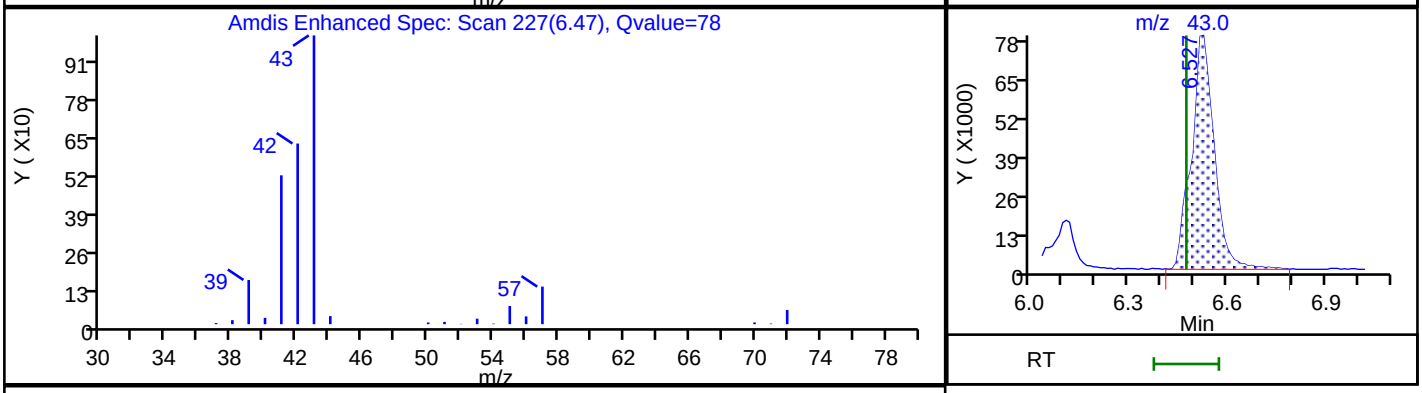
Report Date: 31-Aug-2018 14:39:34 Chrom Revision: 2.3 19-Jul-2018 15:14:50

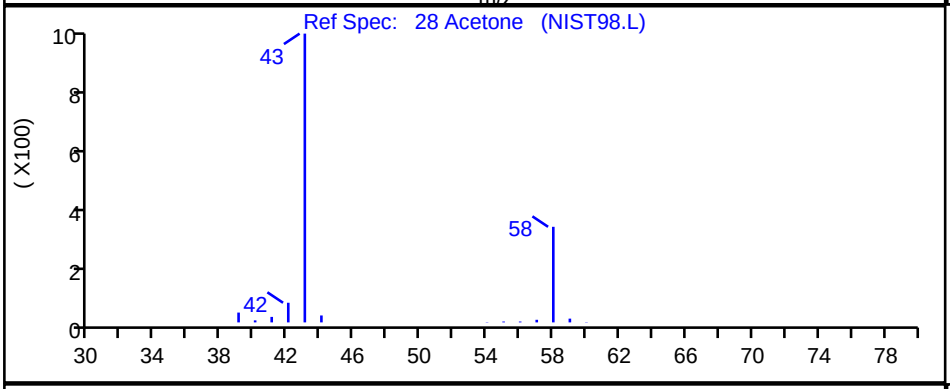
TestAmerica Pleasanton

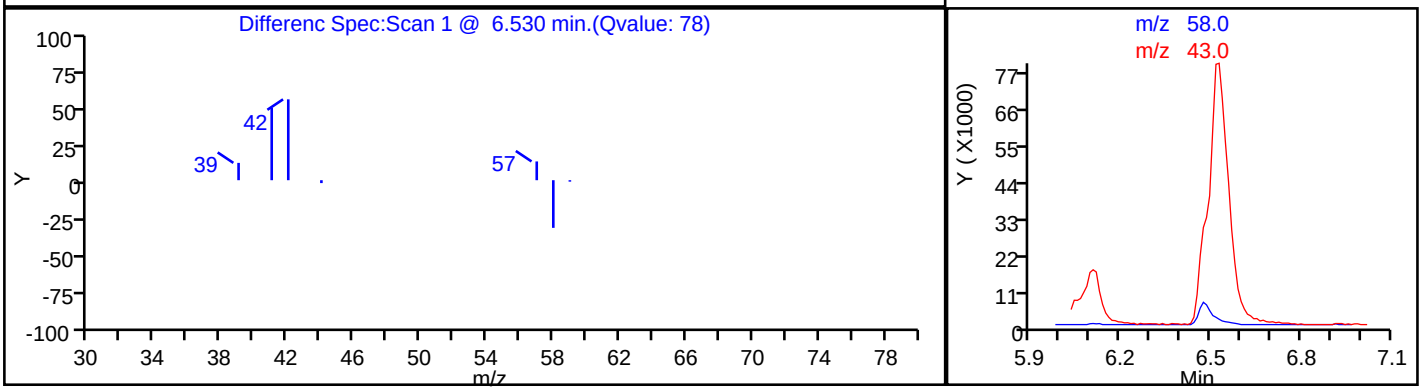
Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311816.D				
Injection Date:	31-Aug-2018 13:40:30	Instrument ID:	CHMSV2		
Lims ID:	720-88241-B-5-A	Lab Sample ID:	720-88241-5		
Client ID:	DG-D9S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1







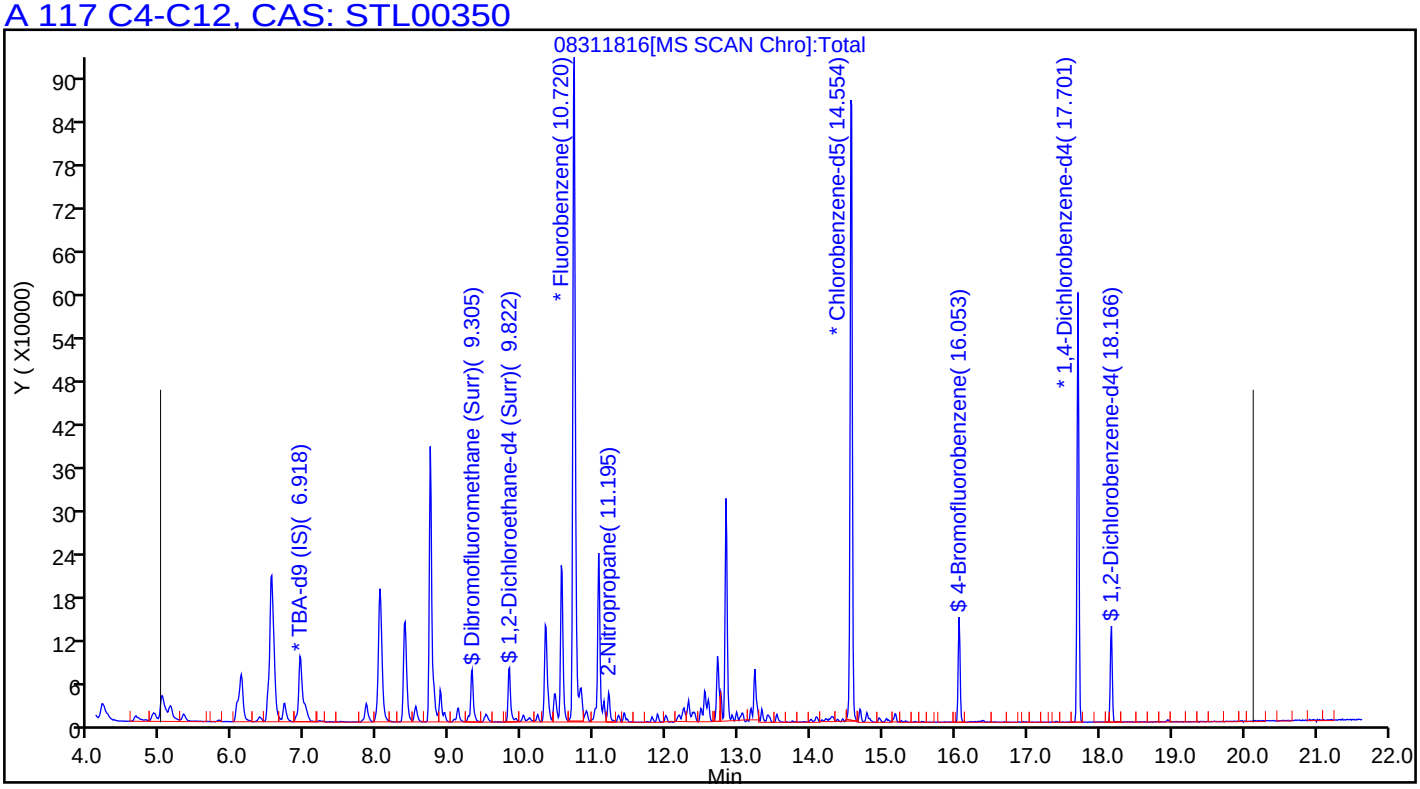


Report Date: 31-Aug-2018 14:39:35 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311816.D				
Injection Date:	31-Aug-2018 13:40:30	Instrument ID:	CHMSV2		
Lims ID:	720-88241-B-5-A	Lab Sample ID:	720-88241-5		
Client ID:	DG-D9S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

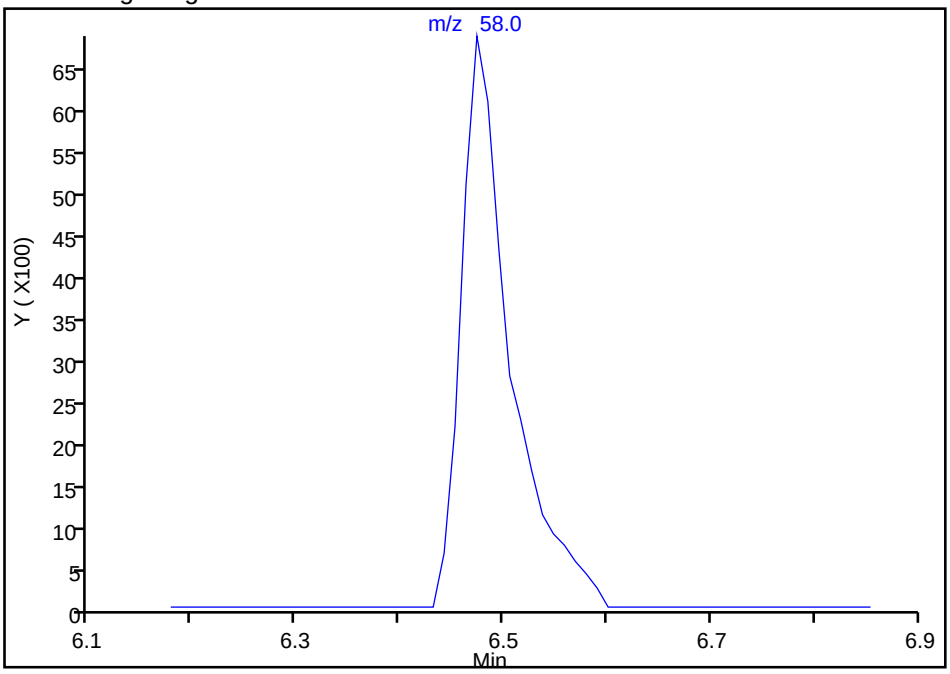
Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311816.D				
Injection Date:	31-Aug-2018 13:40:30	Instrument ID:	CHMSV2		
Lims ID:	720-88241-B-5-A	Lab Sample ID:	720-88241-5		
Client ID:	DG-D9S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1

Signal: 1

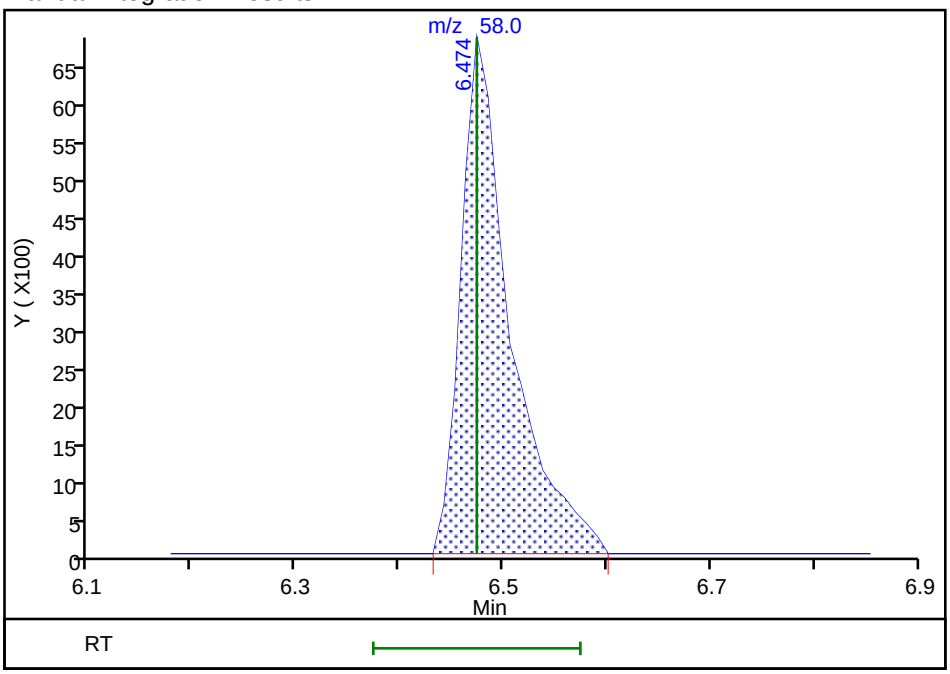
Not Detected
Expected RT: 6.47

Processing Integration Results



Manual Integration Results

RT: 6.47
Area: 22440
Amount: 32.761041
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 14:38:32
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

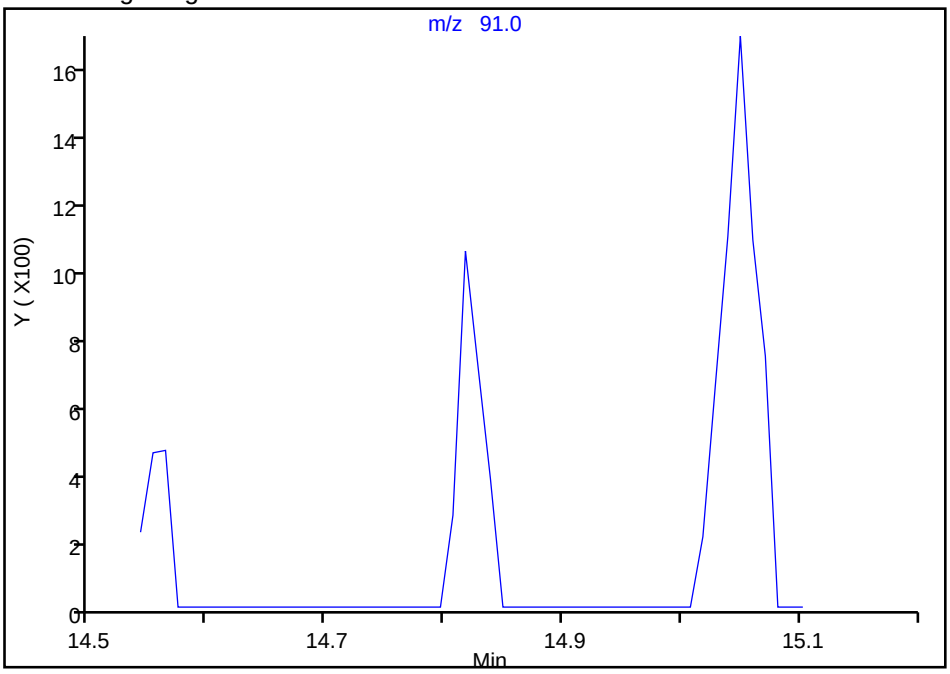
Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311816.D				
Injection Date:	31-Aug-2018 13:40:30	Instrument ID:	CHMSV2		
Lims ID:	720-88241-B-5-A	Lab Sample ID:	720-88241-5		
Client ID:	DG-D9S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

84 Ethylbenzene, CAS: 100-41-4

Signal: 1

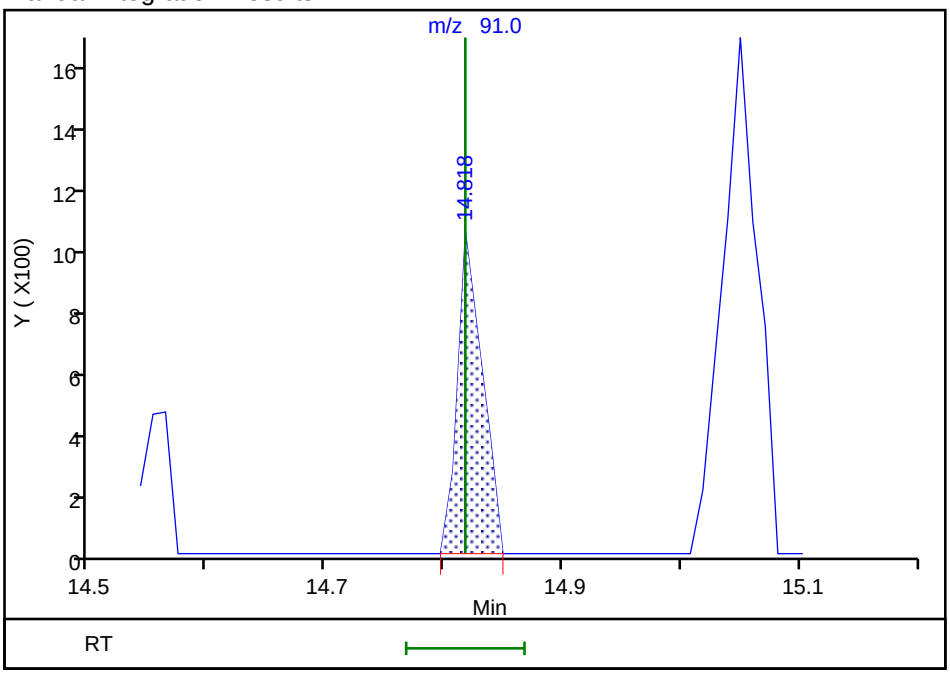
Not Detected
Expected RT: 14.82

Processing Integration Results



Manual Integration Results

RT: 14.82
Area: 1495
Amount: 0.038054
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 14:39:13
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

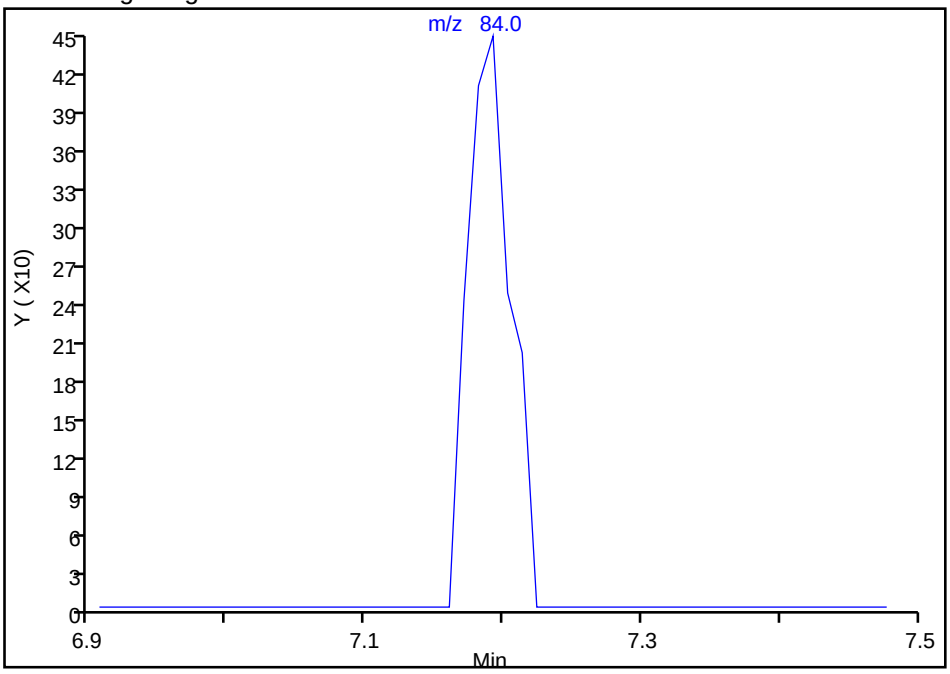
Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311816.D				
Injection Date:	31-Aug-2018 13:40:30	Instrument ID:	CHMSV2		
Lims ID:	720-88241-B-5-A	Lab Sample ID:	720-88241-5		
Client ID:	DG-D9S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

34 Methylene Chloride, CAS: 75-09-2

Signal: 1

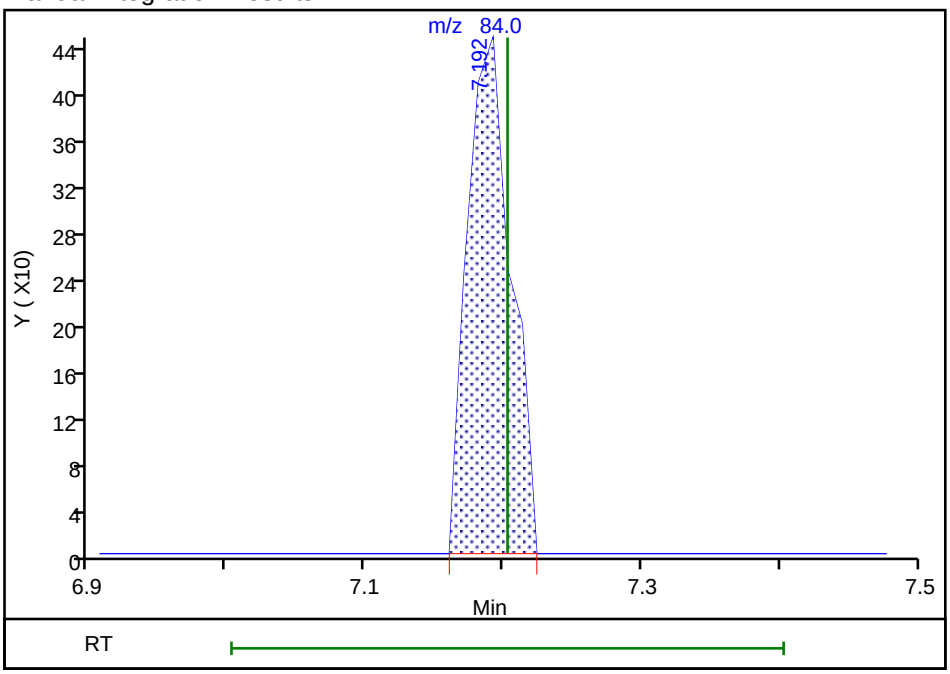
Not Detected
Expected RT: 7.20

Processing Integration Results



Manual Integration Results

RT: 7.19
Area: 980
Amount: 0.145624
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 14:38:36
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

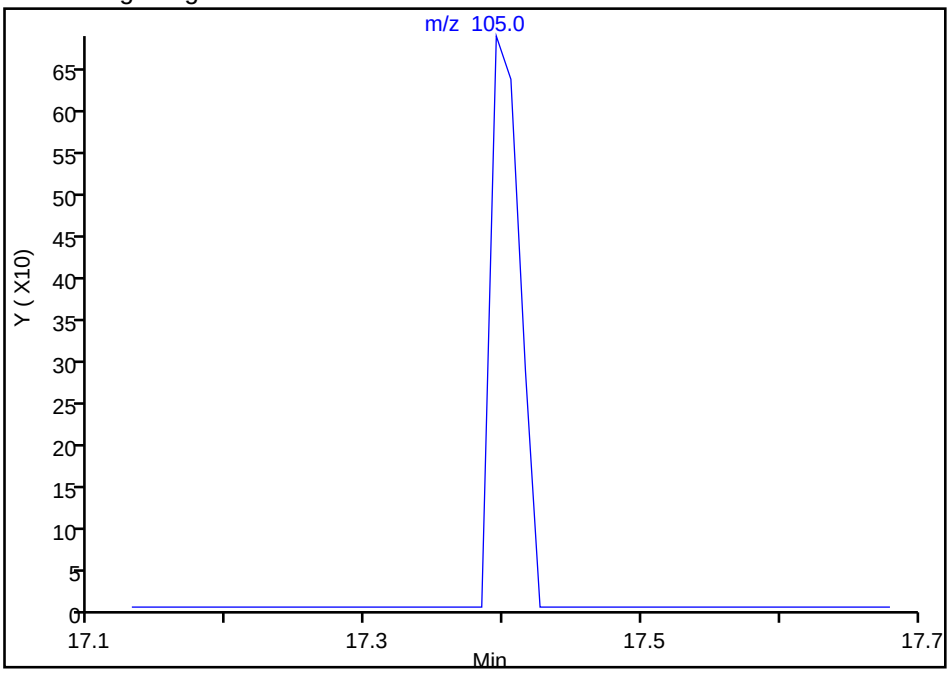
Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311816.D				
Injection Date:	31-Aug-2018 13:40:30	Instrument ID:	CHMSV2		
Lims ID:	720-88241-B-5-A	Lab Sample ID:	720-88241-5		
Client ID:	DG-D9S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

101 1,2,4-Trimethylbenzene, CAS: 95-63-6

Signal: 1

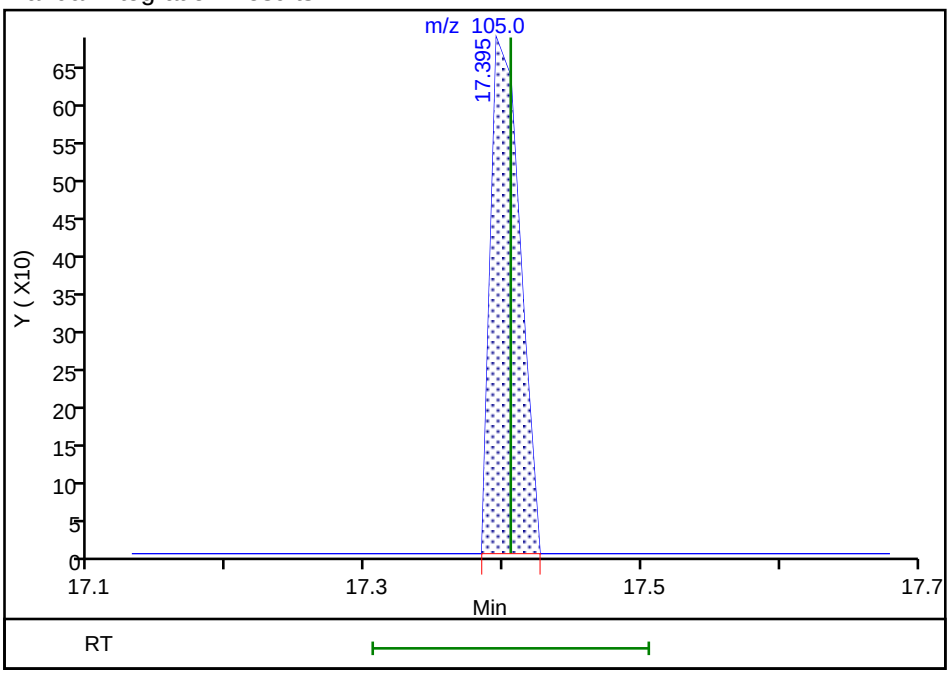
Not Detected
Expected RT: 17.41

Processing Integration Results



Manual Integration Results

RT: 17.39
Area: 1018
Amount: 0.043371
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 14:39:28
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

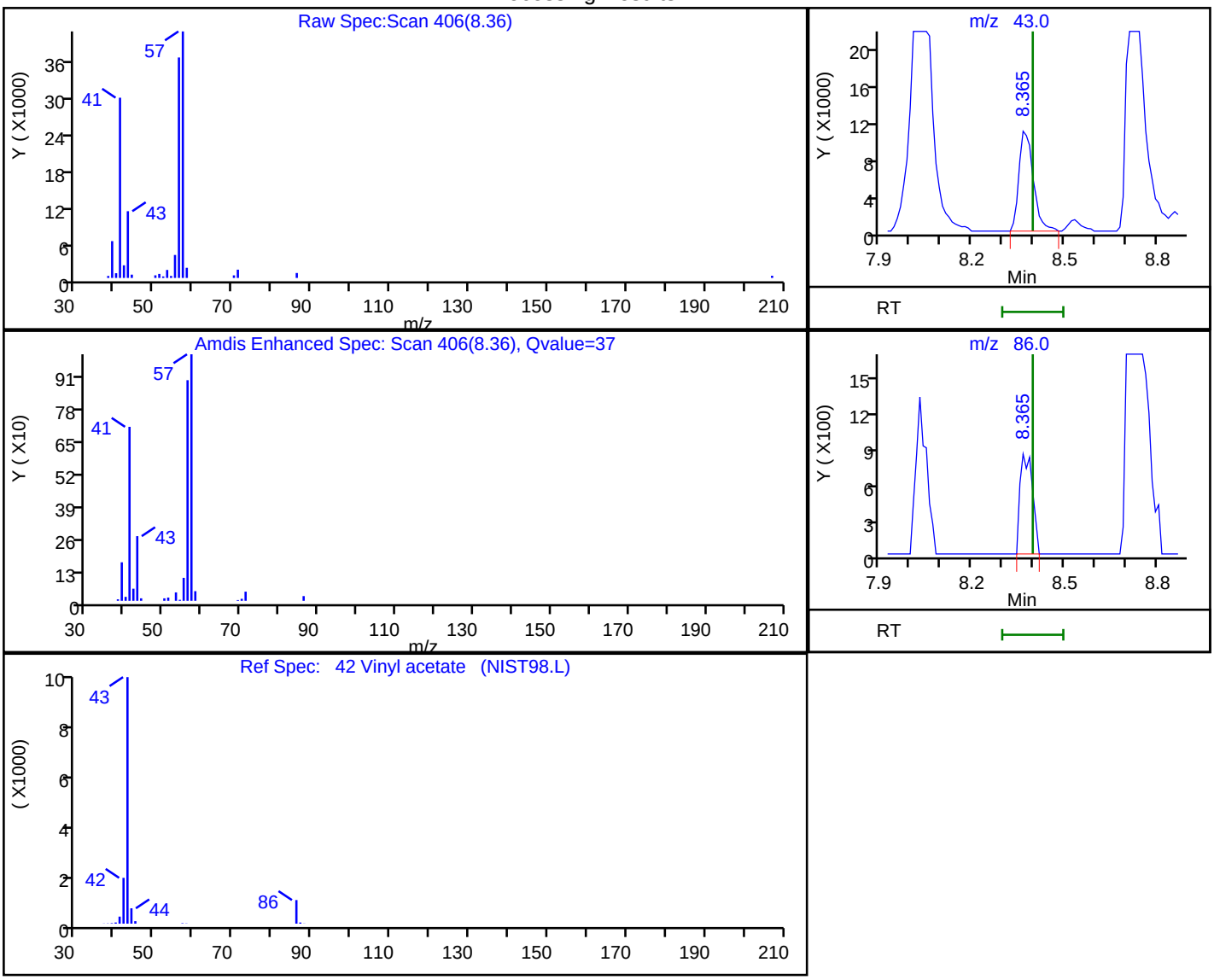
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311816.D				
Injection Date:	31-Aug-2018 13:40:30	Instrument ID:	CHMSV2		
Lims ID:	720-88241-B-5-A	Lab Sample ID:	720-88241-5		
Client ID:	DG-D9S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

42 Vinyl acetate, CAS: 108-05-4

Processing Results



RT	Mass	Response	Amount
8.36	43.00	35694	1.506323
8.36	86.00	2272	

Reviewer: salgadoa, 31-Aug-2018 14:38:42

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

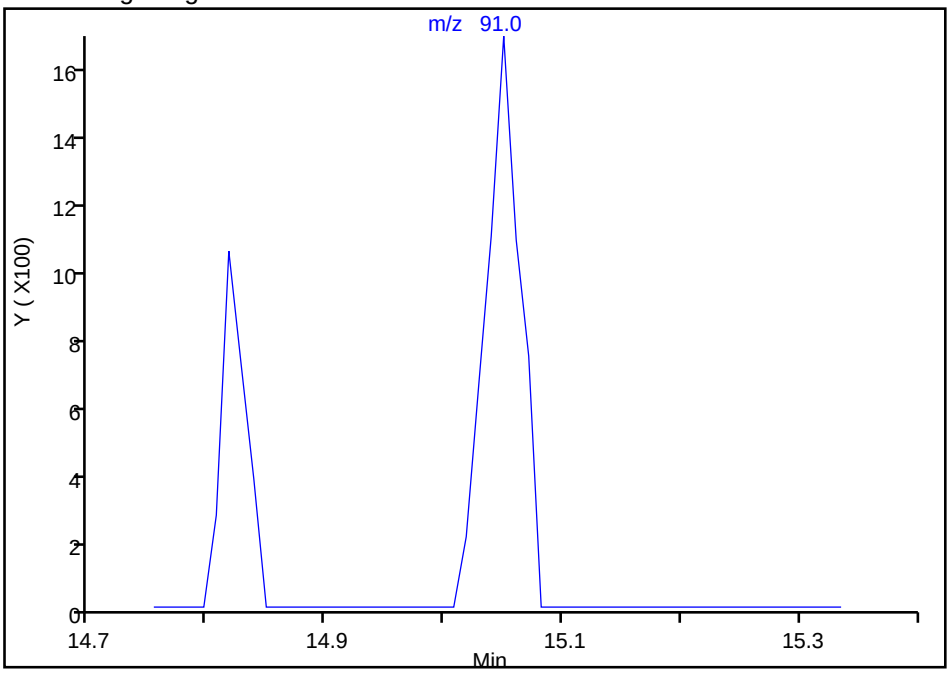
Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311816.D				
Injection Date:	31-Aug-2018 13:40:30	Instrument ID:	CHMSV2		
Lims ID:	720-88241-B-5-A	Lab Sample ID:	720-88241-5		
Client ID:	DG-D9S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

85 m-Xylene & p-Xylene, CAS: 179601-23-1

Signal: 1

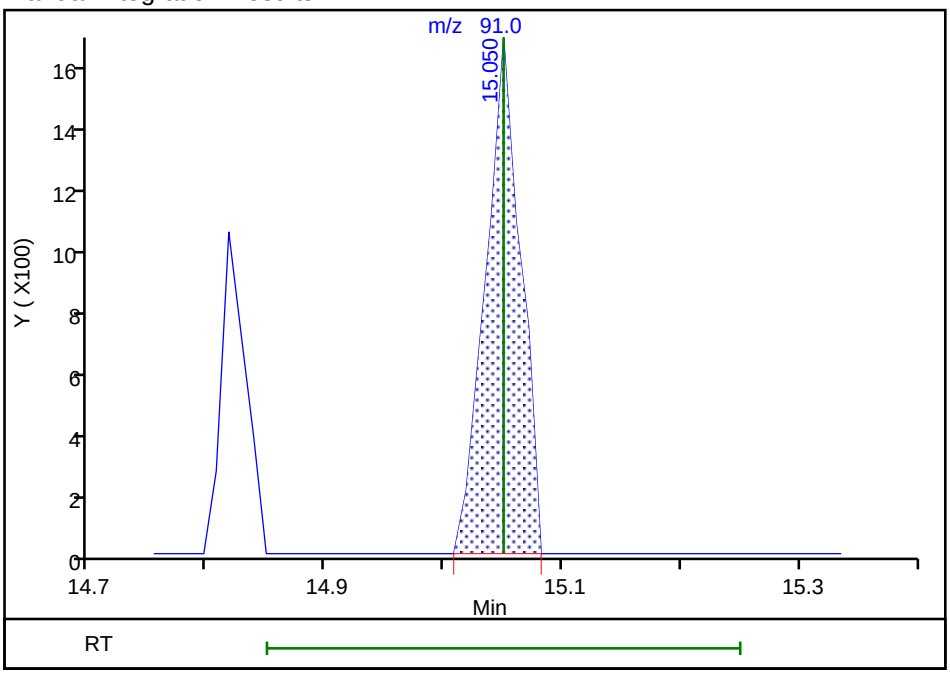
Not Detected
Expected RT: 15.05

Processing Integration Results



Manual Integration Results

RT: 15.05
Area: 3386
Amount: 0.116443
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 14:39:18
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

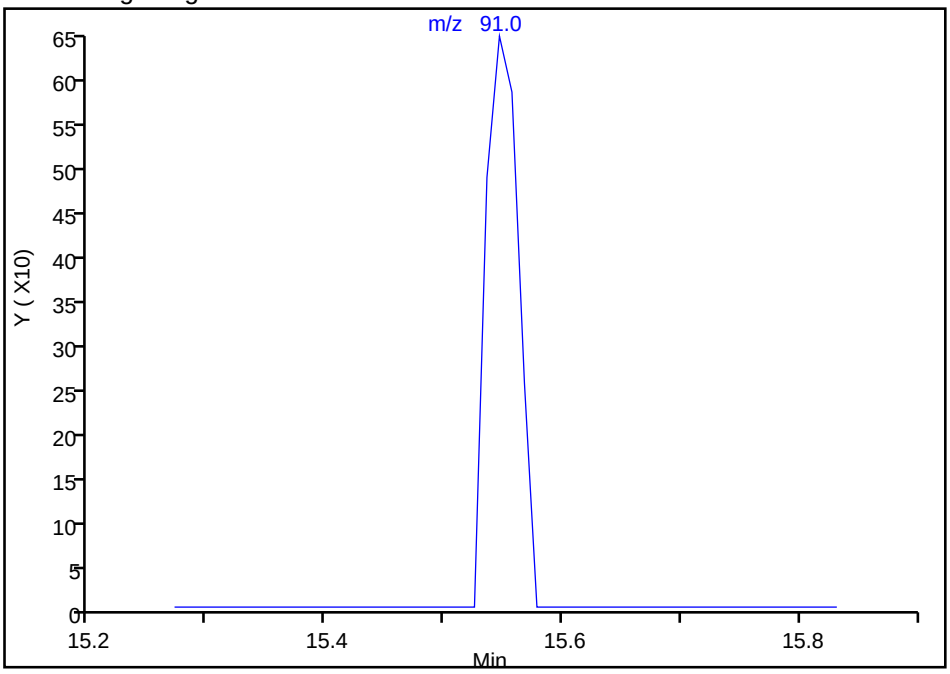
Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311816.D				
Injection Date:	31-Aug-2018 13:40:30	Instrument ID:	CHMSV2		
Lims ID:	720-88241-B-5-A	Lab Sample ID:	720-88241-5		
Client ID:	DG-D9S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

89 o-Xylene, CAS: 95-47-6

Signal: 1

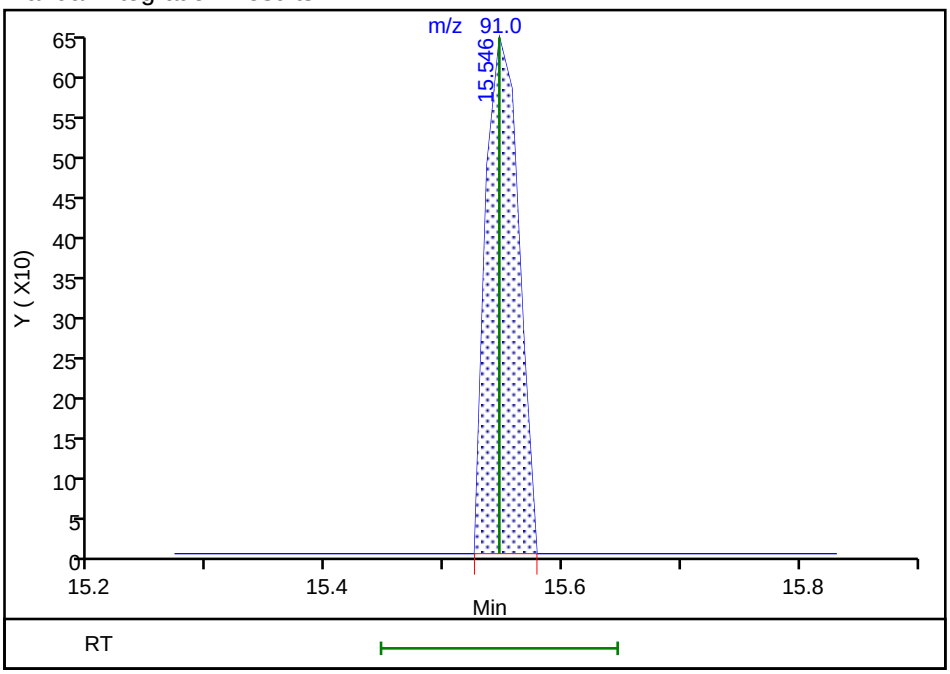
Not Detected
Expected RT: 15.55

Processing Integration Results



RT: 15.55
Area: 1239
Amount: 0.042499
Amount Units: ug/L

Manual Integration Results



Reviewer: salgadoa, 31-Aug-2018 14:39:23
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88241-1
SDG No.:
Client Sample ID: DG-D9S-9.5-10
Lab Sample ID: 720-88241-6
Matrix: Solid
Lab File ID: 08301833.D
Analysis Method: 8260B
Date Collected: 08/24/2018 11:35
Sample wt/vol: 6.109(g)
Date Analyzed: 08/30/2018 23:48
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250622
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.1	0.98
67-64-1	Acetone	40	J	41	31
71-43-2	Benzene	ND		4.1	0.53
75-27-4	Dichlorobromomethane	ND		4.1	0.59
108-86-1	Bromobenzene	ND		4.1	0.65
74-97-5	Chlorobromomethane	ND		16	0.59
75-25-2	Bromoform	ND		4.1	1.6
74-83-9	Bromomethane	ND		8.2	0.65
78-93-3	2-Butanone (MEK)	ND		41	17
104-51-8	n-Butylbenzene	ND		4.1	0.82
135-98-8	sec-Butylbenzene	ND		4.1	0.59
98-06-6	tert-Butylbenzene	ND		4.1	0.60
75-15-0	Carbon disulfide	ND	*	4.1	1.6
56-23-5	Carbon tetrachloride	ND		4.1	0.51
108-90-7	Chlorobenzene	ND		4.1	0.56
75-00-3	Chloroethane	ND		8.2	0.46
67-66-3	Chloroform	ND		4.1	0.54
74-87-3	Chloromethane	ND		8.2	0.65
95-49-8	2-Chlorotoluene	ND		4.1	0.53
106-43-4	4-Chlorotoluene	ND		4.1	0.56
124-48-1	Chlorodibromomethane	ND		4.1	0.58
95-50-1	1,2-Dichlorobenzene	ND		4.1	0.56
541-73-1	1,3-Dichlorobenzene	ND		4.1	0.59
106-46-7	1,4-Dichlorobenzene	ND		4.1	0.58
142-28-9	1,3-Dichloropropane	ND		4.1	0.60
563-58-6	1,1-Dichloropropene	ND		4.1	0.56
96-12-8	1,2-Dibromo-3-Chloropropane	ND		8.2	1.4
106-93-4	Ethylene Dibromide	ND		4.1	1.2
74-95-3	Dibromomethane	ND		8.2	0.70
75-71-8	Dichlorodifluoromethane	ND		8.2	0.65
75-34-3	1,1-Dichloroethane	ND		4.1	0.56
107-06-2	1,2-Dichloroethane	ND		4.1	0.62
75-35-4	1,1-Dichloroethene	ND	*	4.1	0.51
156-59-2	cis-1,2-Dichloroethene	ND		4.1	0.56
156-60-5	trans-1,2-Dichloroethene	ND		4.1	0.61
78-87-5	1,2-Dichloropropane	ND		4.1	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88241-1

SDG No.:

Client Sample ID: DG-D9S-9.5-10 Lab Sample ID: 720-88241-6

Matrix: Solid Lab File ID: 08301833.D

Analysis Method: 8260B Date Collected: 08/24/2018 11:35

Sample wt/vol: 6.109(g) Date Analyzed: 08/30/2018 23:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250622 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.1	0.56
10061-02-6	trans-1,3-Dichloropropene	ND		4.1	0.55
100-41-4	Ethylbenzene	ND		4.1	0.61
87-68-3	Hexachlorobutadiene	ND		4.1	0.74
591-78-6	2-Hexanone	ND		41	8.2
98-82-8	Isopropylbenzene	ND		4.1	0.56
99-87-6	4-Isopropyltoluene	ND		4.1	2.0
75-09-2	Methylene Chloride	ND		8.2	4.6
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		41	8.2
91-20-3	Naphthalene	ND		8.2	1.2
103-65-1	N-Propylbenzene	ND		4.1	0.54
100-42-5	Styrene	ND		4.1	0.52
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.1	0.62
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.1	0.61
127-18-4	Tetrachloroethene	ND		4.1	0.55
108-88-3	Toluene	ND		4.1	0.58
87-61-6	1,2,3-Trichlorobenzene	ND		4.1	0.61
120-82-1	1,2,4-Trichlorobenzene	ND		4.1	0.58
71-55-6	1,1,1-Trichloroethane	ND		4.1	0.50
79-00-5	1,1,2-Trichloroethane	ND		4.1	0.57
79-01-6	Trichloroethene	ND		4.1	0.52
75-69-4	Trichlorofluoromethane	ND		4.1	0.46
96-18-4	1,2,3-Trichloropropane	ND		4.1	0.63
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.1	1.7
95-63-6	1,2,4-Trimethylbenzene	ND		4.1	1.3
108-67-8	1,3,5-Trimethylbenzene	ND		4.1	0.53
108-05-4	Vinyl acetate	ND		16	4.1
75-01-4	Vinyl chloride	ND		4.1	0.60
1330-20-7	Xylenes, Total	ND		4.1	1.0
594-20-7	2,2-Dichloropropane	ND		4.1	1.6
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		200	82

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88241-1

SDG No.:

Client Sample ID: DG-D9S-9.5-10 Lab Sample ID: 720-88241-6

Matrix: Solid Lab File ID: 08301833.D

Analysis Method: 8260B Date Collected: 08/24/2018 11:35

Sample wt/vol: 6.109(g) Date Analyzed: 08/30/2018 23:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250622 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	95		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		60-140
2037-26-5	Toluene-d8 (Surr)	99		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\08301833.D
Lims ID: 720-88241-A-6-A
Client ID: DG-D9S--9.5-10
Sample Type: Client
Inject. Date: 30-Aug-2018 23:48:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88241-A-6
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 31-Aug-2018 06:08:09 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 09:07:07

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.094	7.095	-0.001	98	149004	250.0	
* 2 Fluorobenzene	96	10.901	10.902	-0.001	98	945109	25.0	
* 4 Chlorobenzene-d5	117	14.749	14.740	0.009	85	634484	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.878	17.879	-0.001	96	290750	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.483	9.483	-0.001	54	62437	7.28	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.000	10.000	-0.001	99	59687	7.09	
$ 10 Toluene-d8 (Surr)	98	13.007	13.007	-0.001	92	253261	7.45	
$ 11 4-Bromofluorobenzene	95	16.238	16.248	0.000	91	82469	7.15	
$ 12 1,2-Dichlorobenzene-d4	152	18.344	18.344	-0.001	80	63983	5.96	
28 Acetone	58	6.648	6.638	0.009	94	14275	24.4	
34 Methylene Chloride	84	7.357	7.357	-0.001	6	682	0.0803	
143 Methyl acetate	43	7.408	7.398	0.010	92	17205	4.68	
139 Ethyl acetate	43	9.291	9.291	-0.001	94	56082	10.1	
59 Benzene	78	10.668	10.668	-0.001	30	4418	0.1199	
75 Toluene	92	13.088	13.097	-0.001	64	7836	0.3411	
148 1-Chlorohexane	55	14.739	14.647	0.090	6	6546	0.6295	
126 Butyl Ether	87	14.951	14.951	0.009	77	2941	0.4263	
132 n-Nonane	57	15.336	15.343	-0.007	1	446	NR	
A 116 C4-C10	1	11.085	(5.035-17.135)		0	754061	9.58	
A 153 C6-C8	1	11.148	(8.836-13.459)		0	255582	3.25	
A 154 C6-C9	1	12.105	(8.836-15.373)		0	348254	4.43	
A 117 C4-C12	1	12.645	(5.035-20.255)		0	803001	10.2	
A 119 C6-C10	1	12.986	(8.836-17.135)		0	357978	4.55	
A 118 C5-C12	1	13.429	(6.604-20.255)		0	763817	9.71	
A 120 C6-C12	1	14.546	(8.836-20.255)		0	405963	5.16	
A 155 C8-C10	1	15.241	(13.348-17.135)		0	106181	1.35	
A 121 C7-C12	1	15.720	(11.186-20.255)		0	205821	2.62	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

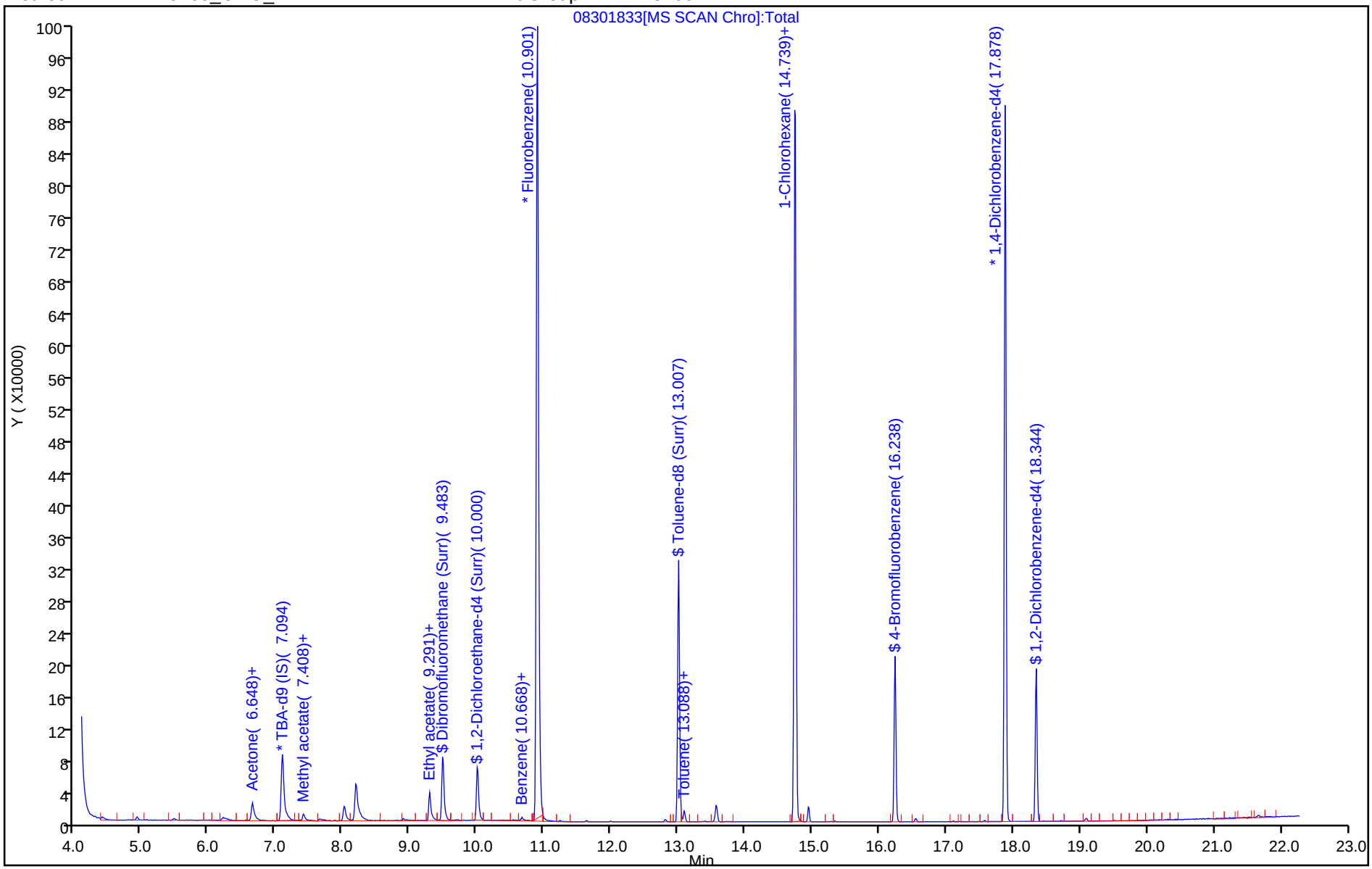
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 09:07:08 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\08301833.D				
Injection Date:	30-Aug-2018 23:48:30	Instrument ID:	HP7	Operator ID:	SF
Lims ID:	720-88241-A-6-A	Lab Sample ID:	720-88241-6	Worklist Smp#:	15
Client ID:	DG-D9S--9.5-10				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260_GRO_HP7	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\08301833.D
Lims ID: 720-88241-A-6-A
Client ID: DG-D9S--9.5-10
Sample Type: Client
Inject. Date: 30-Aug-2018 23:48:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88241-A-6
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 31-Aug-2018 06:08:09 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 09:07:07

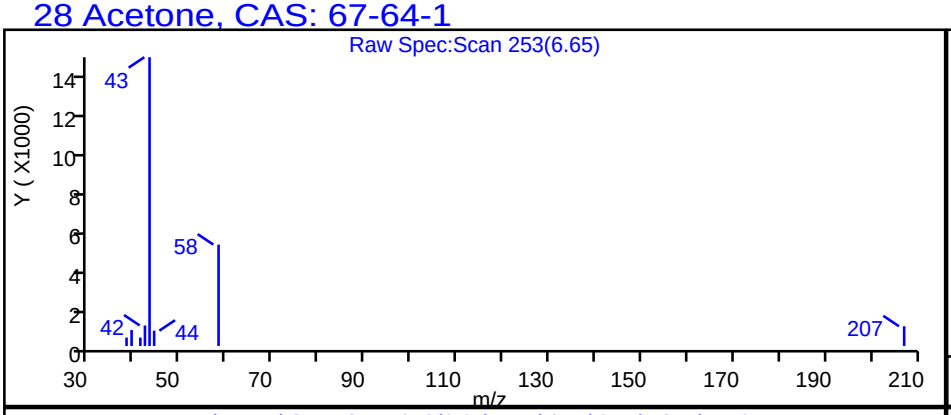
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.09	94.56
$ 10 Toluene-d8 (Surr)	7.50	7.45	99.28
$ 11 4-Bromofluorobenzene	7.50	7.15	95.32
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

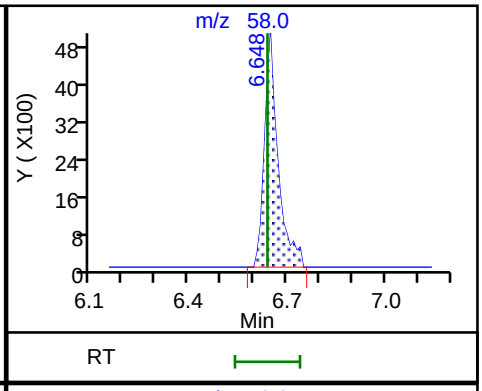
Report Date: 31-Aug-2018 09:07:08 Chrom Revision: 2.3 19-Jul-2018 15:14:50

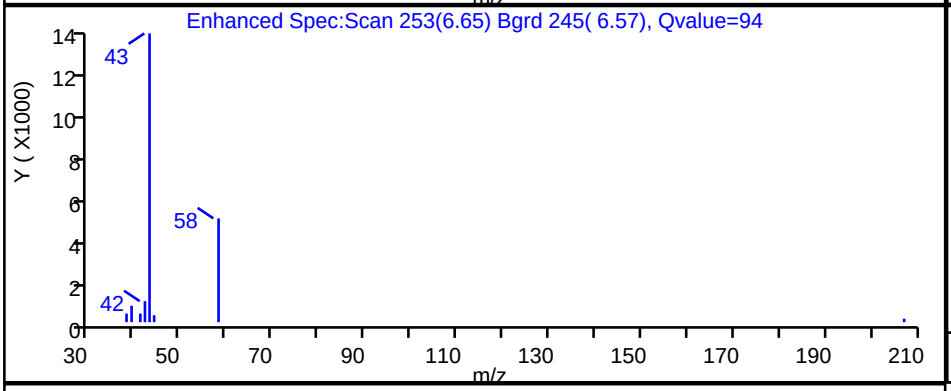
TestAmerica Pleasanton

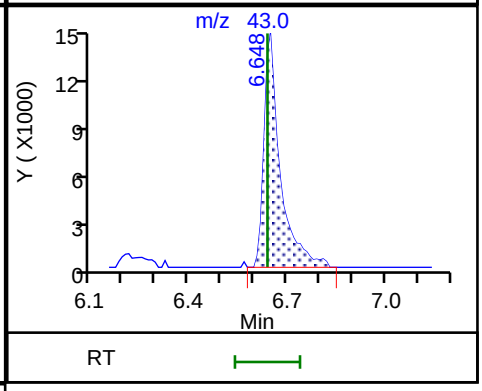
Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\08301833.D				
Injection Date:	30-Aug-2018 23:48:30	Instrument ID:	HP7		
Lims ID:	720-88241-A-6-A	Lab Sample ID:	720-88241-6		
Client ID:	DG-D9S--9.5-10				
Operator ID:	SF	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

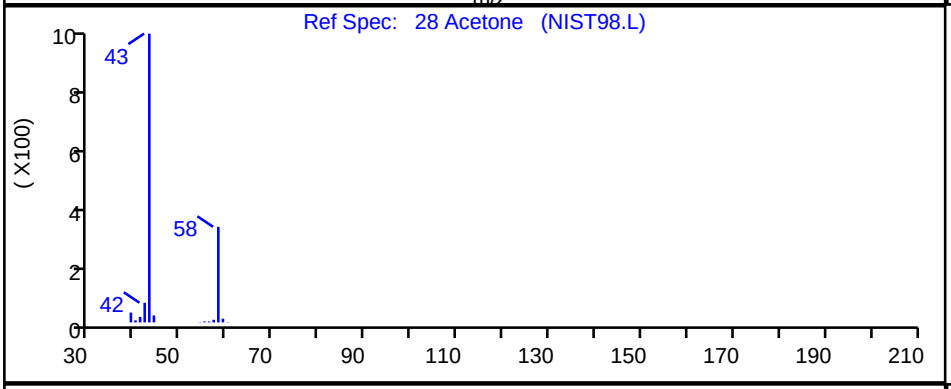
28 Acetone, CAS: 67-64-1

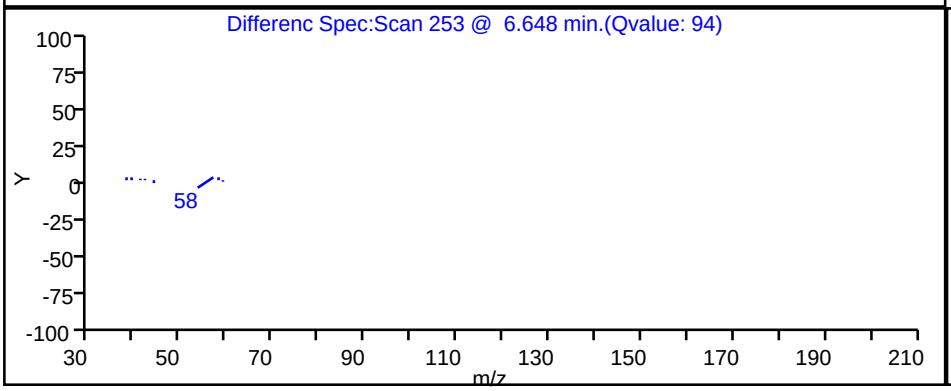


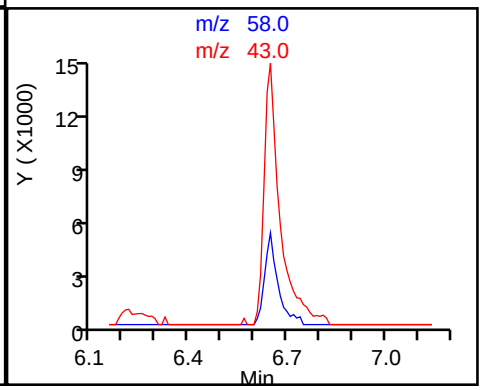










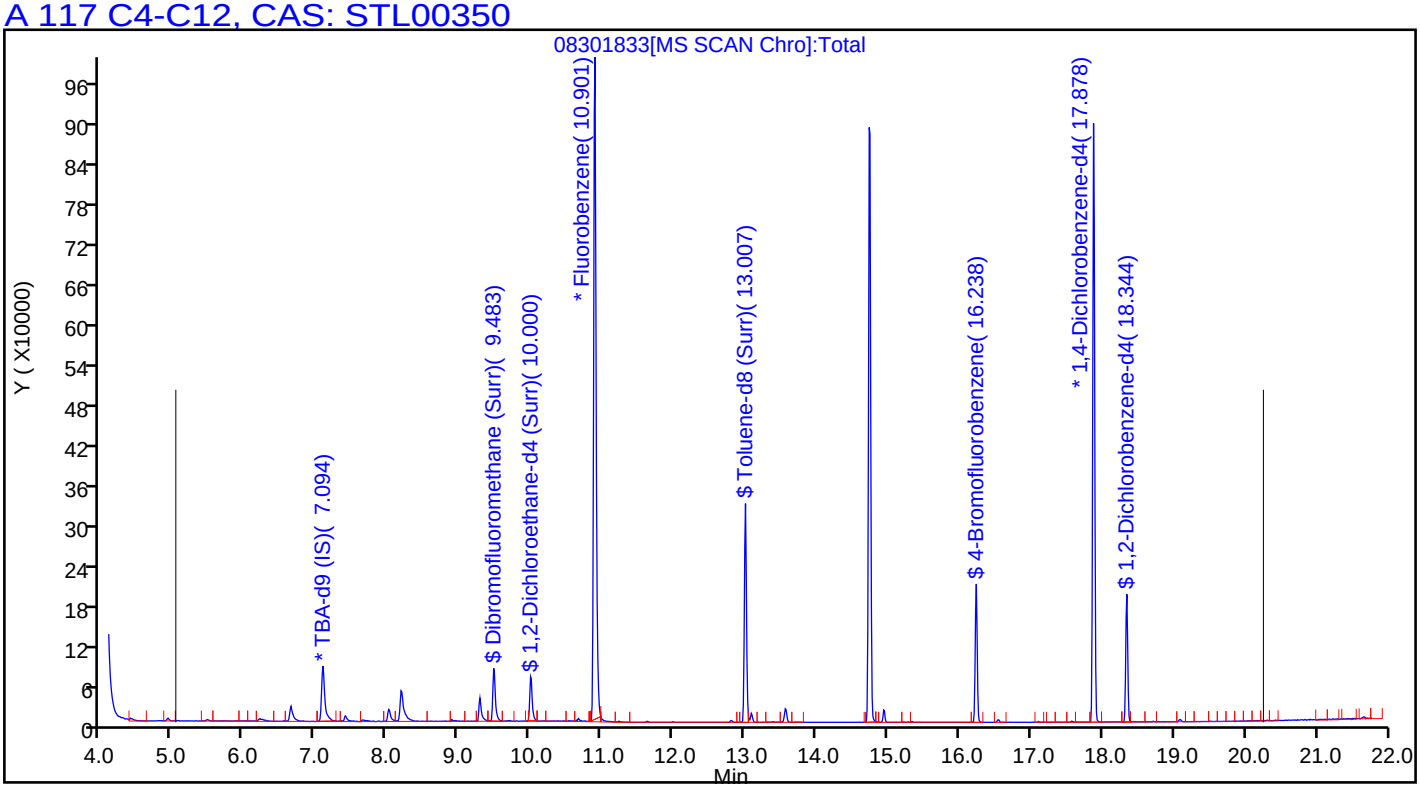


Report Date: 31-Aug-2018 09:07:09 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\08301833.D				
Injection Date:	30-Aug-2018 23:48:30	Instrument ID:	HP7		
Lims ID:	720-88241-A-6-A	Lab Sample ID:	720-88241-6		
Client ID:	DG-D9S--9.5-10				
Operator ID:	SF	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88241-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DCA	TOL
Lab Sample ID	Client Sample ID	(45-131)	(60-140)	(58-140)
720-88241-1	DG-F9S-0.5-1	89	117	94
720-88241-2	DG-F9S-3.5-4	81	109	92
720-88241-3	DG-F9S-9.5-10	70 *	111	86
720-88241-4	DG-D9S-0.5-1	98	114	96
720-88241-5	DG-D9S-3.5-4	81	114	91
720-88241-6	DG-D9S-9.5-10	95	95	99
LCS 720-250622/5	Lab Control Sample	100	92	100
LCS 720-250622/7	Lab Control Sample	103	100	103
LCS 720-250645/5	Lab Control Sample	95	102	97
LCS 720-250645/7	Lab Control Sample	96	105	98
LCSD 720-250622/6	Lab Control Sample Dup	98	92	101
LCSD 720-250622/8	Lab Control Sample Dup	102	100	102
LCSD 720-250645/6	Lab Control Sample Dup	96	107	96
LCSD 720-250645/8	Lab Control Sample Dup	97	104	97
MB 720-250622/4	Method Blank	98	96	101
MB 720-250645/4	Method Blank	93	104	96

Surrogate Legend

BFB = 4-Bromofluorobenzene
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		FBP	TPHL
Lab Sample ID	Client Sample ID	(33-120)	(35-146)
720-88240-D-3-P MS	Matrix Spike	73	89
720-88240-D-3-Q MSD	Matrix Spike Duplicate	67	80
720-88241-1	DG-F9S-0.5-1	70	92
720-88241-1 MS	DG-F9S-0.5-1	62	91
720-88241-1 MSD	DG-F9S-0.5-1	62	90
720-88241-2	DG-F9S-3.5-4	55	82
720-88241-3	DG-F9S-9.5-10	68	90
720-88241-4	DG-D9S-0.5-1	63	82
720-88241-5	DG-D9S-3.5-4	71	91
720-88241-6	DG-D9S-9.5-10	50	73
LCS 720-250487/2-A	Lab Control Sample	68	89
LCS 720-250853/2-A	Lab Control Sample	74	90
MB 720-250487/1-A	Method Blank	71	90
MB 720-250853/1-A	Method Blank	81	89

Surrogate Legend

FBP = 2-Fluorobiphenyl
TPHL = Terphenyl-d14

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88241-1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	TPH1 (40-130)								
720-88240-D-3-G MS	Matrix Spike	0 X D								
720-88240-D-3-H MSD	Matrix Spike Duplicate	0 X D								
720-88241-1	DG-F9S-0.5-1	95								
720-88241-2	DG-F9S-3.5-4	116								
720-88241-3	DG-F9S-9.5-10	122								
720-88241-4	DG-D9S-0.5-1	117								
720-88241-5	DG-D9S-3.5-4	82								
720-88241-6	DG-D9S-9.5-10	94								
LCS 720-250461/2-A	Lab Control Sample	86								
MB 720-250461/1-A	Method Blank	96								

Surrogate Legend

TPH = p-Terphenyl

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	DCBP1 (21-136)	TCX1 (21-145)							
720-88240-D-3-M MS	Matrix Spike	79	77							
720-88241-1	DG-F9S-0.5-1	72	81							
720-88241-3	DG-F9S-9.5-10	67	91							

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	DCBP2 (21-136)	TCX1 (21-145)							
720-88240-D-3-N MSD	Matrix Spike Duplicate	93	80							

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	DCBP1 (21-136)	TCX2 (21-145)							
720-88241-2	DG-F9S-3.5-4	80	75							
720-88241-4	DG-D9S-0.5-1	77	73							
MB 720-250479/1-A	Method Blank	96	72							

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	**Client Sample ID**	**DCBP2 (21-136)**	**TCX2 (21-145)**
720-88241-5	DG-D9S-3.5-4	75	81
720-88241-6	DG-D9S-9.5-10	79	59
LCS 720-250479/2-A	Lab Control Sample	110	81

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	**Client Sample ID**	**TCX2 (14-128)**	**DCBP2 (10-132)**
720-88240-F-3-B MS	Matrix Spike	88	110
720-88240-F-3-C MSD	Matrix Spike Duplicate	97	151 X
720-88241-1	DG-F9S-0.5-1	83	80
720-88241-2	DG-F9S-3.5-4	124	0 X
720-88241-3	DG-F9S-9.5-10	57	64
720-88241-4	DG-D9S-0.5-1	89	80 p
720-88241-5	DG-D9S-3.5-4	69	72
720-88241-6	DG-D9S-9.5-10	70	78
LCS 240-343099/24-A	Lab Control Sample	87	101
MB 240-343099/23-A	Method Blank	88	106

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 720-250622/4
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/30/18 18:12	1
Acetone	ND		50	38	ug/Kg			08/30/18 18:12	1
Benzene	ND		5.0	0.65	ug/Kg			08/30/18 18:12	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/30/18 18:12	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/30/18 18:12	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/30/18 18:12	1
Bromoform	ND		5.0	2.0	ug/Kg			08/30/18 18:12	1
Bromomethane	ND		10	0.79	ug/Kg			08/30/18 18:12	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/30/18 18:12	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/30/18 18:12	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/30/18 18:12	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/30/18 18:12	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/30/18 18:12	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/30/18 18:12	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/30/18 18:12	1
Chloroethane	ND		10	0.56	ug/Kg			08/30/18 18:12	1
Chloroform	ND		5.0	0.66	ug/Kg			08/30/18 18:12	1
Chloromethane	ND		10	0.79	ug/Kg			08/30/18 18:12	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/30/18 18:12	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/30/18 18:12	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/30/18 18:12	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/30/18 18:12	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/30/18 18:12	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/30/18 18:12	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/30/18 18:12	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/30/18 18:12	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/30/18 18:12	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/30/18 18:12	1
Dibromomethane	ND		10	0.86	ug/Kg			08/30/18 18:12	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/30/18 18:12	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/30/18 18:12	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/30/18 18:12	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/30/18 18:12	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/30/18 18:12	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/30/18 18:12	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/30/18 18:12	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/30/18 18:12	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/30/18 18:12	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/30/18 18:12	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/30/18 18:12	1
2-Hexanone	ND		50	10	ug/Kg			08/30/18 18:12	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/30/18 18:12	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/30/18 18:12	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/30/18 18:12	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/30/18 18:12	1
Naphthalene	ND		10	1.5	ug/Kg			08/30/18 18:12	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/30/18 18:12	1
Styrene	ND		5.0	0.63	ug/Kg			08/30/18 18:12	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250622/4
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/30/18 18:12	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/30/18 18:12	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/30/18 18:12	1
Toluene	ND		5.0	0.71	ug/Kg			08/30/18 18:12	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/30/18 18:12	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/30/18 18:12	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/30/18 18:12	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/30/18 18:12	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/30/18 18:12	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/30/18 18:12	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/30/18 18:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/30/18 18:12	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/30/18 18:12	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/30/18 18:12	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/30/18 18:12	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/30/18 18:12	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/30/18 18:12	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/30/18 18:12	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/30/18 18:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*45 - 131*		*08/30/18 18:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*60 - 140*		*08/30/18 18:12*	*1*
Toluene-d8 (Surr)	*101*		*58 - 140*		*08/30/18 18:12*	*1*

Lab Sample ID: LCS 720-250622/5
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	51.5		ug/Kg		103	70 - 144
Acetone	250	200		ug/Kg		80	30 - 162
Benzene	50.0	53.2		ug/Kg		106	70 - 130
Dichlorobromomethane	50.0	51.7		ug/Kg		103	70 - 140
Bromobenzene	50.0	49.4		ug/Kg		99	70 - 130
Chlorobromomethane	50.0	51.8		ug/Kg		104	70 - 130
Bromoform	50.0	49.6		ug/Kg		99	59 - 158
Bromomethane	50.0	49.2		ug/Kg		98	59 - 132
2-Butanone (MEK)	250	217		ug/Kg		87	59 - 159
n-Butylbenzene	50.0	54.4		ug/Kg		109	70 - 142
sec-Butylbenzene	50.0	55.2		ug/Kg		110	70 - 136
tert-Butylbenzene	50.0	53.7		ug/Kg		107	70 - 130
Carbon disulfide	50.0	72.6	*	ug/Kg		145	60 - 140
Carbon tetrachloride	50.0	57.1		ug/Kg		114	70 - 142
Chlorobenzene	50.0	51.0		ug/Kg		102	70 - 130
Chloroethane	50.0	47.4		ug/Kg		95	65 - 130
Chloroform	50.0	52.8		ug/Kg		106	77 - 127

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250622/5
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	50.0	47.2		ug/Kg		94	55 - 140
2-Chlorotoluene	50.0	53.1		ug/Kg		106	70 - 138
4-Chlorotoluene	50.0	53.3		ug/Kg		107	70 - 136
Chlorodibromomethane	50.0	50.8		ug/Kg		102	70 - 146
1,2-Dichlorobenzene	50.0	49.7		ug/Kg		99	70 - 130
1,3-Dichlorobenzene	50.0	50.9		ug/Kg		102	70 - 131
1,4-Dichlorobenzene	50.0	50.5		ug/Kg		101	70 - 130
1,3-Dichloropropane	50.0	48.7		ug/Kg		97	70 - 140
1,1-Dichloropropene	50.0	56.5		ug/Kg		113	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	48.0		ug/Kg		96	60 - 145
Ethylene Dibromide	50.0	49.6		ug/Kg		99	70 - 140
Dibromomethane	50.0	49.5		ug/Kg		99	70 - 139
Dichlorodifluoromethane	50.0	42.1		ug/Kg		84	37 - 158
1,1-Dichloroethane	50.0	55.6		ug/Kg		111	70 - 130
1,2-Dichloroethane	50.0	49.7		ug/Kg		99	70 - 130
1,1-Dichloroethene	50.0	63.6	*	ug/Kg		127	74 - 122
cis-1,2-Dichloroethene	50.0	54.6		ug/Kg		109	70 - 138
trans-1,2-Dichloroethene	50.0	58.7		ug/Kg		117	67 - 130
1,2-Dichloropropane	50.0	53.7		ug/Kg		107	73 - 127
cis-1,3-Dichloropropene	50.0	54.8		ug/Kg		110	68 - 147
trans-1,3-Dichloropropene	50.0	51.7		ug/Kg		103	70 - 155
Ethylbenzene	50.0	54.0		ug/Kg		108	80 - 137
Hexachlorobutadiene	50.0	50.4		ug/Kg		101	70 - 132
2-Hexanone	250	230		ug/Kg		92	62 - 158
Isopropylbenzene	50.0	53.0		ug/Kg		106	70 - 130
4-Isopropyltoluene	50.0	55.2		ug/Kg		110	70 - 133
Methylene Chloride	50.0	52.7		ug/Kg		105	70 - 134
4-Methyl-2-pentanone (MIBK)	250	234		ug/Kg		94	60 - 160
Naphthalene	50.0	46.8		ug/Kg		94	60 - 147
N-Propylbenzene	50.0	56.0		ug/Kg		112	70 - 130
Styrene	50.0	51.3		ug/Kg		103	70 - 130
1,1,1,2-Tetrachloroethane	50.0	51.8		ug/Kg		104	70 - 130
1,1,2,2-Tetrachloroethane	50.0	48.0		ug/Kg		96	70 - 146
Tetrachloroethene	50.0	53.2		ug/Kg		106	70 - 132
Toluene	50.0	52.0		ug/Kg		104	75 - 120
1,2,3-Trichlorobenzene	50.0	47.4		ug/Kg		95	60 - 140
1,2,4-Trichlorobenzene	50.0	49.0		ug/Kg		98	60 - 140
1,1,1-Trichloroethane	50.0	55.2		ug/Kg		110	70 - 130
1,1,2-Trichloroethane	50.0	50.3		ug/Kg		101	70 - 130
Trichloroethene	50.0	51.3		ug/Kg		103	70 - 133
Trichlorofluoromethane	50.0	53.6		ug/Kg		107	60 - 140
1,2,3-Trichloropropane	50.0	47.8		ug/Kg		96	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	68.5		ug/Kg		137	60 - 140
1,2,4-Trimethylbenzene	50.0	53.2		ug/Kg		106	70 - 130
1,3,5-Trimethylbenzene	50.0	53.8		ug/Kg		108	70 - 131
Vinyl acetate	50.0	48.2		ug/Kg		96	38 - 176
Vinyl chloride	50.0	48.4		ug/Kg		97	58 - 125

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250622/5
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
m-Xylene & p-Xylene	50.0	53.1		ug/Kg		106	70 - 146
o-Xylene	50.0	53.0		ug/Kg		106	70 - 140
2,2-Dichloropropane	50.0	58.1		ug/Kg		116	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*92*		*60 - 140*
Toluene-d8 (Surr)	*100*		*58 - 140*

Lab Sample ID: LCS 720-250622/7
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	1020		ug/Kg		102	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*100*		*60 - 140*
Toluene-d8 (Surr)	*103*		*58 - 140*

Lab Sample ID: LCSD 720-250622/6
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	51.0		ug/Kg		102	70 - 144	1	20
Acetone	250	192		ug/Kg		77	30 - 162	4	30
Benzene	50.0	53.0		ug/Kg		106	70 - 130	0	20
Dichlorobromomethane	50.0	51.5		ug/Kg		103	70 - 140	0	20
Bromobenzene	50.0	50.0		ug/Kg		100	70 - 130	1	20
Chlorobromomethane	50.0	51.4		ug/Kg		103	70 - 130	1	20
Bromoform	50.0	47.7		ug/Kg		95	59 - 158	4	20
Bromomethane	50.0	49.0		ug/Kg		98	59 - 132	0	20
2-Butanone (MEK)	250	211		ug/Kg		84	59 - 159	3	20
n-Butylbenzene	50.0	54.3		ug/Kg		109	70 - 142	0	20
sec-Butylbenzene	50.0	55.1		ug/Kg		110	70 - 136	0	20
tert-Butylbenzene	50.0	53.8		ug/Kg		108	70 - 130	0	20
Carbon disulfide	50.0	71.9	*	ug/Kg		144	60 - 140	1	20
Carbon tetrachloride	50.0	57.0		ug/Kg		114	70 - 142	0	20
Chlorobenzene	50.0	50.3		ug/Kg		101	70 - 130	1	20
Chloroethane	50.0	47.4		ug/Kg		95	65 - 130	0	20
Chloroform	50.0	53.2		ug/Kg		106	77 - 127	1	20
Chloromethane	50.0	47.0		ug/Kg		94	55 - 140	0	20
2-Chlorotoluene	50.0	53.0		ug/Kg		106	70 - 138	0	20
4-Chlorotoluene	50.0	53.5		ug/Kg		107	70 - 136	0	20
Chlorodibromomethane	50.0	50.0		ug/Kg		100	70 - 146	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250622/6
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene	50.0	50.0		ug/Kg		100	70 - 130	1	20
1,3-Dichlorobenzene	50.0	51.2		ug/Kg		102	70 - 131	1	20
1,4-Dichlorobenzene	50.0	50.4		ug/Kg		101	70 - 130	0	20
1,3-Dichloropropane	50.0	48.0		ug/Kg		96	70 - 140	1	20
1,1-Dichloropropene	50.0	55.8		ug/Kg		112	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	50.0	47.4		ug/Kg		95	60 - 145	1	20
Ethylene Dibromide	50.0	48.9		ug/Kg		98	70 - 140	1	20
Dibromomethane	50.0	48.2		ug/Kg		96	70 - 139	3	20
Dichlorodifluoromethane	50.0	40.6		ug/Kg		81	37 - 158	4	20
1,1-Dichloroethane	50.0	55.5		ug/Kg		111	70 - 130	0	20
1,2-Dichloroethane	50.0	49.2		ug/Kg		98	70 - 130	1	20
1,1-Dichloroethene	50.0	63.0	*	ug/Kg		126	74 - 122	1	20
cis-1,2-Dichloroethene	50.0	54.1		ug/Kg		108	70 - 138	1	20
trans-1,2-Dichloroethene	50.0	58.7		ug/Kg		117	67 - 130	0	20
1,2-Dichloropropane	50.0	53.9		ug/Kg		108	73 - 127	0	20
cis-1,3-Dichloropropene	50.0	54.5		ug/Kg		109	68 - 147	0	20
trans-1,3-Dichloropropene	50.0	51.0		ug/Kg		102	70 - 155	1	20
Ethylbenzene	50.0	52.8		ug/Kg		106	80 - 137	2	20
Hexachlorobutadiene	50.0	50.6		ug/Kg		101	70 - 132	0	20
2-Hexanone	250	219		ug/Kg		88	62 - 158	5	20
Isopropylbenzene	50.0	51.5		ug/Kg		103	70 - 130	3	20
4-Isopropyltoluene	50.0	54.8		ug/Kg		110	70 - 133	1	20
Methylene Chloride	50.0	53.1		ug/Kg		106	70 - 134	1	20
4-Methyl-2-pentanone (MIBK)	250	228		ug/Kg		91	60 - 160	3	20
Naphthalene	50.0	46.7		ug/Kg		93	60 - 147	0	20
N-Propylbenzene	50.0	55.6		ug/Kg		111	70 - 130	1	20
Styrene	50.0	50.7		ug/Kg		101	70 - 130	1	20
1,1,1,2-Tetrachloroethane	50.0	51.4		ug/Kg		103	70 - 130	1	20
1,1,2,2-Tetrachloroethane	50.0	47.1		ug/Kg		94	70 - 146	2	20
Tetrachloroethene	50.0	51.9		ug/Kg		104	70 - 132	2	20
Toluene	50.0	50.9		ug/Kg		102	75 - 120	2	20
1,2,3-Trichlorobenzene	50.0	48.3		ug/Kg		97	60 - 140	2	20
1,2,4-Trichlorobenzene	50.0	49.5		ug/Kg		99	60 - 140	1	20
1,1,1-Trichloroethane	50.0	55.0		ug/Kg		110	70 - 130	0	20
1,1,2-Trichloroethane	50.0	50.1		ug/Kg		100	70 - 130	0	20
Trichloroethene	50.0	50.8		ug/Kg		102	70 - 133	1	20
Trichlorofluoromethane	50.0	53.2		ug/Kg		106	60 - 140	1	20
1,2,3-Trichloropropane	50.0	47.6		ug/Kg		95	70 - 146	0	20
1,1,2-Trichloro-1,2,2-trifluoroetha ne	50.0	68.5		ug/Kg		137	60 - 140	0	20
1,2,4-Trimethylbenzene	50.0	53.5		ug/Kg		107	70 - 130	1	20
1,3,5-Trimethylbenzene	50.0	54.0		ug/Kg		108	70 - 131	0	20
Vinyl acetate	50.0	47.4		ug/Kg		95	38 - 176	2	20
Vinyl chloride	50.0	47.7		ug/Kg		95	58 - 125	1	20
m-Xylene & p-Xylene	50.0	52.1		ug/Kg		104	70 - 146	2	20
o-Xylene	50.0	51.9		ug/Kg		104	70 - 140	2	20
2,2-Dichloropropane	50.0	58.6		ug/Kg		117	70 - 162	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250622/6
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*92*		*60 - 140*
Toluene-d8 (Surr)	*101*		*58 - 140*

Lab Sample ID: LCSD 720-250622/8
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	1000		ug/Kg		100	70 - 122	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*100*		*60 - 140*
Toluene-d8 (Surr)	*102*		*58 - 140*

Lab Sample ID: MB 720-250645/4
Matrix: Solid
Analysis Batch: 250645

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/31/18 07:58	1
Acetone	ND		50	38	ug/Kg			08/31/18 07:58	1
Benzene	ND		5.0	0.65	ug/Kg			08/31/18 07:58	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/31/18 07:58	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/31/18 07:58	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/31/18 07:58	1
Bromoform	ND		5.0	2.0	ug/Kg			08/31/18 07:58	1
Bromomethane	ND		10	0.79	ug/Kg			08/31/18 07:58	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/31/18 07:58	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/31/18 07:58	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/31/18 07:58	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/31/18 07:58	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/31/18 07:58	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/31/18 07:58	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/31/18 07:58	1
Chloroethane	ND		10	0.56	ug/Kg			08/31/18 07:58	1
Chloroform	ND		5.0	0.66	ug/Kg			08/31/18 07:58	1
Chloromethane	ND		10	0.79	ug/Kg			08/31/18 07:58	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/31/18 07:58	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/31/18 07:58	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/31/18 07:58	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/31/18 07:58	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/31/18 07:58	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/31/18 07:58	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/31/18 07:58	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/31/18 07:58	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250645/4
Matrix: Solid
Analysis Batch: 250645

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/31/18 07:58	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/31/18 07:58	1
Dibromomethane	ND		10	0.86	ug/Kg			08/31/18 07:58	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/31/18 07:58	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/31/18 07:58	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/31/18 07:58	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/31/18 07:58	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/31/18 07:58	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/31/18 07:58	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/31/18 07:58	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/31/18 07:58	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/31/18 07:58	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/31/18 07:58	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/31/18 07:58	1
2-Hexanone	ND		50	10	ug/Kg			08/31/18 07:58	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/31/18 07:58	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/31/18 07:58	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/31/18 07:58	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/31/18 07:58	1
Naphthalene	ND		10	1.5	ug/Kg			08/31/18 07:58	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/31/18 07:58	1
Styrene	ND		5.0	0.63	ug/Kg			08/31/18 07:58	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/31/18 07:58	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/31/18 07:58	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/31/18 07:58	1
Toluene	ND		5.0	0.71	ug/Kg			08/31/18 07:58	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/31/18 07:58	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/31/18 07:58	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/31/18 07:58	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/31/18 07:58	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/31/18 07:58	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/31/18 07:58	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/31/18 07:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/31/18 07:58	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/31/18 07:58	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/31/18 07:58	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/31/18 07:58	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/31/18 07:58	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/31/18 07:58	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/31/18 07:58	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/31/18 07:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*45 - 131*		*08/31/18 07:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*60 - 140*		*08/31/18 07:58*	*1*
Toluene-d8 (Surr)	*96*		*58 - 140*		*08/31/18 07:58*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250645/5
Matrix: Solid
Analysis Batch: 250645

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	55.0		ug/Kg		110	70 - 144
Acetone	250	190		ug/Kg		76	30 - 162
Benzene	50.0	50.2		ug/Kg		100	70 - 130
Dichlorobromomethane	50.0	55.2		ug/Kg		110	70 - 140
Bromobenzene	50.0	48.9		ug/Kg		98	70 - 130
Chlorobromomethane	50.0	58.3		ug/Kg		117	70 - 130
Bromoform	50.0	53.4		ug/Kg		107	59 - 158
Bromomethane	50.0	47.1		ug/Kg		94	59 - 132
2-Butanone (MEK)	250	211		ug/Kg		84	59 - 159
n-Butylbenzene	50.0	47.5		ug/Kg		95	70 - 142
sec-Butylbenzene	50.0	47.0		ug/Kg		94	70 - 136
tert-Butylbenzene	50.0	48.0		ug/Kg		96	70 - 130
Carbon disulfide	50.0	66.1		ug/Kg		132	60 - 140
Carbon tetrachloride	50.0	61.2		ug/Kg		122	70 - 142
Chlorobenzene	50.0	50.8		ug/Kg		102	70 - 130
Chloroethane	50.0	41.5		ug/Kg		83	65 - 130
Chloroform	50.0	54.3		ug/Kg		109	77 - 127
Chloromethane	50.0	35.9		ug/Kg		72	55 - 140
2-Chlorotoluene	50.0	47.4		ug/Kg		95	70 - 138
4-Chlorotoluene	50.0	47.9		ug/Kg		96	70 - 136
Chlorodibromomethane	50.0	56.8		ug/Kg		114	70 - 146
1,2-Dichlorobenzene	50.0	50.5		ug/Kg		101	70 - 130
1,3-Dichlorobenzene	50.0	51.7		ug/Kg		103	70 - 131
1,4-Dichlorobenzene	50.0	50.4		ug/Kg		101	70 - 130
1,3-Dichloropropane	50.0	51.0		ug/Kg		102	70 - 140
1,1-Dichloropropene	50.0	53.8		ug/Kg		108	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	48.2		ug/Kg		96	60 - 145
Ethylene Dibromide	50.0	55.3		ug/Kg		111	70 - 140
Dibromomethane	50.0	53.2		ug/Kg		106	70 - 139
Dichlorodifluoromethane	50.0	35.4		ug/Kg		71	37 - 158
1,1-Dichloroethane	50.0	51.9		ug/Kg		104	70 - 130
1,2-Dichloroethane	50.0	56.8		ug/Kg		114	70 - 130
1,1-Dichloroethene	50.0	64.6	*	ug/Kg		129	74 - 122
cis-1,2-Dichloroethene	50.0	52.3		ug/Kg		105	70 - 138
trans-1,2-Dichloroethene	50.0	58.6		ug/Kg		117	67 - 130
1,2-Dichloropropane	50.0	49.5		ug/Kg		99	73 - 127
cis-1,3-Dichloropropene	50.0	53.2		ug/Kg		106	68 - 147
trans-1,3-Dichloropropene	50.0	51.8		ug/Kg		104	70 - 155
Ethylbenzene	50.0	49.5		ug/Kg		99	80 - 137
Hexachlorobutadiene	50.0	53.4		ug/Kg		107	70 - 132
2-Hexanone	250	212		ug/Kg		85	62 - 158
Isopropylbenzene	50.0	52.4		ug/Kg		105	70 - 130
4-Isopropyltoluene	50.0	49.8		ug/Kg		100	70 - 133
Methylene Chloride	50.0	50.1		ug/Kg		100	70 - 134
4-Methyl-2-pentanone (MIBK)	250	213		ug/Kg		85	60 - 160
Naphthalene	50.0	48.8		ug/Kg		98	60 - 147
N-Propylbenzene	50.0	46.5		ug/Kg		93	70 - 130
Styrene	50.0	47.8		ug/Kg		96	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250645/5
Matrix: Solid
Analysis Batch: 250645

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	55.8		ug/Kg		112	70 - 130
1,1,2,2-Tetrachloroethane	50.0	44.9		ug/Kg		90	70 - 146
Tetrachloroethene	50.0	57.4		ug/Kg		115	70 - 132
Toluene	50.0	48.3		ug/Kg		97	75 - 120
1,2,3-Trichlorobenzene	50.0	52.3		ug/Kg		105	60 - 140
1,2,4-Trichlorobenzene	50.0	53.3		ug/Kg		107	60 - 140
1,1,1-Trichloroethane	50.0	59.5		ug/Kg		119	70 - 130
1,1,2-Trichloroethane	50.0	51.5		ug/Kg		103	70 - 130
Trichloroethene	50.0	56.6		ug/Kg		113	70 - 133
Trichlorofluoromethane	50.0	52.5		ug/Kg		105	60 - 140
1,2,3-Trichloropropane	50.0	47.1		ug/Kg		94	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	70.5	*	ug/Kg		141	60 - 140
1,2,4-Trimethylbenzene	50.0	49.6		ug/Kg		99	70 - 130
1,3,5-Trimethylbenzene	50.0	49.5		ug/Kg		99	70 - 131
Vinyl acetate	50.0	44.0		ug/Kg		88	38 - 176
Vinyl chloride	50.0	41.3		ug/Kg		83	58 - 125
m-Xylene & p-Xylene	50.0	50.8		ug/Kg		102	70 - 146
o-Xylene	50.0	51.5		ug/Kg		103	70 - 140
2,2-Dichloropropane	50.0	63.7		ug/Kg		127	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*102*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: LCS 720-250645/7
Matrix: Solid
Analysis Batch: 250645

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	1040		ug/Kg		104	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*105*		*60 - 140*
Toluene-d8 (Surr)	*98*		*58 - 140*

Lab Sample ID: LCSD 720-250645/6
Matrix: Solid
Analysis Batch: 250645

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	58.8		ug/Kg		118	70 - 144	7	20
Acetone	250	214		ug/Kg		85	30 - 162	12	30
Benzene	50.0	49.2		ug/Kg		98	70 - 130	2	20
Dichlorobromomethane	50.0	55.8		ug/Kg		112	70 - 140	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250645/6
Matrix: Solid
Analysis Batch: 250645

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromobenzene	50.0	48.9		ug/Kg		98	70 - 130	0	20
Chlorobromomethane	50.0	57.9		ug/Kg		116	70 - 130	1	20
Bromoform	50.0	56.3		ug/Kg		113	59 - 158	5	20
Bromomethane	50.0	47.2		ug/Kg		94	59 - 132	0	20
2-Butanone (MEK)	250	241		ug/Kg		96	59 - 159	13	20
n-Butylbenzene	50.0	45.2		ug/Kg		90	70 - 142	5	20
sec-Butylbenzene	50.0	45.4		ug/Kg		91	70 - 136	3	20
tert-Butylbenzene	50.0	46.0		ug/Kg		92	70 - 130	4	20
Carbon disulfide	50.0	63.2		ug/Kg		126	60 - 140	5	20
Carbon tetrachloride	50.0	57.6		ug/Kg		115	70 - 142	6	20
Chlorobenzene	50.0	49.7		ug/Kg		99	70 - 130	2	20
Chloroethane	50.0	40.6		ug/Kg		81	65 - 130	2	20
Chloroform	50.0	53.6		ug/Kg		107	77 - 127	1	20
Chloromethane	50.0	36.2		ug/Kg		72	55 - 140	1	20
2-Chlorotoluene	50.0	46.2		ug/Kg		92	70 - 138	3	20
4-Chlorotoluene	50.0	46.5		ug/Kg		93	70 - 136	3	20
Chlorodibromomethane	50.0	58.5		ug/Kg		117	70 - 146	3	20
1,2-Dichlorobenzene	50.0	49.8		ug/Kg		100	70 - 130	1	20
1,3-Dichlorobenzene	50.0	50.5		ug/Kg		101	70 - 131	2	20
1,4-Dichlorobenzene	50.0	49.3		ug/Kg		99	70 - 130	2	20
1,3-Dichloropropane	50.0	52.8		ug/Kg		106	70 - 140	3	20
1,1-Dichloropropene	50.0	52.5		ug/Kg		105	70 - 130	2	20
1,2-Dibromo-3-Chloropropane	50.0	52.5		ug/Kg		105	60 - 145	9	20
Ethylene Dibromide	50.0	57.5		ug/Kg		115	70 - 140	4	20
Dibromomethane	50.0	54.9		ug/Kg		110	70 - 139	3	20
Dichlorodifluoromethane	50.0	35.3		ug/Kg		71	37 - 158	0	20
1,1-Dichloroethane	50.0	51.4		ug/Kg		103	70 - 130	1	20
1,2-Dichloroethane	50.0	58.0		ug/Kg		116	70 - 130	2	20
1,1-Dichloroethene	50.0	61.2		ug/Kg		122	74 - 122	5	20
cis-1,2-Dichloroethene	50.0	51.2		ug/Kg		102	70 - 138	2	20
trans-1,2-Dichloroethene	50.0	56.3		ug/Kg		113	67 - 130	4	20
1,2-Dichloropropane	50.0	49.9		ug/Kg		100	73 - 127	1	20
cis-1,3-Dichloropropene	50.0	54.3		ug/Kg		109	68 - 147	2	20
trans-1,3-Dichloropropene	50.0	54.3		ug/Kg		109	70 - 155	5	20
Ethylbenzene	50.0	48.1		ug/Kg		96	80 - 137	3	20
Hexachlorobutadiene	50.0	50.8		ug/Kg		102	70 - 132	5	20
2-Hexanone	250	245		ug/Kg		98	62 - 158	15	20
Isopropylbenzene	50.0	50.7		ug/Kg		101	70 - 130	3	20
4-Isopropyltoluene	50.0	47.3		ug/Kg		95	70 - 133	5	20
Methylene Chloride	50.0	49.6		ug/Kg		99	70 - 134	1	20
4-Methyl-2-pentanone (MIBK)	250	242		ug/Kg		97	60 - 160	13	20
Naphthalene	50.0	52.2		ug/Kg		104	60 - 147	7	20
N-Propylbenzene	50.0	44.8		ug/Kg		90	70 - 130	4	20
Styrene	50.0	47.0		ug/Kg		94	70 - 130	2	20
1,1,1,2-Tetrachloroethane	50.0	55.5		ug/Kg		111	70 - 130	1	20
1,1,2,2-Tetrachloroethane	50.0	48.2		ug/Kg		96	70 - 146	7	20
Tetrachloroethene	50.0	55.0		ug/Kg		110	70 - 132	4	20
Toluene	50.0	47.1		ug/Kg		94	75 - 120	3	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250645/6
Matrix: Solid
Analysis Batch: 250645

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichlorobenzene	50.0	53.0		ug/Kg		106	60 - 140	1	20
1,2,4-Trichlorobenzene	50.0	53.2		ug/Kg		106	60 - 140	0	20
1,1,1-Trichloroethane	50.0	56.8		ug/Kg		114	70 - 130	5	20
1,1,2-Trichloroethane	50.0	54.0		ug/Kg		108	70 - 130	5	20
Trichloroethene	50.0	54.9		ug/Kg		110	70 - 133	3	20
Trichlorofluoromethane	50.0	50.9		ug/Kg		102	60 - 140	3	20
1,2,3-Trichloropropane	50.0	51.9		ug/Kg		104	70 - 146	10	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	68.1		ug/Kg		136	60 - 140	3	20
1,2,4-Trimethylbenzene	50.0	48.0		ug/Kg		96	70 - 130	3	20
1,3,5-Trimethylbenzene	50.0	47.1		ug/Kg		94	70 - 131	5	20
Vinyl acetate	50.0	48.7		ug/Kg		97	38 - 176	10	20
Vinyl chloride	50.0	41.2		ug/Kg		82	58 - 125	0	20
m-Xylene & p-Xylene	50.0	49.8		ug/Kg		100	70 - 146	2	20
o-Xylene	50.0	50.6		ug/Kg		101	70 - 140	2	20
2,2-Dichloropropane	50.0	59.2		ug/Kg		118	70 - 162	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*107*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCSD 720-250645/8
Matrix: Solid
Analysis Batch: 250645

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12	1000	1030		ug/Kg		103	70 - 122	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*104*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 720-250487/1-A
Matrix: Solid
Analysis Batch: 250730

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250487

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		10	5.0	ug/Kg		08/29/18 11:45	08/31/18 18:03	1
Acenaphthene	ND		5.0	2.8	ug/Kg		08/29/18 11:45	08/31/18 18:03	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		08/29/18 11:45	08/31/18 18:03	1
Anthracene	ND		5.0	2.0	ug/Kg		08/29/18 11:45	08/31/18 18:03	1
Benzo[a]anthracene	ND		5.0	1.5	ug/Kg		08/29/18 11:45	08/31/18 18:03	1
Benzo[a]pyrene	ND		5.0	1.9	ug/Kg		08/29/18 11:45	08/31/18 18:03	1

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 720-250487/1-A
Matrix: Solid
Analysis Batch: 250730

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250487

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	ND		5.0	2.1	ug/Kg		08/29/18 11:45	08/31/18 18:03	1
Benzo[g,h,i]perylene	ND		5.0	4.3	ug/Kg		08/29/18 11:45	08/31/18 18:03	1
Benzo[k]fluoranthene	ND		5.0	2.1	ug/Kg		08/29/18 11:45	08/31/18 18:03	1
Chrysene	ND		5.0	1.4	ug/Kg		08/29/18 11:45	08/31/18 18:03	1
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		08/29/18 11:45	08/31/18 18:03	1
Fluoranthene	1.70	J	5.0	1.4	ug/Kg		08/29/18 11:45	08/31/18 18:03	1
Fluorene	ND		5.0	2.2	ug/Kg		08/29/18 11:45	08/31/18 18:03	1
Indeno[1,2,3-cd]pyrene	ND		5.0	4.2	ug/Kg		08/29/18 11:45	08/31/18 18:03	1
Naphthalene	5.62		5.0	3.5	ug/Kg		08/29/18 11:45	08/31/18 18:03	1
Phenanthrene	2.28	J	5.0	1.8	ug/Kg		08/29/18 11:45	08/31/18 18:03	1
Pyrene	ND		5.0	1.7	ug/Kg		08/29/18 11:45	08/31/18 18:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*71*		*33 - 120*	*08/29/18 11:45*	*08/31/18 18:03*	*1*
Terphenyl-d14	*90*		*35 - 146*	*08/29/18 11:45*	*08/31/18 18:03*	*1*

Lab Sample ID: LCS 720-250487/2-A
Matrix: Solid
Analysis Batch: 250730

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250487

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	667	429		ug/Kg		64	46 - 110
Acenaphthene	667	471		ug/Kg		71	46 - 106
Acenaphthylene	667	466		ug/Kg		70	46 - 108
Anthracene	667	501		ug/Kg		75	55 - 103
Benzo[a]anthracene	667	582		ug/Kg		87	54 - 110
Benzo[a]pyrene	667	561		ug/Kg		84	62 - 111
Benzo[b]fluoranthene	667	555		ug/Kg		83	60 - 109
Benzo[g,h,i]perylene	667	547		ug/Kg		82	52 - 114
Benzo[k]fluoranthene	667	533		ug/Kg		80	58 - 109
Chrysene	667	555		ug/Kg		83	54 - 108
Dibenz(a,h)anthracene	667	571		ug/Kg		86	58 - 112
Fluoranthene	667	493		ug/Kg		74	59 - 109
Fluorene	667	491		ug/Kg		74	52 - 106
Indeno[1,2,3-cd]pyrene	667	578		ug/Kg		87	55 - 120
Naphthalene	667	422		ug/Kg		63	49 - 110
Phenanthrene	667	481		ug/Kg		72	57 - 110
Pyrene	667	557		ug/Kg		83	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*68*		*33 - 120*
Terphenyl-d14	*89*		*35 - 146*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 720-88240-D-3-P MS
Matrix: Solid
Analysis Batch: 250745

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250487

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	ND		661	464		ug/Kg		70	46 - 110
Acenaphthene	ND		661	543		ug/Kg		82	46 - 106
Acenaphthylene	34	J	661	590		ug/Kg		84	46 - 108
Anthracene	20	J	661	588		ug/Kg		89	55 - 103
Benzo[a]anthracene	ND		661	639		ug/Kg		97	54 - 110
Benzo[a]pyrene	37	J	661	660		ug/Kg		94	62 - 111
Benzo[b]fluoranthene	49	J	661	732		ug/Kg		103	60 - 109
Benzo[g,h,i]perylene	50	F1	661	307	F1	ug/Kg		39	52 - 114
Benzo[k]fluoranthene	28	J F1	661	760	F1	ug/Kg		111	58 - 109
Chrysene	29	J	661	600		ug/Kg		86	54 - 108
Dibenz(a,h)anthracene	ND	F1	661	355	F1	ug/Kg		54	58 - 112
Fluoranthene	32	J B	661	579		ug/Kg		83	59 - 109
Fluorene	ND		661	560		ug/Kg		85	52 - 106
Indeno[1,2,3-cd]pyrene	ND	F1	661	349	F1	ug/Kg		53	55 - 120
Naphthalene	ND		661	508		ug/Kg		77	49 - 110
Phenanthrene	19	J B	661	524		ug/Kg		76	57 - 110
Pyrene	45	J	661	656		ug/Kg		92	50 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*73*		*33 - 120*
Terphenyl-d14	*89*		*35 - 146*

Lab Sample ID: 720-88240-D-3-Q MSD
Matrix: Solid
Analysis Batch: 250745

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250487

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	ND		661	431		ug/Kg		65	46 - 110	7	35
Acenaphthene	ND		661	494		ug/Kg		75	46 - 106	9	35
Acenaphthylene	34	J	661	518		ug/Kg		73	46 - 108	13	35
Anthracene	20	J	661	540		ug/Kg		82	55 - 103	9	35
Benzo[a]anthracene	ND		661	560		ug/Kg		85	54 - 110	13	35
Benzo[a]pyrene	37	J	661	612		ug/Kg		87	62 - 111	8	35
Benzo[b]fluoranthene	49	J	661	700		ug/Kg		99	60 - 109	4	35
Benzo[g,h,i]perylene	50	F1	661	261	F1	ug/Kg		32	52 - 114	16	35
Benzo[k]fluoranthene	28	J F1	661	729		ug/Kg		106	58 - 109	4	35
Chrysene	29	J	661	531		ug/Kg		76	54 - 108	12	35
Dibenz(a,h)anthracene	ND	F1	661	296	F1	ug/Kg		45	58 - 112	18	35
Fluoranthene	32	J B	661	522		ug/Kg		74	59 - 109	10	35
Fluorene	ND		661	505		ug/Kg		76	52 - 106	10	35
Indeno[1,2,3-cd]pyrene	ND	F1	661	290	F1	ug/Kg		44	55 - 120	19	35
Naphthalene	ND		661	472		ug/Kg		71	49 - 110	7	35
Phenanthrene	19	J B	661	482		ug/Kg		70	57 - 110	8	35
Pyrene	45	J	661	601		ug/Kg		84	50 - 120	9	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*67*		*33 - 120*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 720-88240-D-3-Q MSD
Matrix: Solid
Analysis Batch: 250745

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250487

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*80*		*35 - 146*

Lab Sample ID: MB 720-250853/1-A
Matrix: Solid
Analysis Batch: 250960

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250853

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		10	5.0	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Acenaphthene	ND		5.0	2.8	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Anthracene	ND		5.0	2.0	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Benzo[a]anthracene	ND		5.0	1.5	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Benzo[a]pyrene	ND		5.0	1.9	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Benzo[b]fluoranthene	ND		5.0	2.1	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Benzo[g,h,i]perylene	ND		5.0	4.3	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Benzo[k]fluoranthene	ND		5.0	2.1	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Chrysene	ND		5.0	1.4	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Fluoranthene	ND		5.0	1.4	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Fluorene	ND		5.0	2.2	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Indeno[1,2,3-cd]pyrene	ND		5.0	4.2	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Naphthalene	ND		5.0	3.5	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Phenanthrene	ND		5.0	1.8	ug/Kg		09/04/18 17:46	09/06/18 02:11	1
Pyrene	ND		5.0	1.7	ug/Kg		09/04/18 17:46	09/06/18 02:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*33 - 120*	*09/04/18 17:46*	*09/06/18 02:11*	*1*
Terphenyl-d14	*89*		*35 - 146*	*09/04/18 17:46*	*09/06/18 02:11*	*1*

Lab Sample ID: LCS 720-250853/2-A
Matrix: Solid
Analysis Batch: 250960

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250853

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	667	496		ug/Kg		74	46 - 110
Acenaphthene	667	471		ug/Kg		71	46 - 106
Acenaphthylene	667	463		ug/Kg		69	46 - 108
Anthracene	667	511		ug/Kg		77	55 - 103
Benzo[a]anthracene	667	566		ug/Kg		85	54 - 110
Benzo[a]pyrene	667	566		ug/Kg		85	62 - 111
Benzo[b]fluoranthene	667	547		ug/Kg		82	60 - 109
Benzo[g,h,i]perylene	667	587		ug/Kg		88	52 - 114
Benzo[k]fluoranthene	667	535		ug/Kg		80	58 - 109
Chrysene	667	544		ug/Kg		82	54 - 108
Dibenz(a,h)anthracene	667	582		ug/Kg		87	58 - 112
Fluoranthene	667	547		ug/Kg		82	59 - 109
Fluorene	667	495		ug/Kg		74	52 - 106
Indeno[1,2,3-cd]pyrene	667	593		ug/Kg		89	55 - 120

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 720-250853/2-A
Matrix: Solid
Analysis Batch: 250960

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250853

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	667	465		ug/Kg		70	49 - 110
Phenanthrene	667	507		ug/Kg		76	57 - 110
Pyrene	667	580		ug/Kg		87	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*74*		*33 - 120*
Terphenyl-d14	*90*		*35 - 146*

Lab Sample ID: 720-88241-1 MS
Matrix: Solid
Analysis Batch: 250960

Client Sample ID: DG-F9S-0.5-1
Prep Type: Total/NA
Prep Batch: 250853

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	38		649	418		ug/Kg		58	46 - 110
Acenaphthene	ND		649	413		ug/Kg		64	46 - 106
Acenaphthylene	4.5	J	649	397		ug/Kg		60	46 - 108
Anthracene	10		649	511		ug/Kg		77	55 - 103
Benzo[a]anthracene	24		649	560		ug/Kg		83	54 - 110
Benzo[a]pyrene	25		649	559		ug/Kg		82	62 - 111
Benzo[b]fluoranthene	49		649	547		ug/Kg		77	60 - 109
Benzo[g,h,i]perylene	21		649	471		ug/Kg		69	52 - 114
Benzo[k]fluoranthene	10		649	535		ug/Kg		81	58 - 109
Chrysene	75		649	597		ug/Kg		80	54 - 108
Dibenz(a,h)anthracene	9.1		649	479		ug/Kg		72	58 - 112
Fluoranthene	28		649	523		ug/Kg		76	59 - 109
Fluorene	3.2	J	649	457		ug/Kg		70	52 - 106
Indeno[1,2,3-cd]pyrene	13		649	480		ug/Kg		72	55 - 120
Naphthalene	16		649	357		ug/Kg		52	49 - 110
Phenanthrene	63		649	544		ug/Kg		74	57 - 110
Pyrene	57		649	654		ug/Kg		92	50 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*62*		*33 - 120*
Terphenyl-d14	*91*		*35 - 146*

Lab Sample ID: 720-88241-1 MSD
Matrix: Solid
Analysis Batch: 250960

Client Sample ID: DG-F9S-0.5-1
Prep Type: Total/NA
Prep Batch: 250853

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	38		654	426		ug/Kg		59	46 - 110	2	35
Acenaphthene	ND		654	414		ug/Kg		63	46 - 106	0	35
Acenaphthylene	4.5	J	654	402		ug/Kg		61	46 - 108	1	35
Anthracene	10		654	508		ug/Kg		76	55 - 103	1	35
Benzo[a]anthracene	24		654	559		ug/Kg		82	54 - 110	0	35
Benzo[a]pyrene	25		654	562		ug/Kg		82	62 - 111	1	35
Benzo[b]fluoranthene	49		654	548		ug/Kg		76	60 - 109	0	35
Benzo[g,h,i]perylene	21		654	429		ug/Kg		63	52 - 114	9	35

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 720-88241-1 MSD — **Client Sample ID: DG-F9S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250960 — **Prep Batch: 250853**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[k]fluoranthene	10		654	543		ug/Kg		82	58 - 109	2	35
Chrysene	75		654	594		ug/Kg		79	54 - 108	0	35
Dibenz(a,h)anthracene	9.1		654	449		ug/Kg		67	58 - 112	7	35
Fluoranthene	28		654	521		ug/Kg		76	59 - 109	0	35
Fluorene	3.2	J	654	461		ug/Kg		70	52 - 106	1	35
Indeno[1,2,3-cd]pyrene	13		654	449		ug/Kg		67	55 - 120	7	35
Naphthalene	16		654	350		ug/Kg		51	49 - 110	2	35
Phenanthrene	63		654	538		ug/Kg		73	57 - 110	1	35
Pyrene	57		654	649		ug/Kg		91	50 - 120	1	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*62*		*33 - 120*
Terphenyl-d14	*90*		*35 - 146*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-250461/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250456 — **Prep Batch: 250461**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		2000	750	ug/Kg		08/29/18 09:03	08/29/18 23:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*96*		*40 - 130*	*08/29/18 09:03*	*08/29/18 23:29*	*1*

Lab Sample ID: LCS 720-250461/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250456 — **Prep Batch: 250461**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	167000	168000		ug/Kg		101	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*86*		*40 - 130*

Lab Sample ID: 720-88240-D-3-G MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250456 — **Prep Batch: 250461**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	430000		164000	566000		ug/Kg		84	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
p-Terphenyl	*0*	*X D*	*40 - 130*

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 720-88240-D-3-H MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250456 — **Prep Batch: 250461**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	430000		164000	602000		ug/Kg		105	50 - 150	6	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
p-Terphenyl	*0*	*X D*	*40 - 130*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 720-250479/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250736 — **Prep Batch: 250479**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.61	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
Aldrin	ND		2.0	0.50	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
alpha-BHC	ND		2.0	0.55	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
Dieldrin	ND		2.0	0.59	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
Endrin	ND		2.0	0.46	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
Endrin aldehyde	ND		2.0	0.63	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
Methoxychlor	ND		2.0	0.68	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
Toxaphene	ND		40	6.8	ug/Kg		08/29/18 10:43	09/01/18 09:10	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/29/18 10:43	09/01/18 09:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*96*		*21 - 136*	*08/29/18 10:43*	*09/01/18 09:10*	*1*
Tetrachloro-m-xylene	*72*		*21 - 145*	*08/29/18 10:43*	*09/01/18 09:10*	*1*

Lab Sample ID: LCS 720-250479/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250736 — **Prep Batch: 250479**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	16.3		ug/Kg		98	75 - 128
4,4'-DDE	16.7	15.1		ug/Kg		90	76 - 126

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 720-250479/2-A
Matrix: Solid
Analysis Batch: 250736

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250479

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDT	16.7	16.0		ug/Kg		96	63 - 127
Aldrin	16.7	14.0		ug/Kg		84	65 - 120
alpha-BHC	16.7	12.2		ug/Kg		73	46 - 122
beta-BHC	16.7	15.4		ug/Kg		92	78 - 136
cis-Chlordane	16.7	15.1		ug/Kg		90	70 - 120
delta-BHC	16.7	13.7		ug/Kg		82	43 - 125
Dieldrin	16.7	14.9		ug/Kg		89	72 - 120
Endosulfan I	16.7	15.3		ug/Kg		92	62 - 120
Endosulfan II	16.7	17.0		ug/Kg		102	65 - 120
Endosulfan sulfate	16.7	16.5		ug/Kg		99	72 - 121
Endrin	16.7	15.8		ug/Kg		95	68 - 120
Endrin aldehyde	16.7	17.1		ug/Kg		102	68 - 120
Endrin ketone	16.7	17.3		ug/Kg		104	75 - 136
gamma-BHC (Lindane)	16.7	14.2		ug/Kg		85	72 - 120
Heptachlor	16.7	14.3		ug/Kg		86	69 - 120
Heptachlor epoxide	16.7	15.2		ug/Kg		91	68 - 120
Methoxychlor	16.7	18.0		ug/Kg		108	71 - 132
trans-Chlordane	16.7	14.9		ug/Kg		89	68 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*110*		*21 - 136*
Tetrachloro-m-xylene	*81*		*21 - 145*

Lab Sample ID: 720-88240-D-3-M MS
Matrix: Solid
Analysis Batch: 250736

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250479

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		16.0	12.0		ug/Kg		75	40 - 120
4,4'-DDE	ND		16.0	11.5		ug/Kg		72	40 - 120
4,4'-DDT	ND		16.0	14.4		ug/Kg		90	17 - 144
Aldrin	ND		16.0	11.5		ug/Kg		72	53 - 120
alpha-BHC	ND		16.0	11.4		ug/Kg		71	40 - 120
beta-BHC	ND		16.0	10.2		ug/Kg		64	40 - 120
cis-Chlordane	3.5	J p	16.0	15.5		ug/Kg		75	40 - 120
delta-BHC	ND	F2	16.0	9.34		ug/Kg		58	40 - 120
Dieldrin	ND	F2	16.0	13.1		ug/Kg		82	46 - 130
Endosulfan I	ND		16.0	11.4		ug/Kg		72	40 - 120
Endosulfan II	ND		16.0	13.0		ug/Kg		81	40 - 120
Endosulfan sulfate	ND		16.0	11.3		ug/Kg		71	40 - 120
Endrin	ND		16.0	13.8		ug/Kg		87	32 - 143
Endrin aldehyde	ND		16.0	10.4		ug/Kg		65	40 - 120
Endrin ketone	ND	F1	16.0	11.5		ug/Kg		72	40 - 120
gamma-BHC (Lindane)	ND		16.0	11.5		ug/Kg		72	58 - 120
Heptachlor	ND		16.0	13.2		ug/Kg		82	52 - 120
Heptachlor epoxide	ND		16.0	12.2		ug/Kg		76	40 - 120
Methoxychlor	ND		16.0	13.0		ug/Kg		81	40 - 120
trans-Chlordane	3.6	J	16.0	17.5		ug/Kg		87	40 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl	79		21 - 136
Tetrachloro-m-xylene	77		21 - 145

Lab Sample ID: 720-88240-D-3-N MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250736 — **Prep Batch: 250479**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		16.0	12.6		ug/Kg		79	40 - 120	5	20
4,4'-DDE	ND		16.0	13.0		ug/Kg		81	40 - 120	12	20
4,4'-DDT	ND		16.0	15.5		ug/Kg		97	17 - 144	8	20
Aldrin	ND		16.0	12.4		ug/Kg		78	53 - 120	8	20
alpha-BHC	ND		16.0	12.3		ug/Kg		77	40 - 120	7	20
beta-BHC	ND		16.0	11.9		ug/Kg		75	40 - 120	15	20
cis-Chlordane	3.5	J p	16.0	16.5		ug/Kg		82	40 - 120	6	20
delta-BHC	ND	F2	16.0	11.7	F2	ug/Kg		73	40 - 120	22	20
Dieldrin	ND	F2	16.0	18.3	F2	ug/Kg		115	46 - 130	33	20
Endosulfan I	ND		16.0	12.3		ug/Kg		77	40 - 120	8	20
Endosulfan II	ND		16.0	11.7		ug/Kg		73	40 - 120	10	30
Endosulfan sulfate	ND		16.0	12.3		ug/Kg		77	40 - 120	8	20
Endrin	ND		16.0	14.9		ug/Kg		94	32 - 143	8	20
Endrin aldehyde	ND		16.0	10.7		ug/Kg		67	40 - 120	3	20
Endrin ketone	ND	F1	16.0	12.4		ug/Kg		78	40 - 120	7	20
gamma-BHC (Lindane)	ND		16.0	11.3		ug/Kg		71	58 - 120	2	20
Heptachlor	ND		16.0	13.5		ug/Kg		84	52 - 120	2	20
Heptachlor epoxide	ND		16.0	13.8		ug/Kg		87	40 - 120	13	20
Methoxychlor	ND		16.0	12.8		ug/Kg		80	40 - 120	1	20
trans-Chlordane	3.6	J	16.0	16.6		ug/Kg		81	40 - 120	5	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
DCB Decachlorobiphenyl	93		21 - 136
Tetrachloro-m-xylene	80		21 - 145

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-343099/23-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 343339 — **Prep Batch: 343099**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/29/18 14:50	08/31/18 08:41	1
Aroclor-1221	ND		50	24	ug/Kg		08/29/18 14:50	08/31/18 08:41	1
Aroclor-1232	ND		50	23	ug/Kg		08/29/18 14:50	08/31/18 08:41	1
Aroclor-1242	ND		50	19	ug/Kg		08/29/18 14:50	08/31/18 08:41	1
Aroclor-1248	ND		50	24	ug/Kg		08/29/18 14:50	08/31/18 08:41	1
Aroclor-1254	ND		50	23	ug/Kg		08/29/18 14:50	08/31/18 08:41	1
Aroclor-1260	ND		50	22	ug/Kg		08/29/18 14:50	08/31/18 08:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	88		14 - 128	08/29/18 14:50	08/31/18 08:41	1
DCB Decachlorobiphenyl	106		10 - 132	08/29/18 14:50	08/31/18 08:41	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 240-343099/24-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 343339 — **Prep Batch: 343099**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	1000	826		ug/Kg		83	47 - 120
Aroclor-1260	1000	986		ug/Kg		99	46 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*87*		*14 - 128*
DCB Decachlorobiphenyl	*101*		*10 - 132*

Lab Sample ID: 720-88240-F-3-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 343339 — **Prep Batch: 343099**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	ND		991	854		ug/Kg		86	31 - 120
Aroclor-1260	ND		991	968		ug/Kg		98	21 - 122

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*88*		*14 - 128*
DCB Decachlorobiphenyl	*110*		*10 - 132*

Lab Sample ID: 720-88240-F-3-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 343339 — **Prep Batch: 343099**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	ND		997	944		ug/Kg		95	31 - 120	10	30
Aroclor-1260	ND		997	1150		ug/Kg		116	21 - 122	18	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*97*		*14 - 128*
DCB Decachlorobiphenyl	*151*	*X*	*10 - 132*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-250513/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250635 — **Prep Batch: 250513**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Arsenic	ND		1.0	0.085	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Barium	ND		0.50	0.071	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Beryllium	ND		0.10	0.033	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Cadmium	ND		0.13	0.012	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Chromium	ND		0.50	0.053	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Cobalt	ND		0.20	0.020	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Copper	ND		1.5	0.71	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Lead	ND		0.50	0.11	mg/Kg		08/29/18 15:55	08/30/18 15:54	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 720-250513/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250635 — **Prep Batch: 250513**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	ND		0.50	0.064	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Nickel	ND		0.50	0.051	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Selenium	ND		1.0	0.15	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Silver	ND		0.25	0.051	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Thallium	ND		0.50	0.15	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Vanadium	ND		0.50	0.068	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Zinc	ND		1.5	0.64	mg/Kg		08/29/18 15:55	08/30/18 15:54	1

Lab Sample ID: LCS 720-250513/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250635 — **Prep Batch: 250513**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	46.9		mg/Kg		94	80 - 120
Arsenic	50.0	47.0		mg/Kg		94	80 - 120
Barium	50.0	52.1		mg/Kg		104	80 - 120
Beryllium	50.0	51.6		mg/Kg		103	80 - 120
Cadmium	50.0	47.1		mg/Kg		94	80 - 120
Chromium	50.0	47.6		mg/Kg		95	80 - 120
Cobalt	50.0	48.7		mg/Kg		97	80 - 120
Copper	50.0	47.1		mg/Kg		94	80 - 120
Lead	50.0	48.0		mg/Kg		96	80 - 120
Molybdenum	50.0	48.1		mg/Kg		96	80 - 120
Nickel	50.0	47.6		mg/Kg		95	80 - 120
Selenium	50.0	45.8		mg/Kg		92	80 - 120
Silver	25.0	23.8		mg/Kg		95	80 - 120
Thallium	50.0	47.9		mg/Kg		96	80 - 120
Vanadium	50.0	47.3		mg/Kg		95	80 - 120
Zinc	50.0	47.3		mg/Kg		95	80 - 120

Lab Sample ID: 720-88260-A-2-A MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250635 — **Prep Batch: 250513**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.2	J F1	48.1	10.9	F1	mg/Kg		20	75 - 125
Arsenic	1.6	J	48.1	57.1		mg/Kg		115	75 - 125
Barium	27	F1	48.1	85.1		mg/Kg		120	75 - 125
Beryllium	ND	F1	48.1	57.4		mg/Kg		119	75 - 125
Cadmium	0.19	J	48.1	54.3		mg/Kg		113	75 - 125
Chromium	9.9		48.1	67.8		mg/Kg		120	75 - 125
Cobalt	17		48.1	75.3		mg/Kg		120	75 - 125
Copper	120	F1	48.1	201	F1	mg/Kg		175	75 - 125
Lead	120	F1	48.1	237	F1	mg/Kg		239	75 - 125
Molybdenum	ND		48.1	53.2		mg/Kg		111	75 - 125
Nickel	5.8		48.1	60.7		mg/Kg		114	75 - 125
Selenium	ND		48.1	52.4		mg/Kg		109	75 - 125
Silver	0.24	J F1	24.0	30.4		mg/Kg		125	75 - 125
Thallium	1.1	J	48.1	52.4		mg/Kg		107	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88260-A-2-A MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250635 — **Prep Batch: 250513**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	120	F1	48.1	192	F1	mg/Kg		157	75 - 125
Zinc	100	F1	48.1	181	F1	mg/Kg		163	75 - 125

Lab Sample ID: 720-88260-A-2-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250635 — **Prep Batch: 250513**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	1.2	J F1	48.5	9.31	F1	mg/Kg		17	75 - 125	15	20
Arsenic	1.6	J	48.5	57.7		mg/Kg		116	75 - 125	1	20
Barium	27	F1	48.5	104	F1	mg/Kg		158	75 - 125	20	20
Beryllium	ND	F1	48.5	63.4	F1	mg/Kg		131	75 - 125	10	20
Cadmium	0.19	J	48.5	55.7		mg/Kg		114	75 - 125	3	20
Chromium	9.9		48.5	70.4		mg/Kg		125	75 - 125	4	20
Cobalt	17		48.5	75.6		mg/Kg		120	75 - 125	0	20
Copper	120	F1	48.5	201	F1	mg/Kg		172	75 - 125	0	20
Lead	120	F1	48.5	258	F1	mg/Kg		280	75 - 125	9	20
Molybdenum	ND		48.5	54.1		mg/Kg		112	75 - 125	2	20
Nickel	5.8		48.5	61.0		mg/Kg		114	75 - 125	0	20
Selenium	ND		48.5	54.0		mg/Kg		111	75 - 125	3	20
Silver	0.24	J F1	24.3	32.1	F1	mg/Kg		131	75 - 125	5	20
Thallium	1.1	J	48.5	54.4		mg/Kg		110	75 - 125	4	20
Vanadium	120	F1	48.5	200	F1	mg/Kg		171	75 - 125	4	20
Zinc	100	F1	48.5	163		mg/Kg		123	75 - 125	11	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-250548/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250679 — **Prep Batch: 250548**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/29/18 21:54	08/30/18 21:21	1

Lab Sample ID: LCS 720-250548/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250679 — **Prep Batch: 250548**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.820		mg/Kg		98	80 - 120

Lab Sample ID: 720-88259-B-1-G MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250679 — **Prep Batch: 250548**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.12		0.781	0.907		mg/Kg		101	75 - 125

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: 720-88259-B-1-H MSD
Matrix: Solid
Analysis Batch: 250679

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250548

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.12		0.806	0.941		mg/Kg		102	75 - 125	4	20

QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88241-1

GC/MS VOA

Prep Batch: 250573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88241-4	DG-D9S-0.5-1	Total/NA	Solid	5035	
720-88241-6	DG-D9S-9.5-10	Total/NA	Solid	5035	

Analysis Batch: 250622

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88241-4	DG-D9S-0.5-1	Total/NA	Solid	8260B	250573
720-88241-6	DG-D9S-9.5-10	Total/NA	Solid	8260B	250573
MB 720-250622/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250622/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250622/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250622/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250622/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 250645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88241-1	DG-F9S-0.5-1	Total/NA	Solid	8260B	250670
720-88241-2	DG-F9S-3.5-4	Total/NA	Solid	8260B	250670
720-88241-3	DG-F9S-9.5-10	Total/NA	Solid	8260B	250670
720-88241-5	DG-D9S-3.5-4	Total/NA	Solid	8260B	250670
MB 720-250645/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250645/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250645/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250645/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250645/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 250670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88241-1	DG-F9S-0.5-1	Total/NA	Solid	5035	
720-88241-2	DG-F9S-3.5-4	Total/NA	Solid	5035	
720-88241-3	DG-F9S-9.5-10	Total/NA	Solid	5035	
720-88241-5	DG-D9S-3.5-4	Total/NA	Solid	5035	

GC/MS Semi VOA

Prep Batch: 250487

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88241-2	DG-F9S-3.5-4	Total/NA	Solid	3546	
720-88241-4	DG-D9S-0.5-1	Total/NA	Solid	3546	
720-88241-6	DG-D9S-9.5-10	Total/NA	Solid	3546	
MB 720-250487/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250487/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88240-D-3-P MS	Matrix Spike	Total/NA	Solid	3546	
720-88240-D-3-Q MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 250730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88241-4	DG-D9S-0.5-1	Total/NA	Solid	8270C SIM	250487
720-88241-6	DG-D9S-9.5-10	Total/NA	Solid	8270C SIM	250487
MB 720-250487/1-A	Method Blank	Total/NA	Solid	8270C SIM	250487
LCS 720-250487/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	250487

GC/MS Semi VOA (Continued)

Analysis Batch: 250742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88241-2	DG-F9S-3.5-4	Total/NA	Solid	8270C SIM	250487

Analysis Batch: 250745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88240-D-3-P MS	Matrix Spike	Total/NA	Solid	8270C SIM	250487
720-88240-D-3-Q MSD	Matrix Spike Duplicate	Total/NA	Solid	8270C SIM	250487

Prep Batch: 250853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88241-1	DG-F9S-0.5-1	Total/NA	Solid	3546	
720-88241-3	DG-F9S-9.5-10	Total/NA	Solid	3546	
720-88241-5	DG-D9S-3.5-4	Total/NA	Solid	3546	
MB 720-250853/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250853/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88241-1 MS	DG-F9S-0.5-1	Total/NA	Solid	3546	
720-88241-1 MSD	DG-F9S-0.5-1	Total/NA	Solid	3546	

Analysis Batch: 250960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88241-1	DG-F9S-0.5-1	Total/NA	Solid	8270C SIM	250853
720-88241-3	DG-F9S-9.5-10	Total/NA	Solid	8270C SIM	250853
720-88241-5	DG-D9S-3.5-4	Total/NA	Solid	8270C SIM	250853
MB 720-250853/1-A	Method Blank	Total/NA	Solid	8270C SIM	250853
LCS 720-250853/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	250853
720-88241-1 MS	DG-F9S-0.5-1	Total/NA	Solid	8270C SIM	250853
720-88241-1 MSD	DG-F9S-0.5-1	Total/NA	Solid	8270C SIM	250853

GC Semi VOA

Analysis Batch: 250456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250461/1-A	Method Blank	Total/NA	Solid	8015B	250461
LCS 720-250461/2-A	Lab Control Sample	Total/NA	Solid	8015B	250461
720-88240-D-3-G MS	Matrix Spike	Total/NA	Solid	8015B	250461
720-88240-D-3-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	250461

Prep Batch: 250461

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88241-1	DG-F9S-0.5-1	Total/NA	Solid	3546	
720-88241-2	DG-F9S-3.5-4	Total/NA	Solid	3546	
720-88241-3	DG-F9S-9.5-10	Total/NA	Solid	3546	
720-88241-4	DG-D9S-0.5-1	Total/NA	Solid	3546	
720-88241-5	DG-D9S-3.5-4	Total/NA	Solid	3546	
720-88241-6	DG-D9S-9.5-10	Total/NA	Solid	3546	
MB 720-250461/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250461/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88240-D-3-G MS	Matrix Spike	Total/NA	Solid	3546	
720-88240-D-3-H MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 250479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88241-1	DG-F9S-0.5-1	Total/NA	Solid	3546	
720-88241-2	DG-F9S-3.5-4	Total/NA	Solid	3546	
720-88241-3	DG-F9S-9.5-10	Total/NA	Solid	3546	
720-88241-4	DG-D9S-0.5-1	Total/NA	Solid	3546	
720-88241-5	DG-D9S-3.5-4	Total/NA	Solid	3546	
720-88241-6	DG-D9S-9.5-10	Total/NA	Solid	3546	
MB 720-250479/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250479/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88240-D-3-M MS	Matrix Spike	Total/NA	Solid	3546	
720-88240-D-3-N MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 250656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88241-1	DG-F9S-0.5-1	Total/NA	Solid	8015B	250461
720-88241-2	DG-F9S-3.5-4	Total/NA	Solid	8015B	250461
720-88241-3	DG-F9S-9.5-10	Total/NA	Solid	8015B	250461
720-88241-4	DG-D9S-0.5-1	Total/NA	Solid	8015B	250461
720-88241-5	DG-D9S-3.5-4	Total/NA	Solid	8015B	250461

Analysis Batch: 250736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88241-1	DG-F9S-0.5-1	Total/NA	Solid	8081A	250479
720-88241-2	DG-F9S-3.5-4	Total/NA	Solid	8081A	250479
720-88241-3	DG-F9S-9.5-10	Total/NA	Solid	8081A	250479
720-88241-4	DG-D9S-0.5-1	Total/NA	Solid	8081A	250479
720-88241-5	DG-D9S-3.5-4	Total/NA	Solid	8081A	250479
720-88241-6	DG-D9S-9.5-10	Total/NA	Solid	8081A	250479
MB 720-250479/1-A	Method Blank	Total/NA	Solid	8081A	250479
LCS 720-250479/2-A	Lab Control Sample	Total/NA	Solid	8081A	250479
720-88240-D-3-M MS	Matrix Spike	Total/NA	Solid	8081A	250479
720-88240-D-3-N MSD	Matrix Spike Duplicate	Total/NA	Solid	8081A	250479

Analysis Batch: 250762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88241-6	DG-D9S-9.5-10	Total/NA	Solid	8015B	250461

Prep Batch: 343099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88241-1	DG-F9S-0.5-1	Total/NA	Solid	3540C	
720-88241-2	DG-F9S-3.5-4	Total/NA	Solid	3540C	
720-88241-3	DG-F9S-9.5-10	Total/NA	Solid	3540C	
720-88241-4	DG-D9S-0.5-1	Total/NA	Solid	3540C	
720-88241-5	DG-D9S-3.5-4	Total/NA	Solid	3540C	
720-88241-6	DG-D9S-9.5-10	Total/NA	Solid	3540C	
MB 240-343099/23-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-343099/24-A	Lab Control Sample	Total/NA	Solid	3540C	
720-88240-F-3-B MS	Matrix Spike	Total/NA	Solid	3540C	
720-88240-F-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3540C	

GC Semi VOA (Continued)

Analysis Batch: 343336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88241-1	DG-F9S-0.5-1	Total/NA	Solid	8082	343099
720-88241-2	DG-F9S-3.5-4	Total/NA	Solid	8082	343099
720-88241-3	DG-F9S-9.5-10	Total/NA	Solid	8082	343099
720-88241-4	DG-D9S-0.5-1	Total/NA	Solid	8082	343099
720-88241-5	DG-D9S-3.5-4	Total/NA	Solid	8082	343099
720-88241-6	DG-D9S-9.5-10	Total/NA	Solid	8082	343099

Analysis Batch: 343339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-343099/23-A	Method Blank	Total/NA	Solid	8082	343099
LCS 240-343099/24-A	Lab Control Sample	Total/NA	Solid	8082	343099
720-88240-F-3-B MS	Matrix Spike	Total/NA	Solid	8082	343099
720-88240-F-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8082	343099

Metals

Prep Batch: 250513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88241-1	DG-F9S-0.5-1	Total/NA	Solid	3050B	
720-88241-2	DG-F9S-3.5-4	Total/NA	Solid	3050B	
720-88241-3	DG-F9S-9.5-10	Total/NA	Solid	3050B	
720-88241-4	DG-D9S-0.5-1	Total/NA	Solid	3050B	
720-88241-5	DG-D9S-3.5-4	Total/NA	Solid	3050B	
720-88241-6	DG-D9S-9.5-10	Total/NA	Solid	3050B	
MB 720-250513/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250513/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88260-A-2-A MS	Matrix Spike	Total/NA	Solid	3050B	
720-88260-A-2-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Prep Batch: 250548

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88241-1	DG-F9S-0.5-1	Total/NA	Solid	7471A	
720-88241-2	DG-F9S-3.5-4	Total/NA	Solid	7471A	
720-88241-3	DG-F9S-9.5-10	Total/NA	Solid	7471A	
720-88241-4	DG-D9S-0.5-1	Total/NA	Solid	7471A	
720-88241-5	DG-D9S-3.5-4	Total/NA	Solid	7471A	
720-88241-6	DG-D9S-9.5-10	Total/NA	Solid	7471A	
MB 720-250548/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250548/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88259-B-1-G MS	Matrix Spike	Total/NA	Solid	7471A	
720-88259-B-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	

Analysis Batch: 250635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88241-1	DG-F9S-0.5-1	Total/NA	Solid	6010B	250513
720-88241-2	DG-F9S-3.5-4	Total/NA	Solid	6010B	250513
720-88241-3	DG-F9S-9.5-10	Total/NA	Solid	6010B	250513
720-88241-4	DG-D9S-0.5-1	Total/NA	Solid	6010B	250513
720-88241-5	DG-D9S-3.5-4	Total/NA	Solid	6010B	250513
720-88241-6	DG-D9S-9.5-10	Total/NA	Solid	6010B	250513

Metals (Continued)

Analysis Batch: 250635 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250513/1-A	Method Blank	Total/NA	Solid	6010B	250513
LCS 720-250513/2-A	Lab Control Sample	Total/NA	Solid	6010B	250513
720-88260-A-2-A MS	Matrix Spike	Total/NA	Solid	6010B	250513
720-88260-A-2-B MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250513

Analysis Batch: 250679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88241-1	DG-F9S-0.5-1	Total/NA	Solid	7471A	250548
720-88241-2	DG-F9S-3.5-4	Total/NA	Solid	7471A	250548
720-88241-3	DG-F9S-9.5-10	Total/NA	Solid	7471A	250548
720-88241-4	DG-D9S-0.5-1	Total/NA	Solid	7471A	250548
720-88241-5	DG-D9S-3.5-4	Total/NA	Solid	7471A	250548
720-88241-6	DG-D9S-9.5-10	Total/NA	Solid	7471A	250548
MB 720-250548/1-A	Method Blank	Total/NA	Solid	7471A	250548
LCS 720-250548/2-A	Lab Control Sample	Total/NA	Solid	7471A	250548
720-88259-B-1-G MS	Matrix Spike	Total/NA	Solid	7471A	250548
720-88259-B-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	250548

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88241-1

Client Sample ID: DG-F9S-0.5-1 — Lab Sample ID: 720-88241-1

Date Collected: 08/24/18 12:10 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250670	08/25/18 03:05	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250645	08/31/18 12:14	JRM	TAL PLS
Total/NA	Prep	3546			250853	09/04/18 17:46	WGR	TAL PLS
Total/NA	Analysis	8270C SIM		1	250960	09/06/18 03:22	LPL	TAL PLS
Total/NA	Prep	3546			250461	08/29/18 09:03	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250656	08/31/18 23:05	JXL	TAL PLS
Total/NA	Prep	3546			250479	08/29/18 10:43	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250736	09/01/18 13:25	JZT	TAL PLS
Total/NA	Prep	3540C			343099	08/29/18 14:50	AMT	TAL CAN
Total/NA	Analysis	8082		1	343336	08/31/18 09:59	LSH	TAL CAN
Total/NA	Prep	3050B			250513	08/29/18 15:55	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250635	08/30/18 17:48	OBI	TAL PLS
Total/NA	Prep	7471A			250548	08/29/18 21:54	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250679	08/30/18 21:40	MAG	TAL PLS

Client Sample ID: DG-F9S-3.5-4 — Lab Sample ID: 720-88241-2

Date Collected: 08/24/18 12:10 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250670	08/25/18 03:05	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250645	08/31/18 12:43	JRM	TAL PLS
Total/NA	Prep	3546			250487	08/29/18 11:45	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250742	09/01/18 22:57	MQL	TAL PLS
Total/NA	Prep	3546			250461	08/29/18 09:03	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250656	08/31/18 21:27	JXL	TAL PLS
Total/NA	Prep	3546			250479	08/29/18 10:43	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250736	09/01/18 13:43	JZT	TAL PLS
Total/NA	Prep	3540C			343099	08/29/18 14:50	AMT	TAL CAN
Total/NA	Analysis	8082		10	343336	08/31/18 10:17	LSH	TAL CAN
Total/NA	Prep	3050B			250513	08/29/18 15:55	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250635	08/30/18 17:53	OBI	TAL PLS
Total/NA	Prep	7471A			250548	08/29/18 21:54	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250679	08/30/18 21:42	MAG	TAL PLS

Client Sample ID: DG-F9S-9.5-10 — Lab Sample ID: 720-88241-3

Date Collected: 08/24/18 12:10 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250670	08/25/18 03:05	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250645	08/31/18 13:11	JRM	TAL PLS
Total/NA	Prep	3546			250853	09/04/18 17:46	WGR	TAL PLS

Client Sample ID: DG-F9S-9.5-10 — Lab Sample ID: 720-88241-3

Date Collected: 08/24/18 12:10 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C SIM		1	250960	09/06/18 03:45	LPL	TAL PLS
Total/NA	Prep	3546			250461	08/29/18 09:03	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250656	08/31/18 21:51	JXL	TAL PLS
Total/NA	Prep	3546			250479	08/29/18 10:43	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250736	09/01/18 14:01	JZT	TAL PLS
Total/NA	Prep	3540C			343099	08/29/18 14:50	AMT	TAL CAN
Total/NA	Analysis	8082		1	343336	08/31/18 10:34	LSH	TAL CAN
Total/NA	Prep	3050B			250513	08/29/18 15:55	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250635	08/30/18 17:58	OBI	TAL PLS
Total/NA	Prep	7471A			250548	08/29/18 21:54	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250679	08/30/18 21:50	MAG	TAL PLS

Client Sample ID: DG-D9S-0.5-1 — Lab Sample ID: 720-88241-4

Date Collected: 08/24/18 11:35 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250573	08/25/18 03:05	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250622	08/30/18 22:47	JRM	TAL PLS
Total/NA	Prep	3546			250487	08/29/18 11:45	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250730	08/31/18 23:35	MQL	TAL PLS
Total/NA	Prep	3546			250461	08/29/18 09:03	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250656	08/31/18 22:16	JXL	TAL PLS
Total/NA	Prep	3546			250479	08/29/18 10:43	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250736	09/01/18 14:18	JZT	TAL PLS
Total/NA	Prep	3540C			343099	08/29/18 14:50	AMT	TAL CAN
Total/NA	Analysis	8082		10	343336	08/31/18 10:52	LSH	TAL CAN
Total/NA	Prep	3050B			250513	08/29/18 15:55	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250635	08/30/18 18:03	OBI	TAL PLS
Total/NA	Prep	7471A			250548	08/29/18 21:54	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250679	08/30/18 21:52	MAG	TAL PLS

Client Sample ID: DG-D9S-3.5-4 — Lab Sample ID: 720-88241-5

Date Collected: 08/24/18 11:35 — **Matrix: Solid**
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250670	08/25/18 03:05	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250645	08/31/18 13:40	JRM	TAL PLS
Total/NA	Prep	3546			250853	09/04/18 17:46	WGR	TAL PLS
Total/NA	Analysis	8270C SIM		1	250960	09/06/18 04:09	LPL	TAL PLS
Total/NA	Prep	3546			250461	08/29/18 09:03	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250656	08/31/18 23:29	JXL	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88241-1

Client Sample ID: DG-D9S-3.5-4

Lab Sample ID: 720-88241-5
Date Collected: 08/24/18 11:35
Matrix: Solid
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			250479	08/29/18 10:43	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250736	09/01/18 14:36	JZT	TAL PLS
Total/NA	Prep	3540C			343099	08/29/18 14:50	AMT	TAL CAN
Total/NA	Analysis	8082		1	343336	08/31/18 11:09	LSH	TAL CAN
Total/NA	Prep	3050B			250513	08/29/18 15:55	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250635	08/30/18 18:07	OBI	TAL PLS
Total/NA	Prep	7471A			250548	08/29/18 21:54	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250679	08/30/18 21:54	MAG	TAL PLS

Client Sample ID: DG-D9S-9.5-10

Lab Sample ID: 720-88241-6
Date Collected: 08/24/18 11:35
Matrix: Solid
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250573	08/25/18 03:05	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250622	08/30/18 23:48	JRM	TAL PLS
Total/NA	Prep	3546			250487	08/29/18 11:45	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250730	08/31/18 22:24	MQL	TAL PLS
Total/NA	Prep	3546			250461	08/29/18 09:03	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250762	09/04/18 13:21	JXL	TAL PLS
Total/NA	Prep	3546			250479	08/29/18 10:43	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250736	09/01/18 14:54	JZT	TAL PLS
Total/NA	Prep	3540C			343099	08/29/18 14:50	AMT	TAL CAN
Total/NA	Analysis	8082		1	343336	08/31/18 11:26	LSH	TAL CAN
Total/NA	Prep	3050B			250513	08/29/18 15:55	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250635	08/30/18 18:12	OBI	TAL PLS
Total/NA	Prep	7471A			250548	08/29/18 21:54	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250679	08/30/18 21:56	MAG	TAL PLS

Laboratory References:

= Asbestos TEM Laboratories, Inc., 630 BANCROFT WAY, Berkeley, CA 94710

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88241-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Laboratory: TestAmerica Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-19
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19
Illinois	NELAP	5	200004	07-31-19
Kansas	NELAP	7	E-10336	01-31-19
Kentucky (UST)	State Program	4	58	02-23-19
Kentucky (WW)	State Program	4	98016	12-31-18 *
Minnesota	NELAP	5	039-999-348	12-31-18 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19
New York	NELAP	2	10975	03-31-19
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-19
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-18-10	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19
Washington	State Program	10	C971	01-12-19
West Virginia DEP	State Program	3	210	12-31-18 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88241-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PLS
8270C SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
8081A	Organochlorine Pesticides (GC)	SW846	TAL PLS
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS
Subcontract	Asbestos - CARB 435	None	
3050B	Preparation, Metals	SW846	TAL PLS
3540C	Soxhlet Extraction	SW846	TAL CAN
3546	Microwave Extraction	SW846	TAL PLS
5035	Closed System Purge and Trap	SW846	TAL PLS
7471A	Preparation, Mercury	SW846	TAL PLS

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

= Asbestos TEM Laboratories, Inc., 630 BANCROFT WAY, Berkeley, CA 94710

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88241-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-88241-1	DG-F9S-0.5-1	Solid	08/24/18 12:10	08/24/18 15:00
720-88241-2	DG-F9S-3.5-4	Solid	08/24/18 12:10	08/24/18 15:00
720-88241-3	DG-F9S-9.5-10	Solid	08/24/18 12:10	08/24/18 15:00
720-88241-4	DG-D9S-0.5-1	Solid	08/24/18 11:35	08/24/18 15:00
720-88241-5	DG-D9S-3.5-4	Solid	08/24/18 11:35	08/24/18 15:00
720-88241-6	DG-D9S-9.5-10	Solid	08/24/18 11:35	08/24/18 15:00

ASBESTOS TEM LABORATORIES, INC.

CARB Method 435
Polarized Light Microscopy
Analytical Report

Laboratory Job # 1283-01205

630 Bancroft Way
Berkeley, CA 94710
(510) 704-8930
FAX (510) 704-8429

ASBESTOS TEM LABORATORIES, INC

CA DPH ELAP
Lab No. 1866

NVLAP Lab Code: 101891-0
Berkeley, CA

Aug/31/2018

Micah Smith
TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

RE: LABORATORY JOB # 1283-01205
Polarized light microscopy analytical results for 6 bulk sample(s).
Job Site: 72013717
Job No.: UPC-OU-SM

Enclosed please find the bulk material analytical results for one or more samples submitted for asbestos analysis. The analyses were performed in accordance with the California Air Resources Board (ARB) Method 435 for the determination of asbestos in serpentine aggregate samples.

Prior to analysis, samples are logged-in and all data pertinent to the sample recorded. The samples are checked for damage or disruption of any chain-of-custody seals. A unique laboratory ID number is assigned to each sample. A hard copy log-in sheet containing all pertinent information concerning the sample is generated. This and all other relevant paper work are kept with the sample throughout the analytical procedures to assure proper analysis.

Sample preparation follows a standard CARB 435 prep method. The entire sample is dried at 135-150 C and then crushed to ~3/8" gravel size using a Bico Chipmunk crusher. If the submitted sample is >1 pint, the sample was split using a 1/2" riffle splitter following ASTM Method C-702-98 to obtain a 1 pint aliquot. The entire 1 pint aliquot, or entire original sample, is then pulverized in a Bico Braun disc pulverizer calibrated to produce a nominal 200 mesh final product. If necessary, additional homogenization steps are undertaken using a 3/8" riffle splitter. Small aliquots are collected from throughout the pulverized material to create three separate microsope slide mounts containing the appropriate refractive index oil. The prepared slides are placed under a polarizing light microscope where standard mineralogical techniques are used to analyze the various materials present, including asbestos. If asbestos is identified and of less than 10% concentration by visual area estimate then an additional five sample mounts are prepared. Quantification of asbestos concentration is obtained using the standard CAL ARB Method 435 point count protocol. For samples observed to contain visible asbestos of less than 10% concentration, a point counting techinique is used with 50 points counted on each of eight sample mounts for a total of 400 points. The data is then compiled into standard report format and subjected to a thorough quality assurance check before the information is released to the client.

While the CARB 435 method has much to commend it, there are a number of situations where it fails to provide sufficient accuracy to make a definitive determination of the presence/absence of asbestos and/or an accurate count of the asbestos concentration present in a given sample. These problems include, but are not limited to, 1) statistical uncertainty with samples containing <1% asbestos when too few particles are counted, 2) definitive identification and discrimination between various fibrous amphibole minerals such as tremolite/actinolite/hornblende and the "Libby amphiboles" such as tremolite/winchite/richterite/arfvedsonite, and C) small asbestiform fibers which are near or below the resolution limit of the PLM microscope such as those found in various California coast range serpentine bodies. In these cases, further analysis by transmission electron microscopy is recommended to obtain a more accurate result.

Sincerely Yours,

Lab Manager
ASBESTOS TEM LABORATORIES, INC.

--- These results relate only to the samples tested and must not be reproduced, except in full, without the approval of the laboratory. ---

630 BANCROFT WAY ▪ BERKELEY, CA 94710 ▪ PH. (510) 704-8930 ▪ FAX (510) 704-8429
With Branch Offices Located At: 1350 FREEPORT BLVD. UNIT 104, SPARKS, NV 89431

POLARIZED LIGHT MICROSCOPY
CARB 435 ANALYTICAL REPORT

Contact: Micah Smith

Address: TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

Samples Submitted: 6
Samples Analyzed: 6
Job Site / No. UPC-OU-SM
72013717

Report No. **359887**
Date Submitted: Aug-27-18
Date Reported: Aug-31-18

SAMPLE ID	POINTS COUNTED	ASBESTOS %	ASBESTOS TYPE	LOCATION / DESCRIPTION
DG-F9S-0.5-1		<0.25%	None Detected	720-88241-1
Lab ID # 1283-01205-001	400 - Total Points			No Asbestos Detected
DG-F9S-3.5-4		<0.25%	None Detected	720-88241-2
Lab ID # 1283-01205-002	400 - Total Points			No Asbestos Detected
DG-F9S-9.5-10		<0.25%	None Detected	720-88241-3
Lab ID # 1283-01205-003	400 - Total Points			No Asbestos Detected
DG-F9S-0.5-1		<0.25%	None Detected	720-88241-4
Lab ID # 1283-01205-004	400 - Total Points			No Asbestos Detected
DG-F9S-3.5-4		<0.25%	None Detected	720-88241-5
Lab ID # 1283-01205-005	400 - Total Points			No Asbestos Detected
DG-F9S-9.5-10		<0.25%	None Detected	720-88241-6
Lab ID # 1283-01205-006	400 - Total Points			No Asbestos Detected
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			

QC Reviewer _____ **Analys** _____

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

359887

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39418.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: Asbestos TEM Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88241-1
Address: 830 BANCROFT WAY.	Due Date Requested: 8/31/2018			
City: Berkeley	TAT Requested (days):			
State, Zip: CA, 94710				
Phone:	PO #:			
Email:	WO #:			
Project Name: UPC OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SU3 (Asbestos - CARB 435)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-F9S--0.5-1 (720-88241-1)	8/24/18	12:10 Pacific		Solid			X	1	
DG-F9S--3.5-4 (720-88241-2)	8/24/18	12:10 Pacific		Solid			X	1	
DG-F9S--9.5-10 (720-88241-3)	8/24/18	12:10 Pacific		Solid			X	1	
DG-D9S--0.5-1 (720-88241-4)	8/24/18	11:35 Pacific		Solid			X	1	
DG-D9S--3.5-4 (720-88241-5)	8/24/18	11:35 Pacific		Solid			X	1	
DG-D9S--9.5-10 (720-88241-6)	8/24/18	11:35 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 8-27-18 10:35	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: AUG27 '18 10:39AM

Ver: 09/20/2016

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

720-88241

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 185111

Date 8/24 Page 1 of 1

Report To

Attn: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: mkahrilas@geosyntec.com
To: GEOSYNTEC
Sampled By:
Attn: A SMITH
Phone:

Analysis Request

Sample ID	Date	Time	# of Containers	Preserv.	Volatile Organics GC/MS (VOCs) ☒ EPA 8260B + CRO	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☐ Motor Oil ☐ Other	Semi-Volatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☒ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☒ EPA 8081 PCBs ☒ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Metals: ☐ 6020 ☐ 200.8 (ICP-MS):	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	Asbestos (CARB 435)	
DG-F9S-0.5-1	8/24	1210	5		X			X		X		X	X									X	
DG-F9S-3.5-4	↓	1210	↓		X			X		X		X	X									X	
DG-F9S-9.5-10		1210			X			X		X		X	X									X	
DG-D9S-0.5-1		1135			X			X		X		X	X									X	
DG-D9S-3.5-4		1135			X			X		X		X	X									X	
DG-D9S-9.5-10	↓	1135	↓		X			X		X		X	X									X	

Project Info.
Project Name/ #: UPL OU-SM
#: WG2565/02
Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt
# of Containers:
Head Space:
Temp:

10 Day	5 Day	4 Day	3 Day	2 Day	1 Day	Other:
	(5)					

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID _____

Terms and Conditions on reverse

1.4°C

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [signature] Time: 1315	Signature: [signature] Time: 1500	Signature: Time:
Printed Name: MIRANDA KAHRILAS Date: 8/24	Printed Name: [signature] Date: 8/24/18	Printed Name: Date:
Company: GEO	Company: TA	Company:

1) Received by:	2) Received by:	3) Received by:
Signature: [signature] Time: 1315	Signature: [signature] Time: 1500	Signature: Time:
Printed Name: [signature] Date: 8/24/18	Printed Name: [signature] Date: 8/24/18	Printed Name: Date:
Company: TA	Company: TA-720	Company:

720-88241 Chain of Custody

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39419.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88241-1
Address: 4101 Shuffel Street NW, ,	Due Date Requested: 8/31/2018			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: UPC OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

C207

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8082/3540C (MOD) PCB 7 Aroclors	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-F9S--0.5-1 (720-88241-1)	8/24/18	12:10 Pacific		Solid			X	1	
DG-F9S--3.5-4 (720-88241-2)	8/24/18	12:10 Pacific		Solid			X	1	
DG-F9S--9.5-10 (720-88241-3)	8/24/18	12:10 Pacific		Solid			X	1	
DG-D9S--0.5-1 (720-88241-4)	8/24/18	11:35 Pacific		Solid			X	1	
DG-D9S--3.5-4 (720-88241-5)	8/24/18	11:35 Pacific		Solid			X	1	
DG-D9S--9.5-10 (720-88241-6)	8/24/18	11:35 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: Tom Mullen	Date/Time: 8-27-18 1600	Company: Fleg	Received by:	Date/Time: 8/29/18 935	Company: TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		

Ver: 09/20/2016

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** _____
Canton Facility

Client TA Placerville Site Name _____ Cooler unpacked by: SBC
Cooler Received on 8/29/18 Opened on 8/29/18
FedEx: 1st Grd (Exp) UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other _____
Packing material used: (Bubble Wrap) Foam (Plastic Bag) None Other _____
COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF +0 °C) Observed Cooler Temp. 1.4 °C Corrected Cooler Temp. 1.4 °C
   IR GUN #36 (CF -0.3°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 (Yes) No
   -Were the seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes (No)
   -Were tamper/custody seals intact and uncompromised? (Yes) No NA
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes (No)
7. Did all bottles arrive in good condition (Unbroken)? (Yes) No
8. Could all bottle labels be reconciled with the COC? (Yes) No
9. Were correct bottle(s) used for the test(s) indicated? (Yes) No
10. Sufficient quantity received to perform indicated analyses? (Yes) No
11. Are these work share samples? (Yes) No
    If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC849151**
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
16. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____.

WI-NC-099

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88241-1

Login Number: 88241
List Number: 1
Creator: Bullock, Tracy

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	False	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-88255-1
Client Project/Site: UPC OU-SM

For:
Geosyntec Consultants, Inc.
201 N. Civic Drive
Suite 245
Walnut Creek, California 94596

Attn: Mr. Krys Jesionek

Authorized for release by:
9/7/2018 12:40:36 PM

Micah Smith, Project Manager II
(916)374-4302
micah.smith@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 6
Client Sample Results 11
Surrogate Summary 302
QC Sample Results 304
QC Association Summary 343
Lab Chronicle 349
Certification Summary 354
Method Summary 355
Sample Summary 356
Chain of Custody 357
Receipt Checklists 363

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F2	MS/MSD RPD exceeds control limits

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 720-88255-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-88255-1

Comments
As discussed, the samples were analyzed for 1,2,3-Trichloropropane by method 8260B-SIM.

Receipt
The samples were received on 8/27/2018 2:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0º C.

Receipt Exceptions
Samples were logged in based on the project set up as field filtered metals.

All samples were received outside of holding time for Hexavalent Chromium by 7196A.

GC/MS VOA
Method(s) 8260B: The continuing calibration verification (CCV) associated with batch 720-250643 recovered above the upper control limit for 2,2-Dichloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: DG-M7W (720-88255-6), DG-F9W (720-88255-7), DG-DE89W (720-88255-8), DG-D9W (720-88255-9), DG-B9W (720-88255-10), TB-4 (720-88255-11) and FB-4 (720-88255-12).

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 720-250643 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8260B: The following sample(s) were collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH was outside the required criteria when verified by the laboratory, and corrective action was not possible: DG-M7W (720-88255-6). The sample was analyzed within 7 days per EPA recommendation.

Method(s) 8260B: The matrix spike duplicate (MSD) recoveries for analytical batch 720-250641 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits for nearly all compounds.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250641 recovered outside control limits for the following analytes: Carbon disulfide, Methylene Chloride, 1,1-Dichloroethene, 1,1,2-Trichloro-1,2,2-trifluoroethane and trans-1,2-Dichloroethene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The method blank for analytical batch 720-250725 contained Styrene above the method detection limit (MDL). Associated samples were not re-analyzed because results were less than the reporting limit (RL) .

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250725 recovered outside control limits for the following analytes: Carbon disulfide, Chlorobromomethane, 1,1-Dichloroethene, trans-1,2-Dichloroethene and 1,1,2-Trichloro-1,2,2-trifluoroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for analytical batch 720-250725 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits for nearly all compounds.

Method(s) 8260B: The Gasoline Range Organics (GRO) concentration reported for the following sample is due to the presence of discrete peaks: DG-A7W (720-88255-1). Trichloroethene, cis-1,2-Dichloroethene and trans-1,2-Dichloroethene.

Method(s) 8260B: The following volatile samples were analyzed with significant headspace in the sample container(s): DG-G7W (720-88255-4) and DUP-14 (720-88255-13). Significant headspace is defined as a bubble greater than 6 mm in diameter.

Job ID: 720-88255-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

Method(s) 8260B: The Gasoline Range Organics (GRO) concentration reported for the following sample is due to the presence of discrete peaks: DUP-14 (720-88255-13). cis-1,2-Dichloroethene, Trichloroethene and Vinyl chloride.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 720-250832 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8260B SIM: The following volatile sample was analyzed with significant headspace in the sample container(s): DG-C7W (720-88255-2). Significant headspace is defined as a bubble greater than 6 mm in diameter.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
Method(s) 7470A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 720-250639 and analytical batch 720-250735 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) precision was within acceptance limits.

Method(s) 6010B: The matrix spike duplicate (MSD) recoveries for preparation batch 720-250603 and analytical batch 720-250824 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 6010B: The serial dilution performed for the following sample associated with batch 720-250824 was outside of the 10% control limits: (720-88255-F-1-D SD)

Analyte	Recovery
Barium	26%

Method(s) 6010B: The following sample was diluted due to the nature of the sample matrix: DG-G7W (720-88255-4). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
Method(s) 7196A: The following samples were received outside of holding time: DG-A7W (720-88255-1), DG-C7W (720-88255-2), DG-E7W (720-88255-3), DG-G7W (720-88255-4), DG-I7W (720-88255-5), DG-M7W (720-88255-6), DG-F9W (720-88255-7), DG-DE89W (720-88255-8), DG-D9W (720-88255-9), DG-B9W (720-88255-10), DUP-14 (720-88255-13), (720-88255-A-1 MS) and (720-88255-A-1 MSD).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88255-1

Client Sample ID: DG-A7W — Lab Sample ID: 720-88255-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	130		0.50	0.076	ug/L	1		8260B	Total/NA
Gasoline Range Organics (GRO) -C4-C12	280		50	21	ug/L	1		8260B	Total/NA
Tetrachloroethene	5.7		0.50	0.20	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	24		5.0	1.3	ug/L	10		8260B	Total/NA
Trichloroethene	200		5.0	2.0	ug/L	10		8260B	Total/NA
Vinyl chloride	2.6		0.50	0.20	ug/L	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	55		52	31	ug/L	1		8015B	Total/NA
Barium	0.15		0.010	0.0014	mg/L	1		6010B	Dissolved
Beryllium	0.00050	J	0.0020	0.00033	mg/L	1		6010B	Dissolved
Cobalt	0.0049		0.0020	0.0012	mg/L	1		6010B	Dissolved
Copper	0.0015	J	0.020	0.0015	mg/L	1		6010B	Dissolved
Molybdenum	0.0035	J	0.010	0.0023	mg/L	1		6010B	Dissolved
Nickel	0.0055	J	0.010	0.00080	mg/L	1		6010B	Dissolved
Silver	0.017		0.0050	0.0012	mg/L	1		6010B	Dissolved
Vanadium	0.0011	J	0.010	0.00070	mg/L	1		6010B	Dissolved
Zinc	0.048	F1	0.020	0.0096	mg/L	1		6010B	Dissolved

Client Sample ID: DG-C7W — Lab Sample ID: 720-88255-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) -C4-C12	24	J	50	21	ug/L	1		8260B	Total/NA
Trichloroethene	1.2		0.50	0.20	ug/L	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	240		52	31	ug/L	1		8015B	Total/NA
Arsenic	0.0058	J	0.010	0.0026	mg/L	1		6010B	Dissolved
Barium	0.72		0.010	0.0014	mg/L	1		6010B	Dissolved
Chromium	0.015		0.010	0.0015	mg/L	1		6010B	Dissolved
Cobalt	0.0021		0.0020	0.0012	mg/L	1		6010B	Dissolved
Copper	0.0024	J	0.020	0.0015	mg/L	1		6010B	Dissolved
Molybdenum	0.0038	J	0.010	0.0023	mg/L	1		6010B	Dissolved
Nickel	0.0044	J	0.010	0.00080	mg/L	1		6010B	Dissolved
Silver	0.015		0.0050	0.0012	mg/L	1		6010B	Dissolved
Vanadium	0.0023	J	0.010	0.00070	mg/L	1		6010B	Dissolved
Zinc	0.052		0.020	0.0096	mg/L	1		6010B	Dissolved

Client Sample ID: DG-E7W — Lab Sample ID: 720-88255-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.50		0.50	0.076	ug/L	1		8260B	Total/NA
Gasoline Range Organics (GRO) -C4-C12	26	J	50	21	ug/L	1		8260B	Total/NA
Trichloroethene	1.0		0.50	0.20	ug/L	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	170		52	31	ug/L	1		8015B	Total/NA
Antimony	0.0027	J	0.010	0.0027	mg/L	1		6010B	Dissolved
Barium	0.50		0.010	0.0014	mg/L	1		6010B	Dissolved
Chromium	0.0021	J	0.010	0.0015	mg/L	1		6010B	Dissolved
Cobalt	0.0024		0.0020	0.0012	mg/L	1		6010B	Dissolved
Copper	0.0064	J	0.020	0.0015	mg/L	1		6010B	Dissolved
Lead	0.0028	J	0.0050	0.0023	mg/L	1		6010B	Dissolved
Molybdenum	0.0056	J	0.010	0.0023	mg/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-E7W (Continued) — Lab Sample ID: 720-88255-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	0.0061	J	0.010	0.00080	mg/L	1		6010B	Dissolved
Silver	0.015		0.0050	0.0012	mg/L	1		6010B	Dissolved
Vanadium	0.00097	J	0.010	0.00070	mg/L	1		6010B	Dissolved
Zinc	0.036		0.020	0.0096	mg/L	1		6010B	Dissolved
Mercury	0.00025	F1 F2	0.00020	0.00010	mg/L	1		7470A	Dissolved

Client Sample ID: DG-G7W — Lab Sample ID: 720-88255-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	23		0.50	0.076	ug/L	1		8260B	Total/NA
Gasoline Range Organics (GRO) -C4-C12	54		50	21	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	1.9		0.50	0.13	ug/L	1		8260B	Total/NA
Trichloroethene	15		0.50	0.20	ug/L	1		8260B	Total/NA
Vinyl chloride	4.6		0.50	0.20	ug/L	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	130		52	31	ug/L	1		8015B	Total/NA
Arsenic	0.020		0.010	0.0026	mg/L	1		6010B	Dissolved
Barium	1.4		0.010	0.0014	mg/L	1		6010B	Dissolved
Chromium	0.0024	J	0.010	0.0015	mg/L	1		6010B	Dissolved
Cobalt	0.015	J	0.020	0.012	mg/L	10		6010B	Dissolved
Copper	0.0057	J	0.020	0.0015	mg/L	1		6010B	Dissolved
Lead	0.030	J	0.050	0.023	mg/L	10		6010B	Dissolved
Molybdenum	0.012		0.010	0.0023	mg/L	1		6010B	Dissolved
Nickel	0.0074	J	0.010	0.00080	mg/L	1		6010B	Dissolved
Silver	0.020		0.0050	0.0012	mg/L	1		6010B	Dissolved

Client Sample ID: DG-I7W — Lab Sample ID: 720-88255-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	18		0.50	0.076	ug/L	1		8260B	Total/NA
Gasoline Range Organics (GRO) -C4-C12	42	J	50	21	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	1.1		0.50	0.13	ug/L	1		8260B	Total/NA
Trichloroethene	5.3		0.50	0.20	ug/L	1		8260B	Total/NA
Vinyl chloride	13		0.50	0.20	ug/L	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	100		53	32	ug/L	1		8015B	Total/NA
Arsenic	0.031		0.010	0.0026	mg/L	1		6010B	Dissolved
Barium	0.12		0.010	0.0014	mg/L	1		6010B	Dissolved
Chromium	0.027		0.010	0.0015	mg/L	1		6010B	Dissolved
Cobalt	0.0020		0.0020	0.0012	mg/L	1		6010B	Dissolved
Copper	0.0030	J	0.020	0.0015	mg/L	1		6010B	Dissolved
Molybdenum	0.0053	J	0.010	0.0023	mg/L	1		6010B	Dissolved
Nickel	0.0096	J	0.010	0.00080	mg/L	1		6010B	Dissolved
Silver	0.015		0.0050	0.0012	mg/L	1		6010B	Dissolved

Client Sample ID: DG-M7W — Lab Sample ID: 720-88255-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.23	J	0.50	0.076	ug/L	1		8260B	Total/NA
Trichloroethene	0.36	J	0.50	0.20	ug/L	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	600		54	32	ug/L	1		8015B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-M7W (Continued) — Lab Sample ID: 720-88255-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.013		0.010	0.0026	mg/L	1		6010B	Dissolved
Barium	0.52		0.010	0.0014	mg/L	1		6010B	Dissolved
Chromium	0.0034	J	0.010	0.0015	mg/L	1		6010B	Dissolved
Cobalt	0.0096		0.0020	0.0012	mg/L	1		6010B	Dissolved
Copper	0.011	J	0.020	0.0015	mg/L	1		6010B	Dissolved
Lead	0.0023	J	0.0050	0.0023	mg/L	1		6010B	Dissolved
Molybdenum	0.0090	J	0.010	0.0023	mg/L	1		6010B	Dissolved
Nickel	0.014		0.010	0.00080	mg/L	1		6010B	Dissolved
Silver	0.012		0.0050	0.0012	mg/L	1		6010B	Dissolved
Vanadium	0.0020	J	0.010	0.00070	mg/L	1		6010B	Dissolved
Zinc	0.056		0.020	0.0096	mg/L	1		6010B	Dissolved

Client Sample ID: DG-F9W — Lab Sample ID: 720-88255-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.12	J	0.50	0.11	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.095	J	0.50	0.076	ug/L	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	220		52	31	ug/L	1		8015B	Total/NA
Arsenic	0.037		0.010	0.0026	mg/L	1		6010B	Dissolved
Barium	0.18		0.010	0.0014	mg/L	1		6010B	Dissolved
Chromium	0.0024	J	0.010	0.0015	mg/L	1		6010B	Dissolved
Cobalt	0.0050		0.0020	0.0012	mg/L	1		6010B	Dissolved
Copper	0.0039	J	0.020	0.0015	mg/L	1		6010B	Dissolved
Molybdenum	0.0072	J	0.010	0.0023	mg/L	1		6010B	Dissolved
Nickel	0.0069	J	0.010	0.00080	mg/L	1		6010B	Dissolved
Silver	0.014		0.0050	0.0012	mg/L	1		6010B	Dissolved
Zinc	0.026		0.020	0.0096	mg/L	1		6010B	Dissolved

Client Sample ID: DG-DE89W — Lab Sample ID: 720-88255-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.15	J	0.50	0.076	ug/L	1		8260B	Total/NA
Vinyl chloride	0.24	J	0.50	0.20	ug/L	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	210		53	32	ug/L	1		8015B	Total/NA
Arsenic	0.029		0.010	0.0026	mg/L	1		6010B	Dissolved
Barium	0.15		0.010	0.0014	mg/L	1		6010B	Dissolved
Chromium	0.0020	J	0.010	0.0015	mg/L	1		6010B	Dissolved
Cobalt	0.0015	J	0.0020	0.0012	mg/L	1		6010B	Dissolved
Copper	0.0040	J	0.020	0.0015	mg/L	1		6010B	Dissolved
Molybdenum	0.0055	J	0.010	0.0023	mg/L	1		6010B	Dissolved
Nickel	0.0043	J	0.010	0.00080	mg/L	1		6010B	Dissolved
Silver	0.011		0.0050	0.0012	mg/L	1		6010B	Dissolved
Zinc	0.023		0.020	0.0096	mg/L	1		6010B	Dissolved

Client Sample ID: DG-D9W — Lab Sample ID: 720-88255-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.62		0.50	0.076	ug/L	1		8260B	Total/NA
Gasoline Range Organics (GRO) -C4-C12	30	J	50	21	ug/L	1		8260B	Total/NA
Vinyl chloride	0.51		0.50	0.20	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-D9W (Continued) — Lab Sample ID: 720-88255-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	170		52	31	ug/L	1		8015B	Total/NA
Arsenic	0.018		0.010	0.0026	mg/L	1		6010B	Dissolved
Barium	0.28		0.010	0.0014	mg/L	1		6010B	Dissolved
Chromium	0.0024	J	0.010	0.0015	mg/L	1		6010B	Dissolved
Copper	0.0026	J	0.020	0.0015	mg/L	1		6010B	Dissolved
Molybdenum	0.0028	J	0.010	0.0023	mg/L	1		6010B	Dissolved
Nickel	0.0030	J	0.010	0.00080	mg/L	1		6010B	Dissolved
Silver	0.012		0.0050	0.0012	mg/L	1		6010B	Dissolved
Vanadium	0.00073	J	0.010	0.00070	mg/L	1		6010B	Dissolved
Zinc	0.017	J	0.020	0.0096	mg/L	1		6010B	Dissolved

Client Sample ID: DG-B9W — Lab Sample ID: 720-88255-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.1		0.50	0.076	ug/L	1		8260B	Total/NA
Gasoline Range Organics (GRO) -C4-C12	24	J	50	21	ug/L	1		8260B	Total/NA
Vinyl chloride	0.37	J	0.50	0.20	ug/L	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	180		52	31	ug/L	1		8015B	Total/NA
Antimony	0.0035	J	0.010	0.0027	mg/L	1		6010B	Dissolved
Arsenic	0.034	J	0.10	0.026	mg/L	10		6010B	Dissolved
Barium	0.47		0.010	0.0014	mg/L	1		6010B	Dissolved
Chromium	0.0037	J	0.010	0.0015	mg/L	1		6010B	Dissolved
Cobalt	0.0040		0.0020	0.0012	mg/L	1		6010B	Dissolved
Copper	0.012	J	0.020	0.0015	mg/L	1		6010B	Dissolved
Lead	0.0032	J	0.0050	0.0023	mg/L	1		6010B	Dissolved
Molybdenum	0.0074	J	0.010	0.0023	mg/L	1		6010B	Dissolved
Nickel	0.0060	J	0.010	0.00080	mg/L	1		6010B	Dissolved
Silver	0.010		0.0050	0.0012	mg/L	1		6010B	Dissolved
Zinc	0.096		0.020	0.0096	mg/L	1		6010B	Dissolved

Client Sample ID: TB-4 — Lab Sample ID: 720-88255-11

No Detections.

Client Sample ID: FB-4 — Lab Sample ID: 720-88255-12

No Detections.

Client Sample ID: DUP-14 — Lab Sample ID: 720-88255-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	21		0.50	0.076	ug/L	1		8260B	Total/NA
Gasoline Range Organics (GRO) -C4-C12	30	J	50	21	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	1.2		0.50	0.13	ug/L	1		8260B	Total/NA
Trichloroethene	5.9		0.50	0.20	ug/L	1		8260B	Total/NA
Vinyl chloride	16		0.50	0.20	ug/L	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	110		52	31	ug/L	1		8015B	Total/NA
Arsenic	0.031		0.010	0.0026	mg/L	1		6010B	Dissolved
Barium	0.11		0.010	0.0014	mg/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88255-1

Client Sample ID: DUP-14 (Continued) — Lab Sample ID: 720-88255-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	0.0015	J	0.010	0.0015	mg/L	1		6010B	Dissolved
Cobalt	0.0013	J	0.0020	0.0012	mg/L	1		6010B	Dissolved
Copper	0.0016	J	0.020	0.0015	mg/L	1		6010B	Dissolved
Lead	0.0094		0.0050	0.0023	mg/L	1		6010B	Dissolved
Molybdenum	0.0038	J	0.010	0.0023	mg/L	1		6010B	Dissolved
Nickel	0.0020	J	0.010	0.00080	mg/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88255-1

Client Sample ID: DG-A7W

Date Collected: 08/24/18 14:05
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88255-1

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0025	ug/L			08/30/18 22:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*08/30/18 22:09*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			09/01/18 00:50	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			09/01/18 00:50	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			09/01/18 00:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	0.50	0.091	ug/L			09/01/18 00:50	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			09/01/18 00:50	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			09/01/18 00:50	1
1,1-Dichloroethene	ND		5.0	2.0	ug/L			09/05/18 00:52	10
1,1-Dichloropropene	ND		0.50	0.20	ug/L			09/01/18 00:50	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			09/01/18 00:50	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			09/01/18 00:50	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			09/01/18 00:50	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			09/01/18 00:50	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			09/01/18 00:50	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			09/01/18 00:50	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			09/01/18 00:50	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			09/01/18 00:50	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			09/01/18 00:50	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			09/01/18 00:50	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			09/01/18 00:50	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			09/01/18 00:50	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			09/01/18 00:50	1
2-Butanone (MEK)	ND		50	8.4	ug/L			09/01/18 00:50	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			09/01/18 00:50	1
2-Hexanone	ND		50	3.0	ug/L			09/01/18 00:50	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			09/01/18 00:50	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			09/01/18 00:50	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			09/01/18 00:50	1
Acetone	ND		50	20	ug/L			09/01/18 00:50	1
Benzene	ND		0.50	0.25	ug/L			09/01/18 00:50	1
Bromobenzene	ND		1.0	0.20	ug/L			09/01/18 00:50	1
Bromoform	ND		1.0	0.50	ug/L			09/01/18 00:50	1
Bromomethane	ND		1.0	0.49	ug/L			09/01/18 00:50	1
Carbon disulfide	ND	*	5.0	0.78	ug/L			09/01/18 00:50	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			09/01/18 00:50	1
Chlorobenzene	ND		0.50	0.13	ug/L			09/01/18 00:50	1
Chlorobromomethane	ND	*	1.0	0.25	ug/L			09/01/18 00:50	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			09/01/18 00:50	1
Chloroethane	ND		1.0	0.17	ug/L			09/01/18 00:50	1
Chloroform	ND		1.0	0.40	ug/L			09/01/18 00:50	1
Chloromethane	ND		1.0	0.19	ug/L			09/01/18 00:50	1
cis-1,2-Dichloroethene	**130**		0.50	0.076	ug/L			09/01/18 00:50	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			09/01/18 00:50	1
Dibromomethane	ND		0.50	0.30	ug/L			09/01/18 00:50	1

Client Sample ID: DG-A7W

Date Collected: 08/24/18 14:05
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88255-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	ND		0.50	0.20	ug/L			09/01/18 00:50	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			09/01/18 00:50	1
Ethylbenzene	ND		0.50	0.13	ug/L			09/01/18 00:50	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			09/01/18 00:50	1
Gasoline Range Organics (GRO) -C4-C12	**280**		50	21	ug/L			09/01/18 00:50	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			09/01/18 00:50	1
Isopropylbenzene	ND		0.50	0.20	ug/L			09/01/18 00:50	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			09/01/18 00:50	1
Methylene Chloride	ND		5.0	1.5	ug/L			09/01/18 00:50	1
Naphthalene	ND		1.0	0.22	ug/L			09/01/18 00:50	1
n-Butylbenzene	ND		1.0	0.30	ug/L			09/01/18 00:50	1
N-Propylbenzene	ND		1.0	0.20	ug/L			09/01/18 00:50	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			09/01/18 00:50	1
Styrene	ND		0.50	0.22	ug/L			09/01/18 00:50	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			09/01/18 00:50	1
Tetrachloroethene	**5.7**		0.50	0.20	ug/L			09/01/18 00:50	1
Toluene	ND		0.50	0.17	ug/L			09/01/18 00:50	1
trans-1,2-Dichloroethene	**24**		5.0	1.3	ug/L			09/05/18 00:52	10
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			09/01/18 00:50	1
Trichloroethene	**200**		5.0	2.0	ug/L			09/05/18 00:52	10
Trichlorofluoromethane	ND		1.0	0.30	ug/L			09/01/18 00:50	1
Vinyl acetate	ND		10	0.60	ug/L			09/01/18 00:50	1
Vinyl chloride	**2.6**		0.50	0.20	ug/L			09/01/18 00:50	1
Xylenes, Total	ND		0.50	0.40	ug/L			09/01/18 00:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*72 - 130*		*09/01/18 00:50*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*72 - 130*		*09/05/18 00:52*	*10*
4-Bromofluorobenzene	*91*		*67 - 130*		*09/01/18 00:50*	*1*
4-Bromofluorobenzene	*94*		*67 - 130*		*09/05/18 00:52*	*10*
Toluene-d8 (Surr)	*94*		*70 - 130*		*09/01/18 00:50*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*09/05/18 00:52*	*10*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**55**		52	31	ug/L		08/28/18 15:43	08/28/18 23:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*88*		*23 - 156*	*08/28/18 15:43*	*08/28/18 23:09*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010	0.0027	mg/L		08/30/18 14:05	09/04/18 10:18	1
Arsenic	ND		0.010	0.0026	mg/L		08/30/18 14:05	09/04/18 10:18	1
Barium	**0.15**		0.010	0.0014	mg/L		08/30/18 14:05	09/04/18 10:18	1
Beryllium	**0.00050**	**J**	0.0020	0.00033	mg/L		08/30/18 14:05	09/04/18 10:18	1
Cadmium	ND		0.0025	0.0013	mg/L		08/30/18 14:05	09/04/18 10:18	1
Chromium	ND		0.010	0.0015	mg/L		08/30/18 14:05	09/04/18 10:18	1
Cobalt	**0.0049**		0.0020	0.0012	mg/L		08/30/18 14:05	09/04/18 10:18	1
Copper	**0.0015**	**J**	0.020	0.0015	mg/L		08/30/18 14:05	09/04/18 10:18	1

Client Sample ID: DG-A7W

Lab Sample ID: 720-88255-1

Date Collected: 08/24/18 14:05

Matrix: Water

Date Received: 08/27/18 14:25

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0050	0.0023	mg/L		08/30/18 14:05	09/04/18 10:18	1
Molybdenum	**0.0035**	**J**	0.010	0.0023	mg/L		08/30/18 14:05	09/04/18 10:18	1
Nickel	**0.0055**	**J**	0.010	0.00080	mg/L		08/30/18 14:05	09/04/18 10:18	1
Selenium	ND		0.020	0.0071	mg/L		08/30/18 14:05	09/04/18 10:18	1
Silver	**0.017**		0.0050	0.0012	mg/L		08/30/18 14:05	09/04/18 10:18	1
Thallium	ND		0.010	0.0035	mg/L		08/30/18 14:05	09/04/18 10:18	1
Vanadium	**0.0011**	**J**	0.010	0.00070	mg/L		08/30/18 14:05	09/04/18 10:18	1
Zinc	**0.048**	**F1**	0.020	0.0096	mg/L		08/30/18 14:05	09/04/18 10:18	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/28/18 18:59	08/29/18 21:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND	H	0.010	0.0037	mg/L			08/27/18 22:10	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88255-1

Client Sample ID: DG-C7W

Date Collected: 08/24/18 14:15
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88255-2

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0025	ug/L			08/30/18 23:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*104*		*80 - 120*		*08/30/18 23:02*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/31/18 14:45	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/31/18 14:45	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/31/18 14:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	0.50	0.091	ug/L			08/31/18 14:45	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/31/18 14:45	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/31/18 14:45	1
1,1-Dichloroethene	ND	*	0.50	0.20	ug/L			08/31/18 14:45	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/31/18 14:45	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/31/18 14:45	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/31/18 14:45	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/31/18 14:45	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/31/18 14:45	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/31/18 14:45	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/31/18 14:45	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/31/18 14:45	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/31/18 14:45	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/31/18 14:45	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/31/18 14:45	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/31/18 14:45	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/31/18 14:45	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/31/18 14:45	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/31/18 14:45	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 14:45	1
2-Hexanone	ND		50	3.0	ug/L			08/31/18 14:45	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 14:45	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/31/18 14:45	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/31/18 14:45	1
Acetone	ND		50	20	ug/L			08/31/18 14:45	1
Benzene	ND		0.50	0.25	ug/L			08/31/18 14:45	1
Bromobenzene	ND		1.0	0.20	ug/L			08/31/18 14:45	1
Bromoform	ND		1.0	0.50	ug/L			08/31/18 14:45	1
Bromomethane	ND		1.0	0.49	ug/L			08/31/18 14:45	1
Carbon disulfide	ND	*	5.0	0.78	ug/L			08/31/18 14:45	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/31/18 14:45	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/31/18 14:45	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/31/18 14:45	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/31/18 14:45	1
Chloroethane	ND		1.0	0.17	ug/L			08/31/18 14:45	1
Chloroform	ND		1.0	0.40	ug/L			08/31/18 14:45	1
Chloromethane	ND		1.0	0.19	ug/L			08/31/18 14:45	1
cis-1,2-Dichloroethene	ND		0.50	0.076	ug/L			08/31/18 14:45	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/31/18 14:45	1
Dibromomethane	ND		0.50	0.30	ug/L			08/31/18 14:45	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88255-1

Client Sample ID: DG-C7W

Date Collected: 08/24/18 14:15
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88255-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/31/18 14:45	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/31/18 14:45	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/31/18 14:45	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/31/18 14:45	1
Gasoline Range Organics (GRO) -C4-C12	**24**	**J**	50	21	ug/L			08/31/18 14:45	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/31/18 14:45	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/31/18 14:45	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/31/18 14:45	1
Methylene Chloride	ND	*	5.0	1.5	ug/L			08/31/18 14:45	1
Naphthalene	ND		1.0	0.22	ug/L			08/31/18 14:45	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/31/18 14:45	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/31/18 14:45	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/31/18 14:45	1
Styrene	ND		0.50	0.22	ug/L			08/31/18 14:45	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/31/18 14:45	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/31/18 14:45	1
Toluene	ND		0.50	0.17	ug/L			08/31/18 14:45	1
trans-1,2-Dichloroethene	ND	*	0.50	0.13	ug/L			08/31/18 14:45	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/31/18 14:45	1
Trichloroethene	**1.2**		0.50	0.20	ug/L			08/31/18 14:45	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/31/18 14:45	1
Vinyl acetate	ND		10	0.60	ug/L			08/31/18 14:45	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/31/18 14:45	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/31/18 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*72 - 130*		*08/31/18 14:45*	*1*
4-Bromofluorobenzene	*94*		*67 - 130*		*08/31/18 14:45*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/31/18 14:45*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**240**		52	31	ug/L		08/28/18 15:43	08/28/18 20:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*74*		*23 - 156*	*08/28/18 15:43*	*08/28/18 20:19*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010	0.0027	mg/L		08/30/18 14:05	09/04/18 10:23	1
Arsenic	**0.0058**	**J**	0.010	0.0026	mg/L		08/30/18 14:05	09/04/18 10:23	1
Barium	**0.72**		0.010	0.0014	mg/L		08/30/18 14:05	09/04/18 10:23	1
Beryllium	ND		0.0020	0.00033	mg/L		08/30/18 14:05	09/04/18 10:23	1
Cadmium	ND		0.0025	0.0013	mg/L		08/30/18 14:05	09/04/18 10:23	1
Chromium	**0.015**		0.010	0.0015	mg/L		08/30/18 14:05	09/04/18 10:23	1
Cobalt	**0.0021**		0.0020	0.0012	mg/L		08/30/18 14:05	09/04/18 10:23	1
Copper	**0.0024**	**J**	0.020	0.0015	mg/L		08/30/18 14:05	09/04/18 10:23	1
Lead	ND		0.0050	0.0023	mg/L		08/30/18 14:05	09/04/18 10:23	1
Molybdenum	**0.0038**	**J**	0.010	0.0023	mg/L		08/30/18 14:05	09/04/18 10:23	1
Nickel	**0.0044**	**J**	0.010	0.00080	mg/L		08/30/18 14:05	09/04/18 10:23	1

Client Sample ID: DG-C7W

Lab Sample ID: 720-88255-2

Date Collected: 08/24/18 14:15

Matrix: Water

Date Received: 08/27/18 14:25

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.020	0.0071	mg/L		08/30/18 14:05	09/04/18 10:23	1
Silver	**0.015**		0.0050	0.0012	mg/L		08/30/18 14:05	09/04/18 10:23	1
Thallium	ND		0.010	0.0035	mg/L		08/30/18 14:05	09/04/18 10:23	1
Vanadium	**0.0023**	**J**	0.010	0.00070	mg/L		08/30/18 14:05	09/04/18 10:23	1
Zinc	**0.052**		0.020	0.0096	mg/L		08/30/18 14:05	09/04/18 10:23	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/28/18 18:59	08/29/18 21:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND	H	0.010	0.0037	mg/L			08/27/18 22:10	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88255-1

Client Sample ID: DG-E7W

Date Collected: 08/24/18 14:50
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88255-3

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0025	ug/L			08/30/18 23:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*08/30/18 23:28*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/31/18 15:14	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/31/18 15:14	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/31/18 15:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	0.50	0.091	ug/L			08/31/18 15:14	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/31/18 15:14	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/31/18 15:14	1
1,1-Dichloroethene	ND	*	0.50	0.20	ug/L			08/31/18 15:14	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/31/18 15:14	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/31/18 15:14	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/31/18 15:14	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/31/18 15:14	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/31/18 15:14	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/31/18 15:14	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/31/18 15:14	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/31/18 15:14	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/31/18 15:14	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/31/18 15:14	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/31/18 15:14	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/31/18 15:14	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/31/18 15:14	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/31/18 15:14	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/31/18 15:14	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 15:14	1
2-Hexanone	ND		50	3.0	ug/L			08/31/18 15:14	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 15:14	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/31/18 15:14	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/31/18 15:14	1
Acetone	ND		50	20	ug/L			08/31/18 15:14	1
Benzene	ND		0.50	0.25	ug/L			08/31/18 15:14	1
Bromobenzene	ND		1.0	0.20	ug/L			08/31/18 15:14	1
Bromoform	ND		1.0	0.50	ug/L			08/31/18 15:14	1
Bromomethane	ND		1.0	0.49	ug/L			08/31/18 15:14	1
Carbon disulfide	ND	*	5.0	0.78	ug/L			08/31/18 15:14	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/31/18 15:14	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/31/18 15:14	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/31/18 15:14	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/31/18 15:14	1
Chloroethane	ND		1.0	0.17	ug/L			08/31/18 15:14	1
Chloroform	ND		1.0	0.40	ug/L			08/31/18 15:14	1
Chloromethane	ND		1.0	0.19	ug/L			08/31/18 15:14	1
cis-1,2-Dichloroethene	**0.50**		0.50	0.076	ug/L			08/31/18 15:14	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/31/18 15:14	1
Dibromomethane	ND		0.50	0.30	ug/L			08/31/18 15:14	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88255-1

Client Sample ID: DG-E7W

Date Collected: 08/24/18 14:50
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88255-3

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/31/18 15:14	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/31/18 15:14	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/31/18 15:14	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/31/18 15:14	1
Gasoline Range Organics (GRO) -C4-C12	**26**	**J**	50	21	ug/L			08/31/18 15:14	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/31/18 15:14	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/31/18 15:14	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/31/18 15:14	1
Methylene Chloride	ND	*	5.0	1.5	ug/L			08/31/18 15:14	1
Naphthalene	ND		1.0	0.22	ug/L			08/31/18 15:14	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/31/18 15:14	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/31/18 15:14	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/31/18 15:14	1
Styrene	ND		0.50	0.22	ug/L			08/31/18 15:14	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/31/18 15:14	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/31/18 15:14	1
Toluene	ND		0.50	0.17	ug/L			08/31/18 15:14	1
trans-1,2-Dichloroethene	ND	*	0.50	0.13	ug/L			08/31/18 15:14	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/31/18 15:14	1
Trichloroethene	**1.0**		0.50	0.20	ug/L			08/31/18 15:14	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/31/18 15:14	1
Vinyl acetate	ND		10	0.60	ug/L			08/31/18 15:14	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/31/18 15:14	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/31/18 15:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*72 - 130*		*08/31/18 15:14*	*1*
4-Bromofluorobenzene	*90*		*67 - 130*		*08/31/18 15:14*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*08/31/18 15:14*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**170**		52	31	ug/L		08/28/18 15:43	08/28/18 20:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*73*		*23 - 156*	*08/28/18 15:43*	*08/28/18 20:43*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.0027**	**J**	0.010	0.0027	mg/L		08/30/18 14:05	09/04/18 10:27	1
Arsenic	ND		0.010	0.0026	mg/L		08/30/18 14:05	09/04/18 10:27	1
Barium	**0.50**		0.010	0.0014	mg/L		08/30/18 14:05	09/04/18 10:27	1
Beryllium	ND		0.0020	0.00033	mg/L		08/30/18 14:05	09/04/18 10:27	1
Cadmium	ND		0.0025	0.0013	mg/L		08/30/18 14:05	09/04/18 10:27	1
Chromium	**0.0021**	**J**	0.010	0.0015	mg/L		08/30/18 14:05	09/04/18 10:27	1
Cobalt	**0.0024**		0.0020	0.0012	mg/L		08/30/18 14:05	09/04/18 10:27	1
Copper	**0.0064**	**J**	0.020	0.0015	mg/L		08/30/18 14:05	09/04/18 10:27	1
Lead	**0.0028**	**J**	0.0050	0.0023	mg/L		08/30/18 14:05	09/04/18 10:27	1
Molybdenum	**0.0056**	**J**	0.010	0.0023	mg/L		08/30/18 14:05	09/04/18 10:27	1
Nickel	**0.0061**	**J**	0.010	0.00080	mg/L		08/30/18 14:05	09/04/18 10:27	1

Client Sample ID: DG-E7W

Lab Sample ID: 720-88255-3

Date Collected: 08/24/18 14:50

Matrix: Water

Date Received: 08/27/18 14:25

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.020	0.0071	mg/L		08/30/18 14:05	09/04/18 10:27	1
Silver	**0.015**		0.0050	0.0012	mg/L		08/30/18 14:05	09/04/18 10:27	1
Thallium	ND		0.010	0.0035	mg/L		08/30/18 14:05	09/04/18 10:27	1
Vanadium	**0.00097**	**J**	0.010	0.00070	mg/L		08/30/18 14:05	09/04/18 10:27	1
Zinc	**0.036**		0.020	0.0096	mg/L		08/30/18 14:05	09/04/18 10:27	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00025**	**F1 F2**	0.00020	0.00010	mg/L		08/30/18 21:49	08/31/18 16:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND	H	0.010	0.0037	mg/L			08/27/18 22:10	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88255-1

Client Sample ID: DG-G7W

Date Collected: 08/24/18 15:05
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88255-4

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0025	ug/L			08/30/18 23:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*08/30/18 23:54*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/31/18 15:42	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/31/18 15:42	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/31/18 15:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	0.50	0.091	ug/L			08/31/18 15:42	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/31/18 15:42	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/31/18 15:42	1
1,1-Dichloroethene	ND	*	0.50	0.20	ug/L			08/31/18 15:42	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/31/18 15:42	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/31/18 15:42	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/31/18 15:42	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/31/18 15:42	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/31/18 15:42	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/31/18 15:42	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/31/18 15:42	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/31/18 15:42	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/31/18 15:42	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/31/18 15:42	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/31/18 15:42	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/31/18 15:42	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/31/18 15:42	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/31/18 15:42	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/31/18 15:42	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 15:42	1
2-Hexanone	ND		50	3.0	ug/L			08/31/18 15:42	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 15:42	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/31/18 15:42	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/31/18 15:42	1
Acetone	ND		50	20	ug/L			08/31/18 15:42	1
Benzene	ND		0.50	0.25	ug/L			08/31/18 15:42	1
Bromobenzene	ND		1.0	0.20	ug/L			08/31/18 15:42	1
Bromoform	ND		1.0	0.50	ug/L			08/31/18 15:42	1
Bromomethane	ND		1.0	0.49	ug/L			08/31/18 15:42	1
Carbon disulfide	ND	*	5.0	0.78	ug/L			08/31/18 15:42	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/31/18 15:42	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/31/18 15:42	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/31/18 15:42	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/31/18 15:42	1
Chloroethane	ND		1.0	0.17	ug/L			08/31/18 15:42	1
Chloroform	ND		1.0	0.40	ug/L			08/31/18 15:42	1
Chloromethane	ND		1.0	0.19	ug/L			08/31/18 15:42	1
cis-1,2-Dichloroethene	**23**		0.50	0.076	ug/L			08/31/18 15:42	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/31/18 15:42	1
Dibromomethane	ND		0.50	0.30	ug/L			08/31/18 15:42	1

Client Sample ID: DG-G7W

Date Collected: 08/24/18 15:05
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88255-4

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/31/18 15:42	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/31/18 15:42	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/31/18 15:42	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/31/18 15:42	1
Gasoline Range Organics (GRO) -C4-C12	**54**		50	21	ug/L			08/31/18 15:42	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/31/18 15:42	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/31/18 15:42	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/31/18 15:42	1
Methylene Chloride	ND	*	5.0	1.5	ug/L			08/31/18 15:42	1
Naphthalene	ND		1.0	0.22	ug/L			08/31/18 15:42	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/31/18 15:42	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/31/18 15:42	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/31/18 15:42	1
Styrene	ND		0.50	0.22	ug/L			08/31/18 15:42	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/31/18 15:42	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/31/18 15:42	1
Toluene	ND		0.50	0.17	ug/L			08/31/18 15:42	1
trans-1,2-Dichloroethene	**1.9**		0.50	0.13	ug/L			09/04/18 23:21	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/31/18 15:42	1
Trichloroethene	**15**		0.50	0.20	ug/L			08/31/18 15:42	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/31/18 15:42	1
Vinyl acetate	ND		10	0.60	ug/L			08/31/18 15:42	1
Vinyl chloride	**4.6**		0.50	0.20	ug/L			08/31/18 15:42	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/31/18 15:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*72 - 130*		*08/31/18 15:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*72 - 130*		*09/04/18 23:21*	*1*
4-Bromofluorobenzene	*94*		*67 - 130*		*08/31/18 15:42*	*1*
4-Bromofluorobenzene	*97*		*67 - 130*		*09/04/18 23:21*	*1*
Toluene-d8 (Surr)	*90*		*70 - 130*		*08/31/18 15:42*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*09/04/18 23:21*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**130**		52	31	ug/L		08/28/18 15:43	08/28/18 21:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*90*		*23 - 156*	*08/28/18 15:43*	*08/28/18 21:08*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010	0.0027	mg/L		08/30/18 14:05	09/04/18 10:32	1
Arsenic	**0.020**		0.010	0.0026	mg/L		08/30/18 14:05	09/04/18 10:32	1
Barium	**1.4**		0.010	0.0014	mg/L		08/30/18 14:05	09/04/18 10:32	1
Beryllium	ND		0.0020	0.00033	mg/L		08/30/18 14:05	09/04/18 10:32	1
Cadmium	ND		0.025	0.013	mg/L		08/30/18 14:05	09/05/18 12:40	10
Chromium	**0.0024**	**J**	0.010	0.0015	mg/L		08/30/18 14:05	09/04/18 10:32	1
Cobalt	**0.015**	**J**	0.020	0.012	mg/L		08/30/18 14:05	09/05/18 12:40	10
Copper	**0.0057**	**J**	0.020	0.0015	mg/L		08/30/18 14:05	09/04/18 10:32	1

Client Sample ID: DG-G7W

Lab Sample ID: 720-88255-4

Date Collected: 08/24/18 15:05

Matrix: Water

Date Received: 08/27/18 14:25

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.030**	**J**	0.050	0.023	mg/L		08/30/18 14:05	09/05/18 12:40	10
Molybdenum	**0.012**		0.010	0.0023	mg/L		08/30/18 14:05	09/04/18 10:32	1
Nickel	**0.0074**	**J**	0.010	0.00080	mg/L		08/30/18 14:05	09/04/18 10:32	1
Selenium	ND		0.020	0.0071	mg/L		08/30/18 14:05	09/04/18 10:32	1
Silver	**0.020**		0.0050	0.0012	mg/L		08/30/18 14:05	09/04/18 10:32	1
Thallium	ND		0.10	0.035	mg/L		08/30/18 14:05	09/05/18 12:40	10
Vanadium	ND		0.010	0.00070	mg/L		08/30/18 14:05	09/04/18 10:32	1
Zinc	ND		0.20	0.096	mg/L		08/30/18 14:05	09/05/18 12:40	10

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/30/18 21:49	08/31/18 16:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND	H	0.010	0.0037	mg/L			08/27/18 22:10	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88255-1

Client Sample ID: DG-I7W

Date Collected: 08/24/18 15:30
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88255-5

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0025	ug/L			08/31/18 00:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*08/31/18 00:21*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/31/18 16:11	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/31/18 16:11	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/31/18 16:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	0.50	0.091	ug/L			08/31/18 16:11	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/31/18 16:11	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/31/18 16:11	1
1,1-Dichloroethene	ND	*	0.50	0.20	ug/L			08/31/18 16:11	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/31/18 16:11	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/31/18 16:11	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/31/18 16:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/31/18 16:11	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/31/18 16:11	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/31/18 16:11	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/31/18 16:11	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/31/18 16:11	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/31/18 16:11	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/31/18 16:11	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/31/18 16:11	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/31/18 16:11	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/31/18 16:11	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/31/18 16:11	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/31/18 16:11	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 16:11	1
2-Hexanone	ND		50	3.0	ug/L			08/31/18 16:11	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 16:11	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/31/18 16:11	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/31/18 16:11	1
Acetone	ND		50	20	ug/L			08/31/18 16:11	1
Benzene	ND		0.50	0.25	ug/L			08/31/18 16:11	1
Bromobenzene	ND		1.0	0.20	ug/L			08/31/18 16:11	1
Bromoform	ND		1.0	0.50	ug/L			08/31/18 16:11	1
Bromomethane	ND		1.0	0.49	ug/L			08/31/18 16:11	1
Carbon disulfide	ND	*	5.0	0.78	ug/L			08/31/18 16:11	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/31/18 16:11	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/31/18 16:11	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/31/18 16:11	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/31/18 16:11	1
Chloroethane	ND		1.0	0.17	ug/L			08/31/18 16:11	1
Chloroform	ND		1.0	0.40	ug/L			08/31/18 16:11	1
Chloromethane	ND		1.0	0.19	ug/L			08/31/18 16:11	1
cis-1,2-Dichloroethene	**18**		0.50	0.076	ug/L			08/31/18 16:11	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/31/18 16:11	1
Dibromomethane	ND		0.50	0.30	ug/L			08/31/18 16:11	1

Client Sample ID: DG-I7W

Date Collected: 08/24/18 15:30
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88255-5

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/31/18 16:11	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/31/18 16:11	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/31/18 16:11	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/31/18 16:11	1
Gasoline Range Organics (GRO) -C4-C12	**42**	**J**	50	21	ug/L			08/31/18 16:11	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/31/18 16:11	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/31/18 16:11	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/31/18 16:11	1
Methylene Chloride	ND	*	5.0	1.5	ug/L			08/31/18 16:11	1
Naphthalene	ND		1.0	0.22	ug/L			08/31/18 16:11	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/31/18 16:11	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/31/18 16:11	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/31/18 16:11	1
Styrene	ND		0.50	0.22	ug/L			08/31/18 16:11	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/31/18 16:11	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/31/18 16:11	1
Toluene	ND		0.50	0.17	ug/L			08/31/18 16:11	1
trans-1,2-Dichloroethene	**1.1**		0.50	0.13	ug/L			09/04/18 23:51	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/31/18 16:11	1
Trichloroethene	**5.3**		0.50	0.20	ug/L			08/31/18 16:11	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/31/18 16:11	1
Vinyl acetate	ND		10	0.60	ug/L			08/31/18 16:11	1
Vinyl chloride	**13**		0.50	0.20	ug/L			08/31/18 16:11	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/31/18 16:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*72 - 130*		*08/31/18 16:11*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*72 - 130*		*09/04/18 23:51*	*1*
4-Bromofluorobenzene	*89*		*67 - 130*		*08/31/18 16:11*	*1*
4-Bromofluorobenzene	*95*		*67 - 130*		*09/04/18 23:51*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*08/31/18 16:11*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*09/04/18 23:51*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**100**		53	32	ug/L		08/28/18 15:43	08/28/18 21:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*76*		*23 - 156*	*08/28/18 15:43*	*08/28/18 21:32*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010	0.0027	mg/L		08/30/18 14:05	09/04/18 10:58	1
Arsenic	**0.031**		0.010	0.0026	mg/L		08/30/18 14:05	09/04/18 10:58	1
Barium	**0.12**		0.010	0.0014	mg/L		08/30/18 14:05	09/04/18 10:58	1
Beryllium	ND		0.0020	0.00033	mg/L		08/30/18 14:05	09/04/18 10:58	1
Cadmium	ND		0.0025	0.0013	mg/L		08/30/18 14:05	09/04/18 10:58	1
Chromium	**0.027**		0.010	0.0015	mg/L		08/30/18 14:05	09/04/18 10:58	1
Cobalt	**0.0020**		0.0020	0.0012	mg/L		08/30/18 14:05	09/04/18 10:58	1
Copper	**0.0030**	**J**	0.020	0.0015	mg/L		08/30/18 14:05	09/04/18 10:58	1

Client Sample ID: DG-I7W

Lab Sample ID: 720-88255-5

Date Collected: 08/24/18 15:30

Matrix: Water

Date Received: 08/27/18 14:25

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0050	0.0023	mg/L		08/30/18 14:05	09/04/18 10:58	1
Molybdenum	**0.0053**	**J**	0.010	0.0023	mg/L		08/30/18 14:05	09/04/18 10:58	1
Nickel	**0.0096**	**J**	0.010	0.00080	mg/L		08/30/18 14:05	09/04/18 10:58	1
Selenium	ND		0.020	0.0071	mg/L		08/30/18 14:05	09/04/18 10:58	1
Silver	**0.015**		0.0050	0.0012	mg/L		08/30/18 14:05	09/04/18 10:58	1
Thallium	ND		0.010	0.0035	mg/L		08/30/18 14:05	09/04/18 10:58	1
Vanadium	ND		0.010	0.00070	mg/L		08/30/18 14:05	09/04/18 10:58	1
Zinc	ND		0.020	0.0096	mg/L		08/30/18 14:05	09/04/18 10:58	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/30/18 21:49	08/31/18 16:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND	H	0.010	0.0037	mg/L			08/27/18 22:10	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88255-1

Client Sample ID: DG-M7W

Date Collected: 08/24/18 15:30
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88255-6

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0025	ug/L			08/31/18 00:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*103*		*80 - 120*		*08/31/18 00:47*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/31/18 14:17	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/31/18 14:17	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/31/18 14:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091	ug/L			08/31/18 14:17	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/31/18 14:17	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/31/18 14:17	1
1,1-Dichloroethene	ND		0.50	0.20	ug/L			08/31/18 14:17	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/31/18 14:17	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/31/18 14:17	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/31/18 14:17	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/31/18 14:17	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/31/18 14:17	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/31/18 14:17	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/31/18 14:17	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/31/18 14:17	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/31/18 14:17	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/31/18 14:17	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/31/18 14:17	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/31/18 14:17	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/31/18 14:17	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/31/18 14:17	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/31/18 14:17	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 14:17	1
2-Hexanone	ND		50	3.0	ug/L			08/31/18 14:17	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 14:17	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/31/18 14:17	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/31/18 14:17	1
Acetone	ND		50	20	ug/L			08/31/18 14:17	1
Benzene	ND		0.50	0.25	ug/L			08/31/18 14:17	1
Bromobenzene	ND		1.0	0.20	ug/L			08/31/18 14:17	1
Bromoform	ND		1.0	0.50	ug/L			08/31/18 14:17	1
Bromomethane	ND		1.0	0.49	ug/L			08/31/18 14:17	1
Carbon disulfide	ND		5.0	0.78	ug/L			08/31/18 14:17	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/31/18 14:17	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/31/18 14:17	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/31/18 14:17	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/31/18 14:17	1
Chloroethane	ND		1.0	0.17	ug/L			08/31/18 14:17	1
Chloroform	ND		1.0	0.40	ug/L			08/31/18 14:17	1
Chloromethane	ND		1.0	0.19	ug/L			08/31/18 14:17	1
cis-1,2-Dichloroethene	**0.23**	**J**	0.50	0.076	ug/L			08/31/18 14:17	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/31/18 14:17	1
Dibromomethane	ND		0.50	0.30	ug/L			08/31/18 14:17	1

Client Sample ID: DG-M7W

Date Collected: 08/24/18 15:30
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88255-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/31/18 14:17	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/31/18 14:17	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/31/18 14:17	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/31/18 14:17	1
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			08/31/18 14:17	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/31/18 14:17	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/31/18 14:17	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/31/18 14:17	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/31/18 14:17	1
Naphthalene	ND		1.0	0.22	ug/L			08/31/18 14:17	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/31/18 14:17	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/31/18 14:17	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/31/18 14:17	1
Styrene	ND		0.50	0.22	ug/L			08/31/18 14:17	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/31/18 14:17	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/31/18 14:17	1
Toluene	ND		0.50	0.17	ug/L			08/31/18 14:17	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			08/31/18 14:17	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/31/18 14:17	1
Trichloroethene	**0.36**	**J**	0.50	0.20	ug/L			08/31/18 14:17	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/31/18 14:17	1
Vinyl acetate	ND		10	0.60	ug/L			08/31/18 14:17	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/31/18 14:17	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/31/18 14:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*72 - 130*		*08/31/18 14:17*	*1*
4-Bromofluorobenzene	*97*		*67 - 130*		*08/31/18 14:17*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*08/31/18 14:17*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**600**		54	32	ug/L		08/28/18 15:43	08/28/18 23:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*68*		*23 - 156*	*08/28/18 15:43*	*08/28/18 23:34*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010	0.0027	mg/L		08/30/18 14:05	09/04/18 11:03	1
Arsenic	**0.013**		0.010	0.0026	mg/L		08/30/18 14:05	09/04/18 11:03	1
Barium	**0.52**		0.010	0.0014	mg/L		08/30/18 14:05	09/04/18 11:03	1
Beryllium	ND		0.0020	0.00033	mg/L		08/30/18 14:05	09/04/18 11:03	1
Cadmium	ND		0.0025	0.0013	mg/L		08/30/18 14:05	09/04/18 11:03	1
Chromium	**0.0034**	**J**	0.010	0.0015	mg/L		08/30/18 14:05	09/04/18 11:03	1
Cobalt	**0.0096**		0.0020	0.0012	mg/L		08/30/18 14:05	09/04/18 11:03	1
Copper	**0.011**	**J**	0.020	0.0015	mg/L		08/30/18 14:05	09/04/18 11:03	1
Lead	**0.0023**	**J**	0.0050	0.0023	mg/L		08/30/18 14:05	09/04/18 11:03	1
Molybdenum	**0.0090**	**J**	0.010	0.0023	mg/L		08/30/18 14:05	09/04/18 11:03	1
Nickel	**0.014**		0.010	0.00080	mg/L		08/30/18 14:05	09/04/18 11:03	1

Client Sample ID: DG-M7W

Lab Sample ID: 720-88255-6

Date Collected: 08/24/18 15:30

Matrix: Water

Date Received: 08/27/18 14:25

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.020	0.0071	mg/L		08/30/18 14:05	09/04/18 11:03	1
Silver	**0.012**		0.0050	0.0012	mg/L		08/30/18 14:05	09/04/18 11:03	1
Thallium	ND		0.010	0.0035	mg/L		08/30/18 14:05	09/04/18 11:03	1
Vanadium	**0.0020**	**J**	0.010	0.00070	mg/L		08/30/18 14:05	09/04/18 11:03	1
Zinc	**0.056**		0.020	0.0096	mg/L		08/30/18 14:05	09/04/18 11:03	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/30/18 21:49	08/31/18 16:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND	H	0.010	0.0037	mg/L			08/27/18 22:15	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88255-1

Client Sample ID: DG-F9W

Date Collected: 08/24/18 16:10
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88255-7

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0025	ug/L			08/31/18 01:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*08/31/18 01:13*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/31/18 14:47	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/31/18 14:47	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/31/18 14:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091	ug/L			08/31/18 14:47	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/31/18 14:47	1
1,1-Dichloroethane	**0.12**	**J**	0.50	0.11	ug/L			08/31/18 14:47	1
1,1-Dichloroethene	ND		0.50	0.20	ug/L			08/31/18 14:47	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/31/18 14:47	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/31/18 14:47	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/31/18 14:47	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/31/18 14:47	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/31/18 14:47	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/31/18 14:47	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/31/18 14:47	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/31/18 14:47	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/31/18 14:47	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/31/18 14:47	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/31/18 14:47	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/31/18 14:47	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/31/18 14:47	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/31/18 14:47	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/31/18 14:47	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 14:47	1
2-Hexanone	ND		50	3.0	ug/L			08/31/18 14:47	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 14:47	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/31/18 14:47	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/31/18 14:47	1
Acetone	ND		50	20	ug/L			08/31/18 14:47	1
Benzene	ND		0.50	0.25	ug/L			08/31/18 14:47	1
Bromobenzene	ND		1.0	0.20	ug/L			08/31/18 14:47	1
Bromoform	ND		1.0	0.50	ug/L			08/31/18 14:47	1
Bromomethane	ND		1.0	0.49	ug/L			08/31/18 14:47	1
Carbon disulfide	ND		5.0	0.78	ug/L			08/31/18 14:47	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/31/18 14:47	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/31/18 14:47	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/31/18 14:47	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/31/18 14:47	1
Chloroethane	ND		1.0	0.17	ug/L			08/31/18 14:47	1
Chloroform	ND		1.0	0.40	ug/L			08/31/18 14:47	1
Chloromethane	ND		1.0	0.19	ug/L			08/31/18 14:47	1
cis-1,2-Dichloroethene	**0.095**	**J**	0.50	0.076	ug/L			08/31/18 14:47	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/31/18 14:47	1
Dibromomethane	ND		0.50	0.30	ug/L			08/31/18 14:47	1

Client Sample ID: DG-F9W

Date Collected: 08/24/18 16:10
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88255-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/31/18 14:47	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/31/18 14:47	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/31/18 14:47	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/31/18 14:47	1
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			08/31/18 14:47	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/31/18 14:47	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/31/18 14:47	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/31/18 14:47	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/31/18 14:47	1
Naphthalene	ND		1.0	0.22	ug/L			08/31/18 14:47	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/31/18 14:47	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/31/18 14:47	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/31/18 14:47	1
Styrene	ND		0.50	0.22	ug/L			08/31/18 14:47	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/31/18 14:47	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/31/18 14:47	1
Toluene	ND		0.50	0.17	ug/L			08/31/18 14:47	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			08/31/18 14:47	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/31/18 14:47	1
Trichloroethene	ND		0.50	0.20	ug/L			08/31/18 14:47	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/31/18 14:47	1
Vinyl acetate	ND		10	0.60	ug/L			08/31/18 14:47	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/31/18 14:47	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/31/18 14:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*72 - 130*		*08/31/18 14:47*	*1*
4-Bromofluorobenzene	*96*		*67 - 130*		*08/31/18 14:47*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*08/31/18 14:47*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**220**		52	31	ug/L		08/28/18 15:43	08/28/18 21:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*76*		*23 - 156*	*08/28/18 15:43*	*08/28/18 21:56*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010	0.0027	mg/L		08/30/18 14:05	09/04/18 11:08	1
Arsenic	**0.037**		0.010	0.0026	mg/L		08/30/18 14:05	09/04/18 11:08	1
Barium	**0.18**		0.010	0.0014	mg/L		08/30/18 14:05	09/04/18 11:08	1
Beryllium	ND		0.0020	0.00033	mg/L		08/30/18 14:05	09/04/18 11:08	1
Cadmium	ND		0.0025	0.0013	mg/L		08/30/18 14:05	09/04/18 11:08	1
Chromium	**0.0024**	**J**	0.010	0.0015	mg/L		08/30/18 14:05	09/04/18 11:08	1
Cobalt	**0.0050**		0.0020	0.0012	mg/L		08/30/18 14:05	09/04/18 11:08	1
Copper	**0.0039**	**J**	0.020	0.0015	mg/L		08/30/18 14:05	09/04/18 11:08	1
Lead	ND		0.0050	0.0023	mg/L		08/30/18 14:05	09/04/18 11:08	1
Molybdenum	**0.0072**	**J**	0.010	0.0023	mg/L		08/30/18 14:05	09/04/18 11:08	1
Nickel	**0.0069**	**J**	0.010	0.00080	mg/L		08/30/18 14:05	09/04/18 11:08	1

Client Sample ID: DG-F9W

Lab Sample ID: 720-88255-7

Date Collected: 08/24/18 16:10

Matrix: Water

Date Received: 08/27/18 14:25

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.020	0.0071	mg/L		08/30/18 14:05	09/04/18 11:08	1
Silver	**0.014**		0.0050	0.0012	mg/L		08/30/18 14:05	09/04/18 11:08	1
Thallium	ND		0.010	0.0035	mg/L		08/30/18 14:05	09/04/18 11:08	1
Vanadium	ND		0.010	0.00070	mg/L		08/30/18 14:05	09/04/18 11:08	1
Zinc	**0.026**		0.020	0.0096	mg/L		08/30/18 14:05	09/04/18 11:08	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/30/18 21:49	08/31/18 16:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND	H	0.010	0.0037	mg/L			08/27/18 22:15	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88255-1

Client Sample ID: DG-DE89W

Date Collected: 08/24/18 16:20
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88255-8

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0025	ug/L			08/31/18 15:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*08/31/18 15:25*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/31/18 15:17	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/31/18 15:17	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/31/18 15:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091	ug/L			08/31/18 15:17	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/31/18 15:17	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/31/18 15:17	1
1,1-Dichloroethene	ND		0.50	0.20	ug/L			08/31/18 15:17	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/31/18 15:17	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/31/18 15:17	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/31/18 15:17	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/31/18 15:17	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/31/18 15:17	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/31/18 15:17	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/31/18 15:17	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/31/18 15:17	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/31/18 15:17	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/31/18 15:17	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/31/18 15:17	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/31/18 15:17	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/31/18 15:17	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/31/18 15:17	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/31/18 15:17	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 15:17	1
2-Hexanone	ND		50	3.0	ug/L			08/31/18 15:17	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 15:17	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/31/18 15:17	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/31/18 15:17	1
Acetone	ND		50	20	ug/L			08/31/18 15:17	1
Benzene	ND		0.50	0.25	ug/L			08/31/18 15:17	1
Bromobenzene	ND		1.0	0.20	ug/L			08/31/18 15:17	1
Bromoform	ND		1.0	0.50	ug/L			08/31/18 15:17	1
Bromomethane	ND		1.0	0.49	ug/L			08/31/18 15:17	1
Carbon disulfide	ND		5.0	0.78	ug/L			08/31/18 15:17	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/31/18 15:17	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/31/18 15:17	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/31/18 15:17	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/31/18 15:17	1
Chloroethane	ND		1.0	0.17	ug/L			08/31/18 15:17	1
Chloroform	ND		1.0	0.40	ug/L			08/31/18 15:17	1
Chloromethane	ND		1.0	0.19	ug/L			08/31/18 15:17	1
cis-1,2-Dichloroethene	**0.15**	**J**	0.50	0.076	ug/L			08/31/18 15:17	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/31/18 15:17	1
Dibromomethane	ND		0.50	0.30	ug/L			08/31/18 15:17	1

Client Sample ID: DG-DE89W

Lab Sample ID: 720-88255-8

Date Collected: 08/24/18 16:20

Matrix: Water

Date Received: 08/27/18 14:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/31/18 15:17	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/31/18 15:17	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/31/18 15:17	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/31/18 15:17	1
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			08/31/18 15:17	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/31/18 15:17	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/31/18 15:17	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/31/18 15:17	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/31/18 15:17	1
Naphthalene	ND		1.0	0.22	ug/L			08/31/18 15:17	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/31/18 15:17	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/31/18 15:17	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/31/18 15:17	1
Styrene	ND		0.50	0.22	ug/L			08/31/18 15:17	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/31/18 15:17	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/31/18 15:17	1
Toluene	ND		0.50	0.17	ug/L			08/31/18 15:17	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			08/31/18 15:17	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/31/18 15:17	1
Trichloroethene	ND		0.50	0.20	ug/L			08/31/18 15:17	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/31/18 15:17	1
Vinyl acetate	ND		10	0.60	ug/L			08/31/18 15:17	1
Vinyl chloride	**0.24**	**J**	0.50	0.20	ug/L			08/31/18 15:17	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/31/18 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*72 - 130*		*08/31/18 15:17*	*1*
4-Bromofluorobenzene	*97*		*67 - 130*		*08/31/18 15:17*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*08/31/18 15:17*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**210**		53	32	ug/L		08/28/18 15:43	08/28/18 22:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*75*		*23 - 156*	*08/28/18 15:43*	*08/28/18 22:21*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010	0.0027	mg/L		08/30/18 14:05	09/04/18 11:13	1
Arsenic	**0.029**		0.010	0.0026	mg/L		08/30/18 14:05	09/04/18 11:13	1
Barium	**0.15**		0.010	0.0014	mg/L		08/30/18 14:05	09/04/18 11:13	1
Beryllium	ND		0.0020	0.00033	mg/L		08/30/18 14:05	09/04/18 11:13	1
Cadmium	ND		0.0025	0.0013	mg/L		08/30/18 14:05	09/04/18 11:13	1
Chromium	**0.0020**	**J**	0.010	0.0015	mg/L		08/30/18 14:05	09/04/18 11:13	1
Cobalt	**0.0015**	**J**	0.0020	0.0012	mg/L		08/30/18 14:05	09/04/18 11:13	1
Copper	**0.0040**	**J**	0.020	0.0015	mg/L		08/30/18 14:05	09/04/18 11:13	1
Lead	ND		0.0050	0.0023	mg/L		08/30/18 14:05	09/04/18 11:13	1
Molybdenum	**0.0055**	**J**	0.010	0.0023	mg/L		08/30/18 14:05	09/04/18 11:13	1
Nickel	**0.0043**	**J**	0.010	0.00080	mg/L		08/30/18 14:05	09/04/18 11:13	1

Client Sample ID: DG-DE89W

Lab Sample ID: 720-88255-8

Date Collected: 08/24/18 16:20

Matrix: Water

Date Received: 08/27/18 14:25

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.020	0.0071	mg/L		08/30/18 14:05	09/04/18 11:13	1
Silver	**0.011**		0.0050	0.0012	mg/L		08/30/18 14:05	09/04/18 11:13	1
Thallium	ND		0.010	0.0035	mg/L		08/30/18 14:05	09/04/18 11:13	1
Vanadium	ND		0.010	0.00070	mg/L		08/30/18 14:05	09/04/18 11:13	1
Zinc	**0.023**		0.020	0.0096	mg/L		08/30/18 14:05	09/04/18 11:13	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/30/18 21:49	08/31/18 16:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND	H	0.010	0.0037	mg/L			08/27/18 22:15	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88255-1

Client Sample ID: DG-D9W

Date Collected: 08/24/18 16:40
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88255-9

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0025	ug/L			08/31/18 16:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*80 - 120*		*08/31/18 16:44*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/31/18 15:47	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/31/18 15:47	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/31/18 15:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091	ug/L			08/31/18 15:47	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/31/18 15:47	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/31/18 15:47	1
1,1-Dichloroethene	ND		0.50	0.20	ug/L			08/31/18 15:47	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/31/18 15:47	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/31/18 15:47	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/31/18 15:47	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/31/18 15:47	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/31/18 15:47	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/31/18 15:47	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/31/18 15:47	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/31/18 15:47	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/31/18 15:47	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/31/18 15:47	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/31/18 15:47	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/31/18 15:47	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/31/18 15:47	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/31/18 15:47	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/31/18 15:47	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 15:47	1
2-Hexanone	ND		50	3.0	ug/L			08/31/18 15:47	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 15:47	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/31/18 15:47	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/31/18 15:47	1
Acetone	ND		50	20	ug/L			08/31/18 15:47	1
Benzene	ND		0.50	0.25	ug/L			08/31/18 15:47	1
Bromobenzene	ND		1.0	0.20	ug/L			08/31/18 15:47	1
Bromoform	ND		1.0	0.50	ug/L			08/31/18 15:47	1
Bromomethane	ND		1.0	0.49	ug/L			08/31/18 15:47	1
Carbon disulfide	ND		5.0	0.78	ug/L			08/31/18 15:47	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/31/18 15:47	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/31/18 15:47	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/31/18 15:47	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/31/18 15:47	1
Chloroethane	ND		1.0	0.17	ug/L			08/31/18 15:47	1
Chloroform	ND		1.0	0.40	ug/L			08/31/18 15:47	1
Chloromethane	ND		1.0	0.19	ug/L			08/31/18 15:47	1
cis-1,2-Dichloroethene	**0.62**		0.50	0.076	ug/L			08/31/18 15:47	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/31/18 15:47	1
Dibromomethane	ND		0.50	0.30	ug/L			08/31/18 15:47	1

Client Sample ID: DG-D9W

Date Collected: 08/24/18 16:40
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88255-9

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/31/18 15:47	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/31/18 15:47	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/31/18 15:47	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/31/18 15:47	1
Gasoline Range Organics (GRO) -C4-C12	**30**	**J**	50	21	ug/L			08/31/18 15:47	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/31/18 15:47	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/31/18 15:47	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/31/18 15:47	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/31/18 15:47	1
Naphthalene	ND		1.0	0.22	ug/L			08/31/18 15:47	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/31/18 15:47	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/31/18 15:47	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/31/18 15:47	1
Styrene	ND		0.50	0.22	ug/L			08/31/18 15:47	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/31/18 15:47	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/31/18 15:47	1
Toluene	ND		0.50	0.17	ug/L			08/31/18 15:47	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			08/31/18 15:47	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/31/18 15:47	1
Trichloroethene	ND		0.50	0.20	ug/L			08/31/18 15:47	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/31/18 15:47	1
Vinyl acetate	ND		10	0.60	ug/L			08/31/18 15:47	1
Vinyl chloride	**0.51**		0.50	0.20	ug/L			08/31/18 15:47	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/31/18 15:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*72 - 130*		*08/31/18 15:47*	*1*
4-Bromofluorobenzene	*96*		*67 - 130*		*08/31/18 15:47*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*08/31/18 15:47*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**170**		52	31	ug/L		08/28/18 15:43	08/28/18 22:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*70*		*23 - 156*	*08/28/18 15:43*	*08/28/18 22:45*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010	0.0027	mg/L		08/30/18 14:05	09/04/18 11:18	1
Arsenic	**0.018**		0.010	0.0026	mg/L		08/30/18 14:05	09/04/18 11:18	1
Barium	**0.28**		0.010	0.0014	mg/L		08/30/18 14:05	09/04/18 11:18	1
Beryllium	ND		0.0020	0.00033	mg/L		08/30/18 14:05	09/04/18 11:18	1
Cadmium	ND		0.0025	0.0013	mg/L		08/30/18 14:05	09/04/18 11:18	1
Chromium	**0.0024**	**J**	0.010	0.0015	mg/L		08/30/18 14:05	09/04/18 11:18	1
Cobalt	ND		0.0020	0.0012	mg/L		08/30/18 14:05	09/04/18 11:18	1
Copper	**0.0026**	**J**	0.020	0.0015	mg/L		08/30/18 14:05	09/04/18 11:18	1
Lead	ND		0.0050	0.0023	mg/L		08/30/18 14:05	09/04/18 11:18	1
Molybdenum	**0.0028**	**J**	0.010	0.0023	mg/L		08/30/18 14:05	09/04/18 11:18	1
Nickel	**0.0030**	**J**	0.010	0.00080	mg/L		08/30/18 14:05	09/04/18 11:18	1

Client Sample ID: DG-D9W

Lab Sample ID: 720-88255-9

Date Collected: 08/24/18 16:40

Matrix: Water

Date Received: 08/27/18 14:25

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.020	0.0071	mg/L		08/30/18 14:05	09/04/18 11:18	1
Silver	**0.012**		0.0050	0.0012	mg/L		08/30/18 14:05	09/04/18 11:18	1
Thallium	ND		0.010	0.0035	mg/L		08/30/18 14:05	09/04/18 11:18	1
Vanadium	**0.00073**	**J**	0.010	0.00070	mg/L		08/30/18 14:05	09/04/18 11:18	1
Zinc	**0.017**	**J**	0.020	0.0096	mg/L		08/30/18 14:05	09/04/18 11:18	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/30/18 21:49	08/31/18 16:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND	H	0.010	0.0037	mg/L			08/27/18 22:15	1

Client Sample ID: DG-B9W

Lab Sample ID: 720-88255-10

Date Collected: 08/24/18 16:55

Matrix: Water

Date Received: 08/27/18 14:25

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0025	ug/L			08/31/18 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*80 - 120*		*08/31/18 17:10*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/31/18 16:17	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/31/18 16:17	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/31/18 16:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091	ug/L			08/31/18 16:17	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/31/18 16:17	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/31/18 16:17	1
1,1-Dichloroethene	ND		0.50	0.20	ug/L			08/31/18 16:17	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/31/18 16:17	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/31/18 16:17	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/31/18 16:17	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/31/18 16:17	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/31/18 16:17	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/31/18 16:17	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/31/18 16:17	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/31/18 16:17	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/31/18 16:17	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/31/18 16:17	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/31/18 16:17	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/31/18 16:17	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/31/18 16:17	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/31/18 16:17	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/31/18 16:17	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 16:17	1
2-Hexanone	ND		50	3.0	ug/L			08/31/18 16:17	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 16:17	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/31/18 16:17	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/31/18 16:17	1
Acetone	ND		50	20	ug/L			08/31/18 16:17	1
Benzene	ND		0.50	0.25	ug/L			08/31/18 16:17	1
Bromobenzene	ND		1.0	0.20	ug/L			08/31/18 16:17	1
Bromoform	ND		1.0	0.50	ug/L			08/31/18 16:17	1
Bromomethane	ND		1.0	0.49	ug/L			08/31/18 16:17	1
Carbon disulfide	ND		5.0	0.78	ug/L			08/31/18 16:17	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/31/18 16:17	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/31/18 16:17	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/31/18 16:17	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/31/18 16:17	1
Chloroethane	ND		1.0	0.17	ug/L			08/31/18 16:17	1
Chloroform	ND		1.0	0.40	ug/L			08/31/18 16:17	1
Chloromethane	ND		1.0	0.19	ug/L			08/31/18 16:17	1
cis-1,2-Dichloroethene	**2.1**		0.50	0.076	ug/L			08/31/18 16:17	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/31/18 16:17	1
Dibromomethane	ND		0.50	0.30	ug/L			08/31/18 16:17	1

Client Sample ID: DG-B9W

Date Collected: 08/24/18 16:55
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88255-10
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/31/18 16:17	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/31/18 16:17	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/31/18 16:17	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/31/18 16:17	1
Gasoline Range Organics (GRO) -C4-C12	**24**	**J**	50	21	ug/L			08/31/18 16:17	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/31/18 16:17	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/31/18 16:17	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/31/18 16:17	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/31/18 16:17	1
Naphthalene	ND		1.0	0.22	ug/L			08/31/18 16:17	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/31/18 16:17	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/31/18 16:17	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/31/18 16:17	1
Styrene	ND		0.50	0.22	ug/L			08/31/18 16:17	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/31/18 16:17	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/31/18 16:17	1
Toluene	ND		0.50	0.17	ug/L			08/31/18 16:17	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			08/31/18 16:17	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/31/18 16:17	1
Trichloroethene	ND		0.50	0.20	ug/L			08/31/18 16:17	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/31/18 16:17	1
Vinyl acetate	ND		10	0.60	ug/L			08/31/18 16:17	1
Vinyl chloride	**0.37**	**J**	0.50	0.20	ug/L			08/31/18 16:17	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/31/18 16:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*72 - 130*		*08/31/18 16:17*	*1*
4-Bromofluorobenzene	*95*		*67 - 130*		*08/31/18 16:17*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*08/31/18 16:17*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**180**		52	31	ug/L		08/28/18 15:43	08/28/18 23:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*96*		*23 - 156*	*08/28/18 15:43*	*08/28/18 23:58*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.0035**	**J**	0.010	0.0027	mg/L		08/30/18 14:05	09/04/18 11:23	1
Arsenic	**0.034**	**J**	0.10	0.026	mg/L		08/30/18 14:05	09/04/18 19:14	10
Barium	**0.47**		0.010	0.0014	mg/L		08/30/18 14:05	09/04/18 11:23	1
Beryllium	ND		0.0020	0.00033	mg/L		08/30/18 14:05	09/04/18 11:23	1
Cadmium	ND		0.0025	0.0013	mg/L		08/30/18 14:05	09/04/18 11:23	1
Chromium	**0.0037**	**J**	0.010	0.0015	mg/L		08/30/18 14:05	09/04/18 11:23	1
Cobalt	**0.0040**		0.0020	0.0012	mg/L		08/30/18 14:05	09/04/18 11:23	1
Copper	**0.012**	**J**	0.020	0.0015	mg/L		08/30/18 14:05	09/04/18 11:23	1
Lead	**0.0032**	**J**	0.0050	0.0023	mg/L		08/30/18 14:05	09/04/18 11:23	1
Molybdenum	**0.0074**	**J**	0.010	0.0023	mg/L		08/30/18 14:05	09/04/18 11:23	1
Nickel	**0.0060**	**J**	0.010	0.00080	mg/L		08/30/18 14:05	09/04/18 11:23	1

Client Sample ID: DG-B9W

Lab Sample ID: 720-88255-10

Date Collected: 08/24/18 16:55

Matrix: Water

Date Received: 08/27/18 14:25

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.020	0.0071	mg/L		08/30/18 14:05	09/04/18 11:23	1
Silver	**0.010**		0.0050	0.0012	mg/L		08/30/18 14:05	09/04/18 11:23	1
Thallium	ND		0.010	0.0035	mg/L		08/30/18 14:05	09/04/18 11:23	1
Vanadium	ND		0.010	0.00070	mg/L		08/30/18 14:05	09/04/18 11:23	1
Zinc	**0.096**		0.020	0.0096	mg/L		08/30/18 14:05	09/04/18 11:23	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/30/18 21:49	08/31/18 16:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND	H	0.010	0.0037	mg/L			08/27/18 22:15	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88255-1

Client Sample ID: TB-4

Date Collected: 08/24/18 00:00
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88255-11

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0025	ug/L			08/31/18 20:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*96*		*80 - 120*		*08/31/18 20:13*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/31/18 16:47	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/31/18 16:47	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/31/18 16:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091	ug/L			08/31/18 16:47	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/31/18 16:47	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/31/18 16:47	1
1,1-Dichloroethene	ND		0.50	0.20	ug/L			08/31/18 16:47	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/31/18 16:47	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/31/18 16:47	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/31/18 16:47	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/31/18 16:47	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/31/18 16:47	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/31/18 16:47	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/31/18 16:47	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/31/18 16:47	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/31/18 16:47	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/31/18 16:47	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/31/18 16:47	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/31/18 16:47	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/31/18 16:47	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/31/18 16:47	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/31/18 16:47	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 16:47	1
2-Hexanone	ND		50	3.0	ug/L			08/31/18 16:47	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 16:47	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/31/18 16:47	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/31/18 16:47	1
Acetone	ND		50	20	ug/L			08/31/18 16:47	1
Benzene	ND		0.50	0.25	ug/L			08/31/18 16:47	1
Bromobenzene	ND		1.0	0.20	ug/L			08/31/18 16:47	1
Bromoform	ND		1.0	0.50	ug/L			08/31/18 16:47	1
Bromomethane	ND		1.0	0.49	ug/L			08/31/18 16:47	1
Carbon disulfide	ND		5.0	0.78	ug/L			08/31/18 16:47	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/31/18 16:47	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/31/18 16:47	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/31/18 16:47	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/31/18 16:47	1
Chloroethane	ND		1.0	0.17	ug/L			08/31/18 16:47	1
Chloroform	ND		1.0	0.40	ug/L			08/31/18 16:47	1
Chloromethane	ND		1.0	0.19	ug/L			08/31/18 16:47	1
cis-1,2-Dichloroethene	ND		0.50	0.076	ug/L			08/31/18 16:47	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/31/18 16:47	1
Dibromomethane	ND		0.50	0.30	ug/L			08/31/18 16:47	1

Client Sample ID: TB-4

Lab Sample ID: 720-88255-11

Date Collected: 08/24/18 00:00

Matrix: Water

Date Received: 08/27/18 14:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/31/18 16:47	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/31/18 16:47	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/31/18 16:47	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/31/18 16:47	1
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			08/31/18 16:47	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/31/18 16:47	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/31/18 16:47	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/31/18 16:47	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/31/18 16:47	1
Naphthalene	ND		1.0	0.22	ug/L			08/31/18 16:47	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/31/18 16:47	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/31/18 16:47	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/31/18 16:47	1
Styrene	ND		0.50	0.22	ug/L			08/31/18 16:47	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/31/18 16:47	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/31/18 16:47	1
Toluene	ND		0.50	0.17	ug/L			08/31/18 16:47	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			08/31/18 16:47	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/31/18 16:47	1
Trichloroethene	ND		0.50	0.20	ug/L			08/31/18 16:47	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/31/18 16:47	1
Vinyl acetate	ND		10	0.60	ug/L			08/31/18 16:47	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/31/18 16:47	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/31/18 16:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*72 - 130*		*08/31/18 16:47*	*1*
4-Bromofluorobenzene	*95*		*67 - 130*		*08/31/18 16:47*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*08/31/18 16:47*	*1*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88255-1

Client Sample ID: FB-4

Date Collected: 08/24/18 00:00
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88255-12

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0025	ug/L			08/31/18 17:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*08/31/18 17:36*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/31/18 17:17	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/31/18 17:17	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/31/18 17:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091	ug/L			08/31/18 17:17	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/31/18 17:17	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/31/18 17:17	1
1,1-Dichloroethene	ND		0.50	0.20	ug/L			08/31/18 17:17	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/31/18 17:17	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/31/18 17:17	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/31/18 17:17	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/31/18 17:17	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/31/18 17:17	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/31/18 17:17	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/31/18 17:17	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/31/18 17:17	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/31/18 17:17	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/31/18 17:17	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/31/18 17:17	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/31/18 17:17	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/31/18 17:17	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/31/18 17:17	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/31/18 17:17	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 17:17	1
2-Hexanone	ND		50	3.0	ug/L			08/31/18 17:17	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 17:17	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/31/18 17:17	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/31/18 17:17	1
Acetone	ND		50	20	ug/L			08/31/18 17:17	1
Benzene	ND		0.50	0.25	ug/L			08/31/18 17:17	1
Bromobenzene	ND		1.0	0.20	ug/L			08/31/18 17:17	1
Bromoform	ND		1.0	0.50	ug/L			08/31/18 17:17	1
Bromomethane	ND		1.0	0.49	ug/L			08/31/18 17:17	1
Carbon disulfide	ND		5.0	0.78	ug/L			08/31/18 17:17	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/31/18 17:17	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/31/18 17:17	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/31/18 17:17	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/31/18 17:17	1
Chloroethane	ND		1.0	0.17	ug/L			08/31/18 17:17	1
Chloroform	ND		1.0	0.40	ug/L			08/31/18 17:17	1
Chloromethane	ND		1.0	0.19	ug/L			08/31/18 17:17	1
cis-1,2-Dichloroethene	ND		0.50	0.076	ug/L			08/31/18 17:17	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/31/18 17:17	1
Dibromomethane	ND		0.50	0.30	ug/L			08/31/18 17:17	1

Client Sample ID: FB-4

Lab Sample ID: 720-88255-12

Date Collected: 08/24/18 00:00

Matrix: Water

Date Received: 08/27/18 14:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/31/18 17:17	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/31/18 17:17	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/31/18 17:17	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/31/18 17:17	1
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			08/31/18 17:17	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/31/18 17:17	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/31/18 17:17	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/31/18 17:17	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/31/18 17:17	1
Naphthalene	ND		1.0	0.22	ug/L			08/31/18 17:17	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/31/18 17:17	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/31/18 17:17	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/31/18 17:17	1
Styrene	ND		0.50	0.22	ug/L			08/31/18 17:17	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/31/18 17:17	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/31/18 17:17	1
Toluene	ND		0.50	0.17	ug/L			08/31/18 17:17	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			08/31/18 17:17	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/31/18 17:17	1
Trichloroethene	ND		0.50	0.20	ug/L			08/31/18 17:17	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/31/18 17:17	1
Vinyl acetate	ND		10	0.60	ug/L			08/31/18 17:17	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/31/18 17:17	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/31/18 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*72 - 130*		*08/31/18 17:17*	*1*
4-Bromofluorobenzene	*93*		*67 - 130*		*08/31/18 17:17*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*08/31/18 17:17*	*1*

Client Sample ID: DUP-14

Lab Sample ID: 720-88255-13

Date Collected: 08/24/18 00:00

Matrix: Water

Date Received: 08/27/18 14:25

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0025	ug/L			08/31/18 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*08/31/18 18:03*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			09/01/18 00:21	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			09/01/18 00:21	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			09/01/18 00:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	0.50	0.091	ug/L			09/01/18 00:21	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			09/01/18 00:21	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			09/01/18 00:21	1
1,1-Dichloroethene	ND	*	0.50	0.20	ug/L			09/01/18 00:21	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			09/01/18 00:21	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			09/01/18 00:21	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			09/01/18 00:21	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			09/01/18 00:21	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			09/01/18 00:21	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			09/01/18 00:21	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			09/01/18 00:21	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			09/01/18 00:21	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			09/01/18 00:21	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			09/01/18 00:21	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			09/01/18 00:21	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			09/01/18 00:21	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			09/01/18 00:21	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			09/01/18 00:21	1
2-Butanone (MEK)	ND		50	8.4	ug/L			09/01/18 00:21	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			09/01/18 00:21	1
2-Hexanone	ND		50	3.0	ug/L			09/01/18 00:21	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			09/01/18 00:21	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			09/01/18 00:21	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			09/01/18 00:21	1
Acetone	ND		50	20	ug/L			09/01/18 00:21	1
Benzene	ND		0.50	0.25	ug/L			09/01/18 00:21	1
Bromobenzene	ND		1.0	0.20	ug/L			09/01/18 00:21	1
Bromoform	ND		1.0	0.50	ug/L			09/01/18 00:21	1
Bromomethane	ND		1.0	0.49	ug/L			09/01/18 00:21	1
Carbon disulfide	ND	*	5.0	0.78	ug/L			09/01/18 00:21	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			09/01/18 00:21	1
Chlorobenzene	ND		0.50	0.13	ug/L			09/01/18 00:21	1
Chlorobromomethane	ND	*	1.0	0.25	ug/L			09/01/18 00:21	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			09/01/18 00:21	1
Chloroethane	ND		1.0	0.17	ug/L			09/01/18 00:21	1
Chloroform	ND		1.0	0.40	ug/L			09/01/18 00:21	1
Chloromethane	ND		1.0	0.19	ug/L			09/01/18 00:21	1
cis-1,2-Dichloroethene	**21**		0.50	0.076	ug/L			09/01/18 00:21	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			09/01/18 00:21	1
Dibromomethane	ND		0.50	0.30	ug/L			09/01/18 00:21	1

Client Sample ID: DUP-14

Lab Sample ID: 720-88255-13

Date Collected: 08/24/18 00:00

Matrix: Water

Date Received: 08/27/18 14:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	ND		0.50	0.20	ug/L			09/01/18 00:21	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			09/01/18 00:21	1
Ethylbenzene	ND		0.50	0.13	ug/L			09/01/18 00:21	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			09/01/18 00:21	1
Gasoline Range Organics (GRO) -C4-C12	**30**	**J**	50	21	ug/L			09/01/18 00:21	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			09/01/18 00:21	1
Isopropylbenzene	ND		0.50	0.20	ug/L			09/01/18 00:21	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			09/01/18 00:21	1
Methylene Chloride	ND		5.0	1.5	ug/L			09/01/18 00:21	1
Naphthalene	ND		1.0	0.22	ug/L			09/01/18 00:21	1
n-Butylbenzene	ND		1.0	0.30	ug/L			09/01/18 00:21	1
N-Propylbenzene	ND		1.0	0.20	ug/L			09/01/18 00:21	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			09/01/18 00:21	1
Styrene	ND		0.50	0.22	ug/L			09/01/18 00:21	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			09/01/18 00:21	1
Tetrachloroethene	ND		0.50	0.20	ug/L			09/01/18 00:21	1
Toluene	ND		0.50	0.17	ug/L			09/01/18 00:21	1
trans-1,2-Dichloroethene	**1.2**		0.50	0.13	ug/L			09/05/18 00:22	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			09/01/18 00:21	1
Trichloroethene	**5.9**		0.50	0.20	ug/L			09/01/18 00:21	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			09/01/18 00:21	1
Vinyl acetate	ND		10	0.60	ug/L			09/01/18 00:21	1
Vinyl chloride	**16**		0.50	0.20	ug/L			09/01/18 00:21	1
Xylenes, Total	ND		0.50	0.40	ug/L			09/01/18 00:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*72 - 130*		*09/01/18 00:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*72 - 130*		*09/05/18 00:22*	*1*
4-Bromofluorobenzene	*91*		*67 - 130*		*09/01/18 00:21*	*1*
4-Bromofluorobenzene	*94*		*67 - 130*		*09/05/18 00:22*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*09/01/18 00:21*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*09/05/18 00:22*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**110**		52	31	ug/L		08/28/18 15:43	08/29/18 00:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*86*		*23 - 156*	*08/28/18 15:43*	*08/29/18 00:22*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010	0.0027	mg/L		08/31/18 09:52	09/05/18 12:19	1
Arsenic	**0.031**		0.010	0.0026	mg/L		08/31/18 09:52	09/05/18 12:19	1
Barium	**0.11**		0.010	0.0014	mg/L		08/31/18 09:52	09/05/18 12:19	1
Beryllium	ND		0.0020	0.00033	mg/L		08/31/18 09:52	09/05/18 12:19	1
Cadmium	ND		0.0025	0.0013	mg/L		08/31/18 09:52	09/05/18 12:19	1
Chromium	**0.0015**	**J**	0.010	0.0015	mg/L		08/31/18 09:52	09/05/18 12:19	1
Cobalt	**0.0013**	**J**	0.0020	0.0012	mg/L		08/31/18 09:52	09/05/18 12:19	1
Copper	**0.0016**	**J**	0.020	0.0015	mg/L		08/31/18 09:52	09/05/18 12:19	1

Client Sample ID: DUP-14

Lab Sample ID: 720-88255-13

Date Collected: 08/24/18 00:00

Matrix: Water

Date Received: 08/27/18 14:25

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.0094**		0.0050	0.0023	mg/L		08/31/18 09:52	09/05/18 12:19	1
Molybdenum	**0.0038**	**J**	0.010	0.0023	mg/L		08/31/18 09:52	09/05/18 12:19	1
Nickel	**0.0020**	**J**	0.010	0.00080	mg/L		08/31/18 09:52	09/05/18 12:19	1
Selenium	ND		0.020	0.0071	mg/L		08/31/18 09:52	09/05/18 12:19	1
Silver	ND		0.0050	0.0012	mg/L		08/31/18 09:52	09/05/18 12:19	1
Thallium	ND		0.010	0.0035	mg/L		08/31/18 09:52	09/05/18 12:19	1
Vanadium	ND		0.010	0.00070	mg/L		08/31/18 09:52	09/05/18 12:19	1
Zinc	ND		0.020	0.0096	mg/L		08/31/18 09:52	09/05/18 12:19	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/30/18 21:49	08/31/18 16:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND	H	0.010	0.0037	mg/L			08/27/18 22:15	1

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88255-1
SDG No.:
Client Sample ID: DG-A7W
Lab Sample ID: 720-88255-1
Matrix: Water
Lab File ID: FID1000024.D
Analysis Method: 8015B
Date Collected: 08/24/2018 14:05
Extraction Method: 3510C
Date Extracted: 08/28/2018 15:43
Sample wt/vol: 943.9(mL)
Date Analyzed: 08/28/2018 23:09
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250355
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	55		52	31

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	88		23-156

FORM I 8015B

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000024.D
Lims ID: 720-88255-D-1-A
Client ID: DG-A7W
Sample Type: Client
Inject. Date: 28-Aug-2018 23:09:46 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053518-024
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\DRO6_A.m
Limit Group: DRO
Last Update: 29-Aug-2018 14:08:37 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK008

First Level Reviewer: luj Date: 29-Aug-2018 14:08:37

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane	1.278	1.232	0.046	2326	NC	
23 n-Decane	2.115	2.120	-0.006	31871	NC	
A 21 Stoddard Solvent	2.736	(1.232-4.240)		5142326	2.89	
A 1 C9-C13	2.736	(1.232-4.240)		5142326	2.90	
A 57 C10-C12	2.867	(2.120-3.613)		3800892	2.46	
24 Dodecane		3.613			ND	
A 3 C9 - C17	3.781	(1.232-6.330)		7607908	3.90	
A 60 C10-C16	3.985	(2.120-5.850)		6569003	3.76	
A 47 C9 - C18	4.007	(1.232-6.781)		8565025	5.30	
A 25 C9-C19	4.221	(1.232-7.211)		10097235	5.15	
A 15 Kerosene	4.221	(1.232-7.211)		10097235	6.25	
26 C13	4.276	4.240	0.036	38642	NC	
$ 27 n-Decanoic Acid (Surr)		4.609			ND	U
A 59 C12-C16	4.732	(3.613-5.850)		3932497	2.55	
A 62 C10-C20	4.872	(2.120-7.624)		13899482	9.01	
A 28 C9-C24	5.173	(1.232-9.114)		27748095	18.0	
A 29 C9-C25	5.342	(1.232-9.452)		34024984	22.1	
A 54 C10-C23	5.442	(2.120-8.763)		23932903	15.5	
A 4 C10-C24	5.617	(2.120-9.114)		27475483	17.8	
A 16 C10-C25	5.786	(2.120-9.452)		33752372	21.9	
A 67 C12-C22	5.816	(3.613-8.019)		12532822	8.13	
45 Hexadecane	5.839	5.850	-0.011	40029	NC	
A 14 C10-C26	5.950	(2.120-9.779)		36082319	23.4	
A 12 Unknown Hydrocarbons	6.107	(2.120-10.094)		39901174	NC	
A 5 Diesel	6.107	(2.120-10.094)		39901174	25.9	
A 32 C10-C28	6.107	(2.120-10.094)		39901174	25.9	
A 30 C13-C22	6.130	(4.240-8.019)		10538343	6.83	
44 Heptadecane	6.325	6.330	-0.005	350640	NC	
A 31 C12-C24	6.364	(3.613-9.114)		24838977	16.1	
A 9 Crude Oil Range Organics (	6.761	(1.232-12.289)		76590410	NC	
A 52 Mineral oil	6.761	(1.232-12.289)		76590410	43.3	
A 11 Bunker Range Organics (C9-	6.761	(1.232-12.289)		76590410	NC	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
51 n-Octadecane	6.826	6.781	0.045	284044	NC	
A 64 C13-C28	7.167	(4.240-10.094)		35270189	22.9	
A 17 C10-C36	7.205	(2.120-12.289)		76317798	49.5	
33 C19	7.228	7.211	0.017	242580	NC	
A 13 C9-C40	7.391	(1.232-13.550)		103705201	76.9	
A 68 Crude Oil Range Organics (	7.391	(1.232-13.550)		103705201	NC	
A 58 C16-C24	7.482	(5.850-9.114)		20946509	13.6	
61 icosane	7.603	7.624	-0.021	1026682	NC	
A 6 C10-C40	7.835	(2.120-13.550)		103432589	76.8	
35 n-Docosane		8.019			ND	
$ 34 p-Terphenyl	8.093	8.100	-0.007	42093054	21.9	
A 18 C12-C40	8.582	(3.613-13.550)		100796083	75.0	
36 Tricosane	8.719	8.763	-0.044	310487	NC	
A 66 C13-C40	8.895	(4.240-13.550)		98801604	73.6	
A 2 C16-C36 ORO	9.070	(5.850-12.289)		105640513	92.6	
37 n-Tetracosane	9.131	9.114	0.017	839954	NC	
38 C25	9.395	9.452	-0.057	3987899	NC	
A 19 C16-C40	9.700	(5.850-13.550)		96903615	72.5	
A 20 C19-C36	9.750	(7.211-12.289)		98214869	73.9	
46 n-Hexacosane	9.784	9.779	0.005	594438	NC	
A 55 C23-C32	10.010	(8.763-11.257)		35220703	50.7	
39 n-Octacosane	10.033	10.094	-0.061	2022086	NC	
A 40 C24-C36	10.702	(9.114-12.289)		43487837	48.8	
A 7 Motor Oil	10.702	(9.114-12.289)		43487837	48.8	
A 10 C22-C40	10.784	(8.019-13.550)		75025978	60.3	
A 49 C25-C36	10.871	(9.452-12.289)		46553325	52.0	
65 C29	10.982	10.980	0.002	1269922	NC	
A 41 C23-C40	11.156	(8.763-13.550)		79499686	62.2	
56 Dotriacontane	11.258	11.257	0.001	3138651	NC	
A 8 C24-C40	11.332	(9.114-13.550)		75957106	62.4	
A 50 C28-C40	11.822	(10.094-13.550)		63531415	66.9	
A 63 C29-C40	12.265	(10.980-13.550)		47817722	55.2	
42 n-Hexatriacontane	12.353	12.289	0.064	4048336	NC	
43 C40	13.524	13.550	-0.026	1053063	NC	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

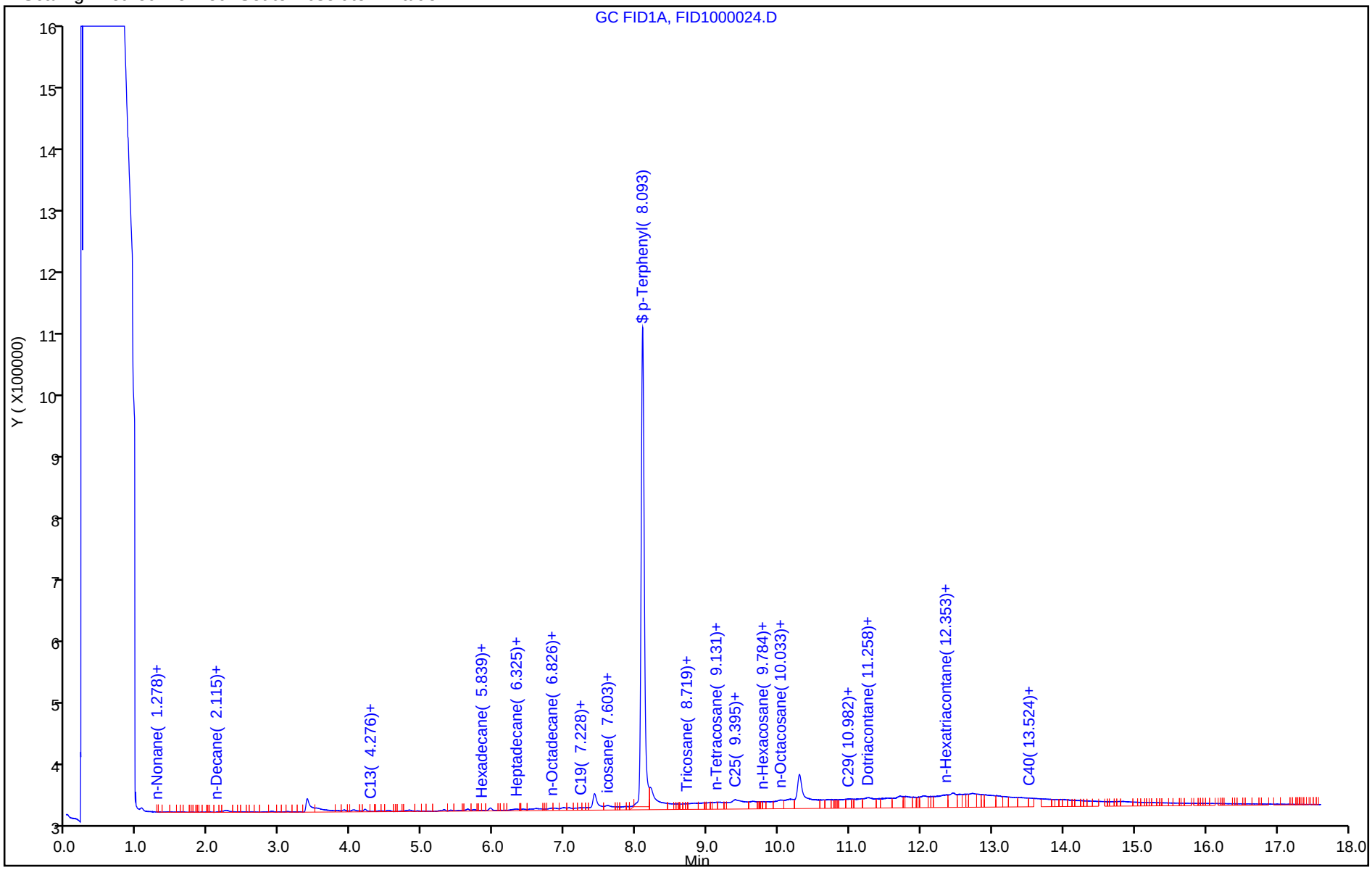
U - Marked Undetected

Report Date: 29-Aug-2018 14:08:38 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000024.D				
Injection Date:	28-Aug-2018 23:09:46	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88255-D-1-A	Lab Sample ID:	720-88255-1	Worklist Smp#:	24
Client ID:	DG-A7W				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000024.D
Lims ID: 720-88255-D-1-A
Client ID: DG-A7W
Sample Type: Client
Inject. Date: 28-Aug-2018 23:09:46 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053518-024
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\DRO6_A.m
Limit Group: DRO
Last Update: 29-Aug-2018 14:08:37 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK008

First Level Reviewer: luj Date: 29-Aug-2018 14:08:37

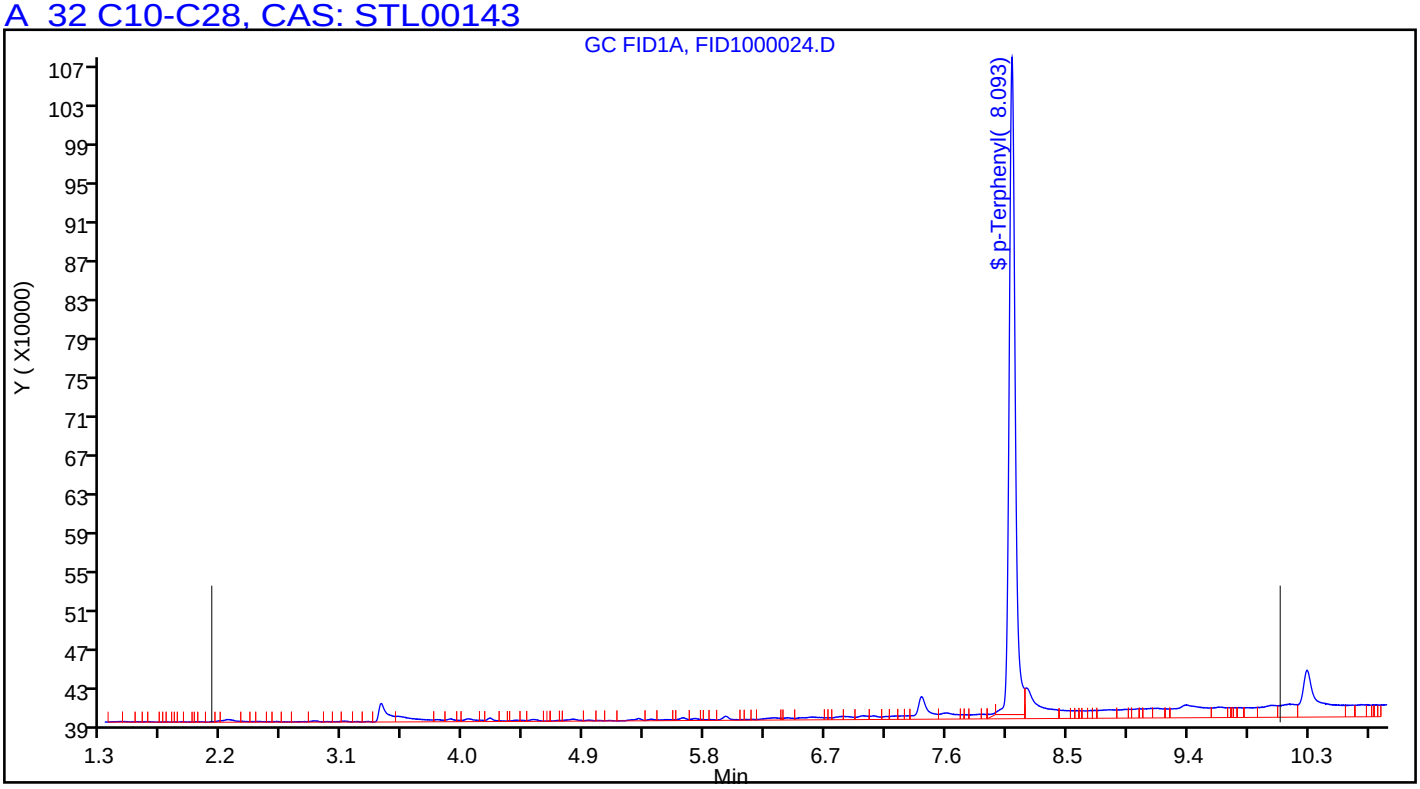
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	21.9	87.68

Report Date: 29-Aug-2018 14:08:39 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000024.D				
Injection Date:	28-Aug-2018 23:09:46	Instrument ID:	CHDRO6		
Lims ID:	720-88255-D-1-A	Lab Sample ID:	720-88255-1		
Client ID:	DG-A7W				
Operator ID:	DCH	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88255-1
SDG No.:
Client Sample ID: DG-C7W
Lab Sample ID: 720-88255-2
Matrix: Water
Lab File ID: FID1000017.D
Analysis Method: 8015B
Date Collected: 08/24/2018 14:15
Extraction Method: 3510C
Date Extracted: 08/28/2018 15:43
Sample wt/vol: 945.9(mL)
Date Analyzed: 08/28/2018 20:19
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250355
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	240		52	31

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	74		23-156

FORM I 8015B

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000017.D
Lims ID: 720-88255-D-2-A
Client ID: DG-C7W
Sample Type: Client
Inject. Date: 28-Aug-2018 20:19:31 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053518-017
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\DRO6_A.m
Limit Group: DRO
Last Update: 29-Aug-2018 13:58:34 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK008

First Level Reviewer: luj Date: 29-Aug-2018 13:58:34

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane	1.288	1.232	0.056	3429	NC	
23 n-Decane	2.125	2.120	0.005	80310	NC	
A 21 Stoddard Solvent	2.736	(1.232-4.240)		10612644	5.96	
A 1 C9-C13	2.736	(1.232-4.240)		10612644	5.98	
A 57 C10-C12	2.867	(2.120-3.613)		6325662	4.10	
24 Dodecane	3.676	3.613	0.063	476581	NC	
A 3 C9 - C17	3.781	(1.232-6.330)		39500093	20.2	
A 60 C10-C16	3.985	(2.120-5.850)		27383876	15.7	
A 47 C9 - C18	4.007	(1.232-6.781)		49361271	30.6	
A 25 C9-C19	4.221	(1.232-7.211)		56399982	28.8	
A 15 Kerosene	4.221	(1.232-7.211)		56399982	34.9	
26 C13	4.255	4.240	0.015	267808	NC	
$ 27 n-Decanoic Acid (Surr)		4.609			ND	U
A 59 C12-C16	4.732	(3.613-5.850)		21058214	13.7	
A 62 C10-C20	4.872	(2.120-7.624)		69259684	44.9	
A 28 C9-C24	5.173	(1.232-9.114)		135845284	88.1	
A 29 C9-C25	5.342	(1.232-9.452)		157325909	102.0	
A 54 C10-C23	5.442	(2.120-8.763)		120139786	77.9	
A 4 C10-C24	5.617	(2.120-9.114)		135194594	87.7	
A 16 C10-C25	5.786	(2.120-9.452)		156675219	101.6	
A 67 C12-C22	5.816	(3.613-8.019)		73396246	47.6	
45 Hexadecane	5.854	5.850	0.004	2144071	NC	
A 14 C10-C26	5.950	(2.120-9.779)		171388390	111.1	
A 12 Unknown Hydrocarbons	6.107	(2.120-10.094)		178055844	NC	
A 5 Diesel	6.107	(2.120-10.094)		178055844	115.4	
A 32 C10-C28	6.107	(2.120-10.094)		178055844	115.4	
A 30 C13-C22	6.130	(4.240-8.019)		70255057	45.5	
44 Heptadecane	6.301	6.330	-0.029	2329820	NC	
A 31 C12-C24	6.364	(3.613-9.114)		128868932	83.6	
A 9 Crude Oil Range Organics (	6.761	(1.232-12.289)		227665357	NC	
A 52 Mineral oil	6.761	(1.232-12.289)		227665357	128.6	
A 11 Bunker Range Organics (C9-	6.761	(1.232-12.289)		227665357	NC	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
51 n-Octadecane	6.775	6.781	-0.006	1725147	NC	
A 64 C13-C28	7.167	(4.240-10.094)		168588993	109.3	
A 17 C10-C36	7.205	(2.120-12.289)		227014667	147.2	
33 C19		7.211			ND	
A 13 C9-C40	7.391	(1.232-13.550)		248998626	184.7	
A 68 Crude Oil Range Organics (	7.391	(1.232-13.550)		248998626	NC	
A 58 C16-C24	7.482	(5.850-9.114)		107810718	69.9	
61 icosane	7.670	7.624	0.046	4057893	NC	
A 6 C10-C40	7.835	(2.120-13.550)		248347936	184.3	
35 n-Docosane		8.019			ND	
$ 34 p-Terphenyl	8.092	8.100	-0.008	35529952	18.5	M
A 18 C12-C40	8.582	(3.613-13.550)		242022274	180.1	
36 Tricosane	8.776	8.763	0.013	2746489	NC	
A 66 C13-C40	8.895	(4.240-13.550)		238881085	178.0	
A 2 C16-C36 ORO	9.070	(5.850-12.289)		238932049	209.5	
37 n-Tetracosane	9.070	9.114	-0.044	1079450	NC	
38 C25	9.438	9.452	-0.014	9673303	NC	
A 19 C16-C40	9.700	(5.850-13.550)		220964060	165.3	
A 20 C19-C36	9.750	(7.211-12.289)		198374773	149.3	
46 n-Hexacosane	9.748	9.779	-0.031	9005840	NC	
A 55 C23-C32	10.010	(8.763-11.257)		86037721	123.9	
39 n-Octacosane	10.082	10.094	-0.012	2120472	NC	
A 40 C24-C36	10.702	(9.114-12.289)		92346340	103.7	M
A 7 Motor Oil	10.702	(9.114-12.289)		55966534	62.8	
A 10 C22-C40	10.784	(8.019-13.550)		100826229	81.1	
A 49 C25-C36	10.871	(9.452-12.289)		80012751	89.4	
65 C29	10.989	10.980	0.009	3813900	NC	
A 41 C23-C40	11.156	(8.763-13.550)		128208150	100.3	
56 Dotriacontane	11.268	11.257	0.011	5095705	NC	
A 8 C24-C40	11.332	(9.114-13.550)		113153342	92.9	
A 50 C28-C40	11.822	(10.094-13.550)		72412564	76.3	
A 63 C29-C40	12.265	(10.980-13.550)		47544825	54.9	
42 n-Hexatriacontane	12.313	12.289	0.024	5066231	NC	
43 C40	13.541	13.550	-0.009	439283	NC	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
- NC - Not Calibrated

Review Flags
- M - Manually Integrated
- U - Marked Undetected

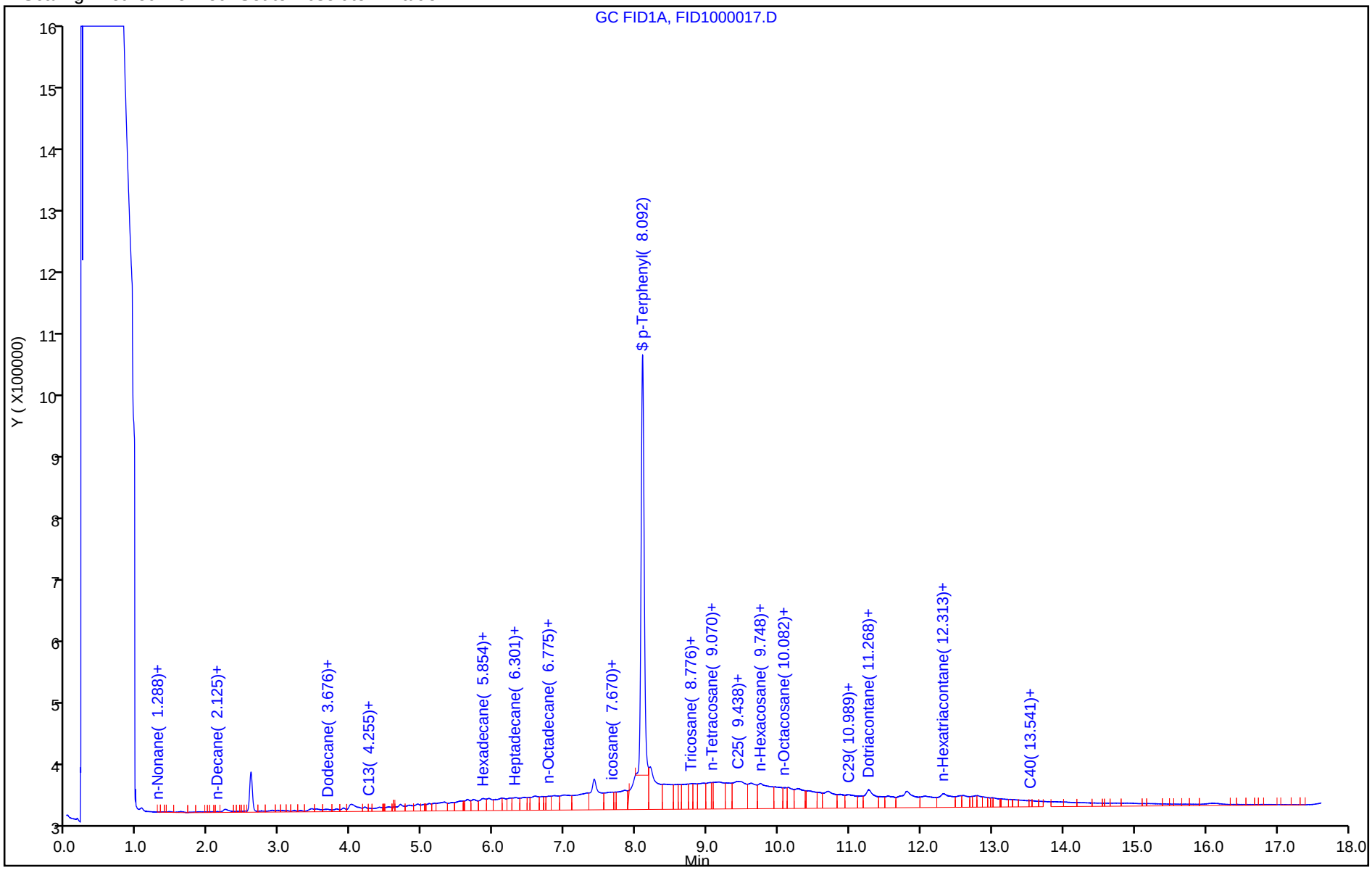
Report Date: 29-Aug-2018 13:58:35 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000017.D

Injection Date:	28-Aug-2018 20:19:31	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88255-D-2-A	Lab Sample ID:	720-88255-2	Worklist Smp#:	17
Client ID:	DG-C7W				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000017.D
Lims ID: 720-88255-D-2-A
Client ID: DG-C7W
Sample Type: Client
Inject. Date: 28-Aug-2018 20:19:31 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053518-017
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\DRO6_A.m
Limit Group: DRO
Last Update: 29-Aug-2018 13:58:34 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK008

First Level Reviewer: luj Date: 29-Aug-2018 13:58:34

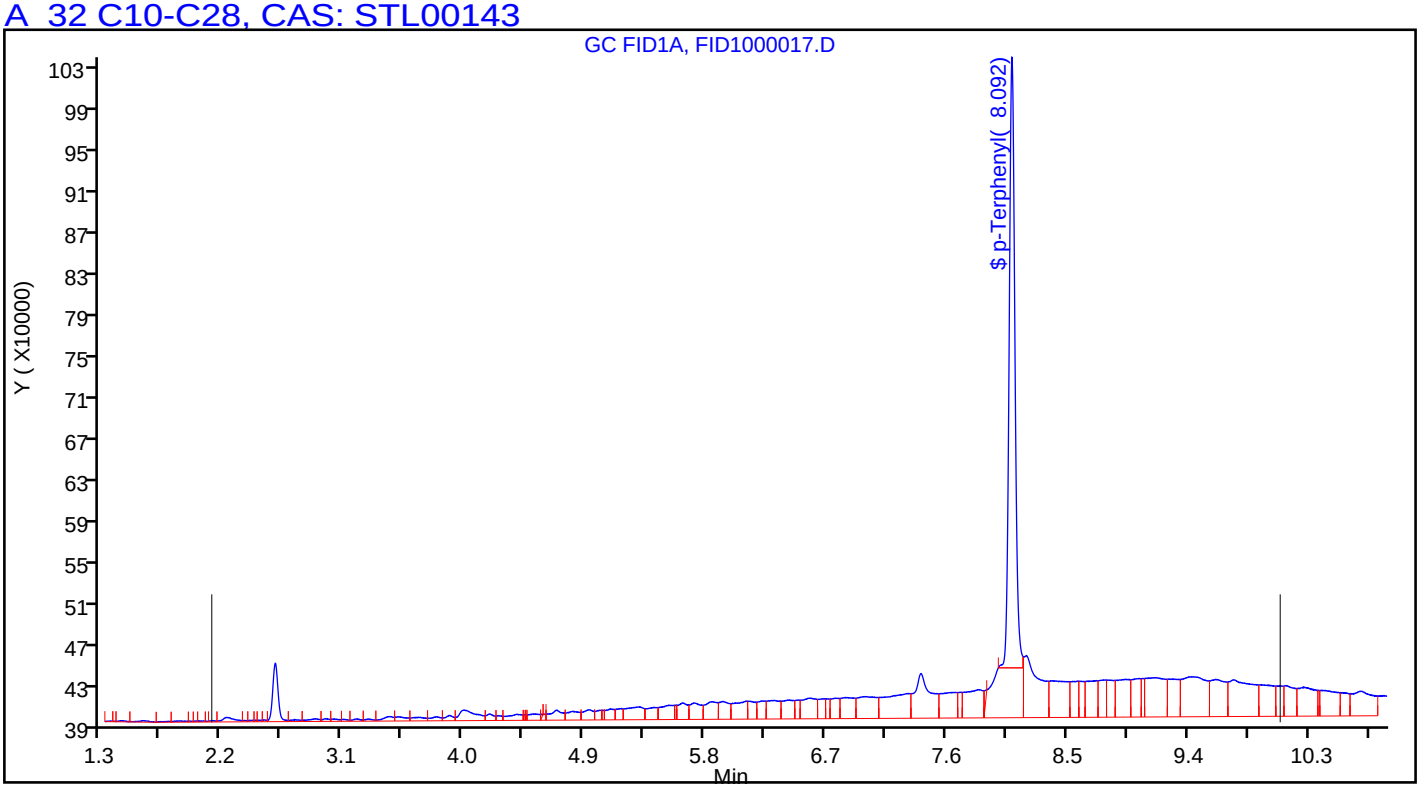
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	18.5	74.01

Report Date: 29-Aug-2018 13:58:37 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000017.D				
Injection Date:	28-Aug-2018 20:19:31	Instrument ID:	CHDRO6		
Lims ID:	720-88255-D-2-A	Lab Sample ID:	720-88255-2		
Client ID:	DG-C7W				
Operator ID:	DCH	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

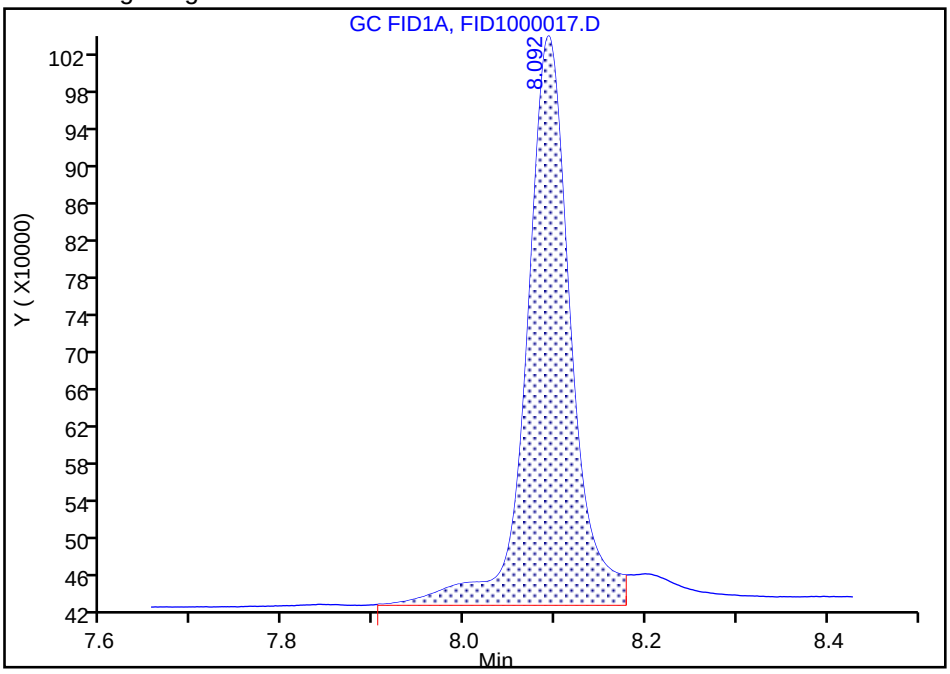
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000017.D				
Injection Date:	28-Aug-2018 20:19:31	Instrument ID:	CHDRO6		
Lims ID:	720-88255-D-2-A	Lab Sample ID:	720-88255-2		
Client ID:	DG-C7W				
Operator ID:	DCH	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

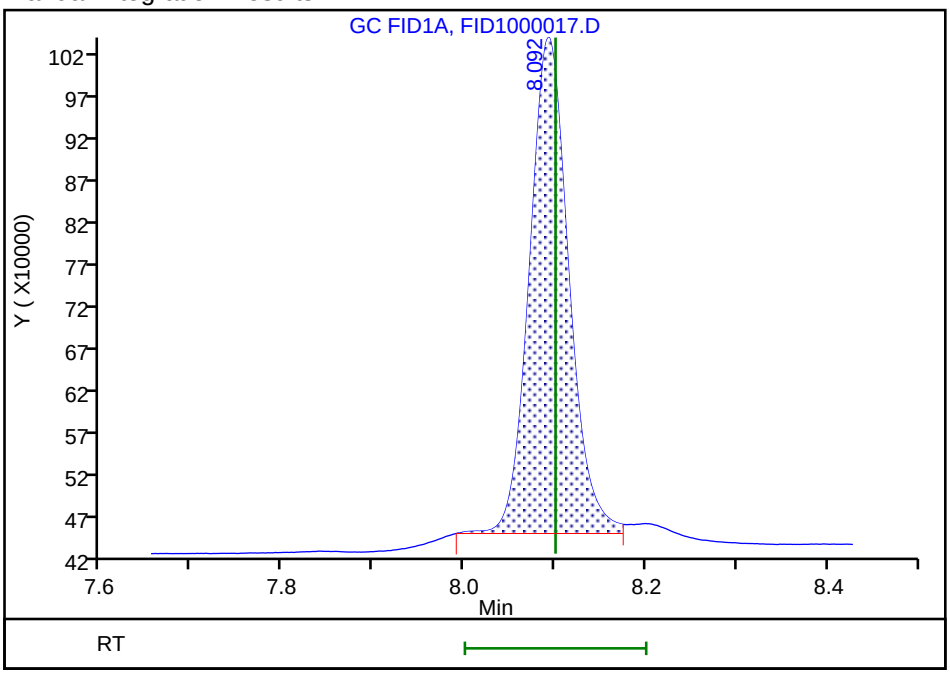
Processing Integration Results

RT: 8.09
Area: 41476447
Amount: 21.598265
Amount Units: mg/L



Manual Integration Results

RT: 8.09
Area: 35529952
Amount: 18.501713
Amount Units: mg/L



Reviewer: luj, 29-Aug-2018 13:58:13

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88255-1
SDG No.:
Client Sample ID: DG-E7W
Lab Sample ID: 720-88255-3
Matrix: Water
Lab File ID: FID1000018.D
Analysis Method: 8015B
Date Collected: 08/24/2018 14:50
Extraction Method: 3510C
Date Extracted: 08/28/2018 15:43
Sample wt/vol: 950.4(mL)
Date Analyzed: 08/28/2018 20:43
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250355
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	170		52	31

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	73		23-156

FORM I 8015B

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000018.D
Lims ID: 720-88255-D-3-A
Client ID: DG-E7W
Sample Type: Client
Inject. Date: 28-Aug-2018 20:43:48 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053518-018
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\DRO6_A.m
Limit Group: DRO
Last Update: 29-Aug-2018 13:59:27 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK008

First Level Reviewer: luj Date: 29-Aug-2018 13:59:27

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane	1.316	1.232	0.084	121110	NC	
23 n-Decane	2.122	2.120	0.002	78347	NC	
A 21 Stoddard Solvent	2.736	(1.232-4.240)		14856345	8.34	
A 1 C9-C13	2.736	(1.232-4.240)		14856345	8.37	
A 57 C10-C12	2.867	(2.120-3.613)		12089235	7.84	
24 Dodecane	3.618	3.613	0.005	285364	NC	
A 3 C9 - C17	3.781	(1.232-6.330)		33323828	17.1	
A 60 C10-C16	3.985	(2.120-5.850)		26589325	15.2	
A 47 C9 - C18	4.007	(1.232-6.781)		38092004	23.6	
A 25 C9-C19	4.221	(1.232-7.211)		44022426	22.4	
A 15 Kerosene	4.221	(1.232-7.211)		44022426	27.3	
26 C13	4.267	4.240	0.027	100451	NC	
$ 27 n-Decanoic Acid (Surr)		4.609			ND	U
A 59 C12-C16	4.732	(3.613-5.850)		14500090	9.40	
A 62 C10-C20	4.872	(2.120-7.624)		52003605	33.7	
A 28 C9-C24	5.173	(1.232-9.114)		98259542	63.7	
A 29 C9-C25	5.342	(1.232-9.452)		109150278	70.8	
A 54 C10-C23	5.442	(2.120-8.763)		83932005	54.4	
A 4 C10-C24	5.617	(2.120-9.114)		97582878	63.3	
A 16 C10-C25	5.786	(2.120-9.452)		108473614	70.3	
A 67 C12-C22	5.816	(3.613-8.019)		48312566	31.3	
45 Hexadecane	5.848	5.850	-0.002	1323240	NC	
A 14 C10-C26	5.950	(2.120-9.779)		119045898	77.2	
A 12 Unknown Hydrocarbons	6.107	(2.120-10.094)		126813840	NC	
A 5 Diesel	6.107	(2.120-10.094)		126813840	82.2	
A 32 C10-C28	6.107	(2.120-10.094)		126813840	82.2	
A 30 C13-C22	6.130	(4.240-8.019)		46529856	30.2	
44 Heptadecane	6.320	6.330	-0.010	810001	NC	
A 31 C12-C24	6.364	(3.613-9.114)		85493643	55.4	
A 9 Crude Oil Range Organics (	6.761	(1.232-12.289)		171345859	NC	
A 52 Mineral oil	6.761	(1.232-12.289)		171345859	96.8	
A 11 Bunker Range Organics (C9-	6.761	(1.232-12.289)		171345859	NC	

Report Date: 29-Aug-2018 13:59:28 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000018.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
51 n-Octadecane	6.851	6.781	0.070	2030599	NC	
A 64 C13-C28	7.167	(4.240-10.094)		112941895	73.2	
A 17 C10-C36	7.205	(2.120-12.289)		170669195	110.7	
33 C19	7.203	7.211	-0.008	1461153	NC	
A 13 C9-C40	7.391	(1.232-13.550)		188918509	140.1	
A 68 Crude Oil Range Organics (	7.391	(1.232-13.550)		188918509	NC	
A 58 C16-C24	7.482	(5.850-9.114)		72316793	46.9	
61 icosane	7.616	7.624	-0.008	1968006	NC	
A 6 C10-C40	7.835	(2.120-13.550)		188241845	139.7	
35 n-Docosane	8.093	8.019	0.074	35164906	NC	M
$ 34 p-Terphenyl	8.093	8.100	-0.007	35164906	18.3	M
A 18 C12-C40	8.582	(3.613-13.550)		176152610	131.1	
36 Tricosane	8.798	8.763	0.035	2976437	NC	
A 66 C13-C40	8.895	(4.240-13.550)		174369900	129.9	
A 2 C16-C36 ORO	9.070	(5.850-12.289)		180001528	157.8	
37 n-Tetracosane	9.171	9.114	0.057	2473533	NC	
38 C25	9.414	9.452	-0.038	5126407	NC	
A 19 C16-C40	9.700	(5.850-13.550)		162975760	121.9	
A 20 C19-C36	9.750	(7.211-12.289)		151397862	113.9	
46 n-Hexacosane	9.770	9.779	-0.009	2401129	NC	
A 55 C23-C32	10.010	(8.763-11.257)		67325819	97.0	
39 n-Octacosane	10.132	10.094	0.038	3936350	NC	
A 40 C24-C36	10.702	(9.114-12.289)		73642542	82.7	M
A 7 Motor Oil	10.702	(9.114-12.289)		54698061	61.4	
A 10 C22-C40	10.784	(8.019-13.550)		93327018	75.0	
A 49 C25-C36	10.871	(9.452-12.289)		67321988	75.2	
65 C29	10.978	10.980	-0.002	2776813	NC	
A 41 C23-C40	11.156	(8.763-13.550)		104309840	81.6	
56 Dotriacontane	11.274	11.257	0.017	3303971	NC	
A 8 C24-C40	11.332	(9.114-13.550)		97158214	79.8	
A 50 C28-C40	11.822	(10.094-13.550)		65703315	69.2	
A 63 C29-C40	12.265	(10.980-13.550)		41769839	48.2	
42 n-Hexatriacontane	12.245	12.289	-0.044	353563	NC	
43 C40	13.610	13.550	0.060	1842064	NC	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

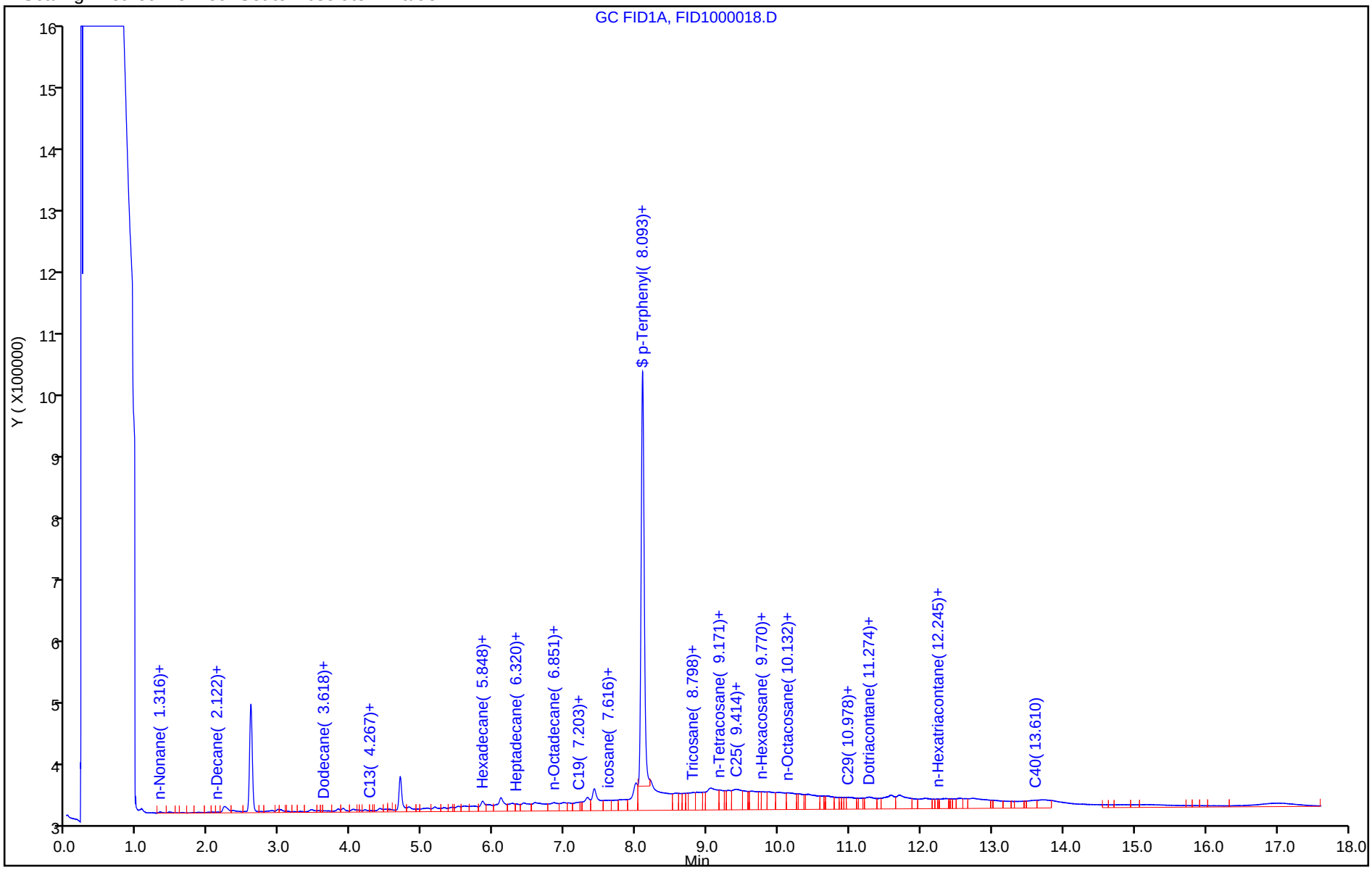
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 29-Aug-2018 13:59:28 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000018.D				
Injection Date:	28-Aug-2018 20:43:48	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88255-D-3-A	Lab Sample ID:	720-88255-3	Worklist Smp#:	18
Client ID:	DG-E7W				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000018.D
Lims ID: 720-88255-D-3-A
Client ID: DG-E7W
Sample Type: Client
Inject. Date: 28-Aug-2018 20:43:48 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053518-018
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\DRO6_A.m
Limit Group: DRO
Last Update: 29-Aug-2018 13:59:27 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK008

First Level Reviewer: luj Date: 29-Aug-2018 13:59:27

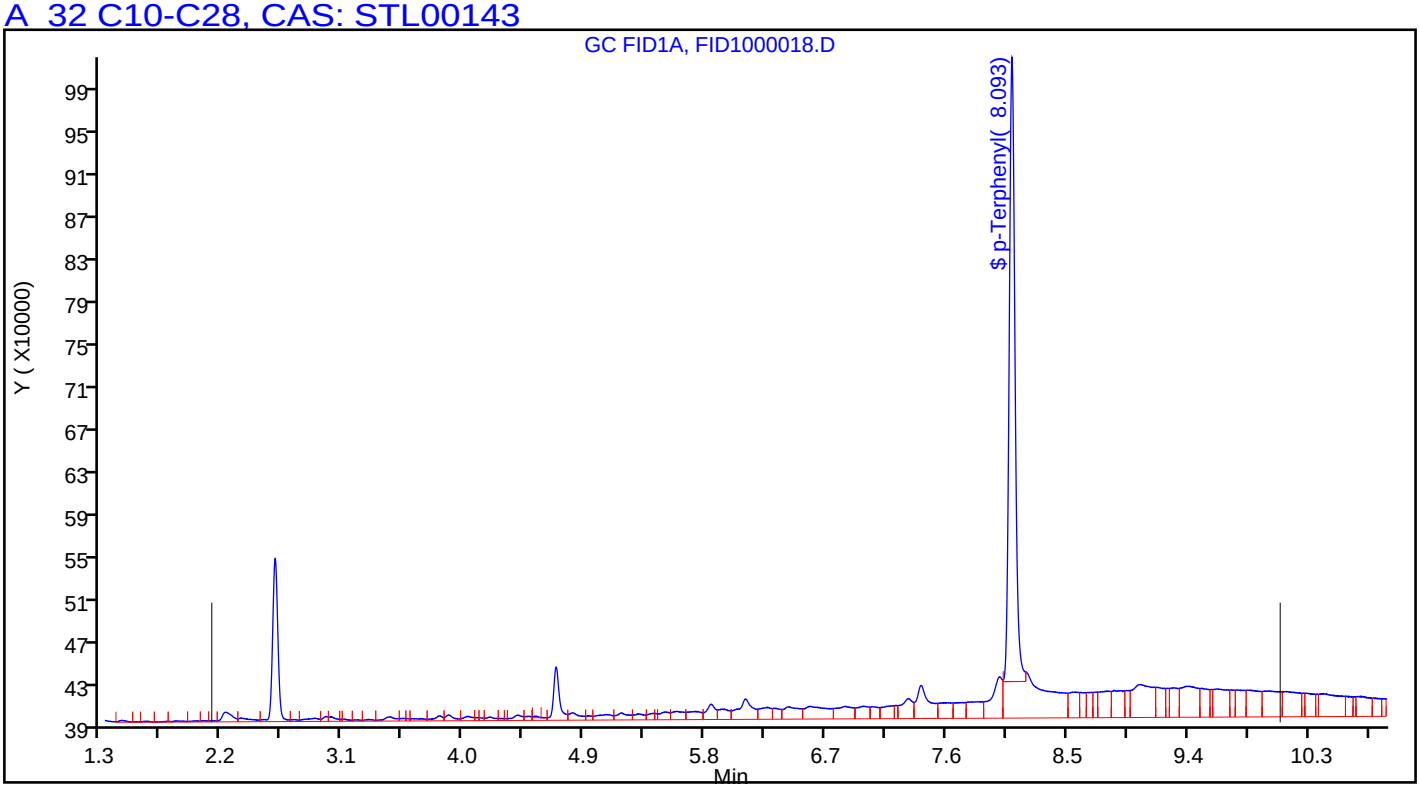
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	18.3	73.25

Report Date: 29-Aug-2018 13:59:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000018.D				
Injection Date:	28-Aug-2018 20:43:48	Instrument ID:	CHDRO6		
Lims ID:	720-88255-D-3-A	Lab Sample ID:	720-88255-3		
Client ID:	DG-E7W				
Operator ID:	DCH	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

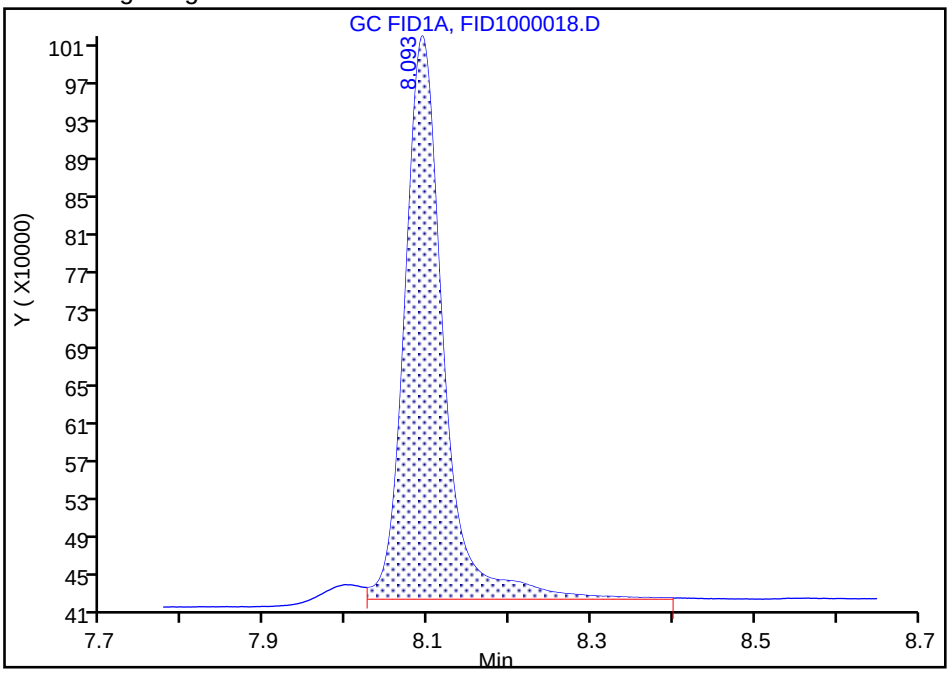
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000018.D				
Injection Date:	28-Aug-2018 20:43:48	Instrument ID:	CHDRO6		
Lims ID:	720-88255-D-3-A	Lab Sample ID:	720-88255-3		
Client ID:	DG-E7W				
Operator ID:	DCH	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

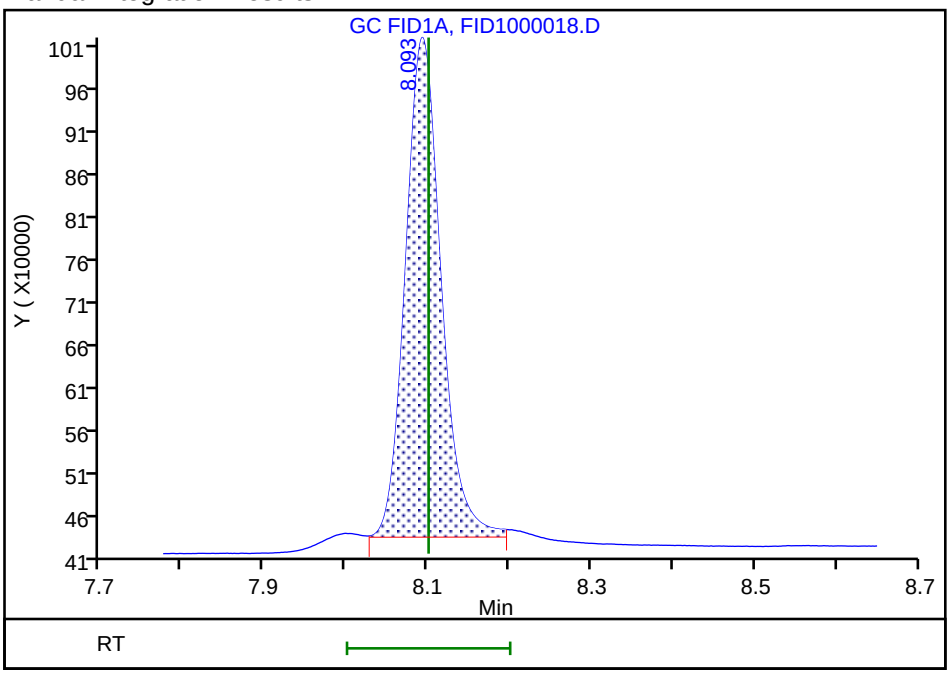
Processing Integration Results

RT: 8.09
Area: 38960466
Amount: 20.288104
Amount Units: mg/L



Manual Integration Results

RT: 8.09
Area: 35164906
Amount: 18.311621
Amount Units: mg/L



Reviewer: luj, 29-Aug-2018 13:59:09

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88255-1

SDG No.:

Client Sample ID: DG-G7W Lab Sample ID: 720-88255-4

Matrix: Water Lab File ID: FID1000019.D

Analysis Method: 8015B Date Collected: 08/24/2018 15:05

Extraction Method: 3510C Date Extracted: 08/28/2018 15:43

Sample wt/vol: 953(mL) Date Analyzed: 08/28/2018 21:08

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250355 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	130		52	31

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	90		23-156

FORM I 8015B

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000019.D
Lims ID: 720-88255-D-4-A
Client ID: DG-G7W
Sample Type: Client
Inject. Date: 28-Aug-2018 21:08:21 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053518-019
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\DRO6_A.m
Limit Group: DRO
Last Update: 29-Aug-2018 14:04:45 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK008

First Level Reviewer: luj Date: 29-Aug-2018 14:04:45

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.232			ND	
23 n-Decane	2.124	2.120	0.004	39108	NC	
A 21 Stoddard Solvent	2.736	(1.232-4.240)		4476717	2.51	
A 1 C9-C13	2.736	(1.232-4.240)		4476717	2.52	
A 57 C10-C12	2.867	(2.120-3.613)		2419769	1.57	
24 Dodecane	3.576	3.613	-0.037	28098	NC	
A 3 C9 - C17	3.781	(1.232-6.330)		17335753	8.88	
A 60 C10-C16	3.985	(2.120-5.850)		13387518	7.66	
A 47 C9 - C18	4.007	(1.232-6.781)		23202459	14.4	
A 25 C9-C19	4.221	(1.232-7.211)		26519637	13.5	
A 15 Kerosene	4.221	(1.232-7.211)		26519637	16.4	
26 C13	4.258	4.240	0.018	127056	NC	
$ 27 n-Decanoic Acid (Surr)		4.609			ND	U
A 59 C12-C16	4.732	(3.613-5.850)		10967749	7.11	
A 62 C10-C20	4.872	(2.120-7.624)		34858948	22.6	
A 28 C9-C24	5.173	(1.232-9.114)		70160597	45.5	
A 29 C9-C25	5.342	(1.232-9.452)		83291731	54.0	
A 54 C10-C23	5.442	(2.120-8.763)		60430890	39.2	
A 4 C10-C24	5.617	(2.120-9.114)		69825431	45.3	
A 16 C10-C25	5.786	(2.120-9.452)		82956565	53.8	
A 67 C12-C22	5.816	(3.613-8.019)		37685334	24.4	
45 Hexadecane	5.850	5.850	0.000	566251	NC	
A 14 C10-C26	5.950	(2.120-9.779)		91134555	59.1	
A 12 Unknown Hydrocarbons	6.107	(2.120-10.094)		94338920	NC	
A 5 Diesel	6.107	(2.120-10.094)		94338920	61.2	
A 32 C10-C28	6.107	(2.120-10.094)		94338920	61.2	
A 30 C13-C22	6.130	(4.240-8.019)		36174658	23.5	
44 Heptadecane	6.345	6.330	0.015	924775	NC	
A 31 C12-C24	6.364	(3.613-9.114)		67405662	43.7	
A 9 Crude Oil Range Organics (	6.761	(1.232-12.289)		130838742	NC	
A 52 Mineral oil	6.761	(1.232-12.289)		130838742	73.9	
A 11 Bunker Range Organics (C9-	6.761	(1.232-12.289)		130838742	NC	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
51 n-Octadecane	6.740	6.781	-0.041	1092398	NC	
A 64 C13-C28	7.167	(4.240-10.094)		90408475	58.6	
A 17 C10-C36	7.205	(2.120-12.289)		130503576	84.6	
33 C19		7.211			ND	
A 13 C9-C40	7.391	(1.232-13.550)		151934456	112.7	
A 68 Crude Oil Range Organics (	7.391	(1.232-13.550)		151934456	NC	
A 58 C16-C24	7.482	(5.850-9.114)		57004164	37.0	
61 icosane	7.636	7.624	0.012	1030818	NC	
A 6 C10-C40	7.835	(2.120-13.550)		151599290	112.5	
35 n-Docosane		8.019			ND	
$ 34 p-Terphenyl	8.094	8.100	-0.006	43149841	22.5	
A 18 C12-C40	8.582	(3.613-13.550)		149179521	111.0	
36 Tricosane	8.789	8.763	0.026	2200520	NC	
A 66 C13-C40	8.895	(4.240-13.550)		147668845	110.0	
A 2 C16-C36 ORO	9.070	(5.850-12.289)		133684067	117.2	
37 n-Tetracosane	9.169	9.114	0.055	2702466	NC	
38 C25	9.407	9.452	-0.045	6841436	NC	
A 19 C16-C40	9.700	(5.850-13.550)		138778023	103.8	
A 20 C19-C36	9.750	(7.211-12.289)		117499227	88.4	
46 n-Hexacosane		9.779			ND	
A 55 C23-C32	10.010	(8.763-11.257)		55550674	80.0	
39 n-Octacosane	10.138	10.094	0.044	4274184	NC	
A 40 C24-C36	10.702	(9.114-12.289)		60255807	67.7	M
A 7 Motor Oil	10.702	(9.114-12.289)		39731667	44.6	
A 10 C22-C40	10.784	(8.019-13.550)		70195116	56.4	
A 49 C25-C36	10.871	(9.452-12.289)		54388447	60.8	
65 C29	10.982	10.980	0.002	2499405	NC	
A 41 C23-C40	11.156	(8.763-13.550)		91168400	71.3	
56 Dotriacontane	11.278	11.257	0.021	2883218	NC	
A 8 C24-C40	11.332	(9.114-13.550)		81773859	67.2	
A 50 C28-C40	11.822	(10.094-13.550)		57260370	60.3	
A 63 C29-C40	12.265	(10.980-13.550)		39437803	45.5	
42 n-Hexatriacontane	12.361	12.289	0.072	5226817	NC	
43 C40	13.634	13.550	0.084	5403141	NC	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
- NC - Not Calibrated

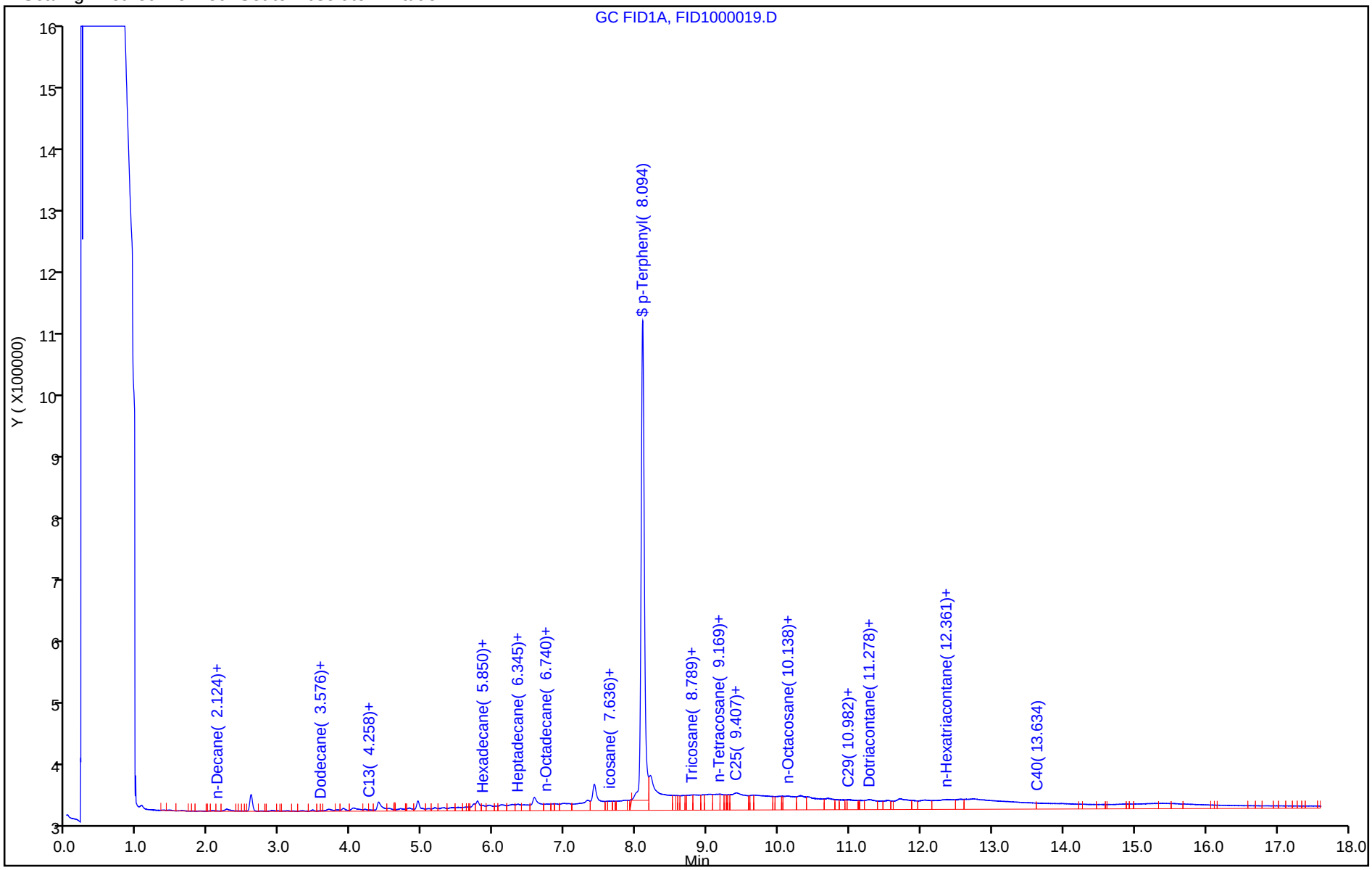
Review Flags
- M - Manually Integrated
- U - Marked Undetected

Report Date: 29-Aug-2018 14:04:47 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000019.D				
Injection Date:	28-Aug-2018 21:08:21	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88255-D-4-A	Lab Sample ID:	720-88255-4	Worklist Smp#:	19
Client ID:	DG-G7W				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000019.D
Lims ID: 720-88255-D-4-A
Client ID: DG-G7W
Sample Type: Client
Inject. Date: 28-Aug-2018 21:08:21 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053518-019
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\DRO6_A.m
Limit Group: DRO
Last Update: 29-Aug-2018 14:04:45 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK008

First Level Reviewer: luj Date: 29-Aug-2018 14:04:45

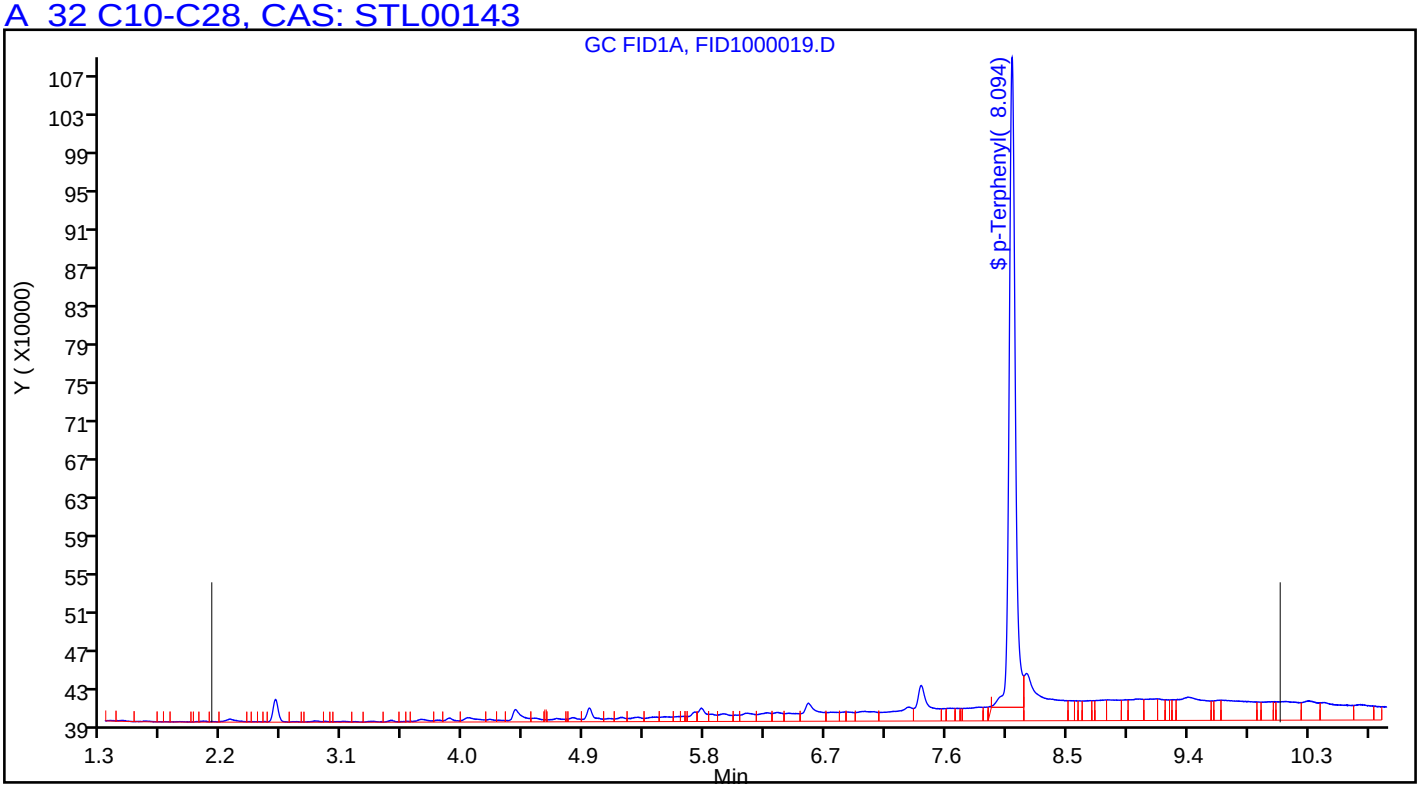
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	22.5	89.88

Report Date: 29-Aug-2018 14:04:49 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000019.D				
Injection Date:	28-Aug-2018 21:08:21	Instrument ID:	CHDRO6		
Lims ID:	720-88255-D-4-A	Lab Sample ID:	720-88255-4		
Client ID:	DG-G7W				
Operator ID:	DCH	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88255-1
SDG No.:
Client Sample ID: DG-I7W
Lab Sample ID: 720-88255-5
Matrix: Water
Lab File ID: FID1000020.D
Analysis Method: 8015B
Date Collected: 08/24/2018 15:30
Extraction Method: 3510C
Date Extracted: 08/28/2018 15:43
Sample wt/vol: 931.5(mL)
Date Analyzed: 08/28/2018 21:32
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250355
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	100		53	32

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	76		23-156

FORM I 8015B

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000020.D
Lims ID: 720-88255-D-5-A
Client ID: DG-I7W
Sample Type: Client
Inject. Date: 28-Aug-2018 21:32:38 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053518-020
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\DRO6_A.m
Limit Group: DRO
Last Update: 29-Aug-2018 14:05:51 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK008

First Level Reviewer: luj Date: 29-Aug-2018 14:05:51

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.232			ND	
23 n-Decane	2.128	2.120	0.008	26037	NC	
A 21 Stoddard Solvent	2.736	(1.232-4.240)		1510287	0.8481	
A 1 C9-C13	2.736	(1.232-4.240)		1510287	0.8504	
A 57 C10-C12	2.867	(2.120-3.613)		750921	0.4868	
24 Dodecane	3.605	3.613	-0.008	6880	NC	
A 3 C9 - C17	3.781	(1.232-6.330)		5334830	2.73	M
A 60 C10-C16	3.985	(2.120-5.850)		3905011	2.24	M
A 47 C9 - C18	4.007	(1.232-6.781)		7816520	4.84	M
A 25 C9-C19	4.221	(1.232-7.211)		10502747	5.36	M
A 15 Kerosene	4.221	(1.232-7.211)		10502747	6.50	M
26 C13	4.197	4.240	-0.043	115156	NC	
$ 27 n-Decanoic Acid (Surr)		4.609			ND	U
A 59 C12-C16	4.732	(3.613-5.850)		3160970	2.05	M
A 62 C10-C20	4.872	(2.120-7.624)		16061740	10.4	M
A 28 C9-C24	5.173	(1.232-9.114)		46315570	30.0	M
A 29 C9-C25	5.342	(1.232-9.452)		58971074	38.2	M
A 54 C10-C23	5.442	(2.120-8.763)		36568470	23.7	M
A 4 C10-C24	5.617	(2.120-9.114)		46115339	29.9	M
A 16 C10-C25	5.786	(2.120-9.452)		58770843	38.1	M
A 67 C12-C22	5.816	(3.613-8.019)		17928807	11.6	M
45 Hexadecane	5.870	5.850	0.020	288652	NC	M
A 14 C10-C26	5.950	(2.120-9.779)		63988898	41.5	M
A 12 Unknown Hydrocarbons	6.107	(2.120-10.094)		72569092	NC	M
A 5 Diesel	6.107	(2.120-10.094)		72569092	47.0	M
A 32 C10-C28	6.107	(2.120-10.094)		72569092	47.0	M
A 30 C13-C22	6.130	(4.240-8.019)		17477948	11.3	M
44 Heptadecane	6.346	6.330	0.016	836558	NC	M
A 31 C12-C24	6.364	(3.613-9.114)		45371298	29.4	M
A 9 Crude Oil Range Organics (	6.761	(1.232-12.289)		97979752	NC	M
A 52 Mineral oil	6.761	(1.232-12.289)		97979752	55.3	M
A 11 Bunker Range Organics (C9-	6.761	(1.232-12.289)		97979752	NC	M

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
51 n-Octadecane	6.878	6.781	0.097	1304837	NC	M
A 64 C13-C28	7.167	(4.240-10.094)		71374192	46.3	M
A 17 C10-C36	7.205	(2.120-12.289)		97779521	63.4	M
33 C19		7.211			ND	
A 13 C9-C40	7.391	(1.232-13.550)		112914341	83.7	M
A 68 Crude Oil Range Organics (	7.391	(1.232-13.550)		112914341	NC	M
A 58 C16-C24	7.482	(5.850-9.114)		42210328	27.4	M
61 icosane	7.647	7.624	0.023	1048470	NC	M
A 6 C10-C40	7.835	(2.120-13.550)		112714110	83.6	M
35 n-Docosane		8.019			ND	
$ 34 p-Terphenyl	8.094	8.100	-0.006	36443773	19.0	M
A 18 C12-C40	8.582	(3.613-13.550)		111970069	83.3	M
36 Tricosane		8.763			ND	
A 66 C13-C40	8.895	(4.240-13.550)		111519210	83.1	M
A 2 C16-C36 ORO	9.070	(5.850-12.289)		122397883	107.3	
37 n-Tetracosane	9.182	9.114	0.068	3805923	NC	M
38 C25	9.402	9.452	-0.050	8849581	NC	M
A 19 C16-C40	9.700	(5.850-13.550)		108809099	81.4	M
A 20 C19-C36	9.750	(7.211-12.289)		112946485	85.0	
46 n-Hexacosane	9.769	9.779	-0.010	1860684	NC	M
A 55 C23-C32	10.010	(8.763-11.257)		48990126	70.6	M
39 n-Octacosane	10.067	10.094	-0.027	4307029	NC	M
A 40 C24-C36	10.702	(9.114-12.289)		38359638	43.1	
A 7 Motor Oil	10.702	(9.114-12.289)		38359638	43.1	
A 10 C22-C40	10.784	(8.019-13.550)		68783685	55.3	
A 49 C25-C36	10.871	(9.452-12.289)		47858259	53.5	M
65 C29	10.985	10.980	0.005	2256610	NC	M
A 41 C23-C40	11.156	(8.763-13.550)		76145640	59.6	M
56 Dotriacontane	11.266	11.257	0.009	2570125	NC	M
A 8 C24-C40	11.332	(9.114-13.550)		66598771	54.7	M
A 50 C28-C40	11.822	(10.094-13.550)		44452047	46.8	M
A 63 C29-C40	12.265	(10.980-13.550)		30105736	34.7	M
42 n-Hexatriacontane	12.349	12.289	0.060	3106765	NC	M
43 C40	13.583	13.550	0.033	2137521	NC	M
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
- NC - Not Calibrated

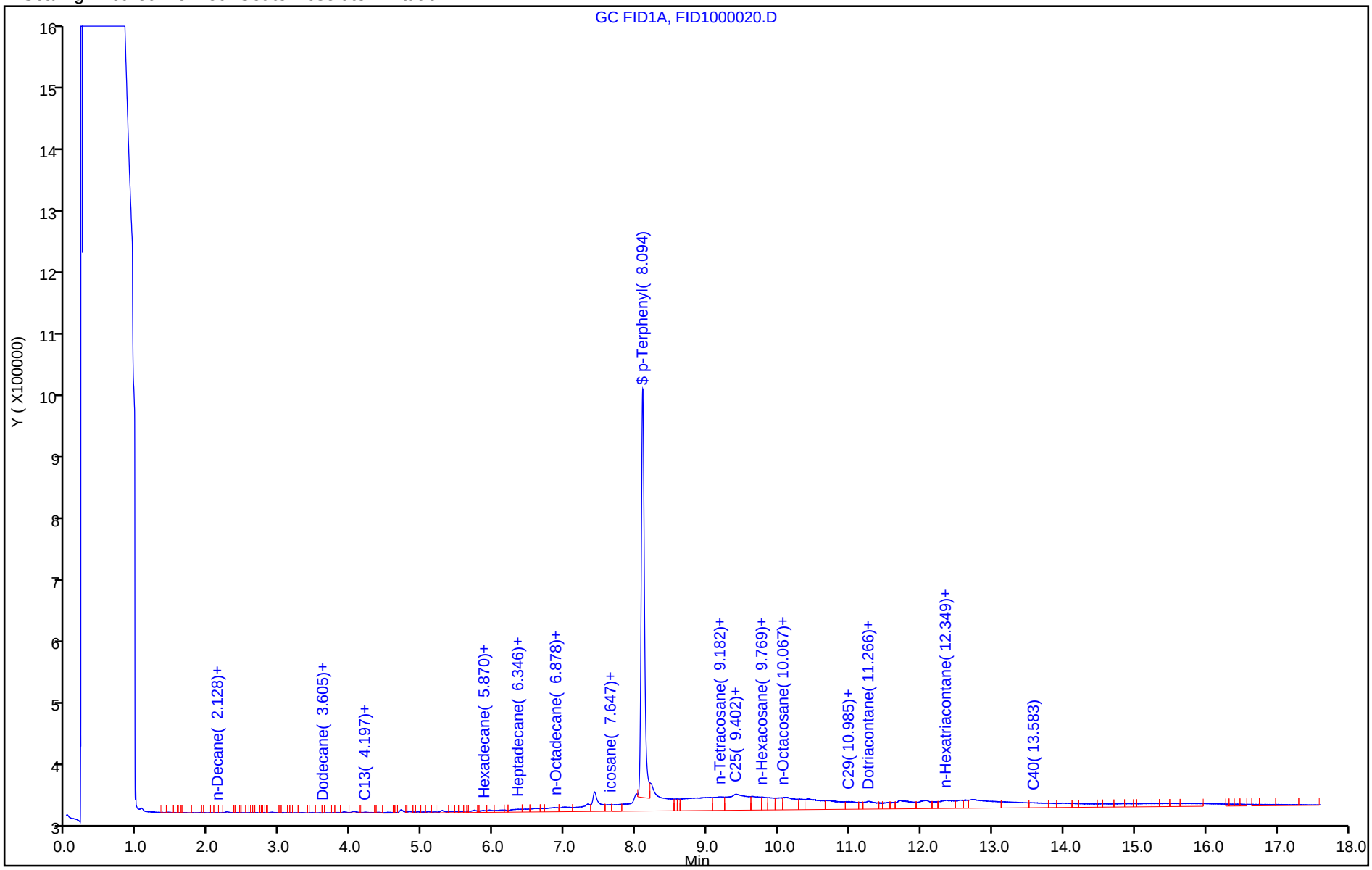
Review Flags
- M - Manually Integrated
- U - Marked Undetected

Report Date: 29-Aug-2018 14:05:52 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000020.D				
Injection Date:	28-Aug-2018 21:32:38	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88255-D-5-A	Lab Sample ID:	720-88255-5	Worklist Smp#:	20
Client ID:	DG-I7W				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000020.D
Lims ID: 720-88255-D-5-A
Client ID: DG-I7W
Sample Type: Client
Inject. Date: 28-Aug-2018 21:32:38 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053518-020
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\DRO6_A.m
Limit Group: DRO
Last Update: 29-Aug-2018 14:05:51 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK008

First Level Reviewer: luj Date: 29-Aug-2018 14:05:51

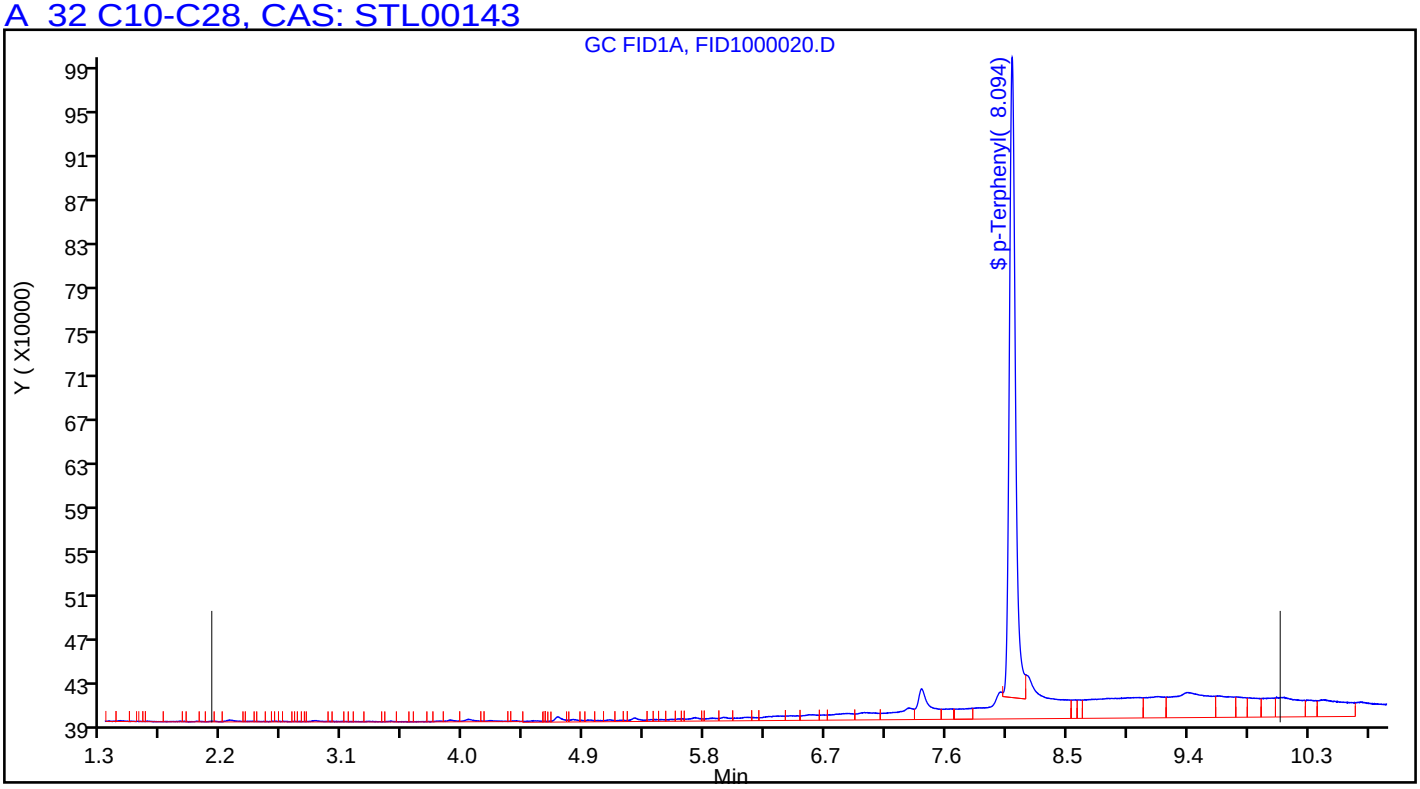
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	19.0	75.91

Report Date: 29-Aug-2018 14:05:57 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000020.D				
Injection Date:	28-Aug-2018 21:32:38	Instrument ID:	CHDRO6		
Lims ID:	720-88255-D-5-A	Lab Sample ID:	720-88255-5		
Client ID:	DG-I7W				
Operator ID:	DCH	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

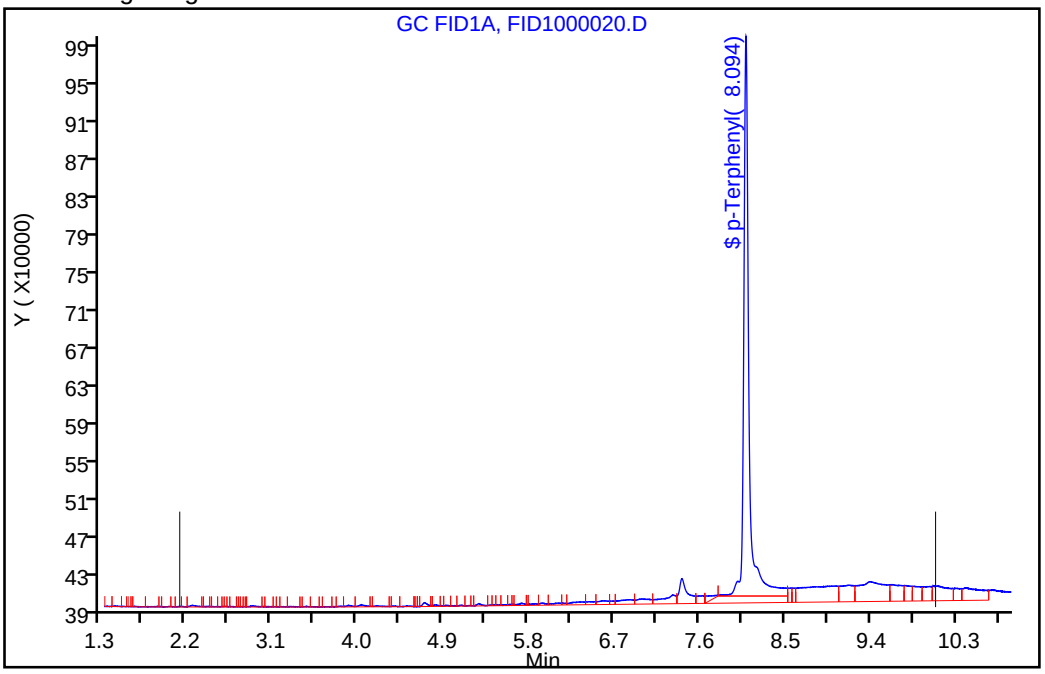
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000020.D				
Injection Date:	28-Aug-2018 21:32:38	Instrument ID:	CHDRO6		
Lims ID:	720-88255-D-5-A	Lab Sample ID:	720-88255-5		
Client ID:	DG-I7W				
Operator ID:	DCH	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.107, CAS: STL00143

Signal: 1

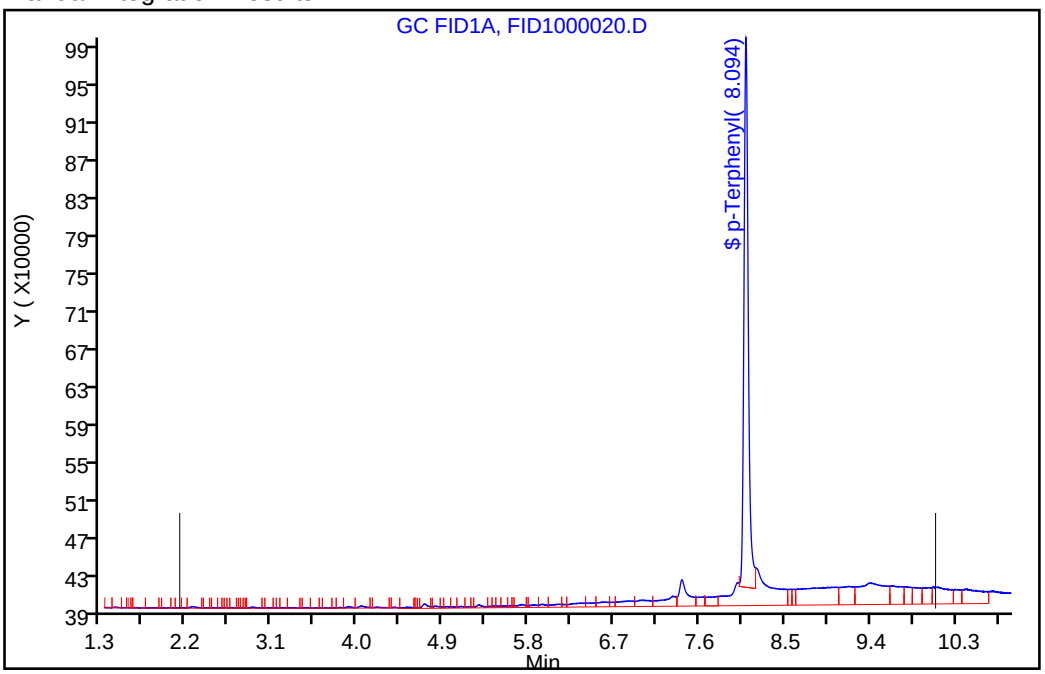
Processing Integration Results

RT: 6.11
Response: 51414616
Amount: 33.333980



Manual Integration Results

RT: 6.11
Response: 72569092
Amount: 47.049202



Reviewer: luj, 29-Aug-2018 14:05:18

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

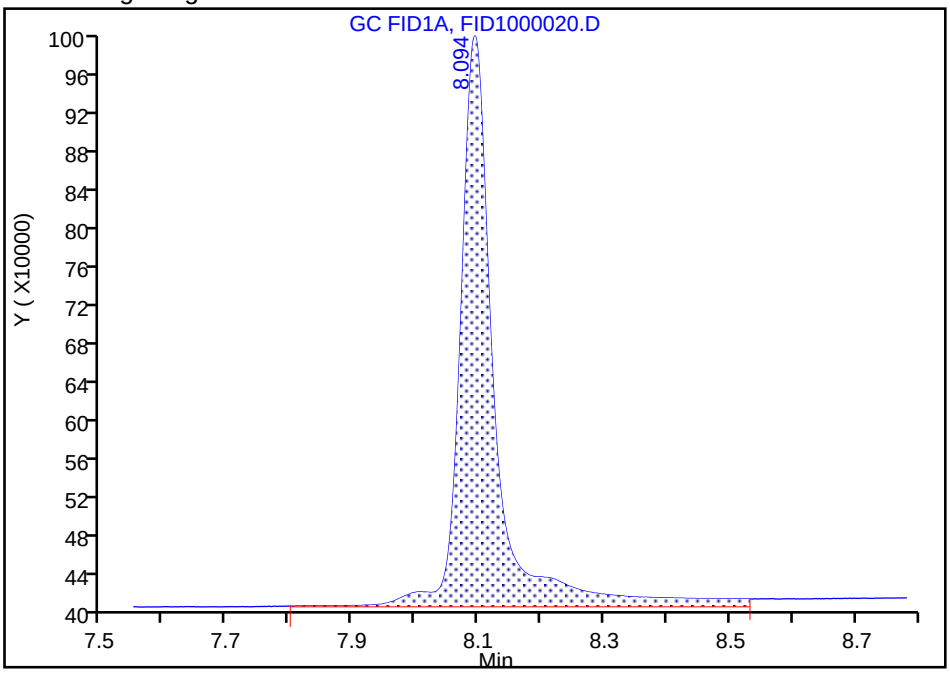
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000020.D				
Injection Date:	28-Aug-2018 21:32:38	Instrument ID:	CHDRO6		
Lims ID:	720-88255-D-5-A	Lab Sample ID:	720-88255-5		
Client ID:	DG-I7W				
Operator ID:	DCH	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

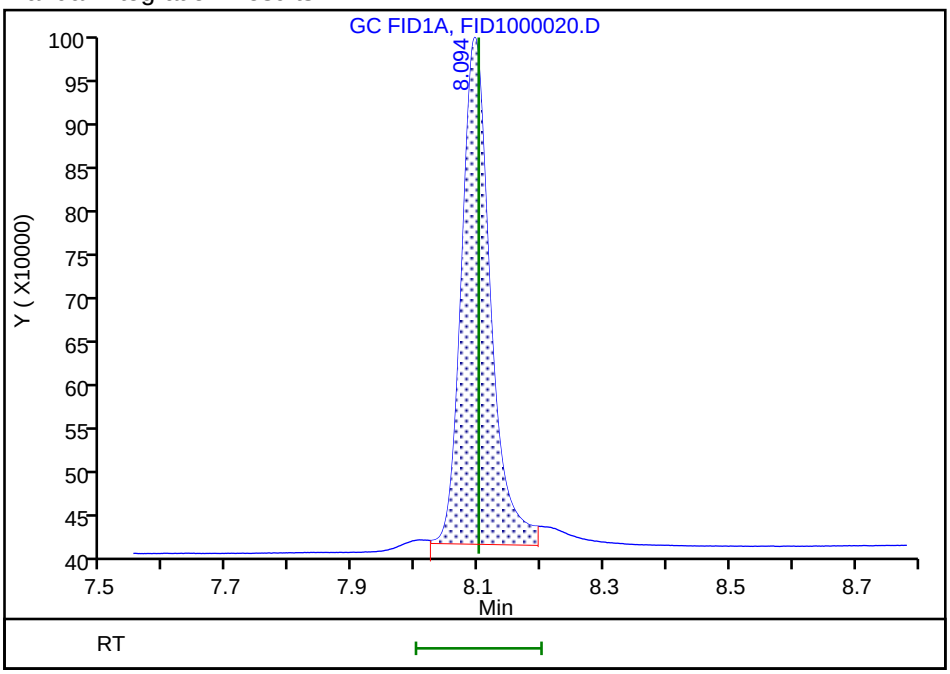
Processing Integration Results

RT: 8.09
Area: 45026745
Amount: 23.447032
Amount Units: mg/L



Manual Integration Results

RT: 8.09
Area: 36443773
Amount: 18.977573
Amount Units: mg/L



Reviewer: luj, 29-Aug-2018 14:05:34

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88255-1
SDG No.:
Client Sample ID: DG-M7W
Lab Sample ID: 720-88255-6
Matrix: Water
Lab File ID: FID1000025.D
Analysis Method: 8015B
Date Collected: 08/24/2018 15:30
Extraction Method: 3510C
Date Extracted: 08/28/2018 15:43
Sample wt/vol: 920.2(mL)
Date Analyzed: 08/28/2018 23:34
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250355
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	600		54	32

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	68		23-156

FORM I 8015B

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000025.D
Lims ID: 720-88255-D-6-A
Client ID: DG-M7W
Sample Type: Client
Inject. Date: 28-Aug-2018 23:34:17 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053518-025
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\DRO6_A.m
Limit Group: DRO
Last Update: 29-Aug-2018 14:09:39 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK008

First Level Reviewer: luj Date: 29-Aug-2018 14:09:39

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane	1.187	1.232	-0.045	2406	NC	
23 n-Decane	2.128	2.120	0.008	120413	NC	
A 21 Stoddard Solvent	2.736	(1.232-4.240)		9092836	5.11	
A 1 C9-C13	2.736	(1.232-4.240)		9092836	5.12	
A 57 C10-C12	2.867	(2.120-3.613)		4391336	2.85	
24 Dodecane	3.649	3.613	0.036	301272	NC	
A 3 C9 - C17	3.781	(1.232-6.330)		58992836	30.2	
A 60 C10-C16	3.985	(2.120-5.850)		37215139	21.3	
A 47 C9 - C18	4.007	(1.232-6.781)		58992836	36.5	
A 25 C9-C19	4.221	(1.232-7.211)		104126130	53.1	
A 15 Kerosene	4.221	(1.232-7.211)		104126130	64.5	
26 C13	4.255	4.240	0.015	428439	NC	
$ 27 n-Decanoic Acid (Surr)		4.609			ND	U
A 59 C12-C16	4.732	(3.613-5.850)		32823803	21.3	
A 62 C10-C20	4.872	(2.120-7.624)		143096084	92.8	
A 28 C9-C24	5.173	(1.232-9.114)		361317871	234.3	
A 29 C9-C25	5.342	(1.232-9.452)		383362803	248.5	
A 54 C10-C23	5.442	(2.120-8.763)		294156078	190.7	
A 4 C10-C24	5.617	(2.120-9.114)		360364835	233.6	
A 16 C10-C25	5.786	(2.120-9.452)		382409767	247.9	
A 67 C12-C22	5.816	(3.613-8.019)		148257103	96.1	
45 Hexadecane	5.883	5.850	0.033	7026649	NC	
A 14 C10-C26	5.950	(2.120-9.779)		416033701	269.7	
A 12 Unknown Hydrocarbons	6.107	(2.120-10.094)		423226099	NC	
A 5 Diesel	6.107	(2.120-10.094)		423226099	274.4	
A 32 C10-C28	6.107	(2.120-10.094)		423226099	274.4	
A 30 C13-C22	6.130	(4.240-8.019)		144508639	93.7	
44 Heptadecane	6.248	6.330	-0.082	4638423	NC	
A 31 C12-C24	6.364	(3.613-9.114)		355973499	230.8	
A 9 Crude Oil Range Organics (	6.761	(1.232-12.289)		535467385	NC	
A 52 Mineral oil	6.761	(1.232-12.289)		535467385	302.4	
A 11 Bunker Range Organics (C9-	6.761	(1.232-12.289)		535467385	NC	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
51 n-Octadecane	6.855	6.781	0.074	36233846	NC	
A 64 C13-C28	7.167	(4.240-10.094)		415086299	269.1	
A 17 C10-C36	7.205	(2.120-12.289)		534514349	346.5	
33 C19		7.211			ND	
A 13 C9-C40	7.391	(1.232-13.550)		574796101	426.3	
A 68 Crude Oil Range Organics (	7.391	(1.232-13.550)		574796101	NC	
A 58 C16-C24	7.482	(5.850-9.114)		323149696	209.5	
61 icosane		7.624			ND	
A 6 C10-C40	7.835	(2.120-13.550)		573843065	425.9	
35 n-Docosane		8.019			ND	
$ 34 p-Terphenyl	8.092	8.100	-0.008	32553799	17.0	M
A 18 C12-C40	8.582	(3.613-13.550)		569451729	423.8	
36 Tricosane	8.817	8.763	0.054	18709331	NC	
A 66 C13-C40	8.895	(4.240-13.550)		565703265	421.4	
A 2 C16-C36 ORO	9.070	(5.850-12.289)		544761009	477.6	
37 n-Tetracosane	9.041	9.114	-0.073	36470780	NC	
38 C25	9.395	9.452	-0.057	22044932	NC	
A 19 C16-C40	9.700	(5.850-13.550)		536627926	401.4	
A 20 C19-C36	9.750	(7.211-12.289)		446298776	335.8	
46 n-Hexacosane		9.779			ND	
A 55 C23-C32	10.010	(8.763-11.257)		209186613	301.3	
39 n-Octacosane	10.142	10.094	0.048	12866549	NC	
A 40 C24-C36	10.702	(9.114-12.289)		205622871	230.9	M
A 7 Motor Oil	10.702	(9.114-12.289)		123974102	139.2	
A 10 C22-C40	10.784	(8.019-13.550)		233201170	187.5	
A 49 C25-C36	10.871	(9.452-12.289)		174149514	194.5	
65 C29		10.980			ND	
A 41 C23-C40	11.156	(8.763-13.550)		279686987	218.8	
56 Dotriacontane	11.257	11.257	-0.001	9673918	NC	
A 8 C24-C40	11.332	(9.114-13.550)		249949010	205.3	
A 50 C28-C40	11.822	(10.094-13.550)		150616966	158.7	
A 63 C29-C40	12.265	(10.980-13.550)		114537159	132.2	
42 n-Hexatriacontane	12.352	12.289	0.063	6770814	NC	
43 C40	13.601	13.550	0.051	4325543	NC	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
- NC - Not Calibrated

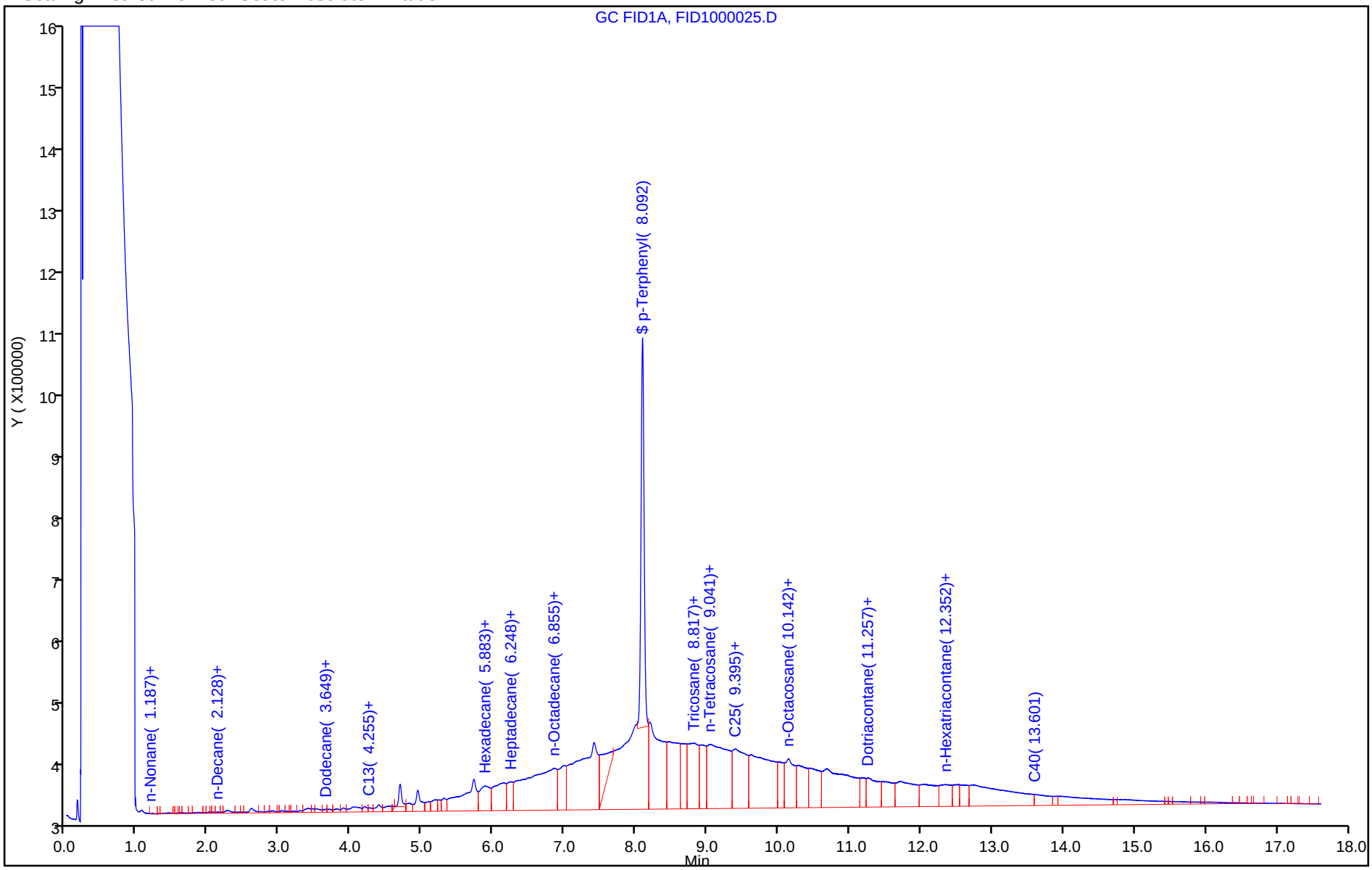
Review Flags
- M - Manually Integrated
- U - Marked Undetected

Report Date: 29-Aug-2018 14:09:40 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000025.D				
Injection Date:	28-Aug-2018 23:34:17	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88255-D-6-A	Lab Sample ID:	720-88255-6	Worklist Smp#:	25
Client ID:	DG-M7W				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000025.D
Lims ID: 720-88255-D-6-A
Client ID: DG-M7W
Sample Type: Client
Inject. Date: 28-Aug-2018 23:34:17 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053518-025
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\DRO6_A.m
Limit Group: DRO
Last Update: 29-Aug-2018 14:09:39 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK008

First Level Reviewer: luj Date: 29-Aug-2018 14:09:39

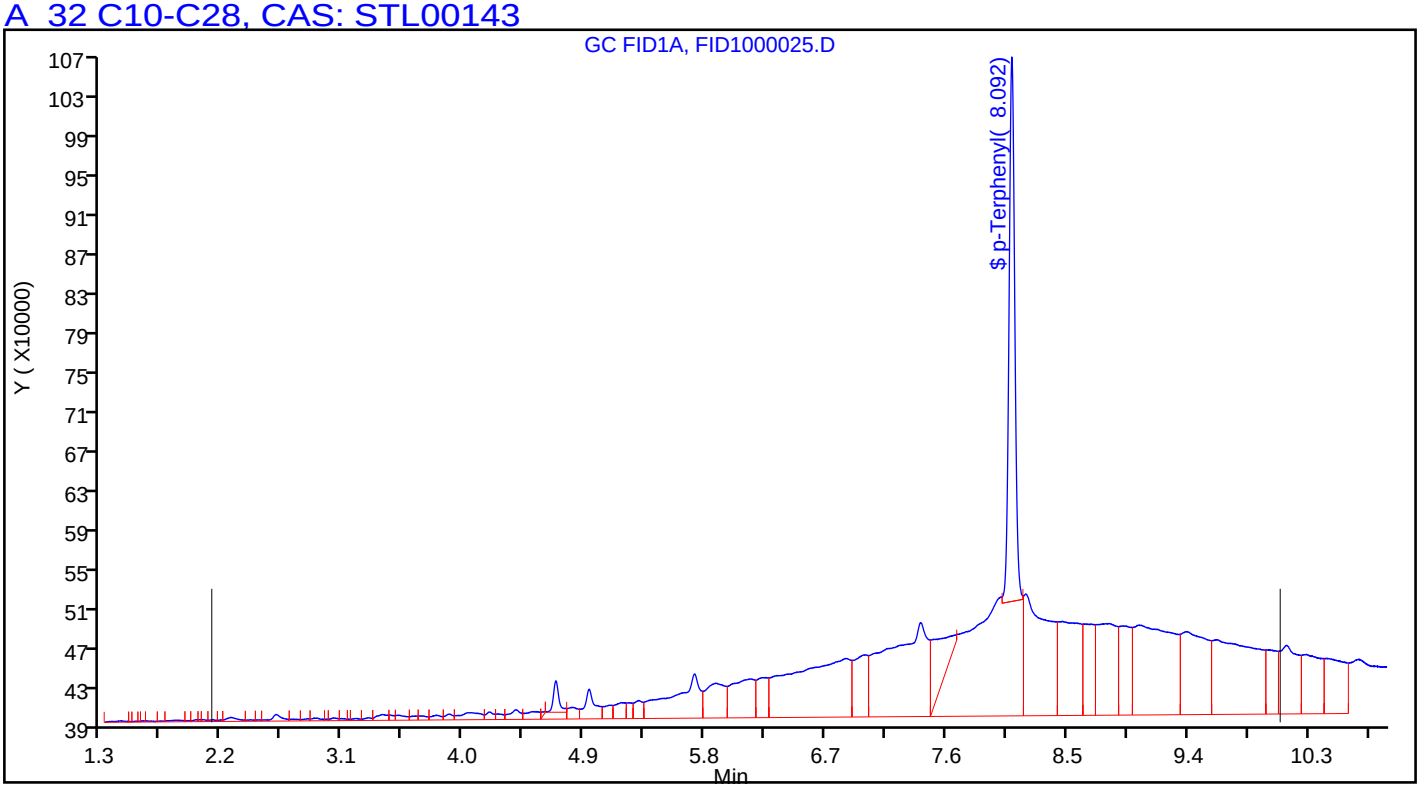
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	17.0	67.81

Report Date: 29-Aug-2018 14:09:41 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000025.D				
Injection Date:	28-Aug-2018 23:34:17	Instrument ID:	CHDRO6		
Lims ID:	720-88255-D-6-A	Lab Sample ID:	720-88255-6		
Client ID:	DG-M7W				
Operator ID:	DCH	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

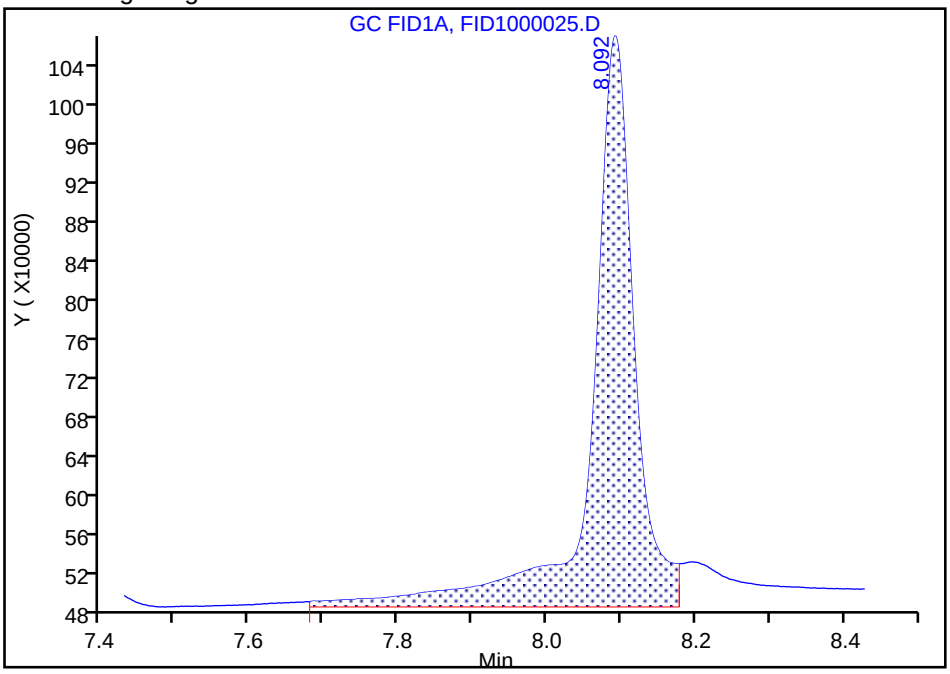
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000025.D				
Injection Date:	28-Aug-2018 23:34:17	Instrument ID:	CHDRO6		
Lims ID:	720-88255-D-6-A	Lab Sample ID:	720-88255-6		
Client ID:	DG-M7W				
Operator ID:	DCH	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

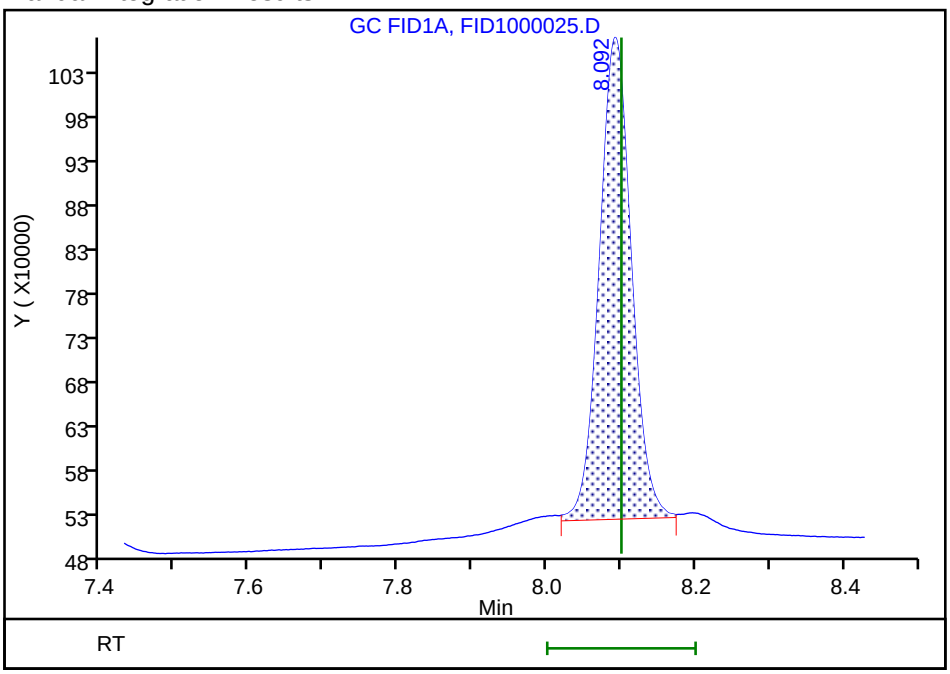
Processing Integration Results

RT: 8.09
Area: 47778522
Amount: 24.879981
Amount Units: mg/L



Manual Integration Results

RT: 8.09
Area: 32553799
Amount: 16.951924
Amount Units: mg/L



Reviewer: luj, 29-Aug-2018 14:09:09

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88255-1
SDG No.:
Client Sample ID: DG-F9W
Lab Sample ID: 720-88255-7
Matrix: Water
Lab File ID: FID1000021.D
Analysis Method: 8015B
Date Collected: 08/24/2018 16:10
Extraction Method: 3510C
Date Extracted: 08/28/2018 15:43
Sample wt/vol: 946.4(mL)
Date Analyzed: 08/28/2018 21:56
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250355
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	220		52	31

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	76		23-156

FORM I 8015B

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000021.D
Lims ID: 720-88255-D-7-A
Client ID: DG-F9W
Sample Type: Client
Inject. Date: 28-Aug-2018 21:56:55 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053518-021
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\DRO6_A.m
Limit Group: DRO
Last Update: 29-Aug-2018 14:06:55 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK008

First Level Reviewer: luj Date: 29-Aug-2018 14:06:55

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane	1.321	1.232	0.089	33168	NC	
23 n-Decane	2.124	2.120	0.004	42970	NC	
A 21 Stoddard Solvent	2.736	(1.232-4.240)		13191207	7.41	
A 1 C9-C13	2.736	(1.232-4.240)		13191207	7.43	
A 57 C10-C12	2.867	(2.120-3.613)		9816835	6.36	
24 Dodecane	3.567	3.613	-0.046	471706	NC	
A 3 C9 - C17	3.781	(1.232-6.330)		35824283	18.4	
A 60 C10-C16	3.985	(2.120-5.850)		28451126	16.3	
A 47 C9 - C18	4.007	(1.232-6.781)		46944804	29.1	
A 25 C9-C19	4.221	(1.232-7.211)		54725012	27.9	
A 15 Kerosene	4.221	(1.232-7.211)		54725012	33.9	
26 C13	4.232	4.240	-0.008	425484	NC	
$ 27 n-Decanoic Acid (Surr)		4.609			ND	U
A 59 C12-C16	4.732	(3.613-5.850)		19105997	12.4	
A 62 C10-C20	4.872	(2.120-7.624)		66522480	43.1	
A 28 C9-C24	5.173	(1.232-9.114)		122586039	79.5	
A 29 C9-C25	5.342	(1.232-9.452)		141054945	91.5	
A 54 C10-C23	5.442	(2.120-8.763)		106094741	68.8	
A 4 C10-C24	5.617	(2.120-9.114)		122063756	79.1	
A 16 C10-C25	5.786	(2.120-9.452)		140532662	91.1	
A 67 C12-C22	5.816	(3.613-8.019)		76004958	49.3	
45 Hexadecane	5.846	5.850	-0.004	1390566	NC	
A 14 C10-C26	5.950	(2.120-9.779)		152572447	98.9	
A 12 Unknown Hydrocarbons	6.107	(2.120-10.094)		160355952	NC	
A 5 Diesel	6.107	(2.120-10.094)		160355952	104.0	
A 32 C10-C28	6.107	(2.120-10.094)		160355952	104.0	
A 30 C13-C22	6.130	(4.240-8.019)		73106647	47.4	
44 Heptadecane	6.275	6.330	-0.055	2132470	NC	
A 31 C12-C24	6.364	(3.613-9.114)		112718627	73.1	
A 9 Crude Oil Range Organics (	6.761	(1.232-12.289)		214150803	NC	
A 52 Mineral oil	6.761	(1.232-12.289)		214150803	120.9	
A 11 Bunker Range Organics (C9-	6.761	(1.232-12.289)		214150803	NC	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
51 n-Octadecane	6.786	6.781	0.005	410786	NC	
A 64 C13-C28	7.167	(4.240-10.094)		148112512	96.0	
A 17 C10-C36	7.205	(2.120-12.289)		213628520	138.5	
33 C19	7.220	7.211	0.009	1247539	NC	
A 13 C9-C40	7.391	(1.232-13.550)		237374348	176.0	
A 68 Crude Oil Range Organics (	7.391	(1.232-13.550)		237374348	NC	
A 58 C16-C24	7.482	(5.850-9.114)		95003196	61.6	
61 icosane	7.622	7.624	-0.002	2003041	NC	
A 6 C10-C40	7.835	(2.120-13.550)		236852065	175.8	
35 n-Docosane		8.019			ND	
$ 34 p-Terphenyl	8.092	8.100	-0.008	36721929	19.1	M
A 18 C12-C40	8.582	(3.613-13.550)		227506936	169.3	
36 Tricosane	8.795	8.763	0.032	7168337	NC	
A 66 C13-C40	8.895	(4.240-13.550)		224608625	167.3	
A 2 C16-C36 ORO	9.070	(5.850-12.289)		214919601	188.4	
37 n-Tetracosane	9.107	9.114	-0.007	857715	NC	
38 C25	9.386	9.452	-0.066	10542900	NC	
A 19 C16-C40	9.700	(5.850-13.550)		209791505	156.9	
A 20 C19-C36	9.750	(7.211-12.289)		182886015	137.6	
46 n-Hexacosane	9.765	9.779	-0.014	5233645	NC	
A 55 C23-C32	10.010	(8.763-11.257)		82859266	119.3	
39 n-Octacosane	10.133	10.094	0.039	3948182	NC	
A 40 C24-C36	10.702	(9.114-12.289)		92757260	104.2	M
A 7 Motor Oil	10.702	(9.114-12.289)		67557022	75.9	
A 10 C22-C40	10.784	(8.019-13.550)		114990519	92.5	
A 49 C25-C36	10.871	(9.452-12.289)		83638758	93.4	
65 C29	10.897	10.980	-0.083	4819661	NC	
A 41 C23-C40	11.156	(8.763-13.550)		130757324	102.3	
56 Dotriacontane	11.292	11.257	0.035	7104929	NC	
A 8 C24-C40	11.332	(9.114-13.550)		115646024	95.0	
A 50 C28-C40	11.822	(10.094-13.550)		80668859	85.0	
A 63 C29-C40	12.265	(10.980-13.550)		53946991	62.3	
42 n-Hexatriacontane	12.237	12.289	-0.052	438362	NC	
43 C40	13.549	13.550	-0.001	1588456	NC	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

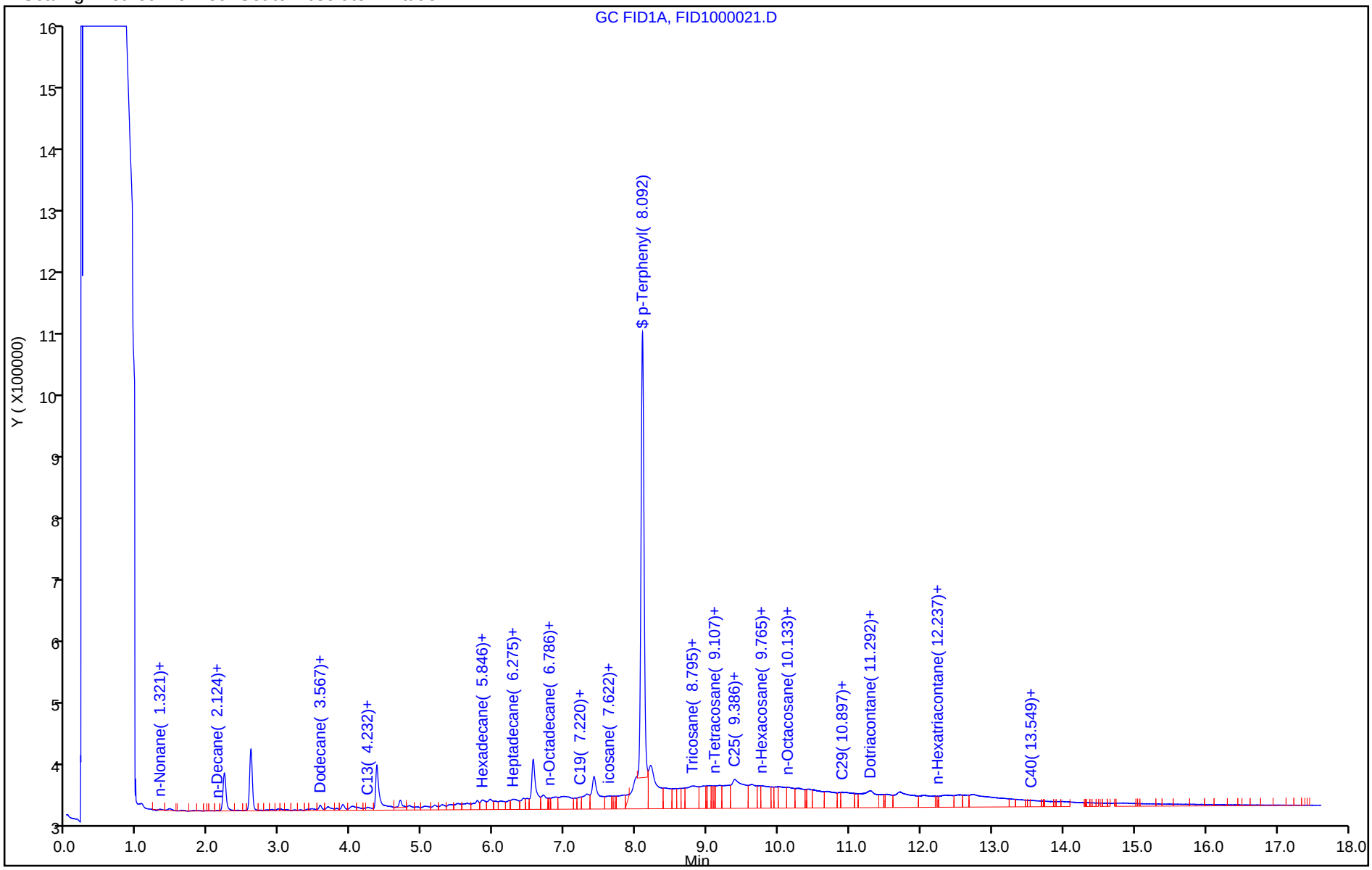
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 29-Aug-2018 14:06:56 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000021.D				
Injection Date:	28-Aug-2018 21:56:55	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88255-D-7-A	Lab Sample ID:	720-88255-7	Worklist Smp#:	21
Client ID:	DG-F9W				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000021.D
Lims ID: 720-88255-D-7-A
Client ID: DG-F9W
Sample Type: Client
Inject. Date: 28-Aug-2018 21:56:55 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053518-021
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\DRO6_A.m
Limit Group: DRO
Last Update: 29-Aug-2018 14:06:55 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK008

First Level Reviewer: luj Date: 29-Aug-2018 14:06:55

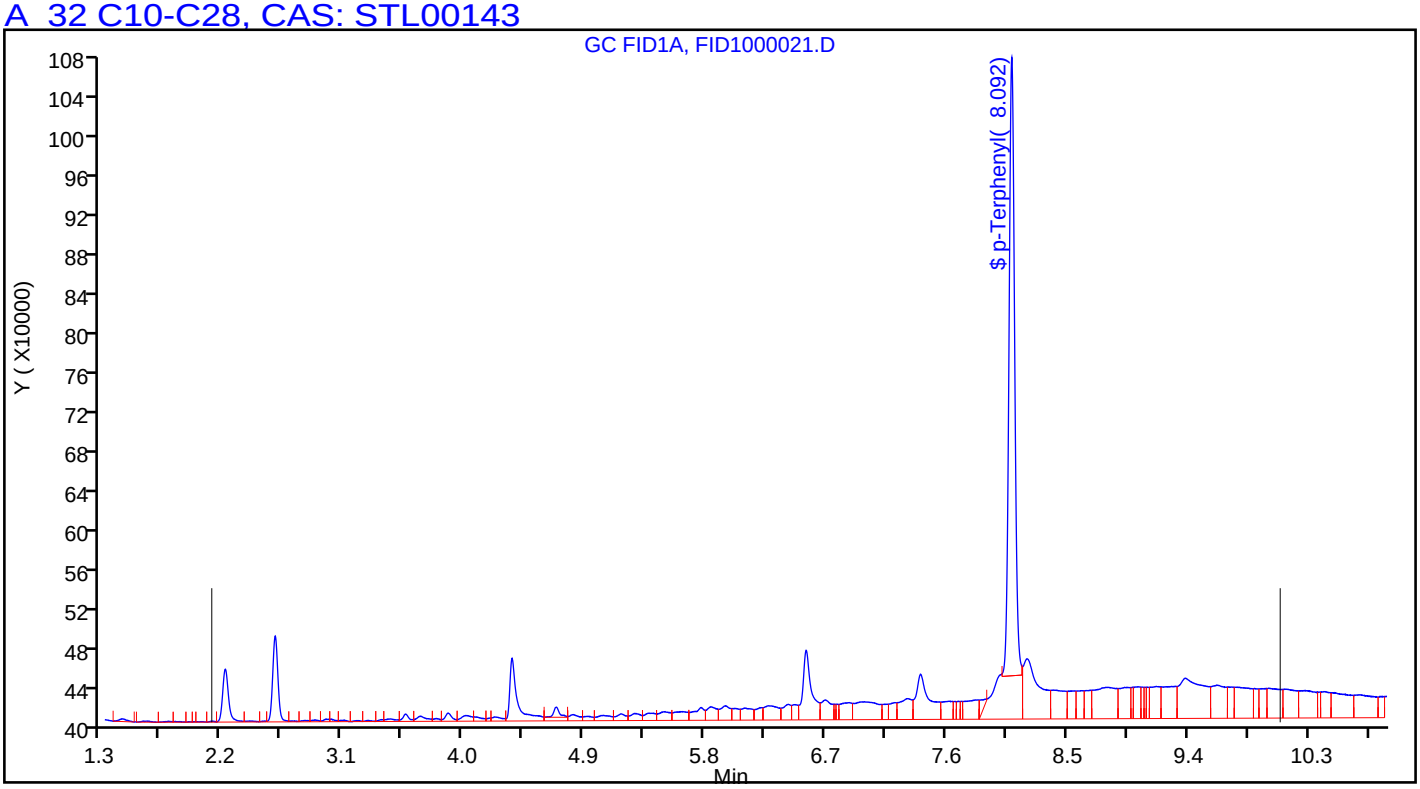
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	19.1	76.49

Report Date: 29-Aug-2018 14:06:57 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000021.D				
Injection Date:	28-Aug-2018 21:56:55	Instrument ID:	CHDRO6		
Lims ID:	720-88255-D-7-A	Lab Sample ID:	720-88255-7		
Client ID:	DG-F9W				
Operator ID:	DCH	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

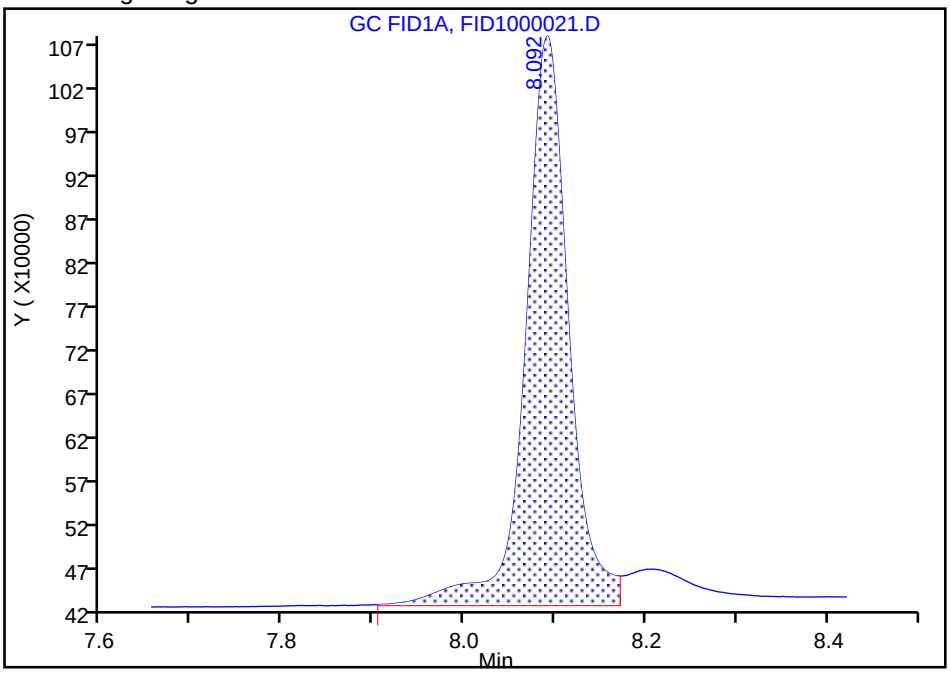
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000021.D				
Injection Date:	28-Aug-2018 21:56:55	Instrument ID:	CHDRO6		
Lims ID:	720-88255-D-7-A	Lab Sample ID:	720-88255-7		
Client ID:	DG-F9W				
Operator ID:	DCH	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

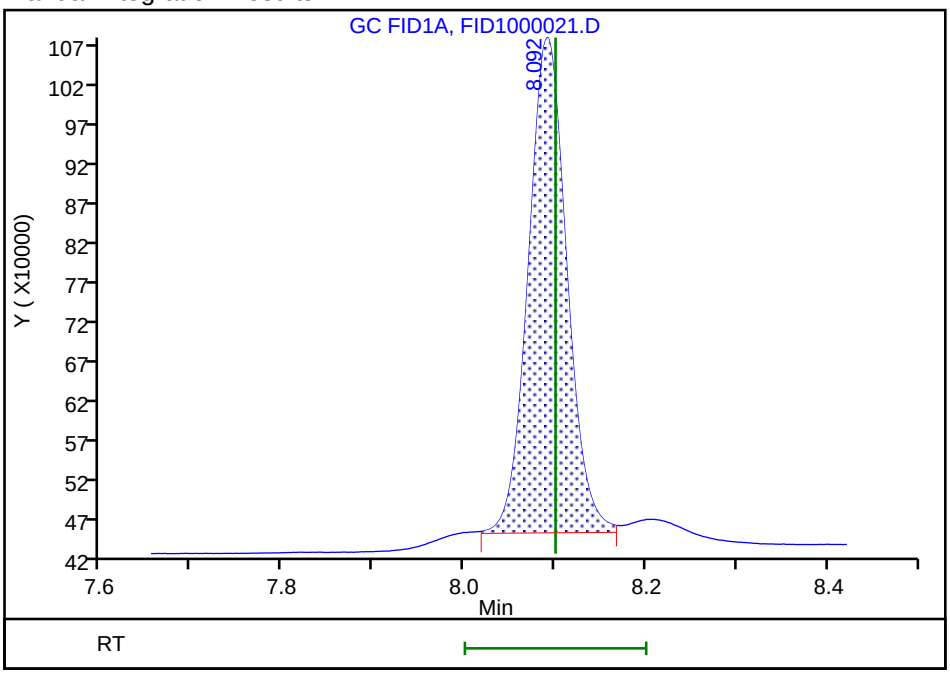
Processing Integration Results

RT: 8.09
Area: 43112644
Amount: 22.450292
Amount Units: mg/L



Manual Integration Results

RT: 8.09
Area: 36721929
Amount: 19.122418
Amount Units: mg/L



Reviewer: luj, 29-Aug-2018 14:06:33

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88255-1

SDG No.:

Client Sample ID: DG-DE89W Lab Sample ID: 720-88255-8

Matrix: Water Lab File ID: FID1000022.D

Analysis Method: 8015B Date Collected: 08/24/2018 16:20

Extraction Method: 3510C Date Extracted: 08/28/2018 15:43

Sample wt/vol: 941.8(mL) Date Analyzed: 08/28/2018 22:21

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250355 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	210		53	32

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	75		23-156

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000022.D
Lims ID: 720-88255-D-8-A
Client ID: DG-DE89W
Sample Type: Client
Inject. Date: 28-Aug-2018 22:21:20 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053518-022
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\DRO6_A.m
Limit Group: DRO
Last Update: 29-Aug-2018 14:07:35 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK008

First Level Reviewer: luj Date: 29-Aug-2018 14:07:35

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.232			ND	
23 n-Decane	2.125	2.120	0.005	234910	NC	
A 21 Stoddard Solvent	2.736	(1.232-4.240)		11140220	6.26	
A 1 C9-C13	2.736	(1.232-4.240)		11140220	6.27	
A 57 C10-C12	2.867	(2.120-3.613)		6233080	4.04	
24 Dodecane	3.565	3.613	-0.048	339636	NC	
A 3 C9 - C17	3.781	(1.232-6.330)		30174704	15.5	
A 60 C10-C16	3.985	(2.120-5.850)		21515597	12.3	
A 47 C9 - C18	4.007	(1.232-6.781)		36409263	22.5	
A 25 C9-C19	4.221	(1.232-7.211)		43878251	22.4	
A 15 Kerosene	4.221	(1.232-7.211)		43878251	27.2	
26 C13	4.261	4.240	0.021	432134	NC	
$ 27 n-Decanoic Acid (Surr)		4.609			ND	U
A 59 C12-C16	4.732	(3.613-5.850)		15622153	10.1	
A 62 C10-C20	4.872	(2.120-7.624)		54486611	35.3	
A 28 C9-C24	5.173	(1.232-9.114)		112536368	73.0	
A 29 C9-C25	5.342	(1.232-9.452)		133136329	86.3	
A 54 C10-C23	5.442	(2.120-8.763)		92568081	60.0	
A 4 C10-C24	5.617	(2.120-9.114)		110748399	71.8	
A 16 C10-C25	5.786	(2.120-9.452)		131348360	85.2	
A 67 C12-C22	5.816	(3.613-8.019)		61699480	40.0	
45 Hexadecane	5.943	5.850	0.093	2107269	NC	
A 14 C10-C26	5.950	(2.120-9.779)		137959321	89.4	
A 12 Unknown Hydrocarbons	6.107	(2.120-10.094)		151332257	NC	
A 5 Diesel	6.107	(2.120-10.094)		151332257	98.1	
A 32 C10-C28	6.107	(2.120-10.094)		151332257	98.1	
A 30 C13-C22	6.130	(4.240-8.019)		58240673	37.8	
44 Heptadecane	6.275	6.330	-0.055	2354737	NC	
A 31 C12-C24	6.364	(3.613-9.114)		104854955	68.0	
A 9 Crude Oil Range Organics (	6.761	(1.232-12.289)		208357333	NC	
A 52 Mineral oil	6.761	(1.232-12.289)		208357333	117.7	
A 11 Bunker Range Organics (C9-	6.761	(1.232-12.289)		208357333	NC	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
51 n-Octadecane	6.783	6.781	0.002	1103948	NC	
A 64 C13-C28	7.167	(4.240-10.094)		141980006	92.1	
A 17 C10-C36	7.205	(2.120-12.289)		206569364	133.9	
33 C19		7.211			ND	
A 13 C9-C40	7.391	(1.232-13.550)		235005633	174.3	
A 68 Crude Oil Range Organics (	7.391	(1.232-13.550)		235005633	NC	
A 58 C16-C24	7.482	(5.850-9.114)		89232802	57.9	
61 icosane	7.673	7.624	0.049	3221303	NC	
A 6 C10-C40	7.835	(2.120-13.550)		233217664	173.1	
35 n-Docosane	8.093	8.019	0.074	35942427	NC	
$ 34 p-Terphenyl	8.093	8.100	-0.007	35942427	18.7	
A 18 C12-C40	8.582	(3.613-13.550)		227324220	169.2	
36 Tricosane	8.774	8.763	0.011	11272019	NC	
A 66 C13-C40	8.895	(4.240-13.550)		223865413	166.8	
A 2 C16-C36 ORO	9.070	(5.850-12.289)		211026827	185.0	
37 n-Tetracosane	9.119	9.114	0.005	6656557	NC	
38 C25	9.435	9.452	-0.017	6392353	NC	
A 19 C16-C40	9.700	(5.850-13.550)		211702067	158.3	
A 20 C19-C36	9.750	(7.211-12.289)		176586548	132.9	
46 n-Hexacosane	9.779	9.779	0.000	7525802	NC	
A 55 C23-C32	10.010	(8.763-11.257)		90959474	131.0	
39 n-Octacosane	10.077	10.094	-0.017	2207782	NC	
A 40 C24-C36	10.702	(9.114-12.289)		95098396	106.8	M
A 7 Motor Oil	10.702	(9.114-12.289)		63408026	71.2	
A 10 C22-C40	10.784	(8.019-13.550)		108717541	87.4	
A 49 C25-C36	10.871	(9.452-12.289)		81613357	91.2	
65 C29	10.982	10.980	0.002	3730976	NC	
A 41 C23-C40	11.156	(8.763-13.550)		140649583	110.0	
56 Dotriacontane	11.260	11.257	0.003	4447297	NC	
A 8 C24-C40	11.332	(9.114-13.550)		122469265	100.6	
A 50 C28-C40	11.822	(10.094-13.550)		84093189	88.6	
A 63 C29-C40	12.265	(10.980-13.550)		56531710	65.2	
42 n-Hexatriacontane	12.332	12.289	0.043	1835685	NC	
43 C40	13.544	13.550	-0.006	3400301	NC	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

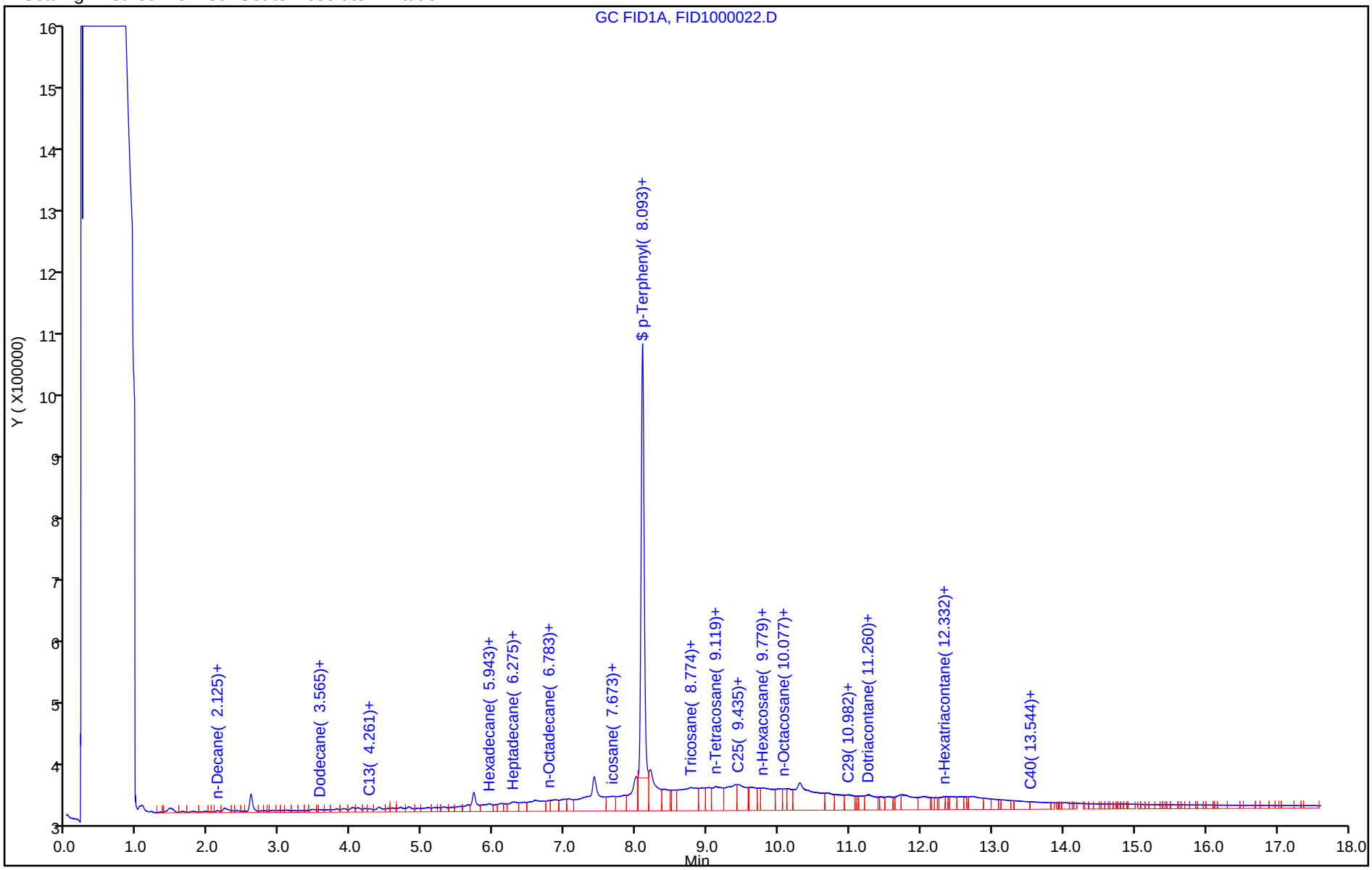
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 29-Aug-2018 14:07:37 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000022.D				
Injection Date:	28-Aug-2018 22:21:20	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88255-D-8-A	Lab Sample ID:	720-88255-8	Worklist Smp#:	22
Client ID:	DG-DE89W				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000022.D
Lims ID: 720-88255-D-8-A
Client ID: DG-DE89W
Sample Type: Client
Inject. Date: 28-Aug-2018 22:21:20 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053518-022
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\DRO6_A.m
Limit Group: DRO
Last Update: 29-Aug-2018 14:07:35 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK008

First Level Reviewer: luj Date: 29-Aug-2018 14:07:35

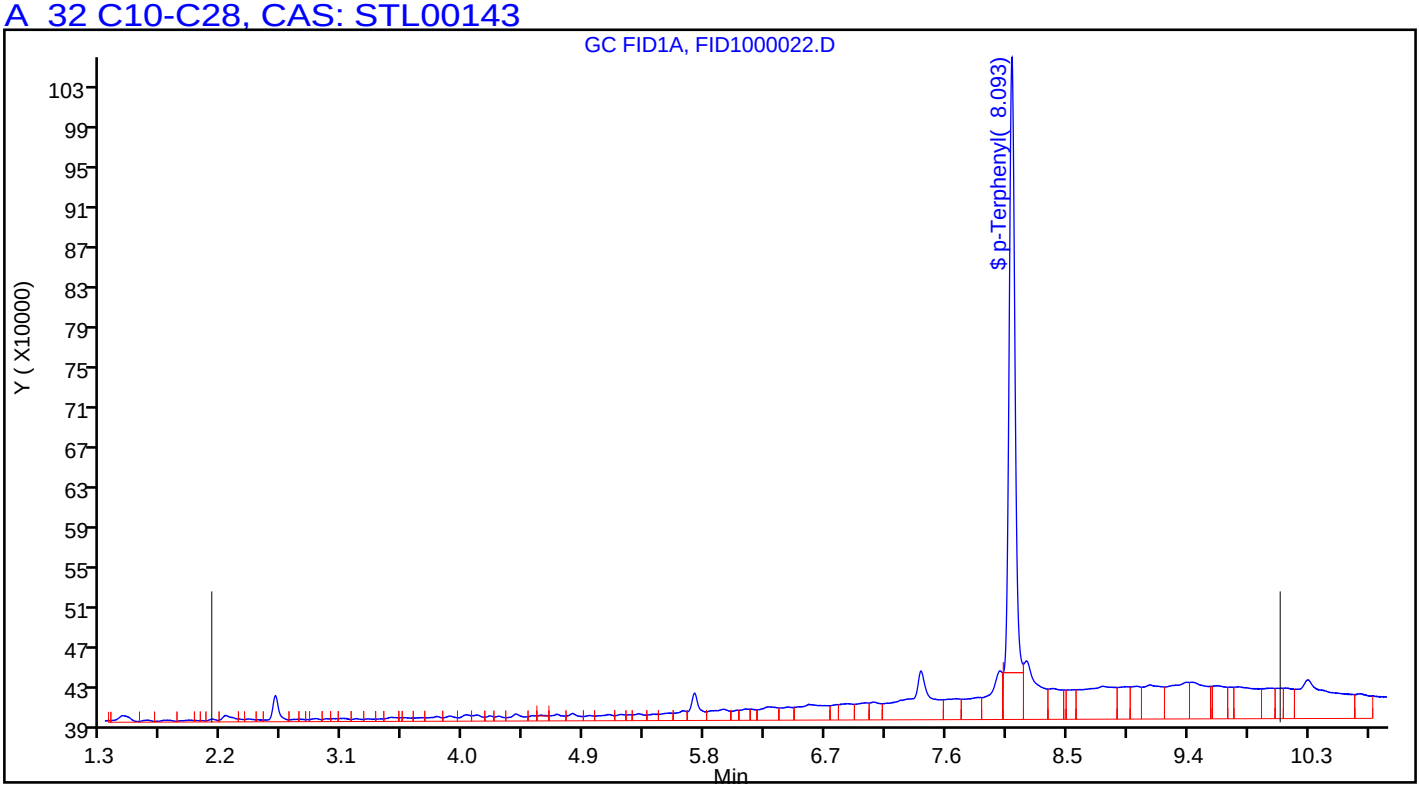
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	18.7	74.87

Report Date: 29-Aug-2018 14:07:39 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000022.D				
Injection Date:	28-Aug-2018 22:21:20	Instrument ID:	CHDRO6		
Lims ID:	720-88255-D-8-A	Lab Sample ID:	720-88255-8		
Client ID:	DG-DE89W				
Operator ID:	DCH	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88255-1

SDG No.:

Client Sample ID: DG-D9W Lab Sample ID: 720-88255-9

Matrix: Water Lab File ID: FID1000023.D

Analysis Method: 8015B Date Collected: 08/24/2018 16:40

Extraction Method: 3510C Date Extracted: 08/28/2018 15:43

Sample wt/vol: 946.3(mL) Date Analyzed: 08/28/2018 22:45

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250355 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	170		52	31

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	70		23-156

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000023.D
Lims ID: 720-88255-D-9-A
Client ID: DG-D9W
Sample Type: Client
Inject. Date: 28-Aug-2018 22:45:35 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053518-023
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\DRO6_A.m
Limit Group: DRO
Last Update: 29-Aug-2018 14:08:12 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK008

First Level Reviewer: luj Date: 29-Aug-2018 14:08:12

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.232			ND	
23 n-Decane	2.122	2.120	0.002	287588	NC	
A 21 Stoddard Solvent	2.736	(1.232-4.240)		12948881	7.27	
A 1 C9-C13	2.736	(1.232-4.240)		12948881	7.29	
A 57 C10-C12	2.867	(2.120-3.613)		6474365	4.20	
24 Dodecane	3.566	3.613	-0.047	238570	NC	
A 3 C9 - C17	3.781	(1.232-6.330)		24468930	12.5	
A 60 C10-C16	3.985	(2.120-5.850)		17204609	9.85	
A 47 C9 - C18	4.007	(1.232-6.781)		27533568	17.0	
A 25 C9-C19	4.221	(1.232-7.211)		33457828	17.1	
A 15 Kerosene	4.221	(1.232-7.211)		33457828	20.7	
26 C13	4.261	4.240	0.021	403357	NC	
$ 27 n-Decanoic Acid (Surr)		4.609			ND	U
A 59 C12-C16	4.732	(3.613-5.850)		10968814	7.11	
A 62 C10-C20	4.872	(2.120-7.624)		40656592	26.4	
A 28 C9-C24	5.173	(1.232-9.114)		90458509	58.6	
A 29 C9-C25	5.342	(1.232-9.452)		107198581	69.5	
A 54 C10-C23	5.442	(2.120-8.763)		73861546	47.9	
A 4 C10-C24	5.617	(2.120-9.114)		87290074	56.6	
A 16 C10-C25	5.786	(2.120-9.452)		104030146	67.4	
A 67 C12-C22	5.816	(3.613-8.019)		44589061	28.9	
45 Hexadecane	5.865	5.850	0.015	559675	NC	
A 14 C10-C26	5.950	(2.120-9.779)		112062186	72.7	
A 12 Unknown Hydrocarbons	6.107	(2.120-10.094)		120594174	NC	
A 5 Diesel	6.107	(2.120-10.094)		120594174	78.2	
A 32 C10-C28	6.107	(2.120-10.094)		120594174	78.2	
A 30 C13-C22	6.130	(4.240-8.019)		41044410	26.6	
44 Heptadecane	6.320	6.330	-0.010	1631451	NC	
A 31 C12-C24	6.364	(3.613-9.114)		81054279	52.6	
A 9 Crude Oil Range Organics (	6.761	(1.232-12.289)		167995092	NC	
A 52 Mineral oil	6.761	(1.232-12.289)		167995092	94.9	
A 11 Bunker Range Organics (C9-	6.761	(1.232-12.289)		167995092	NC	

Report Date: 29-Aug-2018 14:08:13 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000023.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
51 n-Octadecane	6.855	6.781	0.074	3088674	NC	
A 64 C13-C28	7.167	(4.240-10.094)		110813728	71.8	
A 17 C10-C36	7.205	(2.120-12.289)		164826657	106.9	
33 C19		7.211			ND	
A 13 C9-C40	7.391	(1.232-13.550)		184560799	136.9	
A 68 Crude Oil Range Organics (	7.391	(1.232-13.550)		184560799	NC	
A 58 C16-C24	7.482	(5.850-9.114)		70085465	45.4	
61 icosane	7.628	7.624	0.004	949433	NC	
A 6 C10-C40	7.835	(2.120-13.550)		181392364	134.6	
35 n-Docosane	8.093	8.019	0.074	33813134	NC	
$ 34 p-Terphenyl	8.093	8.100	-0.007	33813134	17.6	
A 18 C12-C40	8.582	(3.613-13.550)		175156569	130.3	
36 Tricosane	8.822	8.763	0.059	7235056	NC	
A 66 C13-C40	8.895	(4.240-13.550)		171611918	127.8	
A 2 C16-C36 ORO	9.070	(5.850-12.289)		192328323	168.6	
37 n-Tetracosane	9.180	9.114	0.066	5223285	NC	
38 C25	9.402	9.452	-0.050	11516787	NC	
A 19 C16-C40	9.700	(5.850-13.550)		164187755	122.8	
A 20 C19-C36	9.750	(7.211-12.289)		161377710	121.4	
46 n-Hexacosane	9.835	9.779	0.056	4755117	NC	
A 55 C23-C32	10.010	(8.763-11.257)		74690981	107.6	
39 n-Octacosane	10.072	10.094	-0.022	990720	NC	
A 40 C24-C36	10.702	(9.114-12.289)		60212804	67.6	
A 7 Motor Oil	10.702	(9.114-12.289)		60212804	67.6	
A 10 C22-C40	10.784	(8.019-13.550)		101574519	81.7	
A 49 C25-C36	10.871	(9.452-12.289)		72313298	80.8	
65 C29	10.974	10.980	-0.006	3448330	NC	
A 41 C23-C40	11.156	(8.763-13.550)		107530818	84.1	
56 Dotriacontane	11.268	11.257	0.011	4165296	NC	
A 8 C24-C40	11.332	(9.114-13.550)		94102290	77.3	
A 50 C28-C40	11.822	(10.094-13.550)		61788910	65.1	
A 63 C29-C40	12.265	(10.980-13.550)		37165015	42.9	
42 n-Hexatriacontane	12.293	12.289	0.004	1265458	NC	
43 C40	13.550	13.550	0.000	343883	NC	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

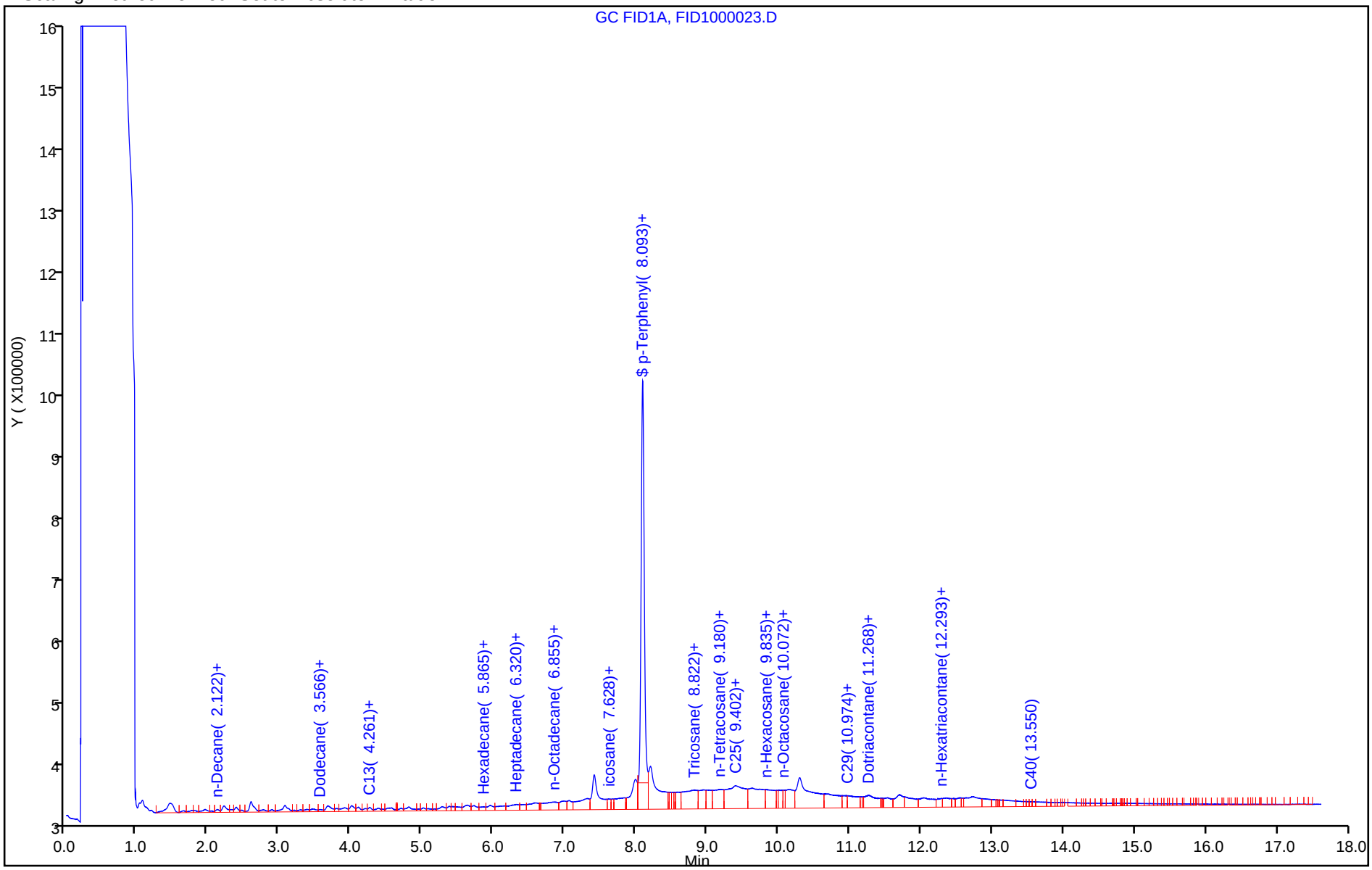
Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

Report Date: 29-Aug-2018 14:08:13 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000023.D				
Injection Date:	28-Aug-2018 22:45:35	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88255-D-9-A	Lab Sample ID:	720-88255-9	Worklist Smp#:	23
Client ID:	DG-D9W				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000023.D
Lims ID: 720-88255-D-9-A
Client ID: DG-D9W
Sample Type: Client
Inject. Date: 28-Aug-2018 22:45:35 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053518-023
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\DRO6_A.m
Limit Group: DRO
Last Update: 29-Aug-2018 14:08:12 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK008

First Level Reviewer: luj Date: 29-Aug-2018 14:08:12

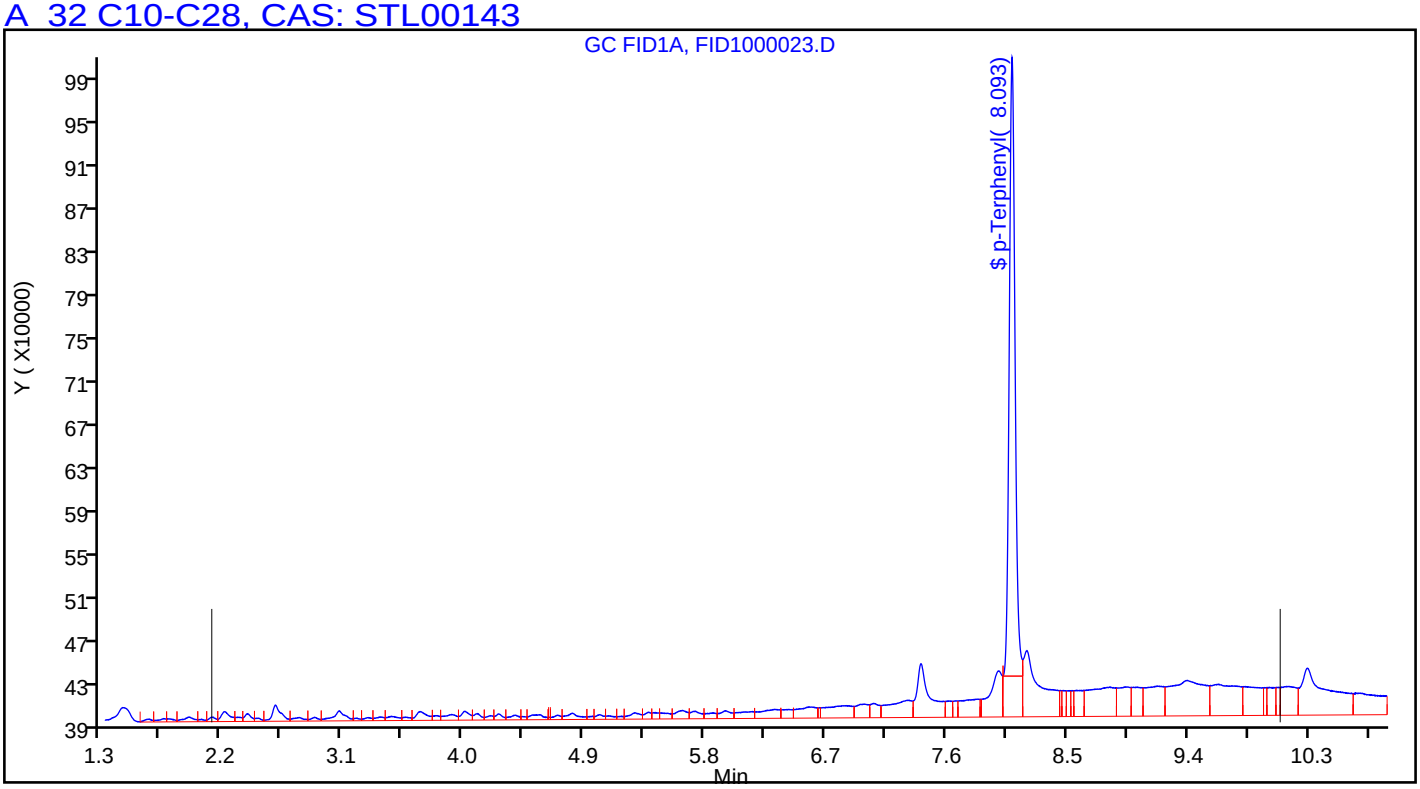
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	17.6	70.43

Report Date: 29-Aug-2018 14:08:14 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000023.D				
Injection Date:	28-Aug-2018 22:45:35	Instrument ID:	CHDRO6		
Lims ID:	720-88255-D-9-A	Lab Sample ID:	720-88255-9		
Client ID:	DG-D9W				
Operator ID:	DCH	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88255-1

SDG No.:

Client Sample ID: DG-B9W Lab Sample ID: 720-88255-10

Matrix: Water Lab File ID: FID1000026.D

Analysis Method: 8015B Date Collected: 08/24/2018 16:55

Extraction Method: 3510C Date Extracted: 08/28/2018 15:43

Sample wt/vol: 953.6(mL) Date Analyzed: 08/28/2018 23:58

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250355 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	180		52	31

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	96		23-156

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000026.D
Lims ID: 720-88255-D-10-A
Client ID: DG-B9W
Sample Type: Client
Inject. Date: 28-Aug-2018 23:58:30 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053518-026
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\DRO6_A.m
Limit Group: DRO
Last Update: 29-Aug-2018 14:10:40 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK008

First Level Reviewer: luj Date: 29-Aug-2018 14:10:40

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.232			ND	
23 n-Decane	2.124	2.120	0.004	153868	NC	
A 21 Stoddard Solvent	2.736	(1.232-4.240)		19528127	11.0	
A 1 C9-C13	2.736	(1.232-4.240)		19528127	11.0	
A 57 C10-C12	2.867	(2.120-3.613)		15387475	9.98	
24 Dodecane	3.568	3.613	-0.045	850515	NC	
A 3 C9 - C17	3.781	(1.232-6.330)		36441702	18.7	
A 60 C10-C16	3.985	(2.120-5.850)		28636266	16.4	
A 47 C9 - C18	4.007	(1.232-6.781)		42367925	26.2	
A 25 C9-C19	4.221	(1.232-7.211)		49395165	25.2	
A 15 Kerosene	4.221	(1.232-7.211)		49395165	30.6	
26 C13	4.192	4.240	-0.048	259463	NC	
$ 27 n-Decanoic Acid (Surr)		4.609			ND	U
A 59 C12-C16	4.732	(3.613-5.850)		14099306	9.14	
A 62 C10-C20	4.872	(2.120-7.624)		59656007	38.7	
A 28 C9-C24	5.173	(1.232-9.114)		100098453	64.9	
A 29 C9-C25	5.342	(1.232-9.452)		115017767	74.6	
A 54 C10-C23	5.442	(2.120-8.763)		85596255	55.5	
A 4 C10-C24	5.617	(2.120-9.114)		98564744	63.9	
A 16 C10-C25	5.786	(2.120-9.452)		113484058	73.6	
A 67 C12-C22	5.816	(3.613-8.019)		46845054	30.4	
45 Hexadecane	5.840	5.850	-0.010	1067764	NC	
A 14 C10-C26	5.950	(2.120-9.779)		120390812	78.1	
A 12 Unknown Hydrocarbons	6.107	(2.120-10.094)		132950826	NC	
A 5 Diesel	6.107	(2.120-10.094)		132950826	86.2	
A 32 C10-C28	6.107	(2.120-10.094)		132950826	86.2	
A 30 C13-C22	6.130	(4.240-8.019)		43647059	28.3	
44 Heptadecane	6.296	6.330	-0.034	3057099	NC	
A 31 C12-C24	6.364	(3.613-9.114)		84027784	54.5	
A 9 Crude Oil Range Organics (	6.761	(1.232-12.289)		183701146	NC	
A 52 Mineral oil	6.761	(1.232-12.289)		183701146	103.8	
A 11 Bunker Range Organics (C9-	6.761	(1.232-12.289)		183701146	NC	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
51 n-Octadecane	6.787	6.781	0.006	1516985	NC	
A 64 C13-C28	7.167	(4.240-10.094)		115215871	74.7	
A 17 C10-C36	7.205	(2.120-12.289)		182167437	118.1	
33 C19	7.251	7.211	0.040	3323148	NC	
A 13 C9-C40	7.391	(1.232-13.550)		208559664	154.7	
A 68 Crude Oil Range Organics (	7.391	(1.232-13.550)		208559664	NC	
A 58 C16-C24	7.482	(5.850-9.114)		70996242	46.0	
61 icosane	7.570	7.624	-0.054	1979533	NC	
A 6 C10-C40	7.835	(2.120-13.550)		207025955	153.6	
35 n-Docosane		8.019			ND	
$ 34 p-Terphenyl	8.092	8.100	-0.008	46247457	24.1	M
A 18 C12-C40	8.582	(3.613-13.550)		192488995	143.2	
36 Tricosane	8.845	8.763	0.082	6600547	NC	
A 66 C13-C40	8.895	(4.240-13.550)		189291000	141.0	
A 2 C16-C36 ORO	9.070	(5.850-12.289)		194063287	170.1	
37 n-Tetracosane	9.028	9.114	-0.086	2925103	NC	
38 C25	9.395	9.452	-0.057	9216229	NC	
A 19 C16-C40	9.700	(5.850-13.550)		179457453	134.2	
A 20 C19-C36	9.750	(7.211-12.289)		158515316	119.3	
46 n-Hexacosane	9.846	9.779	0.067	4797384	NC	
A 55 C23-C32	10.010	(8.763-11.257)		79705171	114.8	
39 n-Octacosane	10.091	10.094	-0.003	7762630	NC	
A 40 C24-C36	10.702	(9.114-12.289)		83669081	94.0	M
A 7 Motor Oil	10.702	(9.114-12.289)		51782444	58.2	
A 10 C22-C40	10.784	(8.019-13.550)		83468633	67.1	
A 49 C25-C36	10.871	(9.452-12.289)		77899608	87.0	
65 C29	10.964	10.980	-0.016	3461612	NC	
A 41 C23-C40	11.156	(8.763-13.550)		121429700	95.0	
56 Dotriacontane	11.256	11.257	-0.001	4454086	NC	
A 8 C24-C40	11.332	(9.114-13.550)		108461211	89.1	
A 50 C28-C40	11.822	(10.094-13.550)		81837759	86.2	
A 63 C29-C40	12.265	(10.980-13.550)		51633340	59.6	
42 n-Hexatriacontane	12.243	12.289	-0.046	1014161	NC	
43 C40		13.550			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

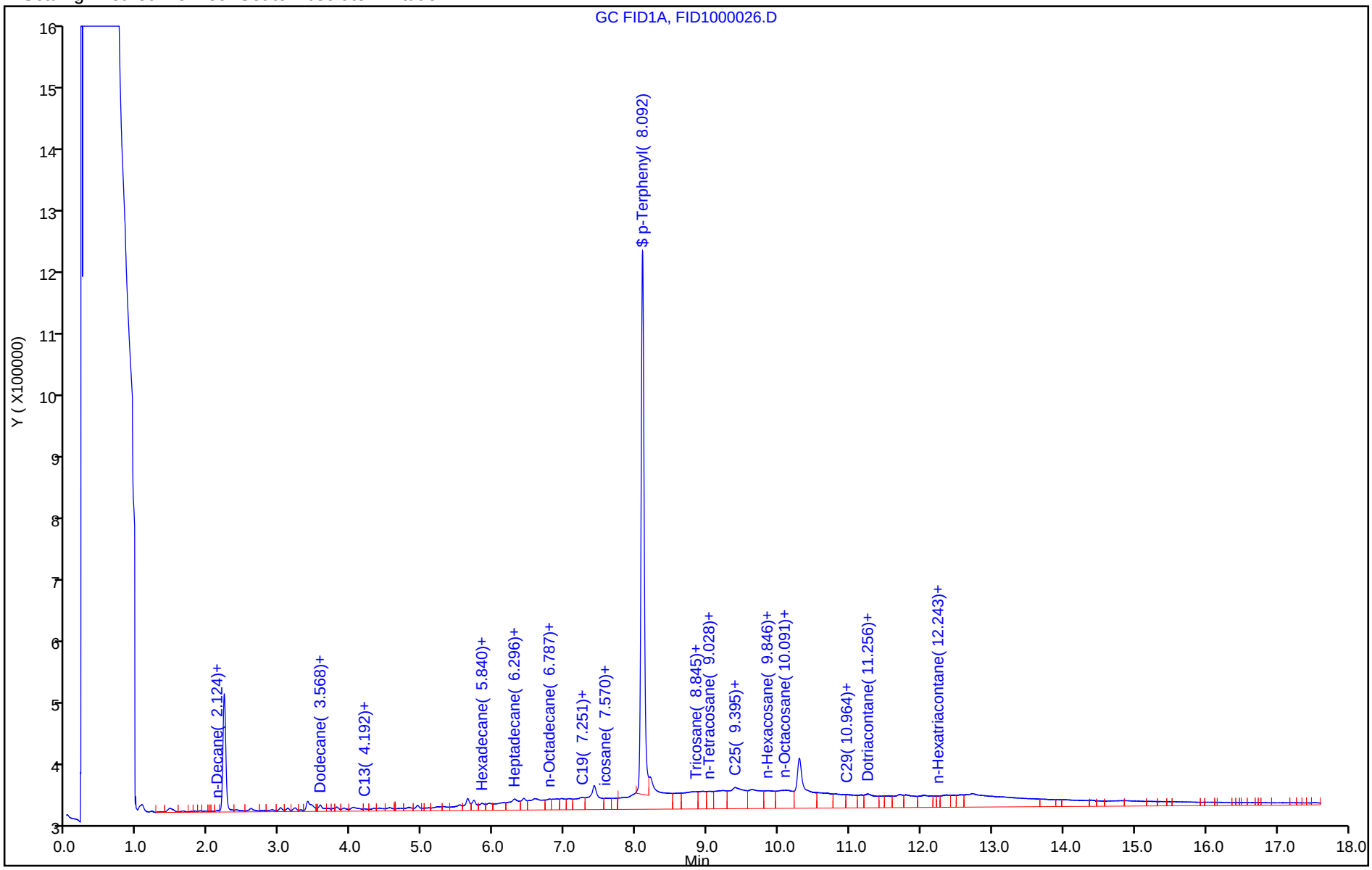
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 29-Aug-2018 14:10:41 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000026.D				
Injection Date:	28-Aug-2018 23:58:30	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88255-D-10-A	Lab Sample ID:	720-88255-10	Worklist Smp#:	26
Client ID:	DG-B9W				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000026.D
Lims ID: 720-88255-D-10-A
Client ID: DG-B9W
Sample Type: Client
Inject. Date: 28-Aug-2018 23:58:30 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053518-026
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\DRO6_A.m
Limit Group: DRO
Last Update: 29-Aug-2018 14:10:40 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK008

First Level Reviewer: luj Date: 29-Aug-2018 14:10:40

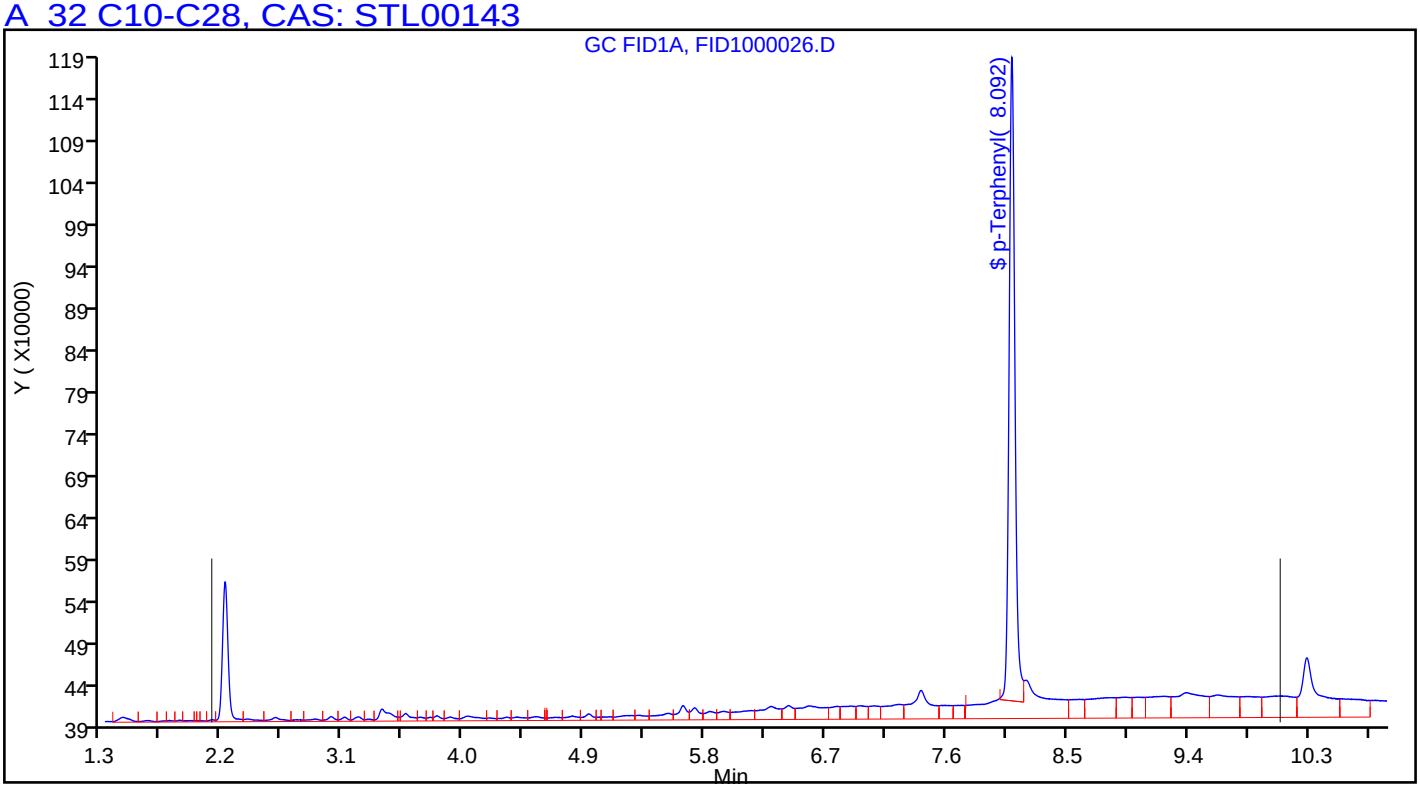
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	24.1	96.33

Report Date: 29-Aug-2018 14:10:42 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000026.D				
Injection Date:	28-Aug-2018 23:58:30	Instrument ID:	CHDRO6		
Lims ID:	720-88255-D-10-A	Lab Sample ID:	720-88255-10		
Client ID:	DG-B9W				
Operator ID:	DCH	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

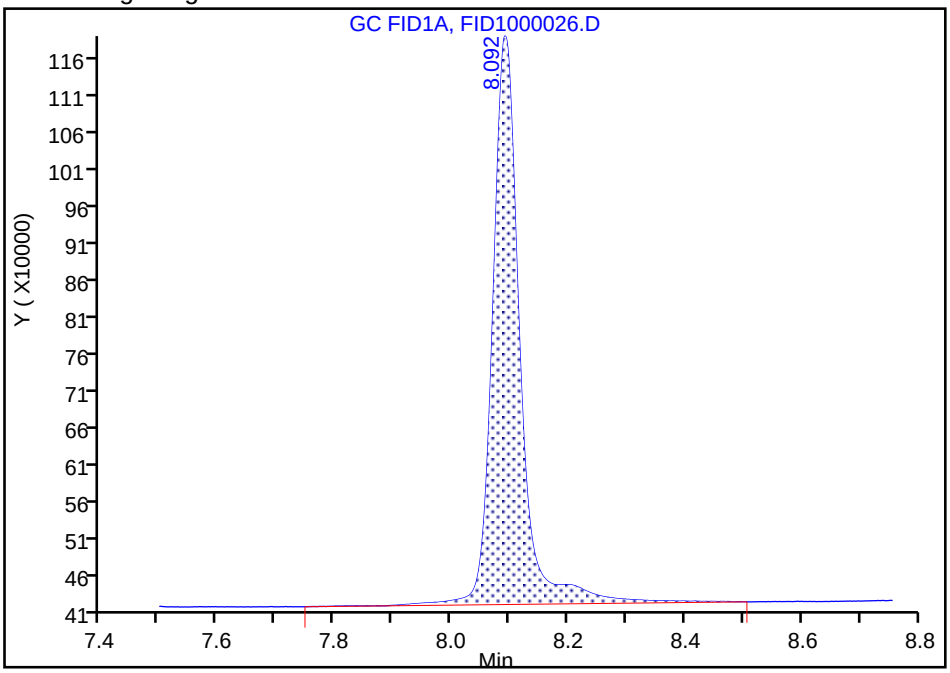
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000026.D				
Injection Date:	28-Aug-2018 23:58:30	Instrument ID:	CHDRO6		
Lims ID:	720-88255-D-10-A	Lab Sample ID:	720-88255-10		
Client ID:	DG-B9W				
Operator ID:	DCH	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

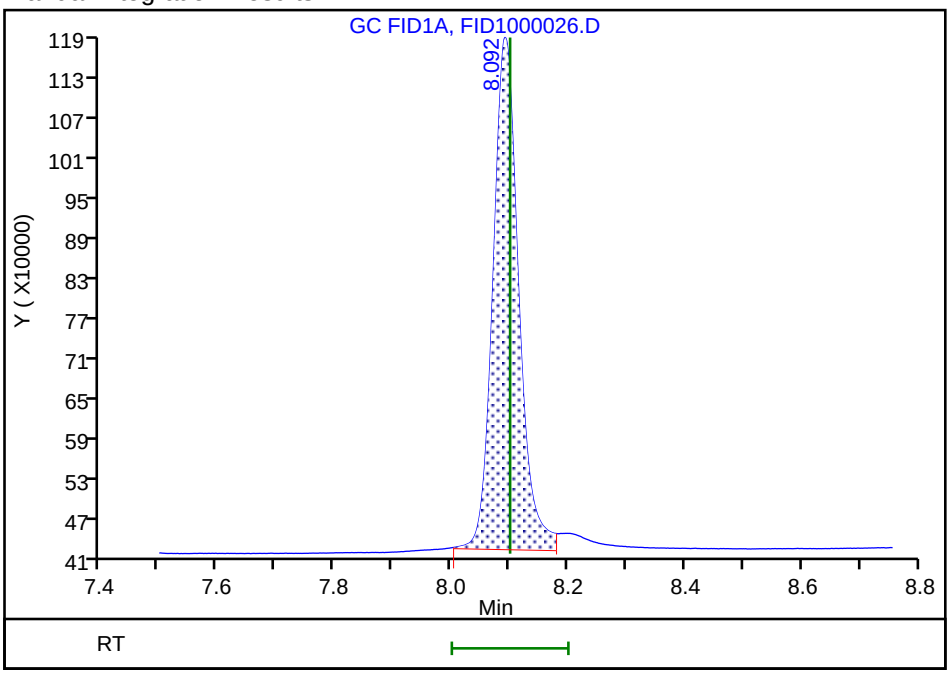
Processing Integration Results

RT: 8.09
Area: 49894839
Amount: 25.982023
Amount Units: mg/L



Manual Integration Results

RT: 8.09
Area: 46247457
Amount: 24.082701
Amount Units: mg/L



Reviewer: luj, 29-Aug-2018 14:10:12

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88255-1
SDG No.:
Client Sample ID: DUP-14
Lab Sample ID: 720-88255-13
Matrix: Water
Lab File ID: FID1000027.D
Analysis Method: 8015B
Date Collected: 08/24/2018 00:00
Extraction Method: 3510C
Date Extracted: 08/28/2018 15:43
Sample wt/vol: 953.9(mL)
Date Analyzed: 08/29/2018 00:22
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250355
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	110		52	31

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	86		23-156

FORM I 8015B

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000027.D
Lims ID: 720-88255-D-13-A
Client ID: DUP-14
Sample Type: Client
Inject. Date: 29-Aug-2018 00:22:43 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053518-027
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\DRO6_A.m
Limit Group: DRO
Last Update: 29-Aug-2018 14:11:25 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK008

First Level Reviewer: luj Date: 29-Aug-2018 14:11:25

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.232			ND	
23 n-Decane	2.133	2.120	0.013	33594	NC	
A 21 Stoddard Solvent	2.736	(1.232-4.240)		1945002	1.09	
A 1 C9-C13	2.736	(1.232-4.240)		1945002	1.10	
A 57 C10-C12	2.867	(2.120-3.613)		1071252	0.6945	
24 Dodecane	3.602	3.613	-0.011	15901	NC	
A 3 C9 - C17	3.781	(1.232-6.330)		5761595	2.95	
A 60 C10-C16	3.985	(2.120-5.850)		3777432	2.16	
A 47 C9 - C18	4.007	(1.232-6.781)		8428622	5.22	
A 25 C9-C19	4.221	(1.232-7.211)		11331851	5.78	
A 15 Kerosene	4.221	(1.232-7.211)		11331851	7.02	
26 C13	4.233	4.240	-0.007	37129	NC	
$ 27 n-Decanoic Acid (Surr)		4.609			ND	U
A 59 C12-C16	4.732	(3.613-5.850)		2722081	1.76	
A 62 C10-C20	4.872	(2.120-7.624)		17517032	11.4	
A 28 C9-C24	5.173	(1.232-9.114)		49602804	32.2	
A 29 C9-C25	5.342	(1.232-9.452)		62623326	40.6	
A 54 C10-C23	5.442	(2.120-8.763)		40944814	26.5	
A 4 C10-C24	5.617	(2.120-9.114)		49427721	32.0	
A 16 C10-C25	5.786	(2.120-9.452)		62448243	40.5	
A 67 C12-C22	5.816	(3.613-8.019)		20033821	13.0	
45 Hexadecane	5.862	5.850	0.012	223973	NC	
A 14 C10-C26	5.950	(2.120-9.779)		69408221	45.0	
A 12 Unknown Hydrocarbons	6.107	(2.120-10.094)		78919433	NC	
A 5 Diesel	6.107	(2.120-10.094)		78919433	51.2	
A 32 C10-C28	6.107	(2.120-10.094)		78919433	51.2	
A 30 C13-C22	6.130	(4.240-8.019)		19356382	12.5	
44 Heptadecane	6.369	6.330	0.039	718488	NC	
A 31 C12-C24	6.364	(3.613-9.114)		48372370	31.4	
A 9 Crude Oil Range Organics (	6.761	(1.232-12.289)		110246096	NC	
A 52 Mineral oil	6.761	(1.232-12.289)		110246096	62.3	
A 11 Bunker Range Organics (C9-	6.761	(1.232-12.289)		110246096	NC	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
51 n-Octadecane	6.737	6.781	-0.044	258605	NC	
A 64 C13-C28	7.167	(4.240-10.094)		77186643	50.0	
A 17 C10-C36	7.205	(2.120-12.289)		110071013	71.4	
33 C19		7.211			ND	
A 13 C9-C40	7.391	(1.232-13.550)		127308153	94.4	
A 68 Crude Oil Range Organics (	7.391	(1.232-13.550)		127308153	NC	
A 58 C16-C24	7.482	(5.850-9.114)		45650289	29.6	
61 icosane	7.632	7.624	0.008	830142	NC	
A 6 C10-C40	7.835	(2.120-13.550)		127133070	94.3	
35 n-Docosane		8.019			ND	
$ 34 p-Terphenyl	8.093	8.100	-0.007	41209078	21.5	M
A 18 C12-C40	8.582	(3.613-13.550)		126077719	93.8	
36 Tricosane	8.708	8.763	-0.055	554324	NC	
A 66 C13-C40	8.895	(4.240-13.550)		125400280	93.4	
A 2 C16-C36 ORO	9.070	(5.850-12.289)		133693001	117.2	
37 n-Tetracosane	9.071	9.114	-0.043	502563	NC	
38 C25	9.390	9.452	-0.062	9316336	NC	
A 19 C16-C40	9.700	(5.850-13.550)		123355638	92.3	
A 20 C19-C36	9.750	(7.211-12.289)		123392277	92.8	
46 n-Hexacosane	9.701	9.779	-0.078	4361550	NC	
A 55 C23-C32	10.010	(8.763-11.257)		58305203	84.0	
39 n-Octacosane	10.055	10.094	-0.039	5117447	NC	
A 40 C24-C36	10.702	(9.114-12.289)		48848087	54.9	
A 7 Motor Oil	10.702	(9.114-12.289)		48848087	54.9	
A 10 C22-C40	10.784	(8.019-13.550)		81793032	65.8	
A 49 C25-C36	10.871	(9.452-12.289)		56939106	63.6	
65 C29	10.918	10.980	-0.062	4121282	NC	
A 41 C23-C40	11.156	(8.763-13.550)		86188256	67.4	
56 Dotriacontane	11.252	11.257	-0.005	4068682	NC	
A 8 C24-C40	11.332	(9.114-13.550)		77705349	63.8	
A 50 C28-C40	11.822	(10.094-13.550)		53331084	56.2	
A 63 C29-C40	12.265	(10.980-13.550)		36073017	41.6	
42 n-Hexatriacontane	12.351	12.289	0.062	3769618	NC	
43 C40		13.550			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
- NC - Not Calibrated

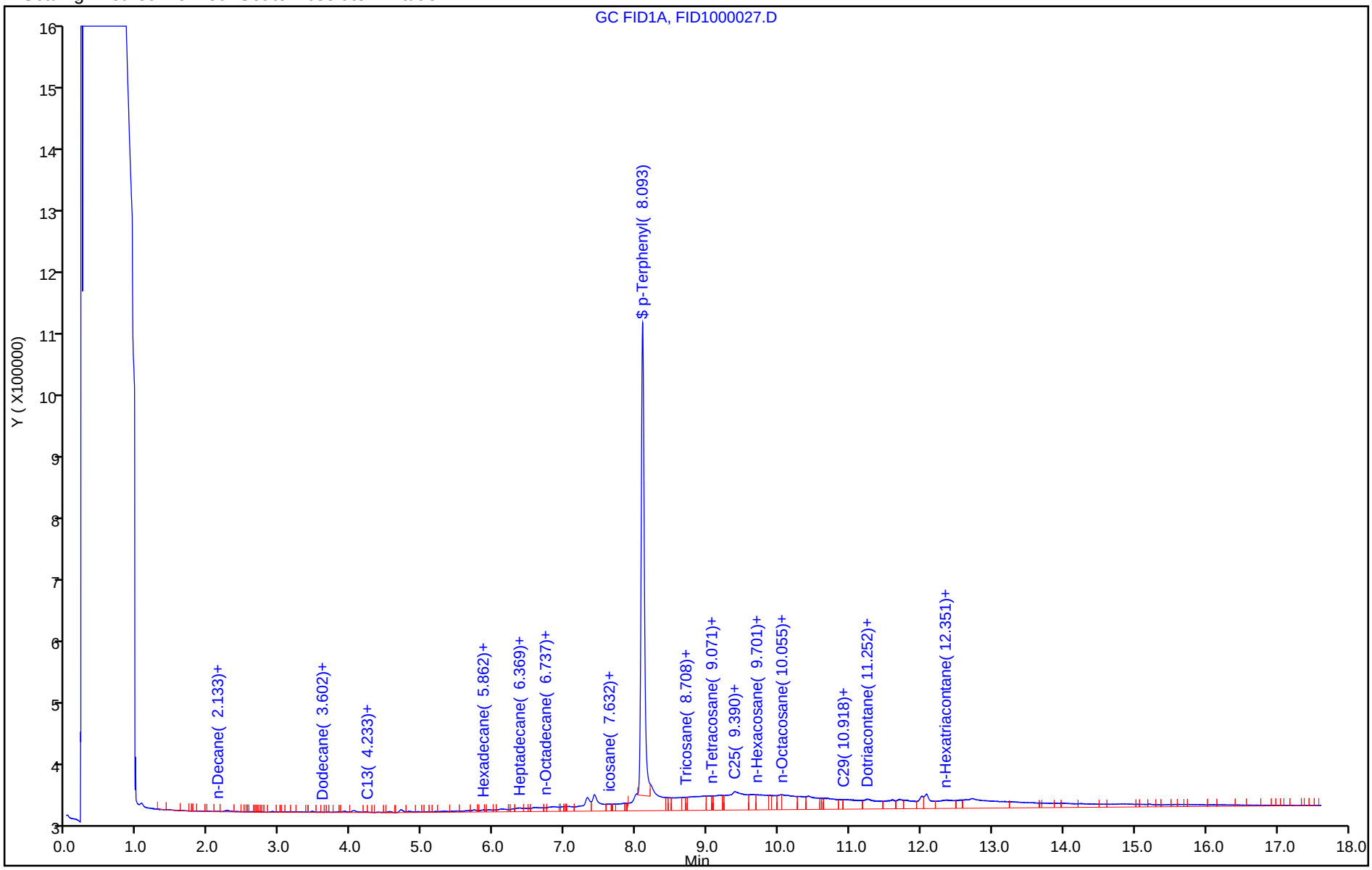
Review Flags
- M - Manually Integrated
- U - Marked Undetected

Report Date: 29-Aug-2018 14:11:27 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000027.D				
Injection Date:	29-Aug-2018 00:22:43	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88255-D-13-A	Lab Sample ID:	720-88255-13	Worklist Smp#:	27
Client ID:	DUP-14				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000027.D
Lims ID: 720-88255-D-13-A
Client ID: DUP-14
Sample Type: Client
Inject. Date: 29-Aug-2018 00:22:43 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053518-027
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\DRO6_A.m
Limit Group: DRO
Last Update: 29-Aug-2018 14:11:25 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK008

First Level Reviewer: luj Date: 29-Aug-2018 14:11:25

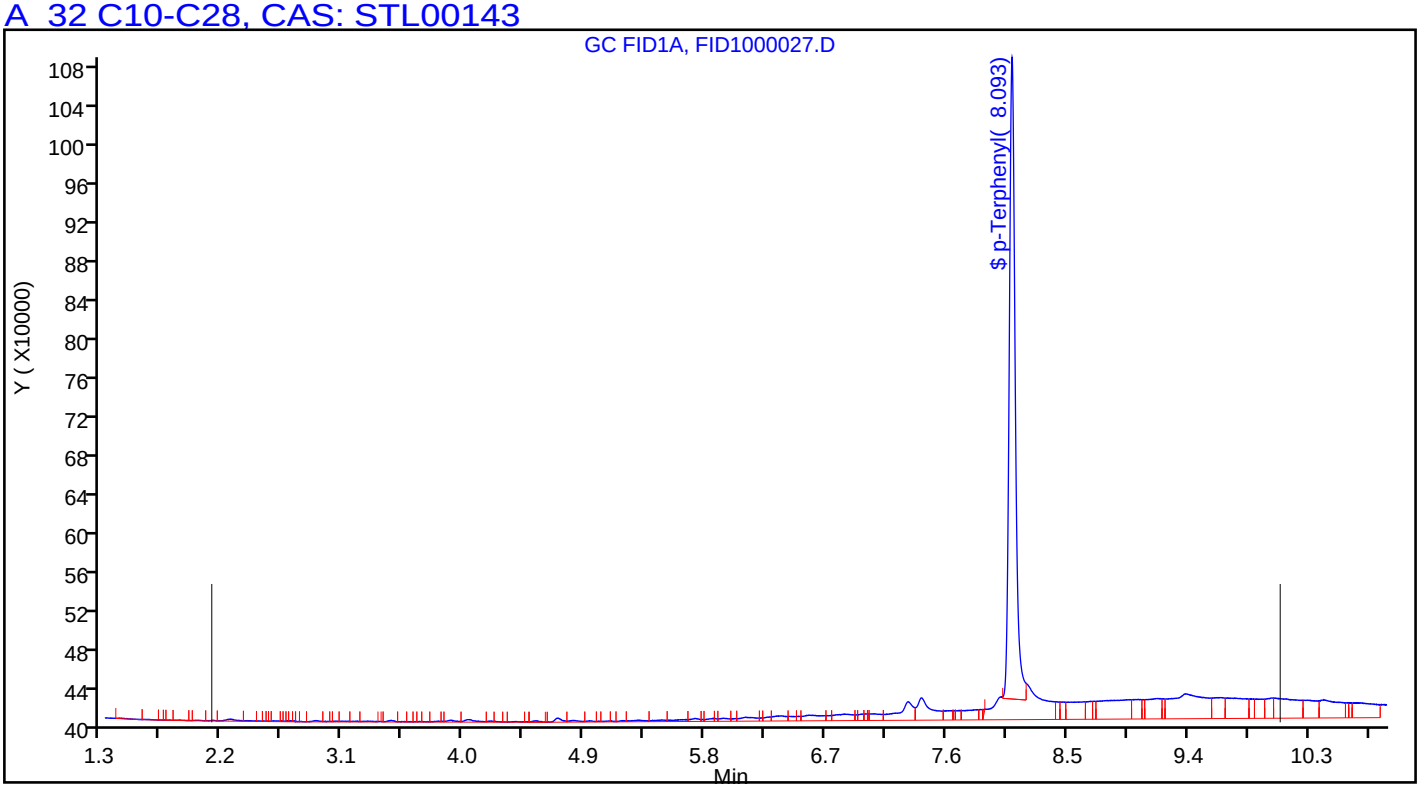
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	21.5	85.84

Report Date: 29-Aug-2018 14:11:28 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000027.D				
Injection Date:	29-Aug-2018 00:22:43	Instrument ID:	CHDRO6		
Lims ID:	720-88255-D-13-A	Lab Sample ID:	720-88255-13		
Client ID:	DUP-14				
Operator ID:	DCH	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

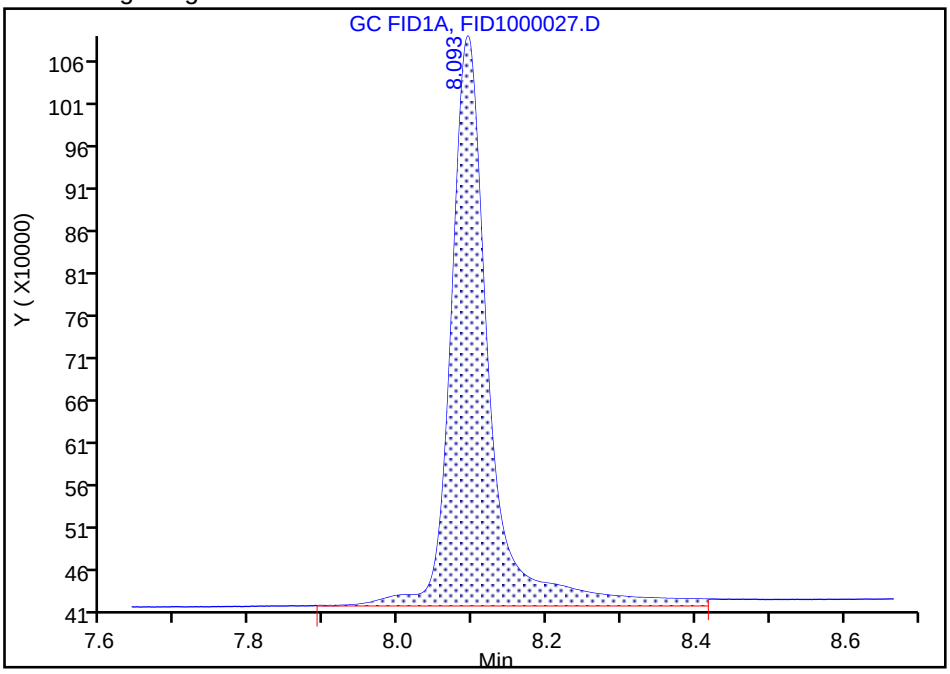
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000027.D				
Injection Date:	29-Aug-2018 00:22:43	Instrument ID:	CHDRO6		
Lims ID:	720-88255-D-13-A	Lab Sample ID:	720-88255-13		
Client ID:	DUP-14				
Operator ID:	DCH	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

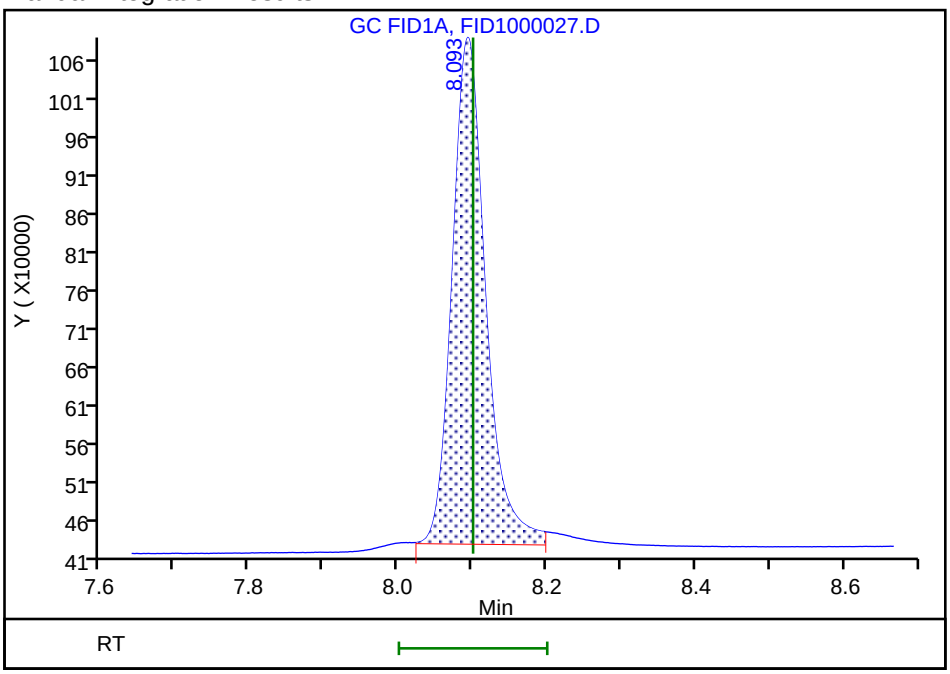
Processing Integration Results

RT: 8.09
Area: 47923753
Amount: 24.955608
Amount Units: mg/L



Manual Integration Results

RT: 8.09
Area: 41209078
Amount: 21.459037
Amount Units: mg/L



Reviewer: luj, 29-Aug-2018 14:11:13

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88255-1
SDG No.:
Client Sample ID: DG-A7W
Lab Sample ID: 720-88255-1
Matrix: Water
Lab File ID: 08311840.D
Analysis Method: 8260B
Date Collected: 08/24/2018 14:05
Sample wt/vol: 10(mL)
Date Analyzed: 09/01/2018 00:50
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250725
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.067
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.074
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	0.50	0.091
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.11
75-34-3	1,1-Dichloroethane	ND		0.50	0.11
563-58-6	1,1-Dichloropropene	ND		0.50	0.20
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.21
96-18-4	1,2,3-Trichloropropane	ND		0.50	0.087
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.20
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.21
107-06-2	1,2-Dichloroethane	ND		0.50	0.077
78-87-5	1,2-Dichloropropane	ND		0.50	0.20
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.17
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.20
142-28-9	1,3-Dichloropropane	ND		1.0	0.17
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.16
594-20-7	2,2-Dichloropropane	ND		0.50	0.17
78-93-3	2-Butanone (MEK)	ND		50	8.4
95-49-8	2-Chlorotoluene	ND		0.50	0.20
591-78-6	2-Hexanone	ND		50	3.0
106-43-4	4-Chlorotoluene	ND		0.50	0.20
99-87-6	4-Isopropyltoluene	ND		1.0	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	4.5
67-64-1	Acetone	ND		50	20
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		1.0	0.20
75-25-2	Bromoform	ND		1.0	0.50
74-83-9	Bromomethane	ND		1.0	0.49
75-15-0	Carbon disulfide	ND	*	5.0	0.78
56-23-5	Carbon tetrachloride	ND		0.50	0.11
108-90-7	Chlorobenzene	ND		0.50	0.13
74-97-5	Chlorobromomethane	ND	*	1.0	0.25

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88255-1
SDG No.:
Client Sample ID: DG-A7W
Lab Sample ID: 720-88255-1
Matrix: Water
Lab File ID: 08311840.D
Analysis Method: 8260B
Date Collected: 08/24/2018 14:05
Sample wt/vol: 10(mL)
Date Analyzed: 09/01/2018 00:50
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250725
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Chlorodibromomethane	ND		0.50	0.10
75-00-3	Chloroethane	ND		1.0	0.17
67-66-3	Chloroform	ND		1.0	0.40
74-87-3	Chloromethane	ND		1.0	0.19
156-59-2	cis-1,2-Dichloroethene	130		0.50	0.076
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
74-95-3	Dibromomethane	ND		0.50	0.30
75-27-4	Dichlorobromomethane	ND		0.50	0.20
75-71-8	Dichlorodifluoromethane	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.13
106-93-4	Ethylene Dibromide	ND		0.50	0.075
STL00350	Gasoline Range Organics (GRO)-C4-C12	280		50	21
87-68-3	Hexachlorobutadiene	ND		1.0	0.27
98-82-8	Isopropylbenzene	ND		0.50	0.20
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.11
75-09-2	Methylene Chloride	ND		5.0	1.5
91-20-3	Naphthalene	ND		1.0	0.22
104-51-8	n-Butylbenzene	ND		1.0	0.30
103-65-1	N-Propylbenzene	ND		1.0	0.20
135-98-8	sec-Butylbenzene	ND		1.0	0.17
100-42-5	Styrene	ND		0.50	0.22
98-06-6	tert-Butylbenzene	ND		1.0	0.20
127-18-4	Tetrachloroethene	5.7		0.50	0.20
108-88-3	Toluene	ND		0.50	0.17
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.17
75-69-4	Trichlorofluoromethane	ND		1.0	0.30
108-05-4	Vinyl acetate	ND		10	0.60
75-01-4	Vinyl chloride	2.6		0.50	0.20
1330-20-7	Xylenes, Total	ND		0.50	0.40

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		72-130
460-00-4	4-Bromofluorobenzene	91		67-130
2037-26-5	Toluene-d8 (Surr)	94		70-130

FORM I 8260B

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53612.b\08311840.D
Lims ID: 720-88255-A-1
Client ID: DG-A7W
Sample Type: Client
Inject. Date: 01-Sep-2018 00:50:30 ALS Bottle#: 13 Worklist Smp#: 15
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88255-A-1
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53612.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 03-Sep-2018 13:53:46 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: phanthasena Date: 03-Sep-2018 13:53:46

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	162235	250.0	
* 2 Fluorobenzene	96	10.720	10.709	0.011	98	1136475	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.564	0.000	85	958024	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	434359	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.305	9.294	0.010	93	74741	7.76	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.811	0.011	0	75650	7.31	
$ 10 Toluene-d8 (Surr)	98	12.821	12.821	0.000	94	317710	7.04	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	91	102093	6.84	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	83	90277	5.94	
$ 6 BFB	95	7.984	6.527	1.457	0	7080	NR	
19 Vinyl chloride	62	4.879	4.884	0.000	96	34087	2.59	
27 Isopropyl alcohol	45	6.390	6.379	0.011	90	46397	59.8	
28 Acetone	58	6.474	6.474	0.000	97	937	1.07	
30 1,1-Dichloroethene	96	7.023	7.041	-0.011	90	9935	1.34	
34 Methylene Chloride	84	7.203	7.182	0.000	86	1664	0.1939	
38 trans-1,2-Dichloroethene	96	7.984	7.982	0.010	92	244755	26.1	
48 cis-1,2-Dichloroethene	61	8.924	8.933	0.000	83	2307199	126.6	
59 Benzene	78	10.477	10.498	-0.010	84	1497	0.0365	
65 Trichloroethene	132	11.206	11.217	0.000	94	3027878	239.8	E
75 Toluene	92	12.906	12.906	0.000	27	1953	0.0634	
81 Tetrachloroethene	164	13.793	13.807	0.000	94	55969	5.67	
131 Butyl Ether	87	14.775	14.775	0.000	93	3282	0.4036	
124 Butane	43	5.006	4.996	0.010	89	16303	NR	
138 n-Nonane	43	15.177	15.198	-0.021	1	959	NR	
126 Dodecane	57	20.056	20.088	-0.032	81	1929	NR	
125 C13	43	21.514	21.556	-0.042	86	2259	NR	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	24541446	279.8	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	22167612	252.7	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	22634329	258.1	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	24935203	284.3	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	22775229	NC	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
A 119 C6-C10	1	12.843	(8.671-17.014)		0	22775229	259.7	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	24715938	281.8	
A 120 C6-C12	1	14.400	(8.671-20.130)		0	23168986	264.2	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	685264	7.81	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	16485660	188.0	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

NC - Not Calibrated

E - Exceeded Maximum Amount

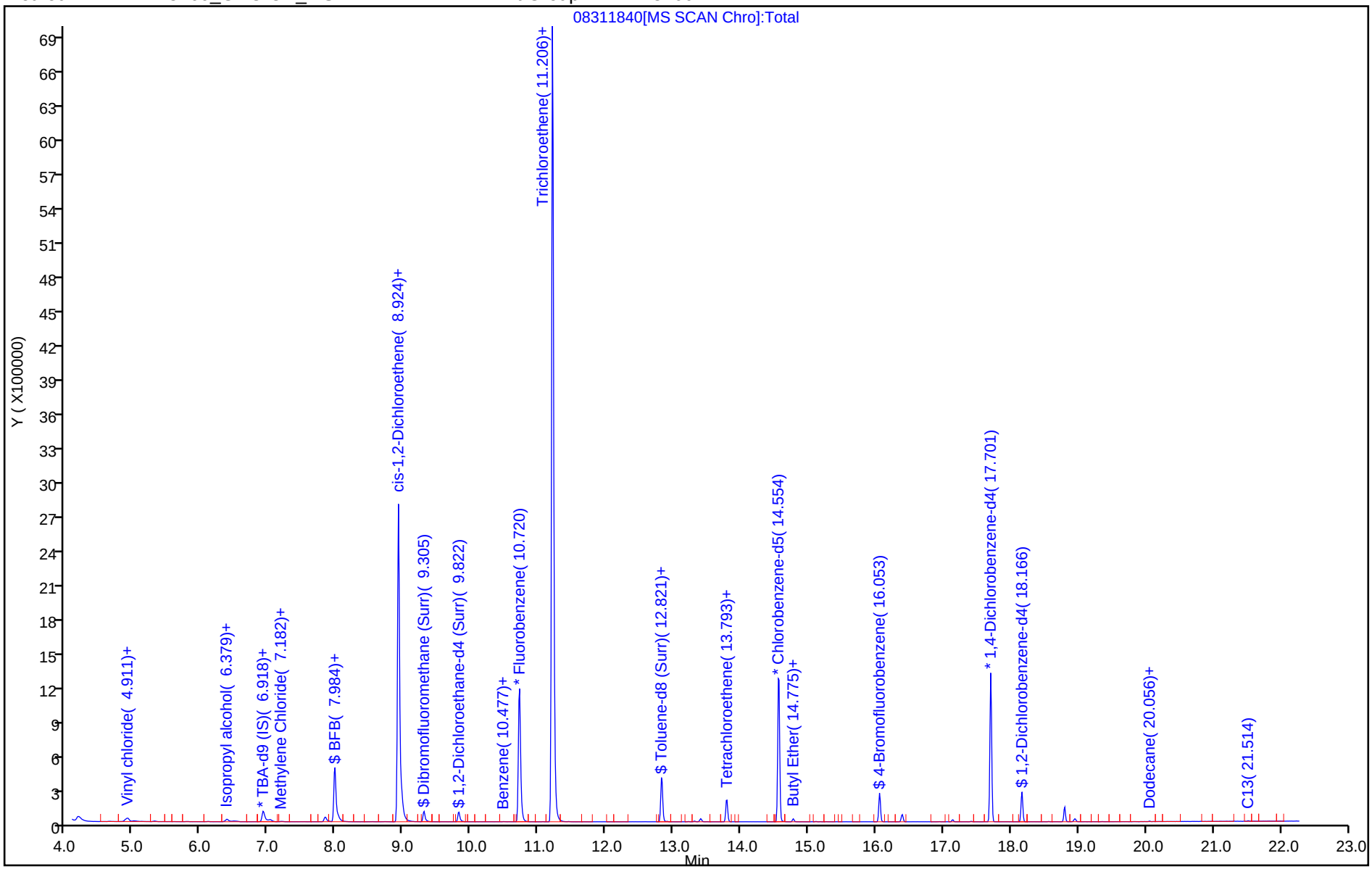
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 03-Sep-2018 13:53:47 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53612.b\08311840.D				
Injection Date:	01-Sep-2018 00:50:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88255-A-1	Lab Sample ID:	720-88255-1	Worklist Smp#:	15
Client ID:	DG-A7W				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53612.b\08311840.D
Lims ID: 720-88255-A-1
Client ID: DG-A7W
Sample Type: Client
Inject. Date: 01-Sep-2018 00:50:30 ALS Bottle#: 13 Worklist Smp#: 15
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88255-A-1
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53612.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 03-Sep-2018 13:53:46 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: phanthasena Date: 03-Sep-2018 13:53:46

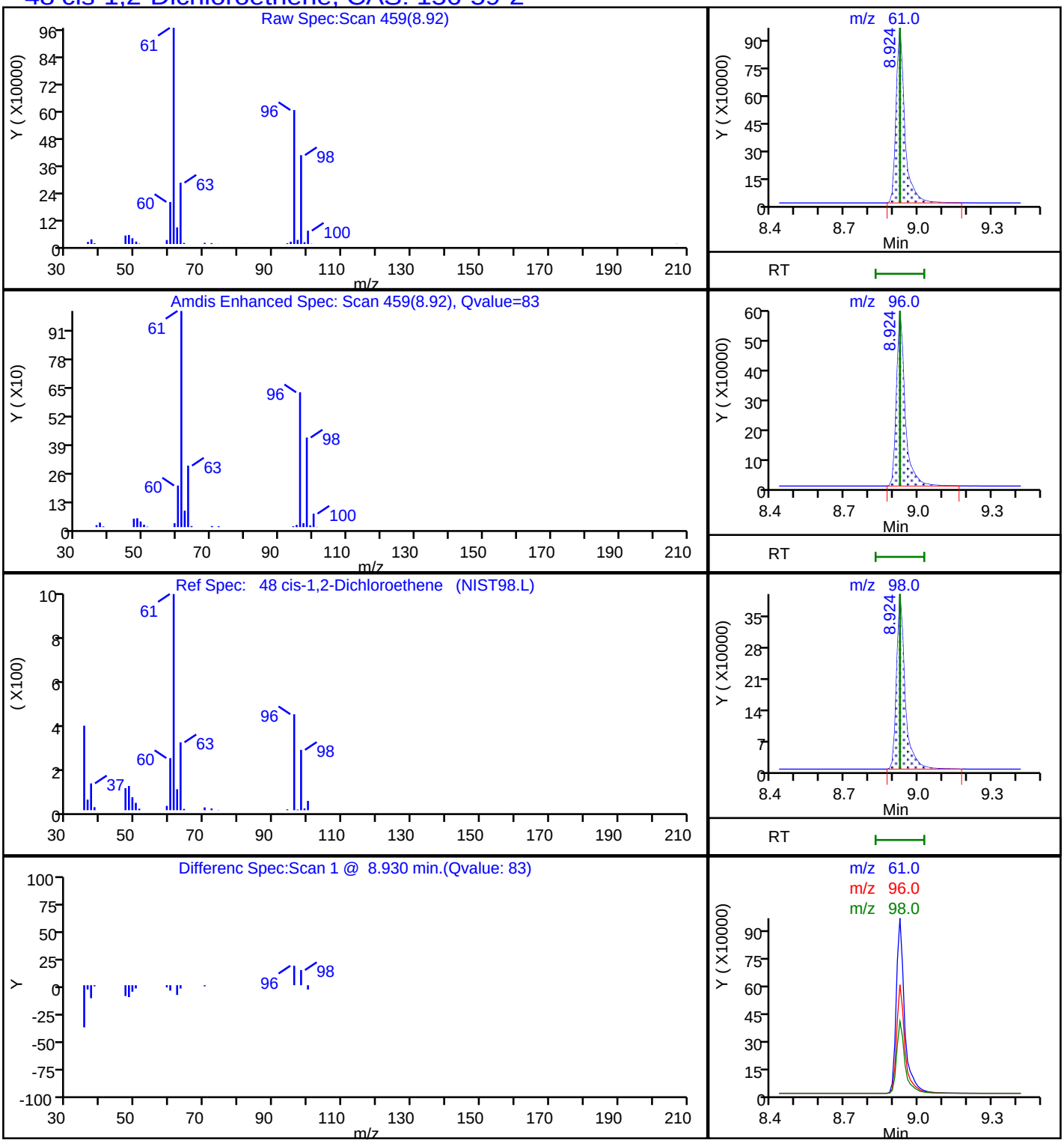
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.31	97.53
$ 10 Toluene-d8 (Surr)	7.50	7.04	93.87
$ 11 4-Bromofluorobenzene	7.50	6.84	91.25
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00
$ 6 BFB	0.0	0	0.00

Report Date: 03-Sep-2018 13:53:48 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53612.b\08311840.D				
Injection Date:	01-Sep-2018 00:50:30	Instrument ID:	CHMSV2		
Lims ID:	720-88255-A-1	Lab Sample ID:	720-88255-1		
Client ID:	DG-A7W				
Operator ID:	VOA	ALS Bottle#:	13	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

48 cis-1,2-Dichloroethene, CAS: 156-59-2

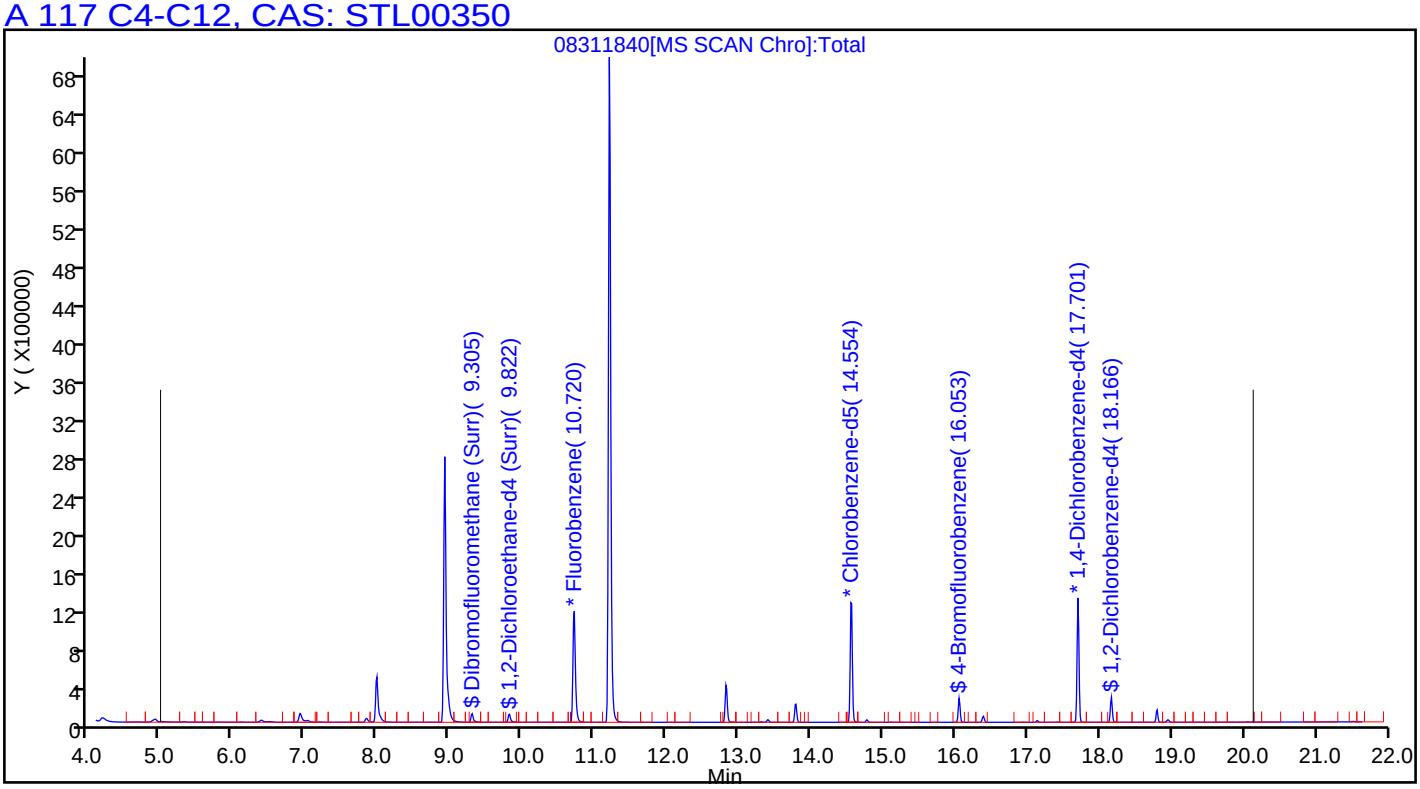


Report Date: 03-Sep-2018 13:53:49 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53612.b\08311840.D				
Injection Date:	01-Sep-2018 00:50:30	Instrument ID:	CHMSV2		
Lims ID:	720-88255-A-1	Lab Sample ID:	720-88255-1		
Client ID:	DG-A7W				
Operator ID:	VOA	ALS Bottle#:	13	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350

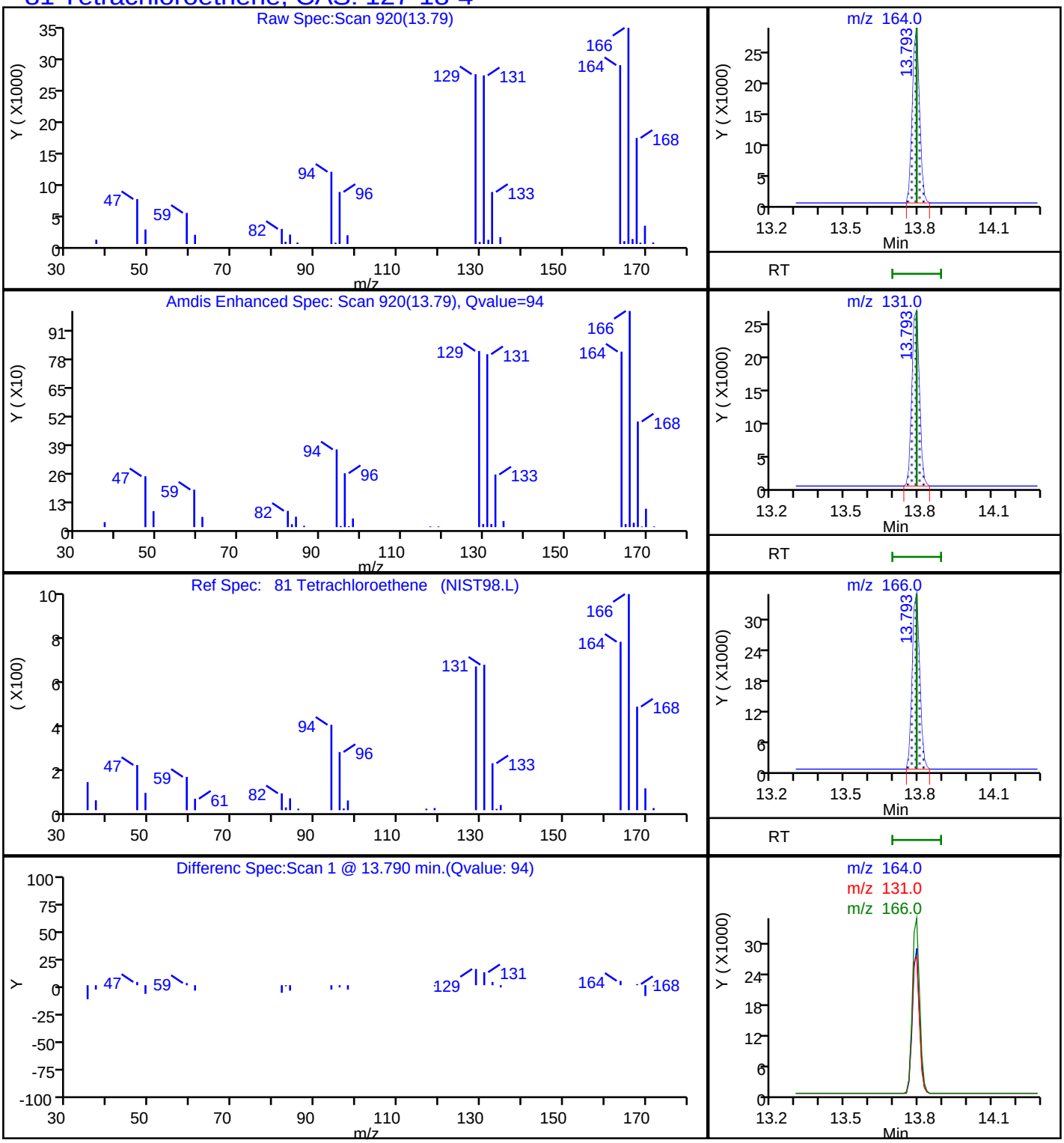


Report Date: 03-Sep-2018 13:53:48 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53612.b\08311840.D				
Injection Date:	01-Sep-2018 00:50:30	Instrument ID:	CHMSV2		
Lims ID:	720-88255-A-1	Lab Sample ID:	720-88255-1		
Client ID:	DG-A7W				
Operator ID:	VOA	ALS Bottle#:	13	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

81 Tetrachloroethene, CAS: 127-18-4

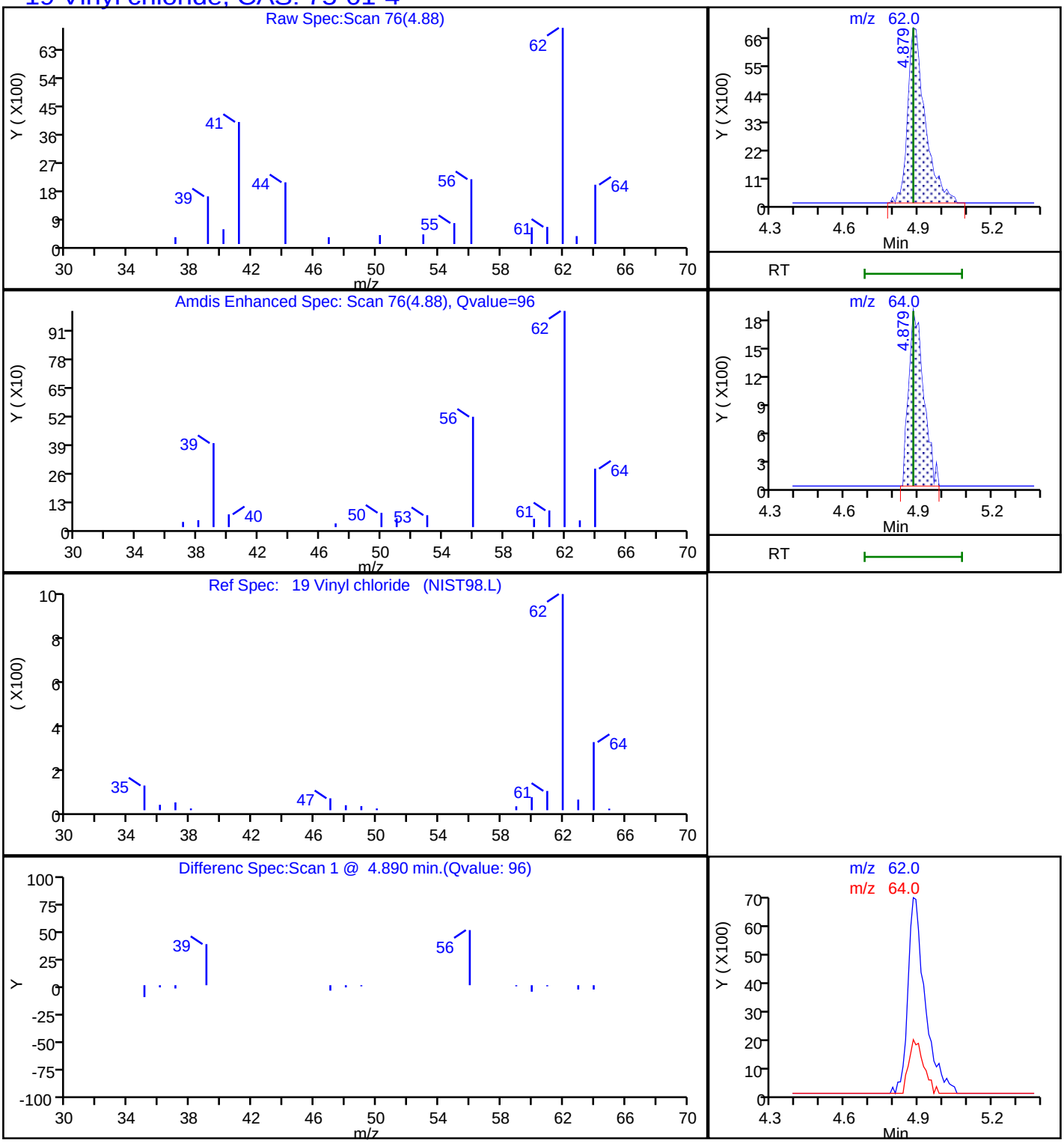


Report Date: 03-Sep-2018 13:53:47 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53612.b\08311840.D				
Injection Date:	01-Sep-2018 00:50:30	Instrument ID:	CHMSV2		
Lims ID:	720-88255-A-1	Lab Sample ID:	720-88255-1		
Client ID:	DG-A7W				
Operator ID:	VOA	ALS Bottle#:	13	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

19 Vinyl chloride, CAS: 75-01-4



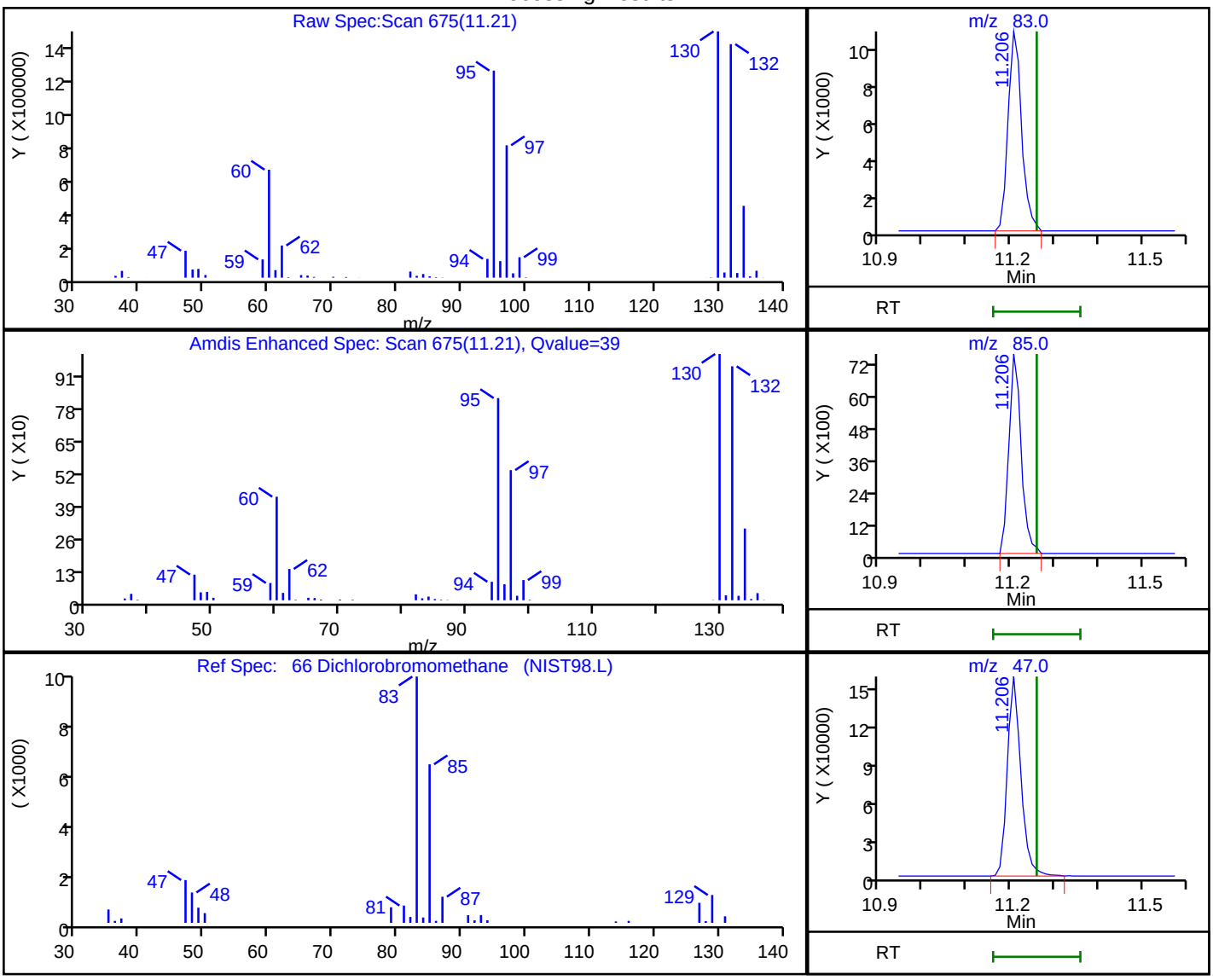
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53612.b\08311840.D				
Injection Date:	01-Sep-2018 00:50:30	Instrument ID:	CHMSV2		
Lims ID:	720-88255-A-1	Lab Sample ID:	720-88255-1		
Client ID:	DG-A7W				
Operator ID:	VOA	ALS Bottle#:	13	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

66 Dichlorobromomethane, CAS: 75-27-4

Processing Results



RT	Mass	Response	Amount
11.21	83.00	23282	1.860930
11.21	85.00	14809	
11.21	47.00	333008	

Reviewer: phanthasena, 03-Sep-2018 13:53:18

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88255-1

SDG No.:

Client Sample ID: DG-A7W Lab Sample ID: 720-88255-1

Matrix: Water Lab File ID: 09041838.D

Analysis Method: 8260B Date Collected: 08/24/2018 14:05

Sample wt/vol: 10(mL) Date Analyzed: 09/05/2018 00:52

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250832 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	ND		5.0	2.0
156-60-5	trans-1,2-Dichloroethene	24		5.0	1.3
79-01-6	Trichloroethene	200		5.0	2.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		72-130
460-00-4	4-Bromofluorobenzene	94		67-130
2037-26-5	Toluene-d8 (Surr)	99		70-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180904-53647.b\09041838.D
Lims ID: 720-88255-B-1
Client ID: DG-A7W
Sample Type: Client
Inject. Date: 05-Sep-2018 00:52:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 10.000 mL Dil. Factor: 10.0000
Sample Info: 720-88255-b-1 RR10X
Misc. Info.: HP-4
Operator ID: SF Instrument ID: HP4

Method: \\ChromNA\Pleasanton\ChromData\HP4\20180904-53647.b\8260W_LL_GRO_HP4.m
Limit Group: 8260B
Last Update: 05-Sep-2018 07:53:42 Calib Date: 26-Jul-2018 01:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP4\20180725-52939.b\07251826.D

Column 1 : DB-VRX (250.00 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: medinaj Date: 05-Sep-2018 10:39:18

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.360	7.360	0.000	97	377428	250.0	
* 2 Fluorobenzene	96	11.167	11.177	-0.010	97	1681259	25.0	
* 3 Chlorobenzene-d5	117	15.035	15.035	0.000	89	1245428	25.0	
* 4 1,4-Dichlorobenzene-d4	152	18.192	18.192	0.000	97	622367	25.0	
$ 5 Dibromofluoromethane (Surr	113	9.756	9.757	-0.010	93	123111	7.91	
$ 6 1,2-Dichloroethane-d4 (Sur	65	10.273	10.274	-0.010	0	148720	7.79	
$ 8 Toluene-d8 (Surr)	98	13.289	13.276	0.000	94	483237	7.46	
$ 9 4-Bromofluorobenzene	95	16.527	16.537	-0.010	89	175749	7.03	
$ 10 1,2-Dichlorobenzene-d4	152	18.659	18.659	0.000	86	138463	6.00	
14 Vinyl chloride	62	5.340	5.314	0.021	62	8253	0.3140	
24 Acetone	58	6.923	6.907	0.010	99	6175	3.65	
27 1,1-Dichloroethene	96	7.461	7.475	-0.021	11	2586	0.1744	
31 Methylene Chloride	84	7.634	7.627	0.000	96	39020	2.45	
37 trans-1,2-Dichloroethene	96	8.426	8.428	-0.010	94	38974	2.43	
47 cis-1,2-Dichloroethene	61	9.380	9.371	0.000	84	313216	10.0	
49 Ethyl acetate	43	9.553	9.544	0.000	17	2405	0.1277	
62 Benzene	78	10.943	10.933	0.000	1	1324	0.0197	
69 Trichloroethene	132	11.674	11.664	0.000	95	362475	19.8	
80 Toluene	92	13.360	13.370	-0.010	94	1498	0.0282	
82 Ethyl methacrylate	69	13.299	13.388	-0.101	34	1410	0.0818	
87 Tetrachloroethene	164	14.263	14.250	0.000	92	8187	0.5027	
93 m-Xylene & p-Xylene	91	15.512	15.522	-0.010	1	1318	0.0193	
126 Butane	43	5.472	5.461	0.011	1	1737	NR	
A 158 C6-C8	1	11.456	(9.106-13.806)		0	3227765	19.0	
A 134 C4-C10	1	11.466	(5.451-17.481)		0	4235118	24.9	
A 159 C6-C9	1	12.400	(9.106-15.694)		0	3508719	20.7	
A 136 C4-C12	1	13.024	(5.451-20.598)		0	4434338	26.1	
A 137 C6-C10	1	13.294	(9.106-17.481)		0	3629248	21.4	
A 138 C5-C12	1	13.826	(7.055-20.598)		0	4334577	25.5	
A 139 C6-C12	1	14.852	(9.106-20.598)		0	3828468	22.5	
A 160 C8-C10	1	15.598	(13.715-17.481)		0	401483	2.36	

Report Date: 05-Sep-2018 10:39:19 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180904-53647.b\09041838.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
A 141 C7-C12	1	16.029	(11.461-20.598)		0	2762470	16.3	
S 142 Xylenes, Total	1				0		0.0193	
T 156 Paraldehyde TIC	45	13.268	13.266	-0.010	0	395	0.3620	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

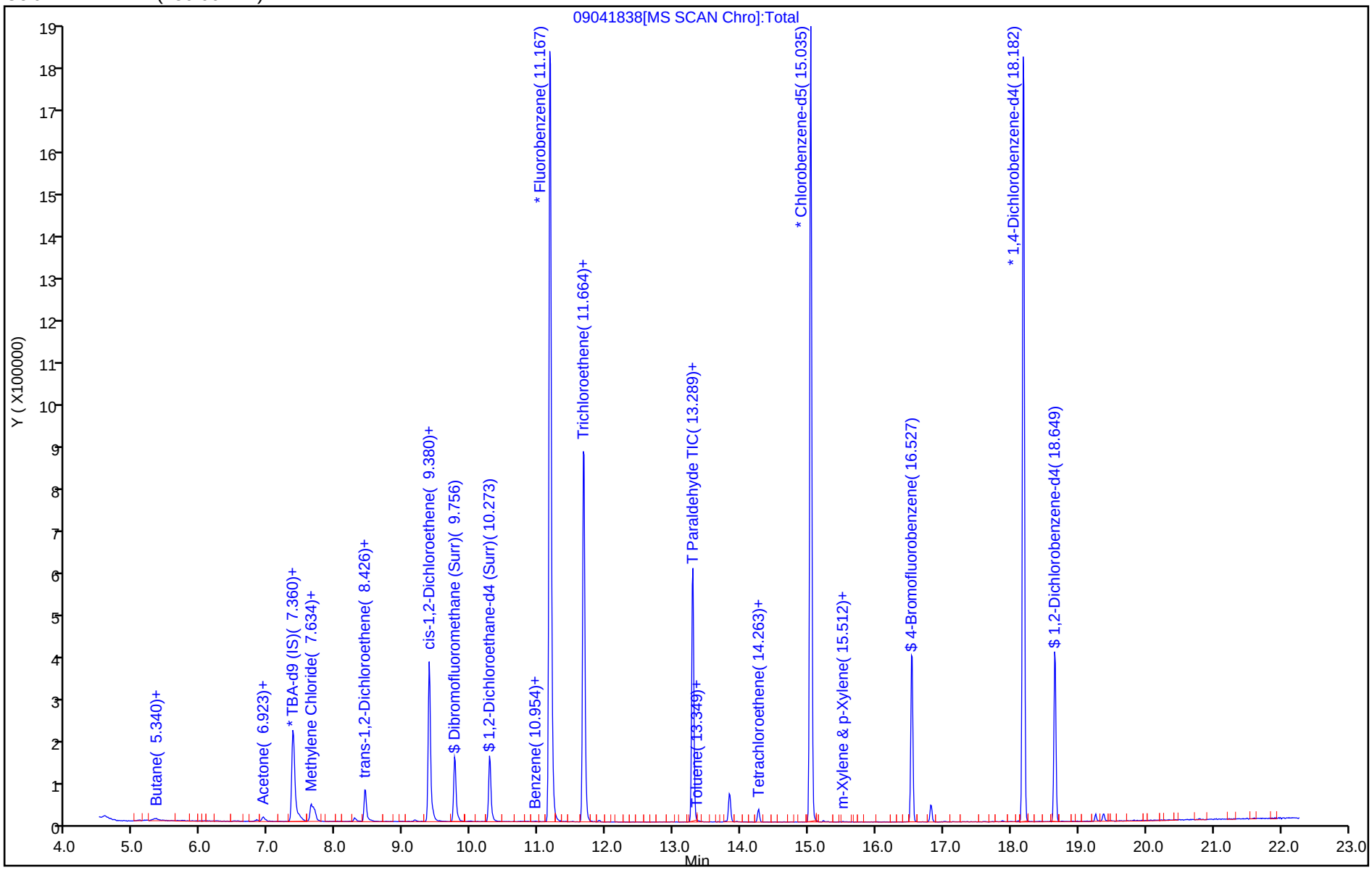
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 05-Sep-2018 10:39:19 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180904-53647.b\09041838.D				
Injection Date:	05-Sep-2018 00:52:30	Instrument ID:	HP4	Operator ID:	SF
Lims ID:	720-88255-B-1	Lab Sample ID:	720-88255-1	Worklist Smp#:	12
Client ID:	DG-A7W				
Purge Vol:	10.000 mL	Dil. Factor:	10.0000	ALS Bottle#:	11
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		

Column: DB-VRX (250.00 mm)



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180904-53647.b\09041838.D				
Lims ID:	720-88255-B-1				
Client ID:	DG-A7W				
Sample Type:	Client				
Inject. Date:	05-Sep-2018 00:52:30	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	10.0000		
Sample Info:	720-88255-b-1 RR10X				
Misc. Info.:	HP-4				
Operator ID:	SF	Instrument ID:	HP4		
Method:	\\ChromNA\Pleasanton\ChromData\HP4\20180904-53647.b\8260W_LL_GRO_HP4.m				
Limit Group:	8260B				
Last Update:	05-Sep-2018 07:53:42	Calib Date:	26-Jul-2018 01:42:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\HP4\20180725-52939.b\07251826.D				
Column 1 :	DB-VRX (250.00 mm)		Det: MS SCAN		
Process Host:	XAWRK013				

First Level Reviewer: medinaj Date: 05-Sep-2018 10:39:18

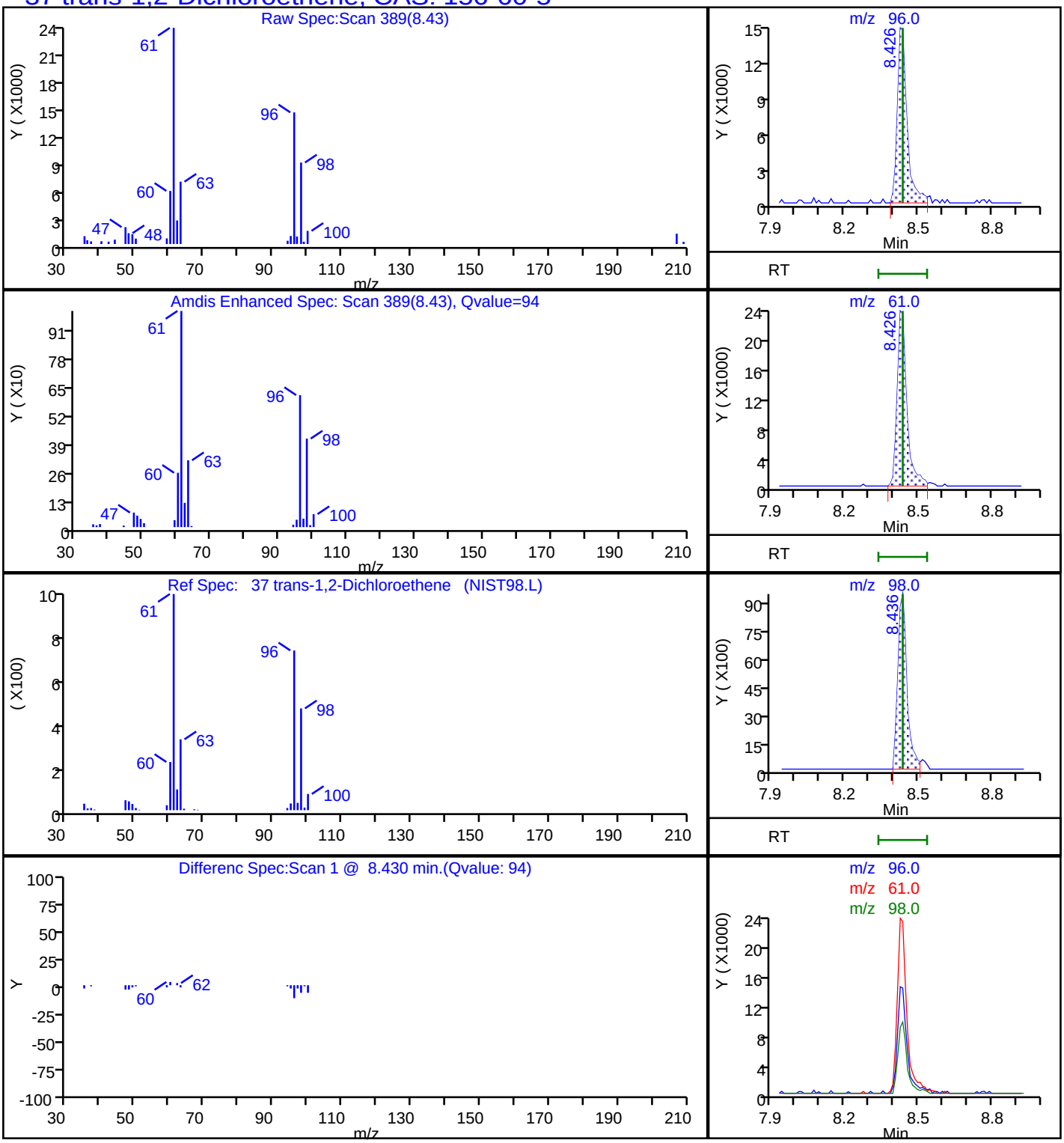
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 6 1,2-Dichloroethane-d4 (Surr)	7.50	7.79	103.81
$ 8 Toluene-d8 (Surr)	7.50	7.46	99.46
$ 9 4-Bromofluorobenzene	7.50	7.03	93.71
$ 10 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 05-Sep-2018 10:39:19 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180904-53647.b\09041838.D				
Injection Date:	05-Sep-2018 00:52:30	Instrument ID:	HP4		
Lims ID:	720-88255-B-1	Lab Sample ID:	720-88255-1		
Client ID:	DG-A7W				
Operator ID:	SF	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	10.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

37 trans-1,2-Dichloroethene, CAS: 156-60-5

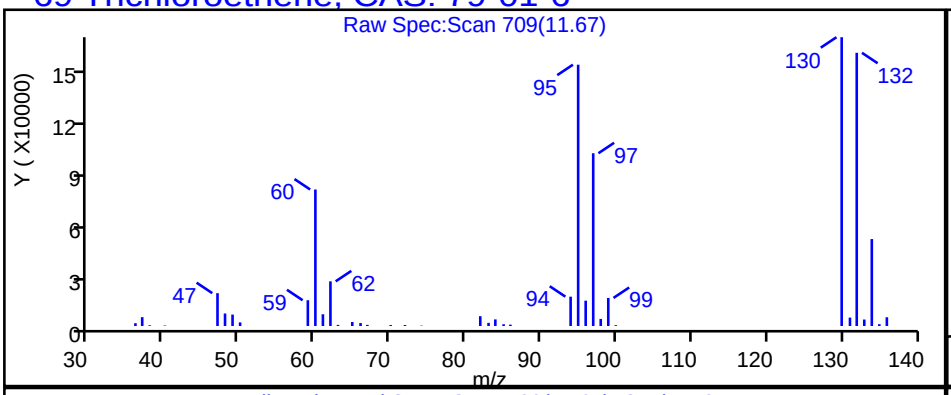


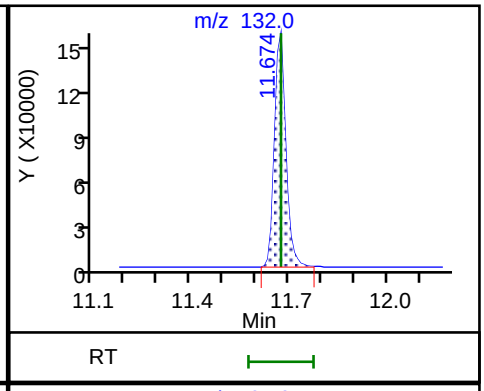
Report Date: 05-Sep-2018 10:39:19 Chrom Revision: 2.3 19-Jul-2018 15:14:50

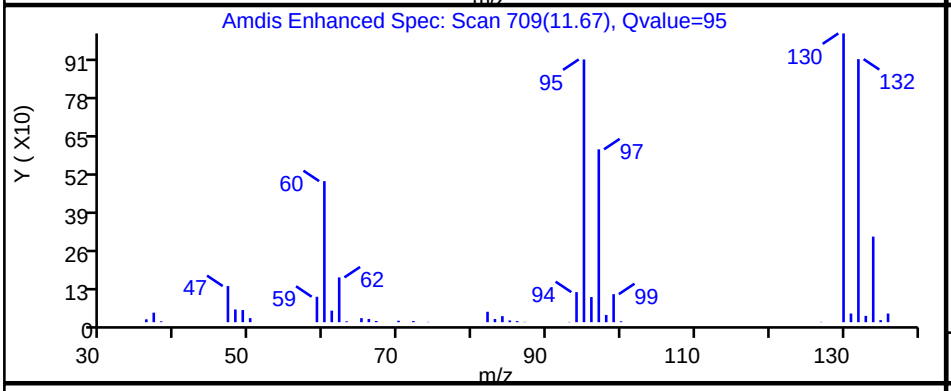
TestAmerica Pleasanton

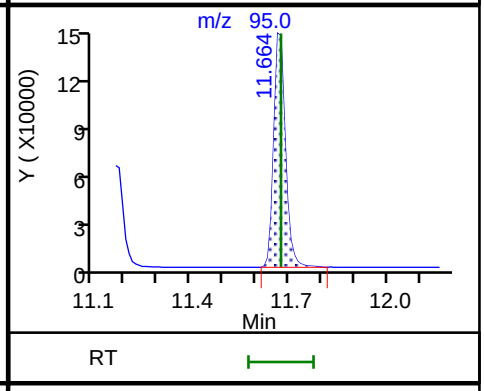
Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180904-53647.b\09041838.D				
Injection Date:	05-Sep-2018 00:52:30	Instrument ID:	HP4		
Lims ID:	720-88255-B-1	Lab Sample ID:	720-88255-1		
Client ID:	DG-A7W				
Operator ID:	SF	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	10.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

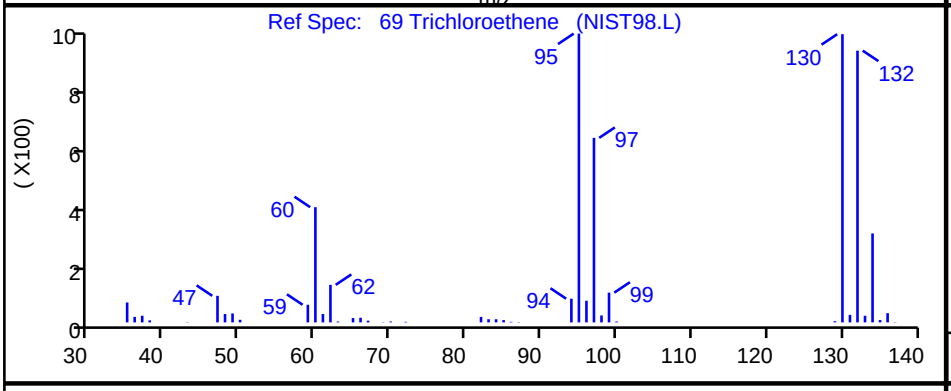
69 Trichloroethene, CAS: 79-01-6

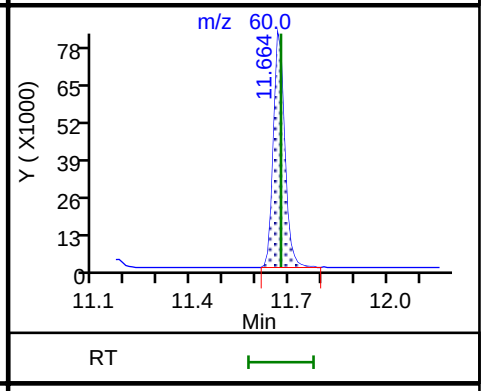


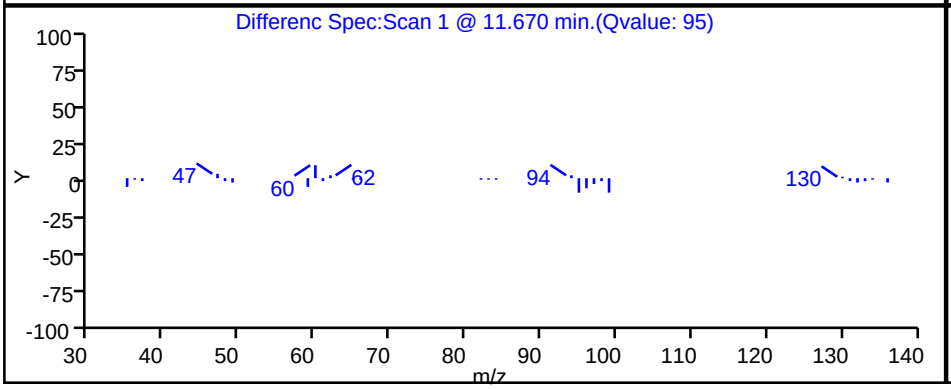


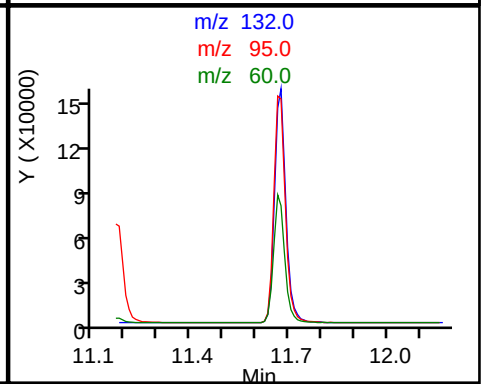












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88255-1

SDG No.:

Client Sample ID: DG-C7W Lab Sample ID: 720-88255-2

Matrix: Water Lab File ID: 08311819.D

Analysis Method: 8260B Date Collected: 08/24/2018 14:15

Sample wt/vol: 10(mL) Date Analyzed: 08/31/2018 14:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250641 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.067
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.074
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	0.50	0.091
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.11
75-34-3	1,1-Dichloroethane	ND		0.50	0.11
75-35-4	1,1-Dichloroethene	ND	*	0.50	0.20
563-58-6	1,1-Dichloropropene	ND		0.50	0.20
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.21
96-18-4	1,2,3-Trichloropropane	ND		0.50	0.087
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.20
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.21
107-06-2	1,2-Dichloroethane	ND		0.50	0.077
78-87-5	1,2-Dichloropropane	ND		0.50	0.20
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.17
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.20
142-28-9	1,3-Dichloropropane	ND		1.0	0.17
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.16
594-20-7	2,2-Dichloropropane	ND		0.50	0.17
78-93-3	2-Butanone (MEK)	ND		50	8.4
95-49-8	2-Chlorotoluene	ND		0.50	0.20
591-78-6	2-Hexanone	ND		50	3.0
106-43-4	4-Chlorotoluene	ND		0.50	0.20
99-87-6	4-Isopropyltoluene	ND		1.0	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	4.5
67-64-1	Acetone	ND		50	20
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		1.0	0.20
75-25-2	Bromoform	ND		1.0	0.50
74-83-9	Bromomethane	ND		1.0	0.49
75-15-0	Carbon disulfide	ND	*	5.0	0.78
56-23-5	Carbon tetrachloride	ND		0.50	0.11
108-90-7	Chlorobenzene	ND		0.50	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88255-1
SDG No.:
Client Sample ID: DG-C7W
Lab Sample ID: 720-88255-2
Matrix: Water
Lab File ID: 08311819.D
Analysis Method: 8260B
Date Collected: 08/24/2018 14:15
Sample wt/vol: 10(mL)
Date Analyzed: 08/31/2018 14:45
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX
ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250641
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-97-5	Chlorobromomethane	ND		1.0	0.25
124-48-1	Chlorodibromomethane	ND		0.50	0.10
75-00-3	Chloroethane	ND		1.0	0.17
67-66-3	Chloroform	ND		1.0	0.40
74-87-3	Chloromethane	ND		1.0	0.19
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.076
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
74-95-3	Dibromomethane	ND		0.50	0.30
75-27-4	Dichlorobromomethane	ND		0.50	0.20
75-71-8	Dichlorodifluoromethane	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.13
106-93-4	Ethylene Dibromide	ND		0.50	0.075
STL00350	Gasoline Range Organics (GRO)-C4-C12	24	J	50	21
87-68-3	Hexachlorobutadiene	ND		1.0	0.27
98-82-8	Isopropylbenzene	ND		0.50	0.20
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.11
75-09-2	Methylene Chloride	ND	*	5.0	1.5
91-20-3	Naphthalene	ND		1.0	0.22
104-51-8	n-Butylbenzene	ND		1.0	0.30
103-65-1	N-Propylbenzene	ND		1.0	0.20
135-98-8	sec-Butylbenzene	ND		1.0	0.17
100-42-5	Styrene	ND		0.50	0.22
98-06-6	tert-Butylbenzene	ND		1.0	0.20
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	ND	*	0.50	0.13
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.17
79-01-6	Trichloroethene	1.2		0.50	0.20
75-69-4	Trichlorofluoromethane	ND		1.0	0.30
108-05-4	Vinyl acetate	ND		10	0.60
75-01-4	Vinyl chloride	ND		0.50	0.20
1330-20-7	Xylenes, Total	ND		0.50	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88255-1

SDG No.:

Client Sample ID: DG-C7W Lab Sample ID: 720-88255-2

Matrix: Water Lab File ID: 08311819.D

Analysis Method: 8260B Date Collected: 08/24/2018 14:15

Sample wt/vol: 10(mL) Date Analyzed: 08/31/2018 14:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250641 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		72-130
460-00-4	4-Bromofluorobenzene	94		67-130
2037-26-5	Toluene-d8 (Surr)	95		70-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\08311819.D
Lims ID: 720-88255-A-2
Client ID: DG-C7W
Sample Type: Client
Inject. Date: 31-Aug-2018 14:45:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88255-A-2
Operator ID: SF Instrument ID: HP9

Method: \\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\HP9_8260_LL.m
Limit Group: 8260B
Last Update: 03-Sep-2018 13:21:52 Calib Date: 23-Aug-2018 18:09:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP9\20180823-53445.b\08231828.D

Column 1 : Det: MS SCAN
Process Host: XAWRK020

First Level Reviewer: chaijita Date: 03-Sep-2018 13:21:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.159	7.159	0.000	0	54231	250.0	
* 2 Fluorobenzene	96	10.936	10.936	0.000	99	573152	25.0	
* 4 Chlorobenzene-d5	117	14.764	14.764	0.000	81	473548	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.903	17.903	0.000	92	264578	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.528	9.528	0.000	53	44627	7.67	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.045	10.045	0.000	0	28925	7.21	
$ 10 Toluene-d8 (Surr)	98	13.032	13.032	0.000	91	149274	7.12	
$ 11 4-Bromofluorobenzene	95	16.252	16.252	0.000	86	53954	7.03	
$ 12 1,2-Dichlorobenzene-d4	152	18.358	18.358	0.000	72	59898	5.87	
19 Vinyl chloride	62	5.063	5.083	-0.020	1	2906	0.1628	
28 Acetone	58	6.713	6.713	0.000	87	1092	4.02	
65 Trichloroethene	132	11.422	11.432	-0.010	68	9002	1.22	
144 Methylcyclohexane	83	12.019	12.029	-0.011	1	947	0.0584	
127 Butyl Ether	87	14.966	14.966	0.000	52	755	0.1656	
A 116 C4-C10	1	11.189	(5.123-17.255)		0	963591	17.9	
A 153 C6-C8	1	11.194	(8.890-13.498)		0	248390	4.61	
A 154 C6-C9	1	12.161	(8.890-15.432)		0	394027	7.32	
A 117 C4-C12	1	12.738	(5.123-20.353)		0	1316704	24.4	
A 123 Aviation Gas	1	12.992	(8.890-17.093)		0	537767	NC	
A 119 C6-C10	1	13.073	(8.890-17.255)		0	545545	10.1	
A 118 C5-C12	1	13.528	(6.703-20.353)		0	1056021	19.6	
A 120 C6-C12	1	14.622	(8.890-20.353)		0	898658	16.7	
A 155 C8-C10	1	15.336	(13.417-17.255)		0	301661	5.60	
A 121 C7-C12	1	15.786	(11.219-20.353)		0	768276	14.3	

QC Flag Legend

Processing Flags

NC - Not Calibrated

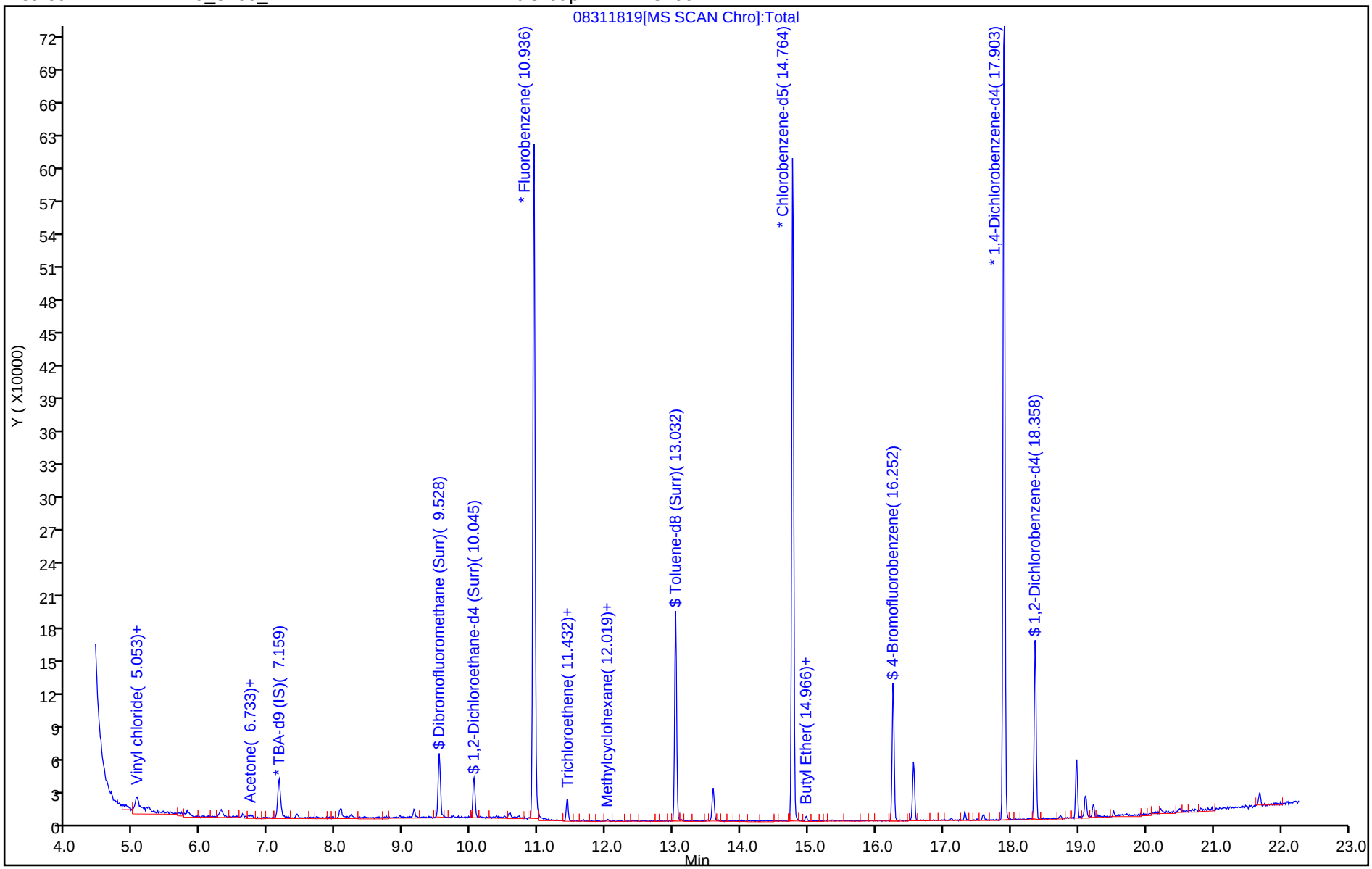
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 03-Sep-2018 13:21:53 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\08311819.D				
Injection Date:	31-Aug-2018 14:45:30	Instrument ID:	HP9	Operator ID:	SF
Lims ID:	720-88255-A-2	Lab Sample ID:	720-88255-2	Worklist Smp#:	19
Client ID:	DG-C7W				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	HP9_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\08311819.D
Lims ID: 720-88255-A-2
Client ID: DG-C7W
Sample Type: Client
Inject. Date: 31-Aug-2018 14:45:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88255-A-2
Operator ID: SF Instrument ID: HP9

Method: \\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\HP9_8260_LL.m
Limit Group: 8260B
Last Update: 03-Sep-2018 13:21:52 Calib Date: 23-Aug-2018 18:09:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP9\20180823-53445.b\08231828.D

Column 1 : Det: MS SCAN
Process Host: XAWRK020

First Level Reviewer: chaijita Date: 03-Sep-2018 13:21:52

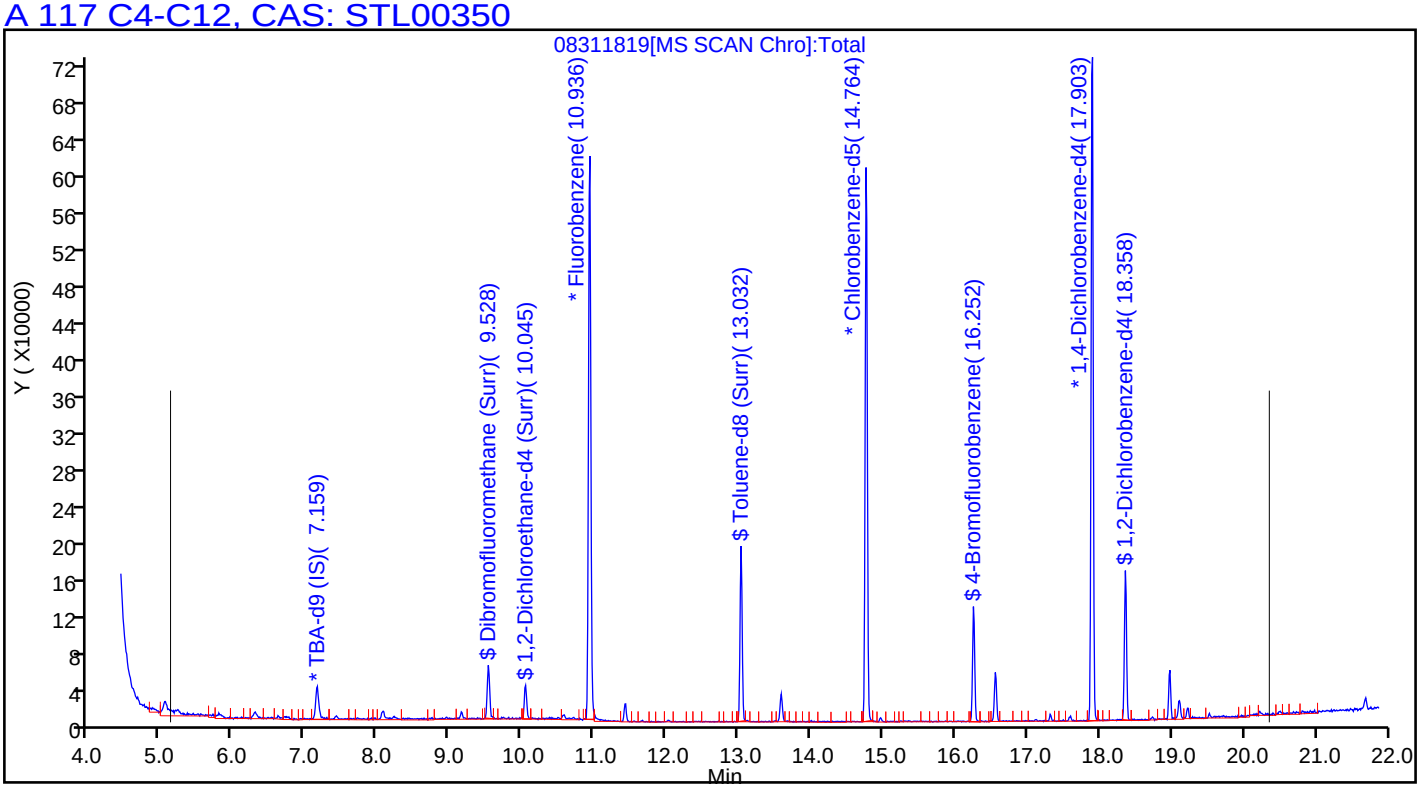
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.21	96.18
$ 10 Toluene-d8 (Surr)	7.50	7.12	94.93
$ 11 4-Bromofluorobenzene	7.50	7.03	93.73
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 03-Sep-2018 13:21:53 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\08311819.D				
Injection Date:	31-Aug-2018 14:45:30	Instrument ID:	HP9		
Lims ID:	720-88255-A-2	Lab Sample ID:	720-88255-2		
Client ID:	DG-C7W				
Operator ID:	SF	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350

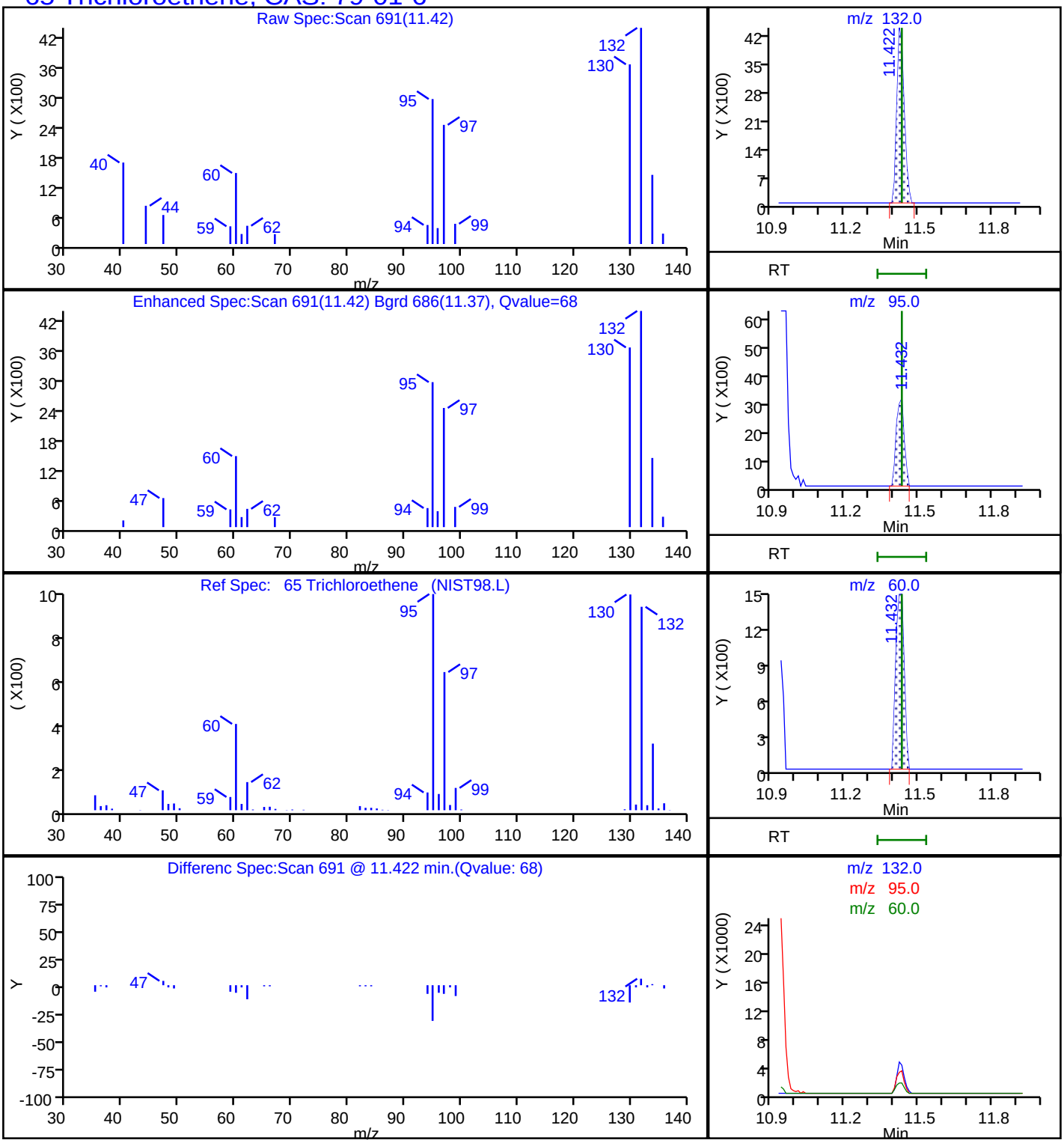


Report Date: 03-Sep-2018 13:21:53 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\08311819.D				
Injection Date:	31-Aug-2018 14:45:30	Instrument ID:	HP9		
Lims ID:	720-88255-A-2	Lab Sample ID:	720-88255-2		
Client ID:	DG-C7W				
Operator ID:	SF	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

65 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88255-1

SDG No.:

Client Sample ID: DG-E7W Lab Sample ID: 720-88255-3

Matrix: Water Lab File ID: 08311820.D

Analysis Method: 8260B Date Collected: 08/24/2018 14:50

Sample wt/vol: 10(mL) Date Analyzed: 08/31/2018 15:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250641 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.067
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.074
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	0.50	0.091
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.11
75-34-3	1,1-Dichloroethane	ND		0.50	0.11
75-35-4	1,1-Dichloroethene	ND	*	0.50	0.20
563-58-6	1,1-Dichloropropene	ND		0.50	0.20
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.21
96-18-4	1,2,3-Trichloropropane	ND		0.50	0.087
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.20
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.21
107-06-2	1,2-Dichloroethane	ND		0.50	0.077
78-87-5	1,2-Dichloropropane	ND		0.50	0.20
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.17
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.20
142-28-9	1,3-Dichloropropane	ND		1.0	0.17
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.16
594-20-7	2,2-Dichloropropane	ND		0.50	0.17
78-93-3	2-Butanone (MEK)	ND		50	8.4
95-49-8	2-Chlorotoluene	ND		0.50	0.20
591-78-6	2-Hexanone	ND		50	3.0
106-43-4	4-Chlorotoluene	ND		0.50	0.20
99-87-6	4-Isopropyltoluene	ND		1.0	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	4.5
67-64-1	Acetone	ND		50	20
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		1.0	0.20
75-25-2	Bromoform	ND		1.0	0.50
74-83-9	Bromomethane	ND		1.0	0.49
75-15-0	Carbon disulfide	ND	*	5.0	0.78
56-23-5	Carbon tetrachloride	ND		0.50	0.11
108-90-7	Chlorobenzene	ND		0.50	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88255-1
SDG No.:
Client Sample ID: DG-E7W
Lab Sample ID: 720-88255-3
Matrix: Water
Lab File ID: 08311820.D
Analysis Method: 8260B
Date Collected: 08/24/2018 14:50
Sample wt/vol: 10(mL)
Date Analyzed: 08/31/2018 15:14
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX
ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250641
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-97-5	Chlorobromomethane	ND		1.0	0.25
124-48-1	Chlorodibromomethane	ND		0.50	0.10
75-00-3	Chloroethane	ND		1.0	0.17
67-66-3	Chloroform	ND		1.0	0.40
74-87-3	Chloromethane	ND		1.0	0.19
156-59-2	cis-1,2-Dichloroethene	0.50		0.50	0.076
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
74-95-3	Dibromomethane	ND		0.50	0.30
75-27-4	Dichlorobromomethane	ND		0.50	0.20
75-71-8	Dichlorodifluoromethane	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.13
106-93-4	Ethylene Dibromide	ND		0.50	0.075
STL00350	Gasoline Range Organics (GRO)-C4-C12	26	J	50	21
87-68-3	Hexachlorobutadiene	ND		1.0	0.27
98-82-8	Isopropylbenzene	ND		0.50	0.20
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.11
75-09-2	Methylene Chloride	ND	*	5.0	1.5
91-20-3	Naphthalene	ND		1.0	0.22
104-51-8	n-Butylbenzene	ND		1.0	0.30
103-65-1	N-Propylbenzene	ND		1.0	0.20
135-98-8	sec-Butylbenzene	ND		1.0	0.17
100-42-5	Styrene	ND		0.50	0.22
98-06-6	tert-Butylbenzene	ND		1.0	0.20
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	ND	*	0.50	0.13
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.17
79-01-6	Trichloroethene	1.0		0.50	0.20
75-69-4	Trichlorofluoromethane	ND		1.0	0.30
108-05-4	Vinyl acetate	ND		10	0.60
75-01-4	Vinyl chloride	ND		0.50	0.20
1330-20-7	Xylenes, Total	ND		0.50	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88255-1

SDG No.:

Client Sample ID: DG-E7W Lab Sample ID: 720-88255-3

Matrix: Water Lab File ID: 08311820.D

Analysis Method: 8260B Date Collected: 08/24/2018 14:50

Sample wt/vol: 10(mL) Date Analyzed: 08/31/2018 15:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250641 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		72-130
460-00-4	4-Bromofluorobenzene	90		67-130
2037-26-5	Toluene-d8 (Surr)	93		70-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\08311820.D
Lims ID: 720-88255-A-3
Client ID: DG-E7W
Sample Type: Client
Inject. Date: 31-Aug-2018 15:14:30 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88255-A-3
Operator ID: SF Instrument ID: HP9

Method: \\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\HP9_8260_LL.m
Limit Group: 8260B
Last Update: 03-Sep-2018 13:22:49 Calib Date: 23-Aug-2018 18:09:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP9\20180823-53445.b\08231828.D

Column 1 : Det: MS SCAN
Process Host: XAWRK020

First Level Reviewer: chaijita Date: 03-Sep-2018 13:22:49

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.149	7.159	-0.010	0	51354	250.0	
* 2 Fluorobenzene	96	10.936	10.936	0.000	98	626962	25.0	
* 4 Chlorobenzene-d5	117	14.764	14.764	0.000	81	492952	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.903	17.903	0.000	92	263491	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.528	9.528	0.000	48	47443	7.46	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.045	10.045	0.000	0	31145	7.10	
$ 10 Toluene-d8 (Surr)	98	13.032	13.032	0.000	91	160488	7.00	
$ 11 4-Bromofluorobenzene	95	16.252	16.252	0.000	88	54050	6.77	
$ 12 1,2-Dichlorobenzene-d4	152	18.358	18.358	0.000	75	60921	6.00	
19 Vinyl chloride	62	5.053	5.083	-0.030	1	2254	0.1154	
28 Acetone	58	6.713	6.713	0.000	89	2006	6.76	
34 Methylene Chloride	84	7.422	7.422	0.000	51	2505	0.3568	
48 cis-1,2-Dichloroethene	61	9.164	9.154	0.010	12	4922	0.4960	
65 Trichloroethene	132	11.432	11.432	0.000	70	8378	1.04	
A 116 C4-C10	1	11.189	(5.123-17.255)		0	1037741	17.6	
A 153 C6-C8	1	11.194	(8.890-13.498)		0	326731	5.55	
A 154 C6-C9	1	12.161	(8.890-15.432)		0	483275	8.20	
A 117 C4-C12	1	12.738	(5.123-20.353)		0	1523598	25.9	
A 123 Aviation Gas	1	12.992	(8.890-17.093)		0	624623	NC	
A 119 C6-C10	1	13.073	(8.890-17.255)		0	636416	10.8	
A 118 C5-C12	1	13.528	(6.703-20.353)		0	1300294	22.1	
A 120 C6-C12	1	14.622	(8.890-20.353)		0	1122273	19.0	
A 155 C8-C10	1	15.336	(13.417-17.255)		0	311845	5.29	
A 121 C7-C12	1	15.786	(11.219-20.353)		0	901052	15.3	

QC Flag Legend

Processing Flags

NC - Not Calibrated

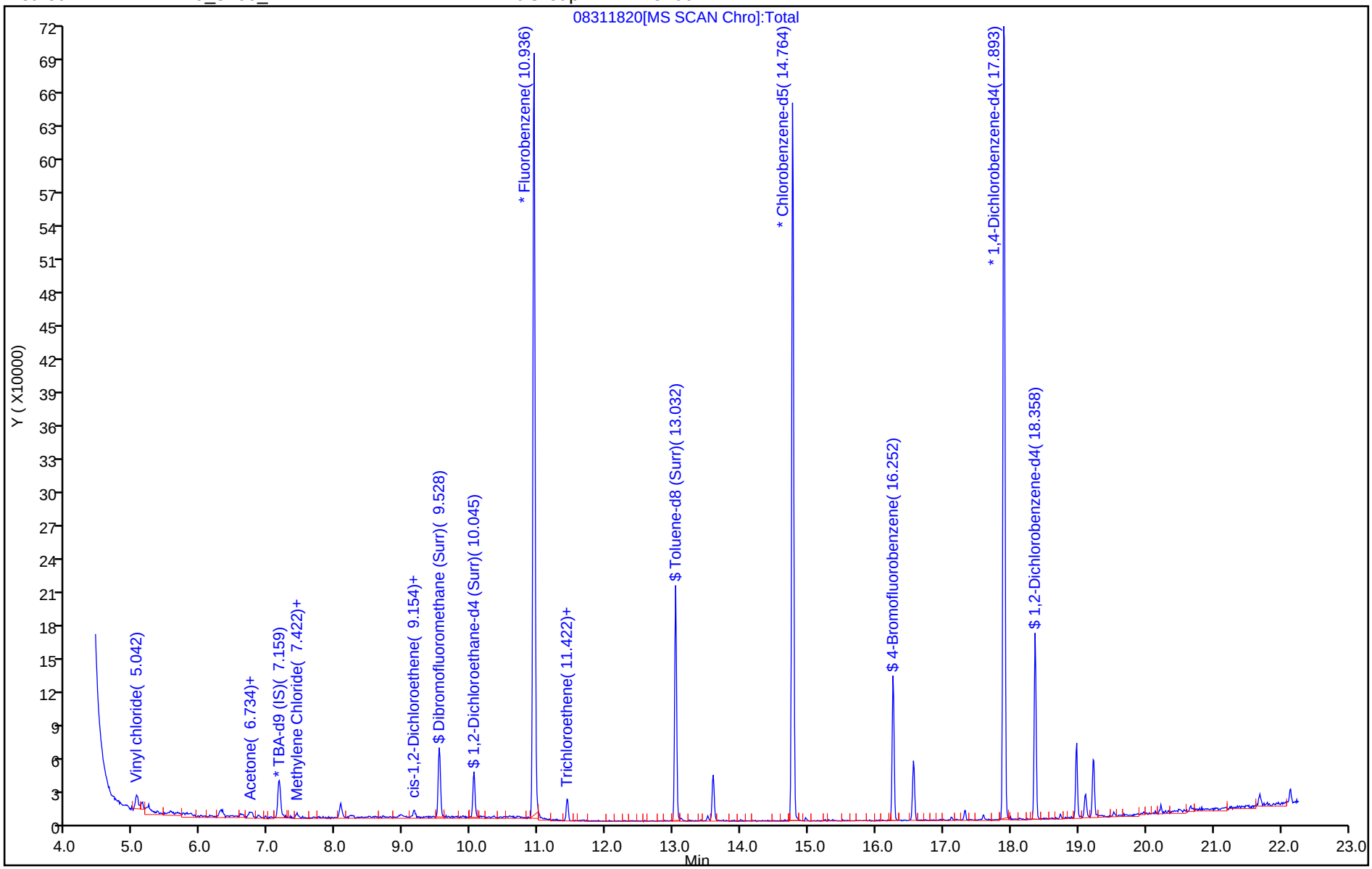
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 03-Sep-2018 13:22:50 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\08311820.D				
Injection Date:	31-Aug-2018 15:14:30	Instrument ID:	HP9	Operator ID:	SF
Lims ID:	720-88255-A-3	Lab Sample ID:	720-88255-3	Worklist Smp#:	20
Client ID:	DG-E7W				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	HP9_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\08311820.D
Lims ID: 720-88255-A-3
Client ID: DG-E7W
Sample Type: Client
Inject. Date: 31-Aug-2018 15:14:30 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88255-A-3
Operator ID: SF Instrument ID: HP9

Method: \\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\HP9_8260_LL.m
Limit Group: 8260B
Last Update: 03-Sep-2018 13:22:49 Calib Date: 23-Aug-2018 18:09:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP9\20180823-53445.b\08231828.D

Column 1 : Det: MS SCAN
Process Host: XAWRK020

First Level Reviewer: chaijita Date: 03-Sep-2018 13:22:49

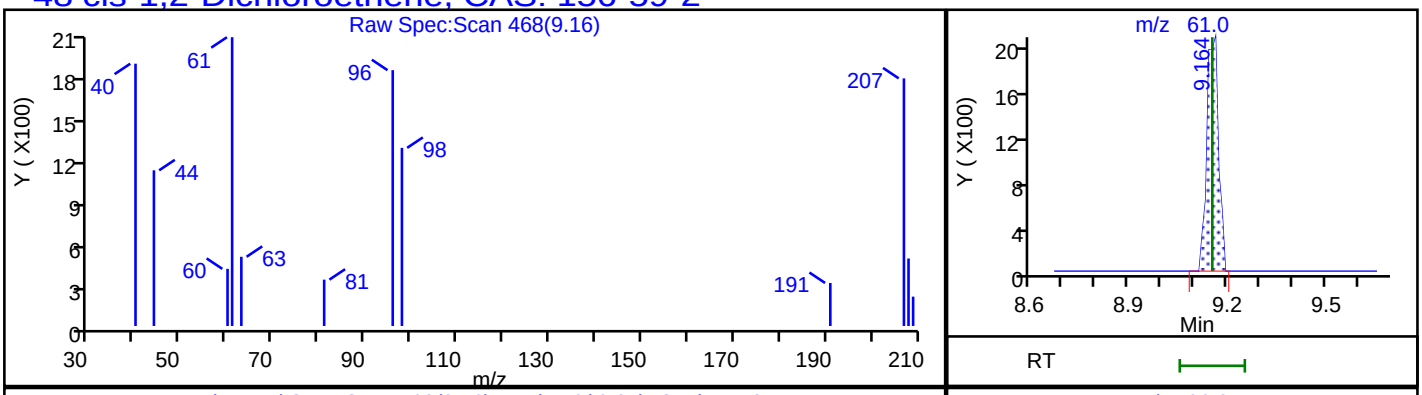
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.10	94.67
$ 10 Toluene-d8 (Surr)	7.50	7.00	93.30
$ 11 4-Bromofluorobenzene	7.50	6.77	90.20
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

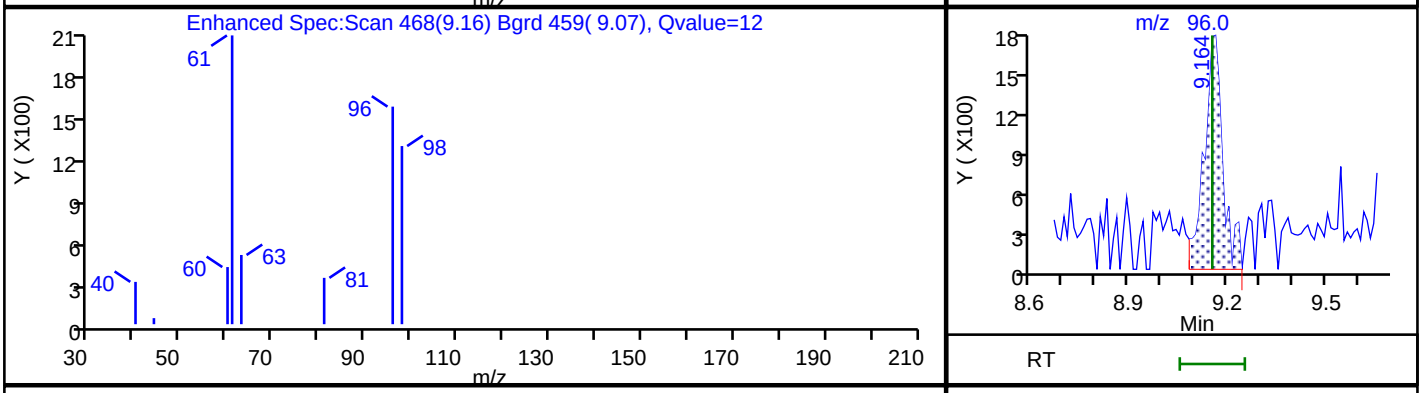
Report Date: 03-Sep-2018 13:22:50 Chrom Revision: 2.3 19-Jul-2018 15:14:50

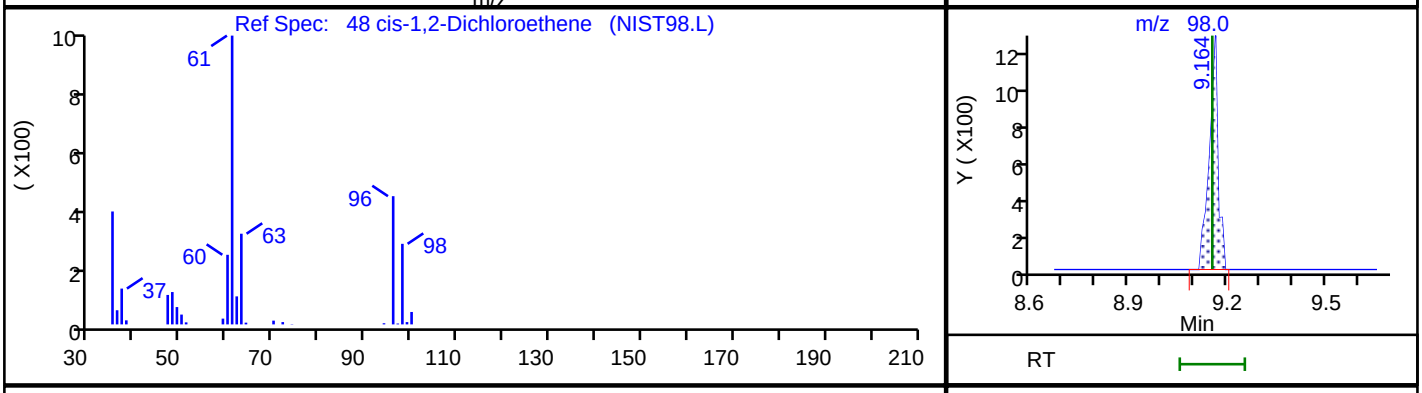
TestAmerica Pleasanton

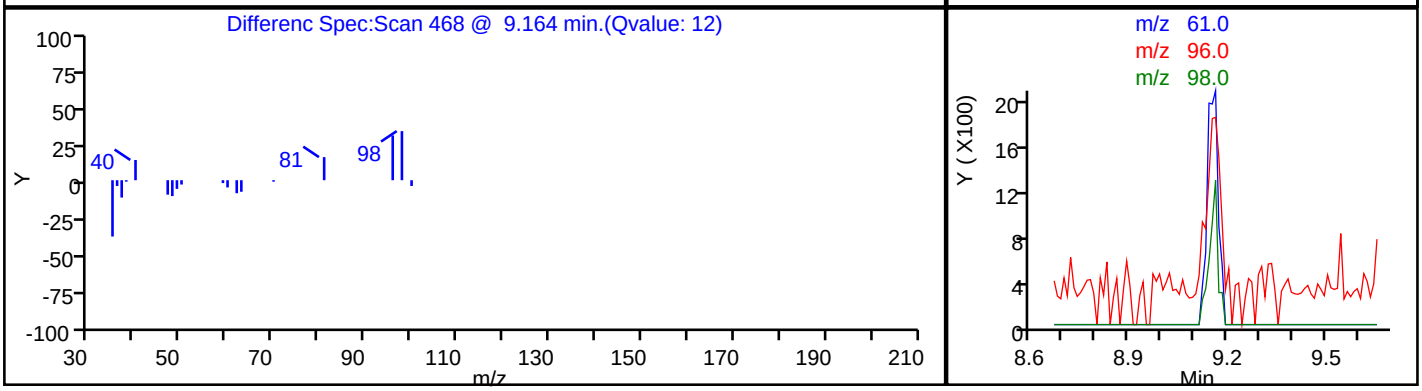
Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\08311820.D				
Injection Date:	31-Aug-2018 15:14:30	Instrument ID:	HP9		
Lims ID:	720-88255-A-3	Lab Sample ID:	720-88255-3		
Client ID:	DG-E7W				
Operator ID:	SF	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

48 cis-1,2-Dichloroethene, CAS: 156-59-2







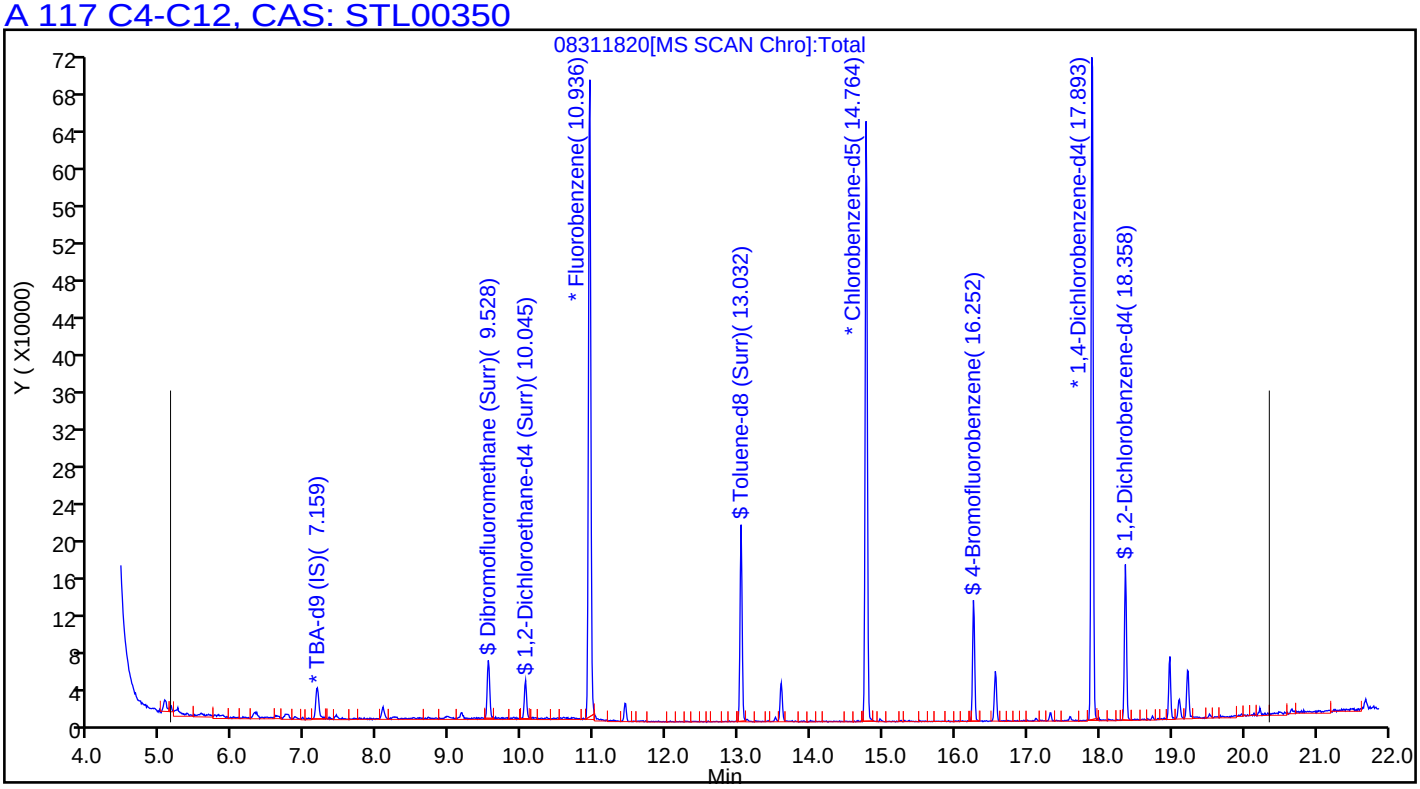


Report Date: 03-Sep-2018 13:22:50 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\08311820.D				
Injection Date:	31-Aug-2018 15:14:30	Instrument ID:	HP9		
Lims ID:	720-88255-A-3	Lab Sample ID:	720-88255-3		
Client ID:	DG-E7W				
Operator ID:	SF	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350

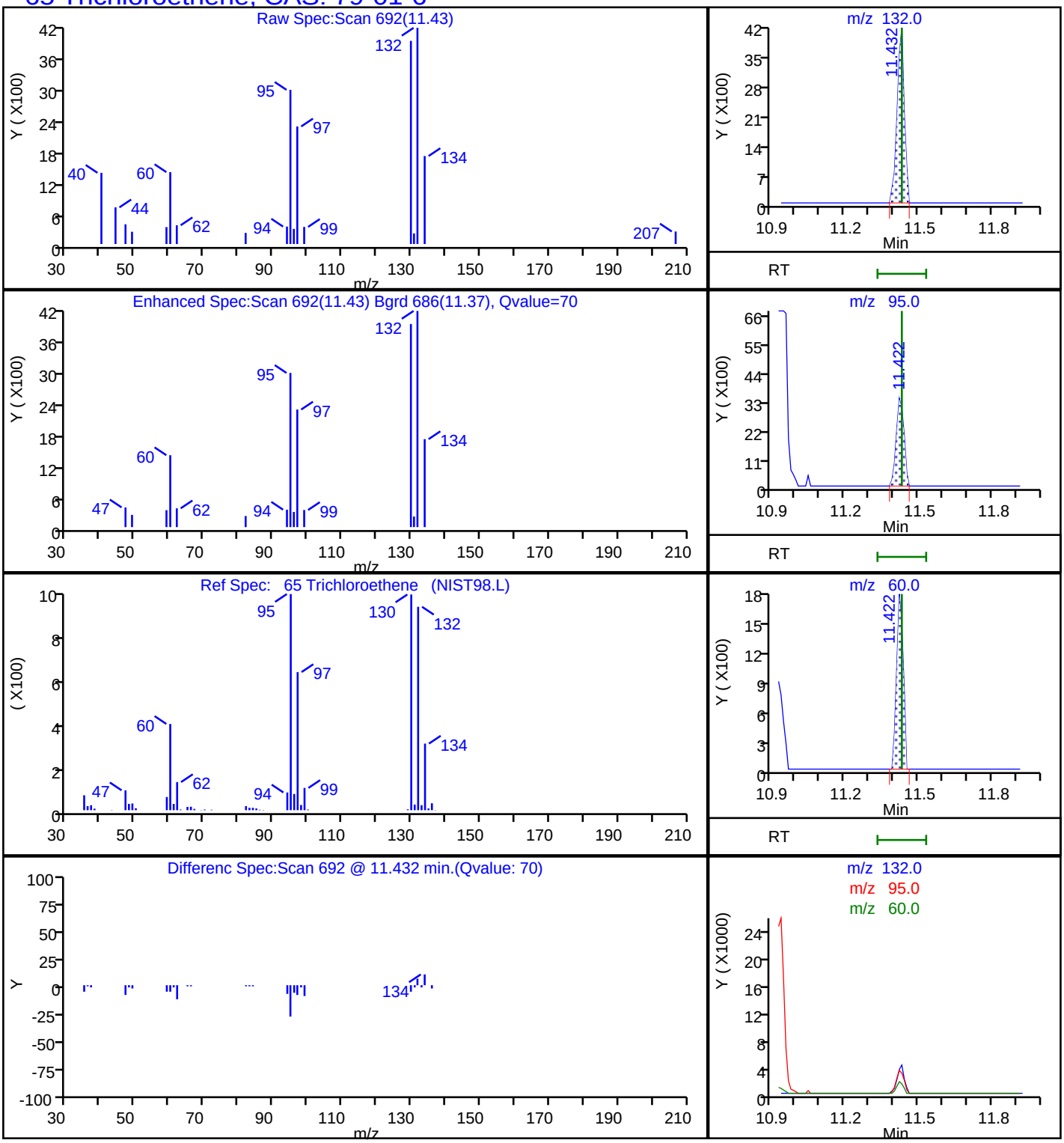


Report Date: 03-Sep-2018 13:22:50 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\08311820.D				
Injection Date:	31-Aug-2018 15:14:30	Instrument ID:	HP9		
Lims ID:	720-88255-A-3	Lab Sample ID:	720-88255-3		
Client ID:	DG-E7W				
Operator ID:	SF	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

65 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88255-1
SDG No.:
Client Sample ID: DG-G7W
Lab Sample ID: 720-88255-4
Matrix: Water
Lab File ID: 08311821.D
Analysis Method: 8260B
Date Collected: 08/24/2018 15:05
Sample wt/vol: 10(mL)
Date Analyzed: 08/31/2018 15:42
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX
ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250641
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.067
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.074
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	0.50	0.091
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.11
75-34-3	1,1-Dichloroethane	ND		0.50	0.11
75-35-4	1,1-Dichloroethene	ND	*	0.50	0.20
563-58-6	1,1-Dichloropropene	ND		0.50	0.20
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.21
96-18-4	1,2,3-Trichloropropane	ND		0.50	0.087
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.20
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.21
107-06-2	1,2-Dichloroethane	ND		0.50	0.077
78-87-5	1,2-Dichloropropane	ND		0.50	0.20
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.17
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.20
142-28-9	1,3-Dichloropropane	ND		1.0	0.17
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.16
594-20-7	2,2-Dichloropropane	ND		0.50	0.17
78-93-3	2-Butanone (MEK)	ND		50	8.4
95-49-8	2-Chlorotoluene	ND		0.50	0.20
591-78-6	2-Hexanone	ND		50	3.0
106-43-4	4-Chlorotoluene	ND		0.50	0.20
99-87-6	4-Isopropyltoluene	ND		1.0	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	4.5
67-64-1	Acetone	ND		50	20
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		1.0	0.20
75-25-2	Bromoform	ND		1.0	0.50
74-83-9	Bromomethane	ND		1.0	0.49
75-15-0	Carbon disulfide	ND	*	5.0	0.78
56-23-5	Carbon tetrachloride	ND		0.50	0.11
108-90-7	Chlorobenzene	ND		0.50	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88255-1
SDG No.:
Client Sample ID: DG-G7W
Lab Sample ID: 720-88255-4
Matrix: Water
Lab File ID: 08311821.D
Analysis Method: 8260B
Date Collected: 08/24/2018 15:05
Sample wt/vol: 10(mL)
Date Analyzed: 08/31/2018 15:42
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX
ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250641
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-97-5	Chlorobromomethane	ND		1.0	0.25
124-48-1	Chlorodibromomethane	ND		0.50	0.10
75-00-3	Chloroethane	ND		1.0	0.17
67-66-3	Chloroform	ND		1.0	0.40
74-87-3	Chloromethane	ND		1.0	0.19
156-59-2	cis-1,2-Dichloroethene	23		0.50	0.076
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
74-95-3	Dibromomethane	ND		0.50	0.30
75-27-4	Dichlorobromomethane	ND		0.50	0.20
75-71-8	Dichlorodifluoromethane	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.13
106-93-4	Ethylene Dibromide	ND		0.50	0.075
STL00350	Gasoline Range Organics (GRO)-C4-C12	54		50	21
87-68-3	Hexachlorobutadiene	ND		1.0	0.27
98-82-8	Isopropylbenzene	ND		0.50	0.20
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.11
75-09-2	Methylene Chloride	ND	*	5.0	1.5
91-20-3	Naphthalene	ND		1.0	0.22
104-51-8	n-Butylbenzene	ND		1.0	0.30
103-65-1	N-Propylbenzene	ND		1.0	0.20
135-98-8	sec-Butylbenzene	ND		1.0	0.17
100-42-5	Styrene	ND		0.50	0.22
98-06-6	tert-Butylbenzene	ND		1.0	0.20
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.17
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.17
79-01-6	Trichloroethene	15		0.50	0.20
75-69-4	Trichlorofluoromethane	ND		1.0	0.30
108-05-4	Vinyl acetate	ND		10	0.60
75-01-4	Vinyl chloride	4.6		0.50	0.20
1330-20-7	Xylenes, Total	ND		0.50	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88255-1

SDG No.:

Client Sample ID: DG-G7W Lab Sample ID: 720-88255-4

Matrix: Water Lab File ID: 08311821.D

Analysis Method: 8260B Date Collected: 08/24/2018 15:05

Sample wt/vol: 10(mL) Date Analyzed: 08/31/2018 15:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250641 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		72-130
460-00-4	4-Bromofluorobenzene	94		67-130
2037-26-5	Toluene-d8 (Surr)	90		70-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\08311821.D
Lims ID: 720-88255-A-4
Client ID: DG-G7W
Sample Type: Client
Inject. Date: 31-Aug-2018 15:42:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88255-A-4
Operator ID: SF Instrument ID: HP9

Method: \\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\HP9_8260_LL.m
Limit Group: 8260B
Last Update: 03-Sep-2018 13:23:50 Calib Date: 23-Aug-2018 18:09:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP9\20180823-53445.b\08231828.D

Column 1 : Det: MS SCAN
Process Host: XAWRK020

First Level Reviewer: chaijita Date: 03-Sep-2018 13:23:50

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.159	7.159	0.000	0	53748	250.0	
* 2 Fluorobenzene	96	10.926	10.936	-0.010	99	623218	25.0	
* 4 Chlorobenzene-d5	117	14.763	14.764	-0.001	81	479363	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.903	17.903	0.000	92	267279	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.528	9.528	0.000	55	47407	7.50	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.045	10.045	0.000	0	31020	7.11	
$ 10 Toluene-d8 (Surr)	98	13.032	13.032	0.000	90	153725	6.74	
$ 11 4-Bromofluorobenzene	95	16.252	16.252	0.000	85	54761	7.05	
$ 12 1,2-Dichlorobenzene-d4	152	18.358	18.358	0.000	76	61464	5.96	
19 Vinyl chloride	62	5.083	5.083	0.000	82	89034	4.59	
28 Acetone	58	6.713	6.713	0.000	74	1683	5.70	
38 trans-1,2-Dichloroethene	96	8.212	8.212	0.000	89	14847	1.63	
48 cis-1,2-Dichloroethene	61	9.154	9.154	0.000	68	228866	23.2	
65 Trichloroethene	132	11.422	11.432	-0.010	92	121677	15.2	
81 Tetrachloroethene	164	13.994	14.004	-0.010	54	1224	0.1919	
127 Butyl Ether	87	14.966	14.966	0.000	52	490	0.0989	
A 116 C4-C10	1	11.189	(5.123-17.255)		0	2574754	44.0	
A 153 C6-C8	1	11.194	(8.890-13.498)		0	1590765	27.2	
A 154 C6-C9	1	12.161	(8.890-15.432)		0	1728496	29.5	
A 117 C4-C12	1	12.738	(5.123-20.353)		0	3155054	53.9	
A 123 Aviation Gas	1	12.992	(8.890-17.093)		0	1857915	NC	
A 119 C6-C10	1	13.073	(8.890-17.255)		0	1867311	31.9	
A 118 C5-C12	1	13.528	(6.703-20.353)		0	2649052	45.2	
A 120 C6-C12	1	14.622	(8.890-20.353)		0	2447611	41.8	
A 155 C8-C10	1	15.336	(13.417-17.255)		0	278443	4.75	
A 121 C7-C12	1	15.786	(11.219-20.353)		0	1540207	26.3	

QC Flag Legend

Processing Flags

NC - Not Calibrated

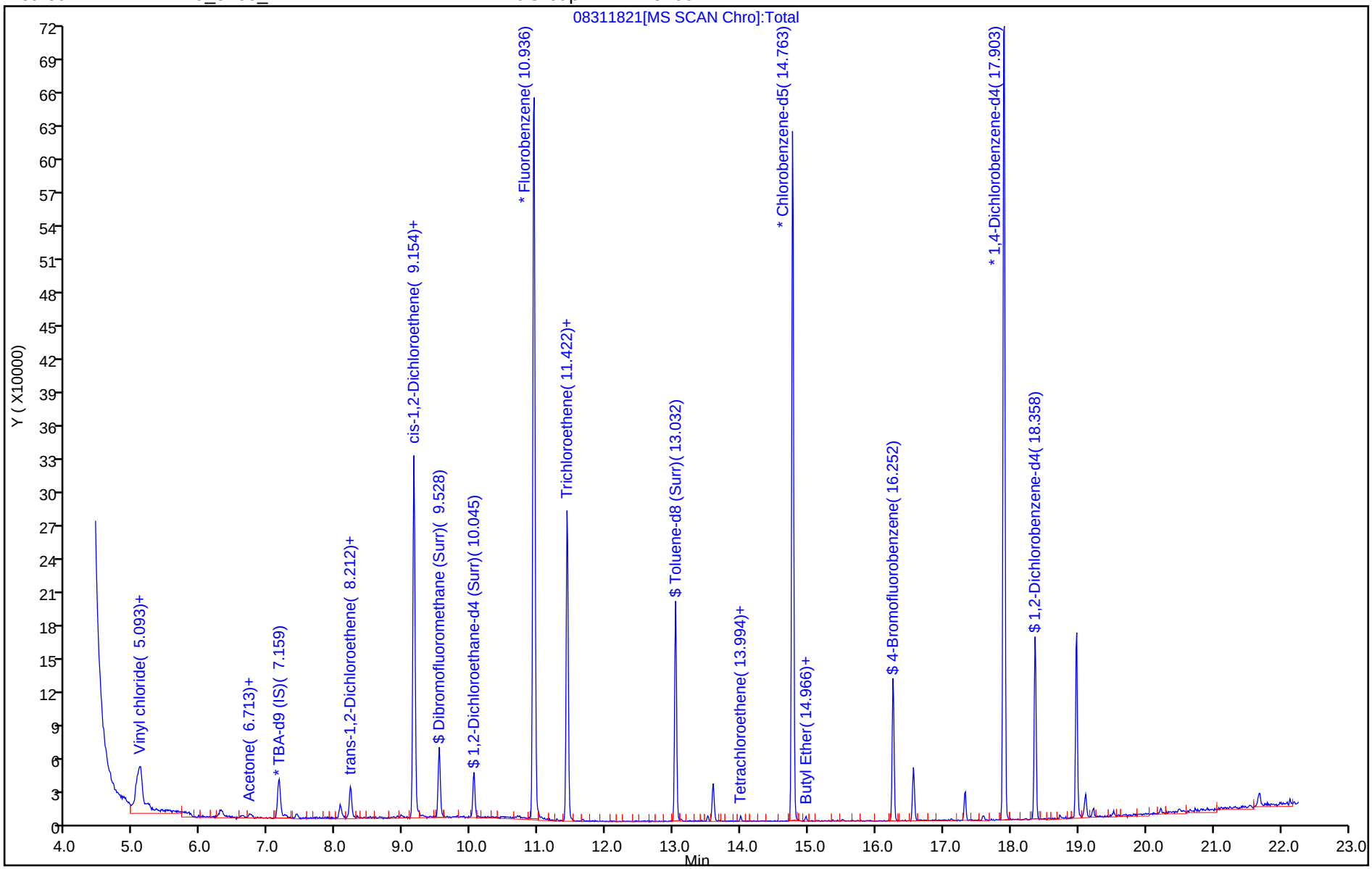
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 03-Sep-2018 13:23:51 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\08311821.D				
Injection Date:	31-Aug-2018 15:42:30	Instrument ID:	HP9	Operator ID:	SF
Lims ID:	720-88255-A-4	Lab Sample ID:	720-88255-4	Worklist Smp#:	21
Client ID:	DG-G7W				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	HP9_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\08311821.D
Lims ID: 720-88255-A-4
Client ID: DG-G7W
Sample Type: Client
Inject. Date: 31-Aug-2018 15:42:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88255-A-4
Operator ID: SF Instrument ID: HP9

Method: \\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\HP9_8260_LL.m
Limit Group: 8260B
Last Update: 03-Sep-2018 13:23:50 Calib Date: 23-Aug-2018 18:09:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP9\20180823-53445.b\08231828.D

Column 1 : Det: MS SCAN
Process Host: XAWRK020

First Level Reviewer: chaijita Date: 03-Sep-2018 13:23:50

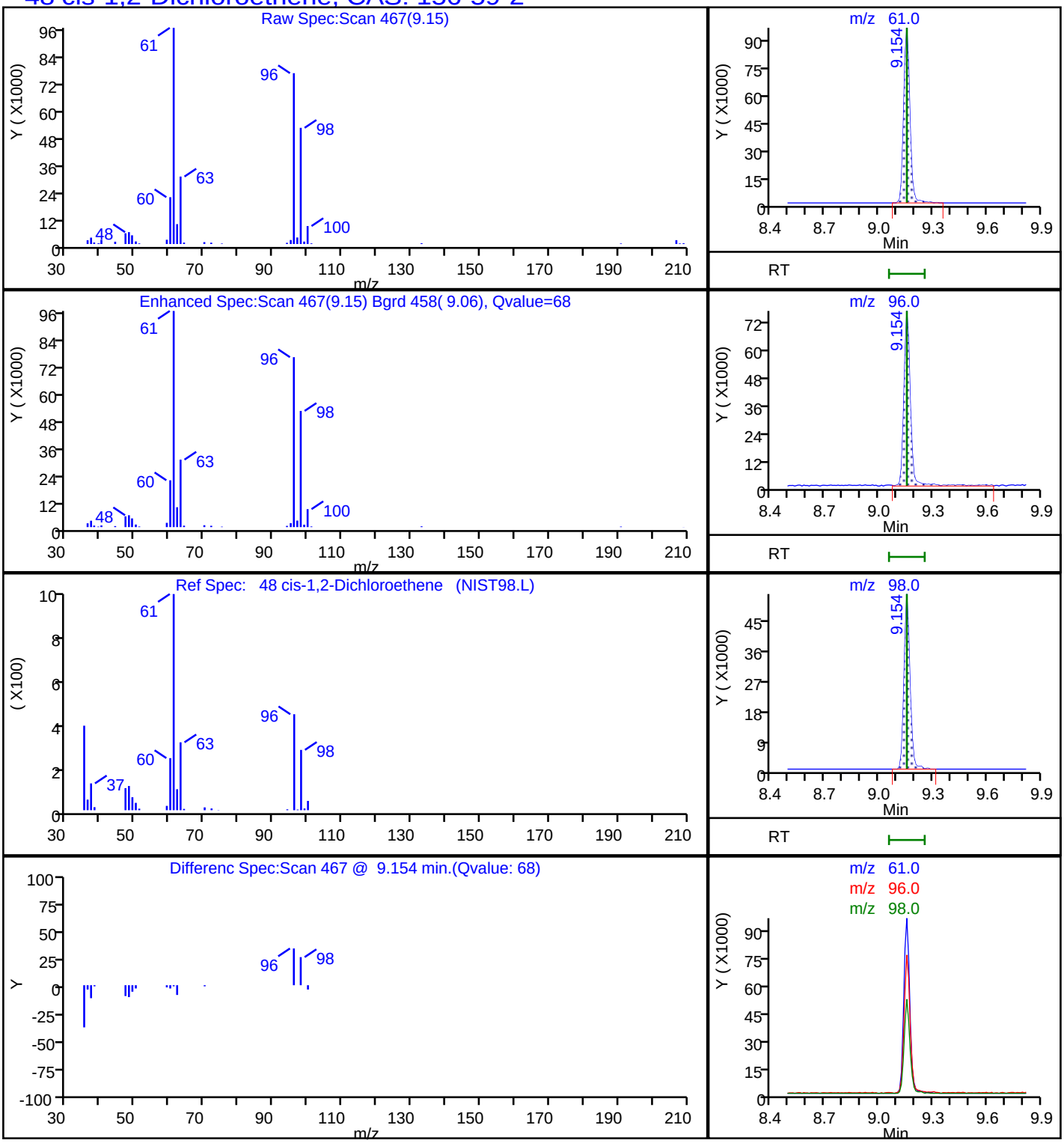
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.11	94.86
$ 10 Toluene-d8 (Surr)	7.50	6.74	89.90
$ 11 4-Bromofluorobenzene	7.50	7.05	93.98
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 03-Sep-2018 13:23:51 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\08311821.D				
Injection Date:	31-Aug-2018 15:42:30	Instrument ID:	HP9		
Lims ID:	720-88255-A-4	Lab Sample ID:	720-88255-4		
Client ID:	DG-G7W				
Operator ID:	SF	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

48 cis-1,2-Dichloroethene, CAS: 156-59-2

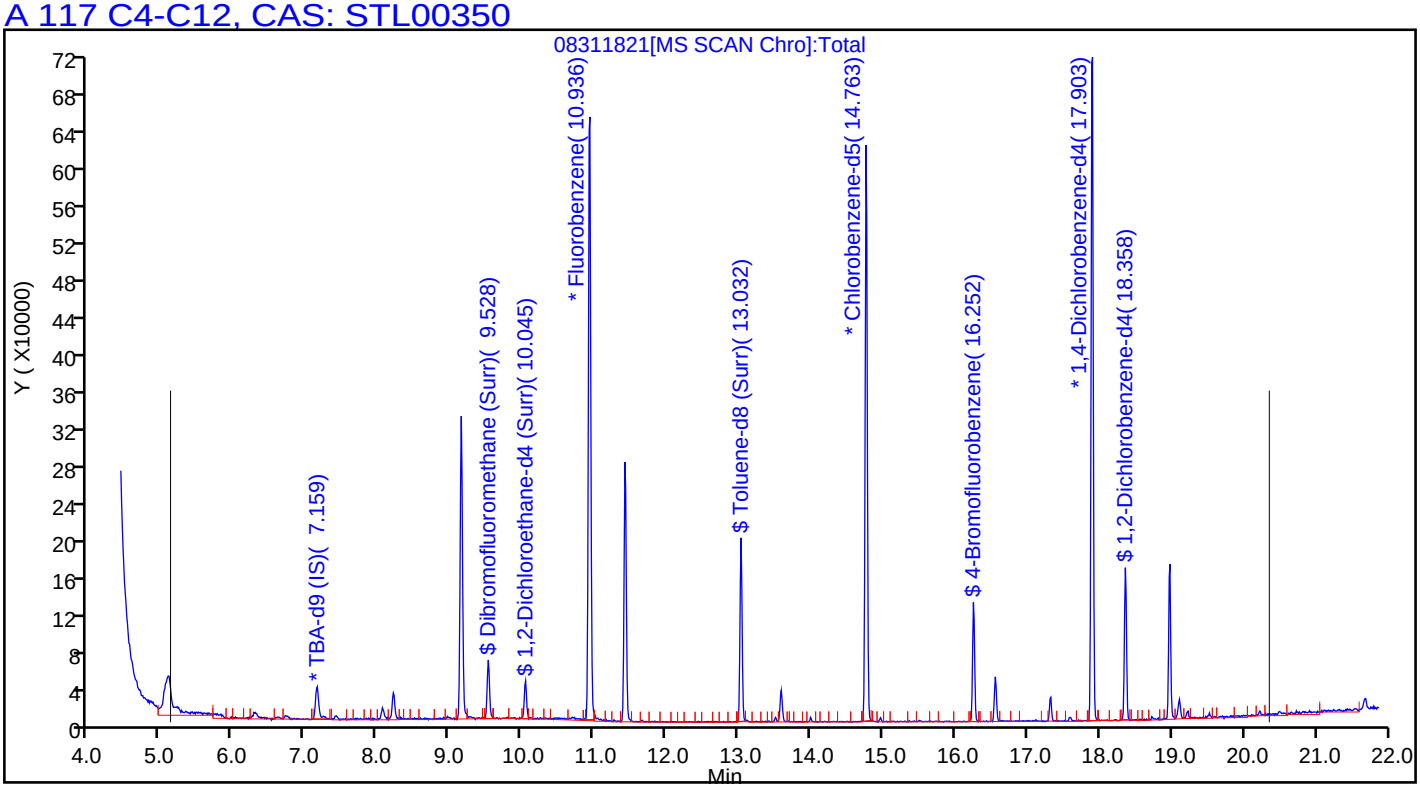


Report Date: 03-Sep-2018 13:23:52 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\08311821.D				
Injection Date:	31-Aug-2018 15:42:30	Instrument ID:	HP9		
Lims ID:	720-88255-A-4	Lab Sample ID:	720-88255-4		
Client ID:	DG-G7W				
Operator ID:	SF	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350

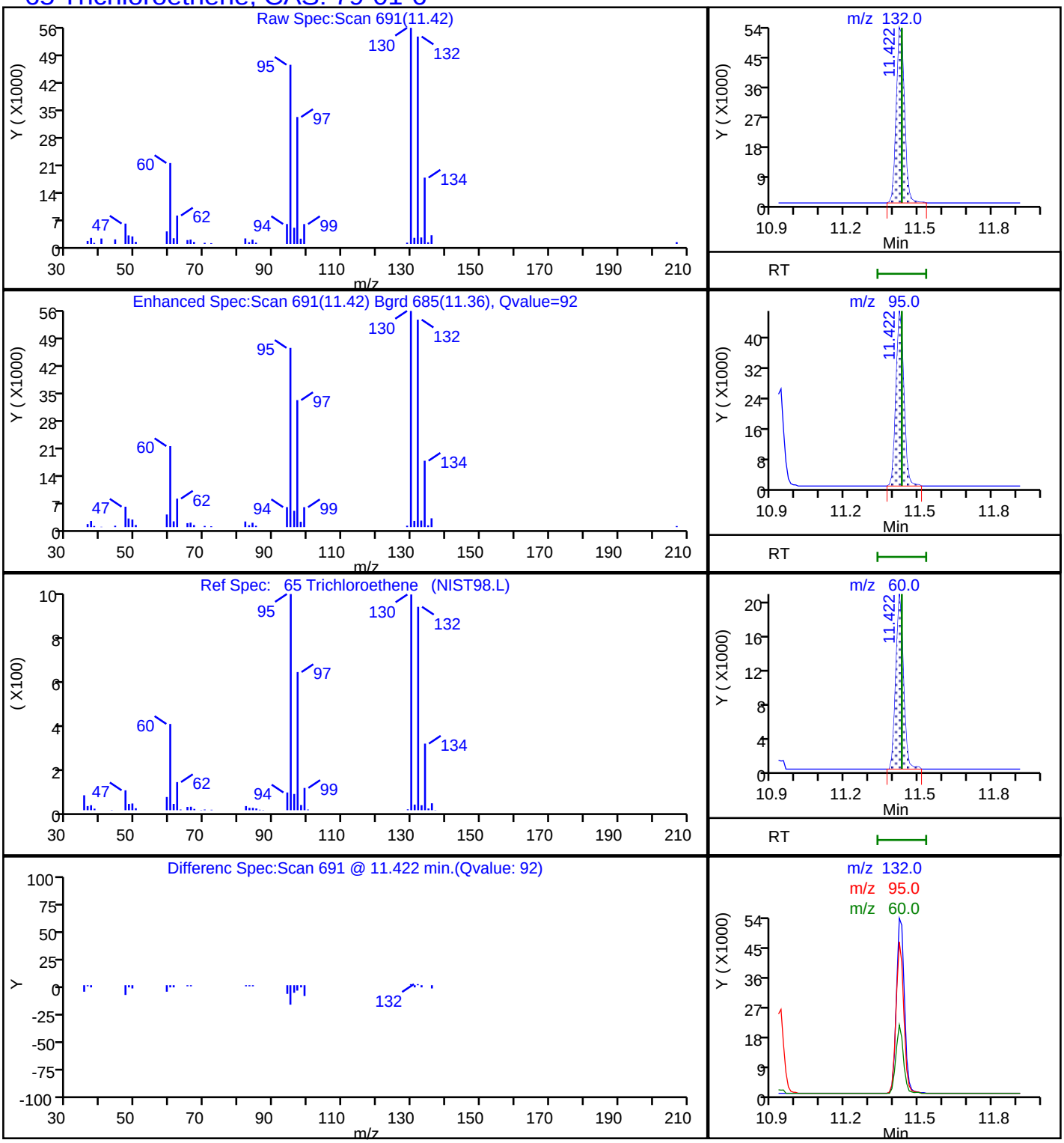


Report Date: 03-Sep-2018 13:23:51 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\08311821.D				
Injection Date:	31-Aug-2018 15:42:30	Instrument ID:	HP9		
Lims ID:	720-88255-A-4	Lab Sample ID:	720-88255-4		
Client ID:	DG-G7W				
Operator ID:	SF	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

65 Trichloroethene, CAS: 79-01-6

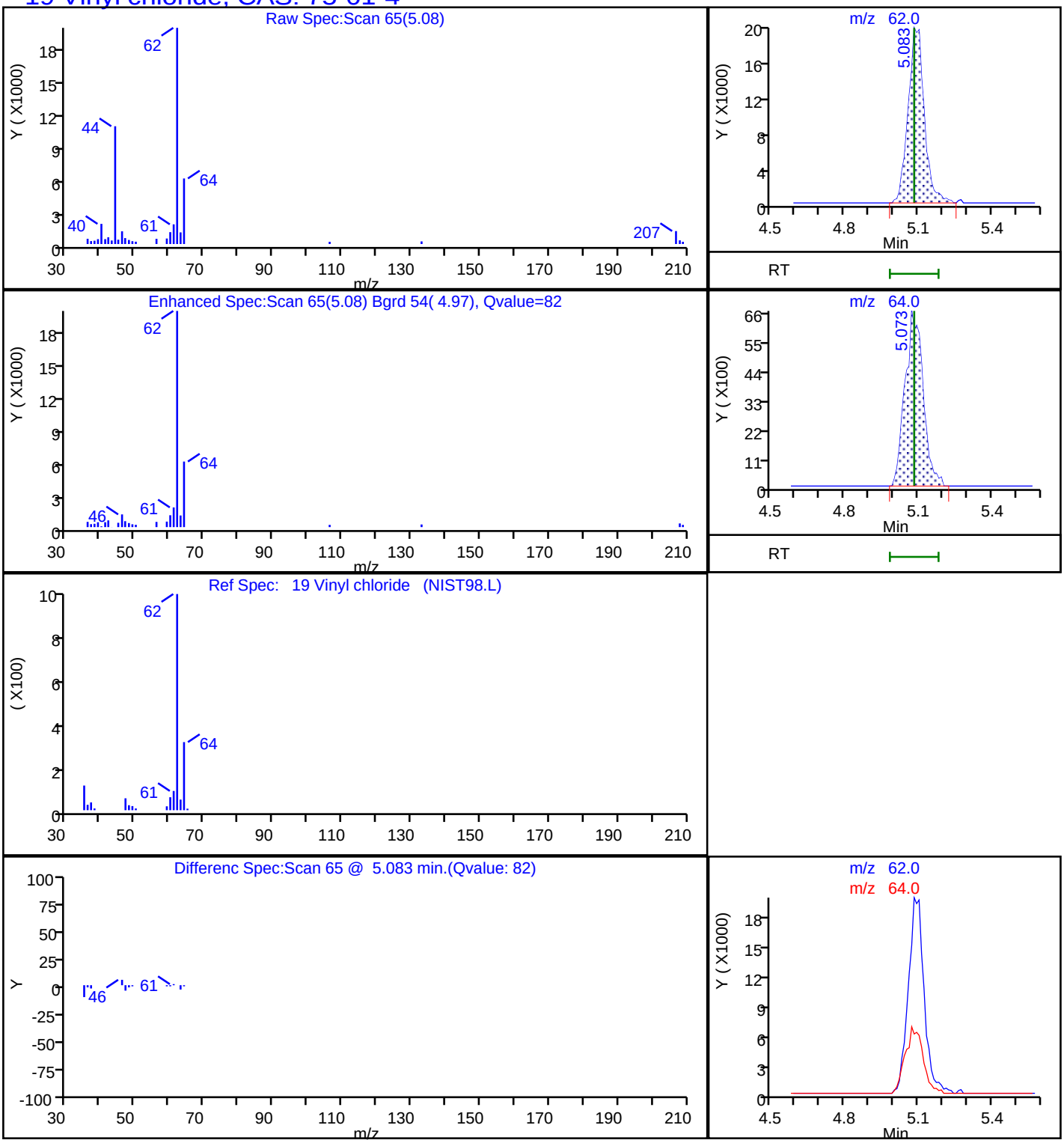


Report Date: 03-Sep-2018 13:23:51 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\08311821.D				
Injection Date:	31-Aug-2018 15:42:30	Instrument ID:	HP9		
Lims ID:	720-88255-A-4	Lab Sample ID:	720-88255-4		
Client ID:	DG-G7W				
Operator ID:	SF	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

19 Vinyl chloride, CAS: 75-01-4



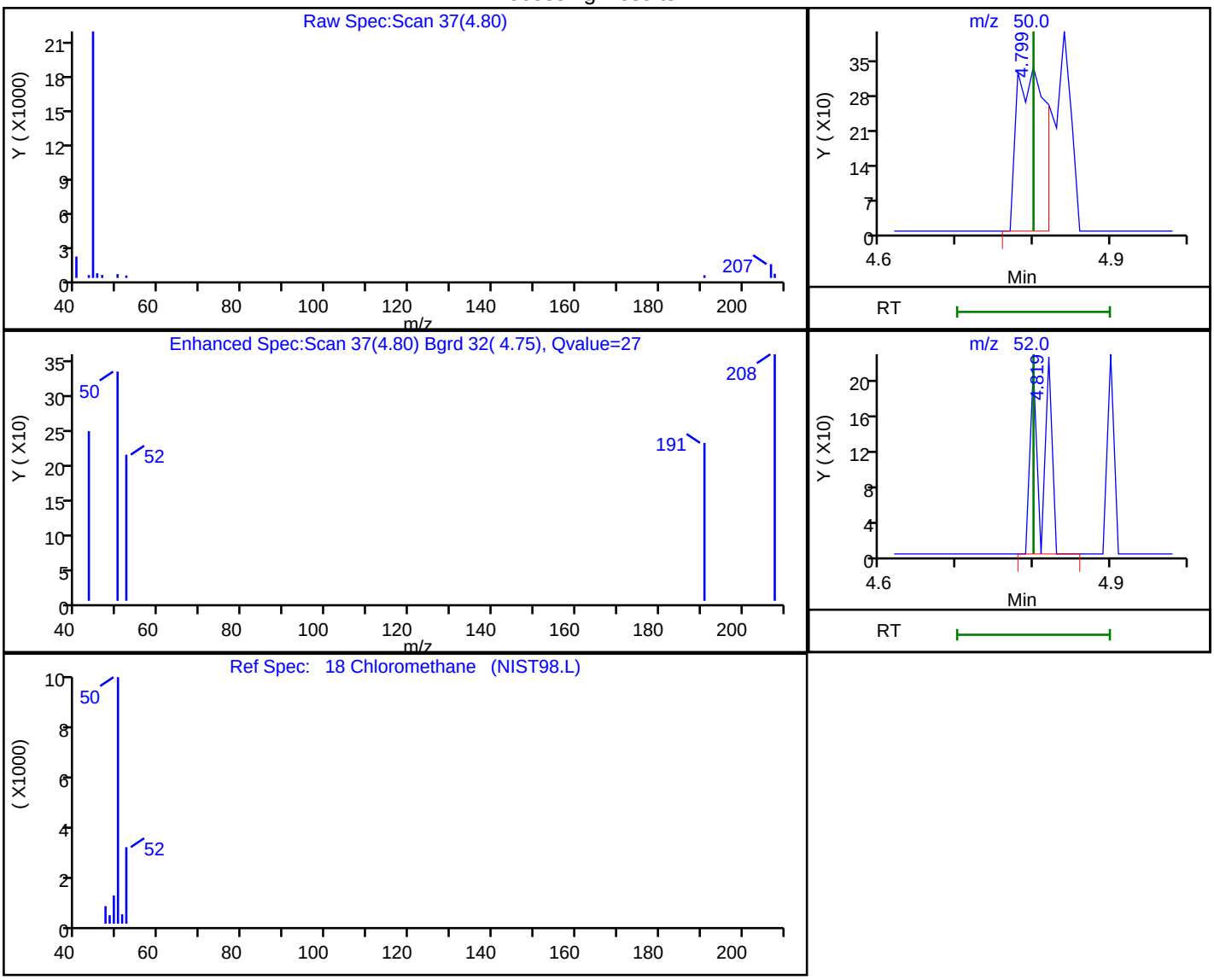
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\08311821.D				
Injection Date:	31-Aug-2018 15:42:30	Instrument ID:	HP9		
Lims ID:	720-88255-A-4	Lab Sample ID:	720-88255-4		
Client ID:	DG-G7W				
Operator ID:	SF	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

18 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
4.80	50.00	873	0.043947
4.82	52.00	264	

Reviewer: chaijita, 03-Sep-2018 13:23:04

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88255-1

SDG No.:

Client Sample ID: DG-G7W Lab Sample ID: 720-88255-4

Matrix: Water Lab File ID: 09041835.D

Analysis Method: 8260B Date Collected: 08/24/2018 15:05

Sample wt/vol: 10(mL) Date Analyzed: 09/04/2018 23:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250832 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	1.9		0.50	0.13

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		72-130
460-00-4	4-Bromofluorobenzene	97		67-130
2037-26-5	Toluene-d8 (Surr)	101		70-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180904-53647.b\09041835.D
Lims ID: 720-88255-B-4
Client ID: DG-G7W
Sample Type: Client
Inject. Date: 04-Sep-2018 23:21:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 720-88255-b-4 RR
Misc. Info.: HP-4
Operator ID: SF Instrument ID: HP4

Method: \\ChromNA\Pleasanton\ChromData\HP4\20180904-53647.b\8260W_LL_GRO_HP4.m
Limit Group: 8260B
Last Update: 05-Sep-2018 07:53:42 Calib Date: 26-Jul-2018 01:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP4\20180725-52939.b\07251826.D

Column 1 : DB-VRX (250.00 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: medinaj Date: 05-Sep-2018 10:37:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.360	7.360	0.000	99	519479	250.0	
* 2 Fluorobenzene	96	11.167	11.177	-0.010	97	1948398	25.0	
* 3 Chlorobenzene-d5	117	15.034	15.035	-0.001	88	1479196	25.0	
* 4 1,4-Dichlorobenzene-d4	152	18.192	18.192	0.000	96	767351	25.0	
$ 5 Dibromofluoromethane (Surr	113	9.756	9.757	-0.010	93	140524	7.79	
$ 6 1,2-Dichloroethane-d4 (Sur	65	10.273	10.274	-0.010	0	169885	7.67	
$ 8 Toluene-d8 (Surr)	98	13.288	13.276	0.000	94	568233	7.57	
$ 9 4-Bromofluorobenzene	95	16.527	16.537	-0.010	88	215366	7.25	
$ 10 1,2-Dichlorobenzene-d4	152	18.649	18.659	-0.010	85	170128	5.98	
14 Vinyl chloride	62	5.319	5.314	0.000	97	156755	5.15	
23 Isopropyl alcohol	45	6.832	6.832	0.000	100	56588	30.0	
24 Acetone	58	6.913	6.907	0.000	98	12474	6.36	
27 1,1-Dichloroethene	96	7.482	7.475	0.000	69	2106	0.1226	
31 Methylene Chloride	84	7.634	7.627	0.000	98	21521	1.17	
37 trans-1,2-Dichloroethene	96	8.436	8.428	0.000	93	34560	1.86	
38 Methyl tert-butyl ether	73	8.537	8.540	-0.011	39	2613	0.0537	
39 1,1-Dichloroethane	63	8.720	8.712	0.000	90	3851	0.0906	
44 2-Butanone (MEK)	72	9.197	9.189	0.000	98	5690	3.20	
47 cis-1,2-Dichloroethene	61	9.380	9.371	0.000	83	662634	18.3	
57 1,1,1-Trichloroethane	97	10.476	10.477	-0.011	1	491	0.0155	
58 n-Butanol	56	10.527	10.517	0.010	27	780	0.9287	
62 Benzene	78	10.943	10.933	0.000	95	5033	0.0646	
69 Trichloroethene	132	11.674	11.664	0.000	96	289316	13.6	
80 Toluene	92	13.370	13.370	0.000	94	4324	0.0685	
82 Ethyl methacrylate	69	13.299	13.388	-0.101	34	1848	0.0926	
83 2-Hexanone	43	13.593	13.560	0.020	1	197	0.0128	
87 Tetrachloroethene	164	14.263	14.250	0.000	84	2758	0.1461	
92 Butyl Ether	87	15.217	15.214	-0.010	92	607	0.0368	
91 Ethylbenzene	91	15.288	15.288	0.000	91	3329	0.0322	
93 m-Xylene & p-Xylene	91	15.512	15.522	-0.010	95	5340	0.0657	
97 o-Xylene	91	16.019	16.019	0.000	93	2399	0.0292	

Report Date: 05-Sep-2018 10:37:35 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180904-53647.b\09041835.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
102 N-Propylbenzene	91	17.014	17.014	0.000	93	2585	0.0214	
105 1,3,5-Trimethylbenzene	105	17.369	17.359	0.010	1	1831	0.0207	
106 tert-Butylbenzene	119	17.725	17.735	-0.010	1	969	0.0122	
107 1,2,4-Trimethylbenzene	105	17.867	17.867	0.000	92	5901	0.0663	
109 1,3-Dichlorobenzene	146	18.131	18.141	-0.010	1	355	0.007345	7
111 1,4-Dichlorobenzene	146	18.182	18.222	-0.040	34	564	0.0120	
112 4-Isopropyltoluene	119	18.232	18.232	0.000	93	4120	0.0413	
113 1,2,3-Trimethylbenzene	105	18.425	18.425	0.000	1	1979	0.0216	
115 n-Butylbenzene	91	18.760	18.760	0.000	80	2540	0.0284	
118 1,3,5-Trichlorobenzene	180	20.334	20.315	0.000	1	371	0.009601	
119 1,2,4-Trichlorobenzene	180	21.055	21.055	0.000	1	692	0.0217	
120 Naphthalene	128	21.400	21.410	-0.010	95	6057	0.0978	
126 Butane	43	5.441	5.461	-0.020	1	2793	NR	
A 158 C6-C8	1	11.456	(9.106-13.806)		0	4239048	21.5	
A 134 C4-C10	1	11.466	(5.451-17.481)		0	5840964	29.7	
A 159 C6-C9	1	12.400	(9.106-15.694)		0	4625542	23.5	
A 136 C4-C12	1	13.024	(5.451-20.598)		0	6206675	31.5	
A 137 C6-C10	1	13.294	(9.106-17.481)		0	4741382	24.1	
A 138 C5-C12	1	13.826	(7.055-20.598)		0	5759507	29.3	
A 139 C6-C12	1	14.852	(9.106-20.598)		0	5107093	25.9	
A 160 C8-C10	1	15.598	(13.715-17.481)		0	787340	4.00	
A 141 C7-C12	1	16.029	(11.461-20.598)		0	2882127	14.6	
S 142 Xylenes, Total	1				0		0.0949	
T 156 Paraldehyde TIC	45	13.278	13.266	0.000	0	420	0.3321	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

7 - Failed Limit of Detection

Reagents:

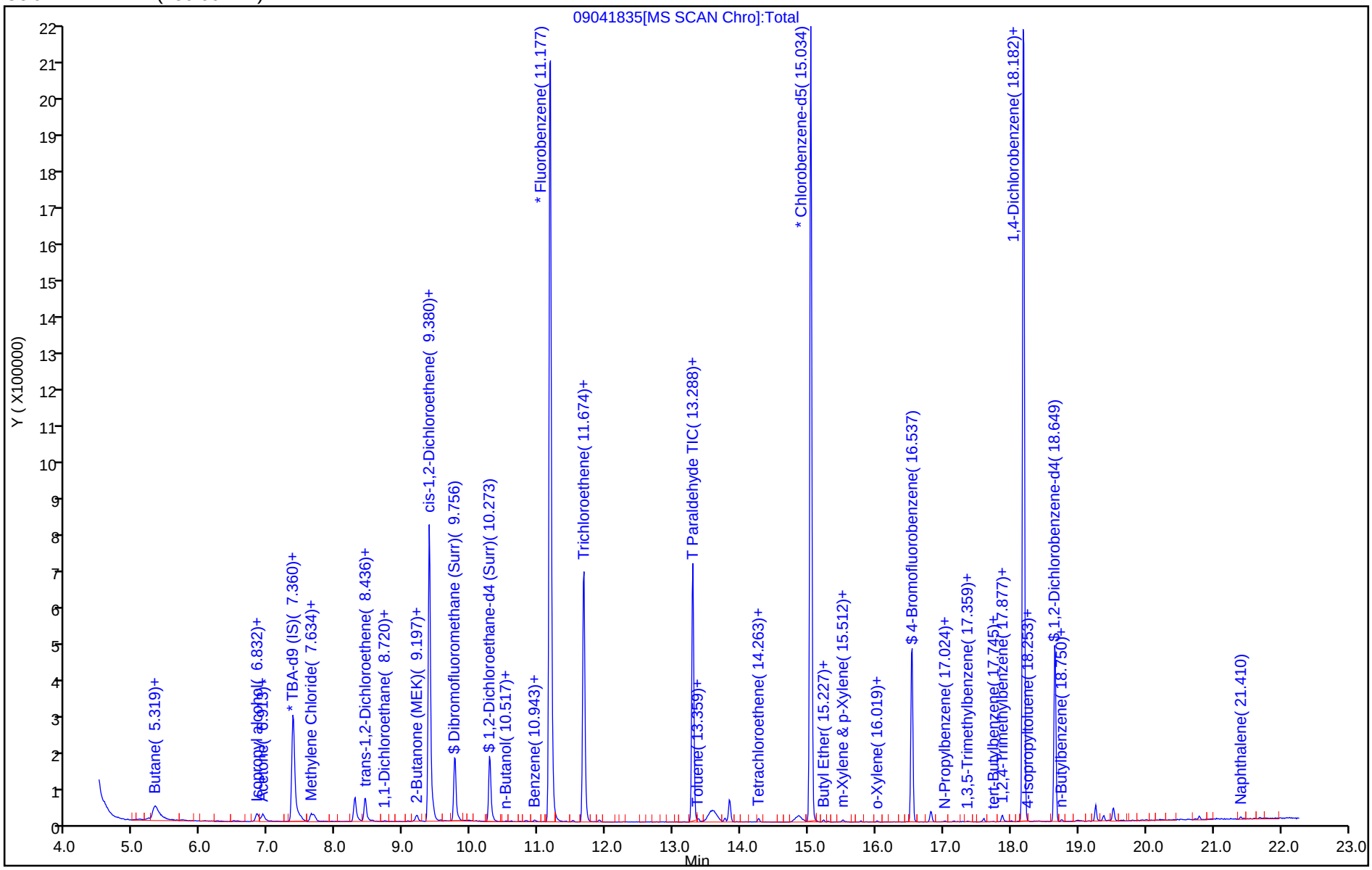
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 05-Sep-2018 10:37:35 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180904-53647.b\09041835.D				
Injection Date:	04-Sep-2018 23:21:30	Instrument ID:	HP4	Operator ID:	SF
Lims ID:	720-88255-B-4	Lab Sample ID:	720-88255-4	Worklist Smp#:	9
Client ID:	DG-G7W				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		

Column: DB-VRX (250.00 mm)



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180904-53647.b\09041835.D				
Lims ID:	720-88255-B-4				
Client ID:	DG-G7W				
Sample Type:	Client				
Inject. Date:	04-Sep-2018 23:21:30	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	720-88255-b-4 RR				
Misc. Info.:	HP-4				
Operator ID:	SF	Instrument ID:	HP4		
Method:	\\ChromNA\Pleasanton\ChromData\HP4\20180904-53647.b\8260W_LL_GRO_HP4.m				
Limit Group:	8260B				
Last Update:	05-Sep-2018 07:53:42	Calib Date:	26-Jul-2018 01:42:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\HP4\20180725-52939.b\07251826.D				
Column 1 :	DB-VRX (250.00 mm)		Det: MS SCAN		
Process Host:	XAWRK013				

First Level Reviewer: medinaj Date: 05-Sep-2018 10:37:34

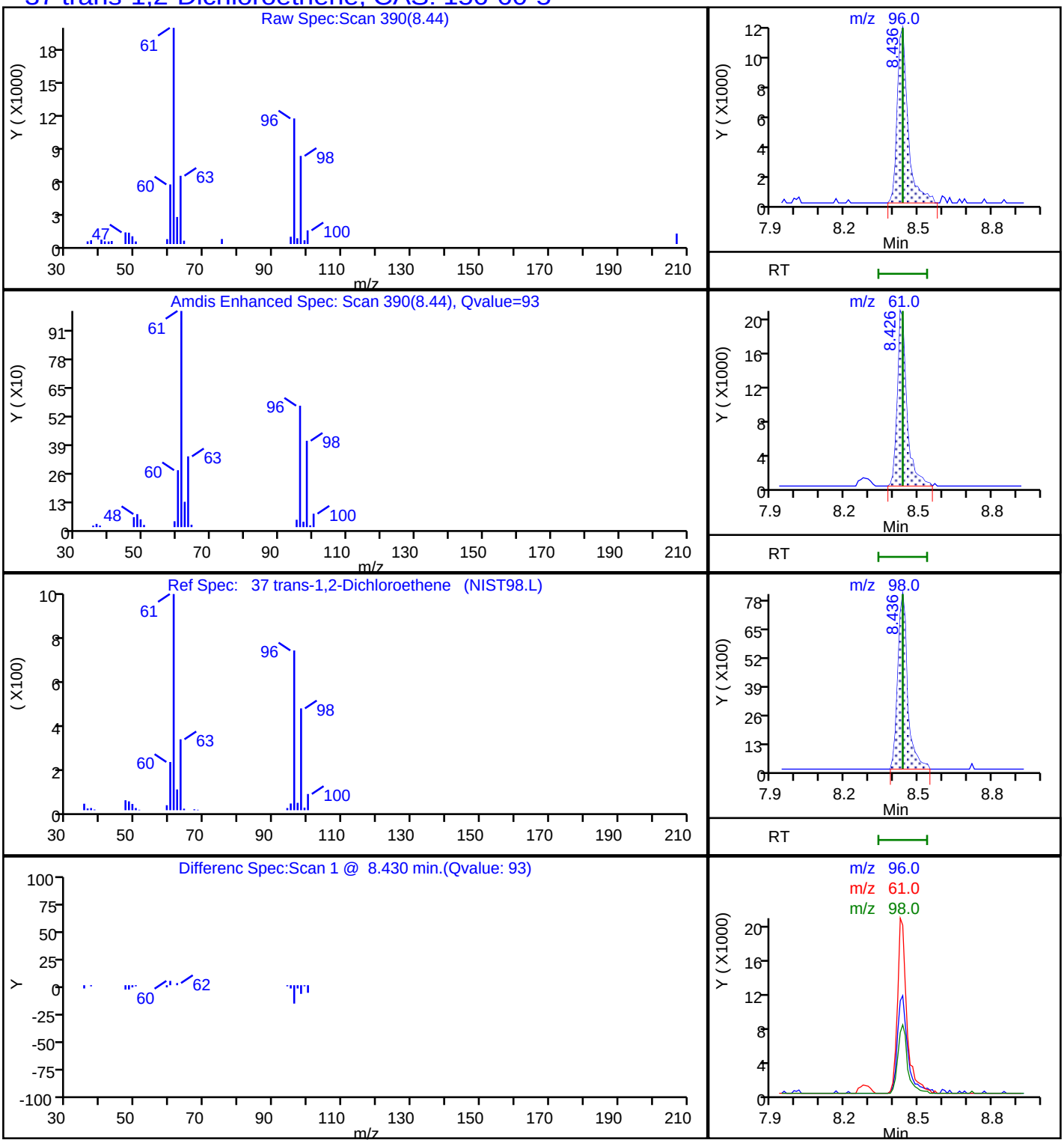
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 6 1,2-Dichloroethane-d4 (Surr)	7.50	7.67	102.32
$ 8 Toluene-d8 (Surr)	7.50	7.57	100.92
$ 9 4-Bromofluorobenzene	7.50	7.25	96.69
$ 10 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 05-Sep-2018 10:37:35 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180904-53647.b\09041835.D				
Injection Date:	04-Sep-2018 23:21:30	Instrument ID:	HP4		
Lims ID:	720-88255-B-4	Lab Sample ID:	720-88255-4		
Client ID:	DG-G7W				
Operator ID:	SF	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

37 trans-1,2-Dichloroethene, CAS: 156-60-5



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88255-1
SDG No.:
Client Sample ID: DG-I7W
Lab Sample ID: 720-88255-5
Matrix: Water
Lab File ID: 08311822.D
Analysis Method: 8260B
Date Collected: 08/24/2018 15:30
Sample wt/vol: 10(mL)
Date Analyzed: 08/31/2018 16:11
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX
ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250641
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.067
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.074
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	0.50	0.091
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.11
75-34-3	1,1-Dichloroethane	ND		0.50	0.11
75-35-4	1,1-Dichloroethene	ND	*	0.50	0.20
563-58-6	1,1-Dichloropropene	ND		0.50	0.20
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.21
96-18-4	1,2,3-Trichloropropane	ND		0.50	0.087
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.20
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.21
107-06-2	1,2-Dichloroethane	ND		0.50	0.077
78-87-5	1,2-Dichloropropane	ND		0.50	0.20
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.17
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.20
142-28-9	1,3-Dichloropropane	ND		1.0	0.17
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.16
594-20-7	2,2-Dichloropropane	ND		0.50	0.17
78-93-3	2-Butanone (MEK)	ND		50	8.4
95-49-8	2-Chlorotoluene	ND		0.50	0.20
591-78-6	2-Hexanone	ND		50	3.0
106-43-4	4-Chlorotoluene	ND		0.50	0.20
99-87-6	4-Isopropyltoluene	ND		1.0	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	4.5
67-64-1	Acetone	ND		50	20
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		1.0	0.20
75-25-2	Bromoform	ND		1.0	0.50
74-83-9	Bromomethane	ND		1.0	0.49
75-15-0	Carbon disulfide	ND	*	5.0	0.78
56-23-5	Carbon tetrachloride	ND		0.50	0.11
108-90-7	Chlorobenzene	ND		0.50	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88255-1
SDG No.:
Client Sample ID: DG-I7W
Lab Sample ID: 720-88255-5
Matrix: Water
Lab File ID: 08311822.D
Analysis Method: 8260B
Date Collected: 08/24/2018 15:30
Sample wt/vol: 10(mL)
Date Analyzed: 08/31/2018 16:11
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX
ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250641
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-97-5	Chlorobromomethane	ND		1.0	0.25
124-48-1	Chlorodibromomethane	ND		0.50	0.10
75-00-3	Chloroethane	ND		1.0	0.17
67-66-3	Chloroform	ND		1.0	0.40
74-87-3	Chloromethane	ND		1.0	0.19
156-59-2	cis-1,2-Dichloroethene	18		0.50	0.076
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
74-95-3	Dibromomethane	ND		0.50	0.30
75-27-4	Dichlorobromomethane	ND		0.50	0.20
75-71-8	Dichlorodifluoromethane	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.13
106-93-4	Ethylene Dibromide	ND		0.50	0.075
STL00350	Gasoline Range Organics (GRO)-C4-C12	42	J	50	21
87-68-3	Hexachlorobutadiene	ND		1.0	0.27
98-82-8	Isopropylbenzene	ND		0.50	0.20
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.11
75-09-2	Methylene Chloride	ND	*	5.0	1.5
91-20-3	Naphthalene	ND		1.0	0.22
104-51-8	n-Butylbenzene	ND		1.0	0.30
103-65-1	N-Propylbenzene	ND		1.0	0.20
135-98-8	sec-Butylbenzene	ND		1.0	0.17
100-42-5	Styrene	ND		0.50	0.22
98-06-6	tert-Butylbenzene	ND		1.0	0.20
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.17
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.17
79-01-6	Trichloroethene	5.3		0.50	0.20
75-69-4	Trichlorofluoromethane	ND		1.0	0.30
108-05-4	Vinyl acetate	ND		10	0.60
75-01-4	Vinyl chloride	13		0.50	0.20
1330-20-7	Xylenes, Total	ND		0.50	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88255-1

SDG No.:

Client Sample ID: DG-I7W Lab Sample ID: 720-88255-5

Matrix: Water Lab File ID: 08311822.D

Analysis Method: 8260B Date Collected: 08/24/2018 15:30

Sample wt/vol: 10(mL) Date Analyzed: 08/31/2018 16:11

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250641 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		72-130
460-00-4	4-Bromofluorobenzene	89		67-130
2037-26-5	Toluene-d8 (Surr)	94		70-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\08311822.D
Lims ID: 720-88255-A-5
Client ID: DG-I7W
Sample Type: Client
Inject. Date: 31-Aug-2018 16:11:30 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88255-A-5
Operator ID: SF Instrument ID: HP9

Method: \\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\HP9_8260_LL.m
Limit Group: 8260B
Last Update: 03-Sep-2018 13:24:55 Calib Date: 23-Aug-2018 18:09:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP9\20180823-53445.b\08231828.D

Column 1 : Det: MS SCAN
Process Host: XAWRK020

First Level Reviewer: chaijita Date: 03-Sep-2018 13:24:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.149	7.159	-0.010	0	51308	250.0	
* 2 Fluorobenzene	96	10.936	10.936	0.000	99	671973	25.0	
* 4 Chlorobenzene-d5	117	14.763	14.764	-0.001	82	520414	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.903	17.903	0.000	92	277006	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.528	9.528	0.000	55	48495	7.11	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.045	10.045	0.000	0	32575	6.93	
$ 10 Toluene-d8 (Surr)	98	13.032	13.032	0.000	93	173771	7.07	
$ 11 4-Bromofluorobenzene	95	16.252	16.252	0.000	87	56222	6.67	
$ 12 1,2-Dichlorobenzene-d4	152	18.358	18.358	0.000	73	61963	5.80	
19 Vinyl chloride	62	5.093	5.083	0.010	83	271099	13.0	
28 Acetone	58	6.713	6.713	0.000	78	1071	3.37	
38 trans-1,2-Dichloroethene	96	8.212	8.212	0.000	92	14198	1.42	
48 cis-1,2-Dichloroethene	61	9.154	9.154	0.000	69	195020	18.3	
65 Trichloroethene	132	11.422	11.432	-0.010	90	45962	5.32	
A 116 C4-C10	1	11.189	(5.123-17.255)		0	2290841	36.3	
A 153 C6-C8	1	11.194	(8.890-13.498)		0	1111179	17.6	
A 154 C6-C9	1	12.161	(8.890-15.432)		0	1255180	19.9	
A 117 C4-C12	1	12.738	(5.123-20.353)		0	2639432	41.8	
A 123 Aviation Gas	1	12.992	(8.890-17.093)		0	1383307	NC	
A 119 C6-C10	1	13.073	(8.890-17.255)		0	1395081	22.1	
A 118 C5-C12	1	13.528	(6.703-20.353)		0	1934586	30.6	
A 120 C6-C12	1	14.622	(8.890-20.353)		0	1743672	27.6	
A 155 C8-C10	1	15.336	(13.417-17.255)		0	283902	4.50	
A 121 C7-C12	1	15.786	(11.219-20.353)		0	912548	14.5	

QC Flag Legend

Processing Flags

NC - Not Calibrated

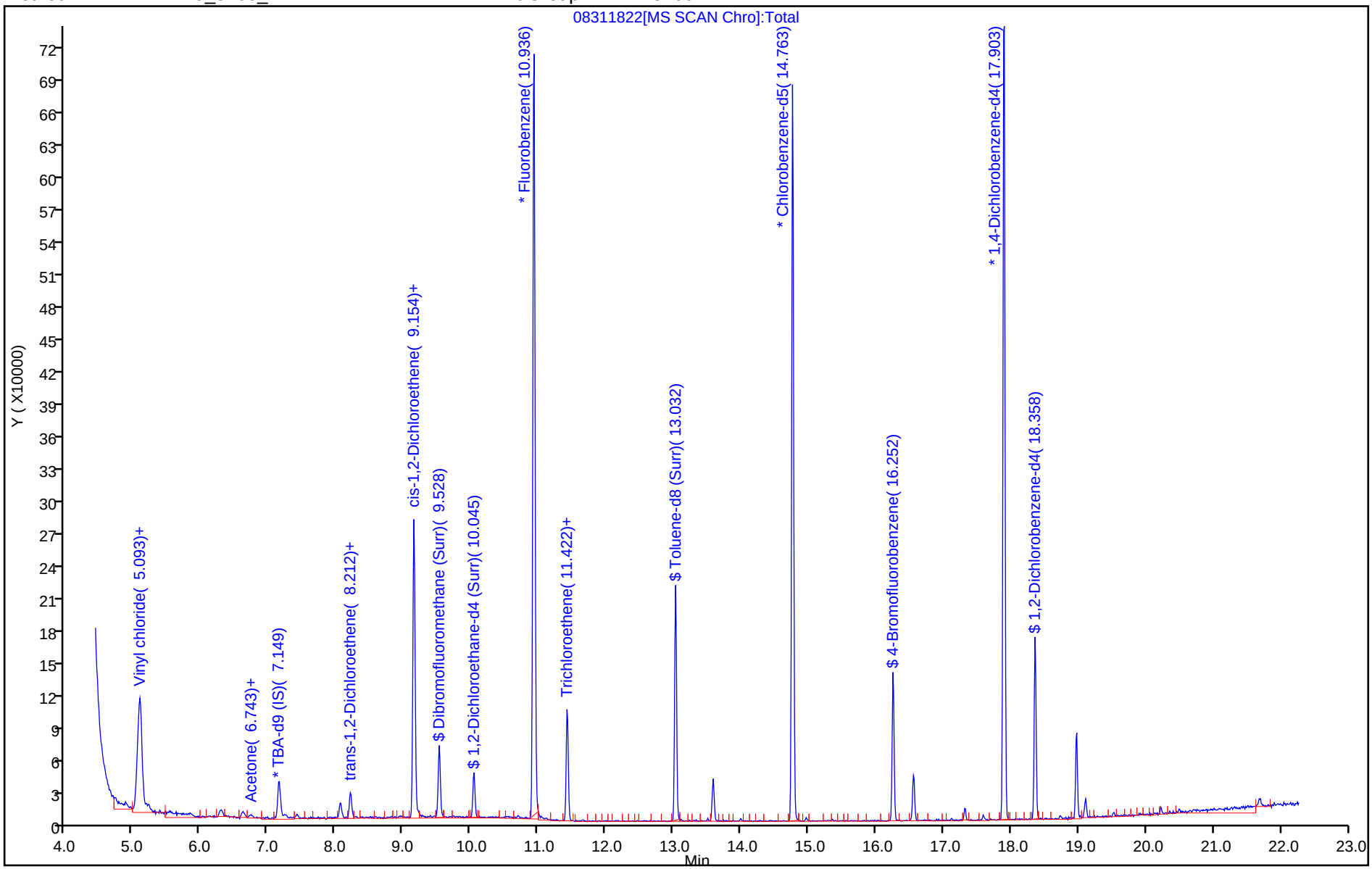
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 03-Sep-2018 13:24:56 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\08311822.D				
Injection Date:	31-Aug-2018 16:11:30	Instrument ID:	HP9	Operator ID:	SF
Lims ID:	720-88255-A-5	Lab Sample ID:	720-88255-5	Worklist Smp#:	22
Client ID:	DG-I7W				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	HP9_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\08311822.D
Lims ID: 720-88255-A-5
Client ID: DG-I7W
Sample Type: Client
Inject. Date: 31-Aug-2018 16:11:30 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88255-A-5
Operator ID: SF Instrument ID: HP9

Method: \\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\HP9_8260_LL.m
Limit Group: 8260B
Last Update: 03-Sep-2018 13:24:55 Calib Date: 23-Aug-2018 18:09:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP9\20180823-53445.b\08231828.D

Column 1 : Det: MS SCAN
Process Host: XAWRK020

First Level Reviewer: chaijita Date: 03-Sep-2018 13:24:55

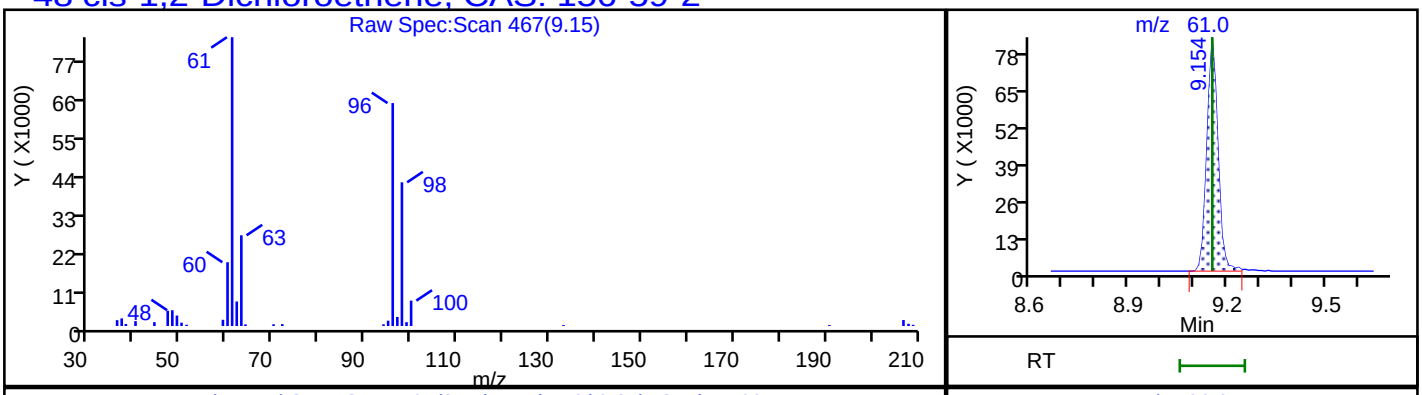
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	6.93	92.39
$ 10 Toluene-d8 (Surr)	7.50	7.07	94.25
$ 11 4-Bromofluorobenzene	7.50	6.67	88.88
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

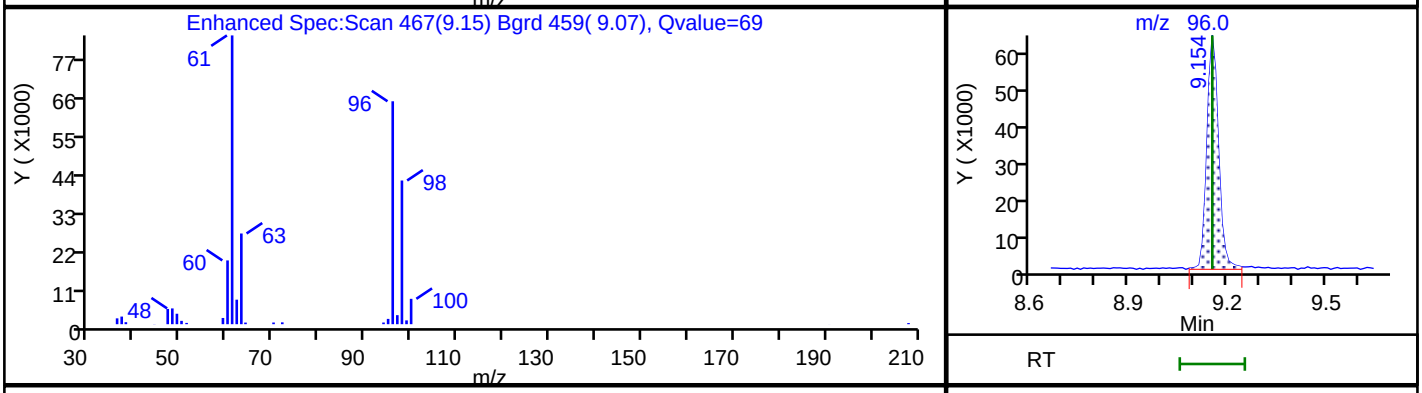
Report Date: 03-Sep-2018 13:24:56 Chrom Revision: 2.3 19-Jul-2018 15:14:50

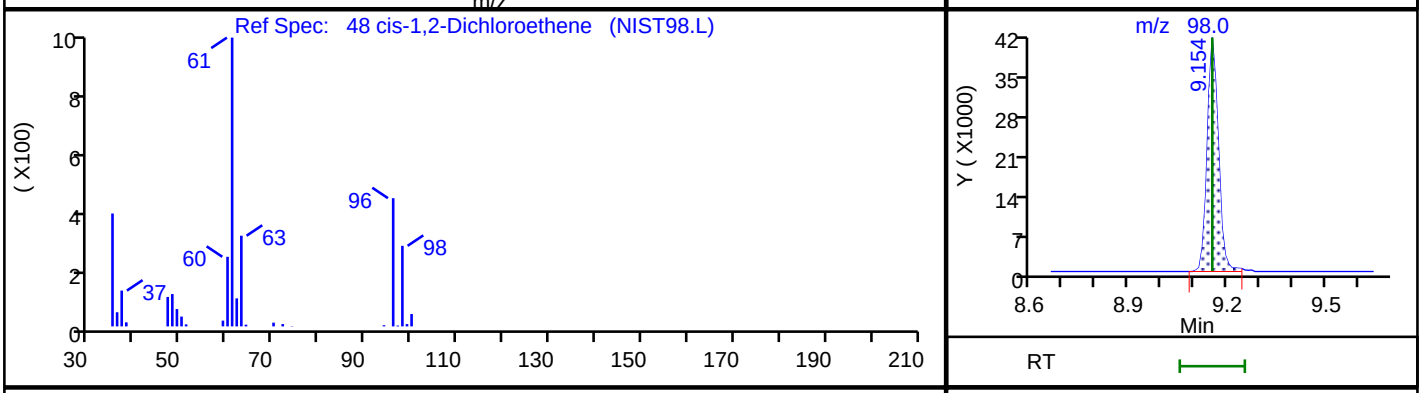
TestAmerica Pleasanton

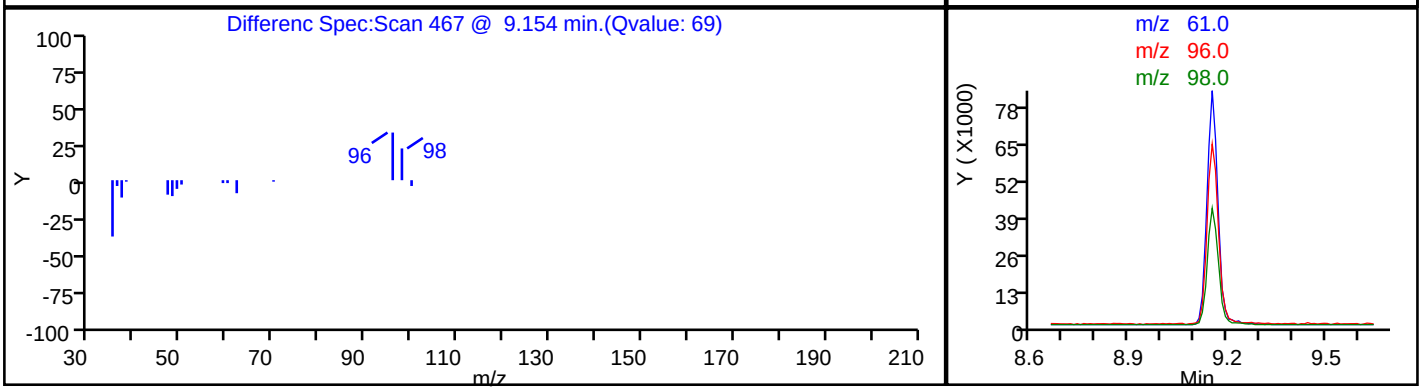
Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\08311822.D				
Injection Date:	31-Aug-2018 16:11:30	Instrument ID:	HP9		
Lims ID:	720-88255-A-5	Lab Sample ID:	720-88255-5		
Client ID:	DG-I7W				
Operator ID:	SF	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

48 cis-1,2-Dichloroethene, CAS: 156-59-2







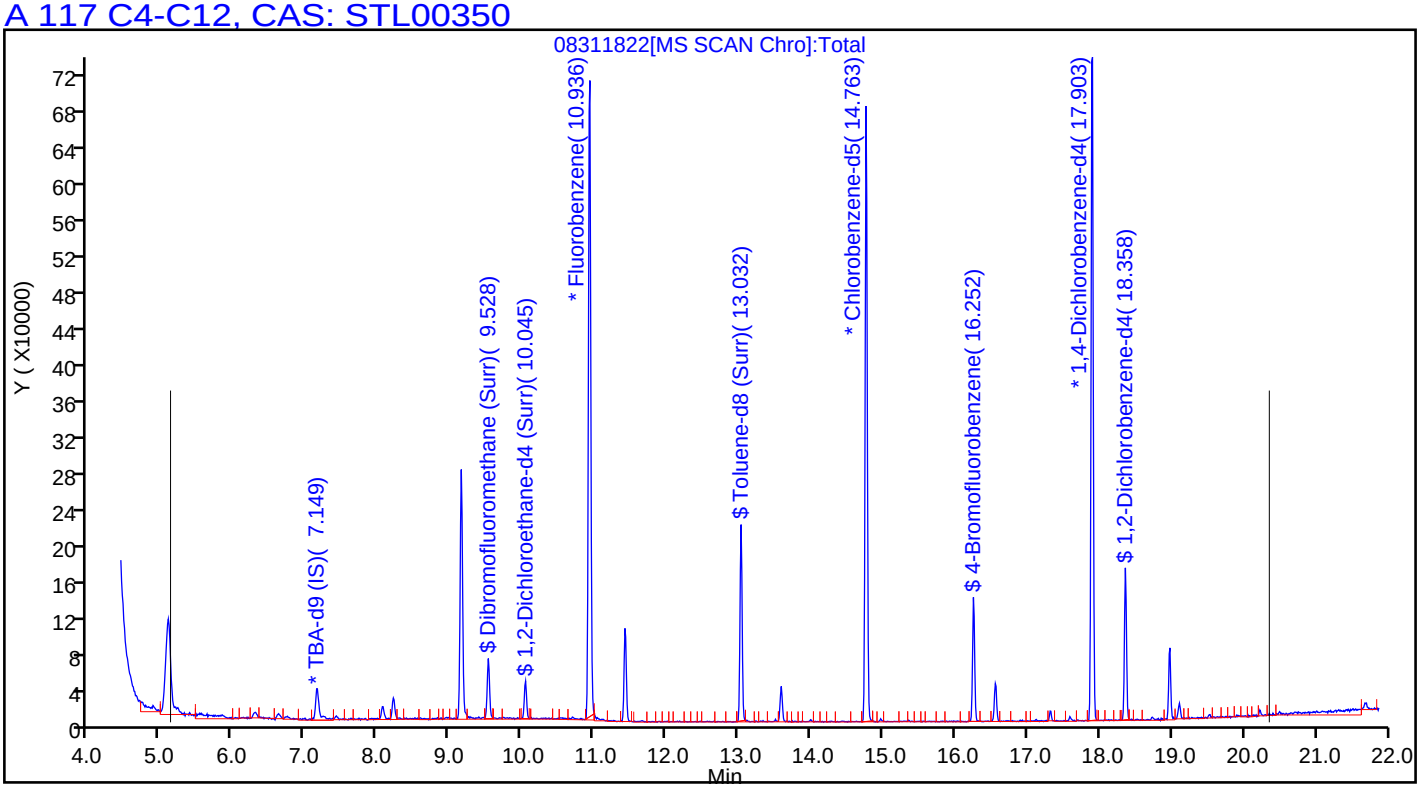


Report Date: 03-Sep-2018 13:24:56 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\08311822.D				
Injection Date:	31-Aug-2018 16:11:30	Instrument ID:	HP9		
Lims ID:	720-88255-A-5	Lab Sample ID:	720-88255-5		
Client ID:	DG-I7W				
Operator ID:	SF	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350

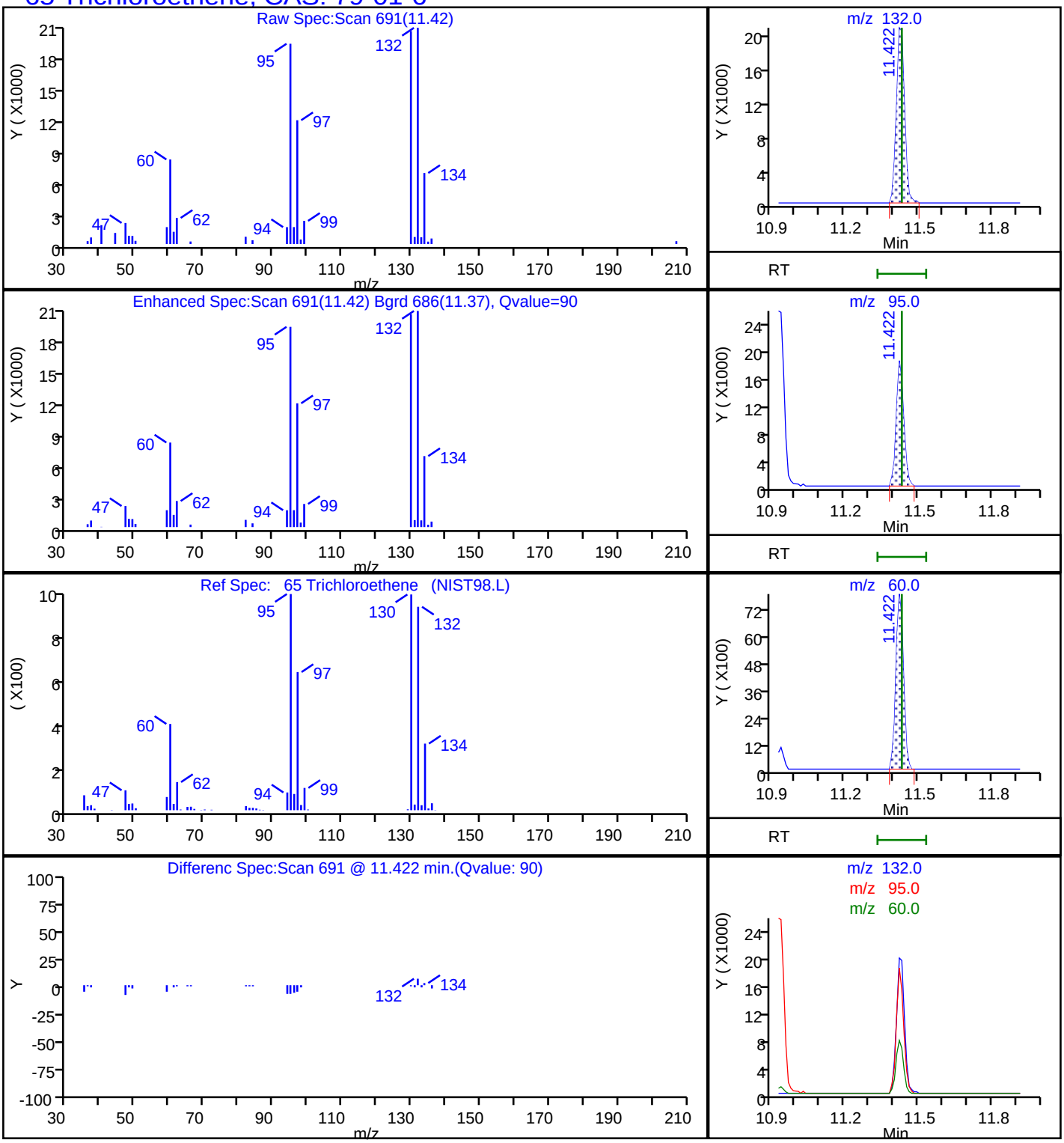


Report Date: 03-Sep-2018 13:24:56 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\08311822.D				
Injection Date:	31-Aug-2018 16:11:30	Instrument ID:	HP9		
Lims ID:	720-88255-A-5	Lab Sample ID:	720-88255-5		
Client ID:	DG-I7W				
Operator ID:	SF	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

65 Trichloroethene, CAS: 79-01-6

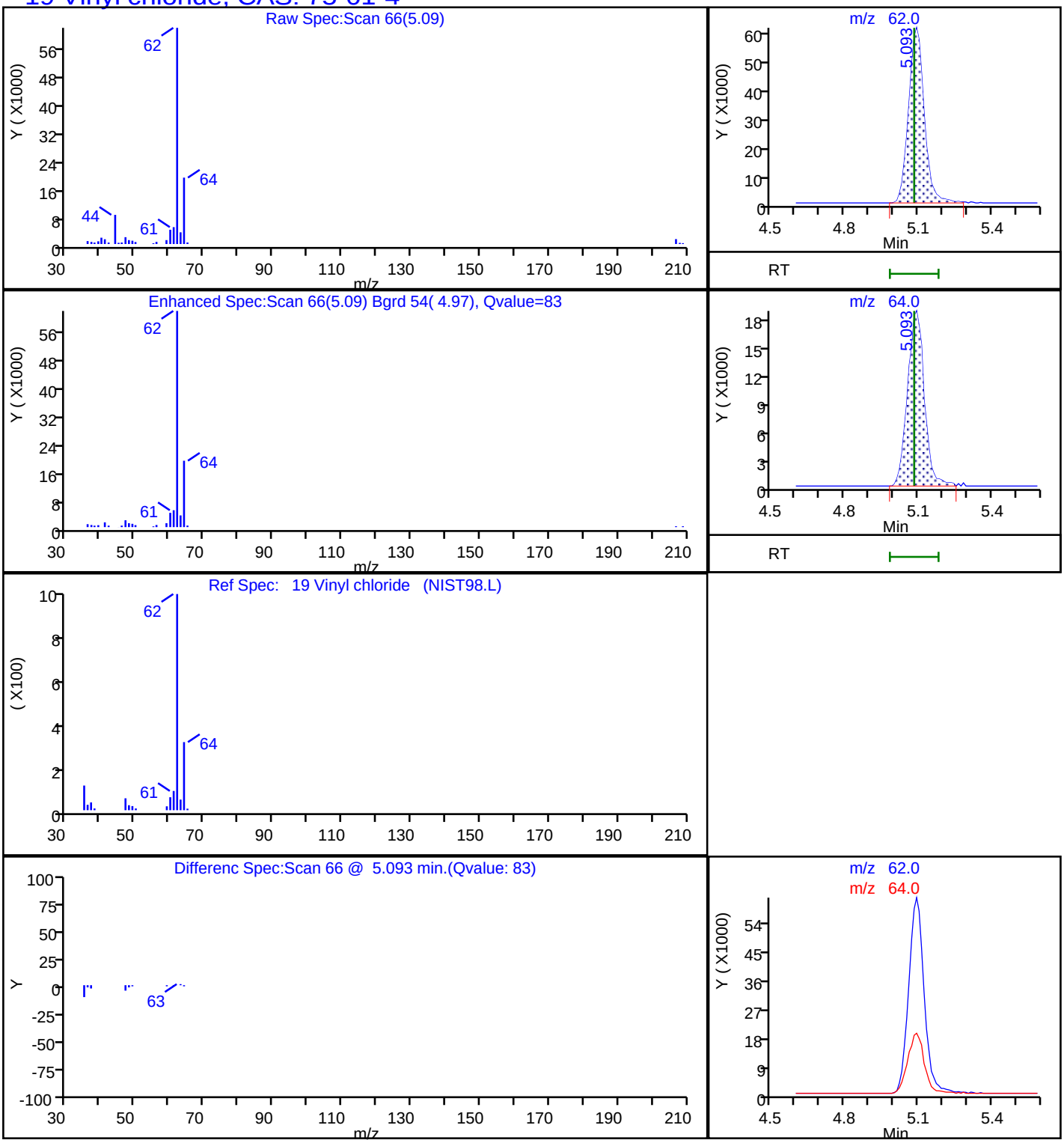


Report Date: 03-Sep-2018 13:24:56 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180831-53593.b\08311822.D				
Injection Date:	31-Aug-2018 16:11:30	Instrument ID:	HP9		
Lims ID:	720-88255-A-5	Lab Sample ID:	720-88255-5		
Client ID:	DG-I7W				
Operator ID:	SF	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

19 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88255-1

SDG No.:

Client Sample ID: DG-I7W Lab Sample ID: 720-88255-5

Matrix: Water Lab File ID: 09041836.D

Analysis Method: 8260B Date Collected: 08/24/2018 15:30

Sample wt/vol: 10(mL) Date Analyzed: 09/04/2018 23:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250832 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	1.1		0.50	0.13

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		72-130
460-00-4	4-Bromofluorobenzene	95		67-130
2037-26-5	Toluene-d8 (Surr)	98		70-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180904-53647.b\09041836.D
Lims ID: 720-88255-B-5
Client ID: DG-I7W
Sample Type: Client
Inject. Date: 04-Sep-2018 23:51:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 720-88255-b-5 RR
Misc. Info.: HP-4
Operator ID: SF Instrument ID: HP4

Method: \\ChromNA\Pleasanton\ChromData\HP4\20180904-53647.b\8260W_LL_GRO_HP4.m
Limit Group: 8260B
Last Update: 05-Sep-2018 07:53:42 Calib Date: 26-Jul-2018 01:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP4\20180725-52939.b\07251826.D

Column 1 : DB-VRX (250.00 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: medinaj Date: 05-Sep-2018 10:40:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.360	7.360	0.000	98	374009	250.0	
* 2 Fluorobenzene	96	11.167	11.177	-0.010	98	1883259	25.0	
* 3 Chlorobenzene-d5	117	15.034	15.035	-0.001	88	1391436	25.0	
* 4 1,4-Dichlorobenzene-d4	152	18.192	18.192	0.000	96	706608	25.0	
$ 5 Dibromofluoromethane (Surr	113	9.755	9.757	-0.011	92	134603	7.72	
$ 6 1,2-Dichloroethane-d4 (Sur	65	10.273	10.274	-0.010	0	157255	7.35	
$ 8 Toluene-d8 (Surr)	98	13.288	13.276	0.000	94	534960	7.37	
$ 9 4-Bromofluorobenzene	95	16.527	16.537	-0.010	87	199572	7.14	
$ 10 1,2-Dichlorobenzene-d4	152	18.659	18.659	0.000	85	154428	5.90	
13 Chloromethane	50	5.035	5.030	0.000	1	658	0.0174	
14 Vinyl chloride	62	5.319	5.314	0.000	97	376353	12.8	
18 Ethanol	45	6.030	6.030	0.000	15	4696	18.3	
23 Isopropyl alcohol	45	6.832	6.832	0.000	99	26996	19.9	
24 Acetone	58	6.923	6.907	0.010	99	4864	2.57	
27 1,1-Dichloroethene	96	7.481	7.475	-0.001	69	1859	0.1119	
31 Methylene Chloride	84	7.634	7.627	0.000	96	14333	0.8043	
37 trans-1,2-Dichloroethene	96	8.436	8.428	0.000	94	20619	1.15	
38 Methyl tert-butyl ether	73	8.537	8.540	-0.011	1	2617	0.0557	
39 1,1-Dichloroethane	63	8.730	8.712	0.010	89	4160	0.1012	
45 Isopropyl ether	45	9.197	9.189	0.000	72	4588	0.0468	
47 cis-1,2-Dichloroethene	61	9.380	9.371	0.000	84	421048	12.0	
55 t-Amyl alcohol	59	10.131	10.121	0.010	6	1142	0.7381	
62 Benzene	78	10.943	10.933	0.000	93	4021	0.0534	
69 Trichloroethene	132	11.674	11.664	0.000	96	79028	3.85	
80 Toluene	92	13.369	13.370	-0.001	90	2002	0.0337	
82 Ethyl methacrylate	69	13.298	13.388	-0.102	34	1343	0.0696	
87 Tetrachloroethene	164	14.253	14.250	-0.010	83	705	0.0386	
90 Chlorobenzene	112	15.045	15.075	-0.030	37	127	0.002364	7
92 Butyl Ether	87	15.227	15.214	0.000	49	443	0.0278	
91 Ethylbenzene	91	15.298	15.288	0.010	1	1627	0.0167	
93 m-Xylene & p-Xylene	91	15.512	15.522	-0.010	1	2495	0.0327	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
97 o-Xylene	91	16.019	16.019	0.000	1	1051	0.0136	
105 1,3,5-Trimethylbenzene	105	17.369	17.359	0.010	1	355	0.004368	7
107 1,2,4-Trimethylbenzene	105	17.867	17.867	0.000	52	1741	0.0212	
111 1,4-Dichlorobenzene	146	18.192	18.222	-0.030	34	504	0.0116	
112 4-Isopropyltoluene	119	18.232	18.232	0.000	1	1666	0.0182	
115 n-Butylbenzene	91	18.760	18.760	0.000	1	1223	0.0148	
122 1,2,3-Trichlorobenzene	180	21.694	21.694	0.000	1	322	0.0124	
126 Butane	43	5.451	5.461	-0.010	8	2163	NR	
A 158 C6-C8	1	11.456	(9.106-13.806)		0	1958355	10.3	
A 134 C4-C10	1	11.466	(5.451-17.481)		0	3423952	18.0	
A 159 C6-C9	1	12.400	(9.106-15.694)		0	2207961	11.6	
A 136 C4-C12	1	13.024	(5.451-20.598)		0	3731372	19.6	
A 137 C6-C10	1	13.294	(9.106-17.481)		0	2324838	12.2	
A 138 C5-C12	1	13.826	(7.055-20.598)		0	2981514	15.7	
A 139 C6-C12	1	14.852	(9.106-20.598)		0	2629147	13.8	
A 160 C8-C10	1	15.598	(13.715-17.481)		0	366483	1.93	
A 141 C7-C12	1	16.029	(11.461-20.598)		0	1221909	6.42	
S 142 Xylenes, Total	1				0		0.0463	
T 156 Paraldehyde TIC	45	13.288	13.266	0.010	0	844	0.6905	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

7 - Failed Limit of Detection

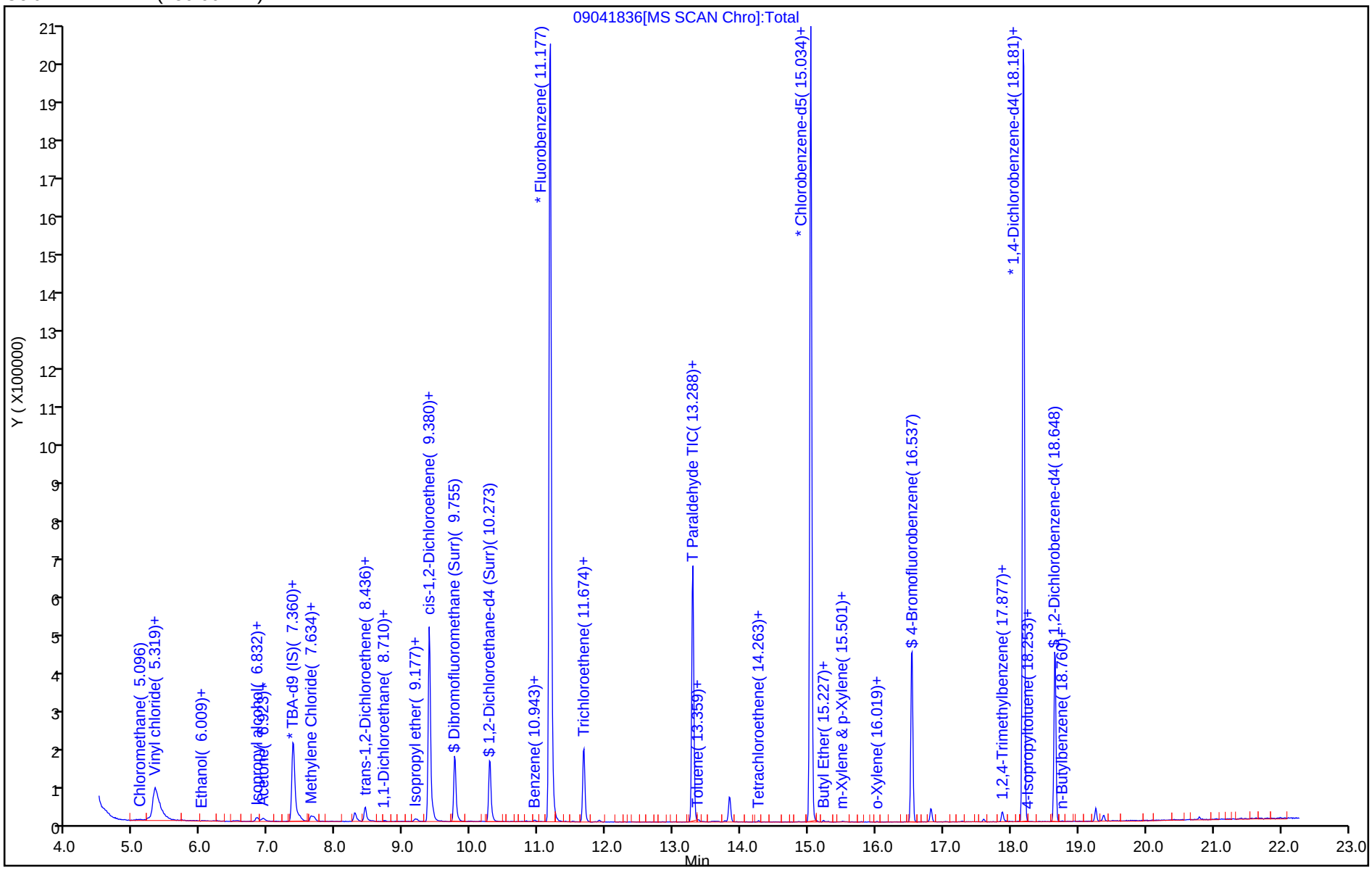
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 05-Sep-2018 10:40:34 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180904-53647.b\09041836.D				
Injection Date:	04-Sep-2018 23:51:30	Instrument ID:	HP4	Operator ID:	SF
Lims ID:	720-88255-B-5	Lab Sample ID:	720-88255-5	Worklist Smp#:	10
Client ID:	DG-I7W				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column: DB-VRX (250.00 mm)					



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180904-53647.b\09041836.D				
Lims ID:	720-88255-B-5				
Client ID:	DG-I7W				
Sample Type:	Client				
Inject. Date:	04-Sep-2018 23:51:30	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	720-88255-b-5 RR				
Misc. Info.:	HP-4				
Operator ID:	SF	Instrument ID:	HP4		
Method:	\\ChromNA\Pleasanton\ChromData\HP4\20180904-53647.b\8260W_LL_GRO_HP4.m				
Limit Group:	8260B				
Last Update:	05-Sep-2018 07:53:42	Calib Date:	26-Jul-2018 01:42:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\HP4\20180725-52939.b\07251826.D				
Column 1 :	DB-VRX (250.00 mm)		Det: MS SCAN		
Process Host:	XAWRK013				

First Level Reviewer: medinaj Date: 05-Sep-2018 10:40:33

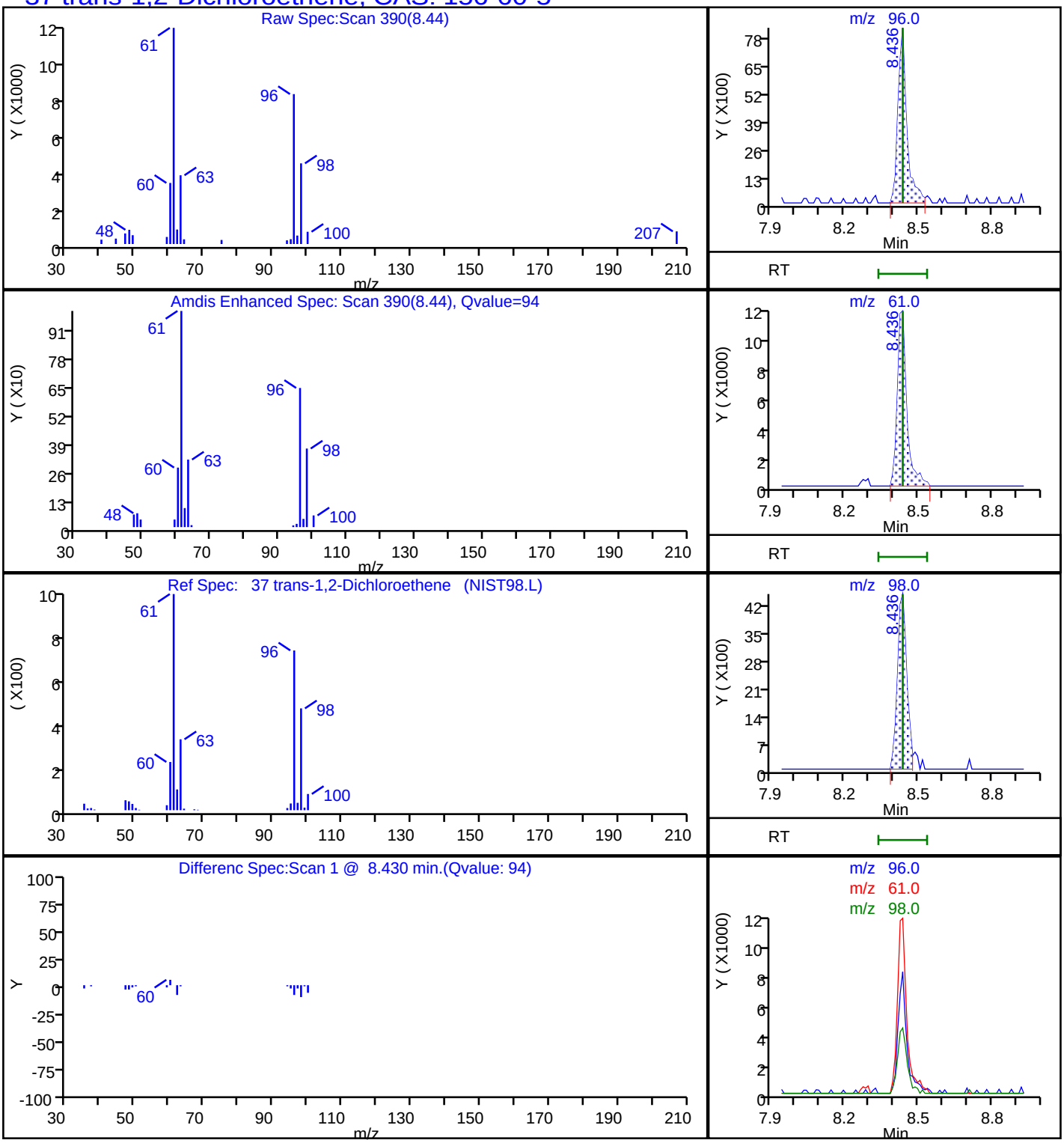
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 6 1,2-Dichloroethane-d4 (Surr)	7.50	7.35	97.99
$ 8 Toluene-d8 (Surr)	7.50	7.37	98.30
$ 9 4-Bromofluorobenzene	7.50	7.14	95.25
$ 10 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 05-Sep-2018 10:40:34 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180904-53647.b\09041836.D				
Injection Date:	04-Sep-2018 23:51:30	Instrument ID:	HP4		
Lims ID:	720-88255-B-5	Lab Sample ID:	720-88255-5		
Client ID:	DG-I7W				
Operator ID:	SF	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

37 trans-1,2-Dichloroethene, CAS: 156-60-5



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88255-1

SDG No.:

Client Sample ID: DG-M7W Lab Sample ID: 720-88255-6

Matrix: Water Lab File ID: 08311816.D

Analysis Method: 8260B Date Collected: 08/24/2018 15:30

Sample wt/vol: 10(mL) Date Analyzed: 08/31/2018 14:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250643 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.067
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.074
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.11
75-34-3	1,1-Dichloroethane	ND		0.50	0.11
75-35-4	1,1-Dichloroethene	ND		0.50	0.20
563-58-6	1,1-Dichloropropene	ND		0.50	0.20
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.21
96-18-4	1,2,3-Trichloropropane	ND		0.50	0.087
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.20
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.21
107-06-2	1,2-Dichloroethane	ND		0.50	0.077
78-87-5	1,2-Dichloropropane	ND		0.50	0.20
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.17
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.20
142-28-9	1,3-Dichloropropane	ND		1.0	0.17
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.16
594-20-7	2,2-Dichloropropane	ND		0.50	0.17
78-93-3	2-Butanone (MEK)	ND		50	8.4
95-49-8	2-Chlorotoluene	ND		0.50	0.20
591-78-6	2-Hexanone	ND		50	3.0
106-43-4	4-Chlorotoluene	ND		0.50	0.20
99-87-6	4-Isopropyltoluene	ND		1.0	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	4.5
67-64-1	Acetone	ND		50	20
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		1.0	0.20
75-25-2	Bromoform	ND		1.0	0.50
74-83-9	Bromomethane	ND		1.0	0.49
75-15-0	Carbon disulfide	ND		5.0	0.78
56-23-5	Carbon tetrachloride	ND		0.50	0.11
108-90-7	Chlorobenzene	ND		0.50	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88255-1
SDG No.:
Client Sample ID: DG-M7W
Lab Sample ID: 720-88255-6
Matrix: Water
Lab File ID: 08311816.D
Analysis Method: 8260B
Date Collected: 08/24/2018 15:30
Sample wt/vol: 10(mL)
Date Analyzed: 08/31/2018 14:17
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX
ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250643
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-97-5	Chlorobromomethane	ND		1.0	0.25
124-48-1	Chlorodibromomethane	ND		0.50	0.10
75-00-3	Chloroethane	ND		1.0	0.17
67-66-3	Chloroform	ND		1.0	0.40
74-87-3	Chloromethane	ND		1.0	0.19
156-59-2	cis-1,2-Dichloroethene	0.23	J	0.50	0.076
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
74-95-3	Dibromomethane	ND		0.50	0.30
75-27-4	Dichlorobromomethane	ND		0.50	0.20
75-71-8	Dichlorodifluoromethane	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.13
106-93-4	Ethylene Dibromide	ND		0.50	0.075
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		50	21
87-68-3	Hexachlorobutadiene	ND		1.0	0.27
98-82-8	Isopropylbenzene	ND		0.50	0.20
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.11
75-09-2	Methylene Chloride	ND		5.0	1.5
91-20-3	Naphthalene	ND		1.0	0.22
104-51-8	n-Butylbenzene	ND		1.0	0.30
103-65-1	N-Propylbenzene	ND		1.0	0.20
135-98-8	sec-Butylbenzene	ND		1.0	0.17
100-42-5	Styrene	ND		0.50	0.22
98-06-6	tert-Butylbenzene	ND		1.0	0.20
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.13
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.17
79-01-6	Trichloroethene	0.36	J	0.50	0.20
75-69-4	Trichlorofluoromethane	ND		1.0	0.30
108-05-4	Vinyl acetate	ND		10	0.60
75-01-4	Vinyl chloride	ND		0.50	0.20
1330-20-7	Xylenes, Total	ND		0.50	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88255-1

SDG No.:

Client Sample ID: DG-M7W Lab Sample ID: 720-88255-6

Matrix: Water Lab File ID: 08311816.D

Analysis Method: 8260B Date Collected: 08/24/2018 15:30

Sample wt/vol: 10(mL) Date Analyzed: 08/31/2018 14:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250643 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		72-130
460-00-4	4-Bromofluorobenzene	97		67-130
2037-26-5	Toluene-d8 (Surr)	101		70-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311816.D
Lims ID: 720-88255-A-6
Client ID: DG-M7W
Sample Type: Client
Inject. Date: 31-Aug-2018 14:17:30 ALS Bottle#: 15 Worklist Smp#: 19
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88255-A-6
Misc. Info.: HP-4
Operator ID: SF Instrument ID: HP4

Method: \\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\8260W_LL_GRO_HP4.m
Limit Group: 8260B
Last Update: 03-Sep-2018 08:53:13 Calib Date: 26-Jul-2018 01:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP4\20180725-52939.b\07251826.D

Column 1 : DB-VRX (250.00 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: chaijita Date: 03-Sep-2018 08:53:13

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.360	7.360	0.000	97	272699	250.0	
* 2 Fluorobenzene	96	11.167	11.177	-0.010	97	1221172	25.0	
* 3 Chlorobenzene-d5	117	15.035	15.035	0.000	89	937111	25.0	
* 4 1,4-Dichlorobenzene-d4	152	18.192	18.192	0.000	97	500364	25.0	
$ 5 Dibromofluoromethane (Surr	113	9.756	9.747	0.000	93	91494	8.10	
$ 6 1,2-Dichloroethane-d4 (Sur	65	10.273	10.264	0.000	0	115562	8.33	
$ 8 Toluene-d8 (Surr)	98	13.288	13.276	0.000	94	354691	7.54	
$ 9 4-Bromofluorobenzene	95	16.527	16.537	-0.010	87	136779	7.27	
$ 10 1,2-Dichlorobenzene-d4	152	18.659	18.659	0.000	86	108110	5.83	
23 Isopropyl alcohol	45	6.832	6.831	0.010	99	59798	60.3	
24 Acetone	58	6.913	6.907	0.000	98	13520	11.0	
44 2-Butanone (MEK)	72	9.197	9.179	0.010	98	3957	3.55	
47 cis-1,2-Dichloroethene	61	9.380	9.372	0.000	80	5163	0.2270	
55 t-Amyl alcohol	59	10.131	10.121	0.010	19	1202	1.07	
69 Trichloroethene	132	11.674	11.664	0.000	92	4730	0.3551	
80 Toluene	92	13.370	13.369	0.000	97	2077	0.0519	
92 Butyl Ether	87	15.227	15.214	0.000	95	933	0.0902	
93 m-Xylene & p-Xylene	91	15.512	15.512	0.000	1	1699	0.0330	
126 Butane	43	5.472	5.461	0.011	1	764	NR	
128 n-Octane	43	13.674	13.745	-0.071	88	2666	NR	
129 n-Nonane	57	15.613	15.664	-0.051	0	1362	NR	
130 n-Decane	57	17.390	17.430	-0.040	93	1937	NR	
131 Dodecane	57	20.506	20.547	-0.041	92	4796	NR	
132 C13	57	22.019	22.059	-0.040	92	7791	NR	
A 158 C6-C8	1	11.456	(9.106-13.806)		0	269390	2.18	
A 134 C4-C10	1	11.466	(5.451-17.481)		0	1353581	11.0	
A 159 C6-C9	1	12.400	(9.106-15.694)		0	584559	4.74	
A 136 C4-C12	1	13.024	(5.451-20.598)		0	2110424	17.1	
A 137 C6-C10	1	13.294	(9.106-17.481)		0	789556	6.40	
A 138 C5-C12	1	13.826	(7.055-20.598)		0	1807799	14.7	
A 139 C6-C12	1	14.852	(9.106-20.598)		0	1546399	12.5	

Report Date: 03-Sep-2018 08:53:14 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311816.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
A 160 C8-C10	1	15.598	(13.715-17.481)		0	530357	4.30	
A 141 C7-C12	1	16.029	(11.461-20.598)		0	1387460	11.2	
S 142 Xylenes, Total	1				0		0.0330	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

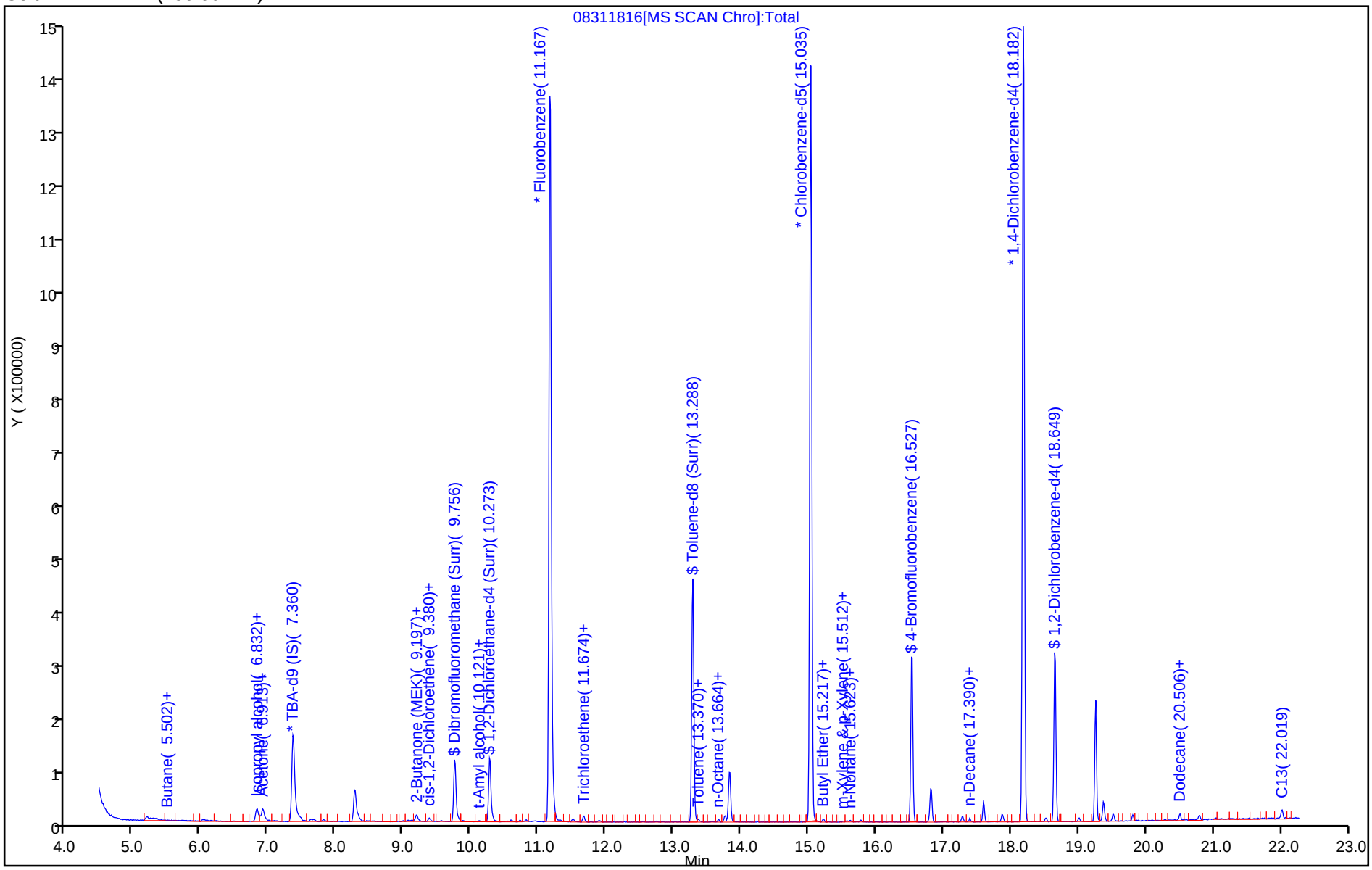
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 03-Sep-2018 08:53:14 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311816.D				
Injection Date:	31-Aug-2018 14:17:30	Instrument ID:	HP4	Operator ID:	SF
Lims ID:	720-88255-A-6	Lab Sample ID:	720-88255-6	Worklist Smp#:	19
Client ID:	DG-M7W				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		

Column: DB-VRX (250.00 mm)



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311816.D				
Lims ID:	720-88255-A-6				
Client ID:	DG-M7W				
Sample Type:	Client				
Inject. Date:	31-Aug-2018 14:17:30	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	88255-A-6				
Misc. Info.:	HP-4				
Operator ID:	SF	Instrument ID:	HP4		
Method:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\8260W_LL_GRO_HP4.m				
Limit Group:	8260B				
Last Update:	03-Sep-2018 08:53:13	Calib Date:	26-Jul-2018 01:42:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\HP4\20180725-52939.b\07251826.D				
Column 1 :	DB-VRX (250.00 mm)		Det: MS SCAN		
Process Host:	XAWRK001				

First Level Reviewer: chaijita Date: 03-Sep-2018 08:53:13

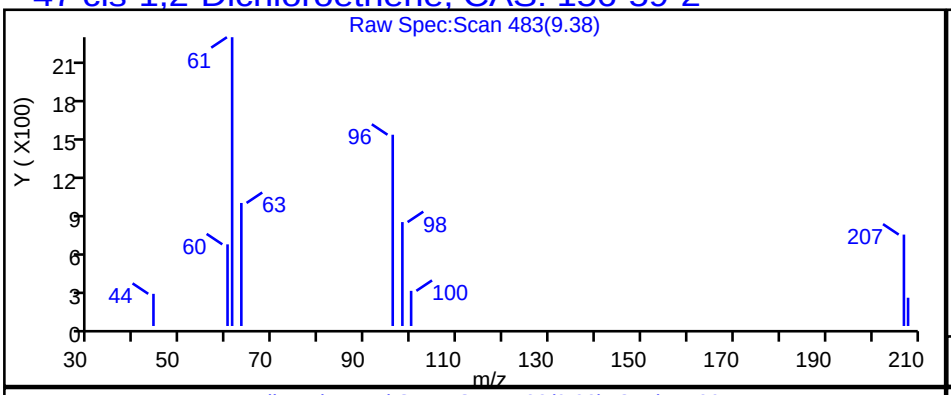
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 6 1,2-Dichloroethane-d4 (Surr)	7.50	8.33	111.05
$ 8 Toluene-d8 (Surr)	7.50	7.54	100.51
$ 9 4-Bromofluorobenzene	7.50	7.27	96.93
$ 10 1,2-Dichlorobenzene-d4	0.0	0	0.00

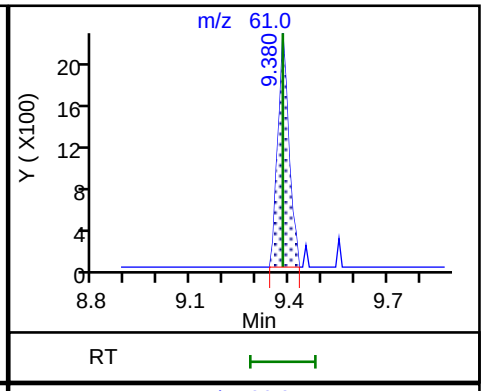
Report Date: 03-Sep-2018 08:53:14 Chrom Revision: 2.3 19-Jul-2018 15:14:50

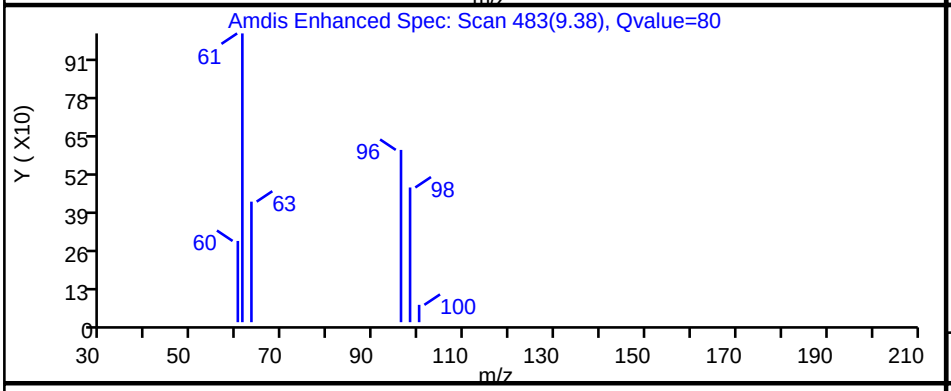
TestAmerica Pleasanton

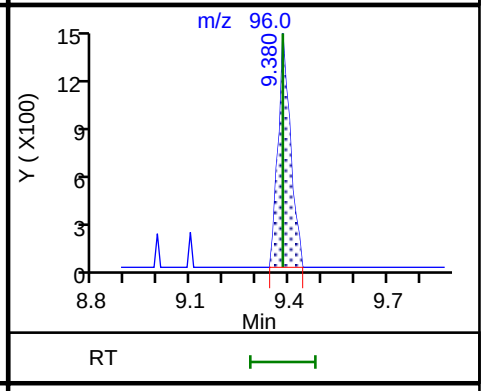
Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311816.D				
Injection Date:	31-Aug-2018 14:17:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-6	Lab Sample ID:	720-88255-6		
Client ID:	DG-M7W				
Operator ID:	SF	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

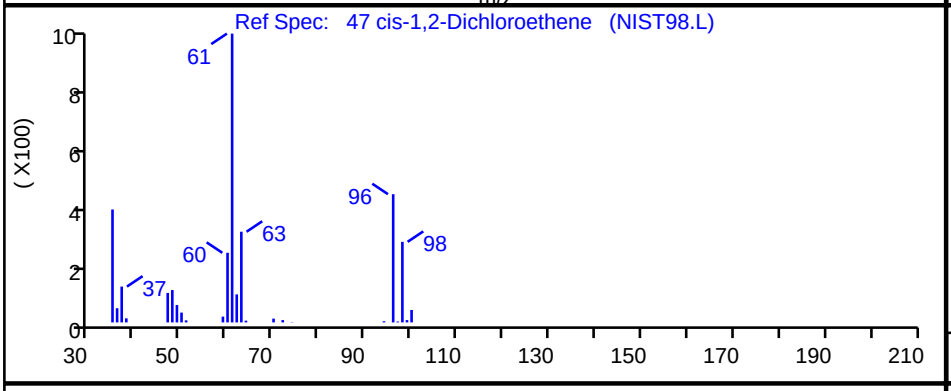
47 cis-1,2-Dichloroethene, CAS: 156-59-2

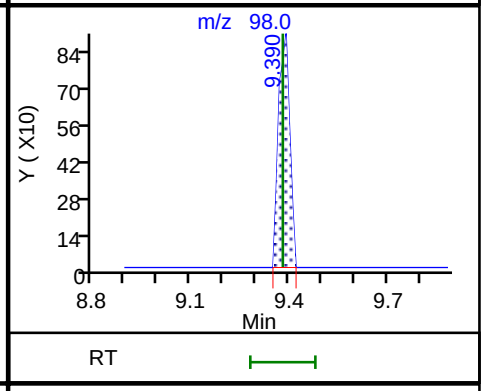


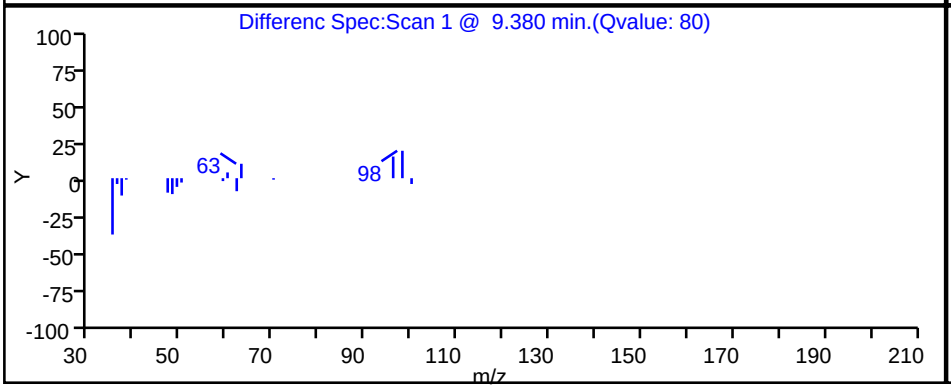


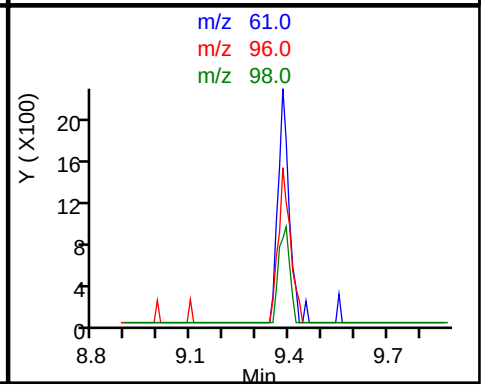










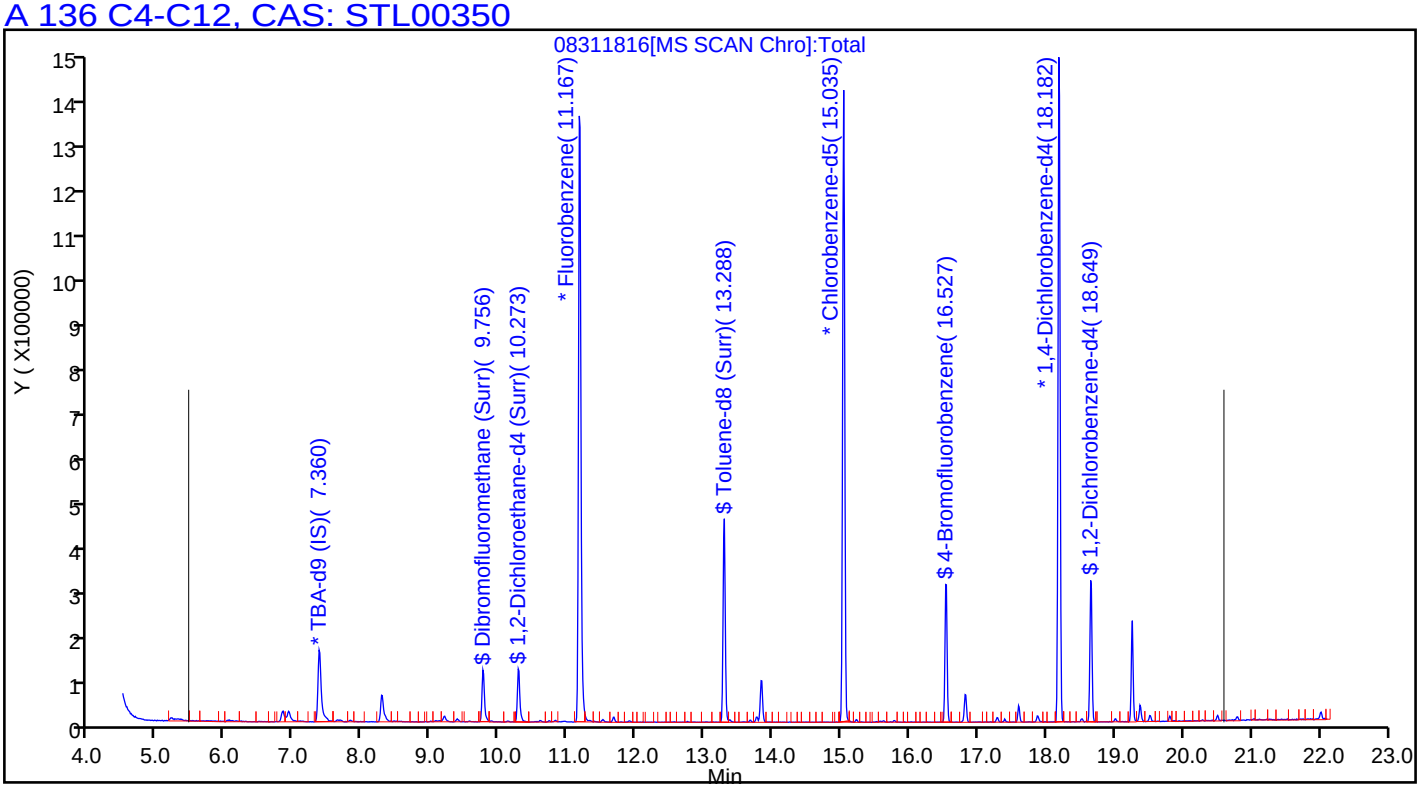


Report Date: 03-Sep-2018 08:53:15 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311816.D				
Injection Date:	31-Aug-2018 14:17:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-6	Lab Sample ID:	720-88255-6		
Client ID:	DG-M7W				
Operator ID:	SF	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

A 136 C4-C12, CAS: STL00350

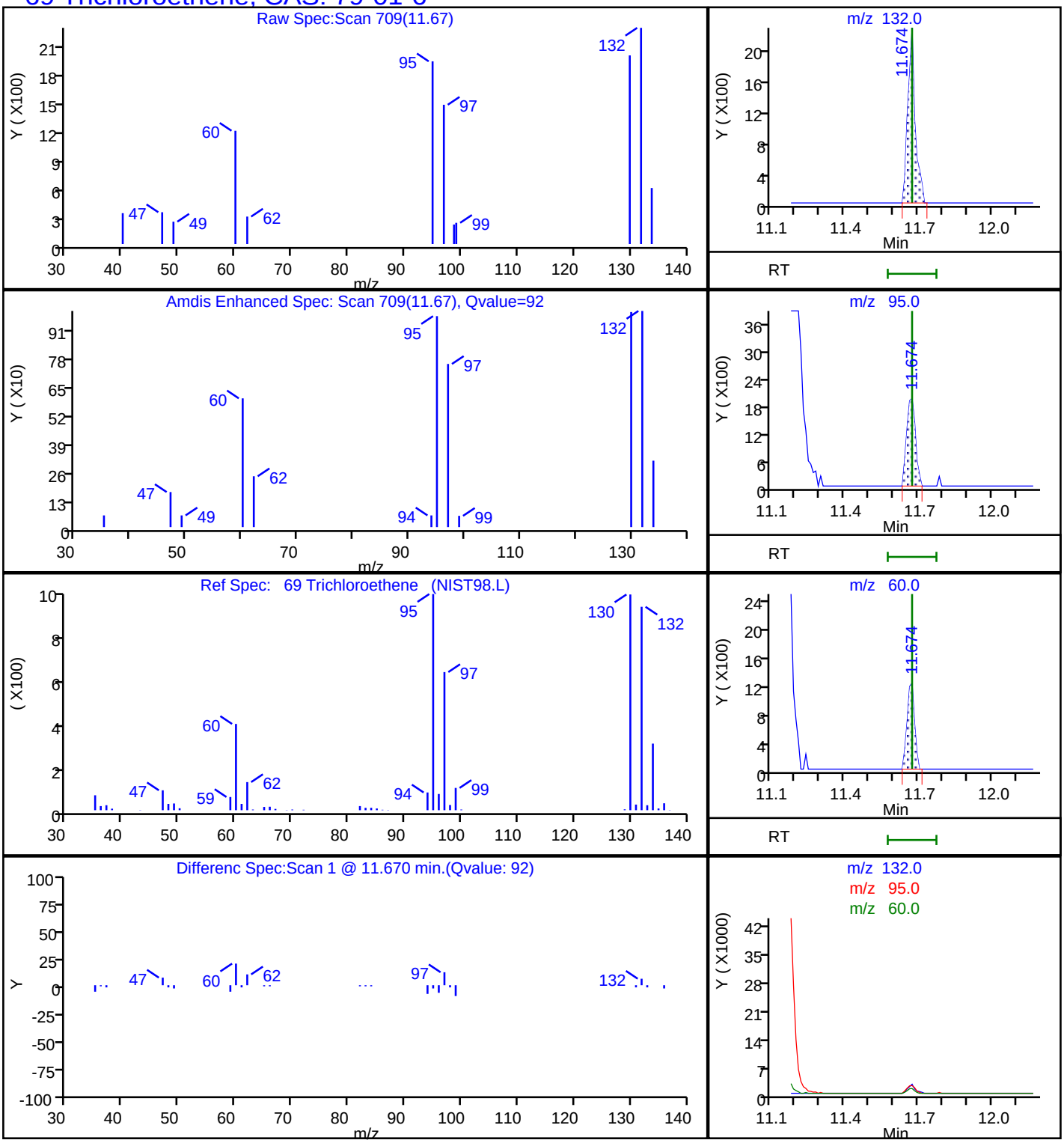


Report Date: 03-Sep-2018 08:53:14 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311816.D				
Injection Date:	31-Aug-2018 14:17:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-6	Lab Sample ID:	720-88255-6		
Client ID:	DG-M7W				
Operator ID:	SF	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

69 Trichloroethene, CAS: 79-01-6



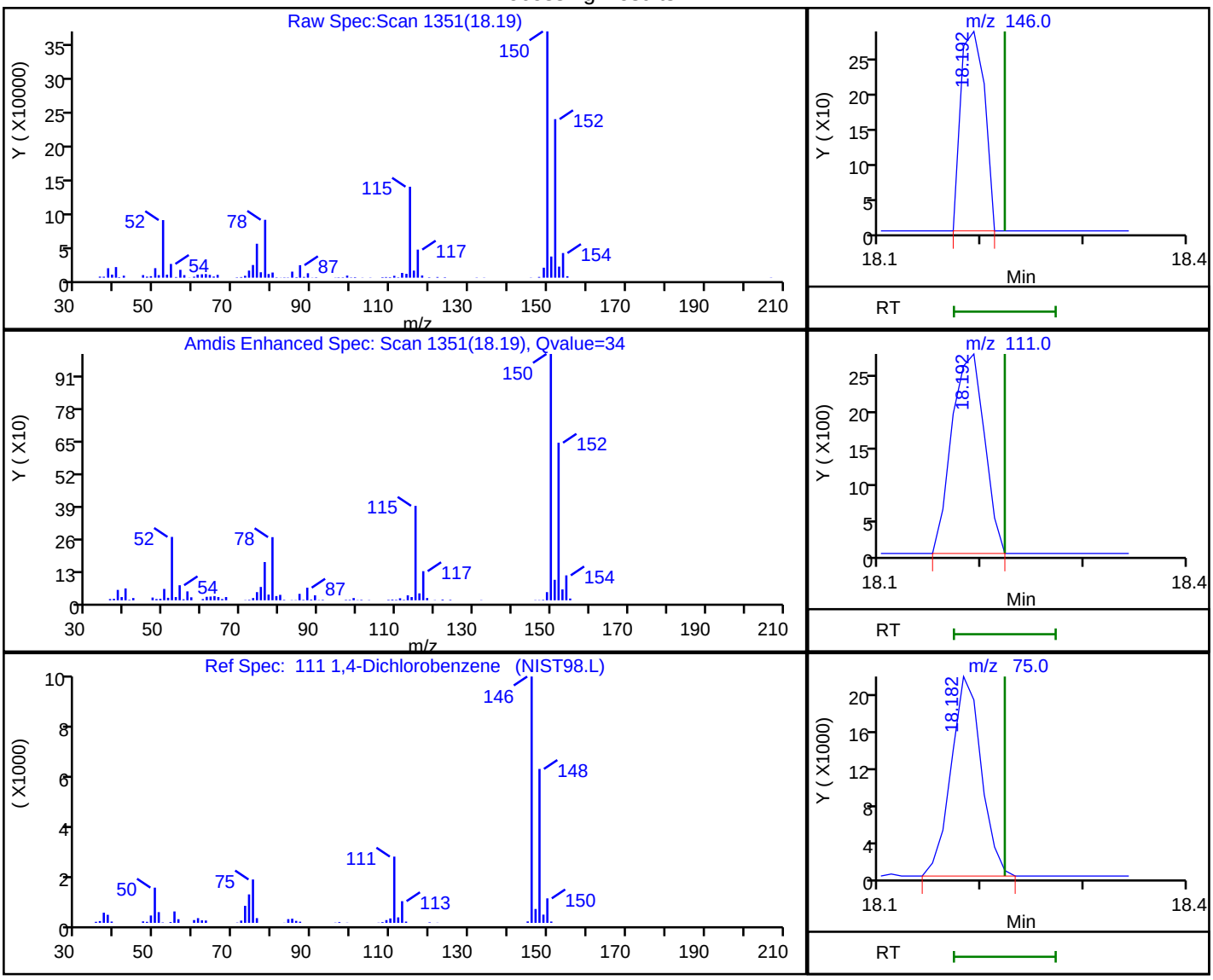
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311816.D				
Injection Date:	31-Aug-2018 14:17:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-6	Lab Sample ID:	720-88255-6		
Client ID:	DG-M7W				
Operator ID:	SF	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

111 1,4-Dichlorobenzene, CAS: 106-46-7

Processing Results



RT	Mass	Response	Amount
18.19	146.00	464	0.015136
18.19	111.00	6157	
18.18	75.00	43726	
18.19	148.00	1753	

Reviewer: chaijita, 03-Sep-2018 08:53:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

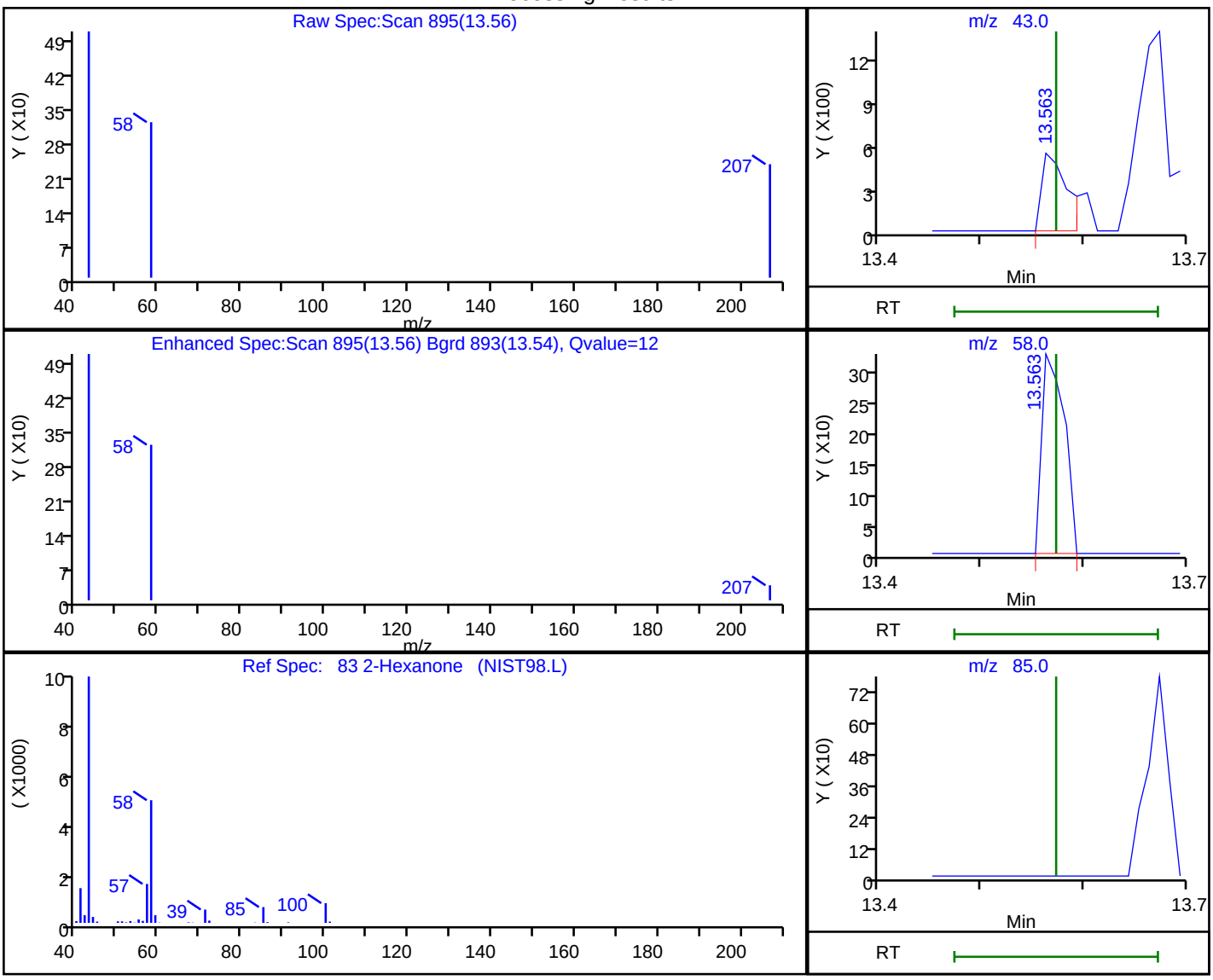
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311816.D				
Injection Date:	31-Aug-2018 14:17:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-6	Lab Sample ID:	720-88255-6		
Client ID:	DG-M7W				
Operator ID:	SF	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

83 2-Hexanone, CAS: 591-78-6

Processing Results



RT	Mass	Response	Amount
13.56	43.00	884	0.091529
13.56	58.00	493	
13.57	85.00	0	

Reviewer: chaijita, 03-Sep-2018 08:52:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

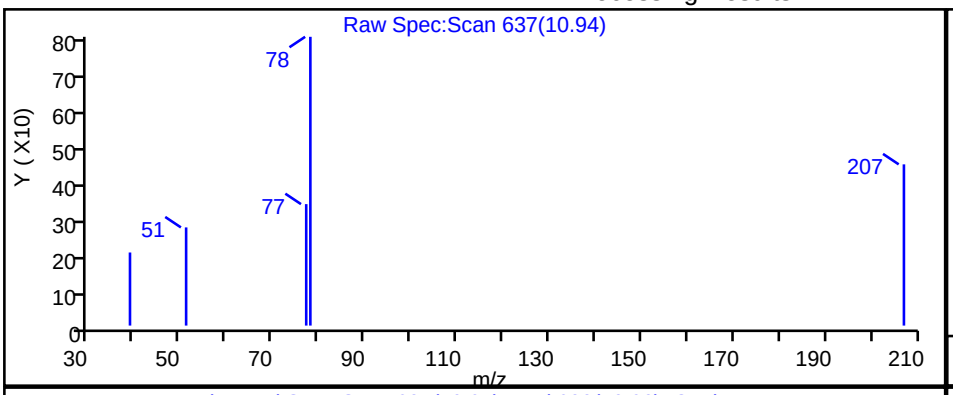
User Disabled Compound Report

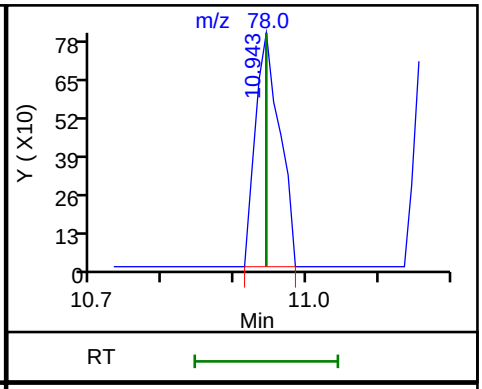
TestAmerica Pleasanton

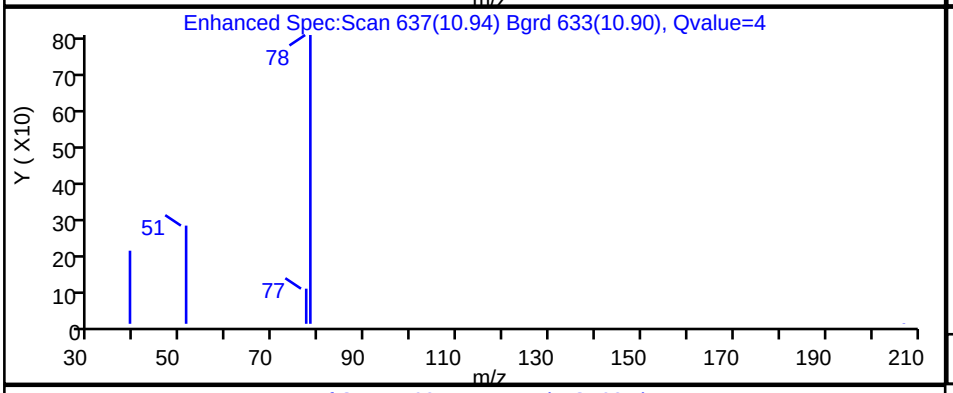
Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311816.D				
Injection Date:	31-Aug-2018 14:17:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-6	Lab Sample ID:	720-88255-6		
Client ID:	DG-M7W				
Operator ID:	SF	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

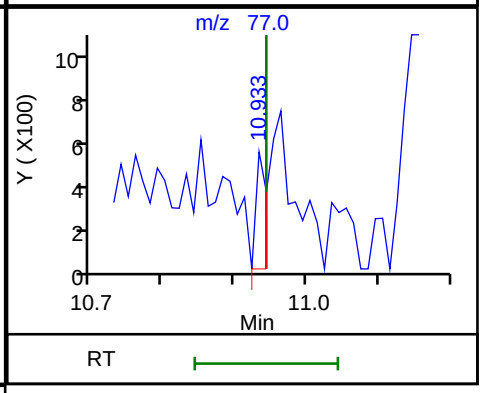
62 Benzene, CAS: 71-43-2

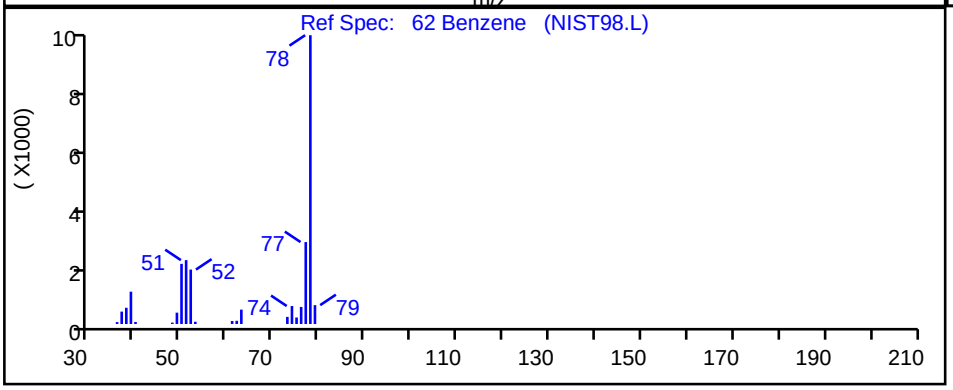
Processing Results











RT	Mass	Response	Amount
10.94	78.00	1899	0.038875
10.93	77.00	520	

Reviewer: chaijita, 03-Sep-2018 08:52:13

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88255-1
SDG No.:
Client Sample ID: DG-F9W
Lab Sample ID: 720-88255-7
Matrix: Water
Lab File ID: 08311817.D
Analysis Method: 8260B
Date Collected: 08/24/2018 16:10
Sample wt/vol: 10(mL)
Date Analyzed: 08/31/2018 14:47
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX
ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250643
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.067
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.074
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.11
75-34-3	1,1-Dichloroethane	0.12	J	0.50	0.11
75-35-4	1,1-Dichloroethene	ND		0.50	0.20
563-58-6	1,1-Dichloropropene	ND		0.50	0.20
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.21
96-18-4	1,2,3-Trichloropropane	ND		0.50	0.087
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.20
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.21
107-06-2	1,2-Dichloroethane	ND		0.50	0.077
78-87-5	1,2-Dichloropropane	ND		0.50	0.20
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.17
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.20
142-28-9	1,3-Dichloropropane	ND		1.0	0.17
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.16
594-20-7	2,2-Dichloropropane	ND		0.50	0.17
78-93-3	2-Butanone (MEK)	ND		50	8.4
95-49-8	2-Chlorotoluene	ND		0.50	0.20
591-78-6	2-Hexanone	ND		50	3.0
106-43-4	4-Chlorotoluene	ND		0.50	0.20
99-87-6	4-Isopropyltoluene	ND		1.0	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	4.5
67-64-1	Acetone	ND		50	20
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		1.0	0.20
75-25-2	Bromoform	ND		1.0	0.50
74-83-9	Bromomethane	ND		1.0	0.49
75-15-0	Carbon disulfide	ND		5.0	0.78
56-23-5	Carbon tetrachloride	ND		0.50	0.11
108-90-7	Chlorobenzene	ND		0.50	0.13

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88255-1
SDG No.:
Client Sample ID: DG-F9W
Lab Sample ID: 720-88255-7
Matrix: Water
Lab File ID: 08311817.D
Analysis Method: 8260B
Date Collected: 08/24/2018 16:10
Sample wt/vol: 10(mL)
Date Analyzed: 08/31/2018 14:47
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX
ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250643
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-97-5	Chlorobromomethane	ND		1.0	0.25
124-48-1	Chlorodibromomethane	ND		0.50	0.10
75-00-3	Chloroethane	ND		1.0	0.17
67-66-3	Chloroform	ND		1.0	0.40
74-87-3	Chloromethane	ND		1.0	0.19
156-59-2	cis-1,2-Dichloroethene	0.095	J	0.50	0.076
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
74-95-3	Dibromomethane	ND		0.50	0.30
75-27-4	Dichlorobromomethane	ND		0.50	0.20
75-71-8	Dichlorodifluoromethane	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.13
106-93-4	Ethylene Dibromide	ND		0.50	0.075
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		50	21
87-68-3	Hexachlorobutadiene	ND		1.0	0.27
98-82-8	Isopropylbenzene	ND		0.50	0.20
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.11
75-09-2	Methylene Chloride	ND		5.0	1.5
91-20-3	Naphthalene	ND		1.0	0.22
104-51-8	n-Butylbenzene	ND		1.0	0.30
103-65-1	N-Propylbenzene	ND		1.0	0.20
135-98-8	sec-Butylbenzene	ND		1.0	0.17
100-42-5	Styrene	ND		0.50	0.22
98-06-6	tert-Butylbenzene	ND		1.0	0.20
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.13
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.17
79-01-6	Trichloroethene	ND		0.50	0.20
75-69-4	Trichlorofluoromethane	ND		1.0	0.30
108-05-4	Vinyl acetate	ND		10	0.60
75-01-4	Vinyl chloride	ND		0.50	0.20
1330-20-7	Xylenes, Total	ND		0.50	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88255-1

SDG No.:

Client Sample ID: DG-F9W Lab Sample ID: 720-88255-7

Matrix: Water Lab File ID: 08311817.D

Analysis Method: 8260B Date Collected: 08/24/2018 16:10

Sample wt/vol: 10(mL) Date Analyzed: 08/31/2018 14:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250643 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		72-130
460-00-4	4-Bromofluorobenzene	96		67-130
2037-26-5	Toluene-d8 (Surr)	101		70-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311817.D
Lims ID: 720-88255-A-7
Client ID: DG-F9W
Sample Type: Client
Inject. Date: 31-Aug-2018 14:47:30 ALS Bottle#: 16 Worklist Smp#: 20
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88255-A-7
Misc. Info.: HP-4
Operator ID: SF Instrument ID: HP4

Method: \\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\8260W_LL_GRO_HP4.m
Limit Group: 8260B
Last Update: 03-Sep-2018 08:54:44 Calib Date: 26-Jul-2018 01:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP4\20180725-52939.b\07251826.D

Column 1 : DB-VRX (250.00 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: chaijita Date: 03-Sep-2018 08:54:44

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.360	7.360	0.000	97	243079	250.0	
* 2 Fluorobenzene	96	11.167	11.177	-0.010	97	1199401	25.0	
* 3 Chlorobenzene-d5	117	15.034	15.035	-0.001	89	920461	25.0	
* 4 1,4-Dichlorobenzene-d4	152	18.192	18.192	0.000	97	473339	25.0	
$ 5 Dibromofluoromethane (Surr	113	9.755	9.747	-0.001	93	87336	7.87	
$ 6 1,2-Dichloroethane-d4 (Sur	65	10.273	10.264	0.000	0	108202	7.94	
$ 8 Toluene-d8 (Surr)	98	13.288	13.276	0.000	94	350263	7.58	
$ 9 4-Bromofluorobenzene	95	16.537	16.537	0.000	88	133137	7.20	
$ 10 1,2-Dichlorobenzene-d4	152	18.659	18.659	0.000	86	104513	5.96	
23 Isopropyl alcohol	45	6.832	6.831	0.010	97	38189	43.2	
24 Acetone	58	6.913	6.907	0.000	99	10619	8.80	
38 Methyl tert-butyl ether	73	8.537	8.530	0.000	89	2298	0.0768	
39 1,1-Dichloroethane	63	8.720	8.712	0.000	91	3149	0.1203	
44 2-Butanone (MEK)	72	9.187	9.179	0.000	99	1144	1.04	
47 cis-1,2-Dichloroethene	61	9.380	9.372	0.000	80	2124	0.0951	
55 t-Amyl alcohol	59	10.121	10.121	0.000	1	1074	1.07	
57 1,1,1-Trichloroethane	97	10.497	10.497	0.010	11	1052	0.0538	M
62 Benzene	78	10.943	10.933	0.000	93	3256	0.0679	
69 Trichloroethene	132	11.684	11.664	0.010	49	1045	0.0799	
74 Methylcyclohexane	83	12.273	12.262	0.000	82	2003	0.0776	
80 Toluene	92	13.369	13.369	-0.001	94	3458	0.0880	
92 Butyl Ether	87	15.227	15.214	0.000	56	372	0.0366	
93 m-Xylene & p-Xylene	91	15.512	15.512	0.000	89	2463	0.0487	
97 o-Xylene	91	16.019	16.019	0.000	1	1385	0.0271	
107 1,2,4-Trimethylbenzene	105	17.867	17.867	0.000	1	933	0.0170	
112 4-Isopropyltoluene	119	18.232	18.232	0.000	92	4920	0.0800	
126 Butane	43	5.431	5.461	-0.030	1	1432	NR	
129 n-Nonane	57	15.623	15.664	-0.041	0	1625	NR	
130 n-Decane	57	17.400	17.430	-0.030	90	1843	NR	
131 Dodecane	57	20.506	20.547	-0.041	85	4276	NR	
132 C13	57	22.019	22.059	-0.040	92	6481	NR	

Report Date: 03-Sep-2018 08:54:45 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311817.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
A 158 C6-C8	1	11.456	(9.106-13.806)		0	252838	2.09	
A 134 C4-C10	1	11.466	(5.451-17.481)		0	1033922	8.53	
A 159 C6-C9	1	12.400	(9.106-15.694)		0	516652	4.26	
A 136 C4-C12	1	13.024	(5.451-20.598)		0	2291714	18.9	
A 137 C6-C10	1	13.294	(9.106-17.481)		0	652483	5.38	
A 138 C5-C12	1	13.826	(7.055-20.598)		0	2181253	18.0	
A 139 C6-C12	1	14.852	(9.106-20.598)		0	1910275	15.8	
A 160 C8-C10	1	15.598	(13.715-17.481)		0	399645	3.30	
A 141 C7-C12	1	16.029	(11.461-20.598)		0	1754112	14.5	
S 142 Xylenes, Total	1				0		0.0758	
T 156 Paraldehyde TIC	45	13.278	13.266	0.000	0	325	0.4175	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

M - Manually Integrated

Reagents:

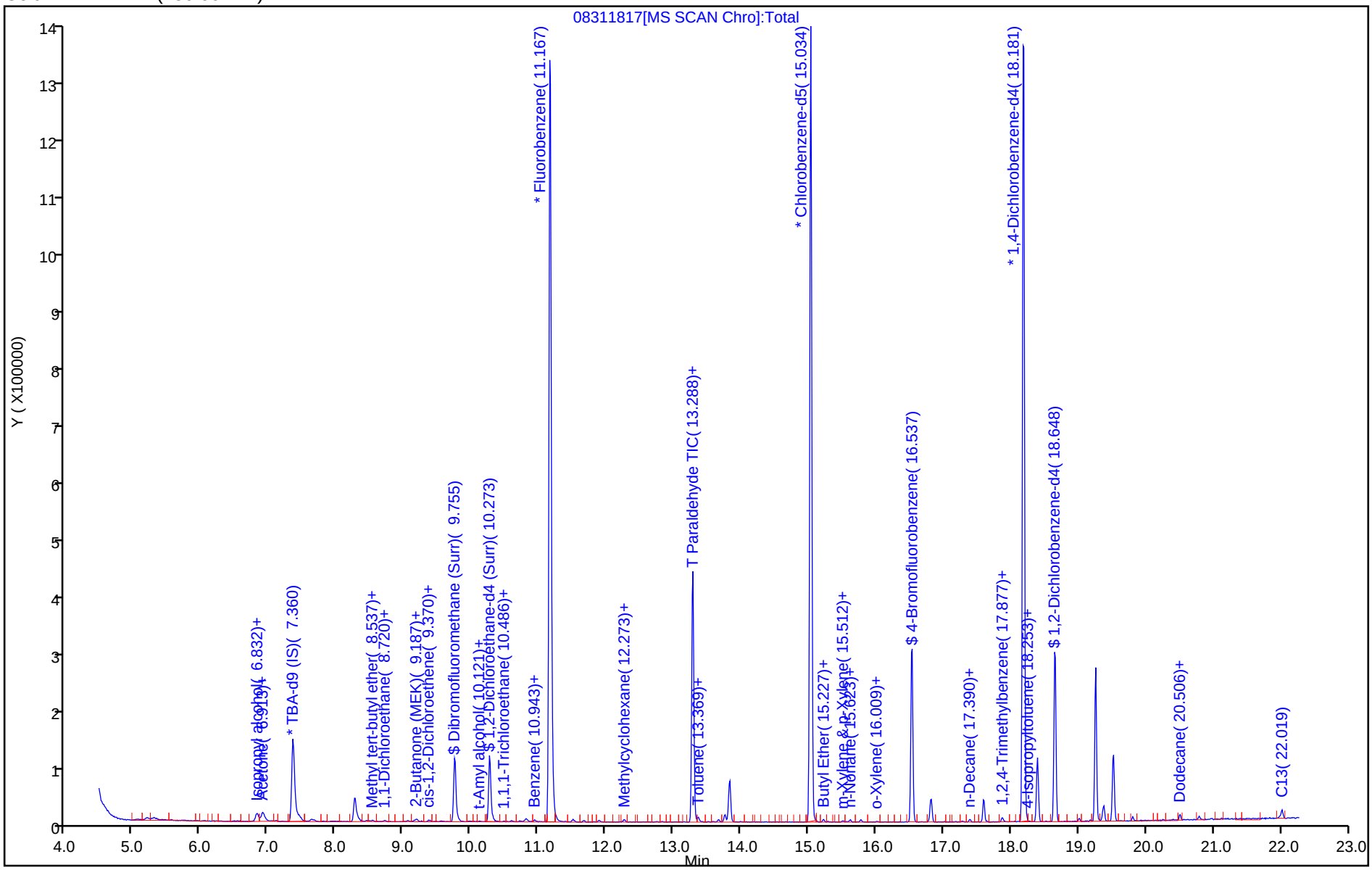
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 03-Sep-2018 08:54:45 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311817.D				
Injection Date:	31-Aug-2018 14:47:30	Instrument ID:	HP4	Operator ID:	SF
Lims ID:	720-88255-A-7	Lab Sample ID:	720-88255-7	Worklist Smp#:	20
Client ID:	DG-F9W				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		

Column: DB-VRX (250.00 mm)



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311817.D				
Lims ID:	720-88255-A-7				
Client ID:	DG-F9W				
Sample Type:	Client				
Inject. Date:	31-Aug-2018 14:47:30	ALS Bottle#:	16	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	88255-A-7				
Misc. Info.:	HP-4				
Operator ID:	SF	Instrument ID:	HP4		
Method:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\8260W_LL_GRO_HP4.m				
Limit Group:	8260B				
Last Update:	03-Sep-2018 08:54:44	Calib Date:	26-Jul-2018 01:42:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\HP4\20180725-52939.b\07251826.D				
Column 1 :	DB-VRX (250.00 mm)		Det: MS SCAN		
Process Host:	XAWRK001				

First Level Reviewer: chaijita Date: 03-Sep-2018 08:54:44

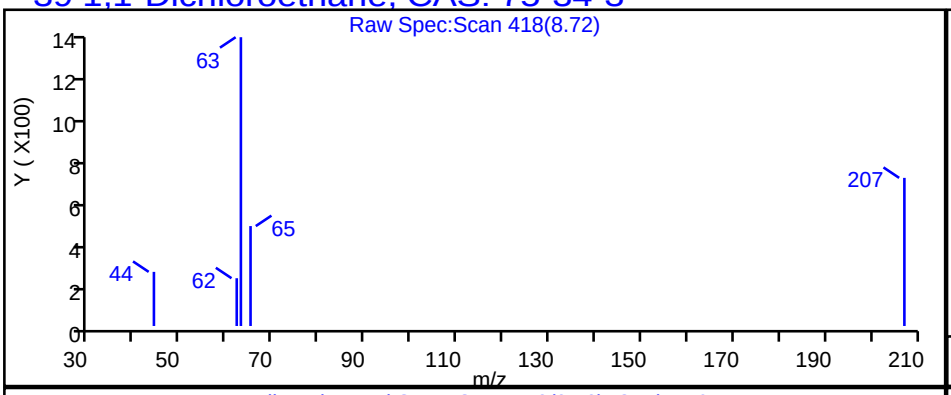
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 6 1,2-Dichloroethane-d4 (Surr)	7.50	7.94	105.87
$ 8 Toluene-d8 (Surr)	7.50	7.58	101.06
$ 9 4-Bromofluorobenzene	7.50	7.20	96.05
$ 10 1,2-Dichlorobenzene-d4	0.0	0	0.00

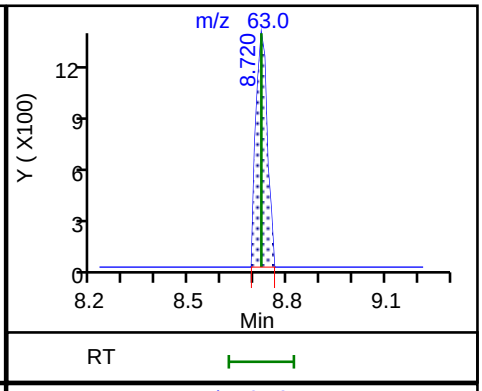
Report Date: 03-Sep-2018 08:54:45 Chrom Revision: 2.3 19-Jul-2018 15:14:50

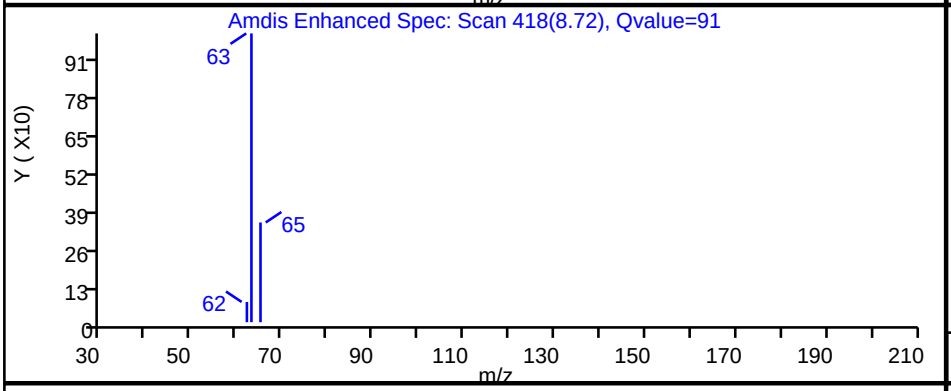
TestAmerica Pleasanton

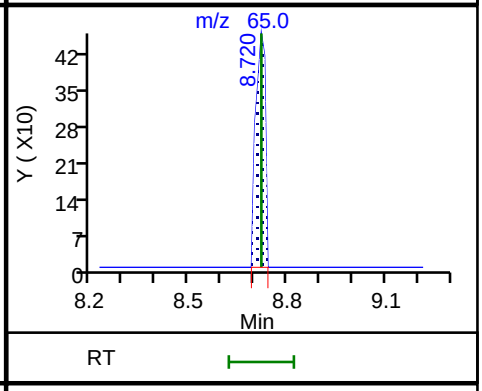
Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311817.D				
Injection Date:	31-Aug-2018 14:47:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-7	Lab Sample ID:	720-88255-7		
Client ID:	DG-F9W				
Operator ID:	SF	ALS Bottle#:	16	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

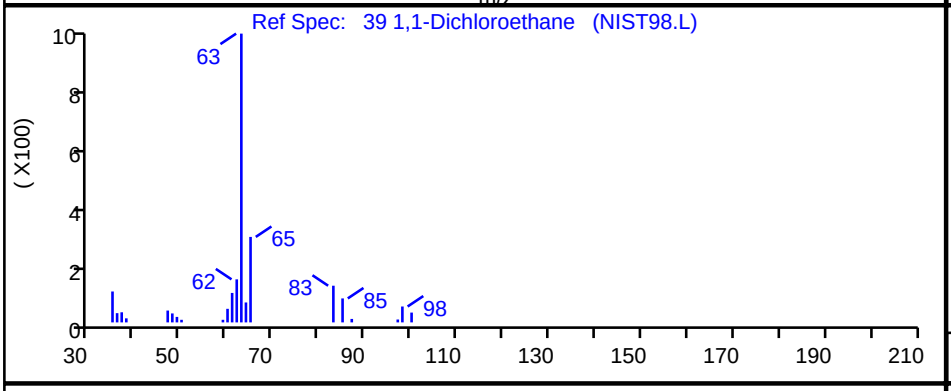
39 1,1-Dichloroethane, CAS: 75-34-3

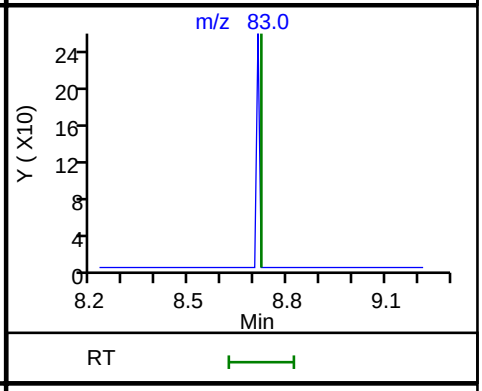


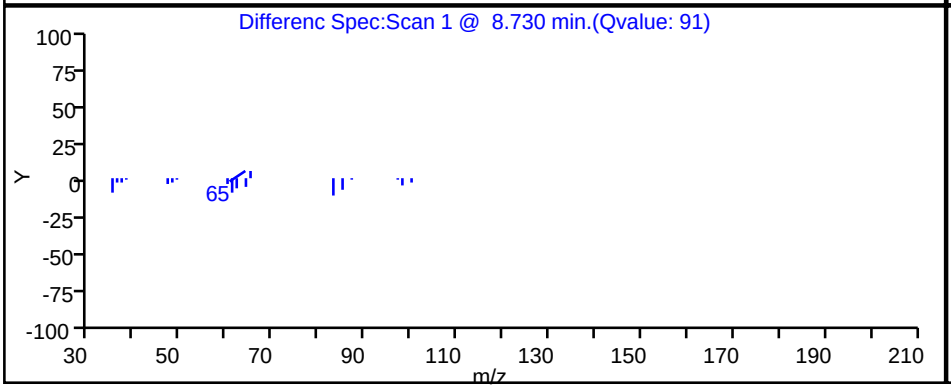


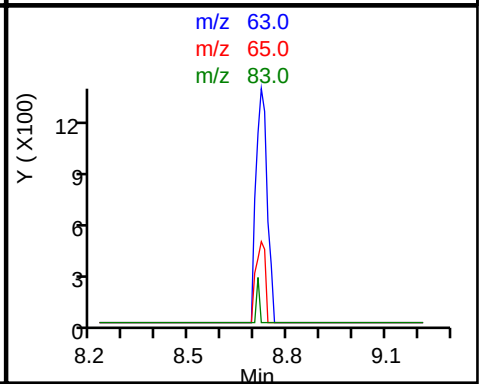










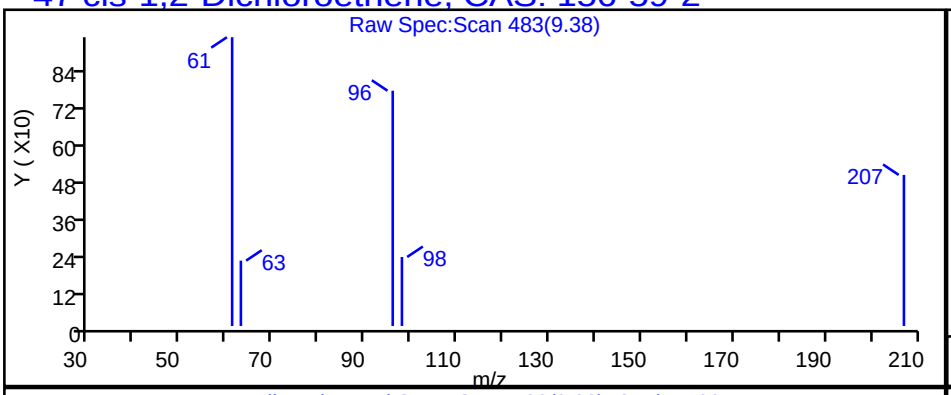


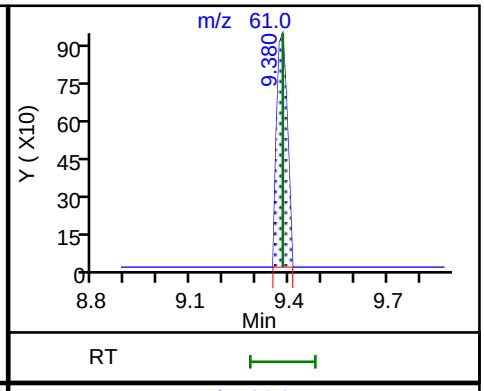
Report Date: 03-Sep-2018 08:54:45 Chrom Revision: 2.3 19-Jul-2018 15:14:50

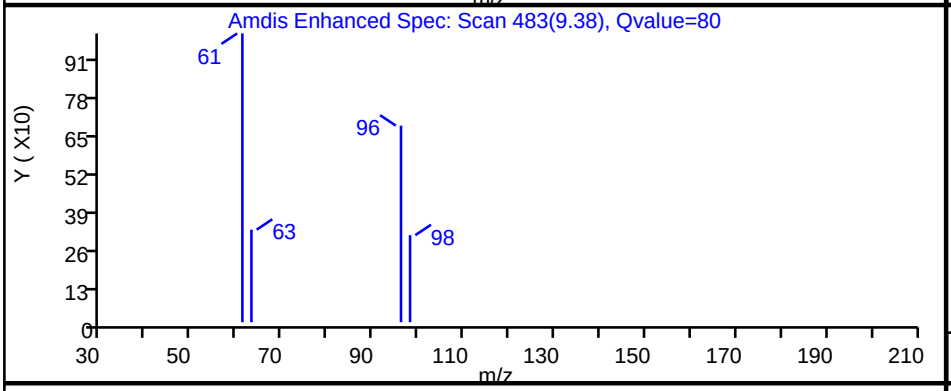
TestAmerica Pleasanton

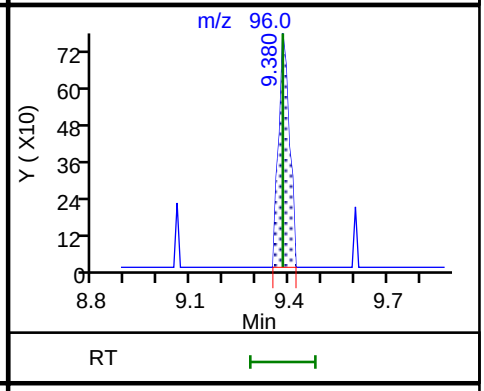
Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311817.D				
Injection Date:	31-Aug-2018 14:47:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-7	Lab Sample ID:	720-88255-7		
Client ID:	DG-F9W				
Operator ID:	SF	ALS Bottle#:	16	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

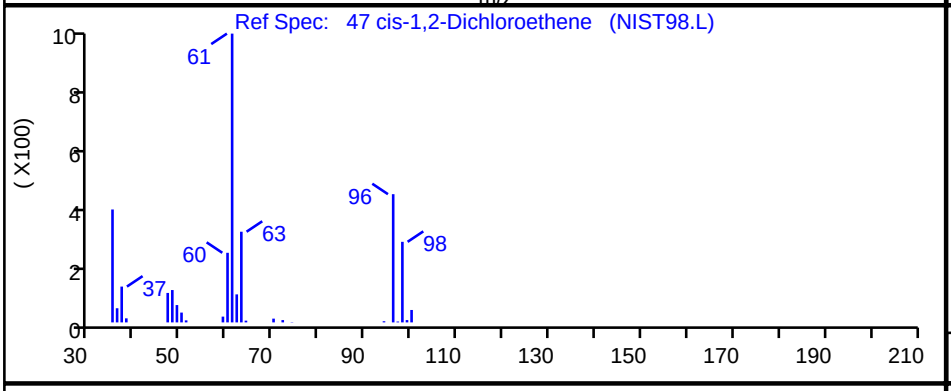
47 cis-1,2-Dichloroethene, CAS: 156-59-2

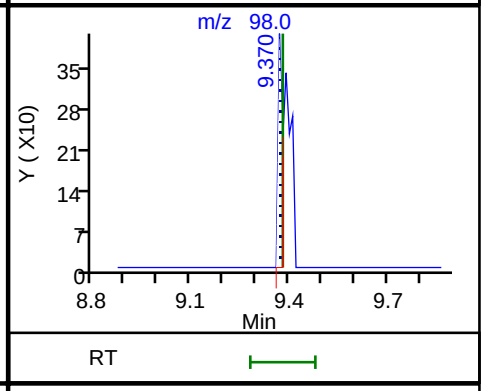


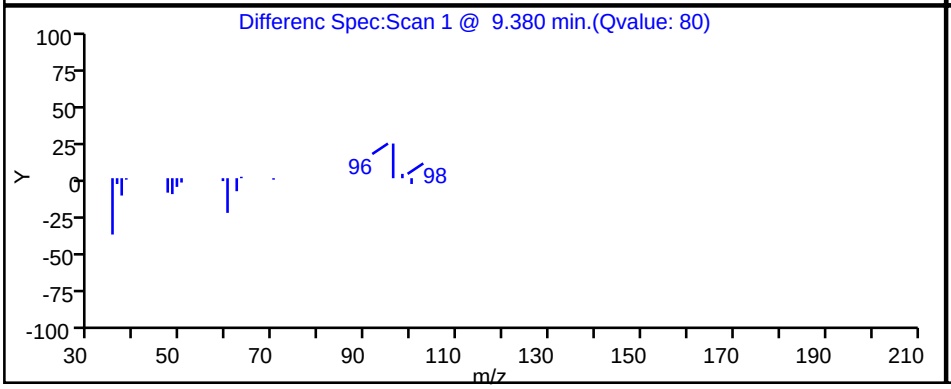


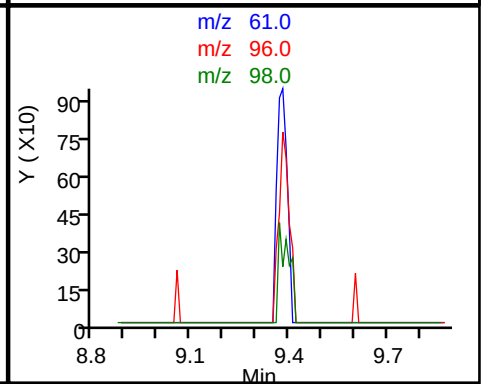










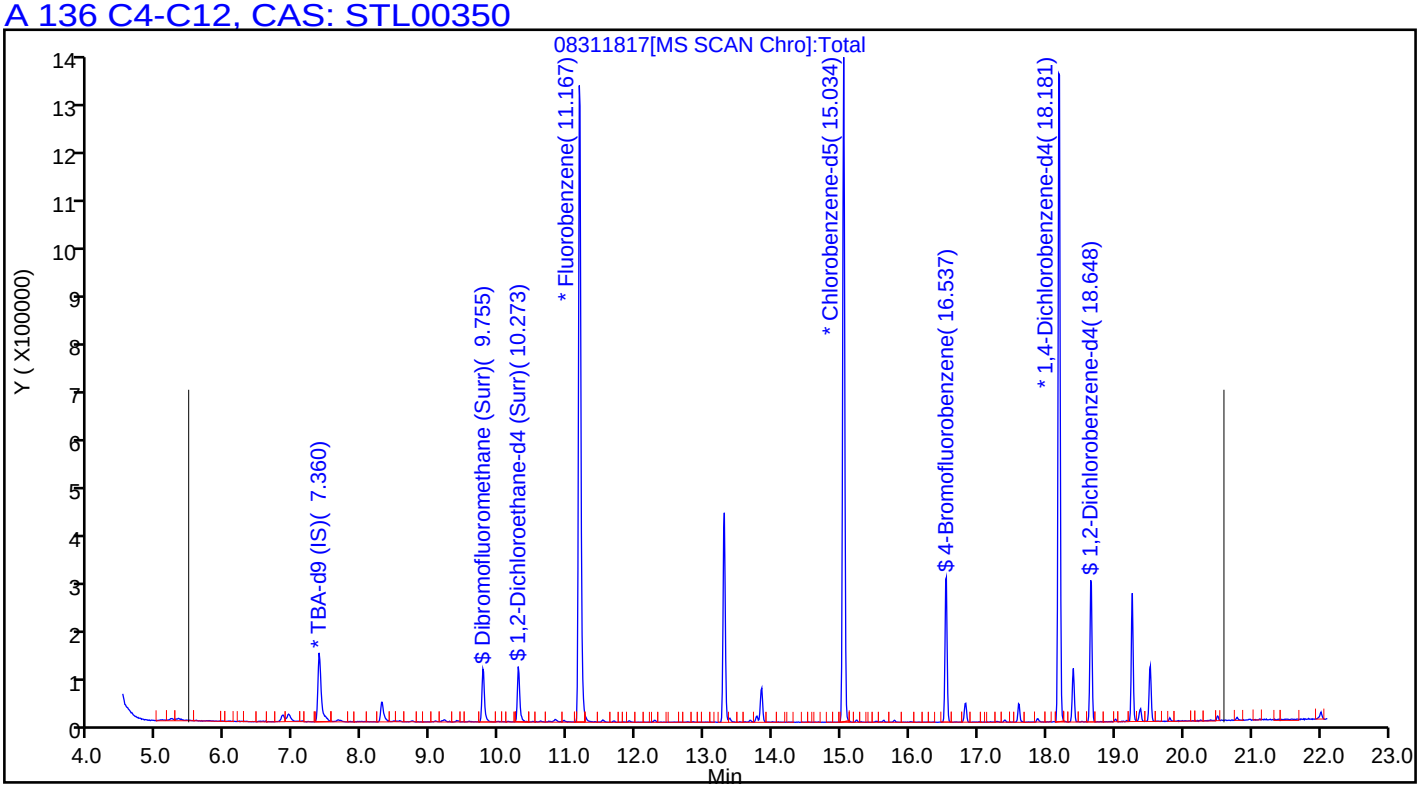


Report Date: 03-Sep-2018 08:54:46 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311817.D				
Injection Date:	31-Aug-2018 14:47:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-7	Lab Sample ID:	720-88255-7		
Client ID:	DG-F9W				
Operator ID:	SF	ALS Bottle#:	16	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

A 136 C4-C12, CAS: STL00350



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

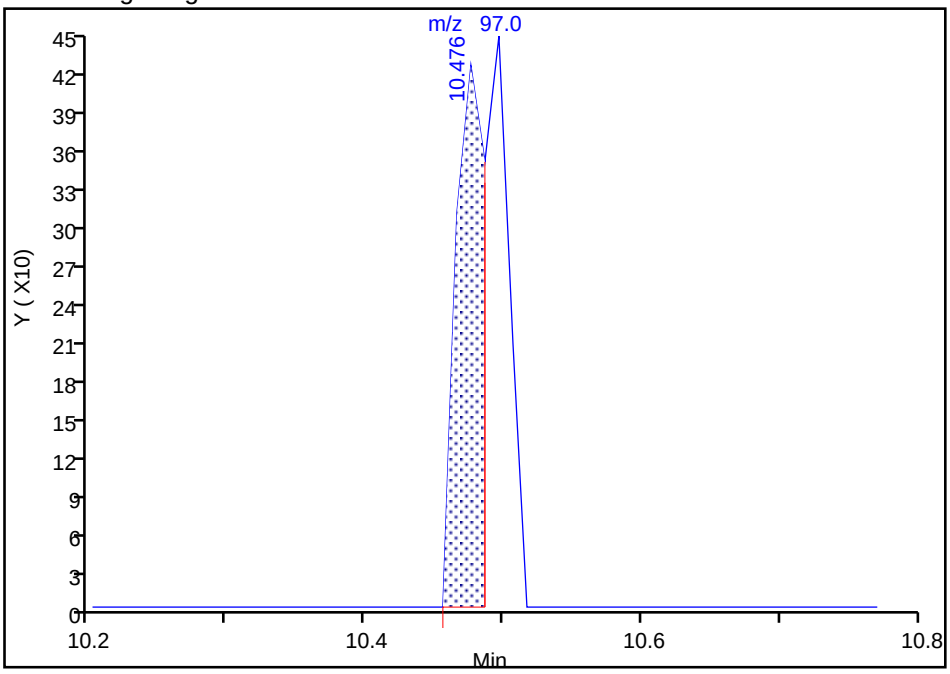
Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311817.D				
Injection Date:	31-Aug-2018 14:47:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-7	Lab Sample ID:	720-88255-7		
Client ID:	DG-F9W				
Operator ID:	SF	ALS Bottle#:	16	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

57 1,1,1-Trichloroethane, CAS: 71-55-6

Signal: 1

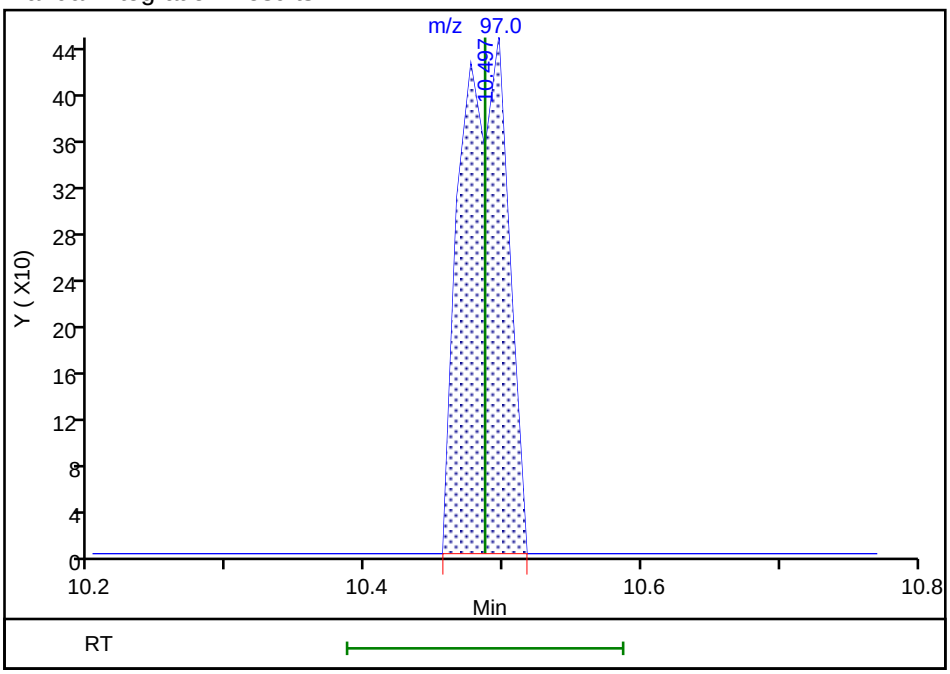
Processing Integration Results

RT: 10.48
Area: 655
Amount: 0.033508
Amount Units: ug/L



Manual Integration Results

RT: 10.50
Area: 1052
Amount: 0.053817
Amount Units: ug/L



Reviewer: chaijita, 03-Sep-2018 08:54:05

Audit Action: Manually Integrated Audit Reason: Baseline

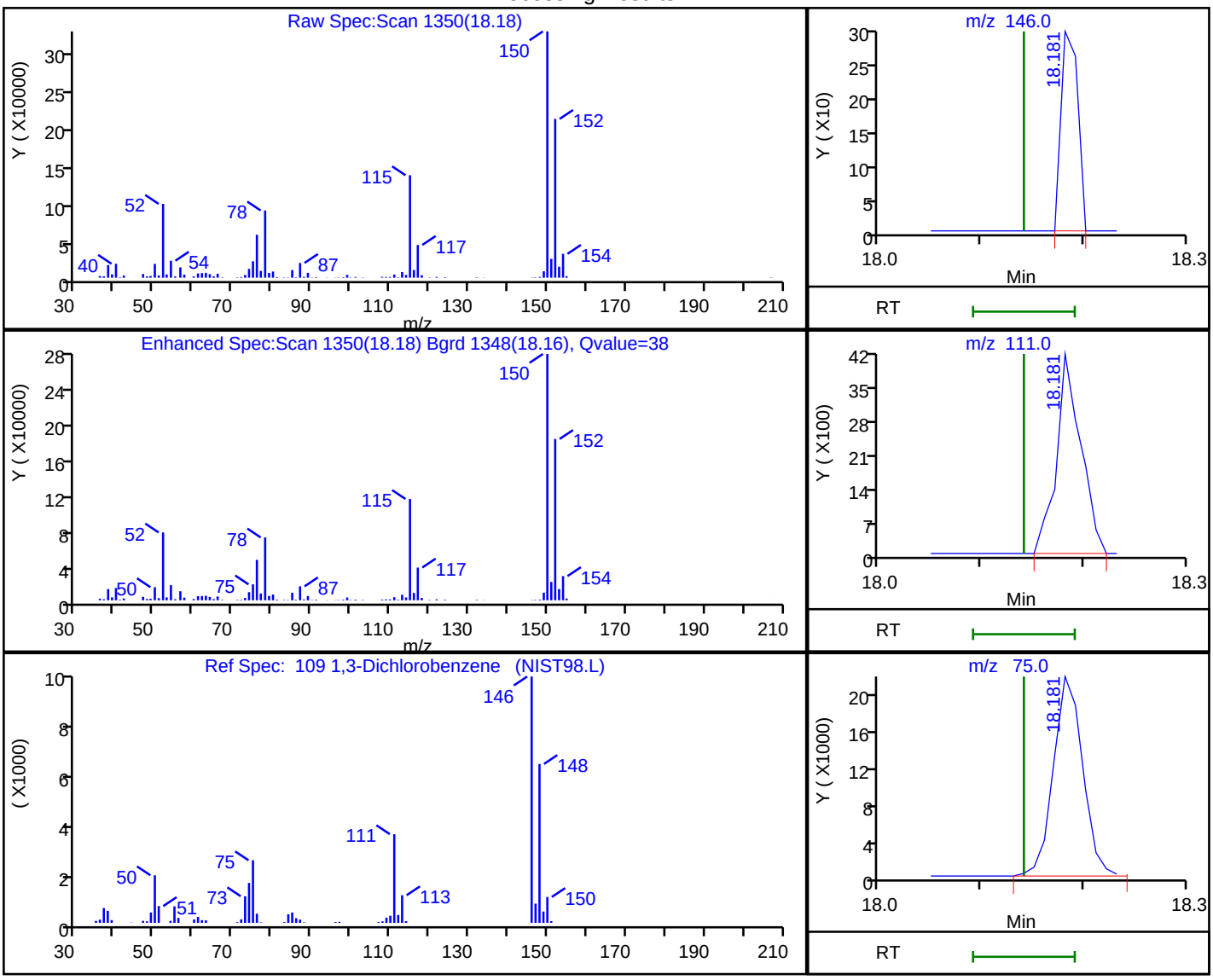
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311817.D				
Injection Date:	31-Aug-2018 14:47:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-7	Lab Sample ID:	720-88255-7		
Client ID:	DG-F9W				
Operator ID:	SF	ALS Bottle#:	16	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

109 1,3-Dichlorobenzene, CAS: 541-73-1

Processing Results



RT	Mass	Response	Amount
18.18	146.00	343	0.011505
18.18	111.00	6863	
18.18	75.00	43470	
18.18	148.00	1738	

Reviewer: chaijita, 03-Sep-2018 08:54:36

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

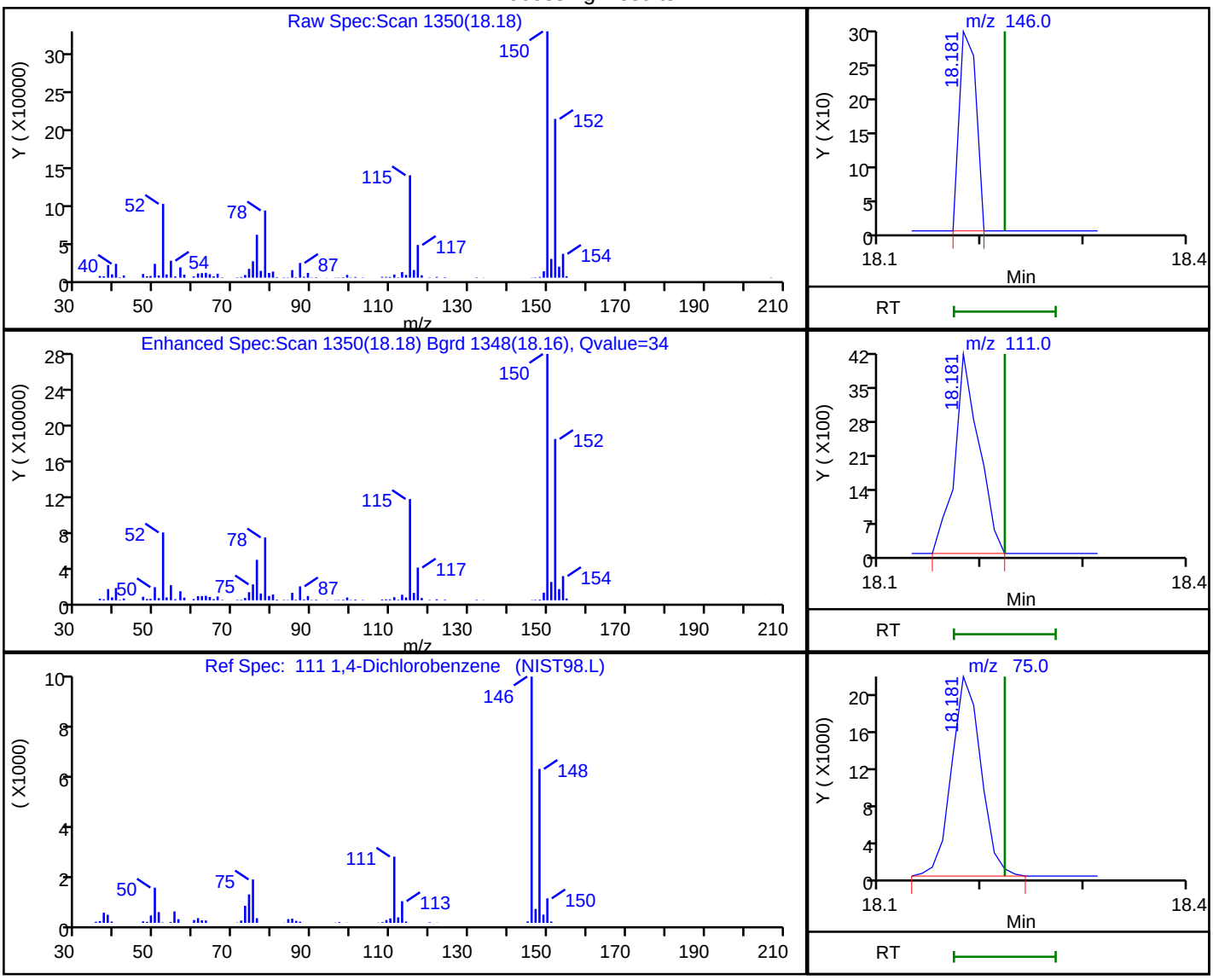
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311817.D				
Injection Date:	31-Aug-2018 14:47:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-7	Lab Sample ID:	720-88255-7		
Client ID:	DG-F9W				
Operator ID:	SF	ALS Bottle#:	16	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

111 1,4-Dichlorobenzene, CAS: 106-46-7

Processing Results



RT	Mass	Response	Amount
18.18	146.00	343	0.011828
18.18	111.00	6863	
18.18	75.00	43470	
18.18	148.00	1738	

Reviewer: chaijita, 03-Sep-2018 08:54:39

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88255-1
SDG No.:
Client Sample ID: DG-DE89W
Lab Sample ID: 720-88255-8
Matrix: Water
Lab File ID: 08311818.D
Analysis Method: 8260B
Date Collected: 08/24/2018 16:20
Sample wt/vol: 10(mL)
Date Analyzed: 08/31/2018 15:17
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250643
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.067
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.074
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.11
75-34-3	1,1-Dichloroethane	ND		0.50	0.11
75-35-4	1,1-Dichloroethene	ND		0.50	0.20
563-58-6	1,1-Dichloropropene	ND		0.50	0.20
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.21
96-18-4	1,2,3-Trichloropropane	ND		0.50	0.087
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.20
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.21
107-06-2	1,2-Dichloroethane	ND		0.50	0.077
78-87-5	1,2-Dichloropropane	ND		0.50	0.20
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.17
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.20
142-28-9	1,3-Dichloropropane	ND		1.0	0.17
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.16
594-20-7	2,2-Dichloropropane	ND		0.50	0.17
78-93-3	2-Butanone (MEK)	ND		50	8.4
95-49-8	2-Chlorotoluene	ND		0.50	0.20
591-78-6	2-Hexanone	ND		50	3.0
106-43-4	4-Chlorotoluene	ND		0.50	0.20
99-87-6	4-Isopropyltoluene	ND		1.0	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	4.5
67-64-1	Acetone	ND		50	20
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		1.0	0.20
75-25-2	Bromoform	ND		1.0	0.50
74-83-9	Bromomethane	ND		1.0	0.49
75-15-0	Carbon disulfide	ND		5.0	0.78
56-23-5	Carbon tetrachloride	ND		0.50	0.11
108-90-7	Chlorobenzene	ND		0.50	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88255-1
SDG No.:
Client Sample ID: DG-DE89W
Lab Sample ID: 720-88255-8
Matrix: Water
Lab File ID: 08311818.D
Analysis Method: 8260B
Date Collected: 08/24/2018 16:20
Sample wt/vol: 10(mL)
Date Analyzed: 08/31/2018 15:17
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX
ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250643
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-97-5	Chlorobromomethane	ND		1.0	0.25
124-48-1	Chlorodibromomethane	ND		0.50	0.10
75-00-3	Chloroethane	ND		1.0	0.17
67-66-3	Chloroform	ND		1.0	0.40
74-87-3	Chloromethane	ND		1.0	0.19
156-59-2	cis-1,2-Dichloroethene	0.15	J	0.50	0.076
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
74-95-3	Dibromomethane	ND		0.50	0.30
75-27-4	Dichlorobromomethane	ND		0.50	0.20
75-71-8	Dichlorodifluoromethane	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.13
106-93-4	Ethylene Dibromide	ND		0.50	0.075
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		50	21
87-68-3	Hexachlorobutadiene	ND		1.0	0.27
98-82-8	Isopropylbenzene	ND		0.50	0.20
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.11
75-09-2	Methylene Chloride	ND		5.0	1.5
91-20-3	Naphthalene	ND		1.0	0.22
104-51-8	n-Butylbenzene	ND		1.0	0.30
103-65-1	N-Propylbenzene	ND		1.0	0.20
135-98-8	sec-Butylbenzene	ND		1.0	0.17
100-42-5	Styrene	ND		0.50	0.22
98-06-6	tert-Butylbenzene	ND		1.0	0.20
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.13
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.17
79-01-6	Trichloroethene	ND		0.50	0.20
75-69-4	Trichlorofluoromethane	ND		1.0	0.30
108-05-4	Vinyl acetate	ND		10	0.60
75-01-4	Vinyl chloride	0.24	J	0.50	0.20
1330-20-7	Xylenes, Total	ND		0.50	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88255-1

SDG No.:

Client Sample ID: DG-DE89W Lab Sample ID: 720-88255-8

Matrix: Water Lab File ID: 08311818.D

Analysis Method: 8260B Date Collected: 08/24/2018 16:20

Sample wt/vol: 10(mL) Date Analyzed: 08/31/2018 15:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250643 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		72-130
460-00-4	4-Bromofluorobenzene	97		67-130
2037-26-5	Toluene-d8 (Surr)	100		70-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311818.D
Lims ID: 720-88255-A-8
Client ID: DG-DE89W
Sample Type: Client
Inject. Date: 31-Aug-2018 15:17:30 ALS Bottle#: 17 Worklist Smp#: 21
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88255-A-8
Misc. Info.: HP-4
Operator ID: SF Instrument ID: HP4

Method: \\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\8260W_LL_GRO_HP4.m
Limit Group: 8260B
Last Update: 03-Sep-2018 08:56:04 Calib Date: 26-Jul-2018 01:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP4\20180725-52939.b\07251826.D

Column 1 : DB-VRX (250.00 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: chaijita Date: 03-Sep-2018 08:56:04

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.360	7.360	0.000	96	254112	250.0	
* 2 Fluorobenzene	96	11.167	11.177	-0.010	97	1172405	25.0	
* 3 Chlorobenzene-d5	117	15.034	15.035	-0.001	89	900986	25.0	
* 4 1,4-Dichlorobenzene-d4	152	18.192	18.192	0.000	97	460405	25.0	
$ 5 Dibromofluoromethane (Surr	113	9.755	9.747	-0.001	93	85096	7.84	
$ 6 1,2-Dichloroethane-d4 (Sur	65	10.273	10.264	0.000	0	108221	8.12	
$ 8 Toluene-d8 (Surr)	98	13.288	13.276	0.000	94	339260	7.51	
$ 9 4-Bromofluorobenzene	95	16.527	16.537	-0.010	87	131336	7.26	
$ 10 1,2-Dichlorobenzene-d4	152	18.659	18.659	0.000	87	98979	5.80	
14 Vinyl chloride	62	5.339	5.314	0.020	22	4336	0.2366	
24 Acetone	58	6.913	6.907	0.000	99	6238	5.29	
28 2-Methyl-2-propanol	59	7.461	7.472	0.000	98	14593	10.6	
31 Methylene Chloride	84	7.654	7.627	0.020	88	3708	0.3343	
47 cis-1,2-Dichloroethene	61	9.370	9.372	-0.010	79	3341	0.1530	
55 t-Amyl alcohol	59	10.131	10.121	0.010	94	5193	4.94	
62 Benzene	78	10.943	10.933	0.000	94	3783	0.0807	
74 Methylcyclohexane	83	12.283	12.262	0.010	1	792	0.0314	
80 Toluene	92	13.370	13.369	0.000	98	1651	0.0429	
83 2-Hexanone	43	13.573	13.560	0.000	70	1768	0.1907	
92 Butyl Ether	87	15.227	15.214	0.000	92	702	0.0707	
126 Butane	43	5.431	5.461	-0.030	4	974	NR	
129 n-Nonane	57	15.623	15.664	-0.041	0	1322	NR	
130 n-Decane	57	17.390	17.430	-0.040	88	1617	NR	
131 Dodecane	57	20.506	20.547	-0.041	90	4425	NR	
132 C13	57	22.019	22.059	-0.040	93	7373	NR	
A 158 C6-C8	1	11.456	(9.106-13.806)		0	276025	2.33	
A 134 C4-C10	1	11.466	(5.451-17.481)		0	1191629	10.1	
A 159 C6-C9	1	12.400	(9.106-15.694)		0	610224	5.15	
A 136 C4-C12	1	13.024	(5.451-20.598)		0	2090025	17.6	
A 137 C6-C10	1	13.294	(9.106-17.481)		0	798936	6.74	
A 138 C5-C12	1	13.826	(7.055-20.598)		0	1975570	16.7	

Report Date: 03-Sep-2018 08:56:04 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311818.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
A 139 C6-C12	1	14.852	(9.106-20.598)		0	1697332	14.3	
A 160 C8-C10	1	15.598	(13.715-17.481)		0	531864	4.49	
A 141 C7-C12	1	16.029	(11.461-20.598)		0	1538658	13.0	
T 156 Paraldehyde TIC	45	13.278	13.266	0.000	0	273	0.3588	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

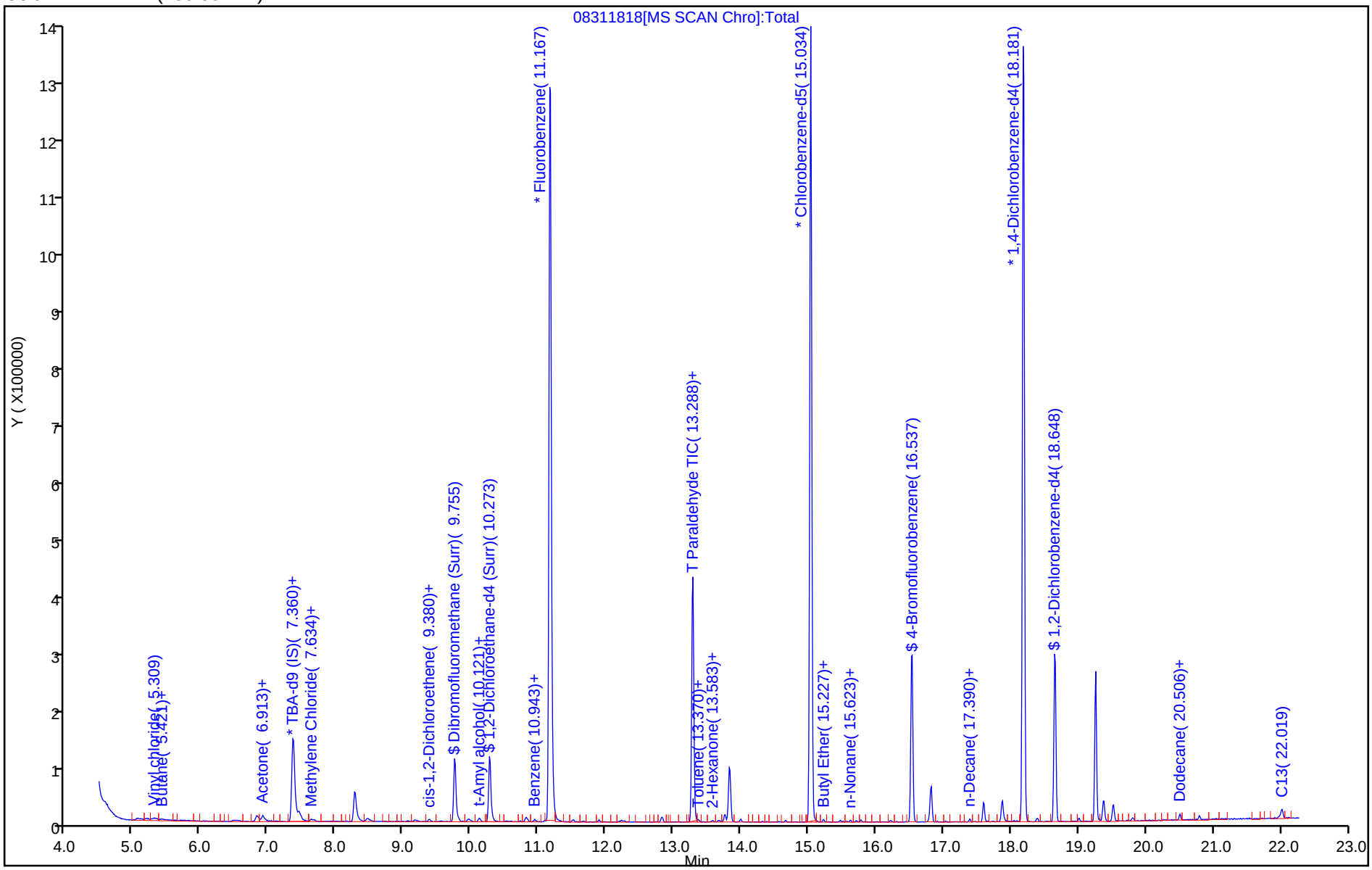
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 03-Sep-2018 08:56:05 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311818.D				
Injection Date:	31-Aug-2018 15:17:30	Instrument ID:	HP4	Operator ID:	SF
Lims ID:	720-88255-A-8	Lab Sample ID:	720-88255-8	Worklist Smp#:	21
Client ID:	DG-DE89W				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		

Column: DB-VRX (250.00 mm)



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311818.D				
Lims ID:	720-88255-A-8				
Client ID:	DG-DE89W				
Sample Type:	Client				
Inject. Date:	31-Aug-2018 15:17:30	ALS Bottle#:	17	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	88255-A-8				
Misc. Info.:	HP-4				
Operator ID:	SF	Instrument ID:	HP4		
Method:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\8260W_LL_GRO_HP4.m				
Limit Group:	8260B				
Last Update:	03-Sep-2018 08:56:04	Calib Date:	26-Jul-2018 01:42:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\HP4\20180725-52939.b\07251826.D				
Column 1 :	DB-VRX (250.00 mm)		Det: MS SCAN		
Process Host:	XAWRK001				

First Level Reviewer: chaijita Date: 03-Sep-2018 08:56:04

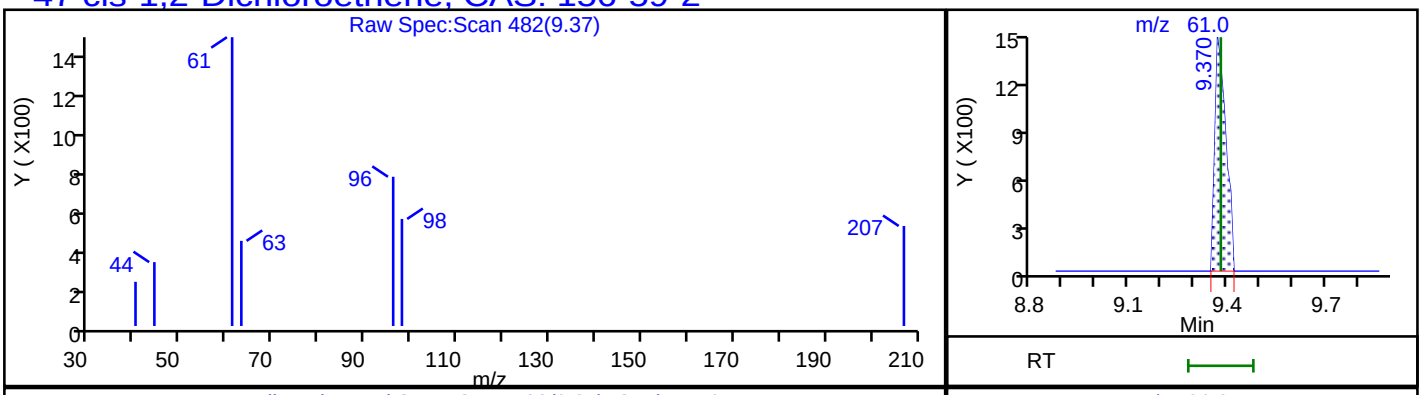
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 6 1,2-Dichloroethane-d4 (Surr)	7.50	8.12	108.33
$ 8 Toluene-d8 (Surr)	7.50	7.51	100.14
$ 9 4-Bromofluorobenzene	7.50	7.26	96.80
$ 10 1,2-Dichlorobenzene-d4	0.0	0	0.00

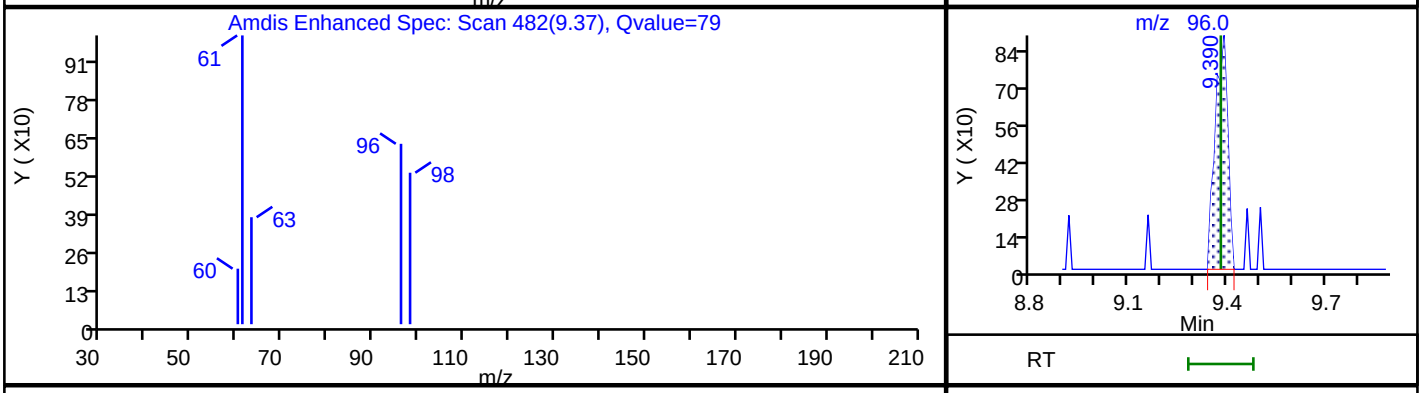
Report Date: 03-Sep-2018 08:56:05 Chrom Revision: 2.3 19-Jul-2018 15:14:50

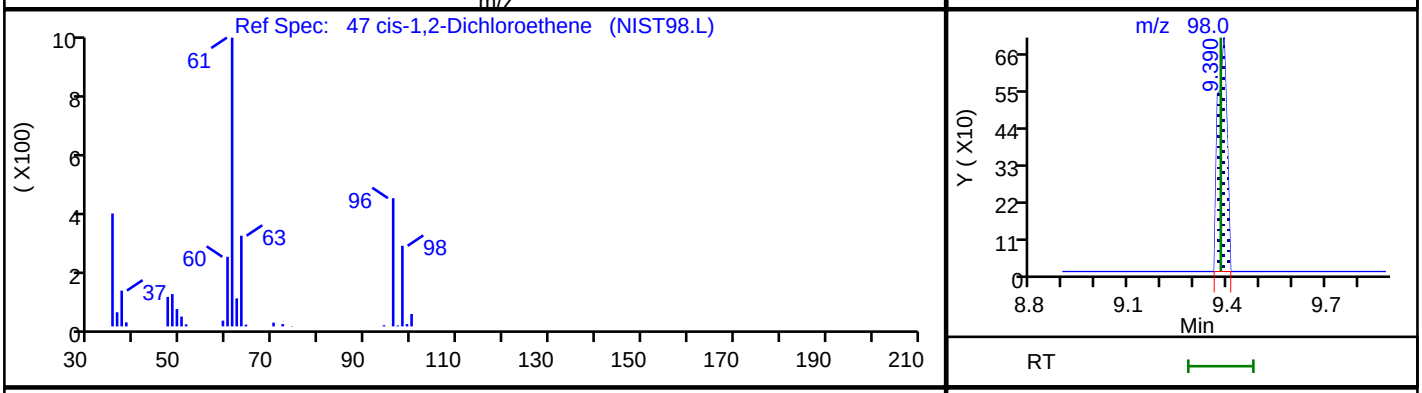
TestAmerica Pleasanton

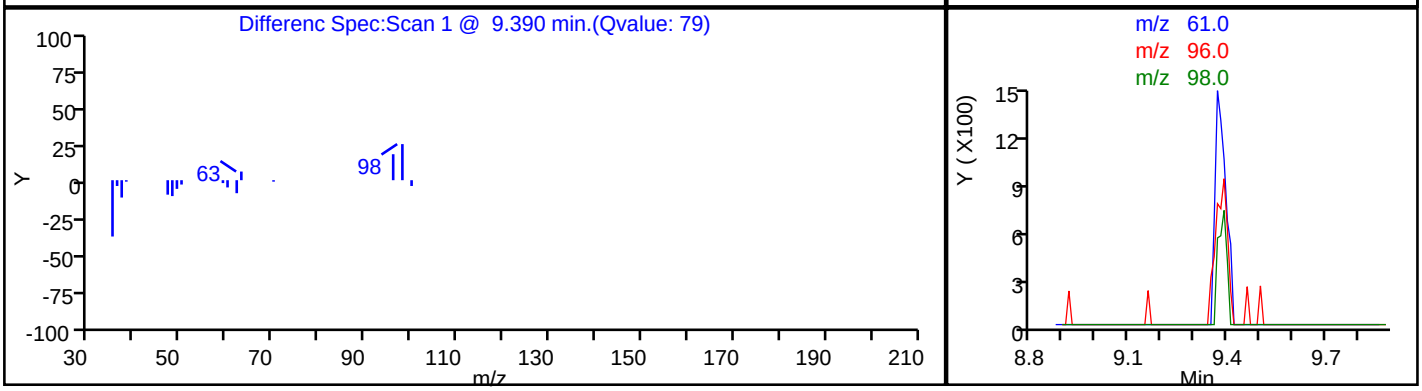
Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311818.D				
Injection Date:	31-Aug-2018 15:17:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-8	Lab Sample ID:	720-88255-8		
Client ID:	DG-DE89W				
Operator ID:	SF	ALS Bottle#:	17	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

47 cis-1,2-Dichloroethene, CAS: 156-59-2







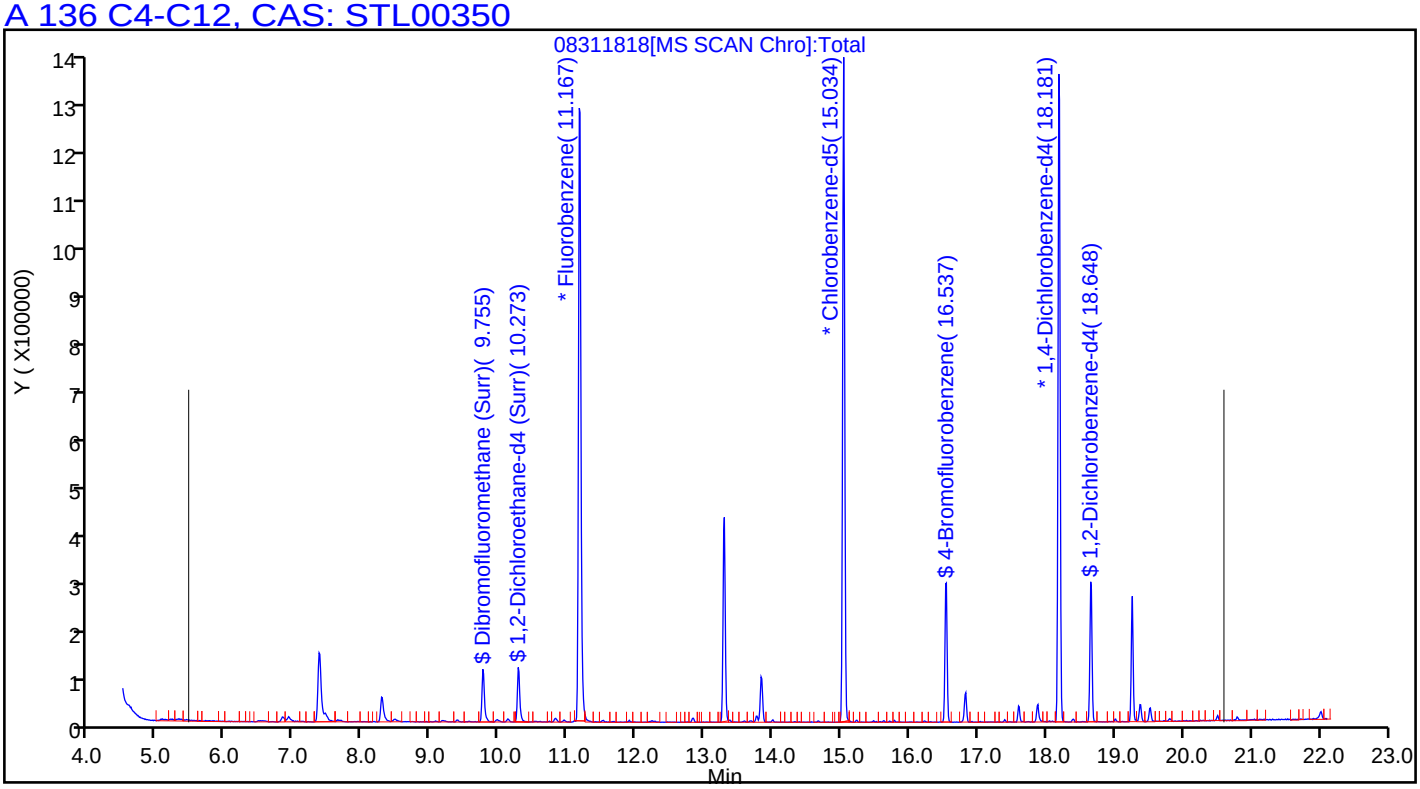


Report Date: 03-Sep-2018 08:56:06 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311818.D				
Injection Date:	31-Aug-2018 15:17:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-8	Lab Sample ID:	720-88255-8		
Client ID:	DG-DE89W				
Operator ID:	SF	ALS Bottle#:	17	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

A 136 C4-C12, CAS: STL00350

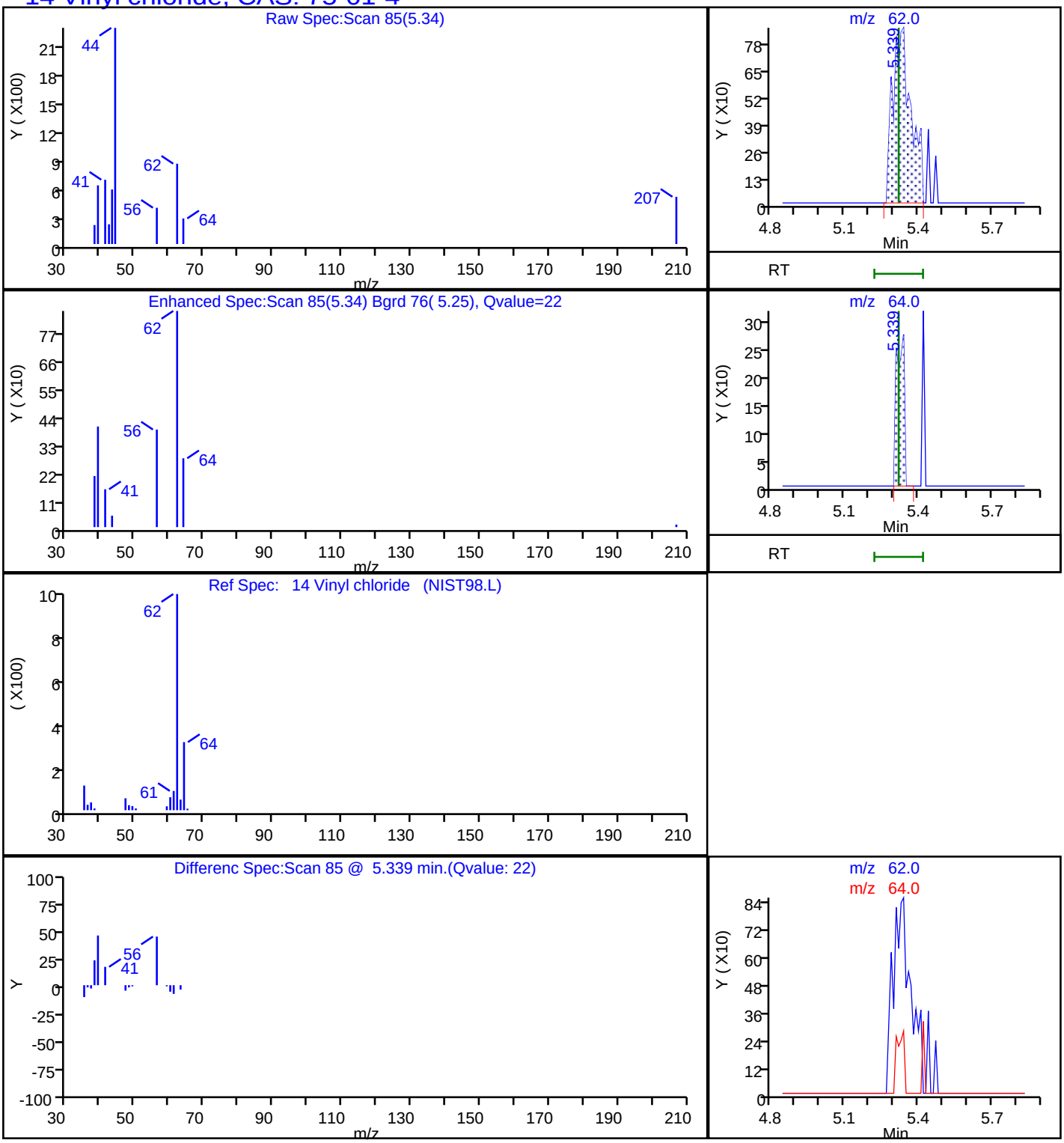


Report Date: 03-Sep-2018 08:56:05 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311818.D				
Injection Date:	31-Aug-2018 15:17:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-8	Lab Sample ID:	720-88255-8		
Client ID:	DG-DE89W				
Operator ID:	SF	ALS Bottle#:	17	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

14 Vinyl chloride, CAS: 75-01-4



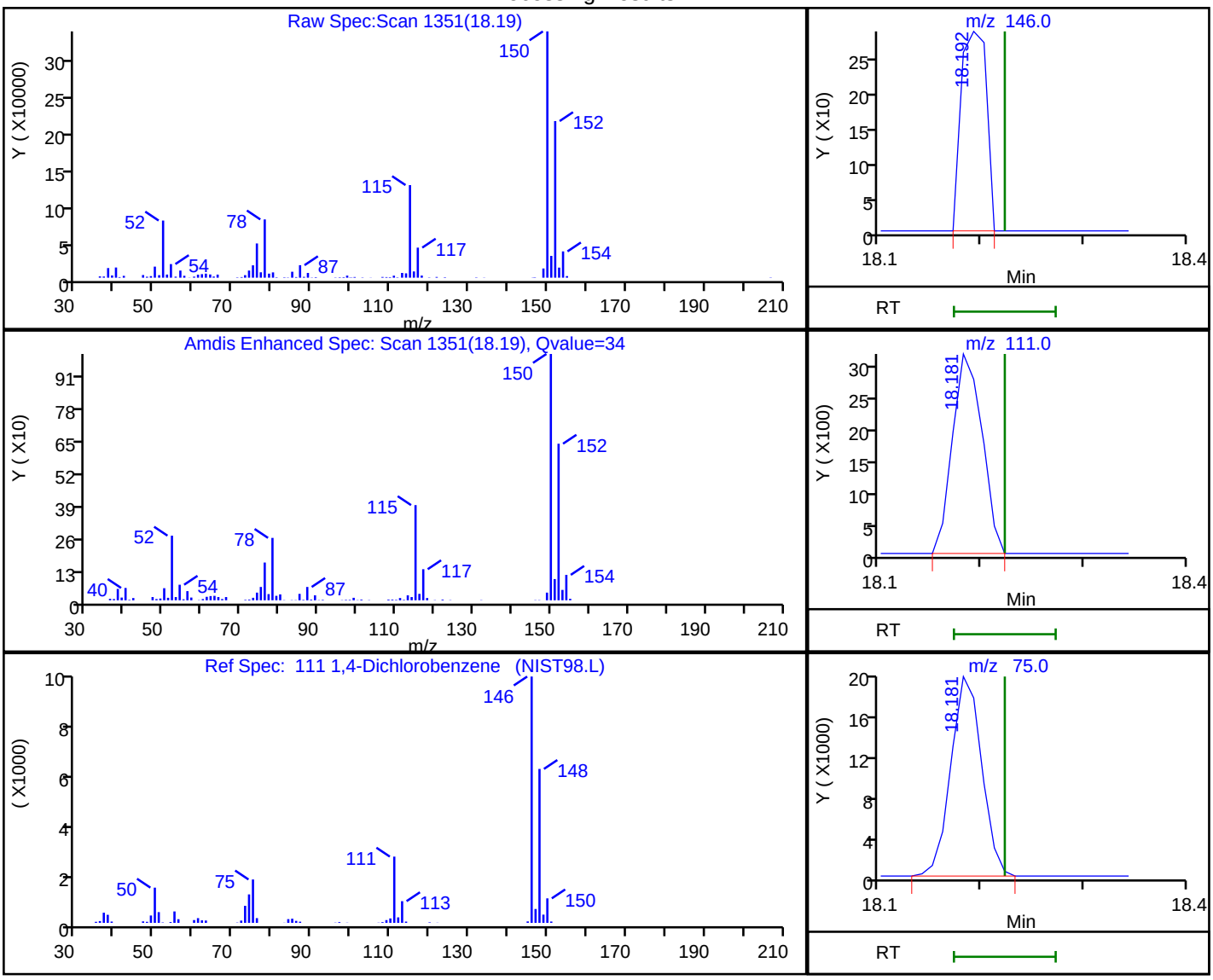
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311818.D				
Injection Date:	31-Aug-2018 15:17:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-8	Lab Sample ID:	720-88255-8		
Client ID:	DG-DE89W				
Operator ID:	SF	ALS Bottle#:	17	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

111 1,4-Dichlorobenzene, CAS: 106-46-7

Processing Results



RT	Mass	Response	Amount
18.19	146.00	495	0.017549
18.18	111.00	6401	
18.18	75.00	40209	
18.18	148.00	884	

Reviewer: chaijita, 03-Sep-2018 08:54:54

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

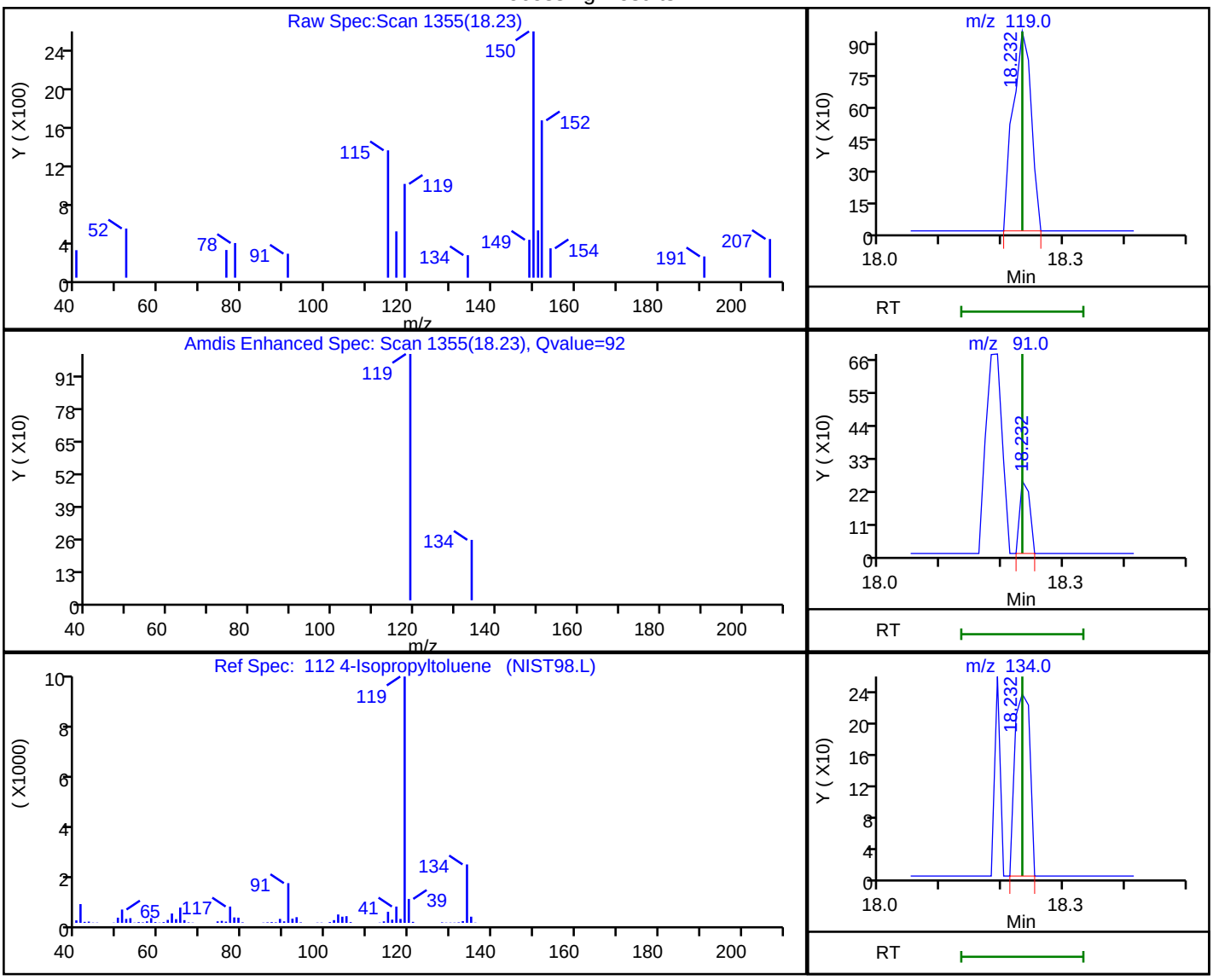
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311818.D				
Injection Date:	31-Aug-2018 15:17:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-8	Lab Sample ID:	720-88255-8		
Client ID:	DG-DE89W				
Operator ID:	SF	ALS Bottle#:	17	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

112 4-Isopropyltoluene, CAS: 99-87-6

Processing Results



RT	Mass	Response	Amount
18.23	119.00	1987	0.033237
18.23	91.00	277	
18.23	134.00	395	

Reviewer: chaijita, 03-Sep-2018 08:56:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

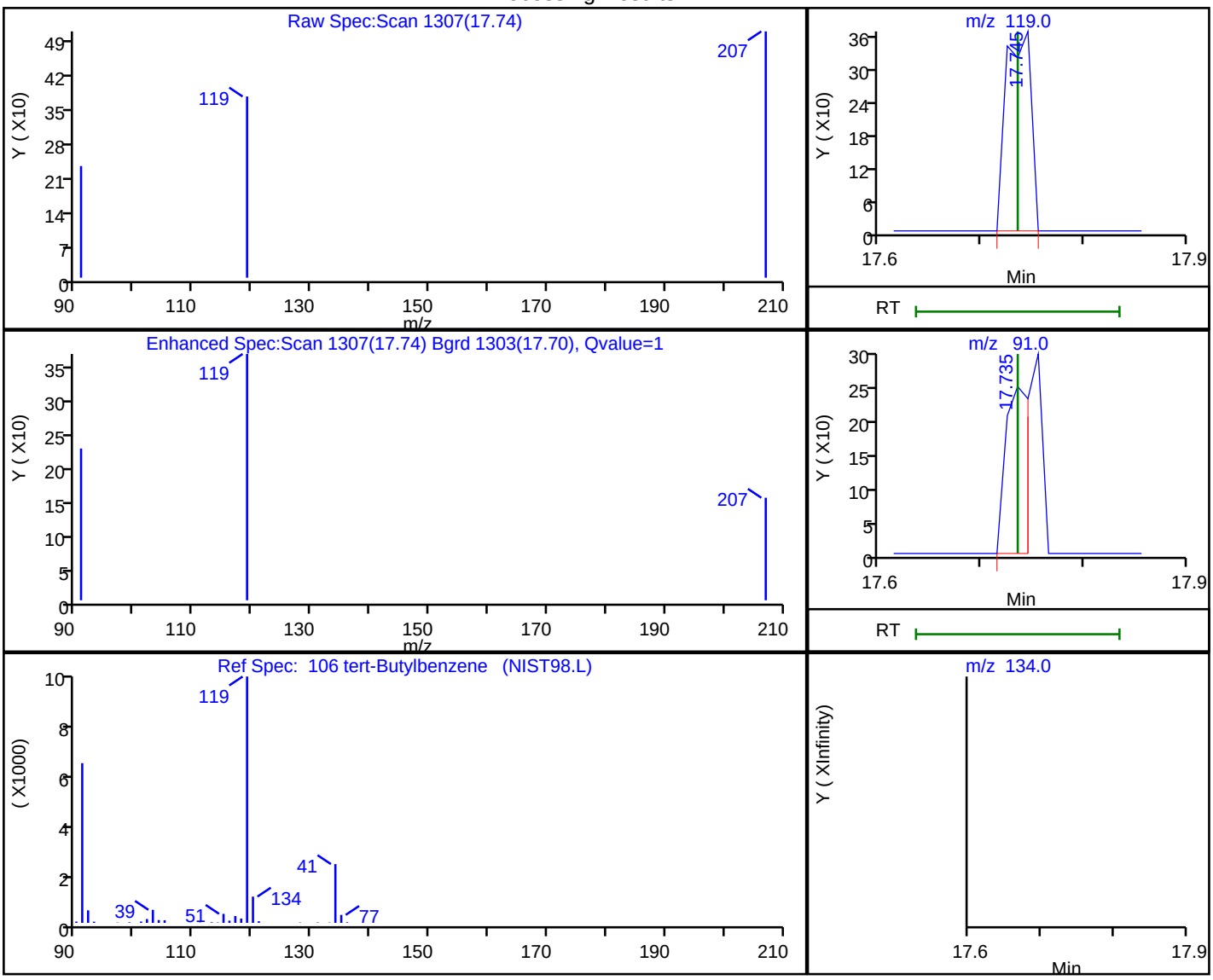
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311818.D				
Injection Date:	31-Aug-2018 15:17:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-8	Lab Sample ID:	720-88255-8		
Client ID:	DG-DE89W				
Operator ID:	SF	ALS Bottle#:	17	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

106 tert-Butylbenzene, CAS: 98-06-6

Processing Results



RT	Mass	Response	Amount
17.74	119.00	630	0.013169
17.73	91.00	412	
17.73	134.00	0	

Reviewer: chaijita, 03-Sep-2018 08:54:52

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

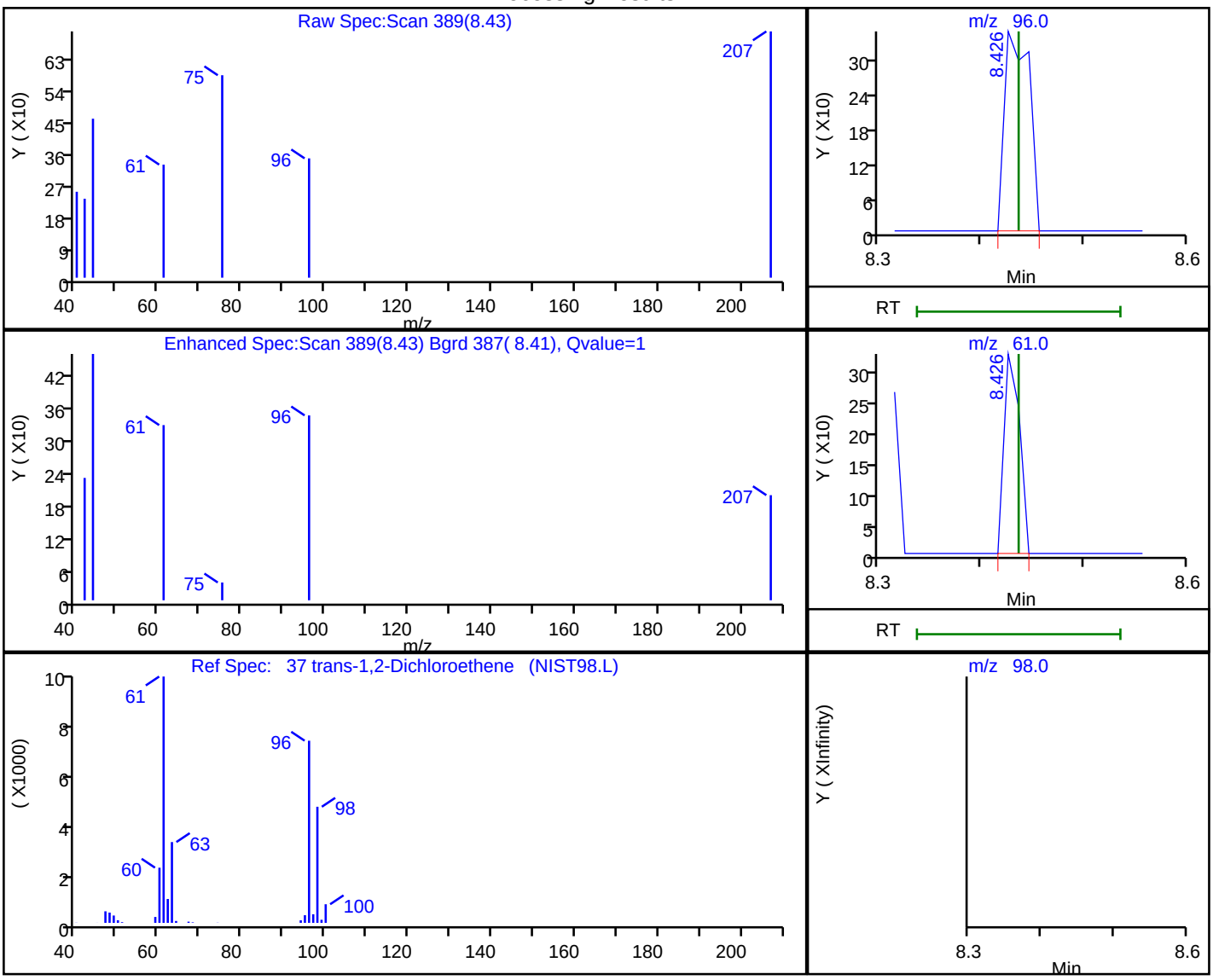
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311818.D				
Injection Date:	31-Aug-2018 15:17:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-8	Lab Sample ID:	720-88255-8		
Client ID:	DG-DE89W				
Operator ID:	SF	ALS Bottle#:	17	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

37 trans-1,2-Dichloroethene, CAS: 156-60-5

Processing Results



RT	Mass	Response	Amount
8.43	96.00	575	0.051426
8.43	61.00	343	
8.44	98.00	0	

Reviewer: chaijita, 03-Sep-2018 08:55:07

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

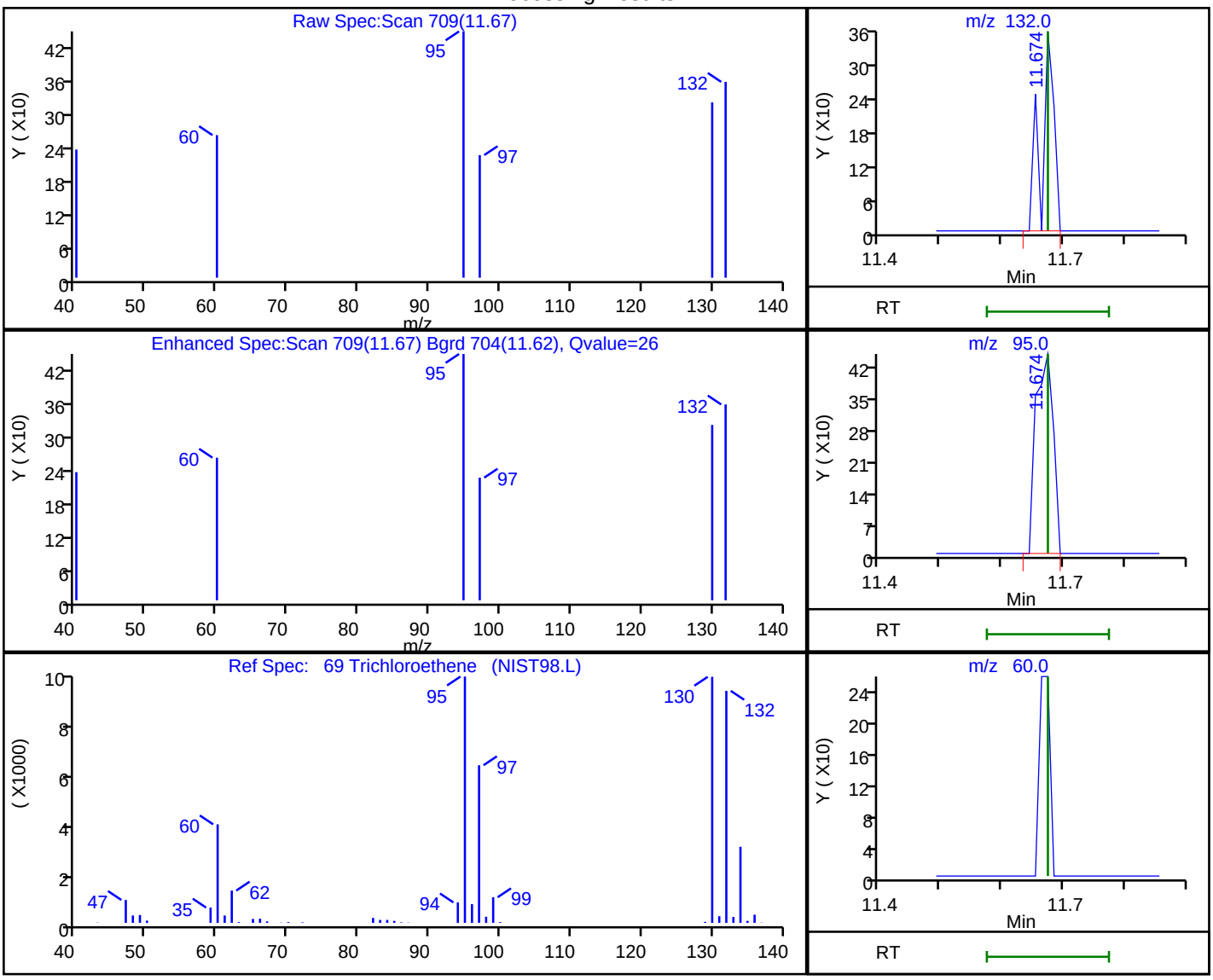
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311818.D				
Injection Date:	31-Aug-2018 15:17:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-8	Lab Sample ID:	720-88255-8		
Client ID:	DG-DE89W				
Operator ID:	SF	ALS Bottle#:	17	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

69 Trichloroethene, CAS: 79-01-6

Processing Results



RT	Mass	Response	Amount
11.67	132.00	497	0.038860
11.67	95.00	876	
11.67	60.00	0	

Reviewer: chaijita, 03-Sep-2018 08:55:29

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

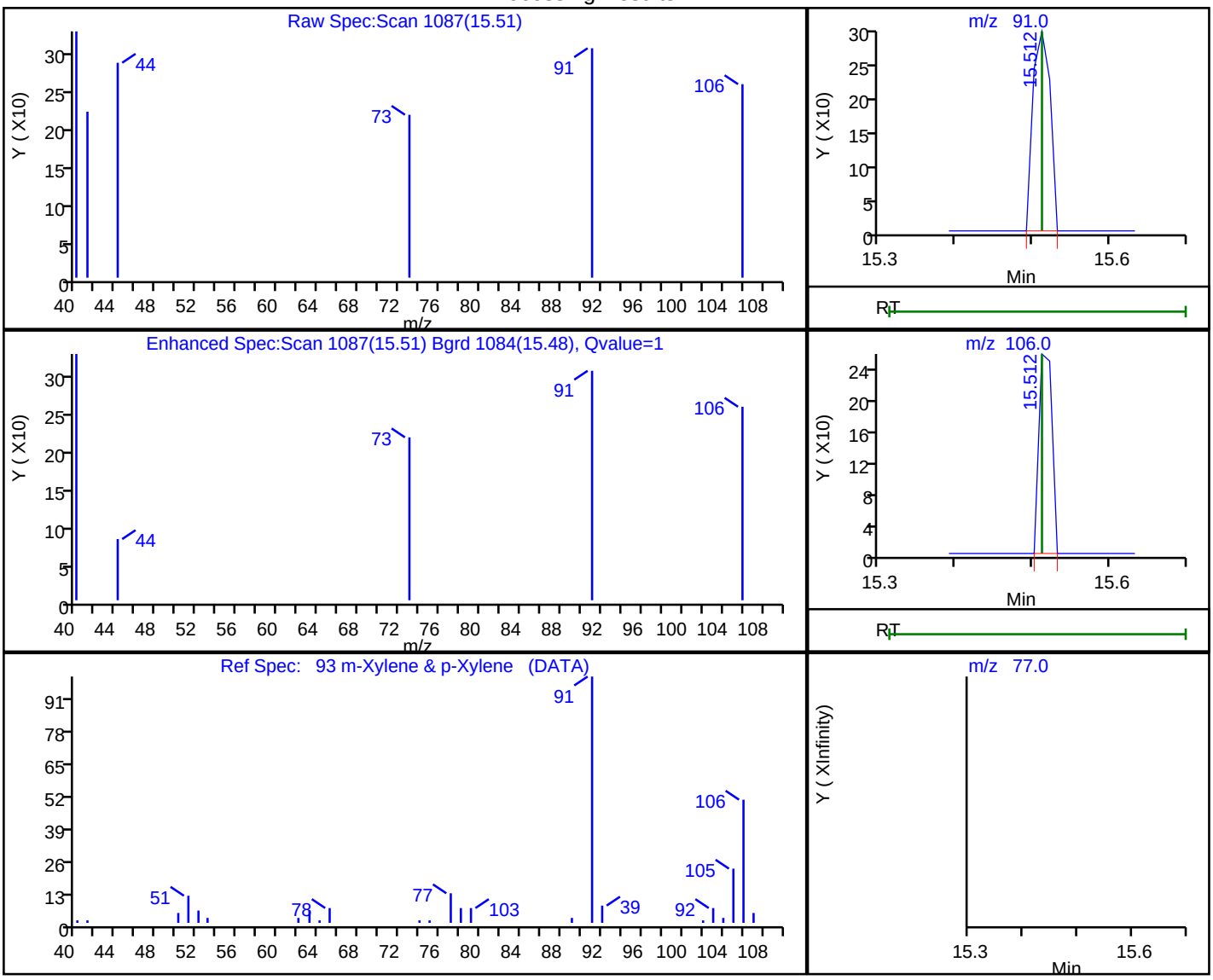
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311818.D				
Injection Date:	31-Aug-2018 15:17:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-8	Lab Sample ID:	720-88255-8		
Client ID:	DG-DE89W				
Operator ID:	SF	ALS Bottle#:	17	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

93 m-Xylene & p-Xylene, CAS: 179601-23-1

Processing Results



RT	Mass	Response	Amount
15.51	91.00	470	0.009500
15.51	106.00	303	
15.51	77.00	0	

Reviewer: chaijita, 03-Sep-2018 08:55:49

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88255-1
SDG No.:
Client Sample ID: DG-D9W
Lab Sample ID: 720-88255-9
Matrix: Water
Lab File ID: 08311819.D
Analysis Method: 8260B
Date Collected: 08/24/2018 16:40
Sample wt/vol: 10(mL)
Date Analyzed: 08/31/2018 15:47
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX
ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250643
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.067
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.074
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.11
75-34-3	1,1-Dichloroethane	ND		0.50	0.11
75-35-4	1,1-Dichloroethene	ND		0.50	0.20
563-58-6	1,1-Dichloropropene	ND		0.50	0.20
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.21
96-18-4	1,2,3-Trichloropropane	ND		0.50	0.087
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.20
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.21
107-06-2	1,2-Dichloroethane	ND		0.50	0.077
78-87-5	1,2-Dichloropropane	ND		0.50	0.20
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.17
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.20
142-28-9	1,3-Dichloropropane	ND		1.0	0.17
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.16
594-20-7	2,2-Dichloropropane	ND		0.50	0.17
78-93-3	2-Butanone (MEK)	ND		50	8.4
95-49-8	2-Chlorotoluene	ND		0.50	0.20
591-78-6	2-Hexanone	ND		50	3.0
106-43-4	4-Chlorotoluene	ND		0.50	0.20
99-87-6	4-Isopropyltoluene	ND		1.0	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	4.5
67-64-1	Acetone	ND		50	20
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		1.0	0.20
75-25-2	Bromoform	ND		1.0	0.50
74-83-9	Bromomethane	ND		1.0	0.49
75-15-0	Carbon disulfide	ND		5.0	0.78
56-23-5	Carbon tetrachloride	ND		0.50	0.11
108-90-7	Chlorobenzene	ND		0.50	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88255-1
SDG No.:
Client Sample ID: DG-D9W
Lab Sample ID: 720-88255-9
Matrix: Water
Lab File ID: 08311819.D
Analysis Method: 8260B
Date Collected: 08/24/2018 16:40
Sample wt/vol: 10(mL)
Date Analyzed: 08/31/2018 15:47
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX
ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250643
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-97-5	Chlorobromomethane	ND		1.0	0.25
124-48-1	Chlorodibromomethane	ND		0.50	0.10
75-00-3	Chloroethane	ND		1.0	0.17
67-66-3	Chloroform	ND		1.0	0.40
74-87-3	Chloromethane	ND		1.0	0.19
156-59-2	cis-1,2-Dichloroethene	0.62		0.50	0.076
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
74-95-3	Dibromomethane	ND		0.50	0.30
75-27-4	Dichlorobromomethane	ND		0.50	0.20
75-71-8	Dichlorodifluoromethane	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.13
106-93-4	Ethylene Dibromide	ND		0.50	0.075
STL00350	Gasoline Range Organics (GRO)-C4-C12	30	J	50	21
87-68-3	Hexachlorobutadiene	ND		1.0	0.27
98-82-8	Isopropylbenzene	ND		0.50	0.20
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.11
75-09-2	Methylene Chloride	ND		5.0	1.5
91-20-3	Naphthalene	ND		1.0	0.22
104-51-8	n-Butylbenzene	ND		1.0	0.30
103-65-1	N-Propylbenzene	ND		1.0	0.20
135-98-8	sec-Butylbenzene	ND		1.0	0.17
100-42-5	Styrene	ND		0.50	0.22
98-06-6	tert-Butylbenzene	ND		1.0	0.20
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.13
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.17
79-01-6	Trichloroethene	ND		0.50	0.20
75-69-4	Trichlorofluoromethane	ND		1.0	0.30
108-05-4	Vinyl acetate	ND		10	0.60
75-01-4	Vinyl chloride	0.51		0.50	0.20
1330-20-7	Xylenes, Total	ND		0.50	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88255-1

SDG No.:

Client Sample ID: DG-D9W Lab Sample ID: 720-88255-9

Matrix: Water Lab File ID: 08311819.D

Analysis Method: 8260B Date Collected: 08/24/2018 16:40

Sample wt/vol: 10(mL) Date Analyzed: 08/31/2018 15:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250643 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	117		72-130
460-00-4	4-Bromofluorobenzene	96		67-130
2037-26-5	Toluene-d8 (Surr)	102		70-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311819.D
Lims ID: 720-88255-A-9
Client ID: DG-D9W
Sample Type: Client
Inject. Date: 31-Aug-2018 15:47:30 ALS Bottle#: 18 Worklist Smp#: 22
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88255-A-9
Misc. Info.: HP-4
Operator ID: SF Instrument ID: HP4

Method: \\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\8260W_LL_GRO_HP4.m
Limit Group: 8260B
Last Update: 03-Sep-2018 08:58:02 Calib Date: 26-Jul-2018 01:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP4\20180725-52939.b\07251826.D

Column 1 : DB-VRX (250.00 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: chaijita Date: 03-Sep-2018 08:58:02

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.360	7.360	0.000	97	307971	250.0	
* 2 Fluorobenzene	96	11.167	11.177	-0.010	97	1194340	25.0	
* 3 Chlorobenzene-d5	117	15.034	15.035	-0.001	89	935785	25.0	
* 4 1,4-Dichlorobenzene-d4	152	18.192	18.192	0.000	97	481971	25.0	
$ 5 Dibromofluoromethane (Surr	113	9.766	9.747	0.010	92	90662	8.20	
$ 6 1,2-Dichloroethane-d4 (Sur	65	10.273	10.264	0.000	0	119581	8.81	
$ 8 Toluene-d8 (Surr)	98	13.288	13.276	0.000	95	351283	7.63	
$ 9 4-Bromofluorobenzene	95	16.527	16.537	-0.010	87	135307	7.20	
$ 10 1,2-Dichlorobenzene-d4	152	18.659	18.659	0.000	87	106682	5.97	
14 Vinyl chloride	62	5.319	5.314	0.000	65	9459	0.5066	
23 Isopropyl alcohol	45	6.822	6.831	0.000	100	121892	108.9	
24 Acetone	58	6.913	6.907	0.000	98	5639	4.69	
28 2-Methyl-2-propanol	59	7.461	7.472	0.000	97	27139	16.2	
31 Methylene Chloride	84	7.684	7.627	0.050	36	2866	0.2536	
39 1,1-Dichloroethane	63	8.720	8.712	0.000	1	1330	0.0510	
47 cis-1,2-Dichloroethene	61	9.380	9.372	0.000	85	13757	0.6185	
55 t-Amyl alcohol	59	10.121	10.121	0.000	95	15528	12.2	
62 Benzene	78	10.953	10.933	0.010	95	3429	0.0718	
69 Trichloroethene	132	11.694	11.664	0.020	1	772	0.0593	
74 Methylcyclohexane	83	12.283	12.262	0.010	94	9743	0.3790	
80 Toluene	92	13.380	13.369	0.010	98	2342	0.0586	
83 2-Hexanone	43	13.573	13.560	0.000	76	1936	0.2050	
92 Butyl Ether	87	15.217	15.214	-0.010	96	1276	0.1262	
93 m-Xylene & p-Xylene	91	15.522	15.512	0.010	93	4283	0.0834	
112 4-Isopropyltoluene	119	18.232	18.232	0.000	1	1322	0.0211	
126 Butane	43	5.441	5.461	-0.020	71	7384	NR	
128 n-Octane	43	13.674	13.745	-0.071	90	2887	NR	
129 n-Nonane	57	15.613	15.664	-0.051	0	2167	NR	
130 n-Decane	57	17.390	17.430	-0.040	88	1572	NR	
131 Dodecane	57	20.506	20.547	-0.041	89	4182	NR	
132 C13	57	22.019	22.059	-0.040	95	4883	NR	

Report Date: 03-Sep-2018 08:58:02 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311819.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
A 158 C6-C8	1	11.456	(9.106-13.806)		0	736979	6.11	
A 134 C4-C10	1	11.466	(5.451-17.481)		0	2422052	20.1	
A 159 C6-C9	1	12.400	(9.106-15.694)		0	1179826	9.78	
A 136 C4-C12	1	13.024	(5.451-20.598)		0	3665297	30.4	
A 137 C6-C10	1	13.294	(9.106-17.481)		0	1476321	12.2	
A 138 C5-C12	1	13.826	(7.055-20.598)		0	3484535	28.9	
A 139 C6-C12	1	14.852	(9.106-20.598)		0	2719566	22.5	
A 160 C8-C10	1	15.598	(13.715-17.481)		0	792594	6.57	
A 141 C7-C12	1	16.029	(11.461-20.598)		0	2314255	19.2	
S 142 Xylenes, Total	1				0		0.0834	
T 156 Paraldehyde TIC	45	13.268	13.266	-0.010	0	278	0.3587	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

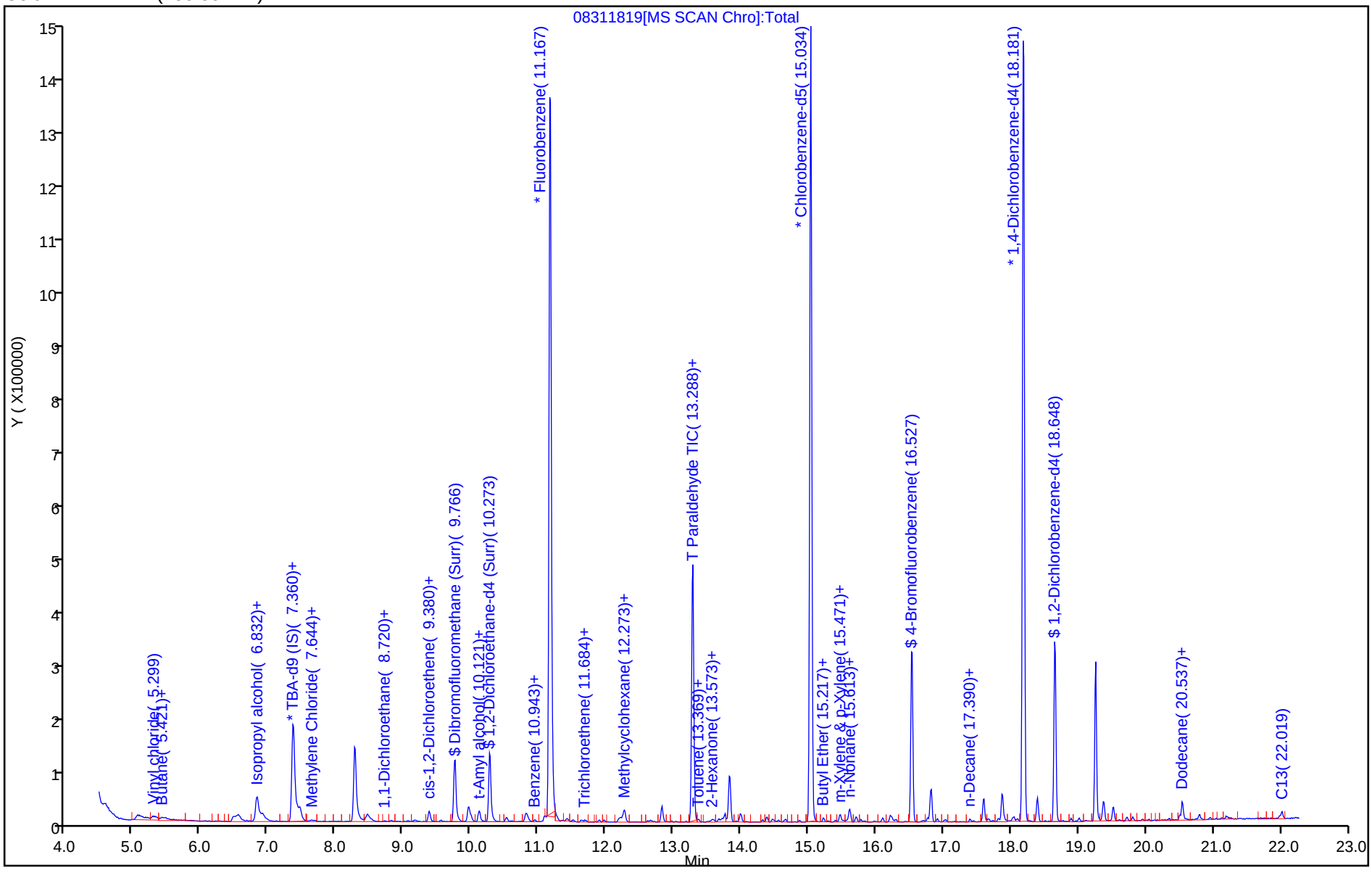
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 03-Sep-2018 08:58:02 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311819.D				
Injection Date:	31-Aug-2018 15:47:30	Instrument ID:	HP4	Operator ID:	SF
Lims ID:	720-88255-A-9	Lab Sample ID:	720-88255-9	Worklist Smp#:	22
Client ID:	DG-D9W				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		

Column: DB-VRX (250.00 mm)



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311819.D				
Lims ID:	720-88255-A-9				
Client ID:	DG-D9W				
Sample Type:	Client				
Inject. Date:	31-Aug-2018 15:47:30	ALS Bottle#:	18	Worklist Smp#:	22
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	88255-A-9				
Misc. Info.:	HP-4				
Operator ID:	SF	Instrument ID:	HP4		

Method:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\8260W_LL_GRO_HP4.m		
Limit Group:	8260B		
Last Update:	03-Sep-2018 08:58:02	Calib Date:	26-Jul-2018 01:42:30
Integrator:	RTE	ID Type:	Deconvolution ID
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\ChromNA\Pleasanton\ChromData\HP4\20180725-52939.b\07251826.D		

Column 1 :	DB-VRX (250.00 mm)	Det: MS SCAN
Process Host:	XAWRK001	

First Level Reviewer: chaijita Date: 03-Sep-2018 08:58:02

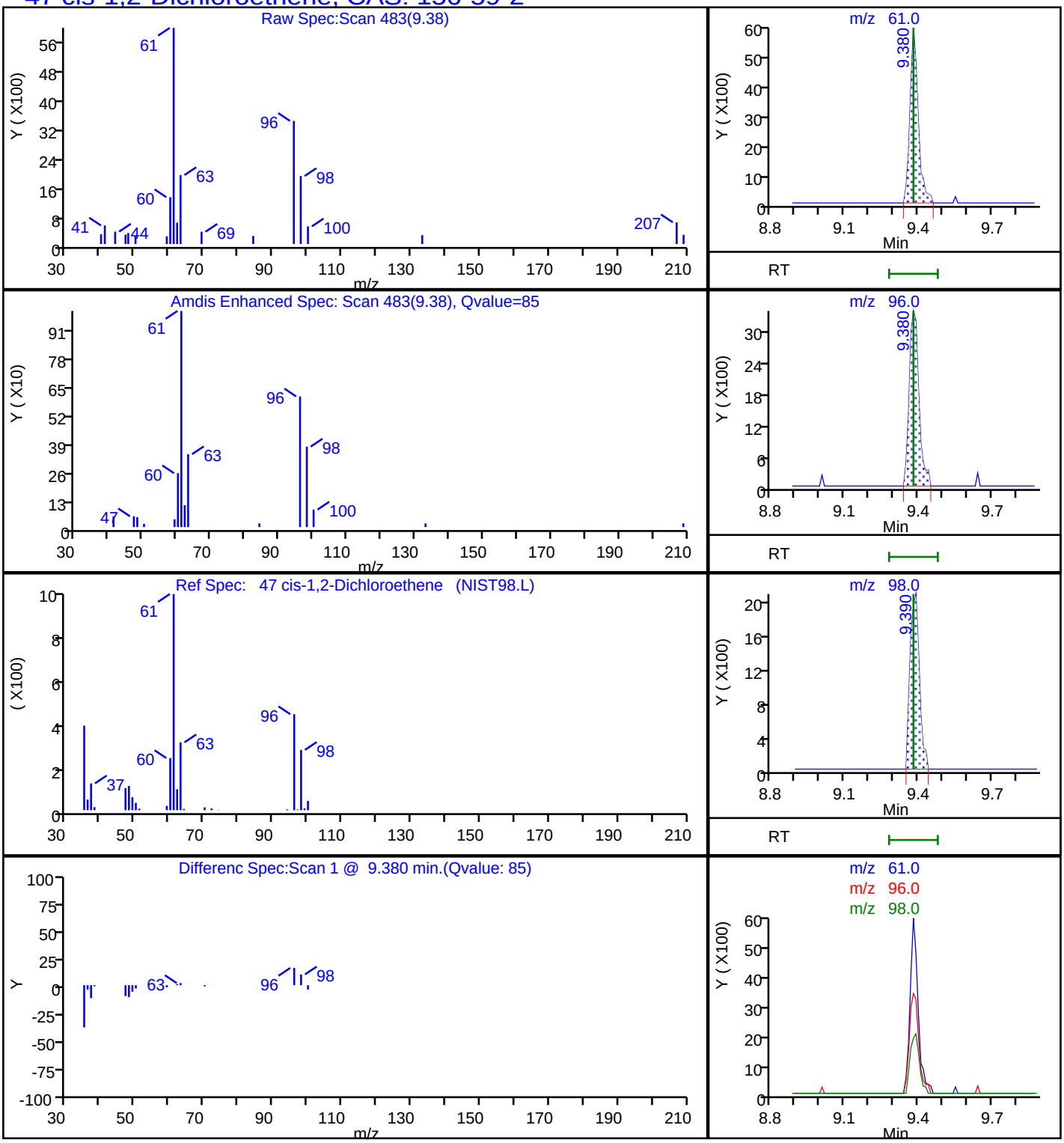
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 6 1,2-Dichloroethane-d4 (Surr)	7.50	8.81	117.50
$ 8 Toluene-d8 (Surr)	7.50	7.63	101.78
$ 9 4-Bromofluorobenzene	7.50	7.20	96.02
$ 10 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 03-Sep-2018 08:58:03 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311819.D				
Injection Date:	31-Aug-2018 15:47:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-9	Lab Sample ID:	720-88255-9		
Client ID:	DG-D9W				
Operator ID:	SF	ALS Bottle#:	18	Worklist Smp#:	22
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

47 cis-1,2-Dichloroethene, CAS: 156-59-2

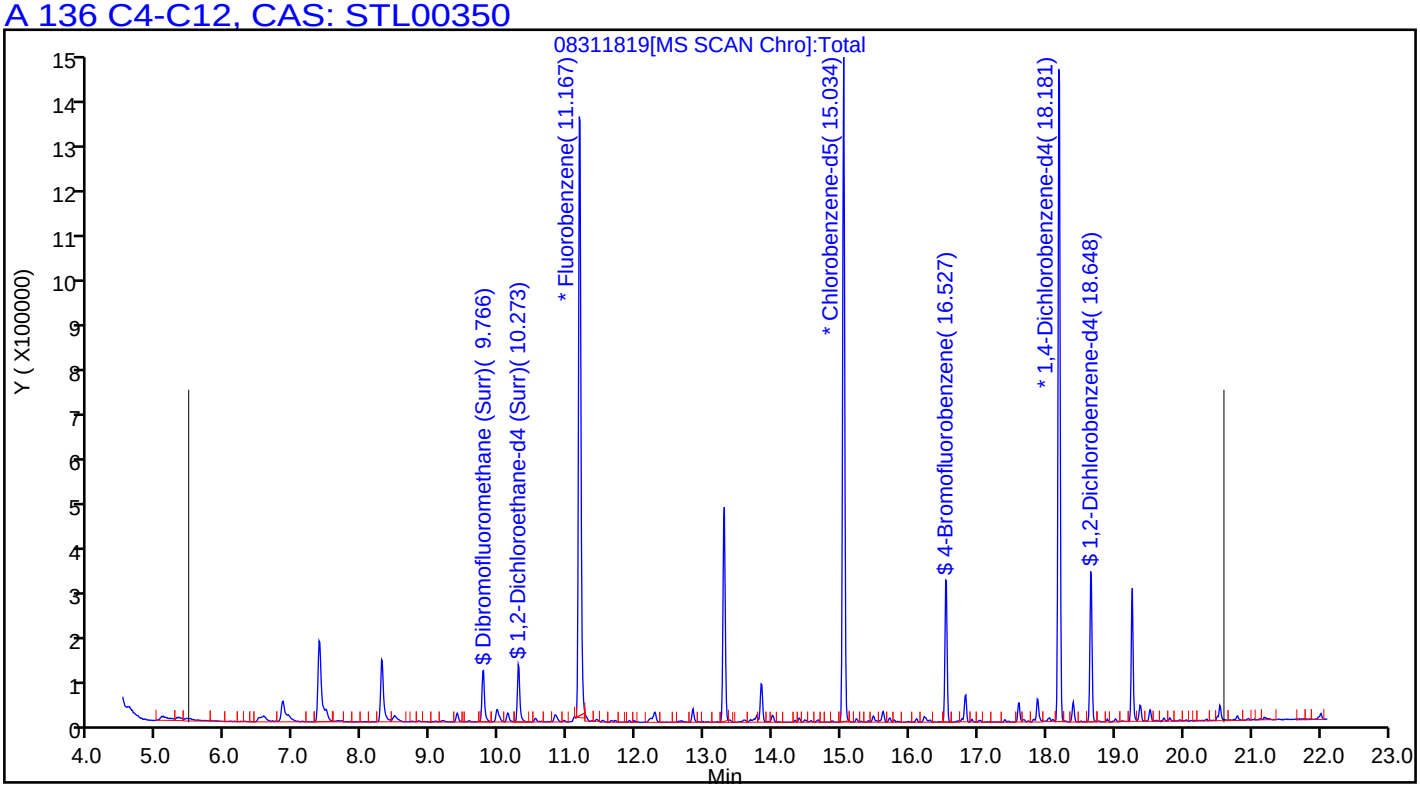


Report Date: 03-Sep-2018 08:58:04 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311819.D				
Injection Date:	31-Aug-2018 15:47:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-9	Lab Sample ID:	720-88255-9		
Client ID:	DG-D9W				
Operator ID:	SF	ALS Bottle#:	18	Worklist Smp#:	22
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

A 136 C4-C12, CAS: STL00350

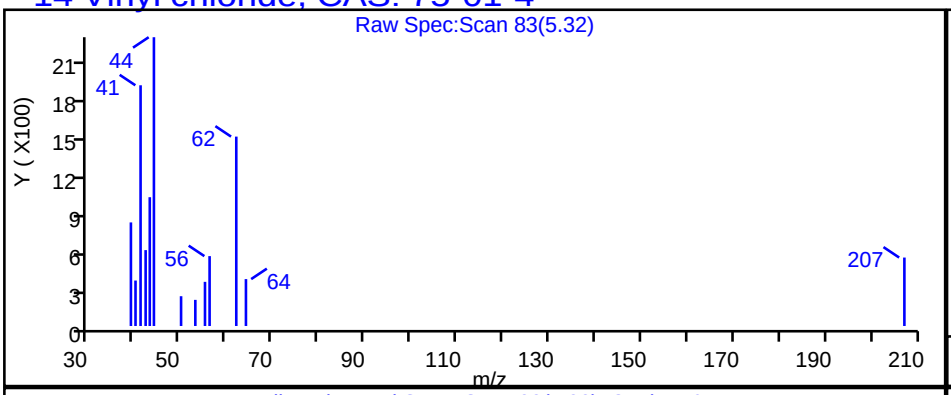


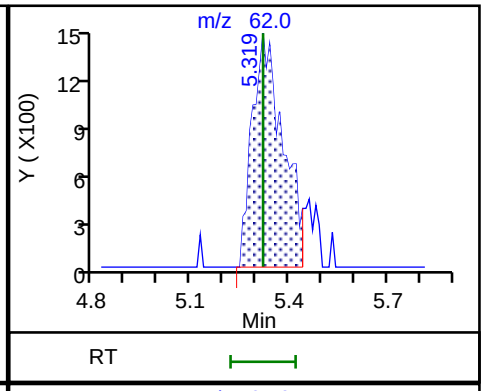
Report Date: 03-Sep-2018 08:58:03 Chrom Revision: 2.3 19-Jul-2018 15:14:50

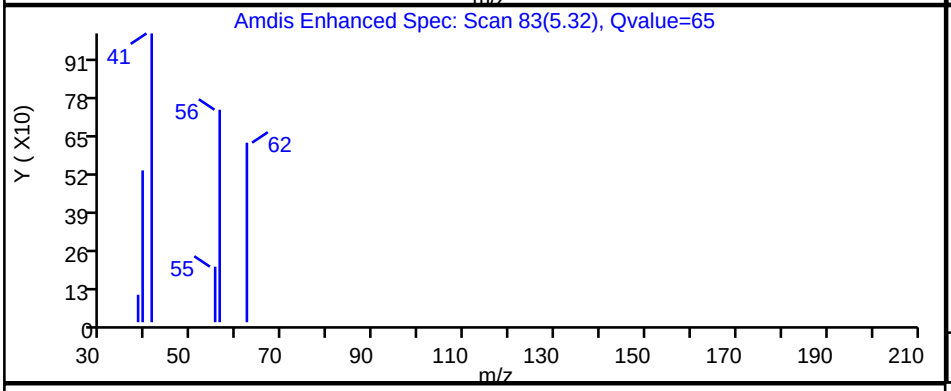
TestAmerica Pleasanton

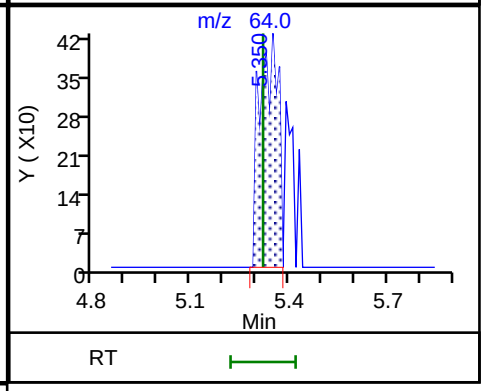
Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311819.D				
Injection Date:	31-Aug-2018 15:47:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-9	Lab Sample ID:	720-88255-9		
Client ID:	DG-D9W				
Operator ID:	SF	ALS Bottle#:	18	Worklist Smp#:	22
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

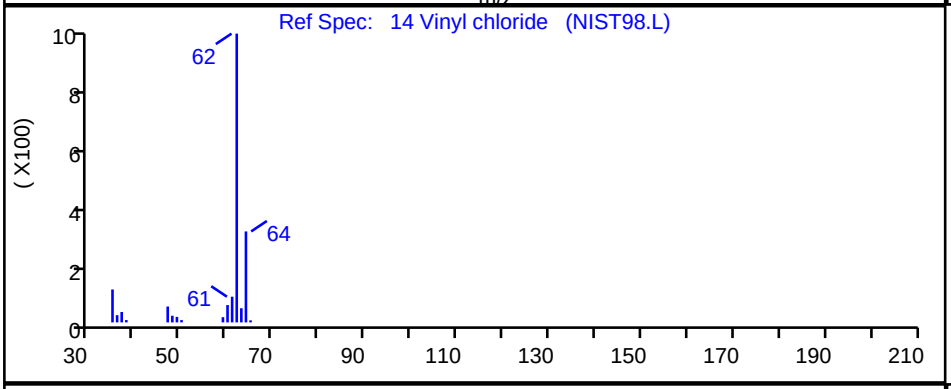
14 Vinyl chloride, CAS: 75-01-4

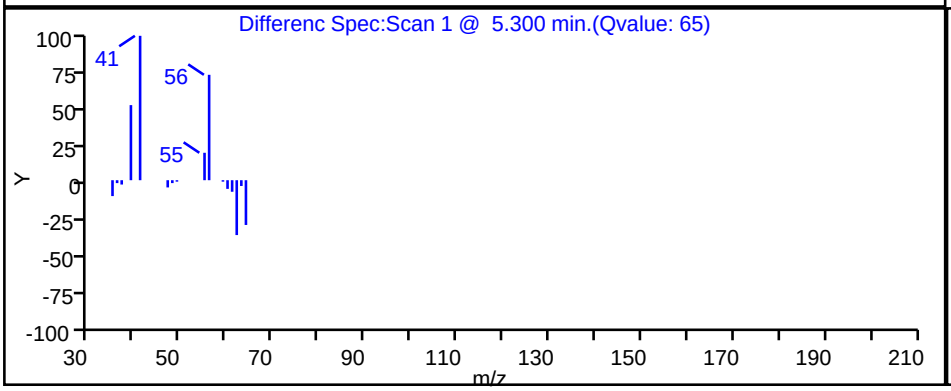


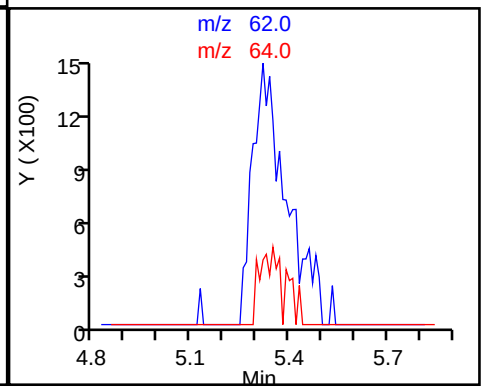












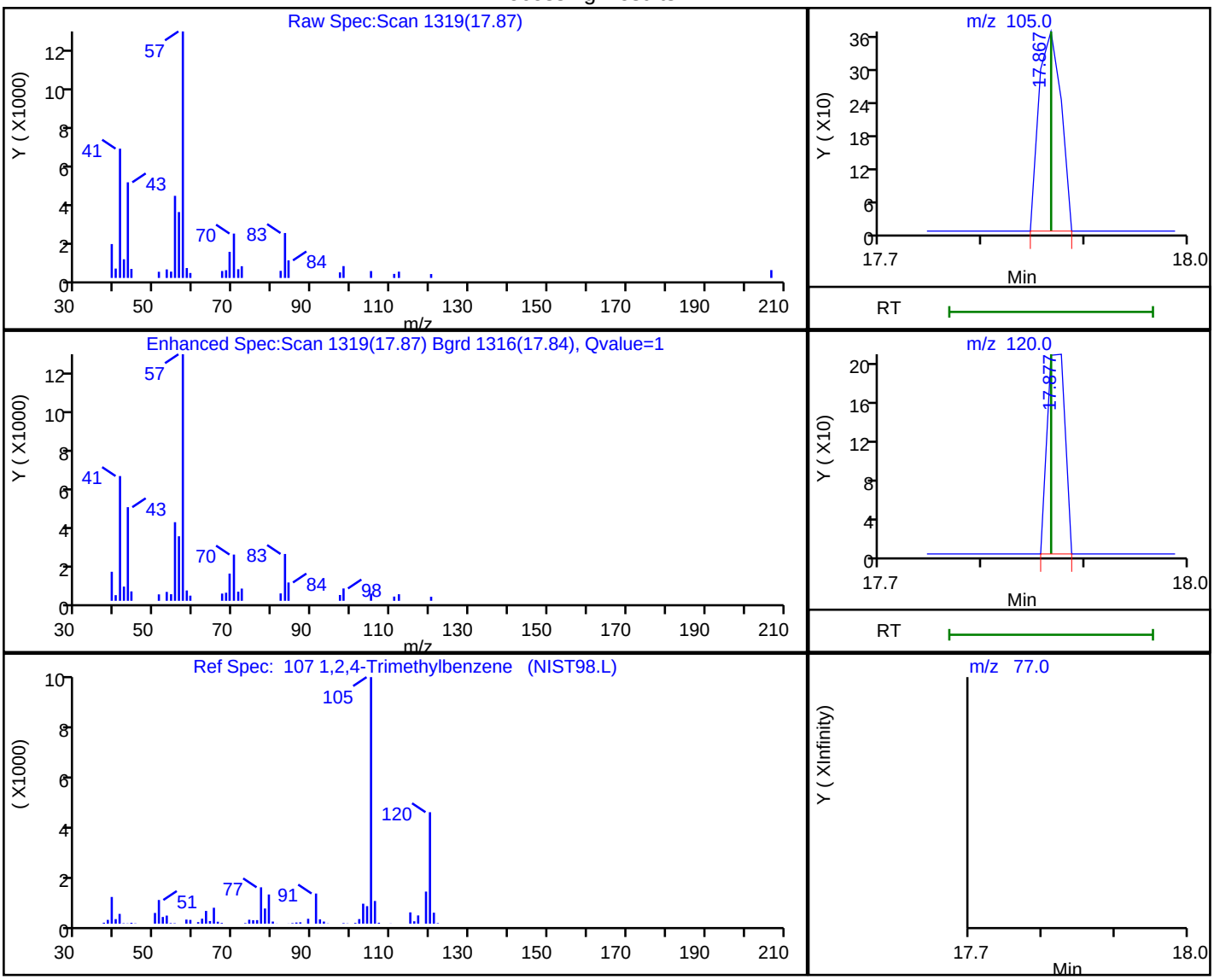
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311819.D				
Injection Date:	31-Aug-2018 15:47:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-9	Lab Sample ID:	720-88255-9		
Client ID:	DG-D9W				
Operator ID:	SF	ALS Bottle#:	18	Worklist Smp#:	22
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

107 1,2,4-Trimethylbenzene, CAS: 95-63-6

Processing Results



RT	Mass	Response	Amount
17.87	105.00	543	0.009706
17.88	120.00	249	
17.87	77.00	0	

Reviewer: chaijita, 03-Sep-2018 08:57:48

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

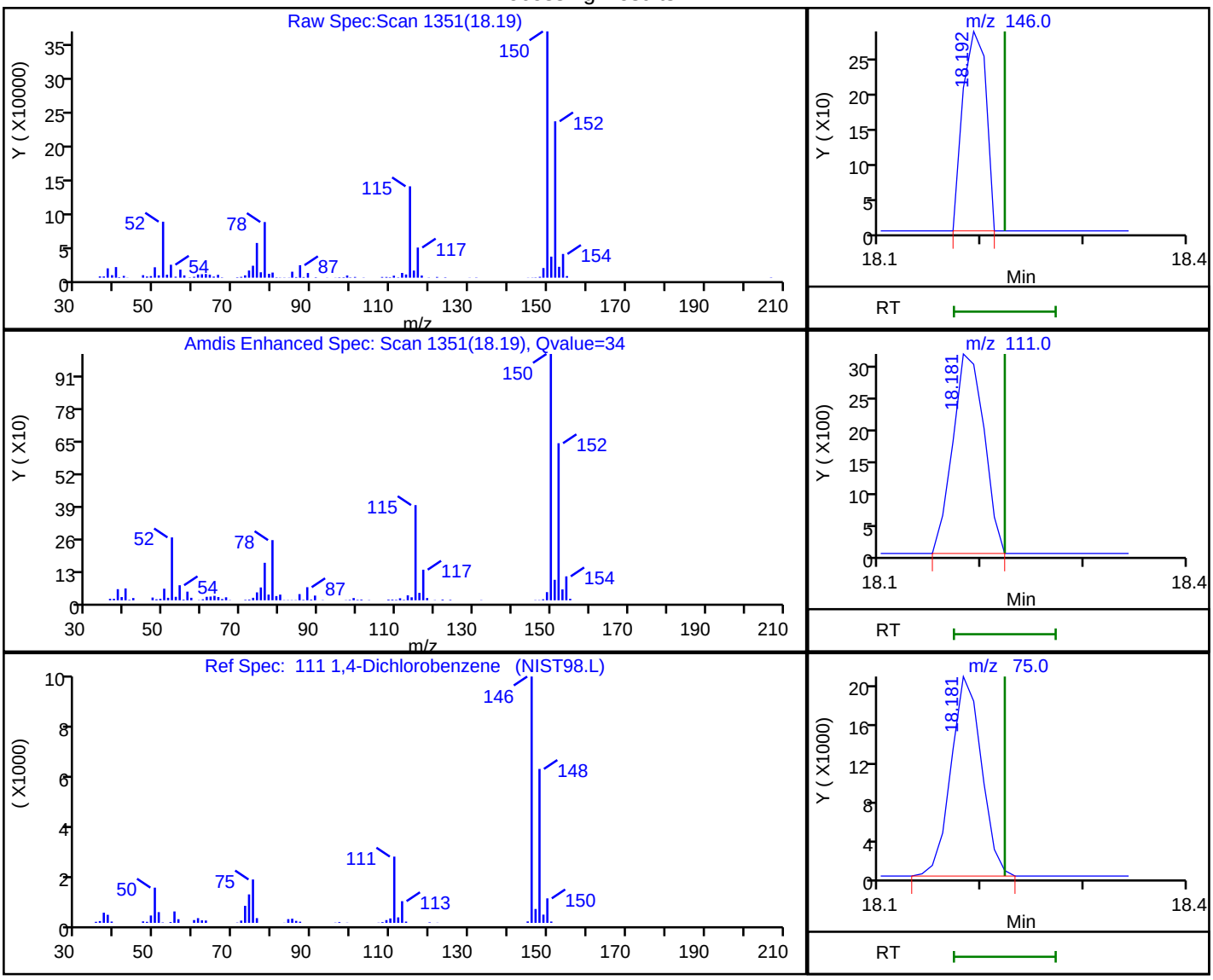
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311819.D				
Injection Date:	31-Aug-2018 15:47:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-9	Lab Sample ID:	720-88255-9		
Client ID:	DG-D9W				
Operator ID:	SF	ALS Bottle#:	18	Worklist Smp#:	22
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

111 1,4-Dichlorobenzene, CAS: 106-46-7

Processing Results



RT	Mass	Response	Amount
18.19	146.00	445	0.015070
18.18	111.00	6677	
18.18	75.00	41854	
18.19	148.00	2652	

Reviewer: chaijita, 03-Sep-2018 08:57:53

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

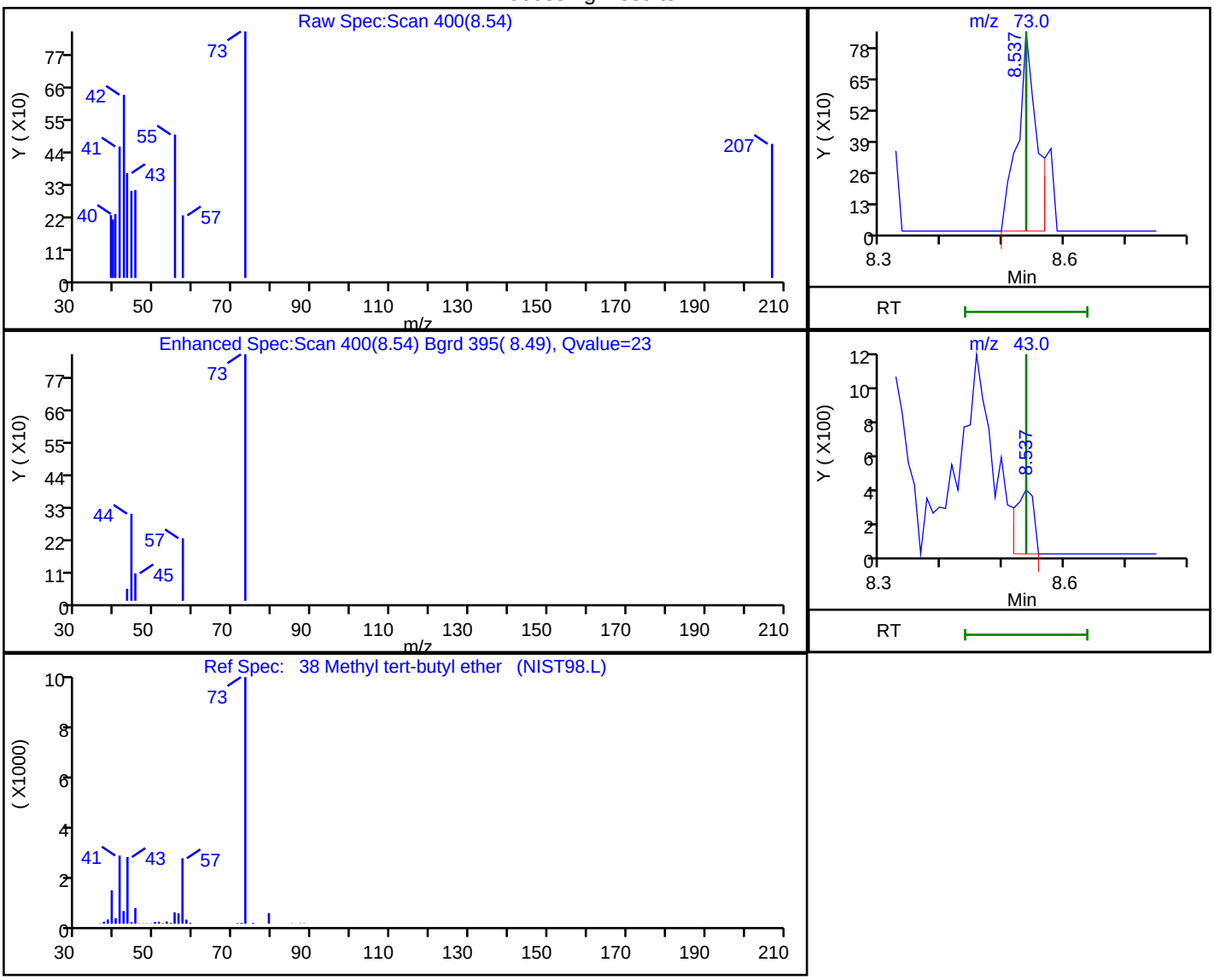
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311819.D				
Injection Date:	31-Aug-2018 15:47:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-9	Lab Sample ID:	720-88255-9		
Client ID:	DG-D9W				
Operator ID:	SF	ALS Bottle#:	18	Worklist Smp#:	22
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

38 Methyl tert-butyl ether, CAS: 1634-04-4

Processing Results



RT	Mass	Response	Amount
8.54	73.00	1809	0.060682
8.54	43.00	750	

Reviewer: chaijita, 03-Sep-2018 08:56:34

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

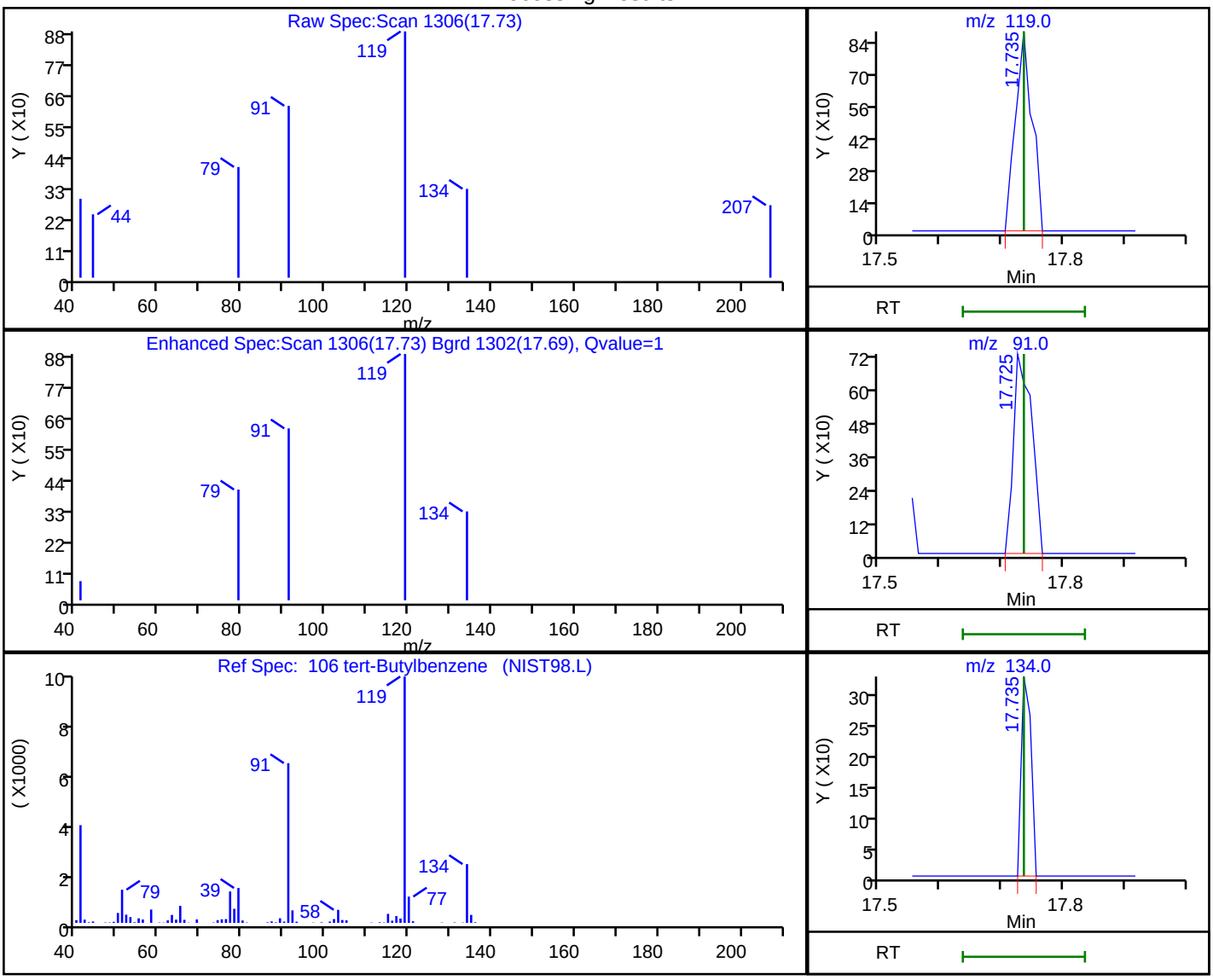
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311819.D				
Injection Date:	31-Aug-2018 15:47:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-9	Lab Sample ID:	720-88255-9		
Client ID:	DG-D9W				
Operator ID:	SF	ALS Bottle#:	18	Worklist Smp#:	22
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

106 tert-Butylbenzene, CAS: 98-06-6

Processing Results



RT	Mass	Response	Amount
17.73	119.00	1678	0.033507
17.72	91.00	1505	
17.73	134.00	353	

Reviewer: chaijita, 03-Sep-2018 08:57:47

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

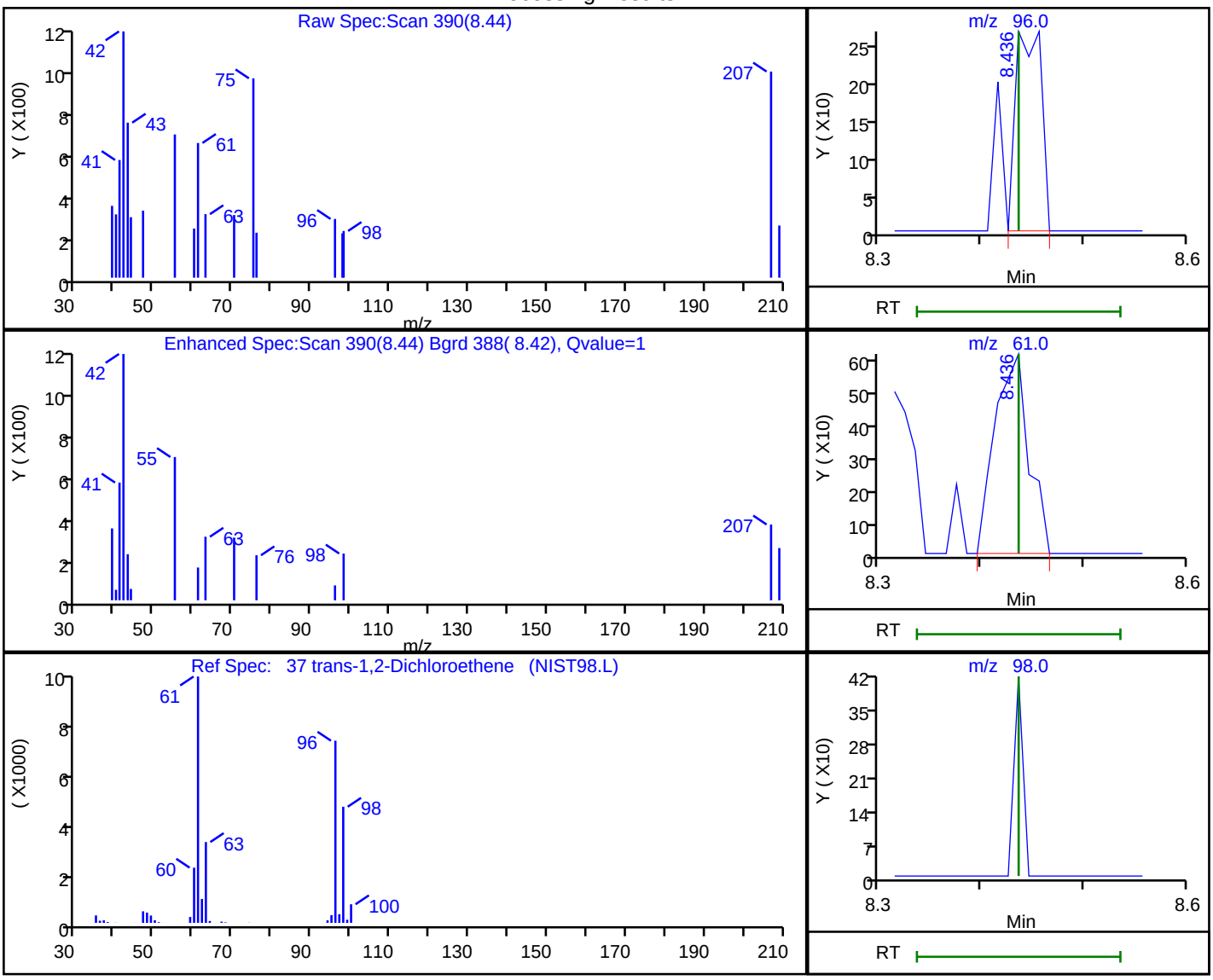
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311819.D				
Injection Date:	31-Aug-2018 15:47:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-9	Lab Sample ID:	720-88255-9		
Client ID:	DG-D9W				
Operator ID:	SF	ALS Bottle#:	18	Worklist Smp#:	22
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

37 trans-1,2-Dichloroethene, CAS: 156-60-5

Processing Results



RT	Mass	Response	Amount
8.44	96.00	471	0.041351
8.44	61.00	1424	
8.44	98.00	0	

Reviewer: chaijita, 03-Sep-2018 08:56:33

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88255-1
SDG No.:
Client Sample ID: DG-B9W
Lab Sample ID: 720-88255-10
Matrix: Water
Lab File ID: 08311820.D
Analysis Method: 8260B
Date Collected: 08/24/2018 16:55
Sample wt/vol: 10(mL)
Date Analyzed: 08/31/2018 16:17
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250643
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.067
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.074
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.11
75-34-3	1,1-Dichloroethane	ND		0.50	0.11
75-35-4	1,1-Dichloroethene	ND		0.50	0.20
563-58-6	1,1-Dichloropropene	ND		0.50	0.20
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.21
96-18-4	1,2,3-Trichloropropane	ND		0.50	0.087
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.20
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.21
107-06-2	1,2-Dichloroethane	ND		0.50	0.077
78-87-5	1,2-Dichloropropane	ND		0.50	0.20
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.17
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.20
142-28-9	1,3-Dichloropropane	ND		1.0	0.17
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.16
594-20-7	2,2-Dichloropropane	ND		0.50	0.17
78-93-3	2-Butanone (MEK)	ND		50	8.4
95-49-8	2-Chlorotoluene	ND		0.50	0.20
591-78-6	2-Hexanone	ND		50	3.0
106-43-4	4-Chlorotoluene	ND		0.50	0.20
99-87-6	4-Isopropyltoluene	ND		1.0	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	4.5
67-64-1	Acetone	ND		50	20
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		1.0	0.20
75-25-2	Bromoform	ND		1.0	0.50
74-83-9	Bromomethane	ND		1.0	0.49
75-15-0	Carbon disulfide	ND		5.0	0.78
56-23-5	Carbon tetrachloride	ND		0.50	0.11
108-90-7	Chlorobenzene	ND		0.50	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88255-1
SDG No.:
Client Sample ID: DG-B9W
Lab Sample ID: 720-88255-10
Matrix: Water
Lab File ID: 08311820.D
Analysis Method: 8260B
Date Collected: 08/24/2018 16:55
Sample wt/vol: 10(mL)
Date Analyzed: 08/31/2018 16:17
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250643
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-97-5	Chlorobromomethane	ND		1.0	0.25
124-48-1	Chlorodibromomethane	ND		0.50	0.10
75-00-3	Chloroethane	ND		1.0	0.17
67-66-3	Chloroform	ND		1.0	0.40
74-87-3	Chloromethane	ND		1.0	0.19
156-59-2	cis-1,2-Dichloroethene	2.1		0.50	0.076
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
74-95-3	Dibromomethane	ND		0.50	0.30
75-27-4	Dichlorobromomethane	ND		0.50	0.20
75-71-8	Dichlorodifluoromethane	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.13
106-93-4	Ethylene Dibromide	ND		0.50	0.075
STL00350	Gasoline Range Organics (GRO)-C4-C12	24	J	50	21
87-68-3	Hexachlorobutadiene	ND		1.0	0.27
98-82-8	Isopropylbenzene	ND		0.50	0.20
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.11
75-09-2	Methylene Chloride	ND		5.0	1.5
91-20-3	Naphthalene	ND		1.0	0.22
104-51-8	n-Butylbenzene	ND		1.0	0.30
103-65-1	N-Propylbenzene	ND		1.0	0.20
135-98-8	sec-Butylbenzene	ND		1.0	0.17
100-42-5	Styrene	ND		0.50	0.22
98-06-6	tert-Butylbenzene	ND		1.0	0.20
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.13
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.17
79-01-6	Trichloroethene	ND		0.50	0.20
75-69-4	Trichlorofluoromethane	ND		1.0	0.30
108-05-4	Vinyl acetate	ND		10	0.60
75-01-4	Vinyl chloride	0.37	J	0.50	0.20
1330-20-7	Xylenes, Total	ND		0.50	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88255-1

SDG No.:

Client Sample ID: DG-B9W Lab Sample ID: 720-88255-10

Matrix: Water Lab File ID: 08311820.D

Analysis Method: 8260B Date Collected: 08/24/2018 16:55

Sample wt/vol: 10(mL) Date Analyzed: 08/31/2018 16:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250643 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	113		72-130
460-00-4	4-Bromofluorobenzene	95		67-130
2037-26-5	Toluene-d8 (Surr)	101		70-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311820.D
Lims ID: 720-88255-A-10
Client ID: DG-B9W
Sample Type: Client
Inject. Date: 31-Aug-2018 16:17:30 ALS Bottle#: 19 Worklist Smp#: 23
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88255-A-10
Misc. Info.: HP-4
Operator ID: SF Instrument ID: HP4

Method: \\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\8260W_LL_GRO_HP4.m
Limit Group: 8260B
Last Update: 03-Sep-2018 09:17:09 Calib Date: 26-Jul-2018 01:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP4\20180725-52939.b\07251826.D

Column 1 : DB-VRX (250.00 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: chaijita Date: 03-Sep-2018 08:59:23

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.360	7.360	0.000	96	275696	250.0	
* 2 Fluorobenzene	96	11.167	11.177	-0.010	97	1133273	25.0	
* 3 Chlorobenzene-d5	117	15.034	15.035	-0.001	89	881896	25.0	
* 4 1,4-Dichlorobenzene-d4	152	18.192	18.192	0.000	97	466547	25.0	
$ 5 Dibromofluoromethane (Surr	113	9.755	9.747	-0.001	92	82704	7.89	
$ 6 1,2-Dichloroethane-d4 (Sur	65	10.273	10.264	0.000	0	109092	8.47	
$ 8 Toluene-d8 (Surr)	98	13.288	13.276	0.000	94	330144	7.56	
$ 9 4-Bromofluorobenzene	95	16.527	16.537	-0.010	87	126722	7.16	
$ 10 1,2-Dichlorobenzene-d4	152	18.659	18.659	0.000	86	101530	5.87	
14 Vinyl chloride	62	5.319	5.314	0.000	55	6573	0.3710	
24 Acetone	58	6.913	6.907	0.000	98	4050	3.55	
31 Methylene Chloride	84	7.674	7.627	0.040	56	2640	0.2462	
47 cis-1,2-Dichloroethene	61	9.380	9.371	0.000	85	43897	2.08	
55 t-Amyl alcohol	59	10.121	10.121	0.000	93	3891	3.41	
62 Benzene	78	10.943	10.933	0.000	88	3407	0.0752	
66 n-Heptane	71	11.502	11.491	0.000	80	426	0.0351	
74 Methylcyclohexane	83	12.273	12.262	0.000	92	2931	0.1201	
80 Toluene	92	13.380	13.370	0.010	93	1750	0.0465	
83 2-Hexanone	43	13.583	13.560	0.010	9	1090	0.1216	
92 Butyl Ether	87	15.227	15.214	0.000	45	568	0.0592	
93 m-Xylene & p-Xylene	91	15.522	15.512	0.010	85	1985	0.0410	
126 Butane	43	5.492	5.461	0.031	1	3067	NR	
129 n-Nonane	57	15.623	15.664	-0.041	0	1482	NR	
130 n-Decane	57	17.390	17.430	-0.040	93	1874	NR	
131 Dodecane	57	20.506	20.547	-0.041	90	5359	NR	
132 C13	57	22.019	22.059	-0.040	92	7466	NR	
A 158 C6-C8	1	11.456	(9.106-13.806)		0	380459	3.32	
A 134 C4-C10	1	11.466	(5.451-17.481)		0	1112536	9.72	
A 159 C6-C9	1	12.400	(9.106-15.694)		0	693234	6.05	
A 136 C4-C12	1	13.024	(5.451-20.598)		0	2790891	24.4	
A 137 C6-C10	1	13.294	(9.106-17.481)		0	862899	7.54	

Report Date: 03-Sep-2018 09:17:11 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311820.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
A 138 C5-C12	1	13.826	(7.055-20.598)		0	2711159	23.7	
A 139 C6-C12	1	14.852	(9.106-20.598)		0	2541254	22.2	
A 160 C8-C10	1	15.598	(13.715-17.481)		0	482440	4.21	
A 141 C7-C12	1	16.029	(11.461-20.598)		0	2289495	20.0	
S 142 Xylenes, Total	1				0		0.0410	
T 156 Paraldehyde TIC	45	13.278	13.266	0.000	0	180	0.2447	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

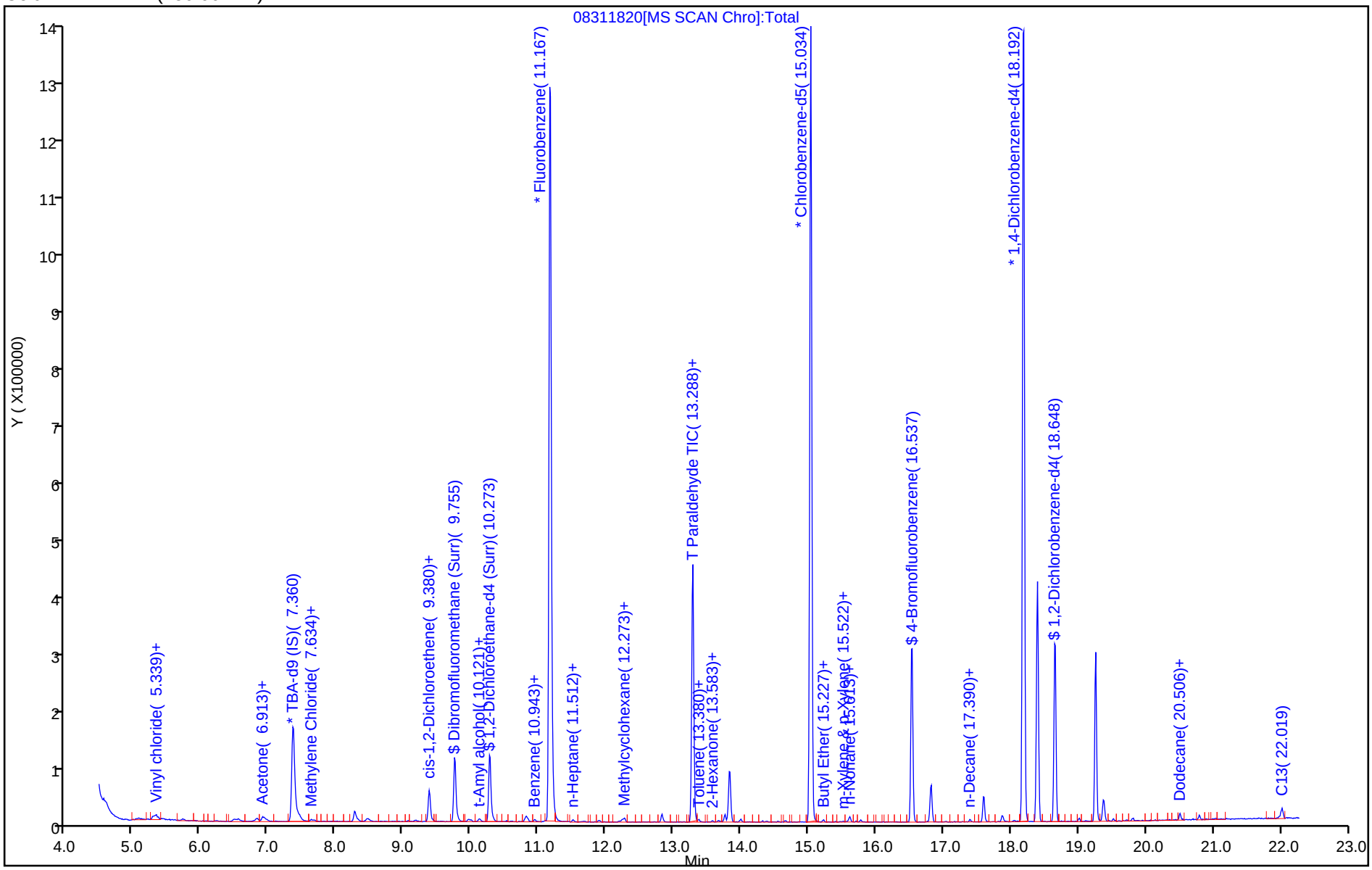
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 03-Sep-2018 09:17:11 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311820.D				
Injection Date:	31-Aug-2018 16:17:30	Instrument ID:	HP4	Operator ID:	SF
Lims ID:	720-88255-A-10	Lab Sample ID:	720-88255-10	Worklist Smp#:	23
Client ID:	DG-B9W				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		

Column: DB-VRX (250.00 mm)



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311820.D				
Lims ID:	720-88255-A-10				
Client ID:	DG-B9W				
Sample Type:	Client				
Inject. Date:	31-Aug-2018 16:17:30	ALS Bottle#:	19	Worklist Smp#:	23
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	88255-A-10				
Misc. Info.:	HP-4				
Operator ID:	SF	Instrument ID:	HP4		
Method:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\8260W_LL_GRO_HP4.m				
Limit Group:	8260B				
Last Update:	03-Sep-2018 09:17:09	Calib Date:	26-Jul-2018 01:42:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\HP4\20180725-52939.b\07251826.D				
Column 1 :	DB-VRX (250.00 mm)		Det: MS SCAN		
Process Host:	XAWRK001				

First Level Reviewer: chaijita Date: 03-Sep-2018 08:59:23

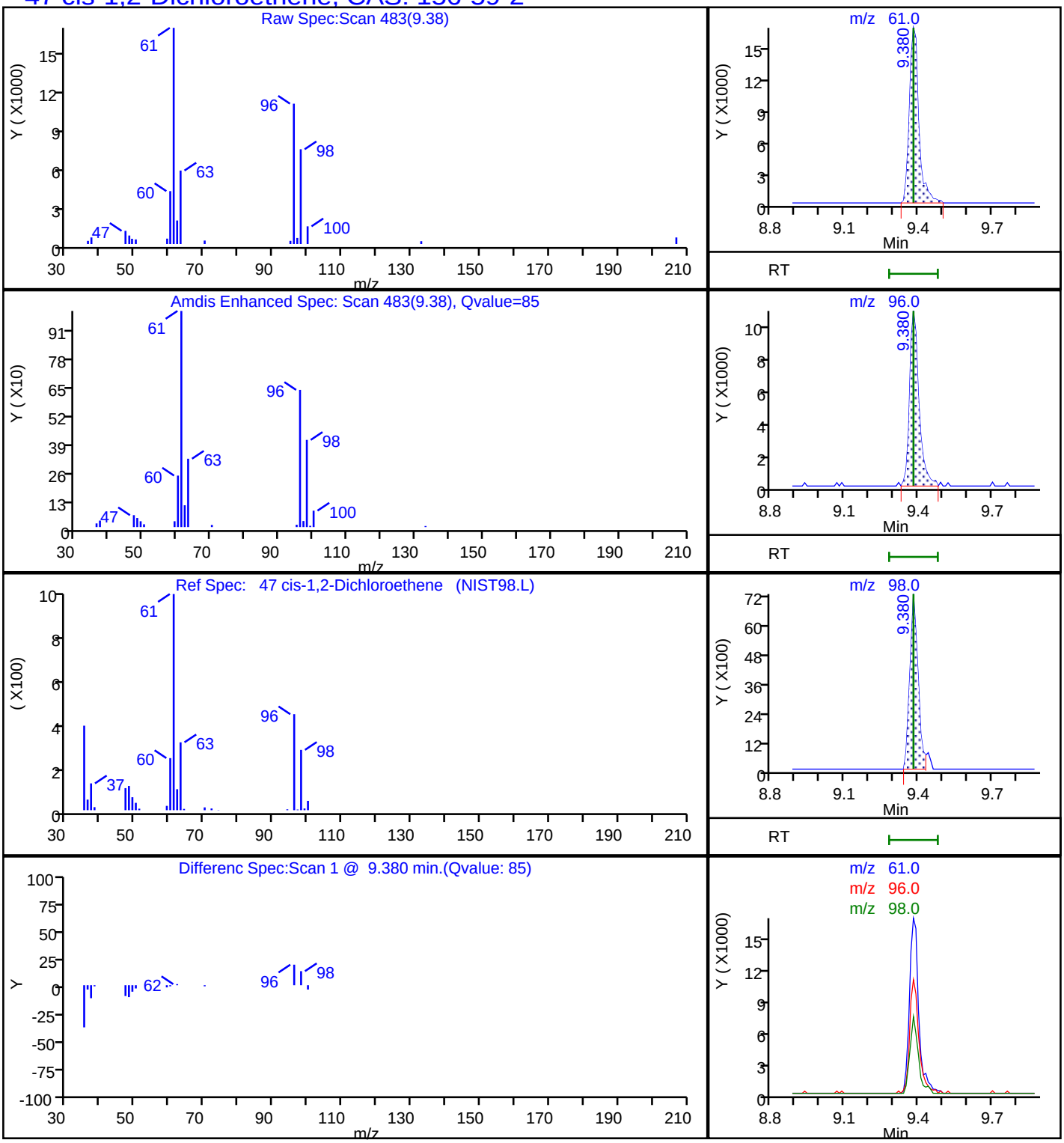
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 6 1,2-Dichloroethane-d4 (Surr)	7.50	8.47	112.97
$ 8 Toluene-d8 (Surr)	7.50	7.56	100.81
$ 9 4-Bromofluorobenzene	7.50	7.16	95.42
$ 10 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 03-Sep-2018 09:17:11 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311820.D				
Injection Date:	31-Aug-2018 16:17:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-10	Lab Sample ID:	720-88255-10		
Client ID:	DG-B9W				
Operator ID:	SF	ALS Bottle#:	19	Worklist Smp#:	23
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

47 cis-1,2-Dichloroethene, CAS: 156-59-2

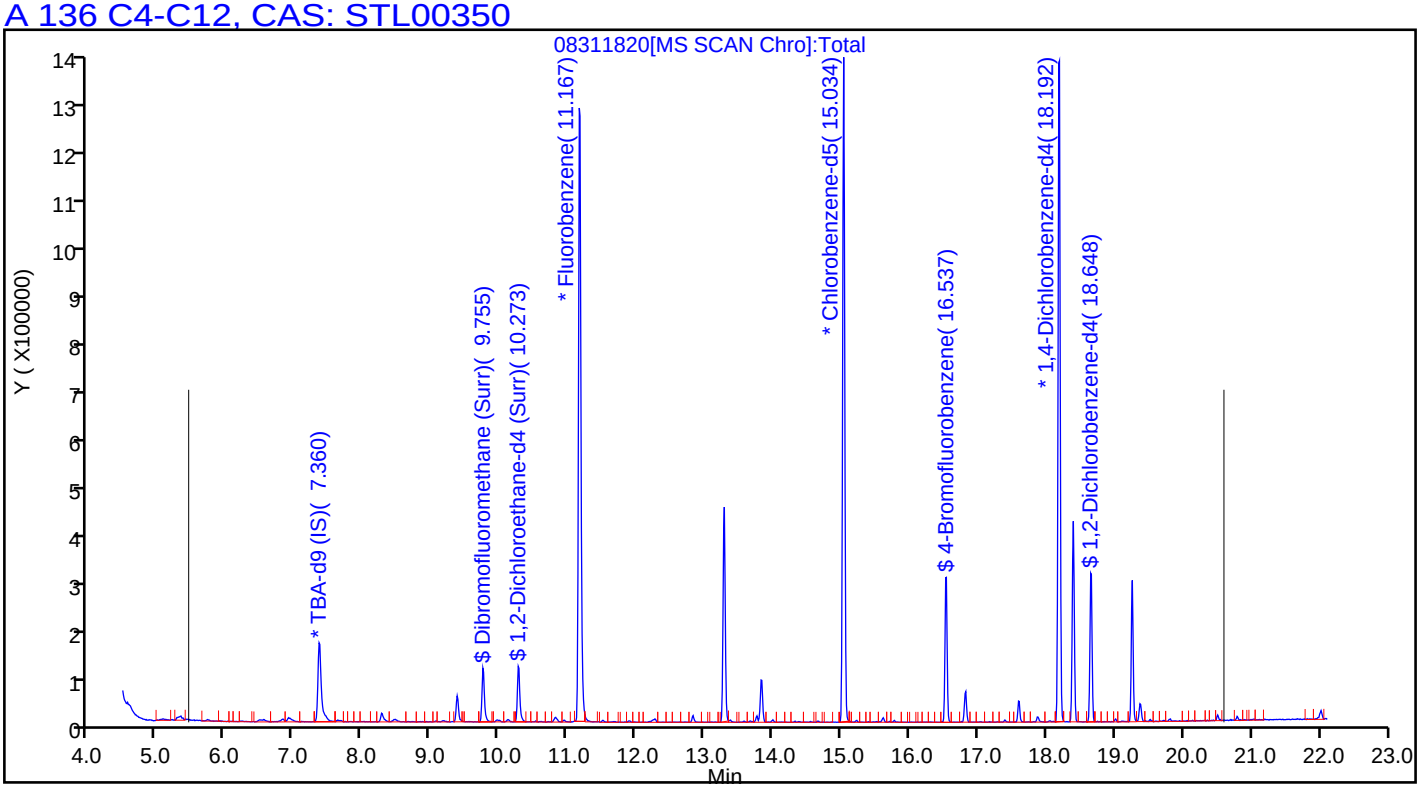


Report Date: 03-Sep-2018 09:17:12 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311820.D				
Injection Date:	31-Aug-2018 16:17:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-10	Lab Sample ID:	720-88255-10		
Client ID:	DG-B9W				
Operator ID:	SF	ALS Bottle#:	19	Worklist Smp#:	23
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

A 136 C4-C12, CAS: STL00350

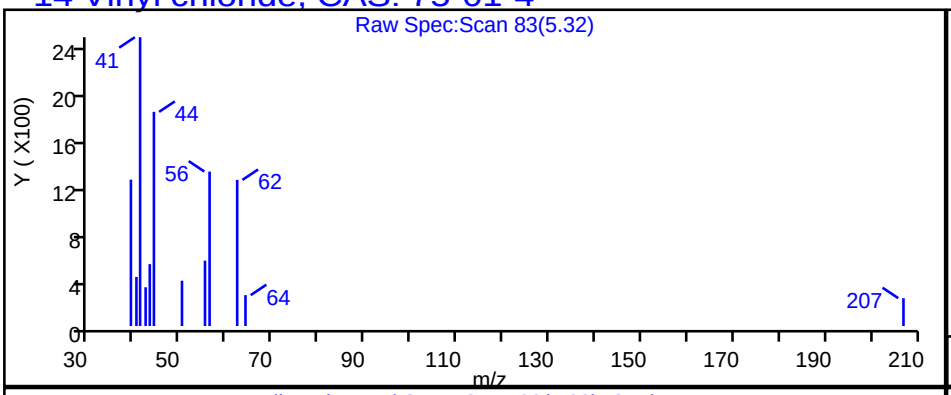


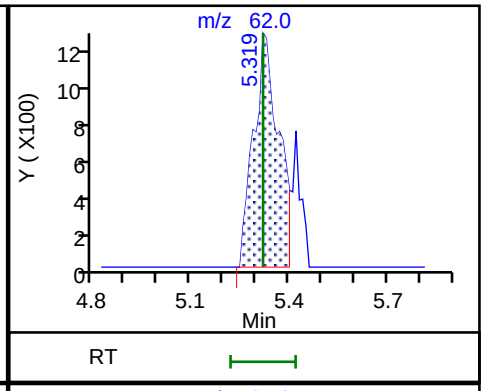
Report Date: 03-Sep-2018 09:17:11 Chrom Revision: 2.3 19-Jul-2018 15:14:50

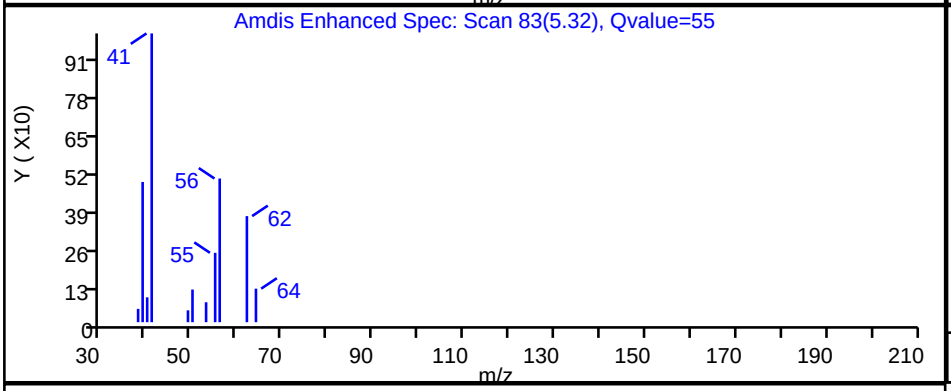
TestAmerica Pleasanton

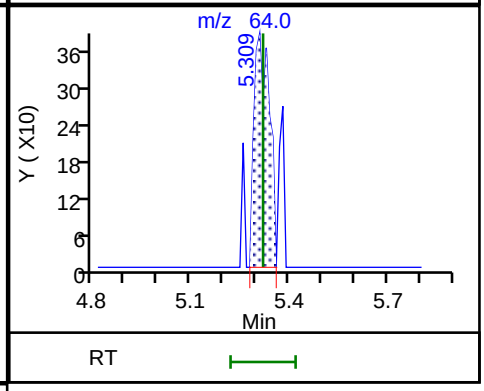
Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311820.D				
Injection Date:	31-Aug-2018 16:17:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-10	Lab Sample ID:	720-88255-10		
Client ID:	DG-B9W				
Operator ID:	SF	ALS Bottle#:	19	Worklist Smp#:	23
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

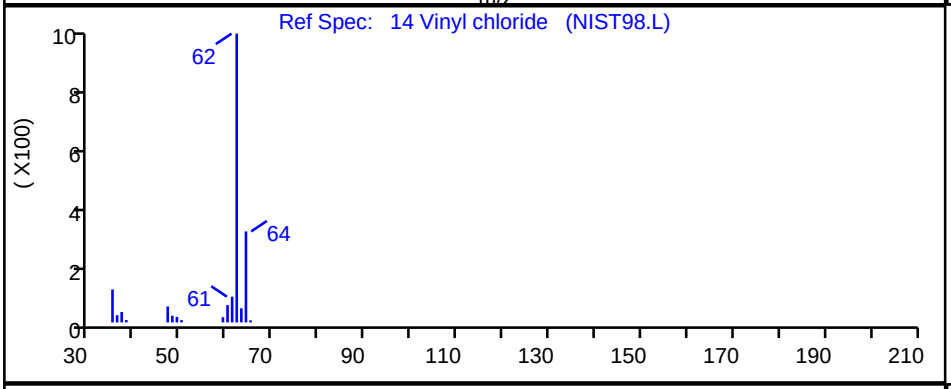
14 Vinyl chloride, CAS: 75-01-4

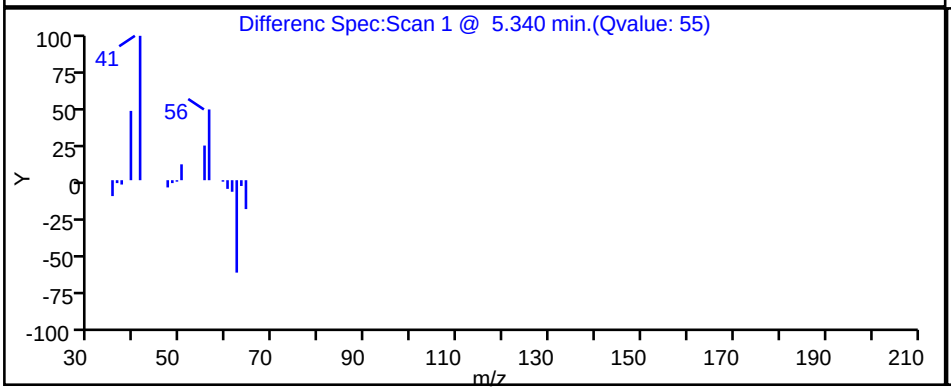


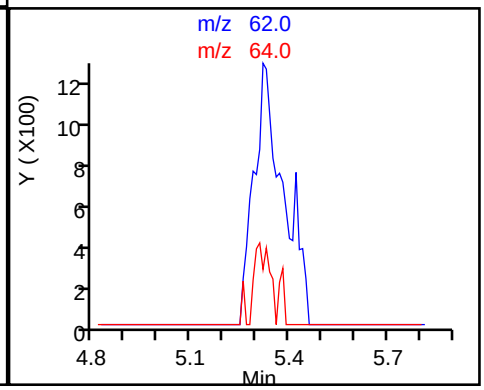












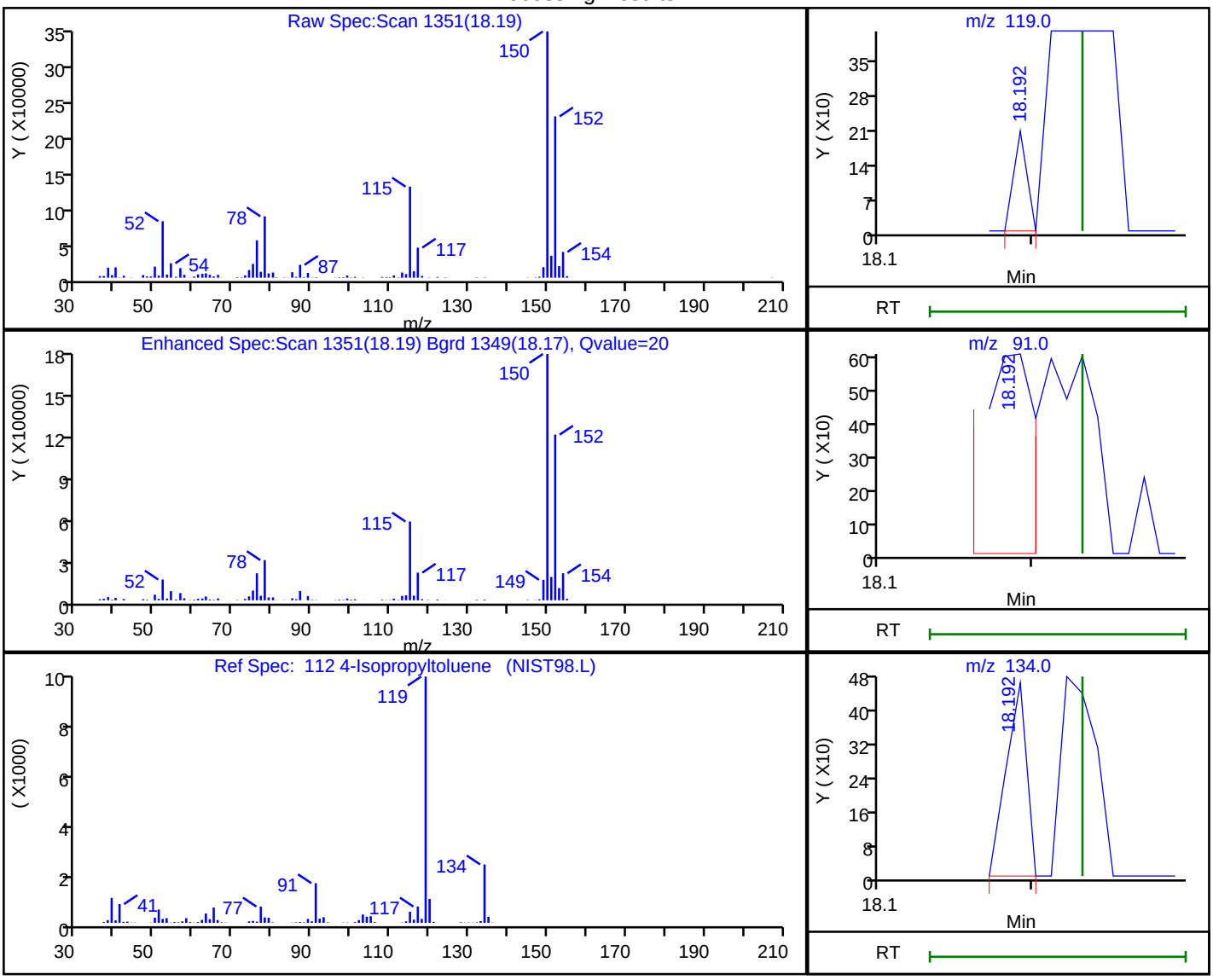
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311820.D				
Injection Date:	31-Aug-2018 16:17:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-10	Lab Sample ID:	720-88255-10		
Client ID:	DG-B9W				
Operator ID:	SF	ALS Bottle#:	19	Worklist Smp#:	23
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

112 4-Isopropyltoluene, CAS: 99-87-6

Processing Results



RT	Mass	Response	Amount
18.19	119.00	123	0.002030
18.19	91.00	1253	
18.19	134.00	430	

Reviewer: chaijita, 03-Sep-2018 08:58:13

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

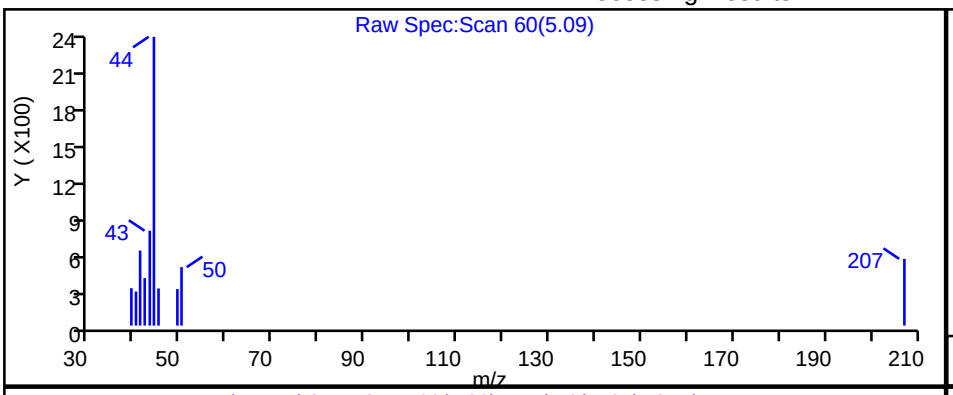
User Disabled Compound Report

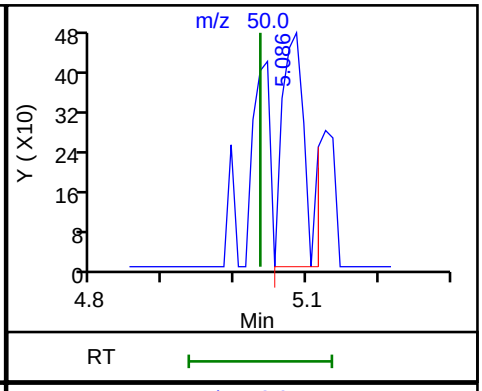
TestAmerica Pleasanton

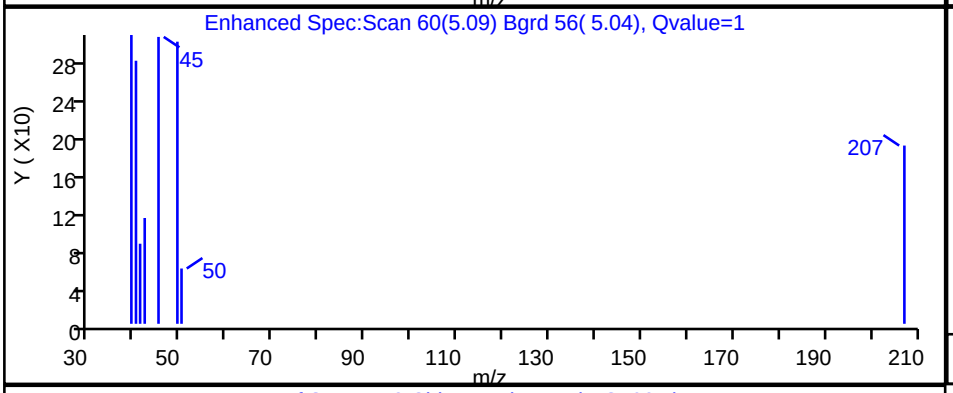
Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311820.D				
Injection Date:	31-Aug-2018 16:17:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-10	Lab Sample ID:	720-88255-10		
Client ID:	DG-B9W				
Operator ID:	SF	ALS Bottle#:	19	Worklist Smp#:	23
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

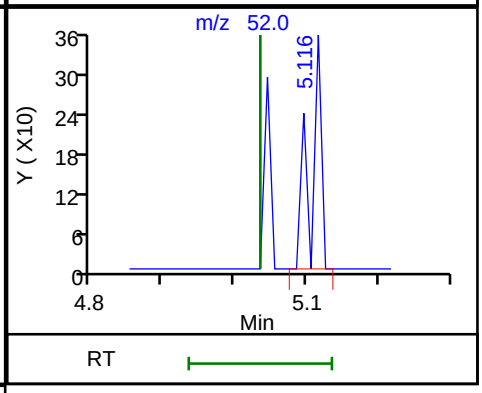
13 Chloromethane, CAS: 74-87-3

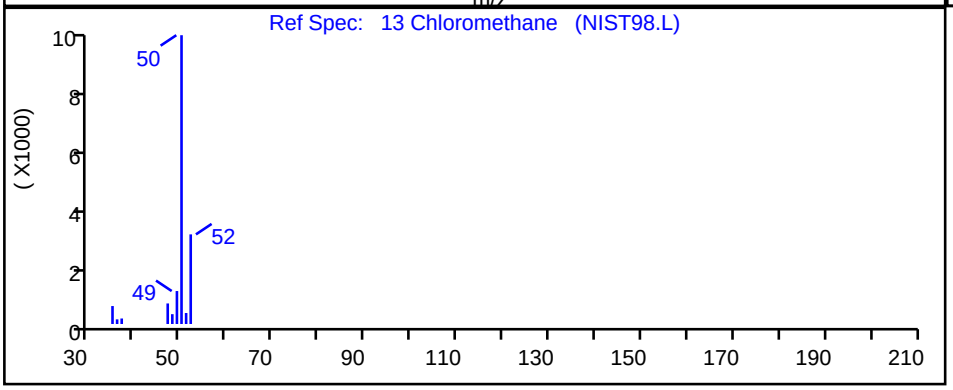
Processing Results











RT	Mass	Response	Amount
5.09	50.00	1092	0.047856
5.12	52.00	361	

Reviewer: chaijita, 03-Sep-2018 08:58:28

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

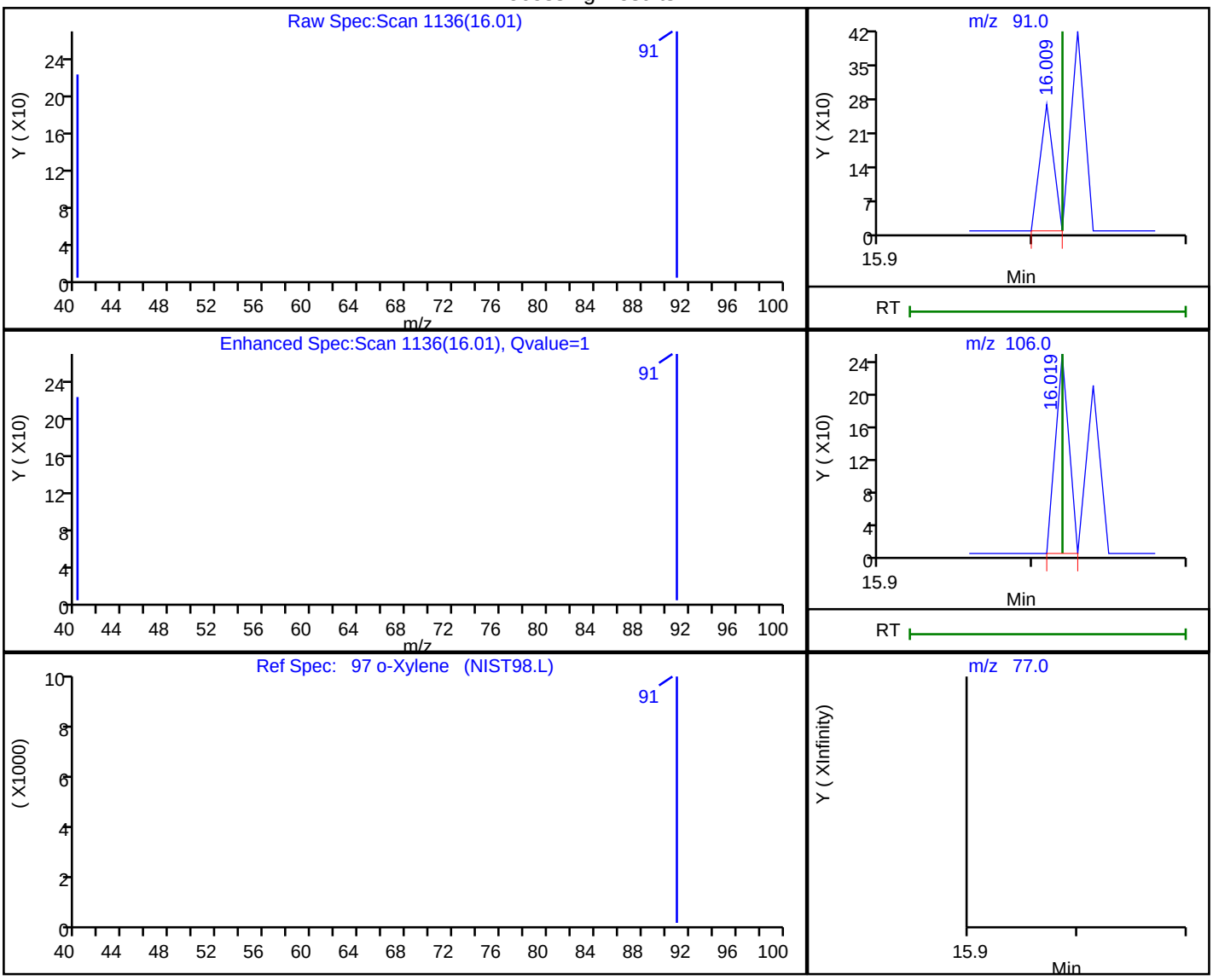
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311820.D				
Injection Date:	31-Aug-2018 16:17:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-10	Lab Sample ID:	720-88255-10		
Client ID:	DG-B9W				
Operator ID:	SF	ALS Bottle#:	19	Worklist Smp#:	23
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

97 o-Xylene, CAS: 95-47-6

Processing Results



RT	Mass	Response	Amount
16.01	91.00	160	0.003266
16.02	106.00	147	
16.02	77.00	0	

Reviewer: chaijita, 03-Sep-2018 08:59:16

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88255-1

SDG No.:

Client Sample ID: TB-4 Lab Sample ID: 720-88255-11

Matrix: Water Lab File ID: 08311821.D

Analysis Method: 8260B Date Collected: 08/24/2018 00:00

Sample wt/vol: 10(mL) Date Analyzed: 08/31/2018 16:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250643 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.067
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.074
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.11
75-34-3	1,1-Dichloroethane	ND		0.50	0.11
75-35-4	1,1-Dichloroethene	ND		0.50	0.20
563-58-6	1,1-Dichloropropene	ND		0.50	0.20
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.21
96-18-4	1,2,3-Trichloropropane	ND		0.50	0.087
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.20
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.21
107-06-2	1,2-Dichloroethane	ND		0.50	0.077
78-87-5	1,2-Dichloropropane	ND		0.50	0.20
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.17
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.20
142-28-9	1,3-Dichloropropane	ND		1.0	0.17
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.16
594-20-7	2,2-Dichloropropane	ND		0.50	0.17
78-93-3	2-Butanone (MEK)	ND		50	8.4
95-49-8	2-Chlorotoluene	ND		0.50	0.20
591-78-6	2-Hexanone	ND		50	3.0
106-43-4	4-Chlorotoluene	ND		0.50	0.20
99-87-6	4-Isopropyltoluene	ND		1.0	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	4.5
67-64-1	Acetone	ND		50	20
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		1.0	0.20
75-25-2	Bromoform	ND		1.0	0.50
74-83-9	Bromomethane	ND		1.0	0.49
75-15-0	Carbon disulfide	ND		5.0	0.78
56-23-5	Carbon tetrachloride	ND		0.50	0.11
108-90-7	Chlorobenzene	ND		0.50	0.13

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88255-1

SDG No.:

Client Sample ID: TB-4 Lab Sample ID: 720-88255-11

Matrix: Water Lab File ID: 08311821.D

Analysis Method: 8260B Date Collected: 08/24/2018 00:00

Sample wt/vol: 10(mL) Date Analyzed: 08/31/2018 16:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250643 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-97-5	Chlorobromomethane	ND		1.0	0.25
124-48-1	Chlorodibromomethane	ND		0.50	0.10
75-00-3	Chloroethane	ND		1.0	0.17
67-66-3	Chloroform	ND		1.0	0.40
74-87-3	Chloromethane	ND		1.0	0.19
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.076
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
74-95-3	Dibromomethane	ND		0.50	0.30
75-27-4	Dichlorobromomethane	ND		0.50	0.20
75-71-8	Dichlorodifluoromethane	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.13
106-93-4	Ethylene Dibromide	ND		0.50	0.075
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		50	21
87-68-3	Hexachlorobutadiene	ND		1.0	0.27
98-82-8	Isopropylbenzene	ND		0.50	0.20
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.11
75-09-2	Methylene Chloride	ND		5.0	1.5
91-20-3	Naphthalene	ND		1.0	0.22
104-51-8	n-Butylbenzene	ND		1.0	0.30
103-65-1	N-Propylbenzene	ND		1.0	0.20
135-98-8	sec-Butylbenzene	ND		1.0	0.17
100-42-5	Styrene	ND		0.50	0.22
98-06-6	tert-Butylbenzene	ND		1.0	0.20
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.13
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.17
79-01-6	Trichloroethene	ND		0.50	0.20
75-69-4	Trichlorofluoromethane	ND		1.0	0.30
108-05-4	Vinyl acetate	ND		10	0.60
75-01-4	Vinyl chloride	ND		0.50	0.20
1330-20-7	Xylenes, Total	ND		0.50	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88255-1

SDG No.:

Client Sample ID: TB-4 Lab Sample ID: 720-88255-11

Matrix: Water Lab File ID: 08311821.D

Analysis Method: 8260B Date Collected: 08/24/2018 00:00

Sample wt/vol: 10(mL) Date Analyzed: 08/31/2018 16:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250643 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		72-130
460-00-4	4-Bromofluorobenzene	95		67-130
2037-26-5	Toluene-d8 (Surr)	100		70-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311821.D
Lims ID: 720-88255-A-11
Client ID: TB-4
Sample Type: Client
Inject. Date: 31-Aug-2018 16:47:30 ALS Bottle#: 20 Worklist Smp#: 24
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88255-A-11
Misc. Info.: HP-4
Operator ID: SF Instrument ID: HP4

Method: \\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\8260W_LL_GRO_HP4.m
Limit Group: 8260B
Last Update: 03-Sep-2018 09:00:17 Calib Date: 26-Jul-2018 01:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP4\20180725-52939.b\07251826.D

Column 1 : DB-VRX (250.00 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: chaijita Date: 03-Sep-2018 09:00:17

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.360	7.360	0.000	96	229723	250.0	
* 2 Fluorobenzene	96	11.167	11.177	-0.010	97	1131522	25.0	
* 3 Chlorobenzene-d5	117	15.035	15.035	0.000	88	872531	25.0	
* 4 1,4-Dichlorobenzene-d4	152	18.192	18.192	0.000	97	437910	25.0	
$ 5 Dibromofluoromethane (Surr	113	9.756	9.747	0.000	93	82408	7.87	
$ 6 1,2-Dichloroethane-d4 (Sur	65	10.273	10.264	0.000	0	107475	8.36	
$ 8 Toluene-d8 (Surr)	98	13.288	13.276	0.000	94	327298	7.51	
$ 9 4-Bromofluorobenzene	95	16.527	16.537	-0.010	86	124199	7.09	
$ 10 1,2-Dichlorobenzene-d4	152	18.659	18.659	0.000	86	96169	5.93	
24 Acetone	58	6.923	6.907	0.010	97	679	0.5964	
54 Tetrahydrofuran	42	9.989	9.980	0.000	86	3164	0.7802	
92 Butyl Ether	87	15.217	15.214	-0.010	94	610	0.0637	
126 Butane	43	5.451	5.461	-0.010	1	134	NR	
127 Pentane	43	6.964	7.146	-0.182	1	1275	NR	
129 n-Nonane	57	15.623	15.664	-0.041	0	1112	NR	
130 n-Decane	57	17.390	17.430	-0.040	91	1855	NR	
131 Dodecane	57	20.506	20.547	-0.041	90	4216	NR	
132 C13	57	22.019	22.059	-0.040	91	6632	NR	
A 158 C6-C8	1	11.456	(9.106-13.806)		0	136703	1.20	
A 134 C4-C10	1	11.466	(5.451-17.481)		0	720746	6.30	
A 159 C6-C9	1	12.400	(9.106-15.694)		0	391067	3.42	
A 136 C4-C12	1	13.024	(5.451-20.598)		0	1021572	8.94	
A 137 C6-C10	1	13.294	(9.106-17.481)		0	556826	4.87	
A 138 C5-C12	1	13.826	(7.055-20.598)		0	973644	8.52	
A 139 C6-C12	1	14.852	(9.106-20.598)		0	857652	7.50	
A 160 C8-C10	1	15.598	(13.715-17.481)		0	427148	3.74	
A 141 C7-C12	1	16.029	(11.461-20.598)		0	803788	7.03	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

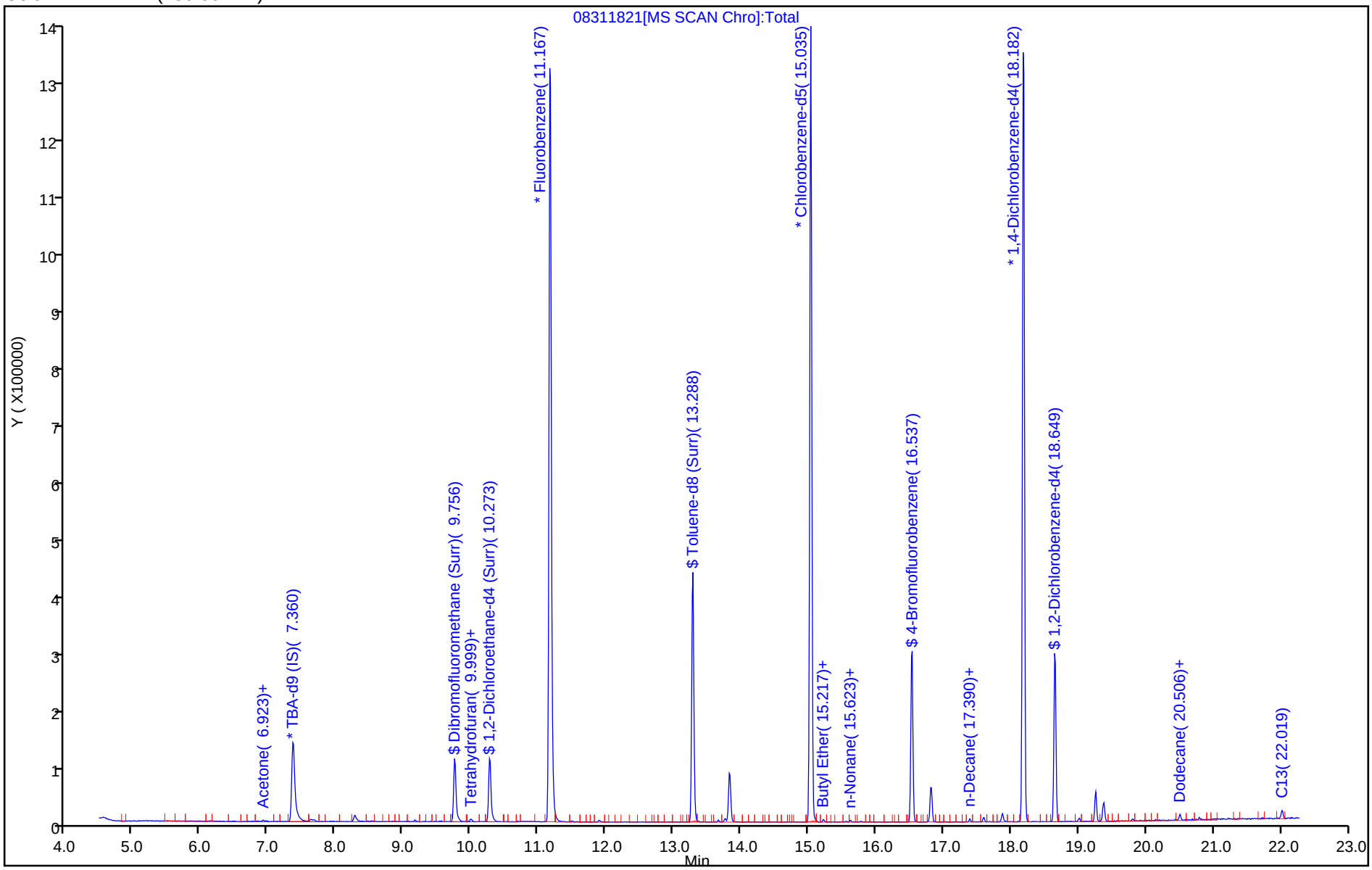
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 03-Sep-2018 09:00:18 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311821.D				
Injection Date:	31-Aug-2018 16:47:30	Instrument ID:	HP4	Operator ID:	SF
Lims ID:	720-88255-A-11	Lab Sample ID:	720-88255-11	Worklist Smp#:	24
Client ID:	TB-4				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		

Column: DB-VRX (250.00 mm)



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311821.D
Lims ID: 720-88255-A-11
Client ID: TB-4
Sample Type: Client
Inject. Date: 31-Aug-2018 16:47:30 ALS Bottle#: 20 Worklist Smp#: 24
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88255-A-11
Misc. Info.: HP-4
Operator ID: SF Instrument ID: HP4

Method: \\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\8260W_LL_GRO_HP4.m
Limit Group: 8260B
Last Update: 03-Sep-2018 09:00:17 Calib Date: 26-Jul-2018 01:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP4\20180725-52939.b\07251826.D

Column 1 : DB-VRX (250.00 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: chaijita Date: 03-Sep-2018 09:00:17

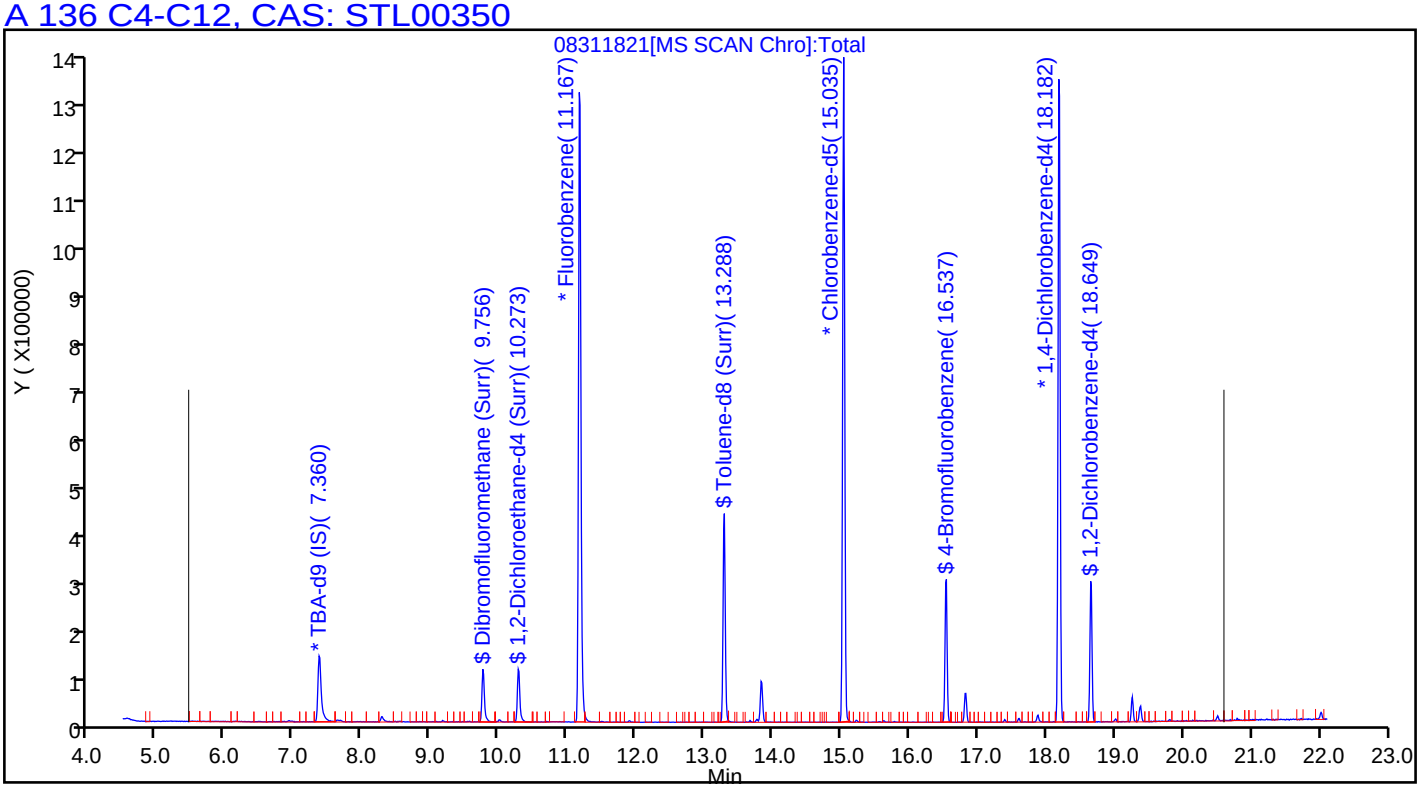
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 6 1,2-Dichloroethane-d4 (Surr)	7.50	8.36	111.47
$ 8 Toluene-d8 (Surr)	7.50	7.51	100.10
$ 9 4-Bromofluorobenzene	7.50	7.09	94.53
$ 10 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 03-Sep-2018 09:00:19 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311821.D				
Injection Date:	31-Aug-2018 16:47:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-11	Lab Sample ID:	720-88255-11		
Client ID:	TB-4				
Operator ID:	SF	ALS Bottle#:	20	Worklist Smp#:	24
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

A 136 C4-C12, CAS: STL00350



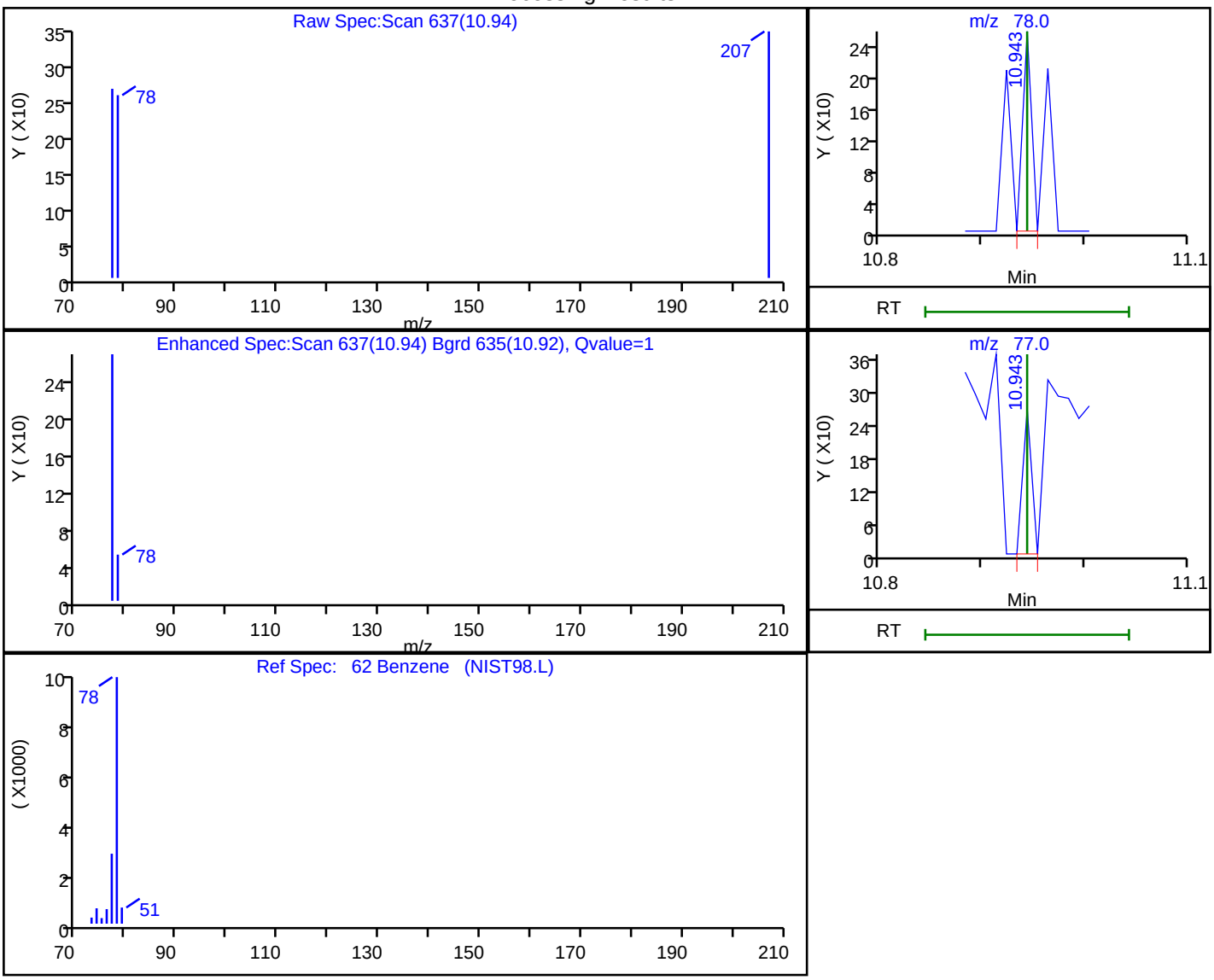
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311821.D				
Injection Date:	31-Aug-2018 16:47:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-11	Lab Sample ID:	720-88255-11		
Client ID:	TB-4				
Operator ID:	SF	ALS Bottle#:	20	Worklist Smp#:	24
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

62 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
10.94	78.00	157	0.003469
10.94	77.00	163	

Reviewer: chaijita, 03-Sep-2018 08:59:51

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88255-1

SDG No.:

Client Sample ID: FB-4 Lab Sample ID: 720-88255-12

Matrix: Water Lab File ID: 08311822.D

Analysis Method: 8260B Date Collected: 08/24/2018 00:00

Sample wt/vol: 10(mL) Date Analyzed: 08/31/2018 17:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250643 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.067
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.074
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.11
75-34-3	1,1-Dichloroethane	ND		0.50	0.11
75-35-4	1,1-Dichloroethene	ND		0.50	0.20
563-58-6	1,1-Dichloropropene	ND		0.50	0.20
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.21
96-18-4	1,2,3-Trichloropropane	ND		0.50	0.087
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.20
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.21
107-06-2	1,2-Dichloroethane	ND		0.50	0.077
78-87-5	1,2-Dichloropropane	ND		0.50	0.20
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.17
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.20
142-28-9	1,3-Dichloropropane	ND		1.0	0.17
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.16
594-20-7	2,2-Dichloropropane	ND		0.50	0.17
78-93-3	2-Butanone (MEK)	ND		50	8.4
95-49-8	2-Chlorotoluene	ND		0.50	0.20
591-78-6	2-Hexanone	ND		50	3.0
106-43-4	4-Chlorotoluene	ND		0.50	0.20
99-87-6	4-Isopropyltoluene	ND		1.0	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	4.5
67-64-1	Acetone	ND		50	20
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		1.0	0.20
75-25-2	Bromoform	ND		1.0	0.50
74-83-9	Bromomethane	ND		1.0	0.49
75-15-0	Carbon disulfide	ND		5.0	0.78
56-23-5	Carbon tetrachloride	ND		0.50	0.11
108-90-7	Chlorobenzene	ND		0.50	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88255-1
SDG No.:
Client Sample ID: FB-4
Lab Sample ID: 720-88255-12
Matrix: Water
Lab File ID: 08311822.D
Analysis Method: 8260B
Date Collected: 08/24/2018 00:00
Sample wt/vol: 10(mL)
Date Analyzed: 08/31/2018 17:17
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX
ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250643
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-97-5	Chlorobromomethane	ND		1.0	0.25
124-48-1	Chlorodibromomethane	ND		0.50	0.10
75-00-3	Chloroethane	ND		1.0	0.17
67-66-3	Chloroform	ND		1.0	0.40
74-87-3	Chloromethane	ND		1.0	0.19
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.076
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
74-95-3	Dibromomethane	ND		0.50	0.30
75-27-4	Dichlorobromomethane	ND		0.50	0.20
75-71-8	Dichlorodifluoromethane	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.13
106-93-4	Ethylene Dibromide	ND		0.50	0.075
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		50	21
87-68-3	Hexachlorobutadiene	ND		1.0	0.27
98-82-8	Isopropylbenzene	ND		0.50	0.20
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.11
75-09-2	Methylene Chloride	ND		5.0	1.5
91-20-3	Naphthalene	ND		1.0	0.22
104-51-8	n-Butylbenzene	ND		1.0	0.30
103-65-1	N-Propylbenzene	ND		1.0	0.20
135-98-8	sec-Butylbenzene	ND		1.0	0.17
100-42-5	Styrene	ND		0.50	0.22
98-06-6	tert-Butylbenzene	ND		1.0	0.20
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.13
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.17
79-01-6	Trichloroethene	ND		0.50	0.20
75-69-4	Trichlorofluoromethane	ND		1.0	0.30
108-05-4	Vinyl acetate	ND		10	0.60
75-01-4	Vinyl chloride	ND		0.50	0.20
1330-20-7	Xylenes, Total	ND		0.50	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88255-1

SDG No.:

Client Sample ID: FB-4 Lab Sample ID: 720-88255-12

Matrix: Water Lab File ID: 08311822.D

Analysis Method: 8260B Date Collected: 08/24/2018 00:00

Sample wt/vol: 10(mL) Date Analyzed: 08/31/2018 17:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250643 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		72-130
460-00-4	4-Bromofluorobenzene	93		67-130
2037-26-5	Toluene-d8 (Surr)	100		70-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311822.D				
Lims ID:	720-88255-A-12				
Client ID:	FB-4				
Sample Type:	Client				
Inject. Date:	31-Aug-2018 17:17:30	ALS Bottle#:	21	Worklist Smp#:	25
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	88255-A-12				
Misc. Info.:	HP-4				
Operator ID:	SF	Instrument ID:	HP4		
Method:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\8260W_LL_GRO_HP4.m				
Limit Group:	8260B				
Last Update:	03-Sep-2018 09:01:38	Calib Date:	26-Jul-2018 01:42:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\HP4\20180725-52939.b\07251826.D				
Column 1 :	DB-VRX (250.00 mm)		Det: MS SCAN		
Process Host:	XAWRK001				
First Level Reviewer: chaijita		Date:	03-Sep-2018 09:01:38		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.360	7.360	0.000	96	255725	250.0	
* 2 Fluorobenzene	96	11.167	11.177	-0.010	97	1095491	25.0	
* 3 Chlorobenzene-d5	117	15.035	15.035	0.000	89	839920	25.0	
* 4 1,4-Dichlorobenzene-d4	152	18.192	18.192	0.000	97	428449	25.0	
$ 5 Dibromofluoromethane (Surr	113	9.756	9.747	0.000	92	80930	7.98	
$ 6 1,2-Dichloroethane-d4 (Sur	65	10.273	10.264	0.000	0	104157	8.37	
$ 8 Toluene-d8 (Surr)	98	13.288	13.276	0.000	94	316676	7.50	
$ 9 4-Bromofluorobenzene	95	16.527	16.537	-0.010	87	117721	6.98	
$ 10 1,2-Dichlorobenzene-d4	152	18.659	18.659	0.000	86	94038	5.92	
23 Isopropyl alcohol	45	6.822	6.831	0.000	99	61350	66.0	
24 Acetone	58	6.913	6.907	0.000	98	1738	1.58	
31 Methylene Chloride	84	7.654	7.627	0.020	93	3231	0.3117	
38 Methyl tert-butyl ether	73	8.537	8.529	0.000	18	1574	0.0576	
49 Ethyl acetate	43	9.553	9.544	0.000	97	6750	0.5502	
54 Tetrahydrofuran	42	9.989	9.980	0.000	94	4484	1.14	
58 n-Butanol	56	10.527	10.517	0.010	15	1119	2.71	
92 Butyl Ether	87	15.227	15.214	0.000	93	422	0.0455	
126 Butane	43	5.461	5.461	0.000	1	131	NR	
129 n-Nonane	57	15.623	15.664	-0.041	0	1482	NR	
131 Dodecane	57	20.506	20.547	-0.041	87	3997	NR	
132 C13	57	22.019	22.059	-0.040	89	5775	NR	
A 158 C6-C8	1	11.456	(9.106-13.806)		0	197577	1.78	
A 134 C4-C10	1	11.466	(5.451-17.481)		0	1237715	11.2	
A 159 C6-C9	1	12.400	(9.106-15.694)		0	516636	4.67	
A 136 C4-C12	1	13.024	(5.451-20.598)		0	1532593	13.8	
A 137 C6-C10	1	13.294	(9.106-17.481)		0	785106	7.09	
A 138 C5-C12	1	13.826	(7.055-20.598)		0	1489949	13.5	
A 139 C6-C12	1	14.852	(9.106-20.598)		0	1079984	9.76	
A 160 C8-C10	1	15.598	(13.715-17.481)		0	595570	5.38	
A 141 C7-C12	1	16.029	(11.461-20.598)		0	939979	8.49	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

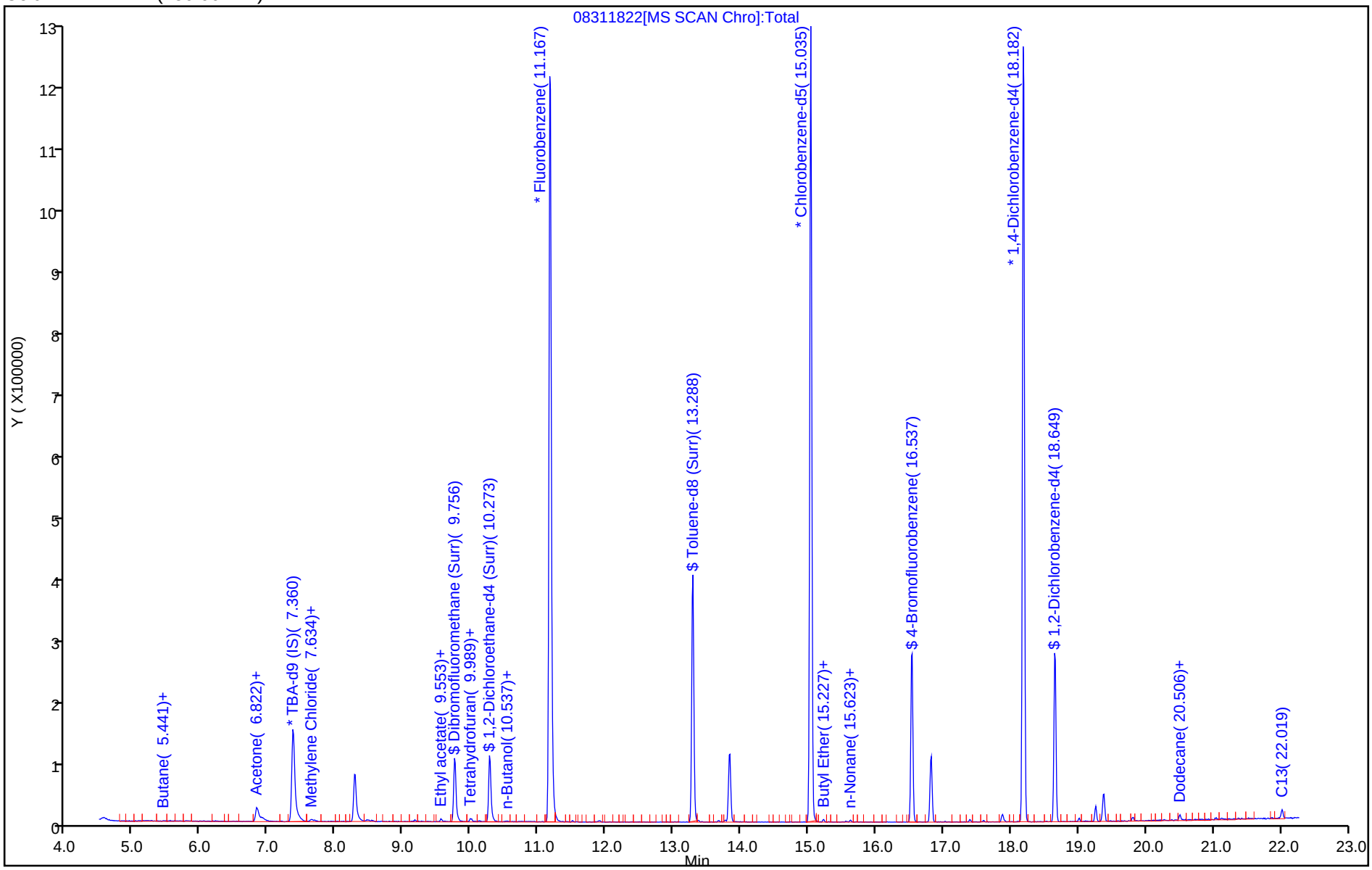
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 03-Sep-2018 09:01:39 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311822.D				
Injection Date:	31-Aug-2018 17:17:30	Instrument ID:	HP4	Operator ID:	SF
Lims ID:	720-88255-A-12	Lab Sample ID:	720-88255-12	Worklist Smp#:	25
Client ID:	FB-4				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		

Column: DB-VRX (250.00 mm)



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311822.D				
Lims ID:	720-88255-A-12				
Client ID:	FB-4				
Sample Type:	Client				
Inject. Date:	31-Aug-2018 17:17:30	ALS Bottle#:	21	Worklist Smp#:	25
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	88255-A-12				
Misc. Info.:	HP-4				
Operator ID:	SF	Instrument ID:	HP4		
Method:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\8260W_LL_GRO_HP4.m				
Limit Group:	8260B				
Last Update:	03-Sep-2018 09:01:38	Calib Date:	26-Jul-2018 01:42:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\HP4\20180725-52939.b\07251826.D				
Column 1 :	DB-VRX (250.00 mm)		Det: MS SCAN		
Process Host:	XAWRK001				

First Level Reviewer: chaijita Date: 03-Sep-2018 09:01:38

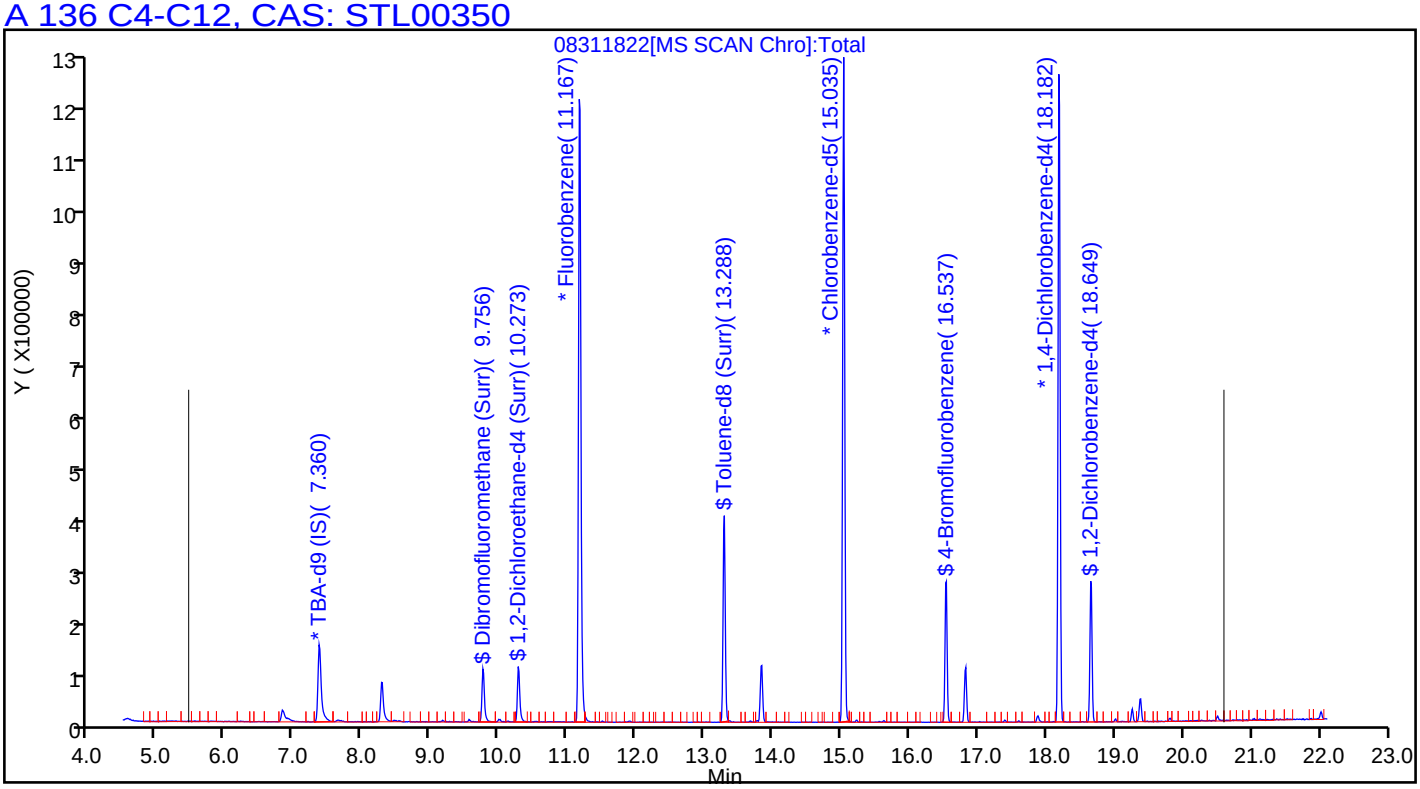
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 6 1,2-Dichloroethane-d4 (Surr)	7.50	8.37	111.58
$ 8 Toluene-d8 (Surr)	7.50	7.50	100.03
$ 9 4-Bromofluorobenzene	7.50	6.98	93.07
$ 10 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 03-Sep-2018 09:01:40 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311822.D				
Injection Date:	31-Aug-2018 17:17:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-12	Lab Sample ID:	720-88255-12		
Client ID:	FB-4				
Operator ID:	SF	ALS Bottle#:	21	Worklist Smp#:	25
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

A 136 C4-C12, CAS: STL00350



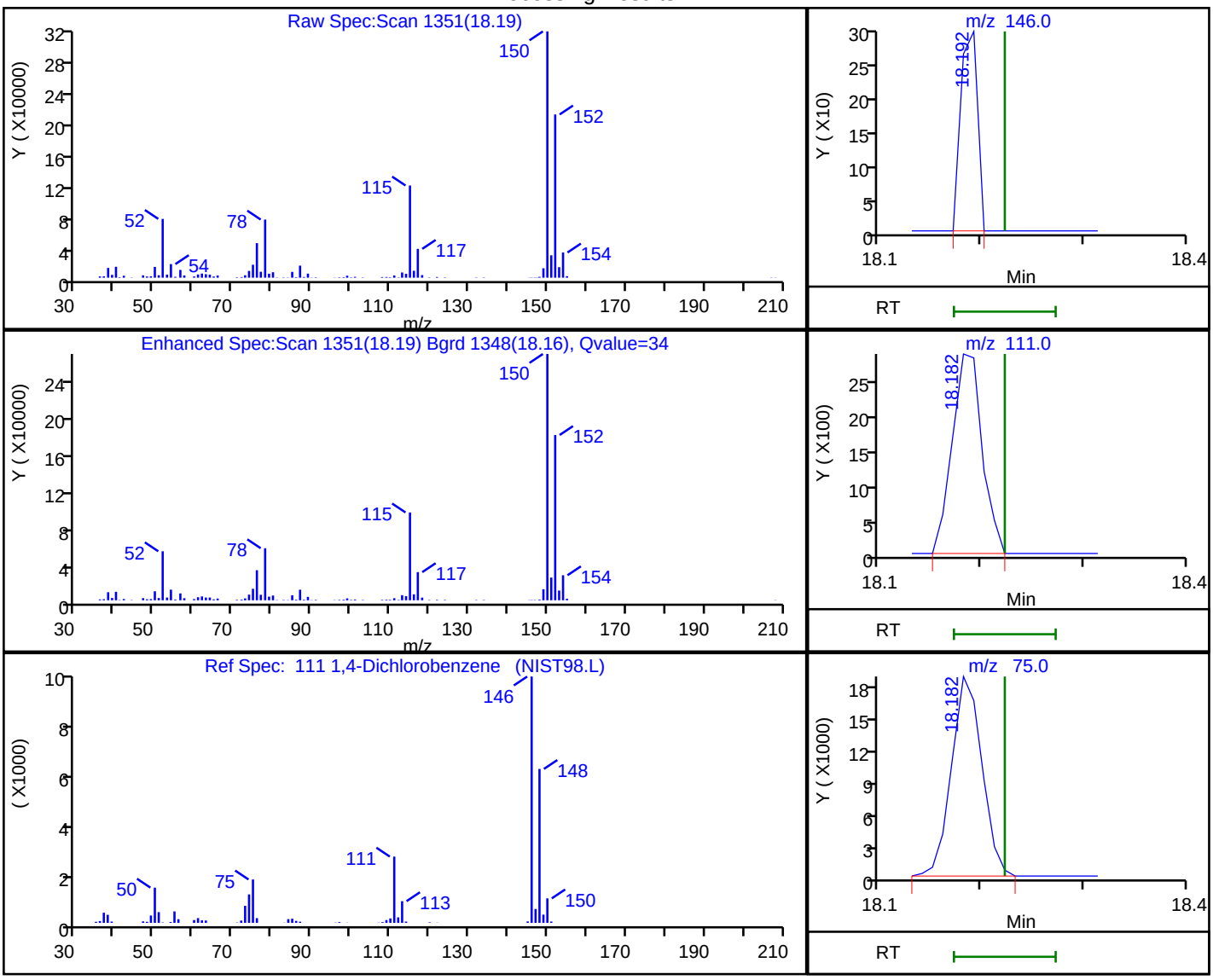
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311822.D				
Injection Date:	31-Aug-2018 17:17:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-12	Lab Sample ID:	720-88255-12		
Client ID:	FB-4				
Operator ID:	SF	ALS Bottle#:	21	Worklist Smp#:	25
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

111 1,4-Dichlorobenzene, CAS: 106-46-7

Processing Results



RT	Mass	Response	Amount
18.19	146.00	336	0.012800
18.18	111.00	5767	
18.18	75.00	38657	
18.19	148.00	1466	

Reviewer: chaijita, 03-Sep-2018 09:00:31

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Report Date: 03-Sep-2018 09:01:39 Chrom Revision: 2.3 19-Jul-2018 15:14:50

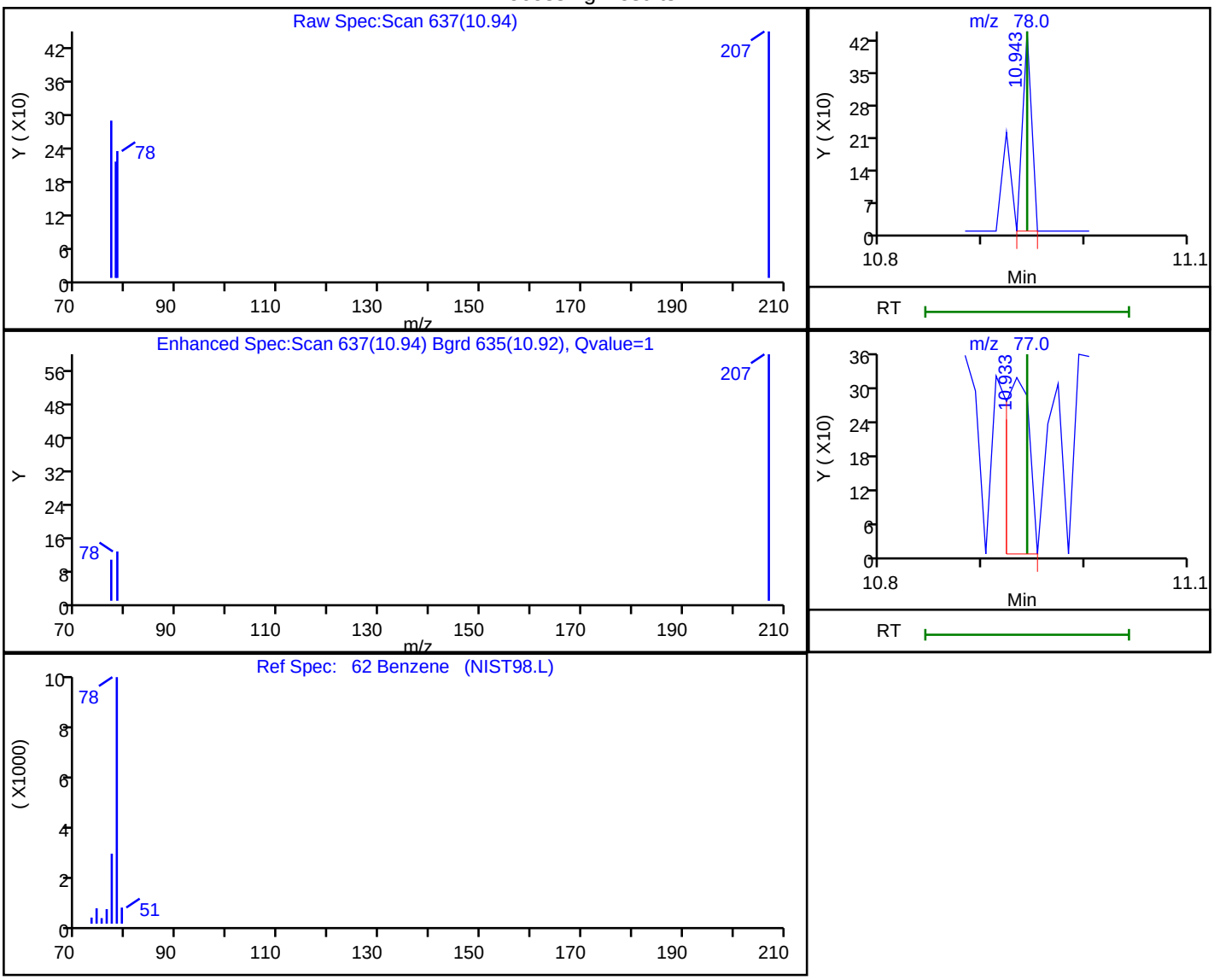
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311822.D				
Injection Date:	31-Aug-2018 17:17:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-12	Lab Sample ID:	720-88255-12		
Client ID:	FB-4				
Operator ID:	SF	ALS Bottle#:	21	Worklist Smp#:	25
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

62 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
10.94	78.00	267	0.006093
10.93	77.00	533	

Reviewer: chaijita, 03-Sep-2018 09:01:06

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

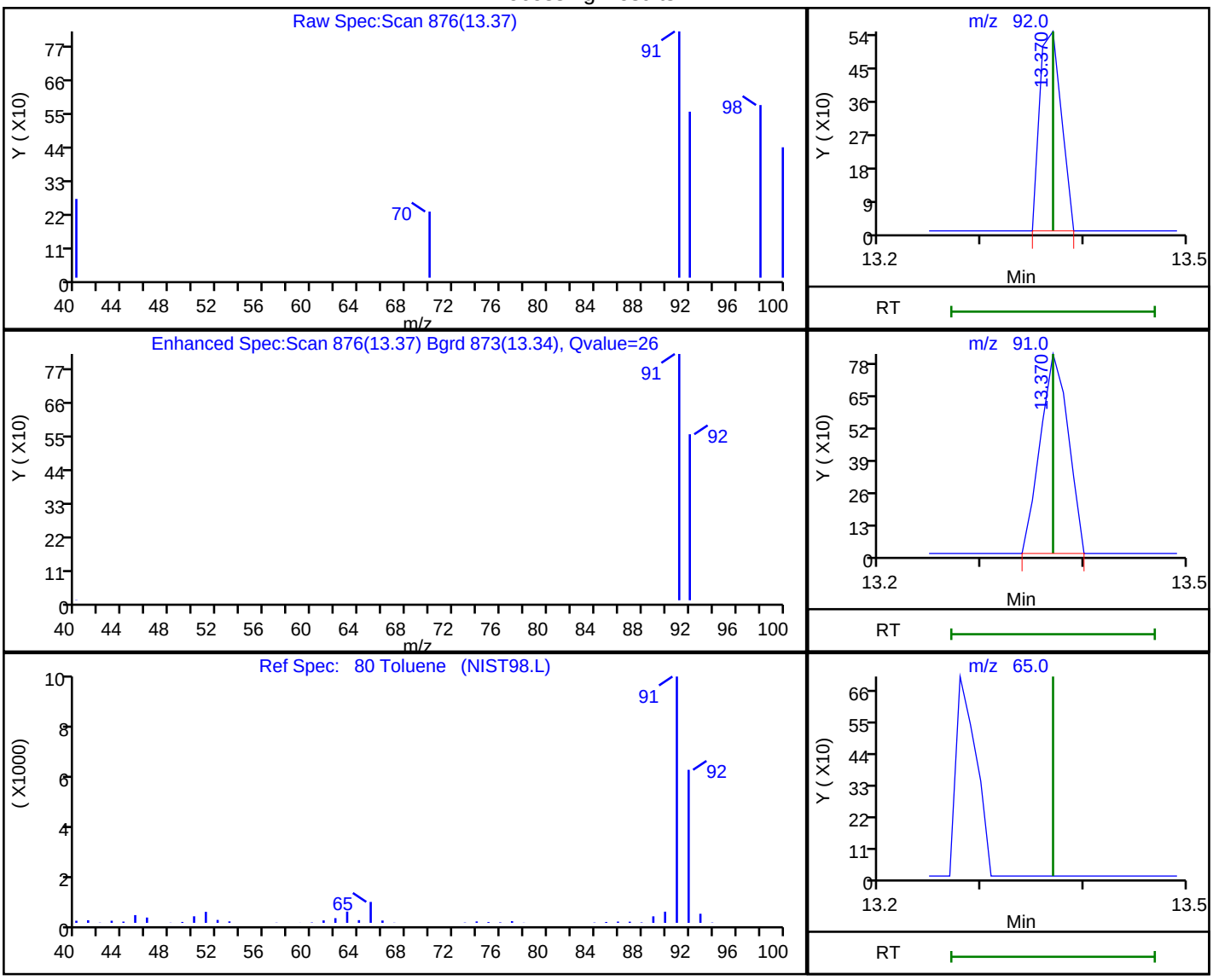
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311822.D				
Injection Date:	31-Aug-2018 17:17:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-12	Lab Sample ID:	720-88255-12		
Client ID:	FB-4				
Operator ID:	SF	ALS Bottle#:	21	Worklist Smp#:	25
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

80 Toluene, CAS: 108-88-3

Processing Results



RT	Mass	Response	Amount
13.37	92.00	808	0.022540
13.37	91.00	1550	
13.37	65.00	0	

Reviewer: chaijita, 03-Sep-2018 09:01:21

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

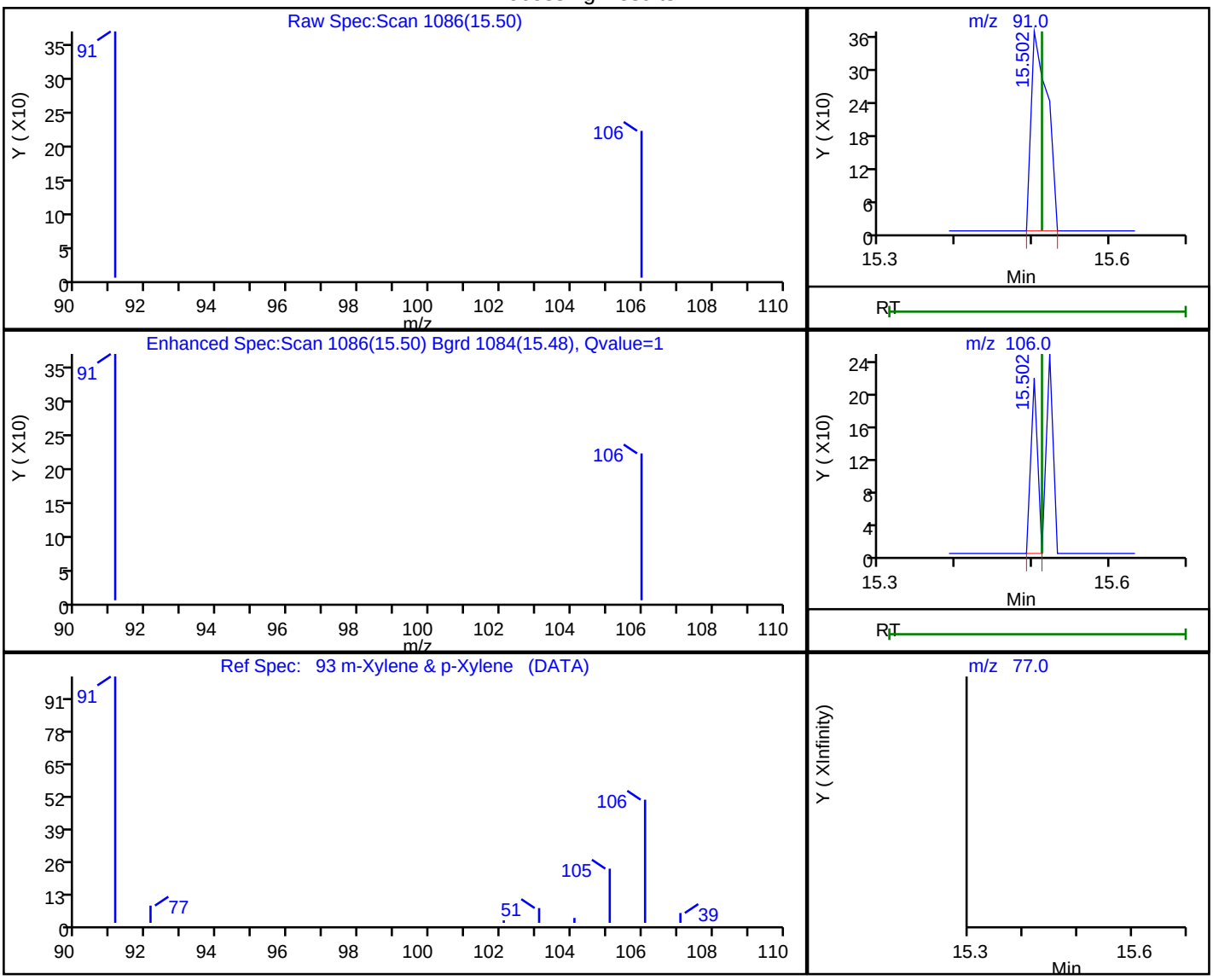
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180831-53595.b\08311822.D				
Injection Date:	31-Aug-2018 17:17:30	Instrument ID:	HP4		
Lims ID:	720-88255-A-12	Lab Sample ID:	720-88255-12		
Client ID:	FB-4				
Operator ID:	SF	ALS Bottle#:	21	Worklist Smp#:	25
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

93 m-Xylene & p-Xylene, CAS: 179601-23-1

Processing Results



RT	Mass	Response	Amount
15.50	91.00	536	0.011622
15.50	106.00	132	
15.51	77.00	0	

Reviewer: chaijita, 03-Sep-2018 09:01:33

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88255-1
SDG No.:
Client Sample ID: DUP-14
Lab Sample ID: 720-88255-13
Matrix: Water
Lab File ID: 08311839.D
Analysis Method: 8260B
Date Collected: 08/24/2018 00:00
Sample wt/vol: 10(mL)
Date Analyzed: 09/01/2018 00:21
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250725
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.067
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.074
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	0.50	0.091
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.11
75-34-3	1,1-Dichloroethane	ND		0.50	0.11
75-35-4	1,1-Dichloroethene	ND	*	0.50	0.20
563-58-6	1,1-Dichloropropene	ND		0.50	0.20
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.21
96-18-4	1,2,3-Trichloropropane	ND		0.50	0.087
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.20
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.21
107-06-2	1,2-Dichloroethane	ND		0.50	0.077
78-87-5	1,2-Dichloropropane	ND		0.50	0.20
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.17
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.20
142-28-9	1,3-Dichloropropane	ND		1.0	0.17
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.16
594-20-7	2,2-Dichloropropane	ND		0.50	0.17
78-93-3	2-Butanone (MEK)	ND		50	8.4
95-49-8	2-Chlorotoluene	ND		0.50	0.20
591-78-6	2-Hexanone	ND		50	3.0
106-43-4	4-Chlorotoluene	ND		0.50	0.20
99-87-6	4-Isopropyltoluene	ND		1.0	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	4.5
67-64-1	Acetone	ND		50	20
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		1.0	0.20
75-25-2	Bromoform	ND		1.0	0.50
74-83-9	Bromomethane	ND		1.0	0.49
75-15-0	Carbon disulfide	ND	*	5.0	0.78
56-23-5	Carbon tetrachloride	ND		0.50	0.11
108-90-7	Chlorobenzene	ND		0.50	0.13

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88255-1
SDG No.:
Client Sample ID: DUP-14
Lab Sample ID: 720-88255-13
Matrix: Water
Lab File ID: 08311839.D
Analysis Method: 8260B
Date Collected: 08/24/2018 00:00
Sample wt/vol: 10(mL)
Date Analyzed: 09/01/2018 00:21
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250725
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-97-5	Chlorobromomethane	ND	*	1.0	0.25
124-48-1	Chlorodibromomethane	ND		0.50	0.10
75-00-3	Chloroethane	ND		1.0	0.17
67-66-3	Chloroform	ND		1.0	0.40
74-87-3	Chloromethane	ND		1.0	0.19
156-59-2	cis-1,2-Dichloroethene	21		0.50	0.076
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
74-95-3	Dibromomethane	ND		0.50	0.30
75-27-4	Dichlorobromomethane	ND		0.50	0.20
75-71-8	Dichlorodifluoromethane	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.13
106-93-4	Ethylene Dibromide	ND		0.50	0.075
STL00350	Gasoline Range Organics (GRO)-C4-C12	30	J	50	21
87-68-3	Hexachlorobutadiene	ND		1.0	0.27
98-82-8	Isopropylbenzene	ND		0.50	0.20
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.11
75-09-2	Methylene Chloride	ND		5.0	1.5
91-20-3	Naphthalene	ND		1.0	0.22
104-51-8	n-Butylbenzene	ND		1.0	0.30
103-65-1	N-Propylbenzene	ND		1.0	0.20
135-98-8	sec-Butylbenzene	ND		1.0	0.17
100-42-5	Styrene	ND		0.50	0.22
98-06-6	tert-Butylbenzene	ND		1.0	0.20
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.17
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.17
79-01-6	Trichloroethene	5.9		0.50	0.20
75-69-4	Trichlorofluoromethane	ND		1.0	0.30
108-05-4	Vinyl acetate	ND		10	0.60
75-01-4	Vinyl chloride	16		0.50	0.20
1330-20-7	Xylenes, Total	ND		0.50	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88255-1

SDG No.:

Client Sample ID: DUP-14 Lab Sample ID: 720-88255-13

Matrix: Water Lab File ID: 08311839.D

Analysis Method: 8260B Date Collected: 08/24/2018 00:00

Sample wt/vol: 10(mL) Date Analyzed: 09/01/2018 00:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250725 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		72-130
460-00-4	4-Bromofluorobenzene	91		67-130
2037-26-5	Toluene-d8 (Surr)	95		70-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53612.b\08311839.D
Lims ID: 720-88255-A-13
Client ID: DUP-14
Sample Type: Client
Inject. Date: 01-Sep-2018 00:21:30 ALS Bottle#: 12 Worklist Smp#: 14
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88255-A-13
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53612.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 03-Sep-2018 13:48:19 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: phanthasena Date: 03-Sep-2018 13:52:37

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	159534	250.0	
* 2 Fluorobenzene	96	10.709	10.709	0.000	98	1128358	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.564	0.000	84	954442	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	443431	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.304	9.294	0.010	93	72072	7.54	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.811	0.011	0	75983	7.40	
$ 10 Toluene-d8 (Surr)	98	12.821	12.821	0.000	94	318316	7.10	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	93	101860	6.85	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	83	90484	5.83	
19 Vinyl chloride	62	4.890	4.884	0.011	97	210855	16.2	
28 Acetone	58	6.485	6.474	0.011	98	2487	2.87	
34 Methylene Chloride	84	7.192	7.182	-0.011	86	1556	0.1827	
38 trans-1,2-Dichloroethene	96	7.974	7.982	0.000	91	11201	1.20	
48 cis-1,2-Dichloroethene	61	8.924	8.933	0.000	84	385779	21.3	
59 Benzene	78	10.487	10.498	0.000	86	1523	0.0374	
65 Trichloroethene	132	11.206	11.217	0.000	94	74155	5.91	
124 Butane	43	4.995	4.996	-0.001	1	1821	NR	
138 n-Nonane	43	15.177	15.198	-0.021	1	952	NR	
126 Dodecane	57	20.056	20.088	-0.032	78	2417	NR	
125 C13	43	21.513	21.556	-0.043	89	1945	NR	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	2254169	25.9	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	1594020	18.3	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	1615571	18.6	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	2622280	30.1	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	1664100	NC	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	1664100	19.1	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	2249698	25.8	
A 120 C6-C12	1	14.400	(8.671-20.130)		0	2032211	23.3	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	117128	1.35	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	865023	9.93	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

NC - Not Calibrated

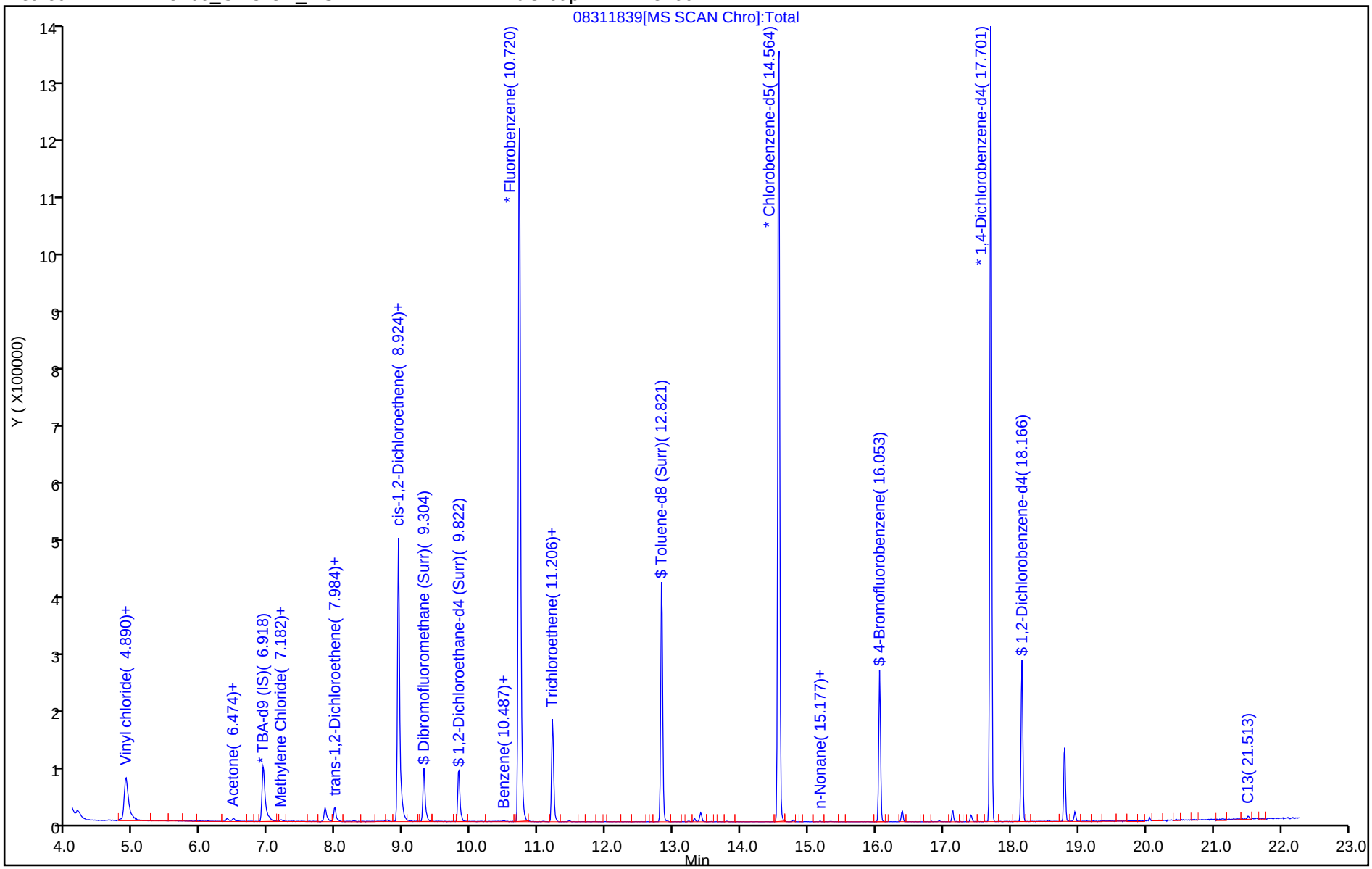
Reagents:

I_IS/SS_00092	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 03-Sep-2018 13:52:38 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53612.b\08311839.D				
Injection Date:	01-Sep-2018 00:21:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88255-A-13	Lab Sample ID:	720-88255-13	Worklist Smp#:	14
Client ID:	DUP-14				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53612.b\08311839.D
Lims ID: 720-88255-A-13
Client ID: DUP-14
Sample Type: Client
Inject. Date: 01-Sep-2018 00:21:30 ALS Bottle#: 12 Worklist Smp#: 14
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88255-A-13
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53612.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 03-Sep-2018 13:48:19 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: phanthasena Date: 03-Sep-2018 13:52:37

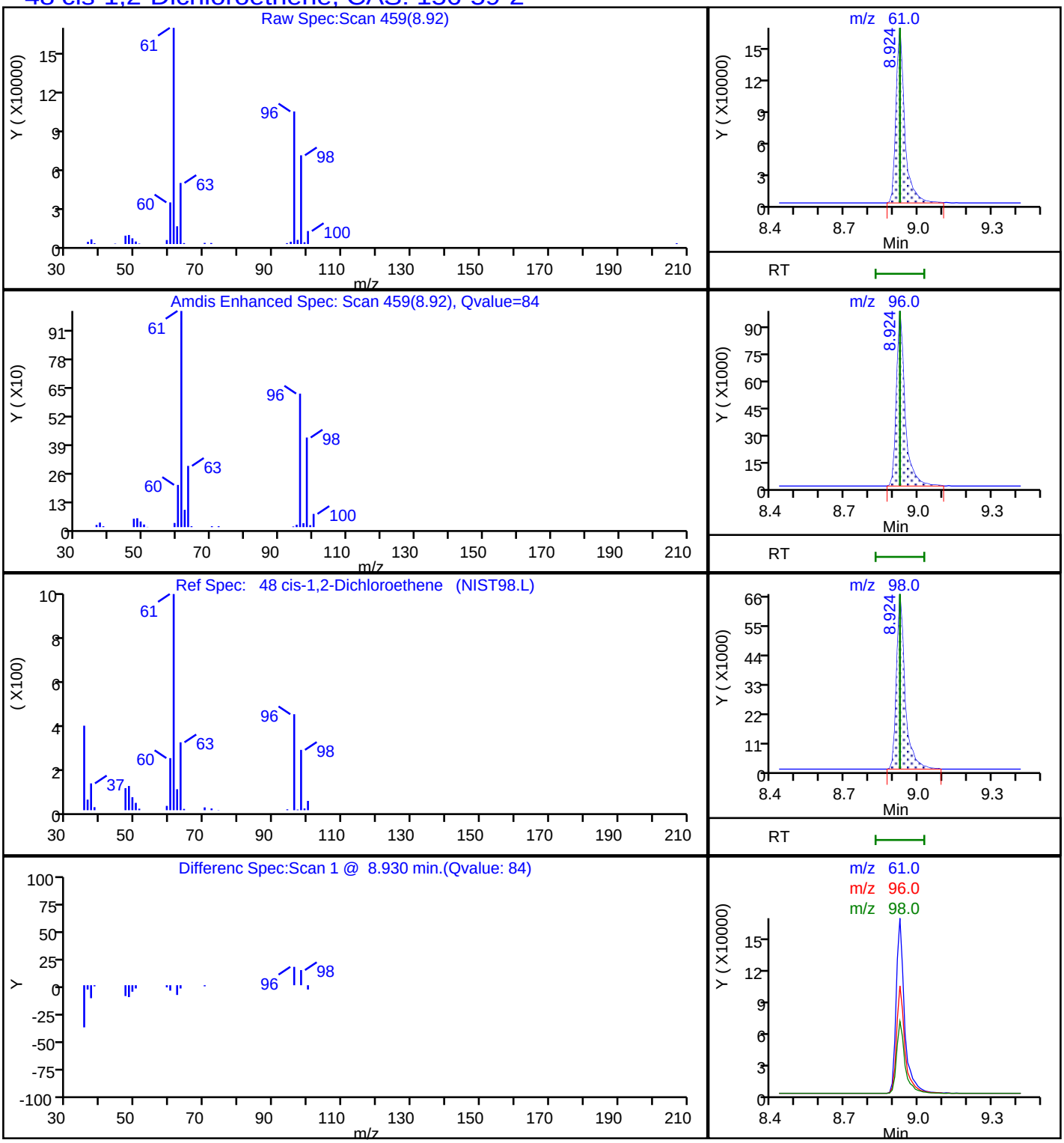
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.40	98.66
$ 10 Toluene-d8 (Surr)	7.50	7.10	94.73
$ 11 4-Bromofluorobenzene	7.50	6.85	91.38
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 03-Sep-2018 13:52:38 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53612.b\08311839.D				
Injection Date:	01-Sep-2018 00:21:30	Instrument ID:	CHMSV2		
Lims ID:	720-88255-A-13	Lab Sample ID:	720-88255-13		
Client ID:	DUP-14				
Operator ID:	VOA	ALS Bottle#:	12	Worklist Smp#:	14
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

48 cis-1,2-Dichloroethene, CAS: 156-59-2

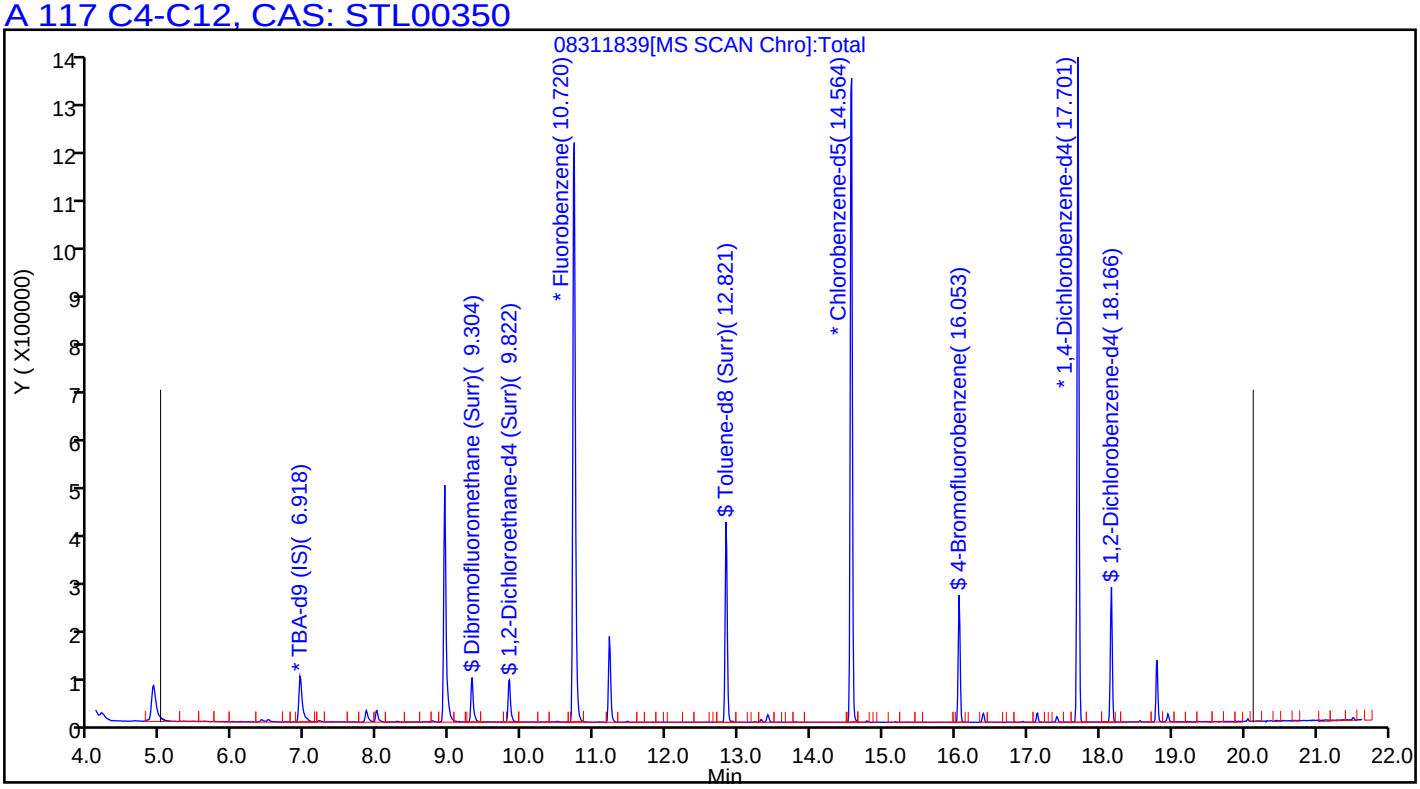


Report Date: 03-Sep-2018 13:52:39 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53612.b\08311839.D				
Injection Date:	01-Sep-2018 00:21:30	Instrument ID:	CHMSV2		
Lims ID:	720-88255-A-13	Lab Sample ID:	720-88255-13		
Client ID:	DUP-14				
Operator ID:	VOA	ALS Bottle#:	12	Worklist Smp#:	14
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350

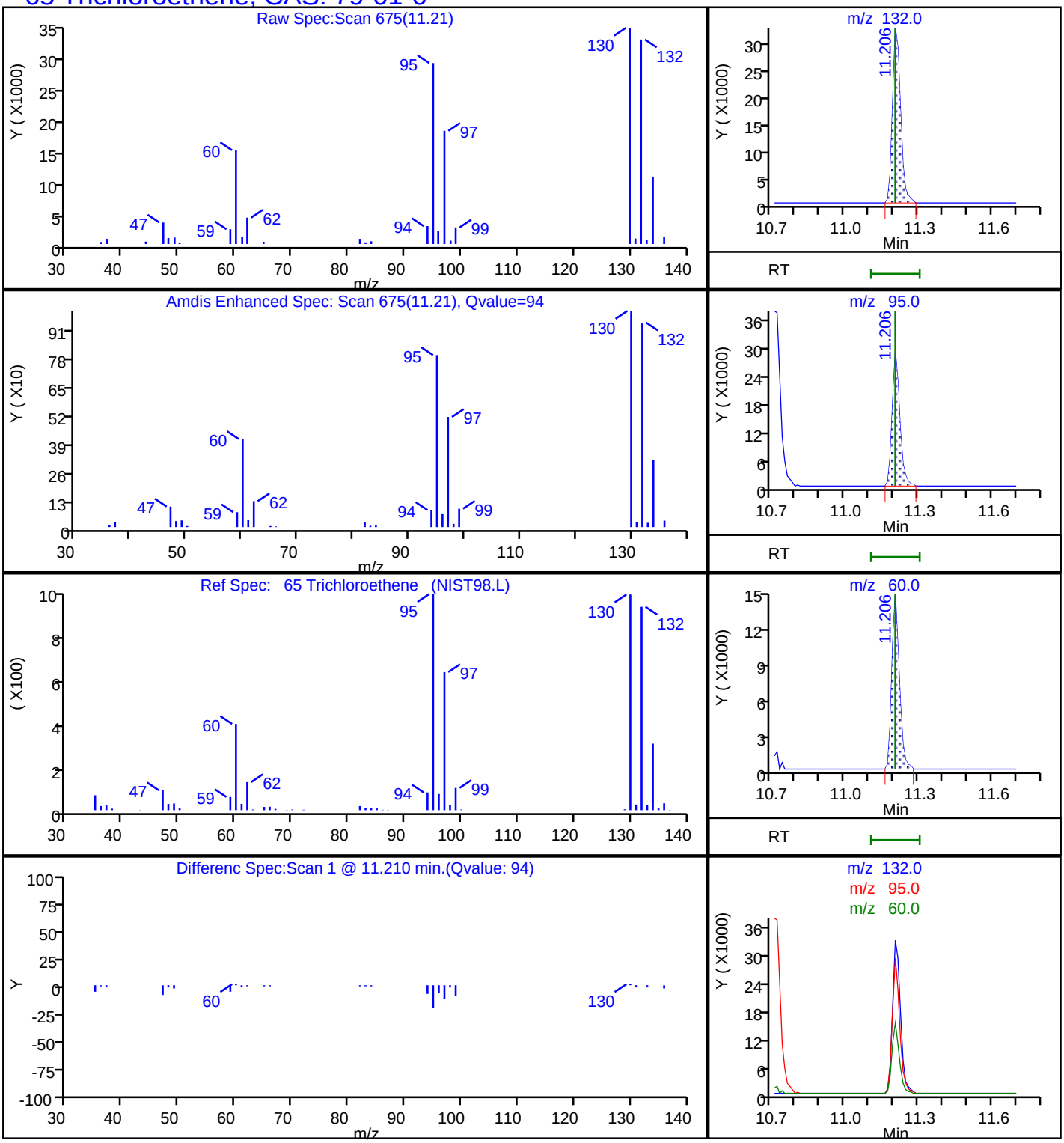


Report Date: 03-Sep-2018 13:52:39 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53612.b\08311839.D				
Injection Date:	01-Sep-2018 00:21:30	Instrument ID:	CHMSV2		
Lims ID:	720-88255-A-13	Lab Sample ID:	720-88255-13		
Client ID:	DUP-14				
Operator ID:	VOA	ALS Bottle#:	12	Worklist Smp#:	14
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

65 Trichloroethene, CAS: 79-01-6

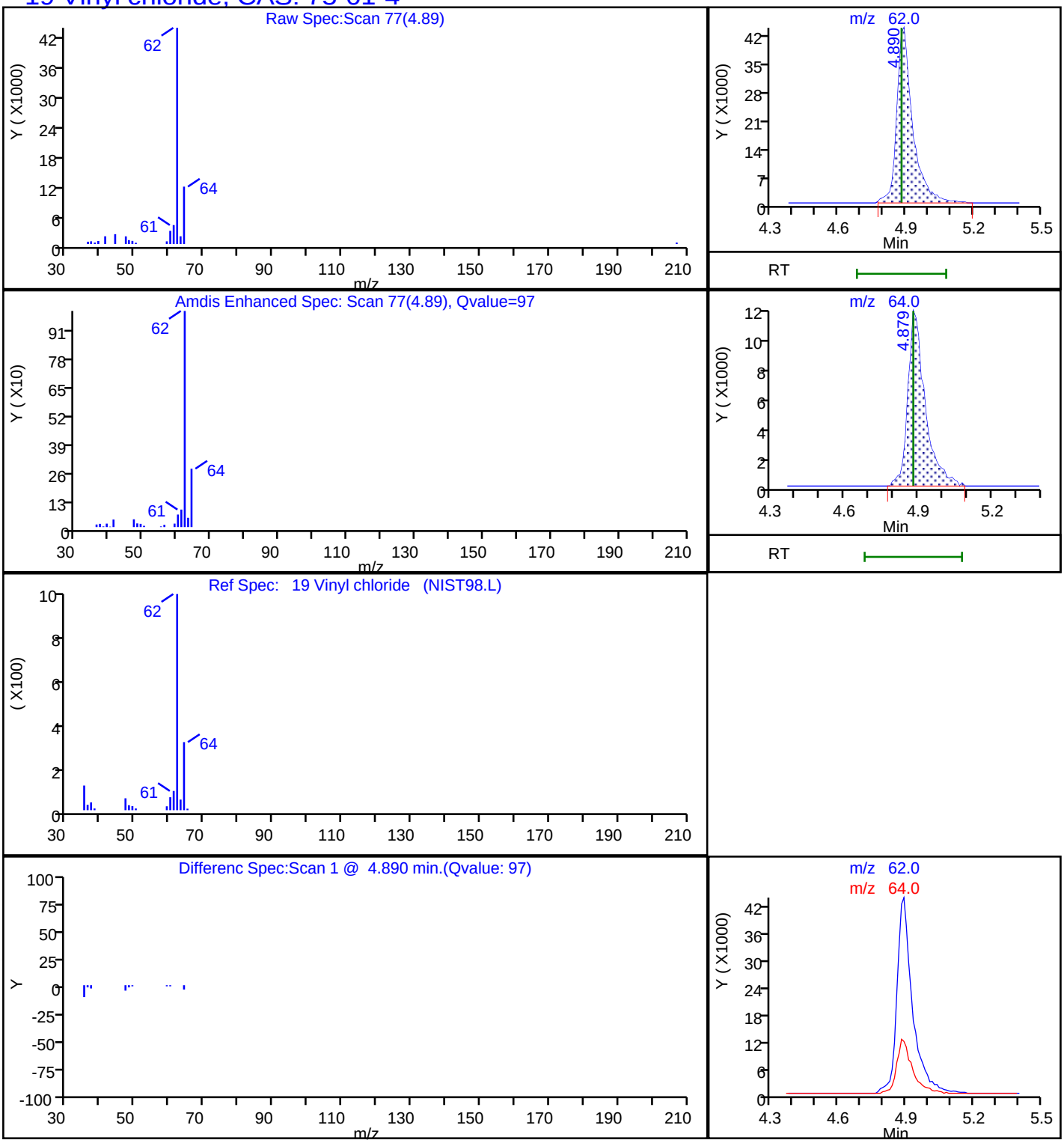


Report Date: 03-Sep-2018 13:52:38 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53612.b\08311839.D				
Injection Date:	01-Sep-2018 00:21:30	Instrument ID:	CHMSV2		
Lims ID:	720-88255-A-13	Lab Sample ID:	720-88255-13		
Client ID:	DUP-14				
Operator ID:	VOA	ALS Bottle#:	12	Worklist Smp#:	14
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

19 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88255-1

SDG No.:

Client Sample ID: DUP-14 Lab Sample ID: 720-88255-13

Matrix: Water Lab File ID: 09041837.D

Analysis Method: 8260B Date Collected: 08/24/2018 00:00

Sample wt/vol: 10(mL) Date Analyzed: 09/05/2018 00:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250832 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	1.2		0.50	0.13

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		72-130
460-00-4	4-Bromofluorobenzene	94		67-130
2037-26-5	Toluene-d8 (Surr)	99		70-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180904-53647.b\09041837.D
Lims ID: 720-88255-B-13
Client ID: DUP-14
Sample Type: Client
Inject. Date: 05-Sep-2018 00:22:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 720-88255-b-13 RR
Misc. Info.: HP-4
Operator ID: SF Instrument ID: HP4

Method: \\ChromNA\Pleasanton\ChromData\HP4\20180904-53647.b\8260W_LL_GRO_HP4.m
Limit Group: 8260B
Last Update: 05-Sep-2018 07:53:42 Calib Date: 26-Jul-2018 01:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP4\20180725-52939.b\07251826.D

Column 1 : DB-VRX (250.00 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: medinaj Date: 05-Sep-2018 10:38:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.360	7.360	0.000	99	412146	250.0	
* 2 Fluorobenzene	96	11.167	11.177	-0.010	97	1844575	25.0	
* 3 Chlorobenzene-d5	117	15.034	15.035	-0.001	92	1385115	25.0	
* 4 1,4-Dichlorobenzene-d4	152	18.192	18.192	0.000	96	694446	25.0	
$ 5 Dibromofluoromethane (Surr	113	9.755	9.757	-0.011	93	132689	7.77	
$ 6 1,2-Dichloroethane-d4 (Sur	65	10.273	10.274	-0.010	0	160409	7.65	
$ 8 Toluene-d8 (Surr)	98	13.288	13.276	0.000	94	527835	7.43	
$ 9 4-Bromofluorobenzene	95	16.537	16.537	0.000	88	196598	7.07	
$ 10 1,2-Dichlorobenzene-d4	152	18.648	18.659	-0.011	85	154591	6.01	
14 Vinyl chloride	62	5.319	5.314	0.000	98	393757	13.7	
23 Isopropyl alcohol	45	6.822	6.832	-0.010	100	90015	60.1	
24 Acetone	58	6.913	6.907	0.000	98	4896	2.64	
27 1,1-Dichloroethene	96	7.451	7.475	-0.031	5	3119	0.1917	
31 Methylene Chloride	84	7.634	7.627	0.000	93	13629	0.7809	
37 trans-1,2-Dichloroethene	96	8.426	8.428	-0.010	94	21319	1.21	
38 Methyl tert-butyl ether	73	8.537	8.540	-0.011	12	2289	0.0497	
39 1,1-Dichloroethane	63	8.720	8.712	0.000	90	4321	0.1074	
45 Isopropyl ether	45	9.197	9.189	0.000	60	4543	0.0473	
47 cis-1,2-Dichloroethene	61	9.380	9.371	0.000	84	473419	13.8	
55 t-Amyl alcohol	59	10.121	10.121	0.000	23	1508	0.8845	
62 Benzene	78	10.943	10.933	0.000	90	4441	0.0602	
69 Trichloroethene	132	11.674	11.664	0.000	95	86387	4.29	
80 Toluene	92	13.370	13.370	0.000	96	2288	0.0387	
82 Ethyl methacrylate	69	13.288	13.388	-0.112	34	1910	0.1010	
87 Tetrachloroethene	164	14.253	14.250	-0.010	79	842	0.0471	
92 Butyl Ether	87	15.227	15.214	0.000	28	350	0.0224	
93 m-Xylene & p-Xylene	91	15.512	15.522	-0.010	1	1894	0.0249	
107 1,2,4-Trimethylbenzene	105	17.867	17.867	0.000	1	933	0.0116	
111 1,4-Dichlorobenzene	146	18.192	18.222	-0.030	34	593	0.0139	
126 Butane	43	5.431	5.461	-0.030	1	2772	NR	
130 n-Decane	57	17.288	17.430	-0.142	86	1159	NR	

Report Date: 05-Sep-2018 10:38:49 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180904-53647.b\09041837.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
132 C13	57	21.867	22.059	-0.192	4	586	NR	
A 158 C6-C8	1	11.456	(9.106-13.806)		0	2159668	11.6	
A 134 C4-C10	1	11.466	(5.451-17.481)		0	4012742	21.5	
A 159 C6-C9	1	12.400	(9.106-15.694)		0	2417701	13.0	
A 136 C4-C12	1	13.024	(5.451-20.598)		0	4299229	23.1	
A 137 C6-C10	1	13.294	(9.106-17.481)		0	2541314	13.6	
A 138 C5-C12	1	13.826	(7.055-20.598)		0	3518142	18.9	
A 139 C6-C12	1	14.852	(9.106-20.598)		0	2827801	15.2	
A 160 C8-C10	1	15.598	(13.715-17.481)		0	386327	2.07	
A 141 C7-C12	1	16.029	(11.461-20.598)		0	1258072	6.75	
S 142 Xylenes, Total	1				0		0.0249	
T 156 Paraldehyde TIC	45	13.288	13.266	0.010	0	466	0.3893	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

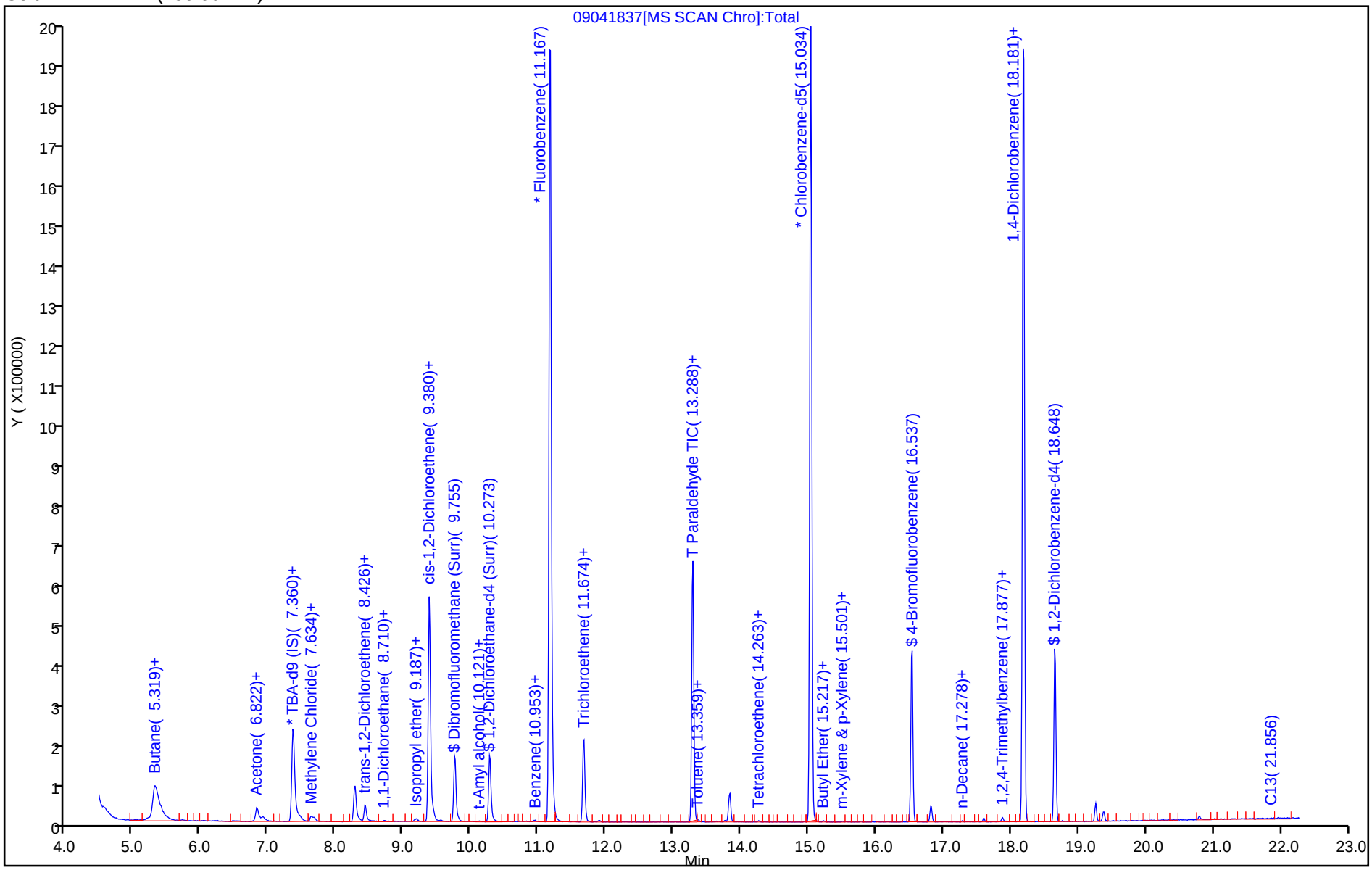
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 05-Sep-2018 10:38:49 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180904-53647.b\09041837.D				
Injection Date:	05-Sep-2018 00:22:30	Instrument ID:	HP4	Operator ID:	SF
Lims ID:	720-88255-B-13	Lab Sample ID:	720-88255-13	Worklist Smp#:	11
Client ID:	DUP-14				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		

Column: DB-VRX (250.00 mm)



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180904-53647.b\09041837.D				
Lims ID:	720-88255-B-13				
Client ID:	DUP-14				
Sample Type:	Client				
Inject. Date:	05-Sep-2018 00:22:30	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	720-88255-b-13 RR				
Misc. Info.:	HP-4				
Operator ID:	SF	Instrument ID:	HP4		
Method:	\\ChromNA\Pleasanton\ChromData\HP4\20180904-53647.b\8260W_LL_GRO_HP4.m				
Limit Group:	8260B				
Last Update:	05-Sep-2018 07:53:42	Calib Date:	26-Jul-2018 01:42:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\HP4\20180725-52939.b\07251826.D				
Column 1 :	DB-VRX (250.00 mm)		Det: MS SCAN		
Process Host:	XAWRK013				

First Level Reviewer: medinaj Date: 05-Sep-2018 10:38:48

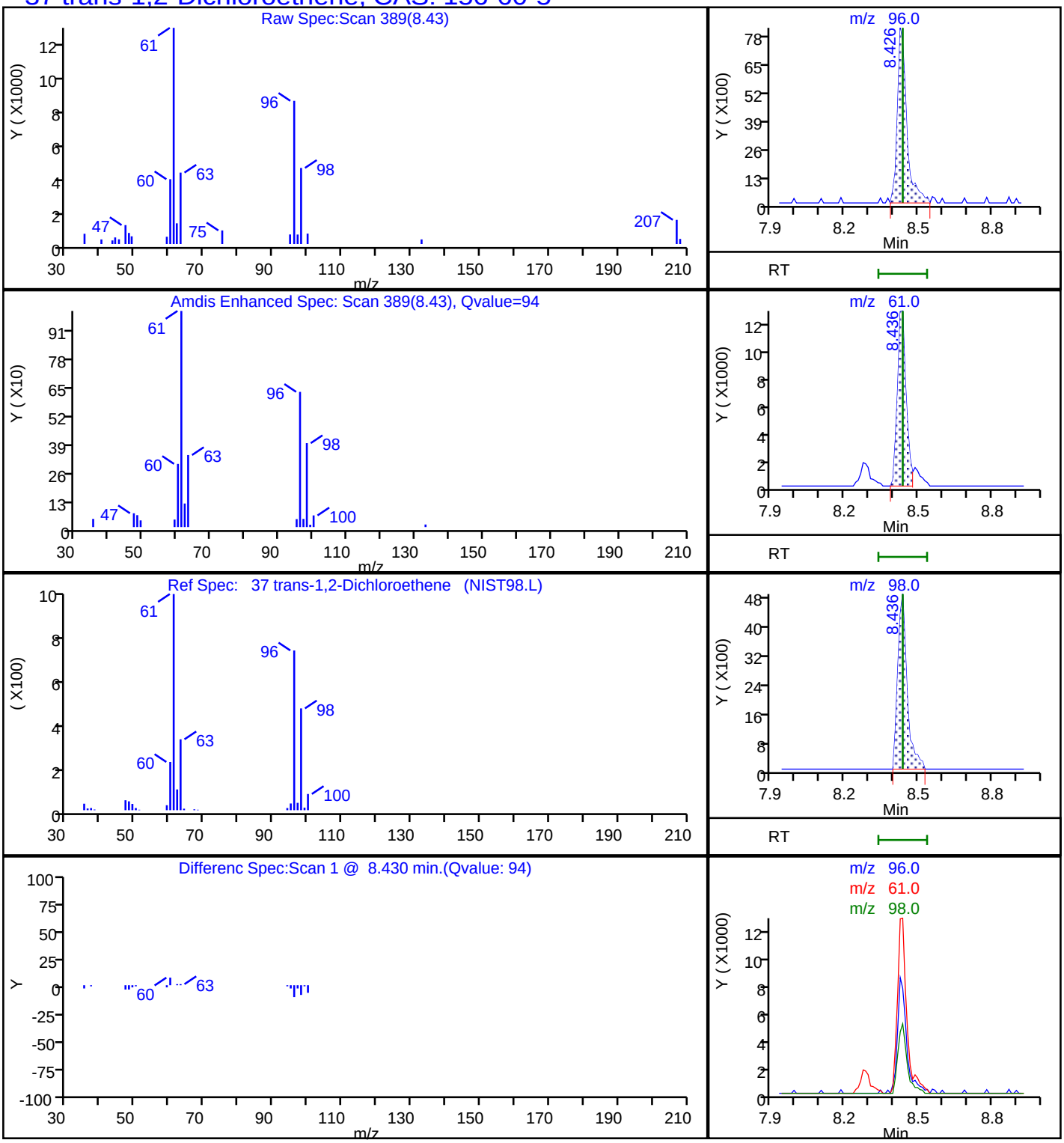
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 6 1,2-Dichloroethane-d4 (Surr)	7.50	7.65	102.05
$ 8 Toluene-d8 (Surr)	7.50	7.43	99.03
$ 9 4-Bromofluorobenzene	7.50	7.07	94.26
$ 10 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 05-Sep-2018 10:38:49 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180904-53647.b\09041837.D				
Injection Date:	05-Sep-2018 00:22:30	Instrument ID:	HP4		
Lims ID:	720-88255-B-13	Lab Sample ID:	720-88255-13		
Client ID:	DUP-14				
Operator ID:	SF	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

37 trans-1,2-Dichloroethene, CAS: 156-60-5



Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88255-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		DCA	BFB	TOL
Lab Sample ID	Client Sample ID	(72-130)	(67-130)	(70-130)
720-88100-B-3 MS	Matrix Spike	111	95	100
720-88100-B-3 MSD	Matrix Spike Duplicate	106	98	103
720-88209-A-1 MS	Matrix Spike	91	99	92
720-88209-A-1 MSD	Matrix Spike Duplicate	94	97	91
720-88255-1	DG-A7W	98	91	94
720-88255-1	DG-A7W	104	94	99
720-88255-2	DG-C7W	96	94	95
720-88255-3	DG-E7W	95	90	93
720-88255-4	DG-G7W	95	94	90
720-88255-4	DG-G7W	102	97	101
720-88255-5	DG-I7W	92	89	94
720-88255-5	DG-I7W	98	95	98
720-88255-6	DG-M7W	111	97	101
720-88255-7	DG-F9W	106	96	101
720-88255-8	DG-DE89W	108	97	100
720-88255-9	DG-D9W	117	96	102
720-88255-10	DG-B9W	113	95	101
720-88255-11	TB-4	111	95	100
720-88255-12	FB-4	112	93	100
720-88255-13	DUP-14	99	91	95
720-88255-13	DUP-14	102	94	99
720-88312-A-1 MS	Matrix Spike	103	93	100
720-88312-A-1 MSD	Matrix Spike Duplicate	99	92	99
720-88353-A-2 MS	Matrix Spike	100	93	97
720-88353-A-2 MSD	Matrix Spike Duplicate	96	92	95
LCS 720-250641/5	Lab Control Sample	86	99	95
LCS 720-250641/7	Lab Control Sample	91	99	100
LCS 720-250643/5	Lab Control Sample	99	94	100
LCS 720-250643/7	Lab Control Sample	97	97	100
LCS 720-250725/5	Lab Control Sample	95	94	96
LCS 720-250725/7	Lab Control Sample	95	98	96
LCS 720-250832/5	Lab Control Sample	100	95	100
LCS 720-250832/7	Lab Control Sample	101	95	101
LCSD 720-250641/6	Lab Control Sample Dup	89	97	94
LCSD 720-250641/8	Lab Control Sample Dup	91	100	98
LCSD 720-250643/6	Lab Control Sample Dup	94	94	101
LCSD 720-250643/8	Lab Control Sample Dup	98	96	100
LCSD 720-250725/6	Lab Control Sample Dup	93	97	97
LCSD 720-250725/8	Lab Control Sample Dup	96	95	97
LCSD 720-250832/6	Lab Control Sample Dup	97	94	100
LCSD 720-250832/8	Lab Control Sample Dup	99	96	100
MB 720-250641/4	Method Blank	93	96	96
MB 720-250643/4	Method Blank	97	94	99
MB 720-250725/4	Method Blank	94	96	96
MB 720-250832/4	Method Blank	99	93	99

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene

TOL = Toluene-d8 (Surr)

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

Lab Sample ID	Client Sample ID	DBFM (80-120)
720-88220-A-7 MS	Matrix Spike	100
720-88220-A-7 MSD	Matrix Spike Duplicate	102
720-88255-1	DG-A7W	100
720-88255-2	DG-C7W	104
720-88255-3	DG-E7W	100
720-88255-4	DG-G7W	101
720-88255-5	DG-I7W	101
720-88255-6	DG-M7W	103
720-88255-7	DG-F9W	102
720-88255-8	DG-DE89W	98
720-88255-8 MS	DG-DE89W	100
720-88255-8 MSD	DG-DE89W	96
720-88255-9	DG-D9W	97
720-88255-10	DG-B9W	97
720-88255-11	TB-4	96
720-88255-12	FB-4	101
720-88255-13	DUP-14	100
LCS 440-496565/4	Lab Control Sample	101
LCS 440-496818/4	Lab Control Sample	102
MB 440-496565/3	Method Blank	100
MB 440-496818/3	Method Blank	99

Percent Surrogate Recovery (Acceptance Limits)

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Water **Prep Type: Total/NA**

Lab Sample ID	Client Sample ID	TPH1 (23-156)
720-88255-1	DG-A7W	88
720-88255-2	DG-C7W	74
720-88255-3	DG-E7W	73
720-88255-4	DG-G7W	90
720-88255-5	DG-I7W	76
720-88255-6	DG-M7W	68
720-88255-7	DG-F9W	76
720-88255-8	DG-DE89W	75
720-88255-9	DG-D9W	70
720-88255-10	DG-B9W	96
720-88255-13	DUP-14	86
LCS 720-250415/2-A	Lab Control Sample	105
LCSD 720-250415/3-A	Lab Control Sample Dup	99
MB 720-250415/1-A	Method Blank	96

Percent Surrogate Recovery (Acceptance Limits)

Surrogate Legend

TPH = p-Terphenyl

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 720-250641/4
Matrix: Water
Analysis Batch: 250641

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/31/18 07:32	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/31/18 07:32	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/31/18 07:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091	ug/L			08/31/18 07:32	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/31/18 07:32	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/31/18 07:32	1
1,1-Dichloroethene	ND		0.50	0.20	ug/L			08/31/18 07:32	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/31/18 07:32	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/31/18 07:32	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/31/18 07:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/31/18 07:32	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/31/18 07:32	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/31/18 07:32	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/31/18 07:32	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/31/18 07:32	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/31/18 07:32	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/31/18 07:32	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/31/18 07:32	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/31/18 07:32	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/31/18 07:32	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/31/18 07:32	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/31/18 07:32	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 07:32	1
2-Hexanone	ND		50	3.0	ug/L			08/31/18 07:32	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 07:32	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/31/18 07:32	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/31/18 07:32	1
Acetone	ND		50	20	ug/L			08/31/18 07:32	1
Benzene	ND		0.50	0.25	ug/L			08/31/18 07:32	1
Bromobenzene	ND		1.0	0.20	ug/L			08/31/18 07:32	1
Bromoform	ND		1.0	0.50	ug/L			08/31/18 07:32	1
Bromomethane	ND		1.0	0.49	ug/L			08/31/18 07:32	1
Carbon disulfide	ND		5.0	0.78	ug/L			08/31/18 07:32	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/31/18 07:32	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/31/18 07:32	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/31/18 07:32	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/31/18 07:32	1
Chloroethane	ND		1.0	0.17	ug/L			08/31/18 07:32	1
Chloroform	ND		1.0	0.40	ug/L			08/31/18 07:32	1
Chloromethane	ND		1.0	0.19	ug/L			08/31/18 07:32	1
cis-1,2-Dichloroethene	ND		0.50	0.076	ug/L			08/31/18 07:32	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/31/18 07:32	1
Dibromomethane	ND		0.50	0.30	ug/L			08/31/18 07:32	1
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/31/18 07:32	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/31/18 07:32	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/31/18 07:32	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/31/18 07:32	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250641/4
Matrix: Water
Analysis Batch: 250641

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			08/31/18 07:32	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/31/18 07:32	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/31/18 07:32	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/31/18 07:32	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/31/18 07:32	1
Naphthalene	ND		1.0	0.22	ug/L			08/31/18 07:32	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/31/18 07:32	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/31/18 07:32	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/31/18 07:32	1
Styrene	ND		0.50	0.22	ug/L			08/31/18 07:32	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/31/18 07:32	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/31/18 07:32	1
Toluene	ND		0.50	0.17	ug/L			08/31/18 07:32	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			08/31/18 07:32	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/31/18 07:32	1
Trichloroethene	ND		0.50	0.20	ug/L			08/31/18 07:32	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/31/18 07:32	1
Vinyl acetate	ND		10	0.60	ug/L			08/31/18 07:32	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/31/18 07:32	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/31/18 07:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*72 - 130*		*08/31/18 07:32*	*1*
4-Bromofluorobenzene	*96*		*67 - 130*		*08/31/18 07:32*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/31/18 07:32*	*1*

Lab Sample ID: LCS 720-250641/5
Matrix: Water
Analysis Batch: 250641

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	25.7		ug/L		103	81 - 121
1,1,1-Trichloroethane	25.0	27.9		ug/L		111	74 - 130
1,1,2,2-Tetrachloroethane	25.0	21.0		ug/L		84	70 - 115
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	35.5	*	ug/L		142	70 - 133
1,1,2-Trichloroethane	25.0	24.7		ug/L		99	80 - 117
1,1-Dichloroethane	25.0	28.0		ug/L		112	77 - 119
1,1-Dichloroethene	25.0	33.2	*	ug/L		133	69 - 119
1,1-Dichloropropene	25.0	25.7		ug/L		103	83 - 130
1,2,3-Trichlorobenzene	25.0	26.9		ug/L		107	87 - 123
1,2,3-Trichloropropane	25.0	21.0		ug/L		84	77 - 120
1,2,4-Trichlorobenzene	25.0	28.2		ug/L		113	78 - 120
1,2,4-Trimethylbenzene	25.0	26.0		ug/L		104	75 - 115
1,2-Dibromo-3-Chloropropane	25.0	23.9		ug/L		96	74 - 126
1,2-Dichlorobenzene	25.0	24.8		ug/L		99	77 - 117
1,2-Dichloroethane	25.0	23.8		ug/L		95	73 - 122

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250641/5
Matrix: Water
Analysis Batch: 250641

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	25.0	25.8		ug/L		103	79 - 119
1,3,5-Trimethylbenzene	25.0	26.0		ug/L		104	77 - 117
1,3-Dichlorobenzene	25.0	24.5		ug/L		98	76 - 116
1,3-Dichloropropane	25.0	23.3		ug/L		93	77 - 117
1,4-Dichlorobenzene	25.0	24.3		ug/L		97	76 - 116
2,2-Dichloropropane	25.0	30.8		ug/L		123	74 - 156
2-Butanone (MEK)	125	104		ug/L		83	66 - 133
2-Chlorotoluene	25.0	25.3		ug/L		101	75 - 115
2-Hexanone	125	114		ug/L		91	63 - 140
4-Chlorotoluene	25.0	25.5		ug/L		102	73 - 119
4-Isopropyltoluene	25.0	25.9		ug/L		104	80 - 120
4-Methyl-2-pentanone (MIBK)	125	115		ug/L		92	66 - 140
Acetone	125	137		ug/L		109	61 - 147
Benzene	25.0	25.9		ug/L		103	79 - 119
Bromobenzene	25.0	24.6		ug/L		98	77 - 117
Bromoform	25.0	23.9		ug/L		95	75 - 127
Bromomethane	25.0	25.0		ug/L		100	70 - 132
Carbon disulfide	25.0	39.6	*	ug/L		158	64 - 127
Carbon tetrachloride	25.0	27.8		ug/L		111	72 - 142
Chlorobenzene	25.0	24.2		ug/L		97	76 - 116
Chlorobromomethane	25.0	27.6		ug/L		110	81 - 122
Chlorodibromomethane	25.0	24.6		ug/L		98	77 - 133
Chloroethane	25.0	24.2		ug/L		97	70 - 131
Chloroform	25.0	24.5		ug/L		98	82 - 119
Chloromethane	25.0	21.9		ug/L		87	49 - 134
cis-1,2-Dichloroethene	25.0	27.3		ug/L		109	77 - 117
cis-1,3-Dichloropropene	25.0	26.3		ug/L		105	82 - 119
Dibromomethane	25.0	24.1		ug/L		96	79 - 117
Dichlorobromomethane	25.0	23.7		ug/L		95	81 - 130
Dichlorodifluoromethane	25.0	14.5		ug/L		58	21 - 150
Ethylbenzene	25.0	25.2		ug/L		101	77 - 117
Ethylene Dibromide	25.0	23.2		ug/L		93	80 - 121
Hexachlorobutadiene	25.0	24.4		ug/L		98	78 - 140
Isopropylbenzene	25.0	27.7		ug/L		111	77 - 130
Methyl tert-butyl ether	25.0	26.1		ug/L		104	70 - 130
Methylene Chloride	25.0	30.0	*	ug/L		120	75 - 117
m-Xylene & p-Xylene	25.0	25.7		ug/L		103	74 - 119
Naphthalene	25.0	26.0		ug/L		104	81 - 121
n-Butylbenzene	25.0	25.9		ug/L		103	78 - 119
N-Propylbenzene	25.0	25.2		ug/L		101	77 - 117
o-Xylene	25.0	26.5		ug/L		106	77 - 118
sec-Butylbenzene	25.0	25.6		ug/L		102	78 - 118
Styrene	25.0	25.0		ug/L		100	76 - 116
tert-Butylbenzene	25.0	24.7		ug/L		99	78 - 118
Tetrachloroethene	25.0	26.9		ug/L		108	81 - 130
Toluene	25.0	24.0		ug/L		96	75 - 120
trans-1,2-Dichloroethene	25.0	32.4	*	ug/L		130	79 - 117
trans-1,3-Dichloropropene	25.0	23.8		ug/L		95	76 - 122

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250641/5
Matrix: Water
Analysis Batch: 250641

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichloroethene	25.0	24.8		ug/L		99	80 - 123
Trichlorofluoromethane	25.0	24.1		ug/L		96	75 - 141
Vinyl acetate	25.0	23.9		ug/L		95	50 - 126
Vinyl chloride	25.0	21.1		ug/L		84	58 - 138

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*86*		*72 - 130*
4-Bromofluorobenzene	*99*		*67 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*

Lab Sample ID: LCS 720-250641/7
Matrix: Water
Analysis Batch: 250641

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	500	592		ug/L		118	77 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*72 - 130*
4-Bromofluorobenzene	*99*		*67 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 720-250641/6
Matrix: Water
Analysis Batch: 250641

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	25.1		ug/L		100	81 - 121	2	20
1,1,1-Trichloroethane	25.0	26.0		ug/L		104	74 - 130	7	20
1,1,2,2-Tetrachloroethane	25.0	22.1		ug/L		88	70 - 115	5	20
1,1,2-Trichloro-1,2,2-trifluoroetha ne	25.0	33.2		ug/L		133	70 - 133	7	20
1,1,2-Trichloroethane	25.0	23.5		ug/L		94	80 - 117	5	20
1,1-Dichloroethane	25.0	26.9		ug/L		108	77 - 119	4	20
1,1-Dichloroethene	25.0	31.5	*	ug/L		126	69 - 119	5	20
1,1-Dichloropropene	25.0	25.9		ug/L		104	83 - 130	1	20
1,2,3-Trichlorobenzene	25.0	27.1		ug/L		109	87 - 123	1	20
1,2,3-Trichloropropane	25.0	22.7		ug/L		91	77 - 120	8	20
1,2,4-Trichlorobenzene	25.0	28.4		ug/L		114	78 - 120	1	20
1,2,4-Trimethylbenzene	25.0	26.4		ug/L		106	75 - 115	1	20
1,2-Dibromo-3-Chloropropane	25.0	26.5		ug/L		106	74 - 126	10	20
1,2-Dichlorobenzene	25.0	25.4		ug/L		102	77 - 117	2	20
1,2-Dichloroethane	25.0	23.9		ug/L		96	73 - 122	0	20
1,2-Dichloropropane	25.0	25.2		ug/L		101	79 - 119	3	20
1,3,5-Trimethylbenzene	25.0	26.4		ug/L		105	77 - 117	2	20
1,3-Dichlorobenzene	25.0	24.5		ug/L		98	76 - 116	0	20
1,3-Dichloropropane	25.0	22.8		ug/L		91	77 - 117	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250641/6
Matrix: Water
Analysis Batch: 250641

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dichlorobenzene	25.0	24.7		ug/L		99	76 - 116	2	20
2,2-Dichloropropane	25.0	28.3		ug/L		113	74 - 156	8	20
2-Butanone (MEK)	125	113		ug/L		90	66 - 133	8	22
2-Chlorotoluene	25.0	25.7		ug/L		103	75 - 115	2	20
2-Hexanone	125	117		ug/L		93	63 - 140	2	24
4-Chlorotoluene	25.0	25.1		ug/L		100	73 - 119	2	20
4-Isopropyltoluene	25.0	26.2		ug/L		105	80 - 120	1	20
4-Methyl-2-pentanone (MIBK)	125	115		ug/L		92	66 - 140	0	21
Acetone	125	130		ug/L		104	61 - 147	5	30
Benzene	25.0	24.9		ug/L		100	79 - 119	4	20
Bromobenzene	25.0	25.1		ug/L		100	77 - 117	2	20
Bromoform	25.0	23.8		ug/L		95	75 - 127	0	20
Bromomethane	25.0	22.4		ug/L		89	70 - 132	11	20
Carbon disulfide	25.0	36.6	*	ug/L		146	64 - 127	8	20
Carbon tetrachloride	25.0	26.2		ug/L		105	72 - 142	6	20
Chlorobenzene	25.0	24.0		ug/L		96	76 - 116	1	20
Chlorobromomethane	25.0	26.4		ug/L		106	81 - 122	4	20
Chlorodibromomethane	25.0	23.9		ug/L		96	77 - 133	3	20
Chloroethane	25.0	21.8		ug/L		87	70 - 131	10	20
Chloroform	25.0	24.0		ug/L		96	82 - 119	2	20
Chloromethane	25.0	19.5		ug/L		78	49 - 134	12	20
cis-1,2-Dichloroethene	25.0	26.2		ug/L		105	77 - 117	4	20
cis-1,3-Dichloropropene	25.0	25.6		ug/L		102	82 - 119	3	20
Dibromomethane	25.0	23.6		ug/L		95	79 - 117	2	20
Dichlorobromomethane	25.0	23.4		ug/L		93	81 - 130	1	20
Dichlorodifluoromethane	25.0	13.0		ug/L		52	21 - 150	11	20
Ethylbenzene	25.0	25.0		ug/L		100	77 - 117	1	20
Ethylene Dibromide	25.0	23.2		ug/L		93	80 - 121	0	20
Hexachlorobutadiene	25.0	25.6		ug/L		102	78 - 140	5	20
Isopropylbenzene	25.0	26.9		ug/L		108	77 - 130	3	20
Methyl tert-butyl ether	25.0	24.2		ug/L		97	70 - 130	7	20
Methylene Chloride	25.0	27.4		ug/L		110	75 - 117	9	20
m-Xylene & p-Xylene	25.0	25.1		ug/L		101	74 - 119	2	20
Naphthalene	25.0	26.9		ug/L		108	81 - 121	3	20
n-Butylbenzene	25.0	26.2		ug/L		105	78 - 119	1	20
N-Propylbenzene	25.0	25.9		ug/L		103	77 - 117	3	20
o-Xylene	25.0	25.9		ug/L		104	77 - 118	2	20
sec-Butylbenzene	25.0	26.0		ug/L		104	78 - 118	2	20
Styrene	25.0	24.4		ug/L		97	76 - 116	3	20
tert-Butylbenzene	25.0	25.6		ug/L		102	78 - 118	3	20
Tetrachloroethene	25.0	26.0		ug/L		104	81 - 130	3	20
Toluene	25.0	24.4		ug/L		98	75 - 120	2	20
trans-1,2-Dichloroethene	25.0	31.2	*	ug/L		125	79 - 117	4	20
trans-1,3-Dichloropropene	25.0	23.3		ug/L		93	76 - 122	2	20
Trichloroethene	25.0	24.9		ug/L		100	80 - 123	1	20
Trichlorofluoromethane	25.0	22.3		ug/L		89	75 - 141	8	20
Vinyl acetate	25.0	24.7		ug/L		99	50 - 126	4	20
Vinyl chloride	25.0	19.3		ug/L		77	58 - 138	9	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250641/6
Matrix: Water
Analysis Batch: 250641

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*72 - 130*
4-Bromofluorobenzene	*97*		*67 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

Lab Sample ID: LCSD 720-250641/8
Matrix: Water
Analysis Batch: 250641

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			500	556		ug/L		111	77 - 130	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*72 - 130*
4-Bromofluorobenzene	*100*		*67 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Lab Sample ID: 720-88209-A-1 MS
Matrix: Water
Analysis Batch: 250641

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		25.0	25.2		ug/L		101	60 - 140
1,1,1-Trichloroethane	ND		25.0	25.2		ug/L		101	60 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	22.0		ug/L		88	60 - 140
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	25.0	30.2		ug/L		121	60 - 140
1,1,2-Trichloroethane	ND		25.0	24.2		ug/L		97	60 - 140
1,1-Dichloroethane	ND		25.0	26.7		ug/L		107	60 - 140
1,1-Dichloroethene	ND	*	25.0	28.6		ug/L		114	60 - 140
1,1-Dichloropropene	ND		25.0	24.5		ug/L		98	60 - 140
1,2,3-Trichlorobenzene	ND		25.0	26.5		ug/L		106	60 - 140
1,2,3-Trichloropropane	ND		25.0	22.6		ug/L		91	60 - 140
1,2,4-Trichlorobenzene	ND		25.0	27.3		ug/L		109	60 - 140
1,2,4-Trimethylbenzene	ND		25.0	25.3		ug/L		101	60 - 140
1,2-Dibromo-3-Chloropropane	ND		25.0	25.4		ug/L		101	60 - 140
1,2-Dichlorobenzene	ND		25.0	24.7		ug/L		99	60 - 140
1,2-Dichloroethane	ND		25.0	24.0		ug/L		96	60 - 140
1,2-Dichloropropane	ND		25.0	25.7		ug/L		103	60 - 140
1,3,5-Trimethylbenzene	ND		25.0	24.8		ug/L		99	60 - 140
1,3-Dichlorobenzene	ND		25.0	23.8		ug/L		95	60 - 140
1,3-Dichloropropane	ND		25.0	22.3		ug/L		89	60 - 140
1,4-Dichlorobenzene	ND		25.0	23.7		ug/L		95	60 - 140
2,2-Dichloropropane	ND		25.0	25.9		ug/L		104	60 - 140
2-Butanone (MEK)	ND		125	103		ug/L		82	60 - 140
2-Chlorotoluene	ND		25.0	24.4		ug/L		98	60 - 140
2-Hexanone	ND		125	109		ug/L		87	60 - 140
4-Chlorotoluene	ND		25.0	24.6		ug/L		98	60 - 140

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88209-A-1 MS
Matrix: Water
Analysis Batch: 250641

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Isopropyltoluene	ND		25.0	24.5		ug/L		98	60 - 140
4-Methyl-2-pentanone (MIBK)	ND		125	113		ug/L		90	58 - 130
Acetone	ND		125	113		ug/L		90	60 - 140
Benzene	ND		25.0	24.7		ug/L		99	60 - 140
Bromobenzene	ND		25.0	24.5		ug/L		98	60 - 140
Bromoform	ND		25.0	24.2		ug/L		97	56 - 140
Bromomethane	ND		25.0	21.4		ug/L		85	23 - 140
Carbon disulfide	ND	F1 *	25.0	33.7		ug/L		135	38 - 140
Carbon tetrachloride	ND		25.0	24.5		ug/L		98	60 - 140
Chlorobenzene	ND		25.0	23.3		ug/L		93	60 - 140
Chlorobromomethane	ND		25.0	26.5		ug/L		106	60 - 140
Chlorodibromomethane	ND		25.0	24.4		ug/L		98	60 - 140
Chloroethane	ND		25.0	20.6		ug/L		82	51 - 140
Chloroform	ND		25.0	24.2		ug/L		97	60 - 140
Chloromethane	ND		25.0	18.7		ug/L		75	52 - 140
cis-1,2-Dichloroethene	ND		25.0	26.0		ug/L		104	60 - 140
cis-1,3-Dichloropropene	ND		25.0	25.2		ug/L		101	60 - 140
Dibromomethane	ND		25.0	23.4		ug/L		94	60 - 140
Dichlorobromomethane	ND		25.0	23.5		ug/L		94	60 - 140
Dichlorodifluoromethane	ND		25.0	12.2		ug/L		49	38 - 140
Ethylbenzene	ND		25.0	23.5		ug/L		94	60 - 140
Ethylene Dibromide	ND		25.0	22.8		ug/L		91	60 - 140
Hexachlorobutadiene	ND		25.0	24.4		ug/L		98	60 - 140
Isopropylbenzene	ND		25.0	25.6		ug/L		102	60 - 140
Methyl tert-butyl ether	ND		25.0	24.5		ug/L		98	60 - 138
Methylene Chloride	ND	*	25.0	27.6		ug/L		110	40 - 140
m-Xylene & p-Xylene	ND		25.0	23.6		ug/L		95	60 - 140
Naphthalene	ND		25.0	25.9		ug/L		104	56 - 140
n-Butylbenzene	ND		25.0	24.4		ug/L		98	60 - 140
N-Propylbenzene	ND		25.0	24.4		ug/L		97	60 - 140
o-Xylene	ND		25.0	25.0		ug/L		100	60 - 140
sec-Butylbenzene	ND		25.0	24.3		ug/L		97	60 - 140
Styrene	ND		25.0	23.6		ug/L		94	60 - 140
tert-Butylbenzene	ND		25.0	24.3		ug/L		97	60 - 140
Tetrachloroethene	ND		25.0	23.8		ug/L		95	60 - 140
Toluene	ND		25.0	23.4		ug/L		94	60 - 140
trans-1,2-Dichloroethene	ND	*	25.0	29.2		ug/L		117	60 - 140
trans-1,3-Dichloropropene	ND		25.0	23.3		ug/L		93	60 - 140
Trichloroethene	ND		25.0	23.9		ug/L		96	60 - 140
Trichlorofluoromethane	ND		25.0	21.0		ug/L		84	60 - 140
Vinyl acetate	ND		25.0	23.6		ug/L		94	40 - 140
Vinyl chloride	ND		25.0	17.7		ug/L		71	58 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*72 - 130*
4-Bromofluorobenzene	*99*		*67 - 130*
Toluene-d8 (Surr)	*92*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88209-A-1 MSD
Matrix: Water
Analysis Batch: 250641

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		25.0	27.7		ug/L		111	60 - 140	10	20
1,1,1-Trichloroethane	ND		25.0	26.2		ug/L		105	60 - 140	4	20
1,1,2,2-Tetrachloroethane	ND		25.0	23.6		ug/L		94	60 - 140	7	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	25.0	31.7		ug/L		127	60 - 140	5	20
1,1,2-Trichloroethane	ND		25.0	24.0		ug/L		96	60 - 140	1	20
1,1-Dichloroethane	ND		25.0	28.1		ug/L		113	60 - 140	5	20
1,1-Dichloroethene	ND	*	25.0	30.6		ug/L		122	60 - 140	7	20
1,1-Dichloropropene	ND		25.0	24.5		ug/L		98	60 - 140	0	20
1,2,3-Trichlorobenzene	ND		25.0	29.3		ug/L		117	60 - 140	10	20
1,2,3-Trichloropropane	ND		25.0	23.3		ug/L		93	60 - 140	3	20
1,2,4-Trichlorobenzene	ND		25.0	28.4		ug/L		114	60 - 140	4	20
1,2,4-Trimethylbenzene	ND		25.0	26.3		ug/L		105	60 - 140	4	20
1,2-Dibromo-3-Chloropropane	ND		25.0	29.2		ug/L		117	60 - 140	14	20
1,2-Dichlorobenzene	ND		25.0	25.6		ug/L		103	60 - 140	4	20
1,2-Dichloroethane	ND		25.0	24.2		ug/L		97	60 - 140	1	20
1,2-Dichloropropane	ND		25.0	25.8		ug/L		103	60 - 140	1	20
1,3,5-Trimethylbenzene	ND		25.0	25.9		ug/L		103	60 - 140	4	20
1,3-Dichlorobenzene	ND		25.0	24.3		ug/L		97	60 - 140	2	20
1,3-Dichloropropane	ND		25.0	22.3		ug/L		89	60 - 140	0	20
1,4-Dichlorobenzene	ND		25.0	24.7		ug/L		99	60 - 140	4	20
2,2-Dichloropropane	ND		25.0	27.5		ug/L		110	60 - 140	6	20
2-Butanone (MEK)	ND		125	108		ug/L		86	60 - 140	5	20
2-Chlorotoluene	ND		25.0	25.5		ug/L		102	60 - 140	5	20
2-Hexanone	ND		125	113		ug/L		91	60 - 140	4	20
4-Chlorotoluene	ND		25.0	24.7		ug/L		99	60 - 140	0	20
4-Isopropyltoluene	ND		25.0	25.4		ug/L		102	60 - 140	4	20
4-Methyl-2-pentanone (MIBK)	ND		125	118		ug/L		94	58 - 130	4	20
Acetone	ND		125	120		ug/L		96	60 - 140	6	20
Benzene	ND		25.0	25.0		ug/L		100	60 - 140	1	20
Bromobenzene	ND		25.0	25.1		ug/L		100	60 - 140	2	20
Bromoform	ND		25.0	25.4		ug/L		101	56 - 140	5	20
Bromomethane	ND		25.0	22.4		ug/L		90	23 - 140	5	20
Carbon disulfide	ND	F1 *	25.0	35.9	F1	ug/L		144	38 - 140	6	20
Carbon tetrachloride	ND		25.0	25.4		ug/L		102	60 - 140	3	20
Chlorobenzene	ND		25.0	23.7		ug/L		95	60 - 140	2	20
Chlorobromomethane	ND		25.0	27.3		ug/L		109	60 - 140	3	20
Chlorodibromomethane	ND		25.0	24.7		ug/L		99	60 - 140	1	20
Chloroethane	ND		25.0	21.6		ug/L		86	51 - 140	5	20
Chloroform	ND		25.0	25.3		ug/L		101	60 - 140	5	20
Chloromethane	ND		25.0	19.7		ug/L		79	52 - 140	5	20
cis-1,2-Dichloroethene	ND		25.0	27.7		ug/L		111	60 - 140	6	20
cis-1,3-Dichloropropene	ND		25.0	25.3		ug/L		101	60 - 140	1	20
Dibromomethane	ND		25.0	24.8		ug/L		99	60 - 140	6	20
Dichlorobromomethane	ND		25.0	24.1		ug/L		96	60 - 140	3	20
Dichlorodifluoromethane	ND		25.0	12.2		ug/L		49	38 - 140	0	20
Ethylbenzene	ND		25.0	24.1		ug/L		96	60 - 140	2	20
Ethylene Dibromide	ND		25.0	22.5		ug/L		90	60 - 140	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88209-A-1 MSD
Matrix: Water
Analysis Batch: 250641

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hexachlorobutadiene	ND		25.0	25.0		ug/L		100	60 - 140	2	20
Isopropylbenzene	ND		25.0	27.0		ug/L		108	60 - 140	5	20
Methyl tert-butyl ether	ND		25.0	27.6		ug/L		110	60 - 138	12	20
Methylene Chloride	ND	*	25.0	29.6		ug/L		118	40 - 140	7	20
m-Xylene & p-Xylene	ND		25.0	24.2		ug/L		97	60 - 140	2	20
Naphthalene	ND		25.0	29.9		ug/L		120	56 - 140	14	20
n-Butylbenzene	ND		25.0	24.3		ug/L		97	60 - 140	0	20
N-Propylbenzene	ND		25.0	24.4		ug/L		98	60 - 140	0	20
o-Xylene	ND		25.0	26.4		ug/L		106	60 - 140	6	20
sec-Butylbenzene	ND		25.0	25.5		ug/L		102	60 - 140	5	20
Styrene	ND		25.0	23.8		ug/L		95	60 - 140	1	20
tert-Butylbenzene	ND		25.0	25.9		ug/L		104	60 - 140	7	20
Tetrachloroethene	ND		25.0	23.1		ug/L		93	60 - 140	3	20
Toluene	ND		25.0	24.3		ug/L		97	60 - 140	4	20
trans-1,2-Dichloroethene	ND	*	25.0	31.7		ug/L		127	60 - 140	8	20
trans-1,3-Dichloropropene	ND		25.0	23.2		ug/L		93	60 - 140	1	20
Trichloroethene	ND		25.0	23.6		ug/L		94	60 - 140	1	20
Trichlorofluoromethane	ND		25.0	21.8		ug/L		87	60 - 140	3	20
Vinyl acetate	ND		25.0	24.2		ug/L		97	40 - 140	3	20
Vinyl chloride	ND		25.0	18.8		ug/L		75	58 - 140	6	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*72 - 130*
4-Bromofluorobenzene	*97*		*67 - 130*
Toluene-d8 (Surr)	*91*		*70 - 130*

Lab Sample ID: MB 720-250643/4
Matrix: Water
Analysis Batch: 250643

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/31/18 08:13	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/31/18 08:13	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/31/18 08:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091	ug/L			08/31/18 08:13	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/31/18 08:13	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/31/18 08:13	1
1,1-Dichloroethene	ND		0.50	0.20	ug/L			08/31/18 08:13	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/31/18 08:13	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/31/18 08:13	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/31/18 08:13	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/31/18 08:13	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/31/18 08:13	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/31/18 08:13	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/31/18 08:13	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/31/18 08:13	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/31/18 08:13	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/31/18 08:13	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250643/4
Matrix: Water
Analysis Batch: 250643

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/31/18 08:13	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/31/18 08:13	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/31/18 08:13	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/31/18 08:13	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/31/18 08:13	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 08:13	1
2-Hexanone	ND		50	3.0	ug/L			08/31/18 08:13	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 08:13	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/31/18 08:13	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/31/18 08:13	1
Acetone	ND		50	20	ug/L			08/31/18 08:13	1
Benzene	ND		0.50	0.25	ug/L			08/31/18 08:13	1
Bromobenzene	ND		1.0	0.20	ug/L			08/31/18 08:13	1
Bromoform	ND		1.0	0.50	ug/L			08/31/18 08:13	1
Bromomethane	ND		1.0	0.49	ug/L			08/31/18 08:13	1
Carbon disulfide	ND		5.0	0.78	ug/L			08/31/18 08:13	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/31/18 08:13	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/31/18 08:13	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/31/18 08:13	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/31/18 08:13	1
Chloroethane	ND		1.0	0.17	ug/L			08/31/18 08:13	1
Chloroform	ND		1.0	0.40	ug/L			08/31/18 08:13	1
Chloromethane	ND		1.0	0.19	ug/L			08/31/18 08:13	1
cis-1,2-Dichloroethene	ND		0.50	0.076	ug/L			08/31/18 08:13	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/31/18 08:13	1
Dibromomethane	ND		0.50	0.30	ug/L			08/31/18 08:13	1
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/31/18 08:13	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/31/18 08:13	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/31/18 08:13	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/31/18 08:13	1
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			08/31/18 08:13	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/31/18 08:13	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/31/18 08:13	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/31/18 08:13	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/31/18 08:13	1
Naphthalene	ND		1.0	0.22	ug/L			08/31/18 08:13	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/31/18 08:13	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/31/18 08:13	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/31/18 08:13	1
Styrene	ND		0.50	0.22	ug/L			08/31/18 08:13	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/31/18 08:13	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/31/18 08:13	1
Toluene	ND		0.50	0.17	ug/L			08/31/18 08:13	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			08/31/18 08:13	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/31/18 08:13	1
Trichloroethene	ND		0.50	0.20	ug/L			08/31/18 08:13	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/31/18 08:13	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250643/4
Matrix: Water
Analysis Batch: 250643

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl acetate	ND		10	0.60	ug/L			08/31/18 08:13	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/31/18 08:13	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/31/18 08:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*72 - 130*		*08/31/18 08:13*	*1*
4-Bromofluorobenzene	*94*		*67 - 130*		*08/31/18 08:13*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/31/18 08:13*	*1*

Lab Sample ID: LCS 720-250643/5
Matrix: Water
Analysis Batch: 250643

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	26.7		ug/L		107	81 - 121
1,1,1-Trichloroethane	25.0	29.0		ug/L		116	74 - 130
1,1,2,2-Tetrachloroethane	25.0	22.6		ug/L		90	70 - 115
1,1,2-Trichloro-1,2,2-trifluoroetha ne	25.0	28.3		ug/L		113	70 - 133
1,1,2-Trichloroethane	25.0	24.2		ug/L		97	80 - 117
1,1-Dichloroethane	25.0	23.0		ug/L		92	77 - 119
1,1-Dichloroethene	25.0	25.4		ug/L		102	69 - 119
1,1-Dichloropropene	25.0	25.4		ug/L		102	83 - 130
1,2,3-Trichlorobenzene	25.0	23.6		ug/L		95	87 - 123
1,2,3-Trichloropropane	25.0	25.8		ug/L		103	77 - 120
1,2,4-Trichlorobenzene	25.0	24.0		ug/L		96	78 - 120
1,2,4-Trimethylbenzene	25.0	25.4		ug/L		101	75 - 115
1,2-Dibromo-3-Chloropropane	25.0	24.0		ug/L		96	74 - 126
1,2-Dichlorobenzene	25.0	24.2		ug/L		97	77 - 117
1,2-Dichloroethane	25.0	25.0		ug/L		100	73 - 122
1,2-Dichloropropane	25.0	22.0		ug/L		88	79 - 119
1,3,5-Trimethylbenzene	25.0	25.7		ug/L		103	77 - 117
1,3-Dichlorobenzene	25.0	24.1		ug/L		97	76 - 116
1,3-Dichloropropane	25.0	23.9		ug/L		96	77 - 117
1,4-Dichlorobenzene	25.0	25.0		ug/L		100	76 - 116
2,2-Dichloropropane	25.0	33.1		ug/L		133	74 - 156
2-Butanone (MEK)	125	109		ug/L		87	66 - 133
2-Chlorotoluene	25.0	24.6		ug/L		99	75 - 115
2-Hexanone	125	102		ug/L		81	63 - 140
4-Chlorotoluene	25.0	25.0		ug/L		100	73 - 119
4-Isopropyltoluene	25.0	26.9		ug/L		108	80 - 120
4-Methyl-2-pentanone (MIBK)	125	103		ug/L		83	66 - 140
Acetone	125	95.2		ug/L		76	61 - 147
Benzene	25.0	24.7		ug/L		99	79 - 119
Bromobenzene	25.0	23.9		ug/L		96	77 - 117
Bromoform	25.0	23.3		ug/L		93	75 - 127
Bromomethane	25.0	22.4		ug/L		90	70 - 132
Carbon disulfide	25.0	27.9		ug/L		112	64 - 127

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250643/5
Matrix: Water
Analysis Batch: 250643

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon tetrachloride	25.0	29.7		ug/L		119	72 - 142
Chlorobenzene	25.0	24.9		ug/L		100	76 - 116
Chlorobromomethane	25.0	27.5		ug/L		110	81 - 122
Chlorodibromomethane	25.0	28.6		ug/L		114	77 - 133
Chloroethane	25.0	18.3		ug/L		73	70 - 131
Chloroform	25.0	26.8		ug/L		107	82 - 119
Chloromethane	25.0	17.8		ug/L		71	49 - 134
cis-1,2-Dichloroethene	25.0	22.4		ug/L		90	77 - 117
cis-1,3-Dichloropropene	25.0	26.0		ug/L		104	82 - 119
Dibromomethane	25.0	25.4		ug/L		102	79 - 117
Dichlorobromomethane	25.0	27.1		ug/L		108	81 - 130
Dichlorodifluoromethane	25.0	20.2		ug/L		81	21 - 150
Ethylbenzene	25.0	25.0		ug/L		100	77 - 117
Ethylene Dibromide	25.0	26.0		ug/L		104	80 - 121
Hexachlorobutadiene	25.0	22.1		ug/L		89	78 - 140
Isopropylbenzene	25.0	25.9		ug/L		104	77 - 130
Methyl tert-butyl ether	25.0	25.3		ug/L		101	70 - 130
Methylene Chloride	25.0	23.9		ug/L		96	75 - 117
m-Xylene & p-Xylene	25.0	25.4		ug/L		101	74 - 119
Naphthalene	25.0	25.7		ug/L		103	81 - 121
n-Butylbenzene	25.0	25.7		ug/L		103	78 - 119
N-Propylbenzene	25.0	25.5		ug/L		102	77 - 117
o-Xylene	25.0	24.9		ug/L		100	77 - 118
sec-Butylbenzene	25.0	25.6		ug/L		102	78 - 118
Styrene	25.0	24.1		ug/L		96	76 - 116
tert-Butylbenzene	25.0	25.7		ug/L		103	78 - 118
Tetrachloroethene	25.0	23.8		ug/L		95	81 - 130
Toluene	25.0	20.8		ug/L		83	75 - 120
trans-1,2-Dichloroethene	25.0	26.9		ug/L		108	79 - 117
trans-1,3-Dichloropropene	25.0	26.1		ug/L		105	76 - 122
Trichloroethene	25.0	24.9		ug/L		99	80 - 123
Trichlorofluoromethane	25.0	24.3		ug/L		97	75 - 141
Vinyl acetate	25.0	26.4		ug/L		106	50 - 126
Vinyl chloride	25.0	19.1		ug/L		77	58 - 138

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*72 - 130*
4-Bromofluorobenzene	*94*		*67 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCS 720-250643/7
Matrix: Water
Analysis Batch: 250643

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	500	464		ug/L		93	77 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250643/7
Matrix: Water
Analysis Batch: 250643

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		72 - 130
4-Bromofluorobenzene	97		67 - 130
Toluene-d8 (Surr)	100		70 - 130

Lab Sample ID: LCSD 720-250643/6
Matrix: Water
Analysis Batch: 250643

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	26.4		ug/L		106	81 - 121	1	20
1,1,1-Trichloroethane	25.0	29.4		ug/L		118	74 - 130	1	20
1,1,2,2-Tetrachloroethane	25.0	21.7		ug/L		87	70 - 115	4	20
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	29.2		ug/L		117	70 - 133	3	20
1,1,2-Trichloroethane	25.0	23.5		ug/L		94	80 - 117	3	20
1,1-Dichloroethane	25.0	23.2		ug/L		93	77 - 119	1	20
1,1-Dichloroethene	25.0	26.4		ug/L		106	69 - 119	4	20
1,1-Dichloropropene	25.0	25.4		ug/L		102	83 - 130	0	20
1,2,3-Trichlorobenzene	25.0	23.5		ug/L		94	87 - 123	1	20
1,2,3-Trichloropropane	25.0	24.7		ug/L		99	77 - 120	4	20
1,2,4-Trichlorobenzene	25.0	24.0		ug/L		96	78 - 120	0	20
1,2,4-Trimethylbenzene	25.0	26.0		ug/L		104	75 - 115	3	20
1,2-Dibromo-3-Chloropropane	25.0	22.9		ug/L		92	74 - 126	5	20
1,2-Dichlorobenzene	25.0	24.4		ug/L		98	77 - 117	1	20
1,2-Dichloroethane	25.0	23.9		ug/L		96	73 - 122	4	20
1,2-Dichloropropane	25.0	21.6		ug/L		87	79 - 119	2	20
1,3,5-Trimethylbenzene	25.0	26.3		ug/L		105	77 - 117	2	20
1,3-Dichlorobenzene	25.0	24.6		ug/L		99	76 - 116	2	20
1,3-Dichloropropane	25.0	23.3		ug/L		93	77 - 117	3	20
1,4-Dichlorobenzene	25.0	25.4		ug/L		102	76 - 116	2	20
2,2-Dichloropropane	25.0	34.4		ug/L		138	74 - 156	4	20
2-Butanone (MEK)	125	101		ug/L		81	66 - 133	8	22
2-Chlorotoluene	25.0	25.4		ug/L		102	75 - 115	3	20
2-Hexanone	125	92.4		ug/L		74	63 - 140	10	24
4-Chlorotoluene	25.0	25.4		ug/L		101	73 - 119	1	20
4-Isopropyltoluene	25.0	27.9		ug/L		111	80 - 120	3	20
4-Methyl-2-pentanone (MIBK)	125	93.5		ug/L		75	66 - 140	10	21
Acetone	125	87.1		ug/L		70	61 - 147	9	30
Benzene	25.0	24.7		ug/L		99	79 - 119	0	20
Bromobenzene	25.0	24.1		ug/L		96	77 - 117	1	20
Bromoform	25.0	22.6		ug/L		90	75 - 127	3	20
Bromomethane	25.0	23.7		ug/L		95	70 - 132	6	20
Carbon disulfide	25.0	28.7		ug/L		115	64 - 127	3	20
Carbon tetrachloride	25.0	29.9		ug/L		120	72 - 142	1	20
Chlorobenzene	25.0	25.3		ug/L		101	76 - 116	2	20
Chlorobromomethane	25.0	27.0		ug/L		108	81 - 122	2	20
Chlorodibromomethane	25.0	27.0		ug/L		108	77 - 133	6	20
Chloroethane	25.0	19.2		ug/L		77	70 - 131	5	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250643/6
Matrix: Water
Analysis Batch: 250643

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloroform			25.0	26.4		ug/L		105	82 - 119	2	20
Chloromethane			25.0	18.7		ug/L		75	49 - 134	5	20
cis-1,2-Dichloroethene			25.0	21.9		ug/L		87	77 - 117	2	20
cis-1,3-Dichloropropene			25.0	25.6		ug/L		102	82 - 119	2	20
Dibromomethane			25.0	24.0		ug/L		96	79 - 117	6	20
Dichlorobromomethane			25.0	26.3		ug/L		105	81 - 130	3	20
Dichlorodifluoromethane			25.0	20.7		ug/L		83	21 - 150	2	20
Ethylbenzene			25.0	25.2		ug/L		101	77 - 117	1	20
Ethylene Dibromide			25.0	24.7		ug/L		99	80 - 121	5	20
Hexachlorobutadiene			25.0	22.5		ug/L		90	78 - 140	2	20
Isopropylbenzene			25.0	26.3		ug/L		105	77 - 130	2	20
Methyl tert-butyl ether			25.0	24.4		ug/L		98	70 - 130	4	20
Methylene Chloride			25.0	23.9		ug/L		96	75 - 117	0	20
m-Xylene & p-Xylene			25.0	25.2		ug/L		101	74 - 119	0	20
Naphthalene			25.0	25.1		ug/L		100	81 - 121	2	20
n-Butylbenzene			25.0	26.5		ug/L		106	78 - 119	3	20
N-Propylbenzene			25.0	26.1		ug/L		105	77 - 117	2	20
o-Xylene			25.0	25.0		ug/L		100	77 - 118	1	20
sec-Butylbenzene			25.0	26.6		ug/L		106	78 - 118	4	20
Styrene			25.0	24.2		ug/L		97	76 - 116	0	20
tert-Butylbenzene			25.0	26.8		ug/L		107	78 - 118	4	20
Tetrachloroethene			25.0	23.7		ug/L		95	81 - 130	0	20
Toluene			25.0	21.1		ug/L		84	75 - 120	1	20
trans-1,2-Dichloroethene			25.0	27.3		ug/L		109	79 - 117	2	20
trans-1,3-Dichloropropene			25.0	25.3		ug/L		101	76 - 122	3	20
Trichloroethene			25.0	25.1		ug/L		100	80 - 123	1	20
Trichlorofluoromethane			25.0	24.8		ug/L		99	75 - 141	2	20
Vinyl acetate			25.0	24.3		ug/L		97	50 - 126	8	20
Vinyl chloride			25.0	20.6		ug/L		83	58 - 138	8	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*72 - 130*
4-Bromofluorobenzene	*94*		*67 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 720-250643/8
Matrix: Water
Analysis Batch: 250643

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			500	463		ug/L		93	77 - 130	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*72 - 130*
4-Bromofluorobenzene	*96*		*67 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88100-B-3 MS
Matrix: Water
Analysis Batch: 250643

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		25.0	27.6		ug/L		110	60 - 140
1,1,1-Trichloroethane	7.8		25.0	37.9		ug/L		120	60 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	22.8		ug/L		91	60 - 140
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	26.9		ug/L		108	60 - 140
1,1,2-Trichloroethane	ND		25.0	24.6		ug/L		98	60 - 140
1,1-Dichloroethane	34		25.0	52.4		ug/L		75	60 - 140
1,1-Dichloroethene	31		25.0	46.7		ug/L		63	60 - 140
1,1-Dichloropropene	ND		25.0	25.2		ug/L		101	60 - 140
1,2,3-Trichlorobenzene	ND		25.0	24.4		ug/L		98	60 - 140
1,2,3-Trichloropropane	ND		25.0	26.8		ug/L		107	60 - 140
1,2,4-Trichlorobenzene	ND		25.0	23.7		ug/L		95	60 - 140
1,2,4-Trimethylbenzene	ND		25.0	25.5		ug/L		102	60 - 140
1,2-Dibromo-3-Chloropropane	ND		25.0	25.7		ug/L		103	60 - 140
1,2-Dichlorobenzene	ND		25.0	24.7		ug/L		99	60 - 140
1,2-Dichloroethane	0.12	J	25.0	28.5		ug/L		113	60 - 140
1,2-Dichloropropane	ND		25.0	22.5		ug/L		90	60 - 140
1,3,5-Trimethylbenzene	ND		25.0	25.7		ug/L		103	60 - 140
1,3-Dichlorobenzene	ND		25.0	24.4		ug/L		98	60 - 140
1,3-Dichloropropane	ND		25.0	25.3		ug/L		101	60 - 140
1,4-Dichlorobenzene	ND		25.0	25.2		ug/L		101	60 - 140
2,2-Dichloropropane	ND		25.0	33.5		ug/L		134	60 - 140
2-Butanone (MEK)	ND		125	97.8		ug/L		78	60 - 140
2-Chlorotoluene	ND		25.0	25.1		ug/L		101	60 - 140
2-Hexanone	ND		125	103		ug/L		83	60 - 140
4-Chlorotoluene	ND		25.0	25.3		ug/L		101	60 - 140
4-Isopropyltoluene	ND		25.0	26.8		ug/L		107	60 - 140
4-Methyl-2-pentanone (MIBK)	ND		125	106		ug/L		85	58 - 130
Acetone	ND		125	76.2		ug/L		61	60 - 140
Benzene	ND		25.0	24.6		ug/L		98	60 - 140
Bromobenzene	ND		25.0	25.1		ug/L		100	60 - 140
Bromoform	ND		25.0	24.7		ug/L		99	56 - 140
Bromomethane	ND		25.0	21.9		ug/L		88	23 - 140
Carbon disulfide	ND		25.0	27.5		ug/L		110	38 - 140
Carbon tetrachloride	ND		25.0	31.8		ug/L		127	60 - 140
Chlorobenzene	ND		25.0	25.3		ug/L		101	60 - 140
Chlorobromomethane	ND		25.0	28.6		ug/L		115	60 - 140
Chlorodibromomethane	ND		25.0	30.6		ug/L		122	60 - 140
Chloroethane	ND		25.0	17.7		ug/L		71	51 - 140
Chloroform	ND		25.0	28.1		ug/L		112	60 - 140
Chloromethane	ND		25.0	18.2		ug/L		73	52 - 140
cis-1,2-Dichloroethene	75	F1	25.0	91.9		ug/L		66	60 - 140
cis-1,3-Dichloropropene	ND		25.0	26.2		ug/L		105	60 - 140
Dibromomethane	ND		25.0	26.9		ug/L		107	60 - 140
Dichlorobromomethane	ND		25.0	29.0		ug/L		116	60 - 140
Dichlorodifluoromethane	ND		25.0	20.2		ug/L		81	38 - 140
Ethylbenzene	ND		25.0	24.7		ug/L		99	60 - 140
Ethylene Dibromide	ND		25.0	27.9		ug/L		112	60 - 140

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88100-B-3 MS
Matrix: Water
Analysis Batch: 250643

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorobutadiene	ND		25.0	21.4		ug/L		86	60 - 140
Isopropylbenzene	ND		25.0	26.0		ug/L		104	60 - 140
Methyl tert-butyl ether	ND		25.0	26.6		ug/L		106	60 - 138
Methylene Chloride	ND		25.0	24.3		ug/L		97	40 - 140
m-Xylene & p-Xylene	ND		25.0	24.9		ug/L		100	60 - 140
Naphthalene	ND		25.0	26.9		ug/L		108	56 - 140
n-Butylbenzene	ND		25.0	25.0		ug/L		100	60 - 140
N-Propylbenzene	ND		25.0	25.4		ug/L		102	60 - 140
o-Xylene	ND		25.0	25.3		ug/L		101	60 - 140
sec-Butylbenzene	ND		25.0	25.7		ug/L		103	60 - 140
Styrene	ND		25.0	23.6		ug/L		94	60 - 140
tert-Butylbenzene	ND		25.0	26.5		ug/L		106	60 - 140
Tetrachloroethene	ND		25.0	23.0		ug/L		92	60 - 140
Toluene	ND		25.0	20.7		ug/L		83	60 - 140
trans-1,2-Dichloroethene	7.3		25.0	32.1		ug/L		99	60 - 140
trans-1,3-Dichloropropene	ND		25.0	27.4		ug/L		110	60 - 140
Trichloroethene	0.72		25.0	25.2		ug/L		98	60 - 140
Trichlorofluoromethane	ND		25.0	24.6		ug/L		98	60 - 140
Vinyl acetate	ND		25.0	26.1		ug/L		104	40 - 140
Vinyl chloride	2.0		25.0	20.6		ug/L		74	58 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*111*		*72 - 130*
4-Bromofluorobenzene	*95*		*67 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: 720-88100-B-3 MSD
Matrix: Water
Analysis Batch: 250643

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		25.0	27.0		ug/L		108	60 - 140	2	20
1,1,1-Trichloroethane	7.8		25.0	36.5		ug/L		115	60 - 140	4	20
1,1,2,2-Tetrachloroethane	ND		25.0	22.0		ug/L		88	60 - 140	3	20
1,1,2-Trichloro-1,2,2-trifluoroetha ne	ND		25.0	27.9		ug/L		112	60 - 140	4	20
1,1,2-Trichloroethane	ND		25.0	24.5		ug/L		98	60 - 140	0	20
1,1-Dichloroethane	34		25.0	50.6		ug/L		68	60 - 140	3	20
1,1-Dichloroethene	31		25.0	47.8		ug/L		68	60 - 140	2	20
1,1-Dichloropropene	ND		25.0	24.7		ug/L		99	60 - 140	2	20
1,2,3-Trichlorobenzene	ND		25.0	23.7		ug/L		95	60 - 140	3	20
1,2,3-Trichloropropane	ND		25.0	25.8		ug/L		103	60 - 140	4	20
1,2,4-Trichlorobenzene	ND		25.0	23.4		ug/L		94	60 - 140	1	20
1,2,4-Trimethylbenzene	ND		25.0	24.8		ug/L		99	60 - 140	3	20
1,2-Dibromo-3-Chloropropane	ND		25.0	23.9		ug/L		96	60 - 140	7	20
1,2-Dichlorobenzene	ND		25.0	23.9		ug/L		96	60 - 140	3	20
1,2-Dichloroethane	0.12	J	25.0	26.7		ug/L		106	60 - 140	6	20
1,2-Dichloropropane	ND		25.0	22.1		ug/L		88	60 - 140	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88100-B-3 MSD
Matrix: Water
Analysis Batch: 250643

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3,5-Trimethylbenzene	ND		25.0	24.9		ug/L		100	60 - 140	3	20
1,3-Dichlorobenzene	ND		25.0	23.6		ug/L		94	60 - 140	3	20
1,3-Dichloropropane	ND		25.0	24.5		ug/L		98	60 - 140	3	20
1,4-Dichlorobenzene	ND		25.0	24.6		ug/L		98	60 - 140	3	20
2,2-Dichloropropane	ND		25.0	31.0		ug/L		124	60 - 140	8	20
2-Butanone (MEK)	ND		125	102		ug/L		82	60 - 140	5	20
2-Chlorotoluene	ND		25.0	24.2		ug/L		97	60 - 140	4	20
2-Hexanone	ND		125	103		ug/L		82	60 - 140	0	20
4-Chlorotoluene	ND		25.0	24.1		ug/L		97	60 - 140	5	20
4-Isopropyltoluene	ND		25.0	26.1		ug/L		105	60 - 140	3	20
4-Methyl-2-pentanone (MIBK)	ND		125	104		ug/L		83	58 - 130	2	20
Acetone	ND		125	82.1		ug/L		66	60 - 140	8	20
Benzene	ND		25.0	24.3		ug/L		97	60 - 140	1	20
Bromobenzene	ND		25.0	23.8		ug/L		95	60 - 140	5	20
Bromoform	ND		25.0	24.4		ug/L		98	56 - 140	1	20
Bromomethane	ND		25.0	23.5		ug/L		94	23 - 140	7	20
Carbon disulfide	ND		25.0	27.5		ug/L		110	38 - 140	0	20
Carbon tetrachloride	ND		25.0	30.9		ug/L		123	60 - 140	3	20
Chlorobenzene	ND		25.0	24.8		ug/L		99	60 - 140	2	20
Chlorobromomethane	ND		25.0	28.0		ug/L		112	60 - 140	2	20
Chlorodibromomethane	ND		25.0	29.7		ug/L		119	60 - 140	3	20
Chloroethane	ND		25.0	19.1		ug/L		76	51 - 140	8	20
Chloroform	ND		25.0	27.5		ug/L		110	60 - 140	2	20
Chloromethane	ND		25.0	19.3		ug/L		77	52 - 140	6	20
cis-1,2-Dichloroethene	75	F1	25.0	87.7	F1	ug/L		49	60 - 140	5	20
cis-1,3-Dichloropropene	ND		25.0	25.4		ug/L		102	60 - 140	3	20
Dibromomethane	ND		25.0	26.1		ug/L		104	60 - 140	3	20
Dichlorobromomethane	ND		25.0	26.9		ug/L		108	60 - 140	7	20
Dichlorodifluoromethane	ND		25.0	20.8		ug/L		83	38 - 140	3	20
Ethylbenzene	ND		25.0	24.3		ug/L		97	60 - 140	2	20
Ethylene Dibromide	ND		25.0	26.1		ug/L		105	60 - 140	6	20
Hexachlorobutadiene	ND		25.0	21.3		ug/L		85	60 - 140	1	20
Isopropylbenzene	ND		25.0	25.8		ug/L		103	60 - 140	1	20
Methyl tert-butyl ether	ND		25.0	26.0		ug/L		104	60 - 138	2	20
Methylene Chloride	ND		25.0	24.2		ug/L		97	40 - 140	1	20
m-Xylene & p-Xylene	ND		25.0	24.6		ug/L		98	60 - 140	1	20
Naphthalene	ND		25.0	25.9		ug/L		104	56 - 140	4	20
n-Butylbenzene	ND		25.0	24.6		ug/L		99	60 - 140	1	20
N-Propylbenzene	ND		25.0	24.4		ug/L		98	60 - 140	4	20
o-Xylene	ND		25.0	24.8		ug/L		99	60 - 140	2	20
sec-Butylbenzene	ND		25.0	25.0		ug/L		100	60 - 140	3	20
Styrene	ND		25.0	23.0		ug/L		92	60 - 140	2	20
tert-Butylbenzene	ND		25.0	25.6		ug/L		102	60 - 140	3	20
Tetrachloroethene	ND		25.0	22.8		ug/L		91	60 - 140	1	20
Toluene	ND		25.0	20.0		ug/L		80	60 - 140	3	20
trans-1,2-Dichloroethene	7.3		25.0	32.2		ug/L		99	60 - 140	0	20
trans-1,3-Dichloropropene	ND		25.0	26.5		ug/L		106	60 - 140	3	20
Trichloroethene	0.72		25.0	24.8		ug/L		96	60 - 140	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88100-B-3 MSD
Matrix: Water
Analysis Batch: 250643

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Trichlorofluoromethane	ND		25.0	24.8		ug/L		99	60 - 140	1	20
Vinyl acetate	ND		25.0	26.0		ug/L		104	40 - 140	0	20
Vinyl chloride	2.0		25.0	22.4		ug/L		82	58 - 140	9	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*72 - 130*
4-Bromofluorobenzene	*98*		*67 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

Lab Sample ID: MB 720-250725/4
Matrix: Water
Analysis Batch: 250725

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/31/18 20:04	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/31/18 20:04	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/31/18 20:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091	ug/L			08/31/18 20:04	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/31/18 20:04	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/31/18 20:04	1
1,1-Dichloroethene	ND		0.50	0.20	ug/L			08/31/18 20:04	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/31/18 20:04	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/31/18 20:04	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/31/18 20:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/31/18 20:04	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/31/18 20:04	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/31/18 20:04	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/31/18 20:04	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/31/18 20:04	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/31/18 20:04	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/31/18 20:04	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/31/18 20:04	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/31/18 20:04	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/31/18 20:04	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/31/18 20:04	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/31/18 20:04	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 20:04	1
2-Hexanone	ND		50	3.0	ug/L			08/31/18 20:04	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/31/18 20:04	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/31/18 20:04	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/31/18 20:04	1
Acetone	ND		50	20	ug/L			08/31/18 20:04	1
Benzene	ND		0.50	0.25	ug/L			08/31/18 20:04	1
Bromobenzene	ND		1.0	0.20	ug/L			08/31/18 20:04	1
Bromoform	ND		1.0	0.50	ug/L			08/31/18 20:04	1
Bromomethane	ND		1.0	0.49	ug/L			08/31/18 20:04	1
Carbon disulfide	ND		5.0	0.78	ug/L			08/31/18 20:04	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/31/18 20:04	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250725/4
Matrix: Water
Analysis Batch: 250725

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		0.50	0.13	ug/L			08/31/18 20:04	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/31/18 20:04	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/31/18 20:04	1
Chloroethane	ND		1.0	0.17	ug/L			08/31/18 20:04	1
Chloroform	ND		1.0	0.40	ug/L			08/31/18 20:04	1
Chloromethane	ND		1.0	0.19	ug/L			08/31/18 20:04	1
cis-1,2-Dichloroethene	ND		0.50	0.076	ug/L			08/31/18 20:04	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/31/18 20:04	1
Dibromomethane	ND		0.50	0.30	ug/L			08/31/18 20:04	1
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/31/18 20:04	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/31/18 20:04	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/31/18 20:04	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/31/18 20:04	1
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			08/31/18 20:04	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/31/18 20:04	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/31/18 20:04	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/31/18 20:04	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/31/18 20:04	1
Naphthalene	ND		1.0	0.22	ug/L			08/31/18 20:04	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/31/18 20:04	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/31/18 20:04	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/31/18 20:04	1
Styrene	0.228	J	0.50	0.22	ug/L			08/31/18 20:04	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/31/18 20:04	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/31/18 20:04	1
Toluene	ND		0.50	0.17	ug/L			08/31/18 20:04	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			08/31/18 20:04	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/31/18 20:04	1
Trichloroethene	ND		0.50	0.20	ug/L			08/31/18 20:04	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/31/18 20:04	1
Vinyl acetate	ND		10	0.60	ug/L			08/31/18 20:04	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/31/18 20:04	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/31/18 20:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*72 - 130*		*08/31/18 20:04*	*1*
4-Bromofluorobenzene	*96*		*67 - 130*		*08/31/18 20:04*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/31/18 20:04*	*1*

Lab Sample ID: LCS 720-250725/5
Matrix: Water
Analysis Batch: 250725

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	28.6		ug/L		114	81 - 121
1,1,1-Trichloroethane	25.0	29.6		ug/L		118	74 - 130
1,1,2,2-Tetrachloroethane	25.0	26.1		ug/L		104	70 - 115

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250725/5
Matrix: Water
Analysis Batch: 250725

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	36.4	*	ug/L		146	70 - 133
1,1,2-Trichloroethane	25.0	29.2		ug/L		117	80 - 117
1,1-Dichloroethane	25.0	28.0		ug/L		112	77 - 119
1,1-Dichloroethene	25.0	34.4	*	ug/L		137	69 - 119
1,1-Dichloropropene	25.0	28.3		ug/L		113	83 - 130
1,2,3-Trichlorobenzene	25.0	27.0		ug/L		108	87 - 123
1,2,3-Trichloropropane	25.0	27.0		ug/L		108	77 - 120
1,2,4-Trichlorobenzene	25.0	26.6		ug/L		106	78 - 120
1,2,4-Trimethylbenzene	25.0	26.0		ug/L		104	75 - 115
1,2-Dibromo-3-Chloropropane	25.0	27.3		ug/L		109	74 - 126
1,2-Dichlorobenzene	25.0	27.0		ug/L		108	77 - 117
1,2-Dichloroethane	25.0	27.7		ug/L		111	73 - 122
1,2-Dichloropropane	25.0	27.2		ug/L		109	79 - 119
1,3,5-Trimethylbenzene	25.0	26.1		ug/L		104	77 - 117
1,3-Dichlorobenzene	25.0	27.0		ug/L		108	76 - 116
1,3-Dichloropropane	25.0	27.7		ug/L		111	77 - 117
1,4-Dichlorobenzene	25.0	26.0		ug/L		104	76 - 116
2,2-Dichloropropane	25.0	30.9		ug/L		124	74 - 156
2-Butanone (MEK)	125	123		ug/L		99	66 - 133
2-Chlorotoluene	25.0	25.5		ug/L		102	75 - 115
2-Hexanone	125	106		ug/L		85	63 - 140
4-Chlorotoluene	25.0	25.5		ug/L		102	73 - 119
4-Isopropyltoluene	25.0	25.7		ug/L		103	80 - 120
4-Methyl-2-pentanone (MIBK)	125	106		ug/L		85	66 - 140
Acetone	125	107		ug/L		85	61 - 147
Benzene	25.0	27.3		ug/L		109	79 - 119
Bromobenzene	25.0	27.1		ug/L		108	77 - 117
Bromoform	25.0	27.7		ug/L		111	75 - 127
Bromomethane	25.0	25.5		ug/L		102	70 - 132
Carbon disulfide	25.0	35.6	*	ug/L		142	64 - 127
Carbon tetrachloride	25.0	29.1		ug/L		116	72 - 142
Chlorobenzene	25.0	26.8		ug/L		107	76 - 116
Chlorobromomethane	25.0	31.0	*	ug/L		124	81 - 122
Chlorodibromomethane	25.0	29.5		ug/L		118	77 - 133
Chloroethane	25.0	23.1		ug/L		92	70 - 131
Chloroform	25.0	28.1		ug/L		112	82 - 119
Chloromethane	25.0	17.0		ug/L		68	49 - 134
cis-1,2-Dichloroethene	25.0	27.0		ug/L		108	77 - 117
cis-1,3-Dichloropropene	25.0	28.3		ug/L		113	82 - 119
Dibromomethane	25.0	28.4		ug/L		114	79 - 117
Dichlorobromomethane	25.0	29.0		ug/L		116	81 - 130
Dichlorodifluoromethane	25.0	16.1		ug/L		64	21 - 150
Ethylbenzene	25.0	25.9		ug/L		103	77 - 117
Ethylene Dibromide	25.0	29.9		ug/L		119	80 - 121
Hexachlorobutadiene	25.0	26.7		ug/L		107	78 - 140
Isopropylbenzene	25.0	26.7		ug/L		107	77 - 130
Methyl tert-butyl ether	25.0	30.9		ug/L		124	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250725/5
Matrix: Water
Analysis Batch: 250725

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	25.0	27.8		ug/L		111	75 - 117
m-Xylene & p-Xylene	25.0	26.6		ug/L		106	74 - 119
Naphthalene	25.0	26.9		ug/L		108	81 - 121
n-Butylbenzene	25.0	23.9		ug/L		96	78 - 119
N-Propylbenzene	25.0	24.8		ug/L		99	77 - 117
o-Xylene	25.0	27.1		ug/L		109	77 - 118
sec-Butylbenzene	25.0	24.9		ug/L		100	78 - 118
Styrene	25.0	25.0		ug/L		100	76 - 116
tert-Butylbenzene	25.0	25.4		ug/L		102	78 - 118
Tetrachloroethene	25.0	28.9		ug/L		116	81 - 130
Toluene	25.0	25.9		ug/L		103	75 - 120
trans-1,2-Dichloroethene	25.0	31.3	*	ug/L		125	79 - 117
trans-1,3-Dichloropropene	25.0	27.4		ug/L		110	76 - 122
Trichloroethene	25.0	29.2		ug/L		117	80 - 123
Trichlorofluoromethane	25.0	24.8		ug/L		99	75 - 141
Vinyl acetate	25.0	21.4		ug/L		85	50 - 126
Vinyl chloride	25.0	21.4		ug/L		86	58 - 138

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*72 - 130*
4-Bromofluorobenzene	*94*		*67 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*

Lab Sample ID: LCS 720-250725/7
Matrix: Water
Analysis Batch: 250725

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	500	544		ug/L		109	77 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*72 - 130*
4-Bromofluorobenzene	*98*		*67 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*

Lab Sample ID: LCSD 720-250725/6
Matrix: Water
Analysis Batch: 250725

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	28.8		ug/L		115	81 - 121	1	20
1,1,1-Trichloroethane	25.0	29.7		ug/L		119	74 - 130	1	20
1,1,2,2-Tetrachloroethane	25.0	23.4		ug/L		94	70 - 115	11	20
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	37.3	*	ug/L		149	70 - 133	2	20
1,1,2-Trichloroethane	25.0	28.2		ug/L		113	80 - 117	3	20
1,1-Dichloroethane	25.0	28.1		ug/L		112	77 - 119	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250725/6
Matrix: Water
Analysis Batch: 250725

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	25.0	35.1	*	ug/L		141	69 - 119	2	20
1,1-Dichloropropene	25.0	28.4		ug/L		114	83 - 130	0	20
1,2,3-Trichlorobenzene	25.0	26.3		ug/L		105	87 - 123	3	20
1,2,3-Trichloropropane	25.0	24.7		ug/L		99	77 - 120	9	20
1,2,4-Trichlorobenzene	25.0	27.2		ug/L		109	78 - 120	3	20
1,2,4-Trimethylbenzene	25.0	25.9		ug/L		104	75 - 115	0	20
1,2-Dibromo-3-Chloropropane	25.0	23.9		ug/L		96	74 - 126	13	20
1,2-Dichlorobenzene	25.0	26.1		ug/L		105	77 - 117	3	20
1,2-Dichloroethane	25.0	26.9		ug/L		107	73 - 122	3	20
1,2-Dichloropropane	25.0	27.1		ug/L		108	79 - 119	1	20
1,3,5-Trimethylbenzene	25.0	25.9		ug/L		103	77 - 117	1	20
1,3-Dichlorobenzene	25.0	27.2		ug/L		109	76 - 116	1	20
1,3-Dichloropropane	25.0	26.6		ug/L		106	77 - 117	4	20
1,4-Dichlorobenzene	25.0	26.4		ug/L		106	76 - 116	1	20
2,2-Dichloropropane	25.0	32.9		ug/L		132	74 - 156	6	20
2-Butanone (MEK)	125	111		ug/L		89	66 - 133	11	22
2-Chlorotoluene	25.0	25.4		ug/L		101	75 - 115	1	20
2-Hexanone	125	95.8		ug/L		77	63 - 140	10	24
4-Chlorotoluene	25.0	25.3		ug/L		101	73 - 119	1	20
4-Isopropyltoluene	25.0	26.0		ug/L		104	80 - 120	1	20
4-Methyl-2-pentanone (MIBK)	125	94.5		ug/L		76	66 - 140	12	21
Acetone	125	100		ug/L		80	61 - 147	6	30
Benzene	25.0	27.3		ug/L		109	79 - 119	0	20
Bromobenzene	25.0	25.8		ug/L		103	77 - 117	5	20
Bromoform	25.0	26.8		ug/L		107	75 - 127	4	20
Bromomethane	25.0	26.3		ug/L		105	70 - 132	3	20
Carbon disulfide	25.0	36.3	*	ug/L		145	64 - 127	2	20
Carbon tetrachloride	25.0	29.2		ug/L		117	72 - 142	0	20
Chlorobenzene	25.0	27.1		ug/L		108	76 - 116	1	20
Chlorobromomethane	25.0	29.8		ug/L		119	81 - 122	4	20
Chlorodibromomethane	25.0	28.2		ug/L		113	77 - 133	4	20
Chloroethane	25.0	23.9		ug/L		96	70 - 131	4	20
Chloroform	25.0	28.2		ug/L		113	82 - 119	0	20
Chloromethane	25.0	18.2		ug/L		73	49 - 134	7	20
cis-1,2-Dichloroethene	25.0	27.2		ug/L		109	77 - 117	1	20
cis-1,3-Dichloropropene	25.0	27.9		ug/L		112	82 - 119	1	20
Dibromomethane	25.0	27.2		ug/L		109	79 - 117	4	20
Dichlorobromomethane	25.0	28.6		ug/L		115	81 - 130	1	20
Dichlorodifluoromethane	25.0	17.7		ug/L		71	21 - 150	9	20
Ethylbenzene	25.0	26.6		ug/L		106	77 - 117	3	20
Ethylene Dibromide	25.0	28.3		ug/L		113	80 - 121	5	20
Hexachlorobutadiene	25.0	27.2		ug/L		109	78 - 140	2	20
Isopropylbenzene	25.0	27.6		ug/L		110	77 - 130	3	20
Methyl tert-butyl ether	25.0	29.0		ug/L		116	70 - 130	6	20
Methylene Chloride	25.0	27.9		ug/L		111	75 - 117	0	20
m-Xylene & p-Xylene	25.0	27.5		ug/L		110	74 - 119	4	20
Naphthalene	25.0	24.8		ug/L		99	81 - 121	8	20
n-Butylbenzene	25.0	24.8		ug/L		99	78 - 119	4	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250725/6
Matrix: Water
Analysis Batch: 250725

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
N-Propylbenzene			25.0	24.8		ug/L		99	77 - 117	0	20
o-Xylene			25.0	27.3		ug/L		109	77 - 118	1	20
sec-Butylbenzene			25.0	25.0		ug/L		100	78 - 118	0	20
Styrene			25.0	25.5		ug/L		102	76 - 116	2	20
tert-Butylbenzene			25.0	25.2		ug/L		101	78 - 118	1	20
Tetrachloroethene			25.0	29.9		ug/L		120	81 - 130	3	20
Toluene			25.0	26.2		ug/L		105	75 - 120	1	20
trans-1,2-Dichloroethene			25.0	31.8	*	ug/L		127	79 - 117	1	20
trans-1,3-Dichloropropene			25.0	26.5		ug/L		106	76 - 122	4	20
Trichloroethene			25.0	29.3		ug/L		117	80 - 123	0	20
Trichlorofluoromethane			25.0	25.8		ug/L		103	75 - 141	4	20
Vinyl acetate			25.0	20.1		ug/L		80	50 - 126	6	20
Vinyl chloride			25.0	22.8		ug/L		91	58 - 138	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*72 - 130*
4-Bromofluorobenzene	*97*		*67 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 720-250725/8
Matrix: Water
Analysis Batch: 250725

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			500	542		ug/L		108	77 - 130	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*72 - 130*
4-Bromofluorobenzene	*95*		*67 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

Lab Sample ID: 720-88353-A-2 MS
Matrix: Water
Analysis Batch: 250725

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1,1,2-Tetrachloroethane	ND		25.0	29.0		ug/L		116	60 - 140		
1,1,1-Trichloroethane	ND		25.0	30.7		ug/L		123	60 - 140		
1,1,2,2-Tetrachloroethane	ND		25.0	23.5		ug/L		94	60 - 140		
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	* F1	25.0	37.0	F1	ug/L		148	60 - 140		
1,1,2-Trichloroethane	ND		25.0	27.3		ug/L		109	60 - 140		
1,1-Dichloroethane	ND		25.0	28.0		ug/L		112	60 - 140		
1,1-Dichloroethene	ND	*	25.0	33.8		ug/L		135	60 - 140		
1,1-Dichloropropene	ND		25.0	28.1		ug/L		113	60 - 140		
1,2,3-Trichlorobenzene	ND		25.0	26.2		ug/L		105	60 - 140		
1,2,3-Trichloropropane	ND		25.0	25.8		ug/L		103	60 - 140		

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88353-A-2 MS
Matrix: Water
Analysis Batch: 250725

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	ND		25.0	25.7		ug/L		103	60 - 140
1,2,4-Trimethylbenzene	ND		25.0	26.3		ug/L		105	60 - 140
1,2-Dibromo-3-Chloropropane	ND		25.0	25.2		ug/L		101	60 - 140
1,2-Dichlorobenzene	ND		25.0	26.9		ug/L		108	60 - 140
1,2-Dichloroethane	ND		25.0	28.3		ug/L		113	60 - 140
1,2-Dichloropropane	ND		25.0	26.6		ug/L		106	60 - 140
1,3,5-Trimethylbenzene	ND		25.0	26.3		ug/L		105	60 - 140
1,3-Dichlorobenzene	ND		25.0	26.7		ug/L		107	60 - 140
1,3-Dichloropropane	ND		25.0	26.8		ug/L		107	60 - 140
1,4-Dichlorobenzene	ND		25.0	26.1		ug/L		104	60 - 140
2,2-Dichloropropane	ND		25.0	31.1		ug/L		124	60 - 140
2-Butanone (MEK)	ND		125	106		ug/L		85	60 - 140
2-Chlorotoluene	ND		25.0	25.5		ug/L		102	60 - 140
2-Hexanone	ND		125	98.2		ug/L		79	60 - 140
4-Chlorotoluene	ND		25.0	25.2		ug/L		101	60 - 140
4-Isopropyltoluene	ND		25.0	26.0		ug/L		104	60 - 140
4-Methyl-2-pentanone (MIBK)	ND		125	98.3		ug/L		79	58 - 130
Acetone	ND		125	99.5		ug/L		80	60 - 140
Benzene	ND		25.0	26.8		ug/L		107	60 - 140
Bromobenzene	ND		25.0	26.5		ug/L		106	60 - 140
Bromoform	ND		25.0	26.6		ug/L		106	56 - 140
Bromomethane	ND		25.0	23.2		ug/L		93	23 - 140
Carbon disulfide	ND	*	25.0	35.0		ug/L		140	38 - 140
Carbon tetrachloride	ND		25.0	30.4		ug/L		122	60 - 140
Chlorobenzene	ND		25.0	26.7		ug/L		107	60 - 140
Chlorobromomethane	ND	*	25.0	30.4		ug/L		122	60 - 140
Chlorodibromomethane	ND		25.0	29.2		ug/L		117	60 - 140
Chloroethane	ND		25.0	20.6		ug/L		82	51 - 140
Chloroform	ND		25.0	28.6		ug/L		114	60 - 140
Chloromethane	ND		25.0	14.9		ug/L		59	52 - 140
cis-1,2-Dichloroethene	ND		25.0	27.0		ug/L		108	60 - 140
cis-1,3-Dichloropropene	ND		25.0	27.2		ug/L		109	60 - 140
Dibromomethane	ND		25.0	27.4		ug/L		110	60 - 140
Dichlorobromomethane	ND		25.0	29.0		ug/L		116	60 - 140
Dichlorodifluoromethane	ND		25.0	12.5		ug/L		50	38 - 140
Ethylbenzene	ND		25.0	25.8		ug/L		103	60 - 140
Ethylene Dibromide	ND		25.0	28.5		ug/L		114	60 - 140
Hexachlorobutadiene	ND		25.0	26.0		ug/L		104	60 - 140
Isopropylbenzene	ND		25.0	27.0		ug/L		108	60 - 140
Methyl tert-butyl ether	ND		25.0	29.2		ug/L		117	60 - 138
Methylene Chloride	ND		25.0	27.0		ug/L		108	40 - 140
m-Xylene & p-Xylene	ND		25.0	26.2		ug/L		105	60 - 140
Naphthalene	ND		25.0	25.8		ug/L		103	56 - 140
n-Butylbenzene	ND		25.0	23.3		ug/L		93	60 - 140
N-Propylbenzene	ND		25.0	24.5		ug/L		98	60 - 140
o-Xylene	ND		25.0	26.8		ug/L		107	60 - 140
sec-Butylbenzene	ND		25.0	25.3		ug/L		101	60 - 140
Styrene	0.26	J B	25.0	24.5		ug/L		97	60 - 140

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88353-A-2 MS
Matrix: Water
Analysis Batch: 250725

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
tert-Butylbenzene	ND		25.0	26.2		ug/L		105	60 - 140
Tetrachloroethene	ND	F2 F1	25.0	39.4	F1	ug/L		157	60 - 140
Toluene	ND		25.0	25.5		ug/L		102	60 - 140
trans-1,2-Dichloroethene	ND	*	25.0	31.2		ug/L		125	60 - 140
trans-1,3-Dichloropropene	ND		25.0	26.7		ug/L		107	60 - 140
Trichloroethene	ND	F2 F1	25.0	42.9	F1	ug/L		172	60 - 140
Trichlorofluoromethane	ND		25.0	24.2		ug/L		97	60 - 140
Vinyl acetate	ND		25.0	18.2		ug/L		73	40 - 140
Vinyl chloride	ND		25.0	18.7		ug/L		75	58 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*72 - 130*
4-Bromofluorobenzene	*93*		*67 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

Lab Sample ID: 720-88353-A-2 MSD
Matrix: Water
Analysis Batch: 250725

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		25.0	28.9		ug/L		116	60 - 140	0	20
1,1,1-Trichloroethane	ND		25.0	30.9		ug/L		124	60 - 140	1	20
1,1,2,2-Tetrachloroethane	ND		25.0	23.2		ug/L		93	60 - 140	2	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	* F1	25.0	37.9	F1	ug/L		152	60 - 140	3	20
1,1,2-Trichloroethane	ND		25.0	26.9		ug/L		108	60 - 140	2	20
1,1-Dichloroethane	ND		25.0	27.9		ug/L		112	60 - 140	0	20
1,1-Dichloroethene	ND	*	25.0	34.8		ug/L		139	60 - 140	3	20
1,1-Dichloropropene	ND		25.0	28.4		ug/L		114	60 - 140	1	20
1,2,3-Trichlorobenzene	ND		25.0	26.0		ug/L		104	60 - 140	1	20
1,2,3-Trichloropropane	ND		25.0	25.8		ug/L		103	60 - 140	0	20
1,2,4-Trichlorobenzene	ND		25.0	25.2		ug/L		101	60 - 140	2	20
1,2,4-Trimethylbenzene	ND		25.0	26.1		ug/L		104	60 - 140	1	20
1,2-Dibromo-3-Chloropropane	ND		25.0	26.0		ug/L		104	60 - 140	3	20
1,2-Dichlorobenzene	ND		25.0	26.3		ug/L		105	60 - 140	2	20
1,2-Dichloroethane	ND		25.0	27.7		ug/L		111	60 - 140	2	20
1,2-Dichloropropane	ND		25.0	26.0		ug/L		104	60 - 140	2	20
1,3,5-Trimethylbenzene	ND		25.0	26.2		ug/L		105	60 - 140	1	20
1,3-Dichlorobenzene	ND		25.0	26.3		ug/L		105	60 - 140	2	20
1,3-Dichloropropane	ND		25.0	26.2		ug/L		105	60 - 140	2	20
1,4-Dichlorobenzene	ND		25.0	25.5		ug/L		102	60 - 140	2	20
2,2-Dichloropropane	ND		25.0	32.7		ug/L		131	60 - 140	5	20
2-Butanone (MEK)	ND		125	109		ug/L		87	60 - 140	2	20
2-Chlorotoluene	ND		25.0	25.6		ug/L		103	60 - 140	0	20
2-Hexanone	ND		125	98.6		ug/L		79	60 - 140	0	20
4-Chlorotoluene	ND		25.0	25.1		ug/L		100	60 - 140	0	20
4-Isopropyltoluene	ND		25.0	26.1		ug/L		105	60 - 140	0	20
4-Methyl-2-pentanone (MIBK)	ND		125	97.3		ug/L		78	58 - 130	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88353-A-2 MSD
Matrix: Water
Analysis Batch: 250725

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		125	99.9		ug/L		80	60 - 140	0	20
Benzene	ND		25.0	26.8		ug/L		107	60 - 140	0	20
Bromobenzene	ND		25.0	26.4		ug/L		106	60 - 140	1	20
Bromoform	ND		25.0	26.8		ug/L		107	56 - 140	1	20
Bromomethane	ND		25.0	22.6		ug/L		90	23 - 140	3	20
Carbon disulfide	ND	*	25.0	35.0		ug/L		140	38 - 140	0	20
Carbon tetrachloride	ND		25.0	31.2		ug/L		125	60 - 140	3	20
Chlorobenzene	ND		25.0	26.5		ug/L		106	60 - 140	1	20
Chlorobromomethane	ND	*	25.0	30.0		ug/L		120	60 - 140	1	20
Chlorodibromomethane	ND		25.0	28.6		ug/L		114	60 - 140	2	20
Chloroethane	ND		25.0	20.6		ug/L		83	51 - 140	0	20
Chloroform	ND		25.0	28.0		ug/L		112	60 - 140	2	20
Chloromethane	ND		25.0	14.8		ug/L		59	52 - 140	0	20
cis-1,2-Dichloroethene	ND		25.0	27.1		ug/L		108	60 - 140	0	20
cis-1,3-Dichloropropene	ND		25.0	26.7		ug/L		107	60 - 140	2	20
Dibromomethane	ND		25.0	27.0		ug/L		108	60 - 140	1	20
Dichlorobromomethane	ND		25.0	28.3		ug/L		113	60 - 140	2	20
Dichlorodifluoromethane	ND		25.0	12.1		ug/L		48	38 - 140	3	20
Ethylbenzene	ND		25.0	26.0		ug/L		104	60 - 140	0	20
Ethylene Dibromide	ND		25.0	28.7		ug/L		115	60 - 140	1	20
Hexachlorobutadiene	ND		25.0	26.8		ug/L		107	60 - 140	3	20
Isopropylbenzene	ND		25.0	27.7		ug/L		111	60 - 140	2	20
Methyl tert-butyl ether	ND		25.0	28.9		ug/L		116	60 - 138	1	20
Methylene Chloride	ND		25.0	26.5		ug/L		106	40 - 140	2	20
m-Xylene & p-Xylene	ND		25.0	26.4		ug/L		106	60 - 140	1	20
Naphthalene	ND		25.0	26.5		ug/L		106	56 - 140	3	20
n-Butylbenzene	ND		25.0	23.5		ug/L		94	60 - 140	1	20
N-Propylbenzene	ND		25.0	24.8		ug/L		99	60 - 140	1	20
o-Xylene	ND		25.0	26.8		ug/L		107	60 - 140	0	20
sec-Butylbenzene	ND		25.0	25.8		ug/L		103	60 - 140	2	20
Styrene	0.26	J B	25.0	24.8		ug/L		98	60 - 140	1	20
tert-Butylbenzene	ND		25.0	26.4		ug/L		106	60 - 140	1	20
Tetrachloroethene	ND	F2 F1	25.0	29.2	F2	ug/L		117	60 - 140	30	20
Toluene	ND		25.0	25.7		ug/L		103	60 - 140	1	20
trans-1,2-Dichloroethene	ND	*	25.0	31.3		ug/L		125	60 - 140	0	20
trans-1,3-Dichloropropene	ND		25.0	25.7		ug/L		103	60 - 140	4	20
Trichloroethene	ND	F2 F1	25.0	29.8	F2	ug/L		119	60 - 140	36	20
Trichlorofluoromethane	ND		25.0	23.8		ug/L		95	60 - 140	2	20
Vinyl acetate	ND		25.0	17.7		ug/L		71	40 - 140	3	20
Vinyl chloride	ND		25.0	18.8		ug/L		75	58 - 140	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*72 - 130*
4-Bromofluorobenzene	*92*		*67 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250832/4
Matrix: Water
Analysis Batch: 250832

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.50	0.20	ug/L			09/04/18 20:50	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			09/04/18 20:50	1
Trichloroethene	ND		0.50	0.20	ug/L			09/04/18 20:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*72 - 130*		*09/04/18 20:50*	*1*
4-Bromofluorobenzene	*93*		*67 - 130*		*09/04/18 20:50*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*09/04/18 20:50*	*1*

Lab Sample ID: LCS 720-250832/5
Matrix: Water
Analysis Batch: 250832

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	25.0	26.4		ug/L		106	69 - 119
trans-1,2-Dichloroethene	25.0	28.2		ug/L		113	79 - 117
Trichloroethene	25.0	26.0		ug/L		104	80 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*72 - 130*
4-Bromofluorobenzene	*95*		*67 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCS 720-250832/7
Matrix: Water
Analysis Batch: 250832

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	500	490		ug/L		98	77 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*72 - 130*
4-Bromofluorobenzene	*95*		*67 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 720-250832/6
Matrix: Water
Analysis Batch: 250832

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	25.0	26.9		ug/L		107	69 - 119	2	20
trans-1,2-Dichloroethene	25.0	28.1		ug/L		112	79 - 117	0	20
Trichloroethene	25.0	25.5		ug/L		102	80 - 123	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*72 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250832/6
Matrix: Water
Analysis Batch: 250832

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*67 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 720-250832/8
Matrix: Water
Analysis Batch: 250832

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			500	516		ug/L		103	77 - 130	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*72 - 130*
4-Bromofluorobenzene	*96*		*67 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: 720-88312-A-1 MS
Matrix: Water
Analysis Batch: 250832

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		25.0	29.9		ug/L		120	60 - 140
1,1,1-Trichloroethane	ND		25.0	33.6		ug/L		135	60 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	25.7		ug/L		103	60 - 140
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	31.8		ug/L		127	60 - 140
1,1,2-Trichloroethane	ND		25.0	27.3		ug/L		109	60 - 140
1,1-Dichloroethane	ND		25.0	26.4		ug/L		106	60 - 140
1,1-Dichloroethene	ND		25.0	29.9		ug/L		120	60 - 140
1,1-Dichloropropene	ND		25.0	28.3		ug/L		113	60 - 140
1,2,3-Trichlorobenzene	ND		25.0	23.9		ug/L		96	60 - 140
1,2,3-Trichloropropane	ND		25.0	29.4		ug/L		118	60 - 140
1,2,4-Trichlorobenzene	ND		25.0	23.8		ug/L		95	60 - 140
1,2,4-Trimethylbenzene	ND		25.0	28.1		ug/L		112	60 - 140
1,2-Dibromo-3-Chloropropane	ND		25.0	27.0		ug/L		108	60 - 140
1,2-Dichlorobenzene	ND		25.0	27.0		ug/L		108	60 - 140
1,2-Dichloroethane	ND		25.0	28.5		ug/L		114	60 - 140
1,2-Dichloropropane	ND		25.0	25.0		ug/L		100	60 - 140
1,3,5-Trimethylbenzene	ND		25.0	28.6		ug/L		114	60 - 140
1,3-Dichlorobenzene	ND		25.0	26.5		ug/L		106	60 - 140
1,3-Dichloropropane	ND		25.0	27.5		ug/L		110	60 - 140
1,4-Dichlorobenzene	ND		25.0	27.1		ug/L		108	60 - 140
2,2-Dichloropropane	ND	F1	25.0	36.7	F1	ug/L		147	60 - 140
2-Butanone (MEK)	ND		125	118		ug/L		94	60 - 140
2-Chlorotoluene	ND		25.0	27.6		ug/L		110	60 - 140
2-Hexanone	ND		125	113		ug/L		90	60 - 140
4-Chlorotoluene	ND		25.0	27.2		ug/L		109	60 - 140
4-Isopropyltoluene	ND		25.0	29.2		ug/L		117	60 - 140

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88312-A-1 MS
Matrix: Water
Analysis Batch: 250832

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Methyl-2-pentanone (MIBK)	ND		125	116		ug/L		93	58 - 130
Acetone	ND		125	94.0		ug/L		75	60 - 140
Benzene	ND		25.0	28.1		ug/L		112	60 - 140
Bromobenzene	ND		25.0	27.8		ug/L		111	60 - 140
Bromoform	ND		25.0	26.5		ug/L		106	56 - 140
Bromomethane	ND		25.0	30.5		ug/L		122	23 - 140
Carbon disulfide	ND		25.0	33.9		ug/L		136	38 - 140
Carbon tetrachloride	ND		25.0	34.0		ug/L		136	60 - 140
Chlorobenzene	ND		25.0	27.4		ug/L		110	60 - 140
Chlorobromomethane	ND		25.0	31.9		ug/L		128	60 - 140
Chlorodibromomethane	ND		25.0	32.4		ug/L		130	60 - 140
Chloroethane	ND		25.0	24.5		ug/L		98	51 - 140
Chloroform	ND		25.0	30.7		ug/L		123	60 - 140
Chloromethane	ND		25.0	26.5		ug/L		106	52 - 140
cis-1,2-Dichloroethene	ND		25.0	25.6		ug/L		102	60 - 140
cis-1,3-Dichloropropene	ND		25.0	28.7		ug/L		115	60 - 140
Dibromomethane	ND		25.0	28.9		ug/L		116	60 - 140
Dichlorobromomethane	ND		25.0	31.0		ug/L		124	60 - 140
Dichlorodifluoromethane	ND	* F1	25.0	37.3	F1	ug/L		149	38 - 140
Ethylbenzene	ND		25.0	26.9		ug/L		108	60 - 140
Ethylene Dibromide	ND		25.0	29.3		ug/L		117	60 - 140
Hexachlorobutadiene	ND		25.0	22.1		ug/L		88	60 - 140
Isopropylbenzene	ND		25.0	28.2		ug/L		113	60 - 140
Methyl tert-butyl ether	ND		25.0	28.8		ug/L		115	60 - 138
Methylene Chloride	ND		25.0	28.9		ug/L		116	40 - 140
m-Xylene & p-Xylene	ND		25.0	26.8		ug/L		107	60 - 140
Naphthalene	ND		25.0	27.6		ug/L		110	56 - 140
n-Butylbenzene	ND		25.0	26.8		ug/L		107	60 - 140
N-Propylbenzene	ND		25.0	28.1		ug/L		112	60 - 140
o-Xylene	ND		25.0	27.2		ug/L		109	60 - 140
sec-Butylbenzene	ND		25.0	28.3		ug/L		113	60 - 140
Styrene	ND		25.0	26.1		ug/L		104	60 - 140
tert-Butylbenzene	ND		25.0	29.5		ug/L		118	60 - 140
Tetrachloroethene	ND		25.0	26.3		ug/L		105	60 - 140
Toluene	ND		25.0	22.6		ug/L		90	60 - 140
trans-1,2-Dichloroethene	ND		25.0	31.0		ug/L		124	60 - 140
trans-1,3-Dichloropropene	ND		25.0	28.6		ug/L		114	60 - 140
Trichloroethene	ND		25.0	28.0		ug/L		112	60 - 140
Trichlorofluoromethane	ND		25.0	30.8		ug/L		123	60 - 140
Vinyl acetate	ND	*	25.0	28.9		ug/L		116	40 - 140
Vinyl chloride	ND		25.0	28.1		ug/L		112	58 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*72 - 130*
4-Bromofluorobenzene	*93*		*67 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88312-A-1 MSD
Matrix: Water
Analysis Batch: 250832

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		25.0	29.5		ug/L		118	60 - 140	1	20
1,1,1-Trichloroethane	ND		25.0	33.0		ug/L		132	60 - 140	2	20
1,1,2,2-Tetrachloroethane	ND		25.0	26.7		ug/L		107	60 - 140	4	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	32.8		ug/L		131	60 - 140	3	20
1,1,2-Trichloroethane	ND		25.0	27.5		ug/L		110	60 - 140	1	20
1,1-Dichloroethane	ND		25.0	26.3		ug/L		105	60 - 140	0	20
1,1-Dichloroethene	ND		25.0	29.9		ug/L		120	60 - 140	0	20
1,1-Dichloropropene	ND		25.0	28.2		ug/L		113	60 - 140	0	20
1,2,3-Trichlorobenzene	ND		25.0	25.4		ug/L		102	60 - 140	6	20
1,2,3-Trichloropropane	ND		25.0	30.3		ug/L		121	60 - 140	3	20
1,2,4-Trichlorobenzene	ND		25.0	24.4		ug/L		97	60 - 140	2	20
1,2,4-Trimethylbenzene	ND		25.0	28.0		ug/L		112	60 - 140	0	20
1,2-Dibromo-3-Chloropropane	ND		25.0	27.9		ug/L		112	60 - 140	3	20
1,2-Dichlorobenzene	ND		25.0	27.0		ug/L		108	60 - 140	0	20
1,2-Dichloroethane	ND		25.0	28.4		ug/L		114	60 - 140	0	20
1,2-Dichloropropane	ND		25.0	24.8		ug/L		99	60 - 140	1	20
1,3,5-Trimethylbenzene	ND		25.0	28.7		ug/L		115	60 - 140	0	20
1,3-Dichlorobenzene	ND		25.0	26.6		ug/L		106	60 - 140	0	20
1,3-Dichloropropane	ND		25.0	27.6		ug/L		110	60 - 140	0	20
1,4-Dichlorobenzene	ND		25.0	27.1		ug/L		108	60 - 140	0	20
2,2-Dichloropropane	ND	F1	25.0	36.1	F1	ug/L		144	60 - 140	2	20
2-Butanone (MEK)	ND		125	125		ug/L		100	60 - 140	6	20
2-Chlorotoluene	ND		25.0	27.8		ug/L		111	60 - 140	1	20
2-Hexanone	ND		125	115		ug/L		92	60 - 140	2	20
4-Chlorotoluene	ND		25.0	27.2		ug/L		109	60 - 140	0	20
4-Isopropyltoluene	ND		25.0	29.0		ug/L		116	60 - 140	1	20
4-Methyl-2-pentanone (MIBK)	ND		125	117		ug/L		94	58 - 130	1	20
Acetone	ND		125	103		ug/L		83	60 - 140	10	20
Benzene	ND		25.0	28.0		ug/L		112	60 - 140	0	20
Bromobenzene	ND		25.0	27.8		ug/L		111	60 - 140	0	20
Bromoform	ND		25.0	26.4		ug/L		106	56 - 140	0	20
Bromomethane	ND		25.0	31.0		ug/L		124	23 - 140	2	20
Carbon disulfide	ND		25.0	33.6		ug/L		134	38 - 140	1	20
Carbon tetrachloride	ND		25.0	33.6		ug/L		134	60 - 140	1	20
Chlorobenzene	ND		25.0	27.4		ug/L		109	60 - 140	0	20
Chlorobromomethane	ND		25.0	31.8		ug/L		127	60 - 140	0	20
Chlorodibromomethane	ND		25.0	32.4		ug/L		130	60 - 140	0	20
Chloroethane	ND		25.0	24.7		ug/L		99	51 - 140	1	20
Chloroform	ND		25.0	30.2		ug/L		121	60 - 140	2	20
Chloromethane	ND		25.0	27.0		ug/L		108	52 - 140	2	20
cis-1,2-Dichloroethene	ND		25.0	25.2		ug/L		101	60 - 140	2	20
cis-1,3-Dichloropropene	ND		25.0	28.5		ug/L		114	60 - 140	1	20
Dibromomethane	ND		25.0	28.9		ug/L		116	60 - 140	0	20
Dichlorobromomethane	ND		25.0	30.8		ug/L		123	60 - 140	1	20
Dichlorodifluoromethane	ND	* F1	25.0	39.1	F1	ug/L		157	38 - 140	5	20
Ethylbenzene	ND		25.0	26.8		ug/L		107	60 - 140	0	20
Ethylene Dibromide	ND		25.0	29.6		ug/L		118	60 - 140	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88312-A-1 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250832

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hexachlorobutadiene	ND		25.0	22.7		ug/L		91	60 - 140	3	20
Isopropylbenzene	ND		25.0	27.7		ug/L		111	60 - 140	2	20
Methyl tert-butyl ether	ND		25.0	29.3		ug/L		117	60 - 138	2	20
Methylene Chloride	ND		25.0	29.5		ug/L		118	40 - 140	2	20
m-Xylene & p-Xylene	ND		25.0	26.7		ug/L		107	60 - 140	1	20
Naphthalene	ND		25.0	29.6		ug/L		118	56 - 140	7	20
n-Butylbenzene	ND		25.0	26.1		ug/L		104	60 - 140	3	20
N-Propylbenzene	ND		25.0	28.3		ug/L		113	60 - 140	1	20
o-Xylene	ND		25.0	27.0		ug/L		108	60 - 140	1	20
sec-Butylbenzene	ND		25.0	28.6		ug/L		114	60 - 140	1	20
Styrene	ND		25.0	25.8		ug/L		103	60 - 140	1	20
tert-Butylbenzene	ND		25.0	29.5		ug/L		118	60 - 140	0	20
Tetrachloroethene	ND		25.0	25.2		ug/L		101	60 - 140	4	20
Toluene	ND		25.0	22.8		ug/L		91	60 - 140	1	20
trans-1,2-Dichloroethene	ND		25.0	31.0		ug/L		124	60 - 140	0	20
trans-1,3-Dichloropropene	ND		25.0	28.8		ug/L		115	60 - 140	1	20
Trichloroethene	ND		25.0	27.5		ug/L		110	60 - 140	2	20
Trichlorofluoromethane	ND		25.0	30.7		ug/L		123	60 - 140	0	20
Vinyl acetate	ND	*	25.0	29.0		ug/L		116	40 - 140	0	20
Vinyl chloride	ND		25.0	28.5		ug/L		114	58 - 140	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*72 - 130*
4-Bromofluorobenzene	*92*		*67 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-496565/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 496565

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0025	ug/L			08/30/18 15:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*08/30/18 15:35*	*1*

Lab Sample ID: LCS 440-496565/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 496565

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,3-Trichloropropane			0.0500	0.0455		ug/L		91	60 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*101*		*80 - 120*

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88255-1

Lab Sample ID: 720-88220-A-7 MS
Matrix: Water
Analysis Batch: 496565

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	ND		0.0500	0.0499		ug/L		100	55 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*100*		*80 - 120*

Lab Sample ID: 720-88220-A-7 MSD
Matrix: Water
Analysis Batch: 496565

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	ND		0.0500	0.0477		ug/L		95	55 - 135	5	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*102*		*80 - 120*

Lab Sample ID: MB 440-496818/3
Matrix: Water
Analysis Batch: 496818

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0025	ug/L			08/31/18 13:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*08/31/18 13:56*	*1*

Lab Sample ID: LCS 440-496818/4
Matrix: Water
Analysis Batch: 496818

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	0.0500	0.0485		ug/L		97	60 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*102*		*80 - 120*

Lab Sample ID: 720-88255-8 MS
Matrix: Water
Analysis Batch: 496818

Client Sample ID: DG-DE89W
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	ND		0.0500	0.0477		ug/L		95	55 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*100*		*80 - 120*

Method: 8260B SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88255-8 MSD — **Client Sample ID: DG-DE89W**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 496818

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	ND		0.0500	0.0449		ug/L		90	55 - 135	6	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*96*		*80 - 120*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-250415/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250355 — **Prep Batch: 250415**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50	30	ug/L		08/28/18 15:43	08/28/18 19:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*96*		*23 - 156*	*08/28/18 15:43*	*08/28/18 19:55*	*1*

Lab Sample ID: LCS 720-250415/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250355 — **Prep Batch: 250415**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			2500	2500		ug/L		100	34 - 115		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*105*		*23 - 156*

Lab Sample ID: LCSD 720-250415/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250355 — **Prep Batch: 250415**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			2500	2530		ug/L		101	34 - 115	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
p-Terphenyl	*99*		*23 - 156*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-250603/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250849 — **Prep Batch: 250603**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010	0.0027	mg/L		08/30/18 14:05	09/04/18 15:56	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 720-250603/1-A
Matrix: Water
Analysis Batch: 250849

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250603

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.010	0.0026	mg/L		08/30/18 14:05	09/04/18 15:56	1
Barium	ND		0.010	0.0014	mg/L		08/30/18 14:05	09/04/18 15:56	1
Beryllium	ND		0.0020	0.00033	mg/L		08/30/18 14:05	09/04/18 15:56	1
Cadmium	ND		0.0025	0.0013	mg/L		08/30/18 14:05	09/04/18 15:56	1
Chromium	ND		0.010	0.0015	mg/L		08/30/18 14:05	09/04/18 15:56	1
Cobalt	ND		0.0020	0.0012	mg/L		08/30/18 14:05	09/04/18 15:56	1
Copper	ND		0.020	0.0015	mg/L		08/30/18 14:05	09/04/18 15:56	1
Lead	ND		0.0050	0.0023	mg/L		08/30/18 14:05	09/04/18 15:56	1
Molybdenum	ND		0.010	0.0023	mg/L		08/30/18 14:05	09/04/18 15:56	1
Nickel	ND		0.010	0.00080	mg/L		08/30/18 14:05	09/04/18 15:56	1
Selenium	ND		0.020	0.0071	mg/L		08/30/18 14:05	09/04/18 15:56	1
Silver	ND		0.0050	0.0012	mg/L		08/30/18 14:05	09/04/18 15:56	1
Thallium	ND		0.010	0.0035	mg/L		08/30/18 14:05	09/04/18 15:56	1
Vanadium	ND		0.010	0.00070	mg/L		08/30/18 14:05	09/04/18 15:56	1
Zinc	ND		0.020	0.0096	mg/L		08/30/18 14:05	09/04/18 15:56	1

Lab Sample ID: LCS 720-250603/2-A
Matrix: Water
Analysis Batch: 250849

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250603

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.00	0.918		mg/L		92	80 - 120
Arsenic	1.00	0.913		mg/L		91	80 - 120
Barium	1.00	0.904		mg/L		90	80 - 120
Beryllium	1.00	0.905		mg/L		90	80 - 120
Cadmium	1.00	0.925		mg/L		92	80 - 120
Chromium	1.00	0.920		mg/L		92	80 - 120
Cobalt	1.00	0.935		mg/L		93	80 - 120
Copper	1.00	0.923		mg/L		92	80 - 120
Lead	1.00	0.939		mg/L		94	80 - 120
Molybdenum	1.00	0.923		mg/L		92	80 - 120
Nickel	1.00	0.933		mg/L		93	80 - 120
Selenium	1.00	0.921		mg/L		92	80 - 120
Silver	0.500	0.459		mg/L		92	80 - 120
Thallium	1.00	0.952		mg/L		95	80 - 120
Vanadium	1.00	0.922		mg/L		92	80 - 120
Zinc	1.00	0.924		mg/L		92	80 - 120

Lab Sample ID: MB 720-250673/1-A
Matrix: Water
Analysis Batch: 250914

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250673

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010	0.0027	mg/L		08/31/18 09:52	09/05/18 09:22	1
Arsenic	ND		0.010	0.0026	mg/L		08/31/18 09:52	09/05/18 09:22	1
Barium	ND		0.010	0.0014	mg/L		08/31/18 09:52	09/05/18 09:22	1
Beryllium	ND		0.0020	0.00033	mg/L		08/31/18 09:52	09/05/18 09:22	1
Cadmium	ND		0.0025	0.0013	mg/L		08/31/18 09:52	09/05/18 09:22	1
Chromium	ND		0.010	0.0015	mg/L		08/31/18 09:52	09/05/18 09:22	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 720-250673/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250914 — **Prep Batch: 250673**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		0.0020	0.0012	mg/L		08/31/18 09:52	09/05/18 09:22	1
Copper	ND		0.020	0.0015	mg/L		08/31/18 09:52	09/05/18 09:22	1
Lead	ND		0.0050	0.0023	mg/L		08/31/18 09:52	09/05/18 09:22	1
Molybdenum	ND		0.010	0.0023	mg/L		08/31/18 09:52	09/05/18 09:22	1
Nickel	ND		0.010	0.00080	mg/L		08/31/18 09:52	09/05/18 09:22	1
Selenium	ND		0.020	0.0071	mg/L		08/31/18 09:52	09/05/18 09:22	1
Silver	0.00318	J	0.0050	0.0012	mg/L		08/31/18 09:52	09/05/18 09:22	1
Thallium	ND		0.010	0.0035	mg/L		08/31/18 09:52	09/05/18 09:22	1
Vanadium	ND		0.010	0.00070	mg/L		08/31/18 09:52	09/05/18 09:22	1
Zinc	ND		0.020	0.0096	mg/L		08/31/18 09:52	09/05/18 09:22	1

Lab Sample ID: LCS 720-250673/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250914 — **Prep Batch: 250673**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.00	0.968		mg/L		97	80 - 120
Arsenic	1.00	0.961		mg/L		96	80 - 120
Barium	1.00	0.979		mg/L		98	80 - 120
Beryllium	1.00	0.989		mg/L		99	80 - 120
Cadmium	1.00	1.00		mg/L		100	80 - 120
Chromium	1.00	0.992		mg/L		99	80 - 120
Cobalt	1.00	1.03		mg/L		103	80 - 120
Copper	1.00	1.00		mg/L		100	80 - 120
Lead	1.00	1.02		mg/L		102	80 - 120
Molybdenum	1.00	0.996		mg/L		100	80 - 120
Nickel	1.00	0.989		mg/L		99	80 - 120
Selenium	1.00	0.946		mg/L		95	80 - 120
Silver	0.500	0.492		mg/L		98	80 - 120
Thallium	1.00	1.04		mg/L		104	80 - 120
Vanadium	1.00	0.991		mg/L		99	80 - 120
Zinc	1.00	1.01		mg/L		101	80 - 120

Lab Sample ID: 720-88280-J-2-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250914 — **Prep Batch: 250673**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND		1.00	0.866		mg/L		87	75 - 125
Arsenic	0.033		1.00	0.967		mg/L		93	75 - 125
Barium	0.022		1.00	0.970		mg/L		95	75 - 125
Beryllium	ND		1.00	0.962		mg/L		96	75 - 125
Cadmium	ND		1.00	0.989		mg/L		99	75 - 125
Chromium	0.0042	J	1.00	0.906		mg/L		90	75 - 125
Cobalt	0.0015	J	1.00	0.980		mg/L		98	75 - 125
Copper	0.0038	J	1.00	0.900		mg/L		90	75 - 125
Lead	ND		1.00	0.963		mg/L		96	75 - 125
Molybdenum	0.0087	J	1.00	0.932		mg/L		92	75 - 125
Nickel	0.0075	J	1.00	0.885		mg/L		88	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88280-J-2-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250914 — **Prep Batch: 250673**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Selenium	ND		1.00	0.921		mg/L		92	75 - 125		
Silver	0.0053	B	0.500	0.469		mg/L		93	75 - 125		
Thallium	ND		1.00	0.916		mg/L		92	75 - 125		
Vanadium	0.0048	J	1.00	0.925		mg/L		92	75 - 125		
Zinc	0.016	J	1.00	1.01		mg/L		99	75 - 125		

Lab Sample ID: 720-88280-J-2-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250914 — **Prep Batch: 250673**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND		1.00	0.862		mg/L		86	75 - 125	1	20
Arsenic	0.033		1.00	0.956		mg/L		92	75 - 125	1	20
Barium	0.022		1.00	0.957		mg/L		94	75 - 125	1	20
Beryllium	ND		1.00	0.947		mg/L		95	75 - 125	2	20
Cadmium	ND		1.00	0.990		mg/L		99	75 - 125	0	20
Chromium	0.0042	J	1.00	0.895		mg/L		89	75 - 125	1	20
Cobalt	0.0015	J	1.00	0.984		mg/L		98	75 - 125	0	20
Copper	0.0038	J	1.00	0.886		mg/L		88	75 - 125	2	20
Lead	ND		1.00	0.964		mg/L		96	75 - 125	0	20
Molybdenum	0.0087	J	1.00	0.925		mg/L		92	75 - 125	1	20
Nickel	0.0075	J	1.00	0.877		mg/L		87	75 - 125	1	20
Selenium	ND		1.00	0.911		mg/L		91	75 - 125	1	20
Silver	0.0053	B	0.500	0.464		mg/L		92	75 - 125	1	20
Thallium	ND		1.00	0.921		mg/L		92	75 - 125	1	20
Vanadium	0.0048	J	1.00	0.911		mg/L		91	75 - 125	2	20
Zinc	0.016	J	1.00	1.01		mg/L		100	75 - 125	0	20

Lab Sample ID: 720-88255-1 MS — **Client Sample ID: DG-A7W**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 250824 — **Prep Batch: 250603**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Antimony	ND		1.00	0.986		mg/L		99	75 - 125		
Arsenic	ND		1.00	0.985		mg/L		99	75 - 125		
Barium	0.15		1.00	1.14		mg/L		100	75 - 125		
Beryllium	0.00050	J	1.00	1.01		mg/L		101	75 - 125		
Cadmium	ND		1.00	1.16		mg/L		116	75 - 125		
Chromium	ND		1.00	0.979		mg/L		98	75 - 125		
Cobalt	0.0049		1.00	1.17		mg/L		117	75 - 125		
Copper	0.0015	J	1.00	0.971		mg/L		97	75 - 125		
Lead	ND		1.00	1.14		mg/L		114	75 - 125		
Molybdenum	0.0035	J	1.00	1.03		mg/L		102	75 - 125		
Nickel	0.0055	J	1.00	0.973		mg/L		97	75 - 125		
Selenium	ND		1.00	0.973		mg/L		97	75 - 125		
Silver	0.017		0.500	0.504		mg/L		97	75 - 125		
Thallium	ND		1.00	1.12		mg/L		112	75 - 125		
Vanadium	0.0011	J	1.00	0.957		mg/L		96	75 - 125		
Zinc	0.048	F1	1.00	1.22		mg/L		118	75 - 125		

Lab Sample ID: 720-88255-1 MSD — **Client Sample ID: DG-A7W**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 250824 — **Prep Batch: 250603**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND		1.00	0.991		mg/L		99	75 - 125	1	20
Arsenic	ND		1.00	0.992		mg/L		99	75 - 125	1	20
Barium	0.15		1.00	1.16		mg/L		101	75 - 125	1	20
Beryllium	0.00050	J	1.00	1.02		mg/L		102	75 - 125	1	20
Cadmium	ND		1.00	1.24		mg/L		124	75 - 125	6	20
Chromium	ND		1.00	0.992		mg/L		99	75 - 125	1	20
Cobalt	0.0049		1.00	1.25		mg/L		125	75 - 125	7	20
Copper	0.0015	J	1.00	0.978		mg/L		98	75 - 125	1	20
Lead	ND		1.00	1.22		mg/L		122	75 - 125	6	20
Molybdenum	0.0035	J	1.00	1.04		mg/L		103	75 - 125	1	20
Nickel	0.0055	J	1.00	0.981		mg/L		98	75 - 125	1	20
Selenium	ND		1.00	0.980		mg/L		98	75 - 125	1	20
Silver	0.017		0.500	0.509		mg/L		98	75 - 125	1	20
Thallium	ND		1.00	1.19		mg/L		119	75 - 125	6	20
Vanadium	0.0011	J	1.00	0.976		mg/L		97	75 - 125	2	20
Zinc	0.048	F1	1.00	1.30	F1	mg/L		126	75 - 125	6	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 720-250432/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250564 — **Prep Batch: 250432**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/28/18 18:59	08/29/18 20:18	1

Lab Sample ID: LCS 720-250432/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250564 — **Prep Batch: 250432**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0100	0.00944		mg/L		94	85 - 115

Lab Sample ID: MB 720-250639/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250735 — **Prep Batch: 250639**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/30/18 21:49	08/31/18 16:02	1

Lab Sample ID: LCS 720-250639/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250735 — **Prep Batch: 250639**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0100	0.00950		mg/L		95	85 - 115

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 720-88220-B-7-C MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 250564 — **Prep Batch: 250432**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	ND		0.0100	0.00959		mg/L		96	75 - 125		

Lab Sample ID: 720-88220-B-7-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 250564 — **Prep Batch: 250432**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.0100	0.00954		mg/L		95	75 - 125	1	20

Lab Sample ID: 720-88255-3 MS — **Client Sample ID: DG-E7W**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 250735 — **Prep Batch: 250639**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.00025	F1 F2	0.0100	0.00557	F1	mg/L		53	75 - 125		

Lab Sample ID: 720-88255-3 MS — **Client Sample ID: DG-E7W**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 250735 — **Prep Batch: 250639**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.00024	F1 F2	0.0100	0.00585	F1	mg/L		56	75 - 125		

Lab Sample ID: 720-88255-3 MSD — **Client Sample ID: DG-E7W**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 250735 — **Prep Batch: 250639**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00025	F1 F2	0.0100	0.00981	F2	mg/L		96	75 - 125	55	20

Lab Sample ID: 720-88255-3 MSD — **Client Sample ID: DG-E7W**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 250735 — **Prep Batch: 250639**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00024	F1 F2	0.0100	0.00992	F2	mg/L		97	75 - 125	52	20

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 720-250337/9 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250337

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.010	0.0037	mg/L			08/27/18 22:10	1

Method: 7196A - Chromium, Hexavalent (Continued)

Lab Sample ID: LCS 720-250337/10
Matrix: Water
Analysis Batch: 250337

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cr (VI)			0.250	0.250		mg/L		100	90 - 110		

Lab Sample ID: 720-88255-1 MS
Matrix: Water
Analysis Batch: 250337

Client Sample ID: DG-A7W
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cr (VI)	ND	H	0.250	0.255		mg/L		102	85 - 115		

Lab Sample ID: 720-88255-1 MSD
Matrix: Water
Analysis Batch: 250337

Client Sample ID: DG-A7W
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cr (VI)	ND	H	0.250	0.256		mg/L		102	85 - 115	0	20

QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88255-1

GC/MS VOA

Analysis Batch: 250641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88255-2	DG-C7W	Total/NA	Water	8260B	
720-88255-3	DG-E7W	Total/NA	Water	8260B	
720-88255-4	DG-G7W	Total/NA	Water	8260B	
720-88255-5	DG-I7W	Total/NA	Water	8260B	
MB 720-250641/4	Method Blank	Total/NA	Water	8260B	
LCS 720-250641/5	Lab Control Sample	Total/NA	Water	8260B	
LCS 720-250641/7	Lab Control Sample	Total/NA	Water	8260B	
LCSD 720-250641/6	Lab Control Sample Dup	Total/NA	Water	8260B	
LCSD 720-250641/8	Lab Control Sample Dup	Total/NA	Water	8260B	
720-88209-A-1 MS	Matrix Spike	Total/NA	Water	8260B	
720-88209-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 250643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88255-6	DG-M7W	Total/NA	Water	8260B	
720-88255-7	DG-F9W	Total/NA	Water	8260B	
720-88255-8	DG-DE89W	Total/NA	Water	8260B	
720-88255-9	DG-D9W	Total/NA	Water	8260B	
720-88255-10	DG-B9W	Total/NA	Water	8260B	
720-88255-11	TB-4	Total/NA	Water	8260B	
720-88255-12	FB-4	Total/NA	Water	8260B	
MB 720-250643/4	Method Blank	Total/NA	Water	8260B	
LCS 720-250643/5	Lab Control Sample	Total/NA	Water	8260B	
LCS 720-250643/7	Lab Control Sample	Total/NA	Water	8260B	
LCSD 720-250643/6	Lab Control Sample Dup	Total/NA	Water	8260B	
LCSD 720-250643/8	Lab Control Sample Dup	Total/NA	Water	8260B	
720-88100-B-3 MS	Matrix Spike	Total/NA	Water	8260B	
720-88100-B-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 250725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88255-1	DG-A7W	Total/NA	Water	8260B	
720-88255-13	DUP-14	Total/NA	Water	8260B	
MB 720-250725/4	Method Blank	Total/NA	Water	8260B	
LCS 720-250725/5	Lab Control Sample	Total/NA	Water	8260B	
LCS 720-250725/7	Lab Control Sample	Total/NA	Water	8260B	
LCSD 720-250725/6	Lab Control Sample Dup	Total/NA	Water	8260B	
LCSD 720-250725/8	Lab Control Sample Dup	Total/NA	Water	8260B	
720-88353-A-2 MS	Matrix Spike	Total/NA	Water	8260B	
720-88353-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 250832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88255-1	DG-A7W	Total/NA	Water	8260B	
720-88255-4	DG-G7W	Total/NA	Water	8260B	
720-88255-5	DG-I7W	Total/NA	Water	8260B	
720-88255-13	DUP-14	Total/NA	Water	8260B	
MB 720-250832/4	Method Blank	Total/NA	Water	8260B	
LCS 720-250832/5	Lab Control Sample	Total/NA	Water	8260B	
LCS 720-250832/7	Lab Control Sample	Total/NA	Water	8260B	
LCSD 720-250832/6	Lab Control Sample Dup	Total/NA	Water	8260B	

GC/MS VOA (Continued)

Analysis Batch: 250832 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 720-250832/8	Lab Control Sample Dup	Total/NA	Water	8260B	
720-88312-A-1 MS	Matrix Spike	Total/NA	Water	8260B	
720-88312-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 496565

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88255-1	DG-A7W	Total/NA	Water	8260B SIM	
720-88255-2	DG-C7W	Total/NA	Water	8260B SIM	
720-88255-3	DG-E7W	Total/NA	Water	8260B SIM	
720-88255-4	DG-G7W	Total/NA	Water	8260B SIM	
720-88255-5	DG-I7W	Total/NA	Water	8260B SIM	
720-88255-6	DG-M7W	Total/NA	Water	8260B SIM	
720-88255-7	DG-F9W	Total/NA	Water	8260B SIM	
MB 440-496565/3	Method Blank	Total/NA	Water	8260B SIM	
LCS 440-496565/4	Lab Control Sample	Total/NA	Water	8260B SIM	
720-88220-A-7 MS	Matrix Spike	Total/NA	Water	8260B SIM	
720-88220-A-7 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B SIM	

Analysis Batch: 496818

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88255-8	DG-DE89W	Total/NA	Water	8260B SIM	
720-88255-9	DG-D9W	Total/NA	Water	8260B SIM	
720-88255-10	DG-B9W	Total/NA	Water	8260B SIM	
720-88255-11	TB-4	Total/NA	Water	8260B SIM	
720-88255-12	FB-4	Total/NA	Water	8260B SIM	
720-88255-13	DUP-14	Total/NA	Water	8260B SIM	
MB 440-496818/3	Method Blank	Total/NA	Water	8260B SIM	
LCS 440-496818/4	Lab Control Sample	Total/NA	Water	8260B SIM	
720-88255-8 MS	DG-DE89W	Total/NA	Water	8260B SIM	
720-88255-8 MSD	DG-DE89W	Total/NA	Water	8260B SIM	

GC Semi VOA

Analysis Batch: 250355

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88255-1	DG-A7W	Total/NA	Water	8015B	250415
720-88255-2	DG-C7W	Total/NA	Water	8015B	250415
720-88255-3	DG-E7W	Total/NA	Water	8015B	250415
720-88255-4	DG-G7W	Total/NA	Water	8015B	250415
720-88255-5	DG-I7W	Total/NA	Water	8015B	250415
720-88255-6	DG-M7W	Total/NA	Water	8015B	250415
720-88255-7	DG-F9W	Total/NA	Water	8015B	250415
720-88255-8	DG-DE89W	Total/NA	Water	8015B	250415
720-88255-9	DG-D9W	Total/NA	Water	8015B	250415
720-88255-10	DG-B9W	Total/NA	Water	8015B	250415
720-88255-13	DUP-14	Total/NA	Water	8015B	250415
MB 720-250415/1-A	Method Blank	Total/NA	Water	8015B	250415
LCS 720-250415/2-A	Lab Control Sample	Total/NA	Water	8015B	250415
LCSD 720-250415/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	250415

GC Semi VOA (Continued)

Prep Batch: 250415

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88255-1	DG-A7W	Total/NA	Water	3510C	
720-88255-2	DG-C7W	Total/NA	Water	3510C	
720-88255-3	DG-E7W	Total/NA	Water	3510C	
720-88255-4	DG-G7W	Total/NA	Water	3510C	
720-88255-5	DG-I7W	Total/NA	Water	3510C	
720-88255-6	DG-M7W	Total/NA	Water	3510C	
720-88255-7	DG-F9W	Total/NA	Water	3510C	
720-88255-8	DG-DE89W	Total/NA	Water	3510C	
720-88255-9	DG-D9W	Total/NA	Water	3510C	
720-88255-10	DG-B9W	Total/NA	Water	3510C	
720-88255-13	DUP-14	Total/NA	Water	3510C	
MB 720-250415/1-A	Method Blank	Total/NA	Water	3510C	
LCS 720-250415/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 720-250415/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Metals

Prep Batch: 250432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88255-1	DG-A7W	Dissolved	Water	7470A	
720-88255-2	DG-C7W	Dissolved	Water	7470A	
MB 720-250432/1-A	Method Blank	Total/NA	Water	7470A	
LCS 720-250432/2-A	Lab Control Sample	Total/NA	Water	7470A	
720-88220-B-7-C MS	Matrix Spike	Dissolved	Water	7470A	
720-88220-B-7-D MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	

Analysis Batch: 250564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88255-1	DG-A7W	Dissolved	Water	7470A	250432
720-88255-2	DG-C7W	Dissolved	Water	7470A	250432
MB 720-250432/1-A	Method Blank	Total/NA	Water	7470A	250432
LCS 720-250432/2-A	Lab Control Sample	Total/NA	Water	7470A	250432
720-88220-B-7-C MS	Matrix Spike	Dissolved	Water	7470A	250432
720-88220-B-7-D MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	250432

Prep Batch: 250603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88255-1	DG-A7W	Dissolved	Water	3010A	
720-88255-2	DG-C7W	Dissolved	Water	3010A	
720-88255-3	DG-E7W	Dissolved	Water	3010A	
720-88255-4	DG-G7W	Dissolved	Water	3010A	
720-88255-5	DG-I7W	Dissolved	Water	3010A	
720-88255-6	DG-M7W	Dissolved	Water	3010A	
720-88255-7	DG-F9W	Dissolved	Water	3010A	
720-88255-8	DG-DE89W	Dissolved	Water	3010A	
720-88255-9	DG-D9W	Dissolved	Water	3010A	
720-88255-10	DG-B9W	Dissolved	Water	3010A	
MB 720-250603/1-A	Method Blank	Total/NA	Water	3010A	
LCS 720-250603/2-A	Lab Control Sample	Total/NA	Water	3010A	
720-88255-1 MS	DG-A7W	Dissolved	Water	3010A	

Metals (Continued)

Prep Batch: 250603 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88255-1 MSD	DG-A7W	Dissolved	Water	3010A	

Prep Batch: 250639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88255-3	DG-E7W	Dissolved	Water	7470A	
720-88255-4	DG-G7W	Dissolved	Water	7470A	
720-88255-5	DG-I7W	Dissolved	Water	7470A	
720-88255-6	DG-M7W	Dissolved	Water	7470A	
720-88255-7	DG-F9W	Dissolved	Water	7470A	
720-88255-8	DG-DE89W	Dissolved	Water	7470A	
720-88255-9	DG-D9W	Dissolved	Water	7470A	
720-88255-10	DG-B9W	Dissolved	Water	7470A	
720-88255-13	DUP-14	Dissolved	Water	7470A	
MB 720-250639/1-A	Method Blank	Total/NA	Water	7470A	
LCS 720-250639/2-A	Lab Control Sample	Total/NA	Water	7470A	
720-88255-3 MS	DG-E7W	Dissolved	Water	7470A	
720-88255-3 MSD	DG-E7W	Dissolved	Water	7470A	

Prep Batch: 250673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88255-13	DUP-14	Dissolved	Water	3010A	
MB 720-250673/1-A	Method Blank	Total/NA	Water	3010A	
LCS 720-250673/2-A	Lab Control Sample	Total/NA	Water	3010A	
720-88280-J-2-B MS	Matrix Spike	Total/NA	Water	3010A	
720-88280-J-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	

Analysis Batch: 250735

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88255-3	DG-E7W	Dissolved	Water	7470A	250639
720-88255-3	DG-E7W	Dissolved	Water	7470A	250639
720-88255-4	DG-G7W	Dissolved	Water	7470A	250639
720-88255-5	DG-I7W	Dissolved	Water	7470A	250639
720-88255-6	DG-M7W	Dissolved	Water	7470A	250639
720-88255-7	DG-F9W	Dissolved	Water	7470A	250639
720-88255-8	DG-DE89W	Dissolved	Water	7470A	250639
720-88255-9	DG-D9W	Dissolved	Water	7470A	250639
720-88255-10	DG-B9W	Dissolved	Water	7470A	250639
720-88255-13	DUP-14	Dissolved	Water	7470A	250639
MB 720-250639/1-A	Method Blank	Total/NA	Water	7470A	250639
LCS 720-250639/2-A	Lab Control Sample	Total/NA	Water	7470A	250639
720-88255-3 MS	DG-E7W	Dissolved	Water	7470A	250639
720-88255-3 MS	DG-E7W	Dissolved	Water	7470A	250639
720-88255-3 MSD	DG-E7W	Dissolved	Water	7470A	250639
720-88255-3 MSD	DG-E7W	Dissolved	Water	7470A	250639

Analysis Batch: 250824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88255-1	DG-A7W	Dissolved	Water	6010B	250603
720-88255-2	DG-C7W	Dissolved	Water	6010B	250603
720-88255-3	DG-E7W	Dissolved	Water	6010B	250603
720-88255-4	DG-G7W	Dissolved	Water	6010B	250603

Metals (Continued)

Analysis Batch: 250824 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88255-5	DG-I7W	Dissolved	Water	6010B	250603
720-88255-6	DG-M7W	Dissolved	Water	6010B	250603
720-88255-7	DG-F9W	Dissolved	Water	6010B	250603
720-88255-8	DG-DE89W	Dissolved	Water	6010B	250603
720-88255-9	DG-D9W	Dissolved	Water	6010B	250603
720-88255-10	DG-B9W	Dissolved	Water	6010B	250603
720-88255-1 MS	DG-A7W	Dissolved	Water	6010B	250603
720-88255-1 MSD	DG-A7W	Dissolved	Water	6010B	250603

Analysis Batch: 250849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250603/1-A	Method Blank	Total/NA	Water	6010B	250603
LCS 720-250603/2-A	Lab Control Sample	Total/NA	Water	6010B	250603

Analysis Batch: 250862

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88255-10	DG-B9W	Dissolved	Water	6010B	250603

Analysis Batch: 250914

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250673/1-A	Method Blank	Total/NA	Water	6010B	250673
LCS 720-250673/2-A	Lab Control Sample	Total/NA	Water	6010B	250673
720-88280-J-2-B MS	Matrix Spike	Total/NA	Water	6010B	250673
720-88280-J-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	6010B	250673

Analysis Batch: 250922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88255-13	DUP-14	Dissolved	Water	6010B	250673

Analysis Batch: 250936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88255-4	DG-G7W	Dissolved	Water	6010B	250603

General Chemistry

Analysis Batch: 250337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88255-1	DG-A7W	Total/NA	Water	7196A	
720-88255-2	DG-C7W	Total/NA	Water	7196A	
720-88255-3	DG-E7W	Total/NA	Water	7196A	
720-88255-4	DG-G7W	Total/NA	Water	7196A	
720-88255-5	DG-I7W	Total/NA	Water	7196A	
720-88255-6	DG-M7W	Total/NA	Water	7196A	
720-88255-7	DG-F9W	Total/NA	Water	7196A	
720-88255-8	DG-DE89W	Total/NA	Water	7196A	
720-88255-9	DG-D9W	Total/NA	Water	7196A	
720-88255-10	DG-B9W	Total/NA	Water	7196A	
720-88255-13	DUP-14	Total/NA	Water	7196A	
MB 720-250337/9	Method Blank	Total/NA	Water	7196A	
LCS 720-250337/10	Lab Control Sample	Total/NA	Water	7196A	

General Chemistry (Continued)

Analysis Batch: 250337 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 720-250337/11	Lab Control Sample Dup	Total/NA	Water	7196A	
720-88255-1 MS	DG-A7W	Total/NA	Water	7196A	
720-88255-1 MSD	DG-A7W	Total/NA	Water	7196A	

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88255-1

Client Sample ID: DG-A7W — Lab Sample ID: 720-88255-1

Date Collected: 08/24/18 14:05
Date Received: 08/27/18 14:25
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250725	09/01/18 00:50	AP1	TAL PLS
Total/NA	Analysis	8260B		10	250832	09/05/18 00:52	JRM	TAL PLS
Total/NA	Analysis	8260B SIM		1	496565	08/30/18 22:09	GK	TAL IRV
Total/NA	Prep	3510C			250415	08/28/18 15:43	BRR	TAL PLS
Total/NA	Analysis	8015B		1	250355	08/28/18 23:09	JXL	TAL PLS
Dissolved	Prep	3010A			250603	08/30/18 14:05	GLL	TAL PLS
Dissolved	Analysis	6010B		1	250824	09/04/18 10:18	OBI	TAL PLS
Dissolved	Prep	7470A			250432	08/28/18 18:59	OBI	TAL PLS
Dissolved	Analysis	7470A		1	250564	08/29/18 21:04	OBI	TAL PLS
Total/NA	Analysis	7196A		1	250337	08/27/18 22:10	ECB	TAL PLS

Client Sample ID: DG-C7W — Lab Sample ID: 720-88255-2

Date Collected: 08/24/18 14:15
Date Received: 08/27/18 14:25
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250641	08/31/18 14:45	AJS	TAL PLS
Total/NA	Analysis	8260B SIM		1	496565	08/30/18 23:02	GK	TAL IRV
Total/NA	Prep	3510C			250415	08/28/18 15:43	BRR	TAL PLS
Total/NA	Analysis	8015B		1	250355	08/28/18 20:19	JXL	TAL PLS
Dissolved	Prep	3010A			250603	08/30/18 14:05	GLL	TAL PLS
Dissolved	Analysis	6010B		1	250824	09/04/18 10:23	OBI	TAL PLS
Dissolved	Prep	7470A			250432	08/28/18 18:59	OBI	TAL PLS
Dissolved	Analysis	7470A		1	250564	08/29/18 21:06	OBI	TAL PLS
Total/NA	Analysis	7196A		1	250337	08/27/18 22:10	ECB	TAL PLS

Client Sample ID: DG-E7W — Lab Sample ID: 720-88255-3

Date Collected: 08/24/18 14:50
Date Received: 08/27/18 14:25
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250641	08/31/18 15:14	AJS	TAL PLS
Total/NA	Analysis	8260B SIM		1	496565	08/30/18 23:28	GK	TAL IRV
Total/NA	Prep	3510C			250415	08/28/18 15:43	BRR	TAL PLS
Total/NA	Analysis	8015B		1	250355	08/28/18 20:43	JXL	TAL PLS
Dissolved	Prep	3010A			250603	08/30/18 14:05	GLL	TAL PLS
Dissolved	Analysis	6010B		1	250824	09/04/18 10:27	OBI	TAL PLS
Dissolved	Prep	7470A			250639	08/30/18 21:49	MAG	TAL PLS
Dissolved	Analysis	7470A		1	250735	08/31/18 16:31	MAG	TAL PLS
Dissolved	Prep	7470A			250639	08/30/18 21:49	MAG	TAL PLS
Dissolved	Analysis	7470A		1	250735	08/31/18 17:17	MAG	TAL PLS
Total/NA	Analysis	7196A		1	250337	08/27/18 22:10	ECB	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88255-1

Client Sample ID: DG-G7W — Lab Sample ID: 720-88255-4

Date Collected: 08/24/18 15:05 — **Matrix: Water**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250832	09/04/18 23:21	JRM	TAL PLS
Total/NA	Analysis	8260B		1	250641	08/31/18 15:42	AJS	TAL PLS
Total/NA	Analysis	8260B SIM		1	496565	08/30/18 23:54	GK	TAL IRV
Total/NA	Prep	3510C			250415	08/28/18 15:43	BRR	TAL PLS
Total/NA	Analysis	8015B		1	250355	08/28/18 21:08	JXL	TAL PLS
Dissolved	Prep	3010A			250603	08/30/18 14:05	GLL	TAL PLS
Dissolved	Analysis	6010B		1	250824	09/04/18 10:32	OBI	TAL PLS
Dissolved	Prep	3010A			250603	08/30/18 14:05	GLL	TAL PLS
Dissolved	Analysis	6010B		10	250936	09/05/18 12:40	OBI	TAL PLS
Dissolved	Prep	7470A			250639	08/30/18 21:49	MAG	TAL PLS
Dissolved	Analysis	7470A		1	250735	08/31/18 16:33	MAG	TAL PLS
Total/NA	Analysis	7196A		1	250337	08/27/18 22:10	ECB	TAL PLS

Client Sample ID: DG-I7W — Lab Sample ID: 720-88255-5

Date Collected: 08/24/18 15:30 — **Matrix: Water**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250832	09/04/18 23:51	JRM	TAL PLS
Total/NA	Analysis	8260B		1	250641	08/31/18 16:11	AJS	TAL PLS
Total/NA	Analysis	8260B SIM		1	496565	08/31/18 00:21	GK	TAL IRV
Total/NA	Prep	3510C			250415	08/28/18 15:43	BRR	TAL PLS
Total/NA	Analysis	8015B		1	250355	08/28/18 21:32	JXL	TAL PLS
Dissolved	Prep	3010A			250603	08/30/18 14:05	GLL	TAL PLS
Dissolved	Analysis	6010B		1	250824	09/04/18 10:58	OBI	TAL PLS
Dissolved	Prep	7470A			250639	08/30/18 21:49	MAG	TAL PLS
Dissolved	Analysis	7470A		1	250735	08/31/18 16:35	MAG	TAL PLS
Total/NA	Analysis	7196A		1	250337	08/27/18 22:10	ECB	TAL PLS

Client Sample ID: DG-M7W — Lab Sample ID: 720-88255-6

Date Collected: 08/24/18 15:30 — **Matrix: Water**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250643	08/31/18 14:17	AJS	TAL PLS
Total/NA	Analysis	8260B SIM		1	496565	08/31/18 00:47	GK	TAL IRV
Total/NA	Prep	3510C			250415	08/28/18 15:43	BRR	TAL PLS
Total/NA	Analysis	8015B		1	250355	08/28/18 23:34	JXL	TAL PLS
Dissolved	Prep	3010A			250603	08/30/18 14:05	GLL	TAL PLS
Dissolved	Analysis	6010B		1	250824	09/04/18 11:03	OBI	TAL PLS
Dissolved	Prep	7470A			250639	08/30/18 21:49	MAG	TAL PLS
Dissolved	Analysis	7470A		1	250735	08/31/18 16:38	MAG	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88255-1

Client Sample ID: DG-M7W — Lab Sample ID: 720-88255-6

Date Collected: 08/24/18 15:30
Date Received: 08/27/18 14:25
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1	250337	08/27/18 22:15	ECB	TAL PLS

Client Sample ID: DG-F9W — Lab Sample ID: 720-88255-7

Date Collected: 08/24/18 16:10
Date Received: 08/27/18 14:25
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250643	08/31/18 14:47	AJS	TAL PLS
Total/NA	Analysis	8260B SIM		1	496565	08/31/18 01:13	GK	TAL IRV
Total/NA	Prep	3510C			250415	08/28/18 15:43	BRR	TAL PLS
Total/NA	Analysis	8015B		1	250355	08/28/18 21:56	JXL	TAL PLS
Dissolved	Prep	3010A			250603	08/30/18 14:05	GLL	TAL PLS
Dissolved	Analysis	6010B		1	250824	09/04/18 11:08	OBI	TAL PLS
Dissolved	Prep	7470A			250639	08/30/18 21:49	MAG	TAL PLS
Dissolved	Analysis	7470A		1	250735	08/31/18 16:40	MAG	TAL PLS
Total/NA	Analysis	7196A		1	250337	08/27/18 22:15	ECB	TAL PLS

Client Sample ID: DG-DE89W — Lab Sample ID: 720-88255-8

Date Collected: 08/24/18 16:20
Date Received: 08/27/18 14:25
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250643	08/31/18 15:17	AJS	TAL PLS
Total/NA	Analysis	8260B SIM		1	496818	08/31/18 15:25	GK	TAL IRV
Total/NA	Prep	3510C			250415	08/28/18 15:43	BRR	TAL PLS
Total/NA	Analysis	8015B		1	250355	08/28/18 22:21	JXL	TAL PLS
Dissolved	Prep	3010A			250603	08/30/18 14:05	GLL	TAL PLS
Dissolved	Analysis	6010B		1	250824	09/04/18 11:13	OBI	TAL PLS
Dissolved	Prep	7470A			250639	08/30/18 21:49	MAG	TAL PLS
Dissolved	Analysis	7470A		1	250735	08/31/18 16:42	MAG	TAL PLS
Total/NA	Analysis	7196A		1	250337	08/27/18 22:15	ECB	TAL PLS

Client Sample ID: DG-D9W — Lab Sample ID: 720-88255-9

Date Collected: 08/24/18 16:40
Date Received: 08/27/18 14:25
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250643	08/31/18 15:47	AJS	TAL PLS
Total/NA	Analysis	8260B SIM		1	496818	08/31/18 16:44	GK	TAL IRV
Total/NA	Prep	3510C			250415	08/28/18 15:43	BRR	TAL PLS
Total/NA	Analysis	8015B		1	250355	08/28/18 22:45	JXL	TAL PLS
Dissolved	Prep	3010A			250603	08/30/18 14:05	GLL	TAL PLS

Client Sample ID: DG-D9W — Lab Sample ID: 720-88255-9

Date Collected: 08/24/18 16:40 — **Matrix: Water**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6010B		1	250824	09/04/18 11:18	OBI	TAL PLS
Dissolved	Prep	7470A			250639	08/30/18 21:49	MAG	TAL PLS
Dissolved	Analysis	7470A		1	250735	08/31/18 16:44	MAG	TAL PLS
Total/NA	Analysis	7196A		1	250337	08/27/18 22:15	ECB	TAL PLS

Client Sample ID: DG-B9W — Lab Sample ID: 720-88255-10

Date Collected: 08/24/18 16:55 — **Matrix: Water**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250643	08/31/18 16:17	AJS	TAL PLS
Total/NA	Analysis	8260B SIM		1	496818	08/31/18 17:10	GK	TAL IRV
Total/NA	Prep	3510C			250415	08/28/18 15:43	BRR	TAL PLS
Total/NA	Analysis	8015B		1	250355	08/28/18 23:58	JXL	TAL PLS
Dissolved	Prep	3010A			250603	08/30/18 14:05	GLL	TAL PLS
Dissolved	Analysis	6010B		1	250824	09/04/18 11:23	OBI	TAL PLS
Dissolved	Prep	3010A			250603	08/30/18 14:05	GLL	TAL PLS
Dissolved	Analysis	6010B		10	250862	09/04/18 19:14	OBI	TAL PLS
Dissolved	Prep	7470A			250639	08/30/18 21:49	MAG	TAL PLS
Dissolved	Analysis	7470A		1	250735	08/31/18 16:47	MAG	TAL PLS
Total/NA	Analysis	7196A		1	250337	08/27/18 22:15	ECB	TAL PLS

Client Sample ID: TB-4 — Lab Sample ID: 720-88255-11

Date Collected: 08/24/18 00:00 — **Matrix: Water**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250643	08/31/18 16:47	AJS	TAL PLS
Total/NA	Analysis	8260B SIM		1	496818	08/31/18 20:13	GK	TAL IRV

Client Sample ID: FB-4 — Lab Sample ID: 720-88255-12

Date Collected: 08/24/18 00:00 — **Matrix: Water**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250643	08/31/18 17:17	AJS	TAL PLS
Total/NA	Analysis	8260B SIM		1	496818	08/31/18 17:36	GK	TAL IRV

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88255-1

Client Sample ID: DUP-14

Date Collected: 08/24/18 00:00
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88255-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250725	09/01/18 00:21	AP1	TAL PLS
Total/NA	Analysis	8260B		1	250832	09/05/18 00:22	JRM	TAL PLS
Total/NA	Analysis	8260B SIM		1	496818	08/31/18 18:03	GK	TAL IRV
Total/NA	Prep	3510C			250415	08/28/18 15:43	BRR	TAL PLS
Total/NA	Analysis	8015B		1	250355	08/29/18 00:22	JXL	TAL PLS
Dissolved	Prep	3010A			250673	08/31/18 09:52	GLL	TAL PLS
Dissolved	Analysis	6010B		1	250922	09/05/18 12:19	OBI	TAL PLS
Dissolved	Prep	7470A			250639	08/30/18 21:49	MAG	TAL PLS
Dissolved	Analysis	7470A		1	250735	08/31/18 16:49	MAG	TAL PLS
Total/NA	Analysis	7196A		1	250337	08/27/18 22:15	ECB	TAL PLS

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88255-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20

Analysis Method	Prep Method	Matrix	Analyte

Laboratory: TestAmerica Irvine

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	CA ELAP 2706	06-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260B SIM		Water	1,2,3-Trichloropropane

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88255-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PLS
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
6010B	Metals (ICP)	SW846	TAL PLS
7470A	Mercury (CVAA)	SW846	TAL PLS
7196A	Chromium, Hexavalent	SW846	TAL PLS
3010A	Preparation, Total Metals	SW846	TAL PLS
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL PLS
5030B	Purge and Trap	SW846	TAL IRV
5030B	Purge and Trap	SW846	TAL PLS
7470A	Preparation, Mercury	SW846	TAL PLS

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88255-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-88255-1	DG-A7W	Water	08/24/18 14:05	08/27/18 14:25
720-88255-2	DG-C7W	Water	08/24/18 14:15	08/27/18 14:25
720-88255-3	DG-E7W	Water	08/24/18 14:50	08/27/18 14:25
720-88255-4	DG-G7W	Water	08/24/18 15:05	08/27/18 14:25
720-88255-5	DG-I7W	Water	08/24/18 15:30	08/27/18 14:25
720-88255-6	DG-M7W	Water	08/24/18 15:30	08/27/18 14:25
720-88255-7	DG-F9W	Water	08/24/18 16:10	08/27/18 14:25
720-88255-8	DG-DE89W	Water	08/24/18 16:20	08/27/18 14:25
720-88255-9	DG-D9W	Water	08/24/18 16:40	08/27/18 14:25
720-88255-10	DG-B9W	Water	08/24/18 16:55	08/27/18 14:25
720-88255-11	TB-4	Water	08/24/18 00:00	08/27/18 14:25
720-88255-12	FB-4	Water	08/24/18 00:00	08/27/18 14:25
720-88255-13	DUP-14	Water	08/24/18 00:00	08/27/18 14:25

Test/ THE LEADER IN

720-88255 Chain of Custody

TESTAMERICA Pleasanton Chain of Custody

1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3360

720-88255 Rev. 8-27-18

Reference #: 185130

Date 8/24 Page 1 of 2

9/7/2018

Report To

Attn: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: mkahrilas@geosyntec.com

To: GEOSYNTEC
Sampled By: M. KAHRILAS
Attn: A SMITH
Phone: 847-530-7602

Analysis Request

Sample ID	Date	Time	Matrix	Preserv.	Volatile Organics GC/MS (VOCs) ☒ EPA 8260B + 1,4-Dioxane	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☐ Motor Oil ☐ Other	Semi-Volatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☐ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☐ EPA 8081 PCBs ☐ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Metals: ☐ 6020 ☐ 200.8 (ICP-MS):	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☒ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	1,2,3-TCP (8260 SIM)	
DG-A7W	8/24	1405	GW	V	X			X					X				X						X	
DG-C7W	↓	1415	↓	↓	X			X					X				X						X	
DG-E7W		1450			X			X					X				X						X	
DG-G7W		1505			X			X					X				X						X	
DG-T7W		1530			X			X					X				X						X	
DG-M7W		1530			X			X					X				X						X	
DG-F9W		1610			X			X					X				X						X	
DG-DE89W		1620			X			X					X				X						X	
DG-D9W		1640			X			X					X				X						X	
DG-B9W	↓	1655	↓	↓	X			X					X				X						X	

Project Info.

Project Name/#: PC OU-SM
WG2565/02
Credit Card #:

Sample Receipt

# of Containers:
Head Space:
Temp:

If yes, please call with payment information ASAP

10 Day | (5 Day) | 4 Day | 3 Day | 2 Day | 1 Day | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID _____

3.0°C

Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [signature] Time: 1920	Signature: [signature] Time: 1300	Signature: [signature] Time: 1425
Printed Name: MIRANDA KAHRILAS Date: 8/24	Printed Name: Rosemine K. Thomas Date: 8/27	Printed Name: Robert Date: 8/27/18
Company: GEOSYNTEC	Company: Geosyntec	Company: TA

1) Received by:	2) Received by:	3) Received by:
Signature: [signature] Time: 1100	Signature: [signature] Time: 1300	Signature: [signature] Time: 1425
Printed Name: Rosemine K. Thomas Date: 8/27	Printed Name: Robert Date: 8/27/18	Printed Name: Mullen Date: 8-27-18
Company: Geosyntec	Company: TA	Company: TA720

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-1756
Phone: (925) 484-1919 • (925) 600-5160

Reference #: _____

Date 8/24 Page 2 of 2

Report To

Attn: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: mkahrilas@geosyntec.com
To: GEOSYNTEC
Sampled By: M. KAHRILAS
Attn: A SMITH
Phone: 917-530-7602

Analysis Request

Sample ID	Date	Time	Matrix	Preserv.	Volatile Organics GC/MS (VOCs) ☒ EPA 8260B ☐ CLP	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☐ Motor Oil ☐ Other	Semi-Volatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☐ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☐ EPA 8081 PCBs ☐ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Metals: ☐ 6020 ☐ 200.8 (ICP-MS):	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☒ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	1,2,3-TCP (624.2 SIM)	
TB-4	8/24	—	GW	Y	X																		X	
FB-4	↓	—	↓	↓	X																		X	
DUP-14	↓	—	↓	↓	X			X					X				X						X	

Project Info.
Project Name/ #: JPC OU-SM
#: WG2565/02
Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt
# of Containers:
Head Space:
Temp:

10 Day	5 Day	4 Day	3 Day	2 Day	1 Day	Other:
	(5)					

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID _____

Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [signature] Time: 1920	Signature: [signature] Time: ~~1700~~ 1300	Signature: [signature] Time: 1425
Printed Name: MIRANDA KAHRILAS Date: 8/24	Printed Name: Rosemarie K. Thomas Date: 8/27	Printed Name: Robert Date: 8/27/18
Company: GEOSYNTEC	Company: GEOSYNTEC	Company: TA

1) Received by:	2) Received by:	3) Received by:
Signature: [signature] Time: 1100	Signature: [signature] Time: 1300	Signature: Time:
Printed Name: Rosemarie K. Thomas Date: 8/27	Printed Name: Robert Date: 8/27/18	Printed Name: Date:
Company: GEOSYNTEC	Company: TA	Company:

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler	Lab PM: Smith, Micah	Carrier Tracking No(s)	COC No: 720-39439.1
Client Contact: Shipping/Receiving	Phone	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): State Program - California		Job #: 720-88255-1
Address: 17461 Derian Ave, Suite 100,	Due Date Requested: 8/31/2018			
City: Irvine	TAT Requested (days):			
State, Zip: CA, 92614-5817				
Phone: 949-261-1022(Tel) 949-260-3297(Fax)	PO #			
Email	WO #			
Project Name: Brisbane Data Gap Invest Work Plan	Project #: 72013717			
Site	SSOW#			

Analysis Requested

Geostitec

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_SIM	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-A7W (720-88255-1)	8/24/18	14:05 Pacific		Water			X	3	
DG-C7W (720-88255-2)	8/24/18	14:15 Pacific		Water			X	3	
DG-E7W (720-88255-3)	8/24/18	14:50 Pacific		Water			X	3	
DG-G7W (720-88255-4)	8/24/18	15:05 Pacific		Water			X	3	
DG-I7W (720-88255-5)	8/24/18	15:30 Pacific		Water			X	3	
DG-M7W (720-88255-6)	8/24/18	15:30 Pacific		Water			X	3	
DG-F9W (720-88255-7)	8/24/18	16:10 Pacific		Water			X	3	
DG-DE89W (720-88255-8)	8/24/18	16:20 Pacific		Water			X	3	
DG-D9W (720-88255-9)	8/24/18	16:40 Pacific		Water			X	3	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment		
Relinquished by: [signature]	Date/Time: 8/28/18 14:14	Company: TA720	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by: Teresa Cruz	Date/Time: 8/29/18 708	Company: TAPN

Custody Seals Intact: ☒ Yes ☐ No	Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 9.6 IR-SC6 4471 9852 5763 2.4/2.7	

Ver: 09/20/2016

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler	Lab PM: Smith, Micah	Carrier Tracking No(s)	COC No: 720-39439.2
Client Contact: Shipping/Receiving	Phone	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): State Program - California		Job #: 720-88255-1
Address: 17461 Derian Ave, Suite 100,	Due Date Requested: 8/31/2018			
City: Irvine	TAT Requested (days):			
State, Zip: CA, 92614-5817				
Phone: 949-261-1022(Tel) 949-260-3297(Fax)	PO #			
Email	WO #			
Project Name: Brisbane Data Gap Invest Work Plan	Project #: 72013717			
Site	SSOW#			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_SIM	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-B9W (720-88255-10)	8/24/18	16:55 Pacific		Water			X	3	
TB-4 (720-88255-11)	8/24/18	Pacific		Water			X	2	
FB-4 (720-88255-12)	8/24/18	Pacific		Water			X	3	
DUP-14 (720-88255-13)	8/24/18	Pacific		Water			X	3	

Note Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

Empty Kit Relinquished by	Date:	Time.	Method of Shipment

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	8/28/18 14:14	TA			
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
			Teresa Cruz	8/29/18 708	TA IRV

Custody Seals Intact: ☑ Yes ☐ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 9.0 IR-306 4471 9852 5763
2.4/2.7

Ver: 09/20/2016

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler	Lab PM: Smith, Micah	Carrier Tracking No(s)	COC No: 720-39451.1
Client Contact: Shipping/Receiving	Phone	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): State Program - California		Job #: 720-88255-1
Address: 17461 Derian Ave, Suite 100,	Due Date Requested: 8/31/2018			
City: Irvine	TAT Requested (days):			
State, Zip: CA, 92614-5817				
Phone: 949-261-1022(Tel) 949-260-3297(Fax)	PO #			
Email:	WO #			
Project Name: Brisbane Data Gap Invest Work Plan	Project #: 72013717			
Site:	SSOW#:			

closed

Analysis Requested

1 HCL VOAs per sample in case lab needs it.

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_SIM	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-A7W (720-88255-1)	8/24/18	14 05 Pacific		Water			X	1	
DG-C7W (720-88255-2)	8/24/18	14:15 Pacific		Water			X	1	
DG-E7W (720-88255-3)	8/24/18	14:50 Pacific		Water			X	1	
DG-G7W (720-88255-4)	8/24/18	15:05 Pacific		Water			X	1	
DG-I7W (720-88255-5)	8/24/18	15:30 Pacific		Water			X	1	
DG-M7W (720-88255-6)	8/24/18	15:30 Pacific		Water			X	1	
DG-F9W (720-88255-7)	8/24/18	16:10 Pacific		Water			X	1	
DG-DE89W (720-88255-8)	8/24/18	16 20 Pacific		Water			X	1	
DG-D9W (720-88255-9)	8/24/18	16:40 Pacific		Water			X	1	

Note Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by	Date:	Time:	Method of Shipment		
Relinquished by	Date/Time: 8/28/18 14:14	Company: TA PZ	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by: Jim Chu	Date/Time: 8/29/18 708	Company: TA IPU
Custody Seals Intact: ☑ Yes ☐ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: .9.6 24/2.7 IR-SEE 4471 9852 5763		

Ver 09/20/2016

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler	Lab PM: Smith, Micah	Carrier Tracking No(s)	COC No: 720-39451.2
Client Contact: Shipping/Receiving	Phone	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): State Program - California		Job #: 720-88255-1
Address: 17461 Derian Ave, Suite 100,	Due Date Requested: 8/31/2018			
City: Irvine	TAT Requested (days):			
State, Zip: CA, 92614-5817				
Phone: 949-261-1022(Tel) 949-260-3297(Fax)	PO #			
Email	WO #			
Project Name: Brisbane Data Gap Invest Work Plan	Project #: 72013717			
Site	SSOW#			

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Analysis Requested

Geotracker

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_SIM	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-B9W (720-88255-10)	8/24/18	16 55 Pacific		Water			X	1	
TB-4 (720-88255-11)	8/24/18	Pacific		Water			X	1	
FB-4 (720-88255-12)	8/24/18	Pacific		Water			X	1	
DUP-14 (720-88255-13)	8/24/18	Pacific		Water			X	1	

Note Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories This sample shipment is forwarded under chain-of-custody

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date	Time	Method of Shipment

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	8/28/18 14:14	TA720			
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by: [signature]	Date/Time 8/29/18 708	Company TA-PN

Custody Seals Intact: ☑ Yes ☐ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: .9/6 2.4/2.7 R-SC6 4471 9852 5763

Ver. 09/20/2016

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88255-1

Login Number: 88255
List Number: 1
Creator: Mullen, Joan

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	False	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	False	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88255-1

Login Number: 88255
List Number: 2
Creator: Avila, Stephanie 1

List Source: TestAmerica Irvine
List Creation: 08/29/18 08:37 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	Not Present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-88260-1
Client Project/Site: UPC OU-SM
Revision: 1

For:
Geosyntec Consultants, Inc.
201 N. Civic Drive
Suite 245
Walnut Creek, California 94596

Attn: Mr. Krys Jesionek

Authorized for release by:
11/14/2018 7:27:57 PM

Micah Smith, Project Manager II
(925)484-1919
micah.smith@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 6
Client Sample Results 8
Surrogate Summary 13
QC Sample Results 15
QC Association Summary 25
Lab Chronicle 28
Certification Summary 29
Method Summary 30
Sample Summary 31
Chain of Custody 32
Receipt Checklists 36

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
F2	MS/MSD RPD exceeds control limits
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 720-88260-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-88260-1

Comments
This report was revised on 11/14/18 to change the units for the metals data to report in mg/Kg, as requested. The ID for sample DG-F11S-3.5-4 (720-88260-1) was also corrected.

Receipt
The samples were received on 8/27/2018 2:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.8º C.

Receipt Exceptions

The first 16 samples were duplicated on 2 COC's: starting with page 1 of 2 (sample DG-K7S-0.5-1) through page 2 of 2 (sample DG-H12S-3.5-4). They are listed on this Chain of Custody (COC) today and also on Friday 8/24/18 COC's; however, the first 15 samples were received Friday - see submission 720-88240:
The only samples received 8/27/18 on this COC are the last 3 samples: F11S-3.5-4.0, DG-H11S-0.5-1.0 and DG-H11S-3.5-4.0.

GC/MS Semi VOA
Method(s) 8270C SIM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250580 and analytical batch 720-250745 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8270C SIM: The following sample was diluted due to the abundance of non-target analytes: DG-F11S-3.5-4 (720-88260-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8081A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 720-250531 and analytical batch 720-250746 were outside control limits. Sample matrix interference and non-homogeneity are suspected because the associated laboratory control sample was within acceptance limits.

Method(s) 8081A: The following sample required a dilution due to the nature of the sample matrix: DG-F11S-3.5-4 (720-88260-1). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information. Elevated reporting limits (RLs) are provided.

Method(s) 8081A: The %RPD between the primary and confirmation column / detector exceeded 40% for cis-Chlordane for the following sample: DG-F11S-3.5-4 (720-88260-1). The lower value has been reported and qualified in accordance with the laboratory's SOP.

Method(s) 8015B: The following sample required a dilution due to the nature of the sample matrix: DG-F11S-3.5-4 (720-88260-1), (720-88263-E-16-C), (720-88263-E-16-A MS) and (720-88263-E-16-B MSD). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information. Elevated reporting limits (RLs) are provided

Method(s) 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: DG-F11S-3.5-4 (720-88260-1), (720-88263-F-18-A), (720-88263-F-18-B MS) and (720-88263-F-18-C MSD).

Method(s) 8082: The following sample was diluted due to the nature of the sample matrix: DG-F11S-3.5-4 (720-88260-1) at 5.0. Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250513 and analytical batch

Job ID: 720-88260-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

720-250635 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 6010B: The post digestion spike % recovery associated with batch 720-250635 was outside of the 75-125% control limits.

Analyte	Recovery
Barium	128%
Copper	129%
Vanadium	127%

Method(s) 6010B: The serial dilution performed for the following sample associated with batch 720-250635 was outside of the 10% control limits: (720-88260-A-2-C SD).

Analyte	Recovery
Barium	22%
Cobalt	23%
Lead	25%
Vanadium	20%

Method(s) 6010B: The following samples were diluted due to the abundance of non-target analytes: DG-F11S-3.5-4 (720-88260-1), DG-H11S-0.5-1 (720-88260-2), and DG-H11S-3.5-4.0 (720-88260-3). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88260-1

Client Sample ID: DG-F11S-3.5-4 — Lab Sample ID: 720-88260-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	960		96	48	ug/Kg	10		8270C SIM	Total/NA
Acenaphthene	270		48	27	ug/Kg	10		8270C SIM	Total/NA
Acenaphthylene	130		48	23	ug/Kg	10		8270C SIM	Total/NA
Anthracene	1200		48	19	ug/Kg	10		8270C SIM	Total/NA
Benzo[a]anthracene	1200		48	14	ug/Kg	10		8270C SIM	Total/NA
Benzo[a]pyrene	900		48	18	ug/Kg	10		8270C SIM	Total/NA
Benzo[b]fluoranthene	1500		48	20	ug/Kg	10		8270C SIM	Total/NA
Benzo[g,h,i]perylene	380		48	41	ug/Kg	10		8270C SIM	Total/NA
Benzo[k]fluoranthene	460		48	20	ug/Kg	10		8270C SIM	Total/NA
Chrysene	2400		48	13	ug/Kg	10		8270C SIM	Total/NA
Dibenz(a,h)anthracene	190		48	34	ug/Kg	10		8270C SIM	Total/NA
Fluoranthene	1200		48	13	ug/Kg	10		8270C SIM	Total/NA
Fluorene	330		48	21	ug/Kg	10		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	360		48	40	ug/Kg	10		8270C SIM	Total/NA
Naphthalene	570		48	34	ug/Kg	10		8270C SIM	Total/NA
Phenanthrene	2100		48	17	ug/Kg	10		8270C SIM	Total/NA
Pyrene	1600		48	16	ug/Kg	10		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	1300000		39000	15000	ug/Kg	20		8015B	Total/NA
4,4'-DDD	38		20	6.0	ug/Kg	10		8081A	Total/NA
Chlordane (technical)	3900		390	31	ug/Kg	10		8081A	Total/NA
cis-Chlordane	780	p	20	3.9	ug/Kg	10		8081A	Total/NA
trans-Chlordane	940		20	4.5	ug/Kg	10		8081A	Total/NA
Antimony	2.5		1.9	0.31	mg/Kg	4		6010B	Total/NA
Arsenic	120		3.8	0.32	mg/Kg	4		6010B	Total/NA
Barium	100		1.9	0.27	mg/Kg	4		6010B	Total/NA
Beryllium	0.35	J	0.38	0.12	mg/Kg	4		6010B	Total/NA
Cadmium	0.22	J	0.47	0.047	mg/Kg	4		6010B	Total/NA
Chromium	68		1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	10		0.75	0.075	mg/Kg	4		6010B	Total/NA
Copper	63		5.7	2.7	mg/Kg	4		6010B	Total/NA
Lead	140		1.9	0.40	mg/Kg	4		6010B	Total/NA
Molybdenum	2.0		1.9	0.24	mg/Kg	4		6010B	Total/NA
Nickel	38		1.9	0.19	mg/Kg	4		6010B	Total/NA
Selenium	0.73	J	3.8	0.57	mg/Kg	4		6010B	Total/NA
Silver	0.29	J	0.94	0.19	mg/Kg	4		6010B	Total/NA
Thallium	0.91	J	1.9	0.55	mg/Kg	4		6010B	Total/NA
Vanadium	39		1.9	0.26	mg/Kg	4		6010B	Total/NA
Zinc	200		5.7	2.4	mg/Kg	4		6010B	Total/NA
Mercury	0.28	B	0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-H11S-0.5-1 — Lab Sample ID: 720-88260-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.2	J F1	2.0	0.33	mg/Kg	4		6010B	Total/NA
Arsenic	1.6	J	3.9	0.33	mg/Kg	4		6010B	Total/NA
Barium	27	F1	2.0	0.28	mg/Kg	4		6010B	Total/NA
Cadmium	0.19	J	0.49	0.049	mg/Kg	4		6010B	Total/NA
Chromium	9.9		2.0	0.21	mg/Kg	4		6010B	Total/NA
Cobalt	17		0.78	0.078	mg/Kg	4		6010B	Total/NA
Copper	120	F1	5.9	2.8	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88260-1

Client Sample ID: DG-H11S-0.5-1 (Continued) — Lab Sample ID: 720-88260-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	120	F1	2.0	0.41	mg/Kg	4		6010B	Total/NA
Nickel	5.8		2.0	0.20	mg/Kg	4		6010B	Total/NA
Silver	0.24	J F1	0.98	0.20	mg/Kg	4		6010B	Total/NA
Thallium	1.1	J	2.0	0.57	mg/Kg	4		6010B	Total/NA
Vanadium	120	F1	2.0	0.27	mg/Kg	4		6010B	Total/NA
Zinc	100	F1	5.9	2.5	mg/Kg	4		6010B	Total/NA
Mercury	0.15	B	0.015	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-H11S-3.5-4 — Lab Sample ID: 720-88260-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.46	J	1.9	0.32	mg/Kg	4		6010B	Total/NA
Arsenic	2.4	J	3.9	0.33	mg/Kg	4		6010B	Total/NA
Barium	40		1.9	0.28	mg/Kg	4		6010B	Total/NA
Chromium	53		1.9	0.21	mg/Kg	4		6010B	Total/NA
Cobalt	6.0		0.78	0.078	mg/Kg	4		6010B	Total/NA
Copper	6.8		5.8	2.8	mg/Kg	4		6010B	Total/NA
Lead	5.9		1.9	0.41	mg/Kg	4		6010B	Total/NA
Nickel	22		1.9	0.20	mg/Kg	4		6010B	Total/NA
Vanadium	44		1.9	0.26	mg/Kg	4		6010B	Total/NA
Zinc	22		5.8	2.5	mg/Kg	4		6010B	Total/NA
Mercury	0.023	B	0.016	0.0024	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Method 8015B - DRO

Diesel Range Organics (DRO) (GC) by Method 8015B

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88260-1

Client Sample ID: DG-F11S-3.5-4

Date Collected: 08/24/18 14:15
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88260-1

Matrix: Solid

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	960		96	48	ug/Kg		08/30/18 10:18	09/03/18 21:15	10
Acenaphthene	270		48	27	ug/Kg		08/30/18 10:18	09/03/18 21:15	10
Acenaphthylene	130		48	23	ug/Kg		08/30/18 10:18	09/03/18 21:15	10
Anthracene	1200		48	19	ug/Kg		08/30/18 10:18	09/03/18 21:15	10
Benzo[a]anthracene	1200		48	14	ug/Kg		08/30/18 10:18	09/03/18 21:15	10
Benzo[a]pyrene	900		48	18	ug/Kg		08/30/18 10:18	09/03/18 21:15	10
Benzo[b]fluoranthene	1500		48	20	ug/Kg		08/30/18 10:18	09/03/18 21:15	10
Benzo[g,h,i]perylene	380		48	41	ug/Kg		08/30/18 10:18	09/03/18 21:15	10
Benzo[k]fluoranthene	460		48	20	ug/Kg		08/30/18 10:18	09/03/18 21:15	10
Chrysene	2400		48	13	ug/Kg		08/30/18 10:18	09/03/18 21:15	10
Dibenz(a,h)anthracene	190		48	34	ug/Kg		08/30/18 10:18	09/03/18 21:15	10
Fluoranthene	1200		48	13	ug/Kg		08/30/18 10:18	09/03/18 21:15	10
Fluorene	330		48	21	ug/Kg		08/30/18 10:18	09/03/18 21:15	10
Indeno[1,2,3-cd]pyrene	360		48	40	ug/Kg		08/30/18 10:18	09/03/18 21:15	10
Naphthalene	570		48	34	ug/Kg		08/30/18 10:18	09/03/18 21:15	10
Phenanthrene	2100		48	17	ug/Kg		08/30/18 10:18	09/03/18 21:15	10
Pyrene	1600		48	16	ug/Kg		08/30/18 10:18	09/03/18 21:15	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*46*		*33 - 120*	*08/30/18 10:18*	*09/03/18 21:15*	*10*
Terphenyl-d14	*61*		*35 - 146*	*08/30/18 10:18*	*09/03/18 21:15*	*10*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1300000		39000	15000	ug/Kg		08/30/18 08:54	09/05/18 13:51	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*0*	*X D*	*40 - 130*	*08/30/18 08:54*	*09/05/18 13:51*	*20*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	38		20	6.0	ug/Kg		08/29/18 17:11	09/04/18 16:31	10
4,4'-DDE	ND		20	4.1	ug/Kg		08/29/18 17:11	09/04/18 16:31	10
4,4'-DDT	ND		20	4.0	ug/Kg		08/29/18 17:11	09/04/18 16:31	10
Aldrin	ND		20	4.9	ug/Kg		08/29/18 17:11	09/04/18 16:31	10
alpha-BHC	ND		20	5.4	ug/Kg		08/29/18 17:11	09/04/18 16:31	10
beta-BHC	ND		20	3.5	ug/Kg		08/29/18 17:11	09/04/18 16:31	10
Chlordane (technical)	3900		390	31	ug/Kg		08/29/18 17:11	09/04/18 16:31	10
cis-Chlordane	780	p	20	3.9	ug/Kg		08/29/18 17:11	09/04/18 16:31	10
delta-BHC	ND		20	4.3	ug/Kg		08/29/18 17:11	09/04/18 16:31	10
Dieldrin	ND		20	5.8	ug/Kg		08/29/18 17:11	09/04/18 16:31	10
Endosulfan I	ND		20	3.1	ug/Kg		08/29/18 17:11	09/04/18 16:31	10
Endosulfan II	ND		20	4.8	ug/Kg		08/29/18 17:11	09/04/18 16:31	10
Endosulfan sulfate	ND		20	3.7	ug/Kg		08/29/18 17:11	09/04/18 16:31	10
Endrin	ND		20	4.5	ug/Kg		08/29/18 17:11	09/04/18 16:31	10
Endrin aldehyde	ND		20	6.2	ug/Kg		08/29/18 17:11	09/04/18 16:31	10
Endrin ketone	ND		20	3.2	ug/Kg		08/29/18 17:11	09/04/18 16:31	10
gamma-BHC (Lindane)	ND		20	6.2	ug/Kg		08/29/18 17:11	09/04/18 16:31	10
Heptachlor	ND		20	4.5	ug/Kg		08/29/18 17:11	09/04/18 16:31	10
Heptachlor epoxide	ND		20	3.4	ug/Kg		08/29/18 17:11	09/04/18 16:31	10

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88260-1

Client Sample ID: DG-F11S-3.5-4

Date Collected: 08/24/18 14:15
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88260-1

Matrix: Solid

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methoxychlor	ND		20	6.6	ug/Kg		08/29/18 17:11	09/04/18 16:31	10
Toxaphene	ND		390	66	ug/Kg		08/29/18 17:11	09/04/18 16:31	10
trans-Chlordane	**940**		20	4.5	ug/Kg		08/29/18 17:11	09/04/18 16:31	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*0*	*X D*	*21 - 136*	*08/29/18 17:11*	*09/04/18 16:31*	*10*
Tetrachloro-m-xylene	*0*	*X D*	*21 - 145*	*08/29/18 17:11*	*09/04/18 16:31*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		250	110	ug/Kg		08/30/18 06:48	09/04/18 11:45	5
Aroclor-1221	ND		250	120	ug/Kg		08/30/18 06:48	09/04/18 11:45	5
Aroclor-1232	ND		250	120	ug/Kg		08/30/18 06:48	09/04/18 11:45	5
Aroclor-1242	ND		250	97	ug/Kg		08/30/18 06:48	09/04/18 11:45	5
Aroclor-1248	ND		250	120	ug/Kg		08/30/18 06:48	09/04/18 11:45	5
Aroclor-1254	ND		250	120	ug/Kg		08/30/18 06:48	09/04/18 11:45	5
Aroclor-1260	ND		250	110	ug/Kg		08/30/18 06:48	09/04/18 11:45	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*70*		*14 - 128*	*08/30/18 06:48*	*09/04/18 11:45*	*5*
DCB Decachlorobiphenyl	*82*	*p*	*10 - 132*	*08/30/18 06:48*	*09/04/18 11:45*	*5*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**2.5**		1.9	0.31	mg/Kg		08/29/18 15:55	08/30/18 16:28	4
Arsenic	**120**		3.8	0.32	mg/Kg		08/29/18 15:55	08/30/18 16:28	4
Barium	**100**		1.9	0.27	mg/Kg		08/29/18 15:55	08/30/18 16:28	4
Beryllium	**0.35**	**J**	0.38	0.12	mg/Kg		08/29/18 15:55	08/30/18 16:28	4
Cadmium	**0.22**	**J**	0.47	0.047	mg/Kg		08/29/18 15:55	08/30/18 16:28	4
Chromium	**68**		1.9	0.20	mg/Kg		08/29/18 15:55	08/30/18 16:28	4
Cobalt	**10**		0.75	0.075	mg/Kg		08/29/18 15:55	08/30/18 16:28	4
Copper	**63**		5.7	2.7	mg/Kg		08/29/18 15:55	08/30/18 16:28	4
Lead	**140**		1.9	0.40	mg/Kg		08/29/18 15:55	08/30/18 16:28	4
Molybdenum	**2.0**		1.9	0.24	mg/Kg		08/29/18 15:55	08/30/18 16:28	4
Nickel	**38**		1.9	0.19	mg/Kg		08/29/18 15:55	08/30/18 16:28	4
Selenium	**0.73**	**J**	3.8	0.57	mg/Kg		08/29/18 15:55	08/30/18 16:28	4
Silver	**0.29**	**J**	0.94	0.19	mg/Kg		08/29/18 15:55	08/30/18 16:28	4
Thallium	**0.91**	**J**	1.9	0.55	mg/Kg		08/29/18 15:55	08/30/18 16:28	4
Vanadium	**39**		1.9	0.26	mg/Kg		08/29/18 15:55	08/30/18 16:28	4
Zinc	**200**		5.7	2.4	mg/Kg		08/29/18 15:55	08/30/18 16:28	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.28**	**B**	0.016	0.0024	mg/Kg		08/30/18 14:37	09/04/18 17:43	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88260-1

Client Sample ID: DG-H11S-0.5-1

Date Collected: 08/24/18 14:26
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88260-2

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.2	J F1	2.0	0.33	mg/Kg		08/29/18 15:55	08/30/18 16:23	4
Arsenic	1.6	J	3.9	0.33	mg/Kg		08/29/18 15:55	08/30/18 16:23	4
Barium	27	F1	2.0	0.28	mg/Kg		08/29/18 15:55	08/30/18 16:23	4
Beryllium	ND	F1	0.39	0.13	mg/Kg		08/29/18 15:55	08/30/18 16:23	4
Cadmium	0.19	J	0.49	0.049	mg/Kg		08/29/18 15:55	08/30/18 16:23	4
Chromium	9.9		2.0	0.21	mg/Kg		08/29/18 15:55	08/30/18 16:23	4
Cobalt	17		0.78	0.078	mg/Kg		08/29/18 15:55	08/30/18 16:23	4
Copper	120	F1	5.9	2.8	mg/Kg		08/29/18 15:55	08/30/18 16:23	4
Lead	120	F1	2.0	0.41	mg/Kg		08/29/18 15:55	08/30/18 16:23	4
Molybdenum	ND		2.0	0.25	mg/Kg		08/29/18 15:55	08/30/18 16:23	4
Nickel	5.8		2.0	0.20	mg/Kg		08/29/18 15:55	08/30/18 16:23	4
Selenium	ND		3.9	0.59	mg/Kg		08/29/18 15:55	08/30/18 16:23	4
Silver	0.24	J F1	0.98	0.20	mg/Kg		08/29/18 15:55	08/30/18 16:23	4
Thallium	1.1	J	2.0	0.57	mg/Kg		08/29/18 15:55	08/30/18 16:23	4
Vanadium	120	F1	2.0	0.27	mg/Kg		08/29/18 15:55	08/30/18 16:23	4
Zinc	100	F1	5.9	2.5	mg/Kg		08/29/18 15:55	08/30/18 16:23	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.15	B	0.015	0.0023	mg/Kg		08/30/18 14:37	09/04/18 17:45	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88260-1

Client Sample ID: DG-H11S-3.5-4

Date Collected: 08/24/18 14:26
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88260-3

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.46	J	1.9	0.32	mg/Kg		08/29/18 15:55	08/30/18 16:32	4
Arsenic	2.4	J	3.9	0.33	mg/Kg		08/29/18 15:55	08/30/18 16:32	4
Barium	40		1.9	0.28	mg/Kg		08/29/18 15:55	08/30/18 16:32	4
Beryllium	ND		0.39	0.13	mg/Kg		08/29/18 15:55	08/30/18 16:32	4
Cadmium	ND		0.49	0.048	mg/Kg		08/29/18 15:55	08/30/18 16:32	4
Chromium	53		1.9	0.21	mg/Kg		08/29/18 15:55	08/30/18 16:32	4
Cobalt	6.0		0.78	0.078	mg/Kg		08/29/18 15:55	08/30/18 16:32	4
Copper	6.8		5.8	2.8	mg/Kg		08/29/18 15:55	08/30/18 16:32	4
Lead	5.9		1.9	0.41	mg/Kg		08/29/18 15:55	08/30/18 16:32	4
Molybdenum	ND		1.9	0.25	mg/Kg		08/29/18 15:55	08/30/18 16:32	4
Nickel	22		1.9	0.20	mg/Kg		08/29/18 15:55	08/30/18 16:32	4
Selenium	ND		3.9	0.58	mg/Kg		08/29/18 15:55	08/30/18 16:32	4
Silver	ND		0.97	0.20	mg/Kg		08/29/18 15:55	08/30/18 16:32	4
Thallium	ND		1.9	0.56	mg/Kg		08/29/18 15:55	08/30/18 16:32	4
Vanadium	44		1.9	0.26	mg/Kg		08/29/18 15:55	08/30/18 16:32	4
Zinc	22		5.8	2.5	mg/Kg		08/29/18 15:55	08/30/18 16:32	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.023	B	0.016	0.0024	mg/Kg		08/30/18 14:37	09/04/18 17:53	1

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88260-1

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		FBP	TPHL
Lab Sample ID	Client Sample ID	(33-120)	(35-146)
720-88242-D-13-H MS	Matrix Spike	39	55
720-88242-D-13-I MSD	Matrix Spike Duplicate	37	54
720-88260-1	DG-F11S-3.5-4	46	61
LCS 720-250580/2-A	Lab Control Sample	75	90
MB 720-250580/1-A	Method Blank	79	93

Surrogate Legend

FBP = 2-Fluorobiphenyl

TPHL = Terphenyl-d14

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TPH1
Lab Sample ID	Client Sample ID	(40-130)
720-88260-1	DG-F11S-3.5-4	0 X D
720-88263-E-16-A MS	Matrix Spike	0 X D
720-88263-E-16-B MSD	Matrix Spike Duplicate	0 X D
LCS 720-250566/2-A	Lab Control Sample	81
MB 720-250566/1-A	Method Blank	88

Surrogate Legend

TPH = p-Terphenyl

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCBP2	TCX2
Lab Sample ID	Client Sample ID	(21-136)	(21-145)
720-88239-D-13-H MS	Matrix Spike	80	93
LCS 720-250531/2-A	Lab Control Sample	98	83
MB 720-250531/1-A	Method Blank	87	83

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCBP1	TCX1
Lab Sample ID	Client Sample ID	(21-136)	(21-145)
720-88239-D-13-I MSD	Matrix Spike Duplicate	105	94
720-88260-1	DG-F11S-3.5-4	0 X D	0 X D

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88260-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	**Client Sample ID**	**TCX1 (14-128)**	**DCBP1 (10-132)**						
720-88260-1	DG-F11S-3.5-4	70	82 p						
720-88263-F-18-B MS	Matrix Spike	81	87						
720-88263-F-18-C MSD	Matrix Spike Duplicate	72	66						
LCS 240-343157/24-A	Lab Control Sample	78	81						
MB 240-343157/23-A	Method Blank	78	81						

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88260-1

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 720-250580/1-A
Matrix: Solid
Analysis Batch: 250742

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250580

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		10	5.0	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Acenaphthene	ND		5.0	2.8	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Anthracene	ND		5.0	2.0	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Benzo[a]anthracene	ND		5.0	1.5	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Benzo[a]pyrene	ND		5.0	1.9	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Benzo[b]fluoranthene	ND		5.0	2.1	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Benzo[g,h,i]perylene	ND		5.0	4.3	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Benzo[k]fluoranthene	ND		5.0	2.1	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Chrysene	ND		5.0	1.4	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Fluoranthene	ND		5.0	1.4	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Fluorene	ND		5.0	2.2	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Indeno[1,2,3-cd]pyrene	ND		5.0	4.2	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Naphthalene	ND		5.0	3.5	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Phenanthrene	ND		5.0	1.8	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Pyrene	ND		5.0	1.7	ug/Kg		08/30/18 10:18	09/01/18 14:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*79*		*33 - 120*	*08/30/18 10:18*	*09/01/18 14:14*	*1*
Terphenyl-d14	*93*		*35 - 146*	*08/30/18 10:18*	*09/01/18 14:14*	*1*

Lab Sample ID: LCS 720-250580/2-A
Matrix: Solid
Analysis Batch: 250742

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250580

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	667	478		ug/Kg		72	46 - 110
Acenaphthene	667	535		ug/Kg		80	46 - 106
Acenaphthylene	667	523		ug/Kg		78	46 - 108
Anthracene	667	518		ug/Kg		78	55 - 103
Benzo[a]anthracene	667	594		ug/Kg		89	54 - 110
Benzo[a]pyrene	667	559		ug/Kg		84	62 - 111
Benzo[b]fluoranthene	667	578		ug/Kg		87	60 - 109
Benzo[g,h,i]perylene	667	572		ug/Kg		86	52 - 114
Benzo[k]fluoranthene	667	539		ug/Kg		81	58 - 109
Chrysene	667	562		ug/Kg		84	54 - 108
Dibenz(a,h)anthracene	667	599		ug/Kg		90	58 - 112
Fluoranthene	667	521		ug/Kg		78	59 - 109
Fluorene	667	549		ug/Kg		82	52 - 106
Indeno[1,2,3-cd]pyrene	667	603		ug/Kg		90	55 - 120
Naphthalene	667	480		ug/Kg		72	49 - 110
Phenanthrene	667	520		ug/Kg		78	57 - 110
Pyrene	667	579		ug/Kg		87	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*75*		*33 - 120*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 720-250580/2-A
Matrix: Solid
Analysis Batch: 250742

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250580

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*90*		*35 - 146*

Lab Sample ID: 720-88242-D-13-H MS
Matrix: Solid
Analysis Batch: 250745

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250580

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	ND	F1	637	233	F1	ug/Kg		37	46 - 110
Acenaphthene	ND	F1	637	278	F1	ug/Kg		44	46 - 106
Acenaphthylene	8.4	F1	637	276	F1	ug/Kg		42	46 - 108
Anthracene	14	F1	637	327	F1	ug/Kg		49	55 - 103
Benzo[a]anthracene	110		637	473		ug/Kg		57	54 - 110
Benzo[a]pyrene	180	F1	637	554	F1	ug/Kg		59	62 - 111
Benzo[b]fluoranthene	200	F1	637	537	F1	ug/Kg		52	60 - 109
Benzo[g,h,i]perylene	100	F1	637	399	F1	ug/Kg		47	52 - 114
Benzo[k]fluoranthene	86		637	460		ug/Kg		59	58 - 109
Chrysene	120	F1	637	460	F1	ug/Kg		53	54 - 108
Dibenz(a,h)anthracene	32	F1	637	371	F1	ug/Kg		53	58 - 112
Fluoranthene	130	F1	637	459	F1	ug/Kg		52	59 - 109
Fluorene	ND	F1	637	295	F1	ug/Kg		46	52 - 106
Indeno[1,2,3-cd]pyrene	94	F1	637	442		ug/Kg		55	55 - 120
Naphthalene	ND	F1	637	228	F1	ug/Kg		36	49 - 110
Phenanthrene	37	F1	637	331	F1	ug/Kg		46	57 - 110
Pyrene	150		637	497		ug/Kg		54	50 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*39*		*33 - 120*
Terphenyl-d14	*55*		*35 - 146*

Lab Sample ID: 720-88242-D-13-I MSD
Matrix: Solid
Analysis Batch: 250745

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250580

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	ND	F1	637	207	F1	ug/Kg		33	46 - 110	12	35
Acenaphthene	ND	F1	637	271	F1	ug/Kg		42	46 - 106	3	35
Acenaphthylene	8.4	F1	637	258	F1	ug/Kg		39	46 - 108	7	35
Anthracene	14	F1	637	338	F1	ug/Kg		51	55 - 103	3	35
Benzo[a]anthracene	110		637	471		ug/Kg		56	54 - 110	0	35
Benzo[a]pyrene	180	F1	637	535	F1	ug/Kg		56	62 - 111	4	35
Benzo[b]fluoranthene	200	F1	637	531	F1	ug/Kg		51	60 - 109	1	35
Benzo[g,h,i]perylene	100	F1	637	356	F1	ug/Kg		40	52 - 114	11	35
Benzo[k]fluoranthene	86		637	467		ug/Kg		60	58 - 109	2	35
Chrysene	120	F1	637	440	F1	ug/Kg		50	54 - 108	5	35
Dibenz(a,h)anthracene	32	F1	637	348	F1	ug/Kg		50	58 - 112	6	35
Fluoranthene	130	F1	637	447	F1	ug/Kg		50	59 - 109	3	35
Fluorene	ND	F1	637	294	F1	ug/Kg		46	52 - 106	0	35
Indeno[1,2,3-cd]pyrene	94	F1	637	408	F1	ug/Kg		49	55 - 120	8	35

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 720-88242-D-13-I MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250745 — **Prep Batch: 250580**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene	ND	F1	637	201	F1	ug/Kg		32	49 - 110	13	35
Phenanthrene	37	F1	637	342	F1	ug/Kg		48	57 - 110	3	35
Pyrene	150		637	487		ug/Kg		52	50 - 120	2	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*37*		*33 - 120*
Terphenyl-d14	*54*		*35 - 146*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-250566/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250884 — **Prep Batch: 250566**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		2000	750	ug/Kg		08/30/18 08:54	09/05/18 11:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*88*		*40 - 130*	*08/30/18 08:54*	*09/05/18 11:03*	*1*

Lab Sample ID: LCS 720-250566/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250885 — **Prep Batch: 250566**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	167000	135000		ug/Kg		81	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*81*		*40 - 130*

Lab Sample ID: 720-88263-E-16-A MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250885 — **Prep Batch: 250566**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	130000		162000	323000		ug/Kg		121	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
p-Terphenyl	*0*	*X D*	*40 - 130*

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 720-88263-E-16-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250885 — **Prep Batch: 250566**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	130000		162000	271000		ug/Kg		89	50 - 150	17	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
p-Terphenyl	*0*	*X D*	*40 - 130*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 720-250531/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250746 — **Prep Batch: 250531**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.61	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Aldrin	ND		2.0	0.50	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
alpha-BHC	ND		2.0	0.55	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Dieldrin	ND		2.0	0.59	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Endrin	ND		2.0	0.46	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Endrin aldehyde	ND		2.0	0.63	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Methoxychlor	ND		2.0	0.68	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Toxaphene	ND		40	6.8	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/29/18 17:11	09/03/18 14:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*87*		*21 - 136*	*08/29/18 17:11*	*09/03/18 14:01*	*1*
Tetrachloro-m-xylene	*83*		*21 - 145*	*08/29/18 17:11*	*09/03/18 14:01*	*1*

Lab Sample ID: LCS 720-250531/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250746 — **Prep Batch: 250531**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	16.5		ug/Kg		99	75 - 128
4,4'-DDE	16.7	15.3		ug/Kg		92	76 - 126

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 720-250531/2-A
Matrix: Solid
Analysis Batch: 250746

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250531

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDT	16.7	14.9		ug/Kg		89	63 - 127
Aldrin	16.7	13.7		ug/Kg		82	65 - 120
alpha-BHC	16.7	11.0		ug/Kg		66	46 - 122
beta-BHC	16.7	15.9		ug/Kg		95	78 - 136
cis-Chlordane	16.7	15.1		ug/Kg		90	70 - 120
delta-BHC	16.7	13.9		ug/Kg		83	43 - 125
Dieldrin	16.7	14.9		ug/Kg		89	72 - 120
Endosulfan I	16.7	14.9		ug/Kg		89	62 - 120
Endosulfan II	16.7	15.9		ug/Kg		95	65 - 120
Endosulfan sulfate	16.7	15.3		ug/Kg		92	72 - 121
Endrin	16.7	15.6		ug/Kg		94	68 - 120
Endrin aldehyde	16.7	16.0		ug/Kg		96	68 - 120
Endrin ketone	16.7	16.0		ug/Kg		96	75 - 136
gamma-BHC (Lindane)	16.7	14.1		ug/Kg		84	72 - 120
Heptachlor	16.7	14.6		ug/Kg		87	69 - 120
Heptachlor epoxide	16.7	15.1		ug/Kg		91	68 - 120
Methoxychlor	16.7	17.2		ug/Kg		103	71 - 132
trans-Chlordane	16.7	15.1		ug/Kg		91	68 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*98*		*21 - 136*
Tetrachloro-m-xylene	*83*		*21 - 145*

Lab Sample ID: 720-88239-D-13-H MS
Matrix: Solid
Analysis Batch: 250746

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250531

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		15.8	14.2		ug/Kg		89	40 - 120
4,4'-DDE	ND		15.8	14.4		ug/Kg		91	40 - 120
4,4'-DDT	ND		15.8	14.8		ug/Kg		94	17 - 144
Aldrin	ND	F2	15.8	12.8		ug/Kg		81	53 - 120
alpha-BHC	ND		15.8	10.8		ug/Kg		68	40 - 120
beta-BHC	ND		15.8	9.48	J	ug/Kg		60	40 - 120
cis-Chlordane	ND		15.8	13.8		ug/Kg		87	40 - 120
delta-BHC	ND	F2	15.8	11.1		ug/Kg		70	40 - 120
Dieldrin	ND		15.8	13.7		ug/Kg		86	46 - 130
Endosulfan I	ND		15.8	14.7		ug/Kg		93	40 - 120
Endosulfan II	ND		15.8	14.0		ug/Kg		88	40 - 120
Endosulfan sulfate	ND		15.8	11.1		ug/Kg		70	40 - 120
Endrin	ND		15.8	15.5		ug/Kg		98	32 - 143
Endrin aldehyde	ND	F2	15.8	9.82	p	ug/Kg		62	40 - 120
Endrin ketone	ND		15.8	12.5		ug/Kg		79	40 - 120
gamma-BHC (Lindane)	ND		15.8	12.6		ug/Kg		80	58 - 120
Heptachlor	ND		15.8	14.1		ug/Kg		89	52 - 120
Heptachlor epoxide	ND		15.8	14.3		ug/Kg		90	40 - 120
Methoxychlor	ND	F2	15.8	16.5		ug/Kg		104	40 - 120
trans-Chlordane	ND	F1	15.8	14.9		ug/Kg		94	40 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl	80		21 - 136
Tetrachloro-m-xylene	93		21 - 145

Lab Sample ID: 720-88239-D-13-I MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250746 — **Prep Batch: 250531**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		15.8	14.0		ug/Kg		89	40 - 120	1	20
4,4'-DDE	ND		15.8	14.5		ug/Kg		92	40 - 120	0	20
4,4'-DDT	ND		15.8	17.4		ug/Kg		110	17 - 144	16	20
Aldrin	ND	F2	15.8	15.8	F2	ug/Kg		100	53 - 120	21	20
alpha-BHC	ND		15.8	11.6		ug/Kg		73	40 - 120	8	20
beta-BHC	ND		15.8	11.6		ug/Kg		74	40 - 120	20	20
cis-Chlordane	ND		15.8	15.4		ug/Kg		97	40 - 120	11	20
delta-BHC	ND	F2	15.8	13.9	F2	ug/Kg		88	40 - 120	23	20
Dieldrin	ND		15.8	16.4		ug/Kg		104	46 - 130	18	20
Endosulfan I	ND		15.8	15.0		ug/Kg		95	40 - 120	2	20
Endosulfan II	ND		15.8	16.3		ug/Kg		103	40 - 120	15	30
Endosulfan sulfate	ND		15.8	13.2		ug/Kg		84	40 - 120	18	20
Endrin	ND		15.8	18.4		ug/Kg		117	32 - 143	17	20
Endrin aldehyde	ND	F2	15.8	13.0	F2	ug/Kg		82	40 - 120	28	20
Endrin ketone	ND		15.8	14.8		ug/Kg		94	40 - 120	17	20
gamma-BHC (Lindane)	ND		15.8	13.6		ug/Kg		86	58 - 120	8	20
Heptachlor	ND		15.8	14.2		ug/Kg		90	52 - 120	0	20
Heptachlor epoxide	ND		15.8	15.6		ug/Kg		99	40 - 120	9	20
Methoxychlor	ND	F2	15.8	13.4	F2	ug/Kg		84	40 - 120	21	20
trans-Chlordane	ND	F1	15.8	15.6		ug/Kg		99	40 - 120	5	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
DCB Decachlorobiphenyl	105		21 - 136
Tetrachloro-m-xylene	94		21 - 145

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-343157/23-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 343540 — **Prep Batch: 343157**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/30/18 06:48	09/01/18 11:44	1
Aroclor-1221	ND		50	24	ug/Kg		08/30/18 06:48	09/01/18 11:44	1
Aroclor-1232	ND		50	23	ug/Kg		08/30/18 06:48	09/01/18 11:44	1
Aroclor-1242	ND		50	19	ug/Kg		08/30/18 06:48	09/01/18 11:44	1
Aroclor-1248	ND		50	24	ug/Kg		08/30/18 06:48	09/01/18 11:44	1
Aroclor-1254	ND		50	23	ug/Kg		08/30/18 06:48	09/01/18 11:44	1
Aroclor-1260	ND		50	22	ug/Kg		08/30/18 06:48	09/01/18 11:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	78		14 - 128	08/30/18 06:48	09/01/18 11:44	1
DCB Decachlorobiphenyl	81		10 - 132	08/30/18 06:48	09/01/18 11:44	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 240-343157/24-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 343540 — **Prep Batch: 343157**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016			1000	667		ug/Kg		67	47 - 120		
Aroclor-1260			1000	792		ug/Kg		79	46 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*78*		*14 - 128*
DCB Decachlorobiphenyl	*81*		*10 - 132*

Lab Sample ID: 720-88263-F-18-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 343584 — **Prep Batch: 343157**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016	ND		990	737		ug/Kg		74	31 - 120		
Aroclor-1260	ND		990	774		ug/Kg		78	21 - 122		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*81*		*14 - 128*
DCB Decachlorobiphenyl	*87*		*10 - 132*

Lab Sample ID: 720-88263-F-18-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 343584 — **Prep Batch: 343157**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	ND		996	647		ug/Kg		65	31 - 120	13	30
Aroclor-1260	ND		996	660		ug/Kg		66	21 - 122	16	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*72*		*14 - 128*
DCB Decachlorobiphenyl	*66*		*10 - 132*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-250513/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250635 — **Prep Batch: 250513**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Arsenic	ND		1.0	0.085	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Barium	ND		0.50	0.071	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Beryllium	ND		0.10	0.033	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Cadmium	ND		0.13	0.012	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Chromium	ND		0.50	0.053	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Cobalt	ND		0.20	0.020	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Copper	ND		1.5	0.71	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Lead	ND		0.50	0.11	mg/Kg		08/29/18 15:55	08/30/18 15:54	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 720-250513/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250635 — **Prep Batch: 250513**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	ND		0.50	0.064	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Nickel	ND		0.50	0.051	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Selenium	ND		1.0	0.15	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Silver	ND		0.25	0.051	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Thallium	ND		0.50	0.15	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Vanadium	ND		0.50	0.068	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Zinc	ND		1.5	0.64	mg/Kg		08/29/18 15:55	08/30/18 15:54	1

Lab Sample ID: LCS 720-250513/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250635 — **Prep Batch: 250513**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	46.9		mg/Kg		94	80 - 120
Arsenic	50.0	47.0		mg/Kg		94	80 - 120
Barium	50.0	52.1		mg/Kg		104	80 - 120
Beryllium	50.0	51.6		mg/Kg		103	80 - 120
Cadmium	50.0	47.1		mg/Kg		94	80 - 120
Chromium	50.0	47.6		mg/Kg		95	80 - 120
Cobalt	50.0	48.7		mg/Kg		97	80 - 120
Copper	50.0	47.1		mg/Kg		94	80 - 120
Lead	50.0	48.0		mg/Kg		96	80 - 120
Molybdenum	50.0	48.1		mg/Kg		96	80 - 120
Nickel	50.0	47.6		mg/Kg		95	80 - 120
Selenium	50.0	45.8		mg/Kg		92	80 - 120
Silver	25.0	23.8		mg/Kg		95	80 - 120
Thallium	50.0	47.9		mg/Kg		96	80 - 120
Vanadium	50.0	47.3		mg/Kg		95	80 - 120
Zinc	50.0	47.3		mg/Kg		95	80 - 120

Lab Sample ID: 720-88260-2 MS — **Client Sample ID: DG-H11S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250635 — **Prep Batch: 250513**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.2	J F1	48.1	10.9	F1	mg/Kg		20	75 - 125
Arsenic	1.6	J	48.1	57.1		mg/Kg		115	75 - 125
Barium	27	F1	48.1	85.1		mg/Kg		120	75 - 125
Beryllium	ND	F1	48.1	57.4		mg/Kg		119	75 - 125
Cadmium	0.19	J	48.1	54.3		mg/Kg		113	75 - 125
Chromium	9.9		48.1	67.8		mg/Kg		120	75 - 125
Cobalt	17		48.1	75.3		mg/Kg		120	75 - 125
Copper	120	F1	48.1	201	F1	mg/Kg		175	75 - 125
Lead	120	F1	48.1	237	F1	mg/Kg		239	75 - 125
Molybdenum	ND		48.1	53.2		mg/Kg		111	75 - 125
Nickel	5.8		48.1	60.7		mg/Kg		114	75 - 125
Selenium	ND		48.1	52.4		mg/Kg		109	75 - 125
Silver	0.24	J F1	24.0	30.4		mg/Kg		125	75 - 125
Thallium	1.1	J	48.1	52.4		mg/Kg		107	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88260-2 MS — **Client Sample ID: DG-H11S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250635 — **Prep Batch: 250513**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Vanadium	120	F1	48.1	192	F1	mg/Kg		157	75 - 125		
Zinc	100	F1	48.1	181	F1	mg/Kg		163	75 - 125		

Lab Sample ID: 720-88260-2 MSD — **Client Sample ID: DG-H11S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250635 — **Prep Batch: 250513**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	1.2	J F1	48.5	9.31	F1	mg/Kg		17	75 - 125	15	20
Arsenic	1.6	J	48.5	57.7		mg/Kg		116	75 - 125	1	20
Barium	27	F1	48.5	104	F1	mg/Kg		158	75 - 125	20	20
Beryllium	ND	F1	48.5	63.4	F1	mg/Kg		131	75 - 125	10	20
Cadmium	0.19	J	48.5	55.7		mg/Kg		114	75 - 125	3	20
Chromium	9.9		48.5	70.4		mg/Kg		125	75 - 125	4	20
Cobalt	17		48.5	75.6		mg/Kg		120	75 - 125	0	20
Copper	120	F1	48.5	201	F1	mg/Kg		172	75 - 125	0	20
Lead	120	F1	48.5	258	F1	mg/Kg		280	75 - 125	9	20
Molybdenum	ND		48.5	54.1		mg/Kg		112	75 - 125	2	20
Nickel	5.8		48.5	61.0		mg/Kg		114	75 - 125	0	20
Selenium	ND		48.5	54.0		mg/Kg		111	75 - 125	3	20
Silver	0.24	J F1	24.3	32.1	F1	mg/Kg		131	75 - 125	5	20
Thallium	1.1	J	48.5	54.4		mg/Kg		110	75 - 125	4	20
Vanadium	120	F1	48.5	200	F1	mg/Kg		171	75 - 125	4	20
Zinc	100	F1	48.5	163		mg/Kg		123	75 - 125	11	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-250614/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250857 — **Prep Batch: 250614**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0109	J	0.017	0.0025	mg/Kg		08/30/18 14:37	09/04/18 16:56	1

Lab Sample ID: LCS 720-250614/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250857 — **Prep Batch: 250614**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.833	0.952		mg/Kg		114	80 - 120		

Lab Sample ID: 720-88242-D-13-J MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250857 — **Prep Batch: 250614**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.14	B	0.758	1.02		mg/Kg		116	75 - 125		

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: 720-88242-D-13-K MSD
Matrix: Solid
Analysis Batch: 250857

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250614

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.14	B	0.735	0.993		mg/Kg		115	75 - 125	3	20

QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88260-1

GC/MS Semi VOA

Prep Batch: 250580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88260-1	DG-F11S-3.5-4	Total/NA	Solid	3546	
MB 720-250580/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250580/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88242-D-13-H MS	Matrix Spike	Total/NA	Solid	3546	
720-88242-D-13-I MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 250742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250580/1-A	Method Blank	Total/NA	Solid	8270C SIM	250580
LCS 720-250580/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	250580

Analysis Batch: 250745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88242-D-13-H MS	Matrix Spike	Total/NA	Solid	8270C SIM	250580
720-88242-D-13-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8270C SIM	250580

Analysis Batch: 250749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88260-1	DG-F11S-3.5-4	Total/NA	Solid	8270C SIM	250580

GC Semi VOA

Prep Batch: 250531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88260-1	DG-F11S-3.5-4	Total/NA	Solid	3546	
MB 720-250531/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250531/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88239-D-13-H MS	Matrix Spike	Total/NA	Solid	3546	
720-88239-D-13-I MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Prep Batch: 250566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88260-1	DG-F11S-3.5-4	Total/NA	Solid	3546	
MB 720-250566/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250566/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88263-E-16-A MS	Matrix Spike	Total/NA	Solid	3546	
720-88263-E-16-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 250746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250531/1-A	Method Blank	Total/NA	Solid	8081A	250531
LCS 720-250531/2-A	Lab Control Sample	Total/NA	Solid	8081A	250531
720-88239-D-13-H MS	Matrix Spike	Total/NA	Solid	8081A	250531
720-88239-D-13-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8081A	250531

Analysis Batch: 250765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88260-1	DG-F11S-3.5-4	Total/NA	Solid	8081A	250531

GC Semi VOA (Continued)

Analysis Batch: 250884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88260-1	DG-F11S-3.5-4	Total/NA	Solid	8015B	250566
MB 720-250566/1-A	Method Blank	Total/NA	Solid	8015B	250566

Analysis Batch: 250885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-250566/2-A	Lab Control Sample	Total/NA	Solid	8015B	250566
720-88263-E-16-A MS	Matrix Spike	Total/NA	Solid	8015B	250566
720-88263-E-16-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	250566

Prep Batch: 343157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88260-1	DG-F11S-3.5-4	Total/NA	Solid	3540C	
MB 240-343157/23-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-343157/24-A	Lab Control Sample	Total/NA	Solid	3540C	
720-88263-F-18-B MS	Matrix Spike	Total/NA	Solid	3540C	
720-88263-F-18-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3540C	

Analysis Batch: 343540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-343157/23-A	Method Blank	Total/NA	Solid	8082	343157
LCS 240-343157/24-A	Lab Control Sample	Total/NA	Solid	8082	343157

Analysis Batch: 343584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-F-18-B MS	Matrix Spike	Total/NA	Solid	8082	343157
720-88263-F-18-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8082	343157

Analysis Batch: 343618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88260-1	DG-F11S-3.5-4	Total/NA	Solid	8082	343157

Metals

Prep Batch: 250513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88260-1	DG-F11S-3.5-4	Total/NA	Solid	3050B	
720-88260-2	DG-H11S-0.5-1	Total/NA	Solid	3050B	
720-88260-3	DG-H11S-3.5-4	Total/NA	Solid	3050B	
MB 720-250513/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250513/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88260-2 MS	DG-H11S-0.5-1	Total/NA	Solid	3050B	
720-88260-2 MSD	DG-H11S-0.5-1	Total/NA	Solid	3050B	

Prep Batch: 250614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88260-1	DG-F11S-3.5-4	Total/NA	Solid	7471A	
720-88260-2	DG-H11S-0.5-1	Total/NA	Solid	7471A	
720-88260-3	DG-H11S-3.5-4	Total/NA	Solid	7471A	
MB 720-250614/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250614/2-A	Lab Control Sample	Total/NA	Solid	7471A	

Metals (Continued)

Prep Batch: 250614 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88242-D-13-J MS	Matrix Spike	Total/NA	Solid	7471A	
720-88242-D-13-K MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	

Analysis Batch: 250635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88260-1	DG-F11S-3.5-4	Total/NA	Solid	6010B	250513
720-88260-2	DG-H11S-0.5-1	Total/NA	Solid	6010B	250513
720-88260-3	DG-H11S-3.5-4	Total/NA	Solid	6010B	250513
MB 720-250513/1-A	Method Blank	Total/NA	Solid	6010B	250513
LCS 720-250513/2-A	Lab Control Sample	Total/NA	Solid	6010B	250513
720-88260-2 MS	DG-H11S-0.5-1	Total/NA	Solid	6010B	250513
720-88260-2 MSD	DG-H11S-0.5-1	Total/NA	Solid	6010B	250513

Analysis Batch: 250857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88260-1	DG-F11S-3.5-4	Total/NA	Solid	7471A	250614
720-88260-2	DG-H11S-0.5-1	Total/NA	Solid	7471A	250614
720-88260-3	DG-H11S-3.5-4	Total/NA	Solid	7471A	250614
MB 720-250614/1-A	Method Blank	Total/NA	Solid	7471A	250614
LCS 720-250614/2-A	Lab Control Sample	Total/NA	Solid	7471A	250614
720-88242-D-13-J MS	Matrix Spike	Total/NA	Solid	7471A	250614
720-88242-D-13-K MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	250614

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88260-1

Client Sample ID: DG-F11S-3.5-4 — Lab Sample ID: 720-88260-1

Date Collected: 08/24/18 14:15 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			250580	08/30/18 10:18	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		10	250749	09/03/18 21:15	LPL	TAL PLS
Total/NA	Prep	3546			250566	08/30/18 08:54	MAB	TAL PLS
Total/NA	Analysis	8015B		20	250884	09/05/18 13:51	JXL	TAL PLS
Total/NA	Prep	3546			250531	08/29/18 17:11	MAB	TAL PLS
Total/NA	Analysis	8081A		10	250765	09/04/18 16:31	MQL	TAL PLS
Total/NA	Prep	3540C			343157	08/30/18 06:48	DVT	TAL CAN
Total/NA	Analysis	8082		5	343618	09/04/18 11:45	KMG	TAL CAN
Total/NA	Prep	3050B			250513	08/29/18 15:55	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250635	08/30/18 16:28	OBI	TAL PLS
Total/NA	Prep	7471A			250614	08/30/18 14:37	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250857	09/04/18 17:43	OBI	TAL PLS

Client Sample ID: DG-H11S-0.5-1 — Lab Sample ID: 720-88260-2

Date Collected: 08/24/18 14:26 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250513	08/29/18 15:55	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250635	08/30/18 16:23	OBI	TAL PLS
Total/NA	Prep	7471A			250614	08/30/18 14:37	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250857	09/04/18 17:45	OBI	TAL PLS

Client Sample ID: DG-H11S-3.5-4 — Lab Sample ID: 720-88260-3

Date Collected: 08/24/18 14:26 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250513	08/29/18 15:55	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250635	08/30/18 16:32	OBI	TAL PLS
Total/NA	Prep	7471A			250614	08/30/18 14:37	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250857	09/04/18 17:53	OBI	TAL PLS

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88260-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Laboratory: TestAmerica Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-19
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19
Illinois	NELAP	5	200004	07-31-19
Kansas	NELAP	7	E-10336	01-31-19
Kentucky (UST)	State Program	4	58	02-23-19
Kentucky (WW)	State Program	4	98016	12-31-18 *
Minnesota	NELAP	5	039-999-348	12-31-18 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19
New York	NELAP	2	10975	03-31-19
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-19
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-17-9	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19
Washington	State Program	10	C971	01-12-19
West Virginia DEP	State Program	3	210	12-31-18 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88260-1

Method	Method Description	Protocol	Laboratory
8270C SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
8081A	Organochlorine Pesticides (GC)	SW846	TAL PLS
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS
3050B	Preparation, Metals	SW846	TAL PLS
3540C	Soxhlet Extraction	SW846	TAL CAN
3546	Microwave Extraction	SW846	TAL PLS
7471A	Preparation, Mercury	SW846	TAL PLS

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88260-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-88260-1	DG-F11S-3.5-4	Solid	08/24/18 14:15	08/27/18 14:25
720-88260-2	DG-H11S-0.5-1	Solid	08/24/18 14:26	08/27/18 14:25
720-88260-3	DG-H11S-3.5-4	Solid	08/24/18 14:26	08/27/18 14:25

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-88260

8/27/18 ~~720-88252~~

TESTAMERICA PI
1220 Quarry Lane
Phone: (925) 484

720-88260 Chain of Custody

Reference #: 185133

Date 8/27/18 Page 1 of 2

Report To

Attn: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: mkahrilas@geosyntec.com
Bill To: GEOSYNTEC
Attn: A SMITH
Sampled By: R. Thomas/K. Belli
Phone: 470 881 0525

Request

Sample ID	Date	Time	Comp/Grab	Preserv.	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B + GRO	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☐ Motor Oil ☐ Other	SemiVolatile Organics GCMS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☒ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides PCBs ☒ EPA 8081 ☒ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Metals: ☐ 6020 ☐ 200.8 (ICP-MS):	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	Asbestos (CARB 435)	Perform MS/MSD (lab to homogenize)
DG-K7S-0.5-1	8/24	752	S	Y	X			X		X		X	X										X	
DG-K7S-3.5-4		752	S	Y	X			X		X		X	X										X	
DG-L13S-0.5-1		940	S	Y	X			X		X		X	X										X	X
DG-L13S-3.5-4		940	S	Y	X			X		X		X	X										X	X
DG-K13S-0.5-1		1020	S	N									X											
DG-K13S-3.5-4		1020	S	N									X											
DG-M14S-0.5-1		1100	S	N									X											
DG-M14S-3.5-4		1100	S	N									X											
DG-J12S-0.5-1		1130	S	N									X											
DG-J12S-3.5-4		1130	S	N									X											

Project Info.

Project Name/#: UPC OU-SM1
PO#: WG2565/02
Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt

# of Containers:
Head Space:
Temp:

10 Day	5 Day	4 Day	3 Day	2 Day	1 Day	Other:
	(5)					

Report: ☐ Routine ☐ Level 3 ☒ Level 4 ☐ EDD ☐ EDF ☐ Global ID

Special Instructions / Comments:
JH 8/30/18 *
FIRST 16 SAMPLES WERE REC'D 8/24/18
2.8°C
720-88240

Terms and Conditions on reverse

1) Relinquished by: Kelli Belli 615A
Signature Time
Keaton Belli 8/27
Printed Name Date
Geosyntec
Company

2) Relinquished by: 1330 HGC
Signature Time
Rosemarie K. Thomas 8/27
Printed Name Date
Geosyntec
Company

3) Relinquished by: 1425
Signature Time
Robert 8/27/18
Printed Name Date
TA
Company

1) Received by: 1100
Signature Time
Rosemarie Thomas 8/27
Printed Name Date
Geosyntec
Company

2) Received by: 1200
Signature Time
Robert 8/27/18
Printed Name Date
TA
Company

3) Received by: 1435
Signature Time
Dennis A 8/27/18
Printed Name Date
NA-72c
Company

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

720-8820

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 185133

Date 8/27/18 Page 2 of 2

port To

: MIRANDA KAHRILAS
npany: GEOSYNTEC
ress: 1111 BROADWAY 6TH FLOOR
ail: mkahrilas@geosyntec.com
To: GEOSYNTEC
Sampled By: R. Thomas / K. Belli
: A. SMITH
Phone: 470 881 0525

Analysis Request

Sample ID	Date	Time	Matrix	Preserv.	Volatile Organics GC/MS (VOCs) ☒ EPA 8260B + 8120	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☒ Motor Oil ☐ Other	Semi-Volatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☒ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☒ EPA 8081 PCBs ☒ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Metals: ☐ 6020 ☐ 200.8 (ICP-MS):	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH: ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	Asbestos (CARB 435)	
DG-K12S-0.5-1	8/24	1145	S	N									X										
DG-K12S-3.5-4		1145	S	N									X										
DG-I12S-0.5-1			S	N									X										
DG-I12S-3.5-4			S	N									X										
DG-H12S-0.5-1		1201	S	N									X										
DG-H12S-3.5-4		1201	S	N									X										
~~DG-F11S-0.5-1~~		~~1415~~	~~S~~	~~N~~				X	X	X	X	X	X								X		
DG-F11S-3.5-4		1415	S	N				X	X	X	X	X	X										
DG-H11S-0.5-1		1426	S	N									X										
DG-H11S-3.5-4		1426	S	N									X										

Project Info
ect Name/#: UPC OU-SM
: WG2565/02
lit Card #/N: If yes, please call with payment information ASAP

Sample Receipt
# of Containers:
Head Space:
Temp:

10 Day | 5 Day | 4 Day | 3 Day | 2 Day | 1 Day | Other:

ort: ☐ Routine ☐ Level 3 ☒ Level 4 ☐ EDD ☐ EDF
cial Instructions / Comments: ☐ Global ID

rms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: K. Belli — Time: 615	Signature: [illegible] — Time: 1440	Signature: [illegible] — Time: 1425
Printed Name: Keaton Belli — Date: 8/27	Printed Name: Rosemarie K. Thomas — Date: 8/27	Printed Name: [illegible] — Date: 8/27/18
Company: Geosyntec	Company: Geosyntec	Company: TA

1) Received by:	2) Received by:	3) Received by:
Signature: [illegible] — Time: 1100	Signature: [illegible] — Time: 1300	Signature: [illegible] — Time: 1425
Printed Name: Rosemarie K. Thomas — Date: 8/27	Printed Name: [illegible] — Date: 8/27/18	Printed Name: Dennis Aoan — Date: 8/27/18
Company: Geosyntec	Company: TA	Company: TA-TTC

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

0.8/0.8

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39438.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88260-1
Address: 4101 Shuffel Street NW, ,	Due Date Requested: 9/4/2018			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: UPC OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

C209

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8082/3540C (MOD) PCB 7 Aroclors	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-F115-3.5-4 (720-88260-1)	8/24/18	14:15 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:		Method of Shipment:	
Relinquished by:	Date/Time: 8/28/18 1237	Company TA729	Received by:	Date/Time: 8/29/18 935	Company TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** _____
Canton Facility

Client TA Pleasanton Site Name _____ Cooler unpacked by:
Cooler Received on 8/29/18 Opened on 8/29/18
FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other _____
Packing material used: Bubble Wrap Foam Plastic Bag None Other _____
COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF +0 °C) Observed Cooler Temp. 0.8 °C Corrected Cooler Temp. 0.8 °C
   IR GUN #36 (CF -0.3°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   -Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
   -Were tamper/custody seals intact and uncompromised? Yes No NA
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No
    If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC849151**
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
16. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____.

WI-NC-099

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88260-1

Login Number: 88260
List Number: 1
Creator: Bullock, Tracy

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-88261-1
Client Project/Site: UPC OU-SM
Revision: 1

For:
Geosyntec Consultants, Inc.
201 N. Civic Drive
Suite 245
Walnut Creek, California 94596

Attn: Mr. Krys Jesionek

Authorized for release by:
11/21/2018 6:56:22 PM

Micah Smith, Project Manager II
(925)484-1919
micah.smith@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 6
Client Sample Results 12
Surrogate Summary 46
QC Sample Results 48
QC Association Summary 69
Lab Chronicle 74
Certification Summary 78
Method Summary 79
Sample Summary 80
Chain of Custody 81
Receipt Checklists 85

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
F2	MS/MSD RPD exceeds control limits
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 720-88261-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-88261-1

Comments
This report was revised on 11/21/18 to change the units for the metals data to report in mg/Kg, as requested.

Receipt
The samples were received on 8/27/2018 2:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.0º C.

Receipt Exceptions
The following sample was received outside of holding time for Terracores to be frozen: DG-I9S-0.5-1 collected Friday 8/24/18 16:15. Sample was analyzed from the methanol container which was within the holding time.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 720-250928 and analytical batch 720-251035 recovered outside control limits for the following analytes: 1,1-Dichloroethene, 1,1,2-Trichloro-1,2,2-trifluoroethane, trans-1,2-Dichloroethene and 1,1-Dichloroethane. These analytes were biased high in the LCS/LCSD and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method(s) 8270C SIM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250580 and analytical batch 720-250745 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: DG-I9S-0.5-1 (720-88261-11), (720-88263-F-18-A), (720-88263-F-18-B MS) and (720-88263-F-18-C MSD).

Method(s) 8081A: The following sample required a dilution due to the nature of the sample matrix: DG-I9S-0.5-1 (720-88261-11). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method(s) 8081A: The following sample was diluted due to color: DG-I9S-0.5-1 (720-88261-11). Elevated reporting limits (RL) are provided.

Method(s) 8015B: The following sample required a dilution due to the nature of the sample matrix: DG-I9S-0.5-1 (720-88261-11). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 720-250633 and analytical batch 720-250723 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) precision was within acceptance limits.

Method(s) 6010B: Internal standard responses were outside of acceptance limits for the ICSAB, but recoveries met criteria: (ICSAB 720-250879/8). The sample(s) shows evidence of matrix interference.

Method(s) 6010B: All samples were diluted due to the abundance of non-target analytes. Elevated reporting limits (RLs) are provided.

Job ID: 720-88261-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

Method(s) 6010B: The post digestion spike % recovery associated with batch 720-250732 was outside of the 75-125% control limits: (720-88261-A-7-F PDS).

Analyte	Recovery
Silver	132%
Barium	154%
Beryllium	140%
Chromium	133%
Copper	163%
Lead	126%
Vanadium	136%

Method(s) 6010B: The serial dilution performed for the following sample associated with batch 720-250732 was outside of the 10% control limits: (720-88261-A-7-F SD).

Analyte	Recovery
Arsenic	31%
Barium	40%
Cobalt	37%
Chromium	40%
Copper	36%
Nickel	35%
Lead	38%
Vanadium	37%

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88261-1

Client Sample ID: DG-J11S-0.5-1 — Lab Sample ID: 720-88261-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.1		1.6	0.26	mg/Kg	4		6010B	Total/NA
Arsenic	2.7	J	3.1	0.27	mg/Kg	4		6010B	Total/NA
Barium	53		1.6	0.22	mg/Kg	4		6010B	Total/NA
Chromium	33		1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.63	0.063	mg/Kg	4		6010B	Total/NA
Copper	63		4.7	2.2	mg/Kg	4		6010B	Total/NA
Lead	52		1.6	0.33	mg/Kg	4		6010B	Total/NA
Nickel	26		1.6	0.16	mg/Kg	4		6010B	Total/NA
Silver	0.42	J	0.78	0.16	mg/Kg	4		6010B	Total/NA
Thallium	0.46	J	1.6	0.45	mg/Kg	4		6010B	Total/NA
Vanadium	70		1.6	0.21	mg/Kg	4		6010B	Total/NA
Zinc	45		4.7	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.055		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-J11S-3.5-4 — Lab Sample ID: 720-88261-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.4	J	1.8	0.30	mg/Kg	4		6010B	Total/NA
Arsenic	4.6		3.6	0.31	mg/Kg	4		6010B	Total/NA
Barium	60		1.8	0.26	mg/Kg	4		6010B	Total/NA
Cadmium	0.045	J	0.45	0.045	mg/Kg	4		6010B	Total/NA
Chromium	65		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	9.8		0.73	0.073	mg/Kg	4		6010B	Total/NA
Copper	26		5.5	2.6	mg/Kg	4		6010B	Total/NA
Lead	49		1.8	0.38	mg/Kg	4		6010B	Total/NA
Nickel	41		1.8	0.19	mg/Kg	4		6010B	Total/NA
Silver	0.42	J	0.91	0.18	mg/Kg	4		6010B	Total/NA
Thallium	0.67	J	1.8	0.53	mg/Kg	4		6010B	Total/NA
Vanadium	70		1.8	0.25	mg/Kg	4		6010B	Total/NA
Zinc	39		5.5	2.3	mg/Kg	4		6010B	Total/NA
Mercury	0.023		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-L11S-0.5-1 — Lab Sample ID: 720-88261-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.63	J	1.9	0.31	mg/Kg	4		6010B	Total/NA
Arsenic	2.5	J	3.7	0.32	mg/Kg	4		6010B	Total/NA
Barium	42		1.9	0.27	mg/Kg	4		6010B	Total/NA
Cadmium	0.16	J	0.47	0.046	mg/Kg	4		6010B	Total/NA
Chromium	13		1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	17		0.75	0.075	mg/Kg	4		6010B	Total/NA
Copper	120		5.6	2.7	mg/Kg	4		6010B	Total/NA
Lead	31		1.9	0.39	mg/Kg	4		6010B	Total/NA
Nickel	9.8		1.9	0.19	mg/Kg	4		6010B	Total/NA
Silver	0.63	J	0.93	0.19	mg/Kg	4		6010B	Total/NA
Thallium	1.0	J	1.9	0.54	mg/Kg	4		6010B	Total/NA
Vanadium	110		1.9	0.25	mg/Kg	4		6010B	Total/NA
Zinc	130		5.6	2.4	mg/Kg	4		6010B	Total/NA
Mercury	0.051		0.016	0.0024	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88261-1

Client Sample ID: DG-L11S-3.5-4 — Lab Sample ID: 720-88261-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.2	J	1.8	0.30	mg/Kg	4		6010B	Total/NA
Arsenic	7.3		3.6	0.30	mg/Kg	4		6010B	Total/NA
Barium	140		1.8	0.25	mg/Kg	4		6010B	Total/NA
Beryllium	0.54		0.36	0.12	mg/Kg	4		6010B	Total/NA
Cadmium	0.18	J	0.45	0.044	mg/Kg	4		6010B	Total/NA
Chromium	36		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	16		0.71	0.071	mg/Kg	4		6010B	Total/NA
Copper	54		5.4	2.5	mg/Kg	4		6010B	Total/NA
Lead	76		1.8	0.38	mg/Kg	4		6010B	Total/NA
Molybdenum	0.88	J	1.8	0.23	mg/Kg	4		6010B	Total/NA
Nickel	38		1.8	0.18	mg/Kg	4		6010B	Total/NA
Silver	0.55	J	0.89	0.18	mg/Kg	4		6010B	Total/NA
Vanadium	54		1.8	0.24	mg/Kg	4		6010B	Total/NA
Zinc	100		5.4	2.3	mg/Kg	4		6010B	Total/NA
Mercury	0.077		0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-M10S-0.5-1 — Lab Sample ID: 720-88261-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.8		1.7	0.27	mg/Kg	4		6010B	Total/NA
Arsenic	39		3.3	0.28	mg/Kg	4		6010B	Total/NA
Barium	110		1.7	0.23	mg/Kg	4		6010B	Total/NA
Cadmium	0.50		0.41	0.041	mg/Kg	4		6010B	Total/NA
Chromium	26		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	12		0.66	0.066	mg/Kg	4		6010B	Total/NA
Copper	110		5.0	2.4	mg/Kg	4		6010B	Total/NA
Lead	320		1.7	0.35	mg/Kg	4		6010B	Total/NA
Molybdenum	0.31	J	1.7	0.21	mg/Kg	4		6010B	Total/NA
Nickel	21		1.7	0.17	mg/Kg	4		6010B	Total/NA
Silver	0.51	J	0.83	0.17	mg/Kg	4		6010B	Total/NA
Thallium	0.86	J	1.7	0.48	mg/Kg	4		6010B	Total/NA
Vanadium	72		1.7	0.22	mg/Kg	4		6010B	Total/NA
Zinc	150		5.0	2.1	mg/Kg	4		6010B	Total/NA
Mercury	0.24		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-M10S-3.5-4 — Lab Sample ID: 720-88261-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.81	J	1.9	0.31	mg/Kg	4		6010B	Total/NA
Arsenic	16		3.7	0.32	mg/Kg	4		6010B	Total/NA
Barium	46		1.9	0.27	mg/Kg	4		6010B	Total/NA
Beryllium	0.56		0.37	0.12	mg/Kg	4		6010B	Total/NA
Cadmium	0.13	J	0.47	0.046	mg/Kg	4		6010B	Total/NA
Chromium	33		1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	17		0.75	0.075	mg/Kg	4		6010B	Total/NA
Copper	47		5.6	2.7	mg/Kg	4		6010B	Total/NA
Lead	20		1.9	0.39	mg/Kg	4		6010B	Total/NA
Molybdenum	0.26	J	1.9	0.24	mg/Kg	4		6010B	Total/NA
Nickel	35		1.9	0.19	mg/Kg	4		6010B	Total/NA
Vanadium	53		1.9	0.25	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-M10S-3.5-4 (Continued) — Lab Sample ID: 720-88261-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	88		5.6	2.4	mg/Kg	4		6010B	Total/NA
Mercury	0.063		0.015	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-M9S-0.5-1 — Lab Sample ID: 720-88261-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	4.8	F1	1.8	0.30	mg/Kg	4		6010B	Total/NA
Arsenic	25		3.6	0.31	mg/Kg	4		6010B	Total/NA
Barium	77	F1	1.8	0.26	mg/Kg	4		6010B	Total/NA
Beryllium	0.24	J F1	0.36	0.12	mg/Kg	4		6010B	Total/NA
Cadmium	0.28	J	0.45	0.045	mg/Kg	4		6010B	Total/NA
Chromium	34	F1	1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	21		0.73	0.073	mg/Kg	4		6010B	Total/NA
Copper	240		5.5	2.6	mg/Kg	4		6010B	Total/NA
Lead	120	F1 F2	1.8	0.38	mg/Kg	4		6010B	Total/NA
Molybdenum	1.5	J	1.8	0.23	mg/Kg	4		6010B	Total/NA
Nickel	58		1.8	0.19	mg/Kg	4		6010B	Total/NA
Selenium	0.66	J	3.6	0.55	mg/Kg	4		6010B	Total/NA
Silver	0.57	J F1	0.91	0.18	mg/Kg	4		6010B	Total/NA
Thallium	0.89	J	1.8	0.53	mg/Kg	4		6010B	Total/NA
Vanadium	44	F1 F2	1.8	0.25	mg/Kg	4		6010B	Total/NA
Zinc	83	F1	5.5	2.3	mg/Kg	4		6010B	Total/NA
Mercury	0.10		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-M9S-3.5-4 — Lab Sample ID: 720-88261-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.2		1.9	0.32	mg/Kg	4		6010B	Total/NA
Arsenic	16		3.8	0.33	mg/Kg	4		6010B	Total/NA
Barium	67		1.9	0.27	mg/Kg	4		6010B	Total/NA
Beryllium	0.55		0.38	0.13	mg/Kg	4		6010B	Total/NA
Cadmium	0.16	J	0.48	0.048	mg/Kg	4		6010B	Total/NA
Chromium	36		1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	18		0.77	0.077	mg/Kg	4		6010B	Total/NA
Copper	52		5.8	2.7	mg/Kg	4		6010B	Total/NA
Lead	26		1.9	0.40	mg/Kg	4		6010B	Total/NA
Molybdenum	0.48	J	1.9	0.25	mg/Kg	4		6010B	Total/NA
Nickel	44		1.9	0.20	mg/Kg	4		6010B	Total/NA
Silver	0.64	J	0.96	0.19	mg/Kg	4		6010B	Total/NA
Vanadium	46		1.9	0.26	mg/Kg	4		6010B	Total/NA
Zinc	120		5.8	2.4	mg/Kg	4		6010B	Total/NA
Mercury	0.042		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-K9S-0.5-1 — Lab Sample ID: 720-88261-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.31	J	3.3	0.28	mg/Kg	4		6010B	Total/NA
Barium	43		1.7	0.23	mg/Kg	4		6010B	Total/NA
Chromium	12		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	12		0.66	0.066	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88261-1

Client Sample ID: DG-K9S-0.5-1 (Continued) — Lab Sample ID: 720-88261-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	130		5.0	2.4	mg/Kg	4		6010B	Total/NA
Lead	35		1.7	0.35	mg/Kg	4		6010B	Total/NA
Nickel	4.0		1.7	0.17	mg/Kg	4		6010B	Total/NA
Silver	0.48	J	0.83	0.17	mg/Kg	4		6010B	Total/NA
Thallium	0.54	J	1.7	0.48	mg/Kg	4		6010B	Total/NA
Vanadium	110		1.7	0.22	mg/Kg	4		6010B	Total/NA
Zinc	56		5.0	2.1	mg/Kg	4		6010B	Total/NA
Mercury	0.084		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-K9S-3.5-4 — Lab Sample ID: 720-88261-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.69	J	1.8	0.30	mg/Kg	4		6010B	Total/NA
Arsenic	4.3		3.6	0.31	mg/Kg	4		6010B	Total/NA
Barium	97		1.8	0.26	mg/Kg	4		6010B	Total/NA
Cadmium	0.10	J	0.45	0.045	mg/Kg	4		6010B	Total/NA
Chromium	26		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	9.1		0.72	0.072	mg/Kg	4		6010B	Total/NA
Copper	61		5.4	2.6	mg/Kg	4		6010B	Total/NA
Lead	38		1.8	0.38	mg/Kg	4		6010B	Total/NA
Molybdenum	0.89	J	1.8	0.23	mg/Kg	4		6010B	Total/NA
Nickel	28		1.8	0.18	mg/Kg	4		6010B	Total/NA
Silver	0.48	J	0.90	0.18	mg/Kg	4		6010B	Total/NA
Thallium	0.67	J	1.8	0.52	mg/Kg	4		6010B	Total/NA
Vanadium	58		1.8	0.25	mg/Kg	4		6010B	Total/NA
Zinc	75		5.4	2.3	mg/Kg	4		6010B	Total/NA
Mercury	0.053		0.015	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-I9S-0.5-1 — Lab Sample ID: 720-88261-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	26000		11000	1700	ug/Kg	20		8260B	Total/NA
2-Methylnaphthalene	18000		960	480	ug/Kg	20		8270C SIM	Total/NA
Acenaphthene	18000		480	270	ug/Kg	20		8270C SIM	Total/NA
Acenaphthylene	620		480	230	ug/Kg	20		8270C SIM	Total/NA
Anthracene	7000		480	190	ug/Kg	20		8270C SIM	Total/NA
Benzo[a]anthracene	2800		480	140	ug/Kg	20		8270C SIM	Total/NA
Benzo[a]pyrene	950		480	180	ug/Kg	20		8270C SIM	Total/NA
Benzo[b]fluoranthene	1500		480	200	ug/Kg	20		8270C SIM	Total/NA
Benzo[k]fluoranthene	720		480	200	ug/Kg	20		8270C SIM	Total/NA
Chrysene	2200		480	130	ug/Kg	20		8270C SIM	Total/NA
Fluoranthene	17000		480	130	ug/Kg	20		8270C SIM	Total/NA
Fluorene	13000		480	210	ug/Kg	20		8270C SIM	Total/NA
Naphthalene	57000		480	330	ug/Kg	20		8270C SIM	Total/NA
Phenanthrene	37000		480	170	ug/Kg	20		8270C SIM	Total/NA
Pyrene	11000		480	160	ug/Kg	20		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	2100000		95000	36000	ug/Kg	20		8015B	Total/NA
Antimony	0.90	J	1.6	0.26	mg/Kg	4		6010B	Total/NA
Arsenic	5.4		3.1	0.27	mg/Kg	4		6010B	Total/NA
Barium	130		1.6	0.22	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-I9S-0.5-1 (Continued) — Lab Sample ID: 720-88261-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.48		0.39	0.039	mg/Kg	4		6010B	Total/NA
Chromium	24		1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	9.5		0.63	0.063	mg/Kg	4		6010B	Total/NA
Copper	51		4.7	2.2	mg/Kg	4		6010B	Total/NA
Lead	190		1.6	0.33	mg/Kg	4		6010B	Total/NA
Molybdenum	0.70	J	1.6	0.20	mg/Kg	4		6010B	Total/NA
Nickel	36		1.6	0.16	mg/Kg	4		6010B	Total/NA
Vanadium	32		1.6	0.21	mg/Kg	4		6010B	Total/NA
Zinc	120		4.7	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.057		0.015	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-E9S-0.5-1 — Lab Sample ID: 720-88261-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.40	J	3.7	0.31	mg/Kg	4		6010B	Total/NA
Barium	47		1.9	0.26	mg/Kg	4		6010B	Total/NA
Chromium	14		1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	13		0.74	0.074	mg/Kg	4		6010B	Total/NA
Copper	260		5.6	2.6	mg/Kg	4		6010B	Total/NA
Lead	6.7		1.9	0.39	mg/Kg	4		6010B	Total/NA
Nickel	4.6		1.9	0.19	mg/Kg	4		6010B	Total/NA
Silver	0.72	J	0.93	0.19	mg/Kg	4		6010B	Total/NA
Thallium	0.63	J	1.9	0.54	mg/Kg	4		6010B	Total/NA
Vanadium	130		1.9	0.25	mg/Kg	4		6010B	Total/NA
Zinc	43		5.6	2.4	mg/Kg	4		6010B	Total/NA
Mercury	0.32		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-E9S-3.5-4 — Lab Sample ID: 720-88261-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	14		9.3	1.6	mg/Kg	20		6010B	Total/NA
Arsenic	45		19	1.6	mg/Kg	20		6010B	Total/NA
Barium	62		1.9	0.27	mg/Kg	4		6010B	Total/NA
Chromium	110		9.3	0.99	mg/Kg	20		6010B	Total/NA
Cobalt	26		3.7	0.37	mg/Kg	20		6010B	Total/NA
Copper	470		28	13	mg/Kg	20		6010B	Total/NA
Lead	400		9.3	2.0	mg/Kg	20		6010B	Total/NA
Molybdenum	3.5		1.9	0.24	mg/Kg	4		6010B	Total/NA
Nickel	120		9.3	0.95	mg/Kg	20		6010B	Total/NA
Thallium	4.8	J	9.3	2.7	mg/Kg	20		6010B	Total/NA
Vanadium	57		9.3	1.3	mg/Kg	20		6010B	Total/NA
Zinc	280		28	12	mg/Kg	20		6010B	Total/NA
Mercury	0.11		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-I9S-3.5-4 — Lab Sample ID: 720-88261-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.44	J	3.7	0.31	mg/Kg	4		6010B	Total/NA
Barium	21		1.8	0.26	mg/Kg	4		6010B	Total/NA
Cadmium	0.081	J	0.46	0.046	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-I9S-3.5-4 (Continued) — Lab Sample ID: 720-88261-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	13		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	16		0.73	0.073	mg/Kg	4		6010B	Total/NA
Copper	120		5.5	2.6	mg/Kg	4		6010B	Total/NA
Lead	22		1.8	0.39	mg/Kg	4		6010B	Total/NA
Molybdenum	0.24	J	1.8	0.23	mg/Kg	4		6010B	Total/NA
Nickel	6.0		1.8	0.19	mg/Kg	4		6010B	Total/NA
Silver	0.68	J	0.92	0.19	mg/Kg	4		6010B	Total/NA
Thallium	0.98	J	1.8	0.53	mg/Kg	4		6010B	Total/NA
Vanadium	120		1.8	0.25	mg/Kg	4		6010B	Total/NA
Zinc	55		5.5	2.3	mg/Kg	4		6010B	Total/NA
Mercury	0.056		0.015	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-F11S-0.5-1 — Lab Sample ID: 720-88261-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	8.6		1.6	0.27	mg/Kg	4		6010B	Total/NA
Arsenic	130		3.3	0.28	mg/Kg	4		6010B	Total/NA
Barium	110		1.6	0.23	mg/Kg	4		6010B	Total/NA
Cadmium	2.6		0.41	0.040	mg/Kg	4		6010B	Total/NA
Chromium	240		1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.65	0.065	mg/Kg	4		6010B	Total/NA
Copper	250		4.9	2.3	mg/Kg	4		6010B	Total/NA
Lead	650		1.6	0.34	mg/Kg	4		6010B	Total/NA
Molybdenum	2.5		1.6	0.21	mg/Kg	4		6010B	Total/NA
Nickel	42		1.6	0.17	mg/Kg	4		6010B	Total/NA
Selenium	0.62	J	3.3	0.49	mg/Kg	4		6010B	Total/NA
Silver	1.8		0.81	0.16	mg/Kg	4		6010B	Total/NA
Thallium	1.4	J	1.6	0.47	mg/Kg	4		6010B	Total/NA
Vanadium	44		1.6	0.22	mg/Kg	4		6010B	Total/NA
Zinc	390		4.9	2.1	mg/Kg	4		6010B	Total/NA
Mercury	0.38		0.016	0.0024	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88261-1

Client Sample ID: DG-J11S-0.5-1

Date Collected: 08/24/18 14:52
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88261-1

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.1		1.6	0.26	mg/Kg		08/30/18 18:17	08/31/18 13:36	4
Arsenic	2.7	J	3.1	0.27	mg/Kg		08/30/18 18:17	08/31/18 13:36	4
Barium	53		1.6	0.22	mg/Kg		08/30/18 18:17	08/31/18 13:36	4
Beryllium	ND		0.31	0.10	mg/Kg		08/30/18 18:17	08/31/18 13:36	4
Cadmium	ND		0.39	0.039	mg/Kg		08/30/18 18:17	08/31/18 13:36	4
Chromium	33		1.6	0.17	mg/Kg		08/30/18 18:17	08/31/18 13:36	4
Cobalt	11		0.63	0.063	mg/Kg		08/30/18 18:17	08/31/18 13:36	4
Copper	63		4.7	2.2	mg/Kg		08/30/18 18:17	08/31/18 13:36	4
Lead	52		1.6	0.33	mg/Kg		08/30/18 18:17	08/31/18 13:36	4
Molybdenum	ND		1.6	0.20	mg/Kg		08/30/18 18:17	08/31/18 13:36	4
Nickel	26		1.6	0.16	mg/Kg		08/30/18 18:17	08/31/18 13:36	4
Selenium	ND		3.1	0.47	mg/Kg		08/30/18 18:17	08/31/18 13:36	4
Silver	0.42	J	0.78	0.16	mg/Kg		08/30/18 18:17	08/31/18 13:36	4
Thallium	0.46	J	1.6	0.45	mg/Kg		08/30/18 18:17	08/31/18 13:36	4
Vanadium	70		1.6	0.21	mg/Kg		08/30/18 18:17	08/31/18 13:36	4
Zinc	45		4.7	2.0	mg/Kg		08/30/18 18:17	08/31/18 13:36	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.055		0.016	0.0024	mg/Kg		08/30/18 16:17	08/31/18 18:22	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88261-1

Client Sample ID: DG-J11S-3.5-4

Date Collected: 08/24/18 14:52
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88261-2

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.4	J	1.8	0.30	mg/Kg		08/30/18 18:17	08/31/18 13:41	4
Arsenic	4.6		3.6	0.31	mg/Kg		08/30/18 18:17	08/31/18 13:41	4
Barium	60		1.8	0.26	mg/Kg		08/30/18 18:17	08/31/18 13:41	4
Beryllium	ND		0.36	0.12	mg/Kg		08/30/18 18:17	08/31/18 13:41	4
Cadmium	0.045	J	0.45	0.045	mg/Kg		08/30/18 18:17	08/31/18 13:41	4
Chromium	65		1.8	0.19	mg/Kg		08/30/18 18:17	08/31/18 13:41	4
Cobalt	9.8		0.73	0.073	mg/Kg		08/30/18 18:17	08/31/18 13:41	4
Copper	26		5.5	2.6	mg/Kg		08/30/18 18:17	08/31/18 13:41	4
Lead	49		1.8	0.38	mg/Kg		08/30/18 18:17	08/31/18 13:41	4
Molybdenum	ND		1.8	0.23	mg/Kg		08/30/18 18:17	08/31/18 13:41	4
Nickel	41		1.8	0.19	mg/Kg		08/30/18 18:17	08/31/18 13:41	4
Selenium	ND		3.6	0.55	mg/Kg		08/30/18 18:17	08/31/18 13:41	4
Silver	0.42	J	0.91	0.18	mg/Kg		08/30/18 18:17	08/31/18 13:41	4
Thallium	0.67	J	1.8	0.53	mg/Kg		08/30/18 18:17	08/31/18 13:41	4
Vanadium	70		1.8	0.25	mg/Kg		08/30/18 18:17	08/31/18 13:41	4
Zinc	39		5.5	2.3	mg/Kg		08/30/18 18:17	08/31/18 13:41	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.023		0.015	0.0022	mg/Kg		08/30/18 16:17	08/31/18 18:24	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88261-1

Client Sample ID: DG-L11S-0.5-1

Date Collected: 08/24/18 15:02
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88261-3

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.63	J	1.9	0.31	mg/Kg		08/30/18 18:17	08/31/18 13:46	4
Arsenic	2.5	J	3.7	0.32	mg/Kg		08/30/18 18:17	08/31/18 13:46	4
Barium	42		1.9	0.27	mg/Kg		08/30/18 18:17	08/31/18 13:46	4
Beryllium	ND		0.37	0.12	mg/Kg		08/30/18 18:17	08/31/18 13:46	4
Cadmium	0.16	J	0.47	0.046	mg/Kg		08/30/18 18:17	08/31/18 13:46	4
Chromium	13		1.9	0.20	mg/Kg		08/30/18 18:17	08/31/18 13:46	4
Cobalt	17		0.75	0.075	mg/Kg		08/30/18 18:17	08/31/18 13:46	4
Copper	120		5.6	2.7	mg/Kg		08/30/18 18:17	08/31/18 13:46	4
Lead	31		1.9	0.39	mg/Kg		08/30/18 18:17	08/31/18 13:46	4
Molybdenum	ND		1.9	0.24	mg/Kg		08/30/18 18:17	08/31/18 13:46	4
Nickel	9.8		1.9	0.19	mg/Kg		08/30/18 18:17	08/31/18 13:46	4
Selenium	ND		3.7	0.56	mg/Kg		08/30/18 18:17	08/31/18 13:46	4
Silver	0.63	J	0.93	0.19	mg/Kg		08/30/18 18:17	08/31/18 13:46	4
Thallium	1.0	J	1.9	0.54	mg/Kg		08/30/18 18:17	08/31/18 13:46	4
Vanadium	110		1.9	0.25	mg/Kg		08/30/18 18:17	08/31/18 13:46	4
Zinc	130		5.6	2.4	mg/Kg		08/30/18 18:17	08/31/18 13:46	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.051		0.016	0.0024	mg/Kg		08/30/18 16:17	08/31/18 18:26	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88261-1

Client Sample ID: DG-L11S-3.5-4

Date Collected: 08/24/18 15:02
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88261-4

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.2	J	1.8	0.30	mg/Kg		08/30/18 18:17	08/31/18 14:00	4
Arsenic	7.3		3.6	0.30	mg/Kg		08/30/18 18:17	08/31/18 14:00	4
Barium	140		1.8	0.25	mg/Kg		08/30/18 18:17	08/31/18 14:00	4
Beryllium	0.54		0.36	0.12	mg/Kg		08/30/18 18:17	08/31/18 14:00	4
Cadmium	0.18	J	0.45	0.044	mg/Kg		08/30/18 18:17	08/31/18 14:00	4
Chromium	36		1.8	0.19	mg/Kg		08/30/18 18:17	08/31/18 14:00	4
Cobalt	16		0.71	0.071	mg/Kg		08/30/18 18:17	08/31/18 14:00	4
Copper	54		5.4	2.5	mg/Kg		08/30/18 18:17	08/31/18 14:00	4
Lead	76		1.8	0.38	mg/Kg		08/30/18 18:17	08/31/18 14:00	4
Molybdenum	0.88	J	1.8	0.23	mg/Kg		08/30/18 18:17	08/31/18 14:00	4
Nickel	38		1.8	0.18	mg/Kg		08/30/18 18:17	08/31/18 14:00	4
Selenium	ND		3.6	0.54	mg/Kg		08/30/18 18:17	08/31/18 14:00	4
Silver	0.55	J	0.89	0.18	mg/Kg		08/30/18 18:17	08/31/18 14:00	4
Thallium	ND		1.8	0.52	mg/Kg		08/30/18 18:17	08/31/18 14:00	4
Vanadium	54		1.8	0.24	mg/Kg		08/30/18 18:17	08/31/18 14:00	4
Zinc	100		5.4	2.3	mg/Kg		08/30/18 18:17	08/31/18 14:00	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.077		0.014	0.0021	mg/Kg		08/30/18 16:17	08/31/18 18:29	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88261-1

Client Sample ID: DG-M10S-0.5-1

Date Collected: 08/24/18 15:19
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88261-5

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.8		1.7	0.27	mg/Kg		08/30/18 18:17	08/31/18 14:05	4
Arsenic	39		3.3	0.28	mg/Kg		08/30/18 18:17	08/31/18 14:05	4
Barium	110		1.7	0.23	mg/Kg		08/30/18 18:17	08/31/18 14:05	4
Beryllium	ND		0.33	0.11	mg/Kg		08/30/18 18:17	08/31/18 14:05	4
Cadmium	0.50		0.41	0.041	mg/Kg		08/30/18 18:17	08/31/18 14:05	4
Chromium	26		1.7	0.18	mg/Kg		08/30/18 18:17	08/31/18 14:05	4
Cobalt	12		0.66	0.066	mg/Kg		08/30/18 18:17	08/31/18 14:05	4
Copper	110		5.0	2.4	mg/Kg		08/30/18 18:17	08/31/18 14:05	4
Lead	320		1.7	0.35	mg/Kg		08/30/18 18:17	08/31/18 14:05	4
Molybdenum	0.31	J	1.7	0.21	mg/Kg		08/30/18 18:17	08/31/18 14:05	4
Nickel	21		1.7	0.17	mg/Kg		08/30/18 18:17	08/31/18 14:05	4
Selenium	ND		3.3	0.50	mg/Kg		08/30/18 18:17	08/31/18 14:05	4
Silver	0.51	J	0.83	0.17	mg/Kg		08/30/18 18:17	08/31/18 14:05	4
Thallium	0.86	J	1.7	0.48	mg/Kg		08/30/18 18:17	08/31/18 14:05	4
Vanadium	72		1.7	0.22	mg/Kg		08/30/18 18:17	08/31/18 14:05	4
Zinc	150		5.0	2.1	mg/Kg		08/30/18 18:17	08/31/18 14:05	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.24		0.015	0.0022	mg/Kg		08/30/18 16:17	08/31/18 18:31	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88261-1

Client Sample ID: DG-M10S-3.5-4

Date Collected: 08/24/18 15:19
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88261-6

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.81	J	1.9	0.31	mg/Kg		08/30/18 18:17	08/31/18 14:09	4
Arsenic	16		3.7	0.32	mg/Kg		08/30/18 18:17	08/31/18 14:09	4
Barium	46		1.9	0.27	mg/Kg		08/30/18 18:17	08/31/18 14:09	4
Beryllium	0.56		0.37	0.12	mg/Kg		08/30/18 18:17	08/31/18 14:09	4
Cadmium	0.13	J	0.47	0.046	mg/Kg		08/30/18 18:17	08/31/18 14:09	4
Chromium	33		1.9	0.20	mg/Kg		08/30/18 18:17	08/31/18 14:09	4
Cobalt	17		0.75	0.075	mg/Kg		08/30/18 18:17	08/31/18 14:09	4
Copper	47		5.6	2.7	mg/Kg		08/30/18 18:17	08/31/18 14:09	4
Lead	20		1.9	0.39	mg/Kg		08/30/18 18:17	08/31/18 14:09	4
Molybdenum	0.26	J	1.9	0.24	mg/Kg		08/30/18 18:17	08/31/18 14:09	4
Nickel	35		1.9	0.19	mg/Kg		08/30/18 18:17	08/31/18 14:09	4
Selenium	ND		3.7	0.56	mg/Kg		08/30/18 18:17	08/31/18 14:09	4
Silver	ND		0.93	0.19	mg/Kg		08/30/18 18:17	09/04/18 21:06	4
Thallium	ND		1.9	0.54	mg/Kg		08/30/18 18:17	08/31/18 14:09	4
Vanadium	53		1.9	0.25	mg/Kg		08/30/18 18:17	08/31/18 14:09	4
Zinc	88		5.6	2.4	mg/Kg		08/30/18 18:17	08/31/18 14:09	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.063		0.015	0.0023	mg/Kg		08/30/18 16:17	08/31/18 18:38	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88261-1

Client Sample ID: DG-M9S-0.5-1

Date Collected: 08/24/18 15:38
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88261-7

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	4.8	F1	1.8	0.30	mg/Kg		08/30/18 18:17	08/31/18 13:31	4
Arsenic	25		3.6	0.31	mg/Kg		08/30/18 18:17	08/31/18 13:31	4
Barium	77	F1	1.8	0.26	mg/Kg		08/30/18 18:17	08/31/18 13:31	4
Beryllium	0.24	J F1	0.36	0.12	mg/Kg		08/30/18 18:17	08/31/18 13:31	4
Cadmium	0.28	J	0.45	0.045	mg/Kg		08/30/18 18:17	08/31/18 13:31	4
Chromium	34	F1	1.8	0.19	mg/Kg		08/30/18 18:17	08/31/18 13:31	4
Cobalt	21		0.73	0.073	mg/Kg		08/30/18 18:17	08/31/18 13:31	4
Copper	240		5.5	2.6	mg/Kg		08/30/18 18:17	08/31/18 13:31	4
Lead	120	F1 F2	1.8	0.38	mg/Kg		08/30/18 18:17	08/31/18 13:31	4
Molybdenum	1.5	J	1.8	0.23	mg/Kg		08/30/18 18:17	08/31/18 13:31	4
Nickel	58		1.8	0.19	mg/Kg		08/30/18 18:17	08/31/18 13:31	4
Selenium	0.66	J	3.6	0.55	mg/Kg		08/30/18 18:17	08/31/18 13:31	4
Silver	0.57	J F1	0.91	0.18	mg/Kg		08/30/18 18:17	08/31/18 13:31	4
Thallium	0.89	J	1.8	0.53	mg/Kg		08/30/18 18:17	08/31/18 13:31	4
Vanadium	44	F1 F2	1.8	0.25	mg/Kg		08/30/18 18:17	08/31/18 13:31	4
Zinc	83	F1	5.5	2.3	mg/Kg		08/30/18 18:17	08/31/18 13:31	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.10		0.016	0.0023	mg/Kg		08/30/18 16:17	08/31/18 18:19	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88261-1

Client Sample ID: DG-M9S-3.5-4

Date Collected: 08/24/18 15:38
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88261-8

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.2		1.9	0.32	mg/Kg		08/30/18 18:17	08/31/18 14:14	4
Arsenic	16		3.8	0.33	mg/Kg		08/30/18 18:17	08/31/18 14:14	4
Barium	67		1.9	0.27	mg/Kg		08/30/18 18:17	08/31/18 14:14	4
Beryllium	0.55		0.38	0.13	mg/Kg		08/30/18 18:17	08/31/18 14:14	4
Cadmium	0.16	J	0.48	0.048	mg/Kg		08/30/18 18:17	08/31/18 14:14	4
Chromium	36		1.9	0.20	mg/Kg		08/30/18 18:17	08/31/18 14:14	4
Cobalt	18		0.77	0.077	mg/Kg		08/30/18 18:17	08/31/18 14:14	4
Copper	52		5.8	2.7	mg/Kg		08/30/18 18:17	08/31/18 14:14	4
Lead	26		1.9	0.40	mg/Kg		08/30/18 18:17	08/31/18 14:14	4
Molybdenum	0.48	J	1.9	0.25	mg/Kg		08/30/18 18:17	08/31/18 14:14	4
Nickel	44		1.9	0.20	mg/Kg		08/30/18 18:17	08/31/18 14:14	4
Selenium	ND		3.8	0.58	mg/Kg		08/30/18 18:17	08/31/18 14:14	4
Silver	0.64	J	0.96	0.19	mg/Kg		08/30/18 18:17	08/31/18 14:14	4
Thallium	ND		1.9	0.56	mg/Kg		08/30/18 18:17	08/31/18 14:14	4
Vanadium	46		1.9	0.26	mg/Kg		08/30/18 18:17	08/31/18 14:14	4
Zinc	120		5.8	2.4	mg/Kg		08/30/18 18:17	08/31/18 14:14	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.042		0.017	0.0025	mg/Kg		08/30/18 16:17	08/31/18 18:40	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88261-1

Client Sample ID: DG-K9S-0.5-1

Date Collected: 08/24/18 16:00
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88261-9

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.7	0.27	mg/Kg		08/30/18 18:17	08/31/18 14:19	4
Arsenic	**0.31**	**J**	3.3	0.28	mg/Kg		08/30/18 18:17	08/31/18 14:19	4
Barium	**43**		1.7	0.23	mg/Kg		08/30/18 18:17	08/31/18 14:19	4
Beryllium	ND		0.33	0.11	mg/Kg		08/30/18 18:17	08/31/18 14:19	4
Cadmium	ND		0.41	0.041	mg/Kg		08/30/18 18:17	08/31/18 14:19	4
Chromium	**12**		1.7	0.18	mg/Kg		08/30/18 18:17	08/31/18 14:19	4
Cobalt	**12**		0.66	0.066	mg/Kg		08/30/18 18:17	08/31/18 14:19	4
Copper	**130**		5.0	2.4	mg/Kg		08/30/18 18:17	08/31/18 14:19	4
Lead	**35**		1.7	0.35	mg/Kg		08/30/18 18:17	08/31/18 14:19	4
Molybdenum	ND		1.7	0.21	mg/Kg		08/30/18 18:17	08/31/18 14:19	4
Nickel	**4.0**		1.7	0.17	mg/Kg		08/30/18 18:17	08/31/18 14:19	4
Selenium	ND		3.3	0.50	mg/Kg		08/30/18 18:17	08/31/18 14:19	4
Silver	**0.48**	**J**	0.83	0.17	mg/Kg		08/30/18 18:17	08/31/18 14:19	4
Thallium	**0.54**	**J**	1.7	0.48	mg/Kg		08/30/18 18:17	08/31/18 14:19	4
Vanadium	**110**		1.7	0.22	mg/Kg		08/30/18 18:17	08/31/18 14:19	4
Zinc	**56**		5.0	2.1	mg/Kg		08/30/18 18:17	08/31/18 14:19	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.084**		0.015	0.0022	mg/Kg		08/30/18 16:17	08/31/18 18:43	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88261-1

Client Sample ID: DG-K9S-3.5-4

Date Collected: 08/24/18 16:00
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88261-10

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.69	J	1.8	0.30	mg/Kg		08/30/18 18:17	08/31/18 14:24	4
Arsenic	4.3		3.6	0.31	mg/Kg		08/30/18 18:17	08/31/18 14:24	4
Barium	97		1.8	0.26	mg/Kg		08/30/18 18:17	08/31/18 14:24	4
Beryllium	ND		0.36	0.12	mg/Kg		08/30/18 18:17	08/31/18 14:24	4
Cadmium	0.10	J	0.45	0.045	mg/Kg		08/30/18 18:17	08/31/18 14:24	4
Chromium	26		1.8	0.19	mg/Kg		08/30/18 18:17	08/31/18 14:24	4
Cobalt	9.1		0.72	0.072	mg/Kg		08/30/18 18:17	08/31/18 14:24	4
Copper	61		5.4	2.6	mg/Kg		08/30/18 18:17	08/31/18 14:24	4
Lead	38		1.8	0.38	mg/Kg		08/30/18 18:17	08/31/18 14:24	4
Molybdenum	0.89	J	1.8	0.23	mg/Kg		08/30/18 18:17	08/31/18 14:24	4
Nickel	28		1.8	0.18	mg/Kg		08/30/18 18:17	08/31/18 14:24	4
Selenium	ND		3.6	0.54	mg/Kg		08/30/18 18:17	08/31/18 14:24	4
Silver	0.48	J	0.90	0.18	mg/Kg		08/30/18 18:17	08/31/18 14:24	4
Thallium	0.67	J	1.8	0.52	mg/Kg		08/30/18 18:17	08/31/18 14:24	4
Vanadium	58		1.8	0.25	mg/Kg		08/30/18 18:17	08/31/18 14:24	4
Zinc	75		5.4	2.3	mg/Kg		08/30/18 18:17	08/31/18 14:24	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.053		0.015	0.0023	mg/Kg		08/30/18 16:17	08/31/18 18:45	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88261-1

Client Sample ID: DG-I9S-0.5-1

Date Collected: 08/24/18 16:15
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88261-11

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5700	1400	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
Acetone	ND		57000	28000	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
Benzene	ND		5700	390	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
Dichlorobromomethane	ND		5700	440	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
Bromobenzene	ND		5700	460	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
Chlorobromomethane	ND		23000	440	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
Bromoform	ND		5700	410	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
Bromomethane	ND		11000	560	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
2-Butanone (MEK)	ND		57000	24000	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
n-Butylbenzene	ND		5700	1100	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
sec-Butylbenzene	ND		5700	490	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
tert-Butylbenzene	ND		5700	390	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
Carbon disulfide	ND		5700	530	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
Carbon tetrachloride	ND		5700	520	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
Chlorobenzene	ND		5700	400	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
Chloroethane	ND		11000	520	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
Chloroform	ND		5700	390	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
Chloromethane	ND		11000	560	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
2-Chlorotoluene	ND		5700	390	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
4-Chlorotoluene	ND		5700	390	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
Chlorodibromomethane	ND		5700	390	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
1,2-Dichlorobenzene	ND		5700	690	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
1,3-Dichlorobenzene	ND		5700	400	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
1,4-Dichlorobenzene	ND		5700	810	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
1,3-Dichloropropane	ND		5700	450	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
1,1-Dichloropropene	ND		5700	390	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
1,2-Dibromo-3-Chloropropane	ND		11000	690	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
Ethylene Dibromide	ND		5700	1600	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
Dibromomethane	ND		11000	400	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
Dichlorodifluoromethane	ND		11000	910	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
1,1-Dichloroethane	ND	*	5700	390	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
1,2-Dichloroethane	ND		5700	390	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
1,1-Dichloroethene	ND	*	5700	410	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
cis-1,2-Dichloroethene	ND		5700	420	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
trans-1,2-Dichloroethene	ND	*	5700	620	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
1,2-Dichloropropane	ND		5700	390	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
cis-1,3-Dichloropropene	ND		5700	390	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
trans-1,3-Dichloropropene	ND		5700	390	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
Ethylbenzene	ND		5700	860	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
Hexachlorobutadiene	ND		5700	680	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
2-Hexanone	ND		57000	11000	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
Isopropylbenzene	ND		5700	600	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
4-Isopropyltoluene	ND		5700	2900	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
Methylene Chloride	ND		11000	3400	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
4-Methyl-2-pentanone (MIBK)	ND		57000	11000	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
Naphthalene	**26000**		11000	1700	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
N-Propylbenzene	ND		5700	420	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
Styrene	ND		5700	390	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
1,1,1,2-Tetrachloroethane	ND		5700	390	ug/Kg		08/27/18 02:30	09/07/18 01:40	20

Client Sample ID: DG-I9S-0.5-1

Lab Sample ID: 720-88261-11

Date Collected: 08/24/18 16:15

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		5700	560	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
Tetrachloroethene	ND		5700	500	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
Toluene	ND		5700	810	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
1,2,3-Trichlorobenzene	ND		5700	850	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
1,2,4-Trichlorobenzene	ND		5700	630	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
1,1,1-Trichloroethane	ND		5700	620	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
1,1,2-Trichloroethane	ND		5700	420	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
Trichloroethene	ND		5700	390	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
Trichlorofluoromethane	ND		5700	640	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
1,2,3-Trichloropropane	ND		5700	590	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	5700	2400	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
1,2,4-Trimethylbenzene	ND		5700	1800	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
1,3,5-Trimethylbenzene	ND		5700	390	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
Vinyl acetate	ND		23000	1300	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
Vinyl chloride	ND		5700	610	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
Xylenes, Total	ND		5700	1400	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
2,2-Dichloropropane	ND		5700	390	ug/Kg		08/27/18 02:30	09/07/18 01:40	20
Gasoline Range Organics (GRO) -C4-C12	ND		290000	110000	ug/Kg		08/27/18 02:30	09/07/18 01:40	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*66 - 148*	*08/27/18 02:30*	*09/07/18 01:40*	*20*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*	*08/27/18 02:30*	*09/07/18 01:40*	*20*
Toluene-d8 (Surr)	*100*		*65 - 141*	*08/27/18 02:30*	*09/07/18 01:40*	*20*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**18000**		960	480	ug/Kg		08/30/18 10:18	09/03/18 21:38	20
Acenaphthene	**18000**		480	270	ug/Kg		08/30/18 10:18	09/03/18 21:38	20
Acenaphthylene	**620**		480	230	ug/Kg		08/30/18 10:18	09/03/18 21:38	20
Anthracene	**7000**		480	190	ug/Kg		08/30/18 10:18	09/03/18 21:38	20
Benzo[a]anthracene	**2800**		480	140	ug/Kg		08/30/18 10:18	09/03/18 21:38	20
Benzo[a]pyrene	**950**		480	180	ug/Kg		08/30/18 10:18	09/03/18 21:38	20
Benzo[b]fluoranthene	**1500**		480	200	ug/Kg		08/30/18 10:18	09/03/18 21:38	20
Benzo[g,h,i]perylene	ND		480	410	ug/Kg		08/30/18 10:18	09/03/18 21:38	20
Benzo[k]fluoranthene	**720**		480	200	ug/Kg		08/30/18 10:18	09/03/18 21:38	20
Chrysene	**2200**		480	130	ug/Kg		08/30/18 10:18	09/03/18 21:38	20
Dibenz(a,h)anthracene	ND		480	330	ug/Kg		08/30/18 10:18	09/03/18 21:38	20
Fluoranthene	**17000**		480	130	ug/Kg		08/30/18 10:18	09/03/18 21:38	20
Fluorene	**13000**		480	210	ug/Kg		08/30/18 10:18	09/03/18 21:38	20
Indeno[1,2,3-cd]pyrene	ND		480	400	ug/Kg		08/30/18 10:18	09/03/18 21:38	20
Naphthalene	**57000**		480	330	ug/Kg		08/30/18 10:18	09/03/18 21:38	20
Phenanthrene	**37000**		480	170	ug/Kg		08/30/18 10:18	09/03/18 21:38	20
Pyrene	**11000**		480	160	ug/Kg		08/30/18 10:18	09/03/18 21:38	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*54*		*33 - 120*	*08/30/18 10:18*	*09/03/18 21:38*	*20*
Terphenyl-d14	*74*		*35 - 146*	*08/30/18 10:18*	*09/03/18 21:38*	*20*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88261-1

Client Sample ID: DG-I9S-0.5-1

Date Collected: 08/24/18 16:15
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88261-11

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2100000		95000	36000	ug/Kg		08/30/18 08:54	09/05/18 13:26	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*0*	*X D*	*40 - 130*	*08/30/18 08:54*	*09/05/18 13:26*	*20*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		19	5.9	ug/Kg		08/29/18 17:11	09/03/18 18:29	10
4,4'-DDE	ND		19	4.1	ug/Kg		08/29/18 17:11	09/03/18 18:29	10
4,4'-DDT	ND		19	4.0	ug/Kg		08/29/18 17:11	09/03/18 18:29	10
Aldrin	ND		19	4.8	ug/Kg		08/29/18 17:11	09/03/18 18:29	10
alpha-BHC	ND		19	5.3	ug/Kg		08/29/18 17:11	09/03/18 18:29	10
beta-BHC	ND		19	3.5	ug/Kg		08/29/18 17:11	09/03/18 18:29	10
Chlordane (technical)	ND		390	31	ug/Kg		08/29/18 17:11	09/03/18 18:29	10
cis-Chlordane	ND		19	3.9	ug/Kg		08/29/18 17:11	09/03/18 18:29	10
delta-BHC	ND		19	4.3	ug/Kg		08/29/18 17:11	09/03/18 18:29	10
Dieldrin	ND		19	5.7	ug/Kg		08/29/18 17:11	09/03/18 18:29	10
Endosulfan I	ND		19	3.1	ug/Kg		08/29/18 17:11	09/03/18 18:29	10
Endosulfan II	ND		19	4.7	ug/Kg		08/29/18 17:11	09/03/18 18:29	10
Endosulfan sulfate	ND		19	3.7	ug/Kg		08/29/18 17:11	09/03/18 18:29	10
Endrin	ND		19	4.5	ug/Kg		08/29/18 17:11	09/03/18 18:29	10
Endrin aldehyde	ND		19	6.1	ug/Kg		08/29/18 17:11	09/03/18 18:29	10
Endrin ketone	ND		19	3.2	ug/Kg		08/29/18 17:11	09/03/18 18:29	10
gamma-BHC (Lindane)	ND		19	6.1	ug/Kg		08/29/18 17:11	09/03/18 18:29	10
Heptachlor	ND		19	4.5	ug/Kg		08/29/18 17:11	09/03/18 18:29	10
Heptachlor epoxide	ND		19	3.4	ug/Kg		08/29/18 17:11	09/03/18 18:29	10
Methoxychlor	ND		19	6.6	ug/Kg		08/29/18 17:11	09/03/18 18:29	10
Toxaphene	ND		390	66	ug/Kg		08/29/18 17:11	09/03/18 18:29	10
trans-Chlordane	ND		19	4.5	ug/Kg		08/29/18 17:11	09/03/18 18:29	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*0*	*X D*	*21 - 136*	*08/29/18 17:11*	*09/03/18 18:29*	*10*
Tetrachloro-m-xylene	*0*	*X D*	*21 - 145*	*08/29/18 17:11*	*09/03/18 18:29*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		49	22	ug/Kg		08/30/18 06:48	09/01/18 12:28	1
Aroclor-1221	ND		49	24	ug/Kg		08/30/18 06:48	09/01/18 12:28	1
Aroclor-1232	ND		49	23	ug/Kg		08/30/18 06:48	09/01/18 12:28	1
Aroclor-1242	ND		49	19	ug/Kg		08/30/18 06:48	09/01/18 12:28	1
Aroclor-1248	ND		49	24	ug/Kg		08/30/18 06:48	09/01/18 12:28	1
Aroclor-1254	ND		49	23	ug/Kg		08/30/18 06:48	09/01/18 12:28	1
Aroclor-1260	ND		49	22	ug/Kg		08/30/18 06:48	09/01/18 12:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*58*		*14 - 128*	*08/30/18 06:48*	*09/01/18 12:28*	*1*
DCB Decachlorobiphenyl	*65*		*10 - 132*	*08/30/18 06:48*	*09/01/18 12:28*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.90	J	1.6	0.26	mg/Kg		08/30/18 19:34	08/31/18 23:29	4

Client Sample ID: DG-I9S-0.5-1

Lab Sample ID: 720-88261-11

Date Collected: 08/24/18 16:15

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.4		3.1	0.27	mg/Kg		08/30/18 19:34	08/31/18 23:29	4
Barium	130		1.6	0.22	mg/Kg		08/30/18 19:34	08/31/18 23:29	4
Beryllium	ND		0.31	0.10	mg/Kg		08/30/18 19:34	08/31/18 23:29	4
Cadmium	0.48		0.39	0.039	mg/Kg		08/30/18 19:34	08/31/18 23:29	4
Chromium	24		1.6	0.17	mg/Kg		08/30/18 19:34	08/31/18 23:29	4
Cobalt	9.5		0.63	0.063	mg/Kg		08/30/18 19:34	08/31/18 23:29	4
Copper	51		4.7	2.2	mg/Kg		08/30/18 19:34	08/31/18 23:29	4
Lead	190		1.6	0.33	mg/Kg		08/30/18 19:34	08/31/18 23:29	4
Molybdenum	0.70	J	1.6	0.20	mg/Kg		08/30/18 19:34	08/31/18 23:29	4
Nickel	36		1.6	0.16	mg/Kg		08/30/18 19:34	08/31/18 23:29	4
Selenium	ND		3.1	0.47	mg/Kg		08/30/18 19:34	08/31/18 23:29	4
Silver	ND		0.79	0.16	mg/Kg		08/30/18 19:34	08/31/18 23:29	4
Thallium	ND		1.6	0.46	mg/Kg		08/30/18 19:34	08/31/18 23:29	4
Vanadium	32		1.6	0.21	mg/Kg		08/30/18 19:34	08/31/18 23:29	4
Zinc	120		4.7	2.0	mg/Kg		08/30/18 19:34	08/31/18 23:29	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.057		0.015	0.0021	mg/Kg		09/04/18 21:32	09/05/18 11:31	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88261-1

Client Sample ID: DG-E9S-0.5-1

Date Collected: 08/24/18 16:55
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88261-12

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.9	0.31	mg/Kg		08/30/18 18:17	08/31/18 14:29	4
Arsenic	**0.40**	**J**	3.7	0.31	mg/Kg		08/30/18 18:17	08/31/18 14:29	4
Barium	**47**		1.9	0.26	mg/Kg		08/30/18 18:17	08/31/18 14:29	4
Beryllium	ND		0.37	0.12	mg/Kg		08/30/18 18:17	08/31/18 14:29	4
Cadmium	ND		0.46	0.046	mg/Kg		08/30/18 18:17	08/31/18 14:29	4
Chromium	**14**		1.9	0.20	mg/Kg		08/30/18 18:17	08/31/18 14:29	4
Cobalt	**13**		0.74	0.074	mg/Kg		08/30/18 18:17	08/31/18 14:29	4
Copper	**260**		5.6	2.6	mg/Kg		08/30/18 18:17	08/31/18 14:29	4
Lead	**6.7**		1.9	0.39	mg/Kg		08/30/18 18:17	08/31/18 14:29	4
Molybdenum	ND		1.9	0.24	mg/Kg		08/30/18 18:17	08/31/18 14:29	4
Nickel	**4.6**		1.9	0.19	mg/Kg		08/30/18 18:17	08/31/18 14:29	4
Selenium	ND		3.7	0.56	mg/Kg		08/30/18 18:17	08/31/18 14:29	4
Silver	**0.72**	**J**	0.93	0.19	mg/Kg		08/30/18 18:17	08/31/18 14:29	4
Thallium	**0.63**	**J**	1.9	0.54	mg/Kg		08/30/18 18:17	08/31/18 14:29	4
Vanadium	**130**		1.9	0.25	mg/Kg		08/30/18 18:17	08/31/18 14:29	4
Zinc	**43**		5.6	2.4	mg/Kg		08/30/18 18:17	08/31/18 14:29	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.32**		0.016	0.0024	mg/Kg		08/30/18 16:17	08/31/18 18:47	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88261-1

Client Sample ID: DG-E9S-3.5-4

Date Collected: 08/24/18 16:55
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88261-13

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	14		9.3	1.6	mg/Kg		08/30/18 18:17	09/04/18 21:11	20
Arsenic	45		19	1.6	mg/Kg		08/30/18 18:17	09/04/18 21:11	20
Barium	62		1.9	0.27	mg/Kg		08/30/18 18:17	08/31/18 14:34	4
Beryllium	ND		0.37	0.12	mg/Kg		08/30/18 18:17	08/31/18 14:34	4
Cadmium	ND		2.3	0.23	mg/Kg		08/30/18 18:17	09/04/18 21:11	20
Chromium	110		9.3	0.99	mg/Kg		08/30/18 18:17	09/04/18 21:11	20
Cobalt	26		3.7	0.37	mg/Kg		08/30/18 18:17	09/04/18 21:11	20
Copper	470		28	13	mg/Kg		08/30/18 18:17	09/04/18 21:11	20
Lead	400		9.3	2.0	mg/Kg		08/30/18 18:17	09/04/18 21:11	20
Molybdenum	3.5		1.9	0.24	mg/Kg		08/30/18 18:17	08/31/18 14:34	4
Nickel	120		9.3	0.95	mg/Kg		08/30/18 18:17	09/04/18 21:11	20
Selenium	ND		19	2.8	mg/Kg		08/30/18 18:17	09/04/18 21:11	20
Silver	ND		4.7	0.94	mg/Kg		08/30/18 18:17	09/04/18 21:11	20
Thallium	4.8	J	9.3	2.7	mg/Kg		08/30/18 18:17	09/04/18 21:11	20
Vanadium	57		9.3	1.3	mg/Kg		08/30/18 18:17	09/04/18 21:11	20
Zinc	280		28	12	mg/Kg		08/30/18 18:17	09/04/18 21:11	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.11		0.016	0.0024	mg/Kg		08/30/18 16:17	08/31/18 18:50	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88261-1

Client Sample ID: DG-I9S-3.5-4

Date Collected: 08/24/18 16:15
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88261-14

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.8	0.30	mg/Kg		08/30/18 18:17	08/31/18 14:38	4
Arsenic	**0.44**	**J**	3.7	0.31	mg/Kg		08/30/18 18:17	08/31/18 14:38	4
Barium	**21**		1.8	0.26	mg/Kg		08/30/18 18:17	08/31/18 14:38	4
Beryllium	ND		0.37	0.12	mg/Kg		08/30/18 18:17	08/31/18 14:38	4
Cadmium	**0.081**	**J**	0.46	0.046	mg/Kg		08/30/18 18:17	08/31/18 14:38	4
Chromium	**13**		1.8	0.19	mg/Kg		08/30/18 18:17	08/31/18 14:38	4
Cobalt	**16**		0.73	0.073	mg/Kg		08/30/18 18:17	08/31/18 14:38	4
Copper	**120**		5.5	2.6	mg/Kg		08/30/18 18:17	08/31/18 14:38	4
Lead	**22**		1.8	0.39	mg/Kg		08/30/18 18:17	08/31/18 14:38	4
Molybdenum	**0.24**	**J**	1.8	0.23	mg/Kg		08/30/18 18:17	08/31/18 14:38	4
Nickel	**6.0**		1.8	0.19	mg/Kg		08/30/18 18:17	08/31/18 14:38	4
Selenium	ND		3.7	0.55	mg/Kg		08/30/18 18:17	08/31/18 14:38	4
Silver	**0.68**	**J**	0.92	0.19	mg/Kg		08/30/18 18:17	08/31/18 14:38	4
Thallium	**0.98**	**J**	1.8	0.53	mg/Kg		08/30/18 18:17	08/31/18 14:38	4
Vanadium	**120**		1.8	0.25	mg/Kg		08/30/18 18:17	08/31/18 14:38	4
Zinc	**55**		5.5	2.3	mg/Kg		08/30/18 18:17	08/31/18 14:38	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.056**		0.015	0.0023	mg/Kg		08/30/18 16:17	08/31/18 18:52	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88261-1

Client Sample ID: DG-F11S-0.5-1

Lab Sample ID: 720-88261-15

Date Collected: 08/24/18 14:15
Matrix: Solid
Date Received: 08/27/18 14:25

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	8.6		1.6	0.27	mg/Kg		08/30/18 18:17	08/31/18 14:43	4
Arsenic	130		3.3	0.28	mg/Kg		08/30/18 18:17	08/31/18 14:43	4
Barium	110		1.6	0.23	mg/Kg		08/30/18 18:17	08/31/18 14:43	4
Beryllium	ND		0.33	0.11	mg/Kg		08/30/18 18:17	08/31/18 14:43	4
Cadmium	2.6		0.41	0.040	mg/Kg		08/30/18 18:17	08/31/18 14:43	4
Chromium	240		1.6	0.17	mg/Kg		08/30/18 18:17	08/31/18 14:43	4
Cobalt	11		0.65	0.065	mg/Kg		08/30/18 18:17	08/31/18 14:43	4
Copper	250		4.9	2.3	mg/Kg		08/30/18 18:17	08/31/18 14:43	4
Lead	650		1.6	0.34	mg/Kg		08/30/18 18:17	08/31/18 14:43	4
Molybdenum	2.5		1.6	0.21	mg/Kg		08/30/18 18:17	08/31/18 14:43	4
Nickel	42		1.6	0.17	mg/Kg		08/30/18 18:17	08/31/18 14:43	4
Selenium	0.62	J	3.3	0.49	mg/Kg		08/30/18 18:17	08/31/18 14:43	4
Silver	1.8		0.81	0.16	mg/Kg		08/30/18 18:17	08/31/18 14:43	4
Thallium	1.4	J	1.6	0.47	mg/Kg		08/30/18 18:17	08/31/18 14:43	4
Vanadium	44		1.6	0.22	mg/Kg		08/30/18 18:17	08/31/18 14:43	4
Zinc	390		4.9	2.1	mg/Kg		08/30/18 18:17	08/31/18 14:43	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.38		0.016	0.0024	mg/Kg		08/30/18 16:17	08/31/18 18:54	1

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88261-1

SDG No.:

Client Sample ID: DG-I9S-0.5-1 Lab Sample ID: 720-88261-11

Matrix: Solid Lab File ID: FID1000013.D

Analysis Method: 8015B Date Collected: 08/24/2018 16:15

Extraction Method: 3546 Date Extracted: 08/30/2018 08:54

Sample wt/vol: 15.72(g) Date Analyzed: 09/05/2018 13:26

Con. Extract Vol.: 5(mL) Dilution Factor: 20

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250884 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	2100000		95000	36000

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	0	X D	40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000013.D
Lims ID: 720-88261-E-11-B
Client ID: DG-I9S-0.5-1
Sample Type: Client
Inject. Date: 05-Sep-2018 13:26:54 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 20.0000
Sample Info: 720-0053661-013
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\DRO6_A.m
Limit Group: DRO
Last Update: 05-Sep-2018 13:49:00 Calib Date: 05-Sep-2018 09:01:58
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK002

First Level Reviewer: luj Date: 05-Sep-2018 13:49:00

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane	1.128	1.229	-0.101	295794	NC	M
23 n-Decane	2.134	2.116	0.018	254913	NC	M
A 1 C9-C13	2.734	(1.229-4.240)		63088391	35.5	M
A 21 Stoddard Solvent	2.734	(1.229-4.240)		63088391	35.4	M
A 57 C10-C12	2.865	(2.116-3.613)		38062998	24.7	M
24 Dodecane	3.666	3.613	0.053	1100205	NC	M
A 3 C9 - C17	3.780	(1.229-6.331)		151158748	77.5	M
A 60 C10-C16	3.983	(2.116-5.850)		134126993	76.8	M
A 47 C9 - C18	4.005	(1.229-6.782)		190484545	118.0	M
A 15 Kerosene	4.220	(1.229-7.212)		212768485	131.7	M
A 25 C9-C19	4.220	(1.229-7.212)		212768485	108.5	M
26 C13	4.254	4.240	0.014	1329491	NC	M
$ 27 n-Decanoic Acid (Surr)		4.608			ND	U
A 59 C12-C16	4.732	(3.613-5.850)		96063995	62.3	M
A 62 C10-C20	4.871	(2.116-7.625)		238394421	154.6	M
A 28 C9-C24	5.172	(1.229-9.115)		342903447	222.3	M
A 29 C9-C25	5.341	(1.229-9.453)		380570321	246.7	M
A 54 C10-C23	5.440	(2.116-8.764)		302627092	196.2	M
A 4 C10-C24	5.616	(2.116-9.115)		340656155	220.9	M
A 16 C10-C25	5.785	(2.116-9.453)		378323029	245.3	M
45 Hexadecane	5.806	5.850	-0.044	6097065	NC	M
A 14 C10-C26	5.948	(2.116-9.780)		389983996	252.8	M
A 67 C12-C22	6.006	(3.613-8.400)		245668251	159.3	M
A 32 C10-C28	6.258	(2.116-10.400)		510948951	331.3	M
A 5 Diesel	6.258	(2.116-10.400)		510948951	331.3	M
A 12 Unknown Hydrocarbons	6.258	(2.116-10.400)		510948951	NC	M
A 30 C13-C22	6.320	(4.240-8.400)		222890150	144.5	M
44 Heptadecane	6.294	6.331	-0.037	5252962	NC	M
A 31 C12-C24	6.364	(3.613-9.115)		302593157	196.2	M
51 n-Octadecane	6.773	6.782	-0.009	3235353	NC	M
A 9 Crude Oil Range Organics (	6.880	(1.229-12.531)		831390592	NC	M
A 11 Bunker Range Organics (C9-	6.880	(1.229-12.531)		831390592	NC	M

Report Date: 05-Sep-2018 13:49:01 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000013.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.880	(1.229-12.531)		831390592	469.6	M
33 C19	7.195	7.212	-0.017	3888795	NC	M
A 64 C13-C28	7.320	(4.240-10.400)		450107852	291.8	M
A 17 C10-C36	7.324	(2.116-12.531)		829143300	537.6	M
A 68 Crude Oil Range Organics (	7.391	(1.229-13.553)		1586362455	NC	M
A 13 C9-C40	7.391	(1.229-13.553)		1586362455	1176.5	M
A 58 C16-C24	7.483	(5.850-9.115)		212626227	137.9	M
61 icosane	7.576	7.625	-0.049	22251326	NC	M
A 6 C10-C40	7.835	(2.116-13.553)		1584115163	1175.6	M
$ 34 p-Terphenyl		8.110			ND	U
35 n-Docosane	8.440	8.400	0.040	3107834	NC	M
A 18 C12-C40	8.583	(3.613-13.553)		1546052165	1150.5	M
36 Tricosane	8.781	8.764	0.017	10213654	NC	M
A 66 C13-C40	8.897	(4.240-13.553)		1523274064	1134.8	M
37 n-Tetracosane	9.207	9.115	0.092	12977532	NC	M
A 2 C16-C36 ORO	9.191	(5.850-12.531)		1050095342	920.6	
38 C25	9.444	9.453	-0.009	14944187	NC	M
A 19 C16-C40	9.702	(5.850-13.553)		1456085235	1089.1	M
46 n-Hexacosane	9.854	9.780	0.074	36591159	NC	M
A 20 C19-C36	9.872	(7.212-12.531)		949292973	714.2	
A 55 C23-C32	10.146	(8.764-11.528)		402619561	579.9	M
39 n-Octacosane	10.371	10.400	-0.029	20509947	NC	M
65 C29	10.758	10.695	0.063	37035124	NC	M
A 40 C24-C36	10.823	(9.115-12.531)		721343801	810.1	M
A 7 Motor Oil	10.823	(9.115-12.531)		231813582	260.3	
A 10 C22-C40	10.977	(8.400-13.553)		552438041	444.2	
A 49 C25-C36	10.992	(9.453-12.531)		465764458	520.3	M
A 41 C23-C40	11.159	(8.764-13.553)		1281488071	1002.6	M
A 8 C24-C40	11.334	(9.115-13.553)		1243459008	1021.4	M
56 Dotriacontane	11.579	11.528	0.051	63812834	NC	M
A 50 C28-C40	11.977	(10.400-13.553)		1073166212	1130.6	M
A 63 C29-C40	12.124	(10.695-13.553)		1032423241	1191.3	M
42 n-Hexatriacontane		12.531			ND	
43 C40	13.576	13.553	0.023	29643862	NC	M
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

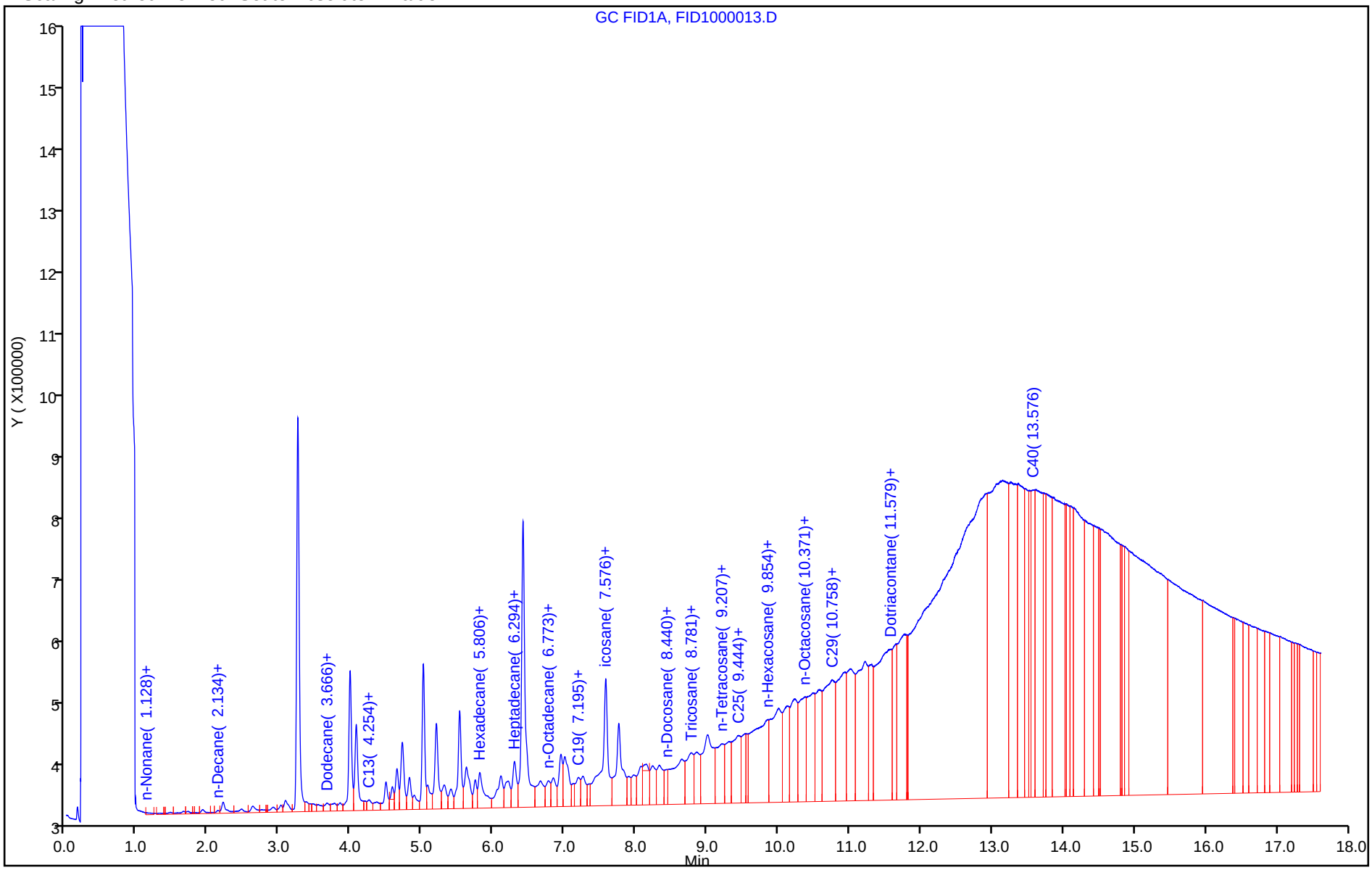
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 05-Sep-2018 13:49:01 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000013.D				
Injection Date:	05-Sep-2018 13:26:54	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88261-E-11-B	Lab Sample ID:	720-88261-11	Worklist Smp#:	13
Client ID:	DG-I9S-0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	20.0000	ALS Bottle#:	13
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value

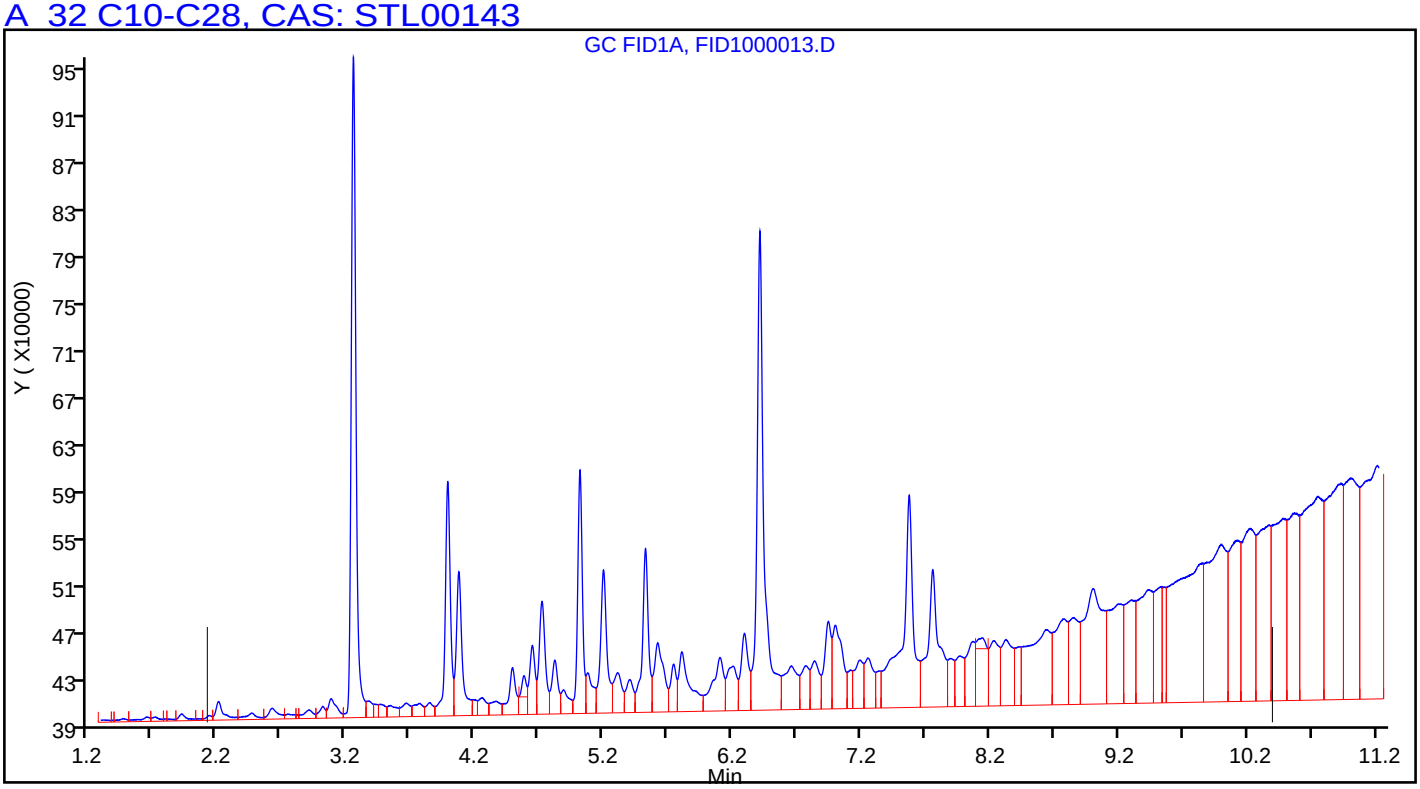


Report Date: 05-Sep-2018 13:49:05 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000013.D				
Injection Date:	05-Sep-2018 13:26:54	Instrument ID:	CHDRO6		
Lims ID:	720-88261-E-11-B	Lab Sample ID:	720-88261-11		
Client ID:	DG-I9S-0.5-1				
Operator ID:	DCH	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	20.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

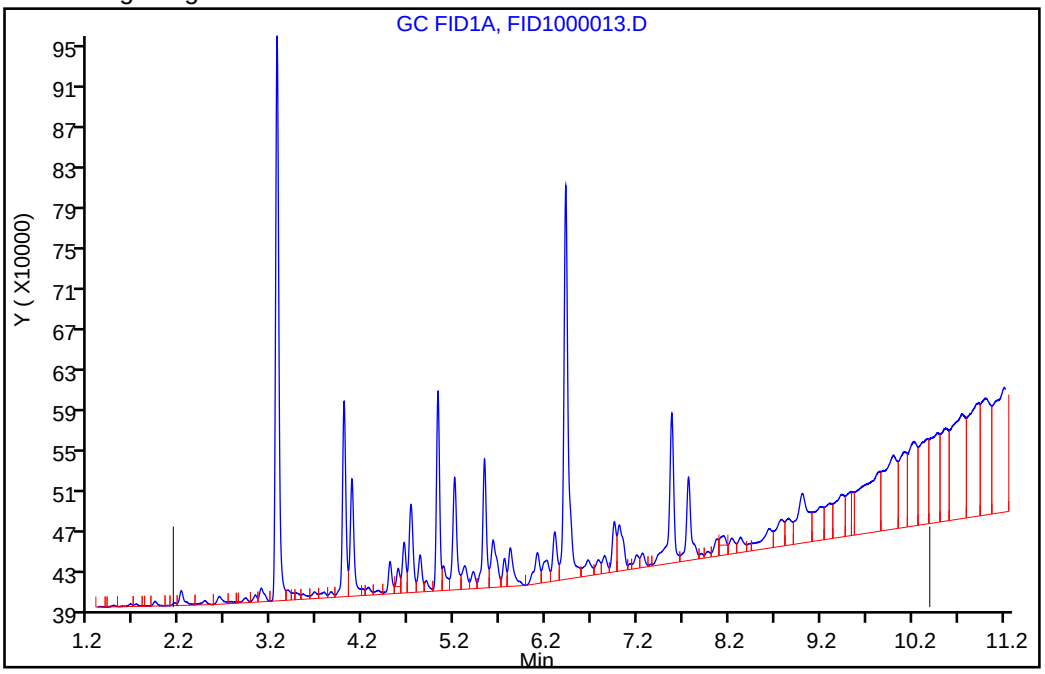
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000013.D				
Injection Date:	05-Sep-2018 13:26:54	Instrument ID:	CHDRO6		
Lims ID:	720-88261-E-11-B	Lab Sample ID:	720-88261-11		
Client ID:	DG-I9S-0.5-1				
Operator ID:	DCH	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	20.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.258, CAS: STL00143

Signal: 1

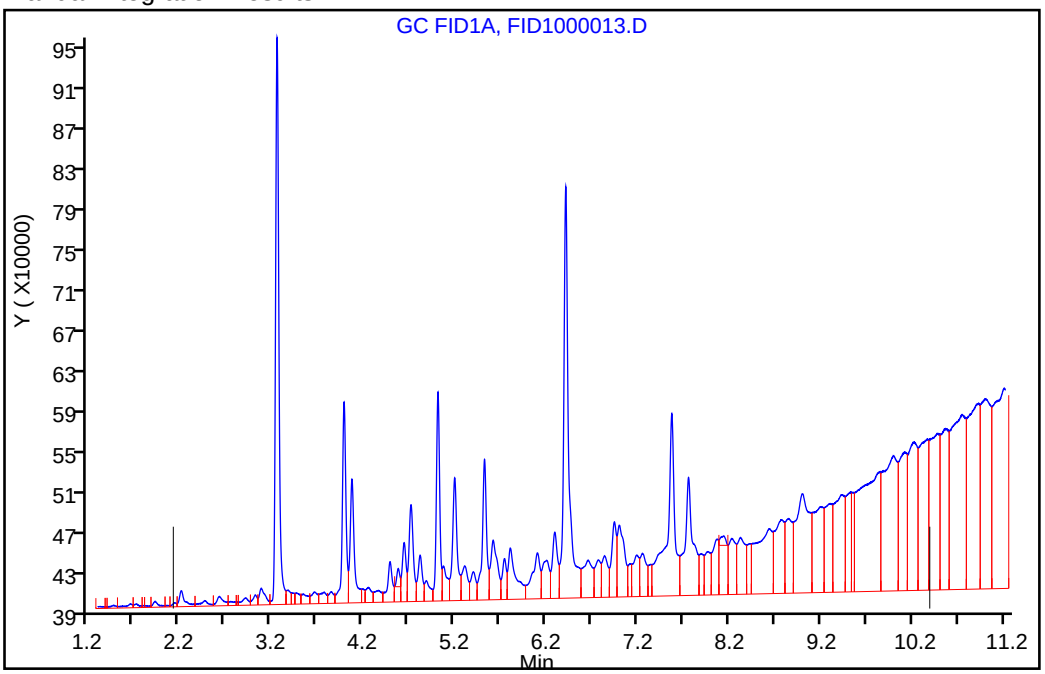
Processing Integration Results

RT: 6.26
Response: 271281693
Amount: 175.8819



Manual Integration Results

RT: 6.26
Response: 510948951
Amount: 331.2669



Reviewer: luj, 05-Sep-2018 13:48:35

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

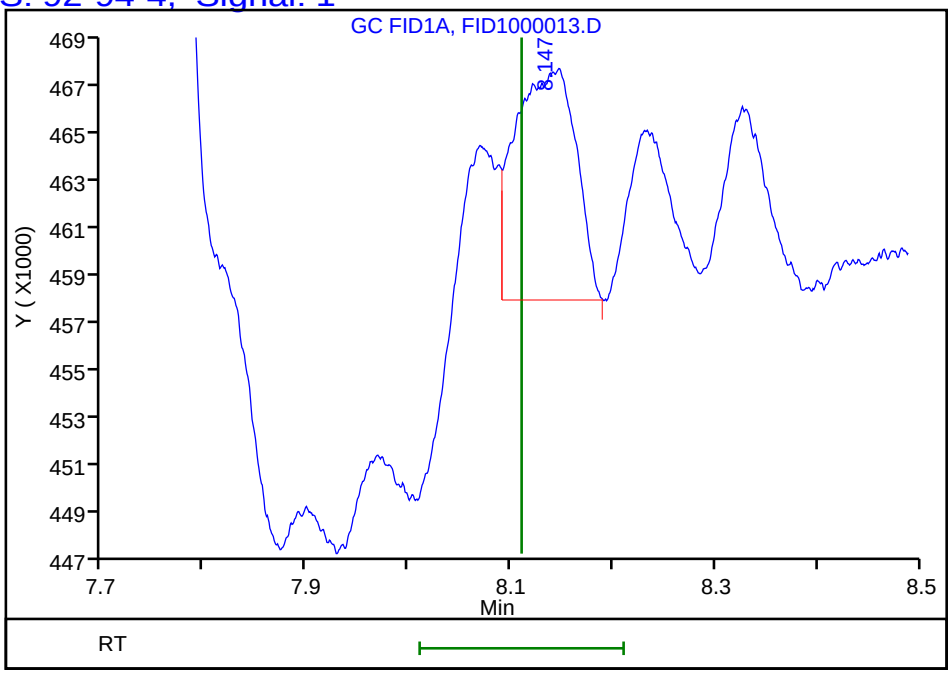
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000013.D				
Injection Date:	05-Sep-2018 13:26:54	Instrument ID:	CHDRO6		
Lims ID:	720-88261-E-11-B	Lab Sample ID:	720-88261-11		
Client ID:	DG-I9S-0.5-1				
Operator ID:	DCH	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	20.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4, Signal: 1

RT: 8.15
Response: 751806
Amount: 0.391492



Reviewer: luj, 05-Sep-2018 13:49:00
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88261-1
SDG No.:
Client Sample ID: DG-I9S-0.5-1
Lab Sample ID: 720-88261-11
Matrix: Solid
Lab File ID: 09061838.D
Analysis Method: 8260B
Date Collected: 08/24/2018 16:15
Sample wt/vol: 8.717(g)
Date Analyzed: 09/07/2018 01:40
Soil Aliquot Vol: 100 (uL)
Dilution Factor: 20
Soil Extract Vol.: 10(mL)
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Medium
Analysis Batch No.: 251035
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		5700	1400
67-64-1	Acetone	ND		57000	28000
71-43-2	Benzene	ND		5700	390
75-27-4	Dichlorobromomethane	ND		5700	440
108-86-1	Bromobenzene	ND		5700	460
74-97-5	Chlorobromomethane	ND		23000	440
75-25-2	Bromoform	ND		5700	410
74-83-9	Bromomethane	ND		11000	560
78-93-3	2-Butanone (MEK)	ND		57000	24000
104-51-8	n-Butylbenzene	ND		5700	1100
135-98-8	sec-Butylbenzene	ND		5700	490
98-06-6	tert-Butylbenzene	ND		5700	390
75-15-0	Carbon disulfide	ND		5700	530
56-23-5	Carbon tetrachloride	ND		5700	520
108-90-7	Chlorobenzene	ND		5700	400
75-00-3	Chloroethane	ND		11000	520
67-66-3	Chloroform	ND		5700	390
74-87-3	Chloromethane	ND		11000	560
95-49-8	2-Chlorotoluene	ND		5700	390
106-43-4	4-Chlorotoluene	ND		5700	390
124-48-1	Chlorodibromomethane	ND		5700	390
95-50-1	1,2-Dichlorobenzene	ND		5700	690
541-73-1	1,3-Dichlorobenzene	ND		5700	400
106-46-7	1,4-Dichlorobenzene	ND		5700	810
142-28-9	1,3-Dichloropropane	ND		5700	450
563-58-6	1,1-Dichloropropene	ND		5700	390
96-12-8	1,2-Dibromo-3-Chloropropane	ND		11000	690
106-93-4	Ethylene Dibromide	ND		5700	1600
74-95-3	Dibromomethane	ND		11000	400
75-71-8	Dichlorodifluoromethane	ND		11000	910
75-34-3	1,1-Dichloroethane	ND	*	5700	390
107-06-2	1,2-Dichloroethane	ND		5700	390
75-35-4	1,1-Dichloroethene	ND	*	5700	410
156-59-2	cis-1,2-Dichloroethene	ND		5700	420
156-60-5	trans-1,2-Dichloroethene	ND	*	5700	620
78-87-5	1,2-Dichloropropane	ND		5700	390

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88261-1

SDG No.:

Client Sample ID: DG-I9S-0.5-1 Lab Sample ID: 720-88261-11

Matrix: Solid Lab File ID: 09061838.D

Analysis Method: 8260B Date Collected: 08/24/2018 16:15

Sample wt/vol: 8.717(g) Date Analyzed: 09/07/2018 01:40

Soil Aliquot Vol: 100 (uL) Dilution Factor: 20

Soil Extract Vol.: 10(mL) GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Medium

Analysis Batch No.: 251035 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		5700	390
10061-02-6	trans-1,3-Dichloropropene	ND		5700	390
100-41-4	Ethylbenzene	ND		5700	860
87-68-3	Hexachlorobutadiene	ND		5700	680
591-78-6	2-Hexanone	ND		57000	11000
98-82-8	Isopropylbenzene	ND		5700	600
99-87-6	4-Isopropyltoluene	ND		5700	2900
75-09-2	Methylene Chloride	ND		11000	3400
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		57000	11000
91-20-3	Naphthalene	26000		11000	1700
103-65-1	N-Propylbenzene	ND		5700	420
100-42-5	Styrene	ND		5700	390
630-20-6	1,1,1,2-Tetrachloroethane	ND		5700	390
79-34-5	1,1,2,2-Tetrachloroethane	ND		5700	560
127-18-4	Tetrachloroethene	ND		5700	500
108-88-3	Toluene	ND		5700	810
87-61-6	1,2,3-Trichlorobenzene	ND		5700	850
120-82-1	1,2,4-Trichlorobenzene	ND		5700	630
71-55-6	1,1,1-Trichloroethane	ND		5700	620
79-00-5	1,1,2-Trichloroethane	ND		5700	420
79-01-6	Trichloroethene	ND		5700	390
75-69-4	Trichlorofluoromethane	ND		5700	640
96-18-4	1,2,3-Trichloropropane	ND		5700	590
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	5700	2400
95-63-6	1,2,4-Trimethylbenzene	ND		5700	1800
108-67-8	1,3,5-Trimethylbenzene	ND		5700	390
108-05-4	Vinyl acetate	ND		23000	1300
75-01-4	Vinyl chloride	ND		5700	610
1330-20-7	Xylenes, Total	ND		5700	1400
594-20-7	2,2-Dichloropropane	ND		5700	390
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		290000	110000

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88261-1

SDG No.:

Client Sample ID: DG-I9S-0.5-1 Lab Sample ID: 720-88261-11

Matrix: Solid Lab File ID: 09061838.D

Analysis Method: 8260B Date Collected: 08/24/2018 16:15

Sample wt/vol: 8.717(g) Date Analyzed: 09/07/2018 01:40

Soil Aliquot Vol: 100 (uL) Dilution Factor: 20

Soil Extract Vol.: 10(mL) GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Medium

Analysis Batch No.: 251035 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	100		66-148
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		62-137
2037-26-5	Toluene-d8 (Surr)	100		65-141

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180906-53704.b\09061838.D
Lims ID: 720-88261-C-11-A
Client ID: DG-I9S-0.5-1
Sample Type: Client
Inject. Date: 07-Sep-2018 01:40:30 ALS Bottle#: 15 Worklist Smp#: 19
Purge Vol: 10.000 mL Dil. Factor: 20.0000
Sample Info: 88261-C-11 2000X
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180906-53704.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 07-Sep-2018 10:57:54 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: medinaj Date: 07-Sep-2018 10:58:27

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.094	7.092	0.002	98	180040	250.0	
* 2 Fluorobenzene	96	10.901	10.899	0.002	98	1007487	25.0	
* 4 Chlorobenzene-d5	117	14.749	14.747	0.002	85	696365	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.878	17.886	-0.008	96	348757	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.483	9.491	-0.009	54	65433	7.15	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.000	10.007	-0.008	98	64999	7.24	
$ 10 Toluene-d8 (Surr)	98	13.007	13.004	0.002	93	272209	7.51	
$ 11 4-Bromofluorobenzene	95	16.238	16.235	0.002	91	94783	7.49	
$ 12 1,2-Dichlorobenzene-d4	152	18.344	18.341	0.002	82	77404	6.01	
34 Methylene Chloride	84	7.357	7.354	0.002	47	4575	0.5055	
148 1-Chlorohexane	55	14.739	14.655	0.083	6	7061	0.6370	
126 Butyl Ether	87	14.952	14.949	0.002	42	1232	0.1627	
136 1,2,3-Trimethylbenzene	105	18.121	18.128	-0.008	1	1654	0.0424	
112 Naphthalene	128	21.058	21.055	0.002	97	284593	11.2	
29 Pentane	43	6.668	6.675	-0.007	40	3222	NR	
A 116 C4-C10	1	11.085	(5.035-17.135)		0	269355	3.21	
A 153 C6-C8	1	11.141	(8.823-13.459)		0	140052	1.67	
A 154 C6-C9	1	12.098	(8.823-15.373)		0	186508	2.22	
A 117 C4-C12	1	12.645	(5.035-20.255)		0	373270	4.45	
A 119 C6-C10	1	12.979	(8.823-17.135)		0	194487	2.32	
A 118 C5-C12	1	13.429	(6.604-20.255)		0	343695	4.10	
A 120 C6-C12	1	14.539	(8.823-20.255)		0	290421	3.46	
A 155 C8-C10	1	15.241	(13.348-17.135)		0	58655	0.6994	
A 121 C7-C12	1	15.724	(11.193-20.255)		0	195443	2.33	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

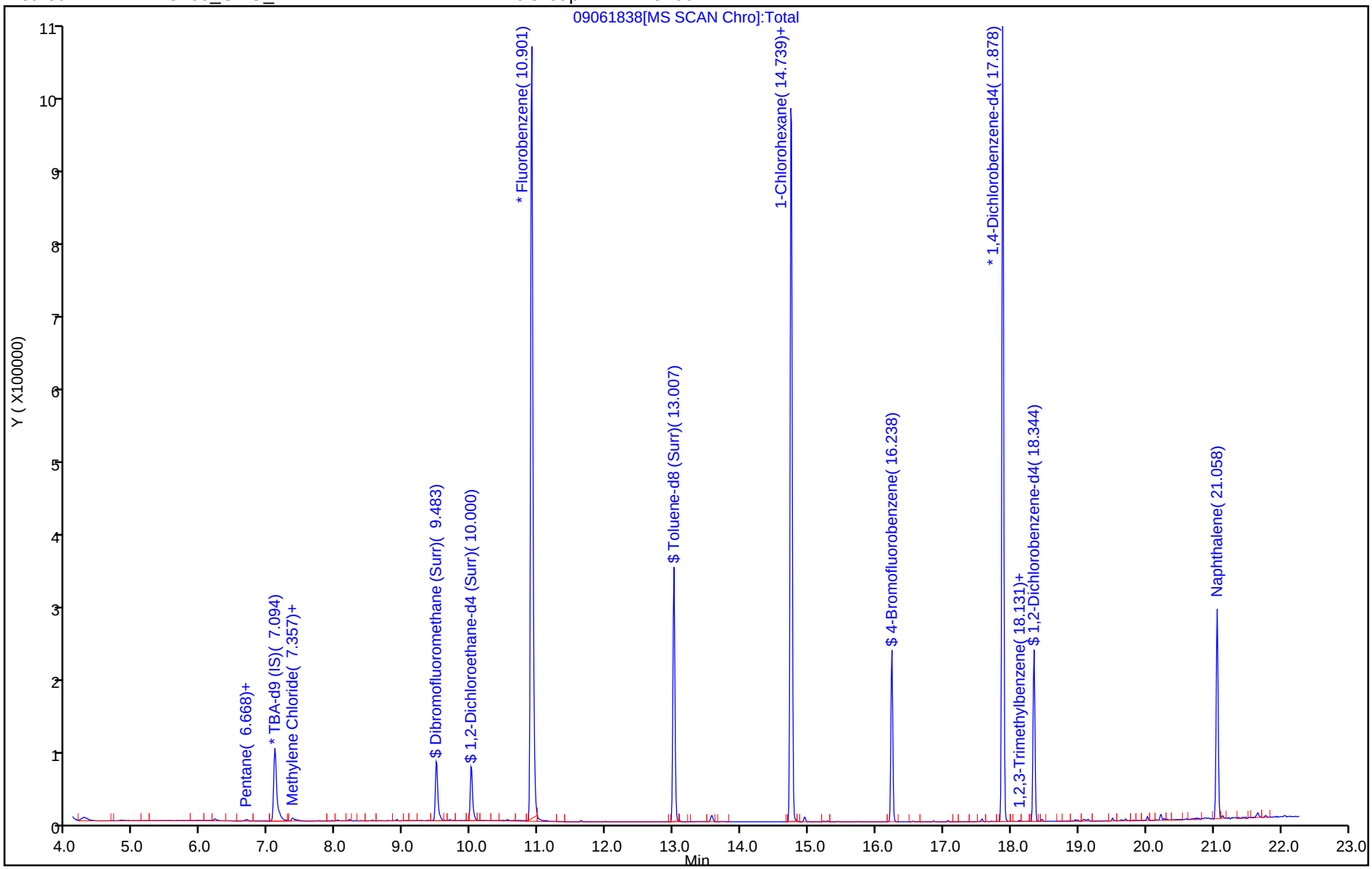
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 07-Sep-2018 10:58:28 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180906-53704.b\09061838.D				
Injection Date:	07-Sep-2018 01:40:30	Instrument ID:	HP7	Operator ID:	SF
Lims ID:	720-88261-C-11-A	Lab Sample ID:	720-88261-11	Worklist Smp#:	19
Client ID:	DG-I9S-0.5-1				
Purge Vol:	10.000 mL	Dil. Factor:	20.0000	ALS Bottle#:	15
Method:	8260_GRO_HP7	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180906-53704.b\09061838.D
Lims ID: 720-88261-C-11-A
Client ID: DG-I9S-0.5-1
Sample Type: Client
Inject. Date: 07-Sep-2018 01:40:30 ALS Bottle#: 15 Worklist Smp#: 19
Purge Vol: 10.000 mL Dil. Factor: 20.0000
Sample Info: 88261-C-11 2000X
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180906-53704.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 07-Sep-2018 10:57:54 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: medinaj Date: 07-Sep-2018 10:58:27

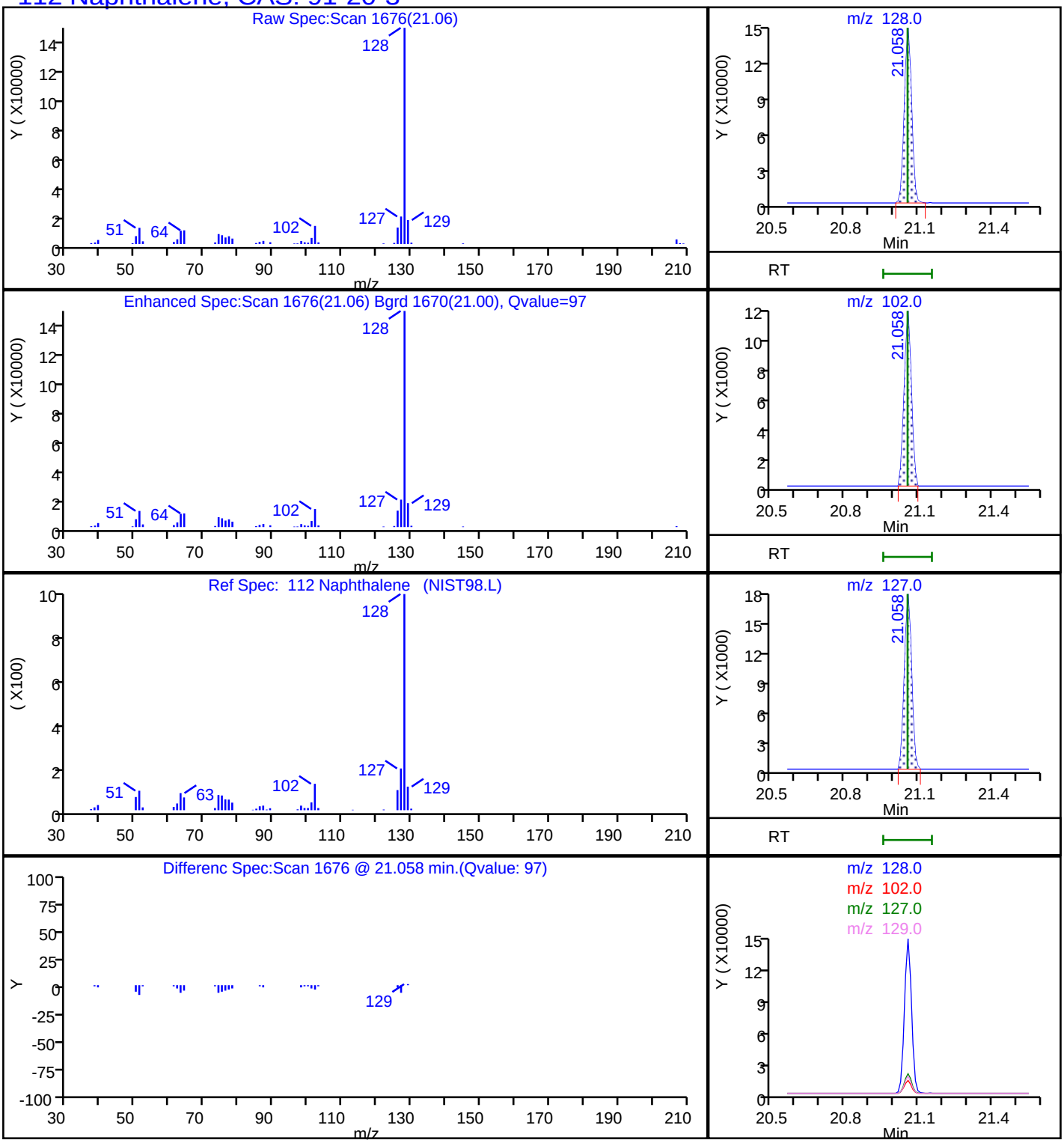
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.24	96.60
$ 10 Toluene-d8 (Surr)	7.50	7.51	100.10
$ 11 4-Bromofluorobenzene	7.50	7.49	99.82
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 07-Sep-2018 10:58:28 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180906-53704.b\09061838.D				
Injection Date:	07-Sep-2018 01:40:30	Instrument ID:	HP7		
Lims ID:	720-88261-C-11-A	Lab Sample ID:	720-88261-11		
Client ID:	DG-I9S-0.5-1				
Operator ID:	SF	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	20.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

112 Naphthalene, CAS: 91-20-3

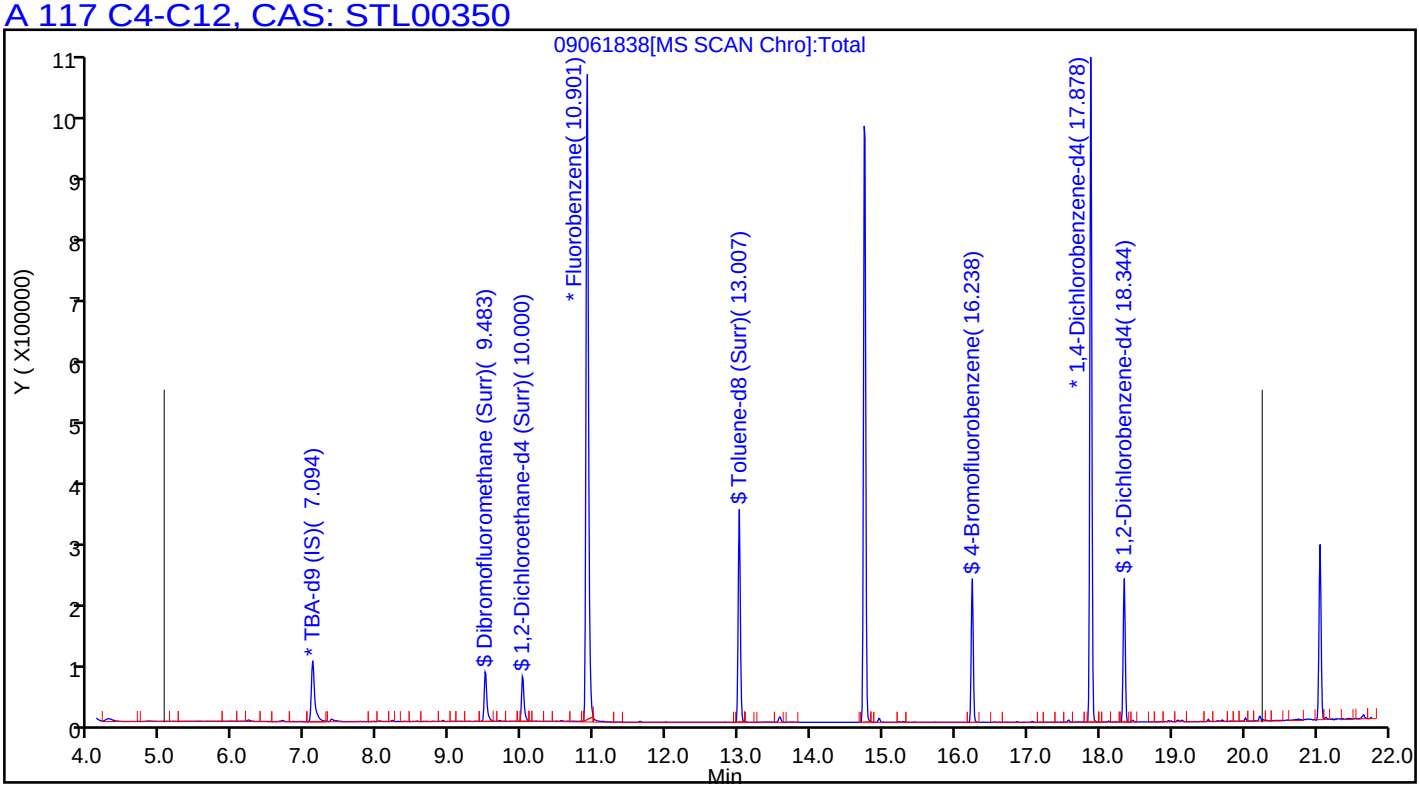


Report Date: 07-Sep-2018 10:58:28 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180906-53704.b\09061838.D				
Injection Date:	07-Sep-2018 01:40:30	Instrument ID:	HP7		
Lims ID:	720-88261-C-11-A	Lab Sample ID:	720-88261-11		
Client ID:	DG-I9S-0.5-1				
Operator ID:	SF	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	20.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88261-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DCA	TOL
Lab Sample ID	Client Sample ID	(66-148)	(62-137)	(65-141)
720-88261-11	DG-I9S-0.5-1	100	97	100
720-88368-C-3-A MS	Matrix Spike	97	93	100
720-88368-C-3-A MSD	Matrix Spike Duplicate	98	95	102
LCS 720-250928/6-A	Lab Control Sample	102	96	102
LCS 720-250928/8-A	Lab Control Sample	99	98	103
LCSD 720-250928/7-A	Lab Control Sample Dup	100	95	102
LCSD 720-250928/9-A	Lab Control Sample Dup	101	98	103
MB 720-250928/5-A	Method Blank	100	97	102

Surrogate Legend

BFB = 4-Bromofluorobenzene
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		FBP	TPHL
Lab Sample ID	Client Sample ID	(33-120)	(35-146)
720-88242-D-13-H MS	Matrix Spike	39	55
720-88242-D-13-I MSD	Matrix Spike Duplicate	37	54
720-88261-11	DG-I9S-0.5-1	54	74
LCS 720-250580/2-A	Lab Control Sample	75	90
MB 720-250580/1-A	Method Blank	79	93

Surrogate Legend

FBP = 2-Fluorobiphenyl
TPHL = Terphenyl-d14

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TPH1
Lab Sample ID	Client Sample ID	(40-130)
720-88261-11	DG-I9S-0.5-1	0 X D
720-88263-E-16-A MS	Matrix Spike	0 X D
720-88263-E-16-B MSD	Matrix Spike Duplicate	0 X D
LCS 720-250566/2-A	Lab Control Sample	81
MB 720-250566/1-A	Method Blank	88

Surrogate Legend

TPH = p-Terphenyl

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88261-1

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCBP2	TCX2
Lab Sample ID	Client Sample ID	(21-136)	(21-145)
720-88239-D-13-H MS	Matrix Spike	80	93
LCS 720-250531/2-A	Lab Control Sample	98	83
MB 720-250531/1-A	Method Blank	87	83

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCBP1	TCX1
Lab Sample ID	Client Sample ID	(21-136)	(21-145)
720-88239-D-13-I MSD	Matrix Spike Duplicate	105	94
720-88261-11	DG-I9S-0.5-1	0 X D	0 X D

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX1	DCBP1
Lab Sample ID	Client Sample ID	(14-128)	(10-132)
720-88261-11	DG-I9S-0.5-1	58	65
720-88263-F-18-B MS	Matrix Spike	81	87
720-88263-F-18-C MSD	Matrix Spike Duplicate	72	66
LCS 240-343157/24-A	Lab Control Sample	78	81
MB 240-343157/23-A	Method Blank	78	81

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 720-250928/5-A
Matrix: Solid
Analysis Batch: 251035

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250928

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		500	120	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
Acetone	ND		5000	2400	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
Benzene	ND		500	34	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
Dichlorobromomethane	ND		500	38	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
Bromobenzene	ND		500	40	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
Chlorobromomethane	ND		2000	38	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
Bromoform	ND		500	36	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
Bromomethane	ND		1000	49	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
2-Butanone (MEK)	ND		5000	2100	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
n-Butylbenzene	ND		500	100	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
sec-Butylbenzene	ND		500	43	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
tert-Butylbenzene	ND		500	34	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
Carbon disulfide	ND		500	46	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
Carbon tetrachloride	ND		500	45	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
Chlorobenzene	ND		500	35	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
Chloroethane	ND		1000	45	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
Chloroform	ND		500	34	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
Chloromethane	ND		1000	49	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
2-Chlorotoluene	ND		500	34	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
4-Chlorotoluene	ND		500	34	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
Chlorodibromomethane	ND		500	34	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
1,2-Dichlorobenzene	ND		500	60	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
1,3-Dichlorobenzene	ND		500	35	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
1,4-Dichlorobenzene	ND		500	71	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
1,3-Dichloropropane	ND		500	39	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
1,1-Dichloropropene	ND		500	34	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
1,2-Dibromo-3-Chloropropane	ND		1000	60	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
Ethylene Dibromide	ND		500	140	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
Dibromomethane	ND		1000	35	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
Dichlorodifluoromethane	ND		1000	79	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
1,1-Dichloroethane	ND		500	34	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
1,2-Dichloroethane	ND		500	34	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
1,1-Dichloroethene	ND		500	36	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
cis-1,2-Dichloroethene	ND		500	37	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
trans-1,2-Dichloroethene	ND		500	54	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
1,2-Dichloropropane	ND		500	34	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
cis-1,3-Dichloropropene	ND		500	34	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
trans-1,3-Dichloropropene	ND		500	34	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
Ethylbenzene	ND		500	75	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
Hexachlorobutadiene	ND		500	59	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
2-Hexanone	ND		5000	1000	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
Isopropylbenzene	ND		500	52	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
4-Isopropyltoluene	ND		500	250	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
Methylene Chloride	ND		1000	300	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
4-Methyl-2-pentanone (MIBK)	ND		5000	1000	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
Naphthalene	ND		1000	150	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
N-Propylbenzene	ND		500	37	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
Styrene	ND		500	34	ug/Kg		09/06/18 16:00	09/06/18 21:03	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250928/5-A
Matrix: Solid
Analysis Batch: 251035

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250928

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		500	34	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
1,1,2,2-Tetrachloroethane	ND		500	49	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
Tetrachloroethene	ND		500	44	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
Toluene	ND		500	71	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
1,2,3-Trichlorobenzene	ND		500	74	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
1,2,4-Trichlorobenzene	ND		500	55	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
1,1,1-Trichloroethane	ND		500	54	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
1,1,2-Trichloroethane	ND		500	37	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
Trichloroethene	ND		500	34	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
Trichlorofluoromethane	ND		500	56	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
1,2,3-Trichloropropane	ND		500	51	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		500	210	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
1,2,4-Trimethylbenzene	ND		500	160	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
1,3,5-Trimethylbenzene	ND		500	34	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
Vinyl acetate	ND		2000	110	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
Vinyl chloride	ND		500	53	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
Xylenes, Total	ND		500	120	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
2,2-Dichloropropane	ND		500	34	ug/Kg		09/06/18 16:00	09/06/18 21:03	1
Gasoline Range Organics (GRO) -C4-C12	ND		25000	10000	ug/Kg		09/06/18 16:00	09/06/18 21:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*66 - 148*	*09/06/18 16:00*	*09/06/18 21:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*	*09/06/18 16:00*	*09/06/18 21:03*	*1*
Toluene-d8 (Surr)	*102*		*65 - 141*	*09/06/18 16:00*	*09/06/18 21:03*	*1*

Lab Sample ID: LCS 720-250928/6-A
Matrix: Solid
Analysis Batch: 251035

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250928

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	5000	5830		ug/Kg		117	71 - 146
Acetone	25000	25100		ug/Kg		100	12 - 234
Benzene	5000	5940		ug/Kg		119	76 - 122
Dichlorobromomethane	5000	5770		ug/Kg		115	80 - 131
Bromobenzene	5000	5280		ug/Kg		106	77 - 125
Chlorobromomethane	5000	5720		ug/Kg		114	74 - 134
Bromoform	5000	5240		ug/Kg		105	54 - 149
Bromomethane	5000	5270		ug/Kg		105	14 - 175
2-Butanone (MEK)	25000	24900		ug/Kg		100	58 - 159
n-Butylbenzene	5000	5850		ug/Kg		117	57 - 164
sec-Butylbenzene	5000	5860		ug/Kg		117	62 - 153
tert-Butylbenzene	5000	5710		ug/Kg		114	72 - 136
Carbon disulfide	5000	7370		ug/Kg		147	13 - 151
Carbon tetrachloride	5000	5990		ug/Kg		120	72 - 136
Chlorobenzene	5000	5560		ug/Kg		111	81 - 128
Chloroethane	5000	5260		ug/Kg		105	53 - 124
Chloroform	5000	5810		ug/Kg		116	75 - 133

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250928/6-A
Matrix: Solid
Analysis Batch: 251035

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250928

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	5000	4610		ug/Kg		92	43 - 146
2-Chlorotoluene	5000	5660		ug/Kg		113	66 - 143
4-Chlorotoluene	5000	5690		ug/Kg		114	73 - 136
Chlorodibromomethane	5000	5530		ug/Kg		111	70 - 130
1,2-Dichlorobenzene	5000	5340		ug/Kg		107	77 - 140
1,3-Dichlorobenzene	5000	5410		ug/Kg		108	71 - 135
1,4-Dichlorobenzene	5000	5360		ug/Kg		107	76 - 130
1,3-Dichloropropane	5000	5390		ug/Kg		108	73 - 133
1,1-Dichloropropene	5000	6090		ug/Kg		122	81 - 134
1,2-Dibromo-3-Chloropropane	5000	5150		ug/Kg		103	52 - 156
Ethylene Dibromide	5000	5450		ug/Kg		109	70 - 138
Dibromomethane	5000	5430		ug/Kg		109	70 - 139
Dichlorodifluoromethane	5000	4090		ug/Kg		82	30 - 120
1,1-Dichloroethane	5000	6230		ug/Kg		125	79 - 125
1,2-Dichloroethane	5000	5560		ug/Kg		111	67 - 126
1,1-Dichloroethene	5000	6550	*	ug/Kg		131	70 - 130
cis-1,2-Dichloroethene	5000	6090		ug/Kg		122	70 - 130
trans-1,2-Dichloroethene	5000	6360		ug/Kg		127	74 - 128
1,2-Dichloropropane	5000	6180		ug/Kg		124	70 - 130
cis-1,3-Dichloropropene	5000	6190		ug/Kg		124	79 - 144
trans-1,3-Dichloropropene	5000	5770		ug/Kg		115	78 - 144
Ethylbenzene	5000	5810		ug/Kg		116	76 - 137
Hexachlorobutadiene	5000	5500		ug/Kg		110	63 - 150
2-Hexanone	25000	26400		ug/Kg		105	54 - 124
Isopropylbenzene	5000	5670		ug/Kg		113	65 - 128
4-Isopropyltoluene	5000	5810		ug/Kg		116	62 - 153
Methylene Chloride	5000	5930		ug/Kg		119	70 - 130
4-Methyl-2-pentanone (MIBK)	25000	26900		ug/Kg		108	53 - 129
Naphthalene	5000	5080		ug/Kg		102	62 - 151
N-Propylbenzene	5000	5860		ug/Kg		117	65 - 144
Styrene	5000	5570		ug/Kg		111	79 - 139
1,1,1,2-Tetrachloroethane	5000	5680		ug/Kg		114	72 - 129
1,1,2,2-Tetrachloroethane	5000	5130		ug/Kg		103	69 - 133
Tetrachloroethene	5000	5620		ug/Kg		112	79 - 130
Toluene	5000	5590		ug/Kg		112	77 - 120
1,2,3-Trichlorobenzene	5000	5240		ug/Kg		105	72 - 159
1,2,4-Trichlorobenzene	5000	5390		ug/Kg		108	71 - 163
1,1,1-Trichloroethane	5000	5870		ug/Kg		117	69 - 132
1,1,2-Trichloroethane	5000	5650		ug/Kg		113	70 - 130
Trichloroethene	5000	5520		ug/Kg		110	69 - 129
Trichlorofluoromethane	5000	5730		ug/Kg		115	49 - 140
1,2,3-Trichloropropane	5000	4980		ug/Kg		100	74 - 135
1,1,2-Trichloro-1,2,2-trifluoroetha ne	5000	6950	*	ug/Kg		139	66 - 128
1,2,4-Trimethylbenzene	5000	5690		ug/Kg		114	62 - 155
1,3,5-Trimethylbenzene	5000	5740		ug/Kg		115	69 - 142
Vinyl acetate	5000	5560		ug/Kg		111	56 - 200
Vinyl chloride	5000	1920		ug/Kg		38	10 - 118

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250928/6-A
Matrix: Solid
Analysis Batch: 251035

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250928

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
m-Xylene & p-Xylene	5000	5690		ug/Kg		114	71 - 142
o-Xylene	5000	5730		ug/Kg		115	71 - 142
2,2-Dichloropropane	5000	6230		ug/Kg		125	67 - 146

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*66 - 148*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*
Toluene-d8 (Surr)	*102*		*65 - 141*

Lab Sample ID: LCS 720-250928/8-A
Matrix: Solid
Analysis Batch: 251035

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250928

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	100000	106000		ug/Kg		106	62 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*66 - 148*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*
Toluene-d8 (Surr)	*103*		*65 - 141*

Lab Sample ID: LCSD 720-250928/7-A
Matrix: Solid
Analysis Batch: 251035

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 250928

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	5000	5830		ug/Kg		117	71 - 146	0	20
Acetone	25000	24700		ug/Kg		99	12 - 234	1	30
Benzene	5000	5960		ug/Kg		119	76 - 122	0	20
Dichlorobromomethane	5000	5820		ug/Kg		116	80 - 131	1	20
Bromobenzene	5000	5380		ug/Kg		108	77 - 125	2	20
Chlorobromomethane	5000	5720		ug/Kg		114	74 - 134	0	20
Bromoform	5000	5120		ug/Kg		102	54 - 149	2	20
Bromomethane	5000	5280		ug/Kg		106	14 - 175	0	20
2-Butanone (MEK)	25000	24700		ug/Kg		99	58 - 159	1	20
n-Butylbenzene	5000	5860		ug/Kg		117	57 - 164	0	20
sec-Butylbenzene	5000	5850		ug/Kg		117	62 - 153	0	20
tert-Butylbenzene	5000	5700		ug/Kg		114	72 - 136	0	20
Carbon disulfide	5000	7440		ug/Kg		149	13 - 151	1	20
Carbon tetrachloride	5000	6020		ug/Kg		120	72 - 136	0	20
Chlorobenzene	5000	5430		ug/Kg		109	81 - 128	2	20
Chloroethane	5000	5320		ug/Kg		106	53 - 124	1	20
Chloroform	5000	5880		ug/Kg		118	75 - 133	1	20
Chloromethane	5000	4590		ug/Kg		92	43 - 146	0	20
2-Chlorotoluene	5000	5730		ug/Kg		115	66 - 143	1	20
4-Chlorotoluene	5000	5760		ug/Kg		115	73 - 136	1	20
Chlorodibromomethane	5000	5580		ug/Kg		112	70 - 130	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250928/7-A
Matrix: Solid
Analysis Batch: 251035

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 250928

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene	5000	5330		ug/Kg		107	77 - 140	0	20
1,3-Dichlorobenzene	5000	5430		ug/Kg		109	71 - 135	0	20
1,4-Dichlorobenzene	5000	5390		ug/Kg		108	76 - 130	0	20
1,3-Dichloropropane	5000	5480		ug/Kg		110	73 - 133	2	20
1,1-Dichloropropene	5000	6080		ug/Kg		122	81 - 134	0	20
1,2-Dibromo-3-Chloropropane	5000	5140		ug/Kg		103	52 - 156	0	20
Ethylene Dibromide	5000	5490		ug/Kg		110	70 - 138	1	20
Dibromomethane	5000	5420		ug/Kg		108	70 - 139	0	20
Dichlorodifluoromethane	5000	4070		ug/Kg		81	30 - 120	1	20
1,1-Dichloroethane	5000	6340	*	ug/Kg		127	79 - 125	2	20
1,2-Dichloroethane	5000	5580		ug/Kg		112	67 - 126	0	20
1,1-Dichloroethene	5000	6630	*	ug/Kg		133	70 - 130	1	20
cis-1,2-Dichloroethene	5000	6150		ug/Kg		123	70 - 130	1	20
trans-1,2-Dichloroethene	5000	6430	*	ug/Kg		129	74 - 128	1	20
1,2-Dichloropropane	5000	6250		ug/Kg		125	70 - 130	1	20
cis-1,3-Dichloropropene	5000	6220		ug/Kg		124	79 - 144	0	20
trans-1,3-Dichloropropene	5000	5800		ug/Kg		116	78 - 144	1	20
Ethylbenzene	5000	5700		ug/Kg		114	76 - 137	2	20
Hexachlorobutadiene	5000	5440		ug/Kg		109	63 - 150	1	20
2-Hexanone	25000	26300		ug/Kg		105	54 - 124	0	20
Isopropylbenzene	5000	5530		ug/Kg		111	65 - 128	3	20
4-Isopropyltoluene	5000	5840		ug/Kg		117	62 - 153	1	20
Methylene Chloride	5000	6020		ug/Kg		120	70 - 130	1	20
4-Methyl-2-pentanone (MIBK)	25000	26800		ug/Kg		107	53 - 129	0	20
Naphthalene	5000	5110		ug/Kg		102	62 - 151	1	20
N-Propylbenzene	5000	5960		ug/Kg		119	65 - 144	2	20
Styrene	5000	5460		ug/Kg		109	79 - 139	2	20
1,1,1,2-Tetrachloroethane	5000	5590		ug/Kg		112	72 - 129	1	20
1,1,2,2-Tetrachloroethane	5000	5130		ug/Kg		103	69 - 133	0	20
Tetrachloroethene	5000	5570		ug/Kg		111	79 - 130	1	20
Toluene	5000	5510		ug/Kg		110	77 - 120	2	20
1,2,3-Trichlorobenzene	5000	5210		ug/Kg		104	72 - 159	1	20
1,2,4-Trichlorobenzene	5000	5350		ug/Kg		107	71 - 163	1	20
1,1,1-Trichloroethane	5000	5920		ug/Kg		118	69 - 132	1	20
1,1,2-Trichloroethane	5000	5710		ug/Kg		114	70 - 130	1	20
Trichloroethene	5000	5570		ug/Kg		111	69 - 129	1	20
Trichlorofluoromethane	5000	5720		ug/Kg		114	49 - 140	0	20
1,2,3-Trichloropropane	5000	5150		ug/Kg		103	74 - 135	3	20
1,1,2-Trichloro-1,2,2-trifluoroetha ne	5000	6980	*	ug/Kg		140	66 - 128	0	20
1,2,4-Trimethylbenzene	5000	5730		ug/Kg		115	62 - 155	1	20
1,3,5-Trimethylbenzene	5000	5770		ug/Kg		115	69 - 142	0	20
Vinyl acetate	5000	5560		ug/Kg		111	56 - 200	0	20
Vinyl chloride	5000	2080		ug/Kg		42	10 - 118	8	20
m-Xylene & p-Xylene	5000	5570		ug/Kg		111	71 - 142	2	20
o-Xylene	5000	5620		ug/Kg		112	71 - 142	2	20
2,2-Dichloropropane	5000	6250		ug/Kg		125	67 - 146	0	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250928/7-A
Matrix: Solid
Analysis Batch: 251035

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 250928

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*66 - 148*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*
Toluene-d8 (Surr)	*102*		*65 - 141*

Lab Sample ID: LCSD 720-250928/9-A
Matrix: Solid
Analysis Batch: 251035

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 250928

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			100000	109000		ug/Kg		109	62 - 120	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*66 - 148*
1,2-Dichloroethane-d4 (Surr)	*98*		*62 - 137*
Toluene-d8 (Surr)	*103*		*65 - 141*

Lab Sample ID: 720-88368-C-3-A MS
Matrix: Solid
Analysis Batch: 251035

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250928

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	ND	F2	3510	3120		ug/Kg		89	71 - 146
Acetone	ND	F2	17600	14800		ug/Kg		85	12 - 234
Benzene	ND	F2	3510	3310		ug/Kg		94	76 - 122
Dichlorobromomethane	ND	F2	3510	3220		ug/Kg		92	80 - 131
Bromobenzene	ND	F2	3510	3150		ug/Kg		90	77 - 125
Chlorobromomethane	ND	F2	3510	3110		ug/Kg		89	74 - 134
Bromoform	ND	F2	3510	2890		ug/Kg		82	54 - 149
Bromomethane	ND	F2	3510	3260		ug/Kg		93	14 - 175
2-Butanone (MEK)	ND	F2	17600	14800		ug/Kg		84	58 - 159
n-Butylbenzene	ND	F2	3510	3480		ug/Kg		99	57 - 164
sec-Butylbenzene	ND	F2	3510	3580		ug/Kg		102	62 - 153
tert-Butylbenzene	ND	F2	3510	3490		ug/Kg		99	72 - 136
Carbon disulfide	ND	F2	3510	3850		ug/Kg		110	13 - 151
Carbon tetrachloride	ND	F2	3510	3340		ug/Kg		95	72 - 136
Chlorobenzene	ND	F2	3510	3130		ug/Kg		89	81 - 128
Chloroethane	ND	F2	3510	3300		ug/Kg		94	53 - 124
Chloroform	ND	F2	3510	3270		ug/Kg		93	75 - 133
Chloromethane	ND	F2	3510	2880		ug/Kg		82	43 - 146
2-Chlorotoluene	ND	F2	3510	3430		ug/Kg		98	66 - 143
4-Chlorotoluene	ND	F2	3510	3440		ug/Kg		98	73 - 136
Chlorodibromomethane	ND	F2	3510	3060		ug/Kg		87	70 - 130
1,2-Dichlorobenzene	ND	F2	3510	3170		ug/Kg		90	77 - 140
1,3-Dichlorobenzene	ND	F2	3510	3230		ug/Kg		92	71 - 135
1,4-Dichlorobenzene	ND	F2	3510	3170		ug/Kg		90	76 - 130
1,3-Dichloropropane	ND	F2	3510	3000		ug/Kg		85	73 - 133
1,1-Dichloropropene	ND	F2	3510	3380		ug/Kg		96	81 - 134

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88368-C-3-A MS
Matrix: Solid
Analysis Batch: 251035

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250928

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	ND	F2	3510	2920		ug/Kg		83	52 - 156
Ethylene Dibromide	ND	F2	3510	3020		ug/Kg		86	70 - 138
Dibromomethane	ND	F2	3510	3000		ug/Kg		85	70 - 139
Dichlorodifluoromethane	ND	F2	3510	2420		ug/Kg		69	30 - 120
1,1-Dichloroethane	ND	* F2	3510	3510		ug/Kg		100	79 - 125
1,2-Dichloroethane	ND	F2	3510	3040		ug/Kg		87	67 - 126
1,1-Dichloroethene	ND	* F2	3510	3520		ug/Kg		100	70 - 130
cis-1,2-Dichloroethene	35	J F2 F1	3510	3460		ug/Kg		97	70 - 130
trans-1,2-Dichloroethene	ND	* F2	3510	3510		ug/Kg		100	74 - 128
1,2-Dichloropropane	ND	F2	3510	3470		ug/Kg		99	70 - 130
cis-1,3-Dichloropropene	ND	F2	3510	3400		ug/Kg		97	79 - 144
trans-1,3-Dichloropropene	ND	F2	3510	3150		ug/Kg		90	78 - 144
Ethylbenzene	ND	F2	3510	3350		ug/Kg		95	76 - 137
Hexachlorobutadiene	ND	F2	3510	3150		ug/Kg		90	63 - 150
2-Hexanone	ND	F2	17600	15900		ug/Kg		90	54 - 124
Isopropylbenzene	ND	F2	3510	3260		ug/Kg		93	65 - 128
4-Isopropyltoluene	ND	F2	3510	3490		ug/Kg		99	62 - 153
Methylene Chloride	ND	F2	3510	3250		ug/Kg		93	70 - 130
4-Methyl-2-pentanone (MIBK)	ND	F2	17600	16200		ug/Kg		93	53 - 129
Naphthalene	ND	F2	3510	2940		ug/Kg		84	62 - 151
N-Propylbenzene	ND	F2	3510	3590		ug/Kg		102	65 - 144
Styrene	ND	F2	3510	3140		ug/Kg		89	79 - 139
1,1,1,2-Tetrachloroethane	ND	F2	3510	3220		ug/Kg		92	72 - 129
1,1,2,2-Tetrachloroethane	ND	F2	3510	3040		ug/Kg		87	69 - 133
Tetrachloroethene	ND	F2	3510	3090		ug/Kg		88	79 - 130
Toluene	ND	F2	3510	3220		ug/Kg		92	77 - 120
1,2,3-Trichlorobenzene	ND	F2	3510	2970		ug/Kg		85	72 - 159
1,2,4-Trichlorobenzene	ND	F2	3510	3030		ug/Kg		86	71 - 163
1,1,1-Trichloroethane	ND	F2	3510	3310		ug/Kg		94	69 - 132
1,1,2-Trichloroethane	ND	F2	3510	3140		ug/Kg		89	70 - 130
Trichloroethene	2200	F2	3510	5020		ug/Kg		81	69 - 129
Trichlorofluoromethane	ND	F2	3510	3590		ug/Kg		102	49 - 140
1,2,3-Trichloropropane	ND	F2	3510	2980		ug/Kg		85	74 - 135
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	* F2	3510	3670		ug/Kg		105	66 - 128
1,2,4-Trimethylbenzene	ND	F2	3510	3430		ug/Kg		98	62 - 155
1,3,5-Trimethylbenzene	ND	F2	3510	3470		ug/Kg		99	69 - 142
Vinyl acetate	ND	F2	3510	3310		ug/Kg		94	56 - 200
Vinyl chloride	ND	F2	3510	1330		ug/Kg		38	10 - 118
m-Xylene & p-Xylene	ND	F2	3510	3260		ug/Kg		93	71 - 142
o-Xylene	ND	F2	3510	3290		ug/Kg		94	71 - 142
2,2-Dichloropropane	ND	F2	3510	3470		ug/Kg		99	67 - 146

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*66 - 148*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*
Toluene-d8 (Surr)	*100*		*65 - 141*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88368-C-3-A MSD
Matrix: Solid
Analysis Batch: 251035

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250928

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	ND	F2	3510	3180		ug/Kg		91	71 - 146	2	20
Acetone	ND	F2	17600	15400		ug/Kg		88	12 - 234	4	20
Benzene	ND	F2	3510	3330		ug/Kg		95	76 - 122	1	20
Dichlorobromomethane	ND	F2	3510	3250		ug/Kg		93	80 - 131	1	20
Bromobenzene	ND	F2	3510	3230		ug/Kg		92	77 - 125	2	20
Chlorobromomethane	ND	F2	3510	3170		ug/Kg		90	74 - 134	2	20
Bromoform	ND	F2	3510	3040		ug/Kg		86	54 - 149	5	20
Bromomethane	ND	F2	3510	3300		ug/Kg		94	14 - 175	1	20
2-Butanone (MEK)	ND	F2	17600	15300		ug/Kg		87	58 - 159	4	20
n-Butylbenzene	ND	F2	3510	3530		ug/Kg		100	57 - 164	1	20
sec-Butylbenzene	ND	F2	3510	3630		ug/Kg		103	62 - 153	2	20
tert-Butylbenzene	ND	F2	3510	3540		ug/Kg		101	72 - 136	2	20
Carbon disulfide	ND	F2	3510	3860		ug/Kg		110	13 - 151	0	20
Carbon tetrachloride	ND	F2	3510	3380		ug/Kg		96	72 - 136	1	20
Chlorobenzene	ND	F2	3510	3180		ug/Kg		90	81 - 128	1	20
Chloroethane	ND	F2	3510	3340		ug/Kg		95	53 - 124	1	20
Chloroform	ND	F2	3510	3290		ug/Kg		94	75 - 133	1	20
Chloromethane	ND	F2	3510	2890		ug/Kg		82	43 - 146	1	20
2-Chlorotoluene	ND	F2	3510	3470		ug/Kg		99	66 - 143	1	20
4-Chlorotoluene	ND	F2	3510	3510		ug/Kg		100	73 - 136	2	20
Chlorodibromomethane	ND	F2	3510	3130		ug/Kg		89	70 - 130	2	20
1,2-Dichlorobenzene	ND	F2	3510	3220		ug/Kg		92	77 - 140	1	20
1,3-Dichlorobenzene	ND	F2	3510	3270		ug/Kg		93	71 - 135	1	20
1,4-Dichlorobenzene	ND	F2	3510	3240		ug/Kg		92	76 - 130	2	20
1,3-Dichloropropane	ND	F2	3510	3090		ug/Kg		88	73 - 133	3	20
1,1-Dichloropropene	ND	F2	3510	3400		ug/Kg		97	81 - 134	1	20
1,2-Dibromo-3-Chloropropane	ND	F2	3510	3080		ug/Kg		88	52 - 156	6	20
Ethylene Dibromide	ND	F2	3510	3100		ug/Kg		88	70 - 138	3	20
Dibromomethane	ND	F2	3510	2990		ug/Kg		85	70 - 139	0	20
Dichlorodifluoromethane	ND	F2	3510	2430		ug/Kg		69	30 - 120	0	20
1,1-Dichloroethane	ND	* F2	3510	3540		ug/Kg		101	79 - 125	1	20
1,2-Dichloroethane	ND	F2	3510	3120		ug/Kg		89	67 - 126	3	20
1,1-Dichloroethene	ND	* F2	3510	3560		ug/Kg		101	70 - 130	1	20
cis-1,2-Dichloroethene	35	J F2 F1	3510	3470		ug/Kg		98	70 - 130	0	20
trans-1,2-Dichloroethene	ND	* F2	3510	3540		ug/Kg		101	74 - 128	1	20
1,2-Dichloropropane	ND	F2	3510	3530		ug/Kg		101	70 - 130	2	20
cis-1,3-Dichloropropene	ND	F2	3510	3490		ug/Kg		99	79 - 144	2	20
trans-1,3-Dichloropropene	ND	F2	3510	3240		ug/Kg		92	78 - 144	3	20
Ethylbenzene	ND	F2	3510	3380		ug/Kg		96	76 - 137	1	20
Hexachlorobutadiene	ND	F2	3510	3240		ug/Kg		92	63 - 150	3	20
2-Hexanone	ND	F2	17600	16600		ug/Kg		95	54 - 124	5	20
Isopropylbenzene	ND	F2	3510	3310		ug/Kg		94	65 - 128	2	20
4-Isopropyltoluene	ND	F2	3510	3570		ug/Kg		102	62 - 153	2	20
Methylene Chloride	ND	F2	3510	3320		ug/Kg		95	70 - 130	2	20
4-Methyl-2-pentanone (MIBK)	ND	F2	17600	17000		ug/Kg		97	53 - 129	5	20
Naphthalene	ND	F2	3510	3110		ug/Kg		89	62 - 151	6	20
N-Propylbenzene	ND	F2	3510	3630		ug/Kg		103	65 - 144	1	20
Styrene	ND	F2	3510	3220		ug/Kg		92	79 - 139	3	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88368-C-3-A MSD
Matrix: Solid
Analysis Batch: 251035

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250928

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND	F2	3510	3290		ug/Kg		94	72 - 129	2	20
1,1,2,2-Tetrachloroethane	ND	F2	3510	3140		ug/Kg		89	69 - 133	3	20
Tetrachloroethene	ND	F2	3510	3160		ug/Kg		90	79 - 130	2	20
Toluene	ND	F2	3510	3250		ug/Kg		92	77 - 120	1	20
1,2,3-Trichlorobenzene	ND	F2	3510	3130		ug/Kg		89	72 - 159	5	20
1,2,4-Trichlorobenzene	ND	F2	3510	3160		ug/Kg		90	71 - 163	4	20
1,1,1-Trichloroethane	ND	F2	3510	3330		ug/Kg		95	69 - 132	1	20
1,1,2-Trichloroethane	ND	F2	3510	3230		ug/Kg		92	70 - 130	3	20
Trichloroethene	2200	F2	3510	5110		ug/Kg		83	69 - 129	2	20
Trichlorofluoromethane	ND	F2	3510	3650		ug/Kg		104	49 - 140	2	20
1,2,3-Trichloropropane	ND	F2	3510	3140		ug/Kg		89	74 - 135	5	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	* F2	3510	3680		ug/Kg		105	66 - 128	0	20
1,2,4-Trimethylbenzene	ND	F2	3510	3500		ug/Kg		100	62 - 155	2	20
1,3,5-Trimethylbenzene	ND	F2	3510	3520		ug/Kg		100	69 - 142	2	20
Vinyl acetate	ND	F2	3510	3470		ug/Kg		99	56 - 200	5	20
Vinyl chloride	ND	F2	3510	1300		ug/Kg		37	10 - 118	3	20
m-Xylene & p-Xylene	ND	F2	3510	3300		ug/Kg		94	71 - 142	1	20
o-Xylene	ND	F2	3510	3320		ug/Kg		95	71 - 142	1	20
2,2-Dichloropropane	ND	F2	3510	3430		ug/Kg		98	67 - 146	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*66 - 148*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*
Toluene-d8 (Surr)	*102*		*65 - 141*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 720-250580/1-A
Matrix: Solid
Analysis Batch: 250742

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250580

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		10	5.0	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Acenaphthene	ND		5.0	2.8	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Anthracene	ND		5.0	2.0	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Benzo[a]anthracene	ND		5.0	1.5	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Benzo[a]pyrene	ND		5.0	1.9	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Benzo[b]fluoranthene	ND		5.0	2.1	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Benzo[g,h,i]perylene	ND		5.0	4.3	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Benzo[k]fluoranthene	ND		5.0	2.1	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Chrysene	ND		5.0	1.4	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Fluoranthene	ND		5.0	1.4	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Fluorene	ND		5.0	2.2	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Indeno[1,2,3-cd]pyrene	ND		5.0	4.2	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Naphthalene	ND		5.0	3.5	ug/Kg		08/30/18 10:18	09/01/18 14:14	1

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 720-250580/1-A
Matrix: Solid
Analysis Batch: 250742

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250580

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	ND		5.0	1.8	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Pyrene	ND		5.0	1.7	ug/Kg		08/30/18 10:18	09/01/18 14:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*79*		*33 - 120*	*08/30/18 10:18*	*09/01/18 14:14*	*1*
Terphenyl-d14	*93*		*35 - 146*	*08/30/18 10:18*	*09/01/18 14:14*	*1*

Lab Sample ID: LCS 720-250580/2-A
Matrix: Solid
Analysis Batch: 250742

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250580

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	667	478		ug/Kg		72	46 - 110
Acenaphthene	667	535		ug/Kg		80	46 - 106
Acenaphthylene	667	523		ug/Kg		78	46 - 108
Anthracene	667	518		ug/Kg		78	55 - 103
Benzo[a]anthracene	667	594		ug/Kg		89	54 - 110
Benzo[a]pyrene	667	559		ug/Kg		84	62 - 111
Benzo[b]fluoranthene	667	578		ug/Kg		87	60 - 109
Benzo[g,h,i]perylene	667	572		ug/Kg		86	52 - 114
Benzo[k]fluoranthene	667	539		ug/Kg		81	58 - 109
Chrysene	667	562		ug/Kg		84	54 - 108
Dibenz(a,h)anthracene	667	599		ug/Kg		90	58 - 112
Fluoranthene	667	521		ug/Kg		78	59 - 109
Fluorene	667	549		ug/Kg		82	52 - 106
Indeno[1,2,3-cd]pyrene	667	603		ug/Kg		90	55 - 120
Naphthalene	667	480		ug/Kg		72	49 - 110
Phenanthrene	667	520		ug/Kg		78	57 - 110
Pyrene	667	579		ug/Kg		87	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*75*		*33 - 120*
Terphenyl-d14	*90*		*35 - 146*

Lab Sample ID: 720-88242-D-13-H MS
Matrix: Solid
Analysis Batch: 250745

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250580

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	ND	F1	637	233	F1	ug/Kg		37	46 - 110
Acenaphthene	ND	F1	637	278	F1	ug/Kg		44	46 - 106
Acenaphthylene	8.4	F1	637	276	F1	ug/Kg		42	46 - 108
Anthracene	14	F1	637	327	F1	ug/Kg		49	55 - 103
Benzo[a]anthracene	110		637	473		ug/Kg		57	54 - 110
Benzo[a]pyrene	180	F1	637	554	F1	ug/Kg		59	62 - 111
Benzo[b]fluoranthene	200	F1	637	537	F1	ug/Kg		52	60 - 109
Benzo[g,h,i]perylene	100	F1	637	399	F1	ug/Kg		47	52 - 114
Benzo[k]fluoranthene	86		637	460		ug/Kg		59	58 - 109

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 720-88242-D-13-H MS
Matrix: Solid
Analysis Batch: 250745

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250580

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chrysene	120	F1	637	460	F1	ug/Kg		53	54 - 108
Dibenz(a,h)anthracene	32	F1	637	371	F1	ug/Kg		53	58 - 112
Fluoranthene	130	F1	637	459	F1	ug/Kg		52	59 - 109
Fluorene	ND	F1	637	295	F1	ug/Kg		46	52 - 106
Indeno[1,2,3-cd]pyrene	94	F1	637	442		ug/Kg		55	55 - 120
Naphthalene	ND	F1	637	228	F1	ug/Kg		36	49 - 110
Phenanthrene	37	F1	637	331	F1	ug/Kg		46	57 - 110
Pyrene	150		637	497		ug/Kg		54	50 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*39*		*33 - 120*
Terphenyl-d14	*55*		*35 - 146*

Lab Sample ID: 720-88242-D-13-I MSD
Matrix: Solid
Analysis Batch: 250745

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250580

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	ND	F1	637	207	F1	ug/Kg		33	46 - 110	12	35
Acenaphthene	ND	F1	637	271	F1	ug/Kg		42	46 - 106	3	35
Acenaphthylene	8.4	F1	637	258	F1	ug/Kg		39	46 - 108	7	35
Anthracene	14	F1	637	338	F1	ug/Kg		51	55 - 103	3	35
Benzo[a]anthracene	110		637	471		ug/Kg		56	54 - 110	0	35
Benzo[a]pyrene	180	F1	637	535	F1	ug/Kg		56	62 - 111	4	35
Benzo[b]fluoranthene	200	F1	637	531	F1	ug/Kg		51	60 - 109	1	35
Benzo[g,h,i]perylene	100	F1	637	356	F1	ug/Kg		40	52 - 114	11	35
Benzo[k]fluoranthene	86		637	467		ug/Kg		60	58 - 109	2	35
Chrysene	120	F1	637	440	F1	ug/Kg		50	54 - 108	5	35
Dibenz(a,h)anthracene	32	F1	637	348	F1	ug/Kg		50	58 - 112	6	35
Fluoranthene	130	F1	637	447	F1	ug/Kg		50	59 - 109	3	35
Fluorene	ND	F1	637	294	F1	ug/Kg		46	52 - 106	0	35
Indeno[1,2,3-cd]pyrene	94	F1	637	408	F1	ug/Kg		49	55 - 120	8	35
Naphthalene	ND	F1	637	201	F1	ug/Kg		32	49 - 110	13	35
Phenanthrene	37	F1	637	342	F1	ug/Kg		48	57 - 110	3	35
Pyrene	150		637	487		ug/Kg		52	50 - 120	2	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*37*		*33 - 120*
Terphenyl-d14	*54*		*35 - 146*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-250566/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250884 — **Prep Batch: 250566**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		2000	750	ug/Kg		08/30/18 08:54	09/05/18 11:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*88*		*40 - 130*	*08/30/18 08:54*	*09/05/18 11:03*	*1*

Lab Sample ID: LCS 720-250566/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250885 — **Prep Batch: 250566**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	167000	135000		ug/Kg		81	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*81*		*40 - 130*

Lab Sample ID: 720-88263-E-16-A MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250885 — **Prep Batch: 250566**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	130000		162000	323000		ug/Kg		121	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
p-Terphenyl	*0*	*X D*	*40 - 130*

Lab Sample ID: 720-88263-E-16-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250885 — **Prep Batch: 250566**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	130000		162000	271000		ug/Kg		89	50 - 150	17	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
p-Terphenyl	*0*	*X D*	*40 - 130*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 720-250531/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250746 — **Prep Batch: 250531**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.61	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/29/18 17:11	09/03/18 14:01	1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 720-250531/1-A
Matrix: Solid
Analysis Batch: 250746

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250531

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Aldrin	ND		2.0	0.50	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
alpha-BHC	ND		2.0	0.55	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Dieldrin	ND		2.0	0.59	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Endrin	ND		2.0	0.46	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Endrin aldehyde	ND		2.0	0.63	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Methoxychlor	ND		2.0	0.68	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Toxaphene	ND		40	6.8	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/29/18 17:11	09/03/18 14:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*87*		*21 - 136*	*08/29/18 17:11*	*09/03/18 14:01*	*1*
Tetrachloro-m-xylene	*83*		*21 - 145*	*08/29/18 17:11*	*09/03/18 14:01*	*1*

Lab Sample ID: LCS 720-250531/2-A
Matrix: Solid
Analysis Batch: 250746

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250531

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	16.5		ug/Kg		99	75 - 128
4,4'-DDE	16.7	15.3		ug/Kg		92	76 - 126
4,4'-DDT	16.7	14.9		ug/Kg		89	63 - 127
Aldrin	16.7	13.7		ug/Kg		82	65 - 120
alpha-BHC	16.7	11.0		ug/Kg		66	46 - 122
beta-BHC	16.7	15.9		ug/Kg		95	78 - 136
cis-Chlordane	16.7	15.1		ug/Kg		90	70 - 120
delta-BHC	16.7	13.9		ug/Kg		83	43 - 125
Dieldrin	16.7	14.9		ug/Kg		89	72 - 120
Endosulfan I	16.7	14.9		ug/Kg		89	62 - 120
Endosulfan II	16.7	15.9		ug/Kg		95	65 - 120
Endosulfan sulfate	16.7	15.3		ug/Kg		92	72 - 121
Endrin	16.7	15.6		ug/Kg		94	68 - 120
Endrin aldehyde	16.7	16.0		ug/Kg		96	68 - 120
Endrin ketone	16.7	16.0		ug/Kg		96	75 - 136
gamma-BHC (Lindane)	16.7	14.1		ug/Kg		84	72 - 120
Heptachlor	16.7	14.6		ug/Kg		87	69 - 120
Heptachlor epoxide	16.7	15.1		ug/Kg		91	68 - 120

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 720-250531/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250746 — **Prep Batch: 250531**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methoxychlor	16.7	17.2		ug/Kg		103	71 - 132
trans-Chlordane	16.7	15.1		ug/Kg		91	68 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*98*		*21 - 136*
Tetrachloro-m-xylene	*83*		*21 - 145*

Lab Sample ID: 720-88239-D-13-H MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250746 — **Prep Batch: 250531**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		15.8	14.2		ug/Kg		89	40 - 120
4,4'-DDE	ND		15.8	14.4		ug/Kg		91	40 - 120
4,4'-DDT	ND		15.8	14.8		ug/Kg		94	17 - 144
Aldrin	ND	F2	15.8	12.8		ug/Kg		81	53 - 120
alpha-BHC	ND		15.8	10.8		ug/Kg		68	40 - 120
beta-BHC	ND		15.8	9.48	J	ug/Kg		60	40 - 120
cis-Chlordane	ND		15.8	13.8		ug/Kg		87	40 - 120
delta-BHC	ND	F2	15.8	11.1		ug/Kg		70	40 - 120
Dieldrin	ND		15.8	13.7		ug/Kg		86	46 - 130
Endosulfan I	ND		15.8	14.7		ug/Kg		93	40 - 120
Endosulfan II	ND		15.8	14.0		ug/Kg		88	40 - 120
Endosulfan sulfate	ND		15.8	11.1		ug/Kg		70	40 - 120
Endrin	ND		15.8	15.5		ug/Kg		98	32 - 143
Endrin aldehyde	ND	F2	15.8	9.82	p	ug/Kg		62	40 - 120
Endrin ketone	ND		15.8	12.5		ug/Kg		79	40 - 120
gamma-BHC (Lindane)	ND		15.8	12.6		ug/Kg		80	58 - 120
Heptachlor	ND		15.8	14.1		ug/Kg		89	52 - 120
Heptachlor epoxide	ND		15.8	14.3		ug/Kg		90	40 - 120
Methoxychlor	ND	F2	15.8	16.5		ug/Kg		104	40 - 120
trans-Chlordane	ND	F1	15.8	14.9		ug/Kg		94	40 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*80*		*21 - 136*
Tetrachloro-m-xylene	*93*		*21 - 145*

Lab Sample ID: 720-88239-D-13-I MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250746 — **Prep Batch: 250531**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		15.8	14.0		ug/Kg		89	40 - 120	1	20
4,4'-DDE	ND		15.8	14.5		ug/Kg		92	40 - 120	0	20
4,4'-DDT	ND		15.8	17.4		ug/Kg		110	17 - 144	16	20
Aldrin	ND	F2	15.8	15.8	F2	ug/Kg		100	53 - 120	21	20
alpha-BHC	ND		15.8	11.6		ug/Kg		73	40 - 120	8	20
beta-BHC	ND		15.8	11.6		ug/Kg		74	40 - 120	20	20

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 720-88239-D-13-I MSD
Matrix: Solid
Analysis Batch: 250746

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250531

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-Chlordane	ND		15.8	15.4		ug/Kg		97	40 - 120	11	20
delta-BHC	ND	F2	15.8	13.9	F2	ug/Kg		88	40 - 120	23	20
Dieldrin	ND		15.8	16.4		ug/Kg		104	46 - 130	18	20
Endosulfan I	ND		15.8	15.0		ug/Kg		95	40 - 120	2	20
Endosulfan II	ND		15.8	16.3		ug/Kg		103	40 - 120	15	30
Endosulfan sulfate	ND		15.8	13.2		ug/Kg		84	40 - 120	18	20
Endrin	ND		15.8	18.4		ug/Kg		117	32 - 143	17	20
Endrin aldehyde	ND	F2	15.8	13.0	F2	ug/Kg		82	40 - 120	28	20
Endrin ketone	ND		15.8	14.8		ug/Kg		94	40 - 120	17	20
gamma-BHC (Lindane)	ND		15.8	13.6		ug/Kg		86	58 - 120	8	20
Heptachlor	ND		15.8	14.2		ug/Kg		90	52 - 120	0	20
Heptachlor epoxide	ND		15.8	15.6		ug/Kg		99	40 - 120	9	20
Methoxychlor	ND	F2	15.8	13.4	F2	ug/Kg		84	40 - 120	21	20
trans-Chlordane	ND	F1	15.8	15.6		ug/Kg		99	40 - 120	5	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*105*		*21 - 136*
Tetrachloro-m-xylene	*94*		*21 - 145*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-343157/23-A
Matrix: Solid
Analysis Batch: 343540

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 343157

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/30/18 06:48	09/01/18 11:44	1
Aroclor-1221	ND		50	24	ug/Kg		08/30/18 06:48	09/01/18 11:44	1
Aroclor-1232	ND		50	23	ug/Kg		08/30/18 06:48	09/01/18 11:44	1
Aroclor-1242	ND		50	19	ug/Kg		08/30/18 06:48	09/01/18 11:44	1
Aroclor-1248	ND		50	24	ug/Kg		08/30/18 06:48	09/01/18 11:44	1
Aroclor-1254	ND		50	23	ug/Kg		08/30/18 06:48	09/01/18 11:44	1
Aroclor-1260	ND		50	22	ug/Kg		08/30/18 06:48	09/01/18 11:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*14 - 128*	*08/30/18 06:48*	*09/01/18 11:44*	*1*
DCB Decachlorobiphenyl	*81*		*10 - 132*	*08/30/18 06:48*	*09/01/18 11:44*	*1*

Lab Sample ID: LCS 240-343157/24-A
Matrix: Solid
Analysis Batch: 343540

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 343157

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	1000	667		ug/Kg		67	47 - 120
Aroclor-1260	1000	792		ug/Kg		79	46 - 120

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 240-343157/24-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 343540 — **Prep Batch: 343157**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	78		14 - 128
DCB Decachlorobiphenyl	81		10 - 132

Lab Sample ID: 720-88263-F-18-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 343584 — **Prep Batch: 343157**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	ND		990	737		ug/Kg		74	31 - 120
Aroclor-1260	ND		990	774		ug/Kg		78	21 - 122

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	81		14 - 128
DCB Decachlorobiphenyl	87		10 - 132

Lab Sample ID: 720-88263-F-18-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 343584 — **Prep Batch: 343157**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	ND		996	647		ug/Kg		65	31 - 120	13	30
Aroclor-1260	ND		996	660		ug/Kg		66	21 - 122	16	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Tetrachloro-m-xylene	72		14 - 128
DCB Decachlorobiphenyl	66		10 - 132

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-250633/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250732 — **Prep Batch: 250633**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Arsenic	ND		1.0	0.085	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Barium	ND		0.50	0.071	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Beryllium	ND		0.10	0.033	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Cadmium	ND		0.13	0.012	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Chromium	ND		0.50	0.053	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Cobalt	ND		0.20	0.020	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Copper	ND		1.5	0.71	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Lead	ND		0.50	0.11	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Nickel	ND		0.50	0.051	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Selenium	ND		1.0	0.15	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Silver	ND		0.25	0.051	mg/Kg		08/30/18 18:17	08/31/18 13:03	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 720-250633/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250732 — **Prep Batch: 250633**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		0.50	0.15	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Vanadium	ND		0.50	0.068	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Zinc	ND		1.5	0.64	mg/Kg		08/30/18 18:17	08/31/18 13:03	1

Lab Sample ID: LCS 720-250633/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250732 — **Prep Batch: 250633**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	47.0		mg/Kg		94	80 - 120
Arsenic	50.0	46.9		mg/Kg		94	80 - 120
Barium	50.0	49.1		mg/Kg		98	80 - 120
Beryllium	50.0	49.2		mg/Kg		98	80 - 120
Cadmium	50.0	47.1		mg/Kg		94	80 - 120
Chromium	50.0	48.2		mg/Kg		96	80 - 120
Cobalt	50.0	48.3		mg/Kg		97	80 - 120
Copper	50.0	47.8		mg/Kg		96	80 - 120
Lead	50.0	47.8		mg/Kg		96	80 - 120
Molybdenum	50.0	48.3		mg/Kg		97	80 - 120
Nickel	50.0	47.8		mg/Kg		96	80 - 120
Selenium	50.0	45.3		mg/Kg		91	80 - 120
Silver	25.0	23.4		mg/Kg		94	80 - 120
Thallium	50.0	48.0		mg/Kg		96	80 - 120
Vanadium	50.0	47.4		mg/Kg		95	80 - 120
Zinc	50.0	47.4		mg/Kg		95	80 - 120

Lab Sample ID: 720-88261-7 MS — **Client Sample ID: DG-M9S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250732 — **Prep Batch: 250633**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	4.8	F1	45.5	17.1	F1	mg/Kg		27	75 - 125
Arsenic	25		45.5	69.5		mg/Kg		98	75 - 125
Barium	77	F1	45.5	184	F1	mg/Kg		236	75 - 125
Beryllium	0.24	J F1	45.5	63.6	F1	mg/Kg		139	75 - 125
Cadmium	0.28	J	45.5	56.8		mg/Kg		124	75 - 125
Chromium	34	F1	45.5	97.3	F1	mg/Kg		139	75 - 125
Cobalt	21		45.5	68.7		mg/Kg		105	75 - 125
Copper	240		45.5	153	4	mg/Kg		-190	75 - 125
Lead	120	F1 F2	45.5	410	F1	mg/Kg		638	75 - 125
Molybdenum	1.5	J	45.5	55.6		mg/Kg		119	75 - 125
Nickel	58		45.5	107		mg/Kg		108	75 - 125
Selenium	0.66	J	45.5	55.8		mg/Kg		121	75 - 125
Silver	0.57	J F1	22.7	28.1		mg/Kg		121	75 - 125
Thallium	0.89	J	45.5	48.3		mg/Kg		104	75 - 125
Vanadium	44	F1 F2	45.5	102	F1	mg/Kg		127	75 - 125
Zinc	83	F1	45.5	141	F1	mg/Kg		126	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88261-7 MSD — **Client Sample ID: DG-M9S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250732 — **Prep Batch: 250633**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	4.8	F1	45.9	15.6	F1	mg/Kg		24	75 - 125	9	20
Arsenic	25		45.9	65.7		mg/Kg		89	75 - 125	6	20
Barium	77	F1	45.9	179	F1	mg/Kg		223	75 - 125	3	20
Beryllium	0.24	J F1	45.9	69.8	F1	mg/Kg		152	75 - 125	9	20
Cadmium	0.28	J	45.9	56.4		mg/Kg		122	75 - 125	1	20
Chromium	34	F1	45.9	93.7	F1	mg/Kg		130	75 - 125	4	20
Cobalt	21		45.9	70.1		mg/Kg		107	75 - 125	2	20
Copper	240		45.9	167	4	mg/Kg		-157	75 - 125	9	20
Lead	120	F1 F2	45.9	278	F1 F2	mg/Kg		345	75 - 125	38	20
Molybdenum	1.5	J	45.9	54.7		mg/Kg		116	75 - 125	2	20
Nickel	58		45.9	93.6		mg/Kg		78	75 - 125	13	20
Selenium	0.66	J	45.9	55.6		mg/Kg		120	75 - 125	0	20
Silver	0.57	J F1	22.9	31.0	F1	mg/Kg		133	75 - 125	10	20
Thallium	0.89	J	45.9	50.6		mg/Kg		108	75 - 125	5	20
Vanadium	44	F1 F2	45.9	135	F1 F2	mg/Kg		198	75 - 125	28	20
Zinc	83	F1	45.9	137		mg/Kg		117	75 - 125	3	20

Lab Sample ID: MB 720-250637/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250761 — **Prep Batch: 250637**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/30/18 19:34	08/31/18 21:02	1
Arsenic	ND		1.0	0.085	mg/Kg		08/30/18 19:34	08/31/18 21:02	1
Barium	ND		0.50	0.071	mg/Kg		08/30/18 19:34	08/31/18 21:02	1
Beryllium	ND		0.10	0.033	mg/Kg		08/30/18 19:34	08/31/18 21:02	1
Cadmium	ND		0.13	0.012	mg/Kg		08/30/18 19:34	08/31/18 21:02	1
Chromium	ND		0.50	0.053	mg/Kg		08/30/18 19:34	08/31/18 21:02	1
Cobalt	ND		0.20	0.020	mg/Kg		08/30/18 19:34	08/31/18 21:02	1
Copper	ND		1.5	0.71	mg/Kg		08/30/18 19:34	08/31/18 21:02	1
Lead	ND		0.50	0.11	mg/Kg		08/30/18 19:34	08/31/18 21:02	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/30/18 19:34	08/31/18 21:02	1
Nickel	ND		0.50	0.051	mg/Kg		08/30/18 19:34	08/31/18 21:02	1
Selenium	ND		1.0	0.15	mg/Kg		08/30/18 19:34	08/31/18 21:02	1
Silver	ND		0.25	0.051	mg/Kg		08/30/18 19:34	08/31/18 21:02	1
Thallium	ND		0.50	0.15	mg/Kg		08/30/18 19:34	08/31/18 21:02	1
Vanadium	ND		0.50	0.068	mg/Kg		08/30/18 19:34	08/31/18 21:02	1
Zinc	ND		1.5	0.64	mg/Kg		08/30/18 19:34	08/31/18 21:02	1

Lab Sample ID: LCS 720-250637/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250761 — **Prep Batch: 250637**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	45.8		mg/Kg		92	80 - 120
Arsenic	50.0	46.7		mg/Kg		93	80 - 120
Barium	50.0	47.8		mg/Kg		96	80 - 120
Beryllium	50.0	46.2		mg/Kg		92	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 720-250637/2-A
Matrix: Solid
Analysis Batch: 250761

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250637

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	50.0	46.6		mg/Kg		93	80 - 120
Chromium	50.0	46.3		mg/Kg		93	80 - 120
Cobalt	50.0	49.1		mg/Kg		98	80 - 120
Copper	50.0	45.6		mg/Kg		91	80 - 120
Lead	50.0	47.6		mg/Kg		95	80 - 120
Molybdenum	50.0	47.8		mg/Kg		96	80 - 120
Nickel	50.0	46.4		mg/Kg		93	80 - 120
Selenium	50.0	44.8		mg/Kg		90	80 - 120
Silver	25.0	24.2		mg/Kg		97	80 - 120
Thallium	50.0	47.4		mg/Kg		95	80 - 120
Vanadium	50.0	46.9		mg/Kg		94	80 - 120
Zinc	50.0	47.8		mg/Kg		96	80 - 120

Lab Sample ID: 720-88313-D-1-A MS
Matrix: Solid
Analysis Batch: 250761

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250637

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.91	J F1	49.0	15.1	F1	mg/Kg		29	75 - 125
Arsenic	6.5		49.0	49.3		mg/Kg		87	75 - 125
Barium	190	F1	49.0	231		mg/Kg		76	75 - 125
Beryllium	ND		49.0	46.9		mg/Kg		96	75 - 125
Cadmium	0.12	J	49.0	46.2		mg/Kg		94	75 - 125
Chromium	49		49.0	95.3		mg/Kg		94	75 - 125
Cobalt	15		49.0	60.1		mg/Kg		93	75 - 125
Copper	21		49.0	67.9		mg/Kg		96	75 - 125
Lead	140	F1 F2	49.0	187		mg/Kg		88	75 - 125
Molybdenum	ND		49.0	42.8		mg/Kg		87	75 - 125
Nickel	39		49.0	86.1		mg/Kg		97	75 - 125
Selenium	ND		49.0	42.7		mg/Kg		87	75 - 125
Silver	0.66	J	24.5	25.0		mg/Kg		99	75 - 125
Thallium	ND		49.0	45.5		mg/Kg		93	75 - 125
Vanadium	44		49.0	91.3		mg/Kg		97	75 - 125
Zinc	110	F1	49.0	138	F1	mg/Kg		51	75 - 125

Lab Sample ID: 720-88313-D-1-B MSD
Matrix: Solid
Analysis Batch: 250761

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250637

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.91	J F1	48.5	13.6	F1	mg/Kg		26	75 - 125	10	20
Arsenic	6.5		48.5	50.3		mg/Kg		90	75 - 125	2	20
Barium	190	F1	48.5	227	F1	mg/Kg		70	75 - 125	2	20
Beryllium	ND		48.5	47.5		mg/Kg		98	75 - 125	1	20
Cadmium	0.12	J	48.5	45.7		mg/Kg		94	75 - 125	1	20
Chromium	49		48.5	90.1		mg/Kg		84	75 - 125	6	20
Cobalt	15		48.5	60.0		mg/Kg		94	75 - 125	0	20
Copper	21		48.5	68.2		mg/Kg		98	75 - 125	0	20
Lead	140	F1 F2	48.5	235	F1 F2	mg/Kg		187	75 - 125	23	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88313-D-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250761 — **Prep Batch: 250637**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Molybdenum	ND		48.5	42.7		mg/Kg		88	75 - 125	0	20
Nickel	39		48.5	85.4		mg/Kg		96	75 - 125	1	20
Selenium	ND		48.5	42.2		mg/Kg		87	75 - 125	1	20
Silver	0.66	J	24.3	24.6		mg/Kg		99	75 - 125	1	20
Thallium	ND		48.5	44.9		mg/Kg		92	75 - 125	2	20
Vanadium	44		48.5	88.8		mg/Kg		92	75 - 125	3	20
Zinc	110	F1	48.5	142	F1	mg/Kg		60	75 - 125	3	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-250621/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250770 — **Prep Batch: 250621**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/30/18 16:17	08/31/18 18:10	1

Lab Sample ID: LCS 720-250621/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250770 — **Prep Batch: 250621**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.821		mg/Kg		99	80 - 120

Lab Sample ID: 720-88261-7 MS — **Client Sample ID: DG-M9S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250770 — **Prep Batch: 250621**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.10		0.806	0.969		mg/Kg		108	75 - 125

Lab Sample ID: 720-88261-7 MSD — **Client Sample ID: DG-M9S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250770 — **Prep Batch: 250621**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.10		0.833	1.05		mg/Kg		114	75 - 125	8	20

Lab Sample ID: MB 720-250662/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250923 — **Prep Batch: 250662**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		09/04/18 21:32	09/05/18 10:32	1

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 720-250662/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250923 — **Prep Batch: 250662**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.833	0.832		mg/Kg		100	80 - 120		

Lab Sample ID: 720-88263-D-3-E MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250923 — **Prep Batch: 250662**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.18		0.714	0.828		mg/Kg		91	75 - 125		

Lab Sample ID: 720-88263-D-3-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250923 — **Prep Batch: 250662**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.18		0.694	0.828		mg/Kg		93	75 - 125	0	20

QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88261-1

GC/MS VOA

Prep Batch: 250928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88261-11	DG-I9S-0.5-1	Total/NA	Solid	5035	
MB 720-250928/5-A	Method Blank	Total/NA	Solid	5035	
LCS 720-250928/6-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 720-250928/8-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 720-250928/7-A	Lab Control Sample Dup	Total/NA	Solid	5035	
LCSD 720-250928/9-A	Lab Control Sample Dup	Total/NA	Solid	5035	
720-88368-C-3-A MS	Matrix Spike	Total/NA	Solid	5035	
720-88368-C-3-A MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 251035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88261-11	DG-I9S-0.5-1	Total/NA	Solid	8260B	250928
MB 720-250928/5-A	Method Blank	Total/NA	Solid	8260B	250928
LCS 720-250928/6-A	Lab Control Sample	Total/NA	Solid	8260B	250928
LCS 720-250928/8-A	Lab Control Sample	Total/NA	Solid	8260B	250928
LCSD 720-250928/7-A	Lab Control Sample Dup	Total/NA	Solid	8260B	250928
LCSD 720-250928/9-A	Lab Control Sample Dup	Total/NA	Solid	8260B	250928
720-88368-C-3-A MS	Matrix Spike	Total/NA	Solid	8260B	250928
720-88368-C-3-A MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	250928

GC/MS Semi VOA

Prep Batch: 250580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88261-11	DG-I9S-0.5-1	Total/NA	Solid	3546	
MB 720-250580/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250580/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88242-D-13-H MS	Matrix Spike	Total/NA	Solid	3546	
720-88242-D-13-I MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 250742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250580/1-A	Method Blank	Total/NA	Solid	8270C SIM	250580
LCS 720-250580/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	250580

Analysis Batch: 250745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88242-D-13-H MS	Matrix Spike	Total/NA	Solid	8270C SIM	250580
720-88242-D-13-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8270C SIM	250580

Analysis Batch: 250749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88261-11	DG-I9S-0.5-1	Total/NA	Solid	8270C SIM	250580

GC Semi VOA

Prep Batch: 250531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88261-11	DG-I9S-0.5-1	Total/NA	Solid	3546	
MB 720-250531/1-A	Method Blank	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 250531 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-250531/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88239-D-13-H MS	Matrix Spike	Total/NA	Solid	3546	
720-88239-D-13-I MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Prep Batch: 250566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88261-11	DG-I9S-0.5-1	Total/NA	Solid	3546	
MB 720-250566/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250566/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88263-E-16-A MS	Matrix Spike	Total/NA	Solid	3546	
720-88263-E-16-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 250746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88261-11	DG-I9S-0.5-1	Total/NA	Solid	8081A	250531
MB 720-250531/1-A	Method Blank	Total/NA	Solid	8081A	250531
LCS 720-250531/2-A	Lab Control Sample	Total/NA	Solid	8081A	250531
720-88239-D-13-H MS	Matrix Spike	Total/NA	Solid	8081A	250531
720-88239-D-13-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8081A	250531

Analysis Batch: 250884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88261-11	DG-I9S-0.5-1	Total/NA	Solid	8015B	250566
MB 720-250566/1-A	Method Blank	Total/NA	Solid	8015B	250566

Analysis Batch: 250885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-250566/2-A	Lab Control Sample	Total/NA	Solid	8015B	250566
720-88263-E-16-A MS	Matrix Spike	Total/NA	Solid	8015B	250566
720-88263-E-16-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	250566

Prep Batch: 343157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88261-11	DG-I9S-0.5-1	Total/NA	Solid	3540C	
MB 240-343157/23-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-343157/24-A	Lab Control Sample	Total/NA	Solid	3540C	
720-88263-F-18-B MS	Matrix Spike	Total/NA	Solid	3540C	
720-88263-F-18-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3540C	

Analysis Batch: 343540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88261-11	DG-I9S-0.5-1	Total/NA	Solid	8082	343157
MB 240-343157/23-A	Method Blank	Total/NA	Solid	8082	343157
LCS 240-343157/24-A	Lab Control Sample	Total/NA	Solid	8082	343157

Analysis Batch: 343584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-F-18-B MS	Matrix Spike	Total/NA	Solid	8082	343157
720-88263-F-18-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8082	343157

Metals

Prep Batch: 250621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88261-1	DG-J11S-0.5-1	Total/NA	Solid	7471A	
720-88261-2	DG-J11S-3.5-4	Total/NA	Solid	7471A	
720-88261-3	DG-L11S-0.5-1	Total/NA	Solid	7471A	
720-88261-4	DG-L11S-3.5-4	Total/NA	Solid	7471A	
720-88261-5	DG-M10S-0.5-1	Total/NA	Solid	7471A	
720-88261-6	DG-M10S-3.5-4	Total/NA	Solid	7471A	
720-88261-7	DG-M9S-0.5-1	Total/NA	Solid	7471A	
720-88261-8	DG-M9S-3.5-4	Total/NA	Solid	7471A	
720-88261-9	DG-K9S-0.5-1	Total/NA	Solid	7471A	
720-88261-10	DG-K9S-3.5-4	Total/NA	Solid	7471A	
720-88261-12	DG-E9S-0.5-1	Total/NA	Solid	7471A	
720-88261-13	DG-E9S-3.5-4	Total/NA	Solid	7471A	
720-88261-14	DG-I9S-3.5-4	Total/NA	Solid	7471A	
720-88261-15	DG-F11S-0.5-1	Total/NA	Solid	7471A	
MB 720-250621/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250621/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88261-7 MS	DG-M9S-0.5-1	Total/NA	Solid	7471A	
720-88261-7 MSD	DG-M9S-0.5-1	Total/NA	Solid	7471A	

Prep Batch: 250633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88261-1	DG-J11S-0.5-1	Total/NA	Solid	3050B	
720-88261-2	DG-J11S-3.5-4	Total/NA	Solid	3050B	
720-88261-3	DG-L11S-0.5-1	Total/NA	Solid	3050B	
720-88261-4	DG-L11S-3.5-4	Total/NA	Solid	3050B	
720-88261-5	DG-M10S-0.5-1	Total/NA	Solid	3050B	
720-88261-6	DG-M10S-3.5-4	Total/NA	Solid	3050B	
720-88261-7	DG-M9S-0.5-1	Total/NA	Solid	3050B	
720-88261-8	DG-M9S-3.5-4	Total/NA	Solid	3050B	
720-88261-9	DG-K9S-0.5-1	Total/NA	Solid	3050B	
720-88261-10	DG-K9S-3.5-4	Total/NA	Solid	3050B	
720-88261-12	DG-E9S-0.5-1	Total/NA	Solid	3050B	
720-88261-13	DG-E9S-3.5-4	Total/NA	Solid	3050B	
720-88261-14	DG-I9S-3.5-4	Total/NA	Solid	3050B	
720-88261-15	DG-F11S-0.5-1	Total/NA	Solid	3050B	
MB 720-250633/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250633/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88261-7 MS	DG-M9S-0.5-1	Total/NA	Solid	3050B	
720-88261-7 MSD	DG-M9S-0.5-1	Total/NA	Solid	3050B	

Prep Batch: 250637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88261-11	DG-I9S-0.5-1	Total/NA	Solid	3050B	
MB 720-250637/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250637/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88313-D-1-A MS	Matrix Spike	Total/NA	Solid	3050B	
720-88313-D-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Prep Batch: 250662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88261-11	DG-I9S-0.5-1	Total/NA	Solid	7471A	

Metals (Continued)

Prep Batch: 250662 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250662/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250662/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88263-D-3-E MS	Matrix Spike	Total/NA	Solid	7471A	
720-88263-D-3-F MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	

Analysis Batch: 250732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88261-1	DG-J11S-0.5-1	Total/NA	Solid	6010B	250633
720-88261-2	DG-J11S-3.5-4	Total/NA	Solid	6010B	250633
720-88261-3	DG-L11S-0.5-1	Total/NA	Solid	6010B	250633
720-88261-4	DG-L11S-3.5-4	Total/NA	Solid	6010B	250633
720-88261-5	DG-M10S-0.5-1	Total/NA	Solid	6010B	250633
720-88261-6	DG-M10S-3.5-4	Total/NA	Solid	6010B	250633
720-88261-7	DG-M9S-0.5-1	Total/NA	Solid	6010B	250633
720-88261-8	DG-M9S-3.5-4	Total/NA	Solid	6010B	250633
720-88261-9	DG-K9S-0.5-1	Total/NA	Solid	6010B	250633
720-88261-10	DG-K9S-3.5-4	Total/NA	Solid	6010B	250633
720-88261-12	DG-E9S-0.5-1	Total/NA	Solid	6010B	250633
720-88261-13	DG-E9S-3.5-4	Total/NA	Solid	6010B	250633
720-88261-14	DG-I9S-3.5-4	Total/NA	Solid	6010B	250633
720-88261-15	DG-F11S-0.5-1	Total/NA	Solid	6010B	250633
MB 720-250633/1-A	Method Blank	Total/NA	Solid	6010B	250633
LCS 720-250633/2-A	Lab Control Sample	Total/NA	Solid	6010B	250633
720-88261-7 MS	DG-M9S-0.5-1	Total/NA	Solid	6010B	250633
720-88261-7 MSD	DG-M9S-0.5-1	Total/NA	Solid	6010B	250633

Analysis Batch: 250761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88261-11	DG-I9S-0.5-1	Total/NA	Solid	6010B	250637
MB 720-250637/1-A	Method Blank	Total/NA	Solid	6010B	250637
LCS 720-250637/2-A	Lab Control Sample	Total/NA	Solid	6010B	250637
720-88313-D-1-A MS	Matrix Spike	Total/NA	Solid	6010B	250637
720-88313-D-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250637

Analysis Batch: 250770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88261-1	DG-J11S-0.5-1	Total/NA	Solid	7471A	250621
720-88261-2	DG-J11S-3.5-4	Total/NA	Solid	7471A	250621
720-88261-3	DG-L11S-0.5-1	Total/NA	Solid	7471A	250621
720-88261-4	DG-L11S-3.5-4	Total/NA	Solid	7471A	250621
720-88261-5	DG-M10S-0.5-1	Total/NA	Solid	7471A	250621
720-88261-6	DG-M10S-3.5-4	Total/NA	Solid	7471A	250621
720-88261-7	DG-M9S-0.5-1	Total/NA	Solid	7471A	250621
720-88261-8	DG-M9S-3.5-4	Total/NA	Solid	7471A	250621
720-88261-9	DG-K9S-0.5-1	Total/NA	Solid	7471A	250621
720-88261-10	DG-K9S-3.5-4	Total/NA	Solid	7471A	250621
720-88261-12	DG-E9S-0.5-1	Total/NA	Solid	7471A	250621
720-88261-13	DG-E9S-3.5-4	Total/NA	Solid	7471A	250621
720-88261-14	DG-I9S-3.5-4	Total/NA	Solid	7471A	250621
720-88261-15	DG-F11S-0.5-1	Total/NA	Solid	7471A	250621
MB 720-250621/1-A	Method Blank	Total/NA	Solid	7471A	250621

Metals (Continued)

Analysis Batch: 250770 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-250621/2-A	Lab Control Sample	Total/NA	Solid	7471A	250621
720-88261-7 MS	DG-M9S-0.5-1	Total/NA	Solid	7471A	250621
720-88261-7 MSD	DG-M9S-0.5-1	Total/NA	Solid	7471A	250621

Analysis Batch: 250879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88261-6	DG-M10S-3.5-4	Total/NA	Solid	6010B	250633
720-88261-13	DG-E9S-3.5-4	Total/NA	Solid	6010B	250633

Analysis Batch: 250923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88261-11	DG-I9S-0.5-1	Total/NA	Solid	7471A	250662
MB 720-250662/1-A	Method Blank	Total/NA	Solid	7471A	250662
LCS 720-250662/2-A	Lab Control Sample	Total/NA	Solid	7471A	250662
720-88263-D-3-E MS	Matrix Spike	Total/NA	Solid	7471A	250662
720-88263-D-3-F MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	250662

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88261-1

Client Sample ID: DG-J11S-0.5-1 — Lab Sample ID: 720-88261-1

Date Collected: 08/24/18 14:52 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250633	08/30/18 18:17	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250732	08/31/18 13:36	BKR	TAL PLS
Total/NA	Prep	7471A			250621	08/30/18 16:17	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250770	08/31/18 18:22	OBI	TAL PLS

Client Sample ID: DG-J11S-3.5-4 — Lab Sample ID: 720-88261-2

Date Collected: 08/24/18 14:52 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250633	08/30/18 18:17	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250732	08/31/18 13:41	BKR	TAL PLS
Total/NA	Prep	7471A			250621	08/30/18 16:17	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250770	08/31/18 18:24	OBI	TAL PLS

Client Sample ID: DG-L11S-0.5-1 — Lab Sample ID: 720-88261-3

Date Collected: 08/24/18 15:02 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250633	08/30/18 18:17	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250732	08/31/18 13:46	BKR	TAL PLS
Total/NA	Prep	7471A			250621	08/30/18 16:17	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250770	08/31/18 18:26	OBI	TAL PLS

Client Sample ID: DG-L11S-3.5-4 — Lab Sample ID: 720-88261-4

Date Collected: 08/24/18 15:02 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250633	08/30/18 18:17	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250732	08/31/18 14:00	BKR	TAL PLS
Total/NA	Prep	7471A			250621	08/30/18 16:17	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250770	08/31/18 18:29	OBI	TAL PLS

Client Sample ID: DG-M10S-0.5-1 — Lab Sample ID: 720-88261-5

Date Collected: 08/24/18 15:19 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250633	08/30/18 18:17	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250732	08/31/18 14:05	BKR	TAL PLS
Total/NA	Prep	7471A			250621	08/30/18 16:17	MAG	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88261-1

Client Sample ID: DG-M10S-0.5-1 — Lab Sample ID: 720-88261-5

Date Collected: 08/24/18 15:19 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1	250770	08/31/18 18:31	OBI	TAL PLS

Client Sample ID: DG-M10S-3.5-4 — Lab Sample ID: 720-88261-6

Date Collected: 08/24/18 15:19 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250633	08/30/18 18:17	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250879	09/04/18 21:06	OBI	TAL PLS
Total/NA	Prep	3050B			250633	08/30/18 18:17	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250732	08/31/18 14:09	BKR	TAL PLS
Total/NA	Prep	7471A			250621	08/30/18 16:17	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250770	08/31/18 18:38	OBI	TAL PLS

Client Sample ID: DG-M9S-0.5-1 — Lab Sample ID: 720-88261-7

Date Collected: 08/24/18 15:38 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250633	08/30/18 18:17	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250732	08/31/18 13:31	BKR	TAL PLS
Total/NA	Prep	7471A			250621	08/30/18 16:17	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250770	08/31/18 18:19	OBI	TAL PLS

Client Sample ID: DG-M9S-3.5-4 — Lab Sample ID: 720-88261-8

Date Collected: 08/24/18 15:38 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250633	08/30/18 18:17	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250732	08/31/18 14:14	BKR	TAL PLS
Total/NA	Prep	7471A			250621	08/30/18 16:17	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250770	08/31/18 18:40	OBI	TAL PLS

Client Sample ID: DG-K9S-0.5-1 — Lab Sample ID: 720-88261-9

Date Collected: 08/24/18 16:00 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250633	08/30/18 18:17	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250732	08/31/18 14:19	BKR	TAL PLS
Total/NA	Prep	7471A			250621	08/30/18 16:17	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250770	08/31/18 18:43	OBI	TAL PLS

Client Sample ID: DG-K9S-3.5-4 — Lab Sample ID: 720-88261-10

Date Collected: 08/24/18 16:00 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250633	08/30/18 18:17	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250732	08/31/18 14:24	BKR	TAL PLS
Total/NA	Prep	7471A			250621	08/30/18 16:17	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250770	08/31/18 18:45	OBI	TAL PLS

Client Sample ID: DG-I9S-0.5-1 — Lab Sample ID: 720-88261-11

Date Collected: 08/24/18 16:15 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250928	08/27/18 02:30	LRC	TAL PLS
Total/NA	Analysis	8260B		20	251035	09/07/18 01:40	JRM	TAL PLS
Total/NA	Prep	3546			250580	08/30/18 10:18	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		20	250749	09/03/18 21:38	LPL	TAL PLS
Total/NA	Prep	3546			250566	08/30/18 08:54	MAB	TAL PLS
Total/NA	Analysis	8015B		20	250884	09/05/18 13:26	JXL	TAL PLS
Total/NA	Prep	3546			250531	08/29/18 17:11	MAB	TAL PLS
Total/NA	Analysis	8081A		10	250746	09/03/18 18:29	JZT	TAL PLS
Total/NA	Prep	3540C			343157	08/30/18 06:48	DVT	TAL CAN
Total/NA	Analysis	8082		1	343540	09/01/18 12:28	KMG	TAL CAN
Total/NA	Prep	3050B			250637	08/30/18 19:34	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250761	08/31/18 23:29	OBI	TAL PLS
Total/NA	Prep	7471A			250662	09/04/18 21:32	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250923	09/05/18 11:31	OBI	TAL PLS

Client Sample ID: DG-E9S-0.5-1 — Lab Sample ID: 720-88261-12

Date Collected: 08/24/18 16:55 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250633	08/30/18 18:17	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250732	08/31/18 14:29	BKR	TAL PLS
Total/NA	Prep	7471A			250621	08/30/18 16:17	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250770	08/31/18 18:47	OBI	TAL PLS

Client Sample ID: DG-E9S-3.5-4 — Lab Sample ID: 720-88261-13

Date Collected: 08/24/18 16:55 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250633	08/30/18 18:17	GLL	TAL PLS
Total/NA	Analysis	6010B		20	250879	09/04/18 21:11	OBI	TAL PLS
Total/NA	Prep	3050B			250633	08/30/18 18:17	GLL	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88261-1

Client Sample ID: DG-E9S-3.5-4 — Lab Sample ID: 720-88261-13

Date Collected: 08/24/18 16:55 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		4	250732	08/31/18 14:34	BKR	TAL PLS
Total/NA	Prep	7471A			250621	08/30/18 16:17	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250770	08/31/18 18:50	OBI	TAL PLS

Client Sample ID: DG-I9S-3.5-4 — Lab Sample ID: 720-88261-14

Date Collected: 08/24/18 16:15 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250633	08/30/18 18:17	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250732	08/31/18 14:38	BKR	TAL PLS
Total/NA	Prep	7471A			250621	08/30/18 16:17	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250770	08/31/18 18:52	OBI	TAL PLS

Client Sample ID: DG-F11S-0.5-1 — Lab Sample ID: 720-88261-15

Date Collected: 08/24/18 14:15 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250633	08/30/18 18:17	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250732	08/31/18 14:43	BKR	TAL PLS
Total/NA	Prep	7471A			250621	08/30/18 16:17	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250770	08/31/18 18:54	OBI	TAL PLS

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88261-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Laboratory: TestAmerica Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-19
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19
Illinois	NELAP	5	200004	07-31-19
Kansas	NELAP	7	E-10336	01-31-19
Kentucky (UST)	State Program	4	58	02-23-19
Kentucky (WW)	State Program	4	98016	12-31-18 *
Minnesota	NELAP	5	039-999-348	12-31-18 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19
New York	NELAP	2	10975	03-31-19
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-19
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-18-10	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19
Washington	State Program	10	C971	01-12-19
West Virginia DEP	State Program	3	210	12-31-18 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88261-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PLS
8270C SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
8081A	Organochlorine Pesticides (GC)	SW846	TAL PLS
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS
3050B	Preparation, Metals	SW846	TAL PLS
3540C	Soxhlet Extraction	SW846	TAL CAN
3546	Microwave Extraction	SW846	TAL PLS
5035	Closed System Purge and Trap	SW846	TAL PLS
7471A	Preparation, Mercury	SW846	TAL PLS

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88261-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-88261-1	DG-J11S-0.5-1	Solid	08/24/18 14:52	08/27/18 14:25
720-88261-2	DG-J11S-3.5-4	Solid	08/24/18 14:52	08/27/18 14:25
720-88261-3	DG-L11S-0.5-1	Solid	08/24/18 15:02	08/27/18 14:25
720-88261-4	DG-L11S-3.5-4	Solid	08/24/18 15:02	08/27/18 14:25
720-88261-5	DG-M10S-0.5-1	Solid	08/24/18 15:19	08/27/18 14:25
720-88261-6	DG-M10S-3.5-4	Solid	08/24/18 15:19	08/27/18 14:25
720-88261-7	DG-M9S-0.5-1	Solid	08/24/18 15:38	08/27/18 14:25
720-88261-8	DG-M9S-3.5-4	Solid	08/24/18 15:38	08/27/18 14:25
720-88261-9	DG-K9S-0.5-1	Solid	08/24/18 16:00	08/27/18 14:25
720-88261-10	DG-K9S-3.5-4	Solid	08/24/18 16:00	08/27/18 14:25
720-88261-11	DG-I9S-0.5-1	Solid	08/24/18 16:15	08/27/18 14:25
720-88261-12	DG-E9S-0.5-1	Solid	08/24/18 16:55	08/27/18 14:25
720-88261-13	DG-E9S-3.5-4	Solid	08/24/18 16:55	08/27/18 14:25
720-88261-14	DG-I9S-3.5-4	Solid	08/24/18 16:15	08/27/18 14:25
720-88261-15	DG-F11S-0.5-1	Solid	08/24/18 14:15	08/27/18 14:25

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-88261

TESTAMERICA Pleasanton
1220 Quarry Lane •
Phone: (925) 484-1

720-88261 Chain of Custody

Reference #: 185133 8/27/18 40 6

Date 8/27/18 Page 1 of 2

Report To

Name: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: mkahrilas@geosyntec.com
Attn To: GEOSYNTEC
Sampled By: R. Thomas / K. Belli
Phone: 4708810525
Attn: A. SMITH

Analysis Request

Sample ID	Date	Time	Matrix	Preserv.	Volatile Organics GC/MS (VOCs) ☒ EPA 8260B 1620	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☒ Motor Oil ☐ Other	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☒ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☒ EPA 8081 PCBs ☒ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Metals: ☐ 6020 ☐ 200.8 (ICP-MS):	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	Asbestos (CARB 435)	Perform NAS/MSD (lab to homogenize)
DG-J11S-0.5-1	8/24	1452	S	N									X											
DG-J11S-3.5-4		1452	S	N									X											
DG-L11S-0.5-1		1502	S	N									X											
DG-L11S-3.5-4		1502	S	N									X											
DG-M10S-0.5-1		1519	S	N									X											
DG-M10S-3.5-4		1519	S	N									X											
~~DG-M9S-0.5-1~~		~~1538~~	~~S~~	~~Y~~	X								X											
~~DG-M9S-3.5-4~~		~~1538~~	~~S~~	~~Y~~	X								X											
DG-M9S-0.5-1	8/24	1538	S	N									X											
DG-M9S-3.5-4	8/24	1538	S	N									X										X	

Project Info.

Project Name/#: UPC OU-SM

WG2565/02

Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt

# of Containers:

Head Space:

Temp:

10 Day	5 Day	4 Day	3 Day	2 Day	1 Day	Other:
	(5)					

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF

Special Instructions / Comments: ☐ Global ID

5.0°C

Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: K. Belli — Time: 615	Signature: [illegible] — Time: 1300	Signature: [illegible] — Time: 1425
Printed Name: Keaton Belli — Date: 8/27	Printed Name: Rosemarie K. Thomas — Date: 8/27	Printed Name: Robert — Date: 8/27/18
Company: Geosyntec	Company: Geosyntec	Company: TA

1) Received by:	2) Received by:	3) Received by:
Signature: [illegible] — Time: 1100	Signature: [illegible] — Time: 1300	Signature: [illegible] — Time: 1425
Printed Name: Rosemarie Thomas — Date: 8/27	Printed Name: [illegible] — Date: 8/27/18	Printed Name: Dennis Aragon — Date: 8/27/18
Company: Geosyntec	Company: TA	Company: TA-720

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

720-88261

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 185138 40 8/27/18

Date 8/27/18 Page 2 of 2

Report To
Attn: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: mkahrilas@geosyntec.com
To: GEOSYNTEC
Attn: A. SMITH
Sampled By: R. Thomas / K. Belli
Phone: 4708810525

Analysis Request

Sample ID	Date	Time	Matrix	Preserv.	Volatile Organics GC/MS (VOCs) ☒ EPA 8260B + GRO	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☒ Motor Oil ☐ Other	Semi-Volatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☒ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☒ EPA 8081 PCBs ☒ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Metals: ☐ 6020 ☐ 200.8 (ICP-MS):	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	Asbestos (CARB435)	
DG-K9S-0.5-1	8/24	1600	S	N									X										
DG-K9S-3.5-4		1600	S	N									X										
DG-I9S-0.5-1		1615	S	~~N~~ Y	X			X		X		X	X										
~~DG-I9S-3.5-4~~		~~1615~~	~~S~~	~~N~~	~~X~~								~~X~~										
DG-E9S-0.5-1	8/24	1655	S	N									X										
DG-E9S-3.5-4		1655	S	N									X										
DG-I9S-3.5-4		1615	S	N									X										
DG-F11S-0.5-1		1415	S	N									X										

Project Info
Project Name/#: UPC OU-SM
#: WG2565/02
Bill Card #/N:
If yes, please call with payment information ASAP

Sample Receipt
# of Containers:
Head Space:
Temp:

10 Day	5 Day	4 Day	3 Day	2 Day	1 Day	Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID

Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: K. Belli — Time: 615	Signature: K. T — Time: 1300 1160	Signature: — Time: 1425
Printed Name: Keaton Belli — Date: 8/27	Printed Name: Rosemine K. Thomas — Date: 8/27	Printed Name: Robert — Date: 8/27/18
Company: Geosyntec	Company: Geosyntec	Company: TA

1) Received by:	2) Received by:	3) Received by:
Signature: K. T — Time: 1160	Signature: — Time: 1300	Signature: — Time: 1425
Printed Name: Rosemine K. Thomas — Date: 8/27	Printed Name: Robert — Date: 8/27/18	Printed Name: Dennis Aran — Date: 8/27/18
Company: Geosyntec	Company: TA	Company: NA-TC

0.8/0.8

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39438.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88261-1
Address: 4101 Shuffel Street NW,	Due Date Requested: 9/4/2018			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: UPC OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

C209

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8082/3540C (MOD) PCB 7 Aroclors	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-I9S-0.5-1 (720-88261-11)	8/24/18	16:15 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	8/28/18 1237	TAL		8/29/18 935	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

TestAmerica Canton Sample Receipt Form/Narrative **Login # :**_____
Canton Facility

Client TA Pleasanton Site Name_____ Cooler unpacked by:
Cooler Received on 8/29/18 Opened on 8/29/18
FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other_____

Receipt After-hours: Drop-off Date/Time_____ Storage Location_____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other_____
Packing material used: Bubble Wrap Foam Plastic Bag None Other_____
COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF +0 °C) Observed Cooler Temp. 0.8 °C Corrected Cooler Temp. 0.8 °C
   IR GUN #36 (CF -0.3°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   -Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
   -Were tamper/custody seals intact and uncompromised? Yes No NA
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No
    If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC849151**
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____ Yes No
16. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____.

WI-NC-099

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88261-1

Login Number: 88261
List Number: 1
Creator: Bullock, Tracy

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	False	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-88262-1
Client Project/Site: UPC OU-SM
Revision: 1

For:
Geosyntec Consultants, Inc.
201 N. Civic Drive
Suite 245
Walnut Creek, California 94596

Attn: Mr. Krys Jesionek

Authorized for release by:
11/27/2018 6:44:36 PM

Micah Smith, Project Manager II
(925)484-1919
micah.smith@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 5
Client Sample Results 6
QC Sample Results 8
QC Association Summary 11
Lab Chronicle 12
Certification Summary 13
Method Summary 14
Sample Summary 15
Chain of Custody 16
Receipt Checklists 17

Definitions/Glossary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88262-1

Qualifiers

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88262-1

Job ID: 720-88262-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-88262-1

Comments
This report was revised on 11/27/18 to change the units for the metals data to report in mg/Kg, as requested.

Receipt
The samples were received on 8/27/2018 2:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.9º C.

Receipt Exceptions
The following samples were duplicated on this 720-88262 Chain of Custody (COC) and on 8/24/18 720-88240 COC; however, the samples were received 8/24/18 : DUP-36, DUP-34, DUP-33. They were logged in as 720-88240-17, -18, and -19.
Sample DUP-13 was received Friday 8/24/18 but was not listed on that COC. It was logged in as 720-88240-20.

Metals
Method(s) 6010B: Internal standard responses were outside of acceptance limits for the ICSAB, but recoveries met criteria: (ICSAB 720-250879/8).

Method(s) 6010B: The following samples were diluted due to the abundance of non-target analyte: DUP-29 (720-88262-1 and DUP-21 (720-88262-2). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88262-1

Client Sample ID: DUP-29 — Lab Sample ID: 720-88262-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	4.5		1.9	0.31	mg/Kg	4		6010B	Total/NA
Arsenic	44		3.8	0.32	mg/Kg	4		6010B	Total/NA
Barium	120		1.9	0.27	mg/Kg	4		6010B	Total/NA
Cadmium	0.76		0.47	0.047	mg/Kg	4		6010B	Total/NA
Chromium	45		1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	13		0.75	0.075	mg/Kg	4		6010B	Total/NA
Copper	130		5.7	2.7	mg/Kg	4		6010B	Total/NA
Lead	510		1.9	0.40	mg/Kg	4		6010B	Total/NA
Molybdenum	0.71	J	1.9	0.24	mg/Kg	4		6010B	Total/NA
Nickel	38		1.9	0.19	mg/Kg	4		6010B	Total/NA
Silver	0.79	J	0.94	0.19	mg/Kg	4		6010B	Total/NA
Thallium	0.62	J	1.9	0.55	mg/Kg	4		6010B	Total/NA
Vanadium	67		1.9	0.26	mg/Kg	4		6010B	Total/NA
Zinc	200		5.7	2.4	mg/Kg	4		6010B	Total/NA
Mercury	0.19	B	0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DUP-21 — Lab Sample ID: 720-88262-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.9		1.7	0.29	mg/Kg	4		6010B	Total/NA
Arsenic	9.8		3.4	0.29	mg/Kg	4		6010B	Total/NA
Barium	56		1.7	0.24	mg/Kg	4		6010B	Total/NA
Beryllium	0.51		0.34	0.11	mg/Kg	4		6010B	Total/NA
Cadmium	0.084	J	0.43	0.043	mg/Kg	4		6010B	Total/NA
Chromium	35		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	16		0.69	0.069	mg/Kg	4		6010B	Total/NA
Copper	48		5.2	2.5	mg/Kg	4		6010B	Total/NA
Lead	19		1.7	0.36	mg/Kg	4		6010B	Total/NA
Molybdenum	0.26	J	1.7	0.22	mg/Kg	4		6010B	Total/NA
Nickel	37		1.7	0.18	mg/Kg	4		6010B	Total/NA
Silver	0.54	J	0.86	0.17	mg/Kg	4		6010B	Total/NA
Vanadium	43		1.7	0.23	mg/Kg	4		6010B	Total/NA
Zinc	100		5.2	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.044	B	0.016	0.0024	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88262-1

Client Sample ID: DUP-29

Date Collected: 08/24/18 00:00
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88262-1

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	4.5		1.9	0.31	mg/Kg		08/30/18 18:17	08/31/18 14:58	4
Arsenic	44		3.8	0.32	mg/Kg		08/30/18 18:17	08/31/18 14:58	4
Barium	120		1.9	0.27	mg/Kg		08/30/18 18:17	08/31/18 14:58	4
Beryllium	ND		0.38	0.12	mg/Kg		08/30/18 18:17	08/31/18 14:58	4
Cadmium	0.76		0.47	0.047	mg/Kg		08/30/18 18:17	08/31/18 14:58	4
Chromium	45		1.9	0.20	mg/Kg		08/30/18 18:17	08/31/18 14:58	4
Cobalt	13		0.75	0.075	mg/Kg		08/30/18 18:17	08/31/18 14:58	4
Copper	130		5.7	2.7	mg/Kg		08/30/18 18:17	08/31/18 14:58	4
Lead	510		1.9	0.40	mg/Kg		08/30/18 18:17	08/31/18 14:58	4
Molybdenum	0.71	J	1.9	0.24	mg/Kg		08/30/18 18:17	08/31/18 14:58	4
Nickel	38		1.9	0.19	mg/Kg		08/30/18 18:17	08/31/18 14:58	4
Selenium	ND		3.8	0.57	mg/Kg		08/30/18 18:17	08/31/18 14:58	4
Silver	0.79	J	0.94	0.19	mg/Kg		08/30/18 18:17	08/31/18 14:58	4
Thallium	0.62	J	1.9	0.55	mg/Kg		08/30/18 18:17	08/31/18 14:58	4
Vanadium	67		1.9	0.26	mg/Kg		08/30/18 18:17	08/31/18 14:58	4
Zinc	200		5.7	2.4	mg/Kg		08/30/18 18:17	08/31/18 14:58	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.19	B	0.016	0.0023	mg/Kg		08/30/18 14:37	09/04/18 17:55	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88262-1

Client Sample ID: DUP-21

Date Collected: 08/24/18 00:00
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88262-2

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.9		1.7	0.29	mg/Kg		08/30/18 18:17	08/31/18 15:03	4
Arsenic	9.8		3.4	0.29	mg/Kg		08/30/18 18:17	08/31/18 15:03	4
Barium	56		1.7	0.24	mg/Kg		08/30/18 18:17	08/31/18 15:03	4
Beryllium	0.51		0.34	0.11	mg/Kg		08/30/18 18:17	09/05/18 12:45	4
Cadmium	0.084	J	0.43	0.043	mg/Kg		08/30/18 18:17	08/31/18 15:03	4
Chromium	35		1.7	0.18	mg/Kg		08/30/18 18:17	08/31/18 15:03	4
Cobalt	16		0.69	0.069	mg/Kg		08/30/18 18:17	08/31/18 15:03	4
Copper	48		5.2	2.5	mg/Kg		08/30/18 18:17	08/31/18 15:03	4
Lead	19		1.7	0.36	mg/Kg		08/30/18 18:17	08/31/18 15:03	4
Molybdenum	0.26	J	1.7	0.22	mg/Kg		08/30/18 18:17	08/31/18 15:03	4
Nickel	37		1.7	0.18	mg/Kg		08/30/18 18:17	08/31/18 15:03	4
Selenium	ND		3.4	0.52	mg/Kg		08/30/18 18:17	08/31/18 15:03	4
Silver	0.54	J	0.86	0.17	mg/Kg		08/30/18 18:17	08/31/18 15:03	4
Thallium	ND		1.7	0.50	mg/Kg		08/30/18 18:17	08/31/18 15:03	4
Vanadium	43		1.7	0.23	mg/Kg		08/30/18 18:17	08/31/18 15:03	4
Zinc	100		5.2	2.2	mg/Kg		08/30/18 18:17	08/31/18 15:03	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.044	B	0.016	0.0024	mg/Kg		08/30/18 14:37	09/04/18 17:57	1

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88262-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-250633/1-A
Matrix: Solid
Analysis Batch: 250732

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250633

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Arsenic	ND		1.0	0.085	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Barium	ND		0.50	0.071	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Beryllium	ND		0.10	0.033	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Cadmium	ND		0.13	0.012	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Chromium	ND		0.50	0.053	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Cobalt	ND		0.20	0.020	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Copper	ND		1.5	0.71	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Lead	ND		0.50	0.11	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Nickel	ND		0.50	0.051	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Selenium	ND		1.0	0.15	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Silver	ND		0.25	0.051	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Thallium	ND		0.50	0.15	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Vanadium	ND		0.50	0.068	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Zinc	ND		1.5	0.64	mg/Kg		08/30/18 18:17	08/31/18 13:03	1

Lab Sample ID: LCS 720-250633/2-A
Matrix: Solid
Analysis Batch: 250732

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250633

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	47.0		mg/Kg		94	80 - 120
Arsenic	50.0	46.9		mg/Kg		94	80 - 120
Barium	50.0	49.1		mg/Kg		98	80 - 120
Beryllium	50.0	49.2		mg/Kg		98	80 - 120
Cadmium	50.0	47.1		mg/Kg		94	80 - 120
Chromium	50.0	48.2		mg/Kg		96	80 - 120
Cobalt	50.0	48.3		mg/Kg		97	80 - 120
Copper	50.0	47.8		mg/Kg		96	80 - 120
Lead	50.0	47.8		mg/Kg		96	80 - 120
Molybdenum	50.0	48.3		mg/Kg		97	80 - 120
Nickel	50.0	47.8		mg/Kg		96	80 - 120
Selenium	50.0	45.3		mg/Kg		91	80 - 120
Silver	25.0	23.4		mg/Kg		94	80 - 120
Thallium	50.0	48.0		mg/Kg		96	80 - 120
Vanadium	50.0	47.4		mg/Kg		95	80 - 120
Zinc	50.0	47.4		mg/Kg		95	80 - 120

Lab Sample ID: 720-88261-A-7-D MS
Matrix: Solid
Analysis Batch: 250732

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250633

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	4.8	F1	45.5	17.1	F1	mg/Kg		27	75 - 125
Arsenic	25		45.5	69.5		mg/Kg		98	75 - 125
Barium	77	F1	45.5	184	F1	mg/Kg		236	75 - 125
Beryllium	0.24	J F1	45.5	63.6	F1	mg/Kg		139	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88261-A-7-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250732 — **Prep Batch: 250633**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.28	J	45.5	56.8		mg/Kg		124	75 - 125
Chromium	34	F1	45.5	97.3	F1	mg/Kg		139	75 - 125
Cobalt	21		45.5	68.7		mg/Kg		105	75 - 125
Copper	240		45.5	153	4	mg/Kg		-190	75 - 125
Lead	120	F1 F2	45.5	410	F1	mg/Kg		638	75 - 125
Molybdenum	1.5	J	45.5	55.6		mg/Kg		119	75 - 125
Nickel	58		45.5	107		mg/Kg		108	75 - 125
Selenium	0.66	J	45.5	55.8		mg/Kg		121	75 - 125
Silver	0.57	J F1	22.7	28.1		mg/Kg		121	75 - 125
Thallium	0.89	J	45.5	48.3		mg/Kg		104	75 - 125
Vanadium	44	F1 F2	45.5	102	F1	mg/Kg		127	75 - 125
Zinc	83	F1	45.5	141	F1	mg/Kg		126	75 - 125

Lab Sample ID: 720-88261-A-7-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250732 — **Prep Batch: 250633**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	4.8	F1	45.9	15.6	F1	mg/Kg		24	75 - 125	9	20
Arsenic	25		45.9	65.7		mg/Kg		89	75 - 125	6	20
Barium	77	F1	45.9	179	F1	mg/Kg		223	75 - 125	3	20
Beryllium	0.24	J F1	45.9	69.8	F1	mg/Kg		152	75 - 125	9	20
Cadmium	0.28	J	45.9	56.4		mg/Kg		122	75 - 125	1	20
Chromium	34	F1	45.9	93.7	F1	mg/Kg		130	75 - 125	4	20
Cobalt	21		45.9	70.1		mg/Kg		107	75 - 125	2	20
Copper	240		45.9	167	4	mg/Kg		-157	75 - 125	9	20
Lead	120	F1 F2	45.9	278	F1 F2	mg/Kg		345	75 - 125	38	20
Molybdenum	1.5	J	45.9	54.7		mg/Kg		116	75 - 125	2	20
Nickel	58		45.9	93.6		mg/Kg		78	75 - 125	13	20
Selenium	0.66	J	45.9	55.6		mg/Kg		120	75 - 125	0	20
Silver	0.57	J F1	22.9	31.0	F1	mg/Kg		133	75 - 125	10	20
Thallium	0.89	J	45.9	50.6		mg/Kg		108	75 - 125	5	20
Vanadium	44	F1 F2	45.9	135	F1 F2	mg/Kg		198	75 - 125	28	20
Zinc	83	F1	45.9	137		mg/Kg		117	75 - 125	3	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-250614/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250857 — **Prep Batch: 250614**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0109	J	0.017	0.0025	mg/Kg		08/30/18 14:37	09/04/18 16:56	1

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 720-250614/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250857 — **Prep Batch: 250614**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.952		mg/Kg		114	80 - 120

Lab Sample ID: 720-88242-D-13-J MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250857 — **Prep Batch: 250614**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.14	B	0.758	1.02		mg/Kg		116	75 - 125

Lab Sample ID: 720-88242-D-13-K MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250857 — **Prep Batch: 250614**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.14	B	0.735	0.993		mg/Kg		115	75 - 125	3	20

QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88262-1

Metals

Prep Batch: 250614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88262-1	DUP-29	Total/NA	Solid	7471A	
720-88262-2	DUP-21	Total/NA	Solid	7471A	
MB 720-250614/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250614/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88242-D-13-J MS	Matrix Spike	Total/NA	Solid	7471A	
720-88242-D-13-K MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	

Prep Batch: 250633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88262-1	DUP-29	Total/NA	Solid	3050B	
720-88262-2	DUP-21	Total/NA	Solid	3050B	
MB 720-250633/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250633/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88261-A-7-D MS	Matrix Spike	Total/NA	Solid	3050B	
720-88261-A-7-E MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Analysis Batch: 250732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88262-1	DUP-29	Total/NA	Solid	6010B	250633
720-88262-2	DUP-21	Total/NA	Solid	6010B	250633
MB 720-250633/1-A	Method Blank	Total/NA	Solid	6010B	250633
LCS 720-250633/2-A	Lab Control Sample	Total/NA	Solid	6010B	250633
720-88261-A-7-D MS	Matrix Spike	Total/NA	Solid	6010B	250633
720-88261-A-7-E MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250633

Analysis Batch: 250857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88262-1	DUP-29	Total/NA	Solid	7471A	250614
720-88262-2	DUP-21	Total/NA	Solid	7471A	250614
MB 720-250614/1-A	Method Blank	Total/NA	Solid	7471A	250614
LCS 720-250614/2-A	Lab Control Sample	Total/NA	Solid	7471A	250614
720-88242-D-13-J MS	Matrix Spike	Total/NA	Solid	7471A	250614
720-88242-D-13-K MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	250614

Analysis Batch: 250937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88262-2	DUP-21	Total/NA	Solid	6010B	250633

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88262-1

Client Sample ID: DUP-29

Lab Sample ID: 720-88262-1
Matrix: Solid
Date Collected: 08/24/18 00:00
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250633	08/30/18 18:17	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250732	08/31/18 14:58	BKR	TAL PLS
Total/NA	Prep	7471A			250614	08/30/18 14:37	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250857	09/04/18 17:55	OBI	TAL PLS

Client Sample ID: DUP-21

Lab Sample ID: 720-88262-2
Matrix: Solid
Date Collected: 08/24/18 00:00
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250633	08/30/18 18:17	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250732	08/31/18 15:03	BKR	TAL PLS
Total/NA	Prep	3050B			250633	08/30/18 18:17	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250937	09/05/18 12:45	OBI	TAL PLS
Total/NA	Prep	7471A			250614	08/30/18 14:37	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250857	09/04/18 17:57	OBI	TAL PLS

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88262-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88262-1

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS
3050B	Preparation, Metals	SW846	TAL PLS
7471A	Preparation, Mercury	SW846	TAL PLS

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88262-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-88262-1	DUP-29	Solid	08/24/18 00:00	08/27/18 14:25
720-88262-2	DUP-21	Solid	08/24/18 00:00	08/27/18 14:25

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720-88262

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 185 134

Date 8/27/18 Page 1 of 1

Report To:
Name: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: mkahrilas@geosyntec.com
To: GEOSYNTEC
Sampled By: R. Thomas / K. Belli
A. SMITH
Phone: 4126610525

Analysis Request

Sample ID	Date	Time	Qty	Preserv.	Volatile Organics GC/MS (VOCs) ☒ EPA 8260B +GRO	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☐ Motor Oil ☐ Other	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☒ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☒ EPA 8081 PCBs ☒ EPA 8082	CAM17 Metals (EPA 6010B/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Metals: ☐ 6020 ☐ 200.8 (ICP-MS):	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH: ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	Asbestos (CARB 435)
DUP-13 *	8/24		5	Y	X			X		X		X	X										X
DUP-36 *	↓		5	Y	X			X		X		X	X										X
DUP-34 *			5	N									X										
DUP-33 *			5	N									X										
DUP-29			5	N									X										
DUP-21	↓		5	N									X										

*= SAMPLES REC'D 8/24/18 720-88240 (#1-20)

720-88262 Chain of Custody

Project Info.
Project Name/#: NRC OU-SM
WG2565/02
Credit Card #/N: If yes, please call with payment information ASAP

Sample Receipt
# of Containers:
Head Space:
Temp:

10 Day	5 Day	4 Day	3 Day	2 Day	1 Day	Other:
	(5)					

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID _____

Terms and Conditions on reverse

1.9°C

	1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature	Keaton Belli	R. K.	
Time	615	1300 HGE (RT)	1425
Printed Name	Keaton Belli	Rosanne K Thomas	Rod
Date	8/27	8/27	8/27/18
Company	Geosyntec	Geosyntec	TA

	1) Received by:	2) Received by:	3) Received by:
Signature	R. K.		
Time	1100	1300	1425
Printed Name	Rosanne K Thomas	R.	Dennis Arias
Date	8/27	8/27/18	8/27/18
Company	Geosyntec	TA	LA-720

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88262-1

Login Number: 88262
List Number: 1
Creator: Bullock, Tracy

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	False	No time on COC or sample containers
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-88263-1
Client Project/Site: UPC OU-SM
Revision: 1

For:
Geosyntec Consultants, Inc.
201 N. Civic Drive
Suite 245
Walnut Creek, California 94596

Attn: Mr. Krys Jesionek

Authorized for release by:
11/23/2018 10:53:58 AM

Micah Smith, Project Manager II
(925)484-1919
micah.smith@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 5
Detection Summary 9
Client Sample Results 21
Surrogate Summary 397
QC Sample Results 402
QC Association Summary 457
Lab Chronicle 468
Certification Summary 477
Method Summary 478
Sample Summary 479
Subcontract Data 480
Chain of Custody 486
Receipt Checklists 493

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	ISTD response or retention time outside acceptable limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	ISTD response or retention time outside acceptable limits
X	Surrogate is outside control limits

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
F2	MS/MSD RPD exceeds control limits
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
L	A negative instrument reading had an absolute value greater than the reporting limit

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 720-88263-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-88263-1

Comments
This report was revised on 11/23/18 to change the units for the metals data to report in mg/Kg, as requested.

Receipt
The samples were received on 8/27/2018 2:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.7º C.

Receipt Exceptions
Two DI w/Stir bar and one Methanol Terra Core vials for the following sample were received empty: G-L9S-3.5-4. Logged VOC+Gas on 8 oz. jar. The soil jar was used for analysis of the volatiles on this sample.

The Methanol vial for sample G-H9S-0.5-1 vial did not have a sample ID written on the vial label, received all three vials for this sample in one bubble bag and were logged in accordingly.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250625 recovered outside control limits for the following analytes: 1,1-Dichloroethene and 1,1,2-Trichloro-1,2,2-trifluoroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250626 recovered outside control limits for the following analytes: 1,1-Dichloroethene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250644 recovered outside control limits for the following analytes: 1,1-Dichloroethene and 1,1,2-Trichloro-1,2,2-trifluoroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample (LCS) for analytical batch 720-250750 recovered outside control limits for the following analytes: Carbon disulfide. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample duplicate (LCSD) for analytical batch 720-250750 recovered outside control limits for the following analytes: 1,1-Dichloroethene. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 720-250958 and analytical batch 720-250946 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method(s) 8260B: Internal standard (ISTD) response for the following samples were outside control limits: DG-K11S-9.5-10 (720-88263-12) and DG-I11S-0.5-1 (720-88263-13). The samples were re-extracted and/or re-analyzed with concurring results, and the second set of data has been reported.

Method(s) 8260B: Internal standard (ISTD) response for the following samples were outside control limits: DG-H9S-3.5-4 (720-88263-4), DG-M11S-3.5-4 (720-88263-9), DG-I11S-3.5-4 (720-88263-14) and DG-I11S-9.5-10 (720-88263-15). The sample(s) was re-extracted and/or re-analyzed with concurring results, and the original set of data has been reported.

Method(s) 8260B: Internal standard (ISTD) response for the following sample was outside control limits: DG-L9S-3.5-4 (720-88263-7). The sample was re-extracted and/or re-analyzed with concurring results, and the third set of data has been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Job ID: 720-88263-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

GC/MS Semi VOA

Method(s) 8270C SIM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250580 and analytical batch 720-250745 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8270C SIM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250607 and analytical batch 720-250799 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8270C SIM: Internal standard responses were outside of acceptance limits for the following samples: (720-88263-E-10-B MS) and (720-88263-E-10-C MSD). The sample(s) shows evidence of matrix interference.

Method(s) 8270C SIM: Internal standard (ISTD) response for Perylene-d12 for the following sample was outside acceptance criteria: DG-I11S-3.5-4 (720-88263-14). This ISTD does not correspond to any of the requested target compounds; therefore, the data have been reported.

Method(s) 8270C SIM: The following samples required a dilution due to the nature of the sample matrix: DG-I11S-9.5-10 (720-88263-15), DG-E11S-0.5-1 (720-88263-16) and DG-E11S-3.5-4 (720-88263-17). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method(s) 8270C SIM: The following samples were diluted due to the abundance of non-target analytes: DG-H9S-0.5-1 (720-88263-3), DG-I11S-0.5-1 (720-88263-13), DG-I11S-3.5-4 (720-88263-14), DG-I11S-9.5-10 (720-88263-15), DG-E11S-0.5-1 (720-88263-16) and DG-E11S-3.5-4 (720-88263-17). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

Method(s) 8081A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250531 and analytical batch 720-250746 were outside control limits on one of the two columns. Sample matrix interference and non-homogeneity are suspected because the associated laboratory control sample was within acceptance limits.

Method(s) 8081A: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 720-250531 and analytical batch 720-250746 were outside control limits. Sample matrix interference and non-homogeneity are suspected because the associated laboratory control sample was within acceptance limits.

Method(s) 8081A: The matrix spike / matrix spike duplicate(MS/MSD) recoveries for preparation batch 720-250595 and analytical batch 720-250868 was outside control limits on one of the two columns. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) was within acceptance limits.

Method(s) 8081A: The matrix spike / matrix spike duplicate(MS/MSD) precision for preparation batch 720-250595 and analytical batch 720-250868 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) was within acceptance limits.

Method(s) 8081A: The following samples were diluted due to the abundance of non-target analytes: DG-E11S-0.5-1 (720-88263-16) and DG-E11S-3.5-4 (720-88263-17). Elevated reporting limits (RLs) are provided.

Method(s) 8081A: The following sample required a dilution due to the nature of the sample matrix: DG-I11S-9.5-10 (720-88263-15). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method(s) 8081A: The following samples were diluted due to color: DG-I11S-3.5-4 (720-88263-14) and DG-I11S-9.5-10 (720-88263-15). Elevated reporting limits (RL) are provided.

Method(s) 8081A: The %RPD between the primary and confirmation column exceeded 40% for cis-Chlordane & trans-Chlordane for the following sample: DG-H9S-0.5-1 (720-88263-3). The lower value(s) has been reported and qualified in accordance with the laboratory's

Job ID: 720-88263-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

SOP.

Method(s) 8081A: The %RPD between the primary and confirmation column exceeded 40% for 4,4'-DDT for the following sample: DG-M11S-0.5-1 (720-88263-8). The lower value(s) has been reported and qualified in accordance with the laboratory's SOP.

Method(s) 8081A: The %RPD between the primary and confirmation column exceeded 40% for 4,4'-DDT & trans-Chlordane for the following sample: DG-K11S-0.5-1 (720-88263-10). The lower value(s) has been reported and qualified in accordance with the laboratory's SOP.

Method(s) 8081A: The %RPD between the primary and confirmation column exceeded 40% for cis-Chlordane for the following sample: DG-I11S-0.5-1 (720-88263-13). The lower value(s) has been reported and qualified in accordance with the laboratory's SOP.

Method(s) 8015B: The following samples required a dilution due to the nature of the sample matrix: DG-L9S-0.5-1 (720-88263-6), DG-I11S-3.5-4 (720-88263-14), DG-I11S-9.5-10 (720-88263-15), DG-E11S-0.5-1 (720-88263-16), DG-E11S-3.5-4 (720-88263-17), (720-88263-E-16-A MS) and (720-88263-E-16-B MSD). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method(s) 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: DG-H9S-9.5-10 (720-88263-5), DG-L9S-3.5-4 (720-88263-7), DG-M11S-3.5-4 (720-88263-9), DG-K11S-9.5-10 (720-88263-12), DG-I11S-9.5-10 (720-88263-15), DG-E11S-3.5-4 (720-88263-17), DG-E11S-9.5-10 (720-88263-18), (720-88263-F-18-B MS) and (720-88263-F-18-C MSD).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250513 and analytical batch 720-250635 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 720-250563 and analytical batch 720-250655 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) precision was within acceptance limits.

Method(s) 6010B: The following samples were diluted due to the abundance of non-target analytes: DG-H9S-9.5-10 (720-88263-5), DG-L9S-0.5-1 (720-88263-6), DG-L9S-3.5-4 (720-88263-7), DG-M11S-0.5-1 (720-88263-8), DG-M11S-3.5-4 (720-88263-9), DG-K11S-0.5-1 (720-88263-10), DG-K11S-3.5-4 (720-88263-11), DG-K11S-9.5-10 (720-88263-12), DG-I11S-0.5-1 (720-88263-13), DG-I11S-9.5-10 (720-88263-15), DG-E11S-0.5-1 (720-88263-16) and DG-E11S-3.5-4 (720-88263-17). Elevated reporting limits (RLs) are provided.

Method(s) 6010B: The serial dilution performed for the following sample associated with batch 720-250655 was outside control limits: (720-88263-D-16-C SD).

Analyte	Recovery
Barium	31%
Chromium	91%
Cobalt	20%
Copper	20%
Lead	22%
Vanadium	22%

Method(s) 6010B: Internal standard responses were outside of acceptance limits for the ICSAB, but recoveries met criteria: (ICSAB 720-250878/8). The sample(s) shows evidence of matrix interference.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Job ID: 720-88263-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Subcontract Work
Method Asbestos - CARB 435: This method was subcontracted to ASBESTOS TEM LABORATORIES, INC. The subcontract laboratory certification is different from that of the facility issuing the final report.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-FG910S-0.5-1 — Lab Sample ID: 720-88263-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	4.2	J	4.7	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	4.8		4.7	1.4	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	6.2		4.7	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	7.6		4.7	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	28		4.7	4.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	4.2	J	4.7	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	10		4.7	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	12		4.7	1.3	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	5.3		4.7	4.0	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	15		4.7	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	17		4.7	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	66000		1900	710	ug/Kg	1		8015B	Total/NA
Antimony	1.7		1.6	0.26	mg/Kg	4		6010B	Total/NA
Arsenic	3.6		3.1	0.26	mg/Kg	4		6010B	Total/NA
Barium	250		1.6	0.22	mg/Kg	4		6010B	Total/NA
Cadmium	0.43		0.39	0.038	mg/Kg	4		6010B	Total/NA
Chromium	40		1.6	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.62	0.062	mg/Kg	4		6010B	Total/NA
Copper	360		4.7	2.2	mg/Kg	4		6010B	Total/NA
Lead	160		1.6	0.33	mg/Kg	4		6010B	Total/NA
Molybdenum	0.88	J	1.6	0.20	mg/Kg	4		6010B	Total/NA
Nickel	69		1.6	0.16	mg/Kg	4		6010B	Total/NA
Silver	0.98		0.78	0.16	mg/Kg	4		6010B	Total/NA
Thallium	0.60	J	1.6	0.45	mg/Kg	4		6010B	Total/NA
Vanadium	90		1.6	0.21	mg/Kg	4		6010B	Total/NA
Zinc	190		4.7	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.070		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-F910S-3.5-4 — Lab Sample ID: 720-88263-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	6.6	J	9.8	4.9	ug/Kg	1		8270C SIM	Total/NA
Anthracene	2.8	J	4.9	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	2.9	J	4.9	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	20		4.9	2.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	3.5	J	4.9	2.1	ug/Kg	1		8270C SIM	Total/NA
Chrysene	16		4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	12		4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Fluorene	3.2	J	4.9	2.2	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	12		4.9	3.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	54		4.9	1.8	ug/Kg	1		8270C SIM	Total/NA
Pyrene	11		4.9	1.7	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	17000		2000	740	ug/Kg	1		8015B	Total/NA
Antimony	1.1	J	1.9	0.32	mg/Kg	4		6010B	Total/NA
Arsenic	8.9		3.8	0.33	mg/Kg	4		6010B	Total/NA
Barium	71		1.9	0.27	mg/Kg	4		6010B	Total/NA
Beryllium	0.79		0.38	0.13	mg/Kg	4		6010B	Total/NA
Cadmium	0.063	J	0.48	0.048	mg/Kg	4		6010B	Total/NA
Chromium	47		1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	26		0.77	0.077	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-F910S-3.5-4 (Continued) — Lab Sample ID: 720-88263-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	56		5.8	2.7	mg/Kg	4		6010B	Total/NA
Lead	22		1.9	0.40	mg/Kg	4		6010B	Total/NA
Nickel	52		1.9	0.20	mg/Kg	4		6010B	Total/NA
Selenium	0.62	J	3.8	0.58	mg/Kg	4		6010B	Total/NA
Silver	0.93	J	0.96	0.19	mg/Kg	4		6010B	Total/NA
Thallium	0.58	J	1.9	0.56	mg/Kg	4		6010B	Total/NA
Vanadium	49		1.9	0.26	mg/Kg	4		6010B	Total/NA
Zinc	99		5.8	2.4	mg/Kg	4		6010B	Total/NA
Mercury	0.27		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-H9S-0.5-1 — Lab Sample ID: 720-88263-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	10	J	20	9.9	ug/Kg	2		8270C SIM	Total/NA
Acenaphthylene	7.2	J	9.9	4.8	ug/Kg	2		8270C SIM	Total/NA
Anthracene	10		9.9	4.0	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]anthracene	16		9.9	3.0	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]pyrene	16		9.9	3.8	ug/Kg	2		8270C SIM	Total/NA
Benzo[b]fluoranthene	31		9.9	4.2	ug/Kg	2		8270C SIM	Total/NA
Benzo[g,h,i]perylene	9.0	J	9.9	8.5	ug/Kg	2		8270C SIM	Total/NA
Benzo[k]fluoranthene	14		9.9	4.2	ug/Kg	2		8270C SIM	Total/NA
Chrysene	17		9.9	2.8	ug/Kg	2		8270C SIM	Total/NA
Fluoranthene	20		9.9	2.8	ug/Kg	2		8270C SIM	Total/NA
Phenanthrene	22		9.9	3.6	ug/Kg	2		8270C SIM	Total/NA
Pyrene	25		9.9	3.4	ug/Kg	2		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	68000		2000	740	ug/Kg	1		8015B	Total/NA
Chlordane (technical)	14	J	38	3.0	ug/Kg	1		8081A	Total/NA
cis-Chlordane	0.77	J p	1.9	0.38	ug/Kg	1		8081A	Total/NA
trans-Chlordane	1.9	p	1.9	0.43	ug/Kg	1		8081A	Total/NA
Antimony	0.83	J	1.8	0.29	mg/Kg	4		6010B	Total/NA
Arsenic	4.2		3.5	0.30	mg/Kg	4		6010B	Total/NA
Barium	58		1.8	0.25	mg/Kg	4		6010B	Total/NA
Cadmium	0.24	J	0.44	0.044	mg/Kg	4		6010B	Total/NA
Chromium	11		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	8.5		0.70	0.070	mg/Kg	4		6010B	Total/NA
Copper	100		5.3	2.5	mg/Kg	4		6010B	Total/NA
Lead	110		1.8	0.37	mg/Kg	4		6010B	Total/NA
Molybdenum	0.33	J	1.8	0.22	mg/Kg	4		6010B	Total/NA
Nickel	7.6		1.8	0.18	mg/Kg	4		6010B	Total/NA
Silver	0.38	J	0.88	0.18	mg/Kg	4		6010B	Total/NA
Vanadium	63		1.8	0.24	mg/Kg	4		6010B	Total/NA
Zinc	120		5.3	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.18		0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-H9S-3.5-4 — Lab Sample ID: 720-88263-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	2.7	J	4.8	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	3.2	J	4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	2.0	J	4.8	2.0	ug/Kg	1		8270C SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-H9S-3.5-4 (Continued) — Lab Sample ID: 720-88263-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chrysene	2.7	J	4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	4.0	J	4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	3.6	J	4.8	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	4.4	J	4.8	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	5000		2000	740	ug/Kg	1		8015B	Total/NA
Antimony	1.7	J	1.9	0.32	mg/Kg	4		6010B	Total/NA
Arsenic	3.6	J	3.8	0.32	mg/Kg	4		6010B	Total/NA
Barium	61		1.9	0.27	mg/Kg	4		6010B	Total/NA
Cadmium	0.12	J	0.48	0.047	mg/Kg	4		6010B	Total/NA
Chromium	30		1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	5.8		0.76	0.076	mg/Kg	4		6010B	Total/NA
Copper	24		5.7	2.7	mg/Kg	4		6010B	Total/NA
Lead	120		1.9	0.40	mg/Kg	4		6010B	Total/NA
Molybdenum	0.36	J	1.9	0.24	mg/Kg	4		6010B	Total/NA
Nickel	25		1.9	0.19	mg/Kg	4		6010B	Total/NA
Selenium	0.63	J	3.8	0.57	mg/Kg	4		6010B	Total/NA
Silver	0.44	J	0.95	0.19	mg/Kg	4		6010B	Total/NA
Vanadium	29		1.9	0.26	mg/Kg	4		6010B	Total/NA
Zinc	49		5.7	2.4	mg/Kg	4		6010B	Total/NA
Mercury	0.036		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-H9S-9.5-10 — Lab Sample ID: 720-88263-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	38	J	39	30	ug/Kg	1		8260B	Total/NA
Anthracene	2.4	J	4.8	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	2.6	J	4.8	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	3.4	J	4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	2.0	J	4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	3.2	J	4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	5.1		4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	9.5		4.8	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	6.6		4.8	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	8500		2000	730	ug/Kg	1		8015B	Total/NA
Antimony	1.7		1.2	0.19	mg/Kg	4		6010B	Total/NA
Arsenic	1.5	J	2.3	0.20	mg/Kg	4		6010B	Total/NA
Barium	95		1.2	0.16	mg/Kg	4		6010B	Total/NA
Chromium	120		1.2	0.12	mg/Kg	4		6010B	Total/NA
Cobalt	24		0.46	0.046	mg/Kg	4		6010B	Total/NA
Copper	43		3.5	1.6	mg/Kg	4		6010B	Total/NA
Lead	5.4		1.2	0.24	mg/Kg	4		6010B	Total/NA
Molybdenum	0.42	J	1.2	0.15	mg/Kg	4		6010B	Total/NA
Nickel	69		1.2	0.12	mg/Kg	4		6010B	Total/NA
Silver	0.50	J	0.58	0.12	mg/Kg	4		6010B	Total/NA
Thallium	1.8		1.2	0.34	mg/Kg	4		6010B	Total/NA
Vanadium	120		1.2	0.16	mg/Kg	4		6010B	Total/NA
Zinc	51		3.5	1.5	mg/Kg	4		6010B	Total/NA
Mercury	0.14		0.015	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-L9S-0.5-1 — Lab Sample ID: 720-88263-6

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-L9S-0.5-1 (Continued) — Lab Sample ID: 720-88263-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	3.5	J	4.9	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	8.0		4.9	1.5	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	9.1		4.9	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	13		4.9	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	5.3		4.9	4.2	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	6.4		4.9	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	11		4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	13		4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	4.5	J	4.9	4.1	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	3.5	J	4.9	3.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	13		4.9	1.8	ug/Kg	1		8270C SIM	Total/NA
Pyrene	16		4.9	1.7	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	760000		9700	3600	ug/Kg	5		8015B	Total/NA
4,4'-DDT	0.41	J	1.9	0.39	ug/Kg	1		8081A	Total/NA
Arsenic	4.9		3.7	0.32	mg/Kg	4		6010B	Total/NA
Barium	88		1.9	0.27	mg/Kg	4		6010B	Total/NA
Cadmium	0.064	J	0.47	0.046	mg/Kg	4		6010B	Total/NA
Chromium	19		1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	10		0.75	0.075	mg/Kg	4		6010B	Total/NA
Copper	67		5.6	2.7	mg/Kg	4		6010B	Total/NA
Lead	170		1.9	0.39	mg/Kg	4		6010B	Total/NA
Molybdenum	0.25	J	1.9	0.24	mg/Kg	4		6010B	Total/NA
Nickel	12		1.9	0.19	mg/Kg	4		6010B	Total/NA
Silver	0.27	J	0.93	0.19	mg/Kg	4		6010B	Total/NA
Vanadium	65		1.9	0.25	mg/Kg	4		6010B	Total/NA
Zinc	81		5.6	2.4	mg/Kg	4		6010B	Total/NA
Mercury	0.11		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-L9S-3.5-4 — Lab Sample ID: 720-88263-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	4.8	J	9.5	4.8	ug/Kg	1		8270C SIM	Total/NA
Acenaphthylene	2.9	J	4.8	2.3	ug/Kg	1		8270C SIM	Total/NA
Anthracene	2.8	J	4.8	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	3.4	J	4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	7.5		4.8	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	27		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	5.3		4.8	4.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	5.8		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	21		4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	12		4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluorene	2.2	J	4.8	2.1	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	4.7	J	4.8	4.0	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	19		4.8	3.3	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	38		4.8	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	16		4.8	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	3200		1900	720	ug/Kg	1		8015B	Total/NA
Antimony	0.91	J	1.3	0.21	mg/Kg	4		6010B	Total/NA
Arsenic	10		2.5	0.22	mg/Kg	4		6010B	Total/NA
Barium	120		1.3	0.18	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-L9S-3.5-4 (Continued) — Lab Sample ID: 720-88263-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Beryllium	0.53		0.25	0.082	mg/Kg	4		6010B	Total/NA
Cadmium	0.10	J	0.32	0.031	mg/Kg	4		6010B	Total/NA
Chromium	45		1.3	0.13	mg/Kg	4		6010B	Total/NA
Cobalt	13		0.51	0.051	mg/Kg	4		6010B	Total/NA
Copper	26		3.8	1.8	mg/Kg	4		6010B	Total/NA
Lead	15		1.3	0.27	mg/Kg	4		6010B	Total/NA
Molybdenum	0.49	J	1.3	0.16	mg/Kg	4		6010B	Total/NA
Nickel	26		1.3	0.13	mg/Kg	4		6010B	Total/NA
Silver	0.45	J	0.63	0.13	mg/Kg	4		6010B	Total/NA
Vanadium	42		1.3	0.17	mg/Kg	4		6010B	Total/NA
Zinc	71		3.8	1.6	mg/Kg	4		6010B	Total/NA
Mercury	0.056		0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-M11S-0.5-1 — Lab Sample ID: 720-88263-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	5.5		5.0	1.5	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	7.5		5.0	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	13		5.0	2.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	5.5		5.0	4.3	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	4.5	J	5.0	2.1	ug/Kg	1		8270C SIM	Total/NA
Chrysene	8.0		5.0	1.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	13		5.0	1.4	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	4.6	J	5.0	4.2	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	9.6		5.0	1.8	ug/Kg	1		8270C SIM	Total/NA
Pyrene	16		5.0	1.7	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	36000		1900	710	ug/Kg	1		8015B	Total/NA
4,4'-DDT	0.41	J p	1.9	0.40	ug/Kg	1		8081A	Total/NA
Methoxychlor	0.75	J	1.9	0.66	ug/Kg	1		8081A	Total/NA
Antimony	0.90	J	1.2	0.20	mg/Kg	4		6010B	Total/NA
Arsenic	2.3	J	2.4	0.20	mg/Kg	4		6010B	Total/NA
Barium	42		1.2	0.17	mg/Kg	4		6010B	Total/NA
Cadmium	0.077	J	0.30	0.030	mg/Kg	4		6010B	Total/NA
Chromium	13		1.2	0.13	mg/Kg	4		6010B	Total/NA
Cobalt	15		0.48	0.048	mg/Kg	4		6010B	Total/NA
Copper	110		3.6	1.7	mg/Kg	4		6010B	Total/NA
Lead	85		1.2	0.25	mg/Kg	4		6010B	Total/NA
Molybdenum	0.15	J	1.2	0.15	mg/Kg	4		6010B	Total/NA
Nickel	7.8		1.2	0.12	mg/Kg	4		6010B	Total/NA
Silver	0.33	J	0.60	0.12	mg/Kg	4		6010B	Total/NA
Thallium	1.0	J	1.2	0.35	mg/Kg	4		6010B	Total/NA
Vanadium	110		1.2	0.16	mg/Kg	4		6010B	Total/NA
Zinc	80		3.6	1.5	mg/Kg	4		6010B	Total/NA
Mercury	0.099		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-M11S-3.5-4 — Lab Sample ID: 720-88263-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	45	J	49	37	ug/Kg	1		8260B	Total/NA
Acenaphthylene	2.3	J	4.8	2.3	ug/Kg	1		8270C SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-M11S-3.5-4 (Continued) — Lab Sample ID: 720-88263-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	3.7	J	4.8	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	3.7	J	4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	5.5		4.8	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	57		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	5.4		4.8	4.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	7.6		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	48		4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Dibenz(a,h)anthracene	3.9	J	4.8	3.3	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	21		4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	4.6	J	4.8	4.0	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	14		4.8	3.3	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	110		4.8	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	17		4.8	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	8900		2000	740	ug/Kg	1		8015B	Total/NA
Antimony	1.1	J	1.7	0.29	mg/Kg	4		6010B	Total/NA
Arsenic	12		3.5	0.30	mg/Kg	4		6010B	Total/NA
Barium	63		1.7	0.25	mg/Kg	4		6010B	Total/NA
Beryllium	0.78		0.35	0.11	mg/Kg	4		6010B	Total/NA
Cadmium	0.078	J	0.43	0.043	mg/Kg	4		6010B	Total/NA
Chromium	44		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	20		0.70	0.070	mg/Kg	4		6010B	Total/NA
Copper	76		5.2	2.5	mg/Kg	4		6010B	Total/NA
Lead	47		1.7	0.37	mg/Kg	4		6010B	Total/NA
Molybdenum	0.27	J	1.7	0.22	mg/Kg	4		6010B	Total/NA
Nickel	46		1.7	0.18	mg/Kg	4		6010B	Total/NA
Silver	0.24	J	0.87	0.18	mg/Kg	4		6010B	Total/NA
Vanadium	68		1.7	0.24	mg/Kg	4		6010B	Total/NA
Zinc	110		5.2	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.072		0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-K11S-0.5-1 — Lab Sample ID: 720-88263-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	6.4	J	9.8	4.9	ug/Kg	1		8270C SIM	Total/NA
Acenaphthylene	3.2	J	4.9	2.3	ug/Kg	1		8270C SIM	Total/NA
Anthracene	5.8		4.9	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	16		4.9	1.5	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	21		4.9	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	33	F1	4.9	2.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	9.4	F1	4.9	4.2	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	14	F1	4.9	2.1	ug/Kg	1		8270C SIM	Total/NA
Chrysene	25		4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	24		4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	8.7	F1	4.9	4.1	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	4.5	J	4.9	3.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	19		4.9	1.8	ug/Kg	1		8270C SIM	Total/NA
Pyrene	29		4.9	1.7	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	59000		2000	740	ug/Kg	1		8015B	Total/NA
4,4'-DDT	2.2	p	2.0	0.41	ug/Kg	1		8081A	Total/NA
cis-Chlordane	0.94	J	2.0	0.40	ug/Kg	1		8081A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-K11S-0.5-1 (Continued) — Lab Sample ID: 720-88263-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
trans-Chlordane	1.0	J p	2.0	0.45	ug/Kg	1		8081A	Total/NA
Antimony	3.2		1.5	0.24	mg/Kg	4		6010B	Total/NA
Arsenic	5.7		2.9	0.25	mg/Kg	4		6010B	Total/NA
Barium	120		1.5	0.21	mg/Kg	4		6010B	Total/NA
Cadmium	0.32	J	0.36	0.036	mg/Kg	4		6010B	Total/NA
Chromium	25		1.5	0.15	mg/Kg	4		6010B	Total/NA
Cobalt	16		0.58	0.058	mg/Kg	4		6010B	Total/NA
Copper	150		4.4	2.1	mg/Kg	4		6010B	Total/NA
Lead	420		1.5	0.31	mg/Kg	4		6010B	Total/NA
Molybdenum	0.56	J	1.5	0.19	mg/Kg	4		6010B	Total/NA
Nickel	15		1.5	0.15	mg/Kg	4		6010B	Total/NA
Silver	0.25	J	0.73	0.15	mg/Kg	4		6010B	Total/NA
Thallium	1.4	J	1.5	0.42	mg/Kg	4		6010B	Total/NA
Vanadium	120		1.5	0.20	mg/Kg	4		6010B	Total/NA
Zinc	160		4.4	1.9	mg/Kg	4		6010B	Total/NA
Mercury	0.073		0.015	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-K11S-3.5-4 — Lab Sample ID: 720-88263-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	110		9.5	4.8	ug/Kg	1		8270C SIM	Total/NA
Acenaphthene	3.9	J	4.8	2.7	ug/Kg	1		8270C SIM	Total/NA
Acenaphthylene	2.7	J	4.8	2.3	ug/Kg	1		8270C SIM	Total/NA
Anthracene	12		4.8	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	15		4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	14		4.8	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	23		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	6.6		4.8	4.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	6.3		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	32		4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Dibenz(a,h)anthracene	3.7	J	4.8	3.3	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	15		4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluorene	30		4.8	2.1	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	4.3	J	4.8	4.0	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	46		4.8	3.3	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	130		4.8	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	32		4.8	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	13000		1900	710	ug/Kg	1		8015B	Total/NA
Antimony	2.1		1.9	0.32	mg/Kg	4		6010B	Total/NA
Arsenic	2.1	J	3.8	0.32	mg/Kg	4		6010B	Total/NA
Barium	110		1.9	0.27	mg/Kg	4		6010B	Total/NA
Chromium	110		1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	34		0.76	0.076	mg/Kg	4		6010B	Total/NA
Copper	46		5.7	2.7	mg/Kg	4		6010B	Total/NA
Lead	7.0		1.9	0.40	mg/Kg	4		6010B	Total/NA
Nickel	52		1.9	0.19	mg/Kg	4		6010B	Total/NA
Silver	0.70	J	0.95	0.19	mg/Kg	4		6010B	Total/NA
Thallium	2.8		1.9	0.55	mg/Kg	4		6010B	Total/NA
Vanadium	190		1.9	0.26	mg/Kg	4		6010B	Total/NA
Zinc	77		5.7	2.4	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-K11S-3.5-4 (Continued) — Lab Sample ID: 720-88263-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.16		0.015	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-K11S-9.5-10 — Lab Sample ID: 720-88263-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	44		42	32	ug/Kg	1		8260B	Total/NA
2-Methylnaphthalene	410		9.8	4.9	ug/Kg	1		8270C SIM	Total/NA
Acenaphthene	12		4.9	2.7	ug/Kg	1		8270C SIM	Total/NA
Acenaphthylene	2.3	J	4.9	2.3	ug/Kg	1		8270C SIM	Total/NA
Anthracene	8.8		4.9	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	22		4.9	1.5	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	21		4.9	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	33		4.9	2.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	9.3		4.9	4.2	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	5.6		4.9	2.1	ug/Kg	1		8270C SIM	Total/NA
Chrysene	61		4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Dibenz(a,h)anthracene	6.6		4.9	3.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	24		4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Fluorene	120		4.9	2.2	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	4.8	J	4.9	4.1	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	140		4.9	3.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	300		4.9	1.8	ug/Kg	1		8270C SIM	Total/NA
Pyrene	62		4.9	1.7	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	23000		2000	730	ug/Kg	1		8015B	Total/NA
Antimony	1.2	J	1.4	0.22	mg/Kg	4		6010B	Total/NA
Arsenic	11		2.7	0.23	mg/Kg	4		6010B	Total/NA
Barium	130		1.4	0.19	mg/Kg	4		6010B	Total/NA
Beryllium	0.49		0.27	0.088	mg/Kg	4		6010B	Total/NA
Cadmium	0.057	J	0.34	0.034	mg/Kg	4		6010B	Total/NA
Chromium	48		1.4	0.14	mg/Kg	4		6010B	Total/NA
Cobalt	14		0.54	0.054	mg/Kg	4		6010B	Total/NA
Copper	41		4.1	1.9	mg/Kg	4		6010B	Total/NA
Lead	15		1.4	0.28	mg/Kg	4		6010B	Total/NA
Molybdenum	0.29	J	1.4	0.17	mg/Kg	4		6010B	Total/NA
Nickel	70		1.4	0.14	mg/Kg	4		6010B	Total/NA
Silver	0.27	J	0.68	0.14	mg/Kg	4		6010B	Total/NA
Thallium	0.92	J	1.4	0.39	mg/Kg	4		6010B	Total/NA
Vanadium	52		1.4	0.18	mg/Kg	4		6010B	Total/NA
Zinc	78		4.1	1.7	mg/Kg	4		6010B	Total/NA
Mercury	0.24		0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-I11S-0.5-1 — Lab Sample ID: 720-88263-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	6.0	J	9.6	4.6	ug/Kg	2		8270C SIM	Total/NA
Anthracene	24		9.6	3.8	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]anthracene	17		9.6	2.9	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]pyrene	24		9.6	3.7	ug/Kg	2		8270C SIM	Total/NA
Benzo[b]fluoranthene	39		9.6	4.0	ug/Kg	2		8270C SIM	Total/NA
Benzo[g,h,i]perylene	25		9.6	8.3	ug/Kg	2		8270C SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-I11S-0.5-1 (Continued) — Lab Sample ID: 720-88263-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[k]fluoranthene	16		9.6	4.0	ug/Kg	2		8270C SIM	Total/NA
Chrysene	33		9.6	2.7	ug/Kg	2		8270C SIM	Total/NA
Dibenz(a,h)anthracene	8.5	J	9.6	6.7	ug/Kg	2		8270C SIM	Total/NA
Fluoranthene	26		9.6	2.7	ug/Kg	2		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	18		9.6	8.1	ug/Kg	2		8270C SIM	Total/NA
Naphthalene	7.0	J	9.6	6.7	ug/Kg	2		8270C SIM	Total/NA
Phenanthrene	20		9.6	3.5	ug/Kg	2		8270C SIM	Total/NA
Pyrene	42		9.6	3.3	ug/Kg	2		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	59000		5900	2200	ug/Kg	3		8015B	Total/NA
Chlordane (technical)	16	J	39	3.1	ug/Kg	1		8081A	Total/NA
cis-Chlordane	1.8	J p	2.0	0.39	ug/Kg	1		8081A	Total/NA
trans-Chlordane	1.8	J	2.0	0.45	ug/Kg	1		8081A	Total/NA
Aroclor-1260	42	J p	50	22	ug/Kg	1		8082	Total/NA
Antimony	4.5		1.5	0.26	mg/Kg	4		6010B	Total/NA
Arsenic	4.2		3.1	0.26	mg/Kg	4		6010B	Total/NA
Barium	71		1.5	0.22	mg/Kg	4		6010B	Total/NA
Cadmium	0.45		0.38	0.038	mg/Kg	4		6010B	Total/NA
Chromium	35		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	13		0.62	0.062	mg/Kg	4		6010B	Total/NA
Copper	120		4.6	2.2	mg/Kg	4		6010B	Total/NA
Lead	160		1.5	0.32	mg/Kg	4		6010B	Total/NA
Molybdenum	0.34	J	1.5	0.20	mg/Kg	4		6010B	Total/NA
Nickel	18		1.5	0.16	mg/Kg	4		6010B	Total/NA
Silver	0.29	J	0.77	0.16	mg/Kg	4		6010B	Total/NA
Thallium	0.61	J	1.5	0.45	mg/Kg	4		6010B	Total/NA
Vanadium	90		1.5	0.21	mg/Kg	4		6010B	Total/NA
Zinc	140		4.6	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.094		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-I11S-3.5-4 — Lab Sample ID: 720-88263-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	340000		19000	7200	ug/Kg	10		8015B	Total/NA
trans-Chlordane	1.3	J	3.9	0.91	ug/Kg	2		8081A	Total/NA
Antimony	0.76	J	1.7	0.29	mg/Kg	4		6010B	Total/NA
Arsenic	2.9	J	3.4	0.29	mg/Kg	4		6010B	Total/NA
Barium	48		1.7	0.24	mg/Kg	4		6010B	Total/NA
Chromium	51		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	8.2		0.69	0.069	mg/Kg	4		6010B	Total/NA
Copper	8.6		5.2	2.5	mg/Kg	4		6010B	Total/NA
Lead	6.1		1.7	0.36	mg/Kg	4		6010B	Total/NA
Molybdenum	1.8		1.7	0.22	mg/Kg	4		6010B	Total/NA
Nickel	38		1.7	0.18	mg/Kg	4		6010B	Total/NA
Vanadium	45		1.7	0.23	mg/Kg	4		6010B	Total/NA
Zinc	23		5.2	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.010	J	0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-I11S-9.5-10 — Lab Sample ID: 720-88263-15

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-I11S-9.5-10 (Continued) — Lab Sample ID: 720-88263-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	160	*	62	47	ug/Kg	1		8260B	Total/NA
Carbon disulfide	4.3	J *	6.2	2.5	ug/Kg	1		8260B	Total/NA
Benzo[b]fluoranthene	22	J	49	21	ug/Kg	10		8270C SIM	Total/NA
Fluoranthene	19	J	49	14	ug/Kg	10		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	110000		19000	7100	ug/Kg	10		8015B	Total/NA
Heptachlor epoxide	11	J	19	3.3	ug/Kg	10		8081A	Total/NA
Antimony	1.1	J	1.6	0.26	mg/Kg	4		6010B	Total/NA
Arsenic	3.9		3.2	0.27	mg/Kg	4		6010B	Total/NA
Barium	95		1.6	0.23	mg/Kg	4		6010B	Total/NA
Beryllium	0.24	J	0.32	0.10	mg/Kg	4		6010B	Total/NA
Chromium	130		1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	12		0.63	0.063	mg/Kg	4		6010B	Total/NA
Copper	18		4.8	2.3	mg/Kg	4		6010B	Total/NA
Lead	6.7		1.6	0.33	mg/Kg	4		6010B	Total/NA
Molybdenum	1.3	J	1.6	0.20	mg/Kg	4		6010B	Total/NA
Nickel	160		1.6	0.16	mg/Kg	4		6010B	Total/NA
Silver	0.18	J	0.79	0.16	mg/Kg	4		6010B	Total/NA
Vanadium	40		1.6	0.22	mg/Kg	4		6010B	Total/NA
Zinc	38		4.8	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.025		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-E11S-0.5-1 — Lab Sample ID: 720-88263-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	57		41	31	ug/Kg	1		8260B	Total/NA
Anthracene	140		49	20	ug/Kg	10		8270C SIM	Total/NA
Benzo[a]pyrene	37	J	49	19	ug/Kg	10		8270C SIM	Total/NA
Benzo[b]fluoranthene	57		49	21	ug/Kg	10		8270C SIM	Total/NA
Benzo[g,h,i]perylene	51		49	42	ug/Kg	10		8270C SIM	Total/NA
Benzo[k]fluoranthene	29	J	49	21	ug/Kg	10		8270C SIM	Total/NA
Chrysene	33	J	49	14	ug/Kg	10		8270C SIM	Total/NA
Fluoranthene	27	J	49	14	ug/Kg	10		8270C SIM	Total/NA
Phenanthrene	57		49	18	ug/Kg	10		8270C SIM	Total/NA
Pyrene	36	J	49	17	ug/Kg	10		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	130000		9700	3600	ug/Kg	5		8015B	Total/NA
Antimony	0.33	J F1	1.4	0.23	mg/Kg	4		6010B	Total/NA
Arsenic	2.6	J	2.8	0.24	mg/Kg	4		6010B	Total/NA
Barium	36	F1	1.4	0.20	mg/Kg	4		6010B	Total/NA
Cadmium	0.077	J	0.35	0.034	mg/Kg	4		6010B	Total/NA
Chromium	12	F1	1.4	0.15	mg/Kg	4		6010B	Total/NA
Cobalt	12	F1	0.56	0.056	mg/Kg	4		6010B	Total/NA
Copper	130	F1 F2	4.2	2.0	mg/Kg	4		6010B	Total/NA
Lead	32	F1	1.4	0.29	mg/Kg	4		6010B	Total/NA
Nickel	6.2		1.4	0.14	mg/Kg	4		6010B	Total/NA
Silver	0.20	J F1	0.69	0.14	mg/Kg	4		6010B	Total/NA
Thallium	1.0	J	1.4	0.40	mg/Kg	4		6010B	Total/NA
Vanadium	110	F1	1.4	0.19	mg/Kg	4		6010B	Total/NA
Zinc	55	F1	4.2	1.8	mg/Kg	4		6010B	Total/NA
Mercury	0.073		0.016	0.0023	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-E11S-3.5-4 — Lab Sample ID: 720-88263-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	490		60	46	ug/Kg	1		8260B	Total/NA
2-Butanone (MEK)	79		60	25	ug/Kg	1		8260B	Total/NA
2-Hexanone	16	J	60	12	ug/Kg	1		8260B	Total/NA
2-Methylnaphthalene	180	J	190	94	ug/Kg	10		8270C SIM	Total/NA
Acenaphthylene	63	J	94	45	ug/Kg	10		8270C SIM	Total/NA
Anthracene	82	J	94	38	ug/Kg	10		8270C SIM	Total/NA
Benzo[a]anthracene	37	J	94	28	ug/Kg	10		8270C SIM	Total/NA
Benzo[a]pyrene	72	J	94	36	ug/Kg	10		8270C SIM	Total/NA
Benzo[b]fluoranthene	110		94	40	ug/Kg	10		8270C SIM	Total/NA
Benzo[g,h,i]perylene	120		94	81	ug/Kg	10		8270C SIM	Total/NA
Benzo[k]fluoranthene	41	J	94	40	ug/Kg	10		8270C SIM	Total/NA
Chrysene	82	J	94	26	ug/Kg	10		8270C SIM	Total/NA
Fluoranthene	56	J	94	26	ug/Kg	10		8270C SIM	Total/NA
Naphthalene	120		94	66	ug/Kg	10		8270C SIM	Total/NA
Phenanthrene	120		94	34	ug/Kg	10		8270C SIM	Total/NA
Pyrene	89	J	94	32	ug/Kg	10		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	270000		39000	15000	ug/Kg	20		8015B	Total/NA
Dieldrin	1.4	J	3.9	1.1	ug/Kg	2		8081A	Total/NA
Antimony	8.0		1.6	0.27	mg/Kg	4		6010B	Total/NA
Arsenic	19		3.2	0.27	mg/Kg	4		6010B	Total/NA
Barium	110		1.6	0.23	mg/Kg	4		6010B	Total/NA
Cadmium	0.32	J	0.40	0.040	mg/Kg	4		6010B	Total/NA
Chromium	34		1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	13		0.65	0.065	mg/Kg	4		6010B	Total/NA
Copper	110		4.8	2.3	mg/Kg	4		6010B	Total/NA
Lead	140		1.6	0.34	mg/Kg	4		6010B	Total/NA
Molybdenum	0.31	J	1.6	0.21	mg/Kg	4		6010B	Total/NA
Nickel	34		1.6	0.16	mg/Kg	4		6010B	Total/NA
Silver	0.36	J	0.81	0.16	mg/Kg	4		6010B	Total/NA
Thallium	1.0	J	1.6	0.47	mg/Kg	4		6010B	Total/NA
Vanadium	73		1.6	0.22	mg/Kg	4		6010B	Total/NA
Zinc	160		4.8	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.32		0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-E11S-9.5-10 — Lab Sample ID: 720-88263-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	140		47	36	ug/Kg	1		8260B	Total/NA
2-Butanone (MEK)	34	J	47	20	ug/Kg	1		8260B	Total/NA
Acenaphthene	13		4.8	2.7	ug/Kg	1		8270C SIM	Total/NA
Anthracene	12		4.8	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	21		4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	23		4.8	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	27		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	9.1		4.8	4.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	9.3		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	25		4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	57		4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluorene	2.8	J	4.8	2.1	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	8.3		4.8	4.0	ug/Kg	1		8270C SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-E11S-9.5-10 (Continued) — Lab Sample ID: 720-88263-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	27		4.8	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	98		4.8	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	18000		1900	720	ug/Kg	1		8015B	Total/NA
Antimony	0.37	J	2.0	0.33	mg/Kg	4		6010B	Total/NA
Arsenic	1.9	J	4.0	0.34	mg/Kg	4		6010B	Total/NA
Barium	55		2.0	0.28	mg/Kg	4		6010B	Total/NA
Beryllium	0.24	J	0.40	0.13	mg/Kg	4		6010B	Total/NA
Chromium	28		2.0	0.21	mg/Kg	4		6010B	Total/NA
Cobalt	6.0		0.79	0.079	mg/Kg	4		6010B	Total/NA
Copper	5.7	J	5.9	2.8	mg/Kg	4		6010B	Total/NA
Lead	4.3		2.0	0.42	mg/Kg	4		6010B	Total/NA
Nickel	22		2.0	0.20	mg/Kg	4		6010B	Total/NA
Vanadium	23		2.0	0.27	mg/Kg	4		6010B	Total/NA
Zinc	15		5.9	2.5	mg/Kg	4		6010B	Total/NA
Mercury	0.030		0.014	0.0021	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-FG910S-0.5-1

Date Collected: 08/27/18 07:50
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-1

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.4	1.1	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
Acetone	ND		44	33	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
Benzene	ND		4.4	0.57	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
Dichlorobromomethane	ND		4.4	0.63	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
Bromobenzene	ND		4.4	0.69	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
Chlorobromomethane	ND		18	0.63	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
Bromoform	ND		4.4	1.8	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
Bromomethane	ND		8.8	0.69	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
2-Butanone (MEK)	ND		44	18	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
n-Butylbenzene	ND		4.4	0.88	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
sec-Butylbenzene	ND		4.4	0.63	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
tert-Butylbenzene	ND		4.4	0.64	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
Carbon disulfide	ND		4.4	1.8	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
Carbon tetrachloride	ND		4.4	0.54	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
Chlorobenzene	ND		4.4	0.61	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
Chloroethane	ND		8.8	0.49	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
Chloroform	ND		4.4	0.58	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
Chloromethane	ND		8.8	0.69	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
2-Chlorotoluene	ND		4.4	0.57	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
4-Chlorotoluene	ND		4.4	0.60	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
Chlorodibromomethane	ND		4.4	0.62	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
1,2-Dichlorobenzene	ND		4.4	0.60	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
1,3-Dichlorobenzene	ND		4.4	0.63	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
1,4-Dichlorobenzene	ND		4.4	0.62	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
1,3-Dichloropropane	ND		4.4	0.64	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
1,1-Dichloropropene	ND		4.4	0.61	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
1,2-Dibromo-3-Chloropropane	ND		8.8	1.5	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
Ethylene Dibromide	ND		4.4	1.3	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
Dibromomethane	ND		8.8	0.76	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
Dichlorodifluoromethane	ND		8.8	0.69	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
1,1-Dichloroethane	ND		4.4	0.60	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
1,2-Dichloroethane	ND		4.4	0.67	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
1,1-Dichloroethene	ND	*	4.4	0.54	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
cis-1,2-Dichloroethene	ND		4.4	0.60	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
trans-1,2-Dichloroethene	ND		4.4	0.66	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
1,2-Dichloropropane	ND		4.4	0.55	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
cis-1,3-Dichloropropene	ND		4.4	0.61	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
trans-1,3-Dichloropropene	ND		4.4	0.59	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
Ethylbenzene	ND		4.4	0.66	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
Hexachlorobutadiene	ND		4.4	0.79	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
2-Hexanone	ND		44	8.8	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
Isopropylbenzene	ND		4.4	0.60	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
4-Isopropyltoluene	ND		4.4	2.2	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
Methylene Chloride	ND		8.8	4.9	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
4-Methyl-2-pentanone (MIBK)	ND		44	8.8	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
Naphthalene	ND		8.8	1.3	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
N-Propylbenzene	ND		4.4	0.58	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
Styrene	ND		4.4	0.55	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
1,1,1,2-Tetrachloroethane	ND		4.4	0.67	ug/Kg		08/27/18 02:30	08/30/18 23:29	1

Client Sample ID: DG-FG910S-0.5-1

Lab Sample ID: 720-88263-1

Date Collected: 08/27/18 07:50

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.4	0.66	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
Tetrachloroethene	ND		4.4	0.59	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
Toluene	ND		4.4	0.62	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
1,2,3-Trichlorobenzene	ND		4.4	0.65	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
1,2,4-Trichlorobenzene	ND		4.4	0.62	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
1,1,1-Trichloroethane	ND		4.4	0.54	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
1,1,2-Trichloroethane	ND		4.4	0.62	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
Trichloroethene	ND		4.4	0.55	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
Trichlorofluoromethane	ND		4.4	0.49	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
1,2,3-Trichloropropane	ND		4.4	0.68	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.4	1.8	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
1,2,4-Trimethylbenzene	ND		4.4	1.4	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
1,3,5-Trimethylbenzene	ND		4.4	0.57	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
Vinyl acetate	ND		18	4.4	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
Vinyl chloride	ND		4.4	0.64	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
Xylenes, Total	ND		4.4	1.1	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
2,2-Dichloropropane	ND		4.4	1.8	ug/Kg		08/27/18 02:30	08/30/18 23:29	1
Gasoline Range Organics (GRO) -C4-C12	ND		220	88	ug/Kg		08/27/18 02:30	08/30/18 23:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*45 - 131*	*08/27/18 02:30*	*08/30/18 23:29*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*60 - 140*	*08/27/18 02:30*	*08/30/18 23:29*	*1*
Toluene-d8 (Surr)	*92*		*58 - 140*	*08/27/18 02:30*	*08/30/18 23:29*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.5	4.7	ug/Kg		08/30/18 10:18	09/03/18 22:02	1
Acenaphthene	ND		4.7	2.7	ug/Kg		08/30/18 10:18	09/03/18 22:02	1
Acenaphthylene	ND		4.7	2.3	ug/Kg		08/30/18 10:18	09/03/18 22:02	1
Anthracene	**4.2**	**J**	4.7	1.9	ug/Kg		08/30/18 10:18	09/03/18 22:02	1
Benzo[a]anthracene	**4.8**		4.7	1.4	ug/Kg		08/30/18 10:18	09/03/18 22:02	1
Benzo[a]pyrene	**6.2**		4.7	1.8	ug/Kg		08/30/18 10:18	09/03/18 22:02	1
Benzo[b]fluoranthene	**7.6**		4.7	2.0	ug/Kg		08/30/18 10:18	09/03/18 22:02	1
Benzo[g,h,i]perylene	**28**		4.7	4.1	ug/Kg		08/30/18 10:18	09/03/18 22:02	1
Benzo[k]fluoranthene	**4.2**	**J**	4.7	2.0	ug/Kg		08/30/18 10:18	09/03/18 22:02	1
Chrysene	**10**		4.7	1.3	ug/Kg		08/30/18 10:18	09/03/18 22:02	1
Dibenz(a,h)anthracene	ND		4.7	3.3	ug/Kg		08/30/18 10:18	09/03/18 22:02	1
Fluoranthene	**12**		4.7	1.3	ug/Kg		08/30/18 10:18	09/03/18 22:02	1
Fluorene	ND		4.7	2.1	ug/Kg		08/30/18 10:18	09/03/18 22:02	1
Indeno[1,2,3-cd]pyrene	**5.3**		4.7	4.0	ug/Kg		08/30/18 10:18	09/03/18 22:02	1
Naphthalene	ND		4.7	3.3	ug/Kg		08/30/18 10:18	09/03/18 22:02	1
Phenanthrene	**15**		4.7	1.7	ug/Kg		08/30/18 10:18	09/03/18 22:02	1
Pyrene	**17**		4.7	1.6	ug/Kg		08/30/18 10:18	09/03/18 22:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*46*		*33 - 120*	*08/30/18 10:18*	*09/03/18 22:02*	*1*
Terphenyl-d14	*69*		*35 - 146*	*08/30/18 10:18*	*09/03/18 22:02*	*1*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-FG910S-0.5-1

Date Collected: 08/27/18 07:50
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-1

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	66000		1900	710	ug/Kg		08/30/18 08:54	09/05/18 03:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*56*		*40 - 130*	*08/30/18 08:54*	*09/05/18 03:51*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		51	22	ug/Kg		08/30/18 06:48	09/01/18 12:43	1
Aroclor-1221	ND		51	24	ug/Kg		08/30/18 06:48	09/01/18 12:43	1
Aroclor-1232	ND		51	23	ug/Kg		08/30/18 06:48	09/01/18 12:43	1
Aroclor-1242	ND		51	19	ug/Kg		08/30/18 06:48	09/01/18 12:43	1
Aroclor-1248	ND		51	24	ug/Kg		08/30/18 06:48	09/01/18 12:43	1
Aroclor-1254	ND		51	23	ug/Kg		08/30/18 06:48	09/01/18 12:43	1
Aroclor-1260	ND		51	22	ug/Kg		08/30/18 06:48	09/01/18 12:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*77*		*14 - 128*	*08/30/18 06:48*	*09/01/18 12:43*	*1*
DCB Decachlorobiphenyl	*77*		*10 - 132*	*08/30/18 06:48*	*09/01/18 12:43*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.7		1.6	0.26	mg/Kg		08/30/18 18:17	08/31/18 15:07	4
Arsenic	3.6		3.1	0.26	mg/Kg		08/30/18 18:17	08/31/18 15:07	4
Barium	250		1.6	0.22	mg/Kg		08/30/18 18:17	08/31/18 15:07	4
Beryllium	ND		0.31	0.10	mg/Kg		08/30/18 18:17	08/31/18 15:07	4
Cadmium	0.43		0.39	0.038	mg/Kg		08/30/18 18:17	08/31/18 15:07	4
Chromium	40		1.6	0.16	mg/Kg		08/30/18 18:17	08/31/18 15:07	4
Cobalt	11		0.62	0.062	mg/Kg		08/30/18 18:17	08/31/18 15:07	4
Copper	360		4.7	2.2	mg/Kg		08/30/18 18:17	08/31/18 15:07	4
Lead	160		1.6	0.33	mg/Kg		08/30/18 18:17	08/31/18 15:07	4
Molybdenum	0.88	J	1.6	0.20	mg/Kg		08/30/18 18:17	08/31/18 15:07	4
Nickel	69		1.6	0.16	mg/Kg		08/30/18 18:17	08/31/18 15:07	4
Selenium	ND		3.1	0.47	mg/Kg		08/30/18 18:17	08/31/18 15:07	4
Silver	0.98		0.78	0.16	mg/Kg		08/30/18 18:17	08/31/18 15:07	4
Thallium	0.60	J	1.6	0.45	mg/Kg		08/30/18 18:17	08/31/18 15:07	4
Vanadium	90		1.6	0.21	mg/Kg		08/30/18 18:17	08/31/18 15:07	4
Zinc	190		4.7	2.0	mg/Kg		08/30/18 18:17	08/31/18 15:07	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.070		0.016	0.0024	mg/Kg		08/30/18 16:17	08/31/18 19:13	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-F910S-3.5-4

Date Collected: 08/27/18 07:50
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-2

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.9	0.94	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
Acetone	ND		39	30	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
Benzene	ND		3.9	0.51	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
Dichlorobromomethane	ND		3.9	0.56	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
Bromobenzene	ND		3.9	0.62	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
Chlorobromomethane	ND		16	0.56	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
Bromoform	ND		3.9	1.6	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
Bromomethane	ND		7.8	0.62	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
2-Butanone (MEK)	ND		39	16	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
n-Butylbenzene	ND		3.9	0.78	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
sec-Butylbenzene	ND		3.9	0.56	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
tert-Butylbenzene	ND		3.9	0.57	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
Carbon disulfide	ND		3.9	1.6	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
Carbon tetrachloride	ND		3.9	0.48	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
Chlorobenzene	ND		3.9	0.54	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
Chloroethane	ND		7.8	0.44	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
Chloroform	ND		3.9	0.52	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
Chloromethane	ND		7.8	0.62	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
2-Chlorotoluene	ND		3.9	0.51	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
4-Chlorotoluene	ND		3.9	0.53	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
Chlorodibromomethane	ND		3.9	0.55	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
1,2-Dichlorobenzene	ND		3.9	0.53	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
1,3-Dichlorobenzene	ND		3.9	0.56	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
1,4-Dichlorobenzene	ND		3.9	0.55	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
1,3-Dichloropropane	ND		3.9	0.57	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
1,1-Dichloropropene	ND		3.9	0.54	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
1,2-Dibromo-3-Chloropropane	ND		7.8	1.3	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
Ethylene Dibromide	ND		3.9	1.1	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
Dibromomethane	ND		7.8	0.67	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
Dichlorodifluoromethane	ND		7.8	0.62	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
1,1-Dichloroethane	ND		3.9	0.53	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
1,2-Dichloroethane	ND		3.9	0.59	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
1,1-Dichloroethene	ND	*	3.9	0.48	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
cis-1,2-Dichloroethene	ND		3.9	0.53	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
trans-1,2-Dichloroethene	ND		3.9	0.59	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
1,2-Dichloropropane	ND		3.9	0.49	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
cis-1,3-Dichloropropene	ND		3.9	0.54	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
trans-1,3-Dichloropropene	ND		3.9	0.52	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
Ethylbenzene	ND		3.9	0.59	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
Hexachlorobutadiene	ND		3.9	0.70	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
2-Hexanone	ND		39	7.8	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
Isopropylbenzene	ND		3.9	0.53	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
4-Isopropyltoluene	ND		3.9	2.0	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
Methylene Chloride	ND		7.8	4.4	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
4-Methyl-2-pentanone (MIBK)	ND		39	7.8	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
Naphthalene	ND		7.8	1.2	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
N-Propylbenzene	ND		3.9	0.52	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
Styrene	ND		3.9	0.49	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
1,1,1,2-Tetrachloroethane	ND		3.9	0.59	ug/Kg		08/27/18 02:30	08/30/18 23:57	1

Client Sample ID: DG-F910S-3.5-4

Lab Sample ID: 720-88263-2

Date Collected: 08/27/18 07:50

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		3.9	0.59	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
Tetrachloroethene	ND		3.9	0.52	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
Toluene	ND		3.9	0.55	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
1,2,3-Trichlorobenzene	ND		3.9	0.58	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
1,2,4-Trichlorobenzene	ND		3.9	0.55	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
1,1,1-Trichloroethane	ND		3.9	0.48	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
1,1,2-Trichloroethane	ND		3.9	0.55	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
Trichloroethene	ND		3.9	0.49	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
Trichlorofluoromethane	ND		3.9	0.44	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
1,2,3-Trichloropropane	ND		3.9	0.60	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	3.9	1.6	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
1,2,4-Trimethylbenzene	ND		3.9	1.3	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
1,3,5-Trimethylbenzene	ND		3.9	0.51	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
Vinyl acetate	ND		16	3.9	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
Vinyl chloride	ND		3.9	0.57	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
Xylenes, Total	ND		3.9	0.95	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
2,2-Dichloropropane	ND		3.9	1.6	ug/Kg		08/27/18 02:30	08/30/18 23:57	1
Gasoline Range Organics (GRO) -C4-C12	ND		200	78	ug/Kg		08/27/18 02:30	08/30/18 23:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*		*45 - 131*	*08/27/18 02:30*	*08/30/18 23:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*60 - 140*	*08/27/18 02:30*	*08/30/18 23:57*	*1*
Toluene-d8 (Surr)	*92*		*58 - 140*	*08/27/18 02:30*	*08/30/18 23:57*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**6.6**	**J**	9.8	4.9	ug/Kg		08/30/18 10:18	09/03/18 22:25	1
Acenaphthene	ND		4.9	2.7	ug/Kg		08/30/18 10:18	09/03/18 22:25	1
Acenaphthylene	ND		4.9	2.4	ug/Kg		08/30/18 10:18	09/03/18 22:25	1
Anthracene	**2.8**	**J**	4.9	2.0	ug/Kg		08/30/18 10:18	09/03/18 22:25	1
Benzo[a]anthracene	ND		4.9	1.5	ug/Kg		08/30/18 10:18	09/03/18 22:25	1
Benzo[a]pyrene	**2.9**	**J**	4.9	1.9	ug/Kg		08/30/18 10:18	09/03/18 22:25	1
Benzo[b]fluoranthene	**20**		4.9	2.1	ug/Kg		08/30/18 10:18	09/03/18 22:25	1
Benzo[g,h,i]perylene	ND		4.9	4.2	ug/Kg		08/30/18 10:18	09/03/18 22:25	1
Benzo[k]fluoranthene	**3.5**	**J**	4.9	2.1	ug/Kg		08/30/18 10:18	09/03/18 22:25	1
Chrysene	**16**		4.9	1.4	ug/Kg		08/30/18 10:18	09/03/18 22:25	1
Dibenz(a,h)anthracene	ND		4.9	3.4	ug/Kg		08/30/18 10:18	09/03/18 22:25	1
Fluoranthene	**12**		4.9	1.4	ug/Kg		08/30/18 10:18	09/03/18 22:25	1
Fluorene	**3.2**	**J**	4.9	2.2	ug/Kg		08/30/18 10:18	09/03/18 22:25	1
Indeno[1,2,3-cd]pyrene	ND		4.9	4.1	ug/Kg		08/30/18 10:18	09/03/18 22:25	1
Naphthalene	**12**		4.9	3.4	ug/Kg		08/30/18 10:18	09/03/18 22:25	1
Phenanthrene	**54**		4.9	1.8	ug/Kg		08/30/18 10:18	09/03/18 22:25	1
Pyrene	**11**		4.9	1.7	ug/Kg		08/30/18 10:18	09/03/18 22:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*44*		*33 - 120*	*08/30/18 10:18*	*09/03/18 22:25*	*1*
Terphenyl-d14	*60*		*35 - 146*	*08/30/18 10:18*	*09/03/18 22:25*	*1*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-F910S-3.5-4

Date Collected: 08/27/18 07:50
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-2

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	17000		2000	740	ug/Kg		08/30/18 08:54	09/05/18 13:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*102*		*40 - 130*	*08/30/18 08:54*	*09/05/18 13:26*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/30/18 06:48	09/01/18 12:57	1
Aroclor-1221	ND		50	24	ug/Kg		08/30/18 06:48	09/01/18 12:57	1
Aroclor-1232	ND		50	23	ug/Kg		08/30/18 06:48	09/01/18 12:57	1
Aroclor-1242	ND		50	19	ug/Kg		08/30/18 06:48	09/01/18 12:57	1
Aroclor-1248	ND		50	24	ug/Kg		08/30/18 06:48	09/01/18 12:57	1
Aroclor-1254	ND		50	23	ug/Kg		08/30/18 06:48	09/01/18 12:57	1
Aroclor-1260	ND		50	22	ug/Kg		08/30/18 06:48	09/01/18 12:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*73*		*14 - 128*	*08/30/18 06:48*	*09/01/18 12:57*	*1*
DCB Decachlorobiphenyl	*80*		*10 - 132*	*08/30/18 06:48*	*09/01/18 12:57*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.1	J	1.9	0.32	mg/Kg		08/30/18 18:17	08/31/18 15:12	4
Arsenic	8.9		3.8	0.33	mg/Kg		08/30/18 18:17	08/31/18 15:12	4
Barium	71		1.9	0.27	mg/Kg		08/30/18 18:17	08/31/18 15:12	4
Beryllium	0.79		0.38	0.13	mg/Kg		08/30/18 18:17	08/31/18 15:12	4
Cadmium	0.063	J	0.48	0.048	mg/Kg		08/30/18 18:17	08/31/18 15:12	4
Chromium	47		1.9	0.20	mg/Kg		08/30/18 18:17	08/31/18 15:12	4
Cobalt	26		0.77	0.077	mg/Kg		08/30/18 18:17	08/31/18 15:12	4
Copper	56		5.8	2.7	mg/Kg		08/30/18 18:17	08/31/18 15:12	4
Lead	22		1.9	0.40	mg/Kg		08/30/18 18:17	08/31/18 15:12	4
Molybdenum	ND		1.9	0.25	mg/Kg		08/30/18 18:17	08/31/18 15:12	4
Nickel	52		1.9	0.20	mg/Kg		08/30/18 18:17	08/31/18 15:12	4
Selenium	0.62	J	3.8	0.58	mg/Kg		08/30/18 18:17	08/31/18 15:12	4
Silver	0.93	J	0.96	0.19	mg/Kg		08/30/18 18:17	08/31/18 15:12	4
Thallium	0.58	J	1.9	0.56	mg/Kg		08/30/18 18:17	08/31/18 15:12	4
Vanadium	49		1.9	0.26	mg/Kg		08/30/18 18:17	08/31/18 15:12	4
Zinc	99		5.8	2.4	mg/Kg		08/30/18 18:17	08/31/18 15:12	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.27		0.015	0.0022	mg/Kg		09/04/18 21:32	09/05/18 10:44	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-H9S-0.5-1

Date Collected: 08/27/18 08:25
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-3

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.2	1.0	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
Acetone	ND		42	32	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
Benzene	ND		4.2	0.55	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
Dichlorobromomethane	ND		4.2	0.60	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
Bromobenzene	ND		4.2	0.66	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
Chlorobromomethane	ND		17	0.60	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
Bromoform	ND		4.2	1.7	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
Bromomethane	ND		8.4	0.66	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
2-Butanone (MEK)	ND		42	18	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
n-Butylbenzene	ND		4.2	0.84	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
sec-Butylbenzene	ND		4.2	0.60	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
tert-Butylbenzene	ND		4.2	0.61	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
Carbon disulfide	ND		4.2	1.7	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
Carbon tetrachloride	ND		4.2	0.52	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
Chlorobenzene	ND		4.2	0.58	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
Chloroethane	ND		8.4	0.47	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
Chloroform	ND		4.2	0.55	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
Chloromethane	ND		8.4	0.66	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
2-Chlorotoluene	ND		4.2	0.55	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
4-Chlorotoluene	ND		4.2	0.57	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
Chlorodibromomethane	ND		4.2	0.60	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
1,2-Dichlorobenzene	ND		4.2	0.57	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
1,3-Dichlorobenzene	ND		4.2	0.60	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
1,4-Dichlorobenzene	ND		4.2	0.60	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
1,3-Dichloropropane	ND		4.2	0.61	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
1,1-Dichloropropene	ND		4.2	0.58	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
1,2-Dibromo-3-Chloropropane	ND		8.4	1.4	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
Ethylene Dibromide	ND		4.2	1.2	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
Dibromomethane	ND		8.4	0.72	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
Dichlorodifluoromethane	ND		8.4	0.66	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
1,1-Dichloroethane	ND		4.2	0.57	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
1,2-Dichloroethane	ND		4.2	0.64	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
1,1-Dichloroethene	ND	*	4.2	0.52	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
cis-1,2-Dichloroethene	ND		4.2	0.57	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
trans-1,2-Dichloroethene	ND		4.2	0.63	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
1,2-Dichloropropane	ND		4.2	0.53	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
cis-1,3-Dichloropropene	ND		4.2	0.58	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
trans-1,3-Dichloropropene	ND		4.2	0.56	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
Ethylbenzene	ND		4.2	0.63	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
Hexachlorobutadiene	ND		4.2	0.76	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
2-Hexanone	ND		42	8.4	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
Isopropylbenzene	ND		4.2	0.57	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
4-Isopropyltoluene	ND		4.2	2.1	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
Methylene Chloride	ND		8.4	4.7	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
4-Methyl-2-pentanone (MIBK)	ND		42	8.4	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
Naphthalene	ND		8.4	1.3	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
N-Propylbenzene	ND		4.2	0.55	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
Styrene	ND		4.2	0.53	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
1,1,1,2-Tetrachloroethane	ND		4.2	0.64	ug/Kg		08/27/18 02:30	08/31/18 00:26	1

Client Sample ID: DG-H9S-0.5-1

Date Collected: 08/27/18 08:25
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-3

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.2	0.63	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
Tetrachloroethene	ND		4.2	0.56	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
Toluene	ND		4.2	0.60	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
1,2,3-Trichlorobenzene	ND		4.2	0.62	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
1,2,4-Trichlorobenzene	ND		4.2	0.60	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
1,1,1-Trichloroethane	ND		4.2	0.51	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
1,1,2-Trichloroethane	ND		4.2	0.59	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
Trichloroethene	ND		4.2	0.53	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
Trichlorofluoromethane	ND		4.2	0.47	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
1,2,3-Trichloropropane	ND		4.2	0.65	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.2	1.7	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
1,2,4-Trimethylbenzene	ND		4.2	1.4	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
1,3,5-Trimethylbenzene	ND		4.2	0.55	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
Vinyl acetate	ND		17	4.2	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
Vinyl chloride	ND		4.2	0.61	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
Xylenes, Total	ND		4.2	1.0	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
2,2-Dichloropropane	ND		4.2	1.7	ug/Kg		08/27/18 02:30	08/31/18 00:26	1
Gasoline Range Organics (GRO) -C4-C12	ND		210	84	ug/Kg		08/27/18 02:30	08/31/18 00:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*84*		*45 - 131*	*08/27/18 02:30*	*08/31/18 00:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*60 - 140*	*08/27/18 02:30*	*08/31/18 00:26*	*1*
Toluene-d8 (Surr)	*91*		*58 - 140*	*08/27/18 02:30*	*08/31/18 00:26*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**10**	**J**	20	9.9	ug/Kg		08/30/18 10:18	09/03/18 22:49	2
Acenaphthene	ND		9.9	5.6	ug/Kg		08/30/18 10:18	09/03/18 22:49	2
Acenaphthylene	**7.2**	**J**	9.9	4.8	ug/Kg		08/30/18 10:18	09/03/18 22:49	2
Anthracene	**10**		9.9	4.0	ug/Kg		08/30/18 10:18	09/03/18 22:49	2
Benzo[a]anthracene	**16**		9.9	3.0	ug/Kg		08/30/18 10:18	09/03/18 22:49	2
Benzo[a]pyrene	**16**		9.9	3.8	ug/Kg		08/30/18 10:18	09/03/18 22:49	2
Benzo[b]fluoranthene	**31**		9.9	4.2	ug/Kg		08/30/18 10:18	09/03/18 22:49	2
Benzo[g,h,i]perylene	**9.0**	**J**	9.9	8.5	ug/Kg		08/30/18 10:18	09/03/18 22:49	2
Benzo[k]fluoranthene	**14**		9.9	4.2	ug/Kg		08/30/18 10:18	09/03/18 22:49	2
Chrysene	**17**		9.9	2.8	ug/Kg		08/30/18 10:18	09/03/18 22:49	2
Dibenz(a,h)anthracene	ND		9.9	7.0	ug/Kg		08/30/18 10:18	09/03/18 22:49	2
Fluoranthene	**20**		9.9	2.8	ug/Kg		08/30/18 10:18	09/03/18 22:49	2
Fluorene	ND		9.9	4.4	ug/Kg		08/30/18 10:18	09/03/18 22:49	2
Indeno[1,2,3-cd]pyrene	ND		9.9	8.3	ug/Kg		08/30/18 10:18	09/03/18 22:49	2
Naphthalene	ND		9.9	7.0	ug/Kg		08/30/18 10:18	09/03/18 22:49	2
Phenanthrene	**22**		9.9	3.6	ug/Kg		08/30/18 10:18	09/03/18 22:49	2
Pyrene	**25**		9.9	3.4	ug/Kg		08/30/18 10:18	09/03/18 22:49	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*53*		*33 - 120*	*08/30/18 10:18*	*09/03/18 22:49*	*2*
Terphenyl-d14	*66*		*35 - 146*	*08/30/18 10:18*	*09/03/18 22:49*	*2*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-H9S-0.5-1

Date Collected: 08/27/18 08:25
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-3

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	68000		2000	740	ug/Kg		08/30/18 08:54	09/05/18 04:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*69*		*40 - 130*	*08/30/18 08:54*	*09/05/18 04:40*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.58	ug/Kg		08/29/18 17:11	09/03/18 19:01	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/29/18 17:11	09/03/18 19:01	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/29/18 17:11	09/03/18 19:01	1
Aldrin	ND		1.9	0.47	ug/Kg		08/29/18 17:11	09/03/18 19:01	1
alpha-BHC	ND		1.9	0.52	ug/Kg		08/29/18 17:11	09/03/18 19:01	1
beta-BHC	ND		1.9	0.34	ug/Kg		08/29/18 17:11	09/03/18 19:01	1
Chlordane (technical)	14	J	38	3.0	ug/Kg		08/29/18 17:11	09/03/18 19:01	1
cis-Chlordane	0.77	J p	1.9	0.38	ug/Kg		08/29/18 17:11	09/03/18 19:01	1
delta-BHC	ND		1.9	0.41	ug/Kg		08/29/18 17:11	09/03/18 19:01	1
Dieldrin	ND		1.9	0.56	ug/Kg		08/29/18 17:11	09/03/18 19:01	1
Endosulfan I	ND		1.9	0.30	ug/Kg		08/29/18 17:11	09/03/18 19:01	1
Endosulfan II	ND		1.9	0.46	ug/Kg		08/29/18 17:11	09/03/18 19:01	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/29/18 17:11	09/03/18 19:01	1
Endrin	ND		1.9	0.43	ug/Kg		08/29/18 17:11	09/03/18 19:01	1
Endrin aldehyde	ND		1.9	0.59	ug/Kg		08/29/18 17:11	09/03/18 19:01	1
Endrin ketone	ND		1.9	0.31	ug/Kg		08/29/18 17:11	09/03/18 19:01	1
gamma-BHC (Lindane)	ND		1.9	0.59	ug/Kg		08/29/18 17:11	09/03/18 19:01	1
Heptachlor	ND		1.9	0.43	ug/Kg		08/29/18 17:11	09/03/18 19:01	1
Heptachlor epoxide	ND		1.9	0.33	ug/Kg		08/29/18 17:11	09/03/18 19:01	1
Methoxychlor	ND		1.9	0.64	ug/Kg		08/29/18 17:11	09/03/18 19:01	1
Toxaphene	ND		38	6.4	ug/Kg		08/29/18 17:11	09/03/18 19:01	1
trans-Chlordane	1.9	p	1.9	0.43	ug/Kg		08/29/18 17:11	09/03/18 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*96*		*21 - 136*	*08/29/18 17:11*	*09/03/18 19:01*	*1*
Tetrachloro-m-xylene	*82*		*21 - 145*	*08/29/18 17:11*	*09/03/18 19:01*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		49	22	ug/Kg		08/30/18 06:48	09/01/18 13:12	1
Aroclor-1221	ND		49	24	ug/Kg		08/30/18 06:48	09/01/18 13:12	1
Aroclor-1232	ND		49	23	ug/Kg		08/30/18 06:48	09/01/18 13:12	1
Aroclor-1242	ND		49	19	ug/Kg		08/30/18 06:48	09/01/18 13:12	1
Aroclor-1248	ND		49	24	ug/Kg		08/30/18 06:48	09/01/18 13:12	1
Aroclor-1254	ND		49	23	ug/Kg		08/30/18 06:48	09/01/18 13:12	1
Aroclor-1260	ND		49	22	ug/Kg		08/30/18 06:48	09/01/18 13:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*14 - 128*	*08/30/18 06:48*	*09/01/18 13:12*	*1*
DCB Decachlorobiphenyl	*90*		*10 - 132*	*08/30/18 06:48*	*09/01/18 13:12*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.83	J	1.8	0.29	mg/Kg		08/30/18 18:17	08/31/18 15:17	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-H9S-0.5-1

Lab Sample ID: 720-88263-3

Date Collected: 08/27/18 08:25

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.2		3.5	0.30	mg/Kg		08/30/18 18:17	08/31/18 15:17	4
Barium	58		1.8	0.25	mg/Kg		08/30/18 18:17	08/31/18 15:17	4
Beryllium	ND		0.35	0.11	mg/Kg		08/30/18 18:17	08/31/18 15:17	4
Cadmium	0.24	J	0.44	0.044	mg/Kg		08/30/18 18:17	08/31/18 15:17	4
Chromium	11		1.8	0.19	mg/Kg		08/30/18 18:17	08/31/18 15:17	4
Cobalt	8.5		0.70	0.070	mg/Kg		08/30/18 18:17	08/31/18 15:17	4
Copper	100		5.3	2.5	mg/Kg		08/30/18 18:17	08/31/18 15:17	4
Lead	110		1.8	0.37	mg/Kg		08/30/18 18:17	08/31/18 15:17	4
Molybdenum	0.33	J	1.8	0.22	mg/Kg		08/30/18 18:17	08/31/18 15:17	4
Nickel	7.6		1.8	0.18	mg/Kg		08/30/18 18:17	08/31/18 15:17	4
Selenium	ND		3.5	0.53	mg/Kg		08/30/18 18:17	08/31/18 15:17	4
Silver	0.38	J	0.88	0.18	mg/Kg		08/30/18 18:17	08/31/18 15:17	4
Thallium	ND		1.8	0.51	mg/Kg		08/30/18 18:17	08/31/18 15:17	4
Vanadium	63		1.8	0.24	mg/Kg		08/30/18 18:17	08/31/18 15:17	4
Zinc	120		5.3	2.2	mg/Kg		08/30/18 18:17	08/31/18 15:17	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.18		0.014	0.0021	mg/Kg		09/04/18 21:32	09/05/18 10:42	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-H9S-3.5-4

Date Collected: 08/27/18 08:25
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-4

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND	*	3.9	0.93	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
Acetone	ND	*	39	30	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
Benzene	ND	*	3.9	0.50	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
Dichlorobromomethane	ND	*	3.9	0.56	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
Bromobenzene	ND	*	3.9	0.61	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
Chlorobromomethane	ND	*	16	0.56	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
Bromoform	ND	*	3.9	1.6	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
Bromomethane	ND	*	7.8	0.61	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
2-Butanone (MEK)	ND	*	39	16	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
n-Butylbenzene	ND	*	3.9	0.78	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
sec-Butylbenzene	ND	*	3.9	0.56	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
tert-Butylbenzene	ND	*	3.9	0.57	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
Carbon disulfide	ND	*	3.9	1.6	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
Carbon tetrachloride	ND	*	3.9	0.48	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
Chlorobenzene	ND	*	3.9	0.54	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
Chloroethane	ND	*	7.8	0.44	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
Chloroform	ND	*	3.9	0.51	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
Chloromethane	ND	*	7.8	0.61	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
2-Chlorotoluene	ND	*	3.9	0.50	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
4-Chlorotoluene	ND	*	3.9	0.53	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
Chlorodibromomethane	ND	*	3.9	0.55	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
1,2-Dichlorobenzene	ND	*	3.9	0.53	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
1,3-Dichlorobenzene	ND	*	3.9	0.56	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
1,4-Dichlorobenzene	ND	*	3.9	0.55	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
1,3-Dichloropropane	ND	*	3.9	0.57	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
1,1-Dichloropropene	ND	*	3.9	0.54	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
1,2-Dibromo-3-Chloropropane	ND	*	7.8	1.3	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
Ethylene Dibromide	ND	*	3.9	1.1	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
Dibromomethane	ND	*	7.8	0.67	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
Dichlorodifluoromethane	ND	*	7.8	0.61	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
1,1-Dichloroethane	ND	*	3.9	0.53	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
1,2-Dichloroethane	ND	*	3.9	0.59	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
1,1-Dichloroethene	ND	*	3.9	0.48	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
cis-1,2-Dichloroethene	ND	*	3.9	0.53	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
trans-1,2-Dichloroethene	ND	*	3.9	0.58	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
1,2-Dichloropropane	ND	*	3.9	0.49	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
cis-1,3-Dichloropropene	ND	*	3.9	0.54	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
trans-1,3-Dichloropropene	ND	*	3.9	0.52	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
Ethylbenzene	ND	*	3.9	0.58	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
Hexachlorobutadiene	ND	*	3.9	0.70	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
2-Hexanone	ND	*	39	7.8	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
Isopropylbenzene	ND	*	3.9	0.53	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
4-Isopropyltoluene	ND	*	3.9	1.9	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
Methylene Chloride	ND	*	7.8	4.4	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
4-Methyl-2-pentanone (MIBK)	ND	*	39	7.8	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
Naphthalene	ND	*	7.8	1.2	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
N-Propylbenzene	ND	*	3.9	0.51	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
Styrene	ND	*	3.9	0.49	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
1,1,1,2-Tetrachloroethane	ND	*	3.9	0.59	ug/Kg		08/27/18 02:30	08/31/18 00:55	1

Client Sample ID: DG-H9S-3.5-4

Date Collected: 08/27/18 08:25
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-4

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	3.9	0.58	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
Tetrachloroethene	ND	*	3.9	0.52	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
Toluene	ND	*	3.9	0.55	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
1,2,3-Trichlorobenzene	ND	*	3.9	0.57	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
1,2,4-Trichlorobenzene	ND	*	3.9	0.55	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
1,1,1-Trichloroethane	ND	*	3.9	0.47	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
1,1,2-Trichloroethane	ND	*	3.9	0.54	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
Trichloroethene	ND	*	3.9	0.49	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
Trichlorofluoromethane	ND	*	3.9	0.44	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
1,2,3-Trichloropropane	ND	*	3.9	0.60	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	3.9	1.6	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
1,2,4-Trimethylbenzene	ND	*	3.9	1.3	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
1,3,5-Trimethylbenzene	ND	*	3.9	0.50	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
Vinyl acetate	ND	*	16	3.9	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
Vinyl chloride	ND	*	3.9	0.57	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
Xylenes, Total	ND		3.9	0.95	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
2,2-Dichloropropane	ND	*	3.9	1.6	ug/Kg		08/27/18 02:30	08/31/18 00:55	1
Gasoline Range Organics (GRO) -C4-C12	ND	*	190	78	ug/Kg		08/27/18 02:30	08/31/18 00:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*84*	*	*45 - 131*	*08/27/18 02:30*	*08/31/18 00:55*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*	*	*60 - 140*	*08/27/18 02:30*	*08/31/18 00:55*	*1*
Toluene-d8 (Surr)	*95*	*	*58 - 140*	*08/27/18 02:30*	*08/31/18 00:55*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.5	4.8	ug/Kg		08/30/18 10:18	09/03/18 23:13	1
Acenaphthene	ND		4.8	2.7	ug/Kg		08/30/18 10:18	09/03/18 23:13	1
Acenaphthylene	ND		4.8	2.3	ug/Kg		08/30/18 10:18	09/03/18 23:13	1
Anthracene	ND		4.8	1.9	ug/Kg		08/30/18 10:18	09/03/18 23:13	1
Benzo[a]anthracene	ND		4.8	1.4	ug/Kg		08/30/18 10:18	09/03/18 23:13	1
Benzo[a]pyrene	**2.7**	**J**	4.8	1.8	ug/Kg		08/30/18 10:18	09/03/18 23:13	1
Benzo[b]fluoranthene	**3.2**	**J**	4.8	2.0	ug/Kg		08/30/18 10:18	09/03/18 23:13	1
Benzo[g,h,i]perylene	ND		4.8	4.1	ug/Kg		08/30/18 10:18	09/03/18 23:13	1
Benzo[k]fluoranthene	**2.0**	**J**	4.8	2.0	ug/Kg		08/30/18 10:18	09/03/18 23:13	1
Chrysene	**2.7**	**J**	4.8	1.3	ug/Kg		08/30/18 10:18	09/03/18 23:13	1
Dibenz(a,h)anthracene	ND		4.8	3.3	ug/Kg		08/30/18 10:18	09/03/18 23:13	1
Fluoranthene	**4.0**	**J**	4.8	1.3	ug/Kg		08/30/18 10:18	09/03/18 23:13	1
Fluorene	ND		4.8	2.1	ug/Kg		08/30/18 10:18	09/03/18 23:13	1
Indeno[1,2,3-cd]pyrene	ND		4.8	4.0	ug/Kg		08/30/18 10:18	09/03/18 23:13	1
Naphthalene	ND		4.8	3.3	ug/Kg		08/30/18 10:18	09/03/18 23:13	1
Phenanthrene	**3.6**	**J**	4.8	1.7	ug/Kg		08/30/18 10:18	09/03/18 23:13	1
Pyrene	**4.4**	**J**	4.8	1.6	ug/Kg		08/30/18 10:18	09/03/18 23:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*52*		*33 - 120*	*08/30/18 10:18*	*09/03/18 23:13*	*1*
Terphenyl-d14	*70*		*35 - 146*	*08/30/18 10:18*	*09/03/18 23:13*	*1*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-H9S-3.5-4

Date Collected: 08/27/18 08:25
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-4

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	5000		2000	740	ug/Kg		08/30/18 08:54	09/06/18 14:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*89*		*40 - 130*	*08/30/18 08:54*	*09/06/18 14:56*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.58	ug/Kg		08/29/18 17:11	09/03/18 19:18	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/29/18 17:11	09/03/18 19:18	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/29/18 17:11	09/03/18 19:18	1
Aldrin	ND		1.9	0.48	ug/Kg		08/29/18 17:11	09/03/18 19:18	1
alpha-BHC	ND		1.9	0.52	ug/Kg		08/29/18 17:11	09/03/18 19:18	1
beta-BHC	ND		1.9	0.34	ug/Kg		08/29/18 17:11	09/03/18 19:18	1
Chlordane (technical)	ND		38	3.1	ug/Kg		08/29/18 17:11	09/03/18 19:18	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/29/18 17:11	09/03/18 19:18	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/29/18 17:11	09/03/18 19:18	1
Dieldrin	ND		1.9	0.56	ug/Kg		08/29/18 17:11	09/03/18 19:18	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/29/18 17:11	09/03/18 19:18	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/29/18 17:11	09/03/18 19:18	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/29/18 17:11	09/03/18 19:18	1
Endrin	ND		1.9	0.44	ug/Kg		08/29/18 17:11	09/03/18 19:18	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/29/18 17:11	09/03/18 19:18	1
Endrin ketone	ND		1.9	0.31	ug/Kg		08/29/18 17:11	09/03/18 19:18	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/29/18 17:11	09/03/18 19:18	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/29/18 17:11	09/03/18 19:18	1
Heptachlor epoxide	ND		1.9	0.33	ug/Kg		08/29/18 17:11	09/03/18 19:18	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/29/18 17:11	09/03/18 19:18	1
Toxaphene	ND		38	6.5	ug/Kg		08/29/18 17:11	09/03/18 19:18	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/29/18 17:11	09/03/18 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*113*		*21 - 136*	*08/29/18 17:11*	*09/03/18 19:18*	*1*
Tetrachloro-m-xylene	*76*		*21 - 145*	*08/29/18 17:11*	*09/03/18 19:18*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/30/18 06:48	09/01/18 13:26	1
Aroclor-1221	ND		50	24	ug/Kg		08/30/18 06:48	09/01/18 13:26	1
Aroclor-1232	ND		50	23	ug/Kg		08/30/18 06:48	09/01/18 13:26	1
Aroclor-1242	ND		50	19	ug/Kg		08/30/18 06:48	09/01/18 13:26	1
Aroclor-1248	ND		50	24	ug/Kg		08/30/18 06:48	09/01/18 13:26	1
Aroclor-1254	ND		50	23	ug/Kg		08/30/18 06:48	09/01/18 13:26	1
Aroclor-1260	ND		50	22	ug/Kg		08/30/18 06:48	09/01/18 13:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*73*		*14 - 128*	*08/30/18 06:48*	*09/01/18 13:26*	*1*
DCB Decachlorobiphenyl	*107*		*10 - 132*	*08/30/18 06:48*	*09/01/18 13:26*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.7	J	1.9	0.32	mg/Kg		08/30/18 18:17	08/31/18 15:22	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-H9S-3.5-4

Lab Sample ID: 720-88263-4

Date Collected: 08/27/18 08:25

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.6	J	3.8	0.32	mg/Kg		08/30/18 18:17	08/31/18 15:22	4
Barium	61		1.9	0.27	mg/Kg		08/30/18 18:17	08/31/18 15:22	4
Beryllium	ND		0.38	0.12	mg/Kg		08/30/18 18:17	08/31/18 15:22	4
Cadmium	0.12	J	0.48	0.047	mg/Kg		08/30/18 18:17	08/31/18 15:22	4
Chromium	30		1.9	0.20	mg/Kg		08/30/18 18:17	08/31/18 15:22	4
Cobalt	5.8		0.76	0.076	mg/Kg		08/30/18 18:17	08/31/18 15:22	4
Copper	24		5.7	2.7	mg/Kg		08/30/18 18:17	08/31/18 15:22	4
Lead	120		1.9	0.40	mg/Kg		08/30/18 18:17	08/31/18 15:22	4
Molybdenum	0.36	J	1.9	0.24	mg/Kg		08/30/18 18:17	08/31/18 15:22	4
Nickel	25		1.9	0.19	mg/Kg		08/30/18 18:17	08/31/18 15:22	4
Selenium	0.63	J	3.8	0.57	mg/Kg		08/30/18 18:17	08/31/18 15:22	4
Silver	0.44	J	0.95	0.19	mg/Kg		08/30/18 18:17	08/31/18 15:22	4
Thallium	ND		1.9	0.55	mg/Kg		08/30/18 18:17	08/31/18 15:22	4
Vanadium	29		1.9	0.26	mg/Kg		08/30/18 18:17	08/31/18 15:22	4
Zinc	49		5.7	2.4	mg/Kg		08/30/18 18:17	08/31/18 15:22	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.036		0.016	0.0024	mg/Kg		09/04/18 21:32	09/05/18 10:47	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-H9S-9.5-10

Date Collected: 08/27/18 08:25
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-5

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.9	0.94	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
Acetone	**38**	**J**	39	30	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
Benzene	ND		3.9	0.51	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
Dichlorobromomethane	ND		3.9	0.56	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
Bromobenzene	ND		3.9	0.62	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
Chlorobromomethane	ND		16	0.56	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
Bromoform	ND		3.9	1.6	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
Bromomethane	ND		7.8	0.62	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
2-Butanone (MEK)	ND		39	16	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
n-Butylbenzene	ND		3.9	0.78	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
sec-Butylbenzene	ND		3.9	0.56	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
tert-Butylbenzene	ND		3.9	0.57	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
Carbon disulfide	ND		3.9	1.6	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
Carbon tetrachloride	ND		3.9	0.48	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
Chlorobenzene	ND		3.9	0.54	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
Chloroethane	ND		7.8	0.44	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
Chloroform	ND		3.9	0.52	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
Chloromethane	ND		7.8	0.62	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
2-Chlorotoluene	ND		3.9	0.51	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
4-Chlorotoluene	ND		3.9	0.53	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
Chlorodibromomethane	ND		3.9	0.56	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
1,2-Dichlorobenzene	ND		3.9	0.53	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
1,3-Dichlorobenzene	ND		3.9	0.56	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
1,4-Dichlorobenzene	ND		3.9	0.56	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
1,3-Dichloropropane	ND		3.9	0.57	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
1,1-Dichloropropene	ND		3.9	0.54	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
1,2-Dibromo-3-Chloropropane	ND		7.8	1.3	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
Ethylene Dibromide	ND		3.9	1.1	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
Dibromomethane	ND		7.8	0.67	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
Dichlorodifluoromethane	ND		7.8	0.62	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
1,1-Dichloroethane	ND		3.9	0.53	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
1,2-Dichloroethane	ND		3.9	0.59	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
1,1-Dichloroethene	ND	*	3.9	0.48	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
cis-1,2-Dichloroethene	ND		3.9	0.53	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
trans-1,2-Dichloroethene	ND		3.9	0.59	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
1,2-Dichloropropane	ND		3.9	0.49	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
cis-1,3-Dichloropropene	ND		3.9	0.54	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
trans-1,3-Dichloropropene	ND		3.9	0.52	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
Ethylbenzene	ND		3.9	0.59	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
Hexachlorobutadiene	ND		3.9	0.70	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
2-Hexanone	ND		39	7.8	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
Isopropylbenzene	ND		3.9	0.53	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
4-Isopropyltoluene	ND		3.9	2.0	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
Methylene Chloride	ND		7.8	4.4	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
4-Methyl-2-pentanone (MIBK)	ND		39	7.8	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
Naphthalene	ND		7.8	1.2	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
N-Propylbenzene	ND		3.9	0.52	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
Styrene	ND		3.9	0.49	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
1,1,1,2-Tetrachloroethane	ND		3.9	0.59	ug/Kg		08/27/18 02:30	08/31/18 14:42	1

Client Sample ID: DG-H9S-9.5-10

Lab Sample ID: 720-88263-5

Date Collected: 08/27/18 08:25

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		3.9	0.59	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
Tetrachloroethene	ND		3.9	0.52	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
Toluene	ND		3.9	0.56	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
1,2,3-Trichlorobenzene	ND		3.9	0.58	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
1,2,4-Trichlorobenzene	ND		3.9	0.56	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
1,1,1-Trichloroethane	ND		3.9	0.48	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
1,1,2-Trichloroethane	ND		3.9	0.55	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
Trichloroethene	ND		3.9	0.49	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
Trichlorofluoromethane	ND		3.9	0.44	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
1,2,3-Trichloropropane	ND		3.9	0.60	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	3.9	1.6	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
1,2,4-Trimethylbenzene	ND		3.9	1.3	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
1,3,5-Trimethylbenzene	ND		3.9	0.51	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
Vinyl acetate	ND		16	3.9	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
Vinyl chloride	ND		3.9	0.57	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
Xylenes, Total	ND		3.9	0.95	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
2,2-Dichloropropane	ND		3.9	1.6	ug/Kg		08/27/18 02:30	08/31/18 14:42	1
Gasoline Range Organics (GRO) -C4-C12	ND		200	78	ug/Kg		08/27/18 02:30	08/31/18 14:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*45 - 131*	*08/27/18 02:30*	*08/31/18 14:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*60 - 140*	*08/27/18 02:30*	*08/31/18 14:42*	*1*
Toluene-d8 (Surr)	*91*		*58 - 140*	*08/27/18 02:30*	*08/31/18 14:42*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.6	4.8	ug/Kg		08/30/18 10:18	09/03/18 23:36	1
Acenaphthene	ND		4.8	2.7	ug/Kg		08/30/18 10:18	09/03/18 23:36	1
Acenaphthylene	ND		4.8	2.3	ug/Kg		08/30/18 10:18	09/03/18 23:36	1
Anthracene	**2.4**	**J**	4.8	1.9	ug/Kg		08/30/18 10:18	09/03/18 23:36	1
Benzo[a]anthracene	ND		4.8	1.4	ug/Kg		08/30/18 10:18	09/03/18 23:36	1
Benzo[a]pyrene	**2.6**	**J**	4.8	1.8	ug/Kg		08/30/18 10:18	09/03/18 23:36	1
Benzo[b]fluoranthene	**3.4**	**J**	4.8	2.0	ug/Kg		08/30/18 10:18	09/03/18 23:36	1
Benzo[g,h,i]perylene	ND		4.8	4.1	ug/Kg		08/30/18 10:18	09/03/18 23:36	1
Benzo[k]fluoranthene	**2.0**	**J**	4.8	2.0	ug/Kg		08/30/18 10:18	09/03/18 23:36	1
Chrysene	**3.2**	**J**	4.8	1.3	ug/Kg		08/30/18 10:18	09/03/18 23:36	1
Dibenz(a,h)anthracene	ND		4.8	3.4	ug/Kg		08/30/18 10:18	09/03/18 23:36	1
Fluoranthene	**5.1**		4.8	1.3	ug/Kg		08/30/18 10:18	09/03/18 23:36	1
Fluorene	ND		4.8	2.1	ug/Kg		08/30/18 10:18	09/03/18 23:36	1
Indeno[1,2,3-cd]pyrene	ND		4.8	4.0	ug/Kg		08/30/18 10:18	09/03/18 23:36	1
Naphthalene	ND		4.8	3.4	ug/Kg		08/30/18 10:18	09/03/18 23:36	1
Phenanthrene	**9.5**		4.8	1.7	ug/Kg		08/30/18 10:18	09/03/18 23:36	1
Pyrene	**6.6**		4.8	1.6	ug/Kg		08/30/18 10:18	09/03/18 23:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*51*		*33 - 120*	*08/30/18 10:18*	*09/03/18 23:36*	*1*
Terphenyl-d14	*64*		*35 - 146*	*08/30/18 10:18*	*09/03/18 23:36*	*1*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-H9S-9.5-10

Date Collected: 08/27/18 08:25
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-5

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	8500		2000	730	ug/Kg		08/30/18 08:54	09/05/18 13:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*97*		*40 - 130*	*08/30/18 08:54*	*09/05/18 13:51*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.60	ug/Kg		08/29/18 17:11	09/04/18 15:38	1
4,4'-DDE	ND		2.0	0.41	ug/Kg		08/29/18 17:11	09/04/18 15:38	1
4,4'-DDT	ND		2.0	0.40	ug/Kg		08/29/18 17:11	09/04/18 15:38	1
Aldrin	ND		2.0	0.49	ug/Kg		08/29/18 17:11	09/04/18 15:38	1
alpha-BHC	ND		2.0	0.54	ug/Kg		08/29/18 17:11	09/04/18 15:38	1
beta-BHC	ND		2.0	0.35	ug/Kg		08/29/18 17:11	09/04/18 15:38	1
Chlordane (technical)	ND		39	3.1	ug/Kg		08/29/18 17:11	09/04/18 15:38	1
cis-Chlordane	ND		2.0	0.39	ug/Kg		08/29/18 17:11	09/04/18 15:38	1
delta-BHC	ND		2.0	0.43	ug/Kg		08/29/18 17:11	09/04/18 15:38	1
Dieldrin	ND		2.0	0.58	ug/Kg		08/29/18 17:11	09/04/18 15:38	1
Endosulfan I	ND		2.0	0.31	ug/Kg		08/29/18 17:11	09/04/18 15:38	1
Endosulfan II	ND		2.0	0.48	ug/Kg		08/29/18 17:11	09/04/18 15:38	1
Endosulfan sulfate	ND		2.0	0.37	ug/Kg		08/29/18 17:11	09/04/18 15:38	1
Endrin	ND		2.0	0.45	ug/Kg		08/29/18 17:11	09/04/18 15:38	1
Endrin aldehyde	ND		2.0	0.62	ug/Kg		08/29/18 17:11	09/04/18 15:38	1
Endrin ketone	ND		2.0	0.32	ug/Kg		08/29/18 17:11	09/04/18 15:38	1
gamma-BHC (Lindane)	ND		2.0	0.62	ug/Kg		08/29/18 17:11	09/04/18 15:38	1
Heptachlor	ND		2.0	0.45	ug/Kg		08/29/18 17:11	09/04/18 15:38	1
Heptachlor epoxide	ND		2.0	0.34	ug/Kg		08/29/18 17:11	09/04/18 15:38	1
Methoxychlor	ND		2.0	0.67	ug/Kg		08/29/18 17:11	09/04/18 15:38	1
Toxaphene	ND		39	6.7	ug/Kg		08/29/18 17:11	09/04/18 15:38	1
trans-Chlordane	ND		2.0	0.45	ug/Kg		08/29/18 17:11	09/04/18 15:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*91*		*21 - 136*	*08/29/18 17:11*	*09/04/18 15:38*	*1*
Tetrachloro-m-xylene	*78*		*21 - 145*	*08/29/18 17:11*	*09/04/18 15:38*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/30/18 06:48	09/01/18 13:41	1
Aroclor-1221	ND		50	24	ug/Kg		08/30/18 06:48	09/01/18 13:41	1
Aroclor-1232	ND		50	23	ug/Kg		08/30/18 06:48	09/01/18 13:41	1
Aroclor-1242	ND		50	19	ug/Kg		08/30/18 06:48	09/01/18 13:41	1
Aroclor-1248	ND		50	24	ug/Kg		08/30/18 06:48	09/01/18 13:41	1
Aroclor-1254	ND		50	23	ug/Kg		08/30/18 06:48	09/01/18 13:41	1
Aroclor-1260	ND		50	22	ug/Kg		08/30/18 06:48	09/01/18 13:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*66*		*14 - 128*	*08/30/18 06:48*	*09/01/18 13:41*	*1*
DCB Decachlorobiphenyl	*79*		*10 - 132*	*08/30/18 06:48*	*09/01/18 13:41*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.7		1.2	0.19	mg/Kg		08/29/18 15:55	08/30/18 16:51	4

Client Sample ID: DG-H9S-9.5-10

Lab Sample ID: 720-88263-5

Date Collected: 08/27/18 08:25

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.5	J	2.3	0.20	mg/Kg		08/29/18 15:55	08/30/18 16:51	4
Barium	95		1.2	0.16	mg/Kg		08/29/18 15:55	08/30/18 16:51	4
Beryllium	ND		0.23	0.075	mg/Kg		08/29/18 15:55	08/30/18 16:51	4
Cadmium	ND		0.29	0.029	mg/Kg		08/29/18 15:55	08/30/18 16:51	4
Chromium	120		1.2	0.12	mg/Kg		08/29/18 15:55	08/30/18 16:51	4
Cobalt	24		0.46	0.046	mg/Kg		08/29/18 15:55	08/30/18 16:51	4
Copper	43		3.5	1.6	mg/Kg		08/29/18 15:55	08/30/18 16:51	4
Lead	5.4		1.2	0.24	mg/Kg		08/29/18 15:55	08/30/18 16:51	4
Molybdenum	0.42	J	1.2	0.15	mg/Kg		08/29/18 15:55	08/30/18 16:51	4
Nickel	69		1.2	0.12	mg/Kg		08/29/18 15:55	08/30/18 16:51	4
Selenium	ND		2.3	0.35	mg/Kg		08/29/18 15:55	08/30/18 16:51	4
Silver	0.50	J	0.58	0.12	mg/Kg		08/29/18 15:55	08/30/18 16:51	4
Thallium	1.8		1.2	0.34	mg/Kg		08/29/18 15:55	08/30/18 16:51	4
Vanadium	120		1.2	0.16	mg/Kg		08/29/18 15:55	08/30/18 16:51	4
Zinc	51		3.5	1.5	mg/Kg		08/29/18 15:55	08/30/18 16:51	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.14		0.015	0.0021	mg/Kg		09/04/18 21:32	09/05/18 10:49	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-L9S-0.5-1

Date Collected: 08/27/18 09:10
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-6

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		6.0	1.4	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
Acetone	ND		60	45	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
Benzene	ND		6.0	0.78	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
Dichlorobromomethane	ND		6.0	0.86	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
Bromobenzene	ND		6.0	0.94	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
Chlorobromomethane	ND		24	0.86	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
Bromoform	ND		6.0	2.4	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
Bromomethane	ND		12	0.94	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
2-Butanone (MEK)	ND		60	25	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
n-Butylbenzene	ND		6.0	1.2	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
sec-Butylbenzene	ND		6.0	0.86	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
tert-Butylbenzene	ND		6.0	0.87	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
Carbon disulfide	ND		6.0	2.4	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
Carbon tetrachloride	ND		6.0	0.74	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
Chlorobenzene	ND		6.0	0.82	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
Chloroethane	ND		12	0.67	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
Chloroform	ND		6.0	0.79	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
Chloromethane	ND		12	0.94	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
2-Chlorotoluene	ND		6.0	0.78	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
4-Chlorotoluene	ND		6.0	0.81	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
Chlorodibromomethane	ND		6.0	0.85	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
1,2-Dichlorobenzene	ND		6.0	0.81	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
1,3-Dichlorobenzene	ND		6.0	0.86	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
1,4-Dichlorobenzene	ND		6.0	0.85	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
1,3-Dichloropropane	ND		6.0	0.87	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
1,1-Dichloropropene	ND		6.0	0.82	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
1,2-Dibromo-3-Chloropropane	ND		12	2.0	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
Ethylene Dibromide	ND		6.0	1.7	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
Dibromomethane	ND		12	1.0	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
Dichlorodifluoromethane	ND		12	0.94	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
1,1-Dichloroethane	ND		6.0	0.81	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
1,2-Dichloroethane	ND		6.0	0.91	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
1,1-Dichloroethene	ND	*	6.0	0.74	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
cis-1,2-Dichloroethene	ND		6.0	0.81	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
trans-1,2-Dichloroethene	ND		6.0	0.89	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
1,2-Dichloropropane	ND		6.0	0.75	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
cis-1,3-Dichloropropene	ND		6.0	0.82	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
trans-1,3-Dichloropropene	ND		6.0	0.80	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
Ethylbenzene	ND		6.0	0.89	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
Hexachlorobutadiene	ND		6.0	1.1	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
2-Hexanone	ND		60	12	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
Isopropylbenzene	ND		6.0	0.81	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
4-Isopropyltoluene	ND		6.0	3.0	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
Methylene Chloride	ND		12	6.7	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
4-Methyl-2-pentanone (MIBK)	ND		60	12	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
Naphthalene	ND		12	1.8	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
N-Propylbenzene	ND		6.0	0.79	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
Styrene	ND		6.0	0.75	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
1,1,1,2-Tetrachloroethane	ND		6.0	0.91	ug/Kg		08/27/18 02:30	08/31/18 01:52	1

Client Sample ID: DG-L9S-0.5-1

Date Collected: 08/27/18 09:10
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-6

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		6.0	0.89	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
Tetrachloroethene	ND		6.0	0.80	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
Toluene	ND		6.0	0.85	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
1,2,3-Trichlorobenzene	ND		6.0	0.88	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
1,2,4-Trichlorobenzene	ND		6.0	0.85	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
1,1,1-Trichloroethane	ND		6.0	0.73	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
1,1,2-Trichloroethane	ND		6.0	0.83	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
Trichloroethene	ND		6.0	0.75	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
Trichlorofluoromethane	ND		6.0	0.67	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
1,2,3-Trichloropropane	ND		6.0	0.92	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	6.0	2.5	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
1,2,4-Trimethylbenzene	ND		6.0	2.0	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
1,3,5-Trimethylbenzene	ND		6.0	0.78	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
Vinyl acetate	ND		24	6.0	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
Vinyl chloride	ND		6.0	0.87	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
Xylenes, Total	ND		6.0	1.5	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
2,2-Dichloropropane	ND		6.0	2.4	ug/Kg		08/27/18 02:30	08/31/18 01:52	1
Gasoline Range Organics (GRO) -C4-C12	ND		300	120	ug/Kg		08/27/18 02:30	08/31/18 01:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*45 - 131*	*08/27/18 02:30*	*08/31/18 01:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*115*		*60 - 140*	*08/27/18 02:30*	*08/31/18 01:52*	*1*
Toluene-d8 (Surr)	*92*		*58 - 140*	*08/27/18 02:30*	*08/31/18 01:52*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.7	4.9	ug/Kg		08/30/18 10:18	09/04/18 00:00	1
Acenaphthene	ND		4.9	2.7	ug/Kg		08/30/18 10:18	09/04/18 00:00	1
Acenaphthylene	ND		4.9	2.3	ug/Kg		08/30/18 10:18	09/04/18 00:00	1
Anthracene	**3.5**	**J**	4.9	1.9	ug/Kg		08/30/18 10:18	09/04/18 00:00	1
Benzo[a]anthracene	**8.0**		4.9	1.5	ug/Kg		08/30/18 10:18	09/04/18 00:00	1
Benzo[a]pyrene	**9.1**		4.9	1.9	ug/Kg		08/30/18 10:18	09/04/18 00:00	1
Benzo[b]fluoranthene	**13**		4.9	2.0	ug/Kg		08/30/18 10:18	09/04/18 00:00	1
Benzo[g,h,i]perylene	**5.3**		4.9	4.2	ug/Kg		08/30/18 10:18	09/04/18 00:00	1
Benzo[k]fluoranthene	**6.4**		4.9	2.0	ug/Kg		08/30/18 10:18	09/04/18 00:00	1
Chrysene	**11**		4.9	1.4	ug/Kg		08/30/18 10:18	09/04/18 00:00	1
Dibenz(a,h)anthracene	ND		4.9	3.4	ug/Kg		08/30/18 10:18	09/04/18 00:00	1
Fluoranthene	**13**		4.9	1.4	ug/Kg		08/30/18 10:18	09/04/18 00:00	1
Fluorene	ND		4.9	2.1	ug/Kg		08/30/18 10:18	09/04/18 00:00	1
Indeno[1,2,3-cd]pyrene	**4.5**	**J**	4.9	4.1	ug/Kg		08/30/18 10:18	09/04/18 00:00	1
Naphthalene	**3.5**	**J**	4.9	3.4	ug/Kg		08/30/18 10:18	09/04/18 00:00	1
Phenanthrene	**13**		4.9	1.8	ug/Kg		08/30/18 10:18	09/04/18 00:00	1
Pyrene	**16**		4.9	1.7	ug/Kg		08/30/18 10:18	09/04/18 00:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*73*		*33 - 120*	*08/30/18 10:18*	*09/04/18 00:00*	*1*
Terphenyl-d14	*67*		*35 - 146*	*08/30/18 10:18*	*09/04/18 00:00*	*1*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-L9S-0.5-1

Date Collected: 08/27/18 09:10
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-6

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**760000**		9700	3600	ug/Kg		08/30/18 08:54	09/06/18 14:32	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*0*	*D X*	*40 - 130*	*08/30/18 08:54*	*09/06/18 14:32*	*5*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/30/18 12:52	09/05/18 18:26	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/30/18 12:52	09/05/18 18:26	1
4,4'-DDT	**0.41**	**J**	1.9	0.39	ug/Kg		08/30/18 12:52	09/05/18 18:26	1
Aldrin	ND		1.9	0.48	ug/Kg		08/30/18 12:52	09/05/18 18:26	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/30/18 12:52	09/05/18 18:26	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/30/18 12:52	09/05/18 18:26	1
Chlordane (technical)	ND		38	3.1	ug/Kg		08/30/18 12:52	09/05/18 18:26	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/30/18 12:52	09/05/18 18:26	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/30/18 12:52	09/05/18 18:26	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/30/18 12:52	09/05/18 18:26	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/30/18 12:52	09/05/18 18:26	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/30/18 12:52	09/05/18 18:26	1
Endosulfan sulfate	ND		1.9	0.37	ug/Kg		08/30/18 12:52	09/05/18 18:26	1
Endrin	ND		1.9	0.44	ug/Kg		08/30/18 12:52	09/05/18 18:26	1
Endrin aldehyde	ND		1.9	0.61	ug/Kg		08/30/18 12:52	09/05/18 18:26	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/30/18 12:52	09/05/18 18:26	1
gamma-BHC (Lindane)	ND		1.9	0.61	ug/Kg		08/30/18 12:52	09/05/18 18:26	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/30/18 12:52	09/05/18 18:26	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/30/18 12:52	09/05/18 18:26	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/30/18 12:52	09/05/18 18:26	1
Toxaphene	ND		38	6.5	ug/Kg		08/30/18 12:52	09/05/18 18:26	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/30/18 12:52	09/05/18 18:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*94*		*21 - 136*	*08/30/18 12:52*	*09/05/18 18:26*	*1*
Tetrachloro-m-xylene	*80*		*21 - 145*	*08/30/18 12:52*	*09/05/18 18:26*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		48	21	ug/Kg		08/30/18 06:48	09/01/18 13:56	1
Aroclor-1221	ND		48	23	ug/Kg		08/30/18 06:48	09/01/18 13:56	1
Aroclor-1232	ND		48	22	ug/Kg		08/30/18 06:48	09/01/18 13:56	1
Aroclor-1242	ND		48	18	ug/Kg		08/30/18 06:48	09/01/18 13:56	1
Aroclor-1248	ND		48	23	ug/Kg		08/30/18 06:48	09/01/18 13:56	1
Aroclor-1254	ND		48	22	ug/Kg		08/30/18 06:48	09/01/18 13:56	1
Aroclor-1260	ND		48	21	ug/Kg		08/30/18 06:48	09/01/18 13:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*71*		*14 - 128*	*08/30/18 06:48*	*09/01/18 13:56*	*1*
DCB Decachlorobiphenyl	*86*		*10 - 132*	*08/30/18 06:48*	*09/01/18 13:56*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.9	0.31	mg/Kg		08/29/18 15:55	08/30/18 16:56	4

Client Sample ID: DG-L9S-0.5-1

Lab Sample ID: 720-88263-6

Date Collected: 08/27/18 09:10

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.9		3.7	0.32	mg/Kg		08/29/18 15:55	08/30/18 16:56	4
Barium	88		1.9	0.27	mg/Kg		08/29/18 15:55	08/30/18 16:56	4
Beryllium	ND		0.37	0.12	mg/Kg		08/29/18 15:55	08/30/18 16:56	4
Cadmium	0.064	J	0.47	0.046	mg/Kg		08/29/18 15:55	08/30/18 16:56	4
Chromium	19		1.9	0.20	mg/Kg		08/29/18 15:55	08/30/18 16:56	4
Cobalt	10		0.75	0.075	mg/Kg		08/29/18 15:55	08/30/18 16:56	4
Copper	67		5.6	2.7	mg/Kg		08/29/18 15:55	08/30/18 16:56	4
Lead	170		1.9	0.39	mg/Kg		08/29/18 15:55	08/30/18 16:56	4
Molybdenum	0.25	J	1.9	0.24	mg/Kg		08/29/18 15:55	08/30/18 16:56	4
Nickel	12		1.9	0.19	mg/Kg		08/29/18 15:55	08/30/18 16:56	4
Selenium	ND		3.7	0.56	mg/Kg		08/29/18 15:55	08/30/18 16:56	4
Silver	0.27	J	0.93	0.19	mg/Kg		08/29/18 15:55	08/30/18 16:56	4
Thallium	ND		1.9	0.54	mg/Kg		08/29/18 15:55	08/30/18 16:56	4
Vanadium	65		1.9	0.25	mg/Kg		08/29/18 15:55	08/30/18 16:56	4
Zinc	81		5.6	2.4	mg/Kg		08/29/18 15:55	08/30/18 16:56	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.11		0.017	0.0025	mg/Kg		09/04/18 21:32	09/05/18 10:51	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-L9S-3.5-4

Date Collected: 08/27/18 09:10
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-7

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.8	1.2	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
Acetone	ND		48	37	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
Benzene	ND		4.8	0.63	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
Dichlorobromomethane	ND		4.8	0.69	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
Bromobenzene	ND		4.8	0.76	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
Chlorobromomethane	ND		19	0.69	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
Bromoform	ND		4.8	1.9	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
Bromomethane	ND		9.6	0.76	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
2-Butanone (MEK)	ND		48	20	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
n-Butylbenzene	ND		4.8	0.96	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
sec-Butylbenzene	ND		4.8	0.69	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
tert-Butylbenzene	ND		4.8	0.70	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
Carbon disulfide	ND	*	4.8	1.9	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
Carbon tetrachloride	ND		4.8	0.60	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
Chlorobenzene	ND		4.8	0.66	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
Chloroethane	ND		9.6	0.54	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
Chloroform	ND		4.8	0.64	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
Chloromethane	ND		9.6	0.76	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
2-Chlorotoluene	ND		4.8	0.63	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
4-Chlorotoluene	ND		4.8	0.66	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
Chlorodibromomethane	ND		4.8	0.68	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
1,2-Dichlorobenzene	ND		4.8	0.66	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
1,3-Dichlorobenzene	ND		4.8	0.69	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
1,4-Dichlorobenzene	ND		4.8	0.68	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
1,3-Dichloropropane	ND		4.8	0.70	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
1,1-Dichloropropene	ND		4.8	0.66	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
1,2-Dibromo-3-Chloropropane	ND		9.6	1.6	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
Ethylene Dibromide	ND		4.8	1.4	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
Dibromomethane	ND		9.6	0.83	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
Dichlorodifluoromethane	ND		9.6	0.76	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
1,1-Dichloroethane	ND		4.8	0.66	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
1,2-Dichloroethane	ND		4.8	0.73	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
1,1-Dichloroethene	ND	*	4.8	0.60	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
cis-1,2-Dichloroethene	ND		4.8	0.66	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
trans-1,2-Dichloroethene	ND		4.8	0.72	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
1,2-Dichloropropane	ND		4.8	0.61	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
cis-1,3-Dichloropropene	ND		4.8	0.66	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
trans-1,3-Dichloropropene	ND		4.8	0.65	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
Ethylbenzene	ND		4.8	0.72	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
Hexachlorobutadiene	ND		4.8	0.87	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
2-Hexanone	ND		48	9.6	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
Isopropylbenzene	ND		4.8	0.66	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
4-Isopropyltoluene	ND		4.8	2.4	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
Methylene Chloride	ND		9.6	5.4	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
4-Methyl-2-pentanone (MIBK)	ND		48	9.6	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
Naphthalene	ND	*	10	1.5	ug/Kg		09/05/18 19:02	09/06/18 00:38	1
N-Propylbenzene	ND		4.8	0.64	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
Styrene	ND		4.8	0.61	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
1,1,1,2-Tetrachloroethane	ND		4.8	0.73	ug/Kg		09/04/18 09:47	09/04/18 13:55	1

Client Sample ID: DG-L9S-3.5-4

Lab Sample ID: 720-88263-7

Date Collected: 08/27/18 09:10

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.8	0.72	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
Tetrachloroethene	ND		4.8	0.65	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
Toluene	ND		4.8	0.68	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
1,2,3-Trichlorobenzene	ND		4.8	0.71	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
1,2,4-Trichlorobenzene	ND		4.8	0.68	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
1,1,1-Trichloroethane	ND		4.8	0.59	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
1,1,2-Trichloroethane	ND		4.8	0.67	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
Trichloroethene	ND		4.8	0.61	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
Trichlorofluoromethane	ND		4.8	0.54	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
1,2,3-Trichloropropane	ND		4.8	0.74	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.8	2.0	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
1,2,4-Trimethylbenzene	ND		4.8	1.6	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
1,3,5-Trimethylbenzene	ND		4.8	0.63	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
Vinyl acetate	ND		19	4.8	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
Vinyl chloride	ND		4.8	0.70	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
Xylenes, Total	ND		4.8	1.2	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
2,2-Dichloropropane	ND		4.8	1.9	ug/Kg		09/04/18 09:47	09/04/18 13:55	1
C4-C10	ND		250	100	ug/Kg		09/05/18 19:02	09/06/18 00:38	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg		09/05/18 19:02	09/06/18 00:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*82*		*45 - 131*	*09/04/18 09:47*	*09/04/18 13:55*	*1*
4-Bromofluorobenzene	*86*		*45 - 131*	*09/05/18 19:02*	*09/06/18 00:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*84*		*60 - 140*	*09/04/18 09:47*	*09/04/18 13:55*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*60 - 140*	*09/05/18 19:02*	*09/06/18 00:38*	*1*
Toluene-d8 (Surr)	*92*		*58 - 140*	*09/04/18 09:47*	*09/04/18 13:55*	*1*
Toluene-d8 (Surr)	*98*		*58 - 140*	*09/05/18 19:02*	*09/06/18 00:38*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**4.8**	**J**	9.5	4.8	ug/Kg		08/30/18 10:18	09/04/18 00:24	1
Acenaphthene	ND		4.8	2.7	ug/Kg		08/30/18 10:18	09/04/18 00:24	1
Acenaphthylene	**2.9**	**J**	4.8	2.3	ug/Kg		08/30/18 10:18	09/04/18 00:24	1
Anthracene	**2.8**	**J**	4.8	1.9	ug/Kg		08/30/18 10:18	09/04/18 00:24	1
Benzo[a]anthracene	**3.4**	**J**	4.8	1.4	ug/Kg		08/30/18 10:18	09/04/18 00:24	1
Benzo[a]pyrene	**7.5**		4.8	1.8	ug/Kg		08/30/18 10:18	09/04/18 00:24	1
Benzo[b]fluoranthene	**27**		4.8	2.0	ug/Kg		08/30/18 10:18	09/04/18 00:24	1
Benzo[g,h,i]perylene	**5.3**		4.8	4.1	ug/Kg		08/30/18 10:18	09/04/18 00:24	1
Benzo[k]fluoranthene	**5.8**		4.8	2.0	ug/Kg		08/30/18 10:18	09/04/18 00:24	1
Chrysene	**21**		4.8	1.3	ug/Kg		08/30/18 10:18	09/04/18 00:24	1
Dibenz(a,h)anthracene	ND		4.8	3.3	ug/Kg		08/30/18 10:18	09/04/18 00:24	1
Fluoranthene	**12**		4.8	1.3	ug/Kg		08/30/18 10:18	09/04/18 00:24	1
Fluorene	**2.2**	**J**	4.8	2.1	ug/Kg		08/30/18 10:18	09/04/18 00:24	1
Indeno[1,2,3-cd]pyrene	**4.7**	**J**	4.8	4.0	ug/Kg		08/30/18 10:18	09/04/18 00:24	1
Naphthalene	**19**		4.8	3.3	ug/Kg		08/30/18 10:18	09/04/18 00:24	1
Phenanthrene	**38**		4.8	1.7	ug/Kg		08/30/18 10:18	09/04/18 00:24	1
Pyrene	**16**		4.8	1.6	ug/Kg		08/30/18 10:18	09/04/18 00:24	1

Client Sample ID: DG-L9S-3.5-4

Date Collected: 08/27/18 09:10
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-7

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	51		33 - 120	08/30/18 10:18	09/04/18 00:24	1
Terphenyl-d14	70		35 - 146	08/30/18 10:18	09/04/18 00:24	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3200		1900	720	ug/Kg		08/30/18 08:54	09/05/18 18:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	97		40 - 130	08/30/18 08:54	09/05/18 18:20	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/30/18 12:52	09/05/18 18:44	1
4,4'-DDE	ND		1.9	0.41	ug/Kg		08/30/18 12:52	09/05/18 18:44	1
4,4'-DDT	ND		1.9	0.40	ug/Kg		08/30/18 12:52	09/05/18 18:44	1
Aldrin	ND		1.9	0.49	ug/Kg		08/30/18 12:52	09/05/18 18:44	1
alpha-BHC	ND		1.9	0.54	ug/Kg		08/30/18 12:52	09/05/18 18:44	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/30/18 12:52	09/05/18 18:44	1
Chlordane (technical)	ND		39	3.1	ug/Kg		08/30/18 12:52	09/05/18 18:44	1
cis-Chlordane	ND		1.9	0.39	ug/Kg		08/30/18 12:52	09/05/18 18:44	1
delta-BHC	ND		1.9	0.43	ug/Kg		08/30/18 12:52	09/05/18 18:44	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/30/18 12:52	09/05/18 18:44	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/30/18 12:52	09/05/18 18:44	1
Endosulfan II	ND		1.9	0.48	ug/Kg		08/30/18 12:52	09/05/18 18:44	1
Endosulfan sulfate	ND		1.9	0.37	ug/Kg		08/30/18 12:52	09/05/18 18:44	1
Endrin	ND		1.9	0.45	ug/Kg		08/30/18 12:52	09/05/18 18:44	1
Endrin aldehyde	ND		1.9	0.61	ug/Kg		08/30/18 12:52	09/05/18 18:44	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/30/18 12:52	09/05/18 18:44	1
gamma-BHC (Lindane)	ND		1.9	0.61	ug/Kg		08/30/18 12:52	09/05/18 18:44	1
Heptachlor	ND		1.9	0.45	ug/Kg		08/30/18 12:52	09/05/18 18:44	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/30/18 12:52	09/05/18 18:44	1
Methoxychlor	ND		1.9	0.66	ug/Kg		08/30/18 12:52	09/05/18 18:44	1
Toxaphene	ND		39	6.6	ug/Kg		08/30/18 12:52	09/05/18 18:44	1
trans-Chlordane	ND		1.9	0.45	ug/Kg		08/30/18 12:52	09/05/18 18:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	92		21 - 136	08/30/18 12:52	09/05/18 18:44	1
Tetrachloro-m-xylene	84		21 - 145	08/30/18 12:52	09/05/18 18:44	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		48	21	ug/Kg		08/30/18 06:48	09/01/18 14:10	1
Aroclor-1221	ND		48	23	ug/Kg		08/30/18 06:48	09/01/18 14:10	1
Aroclor-1232	ND		48	22	ug/Kg		08/30/18 06:48	09/01/18 14:10	1
Aroclor-1242	ND		48	18	ug/Kg		08/30/18 06:48	09/01/18 14:10	1
Aroclor-1248	ND		48	23	ug/Kg		08/30/18 06:48	09/01/18 14:10	1
Aroclor-1254	ND		48	22	ug/Kg		08/30/18 06:48	09/01/18 14:10	1
Aroclor-1260	ND		48	21	ug/Kg		08/30/18 06:48	09/01/18 14:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	68		14 - 128	08/30/18 06:48	09/01/18 14:10	1

Client Sample ID: DG-L9S-3.5-4

Lab Sample ID: 720-88263-7

Date Collected: 08/27/18 09:10

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*92*		*10 - 132*	*08/30/18 06:48*	*09/01/18 14:10*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.91**	**J**	1.3	0.21	mg/Kg		08/29/18 15:55	08/30/18 17:01	4
Arsenic	**10**		2.5	0.22	mg/Kg		08/29/18 15:55	08/30/18 17:01	4
Barium	**120**		1.3	0.18	mg/Kg		08/29/18 15:55	08/30/18 17:01	4
Beryllium	**0.53**		0.25	0.082	mg/Kg		08/29/18 15:55	08/30/18 17:01	4
Cadmium	**0.10**	**J**	0.32	0.031	mg/Kg		08/29/18 15:55	08/30/18 17:01	4
Chromium	**45**		1.3	0.13	mg/Kg		08/29/18 15:55	08/30/18 17:01	4
Cobalt	**13**		0.51	0.051	mg/Kg		08/29/18 15:55	08/30/18 17:01	4
Copper	**26**		3.8	1.8	mg/Kg		08/29/18 15:55	08/30/18 17:01	4
Lead	**15**		1.3	0.27	mg/Kg		08/29/18 15:55	08/30/18 17:01	4
Molybdenum	**0.49**	**J**	1.3	0.16	mg/Kg		08/29/18 15:55	08/30/18 17:01	4
Nickel	**26**		1.3	0.13	mg/Kg		08/29/18 15:55	08/30/18 17:01	4
Selenium	ND		2.5	0.38	mg/Kg		08/29/18 15:55	08/30/18 17:01	4
Silver	**0.45**	**J**	0.63	0.13	mg/Kg		08/29/18 15:55	08/30/18 17:01	4
Thallium	ND		1.3	0.37	mg/Kg		08/29/18 15:55	08/30/18 17:01	4
Vanadium	**42**		1.3	0.17	mg/Kg		08/29/18 15:55	08/30/18 17:01	4
Zinc	**71**		3.8	1.6	mg/Kg		08/29/18 15:55	08/30/18 17:01	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.056**		0.014	0.0021	mg/Kg		09/04/18 21:32	09/05/18 10:54	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-M11S-0.5-1

Date Collected: 08/27/18 10:00
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-8

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.2	1.0	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
Acetone	ND		42	32	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
Benzene	ND		4.2	0.55	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
Dichlorobromomethane	ND		4.2	0.60	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
Bromobenzene	ND		4.2	0.66	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
Chlorobromomethane	ND		17	0.60	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
Bromoform	ND		4.2	1.7	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
Bromomethane	ND		8.4	0.66	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
2-Butanone (MEK)	ND		42	18	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
n-Butylbenzene	ND		4.2	0.84	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
sec-Butylbenzene	ND		4.2	0.60	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
tert-Butylbenzene	ND		4.2	0.61	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
Carbon disulfide	ND		4.2	1.7	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
Carbon tetrachloride	ND		4.2	0.52	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
Chlorobenzene	ND		4.2	0.58	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
Chloroethane	ND		8.4	0.47	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
Chloroform	ND		4.2	0.55	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
Chloromethane	ND		8.4	0.66	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
2-Chlorotoluene	ND		4.2	0.55	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
4-Chlorotoluene	ND		4.2	0.57	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
Chlorodibromomethane	ND		4.2	0.60	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
1,2-Dichlorobenzene	ND		4.2	0.57	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
1,3-Dichlorobenzene	ND		4.2	0.60	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
1,4-Dichlorobenzene	ND		4.2	0.60	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
1,3-Dichloropropane	ND		4.2	0.61	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
1,1-Dichloropropene	ND		4.2	0.58	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
1,2-Dibromo-3-Chloropropane	ND		8.4	1.4	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
Ethylene Dibromide	ND		4.2	1.2	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
Dibromomethane	ND		8.4	0.72	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
Dichlorodifluoromethane	ND		8.4	0.66	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
1,1-Dichloroethane	ND		4.2	0.57	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
1,2-Dichloroethane	ND		4.2	0.64	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
1,1-Dichloroethene	ND	*	4.2	0.52	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
cis-1,2-Dichloroethene	ND		4.2	0.57	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
trans-1,2-Dichloroethene	ND		4.2	0.63	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
1,2-Dichloropropane	ND		4.2	0.53	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
cis-1,3-Dichloropropene	ND		4.2	0.58	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
trans-1,3-Dichloropropene	ND		4.2	0.56	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
Ethylbenzene	ND		4.2	0.63	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
Hexachlorobutadiene	ND		4.2	0.76	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
2-Hexanone	ND		42	8.4	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
Isopropylbenzene	ND		4.2	0.57	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
4-Isopropyltoluene	ND		4.2	2.1	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
Methylene Chloride	ND		8.4	4.7	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
4-Methyl-2-pentanone (MIBK)	ND		42	8.4	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
Naphthalene	ND		8.4	1.3	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
N-Propylbenzene	ND		4.2	0.55	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
Styrene	ND		4.2	0.53	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
1,1,1,2-Tetrachloroethane	ND		4.2	0.64	ug/Kg		08/27/18 02:30	08/31/18 15:15	1

Client Sample ID: DG-M11S-0.5-1

Lab Sample ID: 720-88263-8

Date Collected: 08/27/18 10:00

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.2	0.63	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
Tetrachloroethene	ND		4.2	0.56	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
Toluene	ND		4.2	0.60	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
1,2,3-Trichlorobenzene	ND		4.2	0.62	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
1,2,4-Trichlorobenzene	ND		4.2	0.60	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
1,1,1-Trichloroethane	ND		4.2	0.51	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
1,1,2-Trichloroethane	ND		4.2	0.59	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
Trichloroethene	ND		4.2	0.53	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
Trichlorofluoromethane	ND		4.2	0.47	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
1,2,3-Trichloropropane	ND		4.2	0.65	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.2	1.7	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
1,2,4-Trimethylbenzene	ND		4.2	1.4	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
1,3,5-Trimethylbenzene	ND		4.2	0.55	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
Vinyl acetate	ND		17	4.2	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
Vinyl chloride	ND		4.2	0.61	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
Xylenes, Total	ND		4.2	1.0	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
2,2-Dichloropropane	ND		4.2	1.7	ug/Kg		08/27/18 02:30	08/31/18 15:15	1
Gasoline Range Organics (GRO) -C4-C12	ND		210	84	ug/Kg		08/27/18 02:30	08/31/18 15:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*45 - 131*	*08/27/18 02:30*	*08/31/18 15:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*60 - 140*	*08/27/18 02:30*	*08/31/18 15:15*	*1*
Toluene-d8 (Surr)	*91*		*58 - 140*	*08/27/18 02:30*	*08/31/18 15:15*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.9	5.0	ug/Kg		08/30/18 14:15	09/06/18 06:54	1
Acenaphthene	ND		5.0	2.8	ug/Kg		08/30/18 14:15	09/06/18 06:54	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		08/30/18 14:15	09/06/18 06:54	1
Anthracene	ND		5.0	2.0	ug/Kg		08/30/18 14:15	09/06/18 06:54	1
Benzo[a]anthracene	**5.5**		5.0	1.5	ug/Kg		08/30/18 14:15	09/06/18 06:54	1
Benzo[a]pyrene	**7.5**		5.0	1.9	ug/Kg		08/30/18 14:15	09/06/18 06:54	1
Benzo[b]fluoranthene	**13**		5.0	2.1	ug/Kg		08/30/18 14:15	09/06/18 06:54	1
Benzo[g,h,i]perylene	**5.5**		5.0	4.3	ug/Kg		08/30/18 14:15	09/06/18 06:54	1
Benzo[k]fluoranthene	**4.5**	**J**	5.0	2.1	ug/Kg		08/30/18 14:15	09/06/18 06:54	1
Chrysene	**8.0**		5.0	1.4	ug/Kg		08/30/18 14:15	09/06/18 06:54	1
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		08/30/18 14:15	09/06/18 06:54	1
Fluoranthene	**13**		5.0	1.4	ug/Kg		08/30/18 14:15	09/06/18 06:54	1
Fluorene	ND		5.0	2.2	ug/Kg		08/30/18 14:15	09/06/18 06:54	1
Indeno[1,2,3-cd]pyrene	**4.6**	**J**	5.0	4.2	ug/Kg		08/30/18 14:15	09/06/18 06:54	1
Naphthalene	ND		5.0	3.5	ug/Kg		08/30/18 14:15	09/06/18 06:54	1
Phenanthrene	**9.6**		5.0	1.8	ug/Kg		08/30/18 14:15	09/06/18 06:54	1
Pyrene	**16**		5.0	1.7	ug/Kg		08/30/18 14:15	09/06/18 06:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*73*		*33 - 120*	*08/30/18 14:15*	*09/06/18 06:54*	*1*
Terphenyl-d14	*97*		*35 - 146*	*08/30/18 14:15*	*09/06/18 06:54*	*1*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-M11S-0.5-1

Date Collected: 08/27/18 10:00
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-8

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	36000		1900	710	ug/Kg		08/30/18 08:54	09/05/18 18:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*100*		*40 - 130*	*08/30/18 08:54*	*09/05/18 18:44*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/30/18 12:52	09/05/18 19:01	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/30/18 12:52	09/05/18 19:01	1
4,4'-DDT	0.41	J p	1.9	0.40	ug/Kg		08/30/18 12:52	09/05/18 19:01	1
Aldrin	ND		1.9	0.48	ug/Kg		08/30/18 12:52	09/05/18 19:01	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/30/18 12:52	09/05/18 19:01	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/30/18 12:52	09/05/18 19:01	1
Chlordane (technical)	ND		39	3.1	ug/Kg		08/30/18 12:52	09/05/18 19:01	1
cis-Chlordane	ND		1.9	0.39	ug/Kg		08/30/18 12:52	09/05/18 19:01	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/30/18 12:52	09/05/18 19:01	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/30/18 12:52	09/05/18 19:01	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/30/18 12:52	09/05/18 19:01	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/30/18 12:52	09/05/18 19:01	1
Endosulfan sulfate	ND		1.9	0.37	ug/Kg		08/30/18 12:52	09/05/18 19:01	1
Endrin	ND		1.9	0.44	ug/Kg		08/30/18 12:52	09/05/18 19:01	1
Endrin aldehyde	ND		1.9	0.61	ug/Kg		08/30/18 12:52	09/05/18 19:01	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/30/18 12:52	09/05/18 19:01	1
gamma-BHC (Lindane)	ND		1.9	0.61	ug/Kg		08/30/18 12:52	09/05/18 19:01	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/30/18 12:52	09/05/18 19:01	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/30/18 12:52	09/05/18 19:01	1
Methoxychlor	0.75	J	1.9	0.66	ug/Kg		08/30/18 12:52	09/05/18 19:01	1
Toxaphene	ND		39	6.6	ug/Kg		08/30/18 12:52	09/05/18 19:01	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/30/18 12:52	09/05/18 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*88*		*21 - 136*	*08/30/18 12:52*	*09/05/18 19:01*	*1*
Tetrachloro-m-xylene	*74*		*21 - 145*	*08/30/18 12:52*	*09/05/18 19:01*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		51	23	ug/Kg		08/30/18 06:48	09/01/18 14:25	1
Aroclor-1221	ND		51	25	ug/Kg		08/30/18 06:48	09/01/18 14:25	1
Aroclor-1232	ND		51	24	ug/Kg		08/30/18 06:48	09/01/18 14:25	1
Aroclor-1242	ND		51	20	ug/Kg		08/30/18 06:48	09/01/18 14:25	1
Aroclor-1248	ND		51	25	ug/Kg		08/30/18 06:48	09/01/18 14:25	1
Aroclor-1254	ND		51	24	ug/Kg		08/30/18 06:48	09/01/18 14:25	1
Aroclor-1260	ND		51	23	ug/Kg		08/30/18 06:48	09/01/18 14:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*75*		*14 - 128*	*08/30/18 06:48*	*09/01/18 14:25*	*1*
DCB Decachlorobiphenyl	*82*		*10 - 132*	*08/30/18 06:48*	*09/01/18 14:25*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.90	J	1.2	0.20	mg/Kg		08/29/18 15:55	08/30/18 17:06	4

Client Sample ID: DG-M11S-0.5-1

Lab Sample ID: 720-88263-8

Date Collected: 08/27/18 10:00

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.3	J	2.4	0.20	mg/Kg		08/29/18 15:55	08/30/18 17:06	4
Barium	42		1.2	0.17	mg/Kg		08/29/18 15:55	08/30/18 17:06	4
Beryllium	ND		0.24	0.078	mg/Kg		08/29/18 15:55	08/30/18 17:06	4
Cadmium	0.077	J	0.30	0.030	mg/Kg		08/29/18 15:55	08/30/18 17:06	4
Chromium	13		1.2	0.13	mg/Kg		08/29/18 15:55	08/30/18 17:06	4
Cobalt	15		0.48	0.048	mg/Kg		08/29/18 15:55	08/30/18 17:06	4
Copper	110		3.6	1.7	mg/Kg		08/29/18 15:55	08/30/18 17:06	4
Lead	85		1.2	0.25	mg/Kg		08/29/18 15:55	08/30/18 17:06	4
Molybdenum	0.15	J	1.2	0.15	mg/Kg		08/29/18 15:55	08/30/18 17:06	4
Nickel	7.8		1.2	0.12	mg/Kg		08/29/18 15:55	08/30/18 17:06	4
Selenium	ND		2.4	0.36	mg/Kg		08/29/18 15:55	08/30/18 17:06	4
Silver	0.33	J	0.60	0.12	mg/Kg		08/29/18 15:55	08/30/18 17:06	4
Thallium	1.0	J	1.2	0.35	mg/Kg		08/29/18 15:55	08/30/18 17:06	4
Vanadium	110		1.2	0.16	mg/Kg		08/29/18 15:55	08/30/18 17:06	4
Zinc	80		3.6	1.5	mg/Kg		08/29/18 15:55	08/30/18 17:06	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.099		0.017	0.0025	mg/Kg		09/04/18 21:32	09/05/18 11:01	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-M11S-3.5-4

Date Collected: 08/27/18 10:00
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-9

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.9	1.2	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
Acetone	**45**	**J**	49	37	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
Benzene	ND		4.9	0.64	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
Dichlorobromomethane	ND		4.9	0.71	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
Bromobenzene	ND	*	4.9	0.78	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
Chlorobromomethane	ND		20	0.71	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
Bromoform	ND		4.9	2.0	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
Bromomethane	ND		9.8	0.78	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
2-Butanone (MEK)	ND		49	21	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
n-Butylbenzene	ND	*	4.9	0.98	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
sec-Butylbenzene	ND	*	4.9	0.71	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
tert-Butylbenzene	ND	*	4.9	0.72	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
Carbon disulfide	ND		4.9	2.0	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
Carbon tetrachloride	ND		4.9	0.61	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
Chlorobenzene	ND		4.9	0.68	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
Chloroethane	ND		9.8	0.55	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
Chloroform	ND		4.9	0.65	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
Chloromethane	ND		9.8	0.78	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
2-Chlorotoluene	ND	*	4.9	0.64	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
4-Chlorotoluene	ND	*	4.9	0.67	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
Chlorodibromomethane	ND		4.9	0.70	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
1,2-Dichlorobenzene	ND	*	4.9	0.67	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
1,3-Dichlorobenzene	ND	*	4.9	0.71	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
1,4-Dichlorobenzene	ND	*	4.9	0.70	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
1,3-Dichloropropane	ND		4.9	0.72	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
1,1-Dichloropropene	ND		4.9	0.68	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
1,2-Dibromo-3-Chloropropane	ND	*	9.8	1.7	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
Ethylene Dibromide	ND		4.9	1.4	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
Dibromomethane	ND		9.8	0.85	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
Dichlorodifluoromethane	ND		9.8	0.78	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
1,1-Dichloroethane	ND		4.9	0.67	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
1,2-Dichloroethane	ND		4.9	0.75	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
1,1-Dichloroethene	ND	*	4.9	0.61	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
cis-1,2-Dichloroethene	ND		4.9	0.67	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
trans-1,2-Dichloroethene	ND		4.9	0.74	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
1,2-Dichloropropane	ND		4.9	0.62	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
cis-1,3-Dichloropropene	ND		4.9	0.68	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
trans-1,3-Dichloropropene	ND		4.9	0.66	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
Ethylbenzene	ND		4.9	0.74	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
Hexachlorobutadiene	ND	*	4.9	0.89	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
2-Hexanone	ND		49	9.8	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
Isopropylbenzene	ND		4.9	0.67	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
4-Isopropyltoluene	ND	*	4.9	2.5	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
Methylene Chloride	ND		9.8	5.5	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
4-Methyl-2-pentanone (MIBK)	ND		49	9.8	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
Naphthalene	ND	*	9.8	1.5	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
N-Propylbenzene	ND	*	4.9	0.65	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
Styrene	ND		4.9	0.62	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
1,1,1,2-Tetrachloroethane	ND		4.9	0.75	ug/Kg		08/27/18 02:30	08/31/18 02:48	1

Client Sample ID: DG-M11S-3.5-4

Lab Sample ID: 720-88263-9

Date Collected: 08/27/18 10:00

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	4.9	0.74	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
Tetrachloroethene	ND		4.9	0.66	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
Toluene	ND		4.9	0.70	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
1,2,3-Trichlorobenzene	ND	*	4.9	0.73	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
1,2,4-Trichlorobenzene	ND	*	4.9	0.70	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
1,1,1-Trichloroethane	ND		4.9	0.60	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
1,1,2-Trichloroethane	ND		4.9	0.69	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
Trichloroethene	ND		4.9	0.62	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
Trichlorofluoromethane	ND		4.9	0.55	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
1,2,3-Trichloropropane	ND	*	4.9	0.76	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.9	2.0	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
1,2,4-Trimethylbenzene	ND	*	4.9	1.6	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
1,3,5-Trimethylbenzene	ND	*	4.9	0.64	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
Vinyl acetate	ND		20	4.9	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
Vinyl chloride	ND		4.9	0.72	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
Xylenes, Total	ND		4.9	1.2	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
2,2-Dichloropropane	ND		4.9	2.0	ug/Kg		08/27/18 02:30	08/31/18 02:48	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	98	ug/Kg		08/27/18 02:30	08/31/18 02:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*74*		*45 - 131*	*08/27/18 02:30*	*08/31/18 02:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*60 - 140*	*08/27/18 02:30*	*08/31/18 02:48*	*1*
Toluene-d8 (Surr)	*88*		*58 - 140*	*08/27/18 02:30*	*08/31/18 02:48*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.5	4.8	ug/Kg		08/30/18 14:15	09/04/18 19:06	1
Acenaphthene	ND		4.8	2.7	ug/Kg		08/30/18 14:15	09/04/18 19:06	1
Acenaphthylene	**2.3**	**J**	4.8	2.3	ug/Kg		08/30/18 14:15	09/04/18 19:06	1
Anthracene	**3.7**	**J**	4.8	1.9	ug/Kg		08/30/18 14:15	09/04/18 19:06	1
Benzo[a]anthracene	**3.7**	**J**	4.8	1.4	ug/Kg		08/30/18 14:15	09/04/18 19:06	1
Benzo[a]pyrene	**5.5**		4.8	1.8	ug/Kg		08/30/18 14:15	09/04/18 19:06	1
Benzo[b]fluoranthene	**57**		4.8	2.0	ug/Kg		08/30/18 14:15	09/04/18 19:06	1
Benzo[g,h,i]perylene	**5.4**		4.8	4.1	ug/Kg		08/30/18 14:15	09/04/18 19:06	1
Benzo[k]fluoranthene	**7.6**		4.8	2.0	ug/Kg		08/30/18 14:15	09/04/18 19:06	1
Chrysene	**48**		4.8	1.3	ug/Kg		08/30/18 14:15	09/04/18 19:06	1
Dibenz(a,h)anthracene	**3.9**	**J**	4.8	3.3	ug/Kg		08/30/18 14:15	09/04/18 19:06	1
Fluoranthene	**21**		4.8	1.3	ug/Kg		08/30/18 14:15	09/04/18 19:06	1
Fluorene	ND		4.8	2.1	ug/Kg		08/30/18 14:15	09/04/18 19:06	1
Indeno[1,2,3-cd]pyrene	**4.6**	**J**	4.8	4.0	ug/Kg		08/30/18 14:15	09/04/18 19:06	1
Naphthalene	**14**		4.8	3.3	ug/Kg		08/30/18 14:15	09/04/18 19:06	1
Phenanthrene	**110**		4.8	1.7	ug/Kg		08/30/18 14:15	09/04/18 19:06	1
Pyrene	**17**		4.8	1.6	ug/Kg		08/30/18 14:15	09/04/18 19:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*54*		*33 - 120*	*08/30/18 14:15*	*09/04/18 19:06*	*1*
Terphenyl-d14	*88*		*35 - 146*	*08/30/18 14:15*	*09/04/18 19:06*	*1*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-M11S-3.5-4

Date Collected: 08/27/18 10:00
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-9

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	8900		2000	740	ug/Kg		08/30/18 08:54	09/05/18 17:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*113*		*40 - 130*	*08/30/18 08:54*	*09/05/18 17:55*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/30/18 12:52	09/05/18 19:19	1
4,4'-DDE	ND		1.9	0.41	ug/Kg		08/30/18 12:52	09/05/18 19:19	1
4,4'-DDT	ND		1.9	0.40	ug/Kg		08/30/18 12:52	09/05/18 19:19	1
Aldrin	ND		1.9	0.49	ug/Kg		08/30/18 12:52	09/05/18 19:19	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/30/18 12:52	09/05/18 19:19	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/30/18 12:52	09/05/18 19:19	1
Chlordane (technical)	ND		39	3.1	ug/Kg		08/30/18 12:52	09/05/18 19:19	1
cis-Chlordane	ND		1.9	0.39	ug/Kg		08/30/18 12:52	09/05/18 19:19	1
delta-BHC	ND		1.9	0.43	ug/Kg		08/30/18 12:52	09/05/18 19:19	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/30/18 12:52	09/05/18 19:19	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/30/18 12:52	09/05/18 19:19	1
Endosulfan II	ND		1.9	0.48	ug/Kg		08/30/18 12:52	09/05/18 19:19	1
Endosulfan sulfate	ND		1.9	0.37	ug/Kg		08/30/18 12:52	09/05/18 19:19	1
Endrin	ND		1.9	0.45	ug/Kg		08/30/18 12:52	09/05/18 19:19	1
Endrin aldehyde	ND		1.9	0.61	ug/Kg		08/30/18 12:52	09/05/18 19:19	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/30/18 12:52	09/05/18 19:19	1
gamma-BHC (Lindane)	ND		1.9	0.61	ug/Kg		08/30/18 12:52	09/05/18 19:19	1
Heptachlor	ND		1.9	0.45	ug/Kg		08/30/18 12:52	09/05/18 19:19	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/30/18 12:52	09/05/18 19:19	1
Methoxychlor	ND		1.9	0.66	ug/Kg		08/30/18 12:52	09/05/18 19:19	1
Toxaphene	ND		39	6.6	ug/Kg		08/30/18 12:52	09/05/18 19:19	1
trans-Chlordane	ND		1.9	0.45	ug/Kg		08/30/18 12:52	09/05/18 19:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*87*		*21 - 136*	*08/30/18 12:52*	*09/05/18 19:19*	*1*
Tetrachloro-m-xylene	*84*		*21 - 145*	*08/30/18 12:52*	*09/05/18 19:19*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/30/18 06:48	09/01/18 14:40	1
Aroclor-1221	ND		50	24	ug/Kg		08/30/18 06:48	09/01/18 14:40	1
Aroclor-1232	ND		50	23	ug/Kg		08/30/18 06:48	09/01/18 14:40	1
Aroclor-1242	ND		50	19	ug/Kg		08/30/18 06:48	09/01/18 14:40	1
Aroclor-1248	ND		50	24	ug/Kg		08/30/18 06:48	09/01/18 14:40	1
Aroclor-1254	ND		50	23	ug/Kg		08/30/18 06:48	09/01/18 14:40	1
Aroclor-1260	ND		50	22	ug/Kg		08/30/18 06:48	09/01/18 14:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*72*		*14 - 128*	*08/30/18 06:48*	*09/01/18 14:40*	*1*
DCB Decachlorobiphenyl	*99*		*10 - 132*	*08/30/18 06:48*	*09/01/18 14:40*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.1	J	1.7	0.29	mg/Kg		08/29/18 15:55	08/30/18 17:10	4

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-M11S-3.5-4

Date Collected: 08/27/18 10:00
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-9

Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	12		3.5	0.30	mg/Kg		08/29/18 15:55	08/30/18 17:10	4
Barium	63		1.7	0.25	mg/Kg		08/29/18 15:55	08/30/18 17:10	4
Beryllium	0.78		0.35	0.11	mg/Kg		08/29/18 15:55	09/04/18 21:01	4
Cadmium	0.078	J	0.43	0.043	mg/Kg		08/29/18 15:55	08/30/18 17:10	4
Chromium	44		1.7	0.18	mg/Kg		08/29/18 15:55	08/30/18 17:10	4
Cobalt	20		0.70	0.070	mg/Kg		08/29/18 15:55	08/30/18 17:10	4
Copper	76		5.2	2.5	mg/Kg		08/29/18 15:55	08/30/18 17:10	4
Lead	47		1.7	0.37	mg/Kg		08/29/18 15:55	08/30/18 17:10	4
Molybdenum	0.27	J	1.7	0.22	mg/Kg		08/29/18 15:55	08/30/18 17:10	4
Nickel	46		1.7	0.18	mg/Kg		08/29/18 15:55	08/30/18 17:10	4
Selenium	ND		3.5	0.52	mg/Kg		08/29/18 15:55	08/30/18 17:10	4
Silver	0.24	J	0.87	0.18	mg/Kg		08/29/18 15:55	08/30/18 17:10	4
Thallium	ND		1.7	0.50	mg/Kg		08/29/18 15:55	08/30/18 17:10	4
Vanadium	68		1.7	0.24	mg/Kg		08/29/18 15:55	08/30/18 17:10	4
Zinc	110		5.2	2.2	mg/Kg		08/29/18 15:55	08/30/18 17:10	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.072		0.014	0.0021	mg/Kg		09/04/18 21:32	09/05/18 11:03	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-K11S-0.5-1

Date Collected: 08/27/18 10:35
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-10

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.3	1.0	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
Acetone	ND		43	33	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
Benzene	ND		4.3	0.56	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
Dichlorobromomethane	ND		4.3	0.62	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
Bromobenzene	ND		4.3	0.68	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
Chlorobromomethane	ND		17	0.62	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
Bromoform	ND		4.3	1.7	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
Bromomethane	ND		8.6	0.68	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
2-Butanone (MEK)	ND		43	18	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
n-Butylbenzene	ND		4.3	0.86	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
sec-Butylbenzene	ND		4.3	0.62	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
tert-Butylbenzene	ND		4.3	0.63	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
Carbon disulfide	ND		4.3	1.7	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
Carbon tetrachloride	ND		4.3	0.53	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
Chlorobenzene	ND		4.3	0.59	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
Chloroethane	ND		8.6	0.48	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
Chloroform	ND		4.3	0.57	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
Chloromethane	ND		8.6	0.68	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
2-Chlorotoluene	ND		4.3	0.56	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
4-Chlorotoluene	ND		4.3	0.58	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
Chlorodibromomethane	ND		4.3	0.61	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
1,2-Dichlorobenzene	ND		4.3	0.58	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
1,3-Dichlorobenzene	ND		4.3	0.62	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
1,4-Dichlorobenzene	ND		4.3	0.61	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
1,3-Dichloropropane	ND		4.3	0.63	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
1,1-Dichloropropene	ND		4.3	0.59	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
1,2-Dibromo-3-Chloropropane	ND		8.6	1.5	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
Ethylene Dibromide	ND		4.3	1.2	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
Dibromomethane	ND		8.6	0.74	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
Dichlorodifluoromethane	ND		8.6	0.68	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
1,1-Dichloroethane	ND		4.3	0.58	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
1,2-Dichloroethane	ND		4.3	0.65	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
1,1-Dichloroethene	ND	*	4.3	0.53	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
cis-1,2-Dichloroethene	ND		4.3	0.58	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
trans-1,2-Dichloroethene	ND		4.3	0.65	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
1,2-Dichloropropane	ND		4.3	0.54	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
cis-1,3-Dichloropropene	ND		4.3	0.59	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
trans-1,3-Dichloropropene	ND		4.3	0.58	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
Ethylbenzene	ND		4.3	0.65	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
Hexachlorobutadiene	ND		4.3	0.77	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
2-Hexanone	ND		43	8.6	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
Isopropylbenzene	ND		4.3	0.58	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
4-Isopropyltoluene	ND		4.3	2.2	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
Methylene Chloride	ND		8.6	4.8	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
4-Methyl-2-pentanone (MIBK)	ND		43	8.6	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
Naphthalene	ND		8.6	1.3	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
N-Propylbenzene	ND		4.3	0.57	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
Styrene	ND		4.3	0.54	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
1,1,1,2-Tetrachloroethane	ND		4.3	0.65	ug/Kg		08/27/18 02:30	08/31/18 03:17	1

Client Sample ID: DG-K11S-0.5-1

Lab Sample ID: 720-88263-10

Date Collected: 08/27/18 10:35

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.3	0.65	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
Tetrachloroethene	ND		4.3	0.58	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
Toluene	ND		4.3	0.61	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
1,2,3-Trichlorobenzene	ND		4.3	0.64	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
1,2,4-Trichlorobenzene	ND		4.3	0.61	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
1,1,1-Trichloroethane	ND		4.3	0.52	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
1,1,2-Trichloroethane	ND		4.3	0.60	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
Trichloroethene	ND		4.3	0.54	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
Trichlorofluoromethane	ND		4.3	0.48	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
1,2,3-Trichloropropane	ND		4.3	0.66	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.3	1.8	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
1,2,4-Trimethylbenzene	ND		4.3	1.4	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
1,3,5-Trimethylbenzene	ND		4.3	0.56	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
Vinyl acetate	ND		17	4.3	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
Vinyl chloride	ND		4.3	0.63	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
Xylenes, Total	ND		4.3	1.0	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
2,2-Dichloropropane	ND		4.3	1.7	ug/Kg		08/27/18 02:30	08/31/18 03:17	1
Gasoline Range Organics (GRO) -C4-C12	ND		220	86	ug/Kg		08/27/18 02:30	08/31/18 03:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*45 - 131*	*08/27/18 02:30*	*08/31/18 03:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*120*		*60 - 140*	*08/27/18 02:30*	*08/31/18 03:17*	*1*
Toluene-d8 (Surr)	*92*		*58 - 140*	*08/27/18 02:30*	*08/31/18 03:17*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**6.4**	**J**	9.8	4.9	ug/Kg		08/30/18 14:15	09/04/18 18:18	1
Acenaphthene	ND		4.9	2.7	ug/Kg		08/30/18 14:15	09/04/18 18:18	1
Acenaphthylene	**3.2**	**J**	4.9	2.3	ug/Kg		08/30/18 14:15	09/04/18 18:18	1
Anthracene	**5.8**		4.9	2.0	ug/Kg		08/30/18 14:15	09/04/18 18:18	1
Benzo[a]anthracene	**16**		4.9	1.5	ug/Kg		08/30/18 14:15	09/04/18 18:18	1
Benzo[a]pyrene	**21**		4.9	1.9	ug/Kg		08/30/18 14:15	09/04/18 18:18	1
Benzo[b]fluoranthene	**33**	**F1**	4.9	2.1	ug/Kg		08/30/18 14:15	09/04/18 18:18	1
Benzo[g,h,i]perylene	**9.4**	**F1**	4.9	4.2	ug/Kg		08/30/18 14:15	09/04/18 18:18	1
Benzo[k]fluoranthene	**14**	**F1**	4.9	2.1	ug/Kg		08/30/18 14:15	09/04/18 18:18	1
Chrysene	**25**		4.9	1.4	ug/Kg		08/30/18 14:15	09/04/18 18:18	1
Dibenz(a,h)anthracene	ND	F1	4.9	3.4	ug/Kg		08/30/18 14:15	09/04/18 18:18	1
Fluoranthene	**24**		4.9	1.4	ug/Kg		08/30/18 14:15	09/04/18 18:18	1
Fluorene	ND		4.9	2.2	ug/Kg		08/30/18 14:15	09/04/18 18:18	1
Indeno[1,2,3-cd]pyrene	**8.7**	**F1**	4.9	4.1	ug/Kg		08/30/18 14:15	09/04/18 18:18	1
Naphthalene	**4.5**	**J**	4.9	3.4	ug/Kg		08/30/18 14:15	09/04/18 18:18	1
Phenanthrene	**19**		4.9	1.8	ug/Kg		08/30/18 14:15	09/04/18 18:18	1
Pyrene	**29**		4.9	1.7	ug/Kg		08/30/18 14:15	09/04/18 18:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*54*		*33 - 120*	*08/30/18 14:15*	*09/04/18 18:18*	*1*
Terphenyl-d14	*87*		*35 - 146*	*08/30/18 14:15*	*09/04/18 18:18*	*1*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-K11S-0.5-1

Date Collected: 08/27/18 10:35
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-10

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	59000		2000	740	ug/Kg		08/30/18 08:54	09/05/18 18:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*93*		*40 - 130*	*08/30/18 08:54*	*09/05/18 18:20*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.60	ug/Kg		08/31/18 09:53	09/05/18 20:47	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/31/18 09:53	09/05/18 20:47	1
4,4'-DDT	2.2	p	2.0	0.41	ug/Kg		08/31/18 09:53	09/05/18 20:47	1
Aldrin	ND		2.0	0.49	ug/Kg		08/31/18 09:53	09/05/18 20:47	1
alpha-BHC	ND		2.0	0.54	ug/Kg		08/31/18 09:53	09/05/18 20:47	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/31/18 09:53	09/05/18 20:47	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/31/18 09:53	09/05/18 20:47	1
cis-Chlordane	0.94	J	2.0	0.40	ug/Kg		08/31/18 09:53	09/05/18 20:47	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/31/18 09:53	09/05/18 20:47	1
Dieldrin	ND		2.0	0.58	ug/Kg		08/31/18 09:53	09/05/18 20:47	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/31/18 09:53	09/05/18 20:47	1
Endosulfan II	ND		2.0	0.48	ug/Kg		08/31/18 09:53	09/05/18 20:47	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/31/18 09:53	09/05/18 20:47	1
Endrin	ND		2.0	0.45	ug/Kg		08/31/18 09:53	09/05/18 20:47	1
Endrin aldehyde	ND		2.0	0.62	ug/Kg		08/31/18 09:53	09/05/18 20:47	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/31/18 09:53	09/05/18 20:47	1
gamma-BHC (Lindane)	ND		2.0	0.62	ug/Kg		08/31/18 09:53	09/05/18 20:47	1
Heptachlor	ND		2.0	0.45	ug/Kg		08/31/18 09:53	09/05/18 20:47	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/31/18 09:53	09/05/18 20:47	1
Methoxychlor	ND		2.0	0.67	ug/Kg		08/31/18 09:53	09/05/18 20:47	1
Toxaphene	ND		40	6.7	ug/Kg		08/31/18 09:53	09/05/18 20:47	1
trans-Chlordane	1.0	J p	2.0	0.45	ug/Kg		08/31/18 09:53	09/05/18 20:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*83*	*p*	*21 - 136*	*08/31/18 09:53*	*09/05/18 20:47*	*1*
Tetrachloro-m-xylene	*75*		*21 - 145*	*08/31/18 09:53*	*09/05/18 20:47*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/30/18 06:48	09/01/18 14:54	1
Aroclor-1221	ND		50	24	ug/Kg		08/30/18 06:48	09/01/18 14:54	1
Aroclor-1232	ND		50	23	ug/Kg		08/30/18 06:48	09/01/18 14:54	1
Aroclor-1242	ND		50	19	ug/Kg		08/30/18 06:48	09/01/18 14:54	1
Aroclor-1248	ND		50	24	ug/Kg		08/30/18 06:48	09/01/18 14:54	1
Aroclor-1254	ND		50	23	ug/Kg		08/30/18 06:48	09/01/18 14:54	1
Aroclor-1260	ND		50	22	ug/Kg		08/30/18 06:48	09/01/18 14:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*67*		*14 - 128*	*08/30/18 06:48*	*09/01/18 14:54*	*1*
DCB Decachlorobiphenyl	*60*	*p*	*10 - 132*	*08/30/18 06:48*	*09/01/18 14:54*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.2		1.5	0.24	mg/Kg		08/29/18 15:55	08/30/18 17:15	4

Client Sample ID: DG-K11S-0.5-1

Lab Sample ID: 720-88263-10

Date Collected: 08/27/18 10:35

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.7		2.9	0.25	mg/Kg		08/29/18 15:55	08/30/18 17:15	4
Barium	120		1.5	0.21	mg/Kg		08/29/18 15:55	08/30/18 17:15	4
Beryllium	ND		0.29	0.095	mg/Kg		08/29/18 15:55	08/30/18 17:15	4
Cadmium	0.32	J	0.36	0.036	mg/Kg		08/29/18 15:55	08/30/18 17:15	4
Chromium	25		1.5	0.15	mg/Kg		08/29/18 15:55	08/30/18 17:15	4
Cobalt	16		0.58	0.058	mg/Kg		08/29/18 15:55	08/30/18 17:15	4
Copper	150		4.4	2.1	mg/Kg		08/29/18 15:55	08/30/18 17:15	4
Lead	420		1.5	0.31	mg/Kg		08/29/18 15:55	08/30/18 17:15	4
Molybdenum	0.56	J	1.5	0.19	mg/Kg		08/29/18 15:55	08/30/18 17:15	4
Nickel	15		1.5	0.15	mg/Kg		08/29/18 15:55	08/30/18 17:15	4
Selenium	ND		2.9	0.44	mg/Kg		08/29/18 15:55	08/30/18 17:15	4
Silver	0.25	J	0.73	0.15	mg/Kg		08/29/18 15:55	08/30/18 17:15	4
Thallium	1.4	J	1.5	0.42	mg/Kg		08/29/18 15:55	08/30/18 17:15	4
Vanadium	120		1.5	0.20	mg/Kg		08/29/18 15:55	08/30/18 17:15	4
Zinc	160		4.4	1.9	mg/Kg		08/29/18 15:55	08/30/18 17:15	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.073		0.015	0.0023	mg/Kg		09/04/18 21:32	09/05/18 11:05	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-K11S-3.5-4

Lab Sample ID: 720-88263-11

Date Collected: 08/27/18 10:35
Matrix: Solid
Date Received: 08/27/18 14:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.3	1.0	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
Acetone	ND		43	33	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
Benzene	ND		4.3	0.57	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
Dichlorobromomethane	ND		4.3	0.63	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
Bromobenzene	ND		4.3	0.69	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
Chlorobromomethane	ND		17	0.63	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
Bromoform	ND		4.3	1.7	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
Bromomethane	ND		8.7	0.69	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
2-Butanone (MEK)	ND		43	18	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
n-Butylbenzene	ND		4.3	0.87	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
sec-Butylbenzene	ND		4.3	0.63	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
tert-Butylbenzene	ND		4.3	0.63	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
Carbon disulfide	ND		4.3	1.7	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
Carbon tetrachloride	ND		4.3	0.54	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
Chlorobenzene	ND		4.3	0.60	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
Chloroethane	ND		8.7	0.49	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
Chloroform	ND		4.3	0.57	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
Chloromethane	ND		8.7	0.69	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
2-Chlorotoluene	ND		4.3	0.57	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
4-Chlorotoluene	ND		4.3	0.59	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
Chlorodibromomethane	ND		4.3	0.62	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
1,2-Dichlorobenzene	ND		4.3	0.59	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
1,3-Dichlorobenzene	ND		4.3	0.63	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
1,4-Dichlorobenzene	ND		4.3	0.62	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
1,3-Dichloropropane	ND		4.3	0.63	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
1,1-Dichloropropene	ND		4.3	0.60	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
1,2-Dibromo-3-Chloropropane	ND		8.7	1.5	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
Ethylene Dibromide	ND		4.3	1.2	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
Dibromomethane	ND		8.7	0.75	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
Dichlorodifluoromethane	ND		8.7	0.69	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
1,1-Dichloroethane	ND		4.3	0.59	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
1,2-Dichloroethane	ND		4.3	0.66	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
1,1-Dichloroethene	ND	*	4.3	0.54	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
cis-1,2-Dichloroethene	ND		4.3	0.59	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
trans-1,2-Dichloroethene	ND		4.3	0.65	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
1,2-Dichloropropane	ND		4.3	0.55	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
cis-1,3-Dichloropropene	ND		4.3	0.60	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
trans-1,3-Dichloropropene	ND		4.3	0.58	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
Ethylbenzene	ND		4.3	0.65	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
Hexachlorobutadiene	ND		4.3	0.78	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
2-Hexanone	ND		43	8.7	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
Isopropylbenzene	ND		4.3	0.59	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
4-Isopropyltoluene	ND		4.3	2.2	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
Methylene Chloride	ND		8.7	4.9	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
4-Methyl-2-pentanone (MIBK)	ND		43	8.7	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
Naphthalene	ND		8.7	1.3	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
N-Propylbenzene	ND		4.3	0.57	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
Styrene	ND		4.3	0.55	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
1,1,1,2-Tetrachloroethane	ND		4.3	0.66	ug/Kg		08/27/18 02:30	08/31/18 03:45	1

Client Sample ID: DG-K11S-3.5-4

Lab Sample ID: 720-88263-11

Date Collected: 08/27/18 10:35

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.3	0.65	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
Tetrachloroethene	ND		4.3	0.58	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
Toluene	ND		4.3	0.62	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
1,2,3-Trichlorobenzene	ND		4.3	0.64	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
1,2,4-Trichlorobenzene	ND		4.3	0.62	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
1,1,1-Trichloroethane	ND		4.3	0.53	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
1,1,2-Trichloroethane	ND		4.3	0.61	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
Trichloroethene	ND		4.3	0.55	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
Trichlorofluoromethane	ND		4.3	0.49	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
1,2,3-Trichloropropane	ND		4.3	0.67	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.3	1.8	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
1,2,4-Trimethylbenzene	ND		4.3	1.4	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
1,3,5-Trimethylbenzene	ND		4.3	0.57	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
Vinyl acetate	ND		17	4.3	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
Vinyl chloride	ND		4.3	0.63	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
Xylenes, Total	ND		4.3	1.1	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
2,2-Dichloropropane	ND		4.3	1.7	ug/Kg		08/27/18 02:30	08/31/18 03:45	1
Gasoline Range Organics (GRO) -C4-C12	ND		220	87	ug/Kg		08/27/18 02:30	08/31/18 03:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*87*		*45 - 131*	*08/27/18 02:30*	*08/31/18 03:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*60 - 140*	*08/27/18 02:30*	*08/31/18 03:45*	*1*
Toluene-d8 (Surr)	*92*		*58 - 140*	*08/27/18 02:30*	*08/31/18 03:45*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**110**		9.5	4.8	ug/Kg		08/30/18 14:15	09/04/18 19:29	1
Acenaphthene	**3.9**	**J**	4.8	2.7	ug/Kg		08/30/18 14:15	09/04/18 19:29	1
Acenaphthylene	**2.7**	**J**	4.8	2.3	ug/Kg		08/30/18 14:15	09/04/18 19:29	1
Anthracene	**12**		4.8	1.9	ug/Kg		08/30/18 14:15	09/04/18 19:29	1
Benzo[a]anthracene	**15**		4.8	1.4	ug/Kg		08/30/18 14:15	09/04/18 19:29	1
Benzo[a]pyrene	**14**		4.8	1.8	ug/Kg		08/30/18 14:15	09/04/18 19:29	1
Benzo[b]fluoranthene	**23**		4.8	2.0	ug/Kg		08/30/18 14:15	09/04/18 19:29	1
Benzo[g,h,i]perylene	**6.6**		4.8	4.1	ug/Kg		08/30/18 14:15	09/04/18 19:29	1
Benzo[k]fluoranthene	**6.3**		4.8	2.0	ug/Kg		08/30/18 14:15	09/04/18 19:29	1
Chrysene	**32**		4.8	1.3	ug/Kg		08/30/18 14:15	09/04/18 19:29	1
Dibenz(a,h)anthracene	**3.7**	**J**	4.8	3.3	ug/Kg		08/30/18 14:15	09/04/18 19:29	1
Fluoranthene	**15**		4.8	1.3	ug/Kg		08/30/18 14:15	09/04/18 19:29	1
Fluorene	**30**		4.8	2.1	ug/Kg		08/30/18 14:15	09/04/18 19:29	1
Indeno[1,2,3-cd]pyrene	**4.3**	**J**	4.8	4.0	ug/Kg		08/30/18 14:15	09/04/18 19:29	1
Naphthalene	**46**		4.8	3.3	ug/Kg		08/30/18 14:15	09/04/18 19:29	1
Phenanthrene	**130**		4.8	1.7	ug/Kg		08/30/18 14:15	09/04/18 19:29	1
Pyrene	**32**		4.8	1.6	ug/Kg		08/30/18 14:15	09/04/18 19:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*52*		*33 - 120*	*08/30/18 14:15*	*09/04/18 19:29*	*1*
Terphenyl-d14	*82*		*35 - 146*	*08/30/18 14:15*	*09/04/18 19:29*	*1*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-K11S-3.5-4

Date Collected: 08/27/18 10:35
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-11

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	13000		1900	710	ug/Kg		08/30/18 08:54	09/05/18 18:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*113*		*40 - 130*	*08/30/18 08:54*	*09/05/18 18:44*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/31/18 09:53	09/05/18 21:05	1
4,4'-DDE	ND		1.9	0.41	ug/Kg		08/31/18 09:53	09/05/18 21:05	1
4,4'-DDT	ND		1.9	0.40	ug/Kg		08/31/18 09:53	09/05/18 21:05	1
Aldrin	ND		1.9	0.48	ug/Kg		08/31/18 09:53	09/05/18 21:05	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/31/18 09:53	09/05/18 21:05	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/31/18 09:53	09/05/18 21:05	1
Chlordane (technical)	ND		39	3.1	ug/Kg		08/31/18 09:53	09/05/18 21:05	1
cis-Chlordane	ND		1.9	0.39	ug/Kg		08/31/18 09:53	09/05/18 21:05	1
delta-BHC	ND		1.9	0.43	ug/Kg		08/31/18 09:53	09/05/18 21:05	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/31/18 09:53	09/05/18 21:05	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/31/18 09:53	09/05/18 21:05	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/31/18 09:53	09/05/18 21:05	1
Endosulfan sulfate	ND		1.9	0.37	ug/Kg		08/31/18 09:53	09/05/18 21:05	1
Endrin	ND		1.9	0.45	ug/Kg		08/31/18 09:53	09/05/18 21:05	1
Endrin aldehyde	ND		1.9	0.61	ug/Kg		08/31/18 09:53	09/05/18 21:05	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/31/18 09:53	09/05/18 21:05	1
gamma-BHC (Lindane)	ND		1.9	0.61	ug/Kg		08/31/18 09:53	09/05/18 21:05	1
Heptachlor	ND		1.9	0.45	ug/Kg		08/31/18 09:53	09/05/18 21:05	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/31/18 09:53	09/05/18 21:05	1
Methoxychlor	ND		1.9	0.66	ug/Kg		08/31/18 09:53	09/05/18 21:05	1
Toxaphene	ND		39	6.6	ug/Kg		08/31/18 09:53	09/05/18 21:05	1
trans-Chlordane	ND		1.9	0.45	ug/Kg		08/31/18 09:53	09/05/18 21:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*101*		*21 - 136*	*08/31/18 09:53*	*09/05/18 21:05*	*1*
Tetrachloro-m-xylene	*94*		*21 - 145*	*08/31/18 09:53*	*09/05/18 21:05*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		52	23	ug/Kg		08/30/18 06:48	09/01/18 15:09	1
Aroclor-1221	ND		52	25	ug/Kg		08/30/18 06:48	09/01/18 15:09	1
Aroclor-1232	ND		52	24	ug/Kg		08/30/18 06:48	09/01/18 15:09	1
Aroclor-1242	ND		52	20	ug/Kg		08/30/18 06:48	09/01/18 15:09	1
Aroclor-1248	ND		52	25	ug/Kg		08/30/18 06:48	09/01/18 15:09	1
Aroclor-1254	ND		52	24	ug/Kg		08/30/18 06:48	09/01/18 15:09	1
Aroclor-1260	ND		52	23	ug/Kg		08/30/18 06:48	09/01/18 15:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*14 - 128*	*08/30/18 06:48*	*09/01/18 15:09*	*1*
DCB Decachlorobiphenyl	*63*		*10 - 132*	*08/30/18 06:48*	*09/01/18 15:09*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.1		1.9	0.32	mg/Kg		08/29/18 15:55	08/30/18 17:20	4

Client Sample ID: DG-K11S-3.5-4

Lab Sample ID: 720-88263-11

Date Collected: 08/27/18 10:35

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.1	J	3.8	0.32	mg/Kg		08/29/18 15:55	08/30/18 17:20	4
Barium	110		1.9	0.27	mg/Kg		08/29/18 15:55	08/30/18 17:20	4
Beryllium	ND	L	0.38	0.12	mg/Kg		08/29/18 15:55	08/30/18 17:20	4
Cadmium	ND		0.48	0.047	mg/Kg		08/29/18 15:55	08/30/18 17:20	4
Chromium	110		1.9	0.20	mg/Kg		08/29/18 15:55	08/30/18 17:20	4
Cobalt	34		0.76	0.076	mg/Kg		08/29/18 15:55	08/30/18 17:20	4
Copper	46		5.7	2.7	mg/Kg		08/29/18 15:55	08/30/18 17:20	4
Lead	7.0		1.9	0.40	mg/Kg		08/29/18 15:55	08/30/18 17:20	4
Molybdenum	ND		1.9	0.24	mg/Kg		08/29/18 15:55	08/30/18 17:20	4
Nickel	52		1.9	0.19	mg/Kg		08/29/18 15:55	08/30/18 17:20	4
Selenium	ND		3.8	0.57	mg/Kg		08/29/18 15:55	08/30/18 17:20	4
Silver	0.70	J	0.95	0.19	mg/Kg		08/29/18 15:55	08/30/18 17:20	4
Thallium	2.8		1.9	0.55	mg/Kg		08/29/18 15:55	08/30/18 17:20	4
Vanadium	190		1.9	0.26	mg/Kg		08/29/18 15:55	08/30/18 17:20	4
Zinc	77		5.7	2.4	mg/Kg		08/29/18 15:55	08/30/18 17:20	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.16		0.015	0.0021	mg/Kg		09/04/18 21:32	09/05/18 11:08	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-K11S-9.5-10

Lab Sample ID: 720-88263-12

Date Collected: 08/27/18 10:35
Matrix: Solid
Date Received: 08/27/18 14:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.2	1.0	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
Acetone	**44**		42	32	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
Benzene	ND		4.2	0.55	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
Dichlorobromomethane	ND		4.2	0.61	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
Bromobenzene	ND	*	4.2	0.66	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
Chlorobromomethane	ND		17	0.61	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
Bromoform	ND		4.2	1.7	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
Bromomethane	ND		8.4	0.66	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
2-Butanone (MEK)	ND		42	18	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
n-Butylbenzene	ND	*	4.2	0.84	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
sec-Butylbenzene	ND	*	4.2	0.61	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
tert-Butylbenzene	ND	*	4.2	0.61	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
Carbon disulfide	ND		4.2	1.7	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
Carbon tetrachloride	ND		4.2	0.52	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
Chlorobenzene	ND		4.2	0.58	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
Chloroethane	ND		8.4	0.47	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
Chloroform	ND		4.2	0.56	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
Chloromethane	ND		8.4	0.66	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
2-Chlorotoluene	ND	*	4.2	0.55	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
4-Chlorotoluene	ND	*	4.2	0.57	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
Chlorodibromomethane	ND		4.2	0.60	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
1,2-Dichlorobenzene	ND	*	4.2	0.57	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
1,3-Dichlorobenzene	ND	*	4.2	0.61	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
1,4-Dichlorobenzene	ND	*	4.2	0.60	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
1,3-Dichloropropane	ND		4.2	0.61	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
1,1-Dichloropropene	ND		4.2	0.58	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
1,2-Dibromo-3-Chloropropane	ND	*	8.4	1.4	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
Ethylene Dibromide	ND		4.2	1.2	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
Dibromomethane	ND		8.4	0.72	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
Dichlorodifluoromethane	ND		8.4	0.66	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
1,1-Dichloroethane	ND		4.2	0.57	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
1,2-Dichloroethane	ND		4.2	0.64	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
1,1-Dichloroethene	ND	*	4.2	0.52	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
cis-1,2-Dichloroethene	ND		4.2	0.57	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
trans-1,2-Dichloroethene	ND		4.2	0.63	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
1,2-Dichloropropane	ND		4.2	0.53	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
cis-1,3-Dichloropropene	ND		4.2	0.58	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
trans-1,3-Dichloropropene	ND		4.2	0.56	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
Ethylbenzene	ND		4.2	0.63	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
Hexachlorobutadiene	ND	*	4.2	0.76	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
2-Hexanone	ND		42	8.4	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
Isopropylbenzene	ND		4.2	0.57	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
4-Isopropyltoluene	ND	*	4.2	2.1	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
Methylene Chloride	ND		8.4	4.7	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
4-Methyl-2-pentanone (MIBK)	ND		42	8.4	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
Naphthalene	ND	*	8.4	1.3	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
N-Propylbenzene	ND	*	4.2	0.56	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
Styrene	ND		4.2	0.53	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
1,1,1,2-Tetrachloroethane	ND		4.2	0.64	ug/Kg		08/27/18 02:30	08/31/18 16:54	1

Client Sample ID: DG-K11S-9.5-10

Lab Sample ID: 720-88263-12

Date Collected: 08/27/18 10:35

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	4.2	0.63	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
Tetrachloroethene	ND		4.2	0.56	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
Toluene	ND		4.2	0.60	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
1,2,3-Trichlorobenzene	ND	*	4.2	0.62	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
1,2,4-Trichlorobenzene	ND	*	4.2	0.60	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
1,1,1-Trichloroethane	ND		4.2	0.51	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
1,1,2-Trichloroethane	ND		4.2	0.59	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
Trichloroethene	ND		4.2	0.53	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
Trichlorofluoromethane	ND		4.2	0.47	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
1,2,3-Trichloropropane	ND	*	4.2	0.65	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.2	1.8	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
1,2,4-Trimethylbenzene	ND	*	4.2	1.4	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
1,3,5-Trimethylbenzene	ND	*	4.2	0.55	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
Vinyl acetate	ND		17	4.2	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
Vinyl chloride	ND		4.2	0.61	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
Xylenes, Total	ND		4.2	1.0	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
2,2-Dichloropropane	ND		4.2	1.7	ug/Kg		08/27/18 02:30	08/31/18 16:54	1
Gasoline Range Organics (GRO) -C4-C12	ND		210	84	ug/Kg		08/27/18 02:30	08/31/18 16:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*82*		*45 - 131*	*08/27/18 02:30*	*08/31/18 16:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*60 - 140*	*08/27/18 02:30*	*08/31/18 16:54*	*1*
Toluene-d8 (Surr)	*88*		*58 - 140*	*08/27/18 02:30*	*08/31/18 16:54*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**410**		9.8	4.9	ug/Kg		08/30/18 14:15	09/06/18 10:49	1
Acenaphthene	**12**		4.9	2.7	ug/Kg		08/30/18 14:15	09/06/18 10:49	1
Acenaphthylene	**2.3**	**J**	4.9	2.3	ug/Kg		08/30/18 14:15	09/06/18 10:49	1
Anthracene	**8.8**		4.9	2.0	ug/Kg		08/30/18 14:15	09/06/18 10:49	1
Benzo[a]anthracene	**22**		4.9	1.5	ug/Kg		08/30/18 14:15	09/06/18 10:49	1
Benzo[a]pyrene	**21**		4.9	1.9	ug/Kg		08/30/18 14:15	09/06/18 10:49	1
Benzo[b]fluoranthene	**33**		4.9	2.1	ug/Kg		08/30/18 14:15	09/06/18 10:49	1
Benzo[g,h,i]perylene	**9.3**		4.9	4.2	ug/Kg		08/30/18 14:15	09/06/18 10:49	1
Benzo[k]fluoranthene	**5.6**		4.9	2.1	ug/Kg		08/30/18 14:15	09/06/18 10:49	1
Chrysene	**61**		4.9	1.4	ug/Kg		08/30/18 14:15	09/06/18 10:49	1
Dibenz(a,h)anthracene	**6.6**		4.9	3.4	ug/Kg		08/30/18 14:15	09/06/18 10:49	1
Fluoranthene	**24**		4.9	1.4	ug/Kg		08/30/18 14:15	09/06/18 10:49	1
Fluorene	**120**		4.9	2.2	ug/Kg		08/30/18 14:15	09/06/18 10:49	1
Indeno[1,2,3-cd]pyrene	**4.8**	**J**	4.9	4.1	ug/Kg		08/30/18 14:15	09/06/18 10:49	1
Naphthalene	**140**		4.9	3.4	ug/Kg		08/30/18 14:15	09/06/18 10:49	1
Phenanthrene	**300**		4.9	1.8	ug/Kg		08/30/18 14:15	09/06/18 10:49	1
Pyrene	**62**		4.9	1.7	ug/Kg		08/30/18 14:15	09/06/18 10:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*65*		*33 - 120*	*08/30/18 14:15*	*09/06/18 10:49*	*1*
Terphenyl-d14	*92*		*35 - 146*	*08/30/18 14:15*	*09/06/18 10:49*	*1*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-K11S-9.5-10

Date Collected: 08/27/18 10:35
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-12

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	23000		2000	730	ug/Kg		08/30/18 08:54	09/05/18 04:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*73*		*40 - 130*	*08/30/18 08:54*	*09/05/18 04:16*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/31/18 09:53	09/05/18 21:22	1
4,4'-DDE	ND		1.9	0.41	ug/Kg		08/31/18 09:53	09/05/18 21:22	1
4,4'-DDT	ND		1.9	0.40	ug/Kg		08/31/18 09:53	09/05/18 21:22	1
Aldrin	ND		1.9	0.48	ug/Kg		08/31/18 09:53	09/05/18 21:22	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/31/18 09:53	09/05/18 21:22	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/31/18 09:53	09/05/18 21:22	1
Chlordane (technical)	ND		39	3.1	ug/Kg		08/31/18 09:53	09/05/18 21:22	1
cis-Chlordane	ND		1.9	0.39	ug/Kg		08/31/18 09:53	09/05/18 21:22	1
delta-BHC	ND		1.9	0.43	ug/Kg		08/31/18 09:53	09/05/18 21:22	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/31/18 09:53	09/05/18 21:22	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/31/18 09:53	09/05/18 21:22	1
Endosulfan II	ND		1.9	0.48	ug/Kg		08/31/18 09:53	09/05/18 21:22	1
Endosulfan sulfate	ND		1.9	0.37	ug/Kg		08/31/18 09:53	09/05/18 21:22	1
Endrin	ND		1.9	0.45	ug/Kg		08/31/18 09:53	09/05/18 21:22	1
Endrin aldehyde	ND		1.9	0.61	ug/Kg		08/31/18 09:53	09/05/18 21:22	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/31/18 09:53	09/05/18 21:22	1
gamma-BHC (Lindane)	ND		1.9	0.61	ug/Kg		08/31/18 09:53	09/05/18 21:22	1
Heptachlor	ND		1.9	0.45	ug/Kg		08/31/18 09:53	09/05/18 21:22	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/31/18 09:53	09/05/18 21:22	1
Methoxychlor	ND		1.9	0.66	ug/Kg		08/31/18 09:53	09/05/18 21:22	1
Toxaphene	ND		39	6.6	ug/Kg		08/31/18 09:53	09/05/18 21:22	1
trans-Chlordane	ND		1.9	0.45	ug/Kg		08/31/18 09:53	09/05/18 21:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*92*		*21 - 136*	*08/31/18 09:53*	*09/05/18 21:22*	*1*
Tetrachloro-m-xylene	*70*		*21 - 145*	*08/31/18 09:53*	*09/05/18 21:22*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		48	21	ug/Kg		08/30/18 06:48	09/01/18 15:24	1
Aroclor-1221	ND		48	23	ug/Kg		08/30/18 06:48	09/01/18 15:24	1
Aroclor-1232	ND		48	22	ug/Kg		08/30/18 06:48	09/01/18 15:24	1
Aroclor-1242	ND		48	18	ug/Kg		08/30/18 06:48	09/01/18 15:24	1
Aroclor-1248	ND		48	23	ug/Kg		08/30/18 06:48	09/01/18 15:24	1
Aroclor-1254	ND		48	22	ug/Kg		08/30/18 06:48	09/01/18 15:24	1
Aroclor-1260	ND		48	21	ug/Kg		08/30/18 06:48	09/01/18 15:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*69*		*14 - 128*	*08/30/18 06:48*	*09/01/18 15:24*	*1*
DCB Decachlorobiphenyl	*88*		*10 - 132*	*08/30/18 06:48*	*09/01/18 15:24*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.2	J	1.4	0.22	mg/Kg		08/29/18 15:55	08/30/18 17:25	4

Client Sample ID: DG-K11S-9.5-10

Lab Sample ID: 720-88263-12

Date Collected: 08/27/18 10:35

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	11		2.7	0.23	mg/Kg		08/29/18 15:55	08/30/18 17:25	4
Barium	130		1.4	0.19	mg/Kg		08/29/18 15:55	08/30/18 17:25	4
Beryllium	0.49		0.27	0.088	mg/Kg		08/29/18 15:55	08/30/18 17:25	4
Cadmium	0.057	J	0.34	0.034	mg/Kg		08/29/18 15:55	08/30/18 17:25	4
Chromium	48		1.4	0.14	mg/Kg		08/29/18 15:55	08/30/18 17:25	4
Cobalt	14		0.54	0.054	mg/Kg		08/29/18 15:55	08/30/18 17:25	4
Copper	41		4.1	1.9	mg/Kg		08/29/18 15:55	08/30/18 17:25	4
Lead	15		1.4	0.28	mg/Kg		08/29/18 15:55	08/30/18 17:25	4
Molybdenum	0.29	J	1.4	0.17	mg/Kg		08/29/18 15:55	08/30/18 17:25	4
Nickel	70		1.4	0.14	mg/Kg		08/29/18 15:55	08/30/18 17:25	4
Selenium	ND		2.7	0.41	mg/Kg		08/29/18 15:55	08/30/18 17:25	4
Silver	0.27	J	0.68	0.14	mg/Kg		08/29/18 15:55	08/30/18 17:25	4
Thallium	0.92	J	1.4	0.39	mg/Kg		08/29/18 15:55	08/30/18 17:25	4
Vanadium	52		1.4	0.18	mg/Kg		08/29/18 15:55	08/30/18 17:25	4
Zinc	78		4.1	1.7	mg/Kg		08/29/18 15:55	08/30/18 17:25	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.24		0.014	0.0021	mg/Kg		09/04/18 21:32	09/05/18 11:10	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-I11S-0.5-1

Date Collected: 08/27/18 11:10
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-13

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.3	1.0	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
Acetone	ND		43	33	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
Benzene	ND		4.3	0.56	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
Dichlorobromomethane	ND		4.3	0.62	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
Bromobenzene	ND	*	4.3	0.68	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
Chlorobromomethane	ND		17	0.62	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
Bromoform	ND		4.3	1.7	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
Bromomethane	ND		8.6	0.68	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
2-Butanone (MEK)	ND		43	18	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
n-Butylbenzene	ND	*	4.3	0.86	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
sec-Butylbenzene	ND	*	4.3	0.62	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
tert-Butylbenzene	ND	*	4.3	0.63	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
Carbon disulfide	ND		4.3	1.7	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
Carbon tetrachloride	ND		4.3	0.53	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
Chlorobenzene	ND		4.3	0.59	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
Chloroethane	ND		8.6	0.48	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
Chloroform	ND		4.3	0.57	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
Chloromethane	ND		8.6	0.68	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
2-Chlorotoluene	ND	*	4.3	0.56	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
4-Chlorotoluene	ND	*	4.3	0.58	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
Chlorodibromomethane	ND		4.3	0.61	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
1,2-Dichlorobenzene	ND	*	4.3	0.58	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
1,3-Dichlorobenzene	ND	*	4.3	0.62	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
1,4-Dichlorobenzene	ND	*	4.3	0.61	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
1,3-Dichloropropane	ND		4.3	0.63	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
1,1-Dichloropropene	ND		4.3	0.59	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
1,2-Dibromo-3-Chloropropane	ND	*	8.6	1.5	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
Ethylene Dibromide	ND		4.3	1.2	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
Dibromomethane	ND		8.6	0.74	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
Dichlorodifluoromethane	ND		8.6	0.68	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
1,1-Dichloroethane	ND		4.3	0.58	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
1,2-Dichloroethane	ND		4.3	0.65	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
1,1-Dichloroethene	ND	*	4.3	0.53	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
cis-1,2-Dichloroethene	ND		4.3	0.58	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
trans-1,2-Dichloroethene	ND		4.3	0.64	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
1,2-Dichloropropane	ND		4.3	0.54	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
cis-1,3-Dichloropropene	ND		4.3	0.59	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
trans-1,3-Dichloropropene	ND		4.3	0.58	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
Ethylbenzene	ND		4.3	0.64	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
Hexachlorobutadiene	ND	*	4.3	0.77	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
2-Hexanone	ND		43	8.6	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
Isopropylbenzene	ND		4.3	0.58	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
4-Isopropyltoluene	ND	*	4.3	2.1	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
Methylene Chloride	ND		8.6	4.8	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
4-Methyl-2-pentanone (MIBK)	ND		43	8.6	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
Naphthalene	ND	*	8.6	1.3	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
N-Propylbenzene	ND	*	4.3	0.57	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
Styrene	ND		4.3	0.54	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
1,1,1,2-Tetrachloroethane	ND		4.3	0.65	ug/Kg		08/27/18 02:30	08/31/18 17:28	1

Client Sample ID: DG-I11S-0.5-1

Lab Sample ID: 720-88263-13

Date Collected: 08/27/18 11:10

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	4.3	0.64	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
Tetrachloroethene	ND		4.3	0.58	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
Toluene	ND		4.3	0.61	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
1,2,3-Trichlorobenzene	ND	*	4.3	0.64	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
1,2,4-Trichlorobenzene	ND	*	4.3	0.61	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
1,1,1-Trichloroethane	ND		4.3	0.52	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
1,1,2-Trichloroethane	ND		4.3	0.60	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
Trichloroethene	ND		4.3	0.54	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
Trichlorofluoromethane	ND		4.3	0.48	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
1,2,3-Trichloropropane	ND	*	4.3	0.66	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.3	1.8	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
1,2,4-Trimethylbenzene	ND	*	4.3	1.4	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
1,3,5-Trimethylbenzene	ND	*	4.3	0.56	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
Vinyl acetate	ND		17	4.3	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
Vinyl chloride	ND		4.3	0.63	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
Xylenes, Total	ND		4.3	1.0	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
2,2-Dichloropropane	ND		4.3	1.7	ug/Kg		08/27/18 02:30	08/31/18 17:28	1
Gasoline Range Organics (GRO) -C4-C12	ND		210	86	ug/Kg		08/27/18 02:30	08/31/18 17:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*82*		*45 - 131*	*08/27/18 02:30*	*08/31/18 17:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*122*		*60 - 140*	*08/27/18 02:30*	*08/31/18 17:28*	*1*
Toluene-d8 (Surr)	*84*		*58 - 140*	*08/27/18 02:30*	*08/31/18 17:28*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		19	9.6	ug/Kg		08/30/18 14:15	09/06/18 16:36	2
Acenaphthene	ND		9.6	5.4	ug/Kg		08/30/18 14:15	09/06/18 16:36	2
Acenaphthylene	**6.0**	**J**	9.6	4.6	ug/Kg		08/30/18 14:15	09/06/18 16:36	2
Anthracene	**24**		9.6	3.8	ug/Kg		08/30/18 14:15	09/06/18 16:36	2
Benzo[a]anthracene	**17**		9.6	2.9	ug/Kg		08/30/18 14:15	09/06/18 16:36	2
Benzo[a]pyrene	**24**		9.6	3.7	ug/Kg		08/30/18 14:15	09/06/18 16:36	2
Benzo[b]fluoranthene	**39**		9.6	4.0	ug/Kg		08/30/18 14:15	09/06/18 16:36	2
Benzo[g,h,i]perylene	**25**		9.6	8.3	ug/Kg		08/30/18 14:15	09/06/18 16:36	2
Benzo[k]fluoranthene	**16**		9.6	4.0	ug/Kg		08/30/18 14:15	09/06/18 16:36	2
Chrysene	**33**		9.6	2.7	ug/Kg		08/30/18 14:15	09/06/18 16:36	2
Dibenz(a,h)anthracene	**8.5**	**J**	9.6	6.7	ug/Kg		08/30/18 14:15	09/06/18 16:36	2
Fluoranthene	**26**		9.6	2.7	ug/Kg		08/30/18 14:15	09/06/18 16:36	2
Fluorene	ND		9.6	4.2	ug/Kg		08/30/18 14:15	09/06/18 16:36	2
Indeno[1,2,3-cd]pyrene	**18**		9.6	8.1	ug/Kg		08/30/18 14:15	09/06/18 16:36	2
Naphthalene	**7.0**	**J**	9.6	6.7	ug/Kg		08/30/18 14:15	09/06/18 16:36	2
Phenanthrene	**20**		9.6	3.5	ug/Kg		08/30/18 14:15	09/06/18 16:36	2
Pyrene	**42**		9.6	3.3	ug/Kg		08/30/18 14:15	09/06/18 16:36	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*33 - 120*	*08/30/18 14:15*	*09/06/18 16:36*	*2*
Terphenyl-d14	*113*		*35 - 146*	*08/30/18 14:15*	*09/06/18 16:36*	*2*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-I11S-0.5-1

Date Collected: 08/27/18 11:10
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-13

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	59000		5900	2200	ug/Kg		08/30/18 08:54	09/05/18 15:53	3

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*97*		*40 - 130*	*08/30/18 08:54*	*09/05/18 15:53*	*3*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.60	ug/Kg		08/31/18 09:53	09/05/18 21:40	1
4,4'-DDE	ND		2.0	0.41	ug/Kg		08/31/18 09:53	09/05/18 21:40	1
4,4'-DDT	ND		2.0	0.40	ug/Kg		08/31/18 09:53	09/05/18 21:40	1
Aldrin	ND		2.0	0.49	ug/Kg		08/31/18 09:53	09/05/18 21:40	1
alpha-BHC	ND		2.0	0.54	ug/Kg		08/31/18 09:53	09/05/18 21:40	1
beta-BHC	ND		2.0	0.35	ug/Kg		08/31/18 09:53	09/05/18 21:40	1
Chlordane (technical)	16	J	39	3.1	ug/Kg		08/31/18 09:53	09/05/18 21:40	1
cis-Chlordane	1.8	J p	2.0	0.39	ug/Kg		08/31/18 09:53	09/05/18 21:40	1
delta-BHC	ND		2.0	0.43	ug/Kg		08/31/18 09:53	09/05/18 21:40	1
Dieldrin	ND		2.0	0.58	ug/Kg		08/31/18 09:53	09/05/18 21:40	1
Endosulfan I	ND		2.0	0.31	ug/Kg		08/31/18 09:53	09/05/18 21:40	1
Endosulfan II	ND		2.0	0.48	ug/Kg		08/31/18 09:53	09/05/18 21:40	1
Endosulfan sulfate	ND		2.0	0.37	ug/Kg		08/31/18 09:53	09/05/18 21:40	1
Endrin	ND		2.0	0.45	ug/Kg		08/31/18 09:53	09/05/18 21:40	1
Endrin aldehyde	ND		2.0	0.62	ug/Kg		08/31/18 09:53	09/05/18 21:40	1
Endrin ketone	ND		2.0	0.32	ug/Kg		08/31/18 09:53	09/05/18 21:40	1
gamma-BHC (Lindane)	ND		2.0	0.62	ug/Kg		08/31/18 09:53	09/05/18 21:40	1
Heptachlor	ND		2.0	0.45	ug/Kg		08/31/18 09:53	09/05/18 21:40	1
Heptachlor epoxide	ND		2.0	0.34	ug/Kg		08/31/18 09:53	09/05/18 21:40	1
Methoxychlor	ND		2.0	0.67	ug/Kg		08/31/18 09:53	09/05/18 21:40	1
Toxaphene	ND		39	6.7	ug/Kg		08/31/18 09:53	09/05/18 21:40	1
trans-Chlordane	1.8	J	2.0	0.45	ug/Kg		08/31/18 09:53	09/05/18 21:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*108*		*21 - 136*	*08/31/18 09:53*	*09/05/18 21:40*	*1*
Tetrachloro-m-xylene	*88*		*21 - 145*	*08/31/18 09:53*	*09/05/18 21:40*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/30/18 06:48	09/04/18 10:57	1
Aroclor-1221	ND		50	24	ug/Kg		08/30/18 06:48	09/04/18 10:57	1
Aroclor-1232	ND		50	23	ug/Kg		08/30/18 06:48	09/04/18 10:57	1
Aroclor-1242	ND		50	19	ug/Kg		08/30/18 06:48	09/04/18 10:57	1
Aroclor-1248	ND		50	24	ug/Kg		08/30/18 06:48	09/04/18 10:57	1
Aroclor-1254	ND		50	23	ug/Kg		08/30/18 06:48	09/04/18 10:57	1
Aroclor-1260	42	J p	50	22	ug/Kg		08/30/18 06:48	09/04/18 10:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*72*		*14 - 128*	*08/30/18 06:48*	*09/04/18 10:57*	*1*
DCB Decachlorobiphenyl	*75*		*10 - 132*	*08/30/18 06:48*	*09/04/18 10:57*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	4.5		1.5	0.26	mg/Kg		08/29/18 15:55	08/30/18 17:29	4

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-I11S-0.5-1

Date Collected: 08/27/18 11:10
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-13

Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.2		3.1	0.26	mg/Kg		08/29/18 15:55	08/30/18 17:29	4
Barium	71		1.5	0.22	mg/Kg		08/29/18 15:55	08/30/18 17:29	4
Beryllium	ND		0.31	0.10	mg/Kg		08/29/18 15:55	08/30/18 17:29	4
Cadmium	0.45		0.38	0.038	mg/Kg		08/29/18 15:55	08/30/18 17:29	4
Chromium	35		1.5	0.16	mg/Kg		08/29/18 15:55	08/30/18 17:29	4
Cobalt	13		0.62	0.062	mg/Kg		08/29/18 15:55	08/30/18 17:29	4
Copper	120		4.6	2.2	mg/Kg		08/29/18 15:55	08/30/18 17:29	4
Lead	160		1.5	0.32	mg/Kg		08/29/18 15:55	08/30/18 17:29	4
Molybdenum	0.34	J	1.5	0.20	mg/Kg		08/29/18 15:55	08/30/18 17:29	4
Nickel	18		1.5	0.16	mg/Kg		08/29/18 15:55	08/30/18 17:29	4
Selenium	ND		3.1	0.46	mg/Kg		08/29/18 15:55	08/30/18 17:29	4
Silver	0.29	J	0.77	0.16	mg/Kg		08/29/18 15:55	08/30/18 17:29	4
Thallium	0.61	J	1.5	0.45	mg/Kg		08/29/18 15:55	08/30/18 17:29	4
Vanadium	90		1.5	0.21	mg/Kg		08/29/18 15:55	08/30/18 17:29	4
Zinc	140		4.6	2.0	mg/Kg		08/29/18 15:55	08/30/18 17:29	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.094		0.016	0.0024	mg/Kg		09/04/18 21:32	09/05/18 11:12	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-I11S-3.5-4

Date Collected: 08/27/18 11:10
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-14

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND	*	4.4	1.1	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
Acetone	ND	*	44	33	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
Benzene	ND	*	4.4	0.57	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
Dichlorobromomethane	ND	*	4.4	0.63	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
Bromobenzene	ND	*	4.4	0.69	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
Chlorobromomethane	ND	*	18	0.63	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
Bromoform	ND	*	4.4	1.8	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
Bromomethane	ND	*	8.8	0.69	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
2-Butanone (MEK)	ND	*	44	18	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
n-Butylbenzene	ND	*	4.4	0.88	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
sec-Butylbenzene	ND	*	4.4	0.63	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
tert-Butylbenzene	ND	*	4.4	0.64	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
Carbon disulfide	ND	*	4.4	1.8	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
Carbon tetrachloride	ND	*	4.4	0.55	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
Chlorobenzene	ND	*	4.4	0.61	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
Chloroethane	ND	*	8.8	0.49	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
Chloroform	ND	*	4.4	0.58	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
Chloromethane	ND	*	8.8	0.69	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
2-Chlorotoluene	ND	*	4.4	0.57	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
4-Chlorotoluene	ND	*	4.4	0.60	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
Chlorodibromomethane	ND	*	4.4	0.62	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
1,2-Dichlorobenzene	ND	*	4.4	0.60	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
1,3-Dichlorobenzene	ND	*	4.4	0.63	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
1,4-Dichlorobenzene	ND	*	4.4	0.62	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
1,3-Dichloropropane	ND	*	4.4	0.64	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
1,1-Dichloropropene	ND	*	4.4	0.61	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
1,2-Dibromo-3-Chloropropane	ND	*	8.8	1.5	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
Ethylene Dibromide	ND	*	4.4	1.3	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
Dibromomethane	ND	*	8.8	0.76	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
Dichlorodifluoromethane	ND	*	8.8	0.69	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
1,1-Dichloroethane	ND	*	4.4	0.60	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
1,2-Dichloroethane	ND	*	4.4	0.67	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
1,1-Dichloroethene	ND	*	4.4	0.55	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
cis-1,2-Dichloroethene	ND	*	4.4	0.60	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
trans-1,2-Dichloroethene	ND	*	4.4	0.66	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
1,2-Dichloropropane	ND	*	4.4	0.55	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
cis-1,3-Dichloropropene	ND	*	4.4	0.61	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
trans-1,3-Dichloropropene	ND	*	4.4	0.59	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
Ethylbenzene	ND	*	4.4	0.66	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
Hexachlorobutadiene	ND	*	4.4	0.79	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
2-Hexanone	ND	*	44	8.8	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
Isopropylbenzene	ND	*	4.4	0.60	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
4-Isopropyltoluene	ND	*	4.4	2.2	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
Methylene Chloride	ND	*	8.8	4.9	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
4-Methyl-2-pentanone (MIBK)	ND	*	44	8.8	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
Naphthalene	ND	*	8.8	1.3	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
N-Propylbenzene	ND	*	4.4	0.58	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
Styrene	ND	*	4.4	0.55	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
1,1,1,2-Tetrachloroethane	ND	*	4.4	0.67	ug/Kg		08/27/18 02:30	08/31/18 05:11	1

Client Sample ID: DG-I11S-3.5-4

Lab Sample ID: 720-88263-14

Date Collected: 08/27/18 11:10

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	4.4	0.66	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
Tetrachloroethene	ND	*	4.4	0.59	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
Toluene	ND	*	4.4	0.62	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
1,2,3-Trichlorobenzene	ND	*	4.4	0.65	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
1,2,4-Trichlorobenzene	ND	*	4.4	0.62	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
1,1,1-Trichloroethane	ND	*	4.4	0.54	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
1,1,2-Trichloroethane	ND	*	4.4	0.62	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
Trichloroethene	ND	*	4.4	0.55	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
Trichlorofluoromethane	ND	*	4.4	0.49	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
1,2,3-Trichloropropane	ND	*	4.4	0.68	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.4	1.8	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
1,2,4-Trimethylbenzene	ND	*	4.4	1.4	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
1,3,5-Trimethylbenzene	ND	*	4.4	0.57	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
Vinyl acetate	ND	*	18	4.4	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
Vinyl chloride	ND	*	4.4	0.64	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
Xylenes, Total	ND		4.4	1.1	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
2,2-Dichloropropane	ND	*	4.4	1.8	ug/Kg		08/27/18 02:30	08/31/18 05:11	1
Gasoline Range Organics (GRO) -C4-C12	ND	*	220	88	ug/Kg		08/27/18 02:30	08/31/18 05:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*68*	*	*45 - 131*	*08/27/18 02:30*	*08/31/18 05:11*	*1*
1,2-Dichloroethane-d4 (Surr)	*130*	*	*60 - 140*	*08/27/18 02:30*	*08/31/18 05:11*	*1*
Toluene-d8 (Surr)	*82*	*	*58 - 140*	*08/27/18 02:30*	*08/31/18 05:11*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		77	38	ug/Kg		08/30/18 14:15	09/06/18 11:37	4
Acenaphthene	ND		38	21	ug/Kg		08/30/18 14:15	09/06/18 11:37	4
Acenaphthylene	ND		38	18	ug/Kg		08/30/18 14:15	09/06/18 11:37	4
Anthracene	ND		38	15	ug/Kg		08/30/18 14:15	09/06/18 11:37	4
Benzo[a]anthracene	ND		38	12	ug/Kg		08/30/18 14:15	09/06/18 11:37	4
Benzo[a]pyrene	ND	*	38	15	ug/Kg		08/30/18 14:15	09/06/18 11:37	4
Benzo[b]fluoranthene	ND	*	38	16	ug/Kg		08/30/18 14:15	09/06/18 11:37	4
Benzo[g,h,i]perylene	ND	*	38	33	ug/Kg		08/30/18 14:15	09/06/18 11:37	4
Benzo[k]fluoranthene	ND	*	38	16	ug/Kg		08/30/18 14:15	09/06/18 11:37	4
Chrysene	ND		38	11	ug/Kg		08/30/18 14:15	09/06/18 11:37	4
Dibenz(a,h)anthracene	ND	*	38	27	ug/Kg		08/30/18 14:15	09/06/18 11:37	4
Fluoranthene	ND		38	11	ug/Kg		08/30/18 14:15	09/06/18 11:37	4
Fluorene	ND		38	17	ug/Kg		08/30/18 14:15	09/06/18 11:37	4
Indeno[1,2,3-cd]pyrene	ND	*	38	32	ug/Kg		08/30/18 14:15	09/06/18 11:37	4
Naphthalene	ND		38	27	ug/Kg		08/30/18 14:15	09/06/18 11:37	4
Phenanthrene	ND		38	14	ug/Kg		08/30/18 14:15	09/06/18 11:37	4
Pyrene	ND		38	13	ug/Kg		08/30/18 14:15	09/06/18 11:37	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*88*		*33 - 120*	*08/30/18 14:15*	*09/06/18 11:37*	*4*
Terphenyl-d14	*130*		*35 - 146*	*08/30/18 14:15*	*09/06/18 11:37*	*4*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-I11S-3.5-4

Date Collected: 08/27/18 11:10
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-14

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	340000		19000	7200	ug/Kg		08/30/18 08:54	09/05/18 16:17	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*0*	*X D*	*40 - 130*	*08/30/18 08:54*	*09/05/18 16:17*	*10*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.9	1.2	ug/Kg		08/31/18 09:53	09/05/18 21:58	2
4,4'-DDE	ND		3.9	0.83	ug/Kg		08/31/18 09:53	09/05/18 21:58	2
4,4'-DDT	ND		3.9	0.81	ug/Kg		08/31/18 09:53	09/05/18 21:58	2
Aldrin	ND		3.9	0.98	ug/Kg		08/31/18 09:53	09/05/18 21:58	2
alpha-BHC	ND		3.9	1.1	ug/Kg		08/31/18 09:53	09/05/18 21:58	2
beta-BHC	ND		3.9	0.71	ug/Kg		08/31/18 09:53	09/05/18 21:58	2
Chlordane (technical)	ND		79	6.3	ug/Kg		08/31/18 09:53	09/05/18 21:58	2
cis-Chlordane	ND		3.9	0.79	ug/Kg		08/31/18 09:53	09/05/18 21:58	2
delta-BHC	ND		3.9	0.87	ug/Kg		08/31/18 09:53	09/05/18 21:58	2
Dieldrin	ND		3.9	1.2	ug/Kg		08/31/18 09:53	09/05/18 21:58	2
Endosulfan I	ND		3.9	0.63	ug/Kg		08/31/18 09:53	09/05/18 21:58	2
Endosulfan II	ND		3.9	0.96	ug/Kg		08/31/18 09:53	09/05/18 21:58	2
Endosulfan sulfate	ND		3.9	0.75	ug/Kg		08/31/18 09:53	09/05/18 21:58	2
Endrin	ND		3.9	0.91	ug/Kg		08/31/18 09:53	09/05/18 21:58	2
Endrin aldehyde	ND		3.9	1.2	ug/Kg		08/31/18 09:53	09/05/18 21:58	2
Endrin ketone	ND		3.9	0.65	ug/Kg		08/31/18 09:53	09/05/18 21:58	2
gamma-BHC (Lindane)	ND		3.9	1.2	ug/Kg		08/31/18 09:53	09/05/18 21:58	2
Heptachlor	ND		3.9	0.91	ug/Kg		08/31/18 09:53	09/05/18 21:58	2
Heptachlor epoxide	ND		3.9	0.69	ug/Kg		08/31/18 09:53	09/05/18 21:58	2
Methoxychlor	ND		3.9	1.3	ug/Kg		08/31/18 09:53	09/05/18 21:58	2
Toxaphene	ND		79	13	ug/Kg		08/31/18 09:53	09/05/18 21:58	2
trans-Chlordane	1.3	J	3.9	0.91	ug/Kg		08/31/18 09:53	09/05/18 21:58	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*77*		*21 - 136*	*08/31/18 09:53*	*09/05/18 21:58*	*2*
Tetrachloro-m-xylene	*81*		*21 - 145*	*08/31/18 09:53*	*09/05/18 21:58*	*2*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		52	23	ug/Kg		08/30/18 06:48	09/01/18 15:53	1
Aroclor-1221	ND		52	25	ug/Kg		08/30/18 06:48	09/01/18 15:53	1
Aroclor-1232	ND		52	24	ug/Kg		08/30/18 06:48	09/01/18 15:53	1
Aroclor-1242	ND		52	20	ug/Kg		08/30/18 06:48	09/01/18 15:53	1
Aroclor-1248	ND		52	25	ug/Kg		08/30/18 06:48	09/01/18 15:53	1
Aroclor-1254	ND		52	24	ug/Kg		08/30/18 06:48	09/01/18 15:53	1
Aroclor-1260	ND		52	23	ug/Kg		08/30/18 06:48	09/01/18 15:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*64*		*14 - 128*	*08/30/18 06:48*	*09/01/18 15:53*	*1*
DCB Decachlorobiphenyl	*68*		*10 - 132*	*08/30/18 06:48*	*09/01/18 15:53*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.76	J	1.7	0.29	mg/Kg		08/29/18 15:55	08/30/18 17:34	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-I11S-3.5-4

Lab Sample ID: 720-88263-14

Date Collected: 08/27/18 11:10

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.9	J	3.4	0.29	mg/Kg		08/29/18 15:55	08/30/18 17:34	4
Barium	48		1.7	0.24	mg/Kg		08/29/18 15:55	08/30/18 17:34	4
Beryllium	ND		0.34	0.11	mg/Kg		08/29/18 15:55	08/30/18 17:34	4
Cadmium	ND		0.43	0.043	mg/Kg		08/29/18 15:55	08/30/18 17:34	4
Chromium	51		1.7	0.18	mg/Kg		08/29/18 15:55	08/30/18 17:34	4
Cobalt	8.2		0.69	0.069	mg/Kg		08/29/18 15:55	08/30/18 17:34	4
Copper	8.6		5.2	2.5	mg/Kg		08/29/18 15:55	08/30/18 17:34	4
Lead	6.1		1.7	0.36	mg/Kg		08/29/18 15:55	08/30/18 17:34	4
Molybdenum	1.8		1.7	0.22	mg/Kg		08/29/18 15:55	08/30/18 17:34	4
Nickel	38		1.7	0.18	mg/Kg		08/29/18 15:55	08/30/18 17:34	4
Selenium	ND		3.4	0.52	mg/Kg		08/29/18 15:55	08/30/18 17:34	4
Silver	ND		0.86	0.17	mg/Kg		08/29/18 15:55	08/30/18 17:34	4
Thallium	ND		1.7	0.50	mg/Kg		08/29/18 15:55	08/30/18 17:34	4
Vanadium	45		1.7	0.23	mg/Kg		08/29/18 15:55	08/30/18 17:34	4
Zinc	23		5.2	2.2	mg/Kg		08/29/18 15:55	08/30/18 17:34	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.010	J	0.016	0.0023	mg/Kg		09/04/18 21:32	09/05/18 11:15	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-I11S-9.5-10

Lab Sample ID: 720-88263-15

Date Collected: 08/27/18 11:10
Matrix: Solid
Date Received: 08/27/18 14:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND	*	6.2	1.5	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
Acetone	**160**	*	62	47	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
Benzene	ND	*	6.2	0.81	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
Dichlorobromomethane	ND	*	6.2	0.90	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
Bromobenzene	ND	*	6.2	0.99	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
Chlorobromomethane	ND	*	25	0.90	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
Bromoform	ND	*	6.2	2.5	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
Bromomethane	ND	*	12	0.99	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
2-Butanone (MEK)	ND	*	62	26	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
n-Butylbenzene	ND	*	6.2	1.2	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
sec-Butylbenzene	ND	*	6.2	0.90	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
tert-Butylbenzene	ND	*	6.2	0.91	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
Carbon disulfide	**4.3**	**J ***	6.2	2.5	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
Carbon tetrachloride	ND	*	6.2	0.77	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
Chlorobenzene	ND	*	6.2	0.86	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
Chloroethane	ND	*	12	0.70	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
Chloroform	ND	*	6.2	0.82	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
Chloromethane	ND	*	12	0.99	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
2-Chlorotoluene	ND	*	6.2	0.81	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
4-Chlorotoluene	ND	*	6.2	0.85	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
Chlorodibromomethane	ND	*	6.2	0.89	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
1,2-Dichlorobenzene	ND	*	6.2	0.85	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
1,3-Dichlorobenzene	ND	*	6.2	0.90	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
1,4-Dichlorobenzene	ND	*	6.2	0.89	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
1,3-Dichloropropane	ND	*	6.2	0.91	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
1,1-Dichloropropene	ND	*	6.2	0.86	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
1,2-Dibromo-3-Chloropropane	ND	*	12	2.1	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
Ethylene Dibromide	ND	*	6.2	1.8	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
Dibromomethane	ND	*	12	1.1	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
Dichlorodifluoromethane	ND	*	12	0.99	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
1,1-Dichloroethane	ND	*	6.2	0.85	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
1,2-Dichloroethane	ND	*	6.2	0.95	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
1,1-Dichloroethene	ND	*	6.2	0.77	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
cis-1,2-Dichloroethene	ND	*	6.2	0.85	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
trans-1,2-Dichloroethene	ND	*	6.2	0.94	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
1,2-Dichloropropane	ND	*	6.2	0.79	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
cis-1,3-Dichloropropene	ND	*	6.2	0.86	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
trans-1,3-Dichloropropene	ND	*	6.2	0.84	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
Ethylbenzene	ND	*	6.2	0.94	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
Hexachlorobutadiene	ND	*	6.2	1.1	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
2-Hexanone	ND	*	62	12	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
Isopropylbenzene	ND	*	6.2	0.85	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
4-Isopropyltoluene	ND	*	6.2	3.1	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
Methylene Chloride	ND	*	12	7.0	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
4-Methyl-2-pentanone (MIBK)	ND	*	62	12	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
Naphthalene	ND	*	12	1.9	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
N-Propylbenzene	ND	*	6.2	0.82	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
Styrene	ND	*	6.2	0.79	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
1,1,1,2-Tetrachloroethane	ND	*	6.2	0.95	ug/Kg		08/27/18 02:30	08/31/18 05:39	1

Client Sample ID: DG-I11S-9.5-10

Lab Sample ID: 720-88263-15

Date Collected: 08/27/18 11:10

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	6.2	0.94	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
Tetrachloroethene	ND	*	6.2	0.84	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
Toluene	ND	*	6.2	0.89	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
1,2,3-Trichlorobenzene	ND	*	6.2	0.92	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
1,2,4-Trichlorobenzene	ND	*	6.2	0.89	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
1,1,1-Trichloroethane	ND	*	6.2	0.76	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
1,1,2-Trichloroethane	ND	*	6.2	0.87	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
Trichloroethene	ND	*	6.2	0.79	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
Trichlorofluoromethane	ND	*	6.2	0.70	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
1,2,3-Trichloropropane	ND	*	6.2	0.96	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	6.2	2.6	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
1,2,4-Trimethylbenzene	ND	*	6.2	2.0	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
1,3,5-Trimethylbenzene	ND	*	6.2	0.81	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
Vinyl acetate	ND	*	25	6.2	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
Vinyl chloride	ND	*	6.2	0.91	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
Xylenes, Total	ND		6.2	1.5	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
2,2-Dichloropropane	ND	*	6.2	2.5	ug/Kg		08/27/18 02:30	08/31/18 05:39	1
Gasoline Range Organics (GRO) -C4-C12	ND	*	310	120	ug/Kg		08/27/18 02:30	08/31/18 05:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*73*	*	*45 - 131*	*08/27/18 02:30*	*08/31/18 05:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*125*	*	*60 - 140*	*08/27/18 02:30*	*08/31/18 05:39*	*1*
Toluene-d8 (Surr)	*82*	*	*58 - 140*	*08/27/18 02:30*	*08/31/18 05:39*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		99	49	ug/Kg		08/30/18 14:15	09/06/18 17:00	10
Acenaphthene	ND		49	28	ug/Kg		08/30/18 14:15	09/06/18 17:00	10
Acenaphthylene	ND		49	24	ug/Kg		08/30/18 14:15	09/06/18 17:00	10
Anthracene	ND		49	20	ug/Kg		08/30/18 14:15	09/06/18 17:00	10
Benzo[a]anthracene	ND		49	15	ug/Kg		08/30/18 14:15	09/06/18 17:00	10
Benzo[a]pyrene	ND		49	19	ug/Kg		08/30/18 14:15	09/06/18 17:00	10
Benzo[b]fluoranthene	**22**	**J**	49	21	ug/Kg		08/30/18 14:15	09/06/18 17:00	10
Benzo[g,h,i]perylene	ND		49	42	ug/Kg		08/30/18 14:15	09/06/18 17:00	10
Benzo[k]fluoranthene	ND		49	21	ug/Kg		08/30/18 14:15	09/06/18 17:00	10
Chrysene	ND		49	14	ug/Kg		08/30/18 14:15	09/06/18 17:00	10
Dibenz(a,h)anthracene	ND		49	35	ug/Kg		08/30/18 14:15	09/06/18 17:00	10
Fluoranthene	**19**	**J**	49	14	ug/Kg		08/30/18 14:15	09/06/18 17:00	10
Fluorene	ND		49	22	ug/Kg		08/30/18 14:15	09/06/18 17:00	10
Indeno[1,2,3-cd]pyrene	ND		49	41	ug/Kg		08/30/18 14:15	09/06/18 17:00	10
Naphthalene	ND		49	35	ug/Kg		08/30/18 14:15	09/06/18 17:00	10
Phenanthrene	ND		49	18	ug/Kg		08/30/18 14:15	09/06/18 17:00	10
Pyrene	ND		49	17	ug/Kg		08/30/18 14:15	09/06/18 17:00	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*0*	*X*	*33 - 120*	*08/30/18 14:15*	*09/06/18 17:00*	*10*
Terphenyl-d14	*0*	*X*	*35 - 146*	*08/30/18 14:15*	*09/06/18 17:00*	*10*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-I11S-9.5-10

Lab Sample ID: 720-88263-15

Date Collected: 08/27/18 11:10
Matrix: Solid
Date Received: 08/27/18 14:25

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	110000		19000	7100	ug/Kg		08/30/18 08:54	09/05/18 15:28	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*0*	*X D*	*40 - 130*	*08/30/18 08:54*	*09/05/18 15:28*	*10*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		19	5.8	ug/Kg		08/30/18 12:52	09/05/18 18:09	10
4,4'-DDE	ND		19	4.0	ug/Kg		08/30/18 12:52	09/05/18 18:09	10
4,4'-DDT	ND		19	3.9	ug/Kg		08/30/18 12:52	09/05/18 18:09	10
Aldrin	ND		19	4.7	ug/Kg		08/30/18 12:52	09/05/18 18:09	10
alpha-BHC	ND		19	5.2	ug/Kg		08/30/18 12:52	09/05/18 18:09	10
beta-BHC	ND		19	3.4	ug/Kg		08/30/18 12:52	09/05/18 18:09	10
Chlordane (technical)	ND		380	30	ug/Kg		08/30/18 12:52	09/05/18 18:09	10
cis-Chlordane	ND		19	3.8	ug/Kg		08/30/18 12:52	09/05/18 18:09	10
delta-BHC	ND		19	4.2	ug/Kg		08/30/18 12:52	09/05/18 18:09	10
Dieldrin	ND		19	5.6	ug/Kg		08/30/18 12:52	09/05/18 18:09	10
Endosulfan I	ND		19	3.0	ug/Kg		08/30/18 12:52	09/05/18 18:09	10
Endosulfan II	ND		19	4.6	ug/Kg		08/30/18 12:52	09/05/18 18:09	10
Endosulfan sulfate	ND		19	3.6	ug/Kg		08/30/18 12:52	09/05/18 18:09	10
Endrin	ND		19	4.4	ug/Kg		08/30/18 12:52	09/05/18 18:09	10
Endrin aldehyde	ND		19	6.0	ug/Kg		08/30/18 12:52	09/05/18 18:09	10
Endrin ketone	ND		19	3.1	ug/Kg		08/30/18 12:52	09/05/18 18:09	10
gamma-BHC (Lindane)	ND		19	6.0	ug/Kg		08/30/18 12:52	09/05/18 18:09	10
Heptachlor	ND		19	4.4	ug/Kg		08/30/18 12:52	09/05/18 18:09	10
Heptachlor epoxide	11	J	19	3.3	ug/Kg		08/30/18 12:52	09/05/18 18:09	10
Methoxychlor	ND		19	6.4	ug/Kg		08/30/18 12:52	09/05/18 18:09	10
Toxaphene	ND		380	64	ug/Kg		08/30/18 12:52	09/05/18 18:09	10
trans-Chlordane	ND		19	4.4	ug/Kg		08/30/18 12:52	09/05/18 18:09	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*0*	*D X*	*21 - 136*	*08/30/18 12:52*	*09/05/18 18:09*	*10*
Tetrachloro-m-xylene	*0*	*D X*	*21 - 145*	*08/30/18 12:52*	*09/05/18 18:09*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		52	23	ug/Kg		08/30/18 06:48	09/02/18 15:03	1
Aroclor-1221	ND		52	25	ug/Kg		08/30/18 06:48	09/02/18 15:03	1
Aroclor-1232	ND		52	24	ug/Kg		08/30/18 06:48	09/02/18 15:03	1
Aroclor-1242	ND		52	20	ug/Kg		08/30/18 06:48	09/02/18 15:03	1
Aroclor-1248	ND		52	25	ug/Kg		08/30/18 06:48	09/02/18 15:03	1
Aroclor-1254	ND		52	24	ug/Kg		08/30/18 06:48	09/02/18 15:03	1
Aroclor-1260	ND		52	23	ug/Kg		08/30/18 06:48	09/02/18 15:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*51*		*14 - 128*	*08/30/18 06:48*	*09/02/18 15:03*	*1*
DCB Decachlorobiphenyl	*50*	*p*	*10 - 132*	*08/30/18 06:48*	*09/02/18 15:03*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.1	J	1.6	0.26	mg/Kg		08/30/18 08:40	08/30/18 23:55	4

Client Sample ID: DG-I11S-9.5-10

Lab Sample ID: 720-88263-15

Date Collected: 08/27/18 11:10

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.9		3.2	0.27	mg/Kg		08/30/18 08:40	08/30/18 23:55	4
Barium	95		1.6	0.23	mg/Kg		08/30/18 08:40	08/30/18 23:55	4
Beryllium	0.24	J	0.32	0.10	mg/Kg		08/30/18 08:40	08/30/18 23:55	4
Cadmium	ND		0.40	0.039	mg/Kg		08/30/18 08:40	08/30/18 23:55	4
Chromium	130		1.6	0.17	mg/Kg		08/30/18 08:40	08/30/18 23:55	4
Cobalt	12		0.63	0.063	mg/Kg		08/30/18 08:40	08/30/18 23:55	4
Copper	18		4.8	2.3	mg/Kg		08/30/18 08:40	08/30/18 23:55	4
Lead	6.7		1.6	0.33	mg/Kg		08/30/18 08:40	08/30/18 23:55	4
Molybdenum	1.3	J	1.6	0.20	mg/Kg		08/30/18 08:40	08/30/18 23:55	4
Nickel	160		1.6	0.16	mg/Kg		08/30/18 08:40	08/30/18 23:55	4
Selenium	ND		3.2	0.48	mg/Kg		08/30/18 08:40	08/30/18 23:55	4
Silver	0.18	J	0.79	0.16	mg/Kg		08/30/18 08:40	08/30/18 23:55	4
Thallium	ND		1.6	0.46	mg/Kg		08/30/18 08:40	08/30/18 23:55	4
Vanadium	40		1.6	0.22	mg/Kg		08/30/18 08:40	08/30/18 23:55	4
Zinc	38		4.8	2.0	mg/Kg		08/30/18 08:40	08/30/18 23:55	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.025		0.017	0.0025	mg/Kg		09/04/18 21:32	09/05/18 11:17	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-E11S-0.5-1

Date Collected: 08/27/18 11:50
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-16

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.1	0.98	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
Acetone	**57**		41	31	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
Benzene	ND		4.1	0.53	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
Dichlorobromomethane	ND		4.1	0.59	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
Bromobenzene	ND		4.1	0.64	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
Chlorobromomethane	ND		16	0.59	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
Bromoform	ND		4.1	1.6	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
Bromomethane	ND		8.1	0.64	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
2-Butanone (MEK)	ND		41	17	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
n-Butylbenzene	ND		4.1	0.81	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
sec-Butylbenzene	ND		4.1	0.59	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
tert-Butylbenzene	ND		4.1	0.59	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
Carbon disulfide	ND		4.1	1.6	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
Carbon tetrachloride	ND		4.1	0.50	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
Chlorobenzene	ND		4.1	0.56	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
Chloroethane	ND		8.1	0.46	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
Chloroform	ND		4.1	0.54	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
Chloromethane	ND		8.1	0.64	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
2-Chlorotoluene	ND		4.1	0.53	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
4-Chlorotoluene	ND		4.1	0.55	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
Chlorodibromomethane	ND		4.1	0.58	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
1,2-Dichlorobenzene	ND		4.1	0.55	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
1,3-Dichlorobenzene	ND		4.1	0.59	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
1,4-Dichlorobenzene	ND		4.1	0.58	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
1,3-Dichloropropane	ND		4.1	0.59	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
1,1-Dichloropropene	ND		4.1	0.56	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
1,2-Dibromo-3-Chloropropane	ND		8.1	1.4	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
Ethylene Dibromide	ND		4.1	1.2	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
Dibromomethane	ND		8.1	0.70	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
Dichlorodifluoromethane	ND		8.1	0.64	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
1,1-Dichloroethane	ND		4.1	0.55	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
1,2-Dichloroethane	ND		4.1	0.62	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
1,1-Dichloroethene	ND	*	4.1	0.50	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
cis-1,2-Dichloroethene	ND		4.1	0.55	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
trans-1,2-Dichloroethene	ND		4.1	0.61	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
1,2-Dichloropropane	ND		4.1	0.51	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
cis-1,3-Dichloropropene	ND		4.1	0.56	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
trans-1,3-Dichloropropene	ND		4.1	0.55	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
Ethylbenzene	ND		4.1	0.61	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
Hexachlorobutadiene	ND		4.1	0.73	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
2-Hexanone	ND		41	8.1	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
Isopropylbenzene	ND		4.1	0.55	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
4-Isopropyltoluene	ND		4.1	2.0	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
Methylene Chloride	ND		8.1	4.6	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
4-Methyl-2-pentanone (MIBK)	ND		41	8.1	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
Naphthalene	ND		8.1	1.2	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
N-Propylbenzene	ND		4.1	0.54	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
Styrene	ND		4.1	0.51	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
1,1,1,2-Tetrachloroethane	ND		4.1	0.62	ug/Kg		08/27/18 02:30	08/30/18 22:21	1

Client Sample ID: DG-E11S-0.5-1

Lab Sample ID: 720-88263-16

Date Collected: 08/27/18 11:50

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.1	0.61	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
Tetrachloroethene	ND		4.1	0.55	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
Toluene	ND		4.1	0.58	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
1,2,3-Trichlorobenzene	ND		4.1	0.60	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
1,2,4-Trichlorobenzene	ND		4.1	0.58	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
1,1,1-Trichloroethane	ND		4.1	0.50	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
1,1,2-Trichloroethane	ND		4.1	0.57	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
Trichloroethene	ND		4.1	0.51	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
Trichlorofluoromethane	ND		4.1	0.46	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
1,2,3-Trichloropropane	ND		4.1	0.63	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.1	1.7	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
1,2,4-Trimethylbenzene	ND		4.1	1.3	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
1,3,5-Trimethylbenzene	ND		4.1	0.53	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
Vinyl acetate	ND		16	4.1	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
Vinyl chloride	ND		4.1	0.59	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
Xylenes, Total	ND		4.1	0.99	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
2,2-Dichloropropane	ND		4.1	1.6	ug/Kg		08/27/18 02:30	08/30/18 22:21	1
Gasoline Range Organics (GRO) -C4-C12	ND		200	81	ug/Kg		08/27/18 02:30	08/30/18 22:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*45 - 131*	*08/27/18 02:30*	*08/30/18 22:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*	*08/27/18 02:30*	*08/30/18 22:21*	*1*
Toluene-d8 (Surr)	*94*		*58 - 140*	*08/27/18 02:30*	*08/30/18 22:21*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		98	49	ug/Kg		08/30/18 14:15	09/06/18 17:24	10
Acenaphthene	ND		49	27	ug/Kg		08/30/18 14:15	09/06/18 17:24	10
Acenaphthylene	ND		49	23	ug/Kg		08/30/18 14:15	09/06/18 17:24	10
Anthracene	**140**		49	20	ug/Kg		08/30/18 14:15	09/06/18 17:24	10
Benzo[a]anthracene	ND		49	15	ug/Kg		08/30/18 14:15	09/06/18 17:24	10
Benzo[a]pyrene	**37**	**J**	49	19	ug/Kg		08/30/18 14:15	09/06/18 17:24	10
Benzo[b]fluoranthene	**57**		49	21	ug/Kg		08/30/18 14:15	09/06/18 17:24	10
Benzo[g,h,i]perylene	**51**		49	42	ug/Kg		08/30/18 14:15	09/06/18 17:24	10
Benzo[k]fluoranthene	**29**	**J**	49	21	ug/Kg		08/30/18 14:15	09/06/18 17:24	10
Chrysene	**33**	**J**	49	14	ug/Kg		08/30/18 14:15	09/06/18 17:24	10
Dibenz(a,h)anthracene	ND		49	34	ug/Kg		08/30/18 14:15	09/06/18 17:24	10
Fluoranthene	**27**	**J**	49	14	ug/Kg		08/30/18 14:15	09/06/18 17:24	10
Fluorene	ND		49	21	ug/Kg		08/30/18 14:15	09/06/18 17:24	10
Indeno[1,2,3-cd]pyrene	ND		49	41	ug/Kg		08/30/18 14:15	09/06/18 17:24	10
Naphthalene	ND		49	34	ug/Kg		08/30/18 14:15	09/06/18 17:24	10
Phenanthrene	**57**		49	18	ug/Kg		08/30/18 14:15	09/06/18 17:24	10
Pyrene	**36**	**J**	49	17	ug/Kg		08/30/18 14:15	09/06/18 17:24	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*0*	*X*	*33 - 120*	*08/30/18 14:15*	*09/06/18 17:24*	*10*
Terphenyl-d14	*0*	*X*	*35 - 146*	*08/30/18 14:15*	*09/06/18 17:24*	*10*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-E11S-0.5-1

Date Collected: 08/27/18 11:50
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-16

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	130000		9700	3600	ug/Kg		08/30/18 08:54	09/05/18 17:06	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*0*	*X D*	*40 - 130*	*08/30/18 08:54*	*09/05/18 17:06*	*5*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.8	1.2	ug/Kg		08/30/18 12:52	09/04/18 18:31	2
4,4'-DDE	ND		3.8	0.80	ug/Kg		08/30/18 12:52	09/04/18 18:31	2
4,4'-DDT	ND		3.8	0.78	ug/Kg		08/30/18 12:52	09/04/18 18:31	2
Aldrin	ND		3.8	0.96	ug/Kg		08/30/18 12:52	09/04/18 18:31	2
alpha-BHC	ND		3.8	1.1	ug/Kg		08/30/18 12:52	09/04/18 18:31	2
beta-BHC	ND		3.8	0.69	ug/Kg		08/30/18 12:52	09/04/18 18:31	2
Chlordane (technical)	ND		77	6.1	ug/Kg		08/30/18 12:52	09/04/18 18:31	2
cis-Chlordane	ND		3.8	0.77	ug/Kg		08/30/18 12:52	09/04/18 18:31	2
delta-BHC	ND		3.8	0.84	ug/Kg		08/30/18 12:52	09/04/18 18:31	2
Dieldrin	ND		3.8	1.1	ug/Kg		08/30/18 12:52	09/04/18 18:31	2
Endosulfan I	ND		3.8	0.61	ug/Kg		08/30/18 12:52	09/04/18 18:31	2
Endosulfan II	ND		3.8	0.94	ug/Kg		08/30/18 12:52	09/04/18 18:31	2
Endosulfan sulfate	ND		3.8	0.73	ug/Kg		08/30/18 12:52	09/04/18 18:31	2
Endrin	ND		3.8	0.88	ug/Kg		08/30/18 12:52	09/04/18 18:31	2
Endrin aldehyde	ND		3.8	1.2	ug/Kg		08/30/18 12:52	09/04/18 18:31	2
Endrin ketone	ND		3.8	0.63	ug/Kg		08/30/18 12:52	09/04/18 18:31	2
gamma-BHC (Lindane)	ND		3.8	1.2	ug/Kg		08/30/18 12:52	09/04/18 18:31	2
Heptachlor	ND		3.8	0.88	ug/Kg		08/30/18 12:52	09/04/18 18:31	2
Heptachlor epoxide	ND		3.8	0.67	ug/Kg		08/30/18 12:52	09/04/18 18:31	2
Methoxychlor	ND		3.8	1.3	ug/Kg		08/30/18 12:52	09/04/18 18:31	2
Toxaphene	ND		77	13	ug/Kg		08/30/18 12:52	09/04/18 18:31	2
trans-Chlordane	ND		3.8	0.88	ug/Kg		08/30/18 12:52	09/04/18 18:31	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*77*		*21 - 136*	*08/30/18 12:52*	*09/04/18 18:31*	*2*
Tetrachloro-m-xylene	*83*		*21 - 145*	*08/30/18 12:52*	*09/04/18 18:31*	*2*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/30/18 06:48	09/02/18 15:18	1
Aroclor-1221	ND		50	24	ug/Kg		08/30/18 06:48	09/02/18 15:18	1
Aroclor-1232	ND		50	23	ug/Kg		08/30/18 06:48	09/02/18 15:18	1
Aroclor-1242	ND		50	19	ug/Kg		08/30/18 06:48	09/02/18 15:18	1
Aroclor-1248	ND		50	24	ug/Kg		08/30/18 06:48	09/02/18 15:18	1
Aroclor-1254	ND		50	23	ug/Kg		08/30/18 06:48	09/02/18 15:18	1
Aroclor-1260	ND		50	22	ug/Kg		08/30/18 06:48	09/02/18 15:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*79*		*14 - 128*	*08/30/18 06:48*	*09/02/18 15:18*	*1*
DCB Decachlorobiphenyl	*80*		*10 - 132*	*08/30/18 06:48*	*09/02/18 15:18*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.33	J F1	1.4	0.23	mg/Kg		08/30/18 08:40	08/30/18 23:50	4

Client Sample ID: DG-E11S-0.5-1

Lab Sample ID: 720-88263-16

Date Collected: 08/27/18 11:50

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.6	J	2.8	0.24	mg/Kg		08/30/18 08:40	08/30/18 23:50	4
Barium	36	F1	1.4	0.20	mg/Kg		08/30/18 08:40	08/30/18 23:50	4
Beryllium	ND	F1	0.28	0.090	mg/Kg		08/30/18 08:40	08/30/18 23:50	4
Cadmium	0.077	J	0.35	0.034	mg/Kg		08/30/18 08:40	08/30/18 23:50	4
Chromium	12	F1	1.4	0.15	mg/Kg		08/30/18 08:40	08/30/18 23:50	4
Cobalt	12	F1	0.56	0.056	mg/Kg		08/30/18 08:40	08/30/18 23:50	4
Copper	130	F1 F2	4.2	2.0	mg/Kg		08/30/18 08:40	08/30/18 23:50	4
Lead	32	F1	1.4	0.29	mg/Kg		08/30/18 08:40	08/30/18 23:50	4
Molybdenum	ND		1.4	0.18	mg/Kg		08/30/18 08:40	08/30/18 23:50	4
Nickel	6.2		1.4	0.14	mg/Kg		08/30/18 08:40	08/30/18 23:50	4
Selenium	ND		2.8	0.42	mg/Kg		08/30/18 08:40	08/30/18 23:50	4
Silver	0.20	J F1	0.69	0.14	mg/Kg		08/30/18 08:40	08/30/18 23:50	4
Thallium	1.0	J	1.4	0.40	mg/Kg		08/30/18 08:40	08/30/18 23:50	4
Vanadium	110	F1	1.4	0.19	mg/Kg		08/30/18 08:40	08/30/18 23:50	4
Zinc	55	F1	4.2	1.8	mg/Kg		08/30/18 08:40	08/30/18 23:50	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.073		0.016	0.0023	mg/Kg		09/04/18 21:32	09/05/18 11:19	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-E11S-3.5-4

Lab Sample ID: 720-88263-17

Date Collected: 08/27/18 11:50
Matrix: Solid
Date Received: 08/27/18 14:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		6.0	1.4	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
Acetone	**490**		60	46	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
Benzene	ND		6.0	0.78	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
Dichlorobromomethane	ND		6.0	0.86	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
Bromobenzene	ND		6.0	0.95	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
Chlorobromomethane	ND		24	0.86	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
Bromoform	ND		6.0	2.4	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
Bromomethane	ND		12	0.95	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
2-Butanone (MEK)	**79**		60	25	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
n-Butylbenzene	ND		6.0	1.2	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
sec-Butylbenzene	ND		6.0	0.86	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
tert-Butylbenzene	ND		6.0	0.88	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
Carbon disulfide	ND		6.0	2.4	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
Carbon tetrachloride	ND		6.0	0.74	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
Chlorobenzene	ND		6.0	0.83	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
Chloroethane	ND		12	0.67	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
Chloroform	ND		6.0	0.79	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
Chloromethane	ND		12	0.95	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
2-Chlorotoluene	ND		6.0	0.78	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
4-Chlorotoluene	ND		6.0	0.82	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
Chlorodibromomethane	ND		6.0	0.85	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
1,2-Dichlorobenzene	ND		6.0	0.82	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
1,3-Dichlorobenzene	ND		6.0	0.86	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
1,4-Dichlorobenzene	ND		6.0	0.85	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
1,3-Dichloropropane	ND		6.0	0.88	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
1,1-Dichloropropene	ND		6.0	0.83	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
1,2-Dibromo-3-Chloropropane	ND		12	2.0	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
Ethylene Dibromide	ND		6.0	1.7	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
Dibromomethane	ND		12	1.0	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
Dichlorodifluoromethane	ND		12	0.95	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
1,1-Dichloroethane	ND		6.0	0.82	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
1,2-Dichloroethane	ND		6.0	0.91	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
1,1-Dichloroethene	ND	*	6.0	0.74	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
cis-1,2-Dichloroethene	ND		6.0	0.82	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
trans-1,2-Dichloroethene	ND		6.0	0.90	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
1,2-Dichloropropane	ND		6.0	0.76	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
cis-1,3-Dichloropropene	ND		6.0	0.83	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
trans-1,3-Dichloropropene	ND		6.0	0.80	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
Ethylbenzene	ND		6.0	0.90	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
Hexachlorobutadiene	ND		6.0	1.1	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
2-Hexanone	**16**	**J**	60	12	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
Isopropylbenzene	ND		6.0	0.82	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
4-Isopropyltoluene	ND		6.0	3.0	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
Methylene Chloride	ND		12	6.7	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
4-Methyl-2-pentanone (MIBK)	ND		60	12	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
Naphthalene	ND		12	1.8	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
N-Propylbenzene	ND		6.0	0.79	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
Styrene	ND		6.0	0.76	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
1,1,1,2-Tetrachloroethane	ND		6.0	0.91	ug/Kg		08/27/18 02:30	08/30/18 22:50	1

Client Sample ID: DG-E11S-3.5-4

Lab Sample ID: 720-88263-17

Date Collected: 08/27/18 11:50

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		6.0	0.90	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
Tetrachloroethene	ND		6.0	0.80	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
Toluene	ND		6.0	0.85	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
1,2,3-Trichlorobenzene	ND		6.0	0.89	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
1,2,4-Trichlorobenzene	ND		6.0	0.85	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
1,1,1-Trichloroethane	ND		6.0	0.73	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
1,1,2-Trichloroethane	ND		6.0	0.84	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
Trichloroethene	ND		6.0	0.76	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
Trichlorofluoromethane	ND		6.0	0.67	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
1,2,3-Trichloropropane	ND		6.0	0.92	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.0	2.5	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
1,2,4-Trimethylbenzene	ND		6.0	2.0	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
1,3,5-Trimethylbenzene	ND		6.0	0.78	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
Vinyl acetate	ND		24	6.0	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
Vinyl chloride	ND		6.0	0.88	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
Xylenes, Total	ND		6.0	1.5	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
2,2-Dichloropropane	ND		6.0	2.4	ug/Kg		08/27/18 02:30	08/30/18 22:50	1
Gasoline Range Organics (GRO) -C4-C12	ND		300	120	ug/Kg		08/27/18 02:30	08/30/18 22:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*45 - 131*	*08/27/18 02:30*	*08/30/18 22:50*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*	*08/27/18 02:30*	*08/30/18 22:50*	*1*
Toluene-d8 (Surr)	*93*		*58 - 140*	*08/27/18 02:30*	*08/30/18 22:50*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**180**	**J**	190	94	ug/Kg		08/30/18 14:15	09/06/18 17:47	10
Acenaphthene	ND		94	53	ug/Kg		08/30/18 14:15	09/06/18 17:47	10
Acenaphthylene	**63**	**J**	94	45	ug/Kg		08/30/18 14:15	09/06/18 17:47	10
Anthracene	**82**	**J**	94	38	ug/Kg		08/30/18 14:15	09/06/18 17:47	10
Benzo[a]anthracene	**37**	**J**	94	28	ug/Kg		08/30/18 14:15	09/06/18 17:47	10
Benzo[a]pyrene	**72**	**J**	94	36	ug/Kg		08/30/18 14:15	09/06/18 17:47	10
Benzo[b]fluoranthene	**110**		94	40	ug/Kg		08/30/18 14:15	09/06/18 17:47	10
Benzo[g,h,i]perylene	**120**		94	81	ug/Kg		08/30/18 14:15	09/06/18 17:47	10
Benzo[k]fluoranthene	**41**	**J**	94	40	ug/Kg		08/30/18 14:15	09/06/18 17:47	10
Chrysene	**82**	**J**	94	26	ug/Kg		08/30/18 14:15	09/06/18 17:47	10
Dibenz(a,h)anthracene	ND		94	66	ug/Kg		08/30/18 14:15	09/06/18 17:47	10
Fluoranthene	**56**	**J**	94	26	ug/Kg		08/30/18 14:15	09/06/18 17:47	10
Fluorene	ND		94	41	ug/Kg		08/30/18 14:15	09/06/18 17:47	10
Indeno[1,2,3-cd]pyrene	ND		94	79	ug/Kg		08/30/18 14:15	09/06/18 17:47	10
Naphthalene	**120**		94	66	ug/Kg		08/30/18 14:15	09/06/18 17:47	10
Phenanthrene	**120**		94	34	ug/Kg		08/30/18 14:15	09/06/18 17:47	10
Pyrene	**89**	**J**	94	32	ug/Kg		08/30/18 14:15	09/06/18 17:47	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*0*	*X*	*33 - 120*	*08/30/18 14:15*	*09/06/18 17:47*	*10*
Terphenyl-d14	*0*	*X*	*35 - 146*	*08/30/18 14:15*	*09/06/18 17:47*	*10*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-E11S-3.5-4

Date Collected: 08/27/18 11:50
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-17

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	270000		39000	15000	ug/Kg		08/30/18 08:54	09/05/18 16:42	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*0*	*X D*	*40 - 130*	*08/30/18 08:54*	*09/05/18 16:42*	*20*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.9	1.2	ug/Kg		08/30/18 12:52	09/04/18 18:48	2
4,4'-DDE	ND		3.9	0.81	ug/Kg		08/30/18 12:52	09/04/18 18:48	2
4,4'-DDT	ND		3.9	0.79	ug/Kg		08/30/18 12:52	09/04/18 18:48	2
Aldrin	ND		3.9	0.97	ug/Kg		08/30/18 12:52	09/04/18 18:48	2
alpha-BHC	ND		3.9	1.1	ug/Kg		08/30/18 12:52	09/04/18 18:48	2
beta-BHC	ND		3.9	0.70	ug/Kg		08/30/18 12:52	09/04/18 18:48	2
Chlordane (technical)	ND		77	6.2	ug/Kg		08/30/18 12:52	09/04/18 18:48	2
cis-Chlordane	ND		3.9	0.77	ug/Kg		08/30/18 12:52	09/04/18 18:48	2
delta-BHC	ND		3.9	0.85	ug/Kg		08/30/18 12:52	09/04/18 18:48	2
Dieldrin	1.4	J	3.9	1.1	ug/Kg		08/30/18 12:52	09/04/18 18:48	2
Endosulfan I	ND		3.9	0.62	ug/Kg		08/30/18 12:52	09/04/18 18:48	2
Endosulfan II	ND		3.9	0.95	ug/Kg		08/30/18 12:52	09/04/18 18:48	2
Endosulfan sulfate	ND		3.9	0.74	ug/Kg		08/30/18 12:52	09/04/18 18:48	2
Endrin	ND		3.9	0.89	ug/Kg		08/30/18 12:52	09/04/18 18:48	2
Endrin aldehyde	ND		3.9	1.2	ug/Kg		08/30/18 12:52	09/04/18 18:48	2
Endrin ketone	ND		3.9	0.64	ug/Kg		08/30/18 12:52	09/04/18 18:48	2
gamma-BHC (Lindane)	ND		3.9	1.2	ug/Kg		08/30/18 12:52	09/04/18 18:48	2
Heptachlor	ND		3.9	0.89	ug/Kg		08/30/18 12:52	09/04/18 18:48	2
Heptachlor epoxide	ND		3.9	0.68	ug/Kg		08/30/18 12:52	09/04/18 18:48	2
Methoxychlor	ND		3.9	1.3	ug/Kg		08/30/18 12:52	09/04/18 18:48	2
Toxaphene	ND		77	13	ug/Kg		08/30/18 12:52	09/04/18 18:48	2
trans-Chlordane	ND		3.9	0.89	ug/Kg		08/30/18 12:52	09/04/18 18:48	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*69*		*21 - 136*	*08/30/18 12:52*	*09/04/18 18:48*	*2*
Tetrachloro-m-xylene	*80*		*21 - 145*	*08/30/18 12:52*	*09/04/18 18:48*	*2*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		49	22	ug/Kg		08/30/18 06:48	09/02/18 15:32	1
Aroclor-1221	ND		49	24	ug/Kg		08/30/18 06:48	09/02/18 15:32	1
Aroclor-1232	ND		49	23	ug/Kg		08/30/18 06:48	09/02/18 15:32	1
Aroclor-1242	ND		49	19	ug/Kg		08/30/18 06:48	09/02/18 15:32	1
Aroclor-1248	ND		49	24	ug/Kg		08/30/18 06:48	09/02/18 15:32	1
Aroclor-1254	ND		49	23	ug/Kg		08/30/18 06:48	09/02/18 15:32	1
Aroclor-1260	ND		49	22	ug/Kg		08/30/18 06:48	09/02/18 15:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*39*		*14 - 128*	*08/30/18 06:48*	*09/02/18 15:32*	*1*
DCB Decachlorobiphenyl	*32*	*p*	*10 - 132*	*08/30/18 06:48*	*09/02/18 15:32*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	8.0		1.6	0.27	mg/Kg		08/30/18 08:40	08/30/18 23:59	4

Client Sample ID: DG-E11S-3.5-4

Lab Sample ID: 720-88263-17

Date Collected: 08/27/18 11:50

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	19		3.2	0.27	mg/Kg		08/30/18 08:40	08/30/18 23:59	4
Barium	110		1.6	0.23	mg/Kg		08/30/18 08:40	08/30/18 23:59	4
Beryllium	ND		0.32	0.10	mg/Kg		08/30/18 08:40	08/30/18 23:59	4
Cadmium	0.32	J	0.40	0.040	mg/Kg		08/30/18 08:40	08/30/18 23:59	4
Chromium	34		1.6	0.17	mg/Kg		08/30/18 08:40	08/30/18 23:59	4
Cobalt	13		0.65	0.065	mg/Kg		08/30/18 08:40	08/30/18 23:59	4
Copper	110		4.8	2.3	mg/Kg		08/30/18 08:40	08/30/18 23:59	4
Lead	140		1.6	0.34	mg/Kg		08/30/18 08:40	08/30/18 23:59	4
Molybdenum	0.31	J	1.6	0.21	mg/Kg		08/30/18 08:40	08/30/18 23:59	4
Nickel	34		1.6	0.16	mg/Kg		08/30/18 08:40	08/30/18 23:59	4
Selenium	ND		3.2	0.48	mg/Kg		08/30/18 08:40	08/30/18 23:59	4
Silver	0.36	J	0.81	0.16	mg/Kg		08/30/18 08:40	08/30/18 23:59	4
Thallium	1.0	J	1.6	0.47	mg/Kg		08/30/18 08:40	08/30/18 23:59	4
Vanadium	73		1.6	0.22	mg/Kg		08/30/18 08:40	08/30/18 23:59	4
Zinc	160		4.8	2.0	mg/Kg		08/30/18 08:40	08/30/18 23:59	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.32		0.014	0.0021	mg/Kg		09/04/18 21:32	09/05/18 11:21	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-E11S-9.5-10

Lab Sample ID: 720-88263-18

Date Collected: 08/27/18 11:50
Matrix: Solid
Date Received: 08/27/18 14:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.7	1.1	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
Acetone	**140**		47	36	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
Benzene	ND		4.7	0.61	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
Dichlorobromomethane	ND		4.7	0.68	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
Bromobenzene	ND		4.7	0.74	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
Chlorobromomethane	ND		19	0.68	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
Bromoform	ND		4.7	1.9	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
Bromomethane	ND		9.4	0.74	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
2-Butanone (MEK)	**34**	**J**	47	20	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
n-Butylbenzene	ND		4.7	0.94	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
sec-Butylbenzene	ND		4.7	0.68	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
tert-Butylbenzene	ND		4.7	0.69	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
Carbon disulfide	ND		4.7	1.9	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
Carbon tetrachloride	ND		4.7	0.58	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
Chlorobenzene	ND		4.7	0.65	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
Chloroethane	ND		9.4	0.53	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
Chloroform	ND		4.7	0.62	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
Chloromethane	ND		9.4	0.74	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
2-Chlorotoluene	ND		4.7	0.61	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
4-Chlorotoluene	ND		4.7	0.64	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
Chlorodibromomethane	ND		4.7	0.67	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
1,2-Dichlorobenzene	ND		4.7	0.64	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
1,3-Dichlorobenzene	ND		4.7	0.68	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
1,4-Dichlorobenzene	ND		4.7	0.67	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
1,3-Dichloropropane	ND		4.7	0.69	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
1,1-Dichloropropene	ND		4.7	0.65	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
1,2-Dibromo-3-Chloropropane	ND		9.4	1.6	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
Ethylene Dibromide	ND		4.7	1.3	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
Dibromomethane	ND		9.4	0.81	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
Dichlorodifluoromethane	ND		9.4	0.74	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
1,1-Dichloroethane	ND		4.7	0.64	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
1,2-Dichloroethane	ND		4.7	0.71	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
1,1-Dichloroethene	ND	*	4.7	0.58	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
cis-1,2-Dichloroethene	ND		4.7	0.64	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
trans-1,2-Dichloroethene	ND		4.7	0.70	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
1,2-Dichloropropane	ND		4.7	0.59	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
cis-1,3-Dichloropropene	ND		4.7	0.65	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
trans-1,3-Dichloropropene	ND		4.7	0.63	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
Ethylbenzene	ND		4.7	0.70	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
Hexachlorobutadiene	ND		4.7	0.85	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
2-Hexanone	ND		47	9.4	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
Isopropylbenzene	ND		4.7	0.64	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
4-Isopropyltoluene	ND		4.7	2.3	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
Methylene Chloride	ND		9.4	5.3	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
4-Methyl-2-pentanone (MIBK)	ND		47	9.4	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
Naphthalene	ND		9.4	1.4	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
N-Propylbenzene	ND		4.7	0.62	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
Styrene	ND		4.7	0.59	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
1,1,1,2-Tetrachloroethane	ND		4.7	0.71	ug/Kg		08/27/18 02:30	08/30/18 23:19	1

Client Sample ID: DG-E11S-9.5-10

Lab Sample ID: 720-88263-18

Date Collected: 08/27/18 11:50

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.7	0.70	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
Tetrachloroethene	ND		4.7	0.63	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
Toluene	ND		4.7	0.67	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
1,2,3-Trichlorobenzene	ND		4.7	0.70	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
1,2,4-Trichlorobenzene	ND		4.7	0.67	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
1,1,1-Trichloroethane	ND		4.7	0.57	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
1,1,2-Trichloroethane	ND		4.7	0.66	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
Trichloroethene	ND		4.7	0.59	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
Trichlorofluoromethane	ND		4.7	0.53	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
1,2,3-Trichloropropane	ND		4.7	0.72	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.7	2.0	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
1,2,4-Trimethylbenzene	ND		4.7	1.5	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
1,3,5-Trimethylbenzene	ND		4.7	0.61	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
Vinyl acetate	ND		19	4.7	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
Vinyl chloride	ND		4.7	0.69	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
Xylenes, Total	ND		4.7	1.1	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
2,2-Dichloropropane	ND		4.7	1.9	ug/Kg		08/27/18 02:30	08/30/18 23:19	1
Gasoline Range Organics (GRO) -C4-C12	ND		230	94	ug/Kg		08/27/18 02:30	08/30/18 23:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*45 - 131*	*08/27/18 02:30*	*08/30/18 23:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*60 - 140*	*08/27/18 02:30*	*08/30/18 23:19*	*1*
Toluene-d8 (Surr)	*92*		*58 - 140*	*08/27/18 02:30*	*08/30/18 23:19*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.6	4.8	ug/Kg		08/30/18 14:15	09/06/18 07:17	1
Acenaphthene	**13**		4.8	2.7	ug/Kg		08/30/18 14:15	09/06/18 07:17	1
Acenaphthylene	ND		4.8	2.3	ug/Kg		08/30/18 14:15	09/06/18 07:17	1
Anthracene	**12**		4.8	1.9	ug/Kg		08/30/18 14:15	09/06/18 07:17	1
Benzo[a]anthracene	**21**		4.8	1.4	ug/Kg		08/30/18 14:15	09/06/18 07:17	1
Benzo[a]pyrene	**23**		4.8	1.8	ug/Kg		08/30/18 14:15	09/06/18 07:17	1
Benzo[b]fluoranthene	**27**		4.8	2.0	ug/Kg		08/30/18 14:15	09/06/18 07:17	1
Benzo[g,h,i]perylene	**9.1**		4.8	4.1	ug/Kg		08/30/18 14:15	09/06/18 07:17	1
Benzo[k]fluoranthene	**9.3**		4.8	2.0	ug/Kg		08/30/18 14:15	09/06/18 07:17	1
Chrysene	**25**		4.8	1.3	ug/Kg		08/30/18 14:15	09/06/18 07:17	1
Dibenz(a,h)anthracene	ND		4.8	3.4	ug/Kg		08/30/18 14:15	09/06/18 07:17	1
Fluoranthene	**57**		4.8	1.3	ug/Kg		08/30/18 14:15	09/06/18 07:17	1
Fluorene	**2.8**	**J**	4.8	2.1	ug/Kg		08/30/18 14:15	09/06/18 07:17	1
Indeno[1,2,3-cd]pyrene	**8.3**		4.8	4.0	ug/Kg		08/30/18 14:15	09/06/18 07:17	1
Naphthalene	ND		4.8	3.4	ug/Kg		08/30/18 14:15	09/06/18 07:17	1
Phenanthrene	**27**		4.8	1.7	ug/Kg		08/30/18 14:15	09/06/18 07:17	1
Pyrene	**98**		4.8	1.6	ug/Kg		08/30/18 14:15	09/06/18 07:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*33 - 120*	*08/30/18 14:15*	*09/06/18 07:17*	*1*
Terphenyl-d14	*95*		*35 - 146*	*08/30/18 14:15*	*09/06/18 07:17*	*1*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-E11S-9.5-10

Date Collected: 08/27/18 11:50
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88263-18

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	18000		1900	720	ug/Kg		08/30/18 08:54	09/05/18 19:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*89*		*40 - 130*	*08/30/18 08:54*	*09/05/18 19:09*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.58	ug/Kg		08/30/18 12:52	09/04/18 19:06	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/30/18 12:52	09/04/18 19:06	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/30/18 12:52	09/04/18 19:06	1
Aldrin	ND		1.9	0.47	ug/Kg		08/30/18 12:52	09/04/18 19:06	1
alpha-BHC	ND		1.9	0.52	ug/Kg		08/30/18 12:52	09/04/18 19:06	1
beta-BHC	ND		1.9	0.34	ug/Kg		08/30/18 12:52	09/04/18 19:06	1
Chlordane (technical)	ND		38	3.0	ug/Kg		08/30/18 12:52	09/04/18 19:06	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/30/18 12:52	09/04/18 19:06	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/30/18 12:52	09/04/18 19:06	1
Dieldrin	ND		1.9	0.56	ug/Kg		08/30/18 12:52	09/04/18 19:06	1
Endosulfan I	ND		1.9	0.30	ug/Kg		08/30/18 12:52	09/04/18 19:06	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/30/18 12:52	09/04/18 19:06	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/30/18 12:52	09/04/18 19:06	1
Endrin	ND		1.9	0.44	ug/Kg		08/30/18 12:52	09/04/18 19:06	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/30/18 12:52	09/04/18 19:06	1
Endrin ketone	ND		1.9	0.31	ug/Kg		08/30/18 12:52	09/04/18 19:06	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/30/18 12:52	09/04/18 19:06	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/30/18 12:52	09/04/18 19:06	1
Heptachlor epoxide	ND		1.9	0.33	ug/Kg		08/30/18 12:52	09/04/18 19:06	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/30/18 12:52	09/04/18 19:06	1
Toxaphene	ND		38	6.5	ug/Kg		08/30/18 12:52	09/04/18 19:06	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/30/18 12:52	09/04/18 19:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*75*		*21 - 136*	*08/30/18 12:52*	*09/04/18 19:06*	*1*
Tetrachloro-m-xylene	*79*		*21 - 145*	*08/30/18 12:52*	*09/04/18 19:06*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		52	23	ug/Kg		08/30/18 06:48	09/02/18 15:47	1
Aroclor-1221	ND		52	25	ug/Kg		08/30/18 06:48	09/02/18 15:47	1
Aroclor-1232	ND		52	24	ug/Kg		08/30/18 06:48	09/02/18 15:47	1
Aroclor-1242	ND		52	20	ug/Kg		08/30/18 06:48	09/02/18 15:47	1
Aroclor-1248	ND		52	25	ug/Kg		08/30/18 06:48	09/02/18 15:47	1
Aroclor-1254	ND		52	24	ug/Kg		08/30/18 06:48	09/02/18 15:47	1
Aroclor-1260	ND		52	23	ug/Kg		08/30/18 06:48	09/02/18 15:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*66*		*14 - 128*	*08/30/18 06:48*	*09/02/18 15:47*	*1*
DCB Decachlorobiphenyl	*58*		*10 - 132*	*08/30/18 06:48*	*09/02/18 15:47*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.37	J	2.0	0.33	mg/Kg		08/30/18 08:40	08/31/18 00:04	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-E11S-9.5-10

Lab Sample ID: 720-88263-18

Date Collected: 08/27/18 11:50

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.9	J	4.0	0.34	mg/Kg		08/30/18 08:40	08/31/18 00:04	4
Barium	55		2.0	0.28	mg/Kg		08/30/18 08:40	08/31/18 00:04	4
Beryllium	0.24	J	0.40	0.13	mg/Kg		08/30/18 08:40	08/31/18 00:04	4
Cadmium	ND		0.50	0.049	mg/Kg		08/30/18 08:40	08/31/18 00:04	4
Chromium	28		2.0	0.21	mg/Kg		08/30/18 08:40	08/31/18 00:04	4
Cobalt	6.0		0.79	0.079	mg/Kg		08/30/18 08:40	08/31/18 00:04	4
Copper	5.7	J	5.9	2.8	mg/Kg		08/30/18 08:40	08/31/18 00:04	4
Lead	4.3		2.0	0.42	mg/Kg		08/30/18 08:40	08/31/18 00:04	4
Molybdenum	ND		2.0	0.25	mg/Kg		08/30/18 08:40	08/31/18 00:04	4
Nickel	22		2.0	0.20	mg/Kg		08/30/18 08:40	08/31/18 00:04	4
Selenium	ND		4.0	0.59	mg/Kg		08/30/18 08:40	08/31/18 00:04	4
Silver	ND		0.99	0.20	mg/Kg		08/30/18 08:40	08/31/18 00:04	4
Thallium	ND		2.0	0.57	mg/Kg		08/30/18 08:40	08/31/18 00:04	4
Vanadium	23		2.0	0.27	mg/Kg		08/30/18 08:40	08/31/18 00:04	4
Zinc	15		5.9	2.5	mg/Kg		08/30/18 08:40	08/31/18 00:04	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.030		0.014	0.0021	mg/Kg		09/04/18 21:32	09/05/18 11:28	1

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-FG910S-0.5-1
Lab Sample ID: 720-88263-1
Matrix: Solid
Lab File ID: FID1000039.D
Analysis Method: 8015B
Date Collected: 08/27/2018 07:50
Extraction Method: 3546
Date Extracted: 08/30/2018 08:54
Sample wt/vol: 15.92(g)
Date Analyzed: 09/05/2018 03:51
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250762
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	66000		1900	710

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	56		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000039.D
Lims ID: 720-88263-D-1-B
Client ID: DG-FG910S--0.5-1
Sample Type: Client
Inject. Date: 05-Sep-2018 03:51:55 ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053635-039
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\DRO6_A.m
Limit Group: DRO
Last Update: 05-Sep-2018 12:44:19 Calib Date: 04-Sep-2018 09:05:17
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK002

First Level Reviewer: luj Date: 05-Sep-2018 12:44:19

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane	1.297	1.227	0.070	31365	NC	
23 n-Decane	2.145	2.116	0.029	102288	NC	
A 1 C9-C13	2.734	(1.227-4.241)		40320448	22.7	
A 21 Stoddard Solvent	2.734	(1.227-4.241)		40320448	22.6	
A 57 C10-C12	2.864	(2.116-3.613)		34980785	22.7	
24 Dodecane	3.622	3.613	0.009	83123	NC	
A 3 C9 - C17	3.780	(1.227-6.332)		46135935	23.6	
A 60 C10-C16	3.983	(2.116-5.851)		38142689	21.8	
A 47 C9 - C18	4.005	(1.227-6.784)		60259811	37.3	
A 15 Kerosene	4.220	(1.227-7.214)		70734440	43.8	
A 25 C9-C19	4.220	(1.227-7.214)		70734440	36.1	
26 C13	4.244	4.241	0.003	56666	NC	
$ 27 n-Decanoic Acid (Surr)		4.611			ND	U
A 59 C12-C16	4.732	(3.613-5.851)		3161904	2.05	
A 62 C10-C20	4.871	(2.116-7.627)		136842722	88.7	
A 28 C9-C24	5.172	(1.227-9.117)		505366900	327.6	
A 29 C9-C25	5.341	(1.227-9.456)		590675166	383.0	
A 54 C10-C23	5.441	(2.116-8.766)		415421976	269.3	
A 4 C10-C24	5.616	(2.116-9.117)		501138569	324.9	
A 16 C10-C25	5.786	(2.116-9.456)		586446835	380.2	
45 Hexadecane	5.852	5.851	0.001	732621	NC	
A 14 C10-C26	5.949	(2.116-9.783)		663790658	430.4	
A 67 C12-C22	6.007	(3.613-8.402)		286539357	185.8	
A 32 C10-C28	6.260	(2.116-10.404)		807712886	523.7	
A 5 Diesel	6.260	(2.116-10.404)		807712886	523.7	
A 12 Unknown Hydrocarbons	6.260	(2.116-10.404)		807712886	NC	
A 30 C13-C22	6.321	(4.241-8.402)		285428025	185.1	
44 Heptadecane	6.370	6.332	0.038	4819053	NC	
A 31 C12-C24	6.365	(3.613-9.117)		466157784	302.2	
51 n-Octadecane	6.838	6.784	0.054	10474629	NC	
A 9 Crude Oil Range Organics (	6.883	(1.227-12.538)		1140456841	NC	
A 11 Bunker Range Organics (C9-	6.883	(1.227-12.538)		1140456841	NC	

Report Date: 05-Sep-2018 12:44:20 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000039.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.883	(1.227-12.538)		1140456841	644.1	
33 C19	7.214	7.214	0.000	30623739	NC	
A 64 C13-C28	7.322	(4.241-10.404)		771620769	500.3	
A 17 C10-C36	7.327	(2.116-12.538)		1136228510	736.7	
A 68 Crude Oil Range Organics (	7.394	(1.227-13.561)		1247658530	NC	
A 13 C9-C40	7.394	(1.227-13.561)		1247658530	925.3	
A 58 C16-C24	7.484	(5.851-9.117)		462995880	300.2	
61 icosane	7.629	7.627	0.002	18226952	NC	
A 6 C10-C40	7.838	(2.116-13.561)		1243430199	922.8	
$ 34 p-Terphenyl	8.097	8.109	-0.012	27008238	14.1	M
35 n-Docosane	8.443	8.402	0.041	20562306	NC	
A 18 C12-C40	8.587	(3.613-13.561)		1208449414	899.3	
36 Tricosane	8.832	8.766	0.066	39156514	NC	
A 66 C13-C40	8.901	(4.241-13.561)		1207338082	899.5	
37 n-Tetracosane	9.128	9.117	0.011	33016053	NC	
A 2 C16-C36 ORO	9.195	(5.851-12.538)		1119781864	981.7	
38 C25	9.471	9.456	0.015	45443198	NC	
A 19 C16-C40	9.706	(5.851-13.561)		1205287510	901.5	
46 n-Hexacosane	9.824	9.783	0.041	28741738	NC	
A 20 C19-C36	9.876	(7.214-12.538)		1062413712	799.3	
A 55 C23-C32	10.150	(8.766-11.534)		611341169	880.6	
39 n-Octacosane	10.460	10.404	0.056	45349148	NC	
65 C29	10.701	10.700	0.001	20433152	NC	
A 40 C24-C36	10.828	(9.117-12.538)		545156862	612.2	
A 7 Motor Oil	10.828	(9.117-12.538)		545156862	612.2	
A 10 C22-C40	10.982	(8.402-13.561)		779673740	627.0	
A 49 C25-C36	10.997	(9.456-12.538)		549781675	614.2	
A 41 C23-C40	11.164	(8.766-13.561)		828008223	647.8	
A 8 C24-C40	11.339	(9.117-13.561)		742291630	609.8	
56 Dotriacontane	11.456	11.534	-0.078	29230200	NC	
A 50 C28-C40	11.983	(10.404-13.561)		435717313	459.0	
A 63 C29-C40	12.130	(10.700-13.561)		374231341	431.8	
42 n-Hexatriacontane	12.549	12.538	0.011	3794439	NC	
43 C40	13.482	13.561	-0.079	24056624	NC	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

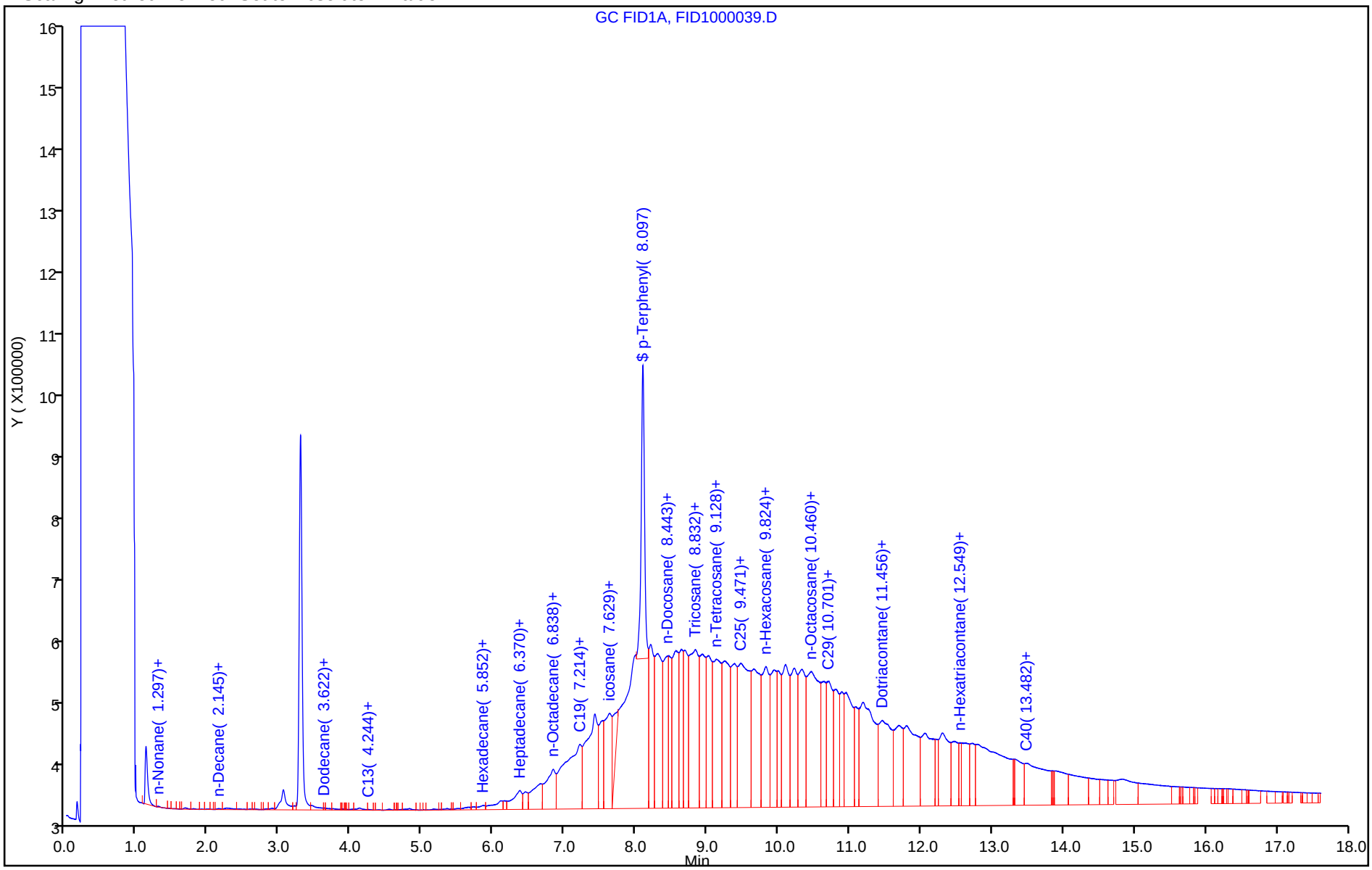
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 05-Sep-2018 12:44:20 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000039.D				
Injection Date:	05-Sep-2018 03:51:55	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88263-D-1-B	Lab Sample ID:	720-88263-1	Worklist Smp#:	39
Client ID:	DG-FG910S--0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	39
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000039.D
Lims ID: 720-88263-D-1-B
Client ID: DG-FG910S--0.5-1
Sample Type: Client
Inject. Date: 05-Sep-2018 03:51:55 ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053635-039
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\DRO6_A.m
Limit Group: DRO
Last Update: 05-Sep-2018 12:44:19 Calib Date: 04-Sep-2018 09:05:17
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK002

First Level Reviewer: luj Date: 05-Sep-2018 12:44:19

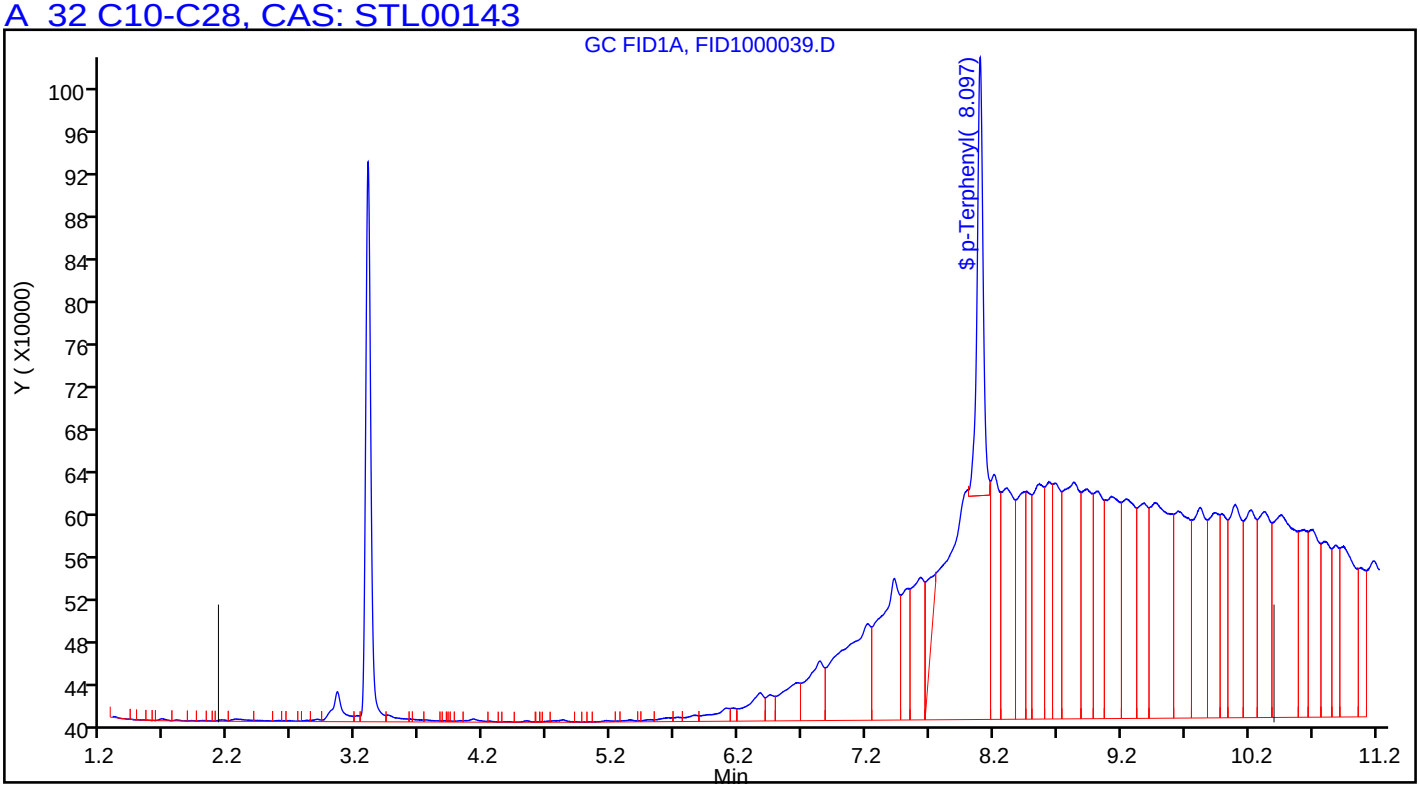
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	14.1	56.26

Report Date: 05-Sep-2018 12:44:21 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000039.D				
Injection Date:	05-Sep-2018 03:51:55	Instrument ID:	CHDRO6		
Lims ID:	720-88263-D-1-B	Lab Sample ID:	720-88263-1		
Client ID:	DG-FG910S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

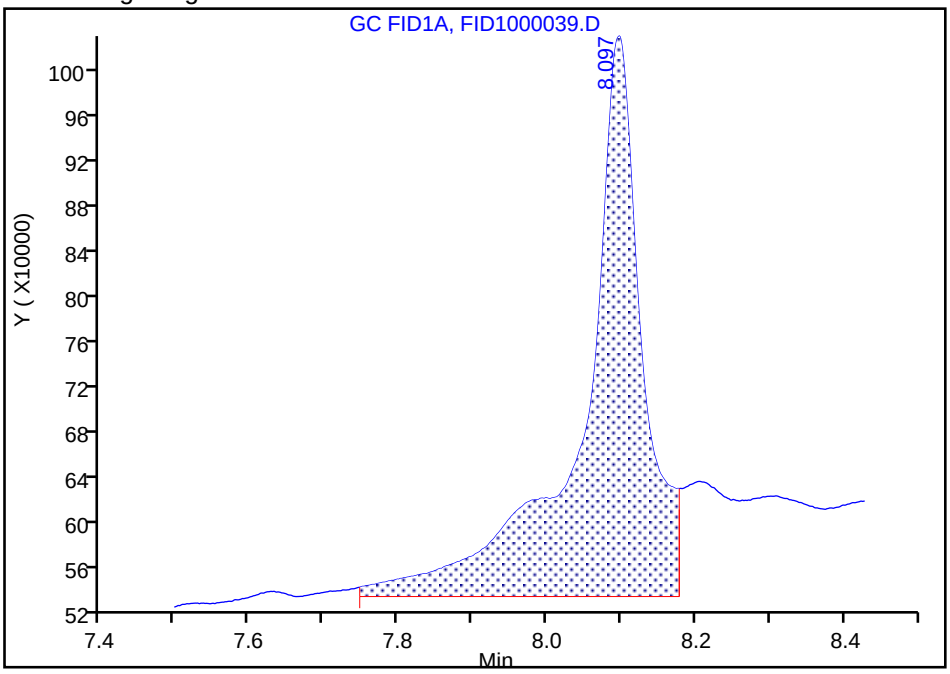
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000039.D				
Injection Date:	05-Sep-2018 03:51:55	Instrument ID:	CHDRO6		
Lims ID:	720-88263-D-1-B	Lab Sample ID:	720-88263-1		
Client ID:	DG-FG910S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

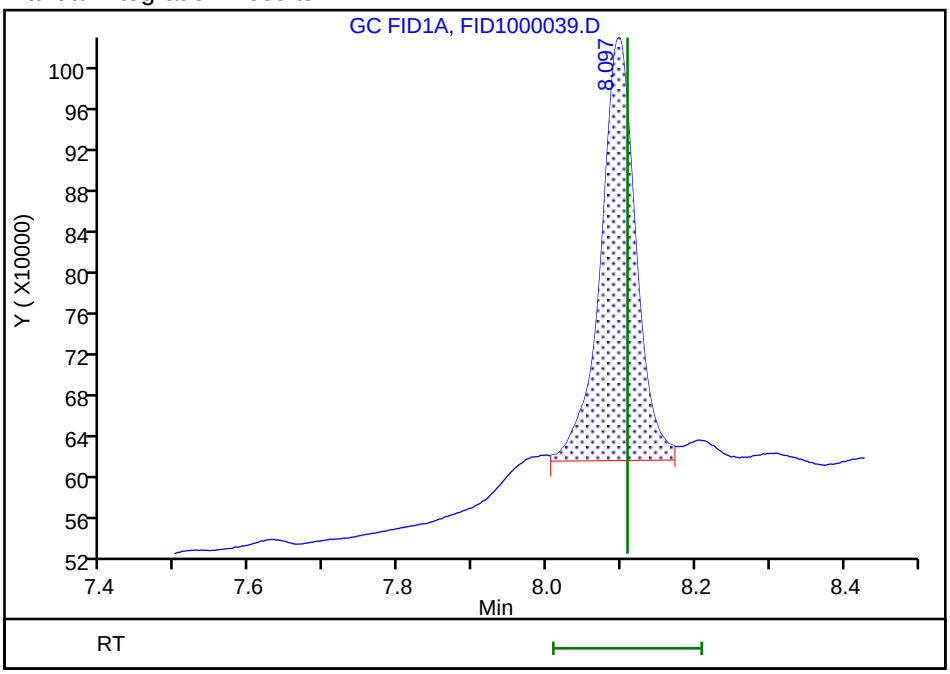
Processing Integration Results

RT: 8.10
Area: 55995309
Amount: 29.158755
Amount Units: mg/L



Manual Integration Results

RT: 8.10
Area: 27008238
Amount: 14.064153
Amount Units: mg/L



Reviewer: luj, 05-Sep-2018 12:44:12

Audit Action: Manually Integrated Audit Reason: Wrong Peak

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-F910S-3.5-4
Lab Sample ID: 720-88263-2
Matrix: Solid
Lab File ID: FID2000013.D
Analysis Method: 8015B
Date Collected: 08/27/2018 07:50
Extraction Method: 3546
Date Extracted: 08/30/2018 08:54
Sample wt/vol: 15.17(g)
Date Analyzed: 09/05/2018 13:26
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250885
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	17000		2000	740

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	102		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000013.D
Lims ID: 720-88263-E-2-A
Client ID: DG-F910S-3.5-4
Sample Type: Client
Inject. Date: 05-Sep-2018 13:26:54 ALS Bottle#: 63 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053662-013
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\DRO6_B.m
Limit Group: DRO
Last Update: 05-Sep-2018 15:38:15 Calib Date: 05-Sep-2018 11:27:56
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000009.D

Column 1 : Det: GC FID1A
Process Host: XAWRK002

First Level Reviewer: luj Date: 05-Sep-2018 15:38:15

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.305			ND	
23 n-Decane	2.189	2.168	0.021	104504	NC	
A 1 C9-C13	2.774	(1.305-4.243)		5445485	2.50	
A 21 Stoddard Solvent	2.774	(1.305-4.243)		5445485	NC	
A 57 C10-C12	2.898	(2.168-3.628)		4917708	10.1	
24 Dodecane	3.540	3.628	-0.088	1346518	NC	
A 3 C9 - C17	3.805	(1.305-6.306)		32421751	14.2	M
A 60 C10-C16	3.999	(2.168-5.830)		31296722	15.4	M
A 47 C9 - C18	4.028	(1.305-6.750)		36387494	19.2	M
A 25 C9-C19	4.240	(1.305-7.174)		42175028	18.3	M
A 15 Kerosene	4.240	(1.305-7.174)		42175028	22.2	M
26 C13	4.284	4.243	0.041	90304	NC	
$ 27 n-Decanoic Acid (Surr)		4.643			ND	U
A 59 C12-C16	4.729	(3.628-5.830)		27725532	23.0	M
A 61 C10-C20	4.875	(2.168-7.582)		58399649	40.4	M
A 28 C9-C24	5.178	(1.305-9.051)		133991360	83.2	M
A 29 C9-C25	5.344	(1.305-9.384)		149038678	91.7	M
A 54 C10-C23	5.437	(2.168-8.705)		110754126	70.0	M
A 4 C10-C24	5.610	(2.168-9.051)		133856511	83.1	M
A 16 C10-C25	5.776	(2.168-9.384)		148903829	91.6	M
45 Hexadecane	5.883	5.830	0.053	236334	NC	M
A 14 C10-C26	5.937	(2.168-9.705)		172092141	104.7	M
A 67 C12-C22	5.987	(3.628-8.346)		98034924	62.8	M
A 32 C10-C28	6.242	(2.168-10.315)		213580302	128.2	M
A 5 Diesel	6.242	(2.168-10.315)		213580302	128.2	M
A 12 Unknown Hydrocarbons	6.242	(2.168-10.315)		213580302	NC	M
A 30 C13-C22	6.294	(4.243-8.346)		96295478	61.8	M
44 Heptadecane	6.340	6.306	0.034	1377333	NC	M
A 31 C12-C24	6.339	(3.628-9.051)		130285321	81.1	M
49 n-Octadecane	6.802	6.750	0.052	2637574	NC	M
A 9 Crude Oil Range Organics (	6.857	(1.305-12.408)		381941829	NC	M
A 11 Bunker Range Organics (C9-	6.857	(1.305-12.408)		381941829	NC	M

Report Date: 05-Sep-2018 15:38:16 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000013.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.857	(1.305-12.408)		381941829	180.9	M
33 C19	7.183	7.174	0.009	5097931	NC	M
A 64 C13-C28	7.279	(4.243-10.315)		208269666	125.2	M
A 17 C10-C36	7.288	(2.168-12.408)		381806980	223.5	M
A 68 Crude Oil Range Organics (	7.347	(1.305-13.389)		474299211	NC	M
A 13 C9-C40	7.347	(1.305-13.389)		474299211	303.6	M
A 58 C16-C24	7.440	(5.830-9.051)		102559789	65.4	M
62 icosane	7.598	7.582	0.016	4969941	NC	M
A 6 C10-C40	7.779	(2.168-13.389)		474164362	303.8	M
$ 34 p-Terphenyl	8.075	8.086	-0.011	50470637	25.4	
35 n-Docosane	8.343	8.346	-0.003	10114756	NC	M
A 18 C12-C40	8.508	(3.628-13.389)		470593172	302.4	M
36 Tricosane	8.720	8.705	0.015	10352323	NC	M
A 66 C13-C40	8.816	(4.243-13.389)		468853726	301.6	M
37 n-Tetracosane	9.063	9.051	0.012	6392267	NC	M
A 2 C16-C36 ORO	9.119	(5.830-12.408)		350510258	296.4	M
38 C25	9.399	9.384	0.015	18499565	NC	M
A 19 C16-C40	9.610	(5.830-13.389)		442867640	285.8	M
46 n-Hexacosane	9.763	9.705	0.058	9789645	NC	M
A 20 C19-C36	9.791	(7.174-12.408)		233378041	171.4	
A 55 C23-C32	10.064	(8.705-11.424)		181753888	234.9	M
39 n-Octacosane	10.345	10.315	0.030	14869919	NC	M
65 C29	10.629	10.606	0.023	20204298	NC	M
A 40 C24-C36	10.729	(9.051-12.408)		246095042	251.0	M
A 7 Motor Oil	10.729	(9.051-12.408)		204541712	208.6	
A 10 C22-C40	10.867	(8.346-13.389)		286802352	206.3	
A 50 C25-C36	10.896	(9.384-12.408)		179110712	194.4	
A 41 C23-C40	11.047	(8.705-13.389)		275121177	201.3	
A 8 C24-C40	11.220	(9.051-13.389)		264906519	197.5	
56 Dotriacontane	11.440	11.424	0.016	8311963	NC	M
A 51 C28-C40	11.852	(10.315-13.389)		210890767	194.4	
A 63 C29-C40	11.997	(10.606-13.389)		195655073	195.8	
42 n-Hexatriacontane	12.428	12.408	0.020	14511282	NC	M
43 C40		13.389		ND		
$ 69 Stearic Acid (Surr)		0.000		ND		

QC Flag Legend

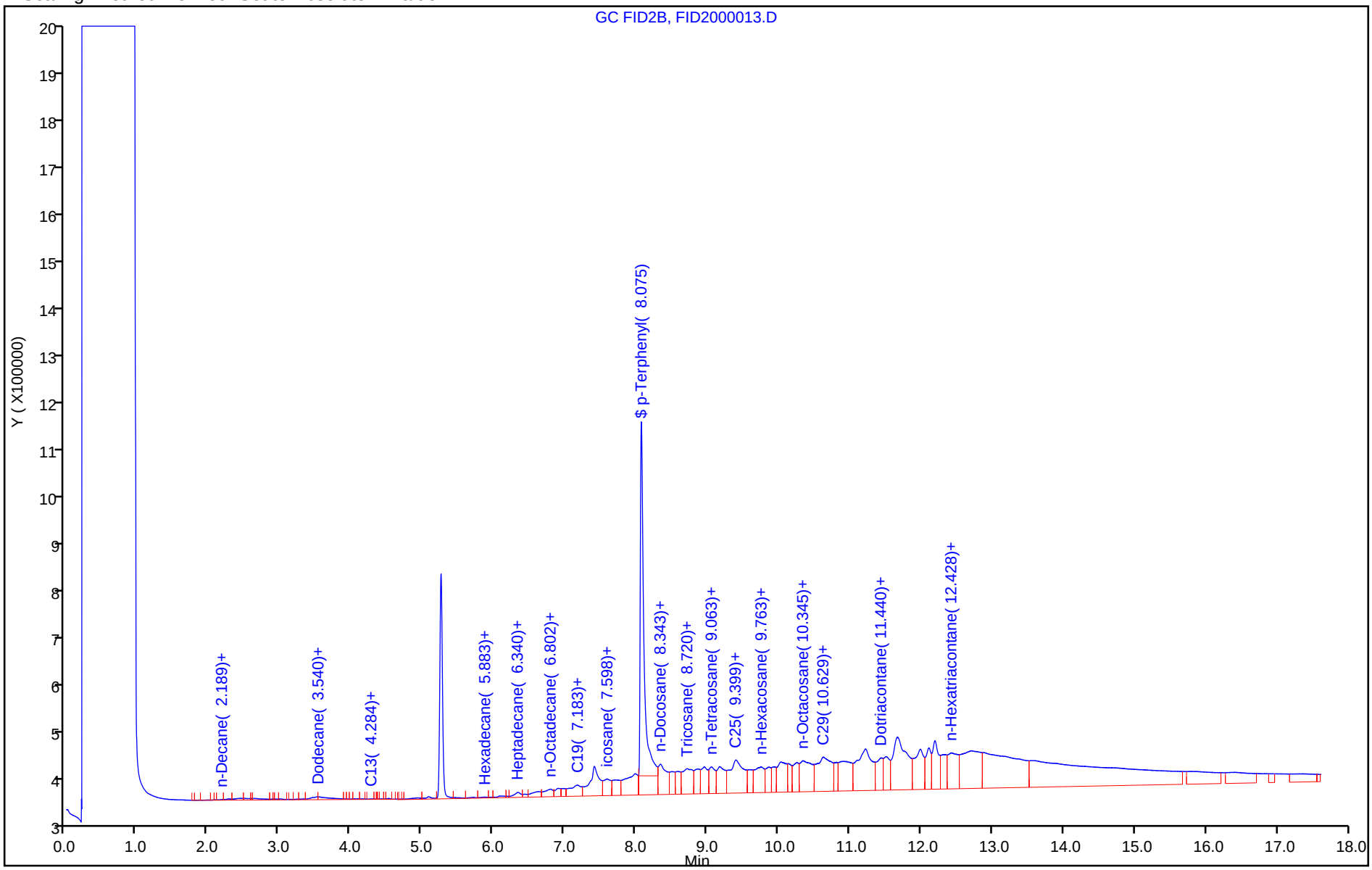
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 05-Sep-2018 15:38:16 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000013.D				
Injection Date:	05-Sep-2018 13:26:54	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88263-E-2-A	Lab Sample ID:	720-88263-2	Worklist Smp#:	13
Client ID:	DG-F910S-3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	63
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000013.D
Lims ID: 720-88263-E-2-A
Client ID: DG-F910S-3.5-4
Sample Type: Client
Inject. Date: 05-Sep-2018 13:26:54 ALS Bottle#: 63 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053662-013
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\DRO6_B.m
Limit Group: DRO
Last Update: 05-Sep-2018 15:38:15 Calib Date: 05-Sep-2018 11:27:56
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000009.D

Column 1 : Det: GC FID1A
Process Host: XAWRK002

First Level Reviewer: luj Date: 05-Sep-2018 15:38:15

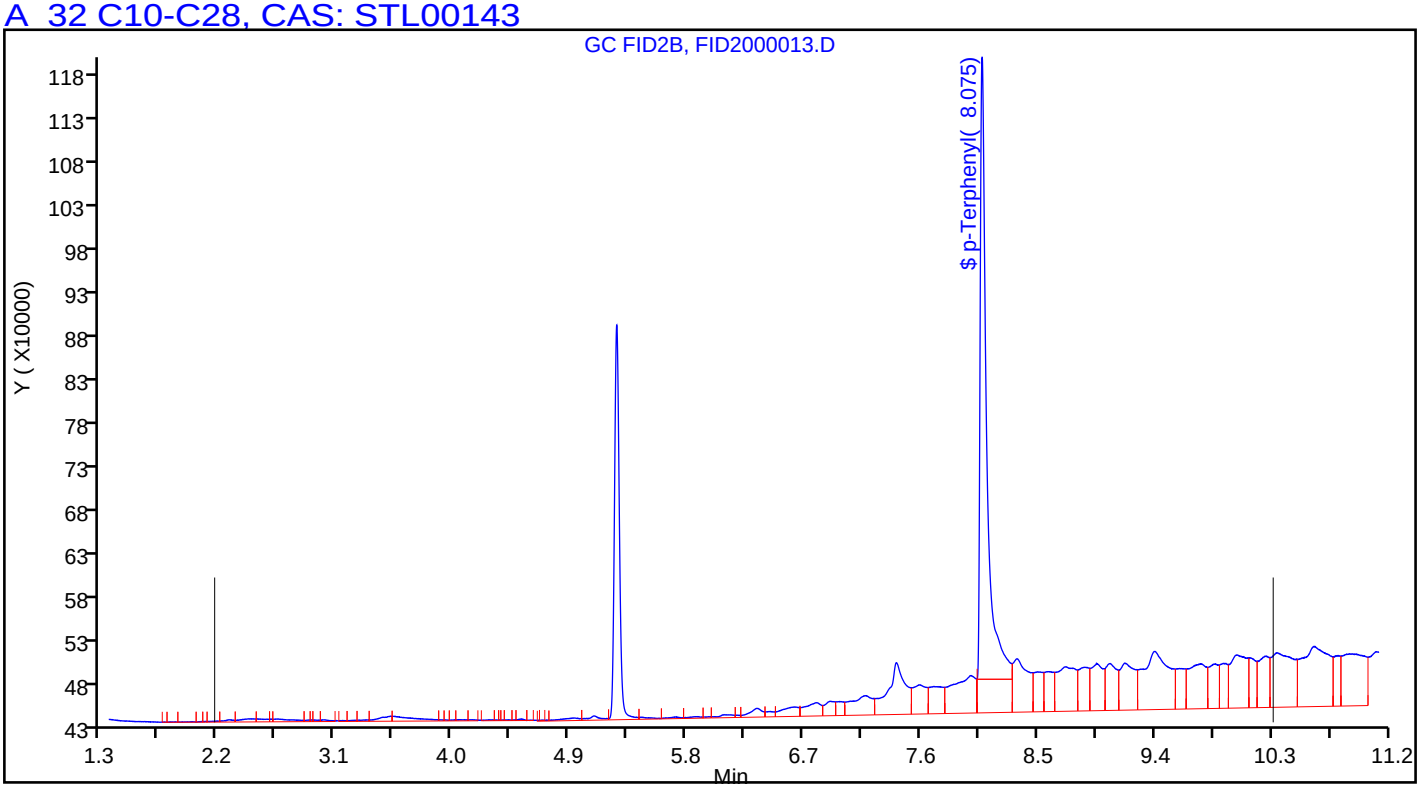
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	25.4	101.68

Report Date: 05-Sep-2018 15:38:19 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000013.D				
Injection Date:	05-Sep-2018 13:26:54	Instrument ID:	CHDRO6		
Lims ID:	720-88263-E-2-A	Lab Sample ID:	720-88263-2		
Client ID:	DG-F910S-3.5-4				
Operator ID:	DCH	ALS Bottle#:	63	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

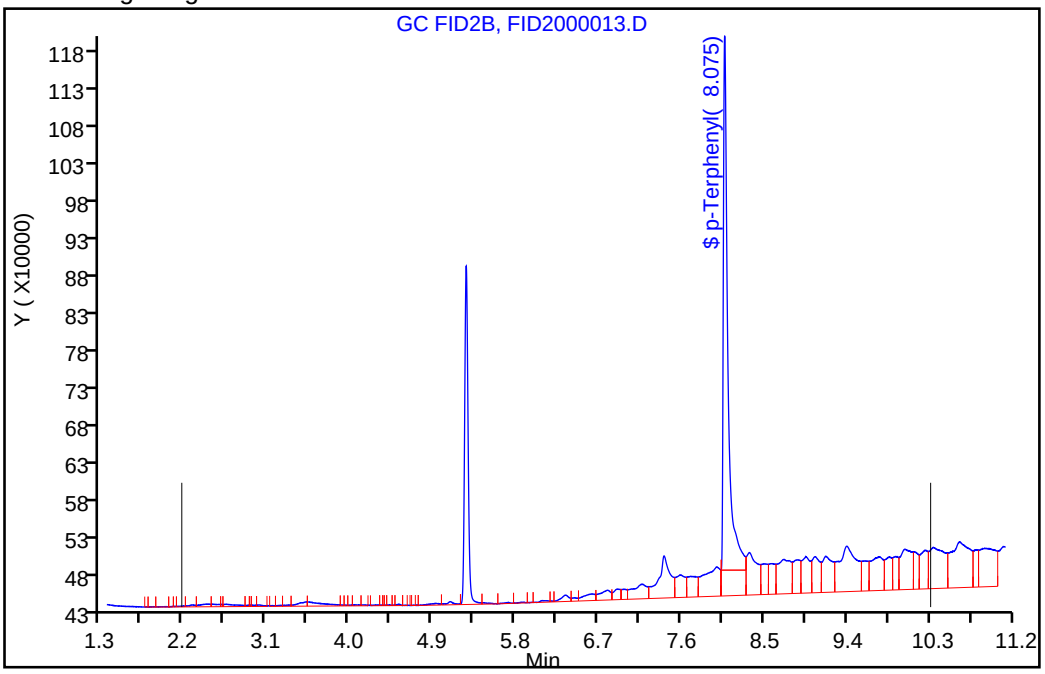
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000013.D				
Injection Date:	05-Sep-2018 13:26:54	Instrument ID:	CHDRO6		
Lims ID:	720-88263-E-2-A	Lab Sample ID:	720-88263-2		
Client ID:	DG-F910S-3.5-4				
Operator ID:	DCH	ALS Bottle#:	63	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.242, CAS: STL00143

Signal: 1

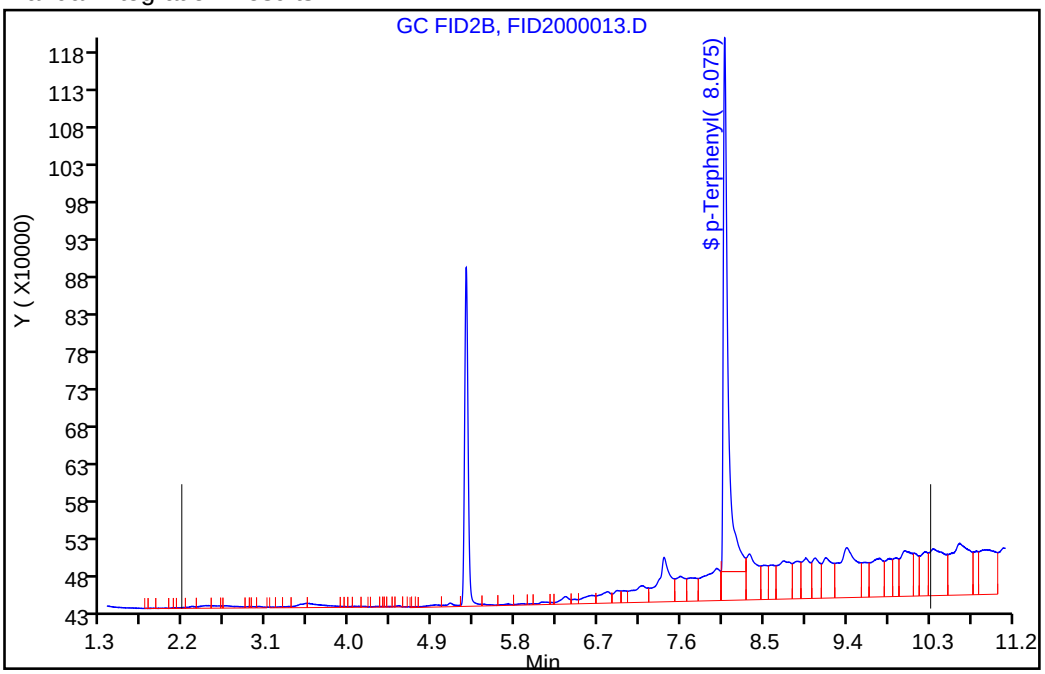
Processing Integration Results

RT: 6.24
Response: 189821104
Amount: 114.7799



Manual Integration Results

RT: 6.24
Response: 213580302
Amount: 128.2328



Reviewer: luj, 05-Sep-2018 15:37:50

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-H9S-0.5-1 Lab Sample ID: 720-88263-3

Matrix: Solid Lab File ID: FID1000041.D

Analysis Method: 8015B Date Collected: 08/27/2018 08:25

Extraction Method: 3546 Date Extracted: 08/30/2018 08:54

Sample wt/vol: 15.25(g) Date Analyzed: 09/05/2018 04:40

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250762 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	68000		2000	740

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	69		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000041.D
Lims ID: 720-88263-D-3-B
Client ID: DG-H9S--0.5-1
Sample Type: Client
Inject. Date: 05-Sep-2018 04:40:22 ALS Bottle#: 41 Worklist Smp#: 41
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053635-041
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\DRO6_A.m
Limit Group: DRO
Last Update: 05-Sep-2018 12:46:13 Calib Date: 04-Sep-2018 09:05:17
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK002

First Level Reviewer: luj Date: 05-Sep-2018 12:46:13

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane	1.303	1.227	0.076	684	NC	
23 n-Decane	2.140	2.116	0.024	120832	NC	
A 1 C9-C13	2.734	(1.227-4.241)		44491447	25.1	
A 21 Stoddard Solvent	2.734	(1.227-4.241)		44491447	25.0	
A 57 C10-C12	2.864	(2.116-3.613)		39941972	25.9	
24 Dodecane	3.615	3.613	0.002	279928	NC	
A 3 C9 - C17	3.780	(1.227-6.332)		53965312	27.7	M
A 60 C10-C16	3.983	(2.116-5.851)		47079187	26.9	M
A 47 C9 - C18	4.005	(1.227-6.784)		68134280	42.2	M
A 15 Kerosene	4.220	(1.227-7.214)		102922137	63.7	M
A 25 C9-C19	4.220	(1.227-7.214)		102922137	52.5	M
26 C13	4.247	4.241	0.006	108763	NC	
$ 27 n-Decanoic Acid (Surr)		4.611			ND	MU
A 59 C12-C16	4.732	(3.613-5.851)		7137215	4.63	M
A 62 C10-C20	4.871	(2.116-7.627)		141340363	91.6	M
A 28 C9-C24	5.172	(1.227-9.117)		448273806	290.6	M
A 29 C9-C25	5.341	(1.227-9.456)		509721357	330.5	M
A 54 C10-C23	5.441	(2.116-8.766)		362847069	235.2	M
A 4 C10-C24	5.616	(2.116-9.117)		444922612	288.5	M
A 16 C10-C25	5.786	(2.116-9.456)		506370163	328.3	M
45 Hexadecane	5.846	5.851	-0.005	1010619	NC	M
A 14 C10-C26	5.949	(2.116-9.783)		601340281	389.9	M
A 67 C12-C22	6.007	(3.613-8.402)		245133270	158.9	M
A 32 C10-C28	6.260	(2.116-10.404)		798348138	517.6	M
A 5 Diesel	6.260	(2.116-10.404)		798348138	517.6	M
A 12 Unknown Hydrocarbons	6.260	(2.116-10.404)		798348138	NC	M
A 30 C13-C22	6.321	(4.241-8.402)		243934989	158.2	M
44 Heptadecane	6.370	6.332	0.038	4757278	NC	M
A 31 C12-C24	6.365	(3.613-9.117)		404980640	262.6	M
51 n-Octadecane	6.834	6.784	0.050	8634277	NC	M
A 9 Crude Oil Range Organics (	6.883	(1.227-12.538)		1467877327	NC	M
A 11 Bunker Range Organics (C9-	6.883	(1.227-12.538)		1467877327	NC	M

Report Date: 05-Sep-2018 12:46:14 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000041.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.883	(1.227-12.538)		1467877327	829.0	M
33 C19	7.208	7.214	-0.006	12427464	NC	M
A 64 C13-C28	7.322	(4.241-10.404)		757207885	490.9	M
A 17 C10-C36	7.327	(2.116-12.538)		1464526133	949.5	M
A 68 Crude Oil Range Organics (	7.394	(1.227-13.561)		1871606898	NC	M
A 13 C9-C40	7.394	(1.227-13.561)		1871606898	1388.0	M
A 58 C16-C24	7.484	(5.851-9.117)		398854044	258.6	M
61 icosane	7.629	7.627	0.002	8780703	NC	M
A 6 C10-C40	7.838	(2.116-13.561)		1868255704	1386.5	M
$ 34 p-Terphenyl	8.093	8.109	-0.016	33169389	17.3	M
35 n-Docosane	8.418	8.402	0.016	28779307	NC	M
A 18 C12-C40	8.587	(3.613-13.561)		1828313732	1360.6	M
36 Tricosane	8.767	8.766	0.001	20353108	NC	M
A 66 C13-C40	8.901	(4.241-13.561)		1827115451	1361.2	M
37 n-Tetracosane	9.134	9.117	0.017	32538079	NC	M
A 2 C16-C36 ORO	9.195	(5.851-12.538)		1480475948	1297.9	
38 C25	9.459	9.456	0.003	63327019	NC	M
A 19 C16-C40	9.706	(5.851-13.561)		1822187136	1362.9	M
46 n-Hexacosane	9.825	9.783	0.042	43995814	NC	M
A 20 C19-C36	9.876	(7.214-12.538)		1423695131	1071.2	
A 55 C23-C32	10.150	(8.766-11.534)		850309855	1224.8	M
39 n-Octacosane	10.457	10.404	0.053	53331870	NC	M
65 C29	10.689	10.700	-0.011	67544288	NC	M
A 40 C24-C36	10.828	(9.117-12.538)		1003758426	1127.2	M
A 7 Motor Oil	10.828	(9.117-12.538)		876648984	984.5	
A 10 C22-C40	10.982	(8.402-13.561)		1217129543	978.8	
A 49 C25-C36	10.997	(9.456-12.538)		958155970	1070.4	M
A 41 C23-C40	11.164	(8.766-13.561)		1505408635	1177.8	M
A 8 C24-C40	11.339	(9.117-13.561)		1423333092	1169.2	M
56 Dotriacontane	11.468	11.534	-0.066	77147994	NC	M
A 50 C28-C40	11.983	(10.404-13.561)		1069907566	1127.2	M
A 63 C29-C40	12.130	(10.700-13.561)		998798684	1152.5	M
42 n-Hexatriacontane	12.547	12.538	0.009	11954313	NC	M
43 C40		13.561			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

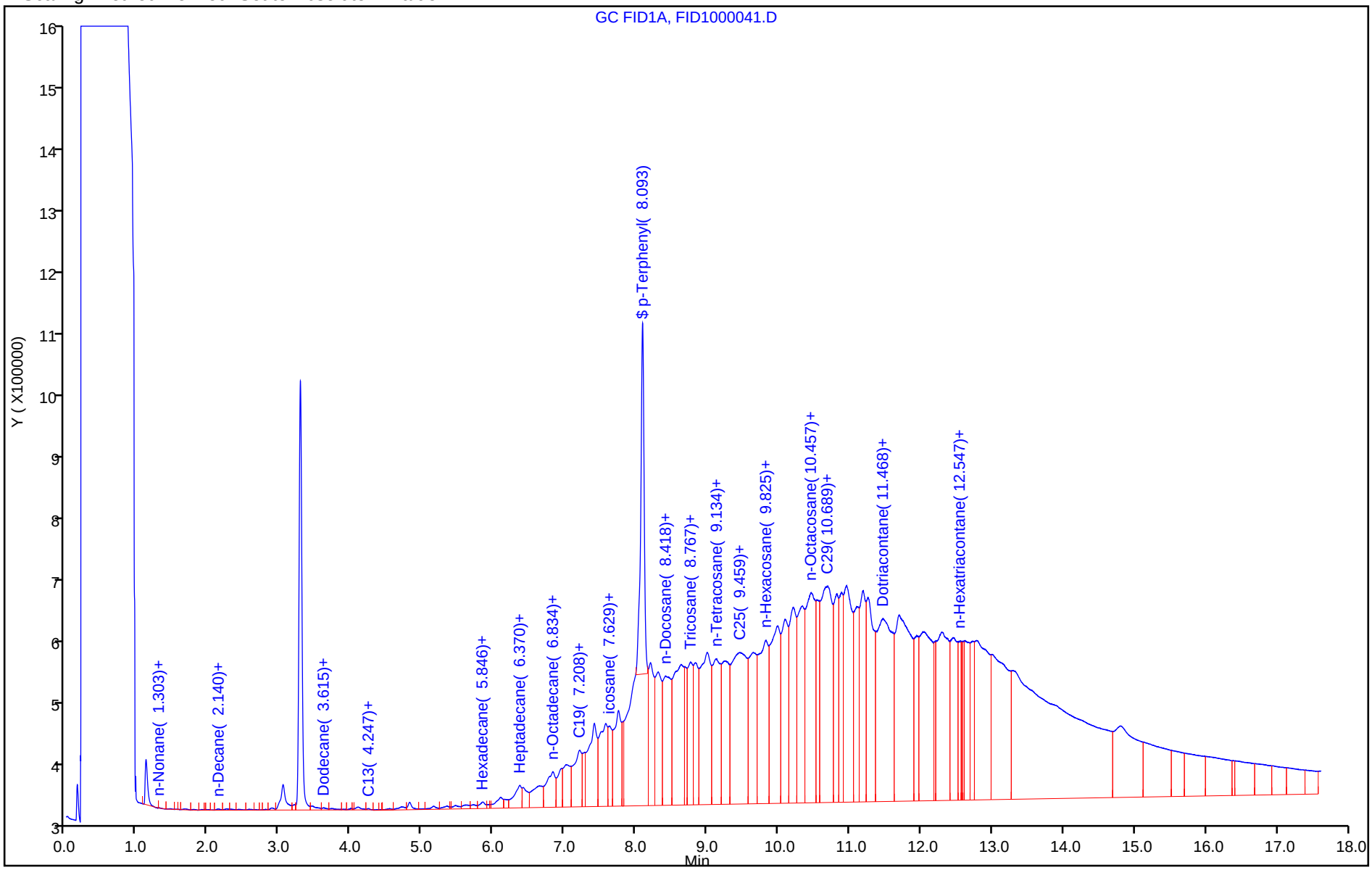
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 05-Sep-2018 12:46:14 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000041.D				
Injection Date:	05-Sep-2018 04:40:22	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88263-D-3-B	Lab Sample ID:	720-88263-3	Worklist Smp#:	41
Client ID:	DG-H9S--0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	41
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000041.D
Lims ID: 720-88263-D-3-B
Client ID: DG-H9S--0.5-1
Sample Type: Client
Inject. Date: 05-Sep-2018 04:40:22 ALS Bottle#: 41 Worklist Smp#: 41
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053635-041
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\DRO6_A.m
Limit Group: DRO
Last Update: 05-Sep-2018 12:46:13 Calib Date: 04-Sep-2018 09:05:17
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK002

First Level Reviewer: luj Date: 05-Sep-2018 12:46:13

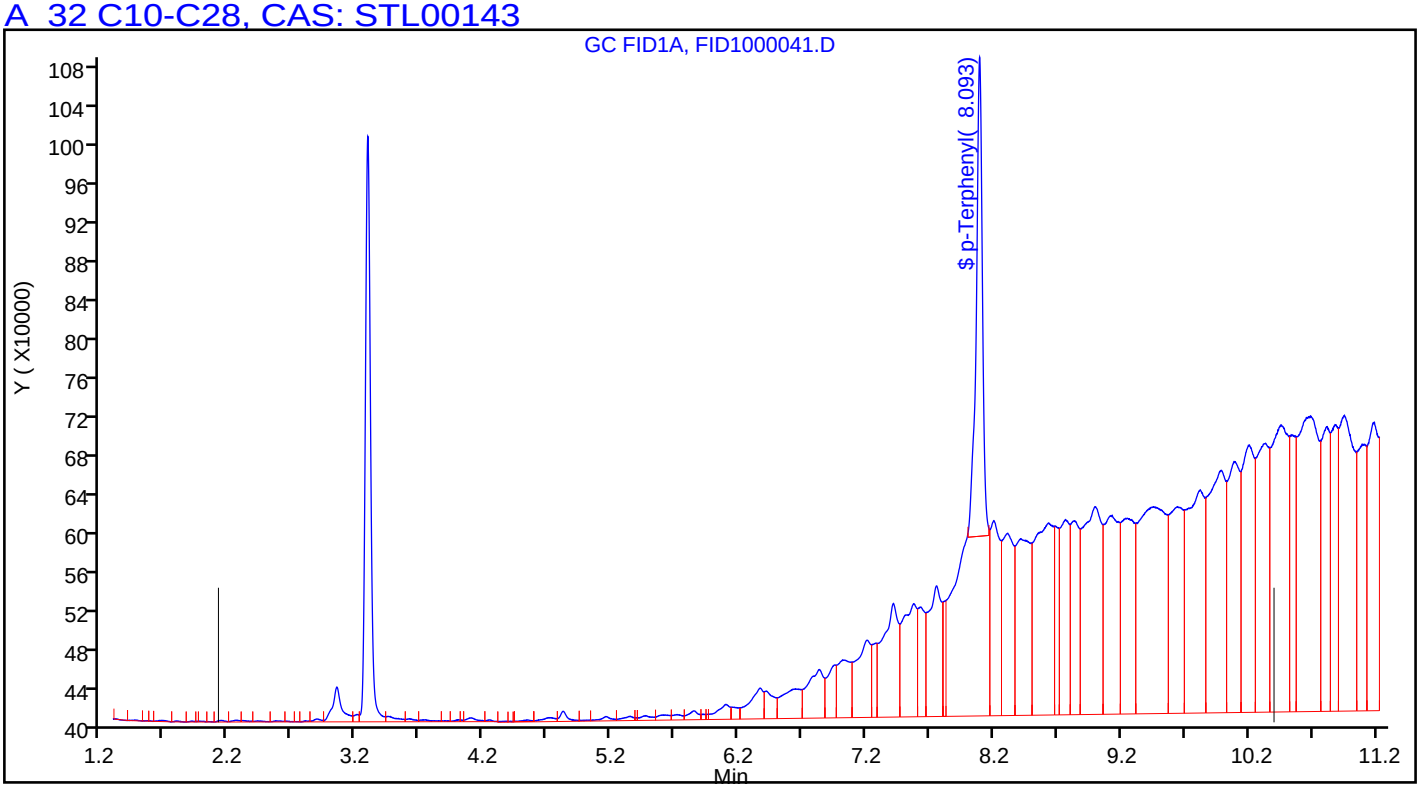
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	17.3	69.09

Report Date: 05-Sep-2018 12:46:17 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000041.D				
Injection Date:	05-Sep-2018 04:40:22	Instrument ID:	CHDRO6		
Lims ID:	720-88263-D-3-B	Lab Sample ID:	720-88263-3		
Client ID:	DG-H9S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

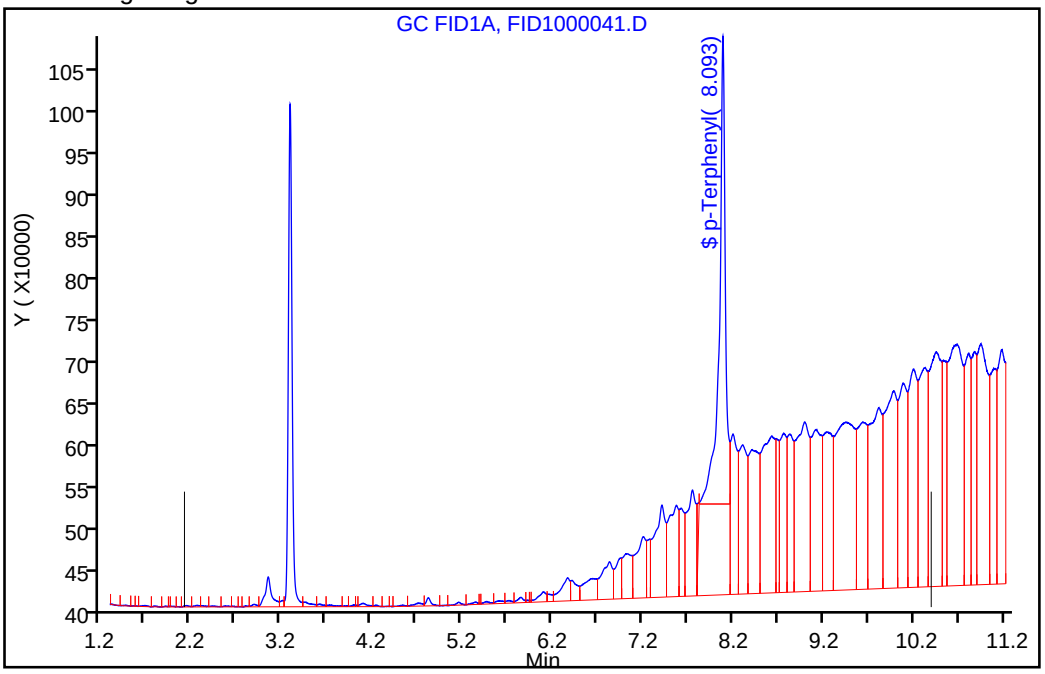
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000041.D				
Injection Date:	05-Sep-2018 04:40:22	Instrument ID:	CHDRO6		
Lims ID:	720-88263-D-3-B	Lab Sample ID:	720-88263-3		
Client ID:	DG-H9S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.260, CAS: STL00143

Signal: 1

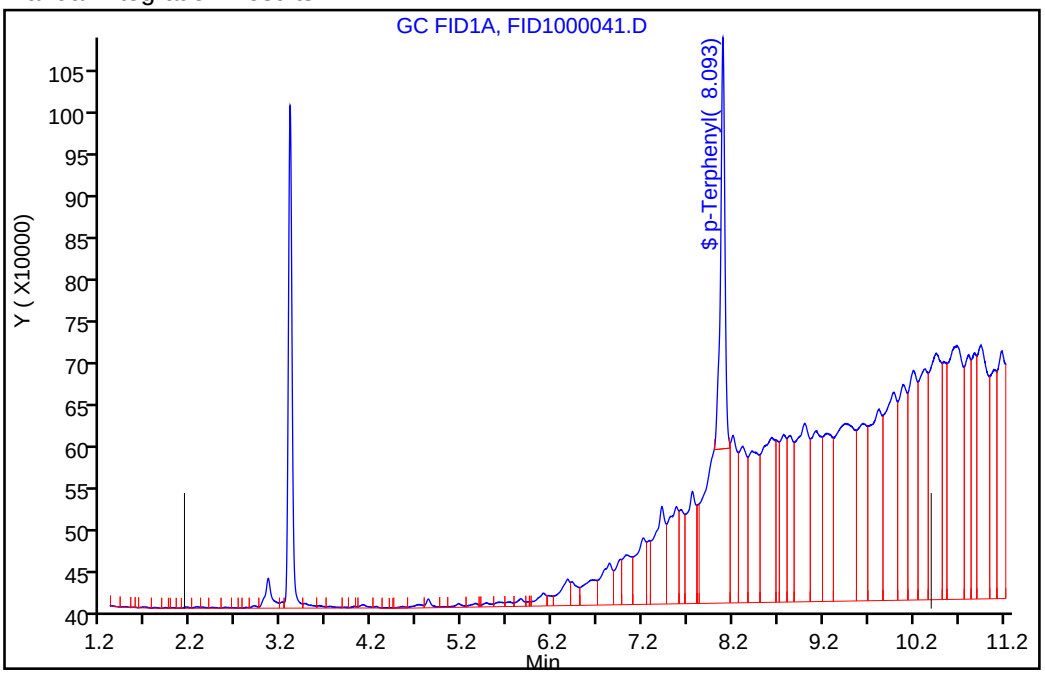
Processing Integration Results

RT: 6.26
Response: 728409053
Amount: 472.2543



Manual Integration Results

RT: 6.26
Response: 798348138
Amount: 517.5984



Reviewer: luj, 05-Sep-2018 12:45:36

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

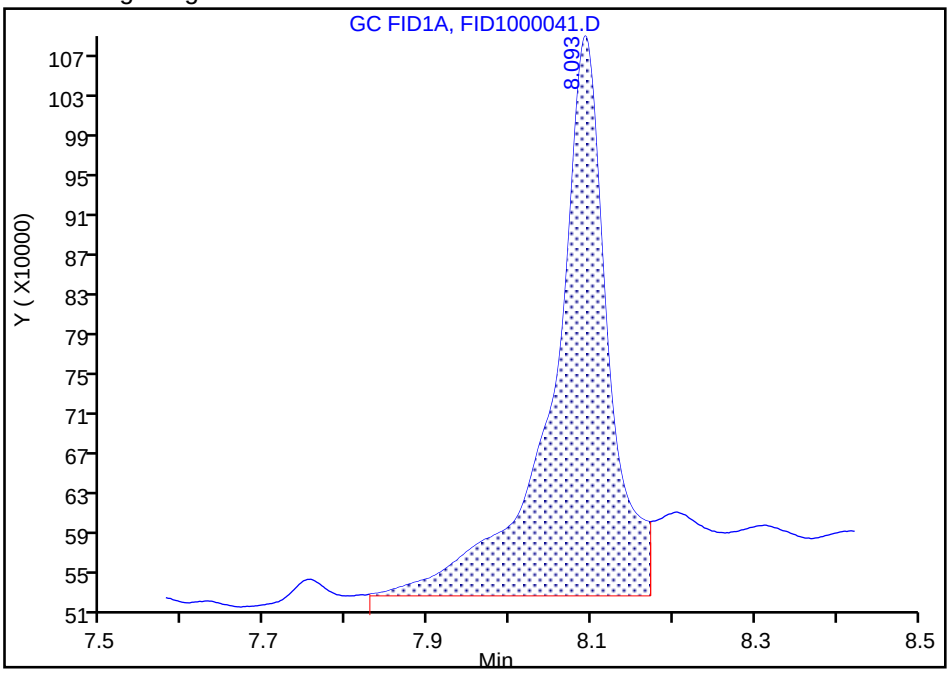
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000041.D				
Injection Date:	05-Sep-2018 04:40:22	Instrument ID:	CHDRO6		
Lims ID:	720-88263-D-3-B	Lab Sample ID:	720-88263-3		
Client ID:	DG-H9S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

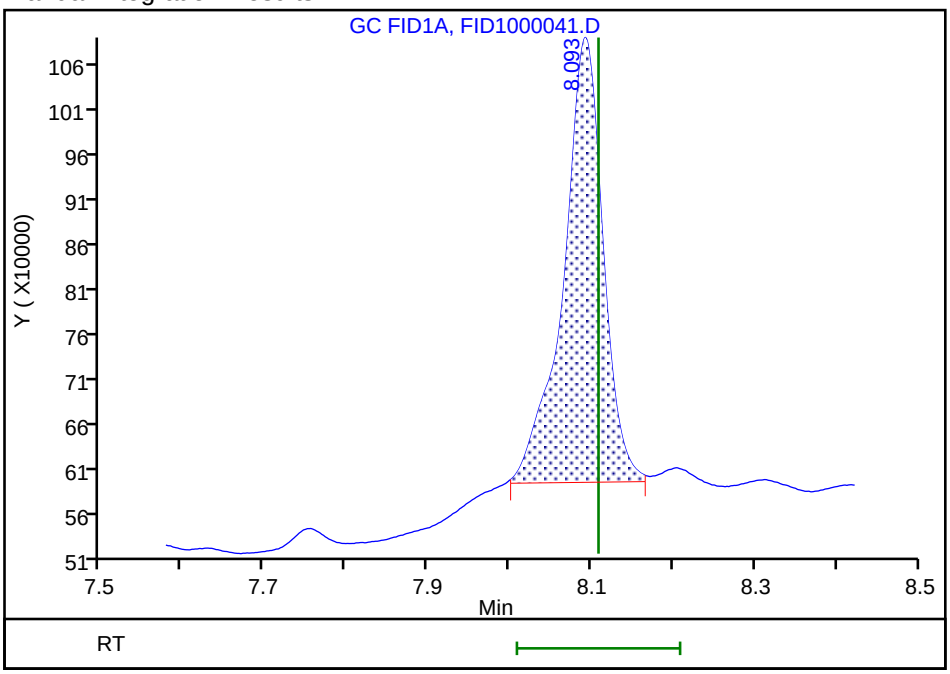
Processing Integration Results

RT: 8.09
Area: 53223867
Amount: 27.715566
Amount Units: mg/L



Manual Integration Results

RT: 8.09
Area: 33169389
Amount: 17.272484
Amount Units: mg/L



Reviewer: luj, 05-Sep-2018 12:46:05

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-H9S-3.5-4
Lab Sample ID: 720-88263-4
Matrix: Solid
Lab File ID: FID1000014.D
Analysis Method: 8015B
Date Collected: 08/27/2018 08:25
Extraction Method: 3546
Date Extracted: 08/30/2018 08:54
Sample wt/vol: 15.29(g)
Date Analyzed: 09/06/2018 14:56
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250980
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	5000		2000	740

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	89		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180906-53687.b\FID1000014.D
Lims ID: 720-88263-E-4-B
Client ID: DG-H9S-3.5-4
Sample Type: Client
Inject. Date: 06-Sep-2018 14:56:49 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053687-014
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180906-53687.b\DRO6_A.m
Limit Group: DRO
Last Update: 06-Sep-2018 15:19:26 Calib Date: 06-Sep-2018 10:28:15
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180906-53687.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK007

First Level Reviewer: luj Date: 06-Sep-2018 15:19:26

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.228			ND	
23 n-Decane	2.131	2.114	0.017	9597	NC	
A 1 C9-C13	2.732	(1.228-4.237)		1370514	0.7717	
A 21 Stoddard Solvent	2.732	(1.228-4.237)		1370514	0.7696	
A 57 C10-C12	2.862	(2.114-3.610)		1021353	0.6622	
24 Dodecane	3.621	3.610	0.011	11276	NC	
A 3 C9 - C17	3.777	(1.228-6.327)		2638103	1.35	M
A 60 C10-C16	3.980	(2.114-5.846)		2134298	1.22	
A 47 C9 - C18	4.003	(1.228-6.778)		3657910	2.27	M
A 15 Kerosene	4.218	(1.228-7.209)		5774779	3.58	M
A 25 C9-C19	4.218	(1.228-7.209)		5774779	2.94	M
26 C13	4.248	4.237	0.011	24847	NC	
$ 27 n-Decanoic Acid (Surr)		4.605			ND	U
A 59 C12-C16	4.728	(3.610-5.846)		1112945	0.7216	
A 62 C10-C20	4.868	(2.114-7.622)		12421912	8.05	M
A 28 C9-C24	5.169	(1.228-9.110)		36254509	23.5	M
A 29 C9-C25	5.338	(1.228-9.448)		40238507	26.1	M
A 54 C10-C23	5.437	(2.114-8.760)		30573266	19.8	M
A 4 C10-C24	5.612	(2.114-9.110)		36178162	23.5	M
A 16 C10-C25	5.781	(2.114-9.448)		40162160	26.0	M
45 Hexadecane	5.840	5.846	-0.006	81575	NC	
A 14 C10-C26	5.944	(2.114-9.774)		46759075	30.3	M
A 67 C12-C22	6.003	(3.610-8.396)		23763700	15.4	M
A 32 C10-C28	6.255	(2.114-10.395)		59179603	38.4	M
A 5 Diesel	6.255	(2.114-10.395)		59179603	38.4	M
A 12 Unknown Hydrocarbons	6.255	(2.114-10.395)		59179603	NC	M
A 30 C13-C22	6.317	(4.237-8.396)		23490886	15.2	M
44 Heptadecane	6.369	6.327	0.042	407114	NC	M
A 31 C12-C24	6.360	(3.610-9.110)		35156809	22.8	M
51 n-Octadecane	6.788	6.778	0.010	221225	NC	M
A 9 Crude Oil Range Organics (	6.877	(1.228-12.527)		139181704	NC	M
A 11 Bunker Range Organics (C9-	6.877	(1.228-12.527)		139181704	NC	M

Report Date: 06-Sep-2018 15:19:28 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180906-53687.b\FID1000014.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.877	(1.228-12.527)		139181704	78.6	M
33 C19	7.208	7.209	-0.001	255459	NC	M
A 64 C13-C28	7.316	(4.237-10.395)		57885436	37.5	M
A 17 C10-C36	7.321	(2.114-12.527)		139105357	90.2	M
A 68 Crude Oil Range Organics (	7.388	(1.228-13.548)		190923061	NC	M
A 13 C9-C40	7.388	(1.228-13.548)		190923061	141.6	M
A 58 C16-C24	7.478	(5.846-9.110)		34125439	22.1	M
61 icosane	7.619	7.622	-0.003	1610939	NC	M
A 6 C10-C40	7.831	(2.114-13.548)		190846714	141.6	M
$ 34 p-Terphenyl	8.092	8.115	-0.023	42790244	22.3	
35 n-Docosane	8.405	8.396	0.009	2353454	NC	M
A 18 C12-C40	8.579	(3.610-13.548)		189825361	141.3	M
36 Tricosane	8.773	8.760	0.013	2988636	NC	M
A 66 C13-C40	8.893	(4.237-13.548)		189552547	141.2	M
37 n-Tetracosane	9.133	9.110	0.023	2552149	NC	M
A 2 C16-C36 ORO	9.187	(5.846-12.527)		194231324	170.3	
38 C25	9.459	9.448	0.011	4402318	NC	M
A 19 C16-C40	9.697	(5.846-13.548)		188793991	141.2	M
46 n-Hexacosane	9.807	9.774	0.033	2450962	NC	M
A 20 C19-C36	9.868	(7.209-12.527)		189313152	142.4	
A 55 C23-C32	10.142	(8.760-11.524)		63291308	91.2	M
39 n-Octacosane	10.446	10.395	0.051	3688682	NC	M
65 C29	10.705	10.690	0.015	7203539	NC	M
A 40 C24-C36	10.819	(9.110-12.527)		98077517	110.1	M
A 7 Motor Oil	10.819	(9.110-12.527)		50562617	56.8	
A 10 C22-C40	10.972	(8.396-13.548)		87398321	70.3	
A 49 C25-C36	10.988	(9.448-12.527)		98943197	110.5	M
A 41 C23-C40	11.154	(8.760-13.548)		160273448	125.4	M
A 8 C24-C40	11.329	(9.110-13.548)		154668552	127.1	M
56 Dotriacontane	11.544	11.524	0.020	3326746	NC	M
A 50 C28-C40	11.972	(10.395-13.548)		131667111	138.7	M
A 63 C29-C40	12.119	(10.690-13.548)		125965653	145.4	M
42 n-Hexatriacontane	12.546	12.527	0.019	4263177	NC	M
43 C40	13.560	13.548	0.012	1173665	NC	M
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

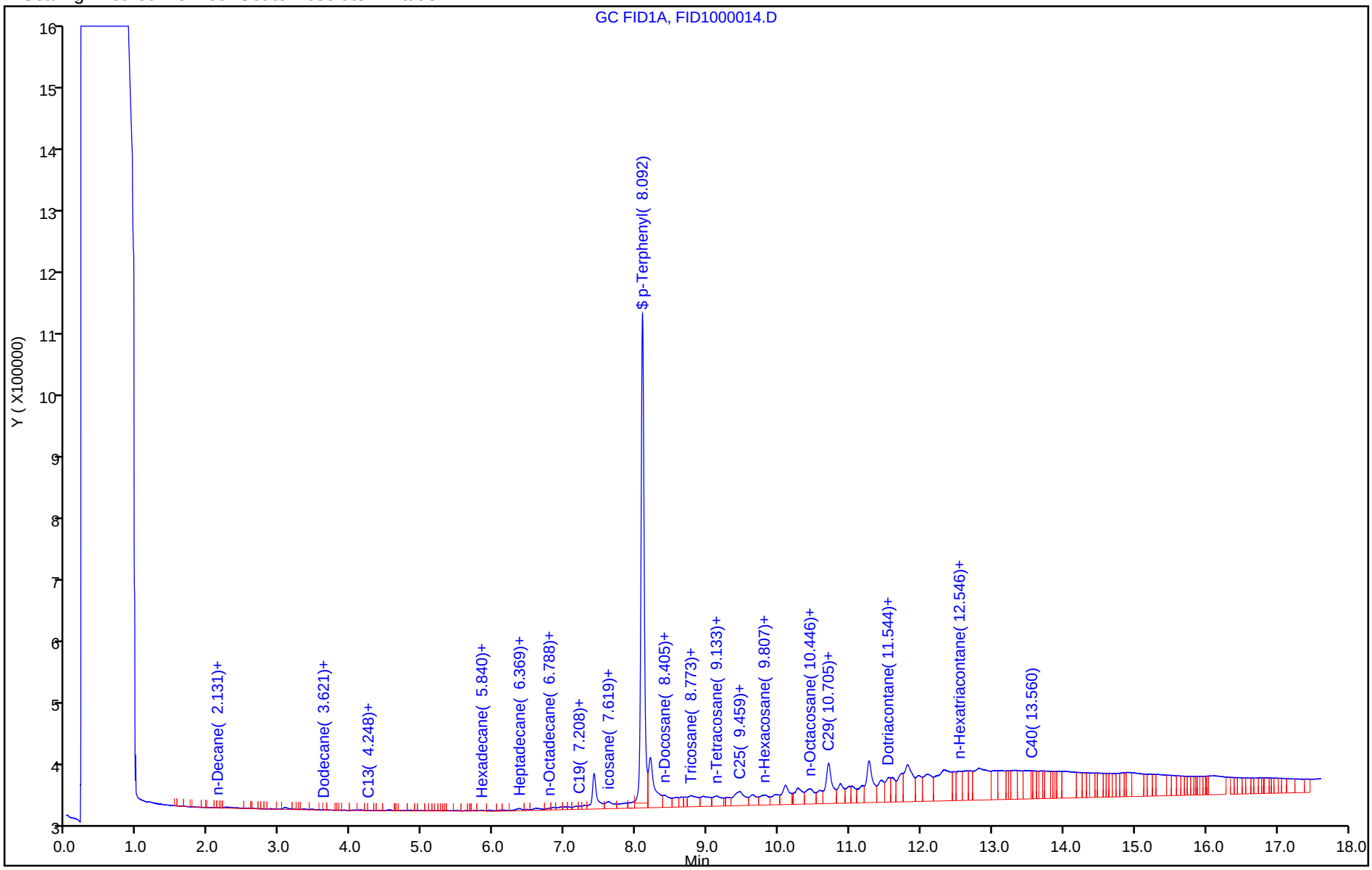
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 06-Sep-2018 15:19:28 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180906-53687.b\FID1000014.D				
Injection Date:	06-Sep-2018 14:56:49	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88263-E-4-B	Lab Sample ID:	720-88263-4	Worklist Smp#:	14
Client ID:	DG-H9S-3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180906-53687.b\FID1000014.D
Lims ID: 720-88263-E-4-B
Client ID: DG-H9S-3.5-4
Sample Type: Client
Inject. Date: 06-Sep-2018 14:56:49 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053687-014
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180906-53687.b\DRO6_A.m
Limit Group: DRO
Last Update: 06-Sep-2018 15:19:26 Calib Date: 06-Sep-2018 10:28:15
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180906-53687.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK007

First Level Reviewer: luj Date: 06-Sep-2018 15:19:26

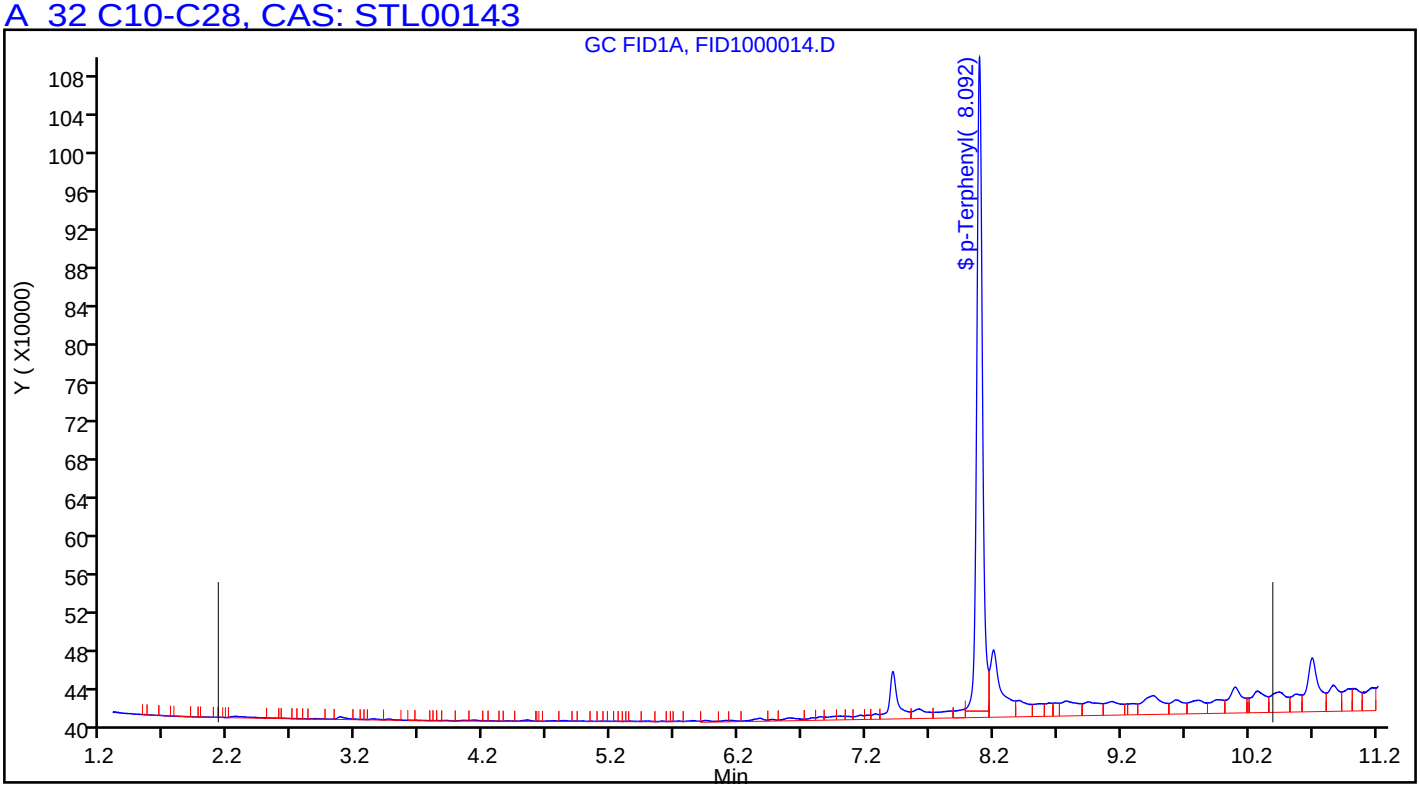
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	22.3	89.13

Report Date: 06-Sep-2018 15:19:31 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180906-53687.b\FID1000014.D				
Injection Date:	06-Sep-2018 14:56:49	Instrument ID:	CHDRO6		
Lims ID:	720-88263-E-4-B	Lab Sample ID:	720-88263-4		
Client ID:	DG-H9S-3.5-4				
Operator ID:	DCH	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

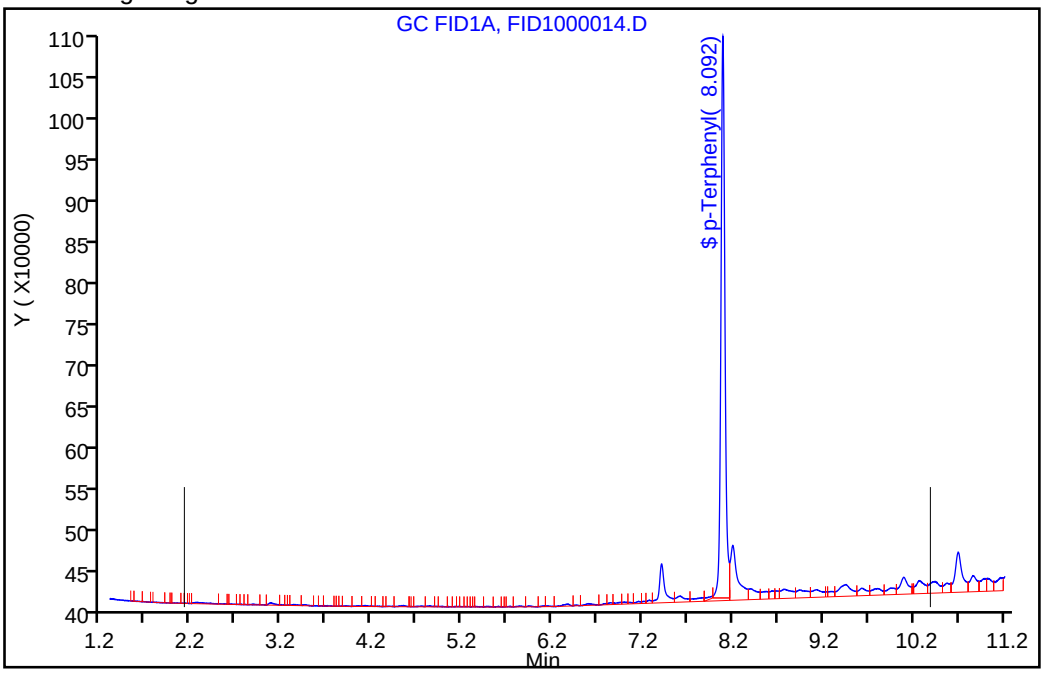
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180906-53687.b\FID1000014.D				
Injection Date:	06-Sep-2018 14:56:49	Instrument ID:	CHDRO6		
Lims ID:	720-88263-E-4-B	Lab Sample ID:	720-88263-4		
Client ID:	DG-H9S-3.5-4				
Operator ID:	DCH	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.255, CAS: STL00143

Signal: 1

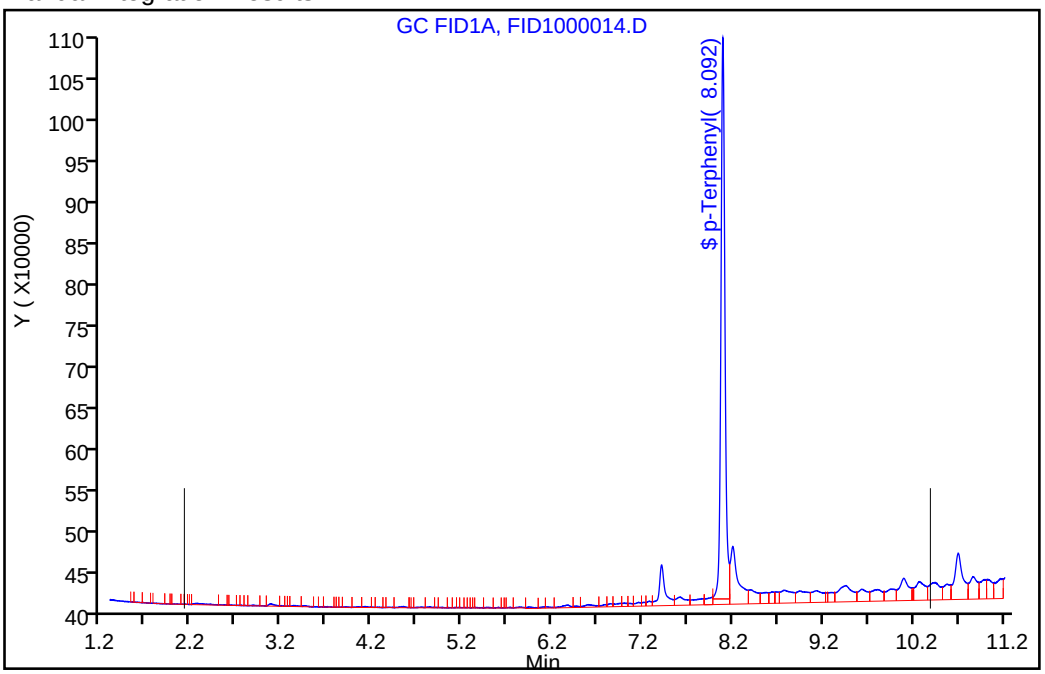
Processing Integration Results

RT: 6.25
Response: 40501368
Amount: 26.258522



Manual Integration Results

RT: 6.25
Response: 59179603
Amount: 38.368306



Reviewer: luj, 06-Sep-2018 15:19:05

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-H9S-9.5-10
Lab Sample ID: 720-88263-5
Matrix: Solid
Lab File ID: FID2000014.D
Analysis Method: 8015B
Date Collected: 08/27/2018 08:25
Extraction Method: 3546
Date Extracted: 08/30/2018 08:54
Sample wt/vol: 15.35(g)
Date Analyzed: 09/05/2018 13:51
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250885
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	8500		2000	730

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	97		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000014.D
Lims ID: 720-88263-D-5-C
Client ID: DG-H9S-9.5-10
Sample Type: Client
Inject. Date: 05-Sep-2018 13:51:04 ALS Bottle#: 64 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053662-014
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\DRO6_B.m
Limit Group: DRO
Last Update: 05-Sep-2018 15:39:00 Calib Date: 05-Sep-2018 11:27:56
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000009.D

Column 1 : Det: GC FID1A
Process Host: XAWRK002

First Level Reviewer: luj Date: 05-Sep-2018 15:39:00

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.305			ND	
23 n-Decane	2.153	2.168	-0.015	36961	NC	
A 1 C9-C13	2.774	(1.305-4.243)		3621150	1.66	
A 21 Stoddard Solvent	2.774	(1.305-4.243)		3621150	NC	
A 57 C10-C12	2.898	(2.168-3.628)		1869853	8.36	
24 Dodecane	3.601	3.628	-0.027	81751	NC	
A 3 C9 - C17	3.805	(1.305-6.306)		4685961	2.05	
A 60 C10-C16	3.999	(2.168-5.830)		4369289	2.15	
A 47 C9 - C18	4.028	(1.305-6.750)		6105325	3.22	
A 25 C9-C19	4.240	(1.305-7.174)		9874859	4.29	
A 15 Kerosene	4.240	(1.305-7.174)		9874859	5.20	
26 C13		4.243			ND	
$ 27 n-Decanoic Acid (Surr)		4.643			ND	U
A 59 C12-C16	4.729	(3.628-5.830)		2581187	8.76	
A 61 C10-C20	4.875	(2.168-7.582)		14596768	15.6	
A 28 C9-C24	5.178	(1.305-9.051)		44097215	32.3	
A 29 C9-C25	5.344	(1.305-9.384)		65173004	44.2	
A 54 C10-C23	5.437	(2.168-8.705)		33477276	26.3	
A 4 C10-C24	5.610	(2.168-9.051)		43982430	32.2	
A 16 C10-C25	5.776	(2.168-9.384)		65058219	44.1	
45 Hexadecane	5.766	5.830	-0.064	173202	NC	
A 14 C10-C26	5.937	(2.168-9.705)		69655998	46.7	
A 67 C12-C22	5.987	(3.628-8.346)		24006946	20.9	
A 32 C10-C28	6.242	(2.168-10.315)		101690213	64.9	
A 5 Diesel	6.242	(2.168-10.315)		101690213	64.9	
A 12 Unknown Hydrocarbons	6.242	(2.168-10.315)		101690213	NC	
A 30 C13-C22	6.294	(4.243-8.346)		23731552	20.7	
44 Heptadecane	6.331	6.306	0.025	788444	NC	
A 31 C12-C24	6.339	(3.628-9.051)		42194328	31.2	
49 n-Octadecane	6.807	6.750	0.057	512171	NC	
A 9 Crude Oil Range Organics (	6.857	(1.305-12.408)		289673434	NC	
A 11 Bunker Range Organics (C9-	6.857	(1.305-12.408)		289673434	NC	

Report Date: 05-Sep-2018 15:39:01 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000014.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.857	(1.305-12.408)		289673434	137.2	
33 C19	7.187	7.174	0.013	1137951	NC	
A 64 C13-C28	7.279	(4.243-10.315)		99626717	63.7	
A 17 C10-C36	7.288	(2.168-12.408)		289558649	171.3	
A 68 Crude Oil Range Organics (	7.347	(1.305-13.389)		383126719	NC	
A 13 C9-C40	7.347	(1.305-13.389)		383126719	245.2	
A 58 C16-C24	7.440	(5.830-9.051)		39786343	29.8	
62 icosane	7.596	7.582	0.014	1917979	NC	
A 6 C10-C40	7.779	(2.168-13.389)		383011934	245.4	
$ 34 p-Terphenyl	8.070	8.086	-0.016	48073674	24.2	
35 n-Docosane	8.349	8.346	0.003	6293180	NC	
A 18 C12-C40	8.508	(3.628-13.389)		381223832	245.0	
36 Tricosane	8.710	8.705	0.005	6679087	NC	
A 66 C13-C40	8.816	(4.243-13.389)		380948438	245.1	
37 n-Tetracosane	9.086	9.051	0.035	6167063	NC	
A 2 C16-C36 ORO	9.119	(5.830-12.408)		285362562	241.3	
38 C25	9.384	9.384	0.000	12777200	NC	
A 19 C16-C40	9.610	(5.830-13.389)		378815847	244.5	
46 n-Hexacosane	9.748	9.705	0.043	7811031	NC	
A 20 C19-C36	9.791	(7.174-12.408)		179897719	132.1	
A 55 C23-C32	10.064	(8.705-11.424)		155565680	201.0	
39 n-Octacosane	10.365	10.315	0.050	12751658	NC	
65 C29	10.619	10.606	0.012	25005304	NC	
A 40 C24-C36	10.729	(9.051-12.408)		228802364	233.4	M
A 7 Motor Oil	10.729	(9.051-12.408)		201114249	205.1	
A 10 C22-C40	10.867	(8.346-13.389)		276165116	198.7	
A 50 C25-C36	10.896	(9.384-12.408)		188851587	205.0	
A 41 C23-C40	11.047	(8.705-13.389)		275615768	201.7	
A 8 C24-C40	11.220	(9.051-13.389)		276966745	206.5	
56 Dotriacontane	11.492	11.424	0.068	15539584	NC	
A 51 C28-C40	11.852	(10.315-13.389)		243005376	224.0	
A 63 C29-C40	11.997	(10.606-13.389)		230048414	230.2	
42 n-Hexatriacontane	12.495	12.408	0.087	14212877	NC	
43 C40		13.389		ND		
$ 69 Stearic Acid (Surr)		0.000		ND		

QC Flag Legend

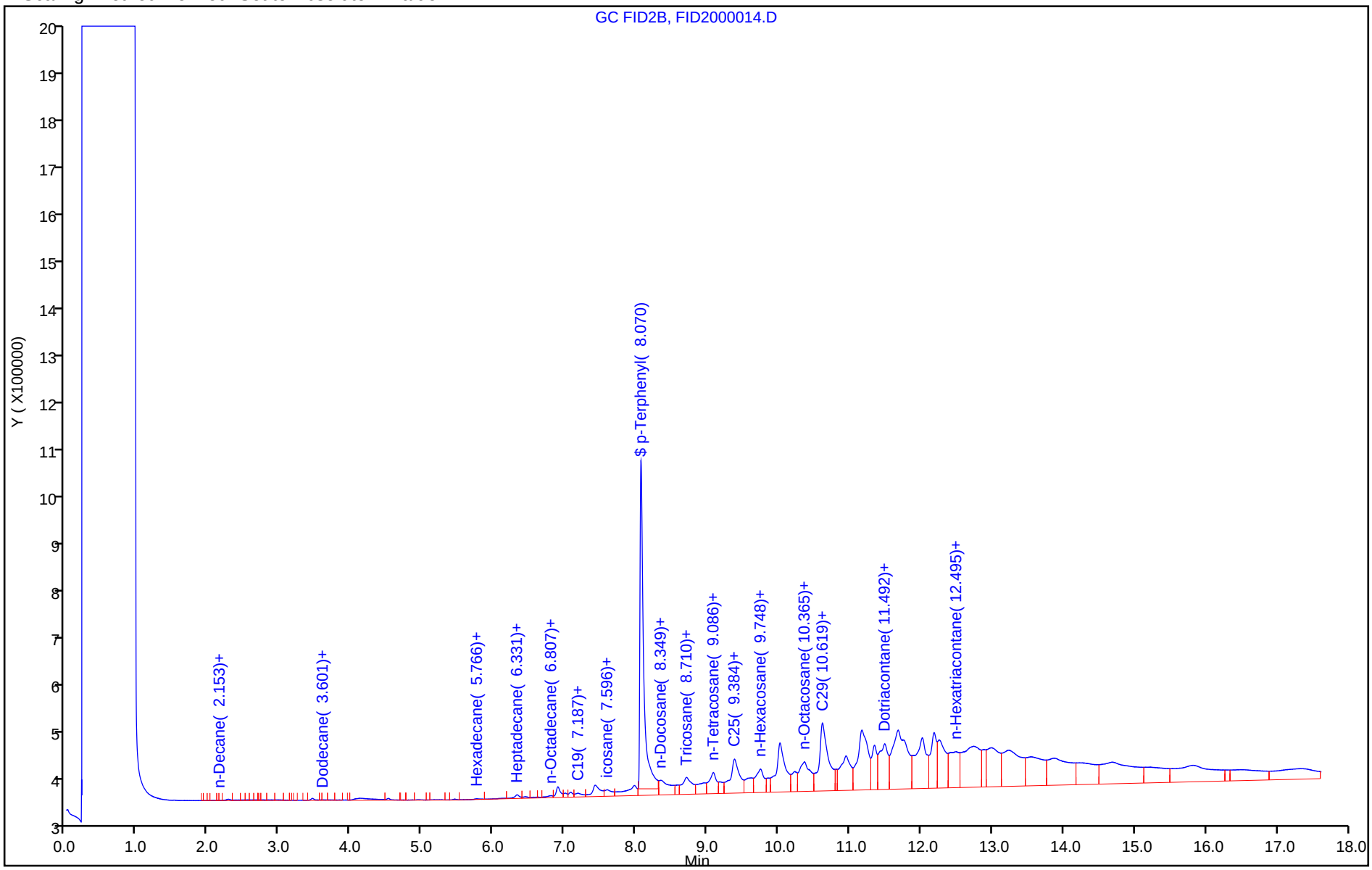
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 05-Sep-2018 15:39:01 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000014.D				
Injection Date:	05-Sep-2018 13:51:04	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88263-D-5-C	Lab Sample ID:	720-88263-5	Worklist Smp#:	14
Client ID:	DG-H9S-9.5-10				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	64
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000014.D
Lims ID: 720-88263-D-5-C
Client ID: DG-H9S-9.5-10
Sample Type: Client
Inject. Date: 05-Sep-2018 13:51:04 ALS Bottle#: 64 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053662-014
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\DRO6_B.m
Limit Group: DRO
Last Update: 05-Sep-2018 15:39:00 Calib Date: 05-Sep-2018 11:27:56
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000009.D

Column 1 : Det: GC FID1A
Process Host: XAWRK002

First Level Reviewer: luj Date: 05-Sep-2018 15:39:00

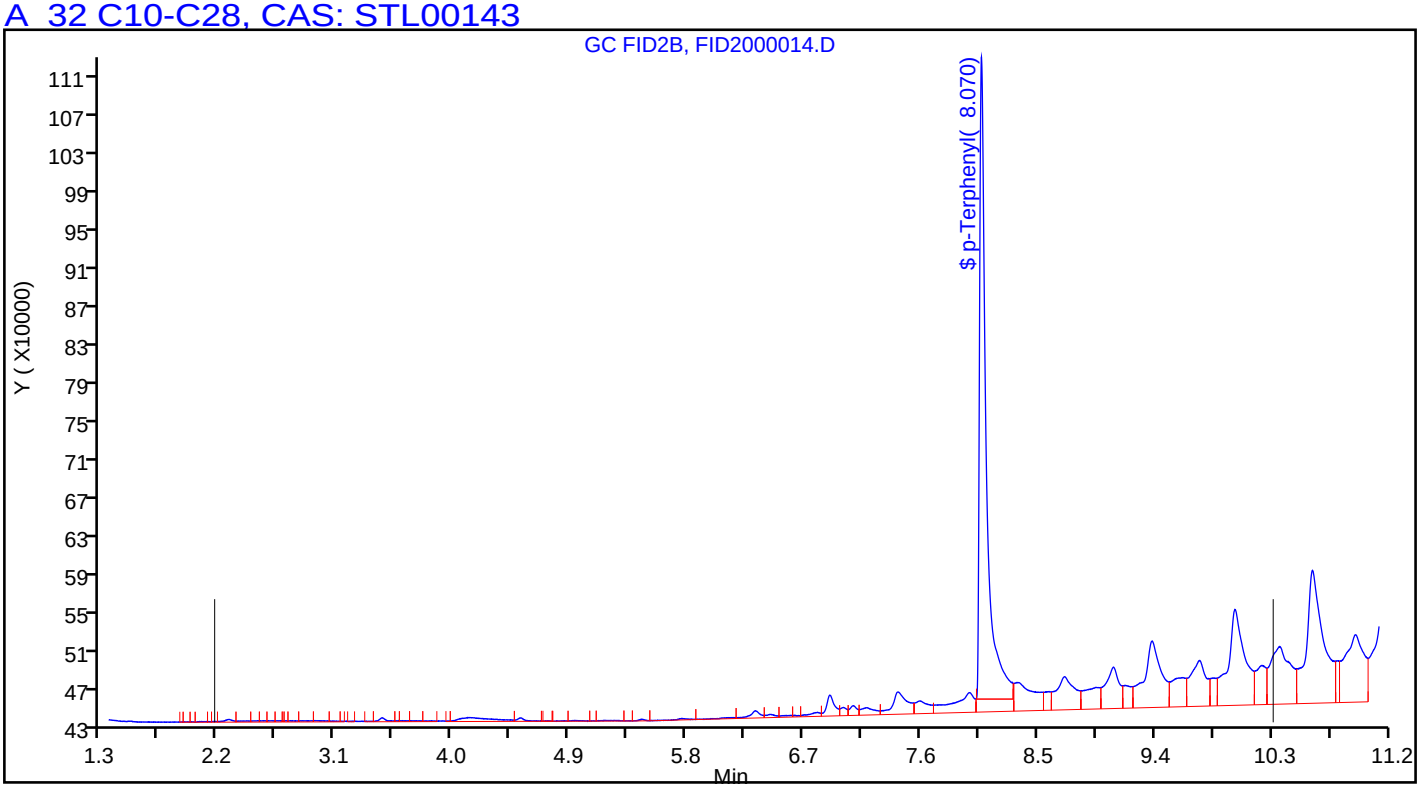
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	24.2	96.85

Report Date: 05-Sep-2018 15:39:02 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000014.D				
Injection Date:	05-Sep-2018 13:51:04	Instrument ID:	CHDRO6		
Lims ID:	720-88263-D-5-C	Lab Sample ID:	720-88263-5		
Client ID:	DG-H9S-9.5-10				
Operator ID:	DCH	ALS Bottle#:	64	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-L9S-0.5-1
Lab Sample ID: 720-88263-6
Matrix: Solid
Lab File ID: FID1000013.D
Analysis Method: 8015B
Date Collected: 08/27/2018 09:10
Extraction Method: 3546
Date Extracted: 08/30/2018 08:54
Sample wt/vol: 15.47(g)
Date Analyzed: 09/06/2018 14:32
Con. Extract Vol.: 2(mL)
Dilution Factor: 5
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250980
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	760000		9700	3600

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	0	D X	40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180906-53687.b\FID1000013.D
Lims ID: 720-88263-E-6-A
Client ID: DG-L9S-0.5-1
Sample Type: Client
Inject. Date: 06-Sep-2018 14:32:22 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 5.0000
Sample Info: 720-0053687-013
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180906-53687.b\DRO6_A.m
Limit Group: DRO
Last Update: 06-Sep-2018 15:16:33 Calib Date: 06-Sep-2018 10:28:15
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180906-53687.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK007

First Level Reviewer: luj Date: 06-Sep-2018 15:16:33

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane	1.193	1.228	-0.035	19955134	NC	M
23 n-Decane	2.161	2.114	0.047	88103259	NC	M
A 1 C9-C13	2.732	(1.228-4.237)		1845455717	1039.2	M
A 21 Stoddard Solvent	2.732	(1.228-4.237)		1845455717	1036.3	M
A 57 C10-C12	2.862	(2.114-3.610)		1751328734	1135.5	M
24 Dodecane	3.653	3.610	0.043	1459747	NC	M
A 3 C9 - C17	3.777	(1.228-6.327)		1861928782	954.1	M
A 60 C10-C16	3.980	(2.114-5.846)		1777439823	1017.5	M
A 47 C9 - C18	4.003	(1.228-6.778)		1862375810	1153.2	M
A 15 Kerosene	4.218	(1.228-7.209)		1862909051	1153.3	M
A 25 C9-C19	4.218	(1.228-7.209)		1862909051	949.9	M
26 C13	4.220	4.237	-0.017	2394943	NC	M
$ 27 n-Decanoic Acid (Surr)		4.605			ND	U
A 59 C12-C16	4.728	(3.610-5.846)		1060573813	687.6	M
A 62 C10-C20	4.868	(2.114-7.622)		1780199587	1154.2	M
A 28 C9-C24	5.169	(1.228-9.110)		1884011592	1221.5	M
A 29 C9-C25	5.338	(1.228-9.448)		1886997835	1223.4	M
A 54 C10-C23	5.437	(2.114-8.760)		1796501706	1164.7	M
A 4 C10-C24	5.612	(2.114-9.110)		1800282299	1167.2	M
A 16 C10-C25	5.781	(2.114-9.448)		1803268542	1169.1	M
45 Hexadecane	5.865	5.846	0.019	88665	NC	M
A 14 C10-C26	5.944	(2.114-9.774)		1808088273	1172.2	M
A 67 C12-C22	6.003	(3.610-8.396)		1077298166	698.5	M
A 32 C10-C28	6.255	(2.114-10.395)		1820408465	1180.2	M
A 5 Diesel	6.255	(2.114-10.395)		1820408465	1180.2	M
A 12 Unknown Hydrocarbons	6.255	(2.114-10.395)		1820408465	NC	M
A 30 C13-C22	6.317	(4.237-8.396)		34832695	22.6	M
44 Heptadecane	6.364	6.327	0.037	263554	NC	M
A 31 C12-C24	6.360	(3.610-9.110)		1083416289	702.4	M
51 n-Octadecane	6.783	6.778	0.005	42614	NC	M
A 9 Crude Oil Range Organics (	6.877	(1.228-12.527)		1990360724	NC	M
A 11 Bunker Range Organics (C9-	6.877	(1.228-12.527)		1990360724	NC	M

Report Date: 06-Sep-2018 15:16:34 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180906-53687.b\FID1000013.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.877	(1.228-12.527)		1990360724	1124.1	M
33 C19	7.213	7.209	0.004	348268	NC	M
A 64 C13-C28	7.316	(4.237-10.395)		61076984	39.6	M
A 17 C10-C36	7.321	(2.114-12.527)		1906631431	1236.1	M
A 68 Crude Oil Range Organics (	7.388	(1.228-13.548)		2079333982	NC	M
A 13 C9-C40	7.388	(1.228-13.548)		2079333982	1542.1	M
A 58 C16-C24	7.478	(5.846-9.110)		23304300	15.1	M
61 icosane	7.627	7.622	0.005	811969	NC	M
A 6 C10-C40	7.831	(2.114-13.548)		1995604689	1481.0	M
$ 34 p-Terphenyl		8.115			ND	U
35 n-Docosane	8.396	8.396	0.000	1353023	NC	M
A 18 C12-C40	8.579	(3.610-13.548)		1278738679	951.6	M
36 Tricosane	8.792	8.760	0.032	807870	NC	M
A 66 C13-C40	8.893	(4.237-13.548)		236273208	176.0	M
37 n-Tetracosane	9.121	9.110	0.011	2653623	NC	M
A 2 C16-C36 ORO	9.187	(5.846-12.527)		141867874	124.4	
38 C25	9.473	9.448	0.025	2532565	NC	M
A 19 C16-C40	9.697	(5.846-13.548)		218626690	163.5	M
46 n-Hexacosane	9.817	9.774	0.043	2049215	NC	M
A 20 C19-C36	9.868	(7.209-12.527)		139933787	105.3	
A 55 C23-C32	10.142	(8.760-11.524)		62224293	89.6	M
39 n-Octacosane	10.348	10.395	-0.047	650344	NC	M
65 C29	10.715	10.690	0.025	6837050	NC	M
A 40 C24-C36	10.819	(9.110-12.527)		117453635	131.9	M
A 7 Motor Oil	10.819	(9.110-12.527)		32339685	36.3	
A 10 C22-C40	10.972	(8.396-13.548)		78124352	62.8	
A 49 C25-C36	10.988	(9.448-12.527)		103362889	115.5	M
A 41 C23-C40	11.154	(8.760-13.548)		199102983	155.8	M
A 8 C24-C40	11.329	(9.110-13.548)		195322390	160.4	M
56 Dotriacontane	11.552	11.524	0.028	4160511	NC	M
A 50 C28-C40	11.972	(10.395-13.548)		175196224	184.6	M
A 63 C29-C40	12.119	(10.690-13.548)		170851205	197.2	M
42 n-Hexatriacontane		12.527			ND	
43 C40	13.577	13.548	0.029	2977509	NC	M
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

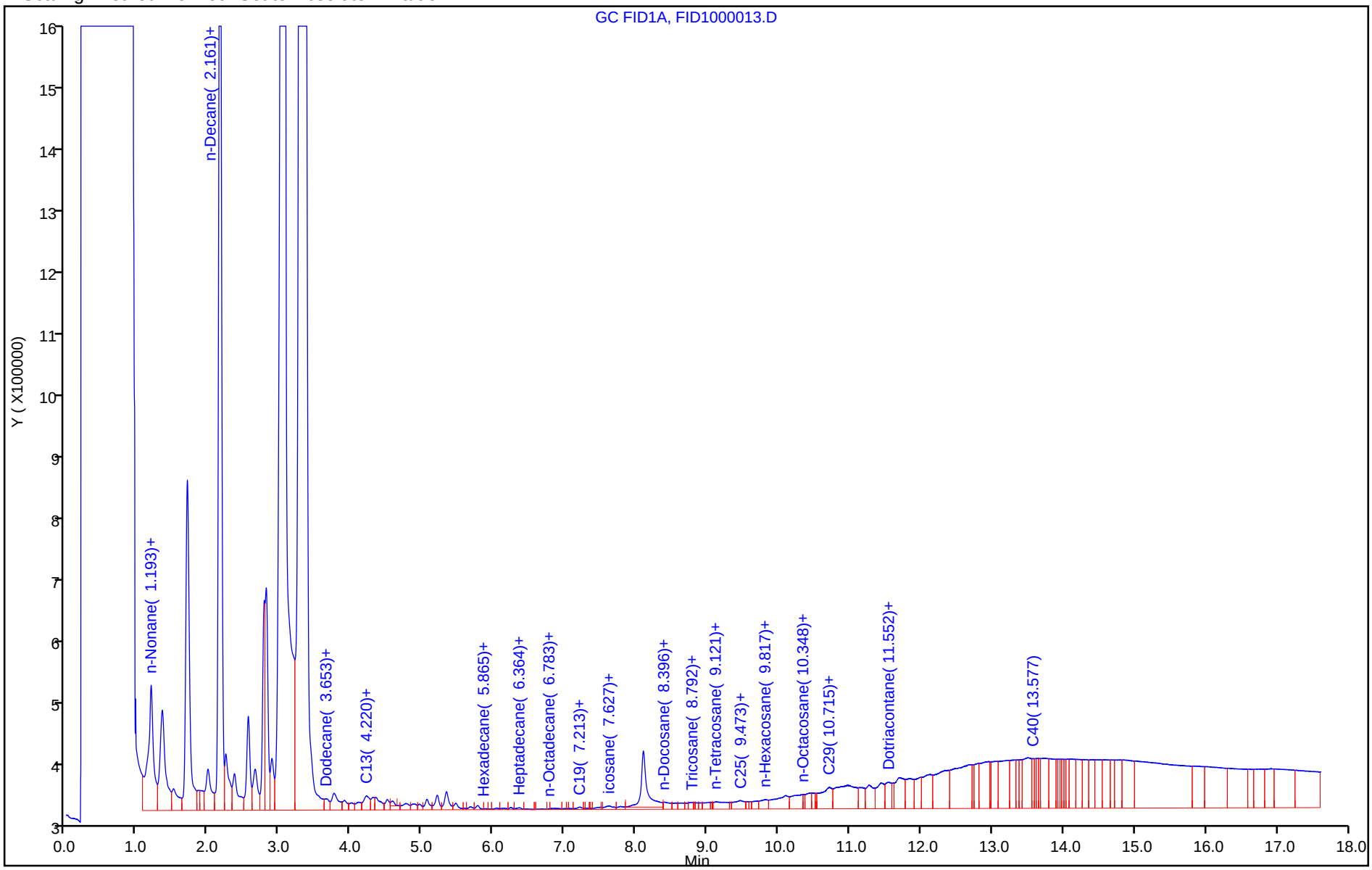
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 06-Sep-2018 15:16:34 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180906-53687.b\FID1000013.D				
Injection Date:	06-Sep-2018 14:32:22	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88263-E-6-A	Lab Sample ID:	720-88263-6	Worklist Smp#:	13
Client ID:	DG-L9S-0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	13
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value

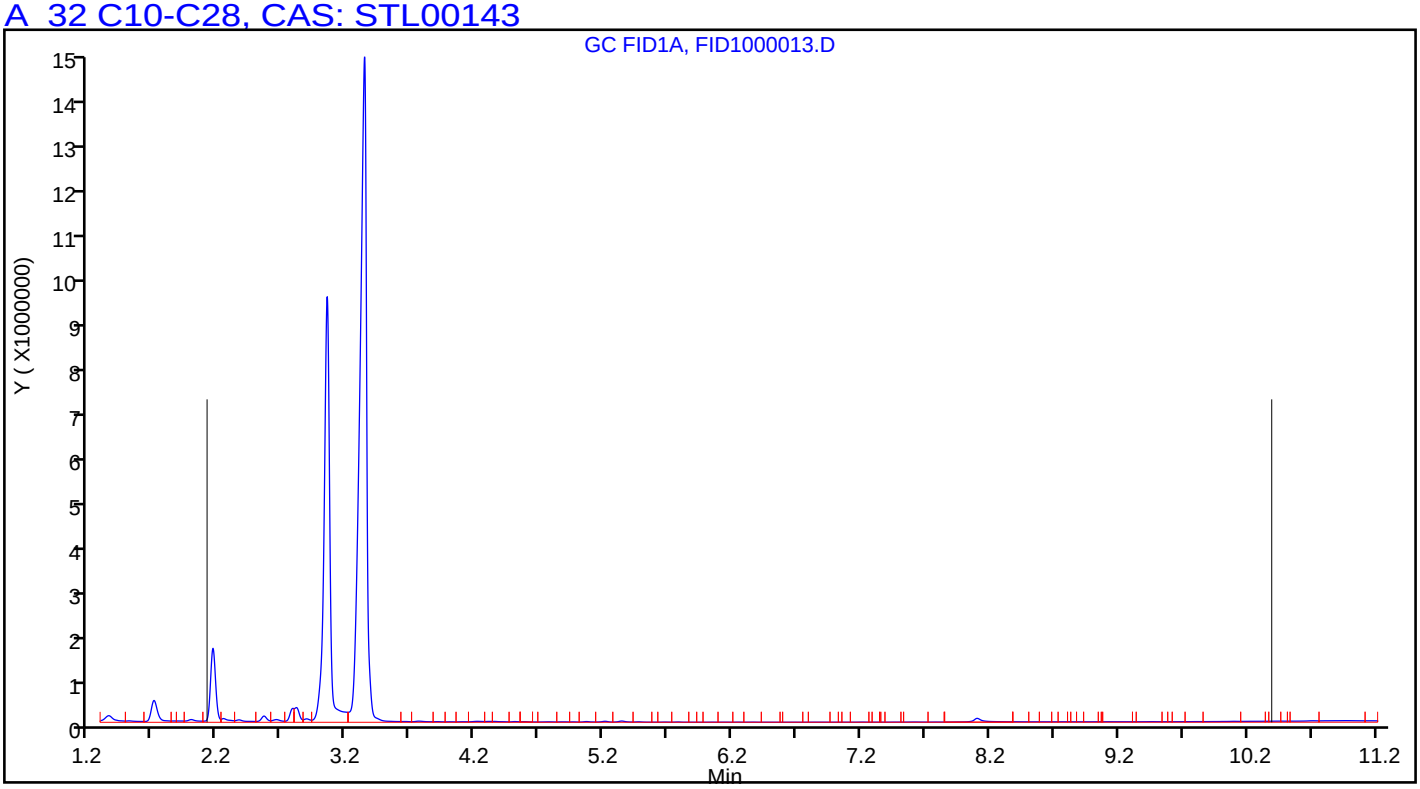


Report Date: 06-Sep-2018 15:16:38 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180906-53687.b\FID1000013.D				
Injection Date:	06-Sep-2018 14:32:22	Instrument ID:	CHDRO6		
Lims ID:	720-88263-E-6-A	Lab Sample ID:	720-88263-6		
Client ID:	DG-L9S-0.5-1				
Operator ID:	DCH	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

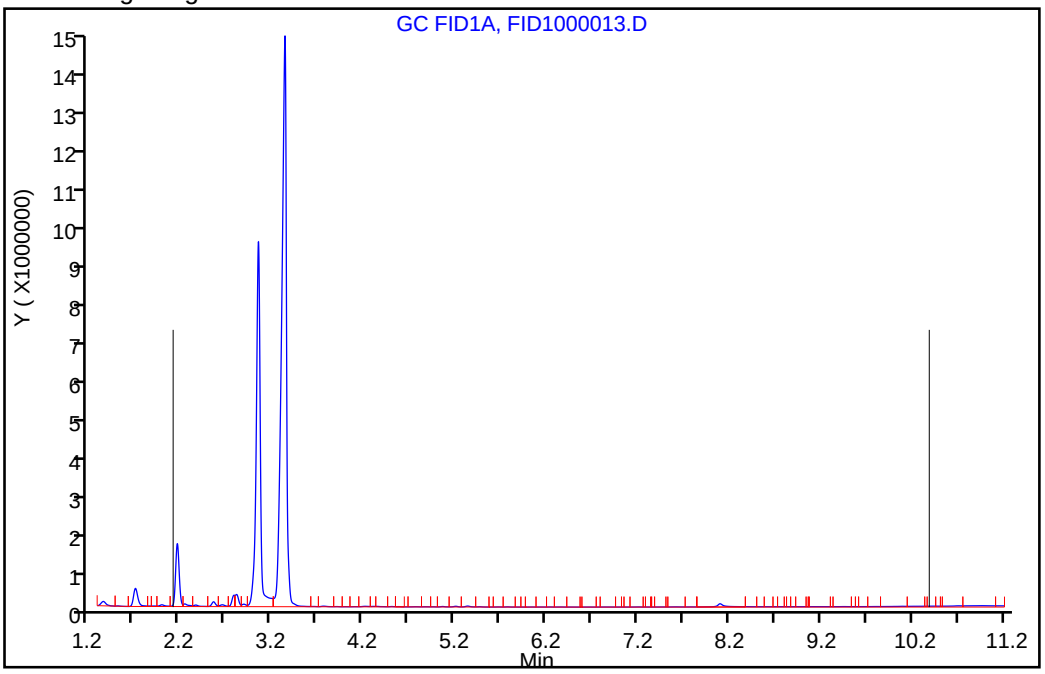
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180906-53687.b\FID1000013.D				
Injection Date:	06-Sep-2018 14:32:22	Instrument ID:	CHDRO6		
Lims ID:	720-88263-E-6-A	Lab Sample ID:	720-88263-6		
Client ID:	DG-L9S-0.5-1				
Operator ID:	DCH	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.255, CAS: STL00143

Signal: 1

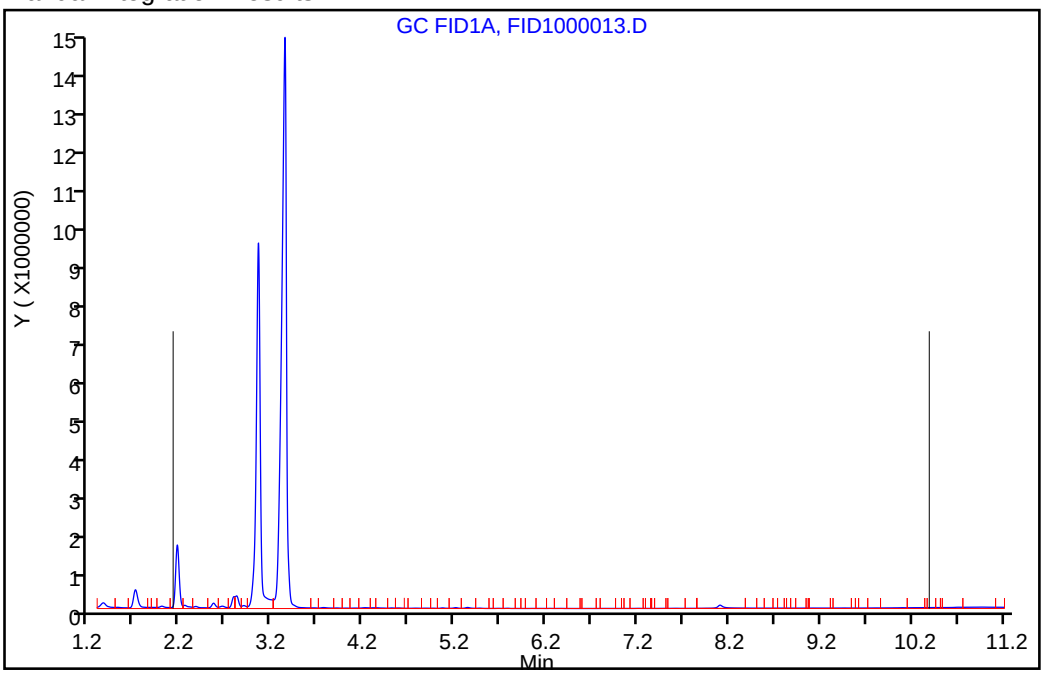
Processing Integration Results

RT: 6.25
Response: 1772324797
Amount: 1149.0631



Manual Integration Results

RT: 6.25
Response: 1820408465
Amount: 1180.2375



Reviewer: luj, 06-Sep-2018 15:15:41

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

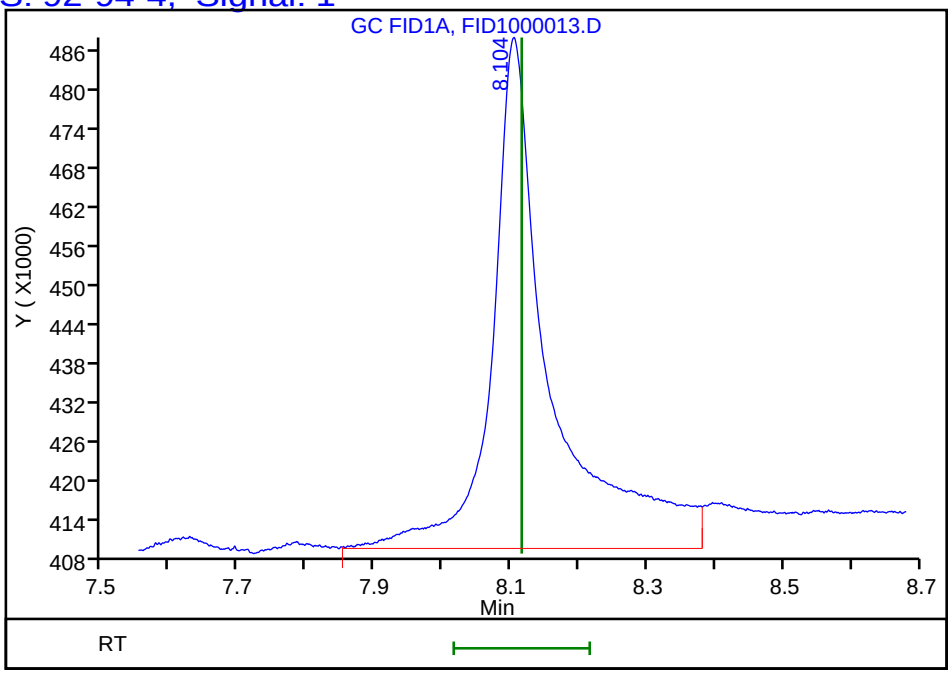
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180906-53687.b\FID1000013.D				
Injection Date:	06-Sep-2018 14:32:22	Instrument ID:	CHDRO6		
Lims ID:	720-88263-E-6-A	Lab Sample ID:	720-88263-6		
Client ID:	DG-L9S-0.5-1				
Operator ID:	DCH	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4, Signal: 1

RT: 8.10
Response: 9369321
Amount: 4.878940



Reviewer: luj, 06-Sep-2018 15:16:33
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-L9S-3.5-4
Lab Sample ID: 720-88263-7
Matrix: Solid
Lab File ID: FID1000025.D
Analysis Method: 8015B
Date Collected: 08/27/2018 09:10
Extraction Method: 3546
Date Extracted: 08/30/2018 08:54
Sample wt/vol: 15.65(g)
Date Analyzed: 09/05/2018 18:20
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250884
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	3200		1900	720

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	97		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000025.D
Lims ID: 720-88263-E-7-B
Client ID: DG-L9S-3.5-4
Sample Type: Client
Inject. Date: 05-Sep-2018 18:20:17 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053661-025
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\DRO6_A.m
Limit Group: DRO
Last Update: 05-Sep-2018 18:53:02 Calib Date: 05-Sep-2018 09:01:58
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK002

First Level Reviewer: luj Date: 05-Sep-2018 18:53:02

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane	1.139	1.229	-0.090	26277	NC	
23 n-Decane	2.121	2.116	0.005	42982	NC	
A 1 C9-C13	2.734	(1.229-4.240)		4984847	2.81	
A 21 Stoddard Solvent	2.734	(1.229-4.240)		4984847	2.80	
A 57 C10-C12	2.865	(2.116-3.613)		3570118	2.31	
24 Dodecane	3.629	3.613	0.016	140491	NC	
A 3 C9 - C17	3.780	(1.229-6.331)		7257014	3.72	
A 60 C10-C16	3.983	(2.116-5.850)		6250508	3.58	
A 47 C9 - C18	4.005	(1.229-6.782)		8412471	5.21	
A 15 Kerosene	4.220	(1.229-7.212)		9271516	5.74	
A 25 C9-C19	4.220	(1.229-7.212)		9271516	4.73	
26 C13	4.240	4.240	0.000	95525	NC	
$ 27 n-Decanoic Acid (Surr)		4.608			ND	U
A 59 C12-C16	4.732	(3.613-5.850)		2680390	1.74	
A 62 C10-C20	4.871	(2.116-7.625)		15516947	10.1	
A 28 C9-C24	5.172	(1.229-9.115)		28207791	18.3	
A 29 C9-C25	5.341	(1.229-9.453)		31170730	20.2	
A 54 C10-C23	5.440	(2.116-8.764)		26479104	17.2	
A 4 C10-C24	5.616	(2.116-9.115)		27984115	18.1	
A 16 C10-C25	5.785	(2.116-9.453)		30947054	20.1	
45 Hexadecane	5.845	5.850	-0.005	44637	NC	
A 14 C10-C26	5.948	(2.116-9.780)		32153194	20.8	
A 67 C12-C22	6.006	(3.613-8.400)		20080334	13.0	
A 32 C10-C28	6.258	(2.116-10.400)		38461596	24.9	
A 5 Diesel	6.258	(2.116-10.400)		38461596	24.9	
A 12 Unknown Hydrocarbons	6.258	(2.116-10.400)		38461596	NC	
A 30 C13-C22	6.320	(4.240-8.400)		18889281	12.2	
44 Heptadecane	6.312	6.331	-0.019	678415	NC	
A 31 C12-C24	6.364	(3.613-9.115)		24413997	15.8	
51 n-Octadecane	6.786	6.782	0.004	98214	NC	
A 9 Crude Oil Range Organics (	6.880	(1.229-12.531)		87930025	NC	
A 11 Bunker Range Organics (C9-	6.880	(1.229-12.531)		87930025	NC	

Report Date: 05-Sep-2018 18:53:03 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000025.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.880	(1.229-12.531)		87930025	49.7	
33 C19		7.212			ND	
A 64 C13-C28	7.320	(4.240-10.400)		33700425	21.8	
A 17 C10-C36	7.324	(2.116-12.531)		87706349	56.9	
A 68 Crude Oil Range Organics (	7.391	(1.229-13.553)		138028161	NC	
A 13 C9-C40	7.391	(1.229-13.553)		138028161	102.4	
A 58 C16-C24	7.483	(5.850-9.115)		21778244	14.1	
61 icosane	7.594	7.625	-0.031	946194	NC	
A 6 C10-C40	7.835	(2.116-13.553)		137804485	102.3	
$ 34 p-Terphenyl	8.091	8.110	-0.019	46697697	24.3	
35 n-Docosane	8.386	8.400	-0.014	1393581	NC	
A 18 C12-C40	8.583	(3.613-13.553)		134234367	99.9	
36 Tricosane	8.752	8.764	-0.012	1678922	NC	
A 66 C13-C40	8.897	(4.240-13.553)		133043314	99.1	
37 n-Tetracosane	9.117	9.115	0.002	1025789	NC	
A 2 C16-C36 ORO	9.191	(5.850-12.531)		167968824	147.3	
38 C25	9.450	9.453	-0.003	1937150	NC	
A 19 C16-C40	9.702	(5.850-13.553)		131598614	98.4	
46 n-Hexacosane	9.785	9.780	0.005	1101805	NC	
A 20 C19-C36	9.872	(7.212-12.531)		162050659	121.9	
A 55 C23-C32	10.146	(8.764-11.528)		33215219	47.8	
39 n-Octacosane	10.417	10.400	0.017	2274112	NC	
65 C29	10.694	10.695	-0.001	3151257	NC	
A 40 C24-C36	10.823	(9.115-12.531)		43011051	48.3	
A 7 Motor Oil	10.823	(9.115-12.531)		43011051	48.3	
A 10 C22-C40	10.977	(8.400-13.553)		83140968	66.9	
A 49 C25-C36	10.992	(9.453-12.531)		58696445	65.6	
A 41 C23-C40	11.159	(8.764-13.553)		113004303	88.4	
A 8 C24-C40	11.334	(9.115-13.553)		109820370	90.2	
56 Dotriacontane	11.532	11.528	0.004	1934505	NC	
A 50 C28-C40	11.977	(10.400-13.553)		99342889	104.7	
A 63 C29-C40	12.124	(10.695-13.553)		96365795	111.2	
42 n-Hexatriacontane	12.478	12.531	-0.053	698108	NC	
43 C40	13.482	13.553	-0.071	14505368	NC	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

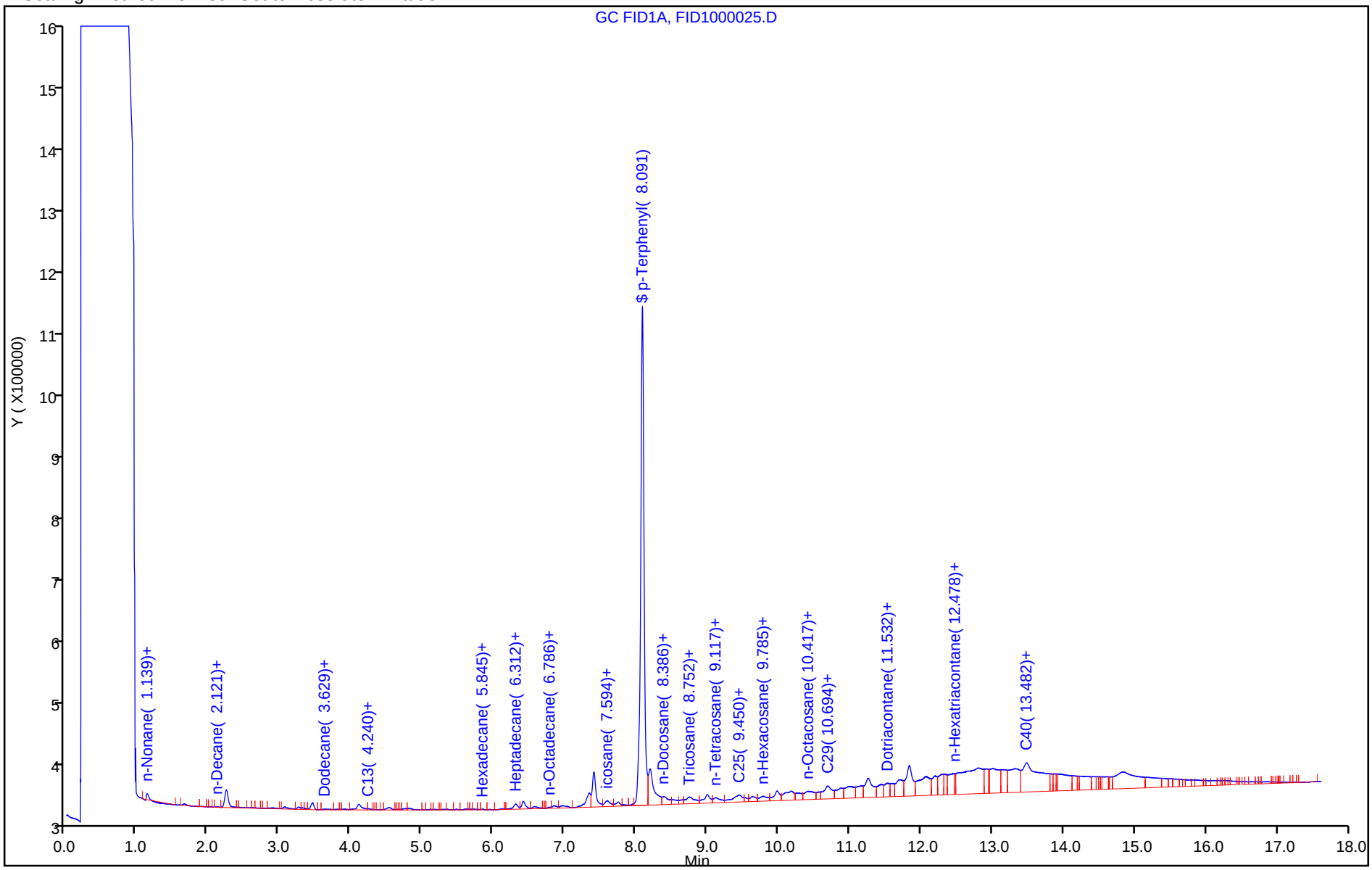
Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

Report Date: 05-Sep-2018 18:53:03 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000025.D				
Injection Date:	05-Sep-2018 18:20:17	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88263-E-7-B	Lab Sample ID:	720-88263-7	Worklist Smp#:	25
Client ID:	DG-L9S-3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000025.D
Lims ID: 720-88263-E-7-B
Client ID: DG-L9S-3.5-4
Sample Type: Client
Inject. Date: 05-Sep-2018 18:20:17 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053661-025
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\DRO6_A.m
Limit Group: DRO
Last Update: 05-Sep-2018 18:53:02 Calib Date: 05-Sep-2018 09:01:58
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK002

First Level Reviewer: luj Date: 05-Sep-2018 18:53:02

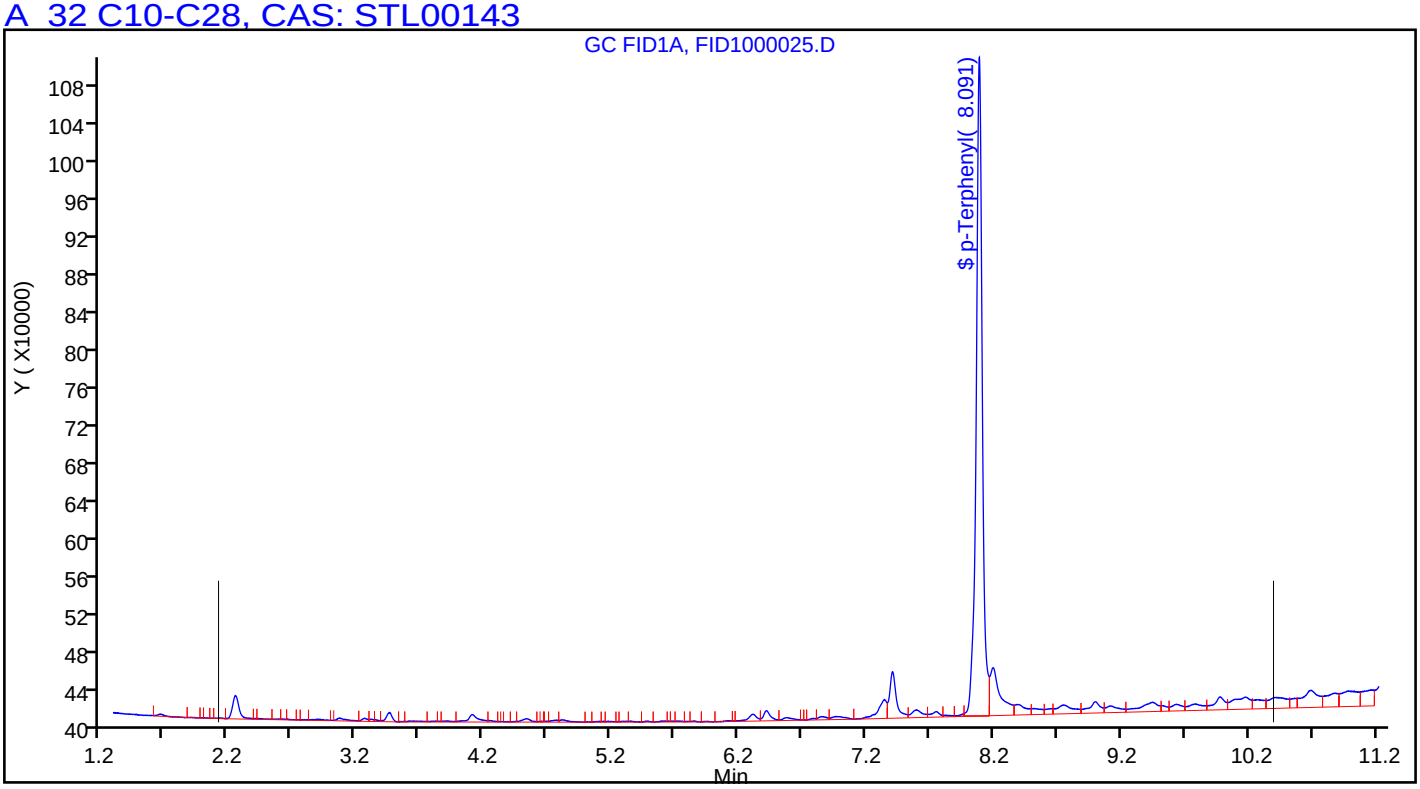
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	24.3	97.27

Report Date: 05-Sep-2018 18:53:05 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000025.D				
Injection Date:	05-Sep-2018 18:20:17	Instrument ID:	CHDRO6		
Lims ID:	720-88263-E-7-B	Lab Sample ID:	720-88263-7		
Client ID:	DG-L9S-3.5-4				
Operator ID:	DCH	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-M11S-0.5-1
Lab Sample ID: 720-88263-8
Matrix: Solid
Lab File ID: FID1000026.D
Analysis Method: 8015B
Date Collected: 08/27/2018 10:00
Extraction Method: 3546
Date Extracted: 08/30/2018 08:54
Sample wt/vol: 15.88(g)
Date Analyzed: 09/05/2018 18:44
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250884
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	36000		1900	710

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	100		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000026.D
Lims ID: 720-88263-D-8-B
Client ID: DG-M11S-0.5-1
Sample Type: Client
Inject. Date: 05-Sep-2018 18:44:40 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053661-026
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\DRO6_A.m
Limit Group: DRO
Last Update: 06-Sep-2018 12:40:07 Calib Date: 05-Sep-2018 09:01:58
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK007

First Level Reviewer: luj Date: 06-Sep-2018 12:40:07

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.229			ND	
23 n-Decane	2.125	2.116	0.009	29097	NC	
A 1 C9-C13	2.734	(1.229-4.240)		8415414	4.74	M
A 21 Stoddard Solvent	2.734	(1.229-4.240)		8415414	4.73	M
A 57 C10-C12	2.865	(2.116-3.613)		6413634	4.16	
24 Dodecane	3.598	3.613	-0.015	44384	NC	
A 3 C9 - C17	3.780	(1.229-6.331)		16221408	8.31	M
A 60 C10-C16	3.983	(2.116-5.850)		12597417	7.21	M
A 47 C9 - C18	4.005	(1.229-6.782)		24636668	15.3	M
A 15 Kerosene	4.220	(1.229-7.212)		31276759	19.4	M
A 25 C9-C19	4.220	(1.229-7.212)		31276759	15.9	M
26 C13	4.253	4.240	0.013	46123	NC	M
$ 27 n-Decanoic Acid (Surr)		4.608			ND	U
A 59 C12-C16	4.732	(3.613-5.850)		6228167	4.04	M
A 62 C10-C20	4.871	(2.116-7.625)		86071045	55.8	M
A 28 C9-C24	5.172	(1.229-9.115)		226417490	146.8	M
A 29 C9-C25	5.341	(1.229-9.453)		267402280	173.4	M
A 54 C10-C23	5.440	(2.116-8.764)		196881439	127.6	M
A 4 C10-C24	5.616	(2.116-9.115)		225316665	146.1	M
A 16 C10-C25	5.785	(2.116-9.453)		266301455	172.7	M
45 Hexadecane	5.848	5.850	-0.002	599584	NC	M
A 14 C10-C26	5.948	(2.116-9.780)		315643440	204.6	M
A 67 C12-C22	6.006	(3.613-8.400)		139385676	90.4	M
A 32 C10-C28	6.258	(2.116-10.400)		435786147	282.5	M
A 5 Diesel	6.258	(2.116-10.400)		435786147	282.5	M
A 12 Unknown Hydrocarbons	6.258	(2.116-10.400)		435786147	NC	M
A 30 C13-C22	6.320	(4.240-8.400)		138440337	89.8	M
44 Heptadecane	6.368	6.331	0.037	2910931	NC	M
A 31 C12-C24	6.364	(3.613-9.115)		218947415	142.0	M
51 n-Octadecane	6.778	6.782	-0.004	1753127	NC	M
A 9 Crude Oil Range Organics (	6.880	(1.229-12.531)		1034336370	NC	M
A 11 Bunker Range Organics (C9-	6.880	(1.229-12.531)		1034336370	NC	M

Report Date: 06-Sep-2018 12:40:08 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000026.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.880	(1.229-12.531)		1034336370	584.2	M
33 C19		7.212			ND	
A 64 C13-C28	7.320	(4.240-10.400)		428471558	277.8	M
A 17 C10-C36	7.324	(2.116-12.531)		1033235545	669.9	M
A 68 Crude Oil Range Organics (	7.391	(1.229-13.553)		1364327946	NC	M
A 13 C9-C40	7.391	(1.229-13.553)		1364327946	1011.8	M
A 58 C16-C24	7.483	(5.850-9.115)		213318832	138.3	M
61 icosane	7.579	7.625	-0.046	6478612	NC	M
A 6 C10-C40	7.835	(2.116-13.553)		1363227121	1011.7	M
$ 34 p-Terphenyl	8.089	8.110	-0.021	48162883	25.1	M
35 n-Docosane	8.406	8.400	0.006	8175857	NC	M
A 18 C12-C40	8.583	(3.613-13.553)		1356857871	1009.7	M
36 Tricosane	8.743	8.764	-0.021	19443763	NC	M
A 66 C13-C40	8.897	(4.240-13.553)		1355912532	1010.1	M
37 n-Tetracosane	9.138	9.115	0.023	11779568	NC	M
A 2 C16-C36 ORO	9.191	(5.850-12.531)		1076440219	943.7	
38 C25	9.461	9.453	0.008	16540367	NC	M
A 19 C16-C40	9.702	(5.850-13.553)		1351229288	1010.6	M
46 n-Hexacosane	9.809	9.780	0.029	26660147	NC	M
A 20 C19-C36	9.872	(7.212-12.531)		1045459800	786.6	
A 55 C23-C32	10.146	(8.764-11.528)		552917052	796.4	M
39 n-Octacosane	10.460	10.400	0.060	33504645	NC	M
65 C29	10.689	10.695	-0.006	43276997	NC	M
A 40 C24-C36	10.823	(9.115-12.531)		777059611	872.6	M
A 7 Motor Oil	10.823	(9.115-12.531)		683097499	767.1	
A 10 C22-C40	10.977	(8.400-13.553)		924827844	743.7	
A 49 C25-C36	10.992	(9.453-12.531)		766934090	856.7	M
A 41 C23-C40	11.159	(8.764-13.553)		1185789445	927.7	M
A 8 C24-C40	11.334	(9.115-13.553)		1137910456	934.7	M
56 Dotriacontane	11.537	11.528	0.009	34580272	NC	M
A 50 C28-C40	11.977	(10.400-13.553)		927440974	977.1	M
A 63 C29-C40	12.124	(10.695-13.553)		867627770	1001.2	M
42 n-Hexatriacontane		12.531			ND	
43 C40		13.553			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

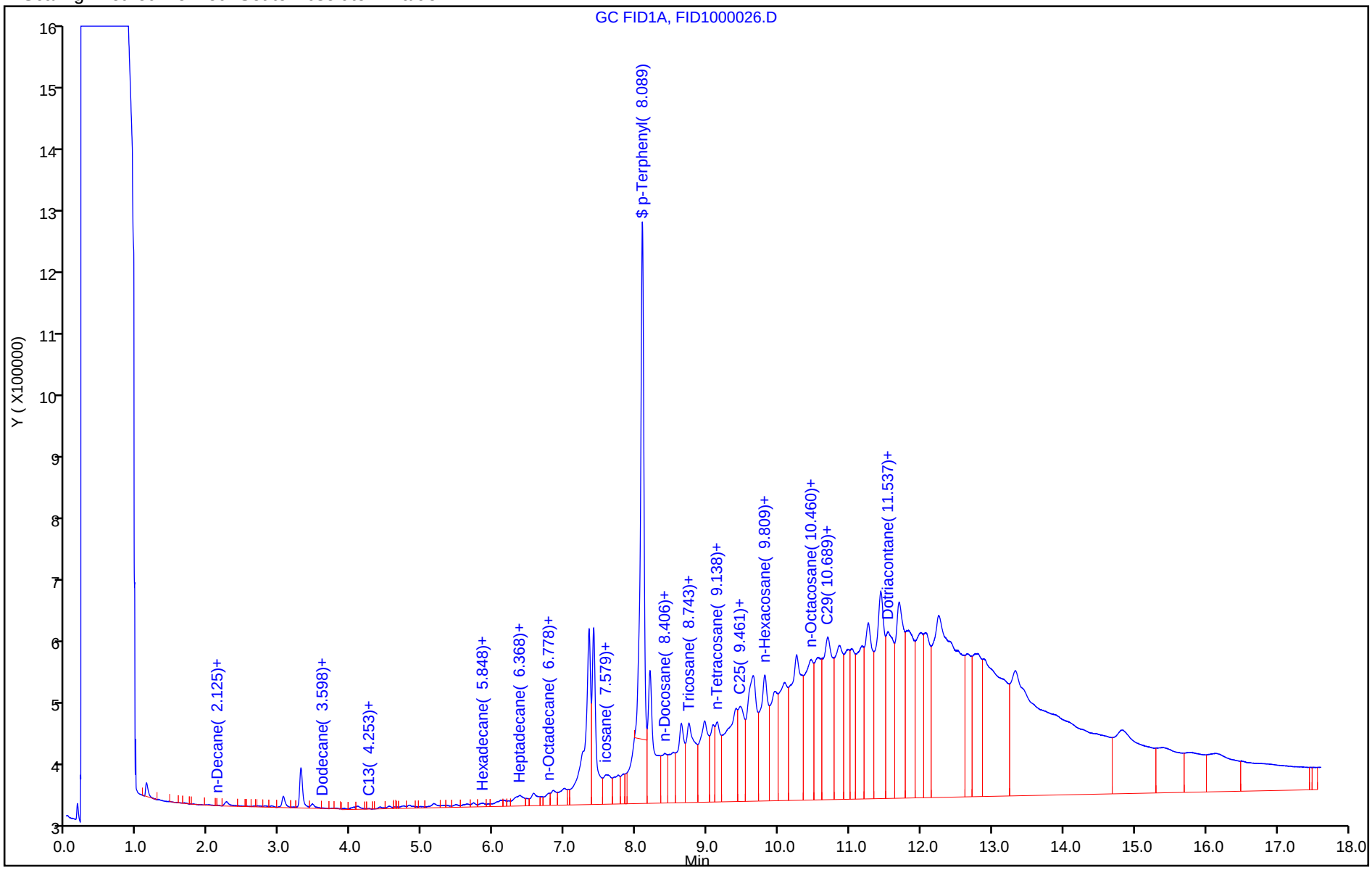
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 06-Sep-2018 12:40:08 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000026.D				
Injection Date:	05-Sep-2018 18:44:40	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88263-D-8-B	Lab Sample ID:	720-88263-8	Worklist Smp#:	26
Client ID:	DG-M11S-0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000026.D
Lims ID: 720-88263-D-8-B
Client ID: DG-M11S-0.5-1
Sample Type: Client
Inject. Date: 05-Sep-2018 18:44:40 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053661-026
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\DRO6_A.m
Limit Group: DRO
Last Update: 06-Sep-2018 12:40:07 Calib Date: 05-Sep-2018 09:01:58
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK007

First Level Reviewer: luj Date: 06-Sep-2018 12:40:07

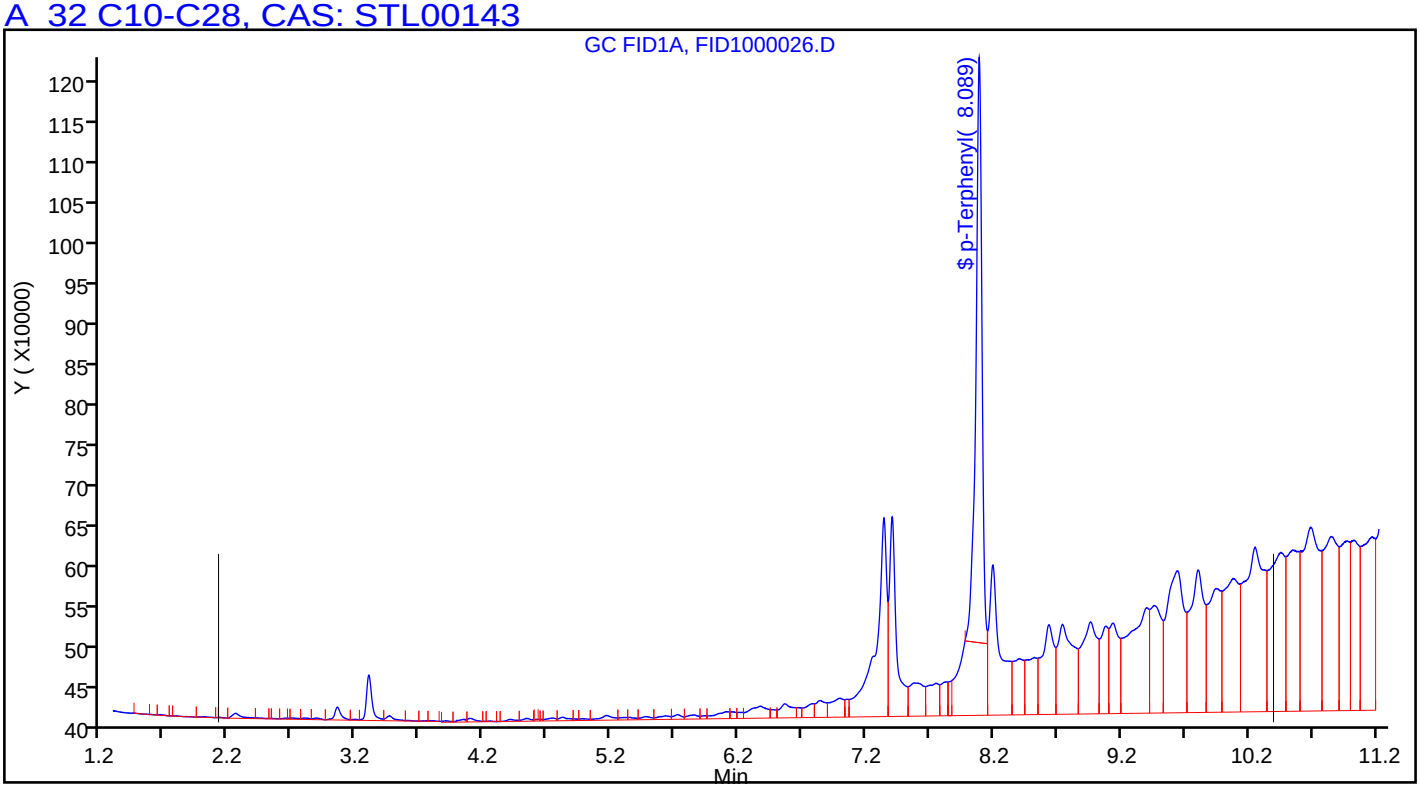
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	25.1	100.32

Report Date: 06-Sep-2018 12:40:11 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000026.D				
Injection Date:	05-Sep-2018 18:44:40	Instrument ID:	CHDRO6		
Lims ID:	720-88263-D-8-B	Lab Sample ID:	720-88263-8		
Client ID:	DG-M11S-0.5-1				
Operator ID:	DCH	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

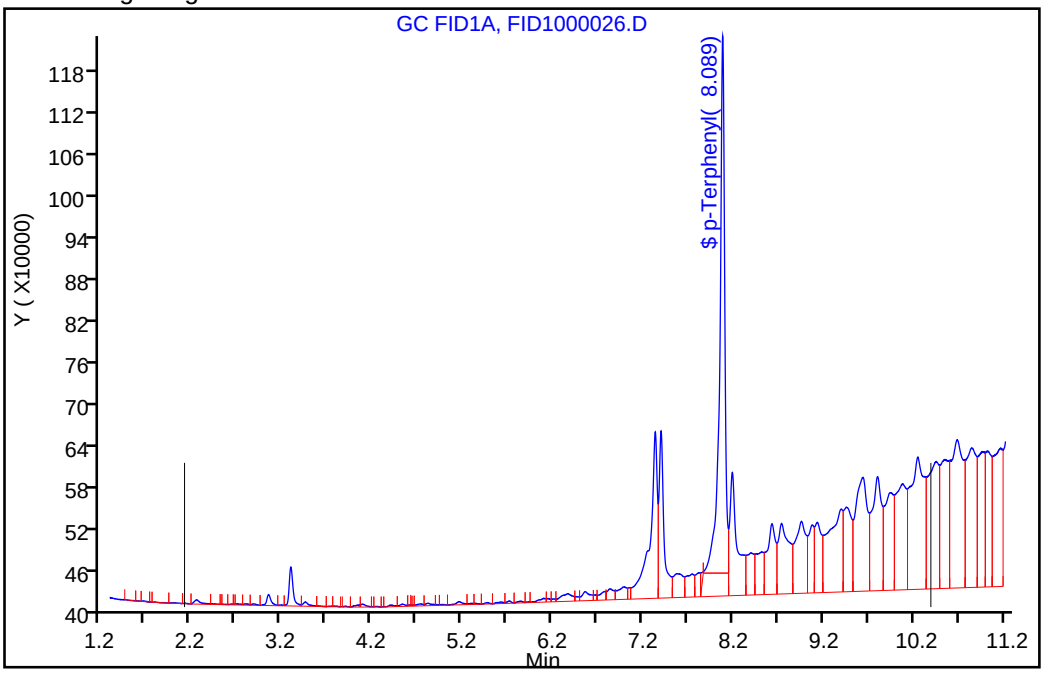
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000026.D				
Injection Date:	05-Sep-2018 18:44:40	Instrument ID:	CHDRO6		
Lims ID:	720-88263-D-8-B	Lab Sample ID:	720-88263-8		
Client ID:	DG-M11S-0.5-1				
Operator ID:	DCH	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.258, CAS: STL00143

Signal: 1

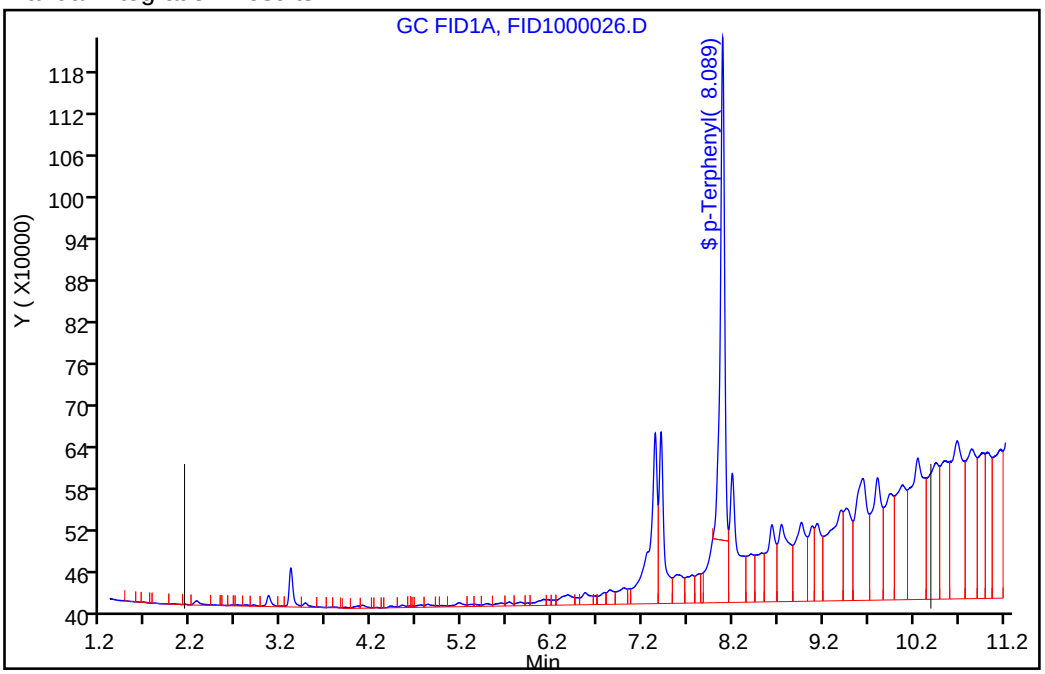
Processing Integration Results

RT: 6.26
Response: 375739134
Amount: 243.6055



Manual Integration Results

RT: 6.26
Response: 435786147
Amount: 282.5361



Reviewer: luj, 06-Sep-2018 12:39:09

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

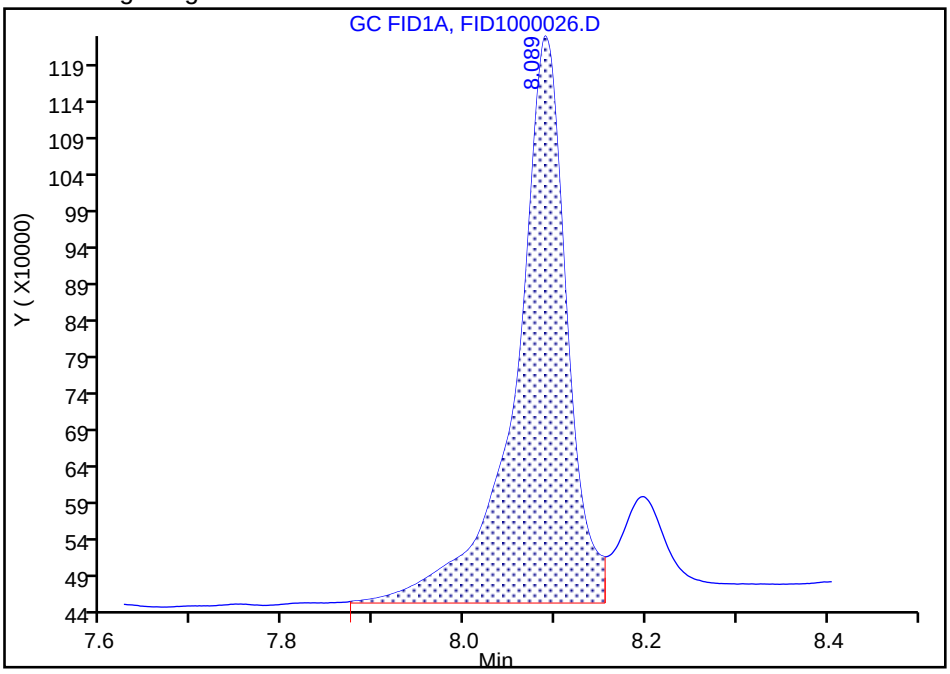
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000026.D				
Injection Date:	05-Sep-2018 18:44:40	Instrument ID:	CHDRO6		
Lims ID:	720-88263-D-8-B	Lab Sample ID:	720-88263-8		
Client ID:	DG-M11S-0.5-1				
Operator ID:	DCH	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

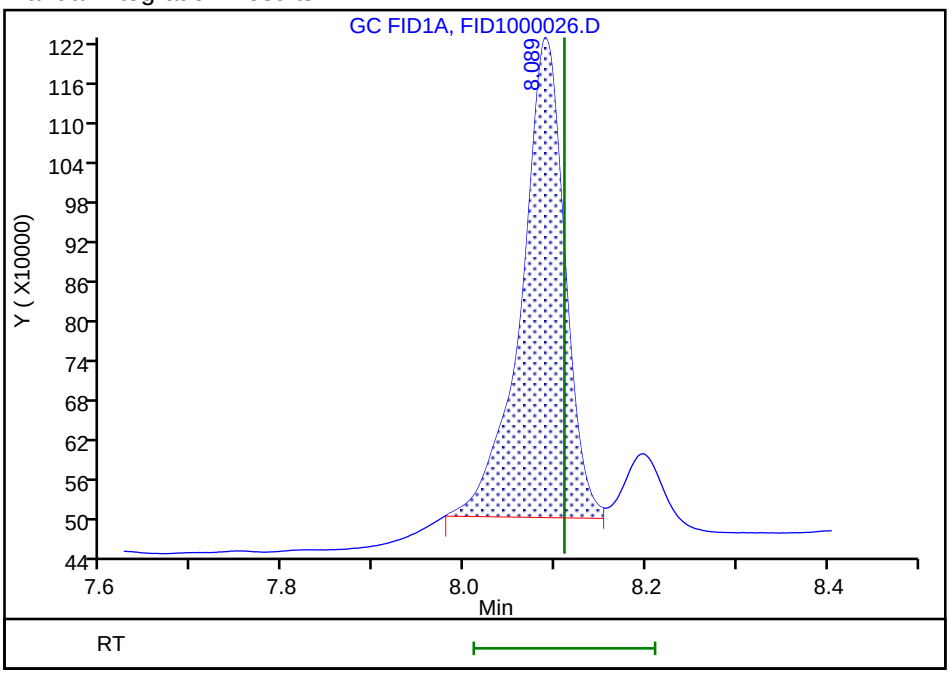
Processing Integration Results

RT: 8.09
Area: 61033861
Amount: 31.782509
Amount Units: mg/L



Manual Integration Results

RT: 8.09
Area: 48162883
Amount: 25.080131
Amount Units: mg/L



Reviewer: luj, 06-Sep-2018 12:39:49

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-M11S-3.5-4
Lab Sample ID: 720-88263-9
Matrix: Solid
Lab File ID: FID1000024.D
Analysis Method: 8015B
Date Collected: 08/27/2018 10:00
Extraction Method: 3546
Date Extracted: 08/30/2018 08:54
Sample wt/vol: 15.21(g)
Date Analyzed: 09/05/2018 17:55
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250884
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	8900		2000	740

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	113		40-130

FORM I 8015B

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000024.D
Lims ID: 720-88263-E-9-B
Client ID: DG-M11S-3.5-4
Sample Type: Client
Inject. Date: 05-Sep-2018 17:55:41 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053661-024
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\DRO6_A.m
Limit Group: DRO
Last Update: 05-Sep-2018 18:53:24 Calib Date: 05-Sep-2018 09:01:58
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK002

First Level Reviewer: luj Date: 05-Sep-2018 18:49:55

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane	1.230	1.229	0.001	163870	NC	
23 n-Decane	2.118	2.116	0.002	274383	NC	
A 1 C9-C13	2.734	(1.229-4.240)		7195523	4.05	
A 21 Stoddard Solvent	2.734	(1.229-4.240)		7195523	4.04	
A 57 C10-C12	2.865	(2.116-3.613)		5259418	3.41	
24 Dodecane	3.615	3.613	0.002	205660	NC	
A 3 C9 - C17	3.780	(1.229-6.331)		12913520	6.62	
A 60 C10-C16	3.983	(2.116-5.850)		10124580	5.80	
A 47 C9 - C18	4.005	(1.229-6.782)		17407364	10.8	
A 15 Kerosene	4.220	(1.229-7.212)		19552794	12.1	
A 25 C9-C19	4.220	(1.229-7.212)		19552794	9.97	
26 C13	4.242	4.240	0.002	121236	NC	
$ 27 n-Decanoic Acid (Surr)		4.608			ND	U
A 59 C12-C16	4.732	(3.613-5.850)		4865162	3.15	
A 62 C10-C20	4.871	(2.116-7.625)		35645472	23.1	
A 28 C9-C24	5.172	(1.229-9.115)		69012521	44.7	
A 29 C9-C25	5.341	(1.229-9.453)		81602965	52.9	
A 54 C10-C23	5.440	(2.116-8.764)		63626437	41.3	
A 4 C10-C24	5.616	(2.116-9.115)		68417328	44.4	
A 16 C10-C25	5.785	(2.116-9.453)		81007772	52.5	
45 Hexadecane	5.852	5.850	0.002	157394	NC	
A 14 C10-C26	5.948	(2.116-9.780)		85054238	55.1	
A 67 C12-C22	6.006	(3.613-8.400)		47332291	30.7	
A 32 C10-C28	6.258	(2.116-10.400)		104693969	67.9	
A 5 Diesel	6.258	(2.116-10.400)		104693969	67.9	
A 12 Unknown Hydrocarbons	6.258	(2.116-10.400)		104693969	NC	
A 30 C13-C22	6.320	(4.240-8.400)		45991379	29.8	
44 Heptadecane	6.304	6.331	-0.027	1214949	NC	
A 31 C12-C24	6.364	(3.613-9.115)		63157910	40.9	
51 n-Octadecane	6.771	6.782	-0.011	688152	NC	
A 9 Crude Oil Range Organics (	6.880	(1.229-12.531)		211430720	NC	
A 11 Bunker Range Organics (C9-	6.880	(1.229-12.531)		211430720	NC	

Report Date: 05-Sep-2018 18:53:27 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000024.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.880	(1.229-12.531)		211430720	119.4	
33 C19	7.254	7.212	0.042	1526463	NC	
A 64 C13-C28	7.320	(4.240-10.400)		98093639	63.6	
A 17 C10-C36	7.324	(2.116-12.531)		210835527	136.7	
A 68 Crude Oil Range Organics (	7.391	(1.229-13.553)		282214183	NC	
A 13 C9-C40	7.391	(1.229-13.553)		282214183	209.3	
A 58 C16-C24	7.483	(5.850-9.115)		58292748	37.8	
61 icosane	7.580	7.625	-0.045	2054424	NC	
A 6 C10-C40	7.835	(2.116-13.553)		281618990	209.0	
$ 34 p-Terphenyl	8.090	8.110	-0.020	54295035	28.3	
35 n-Docosane	8.400	8.400	0.000	2726331	NC	
A 18 C12-C40	8.583	(3.613-13.553)		276359572	205.7	
36 Tricosane	8.738	8.764	-0.026	4973533	NC	
A 66 C13-C40	8.897	(4.240-13.553)		275018660	204.9	
37 n-Tetracosane	9.126	9.115	0.011	3501906	NC	
A 2 C16-C36 ORO	9.191	(5.850-12.531)		299805536	262.8	
38 C25	9.451	9.453	-0.002	4111032	NC	
A 19 C16-C40	9.702	(5.850-13.553)		271494410	203.1	
46 n-Hexacosane	9.788	9.780	0.008	4140770	NC	
A 20 C19-C36	9.872	(7.212-12.531)		282563156	212.6	
A 55 C23-C32	10.146	(8.764-11.528)		94858930	136.6	
39 n-Octacosane	10.414	10.400	0.014	5625726	NC	
65 C29	10.694	10.695	-0.001	7967428	NC	
A 40 C24-C36	10.823	(9.115-12.531)		115846924	130.1	
A 7 Motor Oil	10.823	(9.115-12.531)		115846924	130.1	
A 10 C22-C40	10.977	(8.400-13.553)		170485656	137.1	
A 49 C25-C36	10.992	(9.453-12.531)		133938787	149.6	
A 41 C23-C40	11.159	(8.764-13.553)		222966086	174.4	
A 8 C24-C40	11.334	(9.115-13.553)		213201662	175.1	
56 Dotriacontane	11.533	11.528	0.005	5900452	NC	
A 50 C28-C40	11.977	(10.400-13.553)		176925021	186.4	
A 63 C29-C40	12.124	(10.695-13.553)		167429715	193.2	
42 n-Hexatriacontane	12.523	12.531	-0.008	5805684	NC	
43 C40	13.481	13.553	-0.072	31431787	NC	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

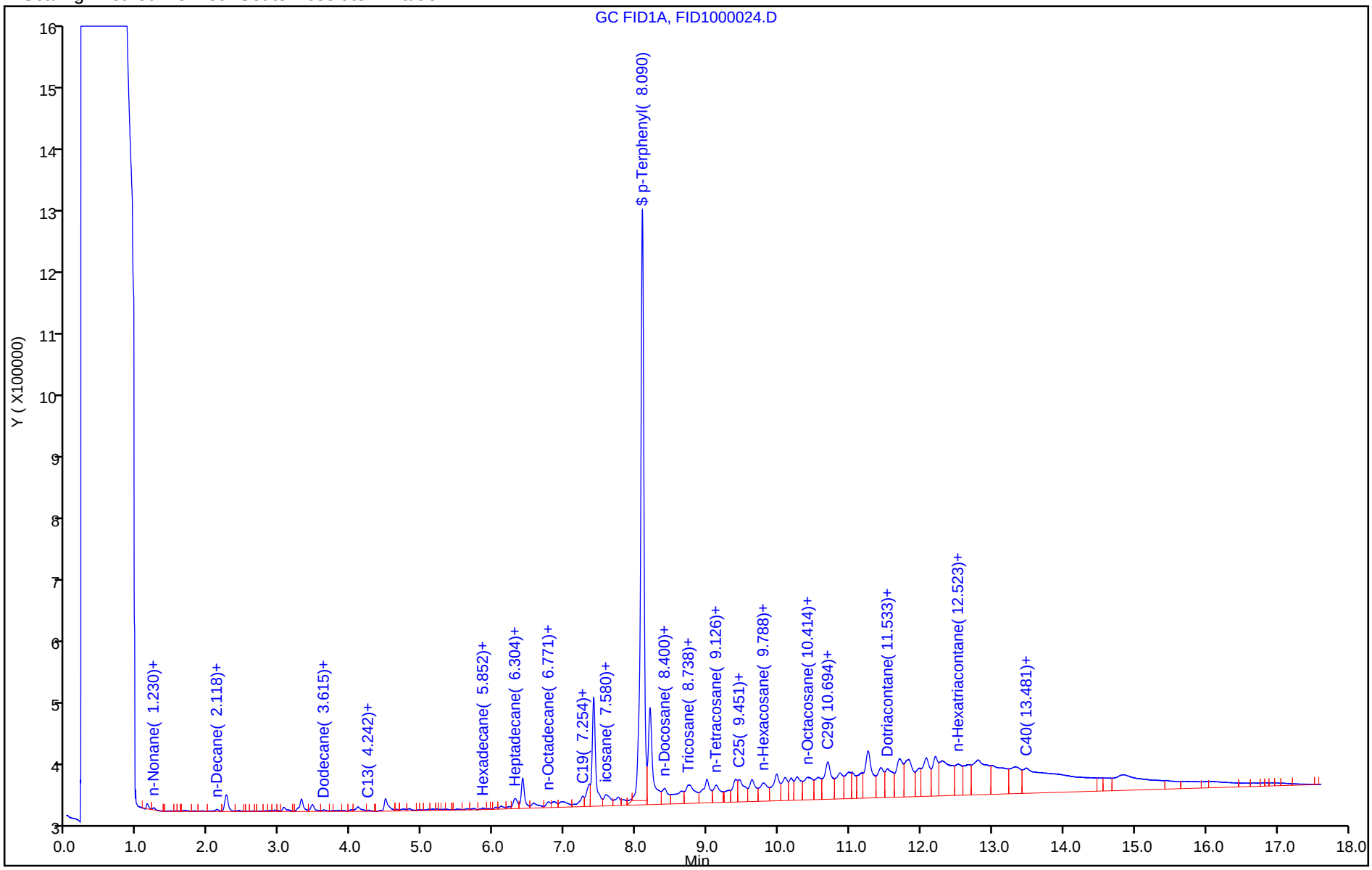
Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

Report Date: 05-Sep-2018 18:53:27 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000024.D				
Injection Date:	05-Sep-2018 17:55:41	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88263-E-9-B	Lab Sample ID:	720-88263-9	Worklist Smp#:	24
Client ID:	DG-M11S-3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000024.D
Lims ID: 720-88263-E-9-B
Client ID: DG-M11S-3.5-4
Sample Type: Client
Inject. Date: 05-Sep-2018 17:55:41 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053661-024
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\DRO6_A.m
Limit Group: DRO
Last Update: 05-Sep-2018 18:53:24 Calib Date: 05-Sep-2018 09:01:58
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK002

First Level Reviewer: luj Date: 05-Sep-2018 18:49:55

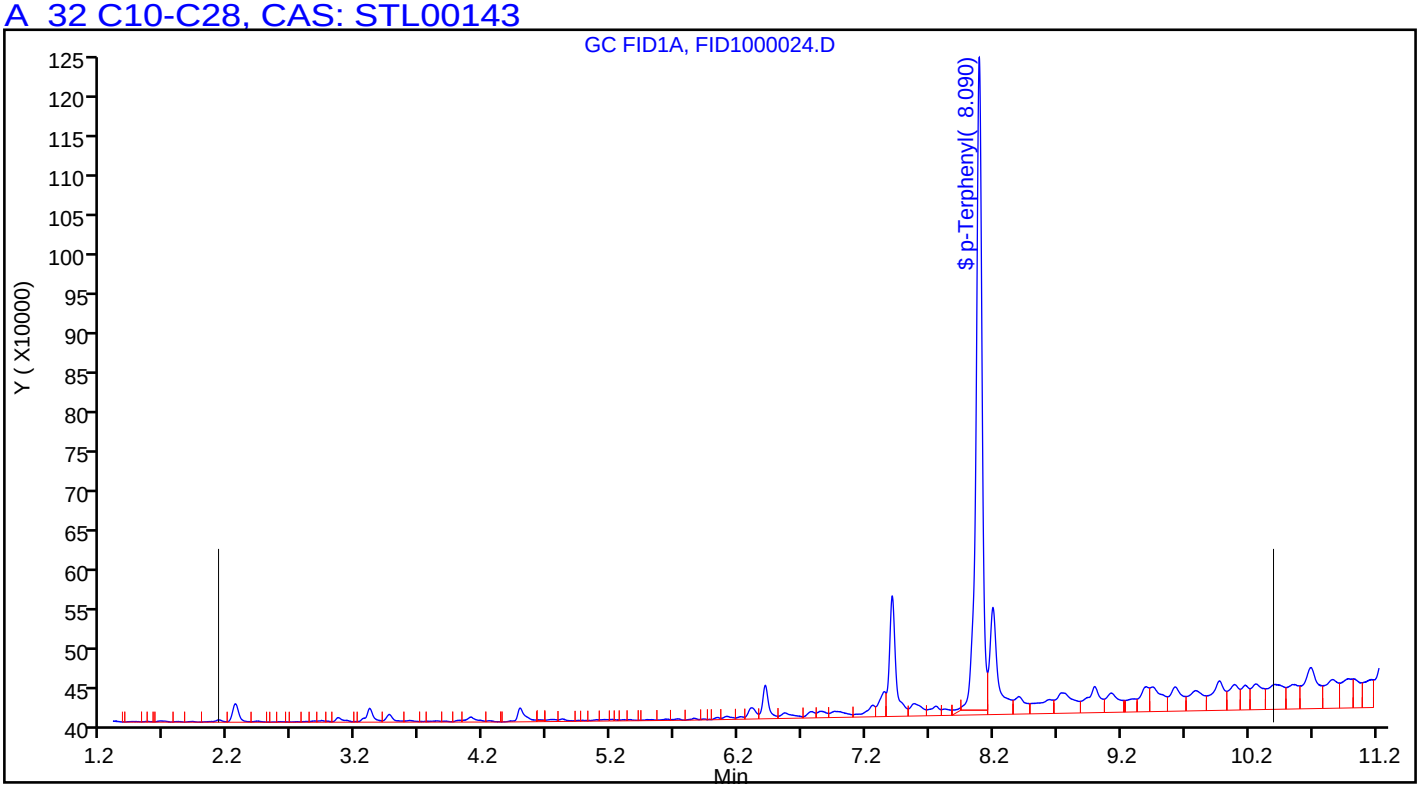
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	28.3	113.09

Report Date: 05-Sep-2018 18:53:29 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000024.D				
Injection Date:	05-Sep-2018 17:55:41	Instrument ID:	CHDRO6		
Lims ID:	720-88263-E-9-B	Lab Sample ID:	720-88263-9		
Client ID:	DG-M11S-3.5-4				
Operator ID:	DCH	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-K11S-0.5-1
Lab Sample ID: 720-88263-10
Matrix: Solid
Lab File ID: FID2000025.D
Analysis Method: 8015B
Date Collected: 08/27/2018 10:35
Extraction Method: 3546
Date Extracted: 08/30/2018 08:54
Sample wt/vol: 15.20(g)
Date Analyzed: 09/05/2018 18:20
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250885
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	59000		2000	740

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	93		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000025.D
Lims ID: 720-88263-E-10-A
Client ID: DG-K11S-0.5-1
Sample Type: Client
Inject. Date: 05-Sep-2018 18:20:17 ALS Bottle#: 75 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053662-025
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\DRO6_B.m
Limit Group: DRO
Last Update: 05-Sep-2018 18:58:37 Calib Date: 05-Sep-2018 11:27:56
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000009.D

Column 1 : Det: GC FID1A
Process Host: XAWRK002

First Level Reviewer: luj Date: 05-Sep-2018 18:58:37

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.305			ND	
23 n-Decane		2.168			ND	
A 1 C9-C13	2.774	(1.305-4.243)		15180433	6.96	M
A 21 Stoddard Solvent	2.774	(1.305-4.243)		15180433	NC	M
A 57 C10-C12	2.898	(2.168-3.628)		10182602	13.1	M
24 Dodecane	3.620	3.628	-0.008	457673	NC	M
A 3 C9 - C17	3.805	(1.305-6.306)		36786318	16.1	M
A 60 C10-C16	3.999	(2.168-5.830)		27151053	13.4	M
A 47 C9 - C18	4.028	(1.305-6.750)		51875102	27.4	M
A 25 C9-C19	4.240	(1.305-7.174)		79114672	34.4	M
A 15 Kerosene	4.240	(1.305-7.174)		79114672	41.7	M
26 C13		4.243			ND	
$ 27 n-Decanoic Acid (Surr)		4.643			ND	MU
A 59 C12-C16	4.729	(3.628-5.830)		17426124	17.2	M
A 61 C10-C20	4.875	(2.168-7.582)		103805229	66.1	M
A 28 C9-C24	5.178	(1.305-9.051)		325911609	191.8	M
A 29 C9-C25	5.344	(1.305-9.384)		401664970	234.7	M
A 54 C10-C23	5.437	(2.168-8.705)		306559599	180.9	M
A 4 C10-C24	5.610	(2.168-9.051)		323396985	190.4	M
A 16 C10-C25	5.776	(2.168-9.384)		399150346	233.3	M
45 Hexadecane	5.843	5.830	0.013	2176280	NC	M
A 14 C10-C26	5.937	(2.168-9.705)		495906481	288.1	M
A 67 C12-C22	5.987	(3.628-8.346)		206443469	124.2	M
A 32 C10-C28	6.242	(2.168-10.315)		784623514	451.6	M
A 5 Diesel	6.242	(2.168-10.315)		784623514	451.6	M
A 12 Unknown Hydrocarbons	6.242	(2.168-10.315)		784623514	NC	M
A 30 C13-C22	6.294	(4.243-8.346)		203502589	122.5	M
44 Heptadecane	6.338	6.306	0.032	6642120	NC	M
A 31 C12-C24	6.339	(3.628-9.051)		313672056	184.9	M
49 n-Octadecane	6.796	6.750	0.046	6616831	NC	M
A 9 Crude Oil Range Organics (	6.857	(1.305-12.408)		1948420397	NC	M
A 11 Bunker Range Organics (C9-	6.857	(1.305-12.408)		1948420397	NC	M

Report Date: 05-Sep-2018 18:58:38 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000025.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.857	(1.305-12.408)		1948420397	923.0	M
33 C19	7.173	7.174	-0.001	16144445	NC	M
A 64 C13-C28	7.279	(4.243-10.315)		771957705	444.4	M
A 17 C10-C36	7.288	(2.168-12.408)		1945905773	1109.1	M
A 68 Crude Oil Range Organics (	7.347	(1.305-13.389)		3555939476	NC	M
A 13 C9-C40	7.347	(1.305-13.389)		3555939476	2276.1	M
A 58 C16-C24	7.440	(5.830-9.051)		296245932	175.0	M
62 icosane	7.594	7.582	0.012	19389276	NC	M
A 6 C10-C40	7.779	(2.168-13.389)		3553424852	2276.9	M
$ 34 p-Terphenyl	8.063	8.086	-0.023	46383886	23.4	M
35 n-Docosane	8.347	8.346	0.001	19337156	NC	M
A 18 C12-C40	8.508	(3.628-13.389)		3543699923	2277.1	M
36 Tricosane	8.702	8.705	-0.003	60802212	NC	M
A 66 C13-C40	8.816	(4.243-13.389)		3540759043	2277.8	M
37 n-Tetracosane	9.052	9.051	0.001	75753361	NC	M
A 2 C16-C36 ORO	9.119	(5.830-12.408)		1918754720	1622.7	M
38 C25	9.387	9.384	0.003	96756135	NC	M
A 19 C16-C40	9.610	(5.830-13.389)		3526273799	2275.9	M
46 n-Hexacosane	9.720	9.705	0.015	94930517	NC	M
A 20 C19-C36	9.791	(7.174-12.408)		1286743843	945.2	
A 55 C23-C32	10.064	(8.705-11.424)		1145553880	1480.3	M
39 n-Octacosane	10.355	10.315	0.040	72992645	NC	M
65 C29	10.625	10.606	0.019	163965315	NC	M
A 40 C24-C36	10.729	(9.051-12.408)		1536498342	1567.2	M
A 7 Motor Oil	10.729	(9.051-12.408)		1224046397	1248.5	
A 10 C22-C40	10.867	(8.346-13.389)		1694336390	1219.0	
A 50 C25-C36	10.896	(9.384-12.408)		1132409300	1229.3	
A 41 C23-C40	11.047	(8.705-13.389)		1663569445	1217.2	
A 8 C24-C40	11.220	(9.051-13.389)		1656745425	1235.2	
56 Dotriacontane	11.382	11.424	-0.042	76748137	NC	M
A 51 C28-C40	11.852	(10.315-13.389)		1362473544	1256.0	
A 63 C29-C40	11.997	(10.606-13.389)		1253805755	1254.6	
42 n-Hexatriacontane		12.408			ND	
43 C40		13.389			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

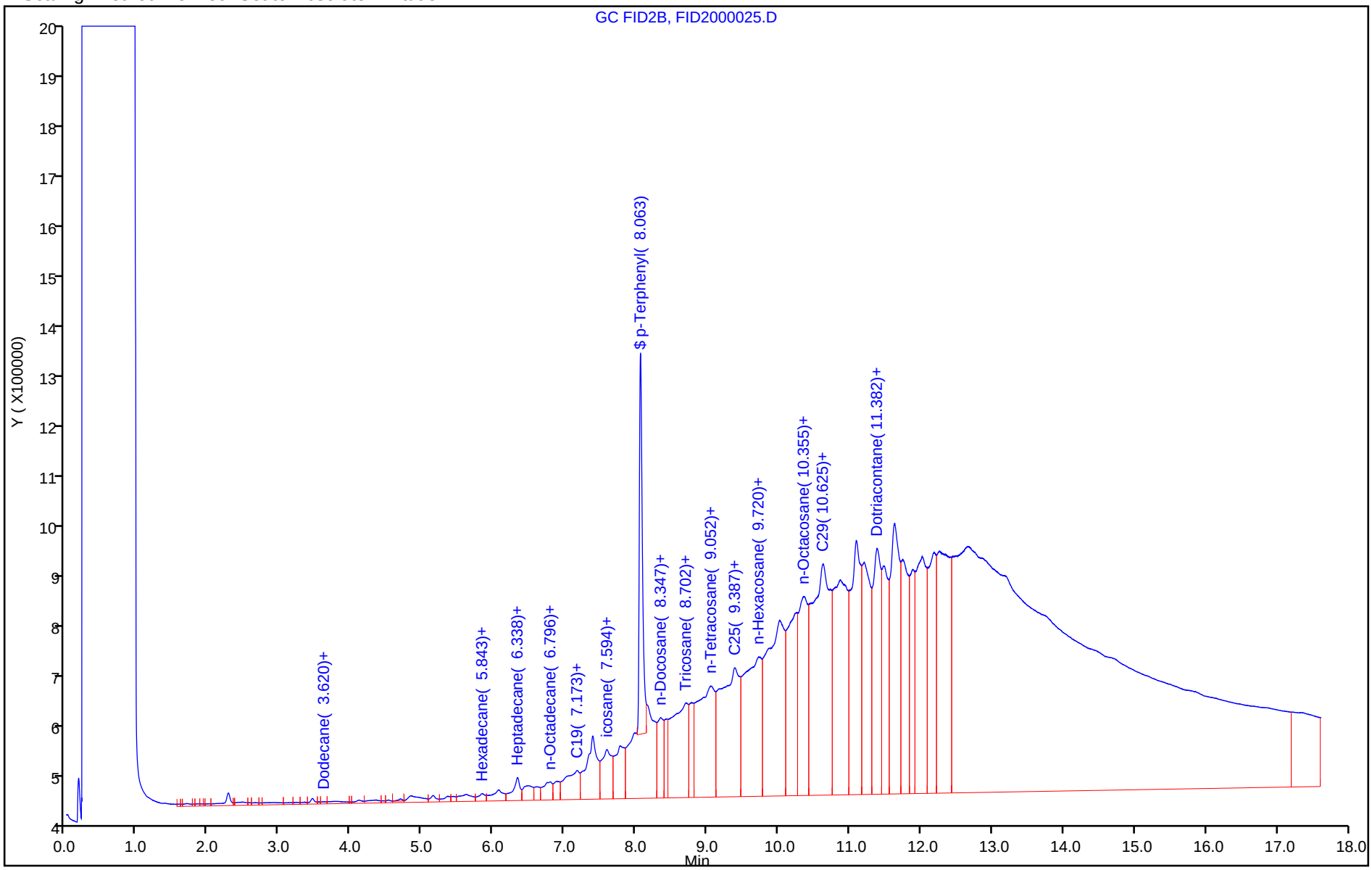
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 05-Sep-2018 18:58:38 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000025.D				
Injection Date:	05-Sep-2018 18:20:17	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88263-E-10-A	Lab Sample ID:	720-88263-10	Worklist Smp#:	25
Client ID:	DG-K11S-0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	75
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000025.D				
Lims ID:	720-88263-E-10-A				
Client ID:	DG-K11S-0.5-1				
Sample Type:	Client				
Inject. Date:	05-Sep-2018 18:20:17	ALS Bottle#:	75	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	720-0053662-025				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\DRO6_B.m				
Limit Group:	DRO				
Last Update:	05-Sep-2018 18:58:37	Calib Date:	05-Sep-2018 11:27:56		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000009.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK002				
First Level Reviewer: luj		Date:	05-Sep-2018 18:58:37		

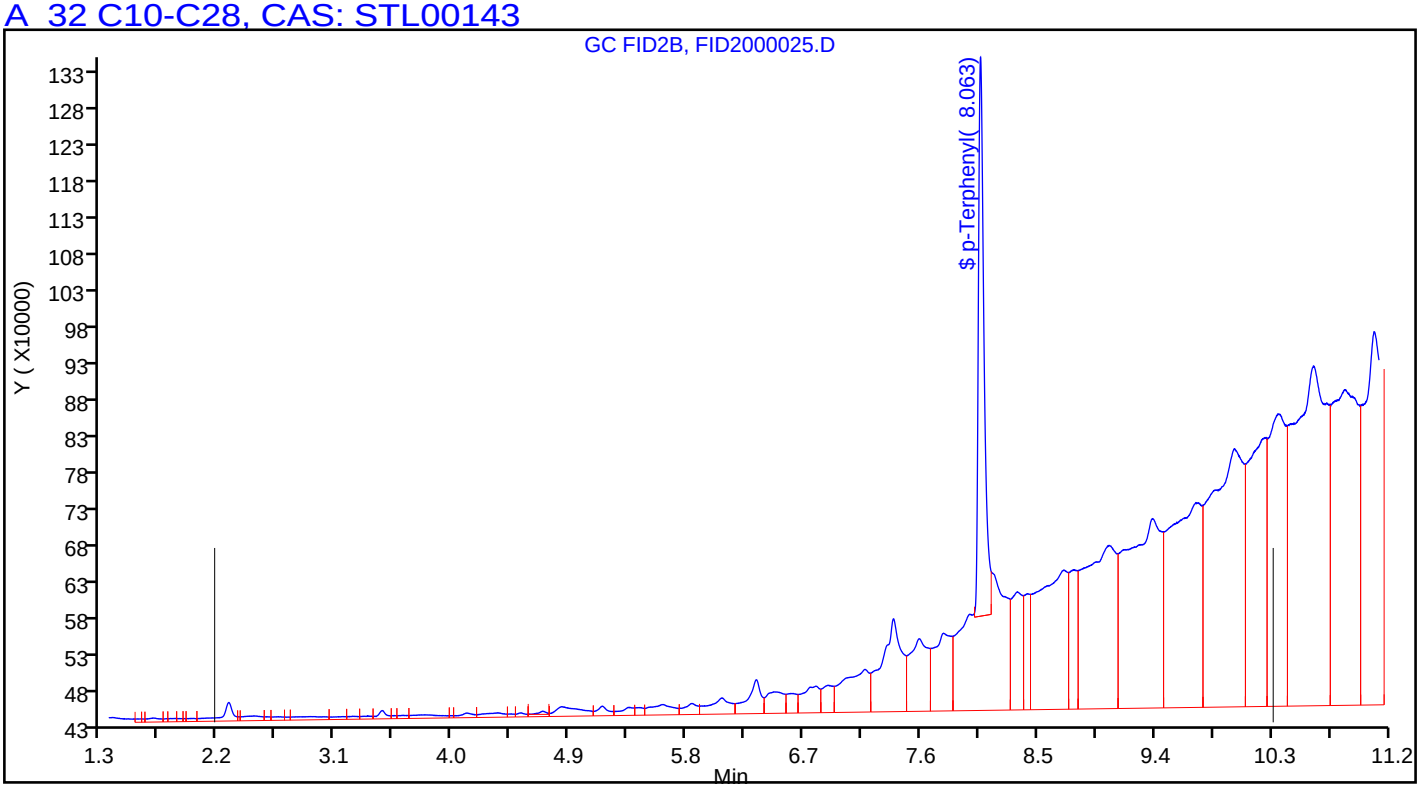
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	23.4	93.45

Report Date: 05-Sep-2018 18:58:41 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000025.D				
Injection Date:	05-Sep-2018 18:20:17	Instrument ID:	CHDRO6		
Lims ID:	720-88263-E-10-A	Lab Sample ID:	720-88263-10		
Client ID:	DG-K11S-0.5-1				
Operator ID:	DCH	ALS Bottle#:	75	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

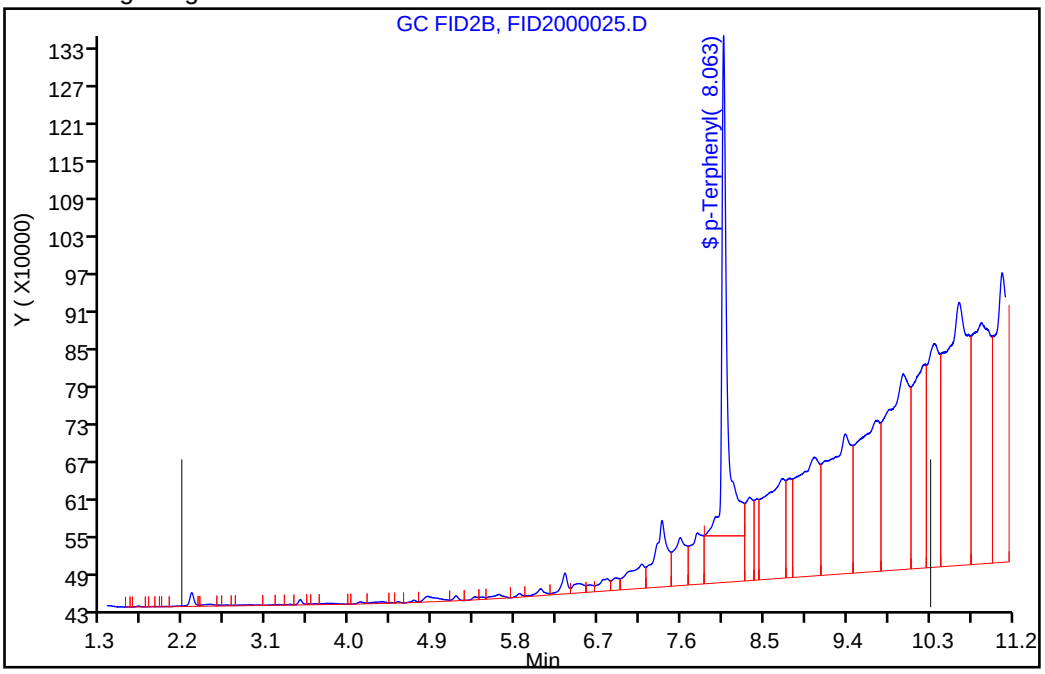
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000025.D				
Injection Date:	05-Sep-2018 18:20:17	Instrument ID:	CHDRO6		
Lims ID:	720-88263-E-10-A	Lab Sample ID:	720-88263-10		
Client ID:	DG-K11S-0.5-1				
Operator ID:	DCH	ALS Bottle#:	75	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.242, CAS: STL00143

Signal: 1

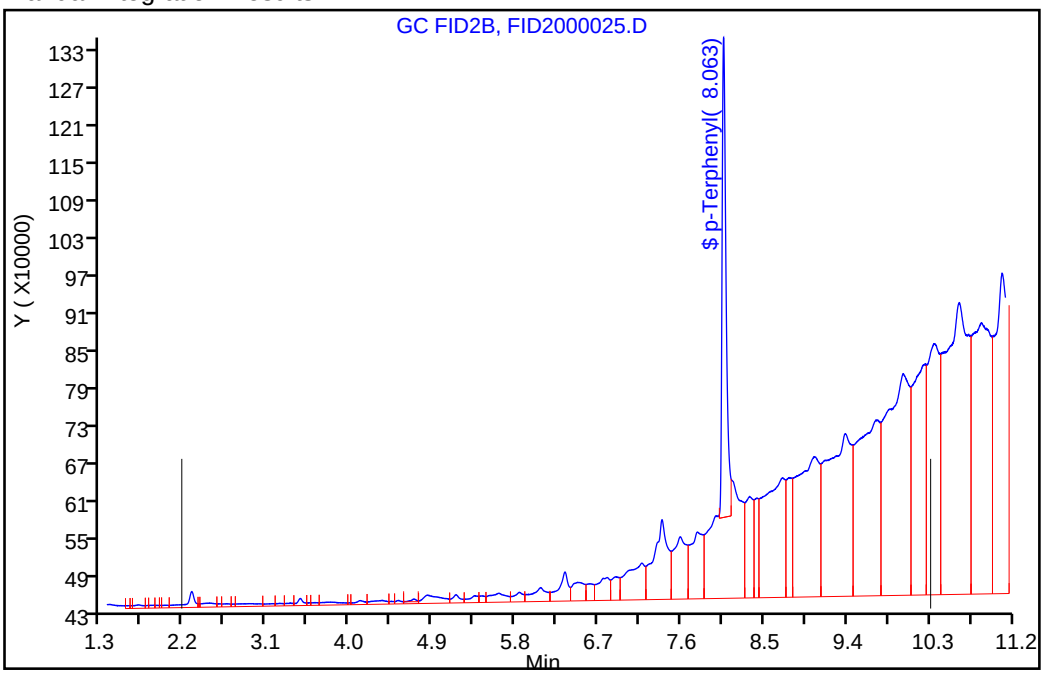
Processing Integration Results

RT: 6.24
Response: 600333160
Amount: 347.2202



Manual Integration Results

RT: 6.24
Response: 784623514
Amount: 451.5692



Reviewer: luj, 05-Sep-2018 18:58:00

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

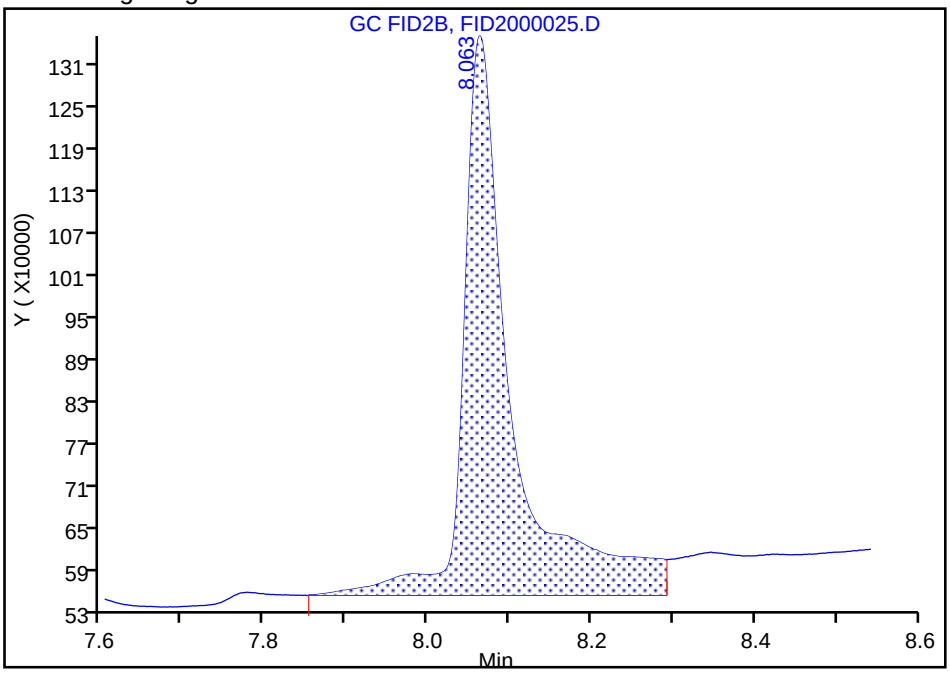
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000025.D				
Injection Date:	05-Sep-2018 18:20:17	Instrument ID:	CHDRO6		
Lims ID:	720-88263-E-10-A	Lab Sample ID:	720-88263-10		
Client ID:	DG-K11S-0.5-1				
Operator ID:	DCH	ALS Bottle#:	75	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

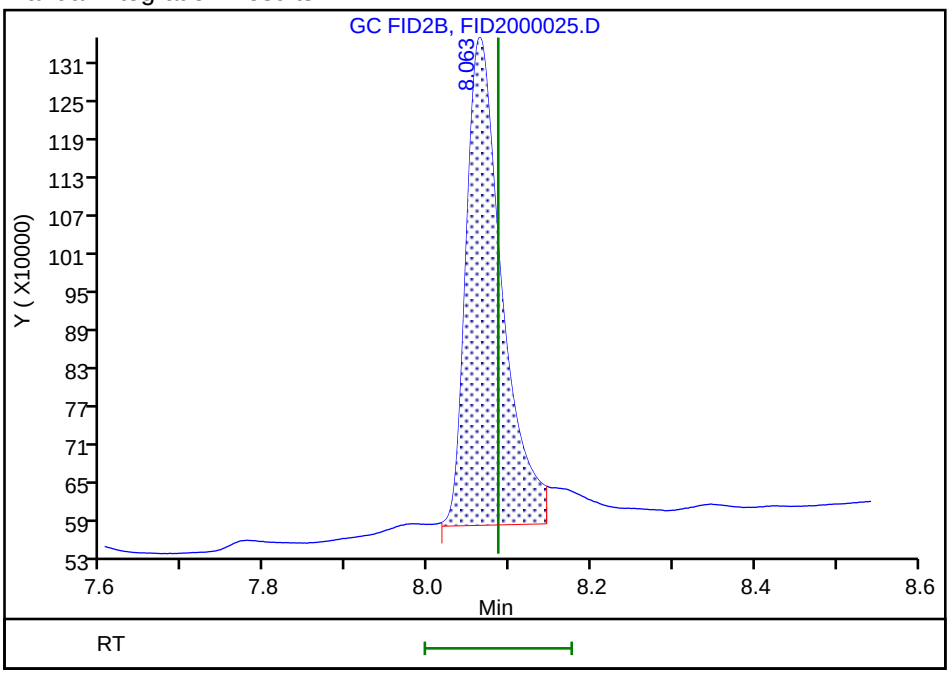
Processing Integration Results

RT: 8.06
Area: 65547842
Amount: 33.013360
Amount Units: mg/L



Manual Integration Results

RT: 8.06
Area: 46383886
Amount: 23.361378
Amount Units: mg/L



Reviewer: luj, 05-Sep-2018 18:58:15

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-K11S-3.5-4
Lab Sample ID: 720-88263-11
Matrix: Solid
Lab File ID: FID2000026.D
Analysis Method: 8015B
Date Collected: 08/27/2018 10:35
Extraction Method: 3546
Date Extracted: 08/30/2018 08:54
Sample wt/vol: 15.94(g)
Date Analyzed: 09/05/2018 18:44
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250885
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	13000		1900	710

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	113		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000026.D
Lims ID: 720-88263-E-11-A
Client ID: DG-K11S-3.5-4
Sample Type: Client
Inject. Date: 05-Sep-2018 18:44:40 ALS Bottle#: 76 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053662-026
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\DRO6_B.m
Limit Group: DRO
Last Update: 06-Sep-2018 13:29:24 Calib Date: 05-Sep-2018 11:27:56
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000009.D

Column 1 : Det: GC FID1A
Process Host: XAWRK007

First Level Reviewer: luj Date: 06-Sep-2018 13:29:24

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.305			ND	
23 n-Decane	2.167	2.168	-0.001	62730	NC	
A 1 C9-C13	2.774	(1.305-4.243)		7783459	3.57	M
A 21 Stoddard Solvent	2.774	(1.305-4.243)		7783459	NC	M
A 57 C10-C12	2.898	(2.168-3.628)		4270489	9.72	
24 Dodecane	3.646	3.628	0.018	21422	NC	
A 3 C9 - C17	3.805	(1.305-6.306)		21559737	9.44	M
A 60 C10-C16	3.999	(2.168-5.830)		17860344	8.81	M
A 47 C9 - C18	4.028	(1.305-6.750)		26955996	14.2	M
A 25 C9-C19	4.240	(1.305-7.174)		38928398	16.9	M
A 15 Kerosene	4.240	(1.305-7.174)		38928398	20.5	M
26 C13	4.222	4.243	-0.021	2435786	NC	M
$ 27 n-Decanoic Acid (Surr)		4.643			ND	U
A 59 C12-C16	4.729	(3.628-5.830)		13589855	15.0	M
A 61 C10-C20	4.875	(2.168-7.582)		46143363	33.4	M
A 28 C9-C24	5.178	(1.305-9.051)		100393096	64.1	M
A 29 C9-C25	5.344	(1.305-9.384)		130226054	81.0	M
A 54 C10-C23	5.437	(2.168-8.705)		81386590	53.4	M
A 4 C10-C24	5.610	(2.168-9.051)		100039300	63.9	M
A 16 C10-C25	5.776	(2.168-9.384)		129872258	80.8	M
45 Hexadecane	5.849	5.830	0.019	1459986	NC	M
A 14 C10-C26	5.937	(2.168-9.705)		134627903	83.5	M
A 67 C12-C22	5.987	(3.628-8.346)		77116101	51.0	M
A 32 C10-C28	6.242	(2.168-10.315)		167475528	102.1	M
A 5 Diesel	6.242	(2.168-10.315)		167475528	102.1	M
A 12 Unknown Hydrocarbons	6.242	(2.168-10.315)		167475528	NC	M
A 30 C13-C22	6.294	(4.243-8.346)		76392713	50.6	M
44 Heptadecane	6.339	6.306	0.033	2429471	NC	M
A 31 C12-C24	6.339	(3.628-9.051)		95768811	61.5	M
49 n-Octadecane	6.756	6.750	0.006	2952400	NC	M
A 9 Crude Oil Range Organics (	6.857	(1.305-12.408)		486384152	NC	M
A 11 Bunker Range Organics (C9-	6.857	(1.305-12.408)		486384152	NC	M

Report Date: 06-Sep-2018 13:29:25 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000026.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.857	(1.305-12.408)		486384152	230.4	M
33 C19	7.172	7.174	-0.002	2590395	NC	M
A 64 C13-C28	7.279	(4.243-10.315)		162481651	99.3	M
A 17 C10-C36	7.288	(2.168-12.408)		486030356	282.5	M
A 68 Crude Oil Range Organics (	7.347	(1.305-13.389)		705535720	NC	M
A 13 C9-C40	7.347	(1.305-13.389)		705535720	451.6	M
A 58 C16-C24	7.440	(5.830-9.051)		82178956	53.8	M
62 icosane	7.585	7.582	0.003	6107179	NC	M
A 6 C10-C40	7.779	(2.168-13.389)		705181924	451.9	M
$ 34 p-Terphenyl	8.064	8.086	-0.022	55918367	28.2	M
35 n-Docosane	8.339	8.346	-0.007	8274082	NC	M
A 18 C12-C40	8.508	(3.628-13.389)		700911435	450.4	M
36 Tricosane	8.707	8.705	0.002	14844542	NC	M
A 66 C13-C40	8.816	(4.243-13.389)		700188047	450.4	M
37 n-Tetracosane	9.065	9.051	0.014	7294425	NC	M
A 2 C16-C36 ORO	9.119	(5.830-12.408)		468170012	395.9	M
38 C25	9.382	9.384	-0.002	18836936	NC	M
A 19 C16-C40	9.610	(5.830-13.389)		687321580	443.6	M
46 n-Hexacosane	9.712	9.705	0.007	8455665	NC	M
A 20 C19-C36	9.791	(7.174-12.408)		78144473	57.4	
A 55 C23-C32	10.064	(8.705-11.424)		219797878	284.0	M
39 n-Octacosane	10.365	10.315	0.050	28699743	NC	M
65 C29	10.612	10.606	0.006	34496284	NC	M
A 40 C24-C36	10.729	(9.051-12.408)		374798000	382.3	M
A 7 Motor Oil	10.729	(9.051-12.408)		160208560	163.4	
A 10 C22-C40	10.867	(8.346-13.389)		264612766	190.4	
A 50 C25-C36	10.896	(9.384-12.408)		156168107	169.5	
A 41 C23-C40	11.047	(8.705-13.389)		277179887	202.8	
A 8 C24-C40	11.220	(9.051-13.389)		299139601	223.0	
56 Dotriacontane	11.488	11.424	0.064	31077684	NC	M
A 51 C28-C40	11.852	(10.315-13.389)		304476664	280.7	
A 63 C29-C40	11.997	(10.606-13.389)		294613946	294.8	
42 n-Hexatriacontane	12.398	12.408	-0.010	21280707	NC	M
43 C40	13.347	13.389	-0.042	43411991	NC	M
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

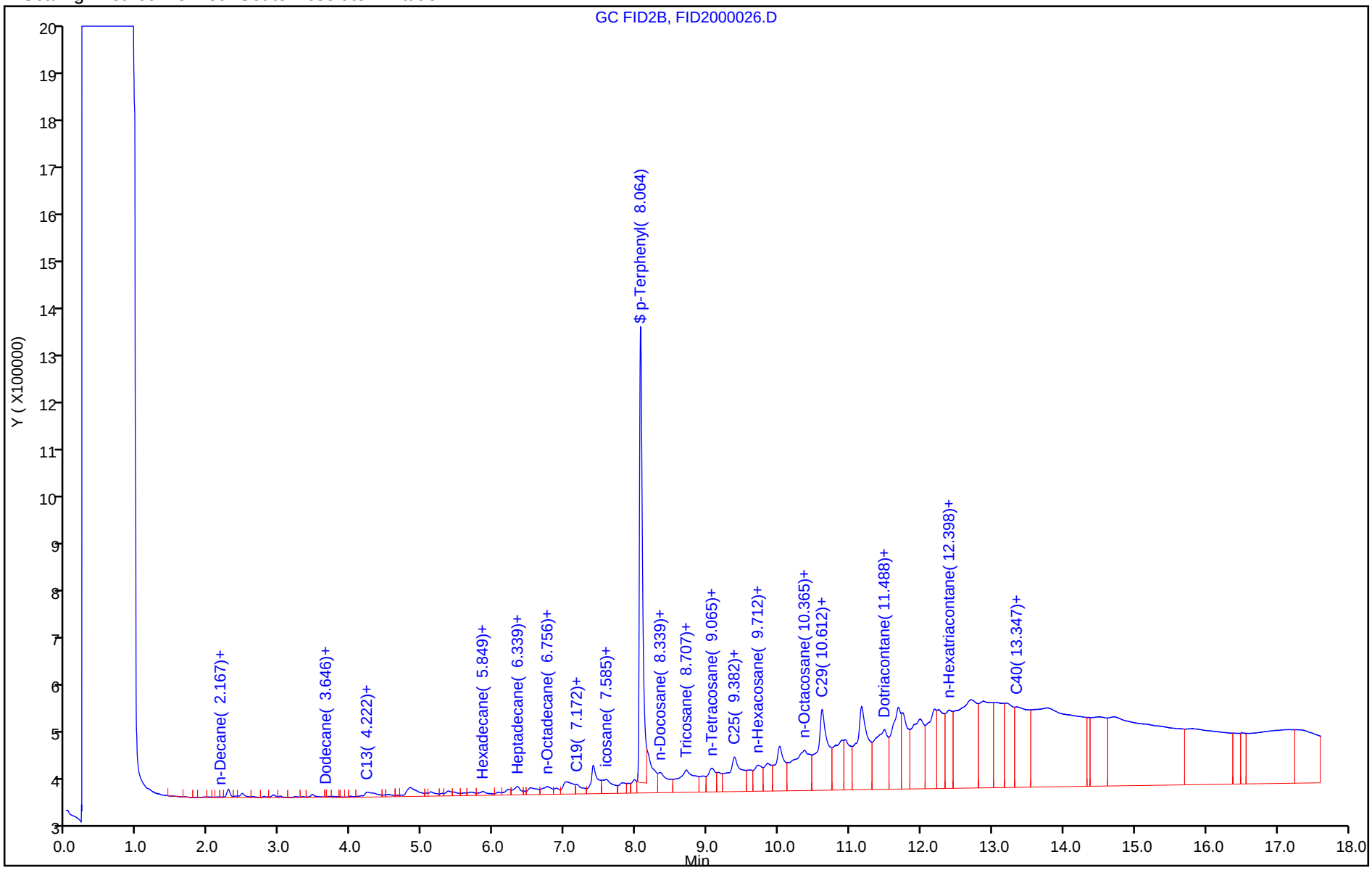
Report Date: 06-Sep-2018 13:29:25 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000026.D

Injection Date:	05-Sep-2018 18:44:40	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88263-E-11-A	Lab Sample ID:	720-88263-11	Worklist Smp#:	26
Client ID:	DG-K11S-3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	76
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000026.D				
Lims ID:	720-88263-E-11-A				
Client ID:	DG-K11S-3.5-4				
Sample Type:	Client				
Inject. Date:	05-Sep-2018 18:44:40	ALS Bottle#:	76	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	720-0053662-026				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\DRO6_B.m				
Limit Group:	DRO				
Last Update:	06-Sep-2018 13:29:24	Calib Date:	05-Sep-2018 11:27:56		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000009.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK007				
First Level Reviewer: luj		Date:	06-Sep-2018 13:29:24		

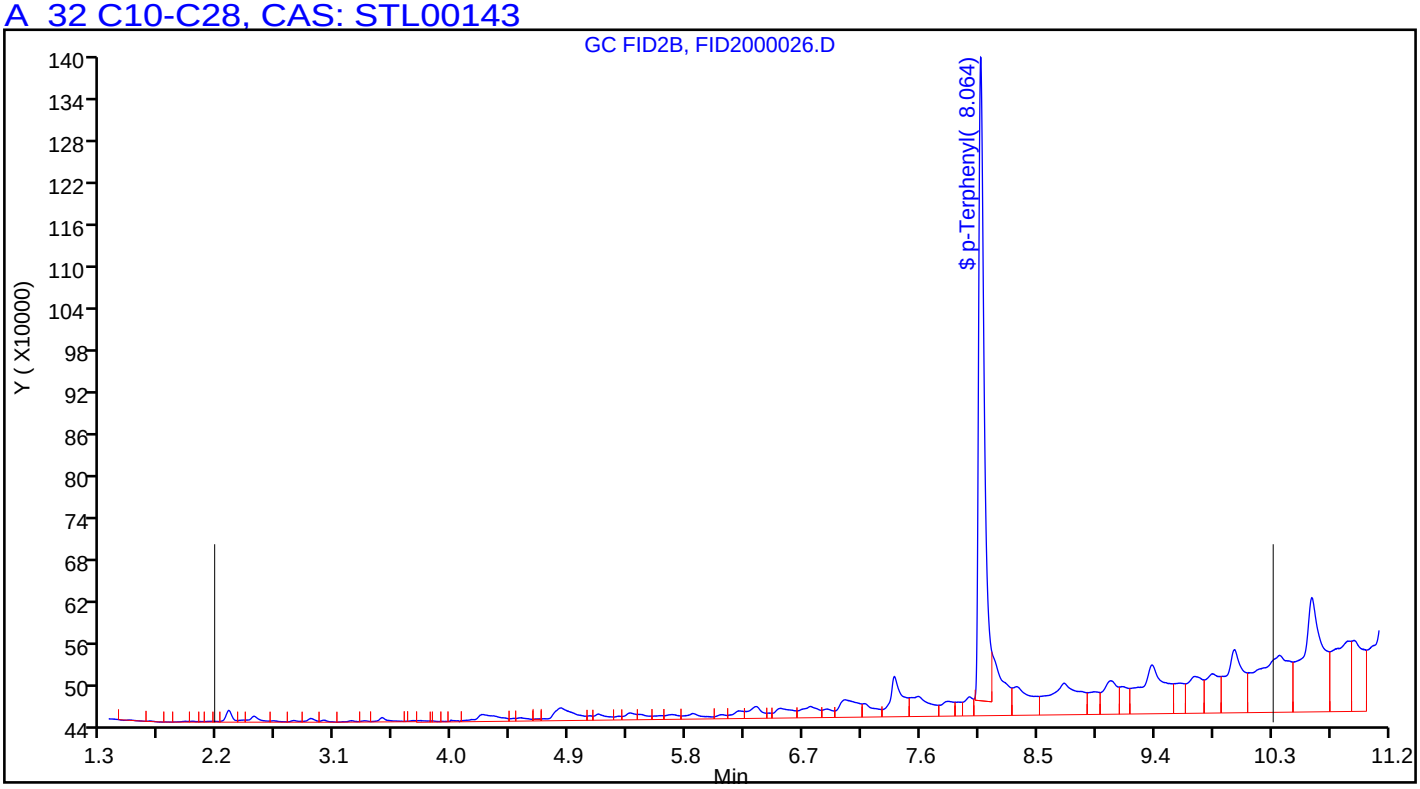
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	28.2	112.65

Report Date: 06-Sep-2018 13:29:28 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000026.D				
Injection Date:	05-Sep-2018 18:44:40	Instrument ID:	CHDRO6		
Lims ID:	720-88263-E-11-A	Lab Sample ID:	720-88263-11		
Client ID:	DG-K11S-3.5-4				
Operator ID:	DCH	ALS Bottle#:	76	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

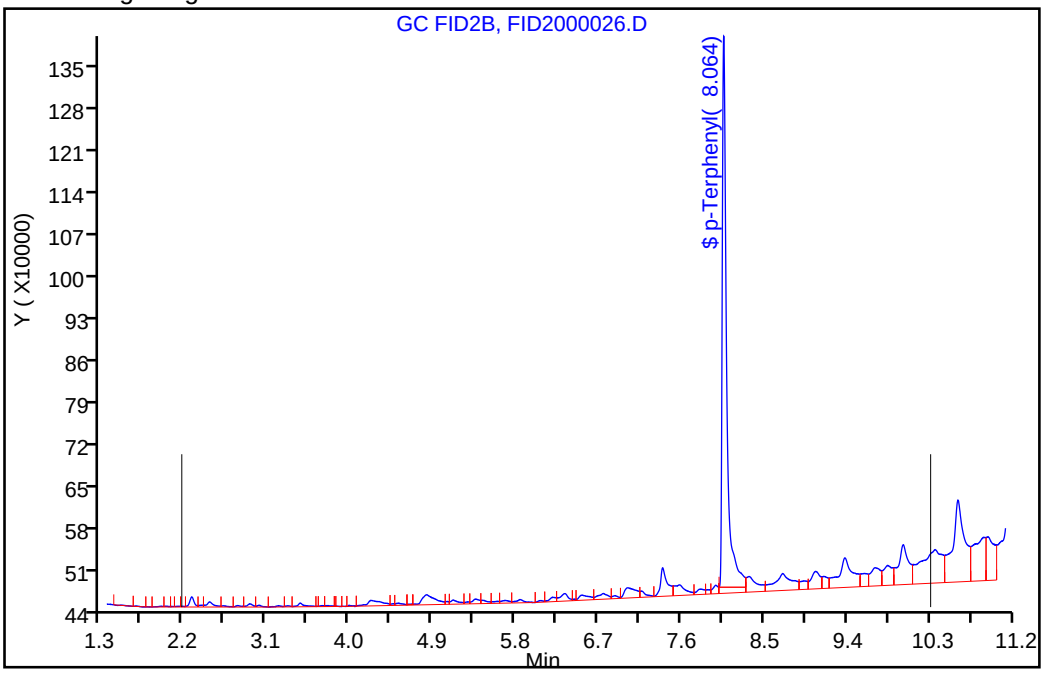
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000026.D				
Injection Date:	05-Sep-2018 18:44:40	Instrument ID:	CHDRO6		
Lims ID:	720-88263-E-11-A	Lab Sample ID:	720-88263-11		
Client ID:	DG-K11S-3.5-4				
Operator ID:	DCH	ALS Bottle#:	76	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.242, CAS: STL00143

Signal: 1

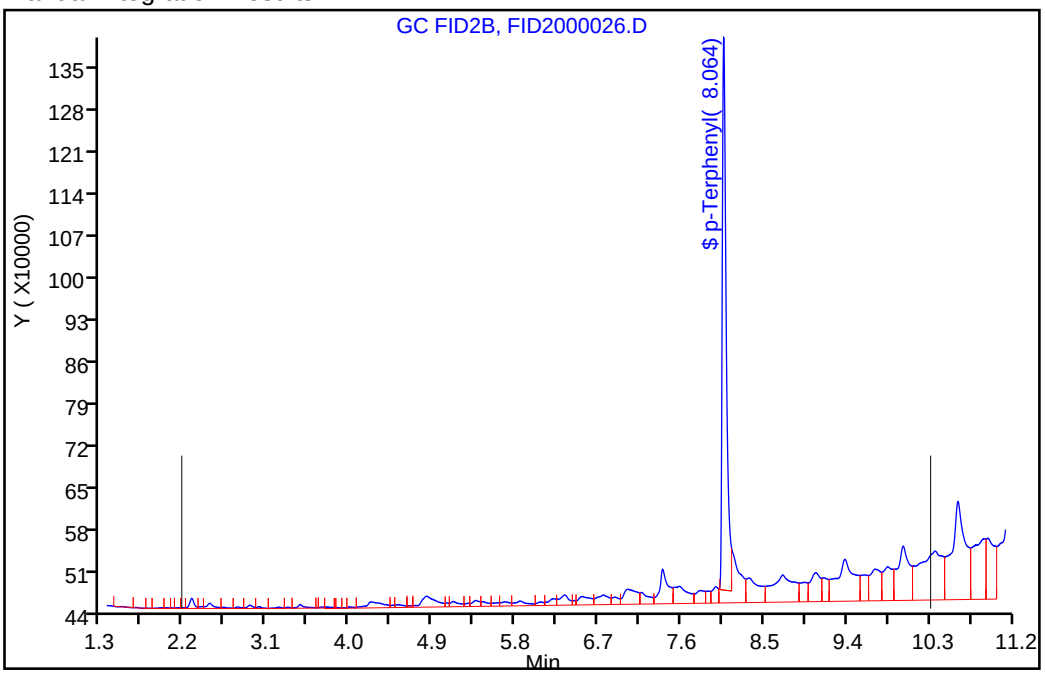
Processing Integration Results

RT: 6.24
Response: 89558789
Amount: 58.009318



Manual Integration Results

RT: 6.24
Response: 167475528
Amount: 102.1274



Reviewer: luj, 06-Sep-2018 13:28:44

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

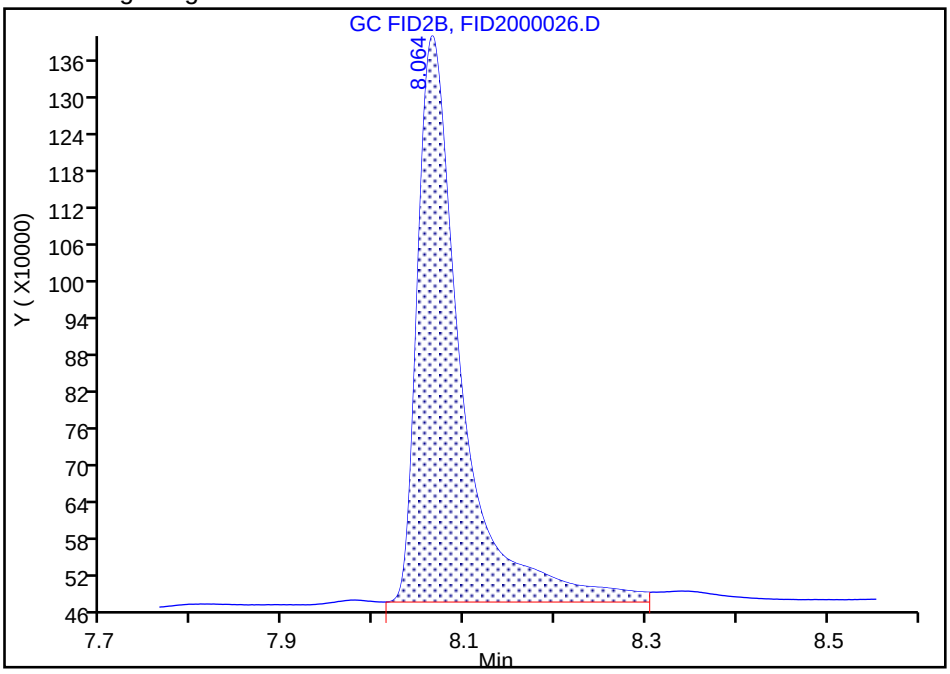
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000026.D				
Injection Date:	05-Sep-2018 18:44:40	Instrument ID:	CHDRO6		
Lims ID:	720-88263-E-11-A	Lab Sample ID:	720-88263-11		
Client ID:	DG-K11S-3.5-4				
Operator ID:	DCH	ALS Bottle#:	76	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

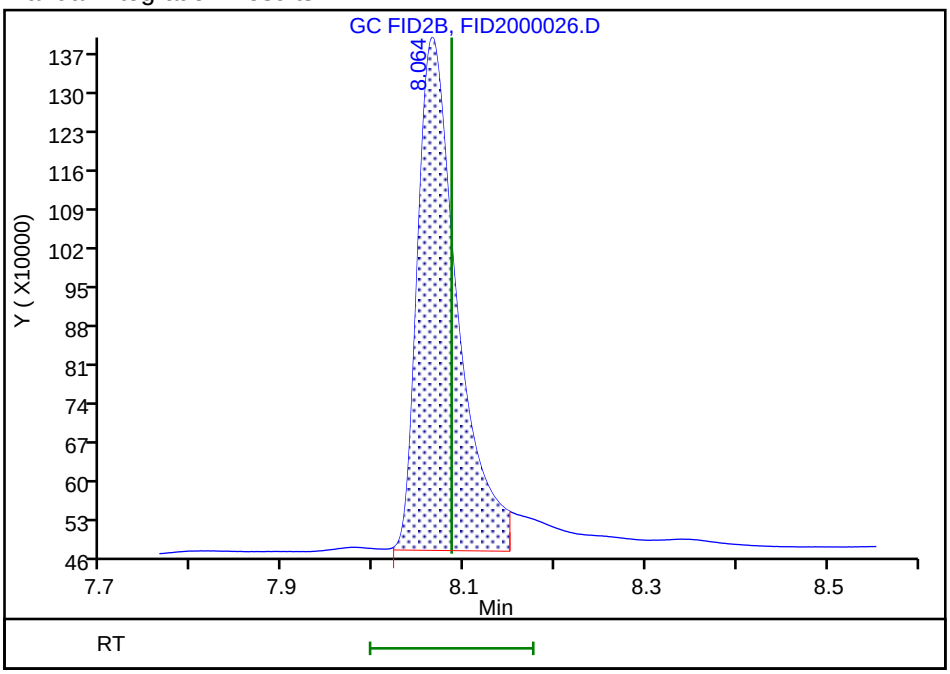
Processing Integration Results

RT: 8.06
Area: 61657518
Amount: 31.053987
Amount Units: mg/L



Manual Integration Results

RT: 8.06
Area: 55918367
Amount: 28.163447
Amount Units: mg/L



Reviewer: luj, 06-Sep-2018 13:29:03

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-K11S-9.5-10 Lab Sample ID: 720-88263-12

Matrix: Solid Lab File ID: FID1000040.D

Analysis Method: 8015B Date Collected: 08/27/2018 10:35

Extraction Method: 3546 Date Extracted: 08/30/2018 08:54

Sample wt/vol: 15.33(g) Date Analyzed: 09/05/2018 04:16

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250762 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	23000		2000	730

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	73		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000040.D
Lims ID: 720-88263-D-12-B
Client ID: DG-K11S--9.5-10
Sample Type: Client
Inject. Date: 05-Sep-2018 04:16:07 ALS Bottle#: 40 Worklist Smp#: 40
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053635-040
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\DRO6_A.m
Limit Group: DRO
Last Update: 05-Sep-2018 12:45:08 Calib Date: 04-Sep-2018 09:05:17
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK002

First Level Reviewer: luj Date: 05-Sep-2018 12:45:08

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane	1.231	1.227	0.004	440009	NC	
23 n-Decane	2.120	2.116	0.004	1725017	NC	
A 1 C9-C13	2.734	(1.227-4.241)		31140421	17.5	
A 21 Stoddard Solvent	2.734	(1.227-4.241)		31140421	17.5	
A 57 C10-C12	2.864	(2.116-3.613)		13666635	8.86	
24 Dodecane	3.620	3.613	0.007	1098677	NC	
A 3 C9 - C17	3.780	(1.227-6.332)		77410192	39.7	
A 60 C10-C16	3.983	(2.116-5.851)		57494340	32.9	
A 47 C9 - C18	4.005	(1.227-6.784)		92388986	57.2	
A 15 Kerosene	4.220	(1.227-7.214)		110773264	68.6	
A 25 C9-C19	4.220	(1.227-7.214)		110773264	56.5	
26 C13	4.242	4.241	0.001	1202268	NC	
$ 27 n-Decanoic Acid (Surr)		4.611			ND	U
A 59 C12-C16	4.732	(3.613-5.851)		43827705	28.4	
A 62 C10-C20	4.871	(2.116-7.627)		129132355	83.7	
A 28 C9-C24	5.172	(1.227-9.117)		211113597	136.9	
A 29 C9-C25	5.341	(1.227-9.456)		237381568	153.9	
A 54 C10-C23	5.441	(2.116-8.766)		193458446	125.4	
A 4 C10-C24	5.616	(2.116-9.117)		205973468	133.5	
A 16 C10-C25	5.786	(2.116-9.456)		232241439	150.6	
45 Hexadecane	5.852	5.851	0.001	3533687	NC	
A 14 C10-C26	5.949	(2.116-9.783)		237677396	154.1	
A 67 C12-C22	6.007	(3.613-8.402)		163605138	106.1	
A 32 C10-C28	6.260	(2.116-10.404)		275585594	178.7	
A 5 Diesel	6.260	(2.116-10.404)		275585594	178.7	
A 12 Unknown Hydrocarbons	6.260	(2.116-10.404)		275585594	NC	
A 30 C13-C22	6.321	(4.241-8.402)		151271481	98.1	
44 Heptadecane	6.322	6.332	-0.010	2616209	NC	
A 31 C12-C24	6.365	(3.613-9.117)		192306833	124.7	
51 n-Octadecane	6.777	6.784	-0.007	2687345	NC	
A 9 Crude Oil Range Organics (	6.883	(1.227-12.538)		410676330	NC	
A 11 Bunker Range Organics (C9-	6.883	(1.227-12.538)		410676330	NC	

Report Date: 05-Sep-2018 12:45:09 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000040.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.883	(1.227-12.538)		410676330	231.9	
33 C19	7.257	7.214	0.043	3725382	NC	
A 64 C13-C28	7.322	(4.241-10.404)		249585302	161.8	
A 17 C10-C36	7.327	(2.116-12.538)		405536201	262.9	
A 68 Crude Oil Range Organics (	7.394	(1.227-13.561)		517807084	NC	
A 13 C9-C40	7.394	(1.227-13.561)		517807084	384.0	
A 58 C16-C24	7.484	(5.851-9.117)		148479128	96.3	
61 icosane		7.627			ND	
A 6 C10-C40	7.838	(2.116-13.561)		512666955	380.5	
$ 34 p-Terphenyl	8.093	8.109	-0.016	34912122	18.2	M
35 n-Docosane	8.314	8.402	-0.088	10380974	NC	
A 18 C12-C40	8.587	(3.613-13.561)		499000320	371.3	
36 Tricosane	8.752	8.766	-0.014	3900760	NC	
A 66 C13-C40	8.901	(4.241-13.561)		486666663	362.6	
37 n-Tetracosane	9.118	9.117	0.001	7834612	NC	
A 2 C16-C36 ORO	9.195	(5.851-12.538)		444162780	389.4	
38 C25	9.428	9.456	-0.028	14587607	NC	
A 19 C16-C40	9.706	(5.851-13.561)		455172615	340.4	
46 n-Hexacosane	9.837	9.783	0.054	8554925	NC	
A 20 C19-C36	9.876	(7.214-12.538)		380517422	286.3	
A 55 C23-C32	10.150	(8.766-11.534)		154058922	221.9	
39 n-Octacosane	10.403	10.404	-0.001	6932726	NC	
65 C29	10.690	10.700	-0.010	8992214	NC	
A 40 C24-C36	10.828	(9.117-12.538)		156324152	175.5	
A 7 Motor Oil	10.828	(9.117-12.538)		156324152	175.5	
A 10 C22-C40	10.982	(8.402-13.561)		234094054	188.2	
A 49 C25-C36	10.997	(9.456-12.538)		187882369	209.9	
A 41 C23-C40	11.164	(8.766-13.561)		323109269	252.8	
A 8 C24-C40	11.339	(9.117-13.561)		306693487	251.9	
56 Dotriacontane	11.533	11.534	-0.001	5129043	NC	
A 50 C28-C40	11.983	(10.404-13.561)		244014087	257.1	
A 63 C29-C40	12.130	(10.700-13.561)		227165654	262.1	
42 n-Hexatriacontane	12.547	12.538	0.009	5194343	NC	
43 C40	13.487	13.561	-0.074	47777834	NC	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

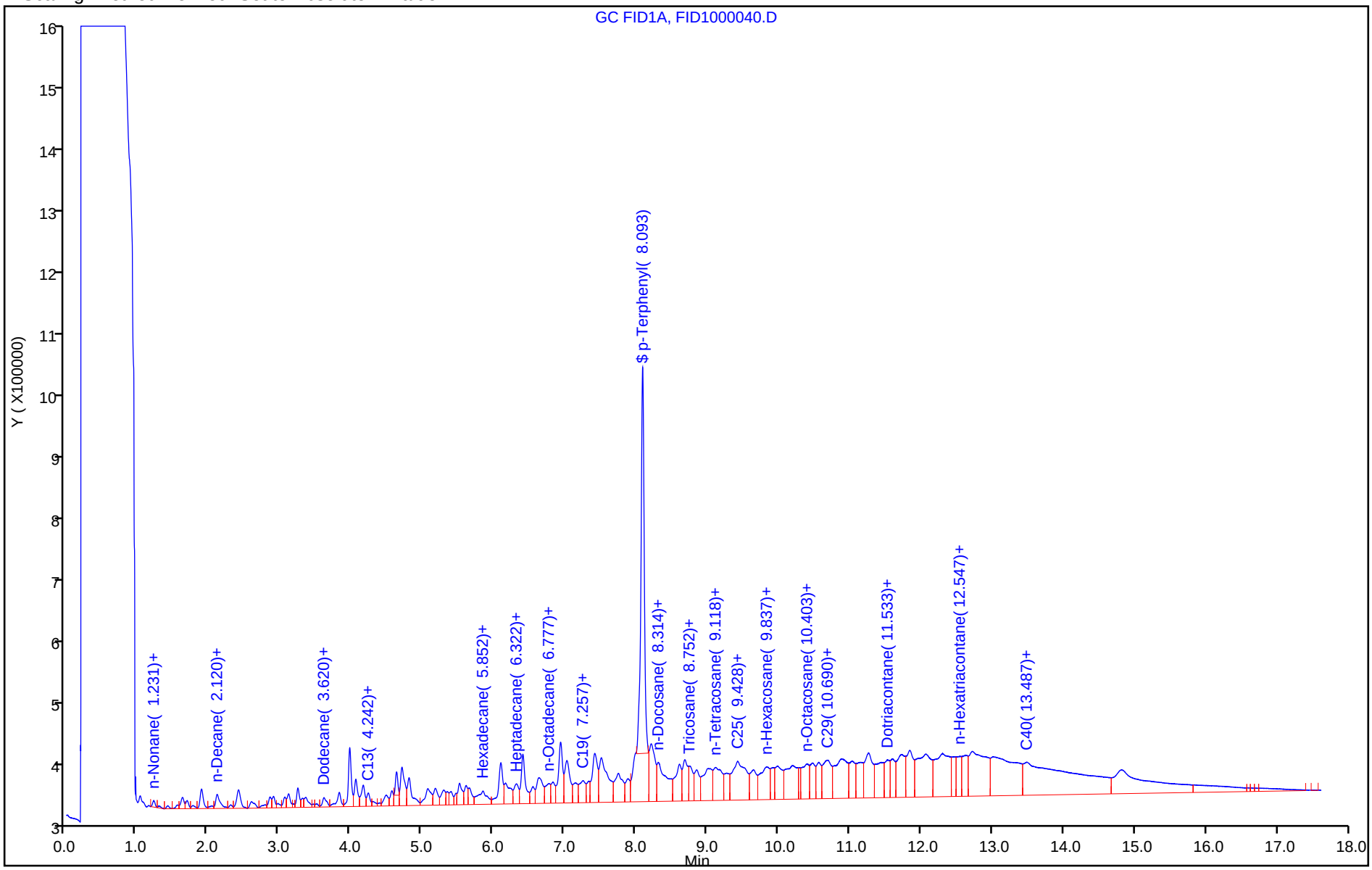
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 05-Sep-2018 12:45:09 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000040.D				
Injection Date:	05-Sep-2018 04:16:07	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88263-D-12-B	Lab Sample ID:	720-88263-12	Worklist Smp#:	40
Client ID:	DG-K11S--9.5-10				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	40
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000040.D				
Lims ID:	720-88263-D-12-B				
Client ID:	DG-K11S--9.5-10				
Sample Type:	Client				
Inject. Date:	05-Sep-2018 04:16:07	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	720-0053635-040				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\DRO6_A.m				
Limit Group:	DRO				
Last Update:	05-Sep-2018 12:45:08	Calib Date:	04-Sep-2018 09:05:17		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000003.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK002				
First Level Reviewer: luj		Date:	05-Sep-2018 12:45:08		

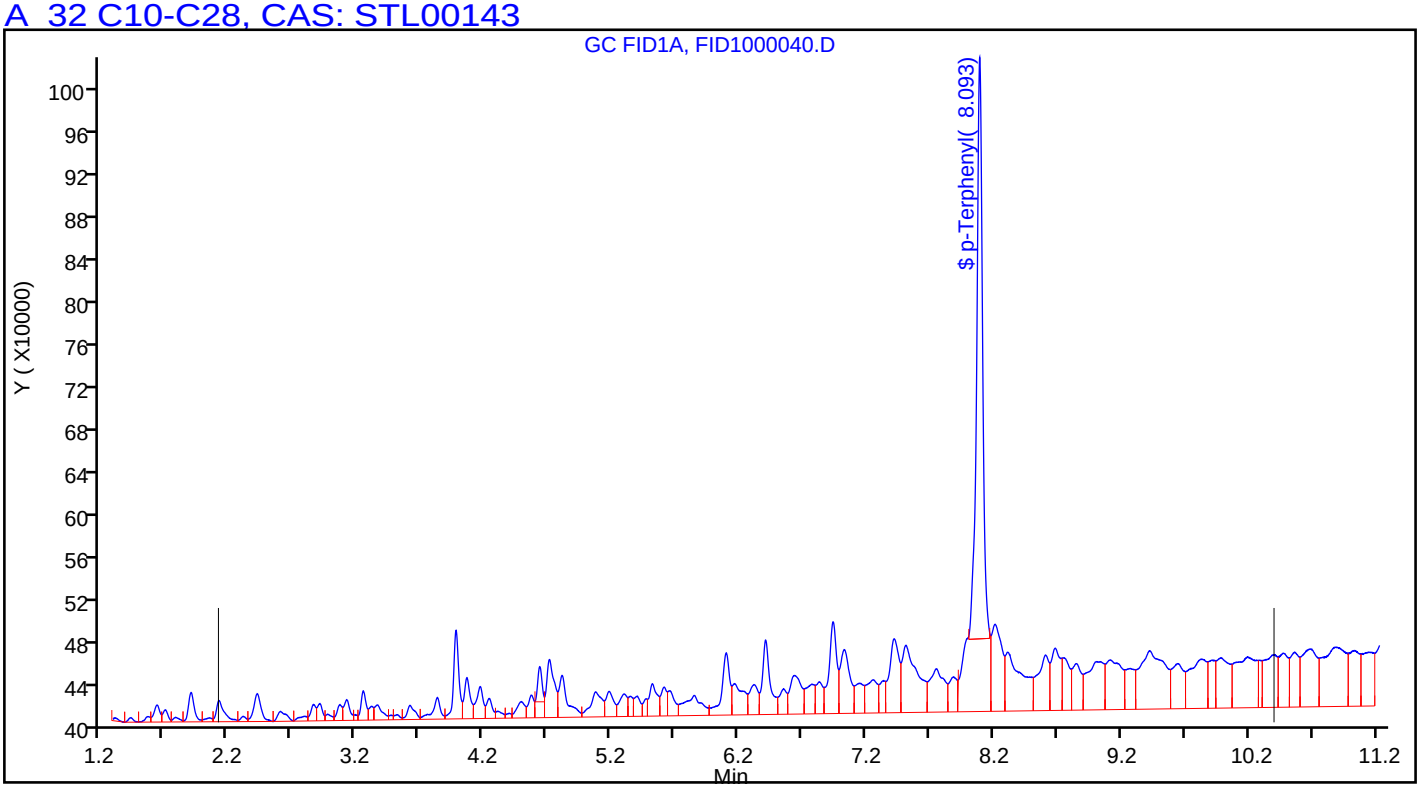
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	18.2	72.72

Report Date: 05-Sep-2018 12:45:11 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000040.D				
Injection Date:	05-Sep-2018 04:16:07	Instrument ID:	CHDRO6		
Lims ID:	720-88263-D-12-B	Lab Sample ID:	720-88263-12		
Client ID:	DG-K11S--9.5-10				
Operator ID:	DCH	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

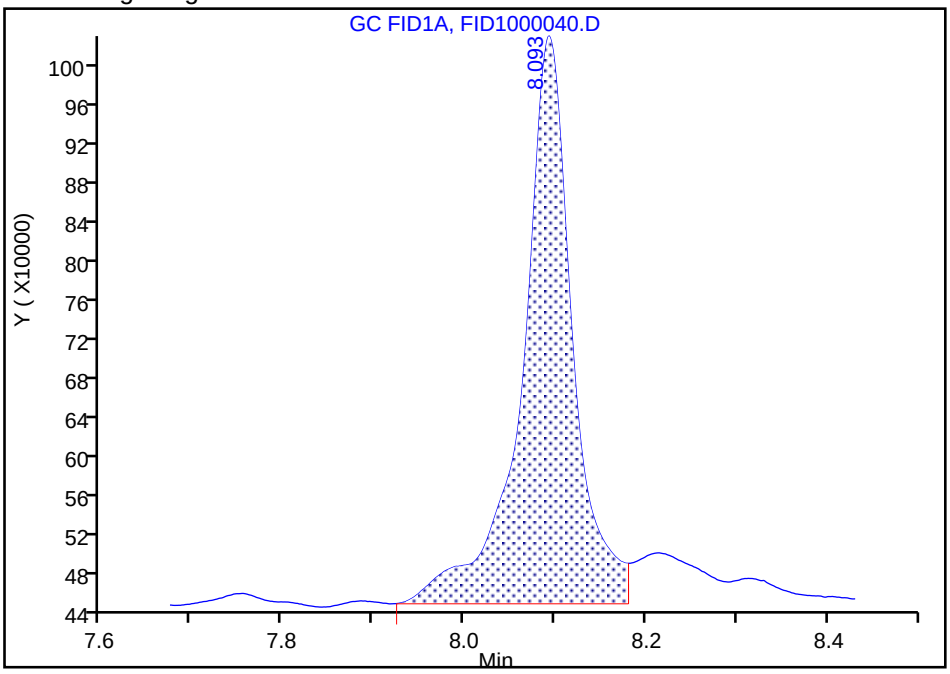
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180904-53635.b\FID1000040.D				
Injection Date:	05-Sep-2018 04:16:07	Instrument ID:	CHDRO6		
Lims ID:	720-88263-D-12-B	Lab Sample ID:	720-88263-12		
Client ID:	DG-K11S--9.5-10				
Operator ID:	DCH	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

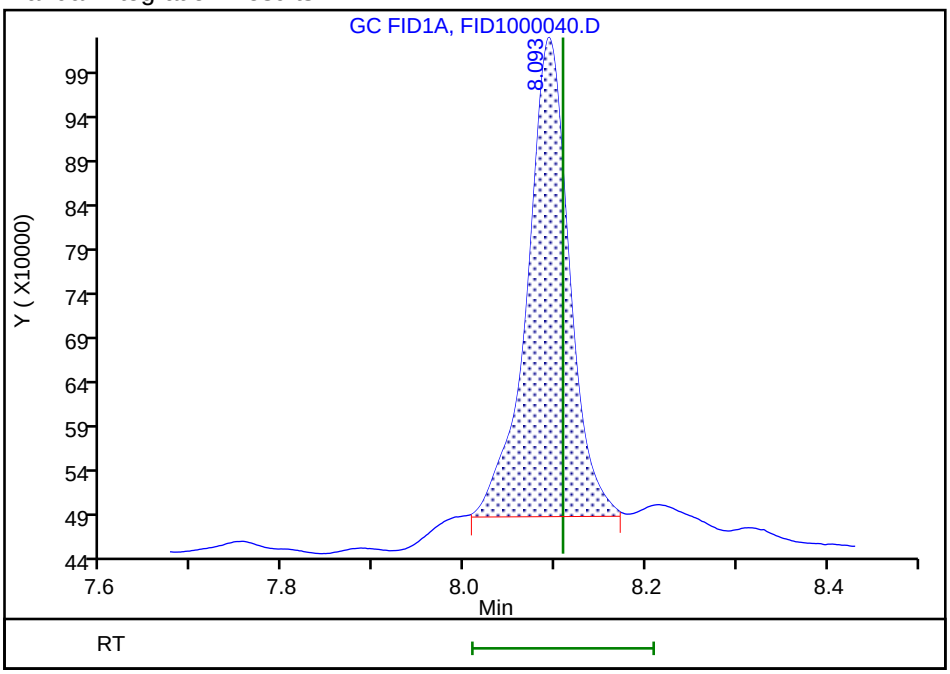
Processing Integration Results

RT: 8.09
Area: 45165406
Amount: 23.519238
Amount Units: mg/L



Manual Integration Results

RT: 8.09
Area: 34912122
Amount: 18.179987
Amount Units: mg/L



Reviewer: luj, 05-Sep-2018 12:45:00

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-I11S-0.5-1 Lab Sample ID: 720-88263-13

Matrix: Solid Lab File ID: FID2000019.D

Analysis Method: 8015B Date Collected: 08/27/2018 11:10

Extraction Method: 3546 Date Extracted: 08/30/2018 08:54

Sample wt/vol: 15.38(g) Date Analyzed: 09/05/2018 15:53

Con. Extract Vol.: 2(mL) Dilution Factor: 3

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250885 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	59000		5900	2200

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	97		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000019.D
Lims ID: 720-88263-D-13-B
Client ID: DG-I11S-0.5-1
Sample Type: Client
Inject. Date: 05-Sep-2018 15:53:32 ALS Bottle#: 69 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 3.0000
Sample Info: 720-0053662-019
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\DRO6_B.m
Limit Group: DRO
Last Update: 05-Sep-2018 16:22:42 Calib Date: 05-Sep-2018 11:27:56
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000009.D

Column 1 : Det: GC FID1A
Process Host: XAWRK002

First Level Reviewer: luj Date: 05-Sep-2018 16:22:42

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.305			ND	
23 n-Decane		2.168			ND	
A 1 C9-C13	2.774	(1.305-4.243)		2222459	1.02	
A 21 Stoddard Solvent	2.774	(1.305-4.243)		2222459	NC	
A 57 C10-C12	2.898	(2.168-3.628)		1508103	8.15	
24 Dodecane	3.695	3.628	0.067	181230	NC	
A 3 C9 - C17	3.805	(1.305-6.306)		4908940	2.15	M
A 60 C10-C16	3.999	(2.168-5.830)		4040646	1.99	M
A 47 C9 - C18	4.028	(1.305-6.750)		6155475	3.25	M
A 25 C9-C19	4.240	(1.305-7.174)		8437094	3.67	M
A 15 Kerosene	4.240	(1.305-7.174)		8437094	4.45	M
26 C13	4.264	4.243	0.021	82431	NC	
$ 27 n-Decanoic Acid (Surr)		4.643			ND	U
A 59 C12-C16	4.729	(3.628-5.830)		2532543	8.73	M
A 61 C10-C20	4.875	(2.168-7.582)		20015362	18.6	M
A 28 C9-C24	5.178	(1.305-9.051)		93669304	60.3	M
A 29 C9-C25	5.344	(1.305-9.384)		112318026	70.9	M
A 54 C10-C23	5.437	(2.168-8.705)		64835506	44.0	M
A 4 C10-C24	5.610	(2.168-9.051)		93577105	60.3	M
A 16 C10-C25	5.776	(2.168-9.384)		112225827	70.8	M
45 Hexadecane	5.788	5.830	-0.042	66461	NC	M
A 14 C10-C26	5.937	(2.168-9.705)		138069671	85.5	M
A 67 C12-C22	5.987	(3.628-8.346)		46273487	33.5	M
A 32 C10-C28	6.242	(2.168-10.315)		255425120	151.9	M
A 5 Diesel	6.242	(2.168-10.315)		255425120	151.9	M
A 12 Unknown Hydrocarbons	6.242	(2.168-10.315)		255425120	NC	M
A 30 C13-C22	6.294	(4.243-8.346)		45651330	33.1	M
44 Heptadecane	6.349	6.306	0.043	729735	NC	M
A 31 C12-C24	6.339	(3.628-9.051)		92069002	59.4	M
49 n-Octadecane	6.802	6.750	0.052	2281619	NC	M
A 9 Crude Oil Range Organics (	6.857	(1.305-12.408)		705576935	NC	M
A 11 Bunker Range Organics (C9-	6.857	(1.305-12.408)		705576935	NC	M

Report Date: 05-Sep-2018 16:22:43 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000019.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.857	(1.305-12.408)		705576935	334.2	M
33 C19	7.181	7.174	0.007	4808754	NC	M
A 64 C13-C28	7.279	(4.243-10.315)		253294860	150.7	M
A 17 C10-C36	7.288	(2.168-12.408)		705484736	406.8	M
A 68 Crude Oil Range Organics (	7.347	(1.305-13.389)		1762000011	NC	M
A 13 C9-C40	7.347	(1.305-13.389)		1762000011	1127.8	M
A 58 C16-C24	7.440	(5.830-9.051)		89536459	58.0	M
62 icosane	7.597	7.582	0.015	3074385	NC	M
A 6 C10-C40	7.779	(2.168-13.389)		1761907812	1129.0	M
$ 34 p-Terphenyl	8.091	8.086	0.005	16063921	8.09	
35 n-Docosane	8.362	8.346	0.016	3645262	NC	M
A 18 C12-C40	8.508	(3.628-13.389)		1760399709	1131.2	M
36 Tricosane	8.730	8.705	0.025	9261931	NC	M
A 66 C13-C40	8.816	(4.243-13.389)		1759777552	1132.1	M
37 n-Tetracosane	9.070	9.051	0.019	9299468	NC	M
A 2 C16-C36 ORO	9.119	(5.830-12.408)		701444090	593.2	M
38 C25	9.405	9.384	0.021	25843844	NC	M
A 19 C16-C40	9.610	(5.830-13.389)		1757867166	1134.6	M
46 n-Hexacosane	9.757	9.705	0.052	34515696	NC	M
A 20 C19-C36	9.791	(7.174-12.408)		475079086	349.0	
A 55 C23-C32	10.064	(8.705-11.424)		477832728	617.4	M
39 n-Octacosane	10.265	10.315	-0.050	23071799	NC	M
65 C29	10.637	10.606	0.031	55190631	NC	M
A 40 C24-C36	10.729	(9.051-12.408)		705844942	720.0	M
A 7 Motor Oil	10.729	(9.051-12.408)		533155412	543.8	
A 10 C22-C40	10.867	(8.346-13.389)		817616268	588.2	
A 50 C25-C36	10.896	(9.384-12.408)		506192611	549.5	
A 41 C23-C40	11.047	(8.705-13.389)		820906892	600.6	
A 8 C24-C40	11.220	(9.051-13.389)		842650475	628.3	
56 Dotriacontane	11.411	11.424	-0.013	17112055	NC	M
A 51 C28-C40	11.852	(10.315-13.389)		760382664	701.0	
A 63 C29-C40	11.997	(10.606-13.389)		713163618	713.6	
42 n-Hexatriacontane		12.408			ND	
43 C40		13.389			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

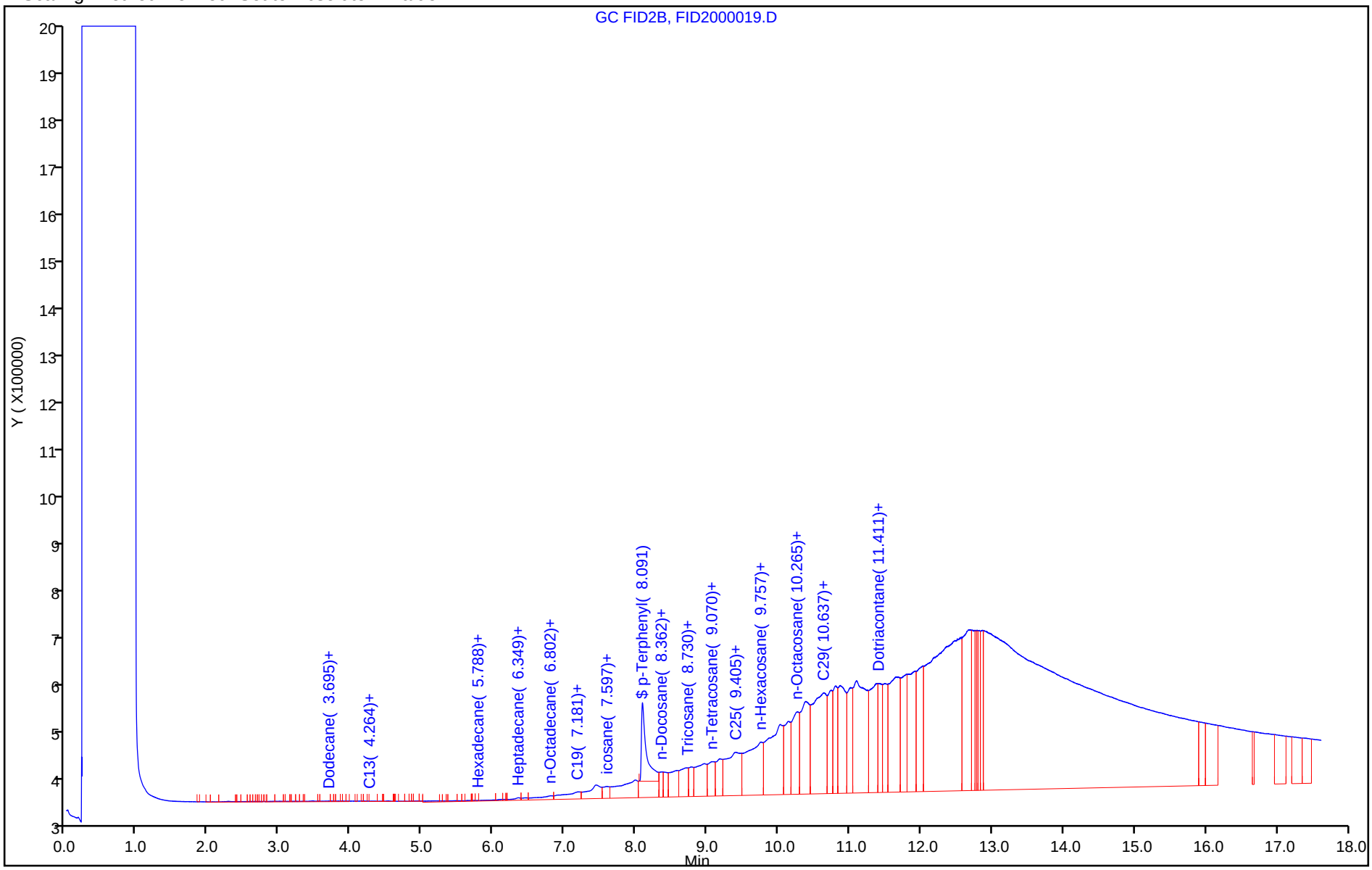
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 05-Sep-2018 16:22:43 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000019.D				
Injection Date:	05-Sep-2018 15:53:32	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88263-D-13-B	Lab Sample ID:	720-88263-13	Worklist Smp#:	19
Client ID:	DG-I11S-0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	3.0000	ALS Bottle#:	69
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000019.D				
Lims ID:	720-88263-D-13-B				
Client ID:	DG-I11S-0.5-1				
Sample Type:	Client				
Inject. Date:	05-Sep-2018 15:53:32	ALS Bottle#:	69	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	3.0000		
Sample Info:	720-0053662-019				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\DRO6_B.m				
Limit Group:	DRO				
Last Update:	05-Sep-2018 16:22:42	Calib Date:	05-Sep-2018 11:27:56		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000009.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK002				

First Level Reviewer: luj Date: 05-Sep-2018 16:22:42

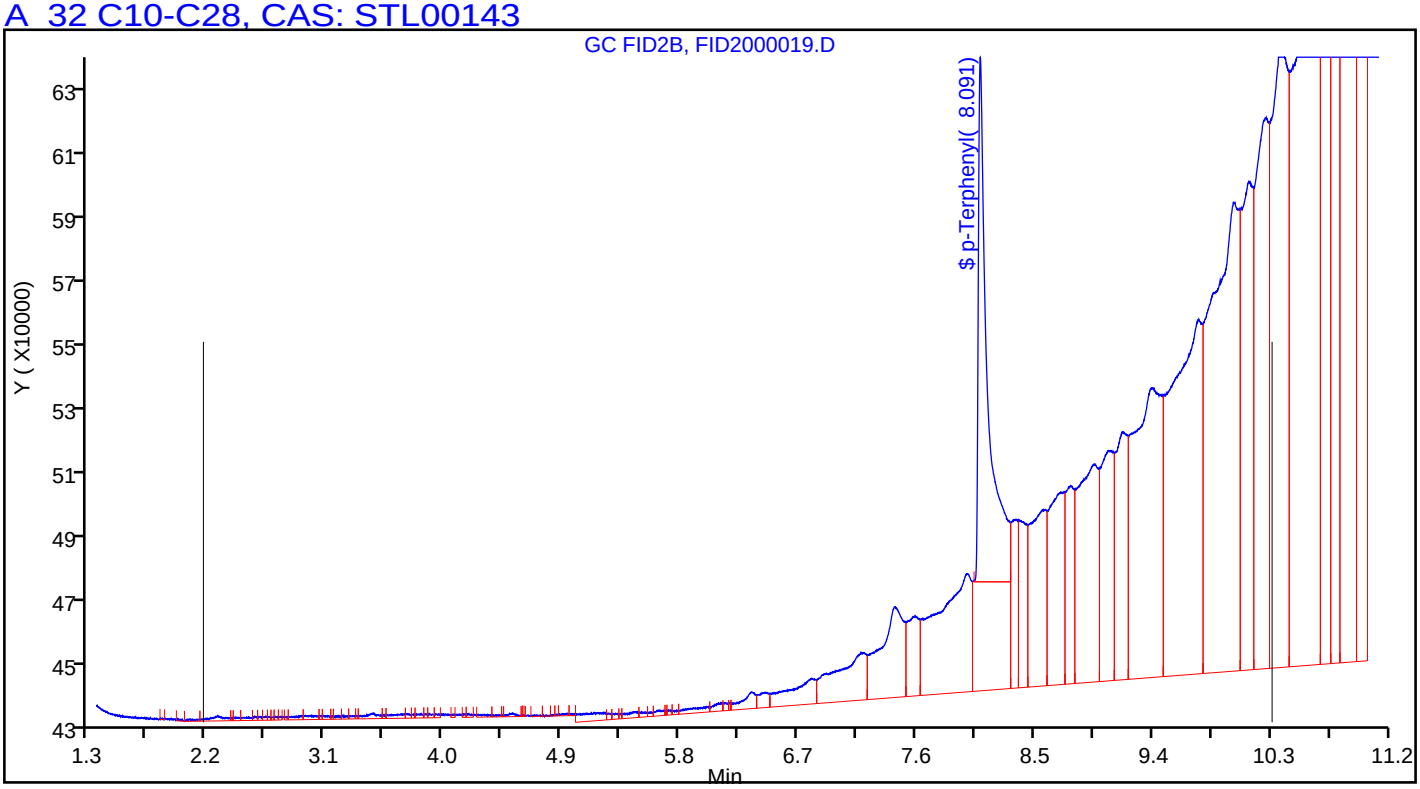
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	8.09	32.36

Report Date: 05-Sep-2018 16:22:46 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000019.D				
Injection Date:	05-Sep-2018 15:53:32	Instrument ID:	CHDRO6		
Lims ID:	720-88263-D-13-B	Lab Sample ID:	720-88263-13		
Client ID:	DG-I11S-0.5-1				
Operator ID:	DCH	ALS Bottle#:	69	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	3.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

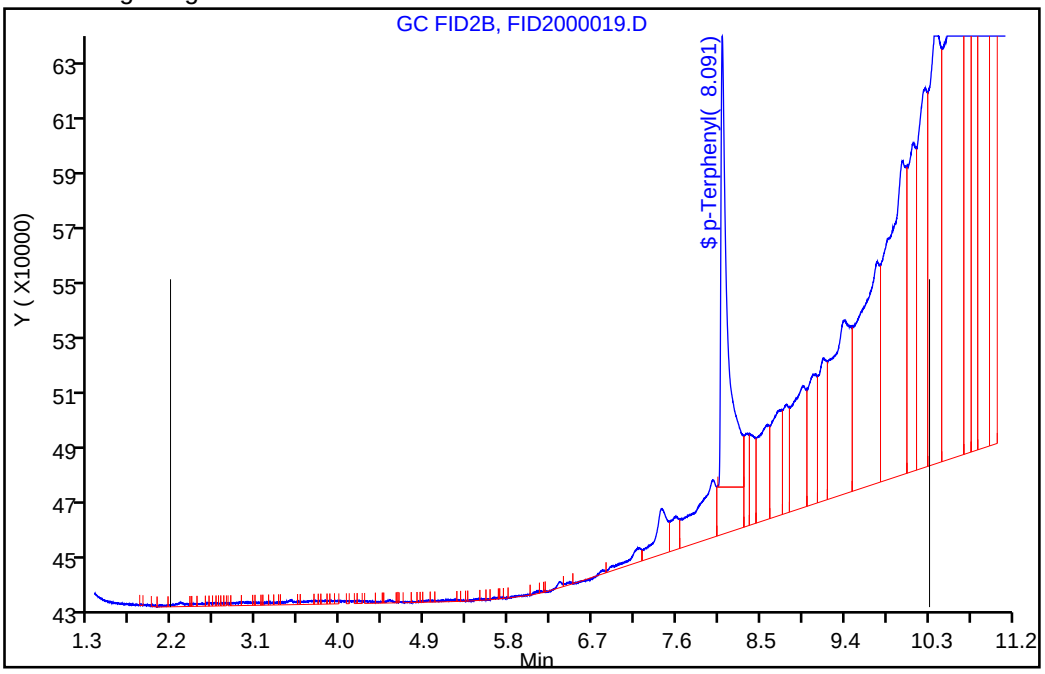
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000019.D				
Injection Date:	05-Sep-2018 15:53:32	Instrument ID:	CHDRO6		
Lims ID:	720-88263-D-13-B	Lab Sample ID:	720-88263-13		
Client ID:	DG-I11S-0.5-1				
Operator ID:	DCH	ALS Bottle#:	69	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	3.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.242, CAS: STL00143

Signal: 1

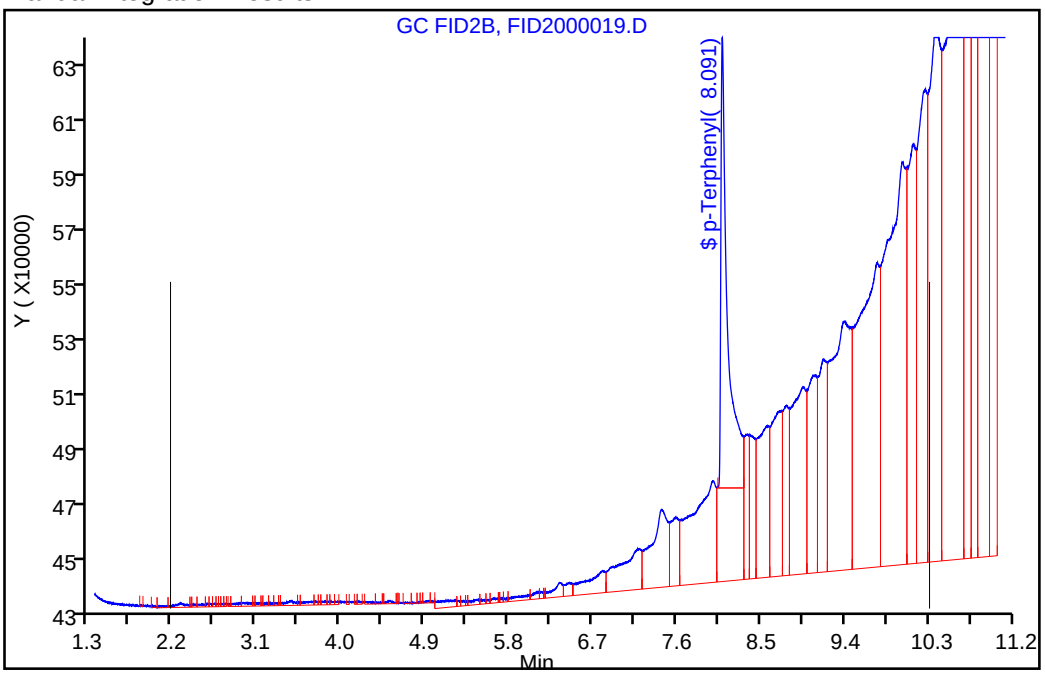
Processing Integration Results

RT: 6.24
Response: 165941579
Amount: 101.2588



Manual Integration Results

RT: 6.24
Response: 255425120
Amount: 151.9262



Reviewer: luj, 05-Sep-2018 16:22:35

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-I11S-3.5-4
Lab Sample ID: 720-88263-14
Matrix: Solid
Lab File ID: FID2000020.D
Analysis Method: 8015B
Date Collected: 08/27/2018 11:10
Extraction Method: 3546
Date Extracted: 08/30/2018 08:54
Sample wt/vol: 15.69(g)
Date Analyzed: 09/05/2018 16:17
Con. Extract Vol.: 2(mL)
Dilution Factor: 10
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250885
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	340000		19000	7200

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	0	X D	40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000020.D
Lims ID: 720-88263-E-14-A
Client ID: DG-I11S-3.5-4
Sample Type: Client
Inject. Date: 05-Sep-2018 16:17:53 ALS Bottle#: 70 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 10.0000
Sample Info: 720-0053662-020
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\DRO6_B.m
Limit Group: DRO
Last Update: 05-Sep-2018 17:43:19 Calib Date: 05-Sep-2018 11:27:56
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000009.D

Column 1 : Det: GC FID1A
Process Host: XAWRK002

First Level Reviewer: luj Date: 05-Sep-2018 17:43:19

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.305			ND	
23 n-Decane		2.168			ND	
A 1 C9-C13	2.774	(1.305-4.243)		1536125	0.7042	M
A 21 Stoddard Solvent	2.774	(1.305-4.243)		1536125	NC	M
A 57 C10-C12	2.898	(2.168-3.628)		614453	7.65	
24 Dodecane	3.636	3.628	0.008	16231	NC	
A 3 C9 - C17	3.805	(1.305-6.306)		18100668	7.93	M
A 60 C10-C16	3.999	(2.168-5.830)		10881185	5.37	M
A 47 C9 - C18	4.028	(1.305-6.750)		37416790	19.8	M
A 25 C9-C19	4.240	(1.305-7.174)		53791662	23.4	M
A 15 Kerosene	4.240	(1.305-7.174)		53791662	28.3	M
26 C13	4.200	4.243	-0.043	308635	NC	M
$ 27 n-Decanoic Acid (Surr)		4.643			ND	
A 59 C12-C16	4.729	(3.628-5.830)		10266732	13.1	M
A 61 C10-C20	4.875	(2.168-7.582)		71355445	47.7	M
A 28 C9-C24	5.178	(1.305-9.051)		225668379	135.1	M
A 29 C9-C25	5.344	(1.305-9.384)		252849367	150.5	M
A 54 C10-C23	5.437	(2.168-8.705)		192537266	116.3	M
A 4 C10-C24	5.610	(2.168-9.051)		225661168	135.1	M
A 16 C10-C25	5.776	(2.168-9.384)		252842156	150.5	M
45 Hexadecane	5.728	5.830	-0.102	2299013	NC	M
A 14 C10-C26	5.937	(2.168-9.705)		252842156	150.5	M
A 67 C12-C22	5.987	(3.628-8.346)		146852290	90.5	M
A 32 C10-C28	6.242	(2.168-10.315)		452370081	263.4	M
A 5 Diesel	6.242	(2.168-10.315)		452370081	263.4	M
A 12 Unknown Hydrocarbons	6.242	(2.168-10.315)		452370081	NC	M
A 30 C13-C22	6.294	(4.243-8.346)		146246464	90.1	M
44 Heptadecane	6.334	6.306	0.028	5931168	NC	M
A 31 C12-C24	6.339	(3.628-9.051)		225046715	134.7	M
49 n-Octadecane	6.716	6.750	-0.034	7603181	NC	M
A 9 Crude Oil Range Organics (	6.857	(1.305-12.408)		1066364263	NC	M
A 11 Bunker Range Organics (C9-	6.857	(1.305-12.408)		1066364263	NC	M

Report Date: 05-Sep-2018 17:43:19 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000020.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.857	(1.305-12.408)		1066364263	505.1	M
33 C19	7.182	7.174	0.008	5694238	NC	M
A 64 C13-C28	7.279	(4.243-10.315)		451149802	262.7	M
A 17 C10-C36	7.288	(2.168-12.408)		1066357052	611.1	M
A 68 Crude Oil Range Organics (	7.347	(1.305-13.389)		1969898455	NC	M
A 13 C9-C40	7.347	(1.305-13.389)		1969898455	1260.9	M
A 58 C16-C24	7.440	(5.830-9.051)		214779983	128.9	M
62 icosane	7.584	7.582	0.002	13786191	NC	M
A 6 C10-C40	7.779	(2.168-13.389)		1969891244	1262.2	M
$ 34 p-Terphenyl		8.086			ND	U
35 n-Docosane	8.397	8.346	0.051	14724436	NC	M
A 18 C12-C40	8.508	(3.628-13.389)		1969276791	1265.4	M
36 Tricosane	8.665	8.705	-0.040	13898229	NC	M
A 66 C13-C40	8.816	(4.243-13.389)		1968670965	1266.4	M
37 n-Tetracosane	9.067	9.051	0.016	14050125	NC	M
A 2 C16-C36 ORO	9.119	(5.830-12.408)		1055475867	892.6	M
38 C25		9.384			ND	
A 19 C16-C40	9.610	(5.830-13.389)		1959010059	1264.4	M
46 n-Hexacosane		9.705			ND	
A 20 C19-C36	9.791	(7.174-12.408)		615748688	452.3	
A 55 C23-C32	10.064	(8.705-11.424)		630839033	815.2	M
39 n-Octacosane	10.258	10.315	-0.057	35059627	NC	M
65 C29	10.642	10.606	0.036	28291382	NC	M
A 40 C24-C36	10.729	(9.051-12.408)		829453821	846.0	M
A 7 Motor Oil	10.729	(9.051-12.408)		629037891	641.6	
A 10 C22-C40	10.867	(8.346-13.389)		860009968	618.7	
A 50 C25-C36	10.896	(9.384-12.408)		566680295	615.2	
A 41 C23-C40	11.047	(8.705-13.389)		849437700	621.5	
A 8 C24-C40	11.220	(9.051-13.389)		861724404	642.5	
56 Dotriacontane	11.357	11.424	-0.067	58011268	NC	M
A 51 C28-C40	11.852	(10.315-13.389)		730811493	673.7	
A 63 C29-C40	11.997	(10.606-13.389)		664861843	665.3	
42 n-Hexatriacontane	12.356	12.408	-0.052	135649916	NC	M
43 C40		13.389			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

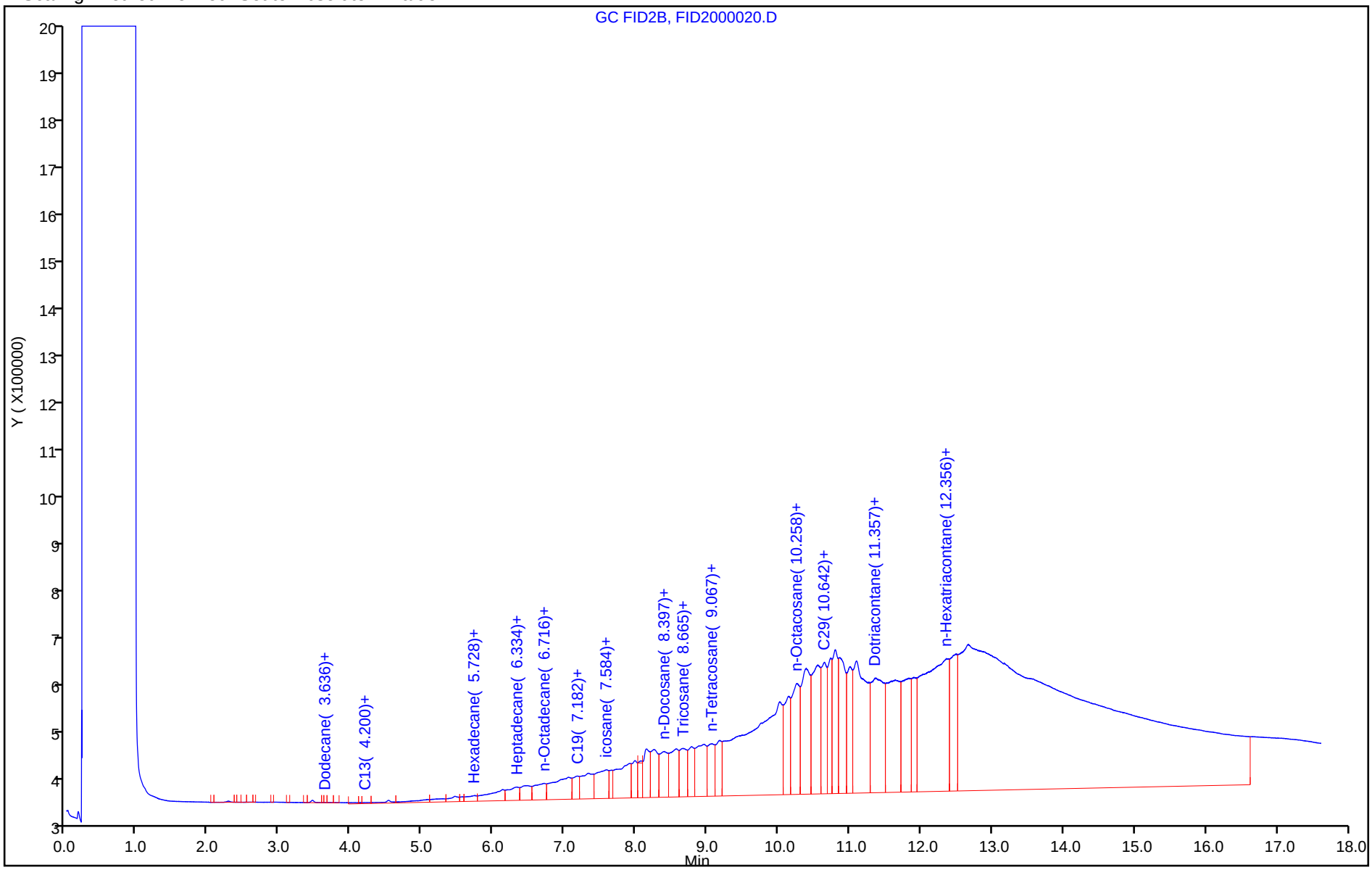
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 05-Sep-2018 17:43:19 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000020.D				
Injection Date:	05-Sep-2018 16:17:53	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88263-E-14-A	Lab Sample ID:	720-88263-14	Worklist Smp#:	20
Client ID:	DG-I11S-3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	70
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value

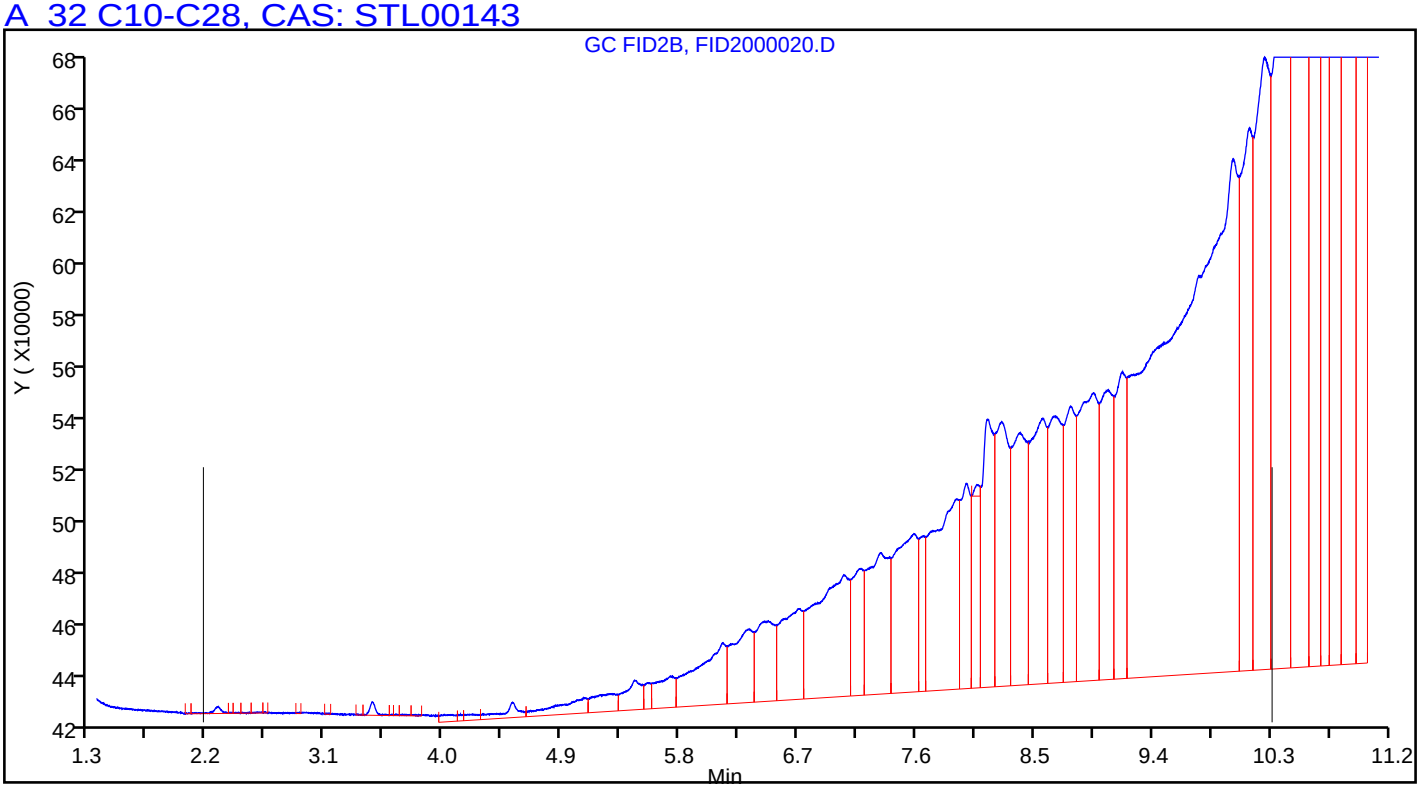


Report Date: 05-Sep-2018 17:43:22 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000020.D				
Injection Date:	05-Sep-2018 16:17:53	Instrument ID:	CHDRO6		
Lims ID:	720-88263-E-14-A	Lab Sample ID:	720-88263-14		
Client ID:	DG-I11S-3.5-4				
Operator ID:	DCH	ALS Bottle#:	70	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

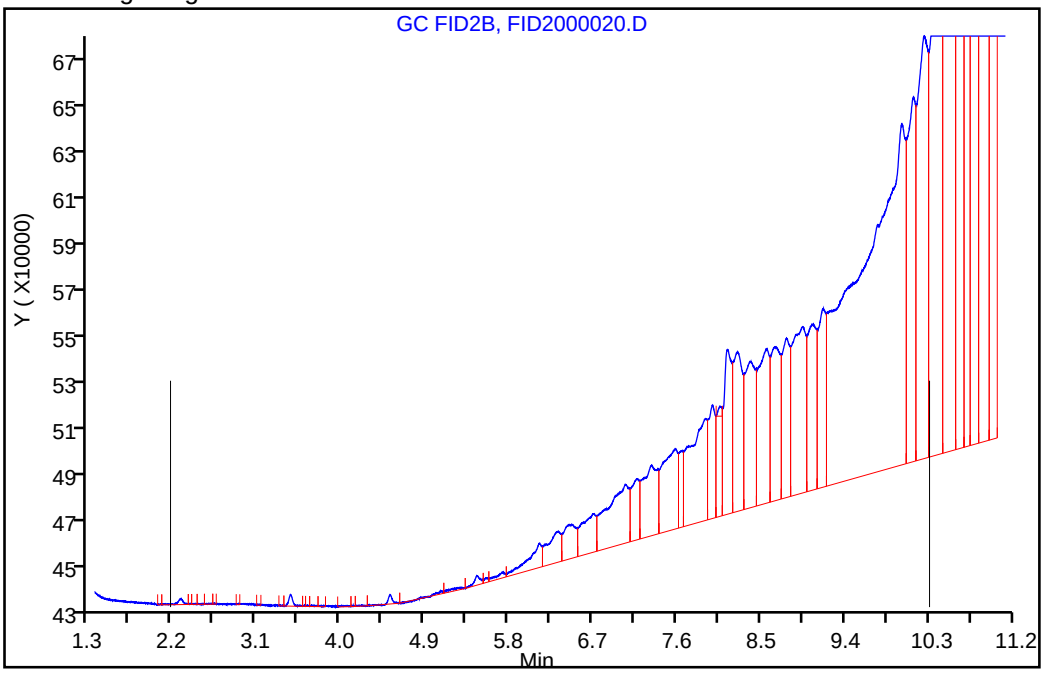
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000020.D				
Injection Date:	05-Sep-2018 16:17:53	Instrument ID:	CHDRO6		
Lims ID:	720-88263-E-14-A	Lab Sample ID:	720-88263-14		
Client ID:	DG-I11S-3.5-4				
Operator ID:	DCH	ALS Bottle#:	70	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.242, CAS: STL00143

Signal: 1

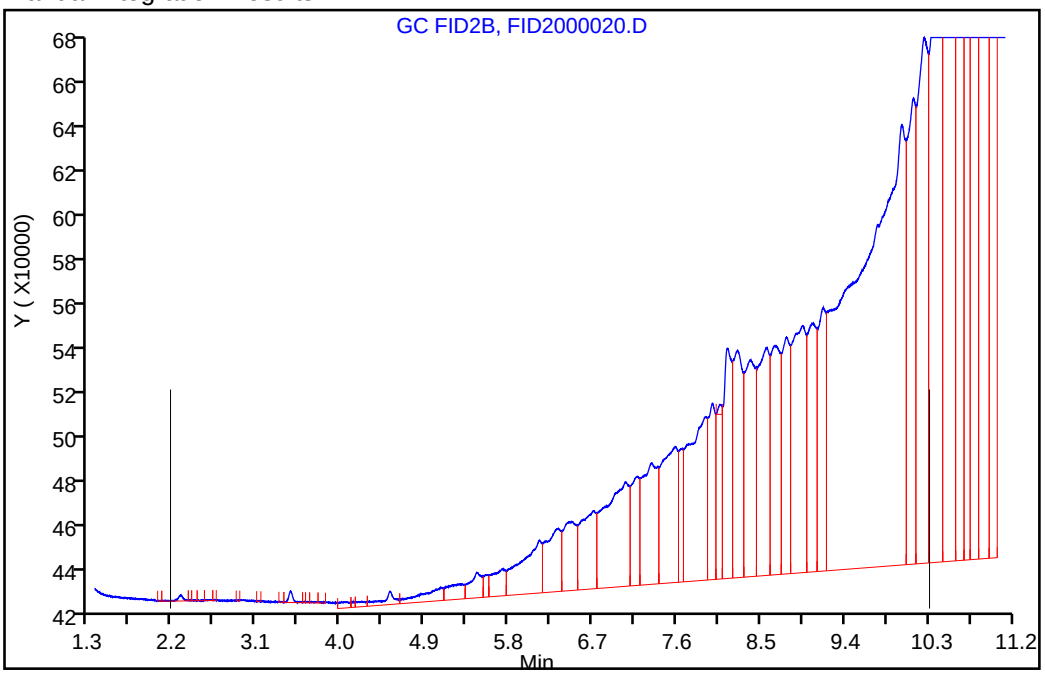
Processing Integration Results

RT: 6.24
Response: 290983286
Amount: 172.0600



Manual Integration Results

RT: 6.24
Response: 452370081
Amount: 263.4405



Reviewer: luj, 05-Sep-2018 17:42:52

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

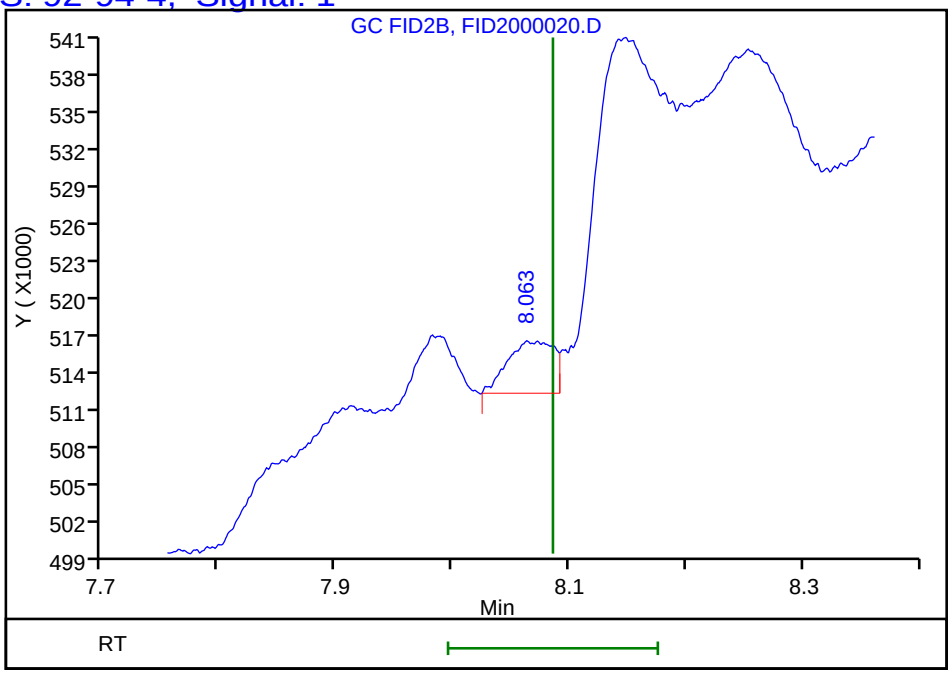
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000020.D				
Injection Date:	05-Sep-2018 16:17:53	Instrument ID:	CHDRO6		
Lims ID:	720-88263-E-14-A	Lab Sample ID:	720-88263-14		
Client ID:	DG-I11S-3.5-4				
Operator ID:	DCH	ALS Bottle#:	70	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4, Signal: 1

RT: 8.06
Response: 230022
Amount: 0.115851



Reviewer: luj, 05-Sep-2018 17:43:19
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-I11S-9.5-10
Lab Sample ID: 720-88263-15
Matrix: Solid
Lab File ID: FID2000018.D
Analysis Method: 8015B
Date Collected: 08/27/2018 11:10
Extraction Method: 3546
Date Extracted: 08/30/2018 08:54
Sample wt/vol: 15.78(g)
Date Analyzed: 09/05/2018 15:28
Con. Extract Vol.: 2(mL)
Dilution Factor: 10
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250885
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	110000		19000	7100

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	0	X D	40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000018.D
Lims ID: 720-88263-E-15-A
Client ID: DG-I11S-9.5-10
Sample Type: Client
Inject. Date: 05-Sep-2018 15:28:57 ALS Bottle#: 68 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 10.0000
Sample Info: 720-0053662-018
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\DRO6_B.m
Limit Group: DRO
Last Update: 05-Sep-2018 16:21:33 Calib Date: 05-Sep-2018 11:27:56
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000009.D

Column 1 : Det: GC FID1A
Process Host: XAWRK002

First Level Reviewer: luj Date: 05-Sep-2018 16:21:33

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.305			ND	
23 n-Decane	2.153	2.168	-0.015	40781	NC	
A 1 C9-C13	2.774	(1.305-4.243)		2402949	1.10	
A 21 Stoddard Solvent	2.774	(1.305-4.243)		2402949	NC	
A 57 C10-C12	2.898	(2.168-3.628)		2029725	8.45	
24 Dodecane		3.628			ND	
A 3 C9 - C17	3.805	(1.305-6.306)		7617001	3.34	M
A 60 C10-C16	3.999	(2.168-5.830)		4803045	2.37	M
A 47 C9 - C18	4.028	(1.305-6.750)		11700338	6.18	M
A 25 C9-C19	4.240	(1.305-7.174)		18147919	7.88	M
A 15 Kerosene	4.240	(1.305-7.174)		18147919	9.56	M
26 C13	4.185	4.243	-0.058	16180	NC	
$ 27 n-Decanoic Acid (Surr)		4.643			ND	U
A 59 C12-C16	4.729	(3.628-5.830)		3056482	9.03	M
A 61 C10-C20	4.875	(2.168-7.582)		31603467	25.2	M
A 28 C9-C24	5.178	(1.305-9.051)		55371983	38.7	M
A 29 C9-C25	5.344	(1.305-9.384)		79979059	52.6	M
A 54 C10-C23	5.437	(2.168-8.705)		52069062	36.8	M
A 4 C10-C24	5.610	(2.168-9.051)		55286901	38.6	M
A 16 C10-C25	5.776	(2.168-9.384)		79893977	52.5	M
45 Hexadecane	5.862	5.830	0.032	348168	NC	M
A 14 C10-C26	5.937	(2.168-9.705)		84192093	55.0	M
A 67 C12-C22	5.987	(3.628-8.346)		39420997	29.6	M
A 32 C10-C28	6.242	(2.168-10.315)		134519784	83.5	M
A 5 Diesel	6.242	(2.168-10.315)		134519784	83.5	M
A 12 Unknown Hydrocarbons	6.242	(2.168-10.315)		134519784	NC	M
A 30 C13-C22	6.294	(4.243-8.346)		38849693	29.3	M
44 Heptadecane	6.307	6.306	0.001	1796444	NC	M
A 31 C12-C24	6.339	(3.628-9.051)		53540338	37.6	M
49 n-Octadecane	6.754	6.750	0.004	1277880	NC	M
A 9 Crude Oil Range Organics (	6.857	(1.305-12.408)		469784419	NC	M
A 11 Bunker Range Organics (C9-	6.857	(1.305-12.408)		469784419	NC	M

Report Date: 05-Sep-2018 16:21:34 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000018.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.857	(1.305-12.408)		469784419	222.5	M
33 C19	7.219	7.174	0.045	2426913	NC	M
A 64 C13-C28	7.279	(4.243-10.315)		132201917	82.2	M
A 17 C10-C36	7.288	(2.168-12.408)		469699337	273.3	M
A 68 Crude Oil Range Organics (	7.347	(1.305-13.389)		723570521	NC	M
A 13 C9-C40	7.347	(1.305-13.389)		723570521	463.1	M
A 58 C16-C24	7.440	(5.830-9.051)		50483856	35.9	M
62 icosane		7.582			ND	
A 6 C10-C40	7.779	(2.168-13.389)		723485439	463.6	M
$ 34 p-Terphenyl		8.086			ND	U
35 n-Docosane	8.350	8.346	0.004	2951990	NC	M
A 18 C12-C40	8.508	(3.628-13.389)		721738876	463.8	M
36 Tricosane	8.697	8.705	-0.008	5752936	NC	M
A 66 C13-C40	8.816	(4.243-13.389)		721167572	463.9	M
37 n-Tetracosane	9.075	9.051	0.024	5959483	NC	M
A 2 C16-C36 ORO	9.119	(5.830-12.408)		464896292	393.2	M
38 C25	9.379	9.384	-0.005	14851681	NC	M
A 19 C16-C40	9.610	(5.830-13.389)		718682394	463.8	M
46 n-Hexacosane	9.745	9.705	0.040	8367090	NC	M
A 20 C19-C36	9.791	(7.174-12.408)		236390419	173.6	
A 55 C23-C32	10.064	(8.705-11.424)		218663063	282.6	M
39 n-Octacosane	10.310	10.315	-0.005	13144665	NC	M
65 C29	10.617	10.606	0.011	27243055	NC	M
A 40 C24-C36	10.729	(9.051-12.408)		411865774	420.1	M
A 7 Motor Oil	10.729	(9.051-12.408)		298800094	304.8	
A 10 C22-C40	10.867	(8.346-13.389)		459873114	330.8	
A 50 C25-C36	10.896	(9.384-12.408)		288980168	313.7	
A 41 C23-C40	11.047	(8.705-13.389)		470342130	344.1	
A 8 C24-C40	11.220	(9.051-13.389)		492761973	367.4	
56 Dotriacontane	11.412	11.424	-0.012	21420058	NC	M
A 51 C28-C40	11.852	(10.315-13.389)		473659338	436.7	
A 63 C29-C40	11.997	(10.606-13.389)		459661758	460.0	
42 n-Hexatriacontane	12.422	12.408	0.014	24397925	NC	M
43 C40	13.297	13.389	-0.092	76580090	NC	M
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

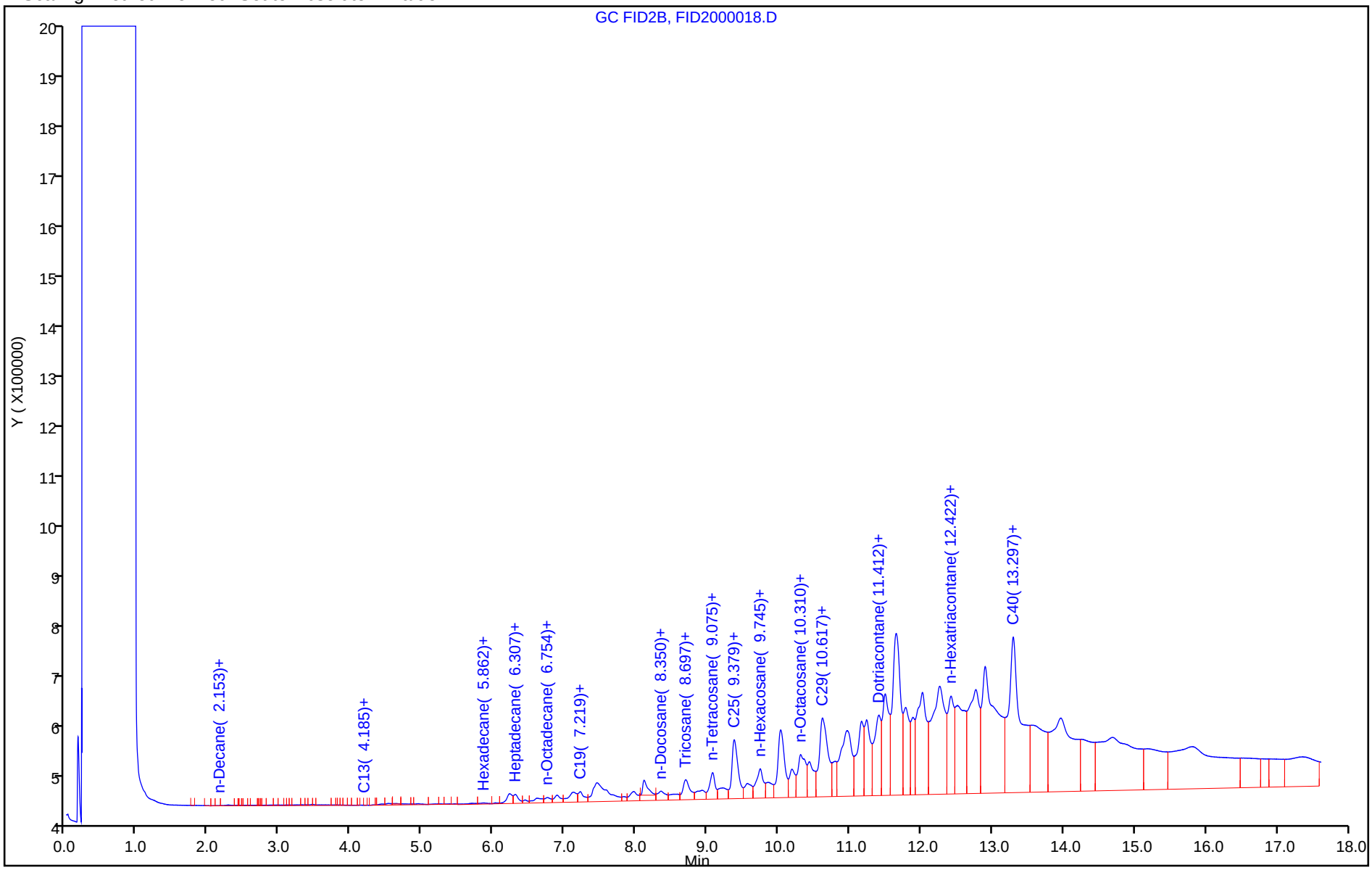
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 05-Sep-2018 16:21:34 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000018.D				
Injection Date:	05-Sep-2018 15:28:57	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88263-E-15-A	Lab Sample ID:	720-88263-15	Worklist Smp#:	18
Client ID:	DG-I11S-9.5-10				
Injection Vol:	1.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	68
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value

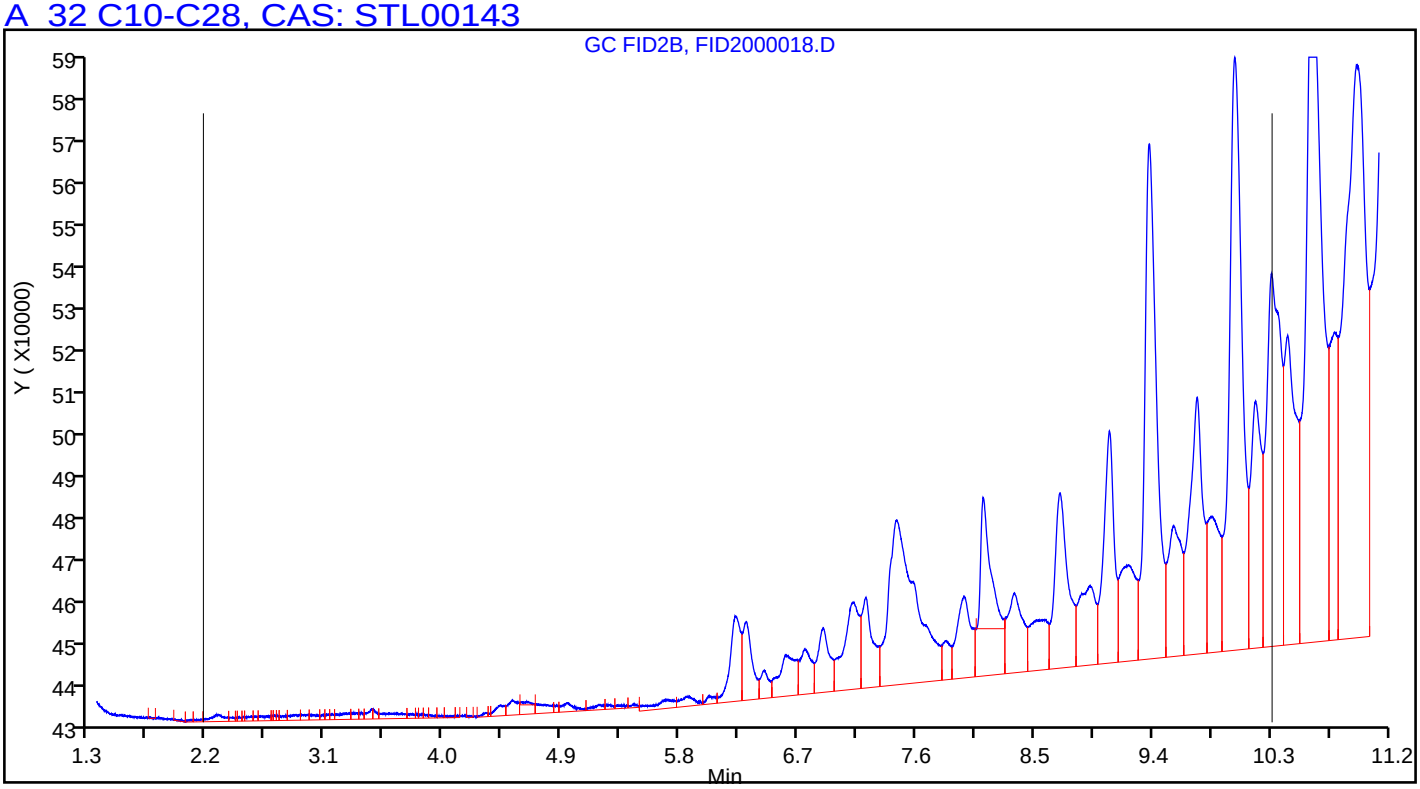


Report Date: 05-Sep-2018 16:21:37 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000018.D				
Injection Date:	05-Sep-2018 15:28:57	Instrument ID:	CHDRO6		
Lims ID:	720-88263-E-15-A	Lab Sample ID:	720-88263-15		
Client ID:	DG-I11S-9.5-10				
Operator ID:	DCH	ALS Bottle#:	68	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

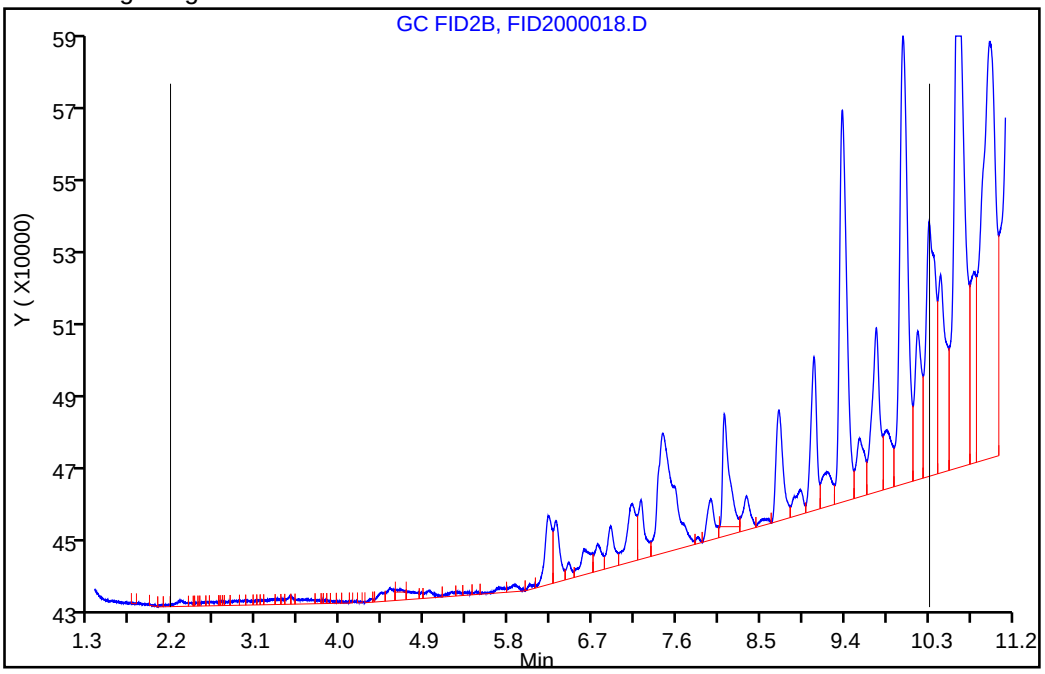
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000018.D				
Injection Date:	05-Sep-2018 15:28:57	Instrument ID:	CHDRO6		
Lims ID:	720-88263-E-15-A	Lab Sample ID:	720-88263-15		
Client ID:	DG-I11S-9.5-10				
Operator ID:	DCH	ALS Bottle#:	68	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.242, CAS: STL00143

Signal: 1

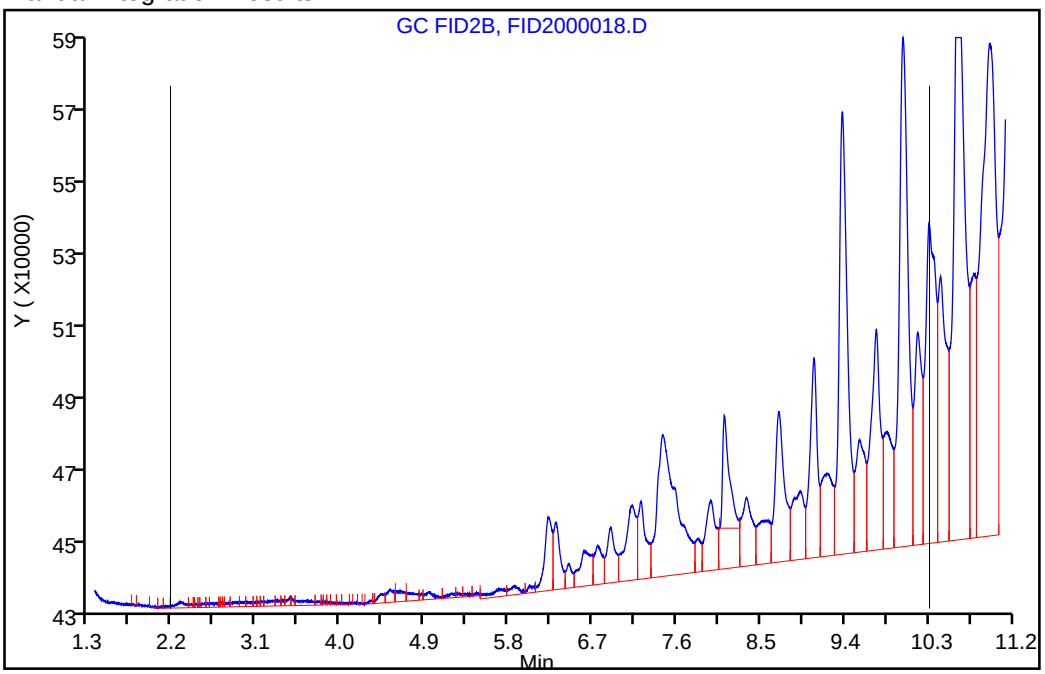
Processing Integration Results

RT: 6.24
Response: 83807573
Amount: 54.752862



Manual Integration Results

RT: 6.24
Response: 134519784
Amount: 83.467154



Reviewer: luj, 05-Sep-2018 16:21:22

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

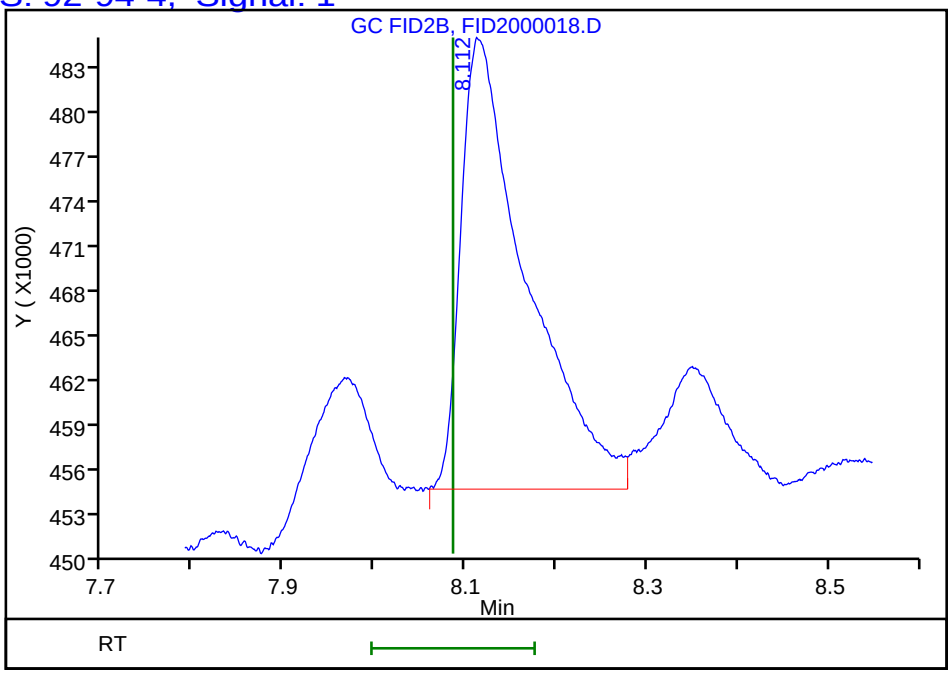
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000018.D				
Injection Date:	05-Sep-2018 15:28:57	Instrument ID:	CHDRO6		
Lims ID:	720-88263-E-15-A	Lab Sample ID:	720-88263-15		
Client ID:	DG-I11S-9.5-10				
Operator ID:	DCH	ALS Bottle#:	68	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4, Signal: 1

RT: 8.11
Response: 3034834
Amount: 1.528503



Reviewer: luj, 05-Sep-2018 16:21:33
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-E11S-0.5-1
Lab Sample ID: 720-88263-16
Matrix: Solid
Lab File ID: FID2000022.D
Analysis Method: 8015B
Date Collected: 08/27/2018 11:50
Extraction Method: 3546
Date Extracted: 08/30/2018 08:54
Sample wt/vol: 15.46(g)
Date Analyzed: 09/05/2018 17:06
Con. Extract Vol.: 2(mL)
Dilution Factor: 5
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250885
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	130000		9700	3600

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	0	X D	40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000022.D
Lims ID: 720-88263-E-16-C
Client ID: DG-E11S-0.5-1
Sample Type: Client
Inject. Date: 05-Sep-2018 17:06:57 ALS Bottle#: 72 Worklist Smp#: 22
Injection Vol: 1.0 ul Dil. Factor: 5.0000
Sample Info: 720-0053662-022
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\DRO6_B.m
Limit Group: DRO
Last Update: 05-Sep-2018 17:29:22 Calib Date: 05-Sep-2018 11:27:56
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000009.D

Column 1 : Det: GC FID1A
Process Host: XAWRK002

First Level Reviewer: luj Date: 05-Sep-2018 17:29:22

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.305			ND	
23 n-Decane	2.181	2.168	0.013	53741	NC	
A 1 C9-C13	2.774	(1.305-4.243)		2101398	0.9633	
A 21 Stoddard Solvent	2.774	(1.305-4.243)		2101398	NC	
A 57 C10-C12	2.898	(2.168-3.628)		1762099	8.30	
24 Dodecane	3.644	3.628	0.016	50143	NC	
A 3 C9 - C17	3.805	(1.305-6.306)		11014496	4.82	M
A 60 C10-C16	3.999	(2.168-5.830)		5944737	2.93	M
A 47 C9 - C18	4.028	(1.305-6.750)		15873549	8.38	M
A 25 C9-C19	4.240	(1.305-7.174)		35588981	15.5	M
A 15 Kerosene	4.240	(1.305-7.174)		35588981	18.8	M
26 C13		4.243			ND	
$ 27 n-Decanoic Acid (Surr)		4.643			ND	U
A 59 C12-C16	4.729	(3.628-5.830)		4200256	9.68	M
A 61 C10-C20	4.875	(2.168-7.582)		48213546	34.6	M
A 28 C9-C24	5.178	(1.305-9.051)		162673219	99.4	M
A 29 C9-C25	5.344	(1.305-9.384)		187032819	113.2	M
A 54 C10-C23	5.437	(2.168-8.705)		126939638	79.2	M
A 4 C10-C24	5.610	(2.168-9.051)		162425386	99.3	M
A 16 C10-C25	5.776	(2.168-9.384)		186784986	113.1	M
45 Hexadecane	5.857	5.830	0.027	1105078	NC	M
A 14 C10-C26	5.937	(2.168-9.705)		208769828	125.5	M
A 67 C12-C22	5.987	(3.628-8.346)		100113304	64.0	M
A 32 C10-C28	6.242	(2.168-10.315)		334485534	196.7	M
A 5 Diesel	6.242	(2.168-10.315)		334485534	196.7	M
A 12 Unknown Hydrocarbons	6.242	(2.168-10.315)		334485534	NC	M
A 30 C13-C22	6.294	(4.243-8.346)		100004220	63.9	M
44 Heptadecane	6.339	6.306	0.033	3308038	NC	M
A 31 C12-C24	6.339	(3.628-9.051)		160680905	98.3	M
49 n-Octadecane	6.798	6.750	0.048	8052683	NC	M
A 9 Crude Oil Range Organics (	6.857	(1.305-12.408)		884735144	NC	M
A 11 Bunker Range Organics (C9-	6.857	(1.305-12.408)		884735144	NC	M

Report Date: 05-Sep-2018 17:29:23 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000022.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.857	(1.305-12.408)		884735144	419.1	M
33 C19	7.173	7.174	-0.001	7360998	NC	M
A 64 C13-C28	7.279	(4.243-10.315)		332631969	195.6	M
A 17 C10-C36	7.288	(2.168-12.408)		884487311	508.1	M
A 68 Crude Oil Range Organics (	7.347	(1.305-13.389)		1239837540	NC	M
A 13 C9-C40	7.347	(1.305-13.389)		1239837540	793.6	M
A 58 C16-C24	7.440	(5.830-9.051)		156480649	95.9	M
62 icosane	7.585	7.582	0.003	5946539	NC	M
A 6 C10-C40	7.779	(2.168-13.389)		1239589707	794.3	M
$ 34 p-Terphenyl		8.086			ND	U
35 n-Docosane	8.349	8.346	0.003	11054907	NC	M
A 18 C12-C40	8.508	(3.628-13.389)		1237845226	795.4	M
36 Tricosane	8.707	8.705	0.002	10663086	NC	M
A 66 C13-C40	8.816	(4.243-13.389)		1237736142	796.2	M
37 n-Tetracosane	9.058	9.051	0.007	10048273	NC	M
A 2 C16-C36 ORO	9.119	(5.830-12.408)		878542574	743.0	M
38 C25	9.398	9.384	0.014	21984842	NC	M
A 19 C16-C40	9.610	(5.830-13.389)		1233644970	796.2	M
46 n-Hexacosane	9.761	9.705	0.056	40884875	NC	M
A 20 C19-C36	9.791	(7.174-12.408)		485054051	356.3	
A 55 C23-C32	10.064	(8.705-11.424)		513707621	663.8	M
39 n-Octacosane	10.254	10.315	-0.061	23292715	NC	M
65 C29	10.646	10.606	0.040	56340277	NC	M
A 40 C24-C36	10.729	(9.051-12.408)		701524001	715.6	M
A 7 Motor Oil	10.729	(9.051-12.408)		514167286	524.5	
A 10 C22-C40	10.867	(8.346-13.389)		749477218	539.2	
A 50 C25-C36	10.896	(9.384-12.408)		473991977	514.5	
A 41 C23-C40	11.047	(8.705-13.389)		747064090	546.6	
A 8 C24-C40	11.220	(9.051-13.389)		759635810	566.4	
56 Dotriacontane	11.377	11.424	-0.047	68512098	NC	M
A 51 C28-C40	11.852	(10.315-13.389)		672596842	620.0	
A 63 C29-C40	11.997	(10.606-13.389)		625100043	625.5	
42 n-Hexatriacontane	12.382	12.408	-0.026	13625456	NC	M
43 C40	13.380	13.389	-0.009	56676188	NC	M
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

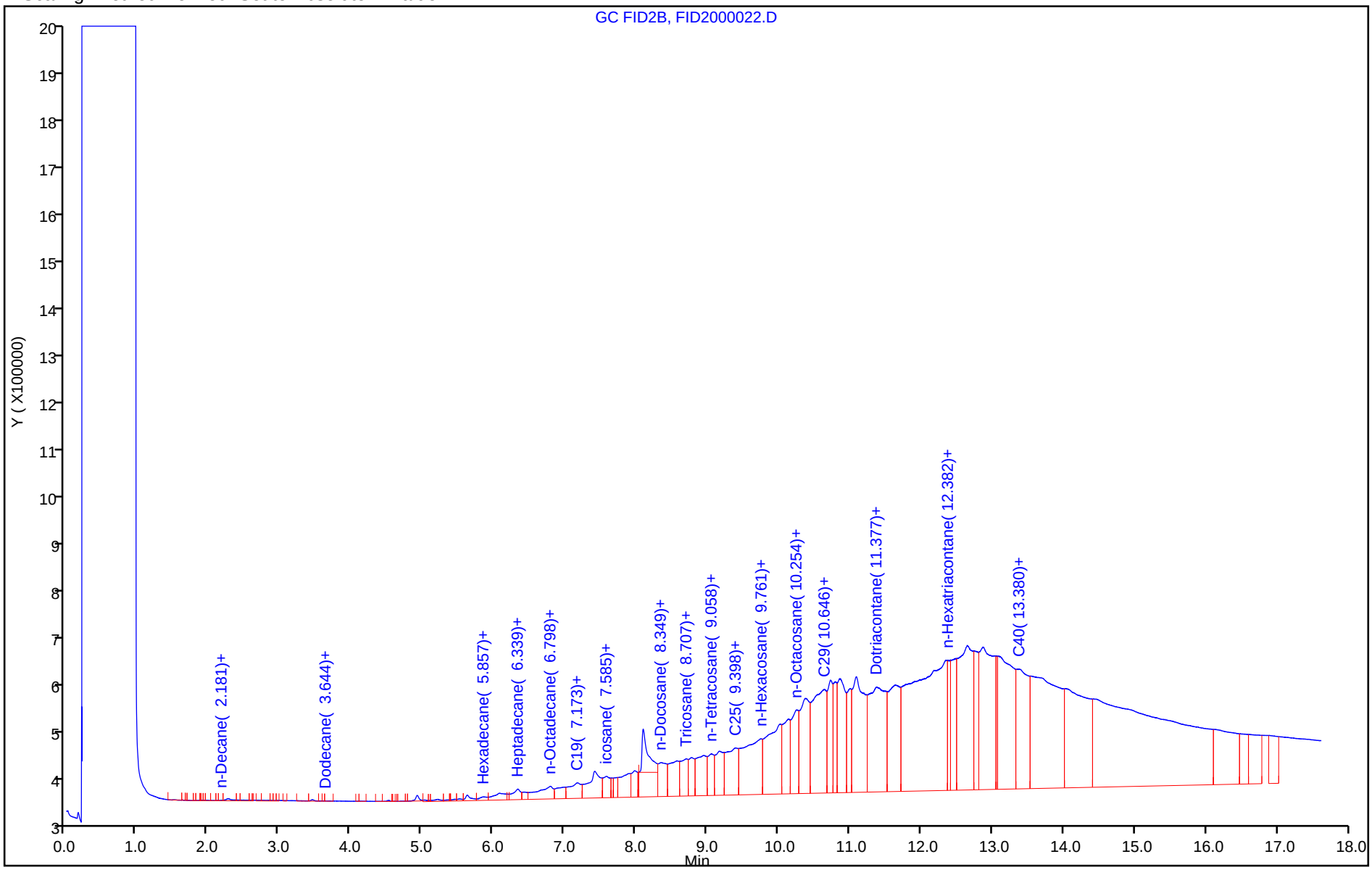
Report Date: 05-Sep-2018 17:29:23 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000022.D

Injection Date:	05-Sep-2018 17:06:57	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88263-E-16-C	Lab Sample ID:	720-88263-16	Worklist Smp#:	22
Client ID:	DG-E11S-0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	72
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value

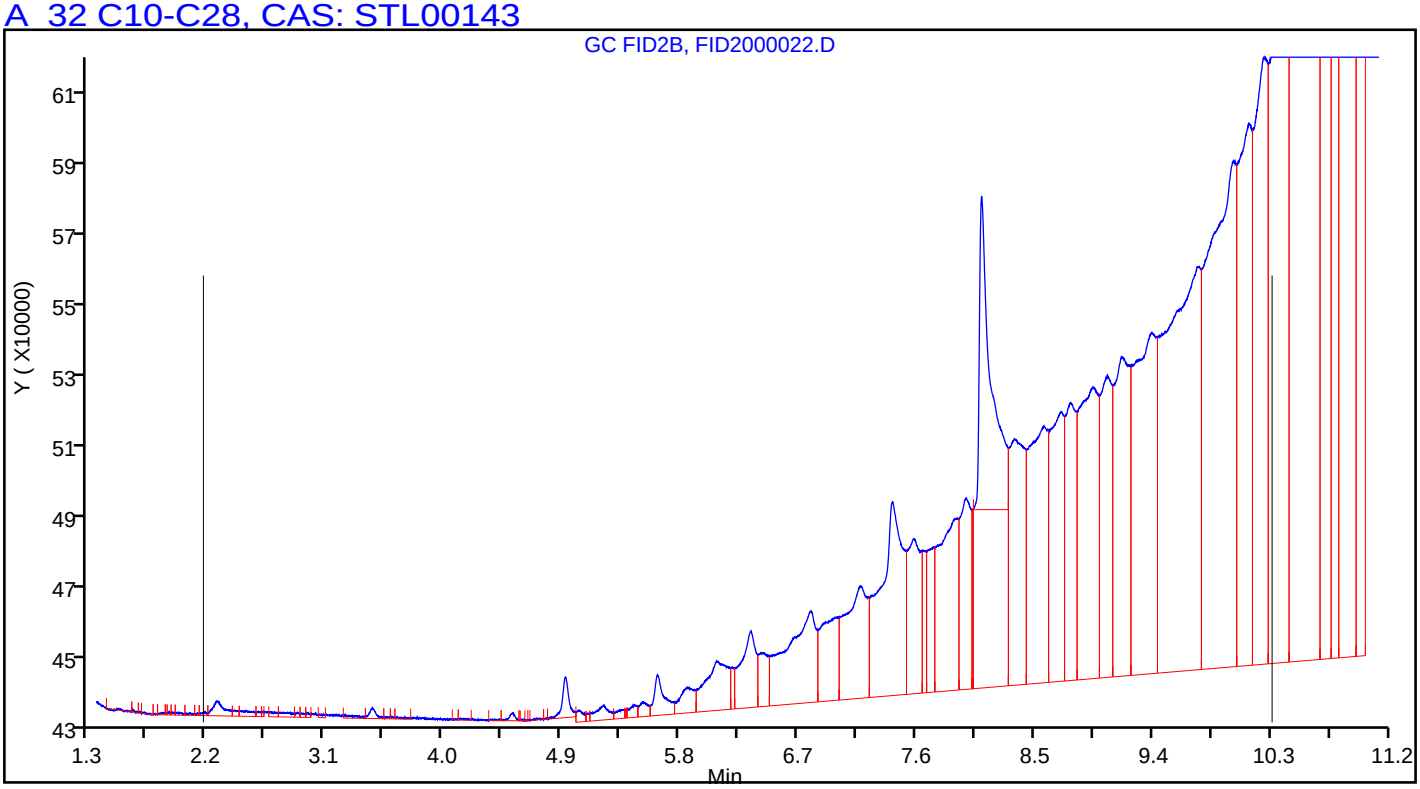


Report Date: 05-Sep-2018 17:29:25 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000022.D				
Injection Date:	05-Sep-2018 17:06:57	Instrument ID:	CHDRO6		
Lims ID:	720-88263-E-16-C	Lab Sample ID:	720-88263-16		
Client ID:	DG-E11S-0.5-1				
Operator ID:	DCH	ALS Bottle#:	72	Worklist Smp#:	22
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

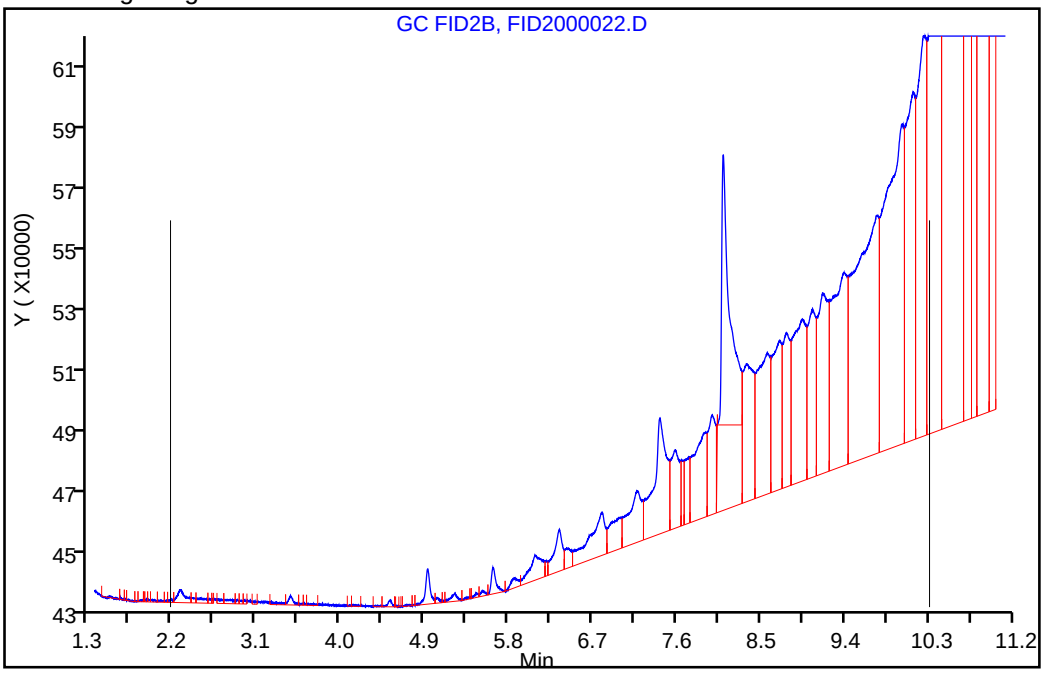
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000022.D				
Injection Date:	05-Sep-2018 17:06:57	Instrument ID:	CHDRO6		
Lims ID:	720-88263-E-16-C	Lab Sample ID:	720-88263-16		
Client ID:	DG-E11S-0.5-1				
Operator ID:	DCH	ALS Bottle#:	72	Worklist Smp#:	22
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.242, CAS: STL00143

Signal: 1

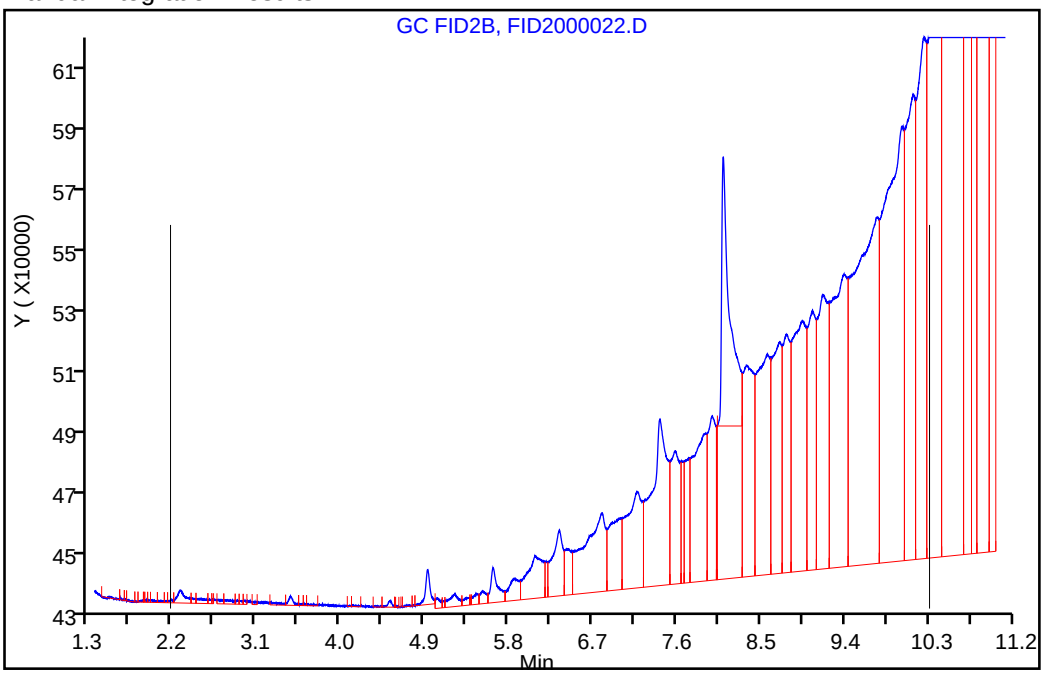
Processing Integration Results

RT: 6.24
Response: 204145539
Amount: 122.8907



Manual Integration Results

RT: 6.24
Response: 334485534
Amount: 196.6919



Reviewer: luj, 05-Sep-2018 17:29:16

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

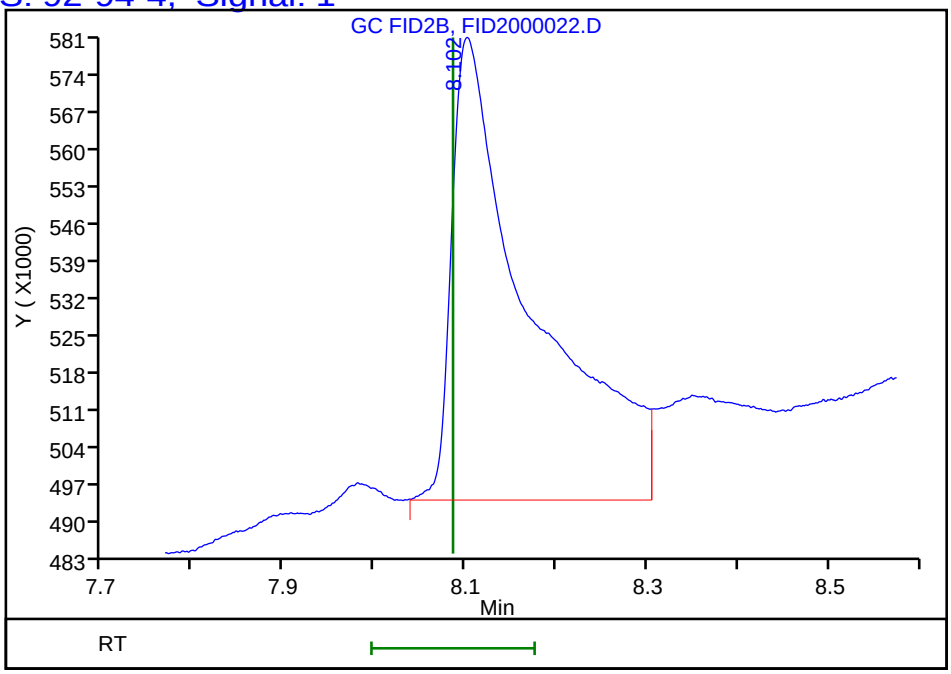
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000022.D				
Injection Date:	05-Sep-2018 17:06:57	Instrument ID:	CHDRO6		
Lims ID:	720-88263-E-16-C	Lab Sample ID:	720-88263-16		
Client ID:	DG-E11S-0.5-1				
Operator ID:	DCH	ALS Bottle#:	72	Worklist Smp#:	22
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4, Signal: 1

RT: 8.10
Response: 10691088
Amount: 5.384597



Reviewer: luj, 05-Sep-2018 17:29:22
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-E11S-3.5-4
Lab Sample ID: 720-88263-17
Matrix: Solid
Lab File ID: FID2000021.D
Analysis Method: 8015B
Date Collected: 08/27/2018 11:50
Extraction Method: 3546
Date Extracted: 08/30/2018 08:54
Sample wt/vol: 15.23(g)
Date Analyzed: 09/05/2018 16:42
Con. Extract Vol.: 2(mL)
Dilution Factor: 20
Injection Volume: 1(uL)
GC Column: MXT-1 ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250885
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	270000		39000	15000

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	0	X D	40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000021.D
Lims ID: 720-88263-E-17-A
Client ID: DG-E11S-3.5-4
Sample Type: Client
Inject. Date: 05-Sep-2018 16:42:19 ALS Bottle#: 71 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 20.0000
Sample Info: 720-0053662-021
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\DRO6_B.m
Limit Group: DRO
Last Update: 05-Sep-2018 17:30:29 Calib Date: 05-Sep-2018 11:27:56
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000009.D

Column 1 : Det: GC FID1A
Process Host: XAWRK002

First Level Reviewer: luj Date: 05-Sep-2018 17:30:29

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.305			ND	
23 n-Decane	2.140	2.168	-0.028	8809	NC	
A 1 C9-C13	2.774	(1.305-4.243)		1401908	0.6427	
A 21 Stoddard Solvent	2.774	(1.305-4.243)		1401908	NC	
A 57 C10-C12	2.898	(2.168-3.628)		1190546	7.97	
24 Dodecane		3.628			ND	
A 3 C9 - C17	3.805	(1.305-6.306)		1838830	0.8055	M
A 60 C10-C16	3.999	(2.168-5.830)		1777229	0.8765	M
A 47 C9 - C18	4.028	(1.305-6.750)		3708592	1.96	M
A 25 C9-C19	4.240	(1.305-7.174)		5204015	2.26	M
A 15 Kerosene	4.240	(1.305-7.174)		5204015	2.74	M
26 C13		4.243			ND	
$ 27 n-Decanoic Acid (Surr)		4.643			ND	
A 59 C12-C16	4.729	(3.628-5.830)		847295	7.78	M
A 61 C10-C20	4.875	(2.168-7.582)		12783222	14.5	M
A 28 C9-C24	5.178	(1.305-9.051)		64453202	43.8	M
A 29 C9-C25	5.344	(1.305-9.384)		77575836	51.2	M
A 54 C10-C23	5.437	(2.168-8.705)		45609450	33.1	M
A 4 C10-C24	5.610	(2.168-9.051)		64391601	43.8	M
A 16 C10-C25	5.776	(2.168-9.384)		77514235	51.2	M
45 Hexadecane		5.830			ND	
A 14 C10-C26	5.937	(2.168-9.705)		77514235	51.2	M
A 67 C12-C22	5.987	(3.628-8.346)		32674340	25.8	M
A 32 C10-C28	6.242	(2.168-10.315)		171785447	104.6	M
A 5 Diesel	6.242	(2.168-10.315)		171785447	104.6	M
A 12 Unknown Hydrocarbons	6.242	(2.168-10.315)		171785447	NC	M
A 30 C13-C22	6.294	(4.243-8.346)		32358549	25.6	M
44 Heptadecane	6.353	6.306	0.047	1253188	NC	M
A 31 C12-C24	6.339	(3.628-9.051)		63461667	43.2	M
49 n-Octadecane	6.812	6.750	0.062	1495423	NC	M
A 9 Crude Oil Range Organics (	6.857	(1.305-12.408)		448669024	NC	M
A 11 Bunker Range Organics (C9-	6.857	(1.305-12.408)		448669024	NC	M

Report Date: 05-Sep-2018 17:30:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000021.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.857	(1.305-12.408)		448669024	212.5	M
33 C19		7.174			ND	
A 64 C13-C28	7.279	(4.243-10.315)		170539722	103.9	M
A 17 C10-C36	7.288	(2.168-12.408)		448607423	261.3	M
A 68 Crude Oil Range Organics (	7.347	(1.305-13.389)		1558885201	NC	M
A 13 C9-C40	7.347	(1.305-13.389)		1558885201	997.8	M
A 58 C16-C24	7.440	(5.830-9.051)		62614372	42.8	M
62 icosane	7.593	7.582	0.011	2965620	NC	M
A 6 C10-C40	7.779	(2.168-13.389)		1558823600	998.8	M
$ 34 p-Terphenyl		8.086			ND	
35 n-Docosane	8.392	8.346	0.046	5572192	NC	M
A 18 C12-C40	8.508	(3.628-13.389)		1557893666	1001.1	M
36 Tricosane	8.781	8.705	0.076	9654838	NC	M
A 66 C13-C40	8.816	(4.243-13.389)		1557577875	1002.0	M
37 n-Tetracosane	9.072	9.051	0.021	6711975	NC	M
A 2 C16-C36 ORO	9.119	(5.830-12.408)		446830194	377.9	M
38 C25		9.384			ND	
A 19 C16-C40	9.610	(5.830-13.389)		1557046371	1004.9	M
46 n-Hexacosane		9.705			ND	
A 20 C19-C36	9.791	(7.174-12.408)		275577103	202.4	
A 55 C23-C32	10.064	(8.705-11.424)		349692848	451.9	M
39 n-Octacosane	10.277	10.315	-0.038	94271212	NC	M
65 C29	10.642	10.606	0.036	40091388	NC	M
A 40 C24-C36	10.729	(9.051-12.408)		518801344	529.2	M
A 7 Motor Oil	10.729	(9.051-12.408)		355269410	362.4	
A 10 C22-C40	10.867	(8.346-13.389)		548399453	394.5	
A 50 C25-C36	10.896	(9.384-12.408)		336468453	365.3	
A 41 C23-C40	11.047	(8.705-13.389)		558033216	408.3	
A 8 C24-C40	11.220	(9.051-13.389)		583385762	435.0	
56 Dotriacontane	11.372	11.424	-0.052	39213165	NC	M
A 51 C28-C40	11.852	(10.315-13.389)		548601395	505.7	
A 63 C29-C40	11.997	(10.606-13.389)		516897587	517.2	
42 n-Hexatriacontane		12.408			ND	
43 C40		13.389			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

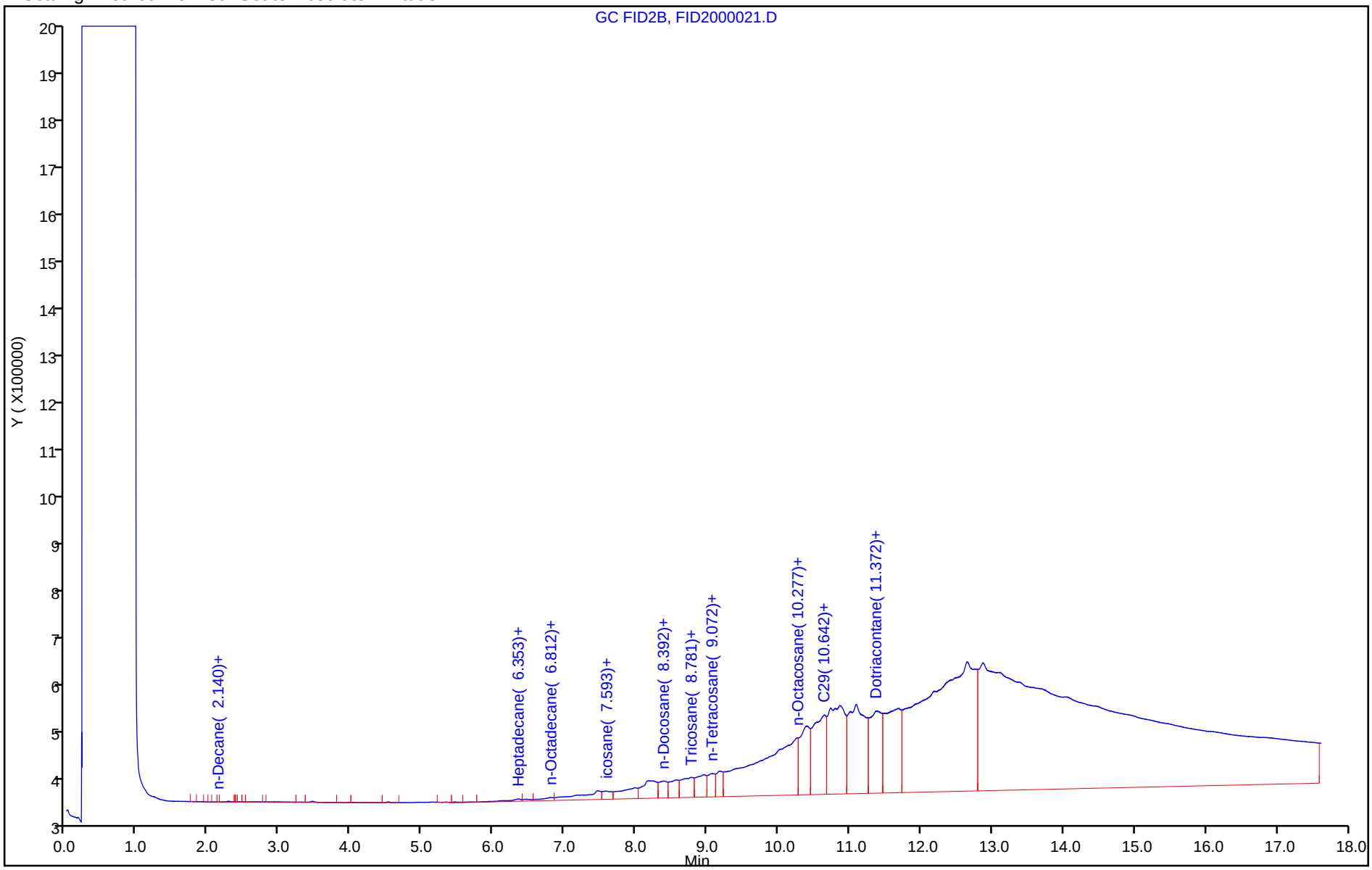
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 05-Sep-2018 17:30:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000021.D				
Injection Date:	05-Sep-2018 16:42:19	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88263-E-17-A	Lab Sample ID:	720-88263-17	Worklist Smp#:	21
Client ID:	DG-E11S-3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	20.0000	ALS Bottle#:	71
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value

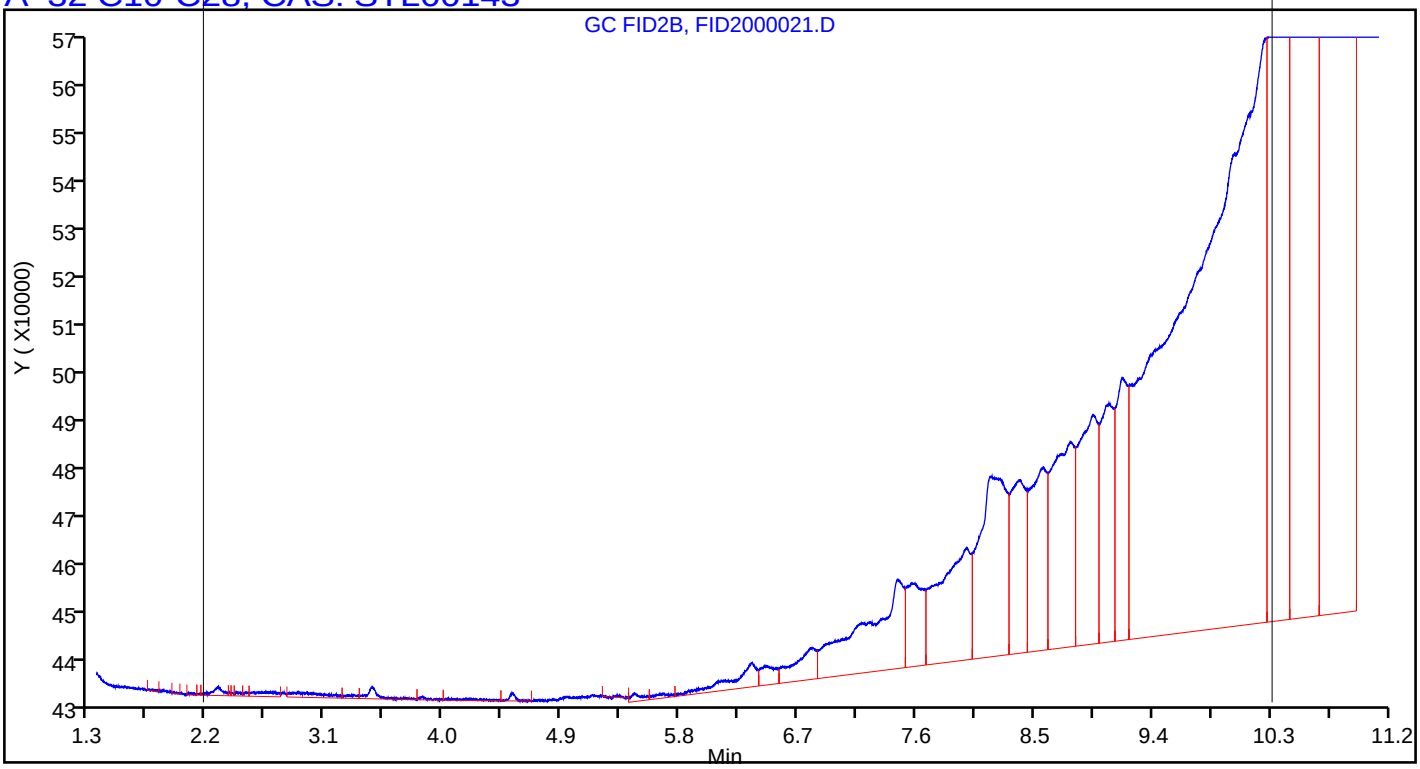


Report Date: 05-Sep-2018 17:30:34 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000021.D				
Injection Date:	05-Sep-2018 16:42:19	Instrument ID:	CHDRO6		
Lims ID:	720-88263-E-17-A	Lab Sample ID:	720-88263-17		
Client ID:	DG-E11S-3.5-4				
Operator ID:	DCH	ALS Bottle#:	71	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	20.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

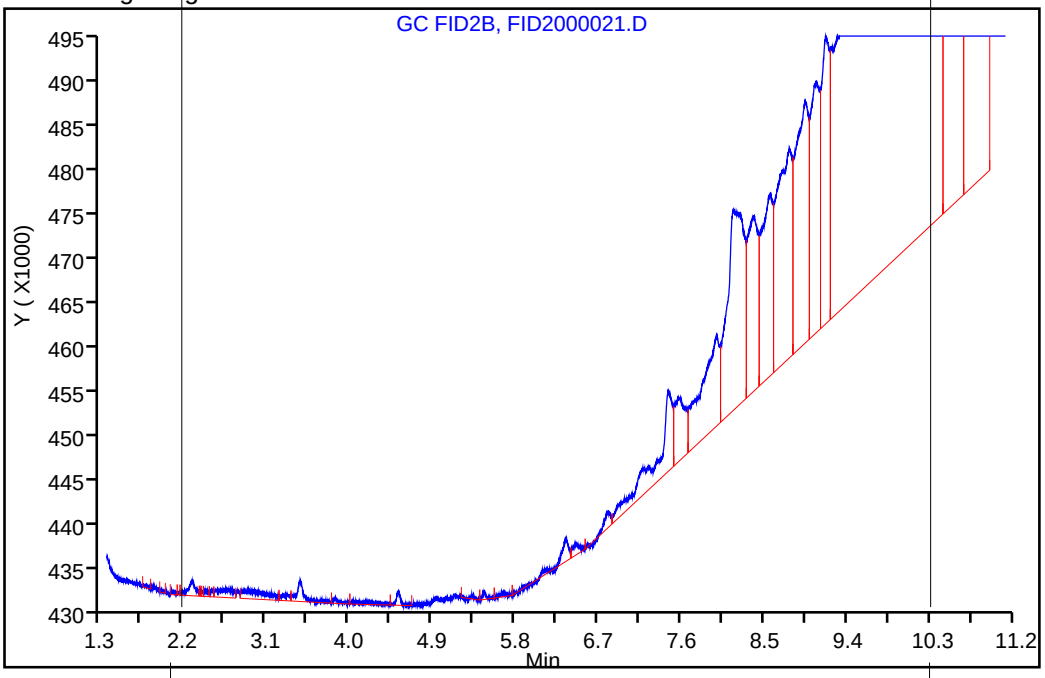
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000021.D				
Injection Date:	05-Sep-2018 16:42:19	Instrument ID:	CHDRO6		
Lims ID:	720-88263-E-17-A	Lab Sample ID:	720-88263-17		
Client ID:	DG-E11S-3.5-4				
Operator ID:	DCH	ALS Bottle#:	71	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	20.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.242, CAS: STL00143

Signal: 1

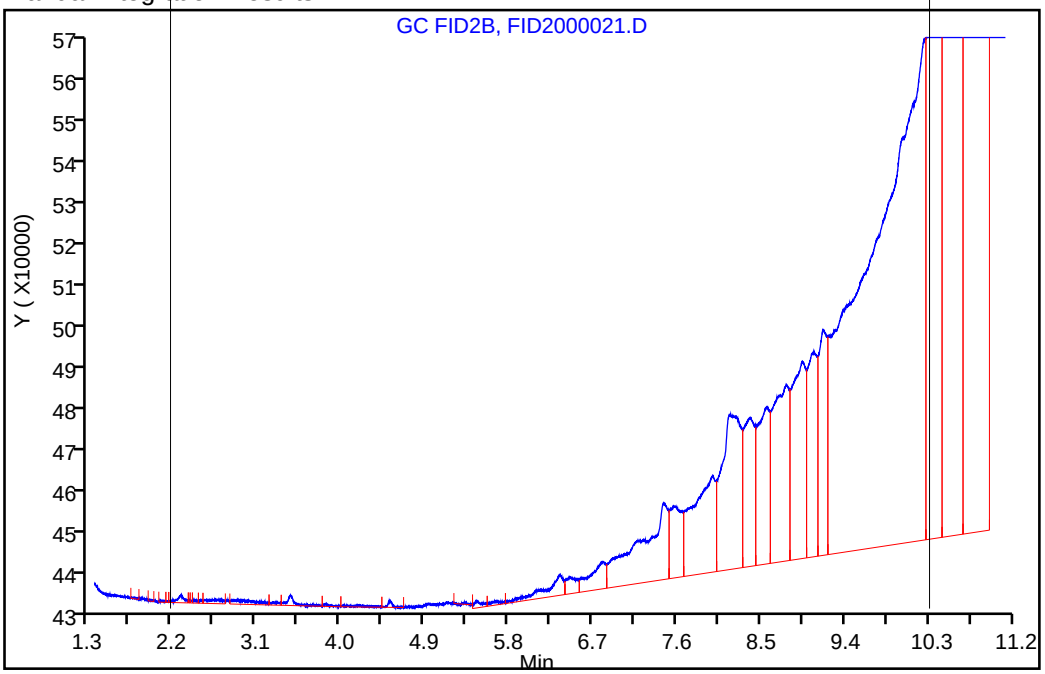
Processing Integration Results

RT: 6.24
Response: 39101828
Amount: 29.439554



Manual Integration Results

RT: 6.24
Response: 171785447
Amount: 104.5677



Reviewer: luj, 05-Sep-2018 17:30:09

Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-E11S-9.5-10 Lab Sample ID: 720-88263-18

Matrix: Solid Lab File ID: FID1000027.D

Analysis Method: 8015B Date Collected: 08/27/2018 11:50

Extraction Method: 3546 Date Extracted: 08/30/2018 08:54

Sample wt/vol: 15.61(g) Date Analyzed: 09/05/2018 19:09

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250884 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	18000		1900	720

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	89		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000027.D
Lims ID: 720-88263-E-18-A
Client ID: DG-E11S-9.5-10
Sample Type: Client
Inject. Date: 05-Sep-2018 19:09:02 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053661-027
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\DRO6_A.m
Limit Group: DRO
Last Update: 06-Sep-2018 12:41:29 Calib Date: 05-Sep-2018 09:01:58
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK007

First Level Reviewer: luj Date: 06-Sep-2018 12:41:29

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane	1.138	1.229	-0.091	67797	NC	
23 n-Decane	2.117	2.116	0.001	56548	NC	
A 1 C9-C13	2.734	(1.229-4.240)		5583464	3.14	M
A 21 Stoddard Solvent	2.734	(1.229-4.240)		5583464	3.14	M
A 57 C10-C12	2.865	(2.116-3.613)		2778365	1.80	
24 Dodecane	3.614	3.613	0.001	124162	NC	
A 3 C9 - C17	3.780	(1.229-6.331)		19515639	10.0	M
A 60 C10-C16	3.983	(2.116-5.850)		12600691	7.21	M
A 47 C9 - C18	4.005	(1.229-6.782)		24850096	15.4	M
A 15 Kerosene	4.220	(1.229-7.212)		35091394	21.7	M
A 25 C9-C19	4.220	(1.229-7.212)		35091394	17.9	M
26 C13	4.247	4.240	0.007	95761	NC	M
$ 27 n-Decanoic Acid (Surr)		4.608			ND	U
A 59 C12-C16	4.732	(3.613-5.850)		9822326	6.37	M
A 62 C10-C20	4.871	(2.116-7.625)		54163156	35.1	M
A 28 C9-C24	5.172	(1.229-9.115)		107029214	69.4	M
A 29 C9-C25	5.341	(1.229-9.453)		135853213	88.1	M
A 54 C10-C23	5.440	(2.116-8.764)		93373453	60.5	M
A 4 C10-C24	5.616	(2.116-9.115)		105688378	68.5	M
A 16 C10-C25	5.785	(2.116-9.453)		134512377	87.2	M
45 Hexadecane	5.854	5.850	0.004	319779	NC	M
A 14 C10-C26	5.948	(2.116-9.780)		146767609	95.2	M
A 67 C12-C22	6.006	(3.613-8.400)		80076585	51.9	M
A 32 C10-C28	6.258	(2.116-10.400)		222500032	144.3	M
A 5 Diesel	6.258	(2.116-10.400)		222500032	144.3	M
A 12 Unknown Hydrocarbons	6.258	(2.116-10.400)		222500032	NC	M
A 30 C13-C22	6.320	(4.240-8.400)		78612322	51.0	M
44 Heptadecane	6.282	6.331	-0.049	2283821	NC	M
A 31 C12-C24	6.364	(3.613-9.115)		102910013	66.7	M
51 n-Octadecane	6.766	6.782	-0.016	1038262	NC	M
A 9 Crude Oil Range Organics (	6.880	(1.229-12.531)		796941891	NC	M
A 11 Bunker Range Organics (C9-	6.880	(1.229-12.531)		796941891	NC	M

Report Date: 06-Sep-2018 12:41:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000027.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.880	(1.229-12.531)		796941891	450.1	M
33 C19	7.153	7.212	-0.059	3230401	NC	M
A 64 C13-C28	7.320	(4.240-10.400)		218257404	141.5	M
A 17 C10-C36	7.324	(2.116-12.531)		795601055	515.8	M
A 68 Crude Oil Range Organics (	7.391	(1.229-13.553)		932254393	NC	M
A 13 C9-C40	7.391	(1.229-13.553)		932254393	691.4	M
A 58 C16-C24	7.483	(5.850-9.115)		93087687	60.4	M
61 icosane	7.572	7.625	-0.053	3289111	NC	M
A 6 C10-C40	7.835	(2.116-13.553)		930913557	690.9	M
$ 34 p-Terphenyl	8.089	8.110	-0.021	42828559	22.3	M
35 n-Docosane	8.411	8.400	0.011	3447204	NC	M
A 18 C12-C40	8.583	(3.613-13.553)		928135192	690.7	M
36 Tricosane	8.776	8.764	0.012	4332788	NC	M
A 66 C13-C40	8.897	(4.240-13.553)		926670929	690.4	M
37 n-Tetracosane	9.139	9.115	0.024	7143569	NC	M
A 2 C16-C36 ORO	9.191	(5.850-12.531)		841775341	738.0	
38 C25	9.392	9.453	-0.061	16335165	NC	M
A 19 C16-C40	9.702	(5.850-13.553)		918312866	686.8	M
46 n-Hexacosane	9.817	9.780	0.037	12257894	NC	M
A 20 C19-C36	9.872	(7.212-12.531)		814068250	612.5	
A 55 C23-C32	10.146	(8.764-11.528)		430473049	620.0	M
39 n-Octacosane	10.450	10.400	0.050	44957809	NC	M
65 C29	10.657	10.695	-0.038	91627932	NC	M
A 40 C24-C36	10.823	(9.115-12.531)		677803713	761.2	M
A 7 Motor Oil	10.823	(9.115-12.531)		585781374	657.8	
A 10 C22-C40	10.977	(8.400-13.553)		696377414	560.0	
A 49 C25-C36	10.992	(9.453-12.531)		677423843	756.7	M
A 41 C23-C40	11.159	(8.764-13.553)		837540104	655.3	M
A 8 C24-C40	11.334	(9.115-13.553)		825225179	677.9	M
56 Dotriacontane	11.593	11.528	0.065	45229385	NC	M
A 50 C28-C40	11.977	(10.400-13.553)		708413525	746.3	M
A 63 C29-C40	12.124	(10.695-13.553)		653643782	754.3	M
42 n-Hexatriacontane	12.609	12.531	0.078	15887416	NC	M
43 C40		13.553		ND		
$ 69 Stearic Acid (Surr)		0.000		ND		

QC Flag Legend

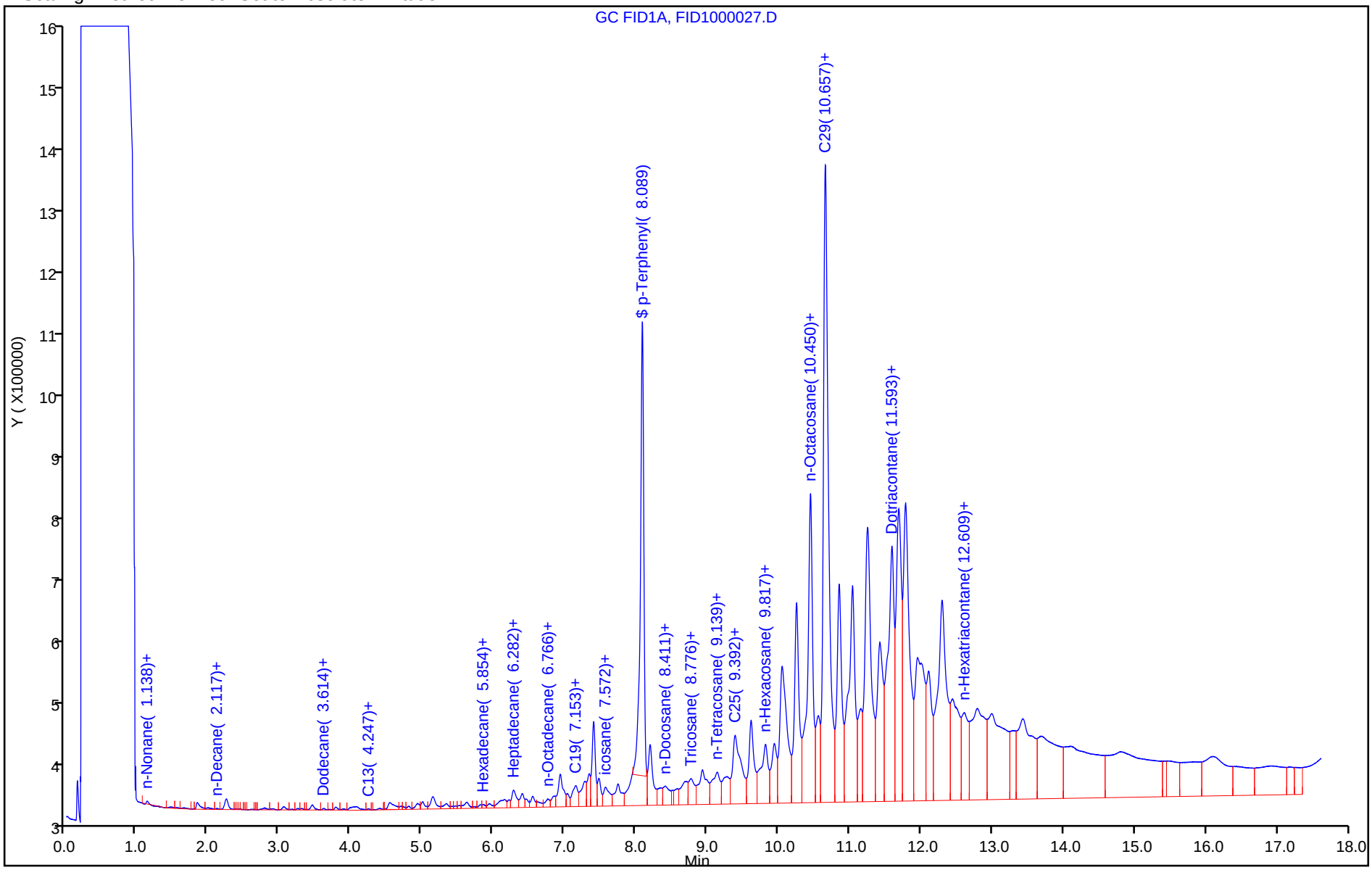
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 06-Sep-2018 12:41:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000027.D				
Injection Date:	05-Sep-2018 19:09:02	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88263-E-18-A	Lab Sample ID:	720-88263-18	Worklist Smp#:	27
Client ID:	DG-E11S-9.5-10				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000027.D
Lims ID: 720-88263-E-18-A
Client ID: DG-E11S-9.5-10
Sample Type: Client
Inject. Date: 05-Sep-2018 19:09:02 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053661-027
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\DRO6_A.m
Limit Group: DRO
Last Update: 06-Sep-2018 12:41:29 Calib Date: 05-Sep-2018 09:01:58
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK007

First Level Reviewer: luj Date: 06-Sep-2018 12:41:29

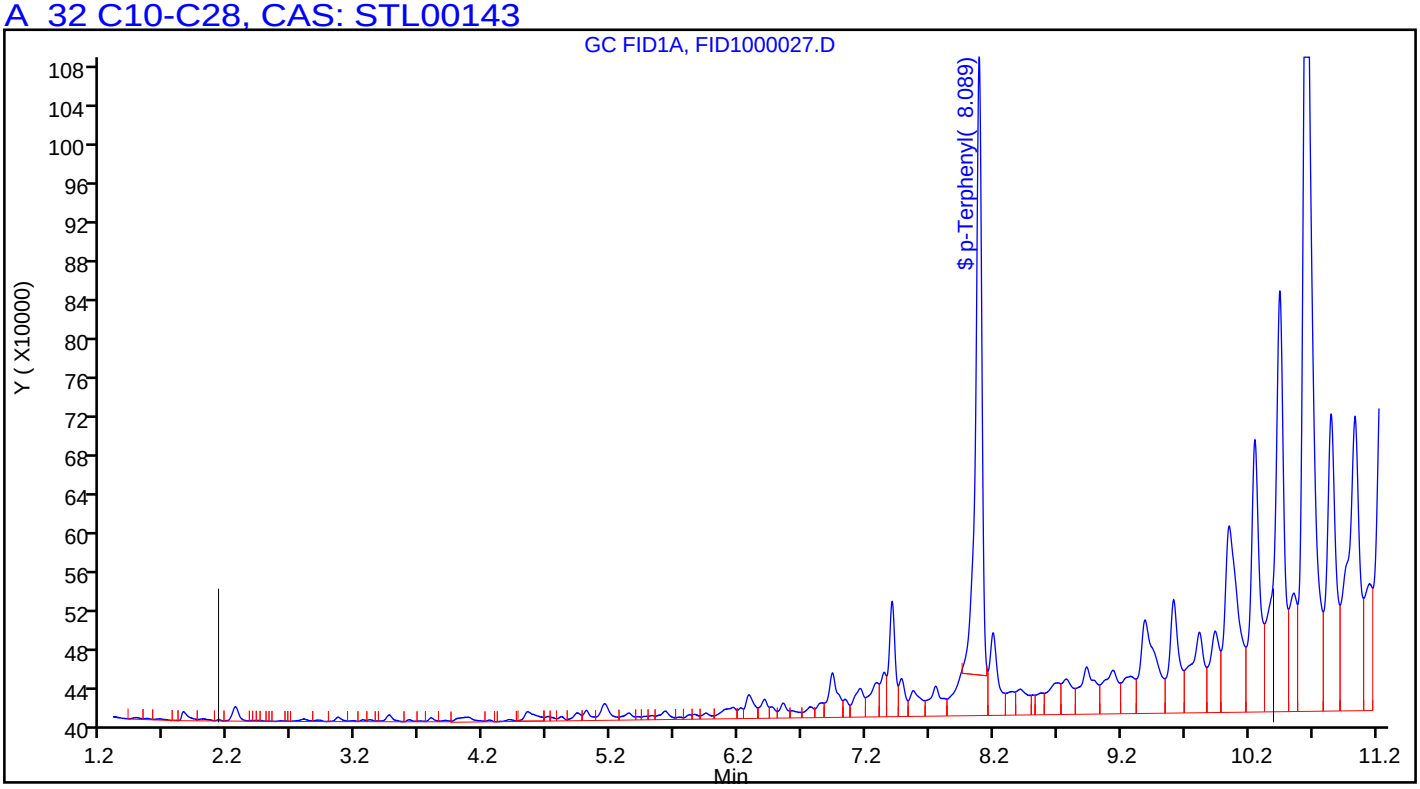
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	22.3	89.21

Report Date: 06-Sep-2018 12:41:33 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000027.D				
Injection Date:	05-Sep-2018 19:09:02	Instrument ID:	CHDRO6		
Lims ID:	720-88263-E-18-A	Lab Sample ID:	720-88263-18		
Client ID:	DG-E11S-9.5-10				
Operator ID:	DCH	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

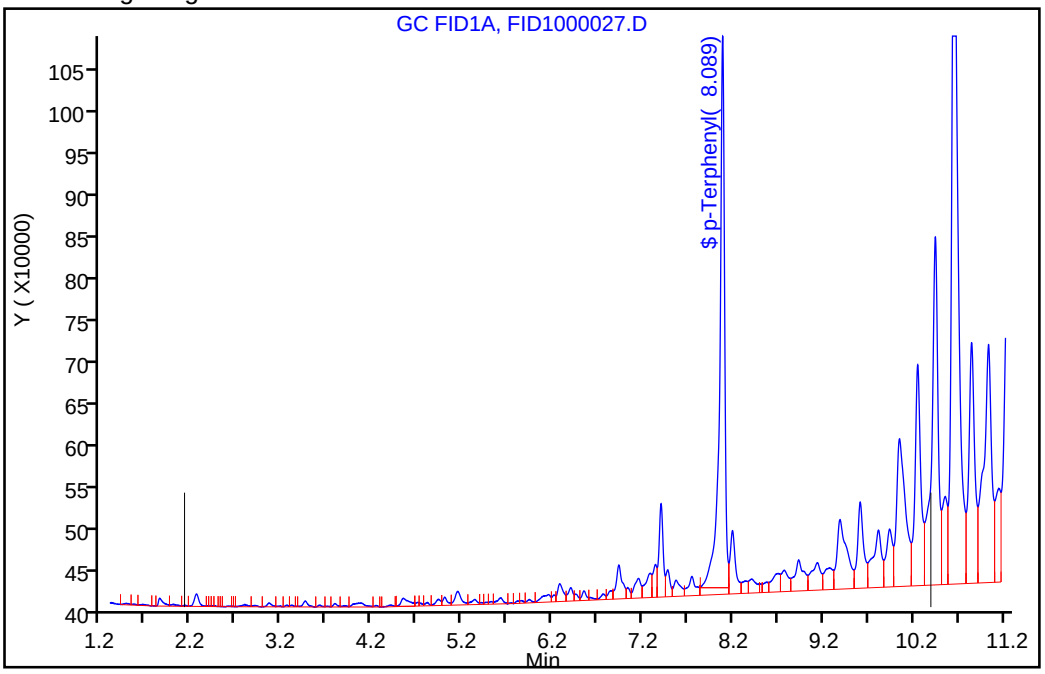
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000027.D				
Injection Date:	05-Sep-2018 19:09:02	Instrument ID:	CHDRO6		
Lims ID:	720-88263-E-18-A	Lab Sample ID:	720-88263-18		
Client ID:	DG-E11S-9.5-10				
Operator ID:	DCH	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.258, CAS: STL00143

Signal: 1

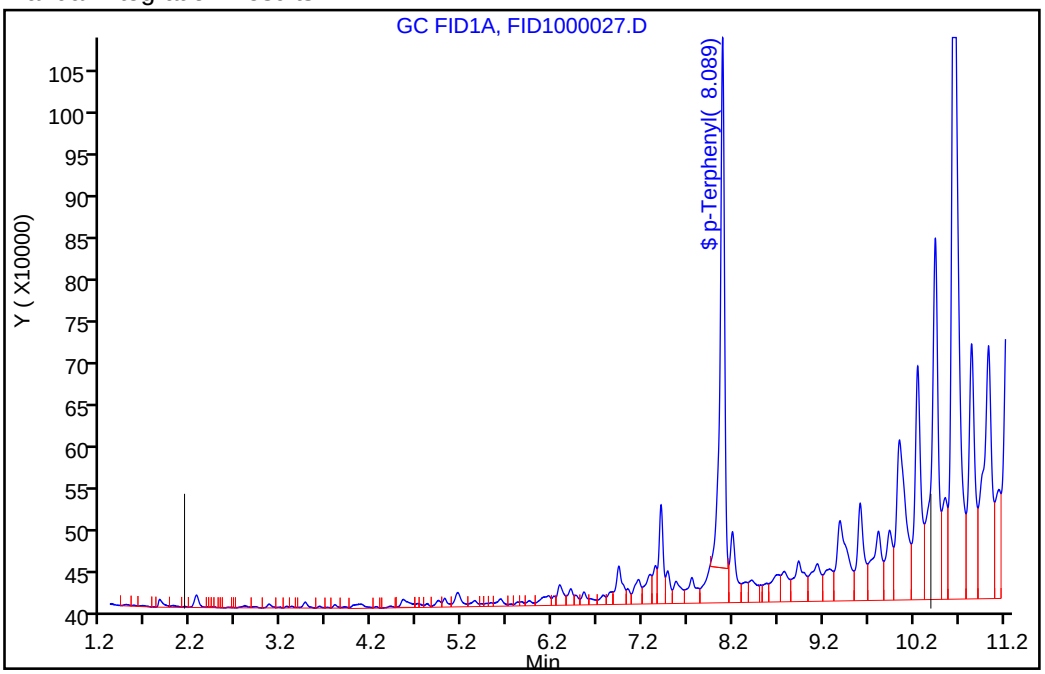
Processing Integration Results

RT: 6.26
Response: 164082827
Amount: 106.3809



Manual Integration Results

RT: 6.26
Response: 222500032
Amount: 144.2549



Reviewer: luj, 06-Sep-2018 12:40:46

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

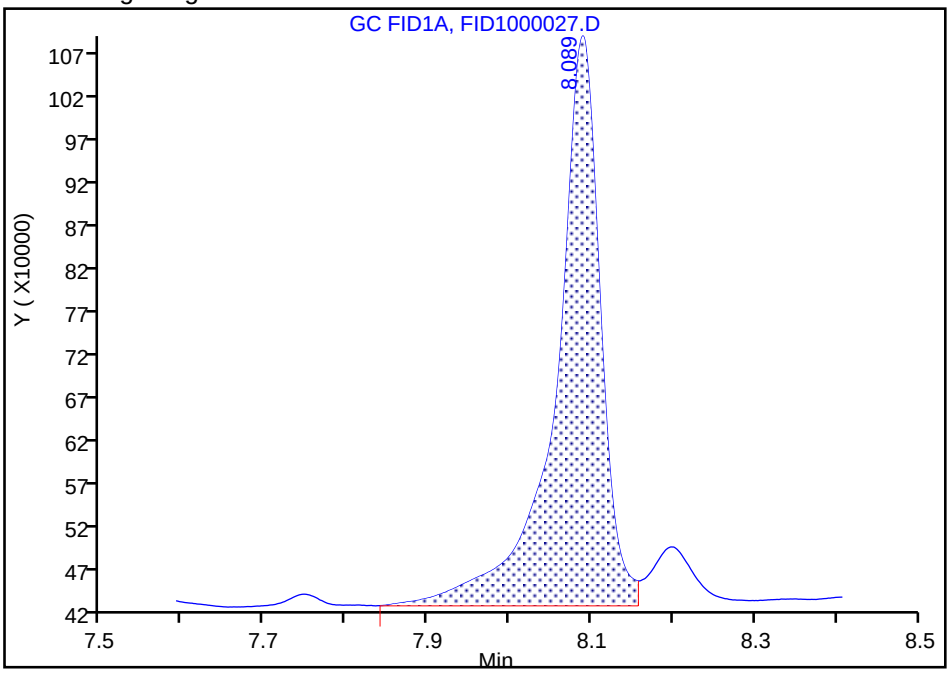
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000027.D				
Injection Date:	05-Sep-2018 19:09:02	Instrument ID:	CHDRO6		
Lims ID:	720-88263-E-18-A	Lab Sample ID:	720-88263-18		
Client ID:	DG-E11S-9.5-10				
Operator ID:	DCH	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

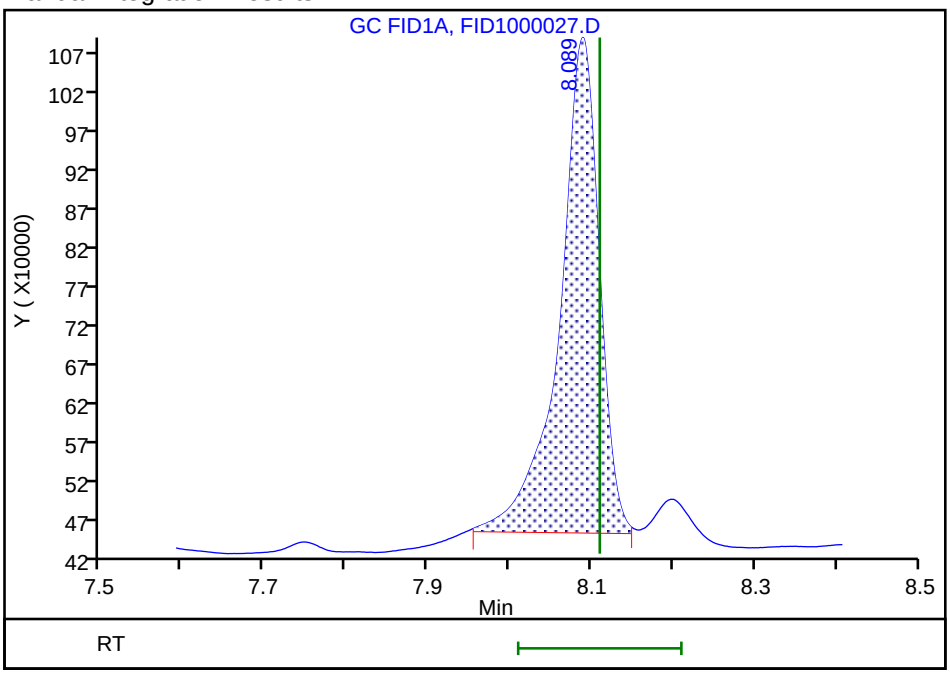
Processing Integration Results

RT: 8.09
Area: 50582991
Amount: 26.340368
Amount Units: mg/L



Manual Integration Results

RT: 8.09
Area: 42828559
Amount: 22.302358
Amount Units: mg/L



Reviewer: luj, 06-Sep-2018 12:41:11

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-FG910S-0.5-1
Lab Sample ID: 720-88263-1
Matrix: Solid
Lab File ID: 08301834.D
Analysis Method: 8260B
Date Collected: 08/27/2018 07:50
Sample wt/vol: 5.69(g)
Date Analyzed: 08/30/2018 23:29
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250625
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.4	1.1
67-64-1	Acetone	ND		44	33
71-43-2	Benzene	ND		4.4	0.57
75-27-4	Dichlorobromomethane	ND		4.4	0.63
108-86-1	Bromobenzene	ND		4.4	0.69
74-97-5	Chlorobromomethane	ND		18	0.63
75-25-2	Bromoform	ND		4.4	1.8
74-83-9	Bromomethane	ND		8.8	0.69
78-93-3	2-Butanone (MEK)	ND		44	18
104-51-8	n-Butylbenzene	ND		4.4	0.88
135-98-8	sec-Butylbenzene	ND		4.4	0.63
98-06-6	tert-Butylbenzene	ND		4.4	0.64
75-15-0	Carbon disulfide	ND		4.4	1.8
56-23-5	Carbon tetrachloride	ND		4.4	0.54
108-90-7	Chlorobenzene	ND		4.4	0.61
75-00-3	Chloroethane	ND		8.8	0.49
67-66-3	Chloroform	ND		4.4	0.58
74-87-3	Chloromethane	ND		8.8	0.69
95-49-8	2-Chlorotoluene	ND		4.4	0.57
106-43-4	4-Chlorotoluene	ND		4.4	0.60
124-48-1	Chlorodibromomethane	ND		4.4	0.62
95-50-1	1,2-Dichlorobenzene	ND		4.4	0.60
541-73-1	1,3-Dichlorobenzene	ND		4.4	0.63
106-46-7	1,4-Dichlorobenzene	ND		4.4	0.62
142-28-9	1,3-Dichloropropane	ND		4.4	0.64
563-58-6	1,1-Dichloropropene	ND		4.4	0.61
96-12-8	1,2-Dibromo-3-Chloropropane	ND		8.8	1.5
106-93-4	Ethylene Dibromide	ND		4.4	1.3
74-95-3	Dibromomethane	ND		8.8	0.76
75-71-8	Dichlorodifluoromethane	ND		8.8	0.69
75-34-3	1,1-Dichloroethane	ND		4.4	0.60
107-06-2	1,2-Dichloroethane	ND		4.4	0.67
75-35-4	1,1-Dichloroethene	ND	*	4.4	0.54
156-59-2	cis-1,2-Dichloroethene	ND		4.4	0.60
156-60-5	trans-1,2-Dichloroethene	ND		4.4	0.66
78-87-5	1,2-Dichloropropane	ND		4.4	0.55

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-FG910S-0.5-1
Lab Sample ID: 720-88263-1
Matrix: Solid
Lab File ID: 08301834.D
Analysis Method: 8260B
Date Collected: 08/27/2018 07:50
Sample wt/vol: 5.69(g)
Date Analyzed: 08/30/2018 23:29
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250625
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.4	0.61
10061-02-6	trans-1,3-Dichloropropene	ND		4.4	0.59
100-41-4	Ethylbenzene	ND		4.4	0.66
87-68-3	Hexachlorobutadiene	ND		4.4	0.79
591-78-6	2-Hexanone	ND		44	8.8
98-82-8	Isopropylbenzene	ND		4.4	0.60
99-87-6	4-Isopropyltoluene	ND		4.4	2.2
75-09-2	Methylene Chloride	ND		8.8	4.9
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		44	8.8
91-20-3	Naphthalene	ND		8.8	1.3
103-65-1	N-Propylbenzene	ND		4.4	0.58
100-42-5	Styrene	ND		4.4	0.55
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.4	0.67
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.4	0.66
127-18-4	Tetrachloroethene	ND		4.4	0.59
108-88-3	Toluene	ND		4.4	0.62
87-61-6	1,2,3-Trichlorobenzene	ND		4.4	0.65
120-82-1	1,2,4-Trichlorobenzene	ND		4.4	0.62
71-55-6	1,1,1-Trichloroethane	ND		4.4	0.54
79-00-5	1,1,2-Trichloroethane	ND		4.4	0.62
79-01-6	Trichloroethene	ND		4.4	0.55
75-69-4	Trichlorofluoromethane	ND		4.4	0.49
96-18-4	1,2,3-Trichloropropane	ND		4.4	0.68
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.4	1.8
95-63-6	1,2,4-Trimethylbenzene	ND		4.4	1.4
108-67-8	1,3,5-Trimethylbenzene	ND		4.4	0.57
108-05-4	Vinyl acetate	ND		18	4.4
75-01-4	Vinyl chloride	ND		4.4	0.64
1330-20-7	Xylenes, Total	ND		4.4	1.1
594-20-7	2,2-Dichloropropane	ND		4.4	1.8
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		220	88

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-FG910S-0.5-1 Lab Sample ID: 720-88263-1

Matrix: Solid Lab File ID: 08301834.D

Analysis Method: 8260B Date Collected: 08/27/2018 07:50

Sample wt/vol: 5.69(g) Date Analyzed: 08/30/2018 23:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250625 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	88		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	116		60-140
2037-26-5	Toluene-d8 (Surr)	92		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301834.D
Lims ID: 720-88263-A-1-A
Client ID: DG-FG910S--0.5-1
Sample Type: Client
Inject. Date: 30-Aug-2018 23:29:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-A-1
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:32:23 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 08:32:38

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	189032	250.0	
* 2 Fluorobenzene	96	10.709	10.709	0.000	98	1033337	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.554	0.010	86	823714	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	336071	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.305	9.303	0.011	92	70716	8.08	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.821	0.010	0	81701	8.69	
$ 10 Toluene-d8 (Surr)	98	12.822	12.834	0.000	94	283990	6.92	
$ 11 4-Bromofluorobenzene	95	16.053	16.065	0.000	91	84759	6.61	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	83	69595	5.92	
28 Acetone	58	6.474	6.481	0.000	97	13231	16.7	
59 Benzene	78	10.488	10.498	0.000	95	3698	0.0992	
75 Toluene	92	12.906	12.915	0.000	96	4905	0.1852	
131 Butyl Ether	87	14.775	14.786	-0.001	92	1352	0.1934	
124 Butane	43	4.985	4.996	-0.011	1	190	NR	
138 n-Nonane	43	15.166	15.198	-0.032	1	323	NR	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	552794	6.93	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	203155	2.55	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	245262	3.08	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	615200	7.71	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	263477	NC	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	263477	3.30	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	594574	7.46	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	326993	4.10	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	77987	0.9779	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	155346	1.95	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

NC - Not Calibrated

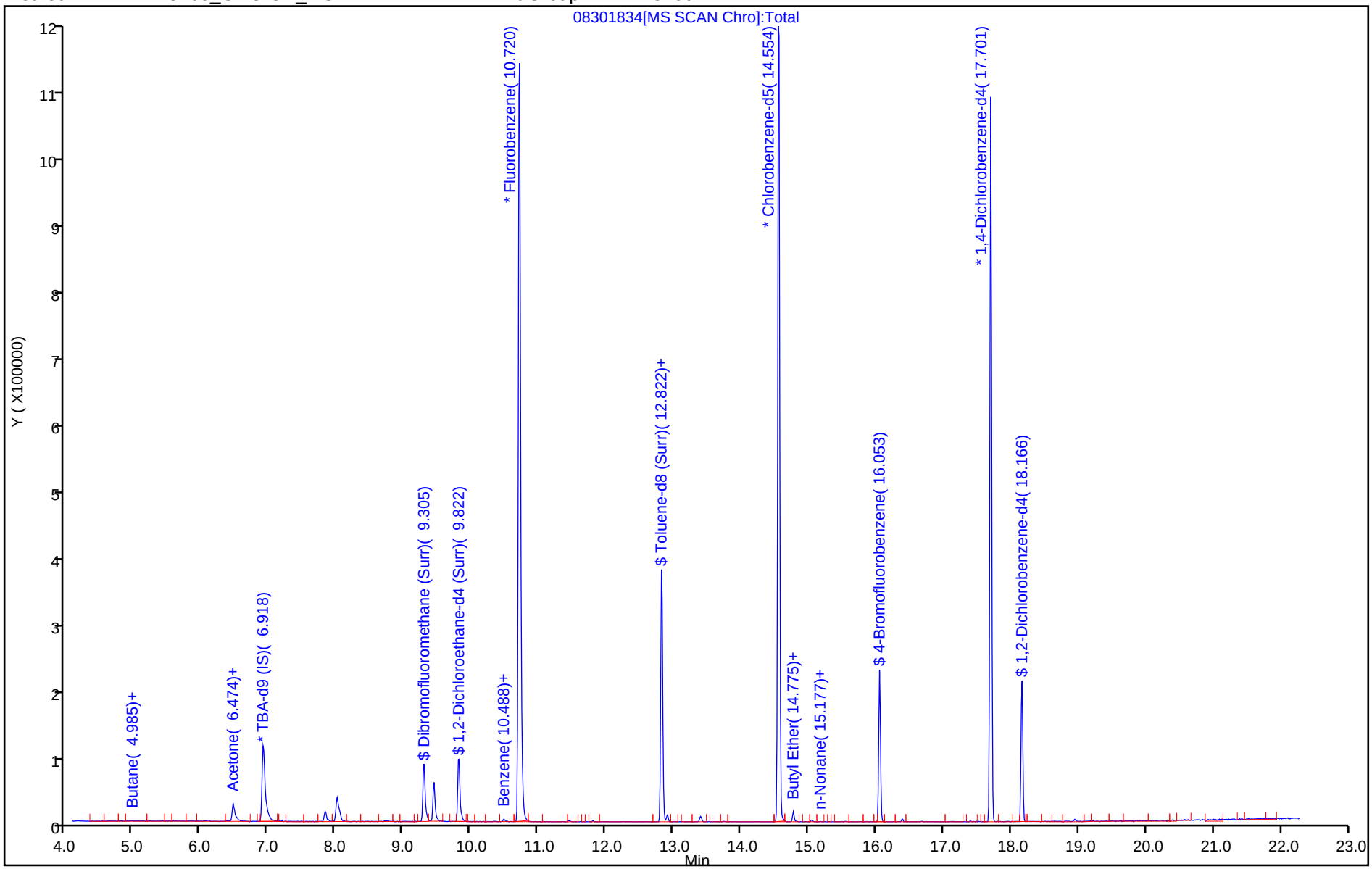
Reagents:

I_IS/SS_00092	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 31-Aug-2018 08:32:39 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301834.D				
Injection Date:	30-Aug-2018 23:29:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88263-A-1-A	Lab Sample ID:	720-88263-1	Worklist Smp#:	12
Client ID:	DG-FG910S--0.5-1				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301834.D
Lims ID: 720-88263-A-1-A
Client ID: DG-FG910S--0.5-1
Sample Type: Client
Inject. Date: 30-Aug-2018 23:29:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-A-1
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:32:23 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 08:32:38

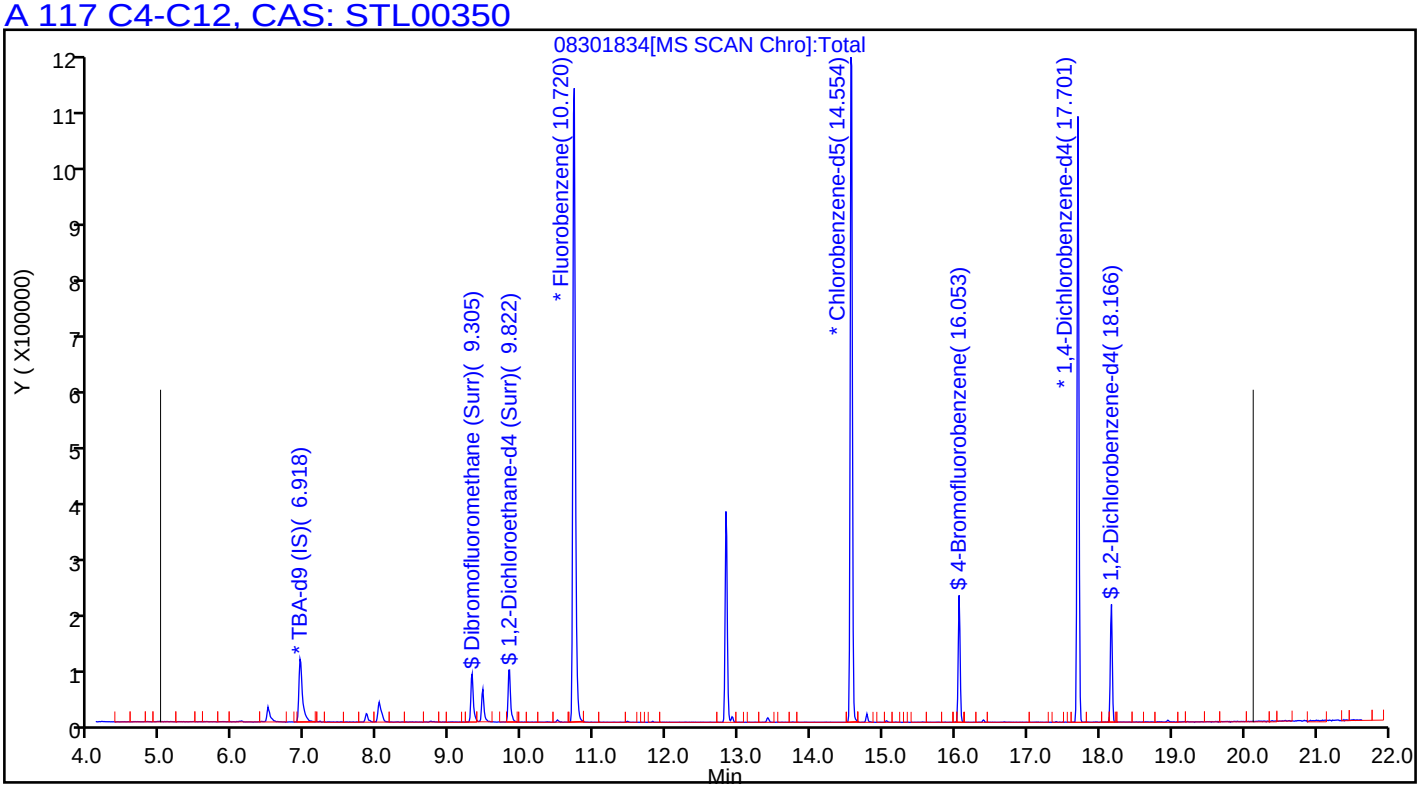
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.69	115.84
$ 10 Toluene-d8 (Surr)	7.50	6.92	92.29
$ 11 4-Bromofluorobenzene	7.50	6.61	88.11
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 31-Aug-2018 08:32:40 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301834.D				
Injection Date:	30-Aug-2018 23:29:30	Instrument ID:	CHMSV2		
Lims ID:	720-88263-A-1-A	Lab Sample ID:	720-88263-1		
Client ID:	DG-FG910S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-F910S-3.5-4
Lab Sample ID: 720-88263-2
Matrix: Solid
Lab File ID: 08301835.D
Analysis Method: 8260B
Date Collected: 08/27/2018 07:50
Sample wt/vol: 6.402(g)
Date Analyzed: 08/30/2018 23:57
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250625
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		3.9	0.94
67-64-1	Acetone	ND		39	30
71-43-2	Benzene	ND		3.9	0.51
75-27-4	Dichlorobromomethane	ND		3.9	0.56
108-86-1	Bromobenzene	ND		3.9	0.62
74-97-5	Chlorobromomethane	ND		16	0.56
75-25-2	Bromoform	ND		3.9	1.6
74-83-9	Bromomethane	ND		7.8	0.62
78-93-3	2-Butanone (MEK)	ND		39	16
104-51-8	n-Butylbenzene	ND		3.9	0.78
135-98-8	sec-Butylbenzene	ND		3.9	0.56
98-06-6	tert-Butylbenzene	ND		3.9	0.57
75-15-0	Carbon disulfide	ND		3.9	1.6
56-23-5	Carbon tetrachloride	ND		3.9	0.48
108-90-7	Chlorobenzene	ND		3.9	0.54
75-00-3	Chloroethane	ND		7.8	0.44
67-66-3	Chloroform	ND		3.9	0.52
74-87-3	Chloromethane	ND		7.8	0.62
95-49-8	2-Chlorotoluene	ND		3.9	0.51
106-43-4	4-Chlorotoluene	ND		3.9	0.53
124-48-1	Chlorodibromomethane	ND		3.9	0.55
95-50-1	1,2-Dichlorobenzene	ND		3.9	0.53
541-73-1	1,3-Dichlorobenzene	ND		3.9	0.56
106-46-7	1,4-Dichlorobenzene	ND		3.9	0.55
142-28-9	1,3-Dichloropropane	ND		3.9	0.57
563-58-6	1,1-Dichloropropene	ND		3.9	0.54
96-12-8	1,2-Dibromo-3-Chloropropane	ND		7.8	1.3
106-93-4	Ethylene Dibromide	ND		3.9	1.1
74-95-3	Dibromomethane	ND		7.8	0.67
75-71-8	Dichlorodifluoromethane	ND		7.8	0.62
75-34-3	1,1-Dichloroethane	ND		3.9	0.53
107-06-2	1,2-Dichloroethane	ND		3.9	0.59
75-35-4	1,1-Dichloroethene	ND	*	3.9	0.48
156-59-2	cis-1,2-Dichloroethene	ND		3.9	0.53
156-60-5	trans-1,2-Dichloroethene	ND		3.9	0.59
78-87-5	1,2-Dichloropropane	ND		3.9	0.49

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-F910S-3.5-4
Lab Sample ID: 720-88263-2
Matrix: Solid
Lab File ID: 08301835.D
Analysis Method: 8260B
Date Collected: 08/27/2018 07:50
Sample wt/vol: 6.402(g)
Date Analyzed: 08/30/2018 23:57
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250625
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		3.9	0.54
10061-02-6	trans-1,3-Dichloropropene	ND		3.9	0.52
100-41-4	Ethylbenzene	ND		3.9	0.59
87-68-3	Hexachlorobutadiene	ND		3.9	0.70
591-78-6	2-Hexanone	ND		39	7.8
98-82-8	Isopropylbenzene	ND		3.9	0.53
99-87-6	4-Isopropyltoluene	ND		3.9	2.0
75-09-2	Methylene Chloride	ND		7.8	4.4
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		39	7.8
91-20-3	Naphthalene	ND		7.8	1.2
103-65-1	N-Propylbenzene	ND		3.9	0.52
100-42-5	Styrene	ND		3.9	0.49
630-20-6	1,1,1,2-Tetrachloroethane	ND		3.9	0.59
79-34-5	1,1,2,2-Tetrachloroethane	ND		3.9	0.59
127-18-4	Tetrachloroethene	ND		3.9	0.52
108-88-3	Toluene	ND		3.9	0.55
87-61-6	1,2,3-Trichlorobenzene	ND		3.9	0.58
120-82-1	1,2,4-Trichlorobenzene	ND		3.9	0.55
71-55-6	1,1,1-Trichloroethane	ND		3.9	0.48
79-00-5	1,1,2-Trichloroethane	ND		3.9	0.55
79-01-6	Trichloroethene	ND		3.9	0.49
75-69-4	Trichlorofluoromethane	ND		3.9	0.44
96-18-4	1,2,3-Trichloropropane	ND		3.9	0.60
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	3.9	1.6
95-63-6	1,2,4-Trimethylbenzene	ND		3.9	1.3
108-67-8	1,3,5-Trimethylbenzene	ND		3.9	0.51
108-05-4	Vinyl acetate	ND		16	3.9
75-01-4	Vinyl chloride	ND		3.9	0.57
1330-20-7	Xylenes, Total	ND		3.9	0.95
594-20-7	2,2-Dichloropropane	ND		3.9	1.6
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		200	78

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-F910S-3.5-4 Lab Sample ID: 720-88263-2

Matrix: Solid Lab File ID: 08301835.D

Analysis Method: 8260B Date Collected: 08/27/2018 07:50

Sample wt/vol: 6.402(g) Date Analyzed: 08/30/2018 23:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250625 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	81		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		60-140
2037-26-5	Toluene-d8 (Surr)	92		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301835.D
Lims ID: 720-88263-A-2-A
Client ID: DG-F910S--3.5-4
Sample Type: Client
Inject. Date: 30-Aug-2018 23:57:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-A-2
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:32:23 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 08:32:46

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	159264	250.0	
* 2 Fluorobenzene	96	10.709	10.709	0.000	98	1038777	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.554	0.010	85	751837	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	266689	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.305	9.303	0.011	92	67877	7.71	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.821	0.010	0	69421	7.34	
$ 10 Toluene-d8 (Surr)	98	12.822	12.834	0.000	94	284327	6.89	
$ 11 4-Bromofluorobenzene	95	16.053	16.065	0.000	90	71543	6.11	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	84	56773	6.08	
28 Acetone	58	6.485	6.481	0.011	97	9899	12.4	
59 Benzene	78	10.487	10.498	-0.001	86	2360	0.0630	
131 Butyl Ether	87	14.775	14.786	-0.001	91	613	0.0961	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	516581	6.44	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	164815	2.06	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	191241	2.39	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	568971	7.10	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	202601	NC	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	202601	2.53	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	536686	6.69	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	253881	3.17	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	62488	0.7795	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	125333	1.56	

QC Flag Legend

Processing Flags
NC - Not Calibrated

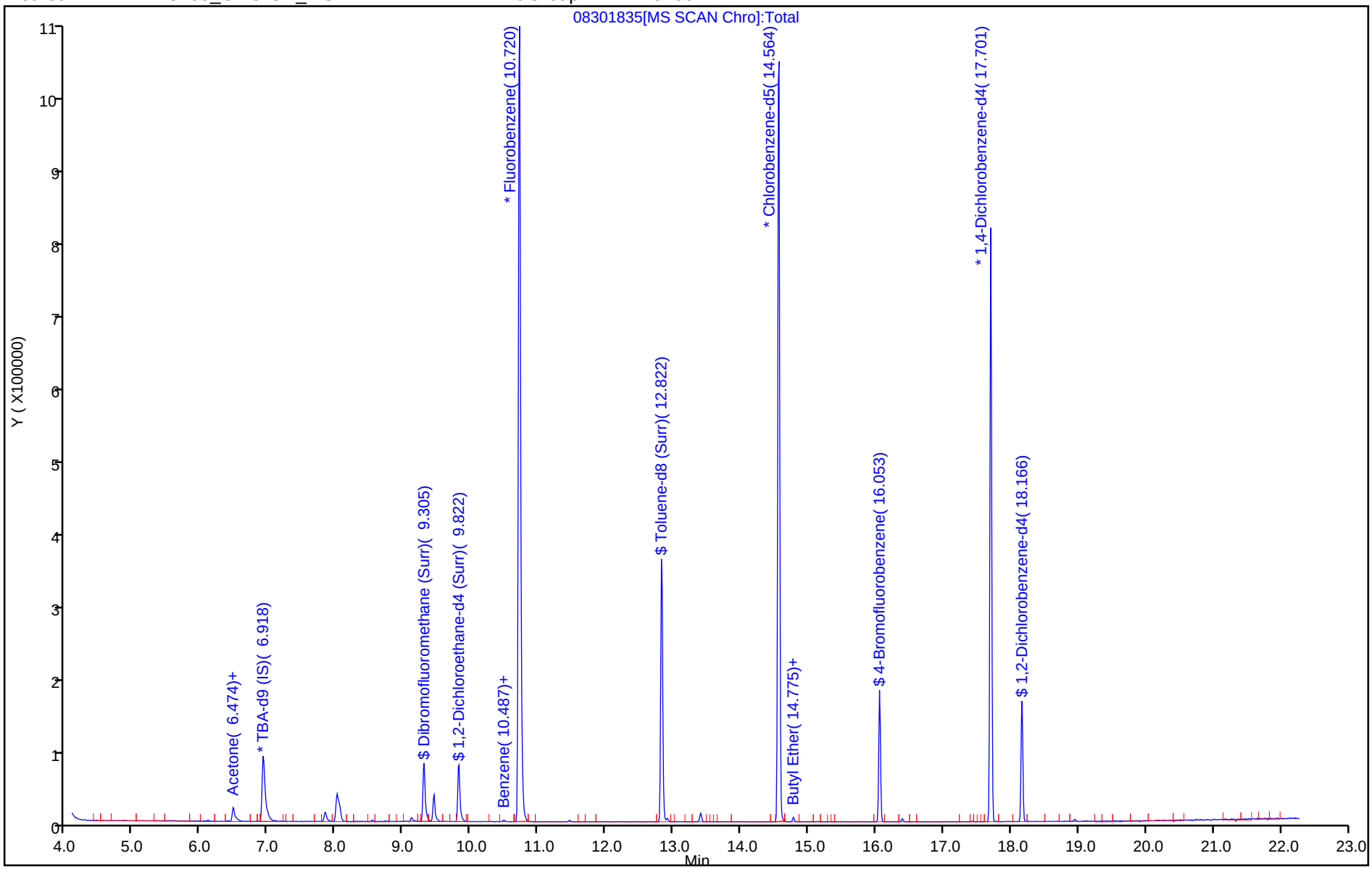
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 08:32:46 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301835.D				
Injection Date:	30-Aug-2018 23:57:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88263-A-2-A	Lab Sample ID:	720-88263-2	Worklist Smp#:	13
Client ID:	DG-F910S--3.5-4				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301835.D
Lims ID: 720-88263-A-2-A
Client ID: DG-F910S--3.5-4
Sample Type: Client
Inject. Date: 30-Aug-2018 23:57:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-A-2
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:32:23 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 08:32:46

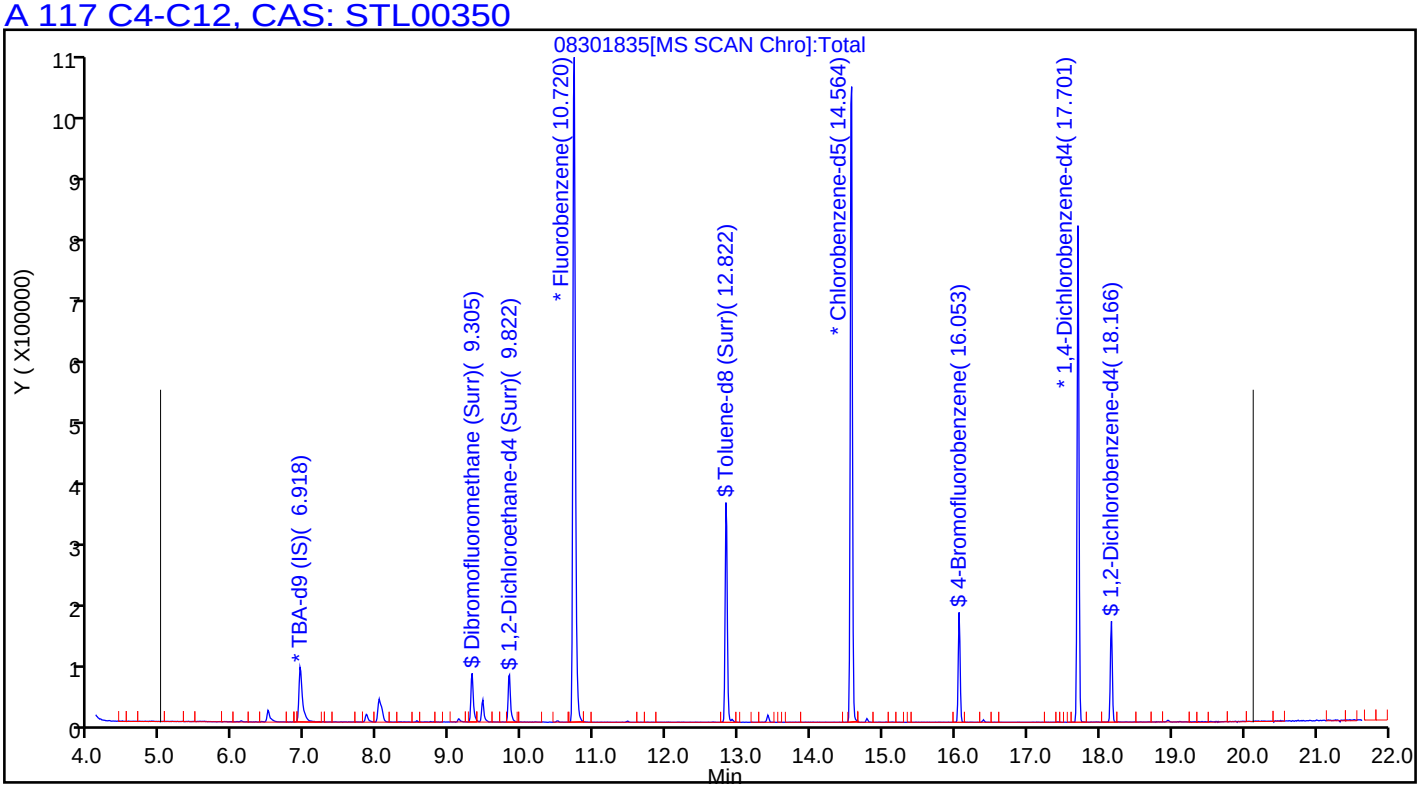
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.34	97.92
$ 10 Toluene-d8 (Surr)	7.50	6.89	91.91
$ 11 4-Bromofluorobenzene	7.50	6.11	81.48
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 31-Aug-2018 08:32:47 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301835.D				
Injection Date:	30-Aug-2018 23:57:30	Instrument ID:	CHMSV2		
Lims ID:	720-88263-A-2-A	Lab Sample ID:	720-88263-2		
Client ID:	DG-F910S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-H9S-0.5-1
Lab Sample ID: 720-88263-3
Matrix: Solid
Lab File ID: 08301836.D
Analysis Method: 8260B
Date Collected: 08/27/2018 08:25
Sample wt/vol: 5.957(g)
Date Analyzed: 08/31/2018 00:26
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250625
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.2	1.0
67-64-1	Acetone	ND		42	32
71-43-2	Benzene	ND		4.2	0.55
75-27-4	Dichlorobromomethane	ND		4.2	0.60
108-86-1	Bromobenzene	ND		4.2	0.66
74-97-5	Chlorobromomethane	ND		17	0.60
75-25-2	Bromoform	ND		4.2	1.7
74-83-9	Bromomethane	ND		8.4	0.66
78-93-3	2-Butanone (MEK)	ND		42	18
104-51-8	n-Butylbenzene	ND		4.2	0.84
135-98-8	sec-Butylbenzene	ND		4.2	0.60
98-06-6	tert-Butylbenzene	ND		4.2	0.61
75-15-0	Carbon disulfide	ND		4.2	1.7
56-23-5	Carbon tetrachloride	ND		4.2	0.52
108-90-7	Chlorobenzene	ND		4.2	0.58
75-00-3	Chloroethane	ND		8.4	0.47
67-66-3	Chloroform	ND		4.2	0.55
74-87-3	Chloromethane	ND		8.4	0.66
95-49-8	2-Chlorotoluene	ND		4.2	0.55
106-43-4	4-Chlorotoluene	ND		4.2	0.57
124-48-1	Chlorodibromomethane	ND		4.2	0.60
95-50-1	1,2-Dichlorobenzene	ND		4.2	0.57
541-73-1	1,3-Dichlorobenzene	ND		4.2	0.60
106-46-7	1,4-Dichlorobenzene	ND		4.2	0.60
142-28-9	1,3-Dichloropropane	ND		4.2	0.61
563-58-6	1,1-Dichloropropene	ND		4.2	0.58
96-12-8	1,2-Dibromo-3-Chloropropane	ND		8.4	1.4
106-93-4	Ethylene Dibromide	ND		4.2	1.2
74-95-3	Dibromomethane	ND		8.4	0.72
75-71-8	Dichlorodifluoromethane	ND		8.4	0.66
75-34-3	1,1-Dichloroethane	ND		4.2	0.57
107-06-2	1,2-Dichloroethane	ND		4.2	0.64
75-35-4	1,1-Dichloroethene	ND	*	4.2	0.52
156-59-2	cis-1,2-Dichloroethene	ND		4.2	0.57
156-60-5	trans-1,2-Dichloroethene	ND		4.2	0.63
78-87-5	1,2-Dichloropropane	ND		4.2	0.53

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-H9S-0.5-1
Lab Sample ID: 720-88263-3
Matrix: Solid
Lab File ID: 08301836.D
Analysis Method: 8260B
Date Collected: 08/27/2018 08:25
Sample wt/vol: 5.957(g)
Date Analyzed: 08/31/2018 00:26
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250625
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.2	0.58
10061-02-6	trans-1,3-Dichloropropene	ND		4.2	0.56
100-41-4	Ethylbenzene	ND		4.2	0.63
87-68-3	Hexachlorobutadiene	ND		4.2	0.76
591-78-6	2-Hexanone	ND		42	8.4
98-82-8	Isopropylbenzene	ND		4.2	0.57
99-87-6	4-Isopropyltoluene	ND		4.2	2.1
75-09-2	Methylene Chloride	ND		8.4	4.7
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		42	8.4
91-20-3	Naphthalene	ND		8.4	1.3
103-65-1	N-Propylbenzene	ND		4.2	0.55
100-42-5	Styrene	ND		4.2	0.53
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.2	0.64
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.2	0.63
127-18-4	Tetrachloroethene	ND		4.2	0.56
108-88-3	Toluene	ND		4.2	0.60
87-61-6	1,2,3-Trichlorobenzene	ND		4.2	0.62
120-82-1	1,2,4-Trichlorobenzene	ND		4.2	0.60
71-55-6	1,1,1-Trichloroethane	ND		4.2	0.51
79-00-5	1,1,2-Trichloroethane	ND		4.2	0.59
79-01-6	Trichloroethene	ND		4.2	0.53
75-69-4	Trichlorofluoromethane	ND		4.2	0.47
96-18-4	1,2,3-Trichloropropane	ND		4.2	0.65
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.2	1.7
95-63-6	1,2,4-Trimethylbenzene	ND		4.2	1.4
108-67-8	1,3,5-Trimethylbenzene	ND		4.2	0.55
108-05-4	Vinyl acetate	ND		17	4.2
75-01-4	Vinyl chloride	ND		4.2	0.61
1330-20-7	Xylenes, Total	ND		4.2	1.0
594-20-7	2,2-Dichloropropane	ND		4.2	1.7
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		210	84

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-H9S-0.5-1 Lab Sample ID: 720-88263-3

Matrix: Solid Lab File ID: 08301836.D

Analysis Method: 8260B Date Collected: 08/27/2018 08:25

Sample wt/vol: 5.957(g) Date Analyzed: 08/31/2018 00:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250625 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	84		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	114		60-140
2037-26-5	Toluene-d8 (Surr)	91		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301836.D
Lims ID: 720-88263-A-3-A
Client ID: DG-H9S--0.5-1
Sample Type: Client
Inject. Date: 31-Aug-2018 00:26:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-A-3
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:32:23 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 08:32:50

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	158363	250.0	
* 2 Fluorobenzene	96	10.709	10.709	0.000	98	976143	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.554	0.010	85	739360	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	282017	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.305	9.303	0.011	93	67112	8.12	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.821	0.010	0	75833	8.54	
$ 10 Toluene-d8 (Surr)	98	12.822	12.834	0.000	94	264681	6.83	
$ 11 4-Bromofluorobenzene	95	16.053	16.065	0.000	90	72375	6.29	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	84	60652	6.15	
28 Acetone	58	6.474	6.481	0.000	98	9409	12.5	
59 Benzene	78	10.488	10.498	0.000	12	1218	0.0346	
131 Butyl Ether	87	14.776	14.786	0.000	93	811	0.1292	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	489303	6.50	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	184523	2.45	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	213888	2.84	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	562703	7.47	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	227633	NC	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	227633	3.02	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	541644	7.19	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	297503	3.95	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	64341	0.8541	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	148236	1.97	

QC Flag Legend

Processing Flags
NC - Not Calibrated

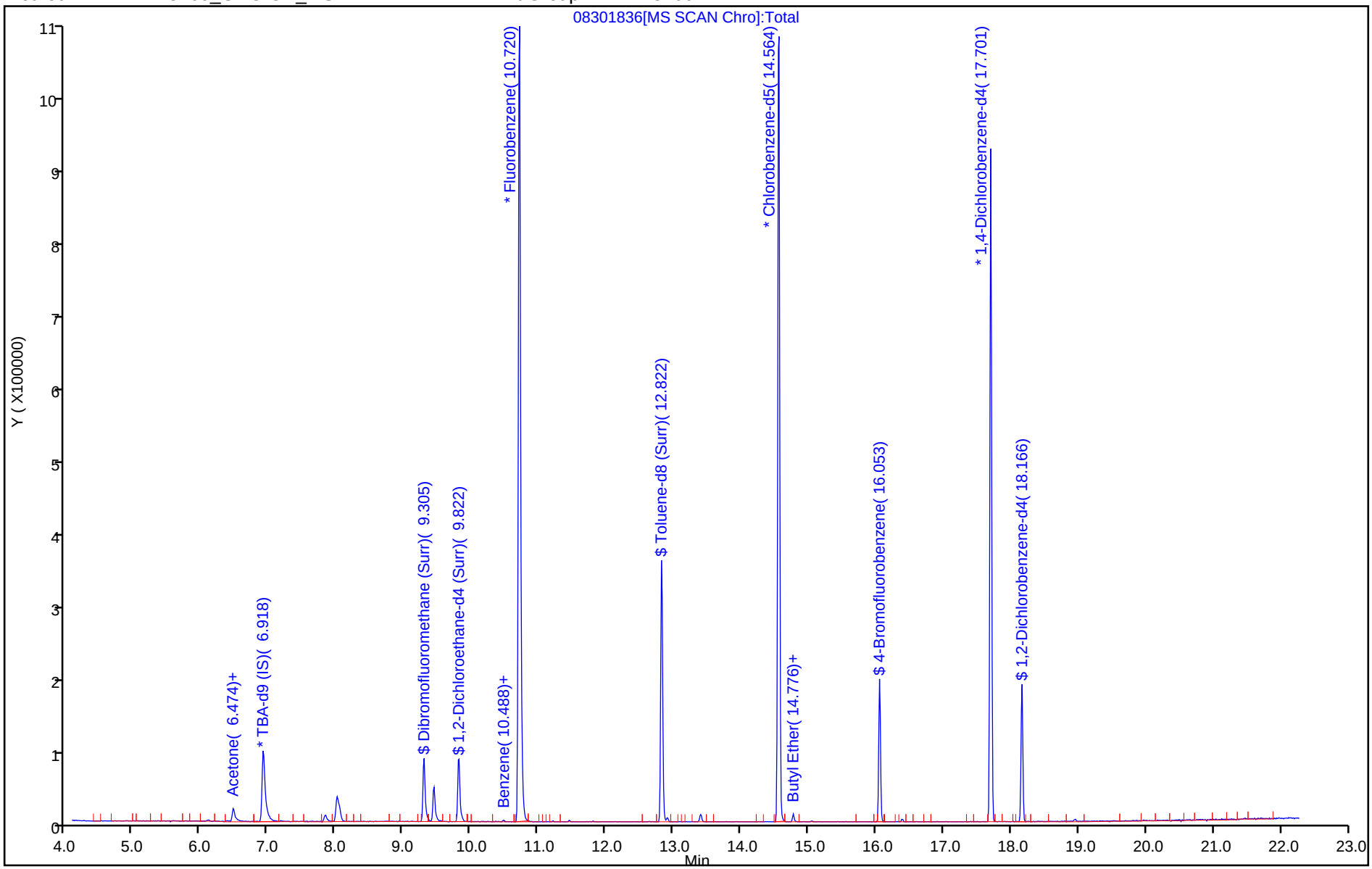
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 08:32:50 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301836.D				
Injection Date:	31-Aug-2018 00:26:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88263-A-3-A	Lab Sample ID:	720-88263-3	Worklist Smp#:	14
Client ID:	DG-H9S--0.5-1				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301836.D
Lims ID: 720-88263-A-3-A
Client ID: DG-H9S--0.5-1
Sample Type: Client
Inject. Date: 31-Aug-2018 00:26:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-A-3
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:32:23 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 08:32:50

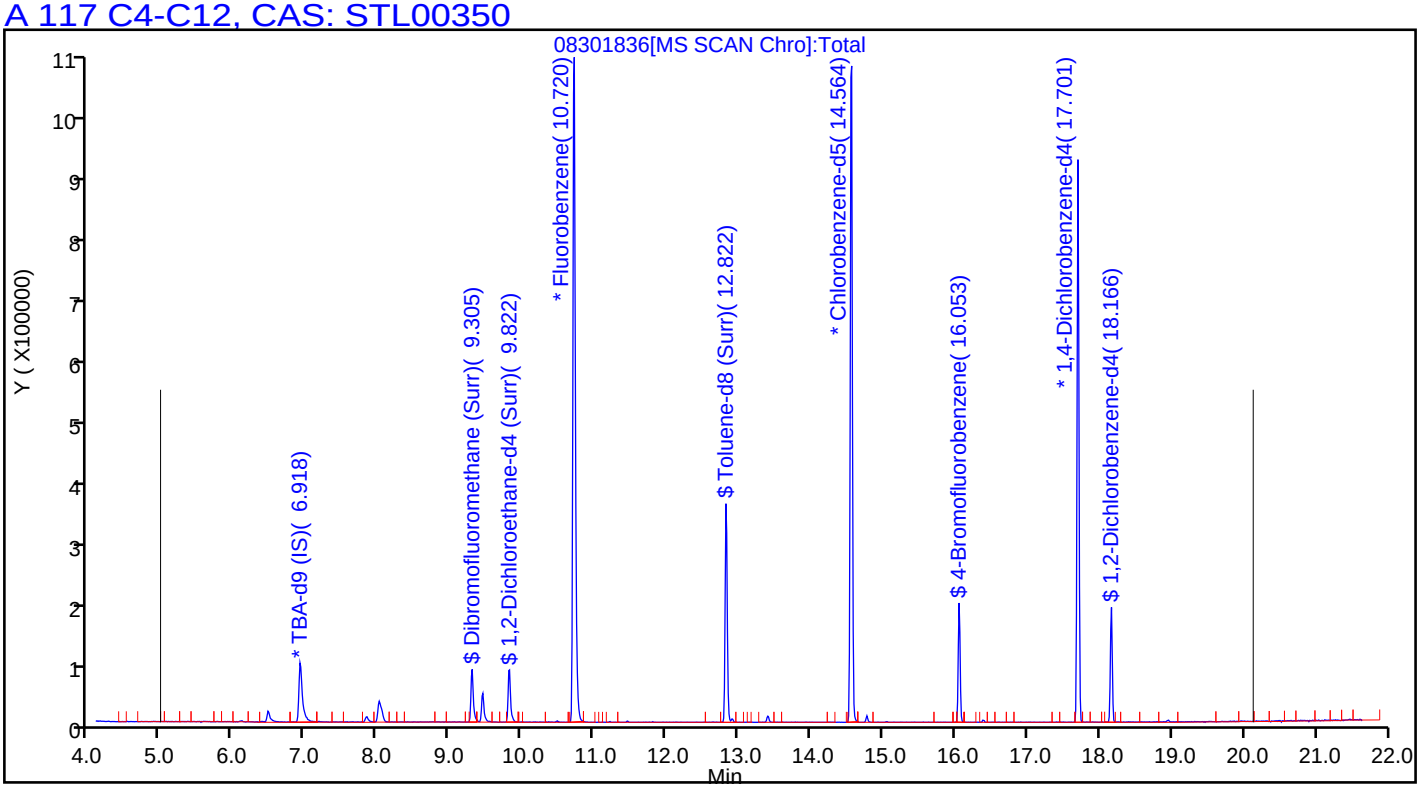
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.54	113.82
$ 10 Toluene-d8 (Surr)	7.50	6.83	91.05
$ 11 4-Bromofluorobenzene	7.50	6.29	83.82
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 31-Aug-2018 08:32:51 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301836.D				
Injection Date:	31-Aug-2018 00:26:30	Instrument ID:	CHMSV2		
Lims ID:	720-88263-A-3-A	Lab Sample ID:	720-88263-3		
Client ID:	DG-H9S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-H9S-3.5-4
Lab Sample ID: 720-88263-4
Matrix: Solid
Lab File ID: 08301837.D
Analysis Method: 8260B
Date Collected: 08/27/2018 08:25
Sample wt/vol: 6.436(g)
Date Analyzed: 08/31/2018 00:55
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250625
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND	*	3.9	0.93
67-64-1	Acetone	ND	*	39	30
71-43-2	Benzene	ND	*	3.9	0.50
75-27-4	Dichlorobromomethane	ND	*	3.9	0.56
108-86-1	Bromobenzene	ND	*	3.9	0.61
74-97-5	Chlorobromomethane	ND	*	16	0.56
75-25-2	Bromoform	ND	*	3.9	1.6
74-83-9	Bromomethane	ND	*	7.8	0.61
78-93-3	2-Butanone (MEK)	ND	*	39	16
104-51-8	n-Butylbenzene	ND	*	3.9	0.78
135-98-8	sec-Butylbenzene	ND	*	3.9	0.56
98-06-6	tert-Butylbenzene	ND	*	3.9	0.57
75-15-0	Carbon disulfide	ND	*	3.9	1.6
56-23-5	Carbon tetrachloride	ND	*	3.9	0.48
108-90-7	Chlorobenzene	ND	*	3.9	0.54
75-00-3	Chloroethane	ND	*	7.8	0.44
67-66-3	Chloroform	ND	*	3.9	0.51
74-87-3	Chloromethane	ND	*	7.8	0.61
95-49-8	2-Chlorotoluene	ND	*	3.9	0.50
106-43-4	4-Chlorotoluene	ND	*	3.9	0.53
124-48-1	Chlorodibromomethane	ND	*	3.9	0.55
95-50-1	1,2-Dichlorobenzene	ND	*	3.9	0.53
541-73-1	1,3-Dichlorobenzene	ND	*	3.9	0.56
106-46-7	1,4-Dichlorobenzene	ND	*	3.9	0.55
142-28-9	1,3-Dichloropropane	ND	*	3.9	0.57
563-58-6	1,1-Dichloropropene	ND	*	3.9	0.54
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	7.8	1.3
106-93-4	Ethylene Dibromide	ND	*	3.9	1.1
74-95-3	Dibromomethane	ND	*	7.8	0.67
75-71-8	Dichlorodifluoromethane	ND	*	7.8	0.61
75-34-3	1,1-Dichloroethane	ND	*	3.9	0.53
107-06-2	1,2-Dichloroethane	ND	*	3.9	0.59
75-35-4	1,1-Dichloroethene	ND	*	3.9	0.48
156-59-2	cis-1,2-Dichloroethene	ND	*	3.9	0.53
156-60-5	trans-1,2-Dichloroethene	ND	*	3.9	0.58
78-87-5	1,2-Dichloropropane	ND	*	3.9	0.49

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-H9S-3.5-4
Lab Sample ID: 720-88263-4
Matrix: Solid
Lab File ID: 08301837.D
Analysis Method: 8260B
Date Collected: 08/27/2018 08:25
Sample wt/vol: 6.436(g)
Date Analyzed: 08/31/2018 00:55
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250625
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND	*	3.9	0.54
10061-02-6	trans-1,3-Dichloropropene	ND	*	3.9	0.52
100-41-4	Ethylbenzene	ND	*	3.9	0.58
87-68-3	Hexachlorobutadiene	ND	*	3.9	0.70
591-78-6	2-Hexanone	ND	*	39	7.8
98-82-8	Isopropylbenzene	ND	*	3.9	0.53
99-87-6	4-Isopropyltoluene	ND	*	3.9	1.9
75-09-2	Methylene Chloride	ND	*	7.8	4.4
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	*	39	7.8
91-20-3	Naphthalene	ND	*	7.8	1.2
103-65-1	N-Propylbenzene	ND	*	3.9	0.51
100-42-5	Styrene	ND	*	3.9	0.49
630-20-6	1,1,1,2-Tetrachloroethane	ND	*	3.9	0.59
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	3.9	0.58
127-18-4	Tetrachloroethene	ND	*	3.9	0.52
108-88-3	Toluene	ND	*	3.9	0.55
87-61-6	1,2,3-Trichlorobenzene	ND	*	3.9	0.57
120-82-1	1,2,4-Trichlorobenzene	ND	*	3.9	0.55
71-55-6	1,1,1-Trichloroethane	ND	*	3.9	0.47
79-00-5	1,1,2-Trichloroethane	ND	*	3.9	0.54
79-01-6	Trichloroethene	ND	*	3.9	0.49
75-69-4	Trichlorofluoromethane	ND	*	3.9	0.44
96-18-4	1,2,3-Trichloropropane	ND	*	3.9	0.60
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	3.9	1.6
95-63-6	1,2,4-Trimethylbenzene	ND	*	3.9	1.3
108-67-8	1,3,5-Trimethylbenzene	ND	*	3.9	0.50
108-05-4	Vinyl acetate	ND	*	16	3.9
75-01-4	Vinyl chloride	ND	*	3.9	0.57
1330-20-7	Xylenes, Total	ND		3.9	0.95
594-20-7	2,2-Dichloropropane	ND	*	3.9	1.6
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND	*	190	78

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-H9S-3.5-4 Lab Sample ID: 720-88263-4

Matrix: Solid Lab File ID: 08301837.D

Analysis Method: 8260B Date Collected: 08/27/2018 08:25

Sample wt/vol: 6.436(g) Date Analyzed: 08/31/2018 00:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250625 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	84	*	45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	119	*	60-140
2037-26-5	Toluene-d8 (Surr)	95	*	58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301837.D
Lims ID: 720-88263-A-4-A
Client ID: DG-H9S--3.5-4
Sample Type: Client
Inject. Date: 31-Aug-2018 00:55:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-A-4
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:32:23 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 08:34:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	59940	250.0	s
* 2 Fluorobenzene	96	10.720	10.709	0.011	98	360587	25.0	s
* 4 Chlorobenzene-d5	117	14.564	14.554	0.010	85	285402	25.0	s
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	114194	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.305	9.303	0.011	93	24565	8.04	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.812	9.821	0.000	0	29224	8.91	
$ 10 Toluene-d8 (Surr)	98	12.822	12.834	0.000	94	101900	7.12	
$ 11 4-Bromofluorobenzene	95	16.053	16.065	0.000	92	27957	6.29	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	83	23362	5.85	
28 Acetone	58	6.485	6.481	0.011	97	4940	17.8	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	253150	9.10	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	119224	4.28	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	129383	4.65	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	329388	11.8	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	137551	NC	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	137551	4.94	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	285344	10.3	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	207853	7.47	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	33774	1.21	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	112299	4.04	

QC Flag Legend

Processing Flags
NC - Not Calibrated
s - Failed ISTD Recovery Test

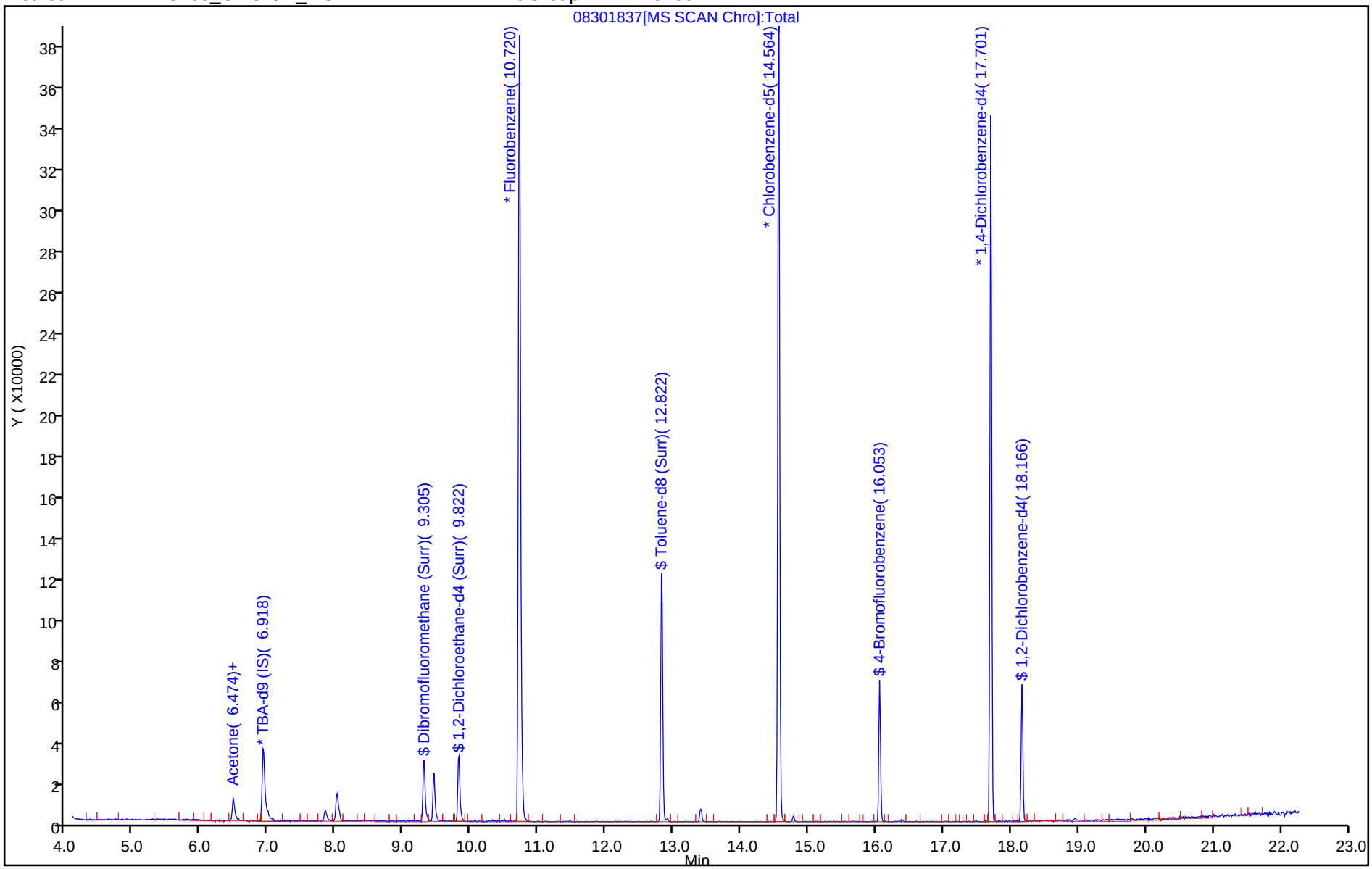
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 08:34:49 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301837.D				
Injection Date:	31-Aug-2018 00:55:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88263-A-4-A	Lab Sample ID:	720-88263-4	Worklist Smp#:	15
Client ID:	DG-H9S--3.5-4				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301837.D
Lims ID: 720-88263-A-4-A
Client ID: DG-H9S--3.5-4
Sample Type: Client
Inject. Date: 31-Aug-2018 00:55:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-A-4
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:32:23 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 08:34:48

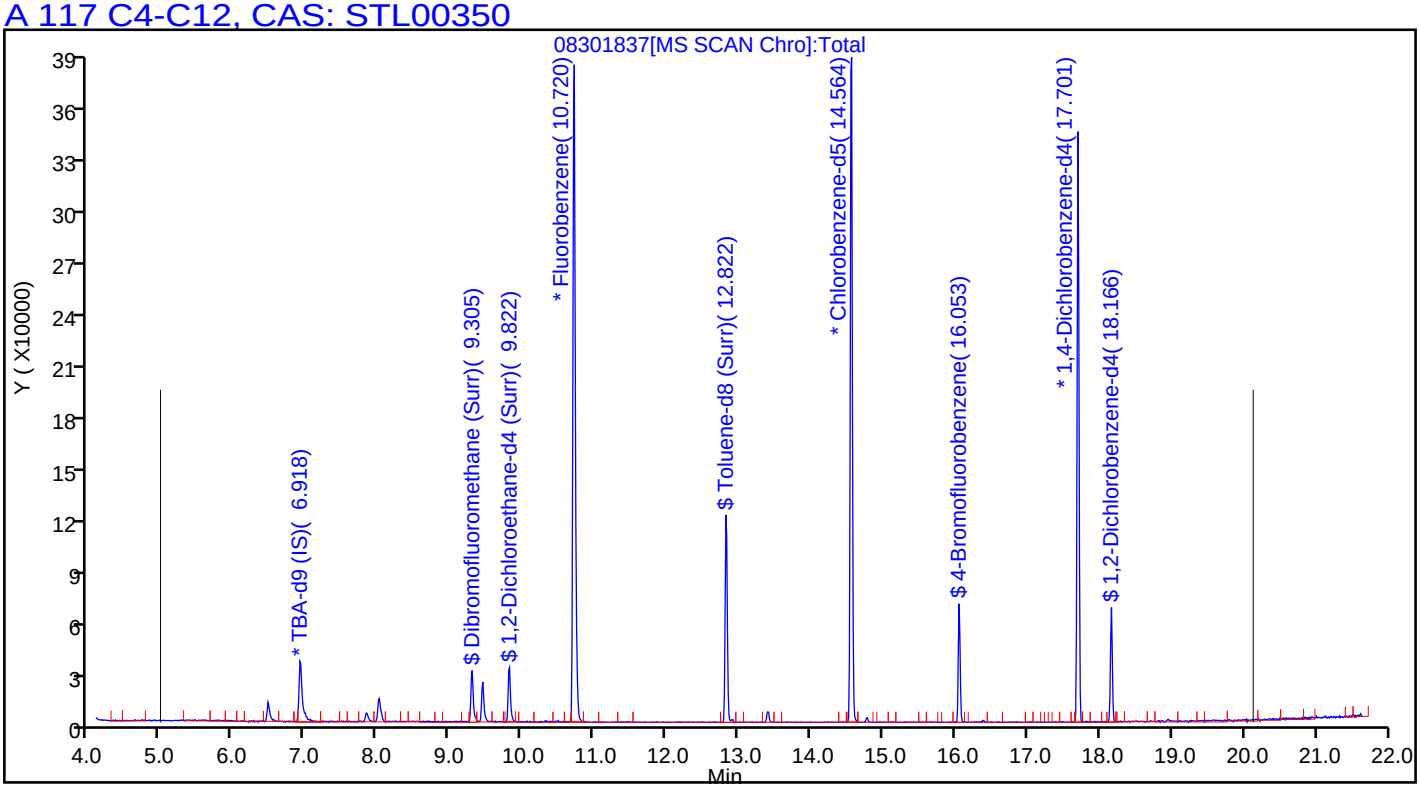
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.91	118.75
$ 10 Toluene-d8 (Surr)	7.50	7.12	94.89
$ 11 4-Bromofluorobenzene	7.50	6.29	83.88
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 31-Aug-2018 08:34:50 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301837.D				
Injection Date:	31-Aug-2018 00:55:30	Instrument ID:	CHMSV2		
Lims ID:	720-88263-A-4-A	Lab Sample ID:	720-88263-4		
Client ID:	DG-H9S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-H9S-9.5-10
Lab Sample ID: 720-88263-5
Matrix: Solid
Lab File ID: 08311819.D
Analysis Method: 8260B
Date Collected: 08/27/2018 08:25
Sample wt/vol: 6.393(g)
Date Analyzed: 08/31/2018 14:42
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250644
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		3.9	0.94
67-64-1	Acetone	38	J	39	30
71-43-2	Benzene	ND		3.9	0.51
75-27-4	Dichlorobromomethane	ND		3.9	0.56
108-86-1	Bromobenzene	ND		3.9	0.62
74-97-5	Chlorobromomethane	ND		16	0.56
75-25-2	Bromoform	ND		3.9	1.6
74-83-9	Bromomethane	ND		7.8	0.62
78-93-3	2-Butanone (MEK)	ND		39	16
104-51-8	n-Butylbenzene	ND		3.9	0.78
135-98-8	sec-Butylbenzene	ND		3.9	0.56
98-06-6	tert-Butylbenzene	ND		3.9	0.57
75-15-0	Carbon disulfide	ND		3.9	1.6
56-23-5	Carbon tetrachloride	ND		3.9	0.48
108-90-7	Chlorobenzene	ND		3.9	0.54
75-00-3	Chloroethane	ND		7.8	0.44
67-66-3	Chloroform	ND		3.9	0.52
74-87-3	Chloromethane	ND		7.8	0.62
95-49-8	2-Chlorotoluene	ND		3.9	0.51
106-43-4	4-Chlorotoluene	ND		3.9	0.53
124-48-1	Chlorodibromomethane	ND		3.9	0.56
95-50-1	1,2-Dichlorobenzene	ND		3.9	0.53
541-73-1	1,3-Dichlorobenzene	ND		3.9	0.56
106-46-7	1,4-Dichlorobenzene	ND		3.9	0.56
142-28-9	1,3-Dichloropropane	ND		3.9	0.57
563-58-6	1,1-Dichloropropene	ND		3.9	0.54
96-12-8	1,2-Dibromo-3-Chloropropane	ND		7.8	1.3
106-93-4	Ethylene Dibromide	ND		3.9	1.1
74-95-3	Dibromomethane	ND		7.8	0.67
75-71-8	Dichlorodifluoromethane	ND		7.8	0.62
75-34-3	1,1-Dichloroethane	ND		3.9	0.53
107-06-2	1,2-Dichloroethane	ND		3.9	0.59
75-35-4	1,1-Dichloroethene	ND	*	3.9	0.48
156-59-2	cis-1,2-Dichloroethene	ND		3.9	0.53
156-60-5	trans-1,2-Dichloroethene	ND		3.9	0.59
78-87-5	1,2-Dichloropropane	ND		3.9	0.49

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-H9S-9.5-10 Lab Sample ID: 720-88263-5

Matrix: Solid Lab File ID: 08311819.D

Analysis Method: 8260B Date Collected: 08/27/2018 08:25

Sample wt/vol: 6.393(g) Date Analyzed: 08/31/2018 14:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250644 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		3.9	0.54
10061-02-6	trans-1,3-Dichloropropene	ND		3.9	0.52
100-41-4	Ethylbenzene	ND		3.9	0.59
87-68-3	Hexachlorobutadiene	ND		3.9	0.70
591-78-6	2-Hexanone	ND		39	7.8
98-82-8	Isopropylbenzene	ND		3.9	0.53
99-87-6	4-Isopropyltoluene	ND		3.9	2.0
75-09-2	Methylene Chloride	ND		7.8	4.4
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		39	7.8
91-20-3	Naphthalene	ND		7.8	1.2
103-65-1	N-Propylbenzene	ND		3.9	0.52
100-42-5	Styrene	ND		3.9	0.49
630-20-6	1,1,1,2-Tetrachloroethane	ND		3.9	0.59
79-34-5	1,1,2,2-Tetrachloroethane	ND		3.9	0.59
127-18-4	Tetrachloroethene	ND		3.9	0.52
108-88-3	Toluene	ND		3.9	0.56
87-61-6	1,2,3-Trichlorobenzene	ND		3.9	0.58
120-82-1	1,2,4-Trichlorobenzene	ND		3.9	0.56
71-55-6	1,1,1-Trichloroethane	ND		3.9	0.48
79-00-5	1,1,2-Trichloroethane	ND		3.9	0.55
79-01-6	Trichloroethene	ND		3.9	0.49
75-69-4	Trichlorofluoromethane	ND		3.9	0.44
96-18-4	1,2,3-Trichloropropane	ND		3.9	0.60
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	3.9	1.6
95-63-6	1,2,4-Trimethylbenzene	ND		3.9	1.3
108-67-8	1,3,5-Trimethylbenzene	ND		3.9	0.51
108-05-4	Vinyl acetate	ND		16	3.9
75-01-4	Vinyl chloride	ND		3.9	0.57
1330-20-7	Xylenes, Total	ND		3.9	0.95
594-20-7	2,2-Dichloropropane	ND		3.9	1.6
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		200	78

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-H9S-9.5-10 Lab Sample ID: 720-88263-5

Matrix: Solid Lab File ID: 08311819.D

Analysis Method: 8260B Date Collected: 08/27/2018 08:25

Sample wt/vol: 6.393(g) Date Analyzed: 08/31/2018 14:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250644 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	95		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		60-140
2037-26-5	Toluene-d8 (Surr)	91		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311819.D
Lims ID: 720-88263-B-5-A
Client ID: DG-H9S--9.5-10
Sample Type: Client
Inject. Date: 31-Aug-2018 14:42:30 ALS Bottle#: 18 Worklist Smp#: 20
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-B-5
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 31-Aug-2018 15:17:20 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: salgadoa Date: 31-Aug-2018 15:17:20

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.825	6.819	0.006	0	226734	250.0	
* 2 Fluorobenzene	96	10.598	10.599	-0.001	98	654243	25.0	
* 4 Chlorobenzene-d5	117	14.439	14.445	-0.006	87	498182	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.585	-0.006	95	257051	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.190	9.190	0.000	94	56237	7.66	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.708	9.708	0.000	0	73041	7.94	
$ 10 Toluene-d8 (Surr)	98	12.708	12.708	0.000	93	181352	6.85	
$ 11 4-Bromofluorobenzene	95	15.933	15.926	0.000	93	68850	7.11	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.036	0.000	84	61504	6.18	
24 Acrolein	56	6.227	6.221	0.012	4	275	0.3187	
28 Acetone	58	6.374	6.374	0.000	99	18411	24.0	
34 Methylene Chloride	84	7.093	7.093	0.018	93	586	0.0828	a
144 Methyl acetate	43	7.136	7.124	0.012	97	1887	0.3375	
37 Carbon disulfide	76	7.367	7.367	0.000	99	6670	0.4341	a
45 2-Butanone (MEK)	72	8.648	8.635	0.012	98	2221	2.53	
59 Benzene	78	10.367	10.367	-0.006	82	1053	0.0378	a
75 Toluene	92	12.793	12.788	0.000	97	1743	0.1064	
128 Butyl Ether	87	14.665	14.652	0.006	95	1231	0.2483	
85 m-Xylene & p-Xylene	91	14.933	14.933	0.000	0	1394	0.0554	a
88 o-Xylene	91	15.427	15.427	-0.006	1	323	0.0124	a
101 1,2,4-Trimethylbenzene	105	17.280	17.280	0.000	1	741	0.0268	a
111 1,2,4-Trichlorobenzene	180	20.414	20.414	0.000	1	396	0.0350	a
29 Pentane	43	6.386	6.410	-0.024	70	62897	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	522907	8.72	
A 154 C6-C8	1	10.852	(8.550-13.153)		0	157569	2.63	
A 155 C6-C9	1	11.842	(8.550-15.134)		0	220149	3.67	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	596699	9.95	
A 119 C6-C10	1	12.732	(8.550-16.914)		0	257363	4.29	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	536593	8.94	
A 120 C6-C12	1	14.278	(8.550-20.005)		0	331155	5.52	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	101794	1.70	

Report Date: 31-Aug-2018 15:17:20 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311819.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
A 121 C7-C12	1	15.451	(10.897-20.005)		0	219478	3.66	
S 122 Xylenes, Total	1				0		0.0678	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

a - User Assigned ID

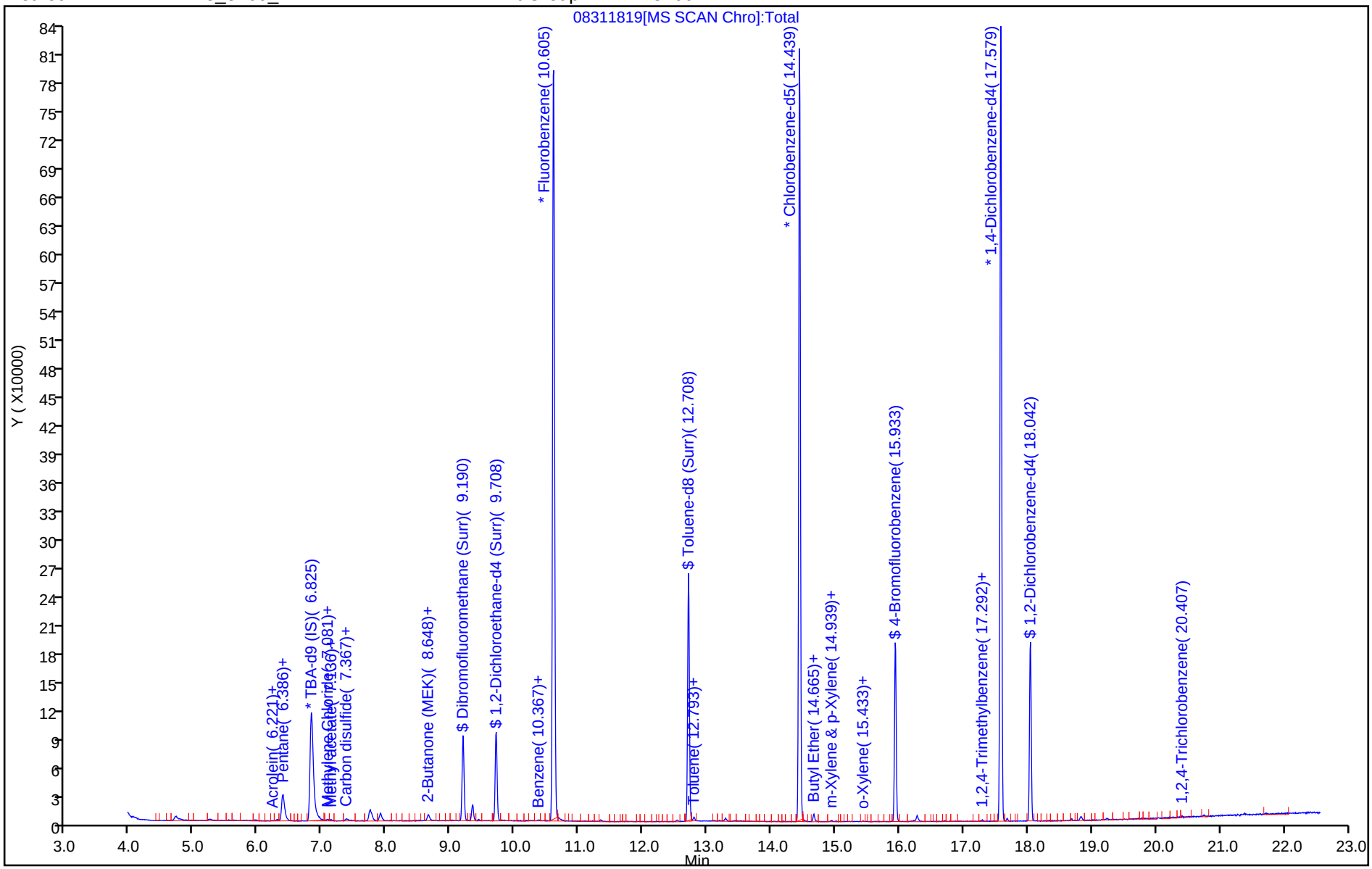
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 15:17:21 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311819.D				
Injection Date:	31-Aug-2018 14:42:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88263-B-5-A	Lab Sample ID:	720-88263-5	Worklist Smp#:	20
Client ID:	DG-H9S--9.5-10				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311819.D
Lims ID: 720-88263-B-5-A
Client ID: DG-H9S--9.5-10
Sample Type: Client
Inject. Date: 31-Aug-2018 14:42:30 ALS Bottle#: 18 Worklist Smp#: 20
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-B-5
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 31-Aug-2018 15:17:20 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: salgadoa Date: 31-Aug-2018 15:17:20

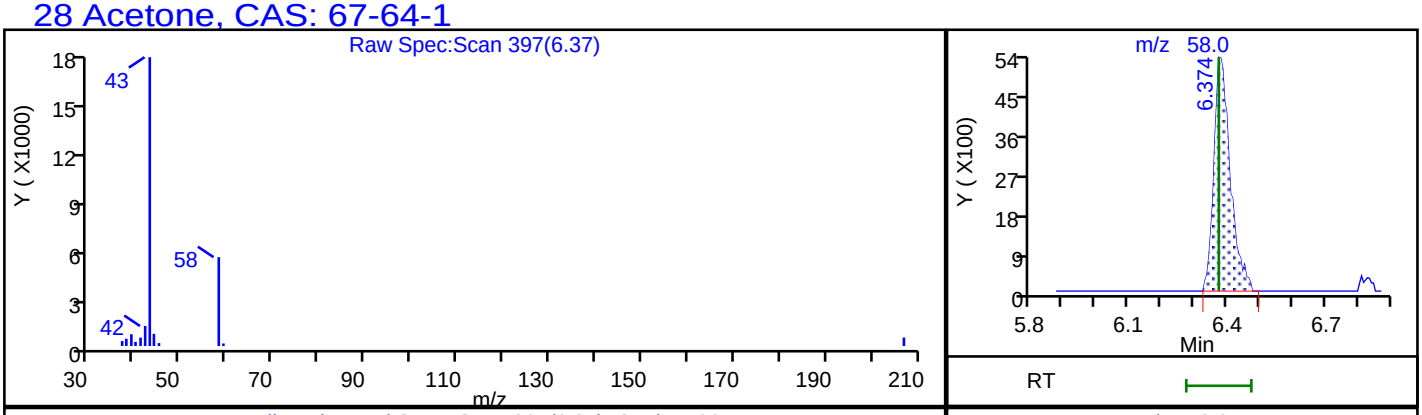
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.94	105.87
$ 10 Toluene-d8 (Surr)	7.50	6.85	91.39
$ 11 4-Bromofluorobenzene	7.50	7.11	94.75
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

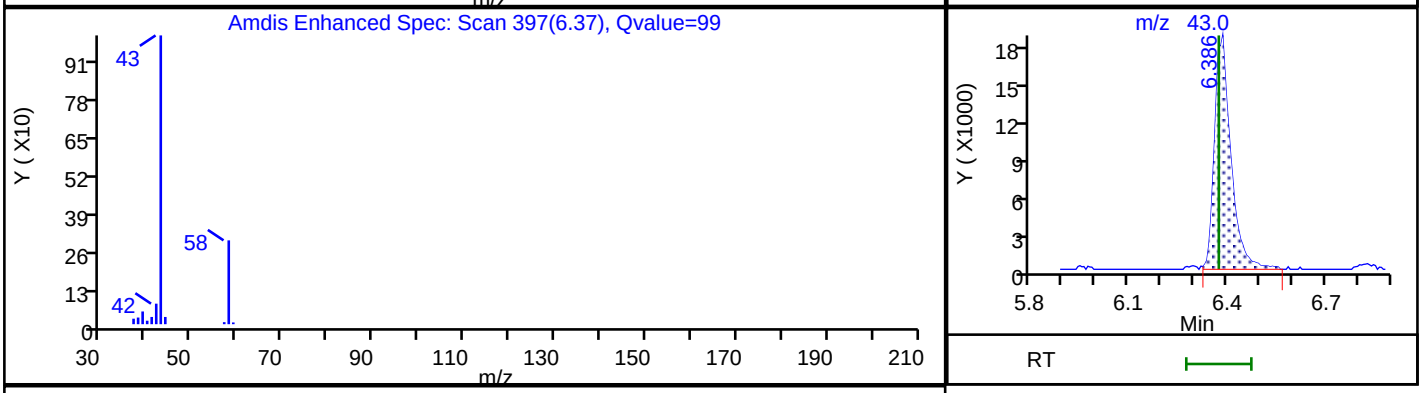
Report Date: 31-Aug-2018 15:17:21 Chrom Revision: 2.3 19-Jul-2018 15:14:50

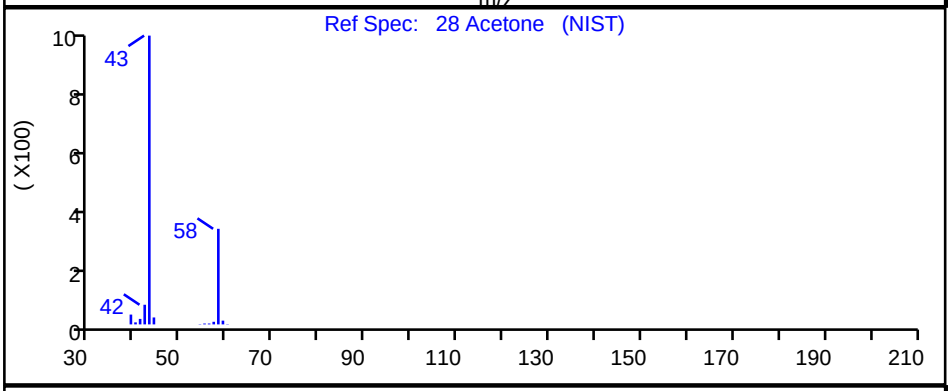
TestAmerica Pleasanton

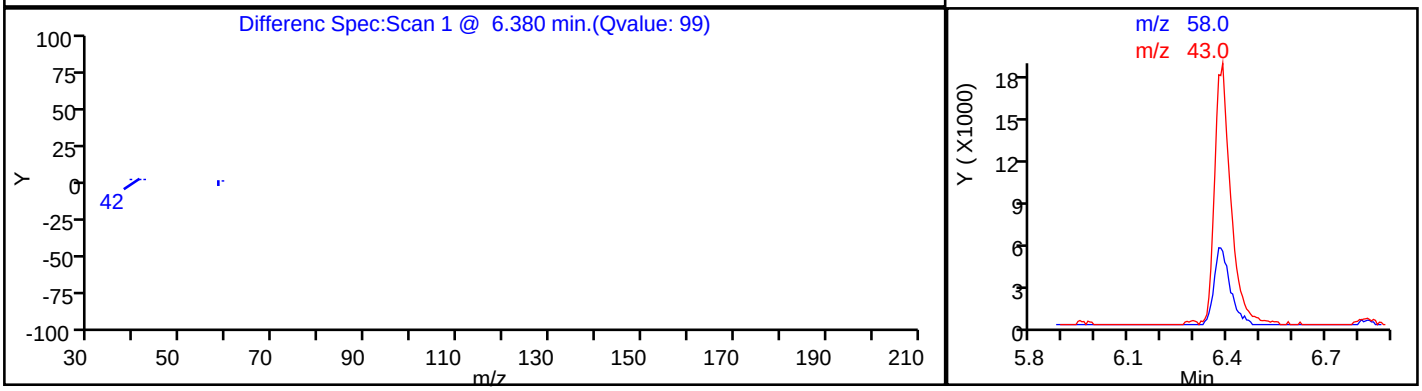
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311819.D				
Injection Date:	31-Aug-2018 14:42:30	Instrument ID:	HP13		
Lims ID:	720-88263-B-5-A	Lab Sample ID:	720-88263-5		
Client ID:	DG-H9S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	18	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1







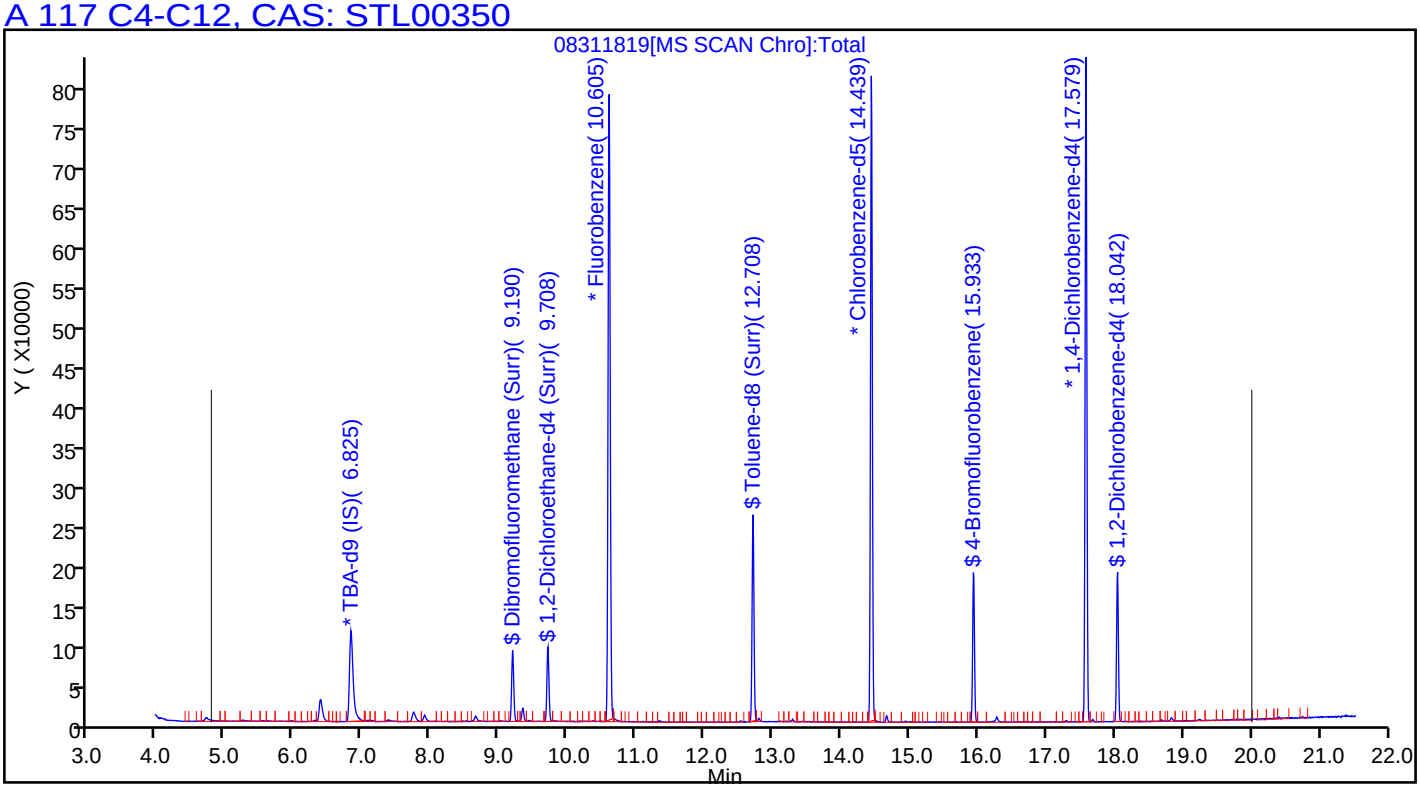


Report Date: 31-Aug-2018 15:17:24 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311819.D				
Injection Date:	31-Aug-2018 14:42:30	Instrument ID:	HP13		
Lims ID:	720-88263-B-5-A	Lab Sample ID:	720-88263-5		
Client ID:	DG-H9S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	18	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

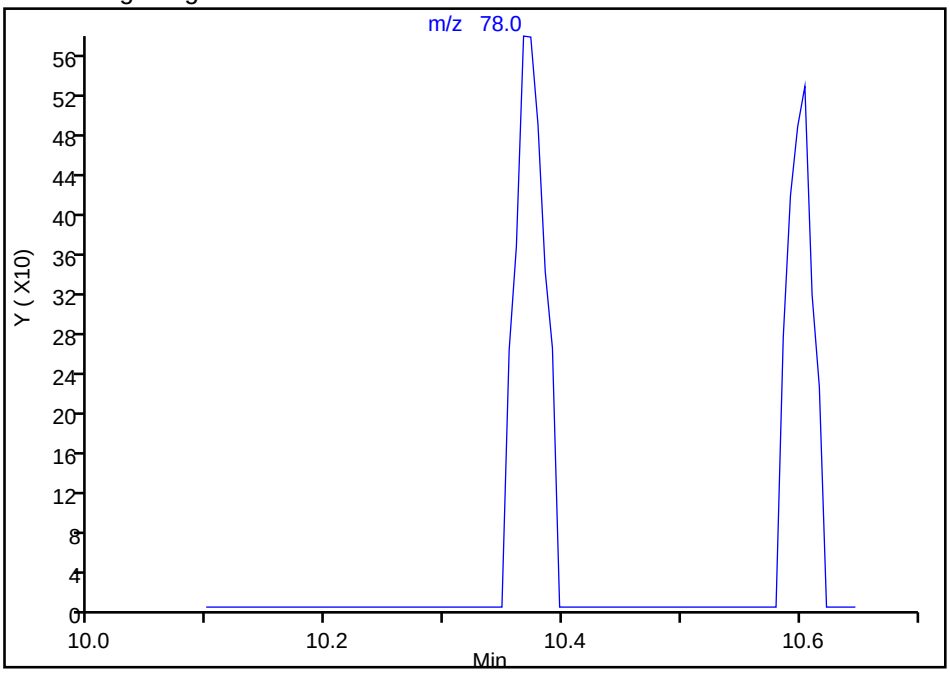
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311819.D				
Injection Date:	31-Aug-2018 14:42:30	Instrument ID:	HP13		
Lims ID:	720-88263-B-5-A	Lab Sample ID:	720-88263-5		
Client ID:	DG-H9S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	18	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

59 Benzene, CAS: 71-43-2

Signal: 1

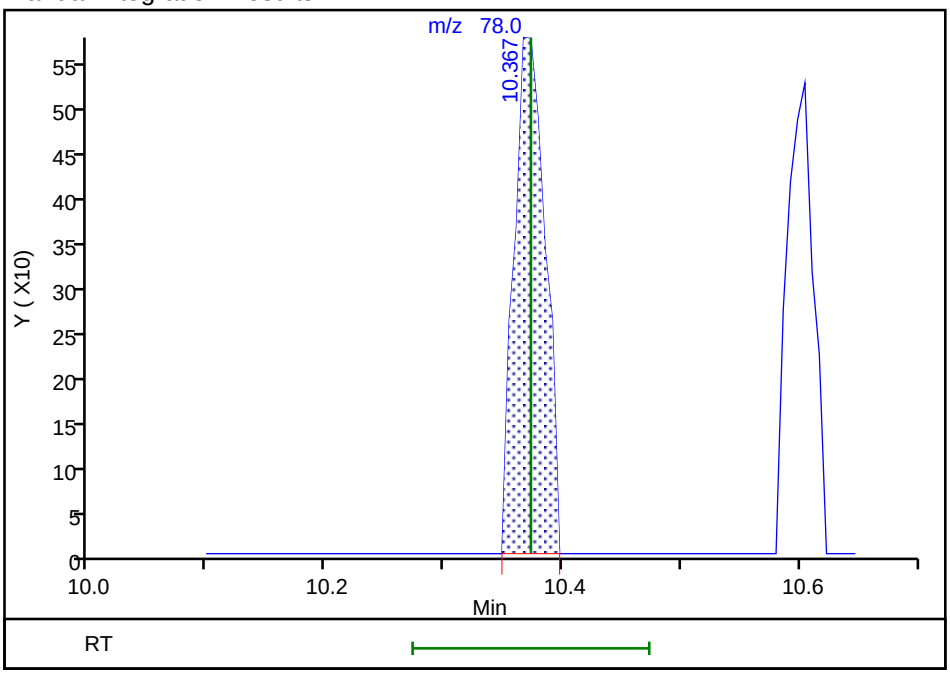
Not Detected
Expected RT: 10.37

Processing Integration Results



Manual Integration Results

RT: 10.37
Area: 1053
Amount: 0.037823
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 15:16:29
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

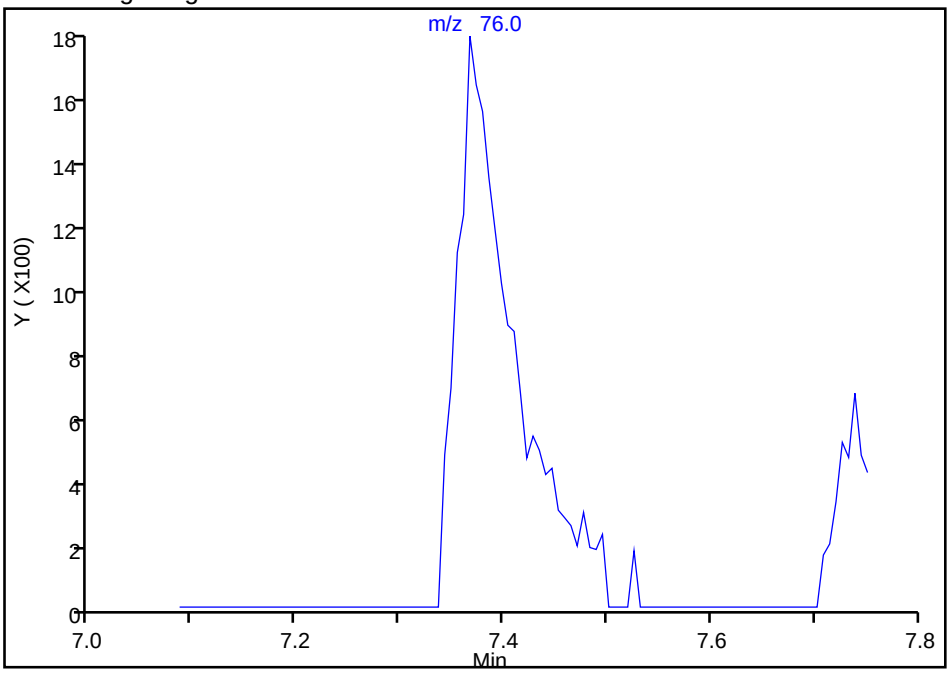
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311819.D				
Injection Date:	31-Aug-2018 14:42:30	Instrument ID:	HP13		
Lims ID:	720-88263-B-5-A	Lab Sample ID:	720-88263-5		
Client ID:	DG-H9S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	18	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

37 Carbon disulfide, CAS: 75-15-0

Signal: 1

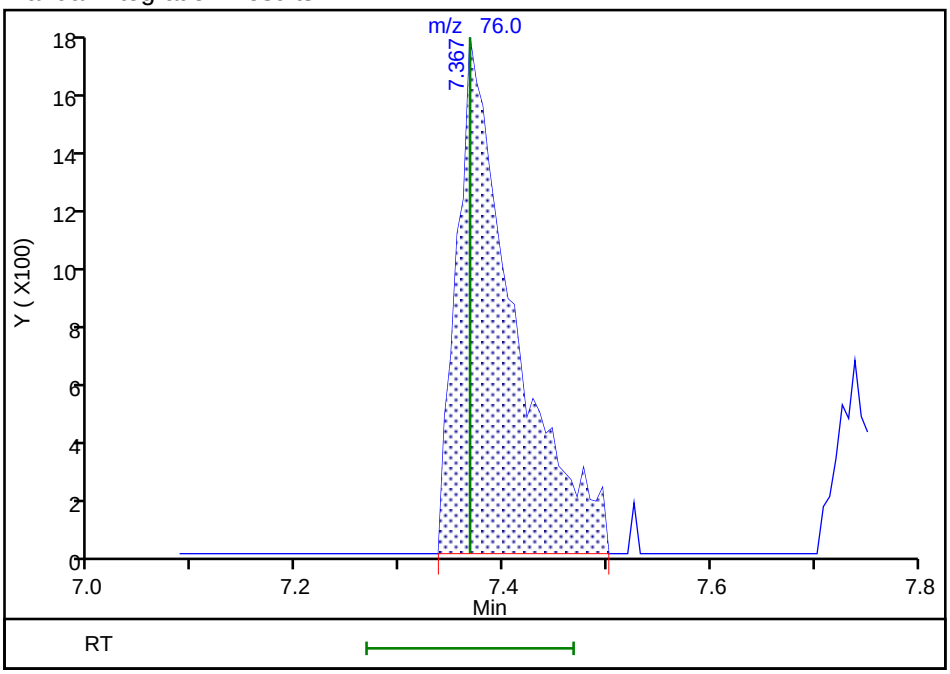
Not Detected
Expected RT: 7.37

Processing Integration Results



RT: 7.37
Area: 6670
Amount: 0.434053
Amount Units: ug/L

Manual Integration Results



Reviewer: salgadoa, 31-Aug-2018 15:16:15
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

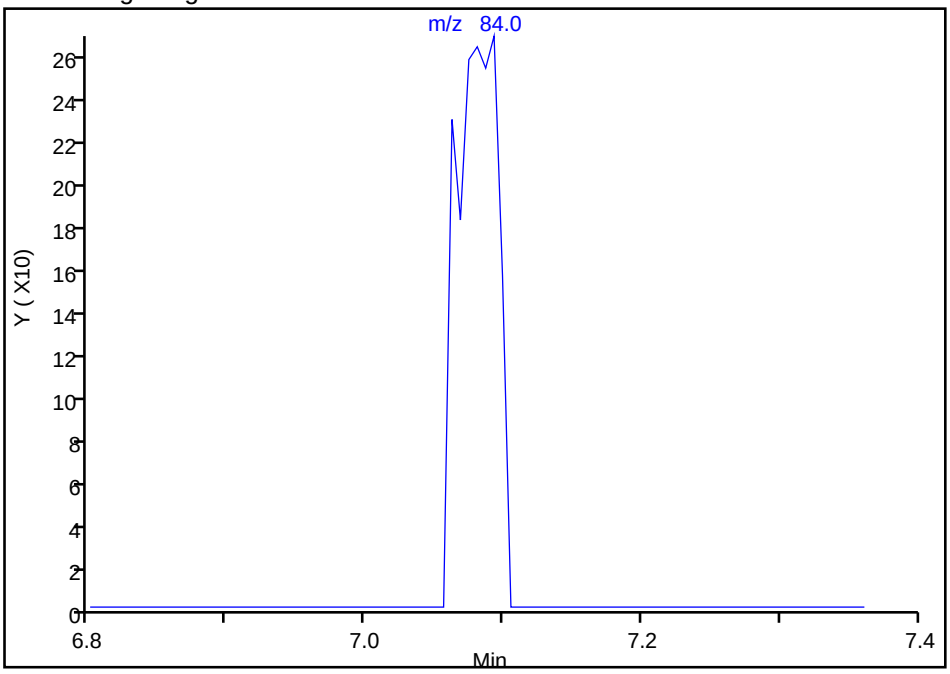
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311819.D				
Injection Date:	31-Aug-2018 14:42:30	Instrument ID:	HP13		
Lims ID:	720-88263-B-5-A	Lab Sample ID:	720-88263-5		
Client ID:	DG-H9S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	18	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

34 Methylene Chloride, CAS: 75-09-2

Signal: 1

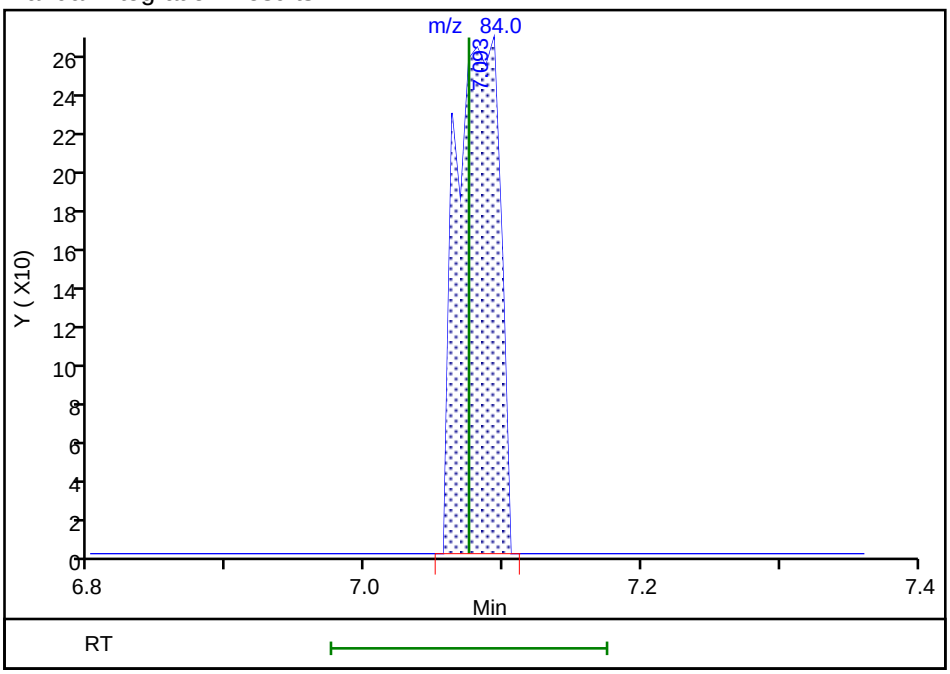
Not Detected
Expected RT: 7.07

Processing Integration Results



RT: 7.09
Area: 586
Amount: 0.082772
Amount Units: ug/L

Manual Integration Results



Reviewer: salgadoa, 31-Aug-2018 15:16:10
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

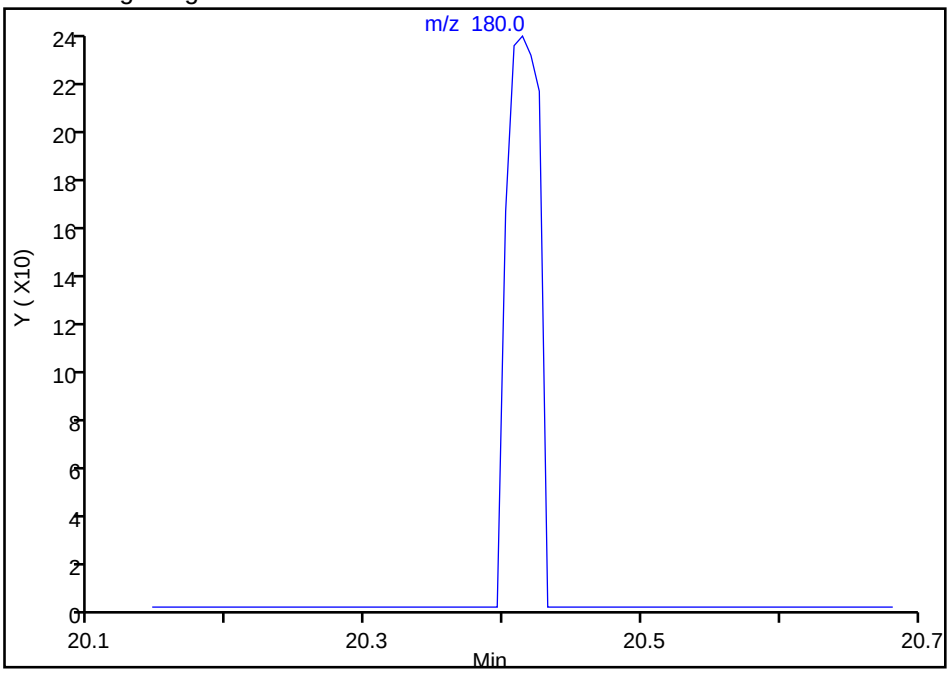
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311819.D				
Injection Date:	31-Aug-2018 14:42:30	Instrument ID:	HP13		
Lims ID:	720-88263-B-5-A	Lab Sample ID:	720-88263-5		
Client ID:	DG-H9S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	18	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

111 1,2,4-Trichlorobenzene, CAS: 120-82-1

Signal: 1

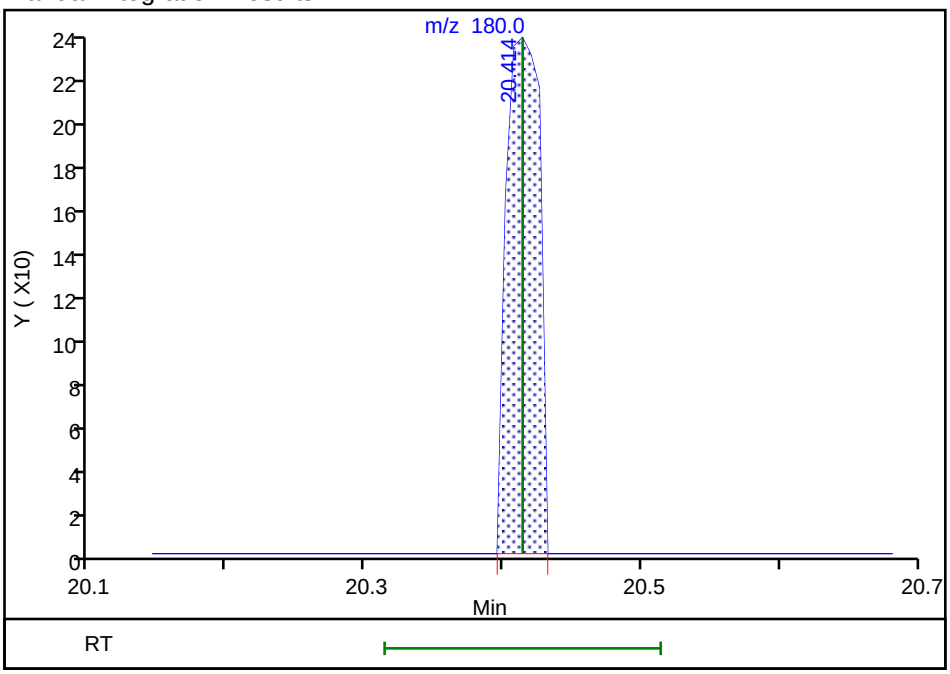
Processing Integration Results

Not Detected
Expected RT: 20.41



Manual Integration Results

RT: 20.41
Area: 396
Amount: 0.034994
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 15:17:14
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

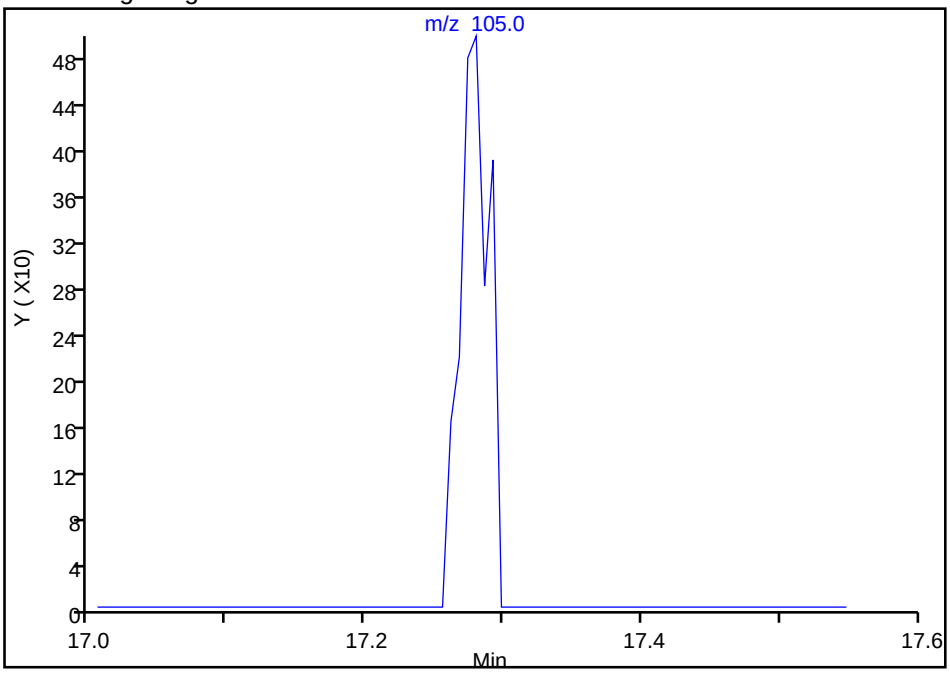
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311819.D				
Injection Date:	31-Aug-2018 14:42:30	Instrument ID:	HP13		
Lims ID:	720-88263-B-5-A	Lab Sample ID:	720-88263-5		
Client ID:	DG-H9S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	18	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

101 1,2,4-Trimethylbenzene, CAS: 95-63-6

Signal: 1

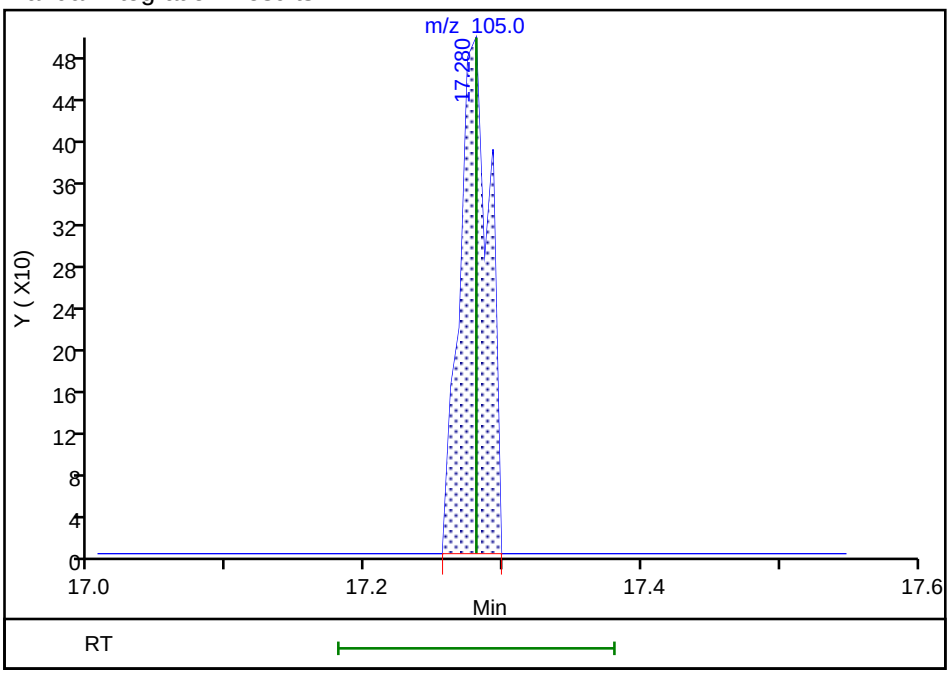
Not Detected
Expected RT: 17.28

Processing Integration Results



Manual Integration Results

RT: 17.28
Area: 741
Amount: 0.026753
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 15:17:06
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

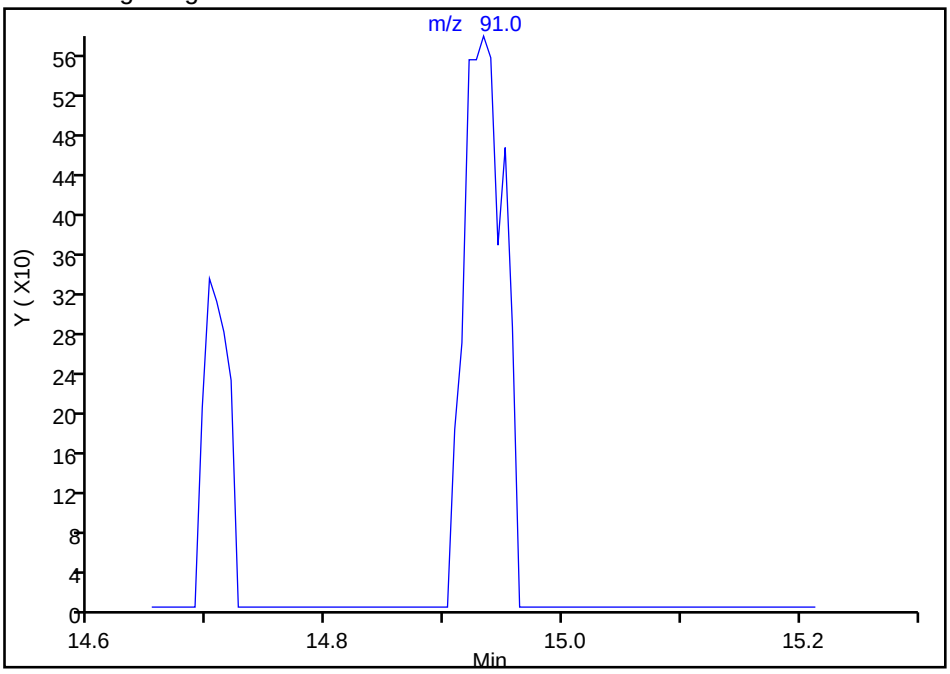
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311819.D				
Injection Date:	31-Aug-2018 14:42:30	Instrument ID:	HP13		
Lims ID:	720-88263-B-5-A	Lab Sample ID:	720-88263-5		
Client ID:	DG-H9S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	18	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

85 m-Xylene & p-Xylene, CAS: 179601-23-1

Signal: 1

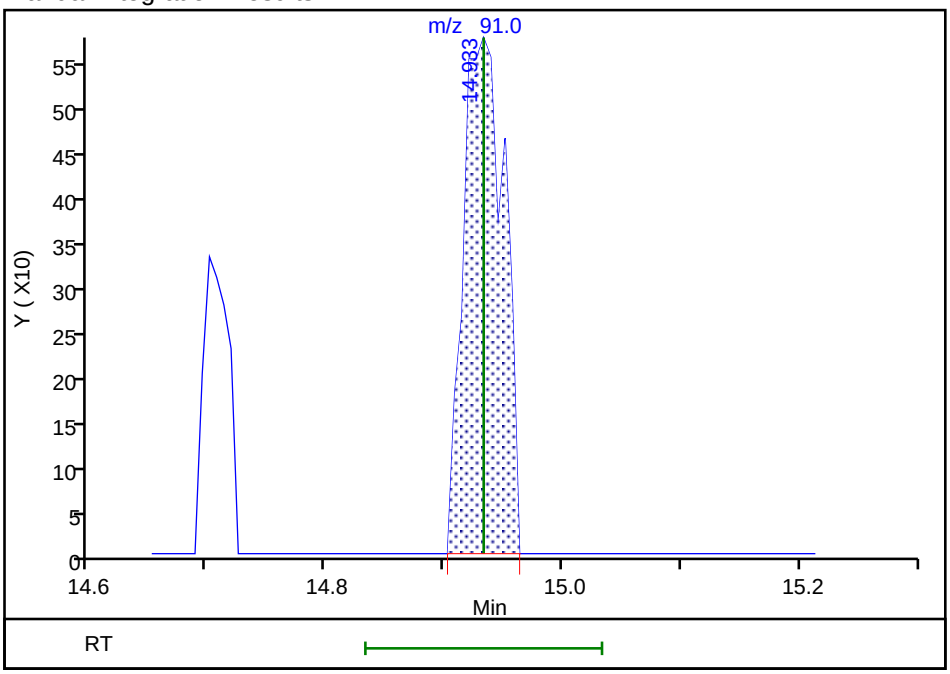
Not Detected
Expected RT: 14.93

Processing Integration Results



Manual Integration Results

RT: 14.93
Area: 1394
Amount: 0.055439
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 15:16:43
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

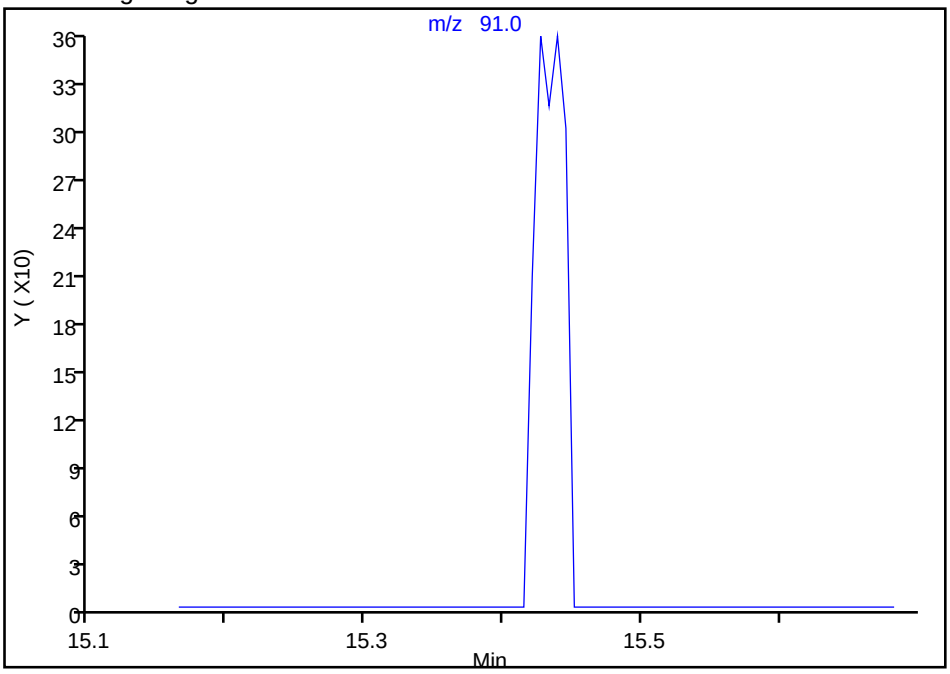
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311819.D				
Injection Date:	31-Aug-2018 14:42:30	Instrument ID:	HP13		
Lims ID:	720-88263-B-5-A	Lab Sample ID:	720-88263-5		
Client ID:	DG-H9S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	18	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

88 o-Xylene, CAS: 95-47-6

Signal: 1

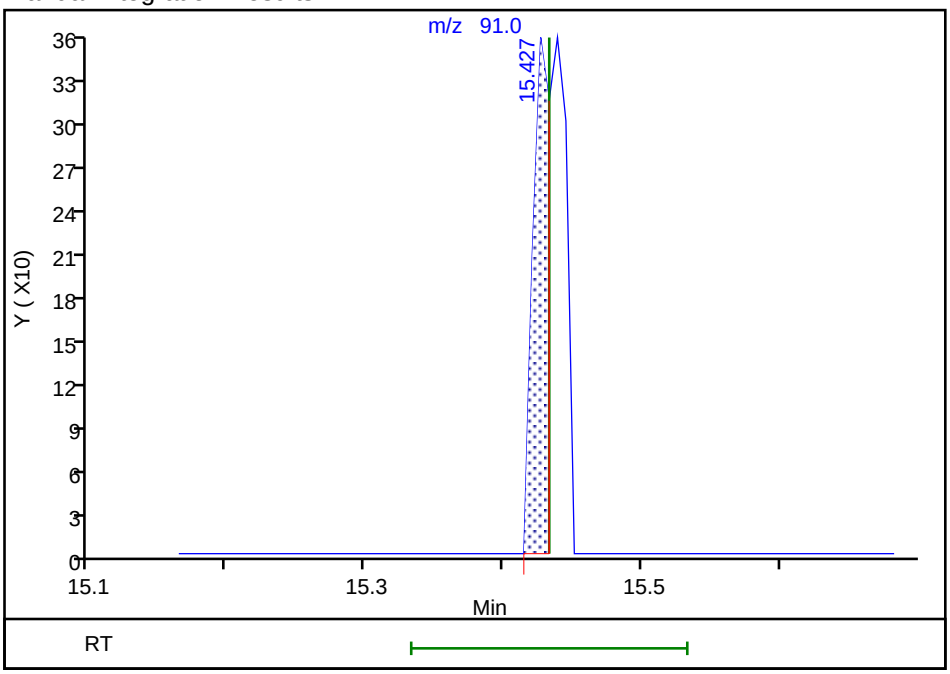
Not Detected
Expected RT: 15.43

Processing Integration Results



Manual Integration Results

RT: 15.43
Area: 323
Amount: 0.012366
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 15:16:54
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-L9S-0.5-1
Lab Sample ID: 720-88263-6
Matrix: Solid
Lab File ID: 08301839.D
Analysis Method: 8260B
Date Collected: 08/27/2018 09:10
Sample wt/vol: 4.192(g)
Date Analyzed: 08/31/2018 01:52
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250625
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		6.0	1.4
67-64-1	Acetone	ND		60	45
71-43-2	Benzene	ND		6.0	0.78
75-27-4	Dichlorobromomethane	ND		6.0	0.86
108-86-1	Bromobenzene	ND		6.0	0.94
74-97-5	Chlorobromomethane	ND		24	0.86
75-25-2	Bromoform	ND		6.0	2.4
74-83-9	Bromomethane	ND		12	0.94
78-93-3	2-Butanone (MEK)	ND		60	25
104-51-8	n-Butylbenzene	ND		6.0	1.2
135-98-8	sec-Butylbenzene	ND		6.0	0.86
98-06-6	tert-Butylbenzene	ND		6.0	0.87
75-15-0	Carbon disulfide	ND		6.0	2.4
56-23-5	Carbon tetrachloride	ND		6.0	0.74
108-90-7	Chlorobenzene	ND		6.0	0.82
75-00-3	Chloroethane	ND		12	0.67
67-66-3	Chloroform	ND		6.0	0.79
74-87-3	Chloromethane	ND		12	0.94
95-49-8	2-Chlorotoluene	ND		6.0	0.78
106-43-4	4-Chlorotoluene	ND		6.0	0.81
124-48-1	Chlorodibromomethane	ND		6.0	0.85
95-50-1	1,2-Dichlorobenzene	ND		6.0	0.81
541-73-1	1,3-Dichlorobenzene	ND		6.0	0.86
106-46-7	1,4-Dichlorobenzene	ND		6.0	0.85
142-28-9	1,3-Dichloropropane	ND		6.0	0.87
563-58-6	1,1-Dichloropropene	ND		6.0	0.82
96-12-8	1,2-Dibromo-3-Chloropropane	ND		12	2.0
106-93-4	Ethylene Dibromide	ND		6.0	1.7
74-95-3	Dibromomethane	ND		12	1.0
75-71-8	Dichlorodifluoromethane	ND		12	0.94
75-34-3	1,1-Dichloroethane	ND		6.0	0.81
107-06-2	1,2-Dichloroethane	ND		6.0	0.91
75-35-4	1,1-Dichloroethene	ND	*	6.0	0.74
156-59-2	cis-1,2-Dichloroethene	ND		6.0	0.81
156-60-5	trans-1,2-Dichloroethene	ND		6.0	0.89
78-87-5	1,2-Dichloropropane	ND		6.0	0.75

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-L9S-0.5-1
Lab Sample ID: 720-88263-6
Matrix: Solid
Lab File ID: 08301839.D
Analysis Method: 8260B
Date Collected: 08/27/2018 09:10
Sample wt/vol: 4.192(g)
Date Analyzed: 08/31/2018 01:52
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250625
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		6.0	0.82
10061-02-6	trans-1,3-Dichloropropene	ND		6.0	0.80
100-41-4	Ethylbenzene	ND		6.0	0.89
87-68-3	Hexachlorobutadiene	ND		6.0	1.1
591-78-6	2-Hexanone	ND		60	12
98-82-8	Isopropylbenzene	ND		6.0	0.81
99-87-6	4-Isopropyltoluene	ND		6.0	3.0
75-09-2	Methylene Chloride	ND		12	6.7
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		60	12
91-20-3	Naphthalene	ND		12	1.8
103-65-1	N-Propylbenzene	ND		6.0	0.79
100-42-5	Styrene	ND		6.0	0.75
630-20-6	1,1,1,2-Tetrachloroethane	ND		6.0	0.91
79-34-5	1,1,2,2-Tetrachloroethane	ND		6.0	0.89
127-18-4	Tetrachloroethene	ND		6.0	0.80
108-88-3	Toluene	ND		6.0	0.85
87-61-6	1,2,3-Trichlorobenzene	ND		6.0	0.88
120-82-1	1,2,4-Trichlorobenzene	ND		6.0	0.85
71-55-6	1,1,1-Trichloroethane	ND		6.0	0.73
79-00-5	1,1,2-Trichloroethane	ND		6.0	0.83
79-01-6	Trichloroethene	ND		6.0	0.75
75-69-4	Trichlorofluoromethane	ND		6.0	0.67
96-18-4	1,2,3-Trichloropropane	ND		6.0	0.92
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	6.0	2.5
95-63-6	1,2,4-Trimethylbenzene	ND		6.0	2.0
108-67-8	1,3,5-Trimethylbenzene	ND		6.0	0.78
108-05-4	Vinyl acetate	ND		24	6.0
75-01-4	Vinyl chloride	ND		6.0	0.87
1330-20-7	Xylenes, Total	ND		6.0	1.5
594-20-7	2,2-Dichloropropane	ND		6.0	2.4
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		300	120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-L9S-0.5-1 Lab Sample ID: 720-88263-6

Matrix: Solid Lab File ID: 08301839.D

Analysis Method: 8260B Date Collected: 08/27/2018 09:10

Sample wt/vol: 4.192(g) Date Analyzed: 08/31/2018 01:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250625 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	94		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	115		60-140
2037-26-5	Toluene-d8 (Surr)	92		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301839.D
Lims ID: 720-88263-A-6-A
Client ID: DG-L9S--0.5-1
Sample Type: Client
Inject. Date: 31-Aug-2018 01:52:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-A-6
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:32:23 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 08:35:15

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	220389	250.0	
* 2 Fluorobenzene	96	10.709	10.709	0.000	98	1122474	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.554	0.010	86	918711	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	434195	25.0	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.811	9.821	-0.001	0	88425	8.66	
$ 10 Toluene-d8 (Surr)	98	12.821	12.834	-0.001	95	308704	6.93	
$ 11 4-Bromofluorobenzene	95	16.053	16.065	0.000	90	100991	7.06	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	84	90719	5.97	
28 Acetone	58	6.474	6.481	0.000	97	12426	14.4	
59 Benzene	78	10.498	10.498	0.010	1	1440	0.0356	
131 Butyl Ether	87	14.786	14.786	0.010	94	1488	0.1908	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	470980	5.44	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	190124	2.19	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	227597	2.63	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	554949	6.41	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	241727	NC	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	241727	2.79	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	537057	6.20	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	316443	3.65	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	77695	0.8969	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	164971	1.90	

QC Flag Legend

Processing Flags
NC - Not Calibrated

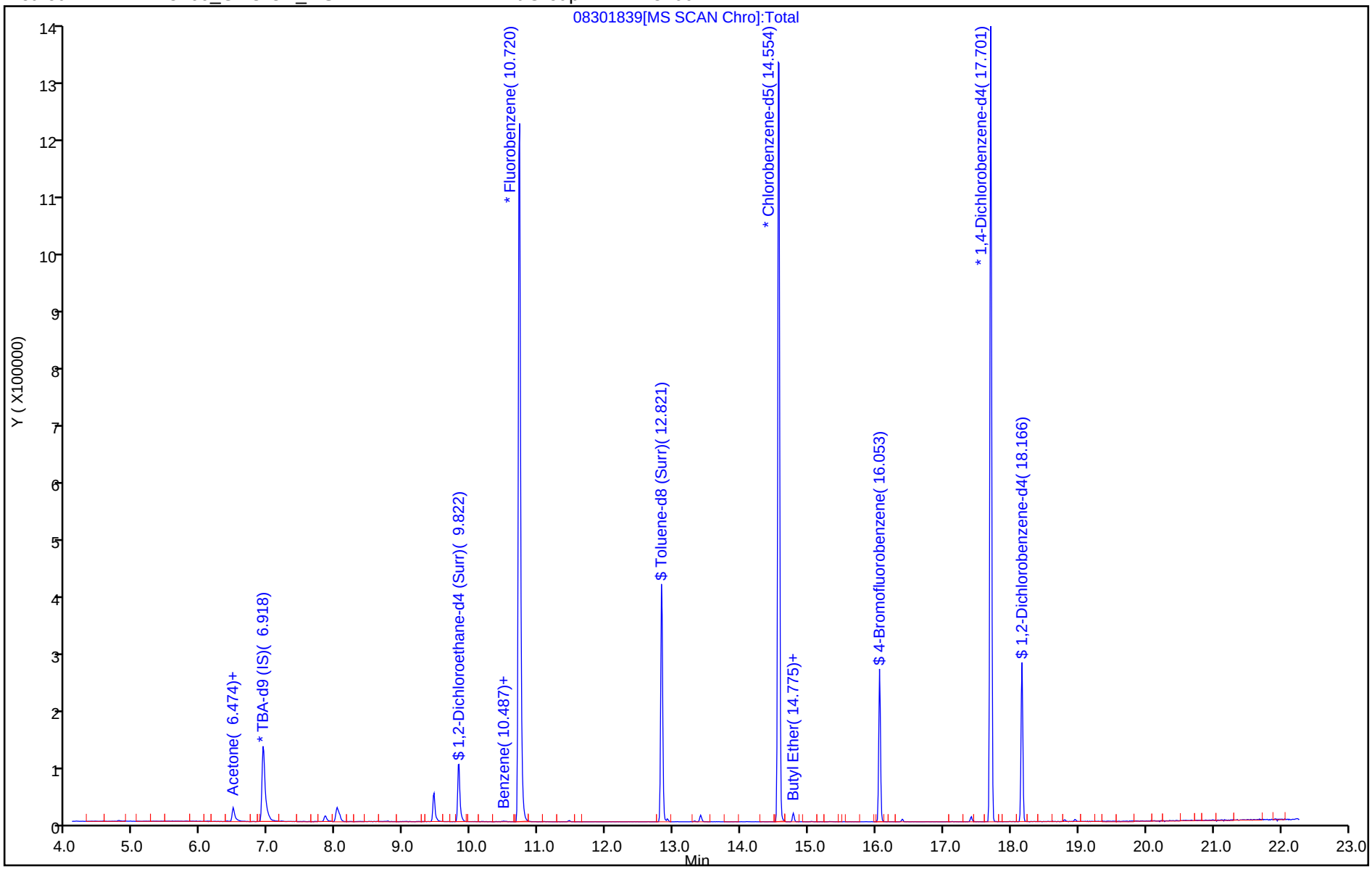
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 08:35:16 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301839.D				
Injection Date:	31-Aug-2018 01:52:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88263-A-6-A	Lab Sample ID:	720-88263-6	Worklist Smp#:	17
Client ID:	DG-L9S--0.5-1				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301839.D
Lims ID: 720-88263-A-6-A
Client ID: DG-L9S--0.5-1
Sample Type: Client
Inject. Date: 31-Aug-2018 01:52:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-A-6
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:32:23 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 08:35:15

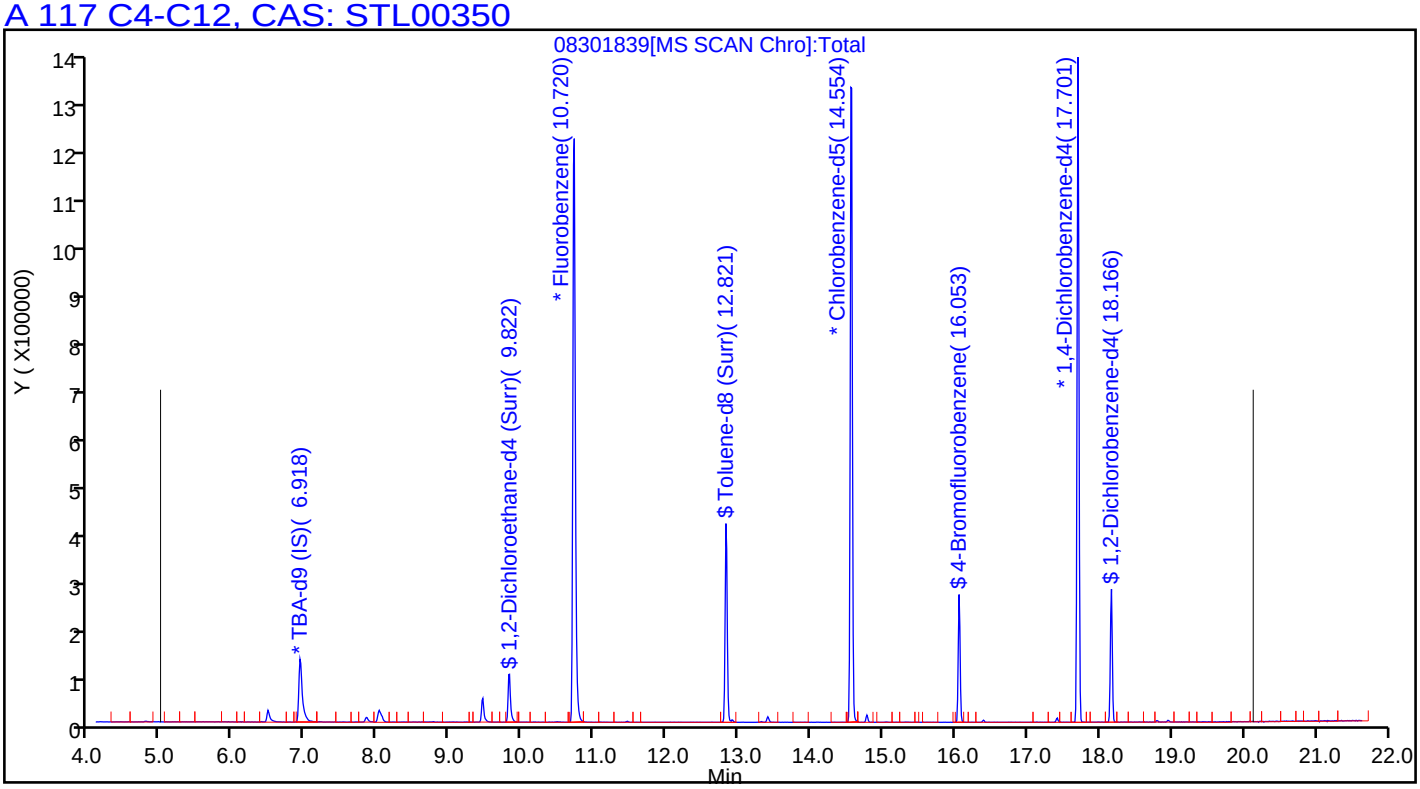
Compound	Amount Added	Amount Recovered	% Rec.
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.66	115.42
$ 10 Toluene-d8 (Surr)	7.50	6.93	92.35
$ 11 4-Bromofluorobenzene	7.50	7.06	94.13
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 31-Aug-2018 08:35:16 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301839.D				
Injection Date:	31-Aug-2018 01:52:30	Instrument ID:	CHMSV2		
Lims ID:	720-88263-A-6-A	Lab Sample ID:	720-88263-6		
Client ID:	DG-L9S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-L9S-3.5-4
Lab Sample ID: 720-88263-7
Matrix: Solid
Lab File ID: 09041814.D
Analysis Method: 8260B
Date Collected: 08/27/2018 09:10
Sample wt/vol: 5.19(g)
Date Analyzed: 09/04/2018 13:55
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250750
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.8	1.2
67-64-1	Acetone	ND		48	37
71-43-2	Benzene	ND		4.8	0.63
75-27-4	Dichlorobromomethane	ND		4.8	0.69
108-86-1	Bromobenzene	ND		4.8	0.76
74-97-5	Chlorobromomethane	ND		19	0.69
75-25-2	Bromoform	ND		4.8	1.9
74-83-9	Bromomethane	ND		9.6	0.76
78-93-3	2-Butanone (MEK)	ND		48	20
104-51-8	n-Butylbenzene	ND		4.8	0.96
135-98-8	sec-Butylbenzene	ND		4.8	0.69
98-06-6	tert-Butylbenzene	ND		4.8	0.70
75-15-0	Carbon disulfide	ND	*	4.8	1.9
56-23-5	Carbon tetrachloride	ND		4.8	0.60
108-90-7	Chlorobenzene	ND		4.8	0.66
75-00-3	Chloroethane	ND		9.6	0.54
67-66-3	Chloroform	ND		4.8	0.64
74-87-3	Chloromethane	ND		9.6	0.76
95-49-8	2-Chlorotoluene	ND		4.8	0.63
106-43-4	4-Chlorotoluene	ND		4.8	0.66
124-48-1	Chlorodibromomethane	ND		4.8	0.68
95-50-1	1,2-Dichlorobenzene	ND		4.8	0.66
541-73-1	1,3-Dichlorobenzene	ND		4.8	0.69
106-46-7	1,4-Dichlorobenzene	ND		4.8	0.68
142-28-9	1,3-Dichloropropane	ND		4.8	0.70
563-58-6	1,1-Dichloropropene	ND		4.8	0.66
96-12-8	1,2-Dibromo-3-Chloropropane	ND		9.6	1.6
106-93-4	Ethylene Dibromide	ND		4.8	1.4
74-95-3	Dibromomethane	ND		9.6	0.83
75-71-8	Dichlorodifluoromethane	ND		9.6	0.76
75-34-3	1,1-Dichloroethane	ND		4.8	0.66
107-06-2	1,2-Dichloroethane	ND		4.8	0.73
75-35-4	1,1-Dichloroethene	ND	*	4.8	0.60
156-59-2	cis-1,2-Dichloroethene	ND		4.8	0.66
156-60-5	trans-1,2-Dichloroethene	ND		4.8	0.72
78-87-5	1,2-Dichloropropane	ND		4.8	0.61

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton | Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-L9S-3.5-4 | Lab Sample ID: 720-88263-7
Matrix: Solid | Lab File ID: 09041814.D
Analysis Method: 8260B | Date Collected: 08/27/2018 09:10
Sample wt/vol: 5.19(g) | Date Analyzed: 09/04/2018 13:55
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: DB-VRX ID: 250(um)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 250750 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.8	0.66
10061-02-6	trans-1,3-Dichloropropene	ND		4.8	0.65
100-41-4	Ethylbenzene	ND		4.8	0.72
87-68-3	Hexachlorobutadiene	ND		4.8	0.87
591-78-6	2-Hexanone	ND		48	9.6
98-82-8	Isopropylbenzene	ND		4.8	0.66
99-87-6	4-Isopropyltoluene	ND		4.8	2.4
75-09-2	Methylene Chloride	ND		9.6	5.4
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		48	9.6
103-65-1	N-Propylbenzene	ND		4.8	0.64
100-42-5	Styrene	ND		4.8	0.61
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.8	0.73
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.8	0.72
127-18-4	Tetrachloroethene	ND		4.8	0.65
108-88-3	Toluene	ND		4.8	0.68
87-61-6	1,2,3-Trichlorobenzene	ND		4.8	0.71
120-82-1	1,2,4-Trichlorobenzene	ND		4.8	0.68
71-55-6	1,1,1-Trichloroethane	ND		4.8	0.59
79-00-5	1,1,2-Trichloroethane	ND		4.8	0.67
79-01-6	Trichloroethene	ND		4.8	0.61
75-69-4	Trichlorofluoromethane	ND		4.8	0.54
96-18-4	1,2,3-Trichloropropane	ND		4.8	0.74
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.8	2.0
95-63-6	1,2,4-Trimethylbenzene	ND		4.8	1.6
108-67-8	1,3,5-Trimethylbenzene	ND		4.8	0.63
108-05-4	Vinyl acetate	ND		19	4.8
75-01-4	Vinyl chloride	ND		4.8	0.70
1330-20-7	Xylenes, Total	ND		4.8	1.2
594-20-7	2,2-Dichloropropane	ND		4.8	1.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	82		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		60-140
2037-26-5	Toluene-d8 (Surr)	92		58-140

FORM I 8260B

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180904-53629.b\09041814.D
Lims ID: 720-88263-D-7-B RR
Client ID:
Sample Type: Client
Inject. Date: 04-Sep-2018 13:55:30 ALS Bottle#: 13 Worklist Smp#: 20
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-D-7
Operator ID: SF Instrument ID: HP9

Method: \\ChromNA\Pleasanton\ChromData\HP9\20180904-53629.b\HP9_8260_LL.m
Limit Group: 8260B
Last Update: 05-Sep-2018 08:31:30 Calib Date: 23-Aug-2018 18:09:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP9\20180823-53445.b\08231828.D

Column 1 : Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: chaijita Date: 05-Sep-2018 08:31:29

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.159	7.159	0.000	0	64514	250.0	
* 2 Fluorobenzene	96	10.936	10.936	0.000	99	679426	25.0	
* 4 Chlorobenzene-d5	117	14.764	14.774	-0.010	81	445877	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.903	17.903	0.000	91	161933	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.528	9.528	0.000	52	46270	6.71	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.045	10.045	0.000	0	29805	6.27	
$ 10 Toluene-d8 (Surr)	98	13.032	13.032	0.000	92	171914	6.92	
$ 11 4-Bromofluorobenzene	95	16.252	16.241	0.000	84	44461	6.15	
$ 12 1,2-Dichlorobenzene-d4	152	18.359	18.358	0.000	78	43395	6.95	
28 Acetone	58	6.734	6.723	0.011	58	881	2.74	
34 Methylene Chloride	84	7.432	7.422	0.010	33	1437	0.1889	
112 Naphthalene	128	21.082	21.082	0.000	96	483721	43.5	
A 116 C4-C10	1	11.189	(5.123-17.255)		0	3743762	58.6	
A 153 C6-C8	1	11.194	(8.890-13.498)		0	3266451	51.2	
A 154 C6-C9	1	12.161	(8.890-15.432)		0	3309385	51.8	
A 117 C4-C12	1	12.738	(5.123-20.353)		0	4119601	64.5	
A 123 Aviation Gas	1	12.992	(8.890-17.093)		0	3485849	NC	
A 119 C6-C10	1	13.073	(8.890-17.255)		0	3494360	54.7	
A 118 C5-C12	1	13.528	(6.703-20.353)		0	3951789	61.9	
A 120 C6-C12	1	14.622	(8.890-20.353)		0	3870199	60.6	
A 155 C8-C10	1	15.336	(13.417-17.255)		0	1171099	18.3	
A 121 C7-C12	1	15.786	(11.220-20.353)		0	3752574	58.8	

QC Flag Legend

Processing Flags
NC - Not Calibrated

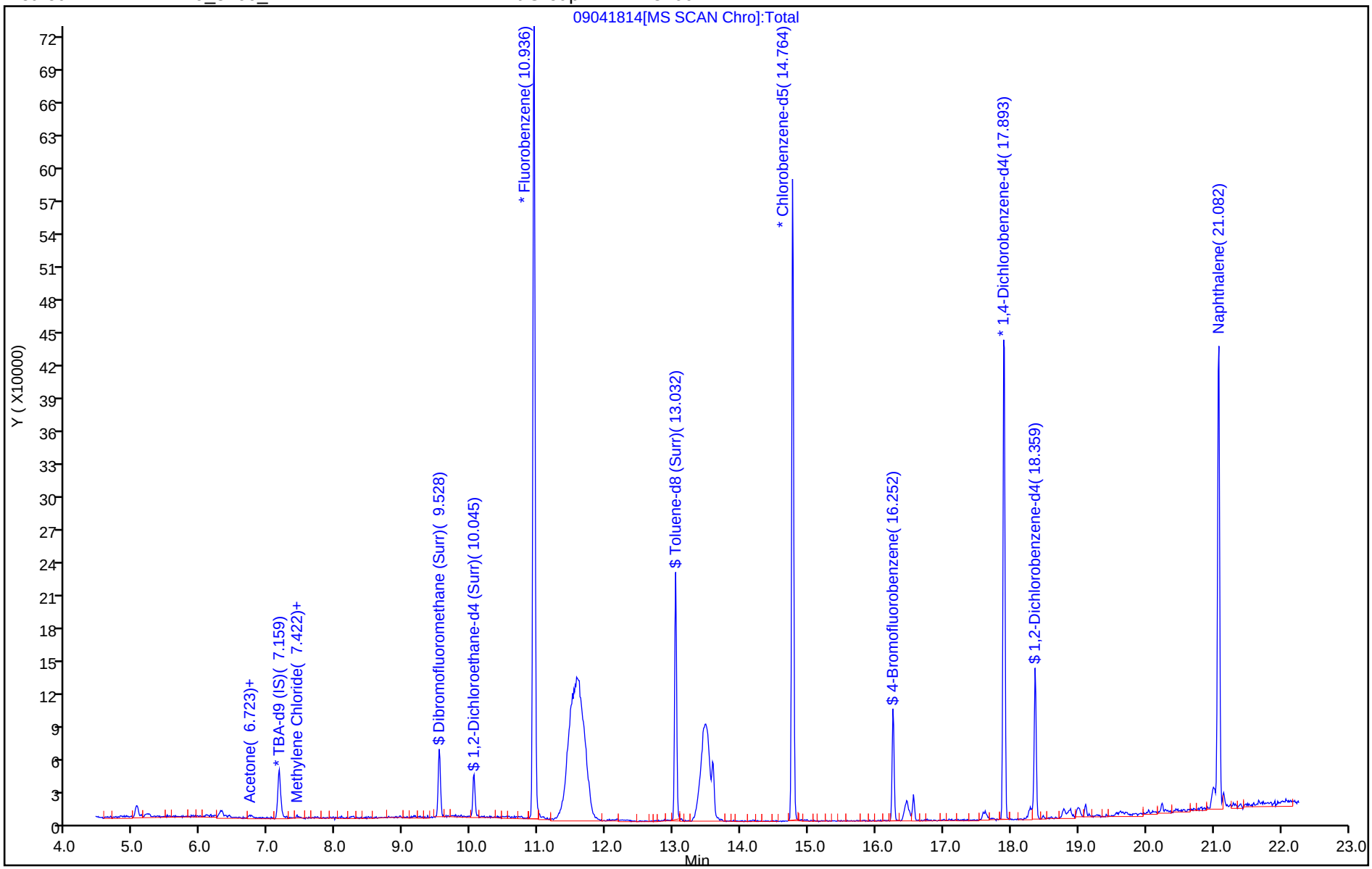
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 05-Sep-2018 08:31:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180904-53629.b\09041814.D				
Injection Date:	04-Sep-2018 13:55:30	Instrument ID:	HP9	Operator ID:	SF
Lims ID:	720-88263-D-7-B RR	Lab Sample ID:	Client 720-250750/20-A	Worklist Smp#:	20
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	HP9_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180904-53629.b\09041814.D
Lims ID: 720-88263-D-7-B RR
Client ID:
Sample Type: Client
Inject. Date: 04-Sep-2018 13:55:30 ALS Bottle#: 13 Worklist Smp#: 20
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-D-7
Operator ID: SF Instrument ID: HP9

Method: \\ChromNA\Pleasanton\ChromData\HP9\20180904-53629.b\HP9_8260_LL.m
Limit Group: 8260B
Last Update: 05-Sep-2018 08:31:30 Calib Date: 23-Aug-2018 18:09:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP9\20180823-53445.b\08231828.D

Column 1 : Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: chaijita Date: 05-Sep-2018 08:31:29

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	7.50	6.71	89.49
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	6.27	83.60
$ 10 Toluene-d8 (Surr)	7.50	6.92	92.22
$ 11 4-Bromofluorobenzene	7.50	6.15	82.04
$ 12 1,2-Dichlorobenzene-d4	6.00	6.95	115.82

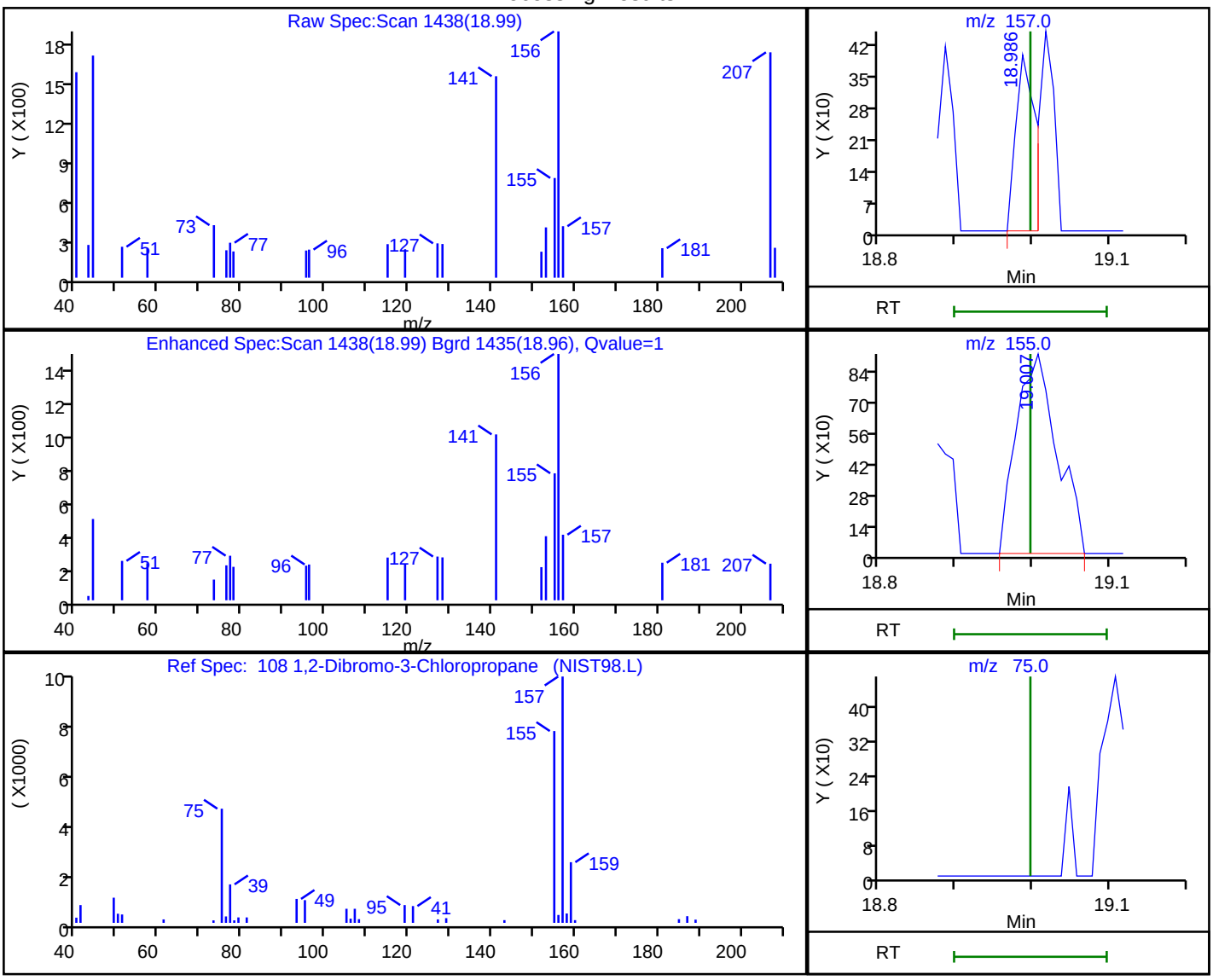
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180904-53629.b\09041814.D				
Injection Date:	04-Sep-2018 13:55:30	Instrument ID:	HP9		
Lims ID:	720-88263-D-7-B RR	Lab Sample ID:	Client 720-250750/20-A		
Client ID:					
Operator ID:	SF	ALS Bottle#:	13	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

108 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Processing Results



RT	Mass	Response	Amount
18.99	157.00	703	1.153797
19.01	155.00	3389	
19.00	75.00	0	

Reviewer: chaijita, 05-Sep-2018 08:31:26

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-L9S-3.5-4 Lab Sample ID: 720-88263-7

Matrix: Solid Lab File ID: 09051833.D

Analysis Method: 8260B Date Collected: 08/27/2018 09:10

Sample wt/vol: 5.01(g) Date Analyzed: 09/06/2018 00:38

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250946 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
91-20-3	Naphthalene	ND	*	10	1.5
STL00504	C4-C10	ND		250	100
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		250	100

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	86		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		60-140
2037-26-5	Toluene-d8 (Surr)	98		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180905-53672.b\09051833.D
Lims ID: 720-88263-D-7-D rr
Client ID:
Sample Type: Client
Inject. Date: 06-Sep-2018 00:38:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-D-7 RR
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180905-53672.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 06-Sep-2018 06:39:38 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: kojirom Date: 06-Sep-2018 13:57:11

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.092	7.091	0.001	98	195816	250.0	
* 2 Fluorobenzene	96	10.900	10.898	0.002	98	941367	25.0	
* 4 Chlorobenzene-d5	117	14.748	14.746	0.002	85	582124	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.877	17.885	-0.008	96	204541	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.492	9.481	0.011	54	54923	6.43	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.009	10.007	0.002	97	63013	7.52	
$ 10 Toluene-d8 (Surr)	98	13.006	13.004	0.001	93	247957	7.32	
$ 11 4-Bromofluorobenzene	95	16.236	16.235	0.001	90	68624	6.48	
$ 12 1,2-Dichlorobenzene-d4	152	18.343	18.330	0.002	78	53311	7.06	
28 Acetone	58	6.657	6.645	0.012	71	1450	2.49	
34 Methylene Chloride	84	7.366	7.354	0.012	64	6683	0.7903	
48 cis-1,2-Dichloroethene	61	9.108	9.106	0.002	1	1989	0.1540	
59 Benzene	78	10.667	10.665	0.002	1	611	0.0167	
65 Trichloroethene	132	11.396	11.394	0.002	39	2178	0.2141	
148 1-Chlorohexane	55	14.748	14.655	0.093	1	5969	0.5763	
A 116 C4-C10	1	11.085	(5.035-17.135)		0	280918	3.58	
A 153 C6-C8	1	11.141	(8.822-13.459)		0	144312	1.84	
A 154 C6-C9	1	12.098	(8.822-15.373)		0	186000	2.37	
A 117 C4-C12	1	12.645	(5.035-20.255)		0	330803	4.22	
A 119 C6-C10	1	12.979	(8.822-17.135)		0	198710	2.54	
A 118 C5-C12	1	13.429	(6.604-20.255)		0	318052	4.06	
A 120 C6-C12	1	14.539	(8.822-20.255)		0	237588	3.03	
A 155 C8-C10	1	15.241	(13.348-17.135)		0	56662	0.7230	
A 121 C7-C12	1	15.718	(11.182-20.255)		0	149859	1.91	

QC Flag Legend

Processing Flags

s - Failed ISTD Recovery Test

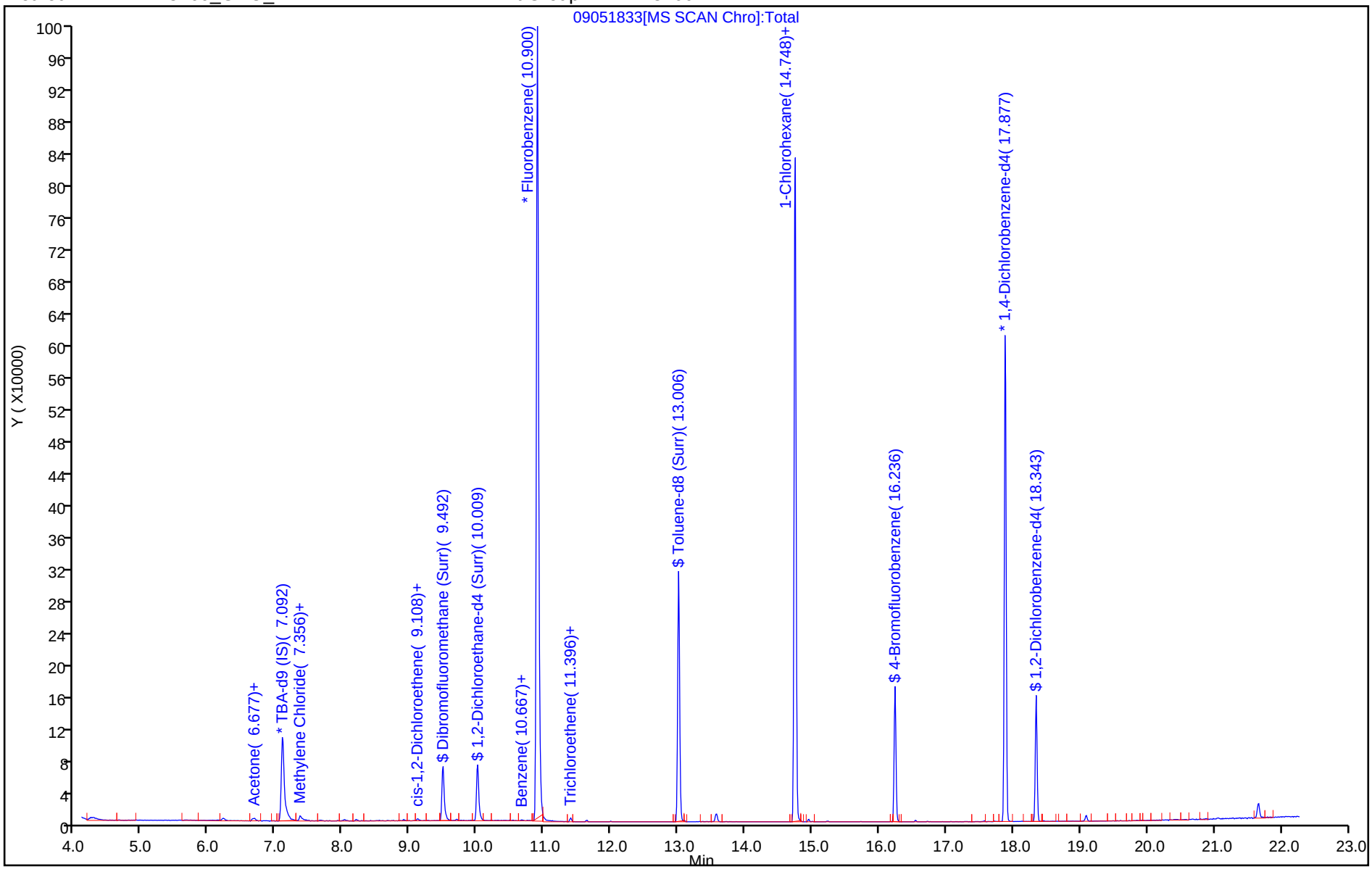
Reagents:

I_IS/SS_00092	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 06-Sep-2018 13:57:12 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180905-53672.b\09051833.D				
Injection Date:	06-Sep-2018 00:38:30	Instrument ID:	HP7	Operator ID:	SF
Lims ID:	720-88263-D-7-D rr	Lab Sample ID:	Client 720-250946/14-A	Worklist Smp#:	14
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260_GRO_HP7	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180905-53672.b\09051833.D
Lims ID: 720-88263-D-7-D rr
Client ID:
Sample Type: Client
Inject. Date: 06-Sep-2018 00:38:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-D-7 RR
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180905-53672.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 06-Sep-2018 06:39:38 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: kojirom Date: 06-Sep-2018 13:57:11

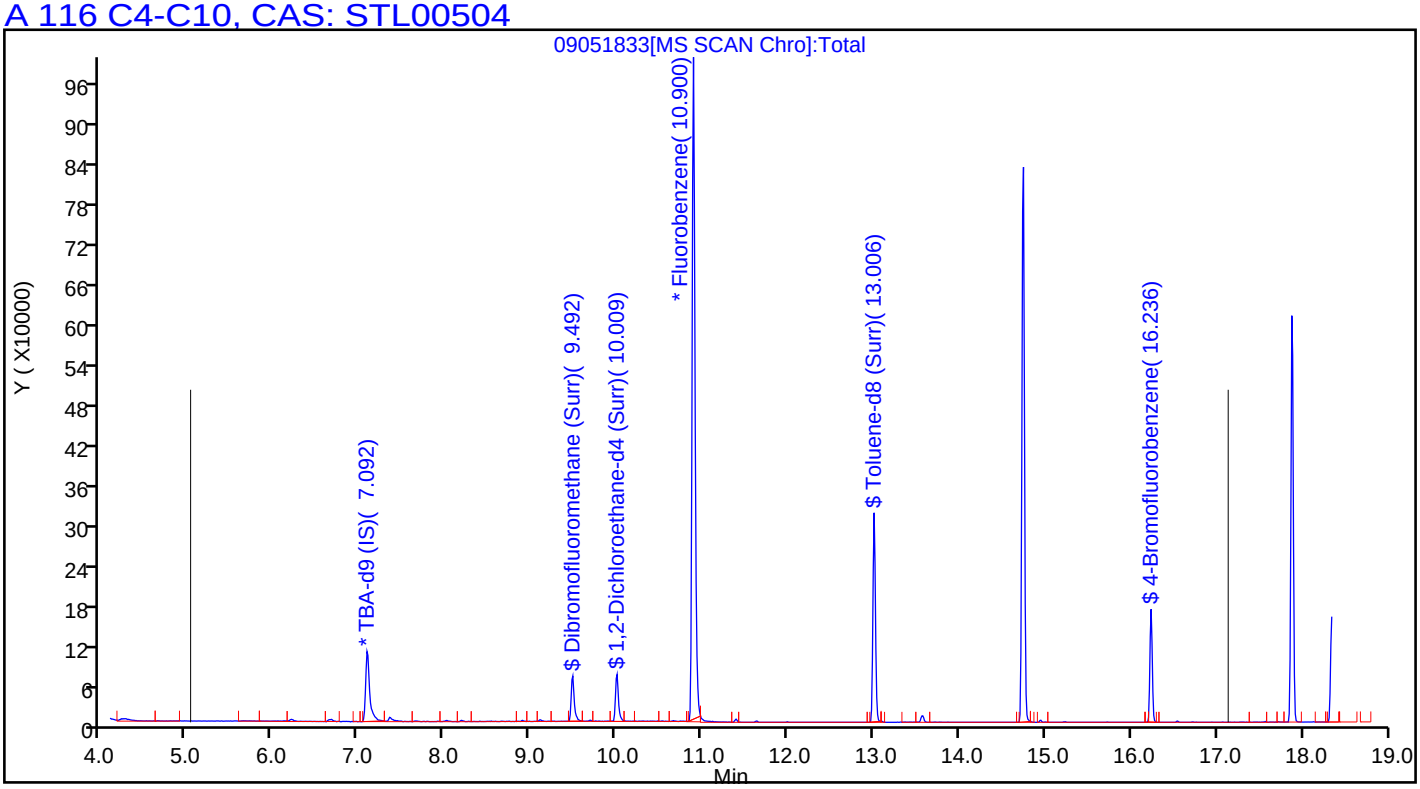
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	7.50	6.43	85.67
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.52	100.22
$ 10 Toluene-d8 (Surr)	7.50	7.32	97.59
$ 11 4-Bromofluorobenzene	7.50	6.48	86.46
$ 12 1,2-Dichlorobenzene-d4	6.00	7.06	117.67

Report Date: 06-Sep-2018 13:57:12 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180905-53672.b\09051833.D				
Injection Date:	06-Sep-2018 00:38:30	Instrument ID:	HP7		
Lims ID:	720-88263-D-7-D rr	Lab Sample ID:	Client 720-250946/14-A		
Client ID:					
Operator ID:	SF	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 116 C4-C10, CAS: STL00504

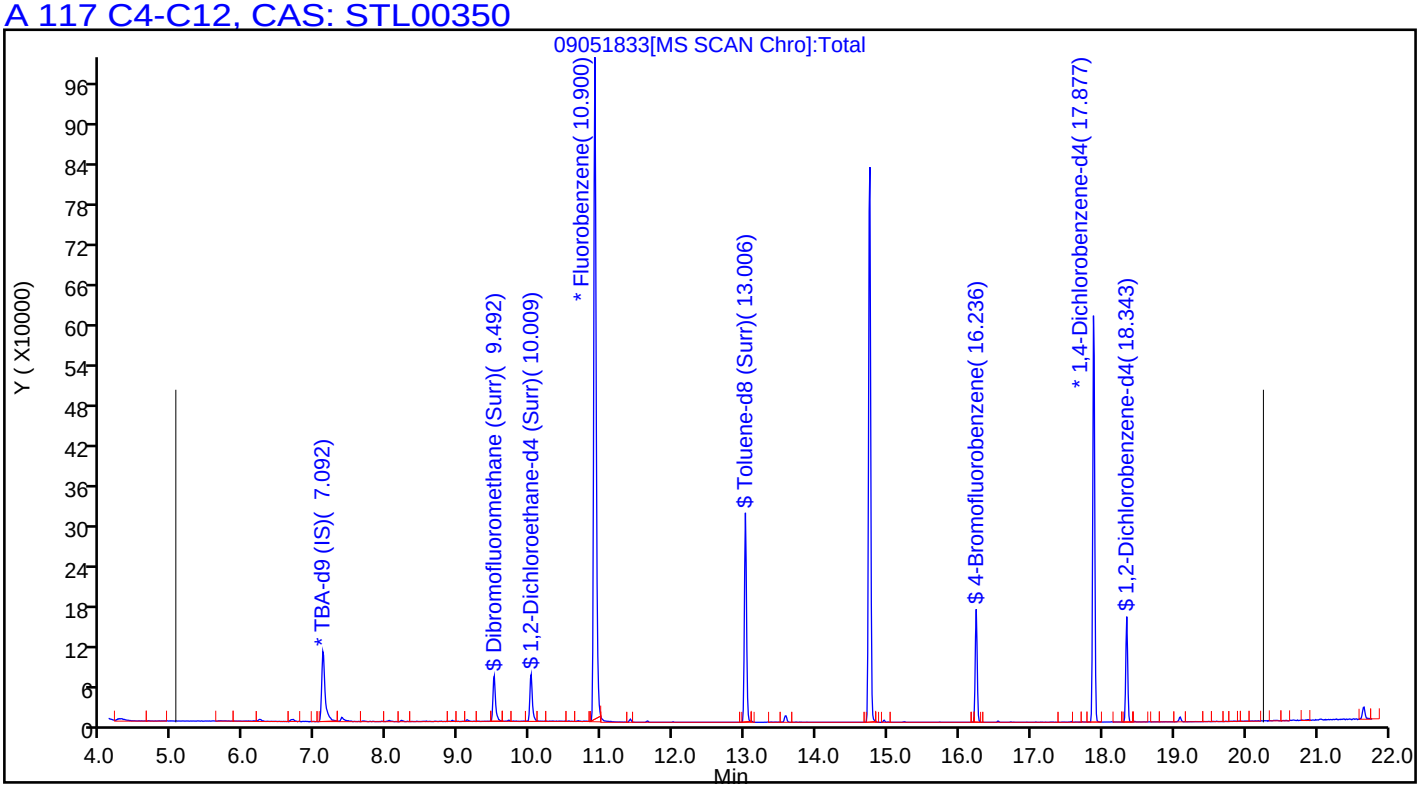


Report Date: 06-Sep-2018 13:57:12 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180905-53672.b\09051833.D				
Injection Date:	06-Sep-2018 00:38:30	Instrument ID:	HP7		
Lims ID:	720-88263-D-7-D rr	Lab Sample ID:	Client 720-250946/14-A		
Client ID:					
Operator ID:	SF	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-M11S-0.5-1
Lab Sample ID: 720-88263-8
Matrix: Solid
Lab File ID: 08311820.D
Analysis Method: 8260B
Date Collected: 08/27/2018 10:00
Sample wt/vol: 5.96(g)
Date Analyzed: 08/31/2018 15:15
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250644
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.2	1.0
67-64-1	Acetone	ND		42	32
71-43-2	Benzene	ND		4.2	0.55
75-27-4	Dichlorobromomethane	ND		4.2	0.60
108-86-1	Bromobenzene	ND		4.2	0.66
74-97-5	Chlorobromomethane	ND		17	0.60
75-25-2	Bromoform	ND		4.2	1.7
74-83-9	Bromomethane	ND		8.4	0.66
78-93-3	2-Butanone (MEK)	ND		42	18
104-51-8	n-Butylbenzene	ND		4.2	0.84
135-98-8	sec-Butylbenzene	ND		4.2	0.60
98-06-6	tert-Butylbenzene	ND		4.2	0.61
75-15-0	Carbon disulfide	ND		4.2	1.7
56-23-5	Carbon tetrachloride	ND		4.2	0.52
108-90-7	Chlorobenzene	ND		4.2	0.58
75-00-3	Chloroethane	ND		8.4	0.47
67-66-3	Chloroform	ND		4.2	0.55
74-87-3	Chloromethane	ND		8.4	0.66
95-49-8	2-Chlorotoluene	ND		4.2	0.55
106-43-4	4-Chlorotoluene	ND		4.2	0.57
124-48-1	Chlorodibromomethane	ND		4.2	0.60
95-50-1	1,2-Dichlorobenzene	ND		4.2	0.57
541-73-1	1,3-Dichlorobenzene	ND		4.2	0.60
106-46-7	1,4-Dichlorobenzene	ND		4.2	0.60
142-28-9	1,3-Dichloropropane	ND		4.2	0.61
563-58-6	1,1-Dichloropropene	ND		4.2	0.58
96-12-8	1,2-Dibromo-3-Chloropropane	ND		8.4	1.4
106-93-4	Ethylene Dibromide	ND		4.2	1.2
74-95-3	Dibromomethane	ND		8.4	0.72
75-71-8	Dichlorodifluoromethane	ND		8.4	0.66
75-34-3	1,1-Dichloroethane	ND		4.2	0.57
107-06-2	1,2-Dichloroethane	ND		4.2	0.64
75-35-4	1,1-Dichloroethene	ND	*	4.2	0.52
156-59-2	cis-1,2-Dichloroethene	ND		4.2	0.57
156-60-5	trans-1,2-Dichloroethene	ND		4.2	0.63
78-87-5	1,2-Dichloropropane	ND		4.2	0.53

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-M11S-0.5-1 Lab Sample ID: 720-88263-8

Matrix: Solid Lab File ID: 08311820.D

Analysis Method: 8260B Date Collected: 08/27/2018 10:00

Sample wt/vol: 5.96(g) Date Analyzed: 08/31/2018 15:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250644 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.2	0.58
10061-02-6	trans-1,3-Dichloropropene	ND		4.2	0.56
100-41-4	Ethylbenzene	ND		4.2	0.63
87-68-3	Hexachlorobutadiene	ND		4.2	0.76
591-78-6	2-Hexanone	ND		42	8.4
98-82-8	Isopropylbenzene	ND		4.2	0.57
99-87-6	4-Isopropyltoluene	ND		4.2	2.1
75-09-2	Methylene Chloride	ND		8.4	4.7
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		42	8.4
91-20-3	Naphthalene	ND		8.4	1.3
103-65-1	N-Propylbenzene	ND		4.2	0.55
100-42-5	Styrene	ND		4.2	0.53
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.2	0.64
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.2	0.63
127-18-4	Tetrachloroethene	ND		4.2	0.56
108-88-3	Toluene	ND		4.2	0.60
87-61-6	1,2,3-Trichlorobenzene	ND		4.2	0.62
120-82-1	1,2,4-Trichlorobenzene	ND		4.2	0.60
71-55-6	1,1,1-Trichloroethane	ND		4.2	0.51
79-00-5	1,1,2-Trichloroethane	ND		4.2	0.59
79-01-6	Trichloroethene	ND		4.2	0.53
75-69-4	Trichlorofluoromethane	ND		4.2	0.47
96-18-4	1,2,3-Trichloropropane	ND		4.2	0.65
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.2	1.7
95-63-6	1,2,4-Trimethylbenzene	ND		4.2	1.4
108-67-8	1,3,5-Trimethylbenzene	ND		4.2	0.55
108-05-4	Vinyl acetate	ND		17	4.2
75-01-4	Vinyl chloride	ND		4.2	0.61
1330-20-7	Xylenes, Total	ND		4.2	1.0
594-20-7	2,2-Dichloropropane	ND		4.2	1.7
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		210	84

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-M11S-0.5-1 Lab Sample ID: 720-88263-8

Matrix: Solid Lab File ID: 08311820.D

Analysis Method: 8260B Date Collected: 08/27/2018 10:00

Sample wt/vol: 5.96(g) Date Analyzed: 08/31/2018 15:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250644 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	95		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		60-140
2037-26-5	Toluene-d8 (Surr)	91		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311820.D
Lims ID: 720-88263-B-8-A
Client ID: DG-M11S--0.5-1
Sample Type: Client
Inject. Date: 31-Aug-2018 15:15:30 ALS Bottle#: 19 Worklist Smp#: 21
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-B-8
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 31-Aug-2018 15:43:49 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: salgadoa Date: 31-Aug-2018 15:43:49

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.825	6.819	0.006	0	253209	250.0	
* 2 Fluorobenzene	96	10.599	10.599	-0.001	98	757169	25.0	
* 4 Chlorobenzene-d5	117	14.439	14.445	-0.006	87	576398	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.585	-0.006	95	295322	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.190	9.190	0.000	94	65435	7.70	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.708	9.708	0.000	0	87094	8.18	
$ 10 Toluene-d8 (Surr)	98	12.708	12.708	0.000	94	209540	6.84	
$ 11 4-Bromofluorobenzene	95	15.933	15.926	0.000	94	79713	7.11	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.036	0.000	85	70817	6.19	
$ 6 BFB	95	9.337	6.440	2.897	0	532	NR	
28 Acetone	58	6.374	6.374	0.000	98	16385	18.4	
34 Methylene Chloride	84	7.087	7.075	0.012	88	763	0.0931	
59 Benzene	78	10.367	10.373	-0.006	94	2354	0.0731	
75 Toluene	92	12.793	12.788	0.000	96	2981	0.1573	
128 Butyl Ether	87	14.665	14.652	0.006	95	2675	0.4664	
85 m-Xylene & p-Xylene	91	14.933	14.933	0.000	0	1522	0.0523	a
87 Styrene	104	15.348	15.348	0.006	72	467	0.0193	a
88 o-Xylene	91	15.439	15.439	0.006	87	652	0.0216	a
111 1,2,4-Trichlorobenzene	180	20.408	20.408	-0.006	1	251	0.0193	a
112 Naphthalene	128	20.755	20.755	0.006	89	1713	0.0563	a
114 1,2,3-Trichlorobenzene	180	21.011	21.011	-0.006	1	206	0.0168	a
29 Pentane	43	6.380	6.410	-0.030	69	60306	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	583174	8.40	
A 154 C6-C8	1	10.852	(8.550-13.153)		0	191329	2.76	
A 155 C6-C9	1	11.842	(8.550-15.134)		0	278520	4.01	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	660064	9.51	
A 119 C6-C10	1	12.732	(8.550-16.914)		0	320539	4.62	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	632693	9.11	
A 120 C6-C12	1	14.278	(8.550-20.005)		0	397429	5.72	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	131014	1.89	
A 121 C7-C12	1	15.451	(10.897-20.005)		0	257867	3.71	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
S 122 Xylenes, Total	1				0		0.0739	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

a - User Assigned ID

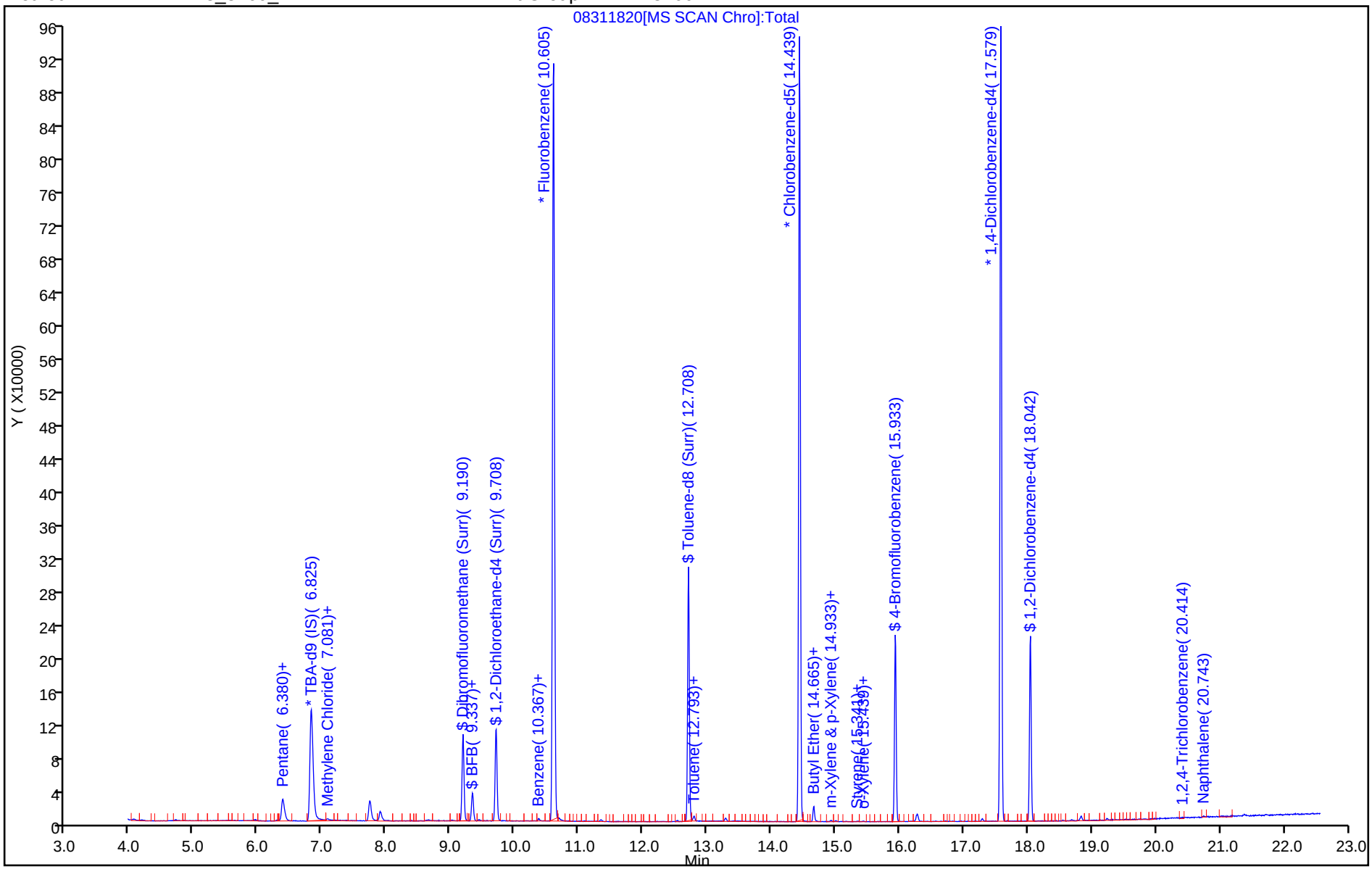
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 15:43:49 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311820.D				
Injection Date:	31-Aug-2018 15:15:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88263-B-8-A	Lab Sample ID:	720-88263-8	Worklist Smp#:	21
Client ID:	DG-M11S--0.5-1				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311820.D
Lims ID: 720-88263-B-8-A
Client ID: DG-M11S--0.5-1
Sample Type: Client
Inject. Date: 31-Aug-2018 15:15:30 ALS Bottle#: 19 Worklist Smp#: 21
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-B-8
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 31-Aug-2018 15:43:49 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: salgadoa Date: 31-Aug-2018 15:43:49

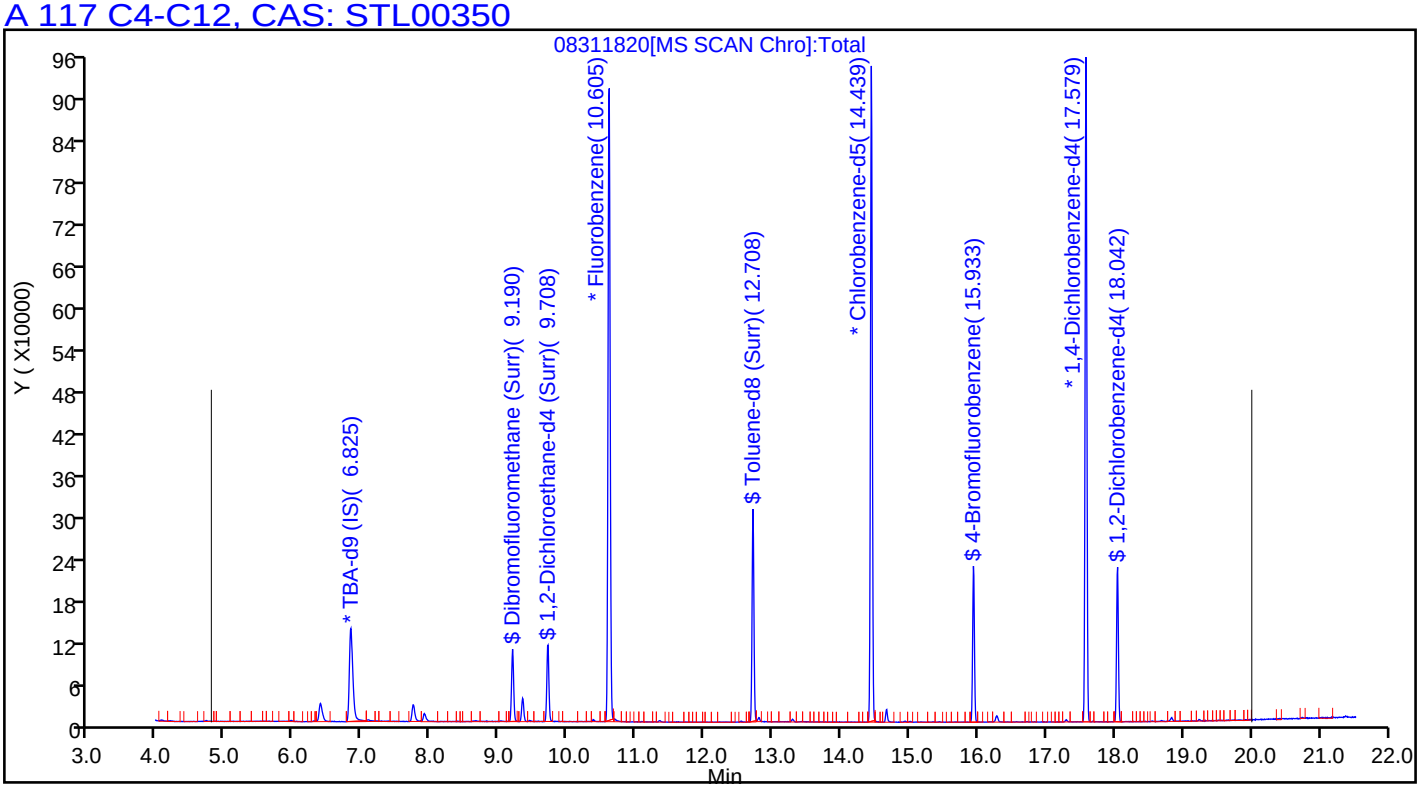
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.18	109.08
$ 10 Toluene-d8 (Surr)	7.50	6.84	91.24
$ 11 4-Bromofluorobenzene	7.50	7.11	94.82
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00
$ 6 BFB	0.0	0	0.00

Report Date: 31-Aug-2018 15:43:50 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311820.D				
Injection Date:	31-Aug-2018 15:15:30	Instrument ID:	HP13		
Lims ID:	720-88263-B-8-A	Lab Sample ID:	720-88263-8		
Client ID:	DG-M11S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	19	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

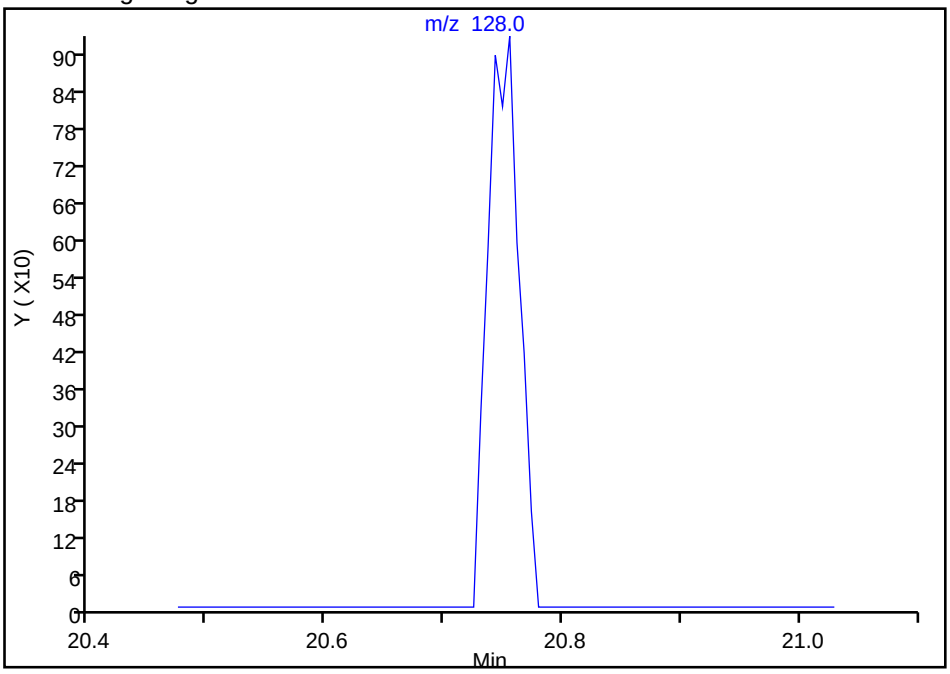
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311820.D				
Injection Date:	31-Aug-2018 15:15:30	Instrument ID:	HP13		
Lims ID:	720-88263-B-8-A	Lab Sample ID:	720-88263-8		
Client ID:	DG-M11S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	19	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

112 Naphthalene, CAS: 91-20-3

Signal: 1

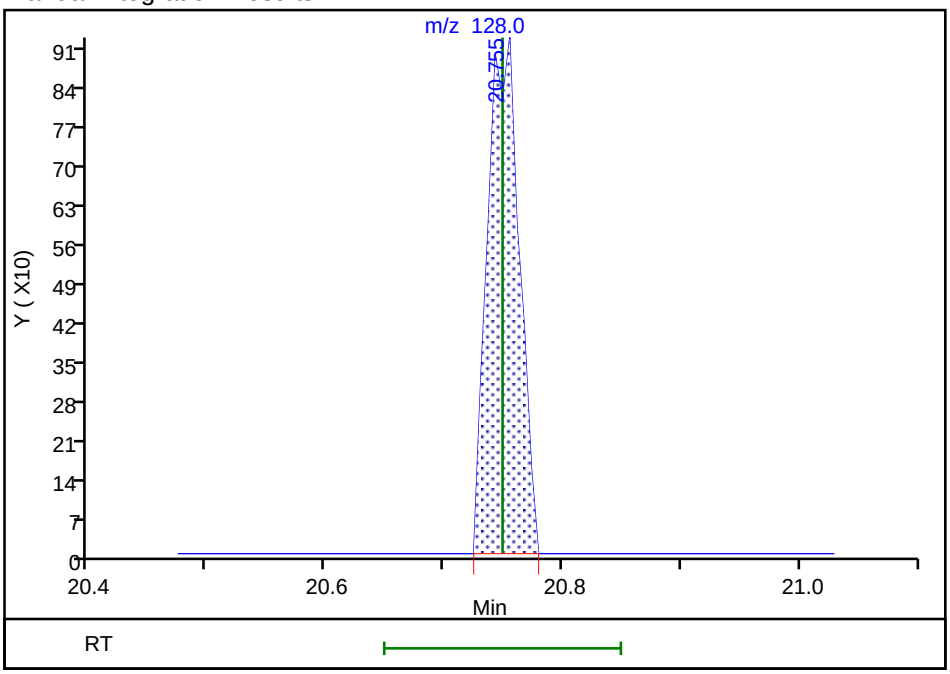
Not Detected
Expected RT: 20.75

Processing Integration Results



Manual Integration Results

RT: 20.76
Area: 1713
Amount: 0.056341
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 15:43:37
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

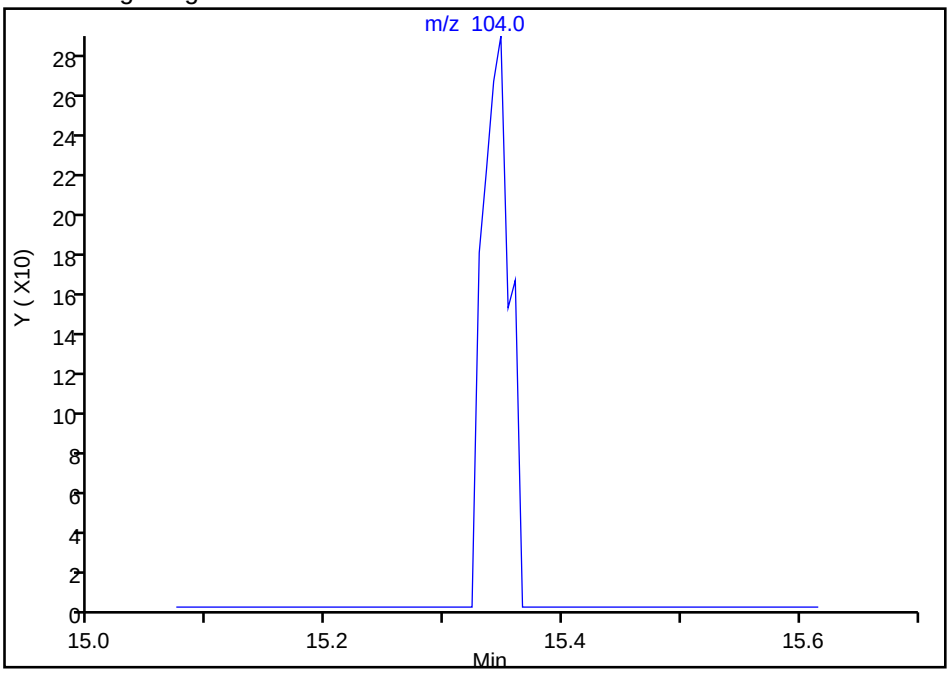
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311820.D				
Injection Date:	31-Aug-2018 15:15:30	Instrument ID:	HP13		
Lims ID:	720-88263-B-8-A	Lab Sample ID:	720-88263-8		
Client ID:	DG-M11S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	19	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

87 Styrene, CAS: 100-42-5

Signal: 1

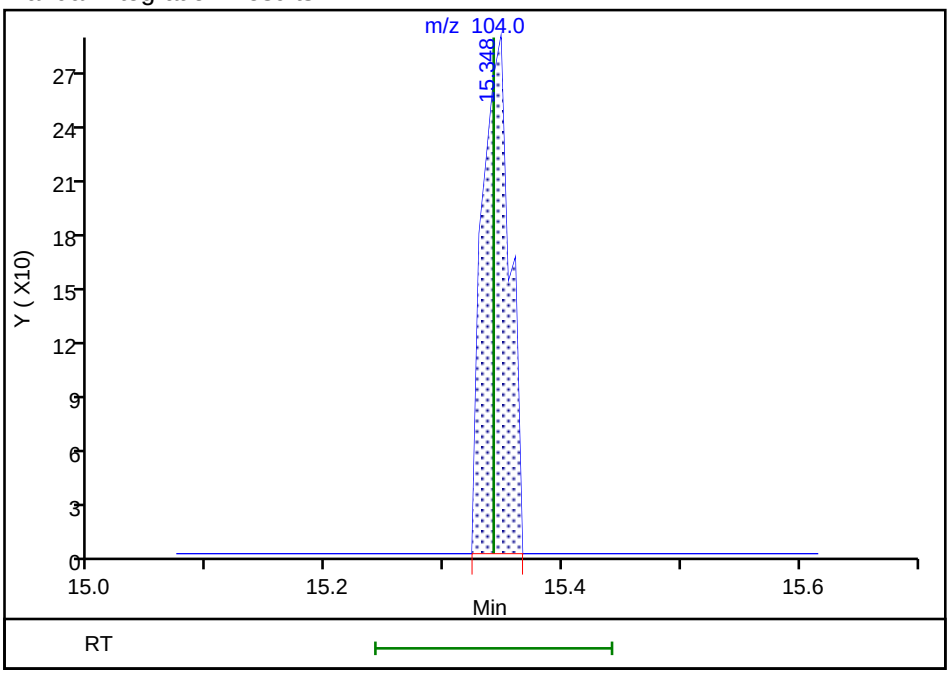
Not Detected
Expected RT: 15.34

Processing Integration Results



Manual Integration Results

RT: 15.35
Area: 467
Amount: 0.019291
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 15:43:21
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

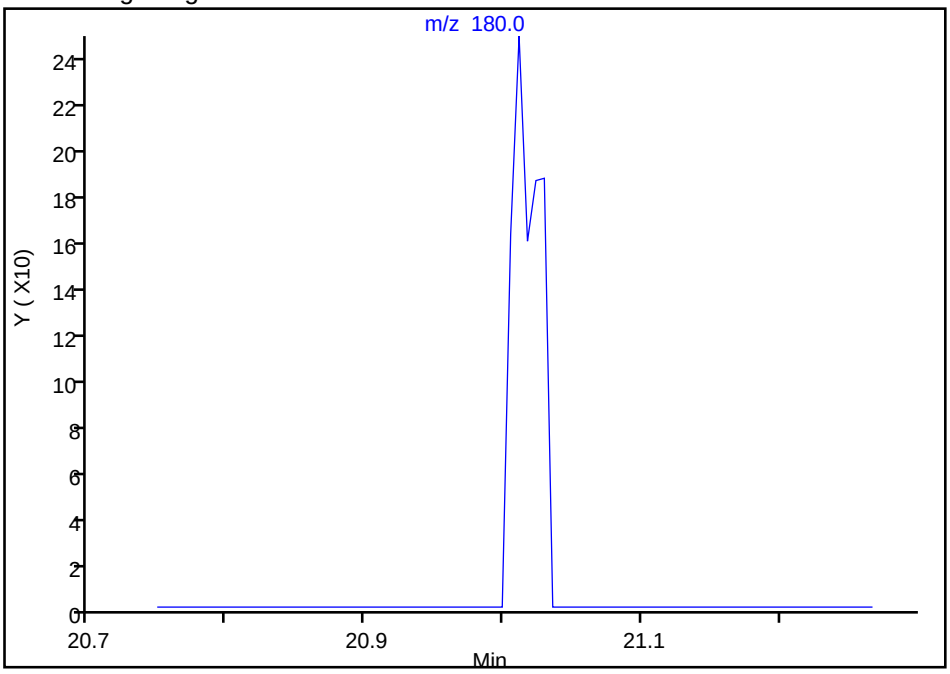
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311820.D				
Injection Date:	31-Aug-2018 15:15:30	Instrument ID:	HP13		
Lims ID:	720-88263-B-8-A	Lab Sample ID:	720-88263-8		
Client ID:	DG-M11S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	19	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

114 1,2,3-Trichlorobenzene, CAS: 87-61-6

Signal: 1

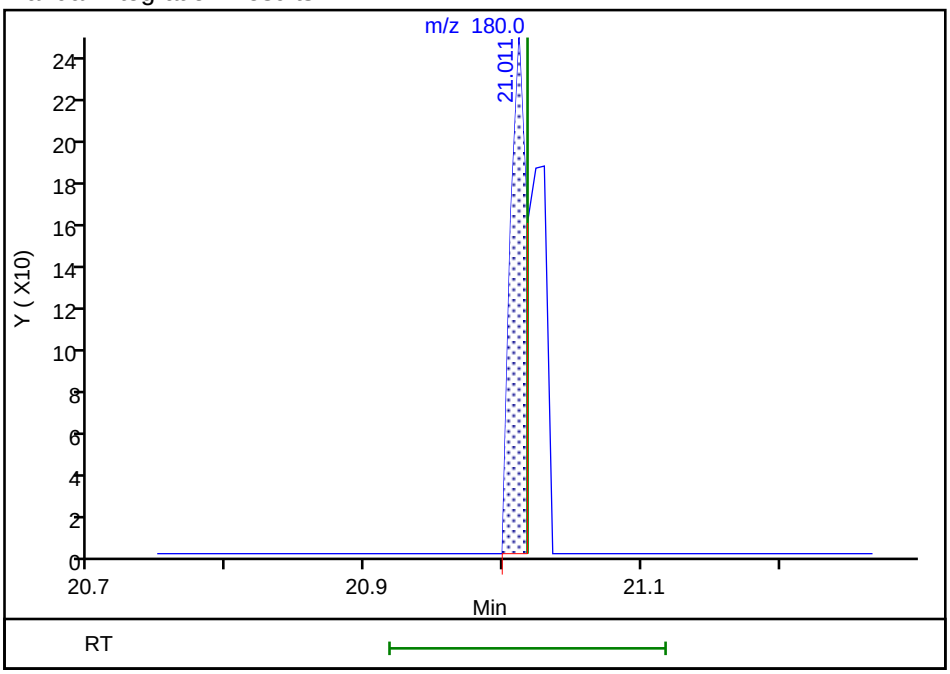
Not Detected
Expected RT: 21.02

Processing Integration Results



Manual Integration Results

RT: 21.01
Area: 206
Amount: 0.016800
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 15:43:44
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

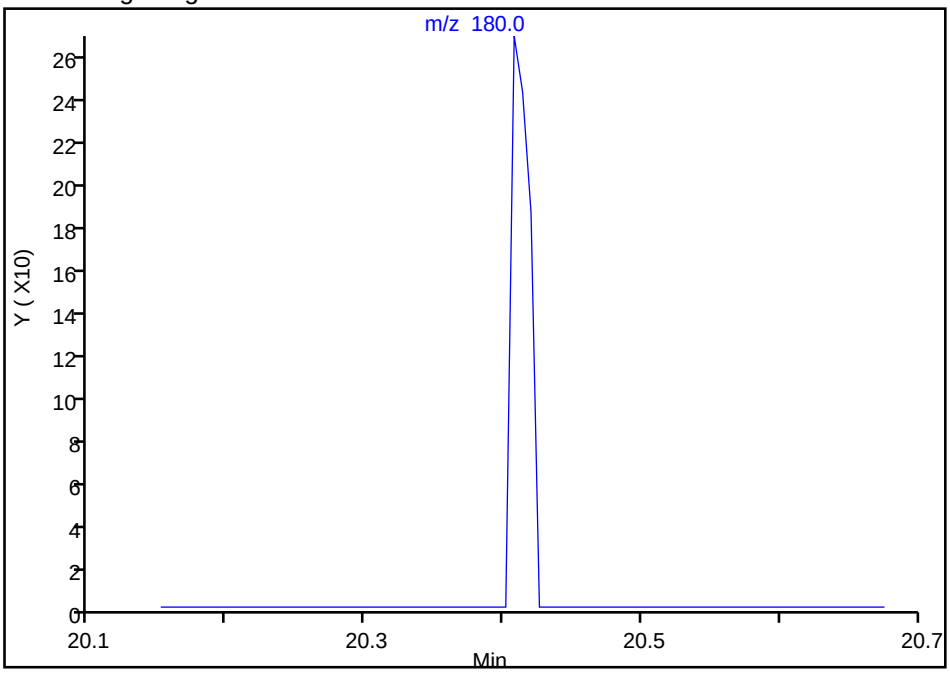
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311820.D				
Injection Date:	31-Aug-2018 15:15:30	Instrument ID:	HP13		
Lims ID:	720-88263-B-8-A	Lab Sample ID:	720-88263-8		
Client ID:	DG-M11S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	19	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

111 1,2,4-Trichlorobenzene, CAS: 120-82-1

Signal: 1

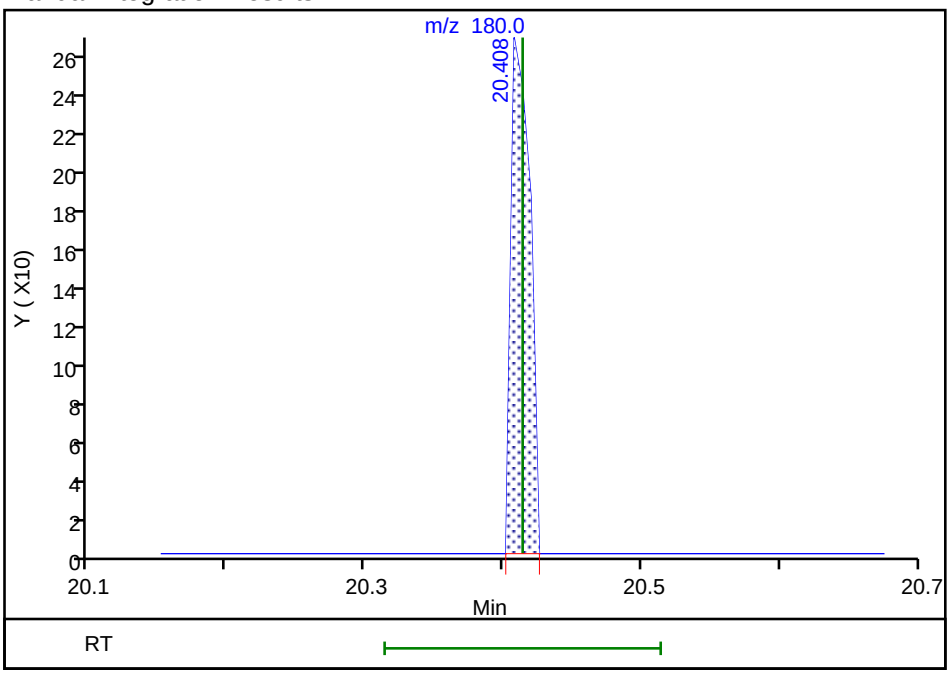
Processing Integration Results

Not Detected
Expected RT: 20.41



Manual Integration Results

RT: 20.41
Area: 251
Amount: 0.019306
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 15:43:34
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

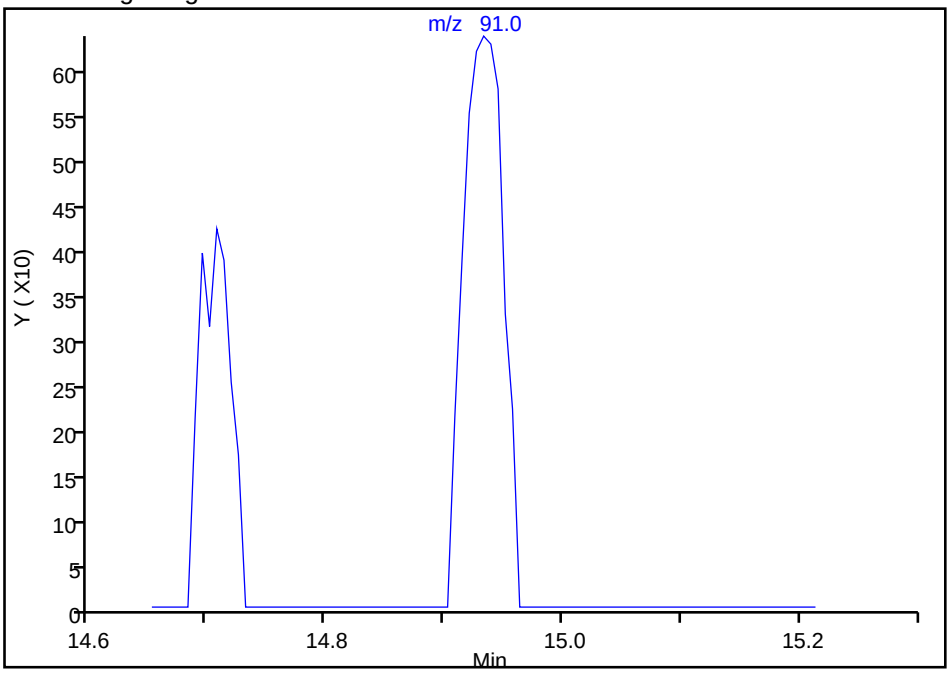
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311820.D				
Injection Date:	31-Aug-2018 15:15:30	Instrument ID:	HP13		
Lims ID:	720-88263-B-8-A	Lab Sample ID:	720-88263-8		
Client ID:	DG-M11S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	19	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

85 m-Xylene & p-Xylene, CAS: 179601-23-1

Signal: 1

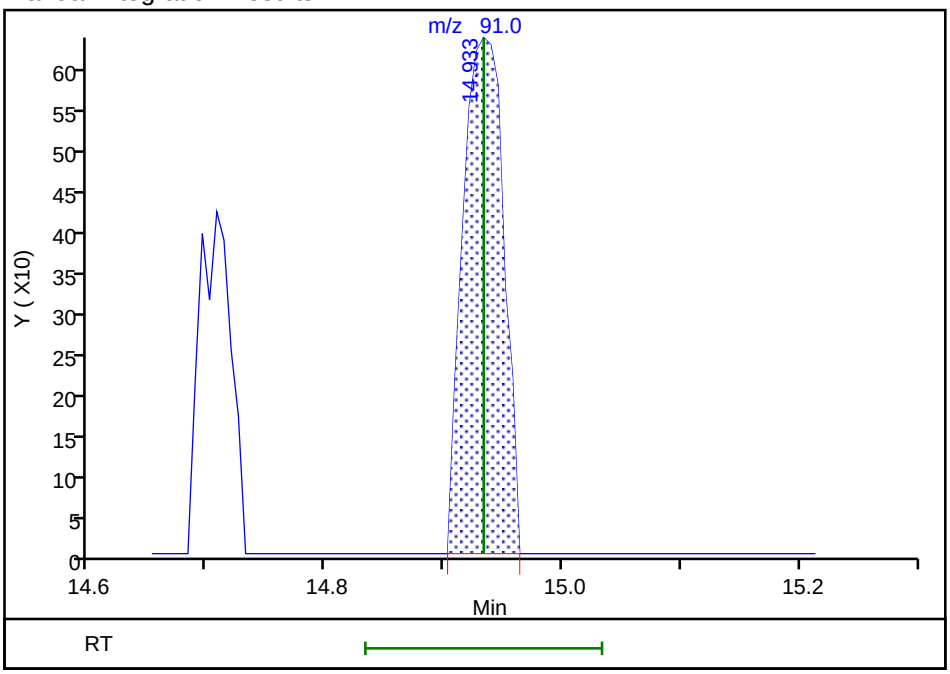
Not Detected
Expected RT: 14.93

Processing Integration Results



Manual Integration Results

RT: 14.93
Area: 1522
Amount: 0.052315
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 15:43:17
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

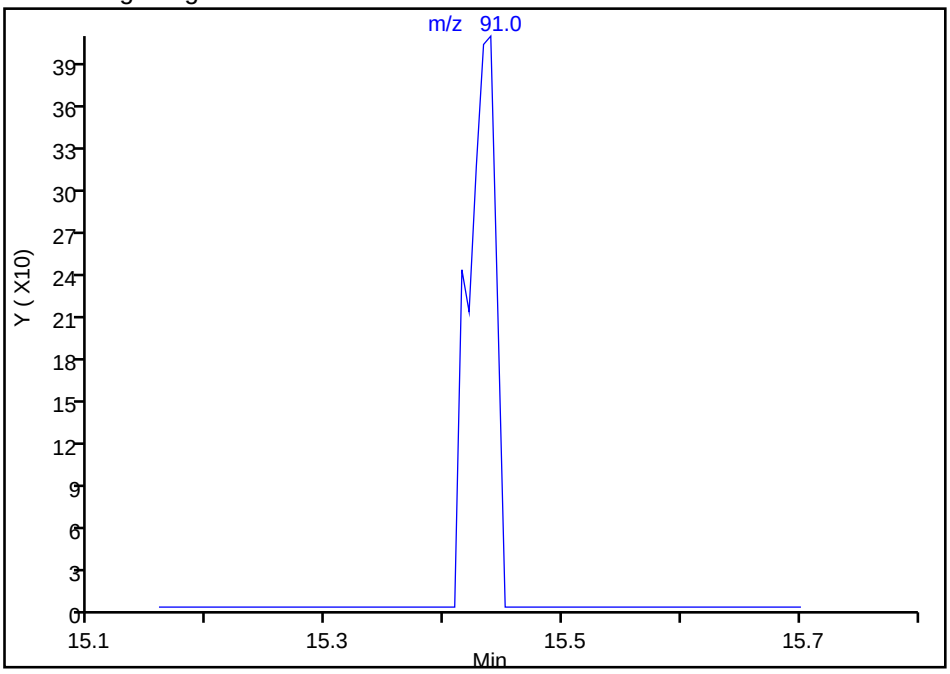
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311820.D				
Injection Date:	31-Aug-2018 15:15:30	Instrument ID:	HP13		
Lims ID:	720-88263-B-8-A	Lab Sample ID:	720-88263-8		
Client ID:	DG-M11S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	19	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

88 o-Xylene, CAS: 95-47-6

Signal: 1

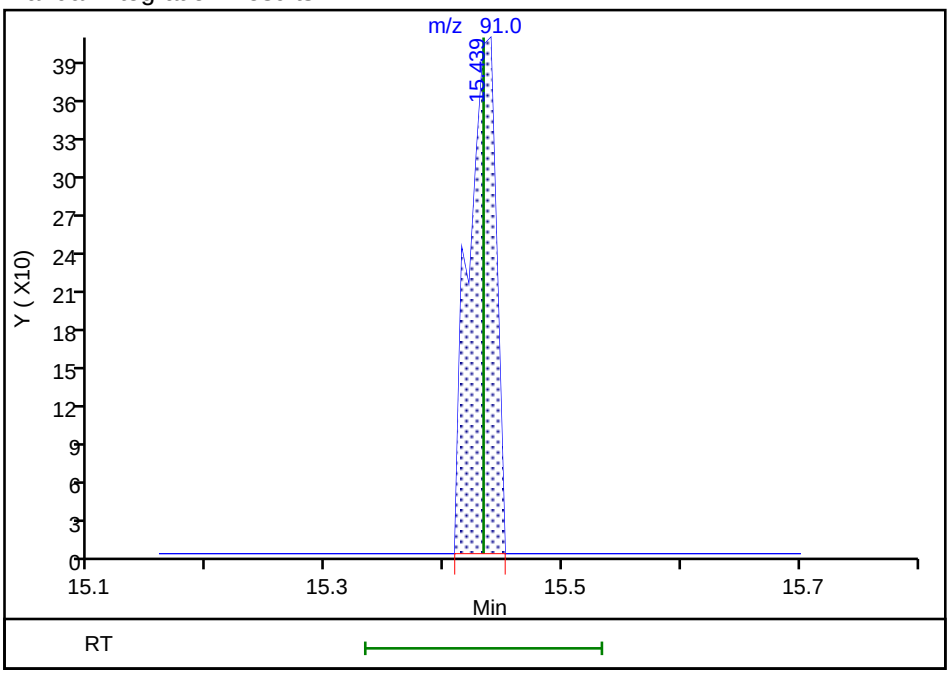
Not Detected
Expected RT: 15.43

Processing Integration Results



Manual Integration Results

RT: 15.44
Area: 652
Amount: 0.021575
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 15:43:24
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-M11S-3.5-4
Lab Sample ID: 720-88263-9
Matrix: Solid
Lab File ID: 08301841.D
Analysis Method: 8260B
Date Collected: 08/27/2018 10:00
Sample wt/vol: 5.082(g)
Date Analyzed: 08/31/2018 02:48
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250625
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.9	1.2
67-64-1	Acetone	45	J	49	37
71-43-2	Benzene	ND		4.9	0.64
75-27-4	Dichlorobromomethane	ND		4.9	0.71
108-86-1	Bromobenzene	ND	*	4.9	0.78
74-97-5	Chlorobromomethane	ND		20	0.71
75-25-2	Bromoform	ND		4.9	2.0
74-83-9	Bromomethane	ND		9.8	0.78
78-93-3	2-Butanone (MEK)	ND		49	21
104-51-8	n-Butylbenzene	ND	*	4.9	0.98
135-98-8	sec-Butylbenzene	ND	*	4.9	0.71
98-06-6	tert-Butylbenzene	ND	*	4.9	0.72
75-15-0	Carbon disulfide	ND		4.9	2.0
56-23-5	Carbon tetrachloride	ND		4.9	0.61
108-90-7	Chlorobenzene	ND		4.9	0.68
75-00-3	Chloroethane	ND		9.8	0.55
67-66-3	Chloroform	ND		4.9	0.65
74-87-3	Chloromethane	ND		9.8	0.78
95-49-8	2-Chlorotoluene	ND	*	4.9	0.64
106-43-4	4-Chlorotoluene	ND	*	4.9	0.67
124-48-1	Chlorodibromomethane	ND		4.9	0.70
95-50-1	1,2-Dichlorobenzene	ND	*	4.9	0.67
541-73-1	1,3-Dichlorobenzene	ND	*	4.9	0.71
106-46-7	1,4-Dichlorobenzene	ND	*	4.9	0.70
142-28-9	1,3-Dichloropropane	ND		4.9	0.72
563-58-6	1,1-Dichloropropene	ND		4.9	0.68
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	9.8	1.7
106-93-4	Ethylene Dibromide	ND		4.9	1.4
74-95-3	Dibromomethane	ND		9.8	0.85
75-71-8	Dichlorodifluoromethane	ND		9.8	0.78
75-34-3	1,1-Dichloroethane	ND		4.9	0.67
107-06-2	1,2-Dichloroethane	ND		4.9	0.75
75-35-4	1,1-Dichloroethene	ND	*	4.9	0.61
156-59-2	cis-1,2-Dichloroethene	ND		4.9	0.67
156-60-5	trans-1,2-Dichloroethene	ND		4.9	0.74
78-87-5	1,2-Dichloropropane	ND		4.9	0.62

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-M11S-3.5-4
Lab Sample ID: 720-88263-9
Matrix: Solid
Lab File ID: 08301841.D
Analysis Method: 8260B
Date Collected: 08/27/2018 10:00
Sample wt/vol: 5.082(g)
Date Analyzed: 08/31/2018 02:48
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250625
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.9	0.68
10061-02-6	trans-1,3-Dichloropropene	ND		4.9	0.66
100-41-4	Ethylbenzene	ND		4.9	0.74
87-68-3	Hexachlorobutadiene	ND	*	4.9	0.89
591-78-6	2-Hexanone	ND		49	9.8
98-82-8	Isopropylbenzene	ND		4.9	0.67
99-87-6	4-Isopropyltoluene	ND	*	4.9	2.5
75-09-2	Methylene Chloride	ND		9.8	5.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		49	9.8
91-20-3	Naphthalene	ND	*	9.8	1.5
103-65-1	N-Propylbenzene	ND	*	4.9	0.65
100-42-5	Styrene	ND		4.9	0.62
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.9	0.75
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	4.9	0.74
127-18-4	Tetrachloroethene	ND		4.9	0.66
108-88-3	Toluene	ND		4.9	0.70
87-61-6	1,2,3-Trichlorobenzene	ND	*	4.9	0.73
120-82-1	1,2,4-Trichlorobenzene	ND	*	4.9	0.70
71-55-6	1,1,1-Trichloroethane	ND		4.9	0.60
79-00-5	1,1,2-Trichloroethane	ND		4.9	0.69
79-01-6	Trichloroethene	ND		4.9	0.62
75-69-4	Trichlorofluoromethane	ND		4.9	0.55
96-18-4	1,2,3-Trichloropropane	ND	*	4.9	0.76
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.9	2.0
95-63-6	1,2,4-Trimethylbenzene	ND	*	4.9	1.6
108-67-8	1,3,5-Trimethylbenzene	ND	*	4.9	0.64
108-05-4	Vinyl acetate	ND		20	4.9
75-01-4	Vinyl chloride	ND		4.9	0.72
1330-20-7	Xylenes, Total	ND		4.9	1.2
594-20-7	2,2-Dichloropropane	ND		4.9	2.0
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		250	98

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-M11S-3.5-4 Lab Sample ID: 720-88263-9

Matrix: Solid Lab File ID: 08301841.D

Analysis Method: 8260B Date Collected: 08/27/2018 10:00

Sample wt/vol: 5.082(g) Date Analyzed: 08/31/2018 02:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250625 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	74		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	114		60-140
2037-26-5	Toluene-d8 (Surr)	88		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301841.D
Lims ID: 720-88263-A-9-A
Client ID: DG-M11S--3.5-4
Sample Type: Client
Inject. Date: 31-Aug-2018 02:48:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-A-9
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:32:23 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 08:35:36

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	201956	250.0	
* 2 Fluorobenzene	96	10.720	10.709	0.011	98	851784	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.554	0.010	85	583454	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	177325	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.304	9.303	0.010	92	58162	8.06	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.821	0.010	0	66483	8.58	
$ 10 Toluene-d8 (Surr)	98	12.821	12.834	-0.001	94	223301	6.60	
$ 11 4-Bromofluorobenzene	95	16.053	16.065	0.000	91	50224	5.53	
$ 12 1,2-Dichlorobenzene-d4	152	18.165	18.166	-0.001	84	43277	6.98	
28 Acetone	58	6.474	6.481	0.000	97	15039	23.0	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	360297	5.48	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	125367	1.91	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	137176	2.09	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	395604	6.02	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	146354	NC	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	146354	2.23	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	375309	5.71	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	180509	2.75	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	50392	0.7666	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	97171	1.48	

QC Flag Legend

Processing Flags
NC - Not Calibrated
s - Failed ISTD Recovery Test

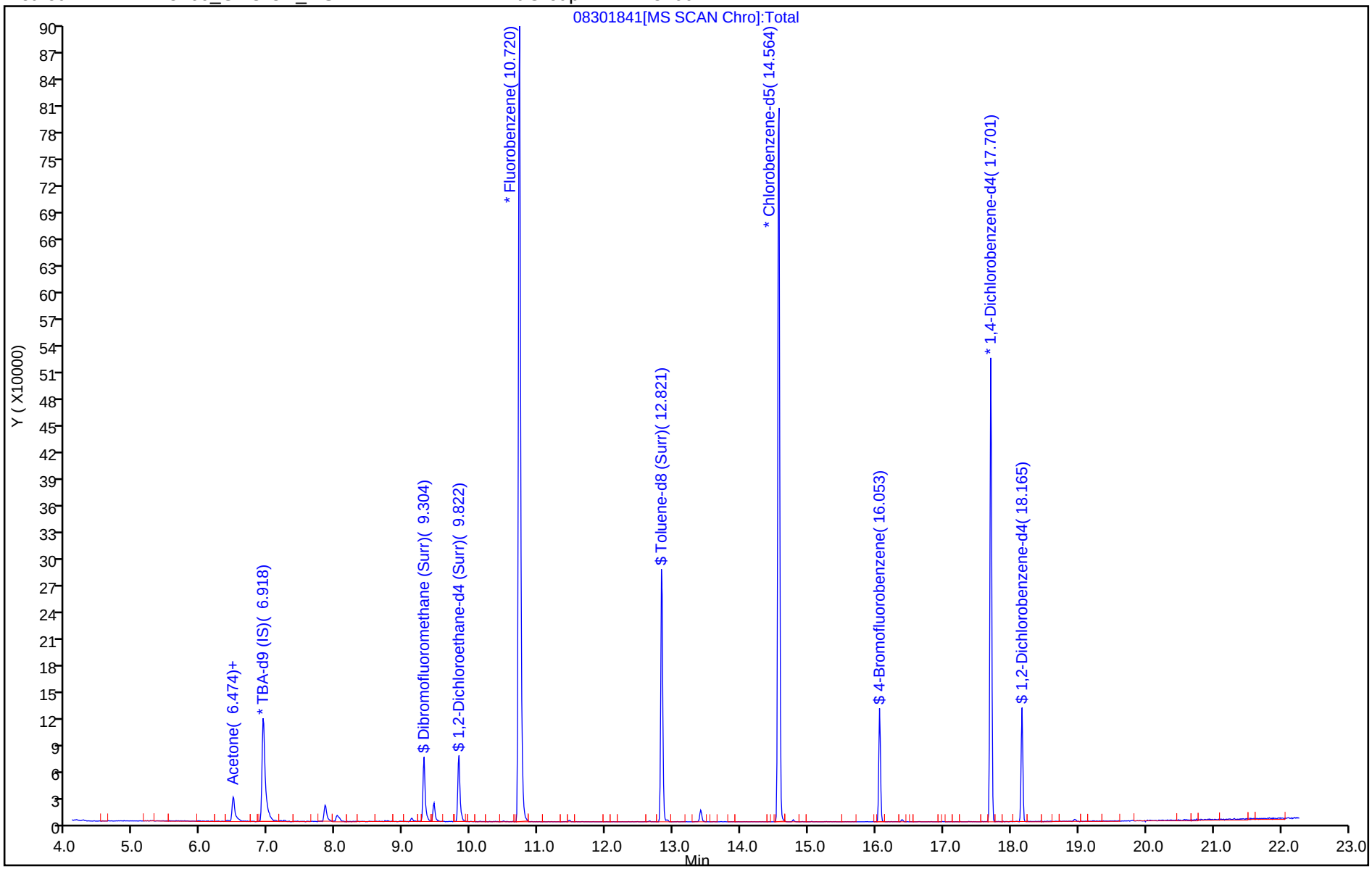
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 08:35:37 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301841.D				
Injection Date:	31-Aug-2018 02:48:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88263-A-9-A	Lab Sample ID:	720-88263-9	Worklist Smp#:	19
Client ID:	DG-M11S--3.5-4				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301841.D
Lims ID: 720-88263-A-9-A
Client ID: DG-M11S--3.5-4
Sample Type: Client
Inject. Date: 31-Aug-2018 02:48:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-A-9
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:32:23 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 08:35:36

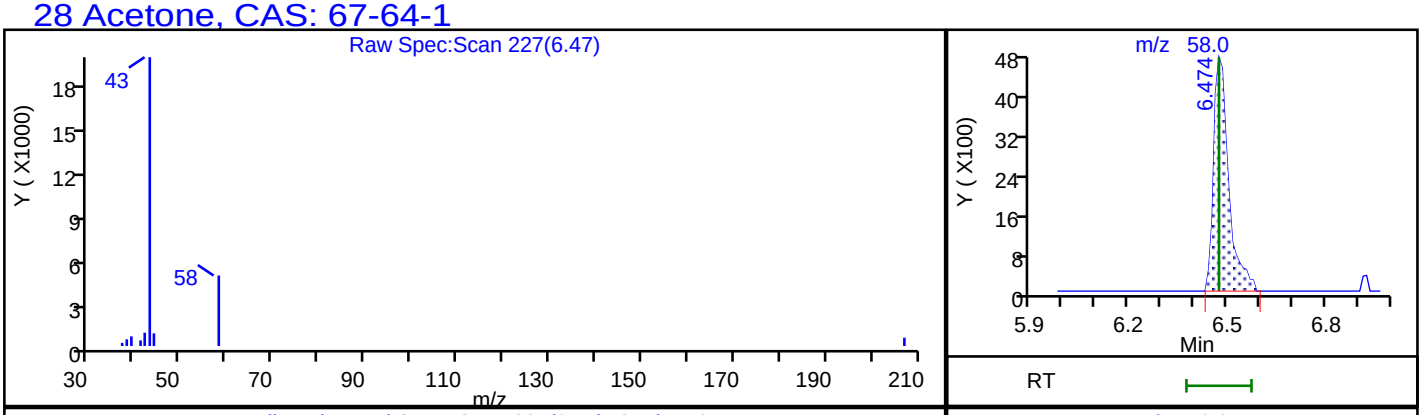
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.58	114.36
$ 10 Toluene-d8 (Surr)	7.50	6.60	88.03
$ 11 4-Bromofluorobenzene	7.50	5.53	73.71
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

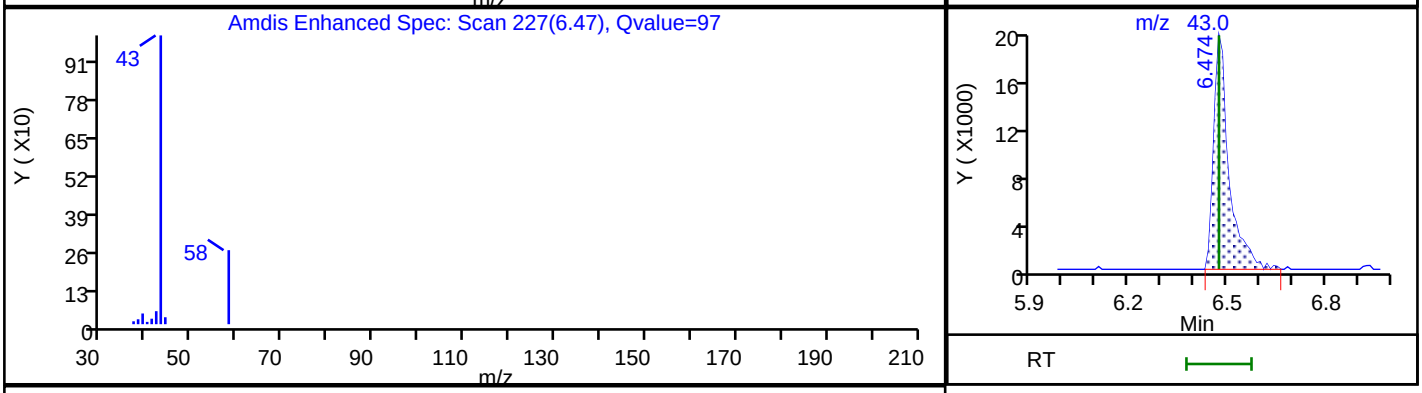
Report Date: 31-Aug-2018 08:35:37 Chrom Revision: 2.3 19-Jul-2018 15:14:50

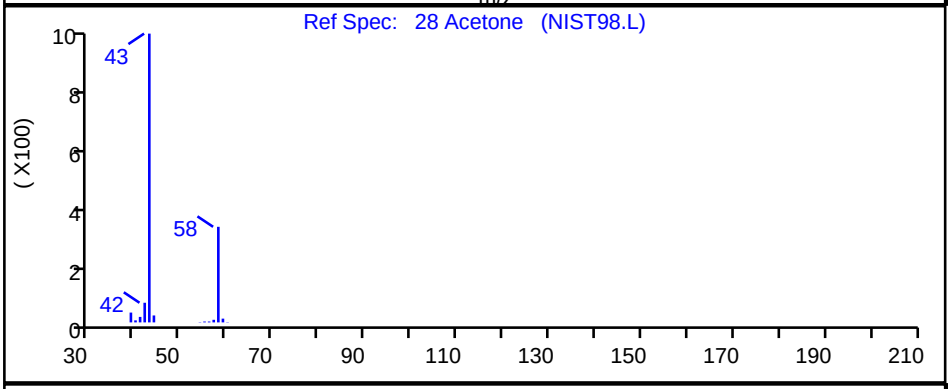
TestAmerica Pleasanton

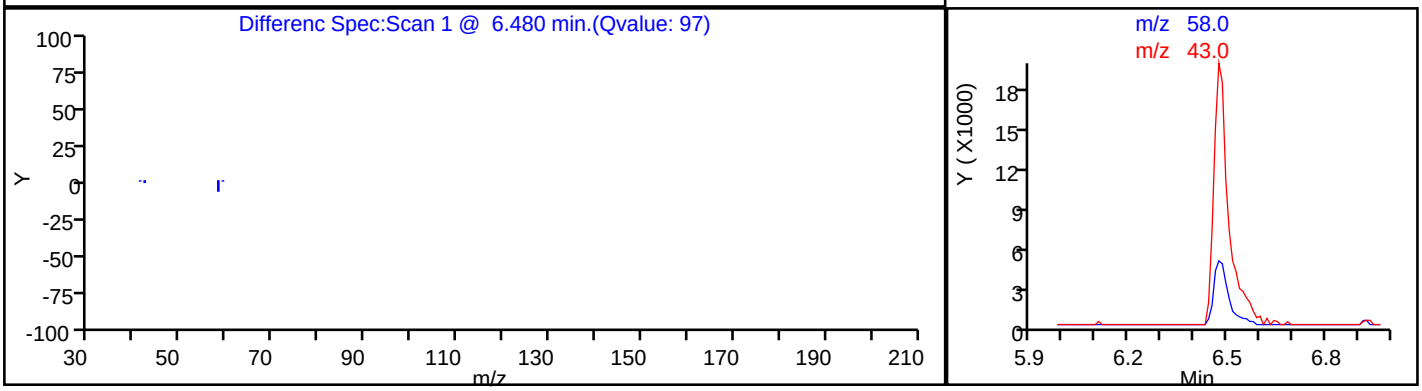
Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301841.D				
Injection Date:	31-Aug-2018 02:48:30	Instrument ID:	CHMSV2		
Lims ID:	720-88263-A-9-A	Lab Sample ID:	720-88263-9		
Client ID:	DG-M11S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1







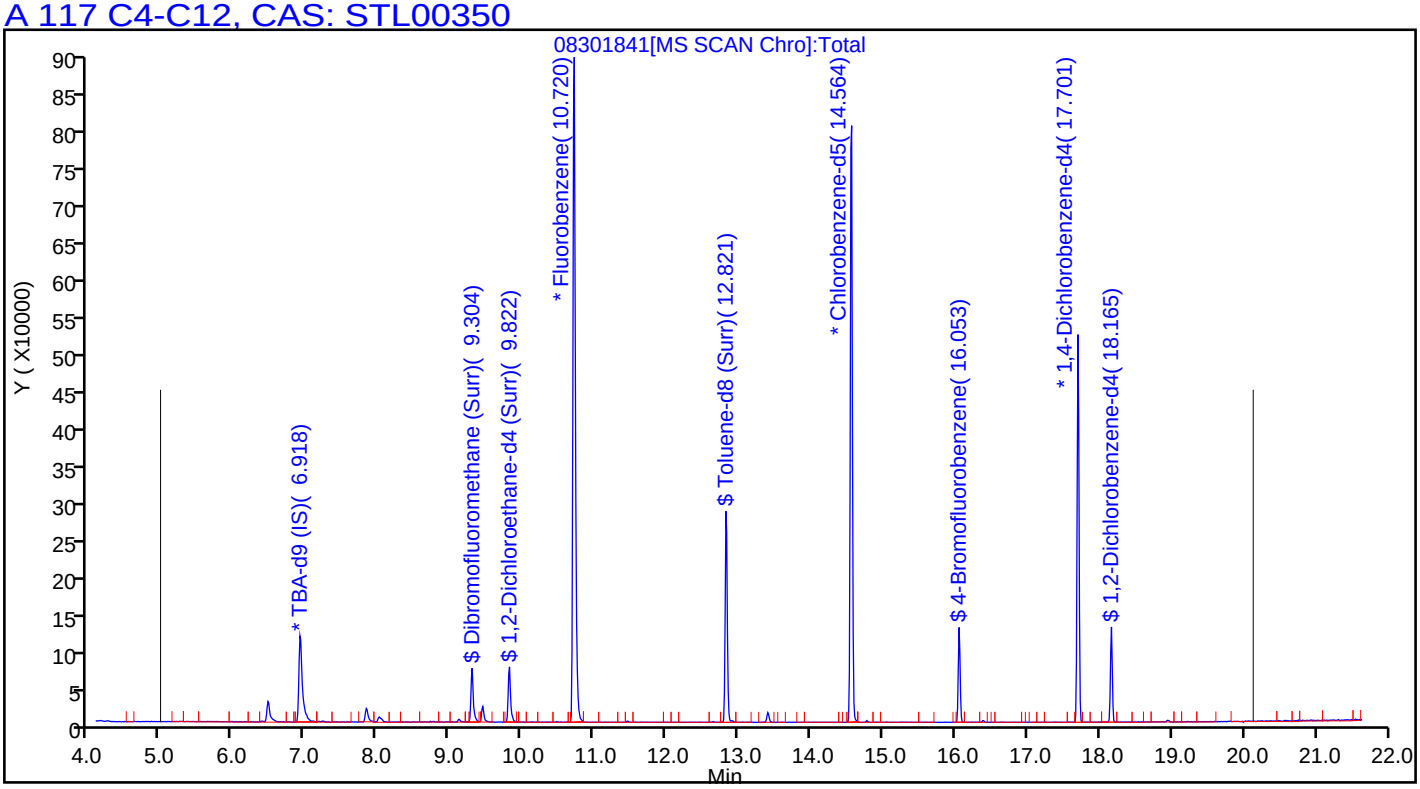


Report Date: 31-Aug-2018 08:35:37 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301841.D				
Injection Date:	31-Aug-2018 02:48:30	Instrument ID:	CHMSV2		
Lims ID:	720-88263-A-9-A	Lab Sample ID:	720-88263-9		
Client ID:	DG-M11S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-K11S-0.5-1 Lab Sample ID: 720-88263-10

Matrix: Solid Lab File ID: 08301842.D

Analysis Method: 8260B Date Collected: 08/27/2018 10:35

Sample wt/vol: 5.813(g) Date Analyzed: 08/31/2018 03:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250625 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.3	1.0
67-64-1	Acetone	ND		43	33
71-43-2	Benzene	ND		4.3	0.56
75-27-4	Dichlorobromomethane	ND		4.3	0.62
108-86-1	Bromobenzene	ND		4.3	0.68
74-97-5	Chlorobromomethane	ND		17	0.62
75-25-2	Bromoform	ND		4.3	1.7
74-83-9	Bromomethane	ND		8.6	0.68
78-93-3	2-Butanone (MEK)	ND		43	18
104-51-8	n-Butylbenzene	ND		4.3	0.86
135-98-8	sec-Butylbenzene	ND		4.3	0.62
98-06-6	tert-Butylbenzene	ND		4.3	0.63
75-15-0	Carbon disulfide	ND		4.3	1.7
56-23-5	Carbon tetrachloride	ND		4.3	0.53
108-90-7	Chlorobenzene	ND		4.3	0.59
75-00-3	Chloroethane	ND		8.6	0.48
67-66-3	Chloroform	ND		4.3	0.57
74-87-3	Chloromethane	ND		8.6	0.68
95-49-8	2-Chlorotoluene	ND		4.3	0.56
106-43-4	4-Chlorotoluene	ND		4.3	0.58
124-48-1	Chlorodibromomethane	ND		4.3	0.61
95-50-1	1,2-Dichlorobenzene	ND		4.3	0.58
541-73-1	1,3-Dichlorobenzene	ND		4.3	0.62
106-46-7	1,4-Dichlorobenzene	ND		4.3	0.61
142-28-9	1,3-Dichloropropane	ND		4.3	0.63
563-58-6	1,1-Dichloropropene	ND		4.3	0.59
96-12-8	1,2-Dibromo-3-Chloropropane	ND		8.6	1.5
106-93-4	Ethylene Dibromide	ND		4.3	1.2
74-95-3	Dibromomethane	ND		8.6	0.74
75-71-8	Dichlorodifluoromethane	ND		8.6	0.68
75-34-3	1,1-Dichloroethane	ND		4.3	0.58
107-06-2	1,2-Dichloroethane	ND		4.3	0.65
75-35-4	1,1-Dichloroethene	ND	*	4.3	0.53
156-59-2	cis-1,2-Dichloroethene	ND		4.3	0.58
156-60-5	trans-1,2-Dichloroethene	ND		4.3	0.65
78-87-5	1,2-Dichloropropane	ND		4.3	0.54

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-K11S-0.5-1 Lab Sample ID: 720-88263-10

Matrix: Solid Lab File ID: 08301842.D

Analysis Method: 8260B Date Collected: 08/27/2018 10:35

Sample wt/vol: 5.813(g) Date Analyzed: 08/31/2018 03:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250625 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.3	0.59
10061-02-6	trans-1,3-Dichloropropene	ND		4.3	0.58
100-41-4	Ethylbenzene	ND		4.3	0.65
87-68-3	Hexachlorobutadiene	ND		4.3	0.77
591-78-6	2-Hexanone	ND		43	8.6
98-82-8	Isopropylbenzene	ND		4.3	0.58
99-87-6	4-Isopropyltoluene	ND		4.3	2.2
75-09-2	Methylene Chloride	ND		8.6	4.8
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		43	8.6
91-20-3	Naphthalene	ND		8.6	1.3
103-65-1	N-Propylbenzene	ND		4.3	0.57
100-42-5	Styrene	ND		4.3	0.54
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.3	0.65
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.3	0.65
127-18-4	Tetrachloroethene	ND		4.3	0.58
108-88-3	Toluene	ND		4.3	0.61
87-61-6	1,2,3-Trichlorobenzene	ND		4.3	0.64
120-82-1	1,2,4-Trichlorobenzene	ND		4.3	0.61
71-55-6	1,1,1-Trichloroethane	ND		4.3	0.52
79-00-5	1,1,2-Trichloroethane	ND		4.3	0.60
79-01-6	Trichloroethene	ND		4.3	0.54
75-69-4	Trichlorofluoromethane	ND		4.3	0.48
96-18-4	1,2,3-Trichloropropane	ND		4.3	0.66
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.3	1.8
95-63-6	1,2,4-Trimethylbenzene	ND		4.3	1.4
108-67-8	1,3,5-Trimethylbenzene	ND		4.3	0.56
108-05-4	Vinyl acetate	ND		17	4.3
75-01-4	Vinyl chloride	ND		4.3	0.63
1330-20-7	Xylenes, Total	ND		4.3	1.0
594-20-7	2,2-Dichloropropane	ND		4.3	1.7
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		220	86

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-K11S-0.5-1 Lab Sample ID: 720-88263-10

Matrix: Solid Lab File ID: 08301842.D

Analysis Method: 8260B Date Collected: 08/27/2018 10:35

Sample wt/vol: 5.813(g) Date Analyzed: 08/31/2018 03:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250625 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	91		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	120		60-140
2037-26-5	Toluene-d8 (Surr)	92		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301842.D
Lims ID: 720-88263-A-10-A
Client ID: DG-K11S--0.5-1
Sample Type: Client
Inject. Date: 31-Aug-2018 03:17:30 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-A-10
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:32:23 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 08:35:41

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	187985	250.0	
* 2 Fluorobenzene	96	10.720	10.709	0.011	98	963554	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.554	0.010	86	782656	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	357909	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.304	9.303	0.010	92	64758	7.93	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.821	0.010	0	78739	8.98	
$ 10 Toluene-d8 (Surr)	98	12.821	12.834	-0.001	94	263759	6.89	
$ 11 4-Bromofluorobenzene	95	16.053	16.065	0.000	91	83047	6.81	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	84	75282	6.01	
28 Acetone	58	6.474	6.481	0.000	97	9672	13.1	
59 Benzene	78	10.487	10.498	-0.001	1	1272	0.0366	
131 Butyl Ether	87	14.775	14.786	-0.001	93	1654	0.2490	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	458911	6.17	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	201258	2.71	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	233847	3.14	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	533216	7.17	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	242148	NC	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	242148	3.26	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	503971	6.78	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	315479	4.24	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	68523	0.9215	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	154072	2.07	

QC Flag Legend

Processing Flags
NC - Not Calibrated

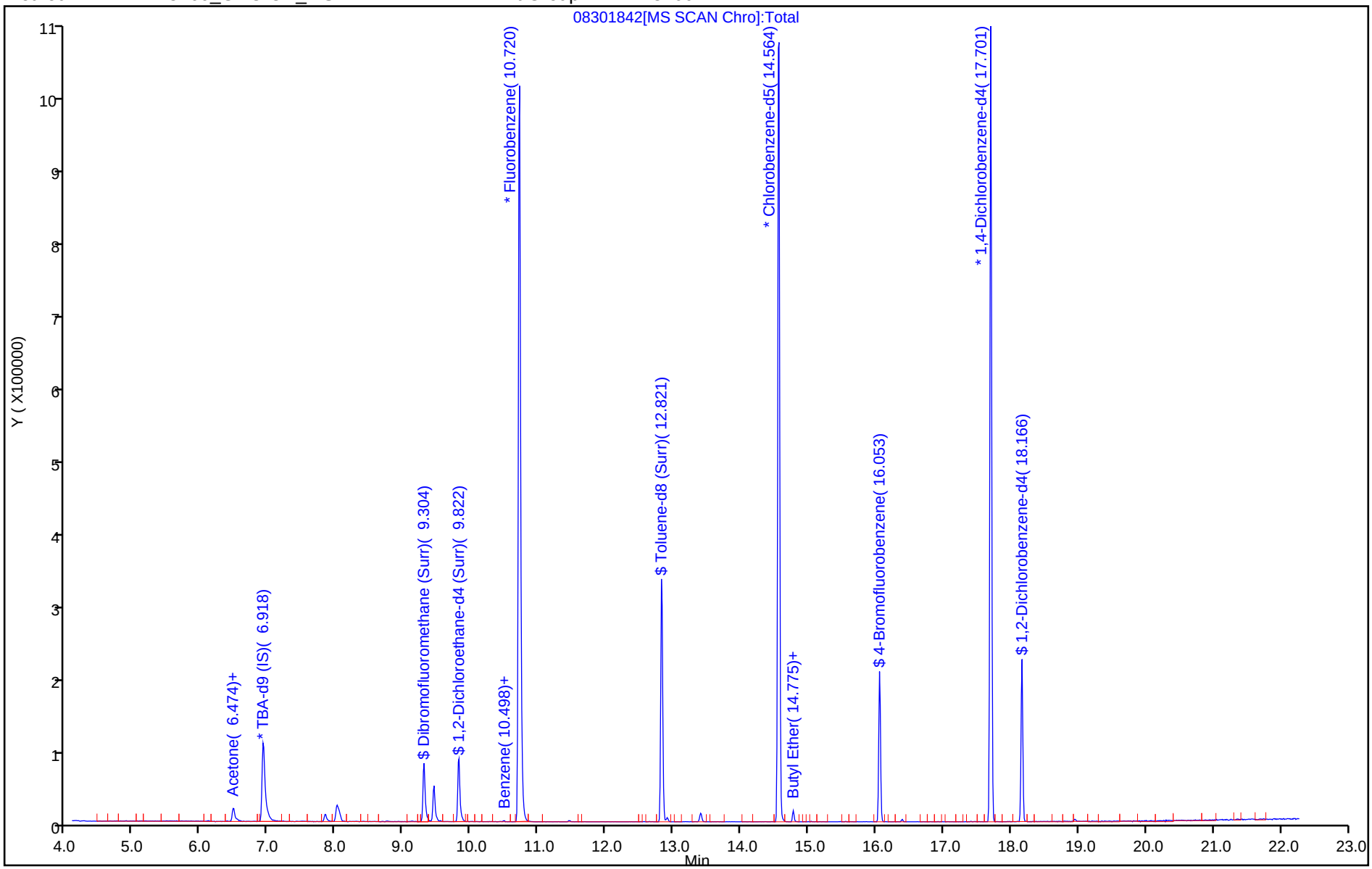
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 08:35:41 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301842.D				
Injection Date:	31-Aug-2018 03:17:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88263-A-10-A	Lab Sample ID:	720-88263-10	Worklist Smp#:	20
Client ID:	DG-K11S--0.5-1				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301842.D
Lims ID: 720-88263-A-10-A
Client ID: DG-K11S--0.5-1
Sample Type: Client
Inject. Date: 31-Aug-2018 03:17:30 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-A-10
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:32:23 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 08:35:41

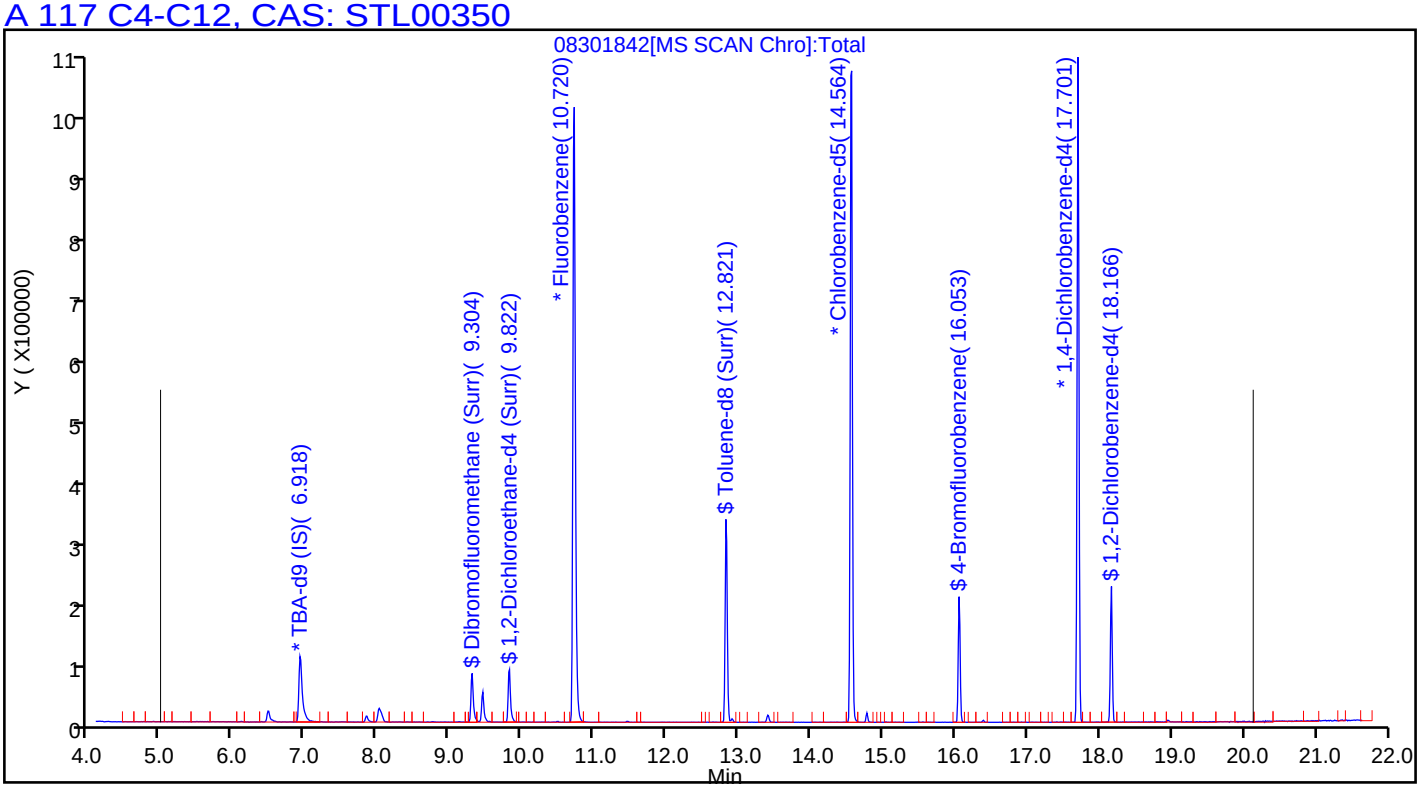
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.98	119.73
$ 10 Toluene-d8 (Surr)	7.50	6.89	91.92
$ 11 4-Bromofluorobenzene	7.50	6.81	90.86
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 31-Aug-2018 08:35:41 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301842.D				
Injection Date:	31-Aug-2018 03:17:30	Instrument ID:	CHMSV2		
Lims ID:	720-88263-A-10-A	Lab Sample ID:	720-88263-10		
Client ID:	DG-K11S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-K11S-3.5-4
Lab Sample ID: 720-88263-11
Matrix: Solid
Lab File ID: 08301843.D
Analysis Method: 8260B
Date Collected: 08/27/2018 10:35
Sample wt/vol: 5.752(g)
Date Analyzed: 08/31/2018 03:45
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250625
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.3	1.0
67-64-1	Acetone	ND		43	33
71-43-2	Benzene	ND		4.3	0.57
75-27-4	Dichlorobromomethane	ND		4.3	0.63
108-86-1	Bromobenzene	ND		4.3	0.69
74-97-5	Chlorobromomethane	ND		17	0.63
75-25-2	Bromoform	ND		4.3	1.7
74-83-9	Bromomethane	ND		8.7	0.69
78-93-3	2-Butanone (MEK)	ND		43	18
104-51-8	n-Butylbenzene	ND		4.3	0.87
135-98-8	sec-Butylbenzene	ND		4.3	0.63
98-06-6	tert-Butylbenzene	ND		4.3	0.63
75-15-0	Carbon disulfide	ND		4.3	1.7
56-23-5	Carbon tetrachloride	ND		4.3	0.54
108-90-7	Chlorobenzene	ND		4.3	0.60
75-00-3	Chloroethane	ND		8.7	0.49
67-66-3	Chloroform	ND		4.3	0.57
74-87-3	Chloromethane	ND		8.7	0.69
95-49-8	2-Chlorotoluene	ND		4.3	0.57
106-43-4	4-Chlorotoluene	ND		4.3	0.59
124-48-1	Chlorodibromomethane	ND		4.3	0.62
95-50-1	1,2-Dichlorobenzene	ND		4.3	0.59
541-73-1	1,3-Dichlorobenzene	ND		4.3	0.63
106-46-7	1,4-Dichlorobenzene	ND		4.3	0.62
142-28-9	1,3-Dichloropropane	ND		4.3	0.63
563-58-6	1,1-Dichloropropene	ND		4.3	0.60
96-12-8	1,2-Dibromo-3-Chloropropane	ND		8.7	1.5
106-93-4	Ethylene Dibromide	ND		4.3	1.2
74-95-3	Dibromomethane	ND		8.7	0.75
75-71-8	Dichlorodifluoromethane	ND		8.7	0.69
75-34-3	1,1-Dichloroethane	ND		4.3	0.59
107-06-2	1,2-Dichloroethane	ND		4.3	0.66
75-35-4	1,1-Dichloroethene	ND	*	4.3	0.54
156-59-2	cis-1,2-Dichloroethene	ND		4.3	0.59
156-60-5	trans-1,2-Dichloroethene	ND		4.3	0.65
78-87-5	1,2-Dichloropropane	ND		4.3	0.55

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-K11S-3.5-4 Lab Sample ID: 720-88263-11

Matrix: Solid Lab File ID: 08301843.D

Analysis Method: 8260B Date Collected: 08/27/2018 10:35

Sample wt/vol: 5.752(g) Date Analyzed: 08/31/2018 03:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250625 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.3	0.60
10061-02-6	trans-1,3-Dichloropropene	ND		4.3	0.58
100-41-4	Ethylbenzene	ND		4.3	0.65
87-68-3	Hexachlorobutadiene	ND		4.3	0.78
591-78-6	2-Hexanone	ND		43	8.7
98-82-8	Isopropylbenzene	ND		4.3	0.59
99-87-6	4-Isopropyltoluene	ND		4.3	2.2
75-09-2	Methylene Chloride	ND		8.7	4.9
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		43	8.7
91-20-3	Naphthalene	ND		8.7	1.3
103-65-1	N-Propylbenzene	ND		4.3	0.57
100-42-5	Styrene	ND		4.3	0.55
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.3	0.66
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.3	0.65
127-18-4	Tetrachloroethene	ND		4.3	0.58
108-88-3	Toluene	ND		4.3	0.62
87-61-6	1,2,3-Trichlorobenzene	ND		4.3	0.64
120-82-1	1,2,4-Trichlorobenzene	ND		4.3	0.62
71-55-6	1,1,1-Trichloroethane	ND		4.3	0.53
79-00-5	1,1,2-Trichloroethane	ND		4.3	0.61
79-01-6	Trichloroethene	ND		4.3	0.55
75-69-4	Trichlorofluoromethane	ND		4.3	0.49
96-18-4	1,2,3-Trichloropropane	ND		4.3	0.67
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.3	1.8
95-63-6	1,2,4-Trimethylbenzene	ND		4.3	1.4
108-67-8	1,3,5-Trimethylbenzene	ND		4.3	0.57
108-05-4	Vinyl acetate	ND		17	4.3
75-01-4	Vinyl chloride	ND		4.3	0.63
1330-20-7	Xylenes, Total	ND		4.3	1.1
594-20-7	2,2-Dichloropropane	ND		4.3	1.7
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		220	87

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-K11S-3.5-4 Lab Sample ID: 720-88263-11

Matrix: Solid Lab File ID: 08301843.D

Analysis Method: 8260B Date Collected: 08/27/2018 10:35

Sample wt/vol: 5.752(g) Date Analyzed: 08/31/2018 03:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250625 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	87		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	116		60-140
2037-26-5	Toluene-d8 (Surr)	92		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301843.D
Lims ID: 720-88263-A-11-A
Client ID: DG-K11S--3.5-4
Sample Type: Client
Inject. Date: 31-Aug-2018 03:45:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-A-11
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:32:23 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 08:35:44

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	181121	250.0	
* 2 Fluorobenzene	96	10.720	10.709	0.011	98	1023623	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.554	0.010	85	824157	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	358012	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.305	9.303	0.011	93	69356	8.00	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.821	0.010	0	80893	8.68	
$ 10 Toluene-d8 (Surr)	98	12.822	12.834	0.000	94	279013	6.86	
$ 11 4-Bromofluorobenzene	95	16.053	16.065	0.000	92	83949	6.54	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	84	75579	6.03	
28 Acetone	58	6.474	6.481	0.000	97	11663	14.8	
59 Benzene	78	10.487	10.498	-0.001	1	1405	0.0381	
75 Toluene	92	12.906	12.915	0.000	98	3419	0.1290	
131 Butyl Ether	87	14.775	14.786	-0.001	94	1243	0.1777	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	551716	6.98	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	239709	3.03	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	273144	3.46	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	598099	7.57	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	287151	NC	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	287151	3.63	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	581531	7.36	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	331492	4.20	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	74415	0.9420	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	127561	1.61	

QC Flag Legend

Processing Flags

NC - Not Calibrated

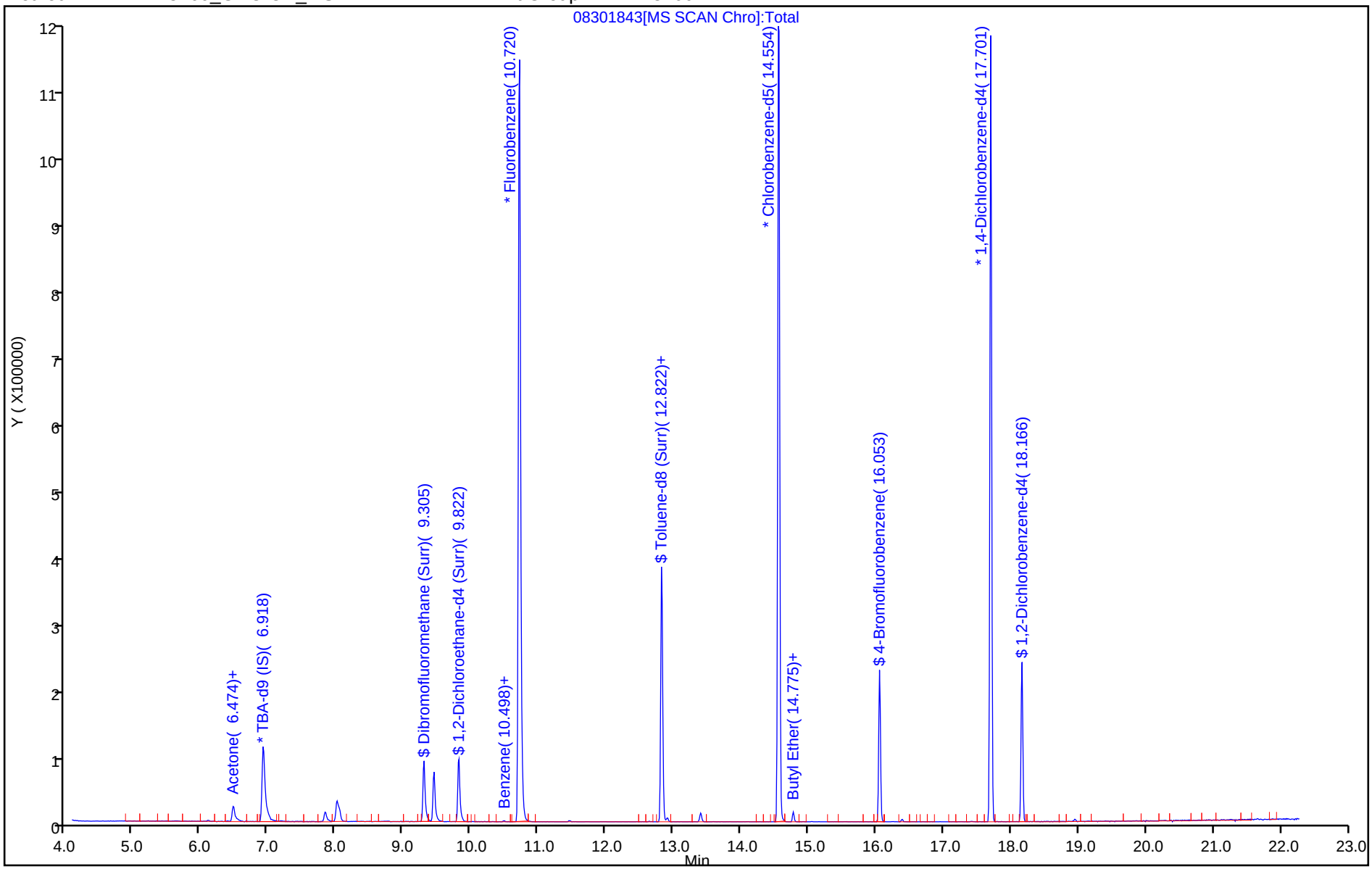
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 08:35:44 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301843.D				
Injection Date:	31-Aug-2018 03:45:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88263-A-11-A	Lab Sample ID:	720-88263-11	Worklist Smp#:	21
Client ID:	DG-K11S--3.5-4				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301843.D
Lims ID: 720-88263-A-11-A
Client ID: DG-K11S--3.5-4
Sample Type: Client
Inject. Date: 31-Aug-2018 03:45:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-A-11
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:32:23 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 08:35:44

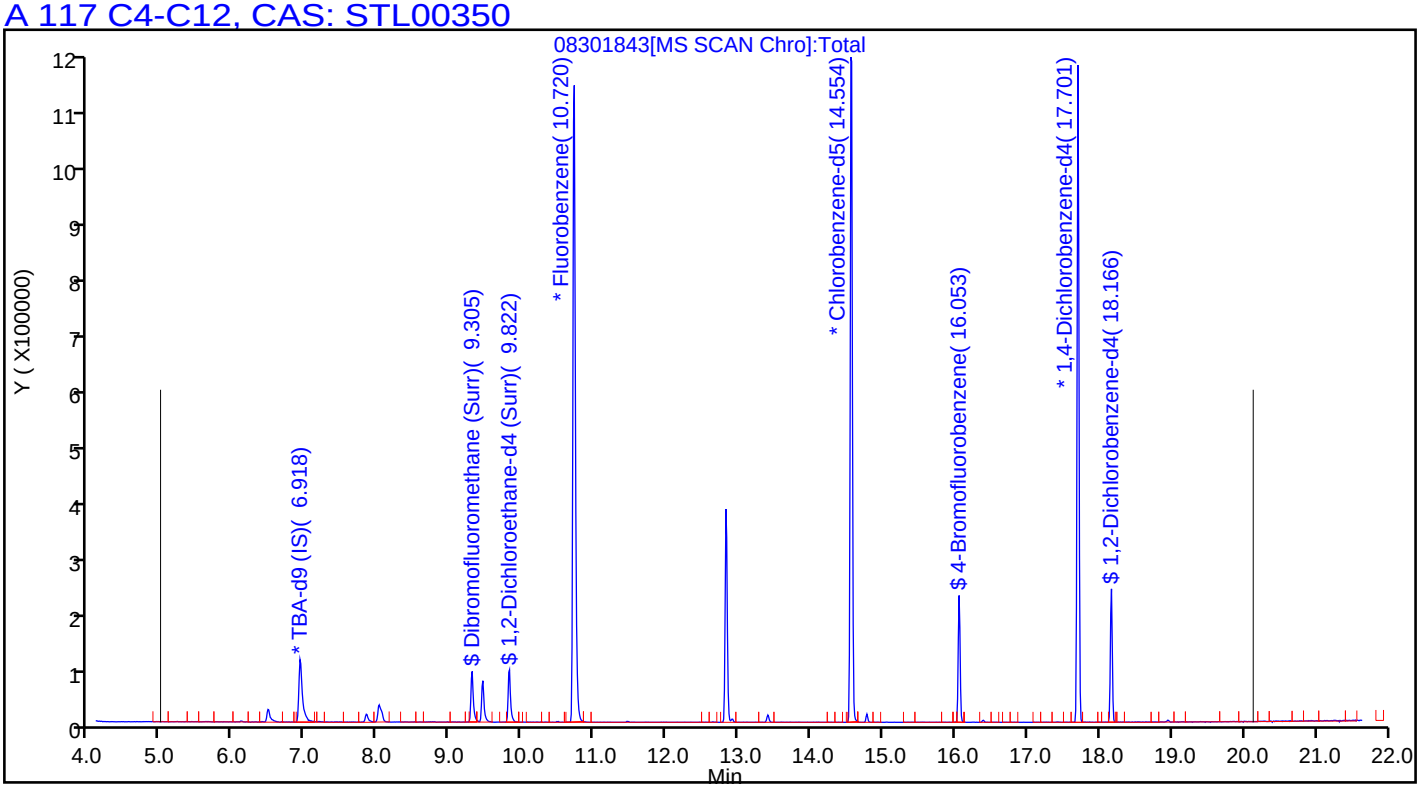
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.68	115.79
$ 10 Toluene-d8 (Surr)	7.50	6.86	91.53
$ 11 4-Bromofluorobenzene	7.50	6.54	87.22
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 31-Aug-2018 08:35:45 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301843.D				
Injection Date:	31-Aug-2018 03:45:30	Instrument ID:	CHMSV2		
Lims ID:	720-88263-A-11-A	Lab Sample ID:	720-88263-11		
Client ID:	DG-K11S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-K11S-9.5-10 Lab Sample ID: 720-88263-12

Matrix: Solid Lab File ID: 08311823.D

Analysis Method: 8260B Date Collected: 08/27/2018 10:35

Sample wt/vol: 5.942(g) Date Analyzed: 08/31/2018 16:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250644 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.2	1.0
67-64-1	Acetone	44		42	32
71-43-2	Benzene	ND		4.2	0.55
75-27-4	Dichlorobromomethane	ND		4.2	0.61
108-86-1	Bromobenzene	ND	*	4.2	0.66
74-97-5	Chlorobromomethane	ND		17	0.61
75-25-2	Bromoform	ND		4.2	1.7
74-83-9	Bromomethane	ND		8.4	0.66
78-93-3	2-Butanone (MEK)	ND		42	18
104-51-8	n-Butylbenzene	ND	*	4.2	0.84
135-98-8	sec-Butylbenzene	ND	*	4.2	0.61
98-06-6	tert-Butylbenzene	ND	*	4.2	0.61
75-15-0	Carbon disulfide	ND		4.2	1.7
56-23-5	Carbon tetrachloride	ND		4.2	0.52
108-90-7	Chlorobenzene	ND		4.2	0.58
75-00-3	Chloroethane	ND		8.4	0.47
67-66-3	Chloroform	ND		4.2	0.56
74-87-3	Chloromethane	ND		8.4	0.66
95-49-8	2-Chlorotoluene	ND	*	4.2	0.55
106-43-4	4-Chlorotoluene	ND	*	4.2	0.57
124-48-1	Chlorodibromomethane	ND		4.2	0.60
95-50-1	1,2-Dichlorobenzene	ND	*	4.2	0.57
541-73-1	1,3-Dichlorobenzene	ND	*	4.2	0.61
106-46-7	1,4-Dichlorobenzene	ND	*	4.2	0.60
142-28-9	1,3-Dichloropropane	ND		4.2	0.61
563-58-6	1,1-Dichloropropene	ND		4.2	0.58
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	8.4	1.4
106-93-4	Ethylene Dibromide	ND		4.2	1.2
74-95-3	Dibromomethane	ND		8.4	0.72
75-71-8	Dichlorodifluoromethane	ND		8.4	0.66
75-34-3	1,1-Dichloroethane	ND		4.2	0.57
107-06-2	1,2-Dichloroethane	ND		4.2	0.64
75-35-4	1,1-Dichloroethene	ND	*	4.2	0.52
156-59-2	cis-1,2-Dichloroethene	ND		4.2	0.57
156-60-5	trans-1,2-Dichloroethene	ND		4.2	0.63
78-87-5	1,2-Dichloropropane	ND		4.2	0.53

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-K11S-9.5-10
Lab Sample ID: 720-88263-12
Matrix: Solid
Lab File ID: 08311823.D
Analysis Method: 8260B
Date Collected: 08/27/2018 10:35
Sample wt/vol: 5.942(g)
Date Analyzed: 08/31/2018 16:54
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250644
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.2	0.58
10061-02-6	trans-1,3-Dichloropropene	ND		4.2	0.56
100-41-4	Ethylbenzene	ND		4.2	0.63
87-68-3	Hexachlorobutadiene	ND	*	4.2	0.76
591-78-6	2-Hexanone	ND		42	8.4
98-82-8	Isopropylbenzene	ND		4.2	0.57
99-87-6	4-Isopropyltoluene	ND	*	4.2	2.1
75-09-2	Methylene Chloride	ND		8.4	4.7
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		42	8.4
91-20-3	Naphthalene	ND	*	8.4	1.3
103-65-1	N-Propylbenzene	ND	*	4.2	0.56
100-42-5	Styrene	ND		4.2	0.53
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.2	0.64
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	4.2	0.63
127-18-4	Tetrachloroethene	ND		4.2	0.56
108-88-3	Toluene	ND		4.2	0.60
87-61-6	1,2,3-Trichlorobenzene	ND	*	4.2	0.62
120-82-1	1,2,4-Trichlorobenzene	ND	*	4.2	0.60
71-55-6	1,1,1-Trichloroethane	ND		4.2	0.51
79-00-5	1,1,2-Trichloroethane	ND		4.2	0.59
79-01-6	Trichloroethene	ND		4.2	0.53
75-69-4	Trichlorofluoromethane	ND		4.2	0.47
96-18-4	1,2,3-Trichloropropane	ND	*	4.2	0.65
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.2	1.8
95-63-6	1,2,4-Trimethylbenzene	ND	*	4.2	1.4
108-67-8	1,3,5-Trimethylbenzene	ND	*	4.2	0.55
108-05-4	Vinyl acetate	ND		17	4.2
75-01-4	Vinyl chloride	ND		4.2	0.61
1330-20-7	Xylenes, Total	ND		4.2	1.0
594-20-7	2,2-Dichloropropane	ND		4.2	1.7
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		210	84

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-K11S-9.5-10 Lab Sample ID: 720-88263-12

Matrix: Solid Lab File ID: 08311823.D

Analysis Method: 8260B Date Collected: 08/27/2018 10:35

Sample wt/vol: 5.942(g) Date Analyzed: 08/31/2018 16:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250644 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	82		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		60-140
2037-26-5	Toluene-d8 (Surr)	88		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311823.D
Lims ID: 720-88263-B-12-A
Client ID: DG-K11S--9.5-10
Sample Type: Client
Inject. Date: 31-Aug-2018 16:54:30 ALS Bottle#: 22 Worklist Smp#: 24
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-B-12
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 31-Aug-2018 18:12:51 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: salgadoa Date: 31-Aug-2018 18:12:51

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.819	6.819	0.000	0	216259	250.0	
* 2 Fluorobenzene	96	10.599	10.599	-0.001	98	626085	25.0	
* 4 Chlorobenzene-d5	117	14.439	14.445	-0.006	87	376269	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.585	-0.006	95	124198	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.190	9.190	0.000	93	53475	7.61	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.702	9.708	-0.006	0	69272	7.87	
$ 10 Toluene-d8 (Surr)	98	12.708	12.708	0.000	94	166770	6.59	
$ 11 4-Bromofluorobenzene	95	15.933	15.926	0.000	94	44906	6.14	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.036	0.000	85	46197	9.61	
28 Acetone	58	6.374	6.374	0.000	98	19351	26.3	
34 Methylene Chloride	84	7.081	7.081	0.006	84	329	0.0486	a
144 Methyl acetate	43	7.136	7.124	0.012	95	2741	0.5122	
37 Carbon disulfide	76	7.367	7.367	0.000	99	11449	0.7786	
45 2-Butanone (MEK)	72	8.648	8.635	0.012	69	269	0.3208	
49 cis-1,2-Dichloroethene	61	8.812	8.812	-0.006	1	260	0.0253	a
140 Ethyl acetate	43	9.001	9.001	0.000	99	60236	7.26	
59 Benzene	78	10.367	10.373	-0.006	95	3258	0.1223	
64 1,2-Dichloropropane	63	11.056	11.056	0.006	69	325	0.0435	a
66 Trichloroethene	132	11.092	11.092	0.000	88	725	0.1051	
145 Methylcyclohexane	83	11.690	11.690	0.000	96	9254	0.8721	
75 Toluene	92	12.787	12.793	-0.006	97	1739	0.1406	
128 Butyl Ether	87	14.659	14.652	0.000	93	392	0.1047	
84 Ethylbenzene	91	14.714	14.714	0.007	89	821	0.0341	a
85 m-Xylene & p-Xylene	91	14.927	14.927	-0.006	0	2223	0.1171	a
88 o-Xylene	91	15.433	15.433	0.000	88	1402	0.0711	a
98 1,3,5-Trimethylbenzene	105	16.774	16.774	-0.006	87	1309	0.1014	a
101 1,2,4-Trimethylbenzene	105	17.280	17.286	0.000	55	1534	0.1146	
136 1,2,3-Trimethylbenzene	105	17.829	17.829	-0.006	90	887	0.0632	a
106 1,2-Dichlorobenzene	146	18.067	18.067	-0.006	82	724	0.0984	a
107 n-Butylbenzene	91	18.170	18.170	0.000	81	543	0.0447	a
29 Pentane	43	6.374	6.410	-0.036	70	65582	NR	

Report Date: 31-Aug-2018 18:12:53 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311823.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
A 116 C4-C10	1	10.849	(4.783-16.914)		0	843270	14.7	
A 154 C6-C8	1	10.852	(8.550-13.153)		0	343755	5.99	
A 155 C6-C9	1	11.842	(8.550-15.134)		0	406376	7.08	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	960454	16.7	
A 119 C6-C10	1	12.732	(8.550-16.914)		0	469486	8.18	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	915756	16.0	
A 120 C6-C12	1	14.278	(8.550-20.005)		0	586670	10.2	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	132812	2.31	
A 121 C7-C12	1	15.451	(10.897-20.005)		0	363711	6.34	
S 122 Xylenes, Total	1				0		0.1881	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

s - Failed ISTD Recovery Test

Review Flags

a - User Assigned ID

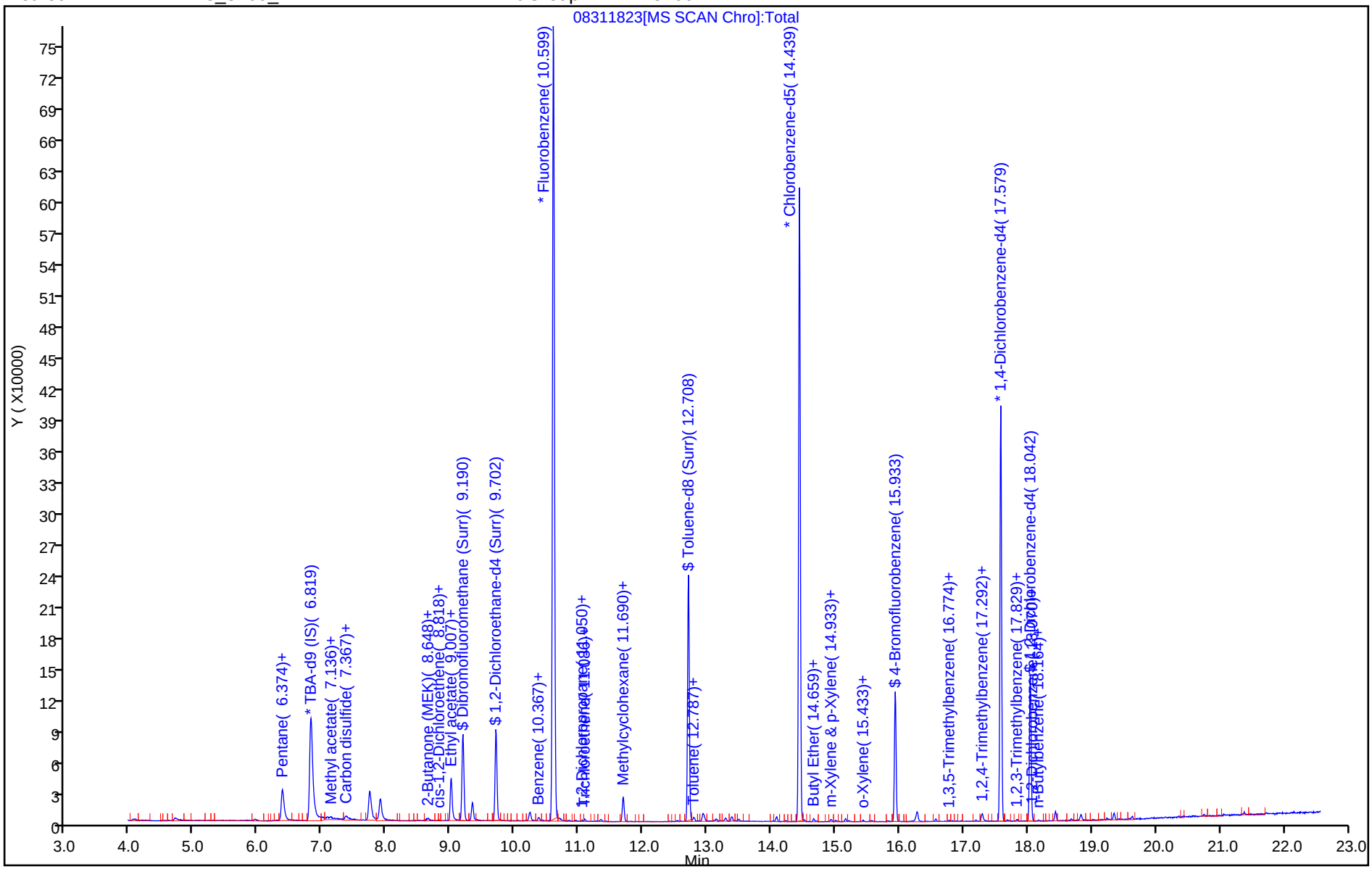
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 18:12:53 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311823.D				
Injection Date:	31-Aug-2018 16:54:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88263-B-12-A	Lab Sample ID:	720-88263-12	Worklist Smp#:	24
Client ID:	DG-K11S--9.5-10				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311823.D
Lims ID: 720-88263-B-12-A
Client ID: DG-K11S--9.5-10
Sample Type: Client
Inject. Date: 31-Aug-2018 16:54:30 ALS Bottle#: 22 Worklist Smp#: 24
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-B-12
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 31-Aug-2018 18:12:51 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: salgadoa Date: 31-Aug-2018 18:12:51

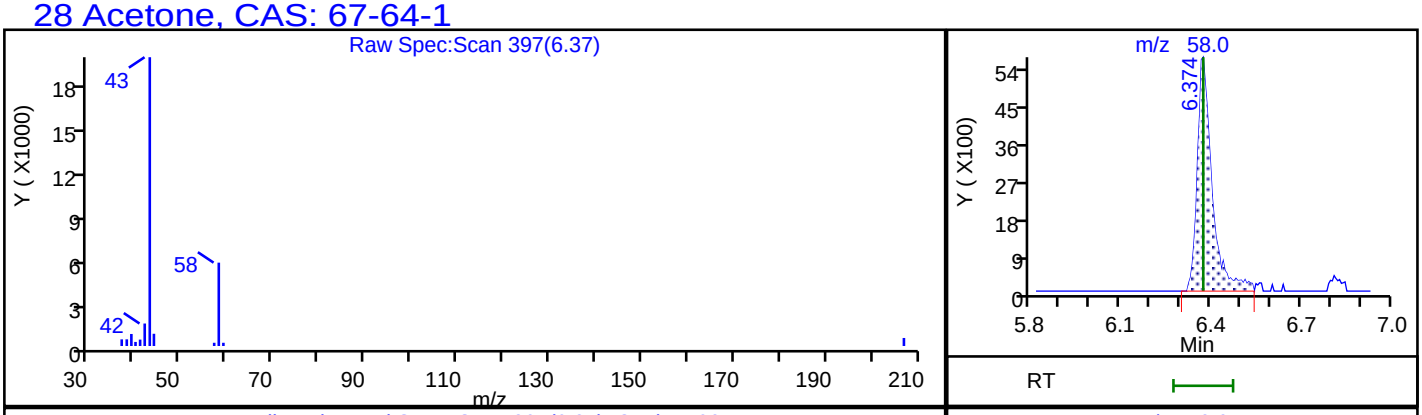
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.87	104.92
$ 10 Toluene-d8 (Surr)	7.50	6.59	87.82
$ 11 4-Bromofluorobenzene	7.50	6.14	81.82
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

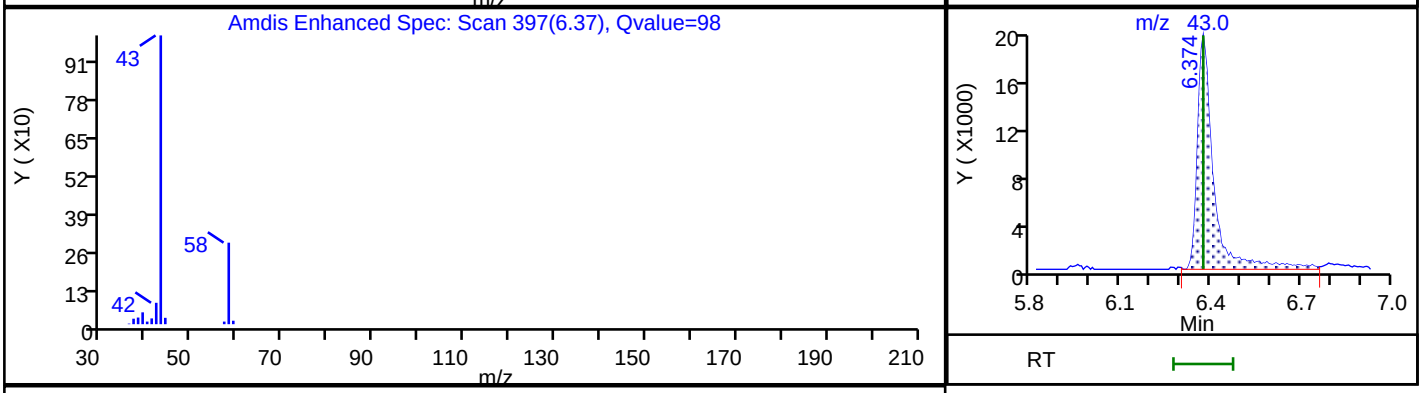
Report Date: 31-Aug-2018 18:12:53 Chrom Revision: 2.3 19-Jul-2018 15:14:50

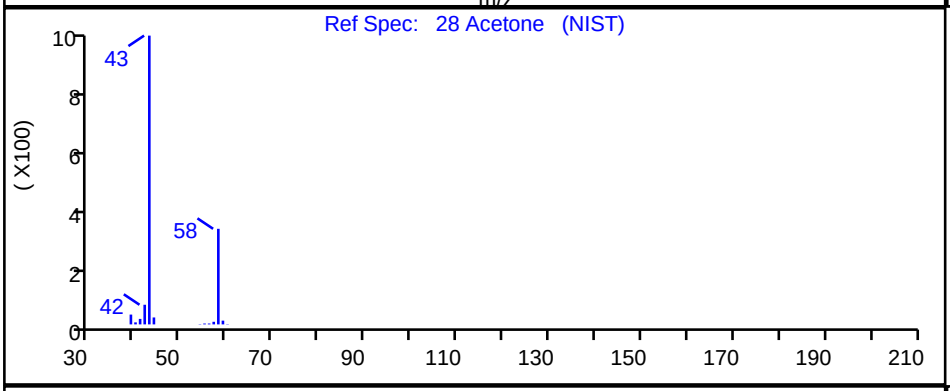
TestAmerica Pleasanton

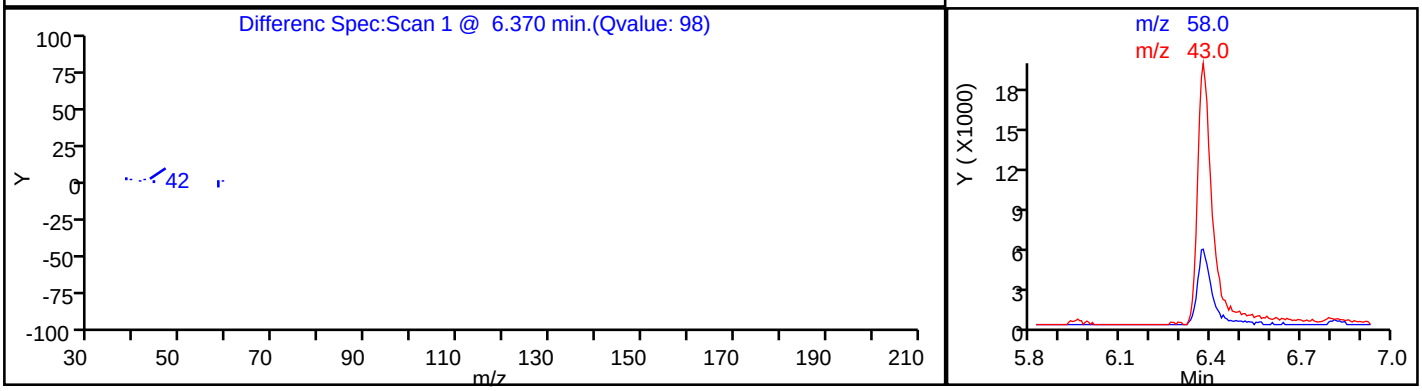
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311823.D				
Injection Date:	31-Aug-2018 16:54:30	Instrument ID:	HP13		
Lims ID:	720-88263-B-12-A	Lab Sample ID:	720-88263-12		
Client ID:	DG-K11S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	22	Worklist Smp#:	24
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1







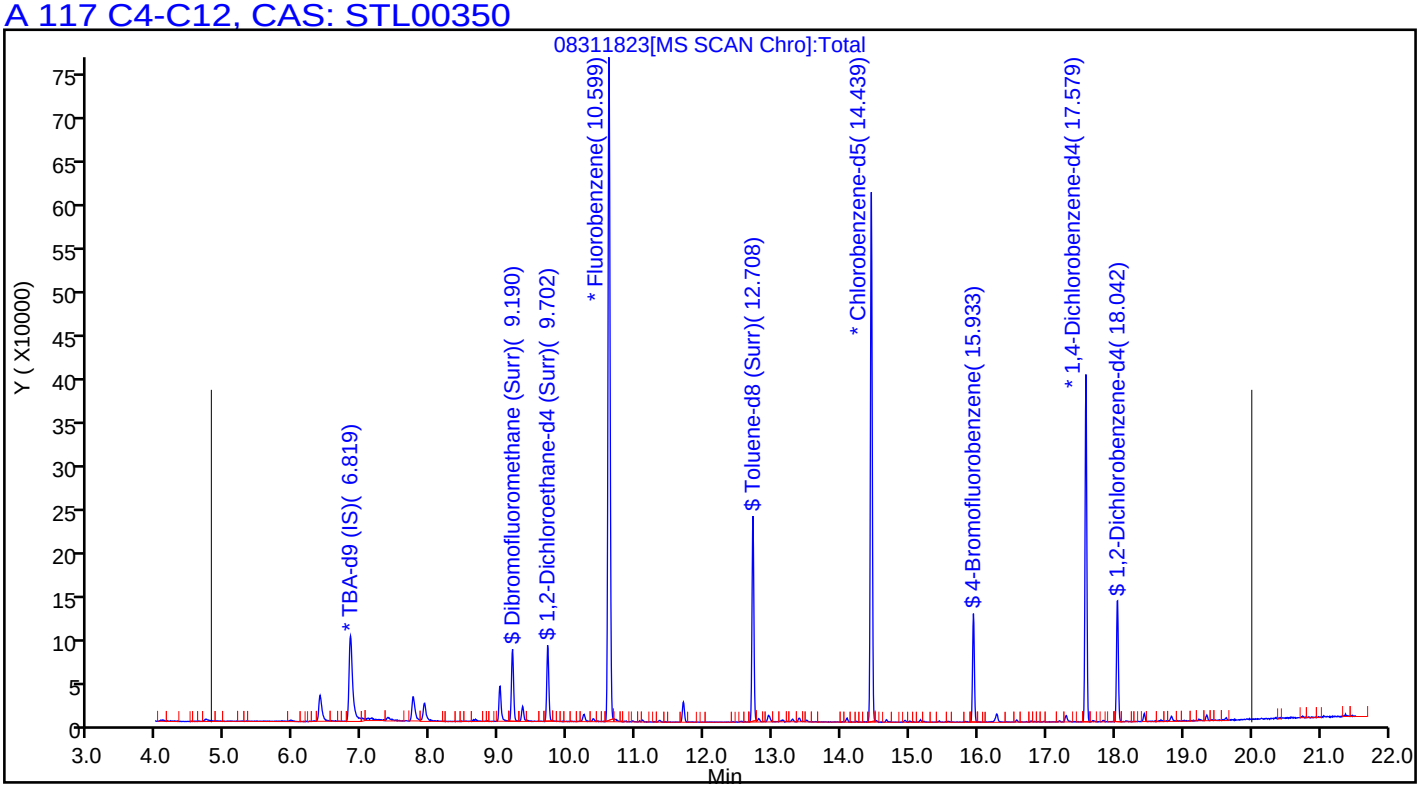


Report Date: 31-Aug-2018 18:12:55 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311823.D				
Injection Date:	31-Aug-2018 16:54:30	Instrument ID:	HP13		
Lims ID:	720-88263-B-12-A	Lab Sample ID:	720-88263-12		
Client ID:	DG-K11S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	22	Worklist Smp#:	24
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

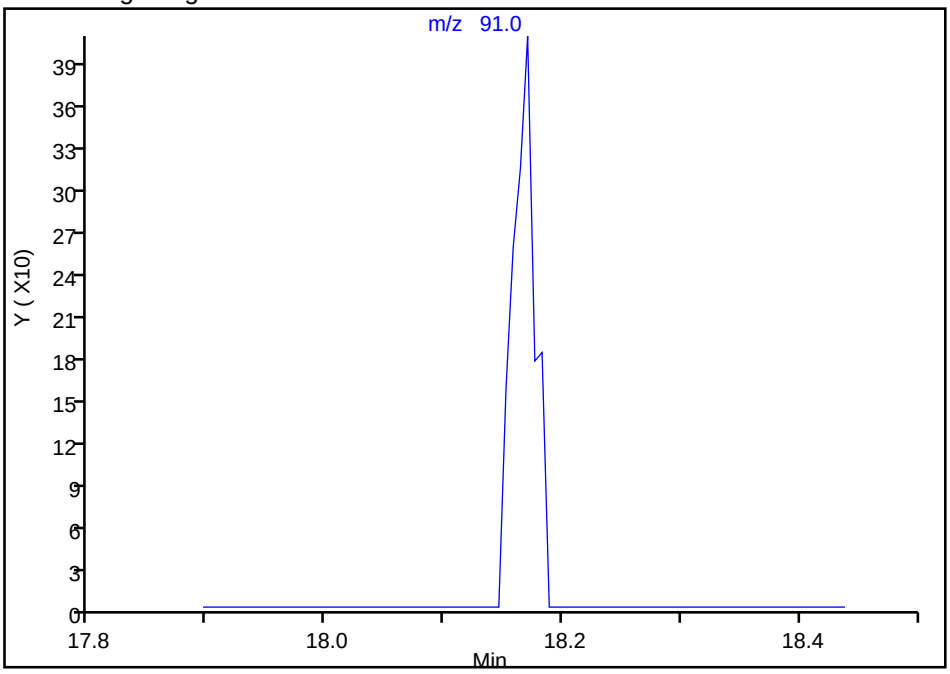
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311823.D				
Injection Date:	31-Aug-2018 16:54:30	Instrument ID:	HP13		
Lims ID:	720-88263-B-12-A	Lab Sample ID:	720-88263-12		
Client ID:	DG-K11S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	22	Worklist Smp#:	24
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

107 n-Butylbenzene, CAS: 104-51-8

Signal: 1

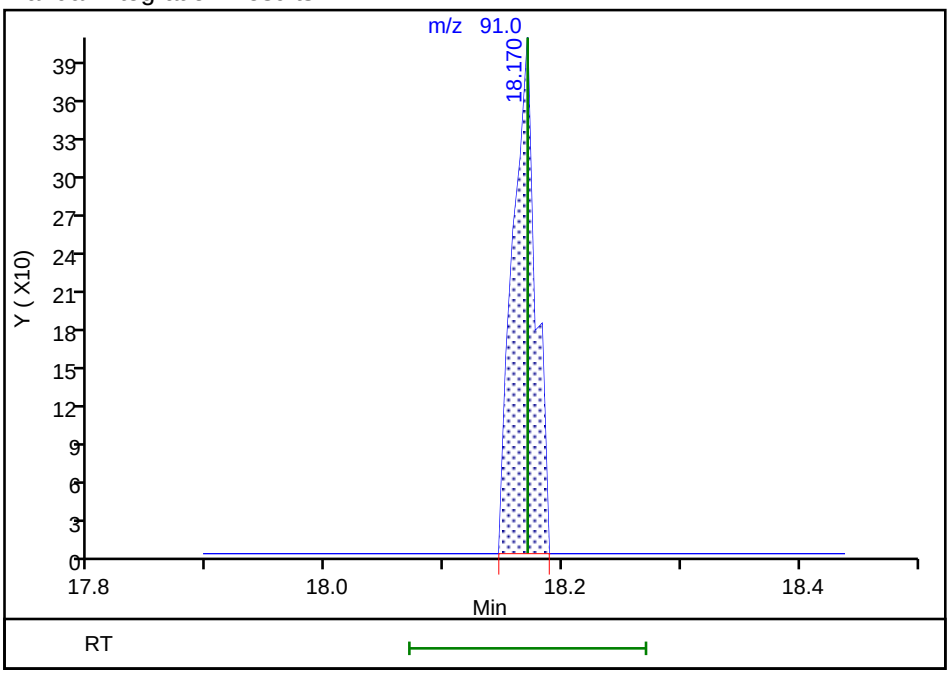
Not Detected
Expected RT: 18.17

Processing Integration Results



Manual Integration Results

RT: 18.17
Area: 543
Amount: 0.044674
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 18:12:43
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

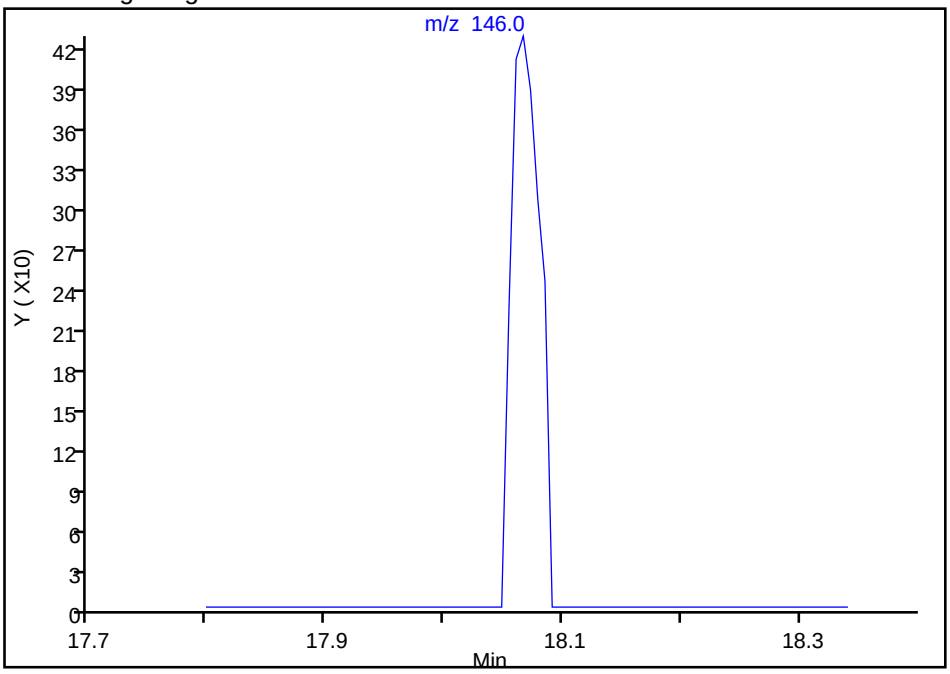
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311823.D				
Injection Date:	31-Aug-2018 16:54:30	Instrument ID:	HP13		
Lims ID:	720-88263-B-12-A	Lab Sample ID:	720-88263-12		
Client ID:	DG-K11S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	22	Worklist Smp#:	24
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

106 1,2-Dichlorobenzene, CAS: 95-50-1

Signal: 1

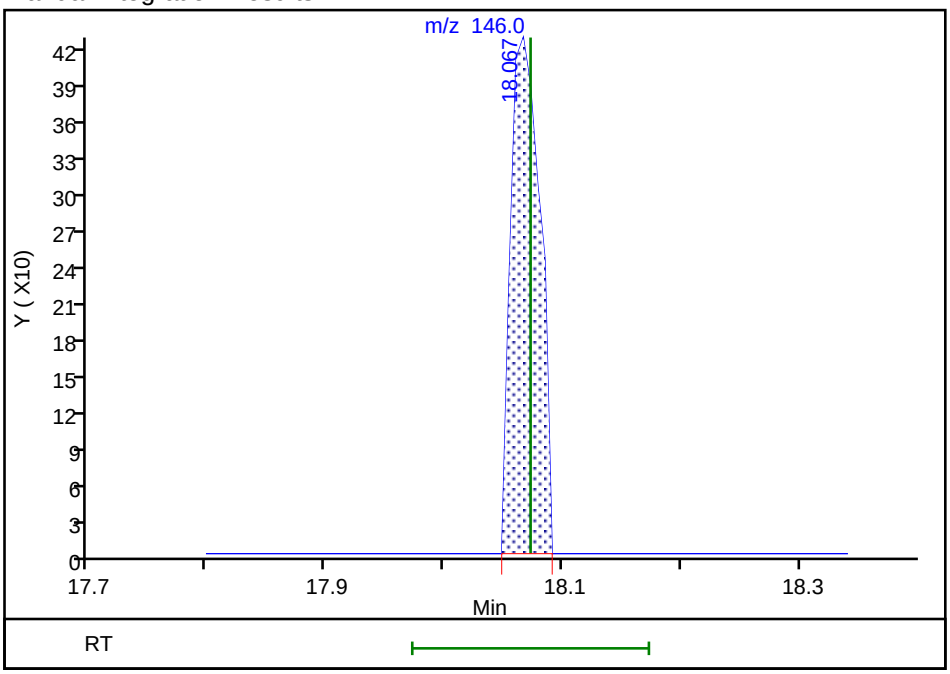
Processing Integration Results

Not Detected
Expected RT: 18.07



Manual Integration Results

RT: 18.07
Area: 724
Amount: 0.098435
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 18:12:38
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

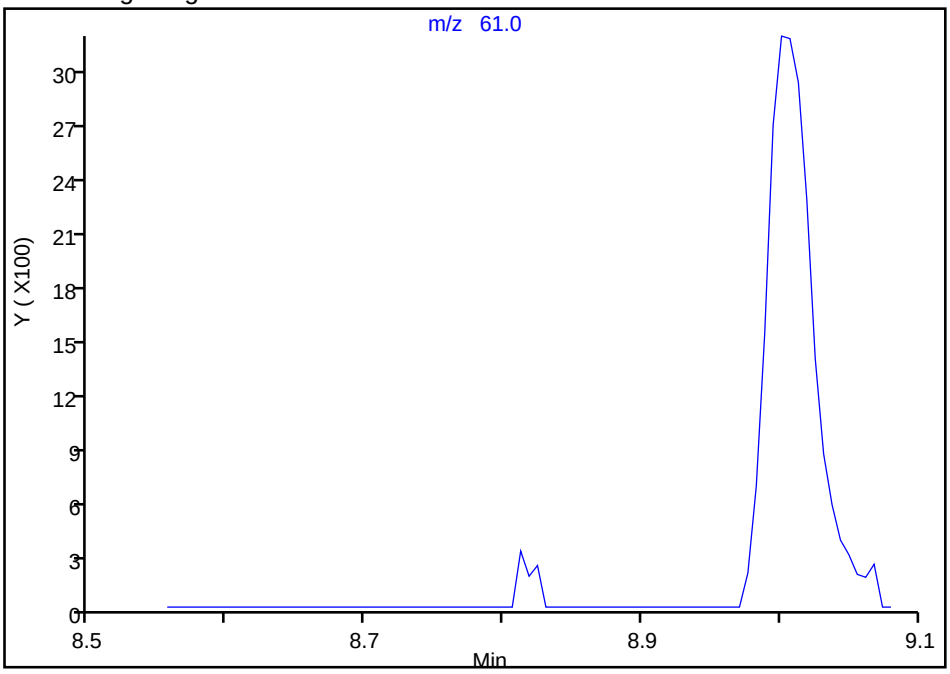
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311823.D				
Injection Date:	31-Aug-2018 16:54:30	Instrument ID:	HP13		
Lims ID:	720-88263-B-12-A	Lab Sample ID:	720-88263-12		
Client ID:	DG-K11S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	22	Worklist Smp#:	24
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

49 cis-1,2-Dichloroethene, CAS: 156-59-2

Signal: 1

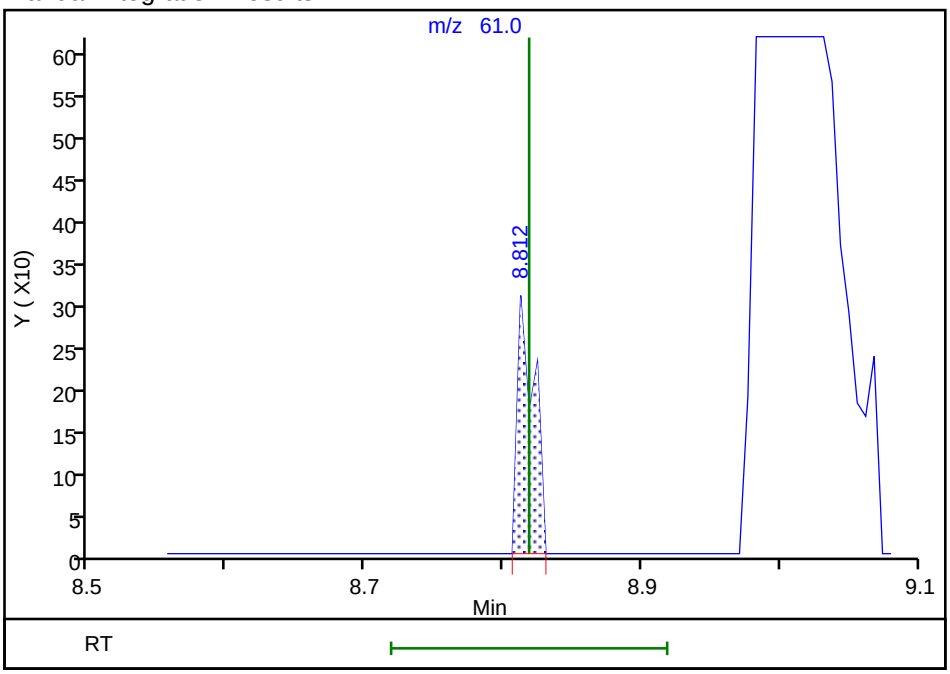
Not Detected
Expected RT: 8.82

Processing Integration Results



Manual Integration Results

RT: 8.81
Area: 260
Amount: 0.025256
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 18:11:49
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

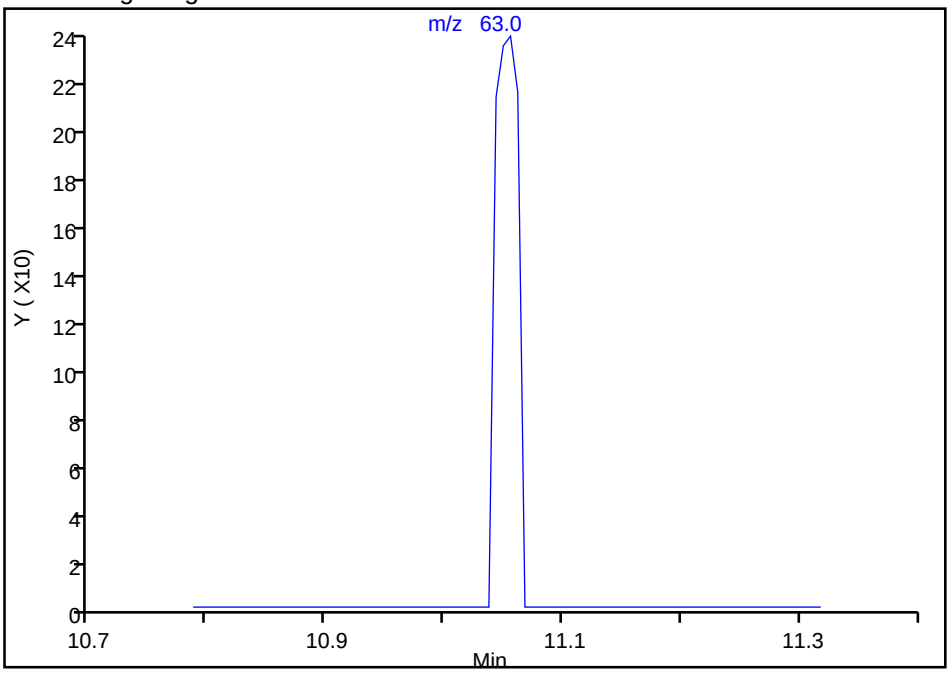
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311823.D				
Injection Date:	31-Aug-2018 16:54:30	Instrument ID:	HP13		
Lims ID:	720-88263-B-12-A	Lab Sample ID:	720-88263-12		
Client ID:	DG-K11S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	22	Worklist Smp#:	24
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

64 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

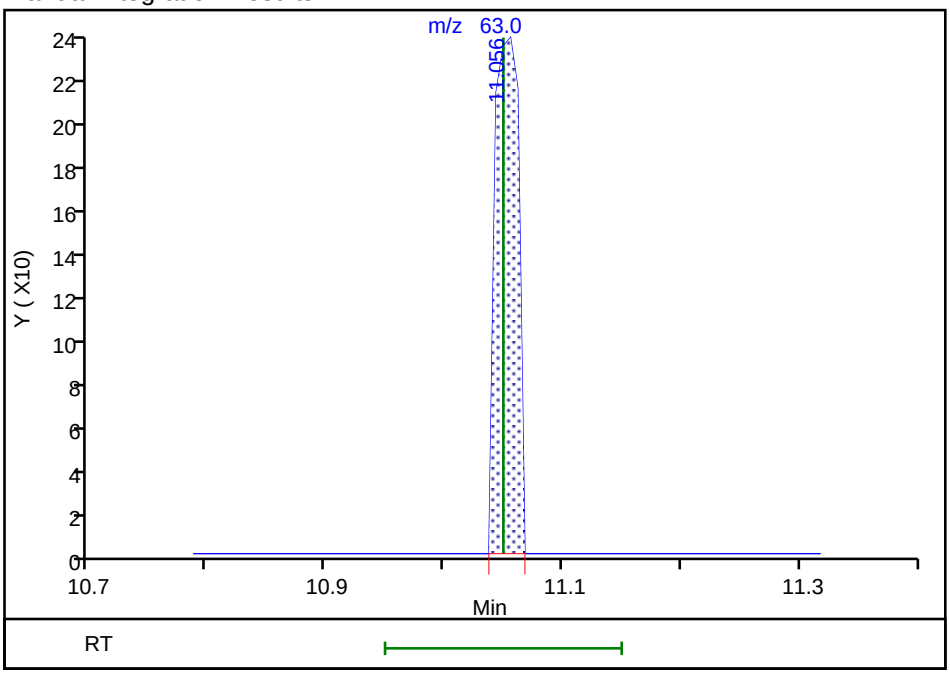
Not Detected
Expected RT: 11.05

Processing Integration Results



RT: 11.06
Area: 325
Amount: 0.043535
Amount Units: ug/L

Manual Integration Results



Reviewer: salgadoa, 31-Aug-2018 18:11:58
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

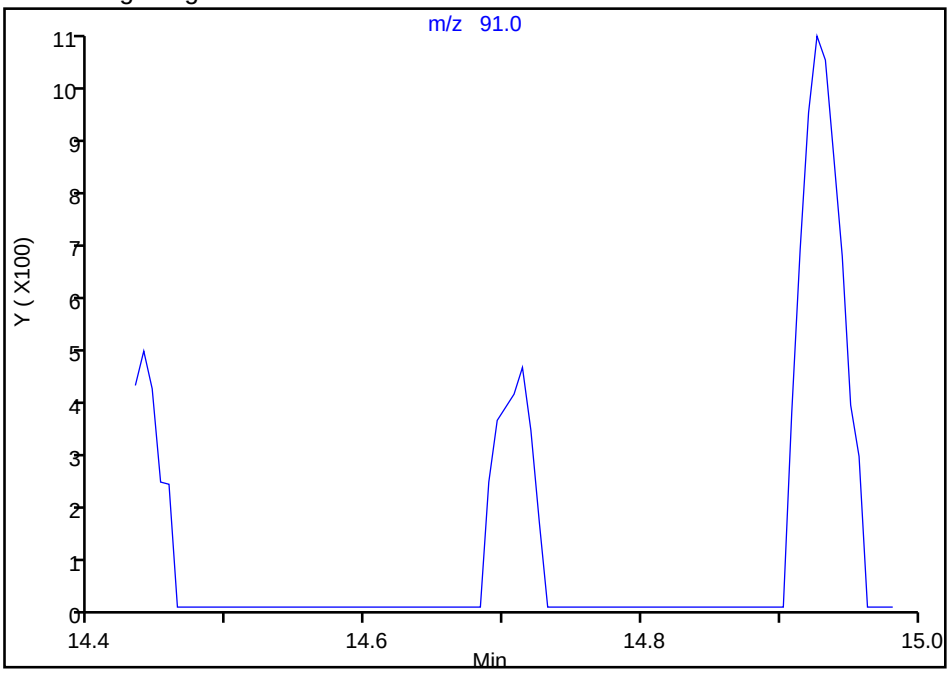
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311823.D				
Injection Date:	31-Aug-2018 16:54:30	Instrument ID:	HP13		
Lims ID:	720-88263-B-12-A	Lab Sample ID:	720-88263-12		
Client ID:	DG-K11S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	22	Worklist Smp#:	24
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

84 Ethylbenzene, CAS: 100-41-4

Signal: 1

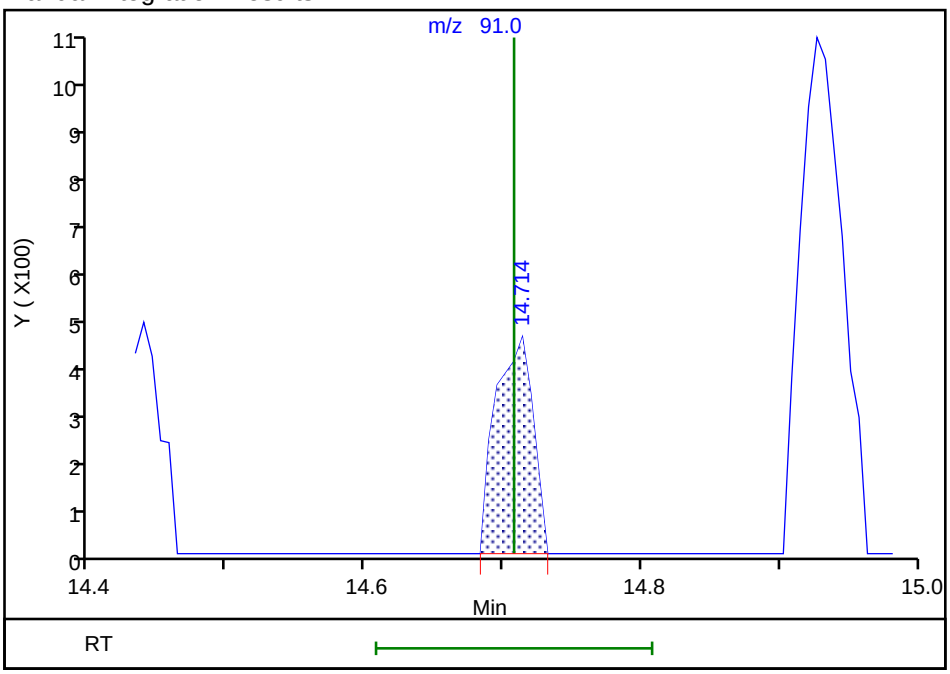
Not Detected
Expected RT: 14.71

Processing Integration Results



Manual Integration Results

RT: 14.71
Area: 821
Amount: 0.034122
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 18:12:14
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

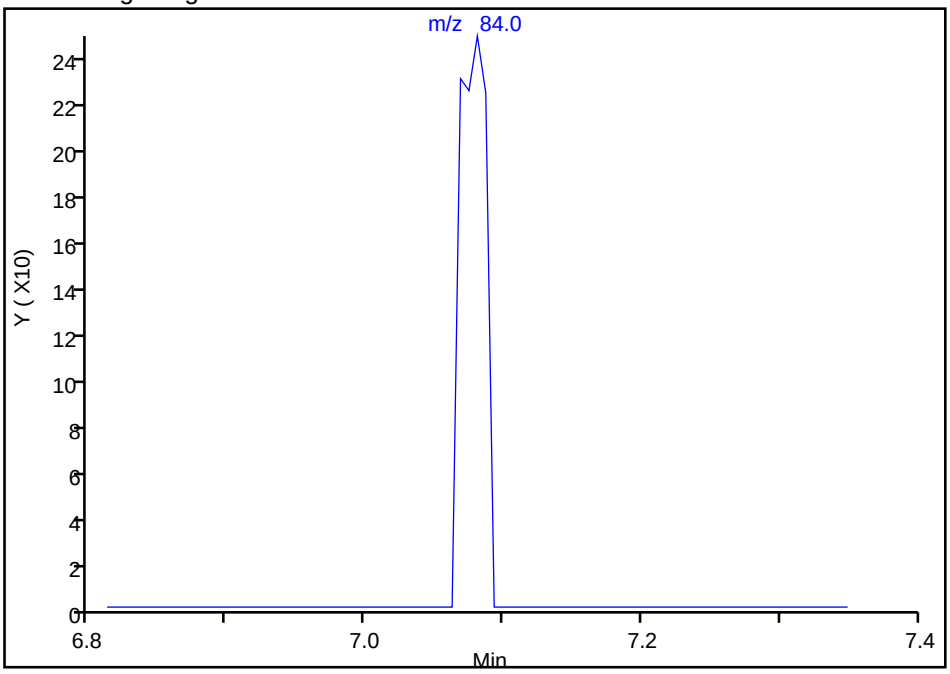
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311823.D				
Injection Date:	31-Aug-2018 16:54:30	Instrument ID:	HP13		
Lims ID:	720-88263-B-12-A	Lab Sample ID:	720-88263-12		
Client ID:	DG-K11S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	22	Worklist Smp#:	24
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

34 Methylene Chloride, CAS: 75-09-2

Signal: 1

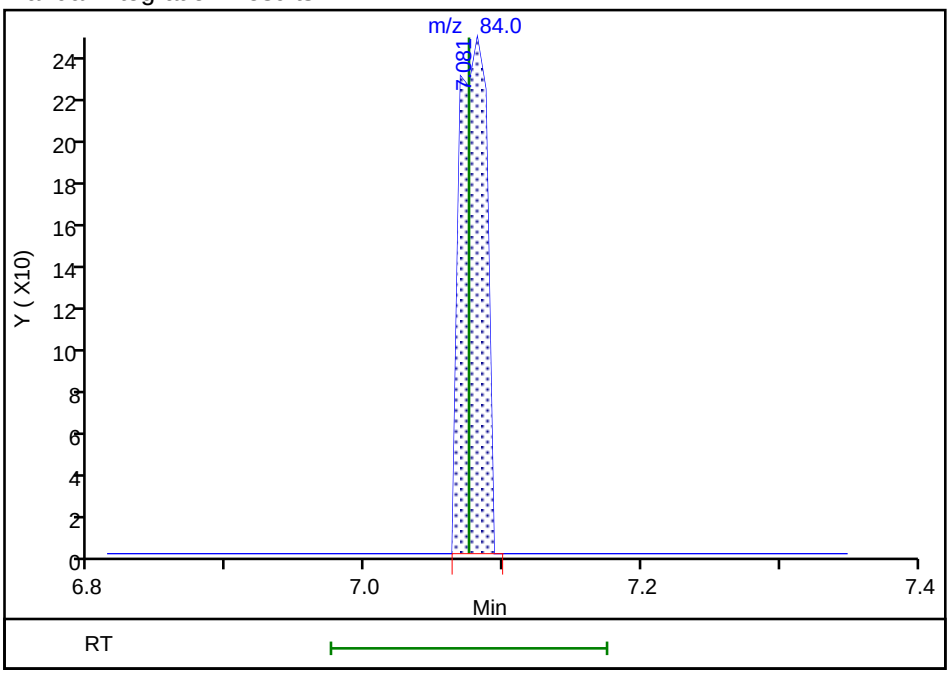
Not Detected
Expected RT: 7.07

Processing Integration Results



RT: 7.08
Area: 329
Amount: 0.048561
Amount Units: ug/L

Manual Integration Results



Reviewer: salgadoa, 31-Aug-2018 18:11:37
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

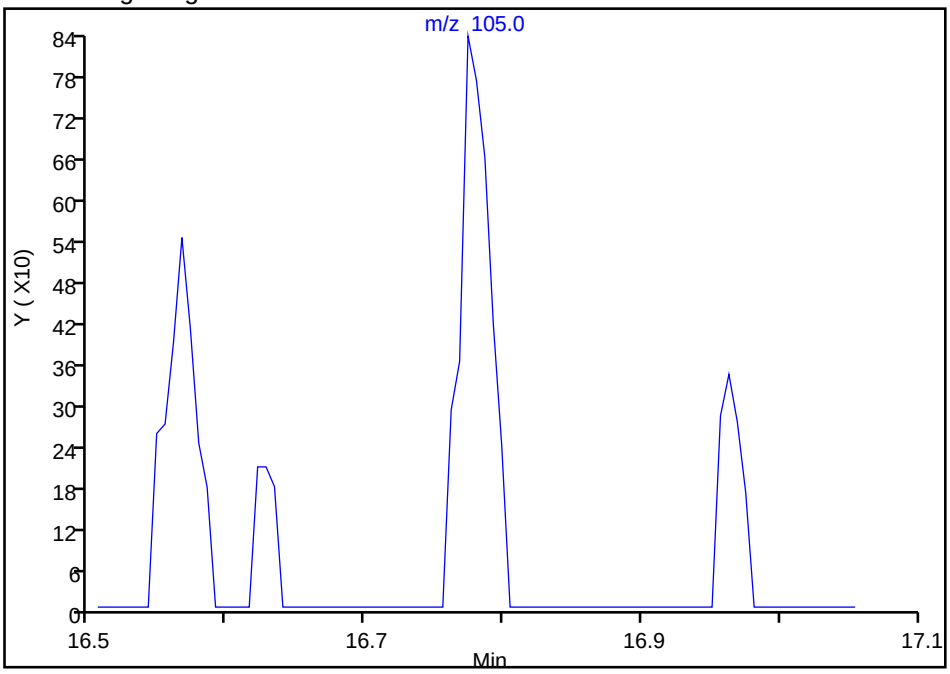
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311823.D				
Injection Date:	31-Aug-2018 16:54:30	Instrument ID:	HP13		
Lims ID:	720-88263-B-12-A	Lab Sample ID:	720-88263-12		
Client ID:	DG-K11S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	22	Worklist Smp#:	24
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

98 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

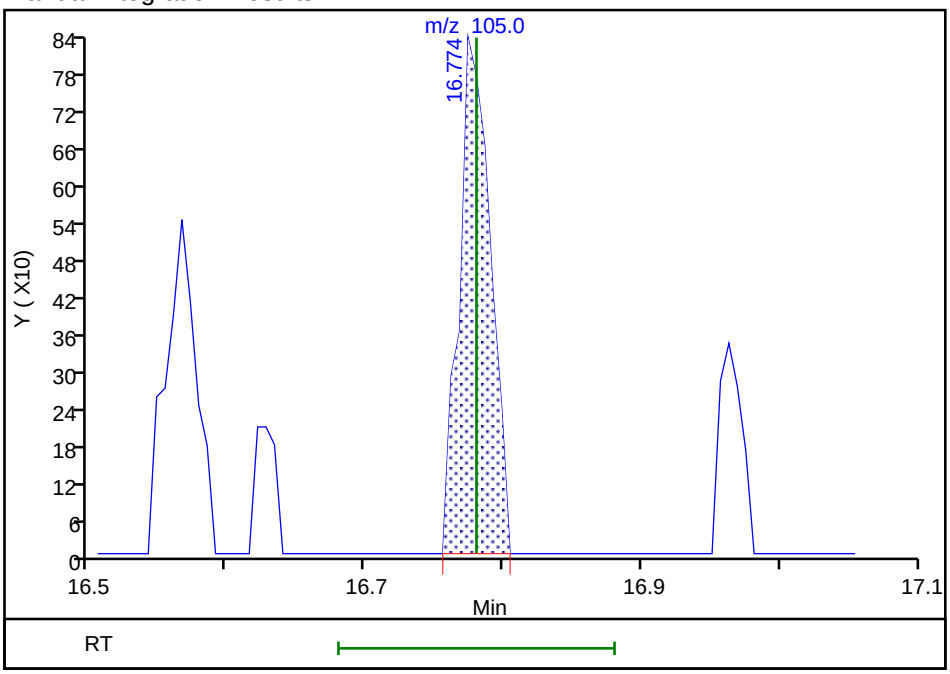
Not Detected
Expected RT: 16.78

Processing Integration Results



Manual Integration Results

RT: 16.77
Area: 1309
Amount: 0.101442
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 18:12:26
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

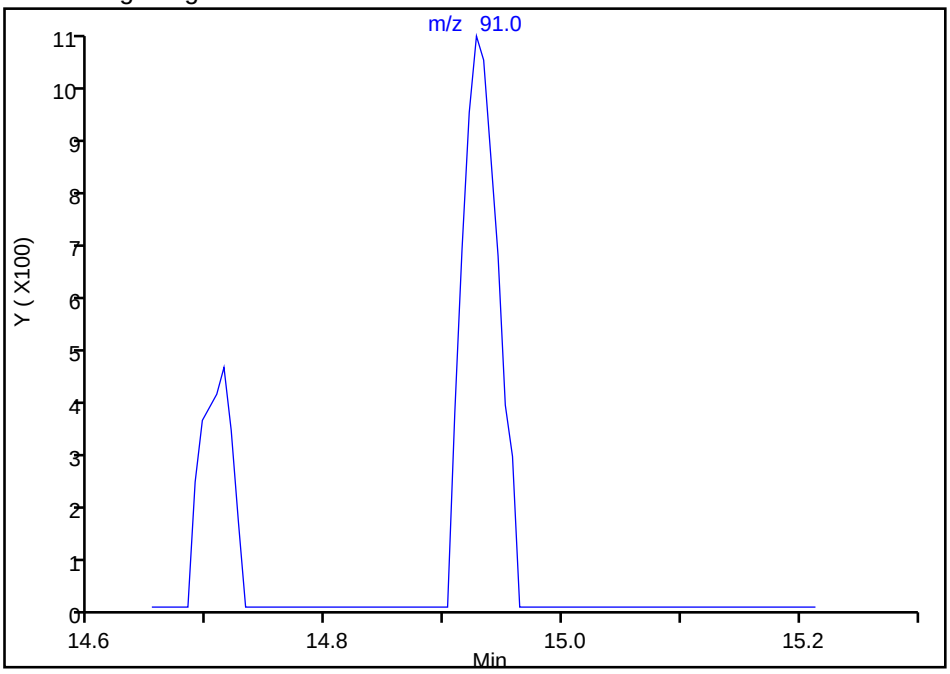
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311823.D				
Injection Date:	31-Aug-2018 16:54:30	Instrument ID:	HP13		
Lims ID:	720-88263-B-12-A	Lab Sample ID:	720-88263-12		
Client ID:	DG-K11S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	22	Worklist Smp#:	24
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

85 m-Xylene & p-Xylene, CAS: 179601-23-1

Signal: 1

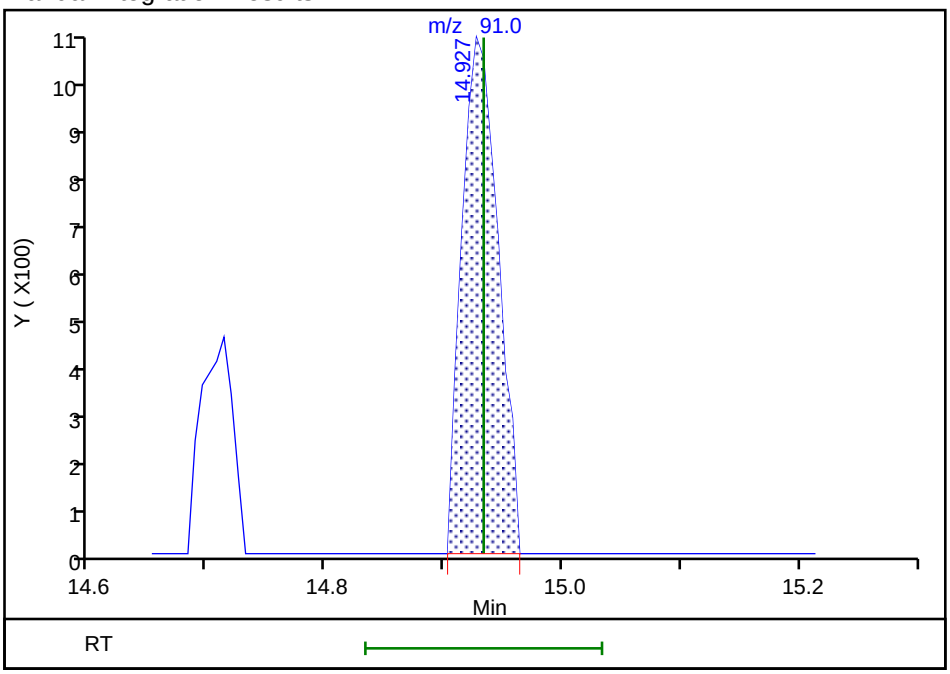
Not Detected
Expected RT: 14.93

Processing Integration Results



Manual Integration Results

RT: 14.93
Area: 2223
Amount: 0.117052
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 18:12:16
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

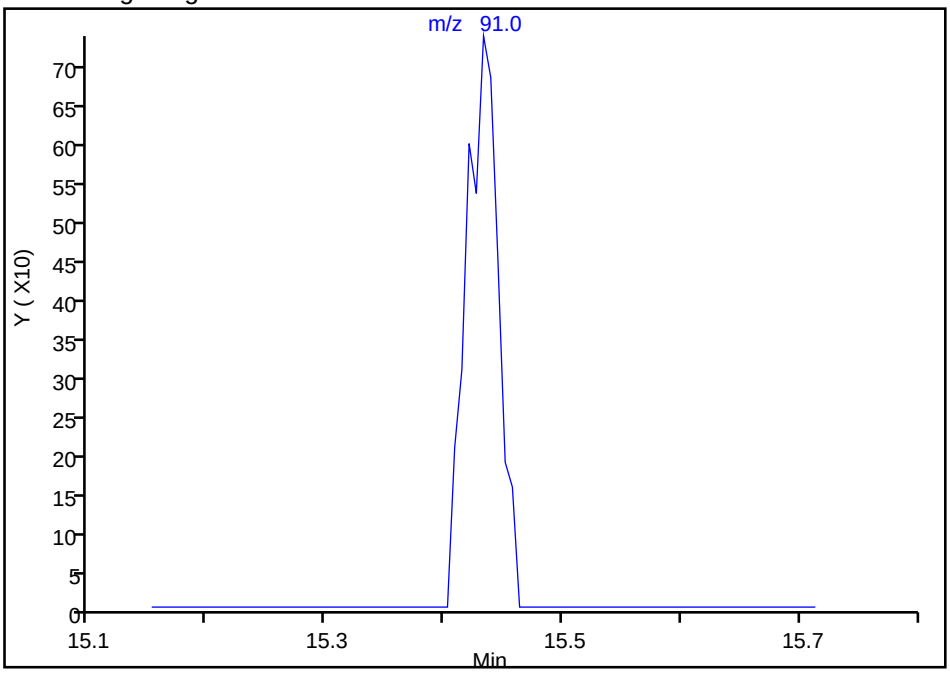
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311823.D				
Injection Date:	31-Aug-2018 16:54:30	Instrument ID:	HP13		
Lims ID:	720-88263-B-12-A	Lab Sample ID:	720-88263-12		
Client ID:	DG-K11S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	22	Worklist Smp#:	24
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

88 o-Xylene, CAS: 95-47-6

Signal: 1

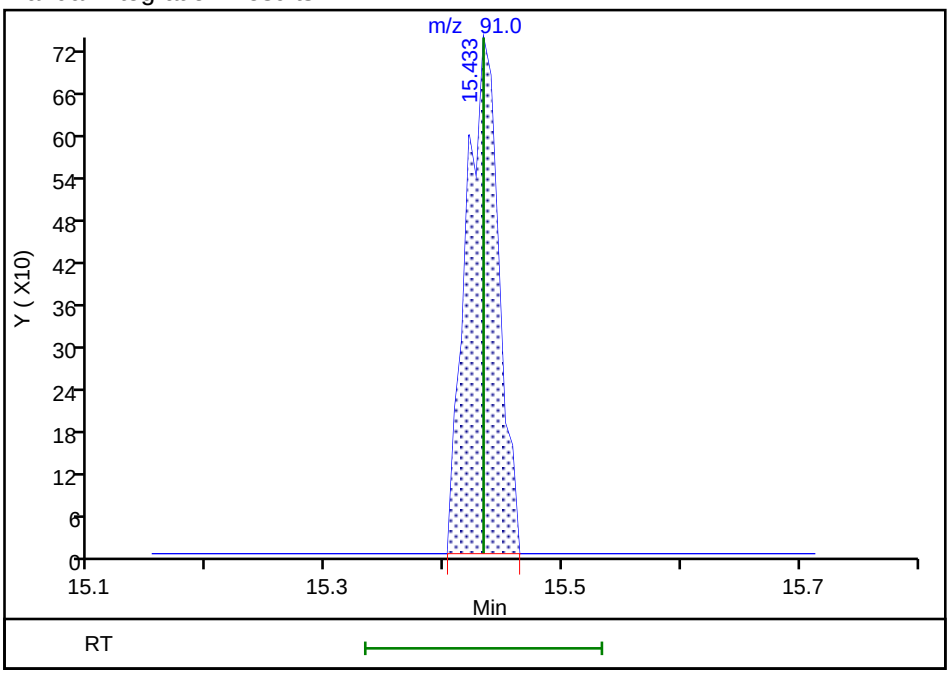
Not Detected
Expected RT: 15.43

Processing Integration Results



Manual Integration Results

RT: 15.43
Area: 1402
Amount: 0.071068
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 18:12:21
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton | Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-I11S-0.5-1 | Lab Sample ID: 720-88263-13

Matrix: Solid | Lab File ID: 08311824.D

Analysis Method: 8260B | Date Collected: 08/27/2018 11:10

Sample wt/vol: 5.819(g) | Date Analyzed: 08/31/2018 17:28

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-VRX ID: 250(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 250644 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.3	1.0
67-64-1	Acetone	ND		43	33
71-43-2	Benzene	ND		4.3	0.56
75-27-4	Dichlorobromomethane	ND		4.3	0.62
108-86-1	Bromobenzene	ND	*	4.3	0.68
74-97-5	Chlorobromomethane	ND		17	0.62
75-25-2	Bromoform	ND		4.3	1.7
74-83-9	Bromomethane	ND		8.6	0.68
78-93-3	2-Butanone (MEK)	ND		43	18
104-51-8	n-Butylbenzene	ND	*	4.3	0.86
135-98-8	sec-Butylbenzene	ND	*	4.3	0.62
98-06-6	tert-Butylbenzene	ND	*	4.3	0.63
75-15-0	Carbon disulfide	ND		4.3	1.7
56-23-5	Carbon tetrachloride	ND		4.3	0.53
108-90-7	Chlorobenzene	ND		4.3	0.59
75-00-3	Chloroethane	ND		8.6	0.48
67-66-3	Chloroform	ND		4.3	0.57
74-87-3	Chloromethane	ND		8.6	0.68
95-49-8	2-Chlorotoluene	ND	*	4.3	0.56
106-43-4	4-Chlorotoluene	ND	*	4.3	0.58
124-48-1	Chlorodibromomethane	ND		4.3	0.61
95-50-1	1,2-Dichlorobenzene	ND	*	4.3	0.58
541-73-1	1,3-Dichlorobenzene	ND	*	4.3	0.62
106-46-7	1,4-Dichlorobenzene	ND	*	4.3	0.61
142-28-9	1,3-Dichloropropane	ND		4.3	0.63
563-58-6	1,1-Dichloropropene	ND		4.3	0.59
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	8.6	1.5
106-93-4	Ethylene Dibromide	ND		4.3	1.2
74-95-3	Dibromomethane	ND		8.6	0.74
75-71-8	Dichlorodifluoromethane	ND		8.6	0.68
75-34-3	1,1-Dichloroethane	ND		4.3	0.58
107-06-2	1,2-Dichloroethane	ND		4.3	0.65
75-35-4	1,1-Dichloroethene	ND	*	4.3	0.53
156-59-2	cis-1,2-Dichloroethene	ND		4.3	0.58
156-60-5	trans-1,2-Dichloroethene	ND		4.3	0.64
78-87-5	1,2-Dichloropropane	ND		4.3	0.54

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-I11S-0.5-1
Lab Sample ID: 720-88263-13
Matrix: Solid
Lab File ID: 08311824.D
Analysis Method: 8260B
Date Collected: 08/27/2018 11:10
Sample wt/vol: 5.819(g)
Date Analyzed: 08/31/2018 17:28
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250644
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.3	0.59
10061-02-6	trans-1,3-Dichloropropene	ND		4.3	0.58
100-41-4	Ethylbenzene	ND		4.3	0.64
87-68-3	Hexachlorobutadiene	ND	*	4.3	0.77
591-78-6	2-Hexanone	ND		43	8.6
98-82-8	Isopropylbenzene	ND		4.3	0.58
99-87-6	4-Isopropyltoluene	ND	*	4.3	2.1
75-09-2	Methylene Chloride	ND		8.6	4.8
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		43	8.6
91-20-3	Naphthalene	ND	*	8.6	1.3
103-65-1	N-Propylbenzene	ND	*	4.3	0.57
100-42-5	Styrene	ND		4.3	0.54
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.3	0.65
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	4.3	0.64
127-18-4	Tetrachloroethene	ND		4.3	0.58
108-88-3	Toluene	ND		4.3	0.61
87-61-6	1,2,3-Trichlorobenzene	ND	*	4.3	0.64
120-82-1	1,2,4-Trichlorobenzene	ND	*	4.3	0.61
71-55-6	1,1,1-Trichloroethane	ND		4.3	0.52
79-00-5	1,1,2-Trichloroethane	ND		4.3	0.60
79-01-6	Trichloroethene	ND		4.3	0.54
75-69-4	Trichlorofluoromethane	ND		4.3	0.48
96-18-4	1,2,3-Trichloropropane	ND	*	4.3	0.66
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.3	1.8
95-63-6	1,2,4-Trimethylbenzene	ND	*	4.3	1.4
108-67-8	1,3,5-Trimethylbenzene	ND	*	4.3	0.56
108-05-4	Vinyl acetate	ND		17	4.3
75-01-4	Vinyl chloride	ND		4.3	0.63
1330-20-7	Xylenes, Total	ND		4.3	1.0
594-20-7	2,2-Dichloropropane	ND		4.3	1.7
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		210	86

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-I11S-0.5-1 Lab Sample ID: 720-88263-13

Matrix: Solid Lab File ID: 08311824.D

Analysis Method: 8260B Date Collected: 08/27/2018 11:10

Sample wt/vol: 5.819(g) Date Analyzed: 08/31/2018 17:28

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250644 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	82		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	122		60-140
2037-26-5	Toluene-d8 (Surr)	84		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311824.D
Lims ID: 720-88263-B-13-A
Client ID: DG-I11S--0.5-1
Sample Type: Client
Inject. Date: 31-Aug-2018 17:28:30 ALS Bottle#: 23 Worklist Smp#: 25
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-B-13
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 31-Aug-2018 18:14:18 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: salgadoa Date: 31-Aug-2018 18:14:18

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.819	6.819	0.000	0	283862	250.0	
* 2 Fluorobenzene	96	10.598	10.599	-0.001	99	591484	25.0	
* 4 Chlorobenzene-d5	117	14.439	14.445	-0.006	87	365934	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.585	-0.006	95	121364	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.190	9.190	0.000	94	55249	8.32	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.702	9.708	-0.006	0	75913	9.13	
$ 10 Toluene-d8 (Surr)	98	12.708	12.708	0.000	94	151171	6.32	
$ 11 4-Bromofluorobenzene	95	15.933	15.926	0.000	92	43597	6.13	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.036	0.000	85	30225	6.43	
$ 6 BFB	95	9.330	6.440	2.890	0	142	NR	
28 Acetone	58	6.380	6.374	0.006	98	10064	14.5	
34 Methylene Chloride	84	7.069	7.069	-0.006	39	684	0.1069	a
59 Benzene	78	10.373	10.373	0.000	93	1336	0.0531	
75 Toluene	92	12.787	12.793	-0.006	98	1673	0.1391	
85 m-Xylene & p-Xylene	91	14.939	14.939	0.006	0	1591	0.0861	a
88 o-Xylene	91	15.433	15.433	0.000	88	620	0.0323	a
101 1,2,4-Trimethylbenzene	105	17.280	17.280	0.000	1	509	0.0389	a
29 Pentane	43	6.380	6.410	-0.030	70	38461	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	438373	8.08	
A 154 C6-C8	1	10.852	(8.550-13.153)		0	154160	2.84	
A 155 C6-C9	1	11.842	(8.550-15.134)		0	200712	3.70	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	506755	9.34	
A 119 C6-C10	1	12.732	(8.550-16.914)		0	240189	4.43	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	483011	8.91	
A 120 C6-C12	1	14.278	(8.550-20.005)		0	308571	5.69	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	86962	1.60	
A 121 C7-C12	1	15.451	(10.897-20.005)		0	191827	3.54	
S 122 Xylenes, Total	1				0		0.1185	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

s - Failed ISTD Recovery Test

Review Flags

a - User Assigned ID

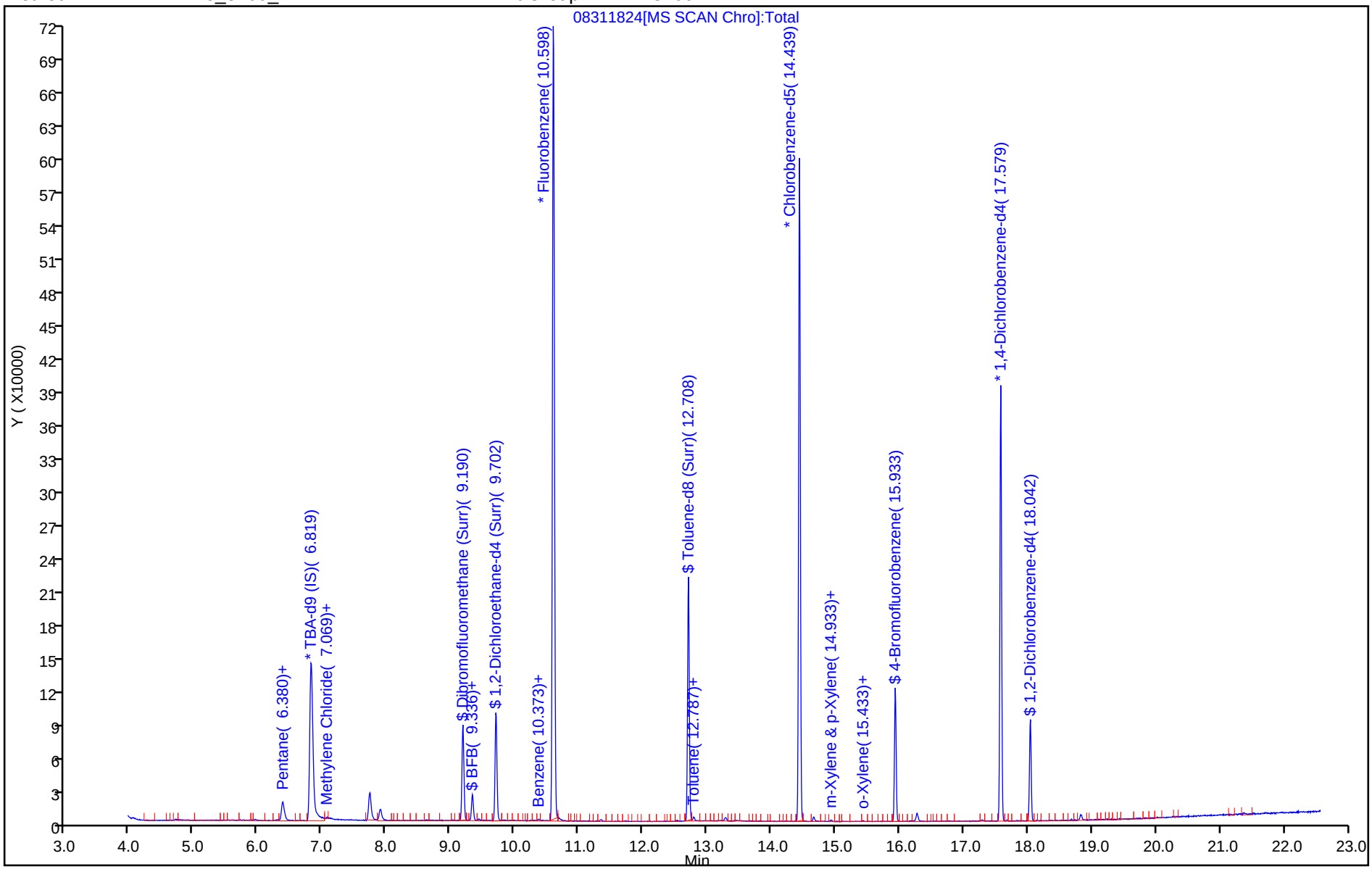
Reagents:

I_IS/SS_00092	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 31-Aug-2018 18:14:19 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311824.D				
Injection Date:	31-Aug-2018 17:28:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88263-B-13-A	Lab Sample ID:	720-88263-13	Worklist Smp#:	25
Client ID:	DG-I11S--0.5-1				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311824.D
Lims ID: 720-88263-B-13-A
Client ID: DG-I11S--0.5-1
Sample Type: Client
Inject. Date: 31-Aug-2018 17:28:30 ALS Bottle#: 23 Worklist Smp#: 25
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-B-13
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 31-Aug-2018 18:14:18 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: salgadoa Date: 31-Aug-2018 18:14:18

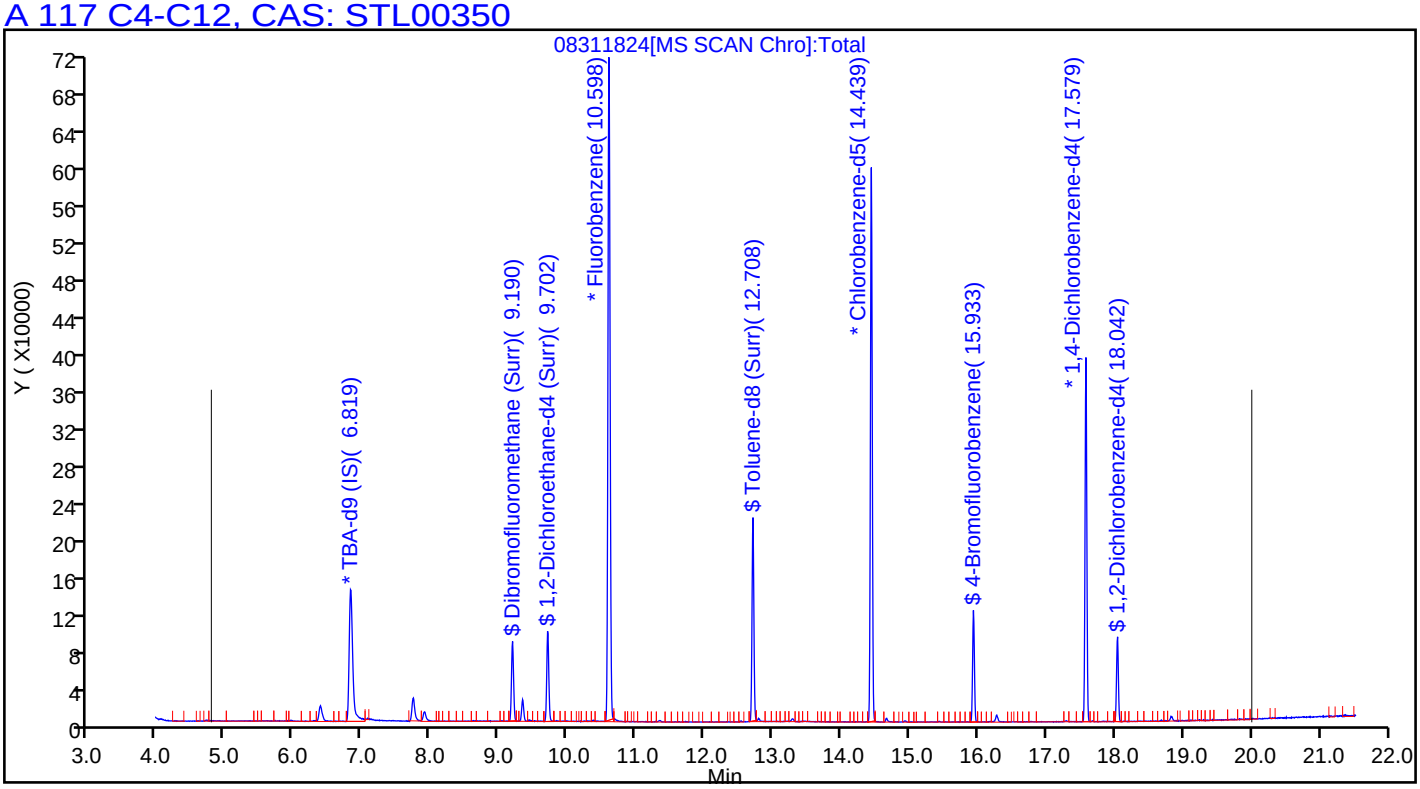
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	9.13	121.70
$ 10 Toluene-d8 (Surr)	7.50	6.32	84.26
$ 11 4-Bromofluorobenzene	7.50	6.13	81.68
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00
$ 6 BFB	0.0	0	0.00

Report Date: 31-Aug-2018 18:14:21 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311824.D				
Injection Date:	31-Aug-2018 17:28:30	Instrument ID:	HP13		
Lims ID:	720-88263-B-13-A	Lab Sample ID:	720-88263-13		
Client ID:	DG-I11S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	23	Worklist Smp#:	25
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

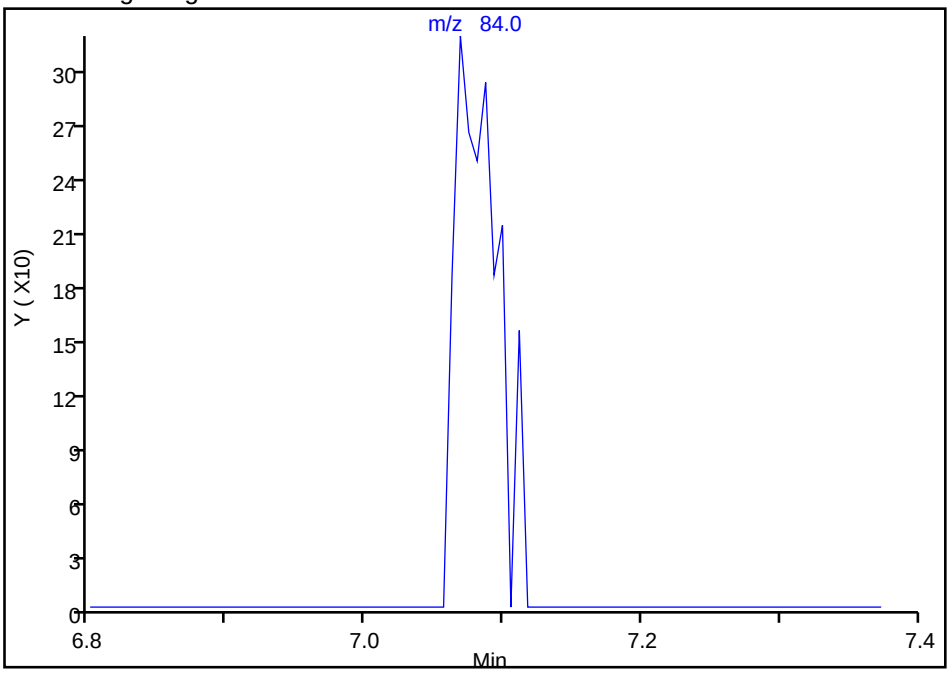
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311824.D				
Injection Date:	31-Aug-2018 17:28:30	Instrument ID:	HP13		
Lims ID:	720-88263-B-13-A	Lab Sample ID:	720-88263-13		
Client ID:	DG-I11S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	23	Worklist Smp#:	25
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

34 Methylene Chloride, CAS: 75-09-2

Signal: 1

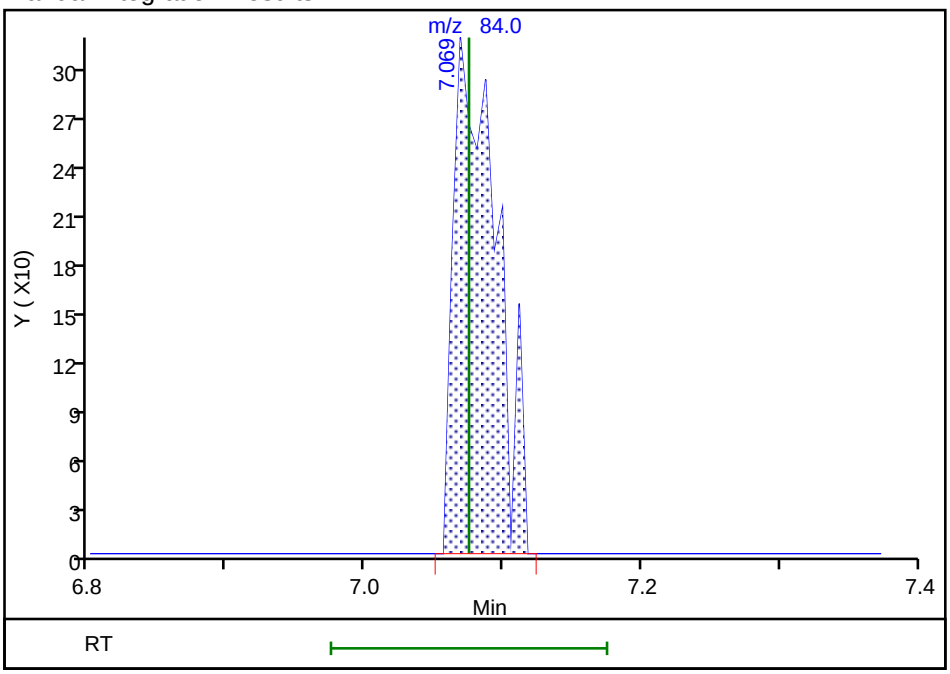
Not Detected
Expected RT: 7.07

Processing Integration Results



Manual Integration Results

RT: 7.07
Area: 684
Amount: 0.106865
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 18:13:20
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

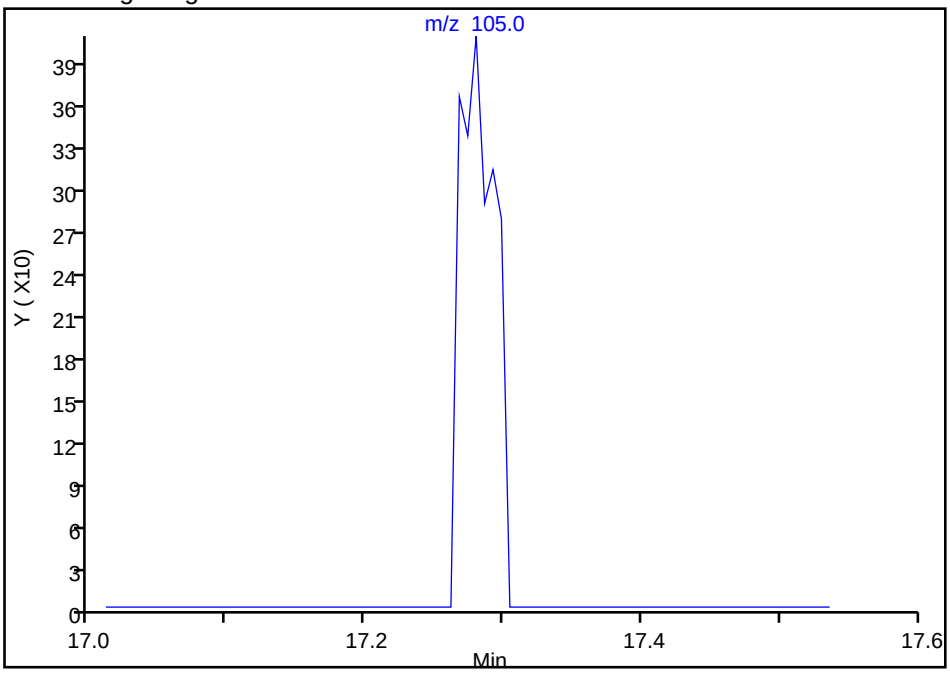
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311824.D				
Injection Date:	31-Aug-2018 17:28:30	Instrument ID:	HP13		
Lims ID:	720-88263-B-13-A	Lab Sample ID:	720-88263-13		
Client ID:	DG-I11S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	23	Worklist Smp#:	25
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

101 1,2,4-Trimethylbenzene, CAS: 95-63-6

Signal: 1

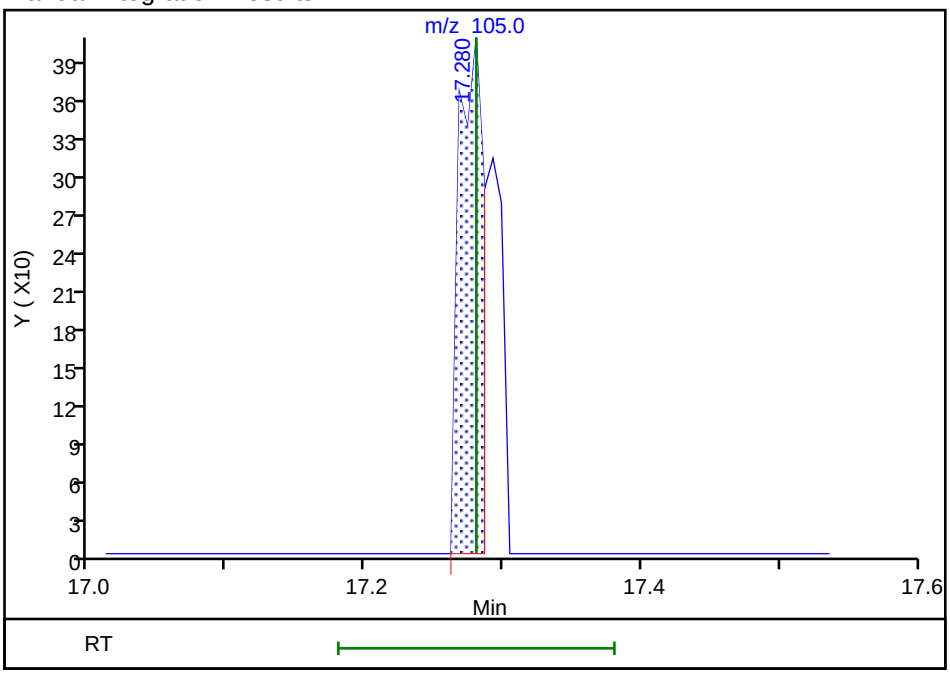
Not Detected
Expected RT: 17.28

Processing Integration Results



Manual Integration Results

RT: 17.28
Area: 509
Amount: 0.038923
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 18:14:02
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

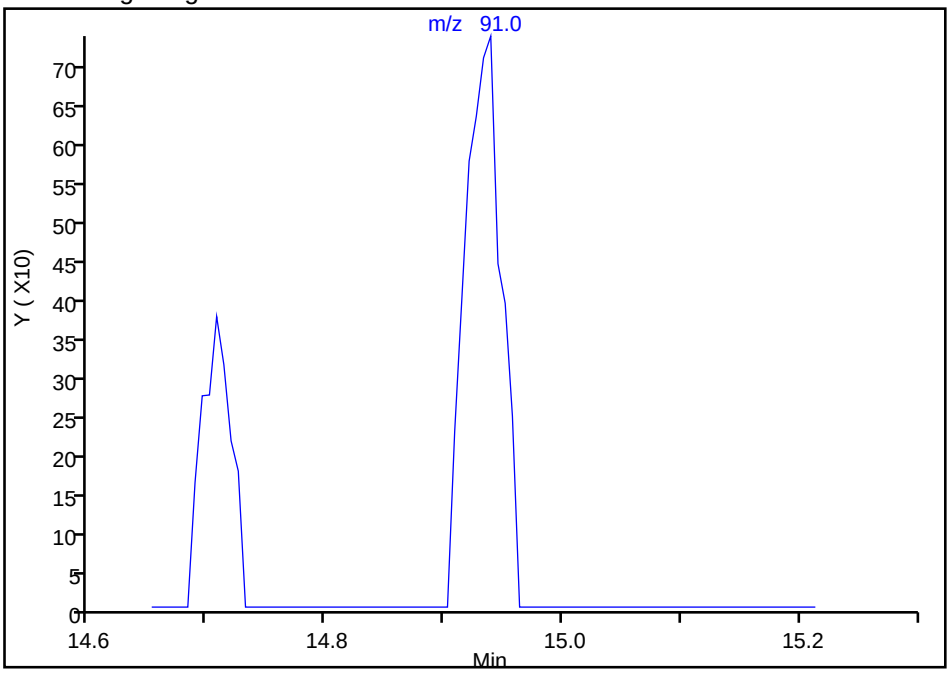
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311824.D				
Injection Date:	31-Aug-2018 17:28:30	Instrument ID:	HP13		
Lims ID:	720-88263-B-13-A	Lab Sample ID:	720-88263-13		
Client ID:	DG-I11S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	23	Worklist Smp#:	25
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

85 m-Xylene & p-Xylene, CAS: 179601-23-1

Signal: 1

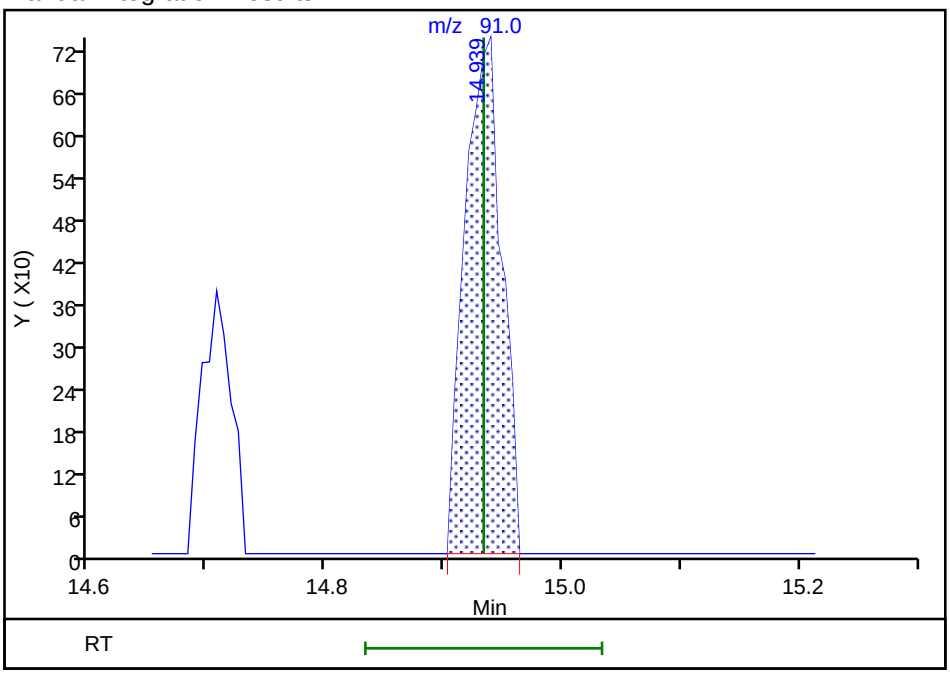
Not Detected
Expected RT: 14.93

Processing Integration Results



Manual Integration Results

RT: 14.94
Area: 1591
Amount: 0.086140
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 18:13:52
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

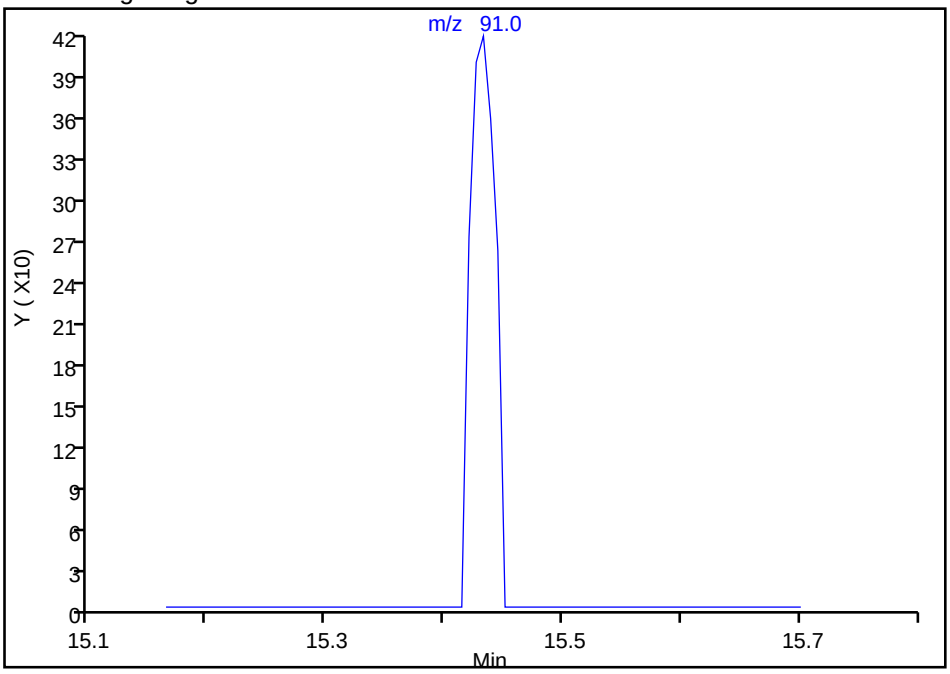
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311824.D				
Injection Date:	31-Aug-2018 17:28:30	Instrument ID:	HP13		
Lims ID:	720-88263-B-13-A	Lab Sample ID:	720-88263-13		
Client ID:	DG-I11S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	23	Worklist Smp#:	25
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

88 o-Xylene, CAS: 95-47-6

Signal: 1

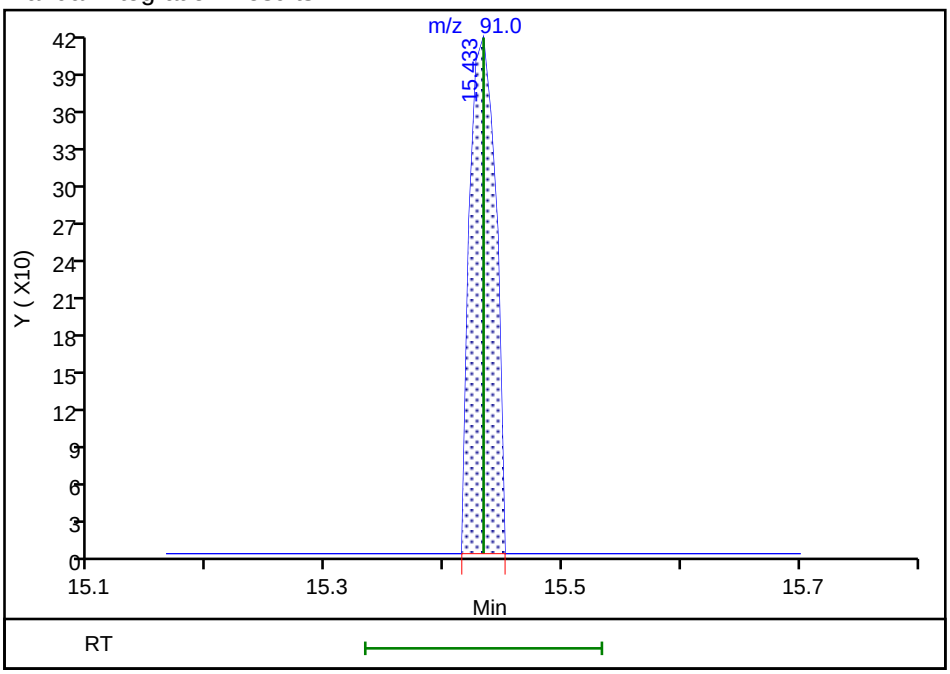
Not Detected
Expected RT: 15.43

Processing Integration Results



Manual Integration Results

RT: 15.43
Area: 620
Amount: 0.032316
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 18:13:56
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-I11S-3.5-4
Lab Sample ID: 720-88263-14
Matrix: Solid
Lab File ID: 08301846.D
Analysis Method: 8260B
Date Collected: 08/27/2018 11:10
Sample wt/vol: 5.688(g)
Date Analyzed: 08/31/2018 05:11
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250625
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND	*	4.4	1.1
67-64-1	Acetone	ND	*	44	33
71-43-2	Benzene	ND	*	4.4	0.57
75-27-4	Dichlorobromomethane	ND	*	4.4	0.63
108-86-1	Bromobenzene	ND	*	4.4	0.69
74-97-5	Chlorobromomethane	ND	*	18	0.63
75-25-2	Bromoform	ND	*	4.4	1.8
74-83-9	Bromomethane	ND	*	8.8	0.69
78-93-3	2-Butanone (MEK)	ND	*	44	18
104-51-8	n-Butylbenzene	ND	*	4.4	0.88
135-98-8	sec-Butylbenzene	ND	*	4.4	0.63
98-06-6	tert-Butylbenzene	ND	*	4.4	0.64
75-15-0	Carbon disulfide	ND	*	4.4	1.8
56-23-5	Carbon tetrachloride	ND	*	4.4	0.55
108-90-7	Chlorobenzene	ND	*	4.4	0.61
75-00-3	Chloroethane	ND	*	8.8	0.49
67-66-3	Chloroform	ND	*	4.4	0.58
74-87-3	Chloromethane	ND	*	8.8	0.69
95-49-8	2-Chlorotoluene	ND	*	4.4	0.57
106-43-4	4-Chlorotoluene	ND	*	4.4	0.60
124-48-1	Chlorodibromomethane	ND	*	4.4	0.62
95-50-1	1,2-Dichlorobenzene	ND	*	4.4	0.60
541-73-1	1,3-Dichlorobenzene	ND	*	4.4	0.63
106-46-7	1,4-Dichlorobenzene	ND	*	4.4	0.62
142-28-9	1,3-Dichloropropane	ND	*	4.4	0.64
563-58-6	1,1-Dichloropropene	ND	*	4.4	0.61
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	8.8	1.5
106-93-4	Ethylene Dibromide	ND	*	4.4	1.3
74-95-3	Dibromomethane	ND	*	8.8	0.76
75-71-8	Dichlorodifluoromethane	ND	*	8.8	0.69
75-34-3	1,1-Dichloroethane	ND	*	4.4	0.60
107-06-2	1,2-Dichloroethane	ND	*	4.4	0.67
75-35-4	1,1-Dichloroethene	ND	*	4.4	0.55
156-59-2	cis-1,2-Dichloroethene	ND	*	4.4	0.60
156-60-5	trans-1,2-Dichloroethene	ND	*	4.4	0.66
78-87-5	1,2-Dichloropropane	ND	*	4.4	0.55

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-I11S-3.5-4
Lab Sample ID: 720-88263-14
Matrix: Solid
Lab File ID: 08301846.D
Analysis Method: 8260B
Date Collected: 08/27/2018 11:10
Sample wt/vol: 5.688(g)
Date Analyzed: 08/31/2018 05:11
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250625
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND	*	4.4	0.61
10061-02-6	trans-1,3-Dichloropropene	ND	*	4.4	0.59
100-41-4	Ethylbenzene	ND	*	4.4	0.66
87-68-3	Hexachlorobutadiene	ND	*	4.4	0.79
591-78-6	2-Hexanone	ND	*	44	8.8
98-82-8	Isopropylbenzene	ND	*	4.4	0.60
99-87-6	4-Isopropyltoluene	ND	*	4.4	2.2
75-09-2	Methylene Chloride	ND	*	8.8	4.9
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	*	44	8.8
91-20-3	Naphthalene	ND	*	8.8	1.3
103-65-1	N-Propylbenzene	ND	*	4.4	0.58
100-42-5	Styrene	ND	*	4.4	0.55
630-20-6	1,1,1,2-Tetrachloroethane	ND	*	4.4	0.67
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	4.4	0.66
127-18-4	Tetrachloroethene	ND	*	4.4	0.59
108-88-3	Toluene	ND	*	4.4	0.62
87-61-6	1,2,3-Trichlorobenzene	ND	*	4.4	0.65
120-82-1	1,2,4-Trichlorobenzene	ND	*	4.4	0.62
71-55-6	1,1,1-Trichloroethane	ND	*	4.4	0.54
79-00-5	1,1,2-Trichloroethane	ND	*	4.4	0.62
79-01-6	Trichloroethene	ND	*	4.4	0.55
75-69-4	Trichlorofluoromethane	ND	*	4.4	0.49
96-18-4	1,2,3-Trichloropropane	ND	*	4.4	0.68
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.4	1.8
95-63-6	1,2,4-Trimethylbenzene	ND	*	4.4	1.4
108-67-8	1,3,5-Trimethylbenzene	ND	*	4.4	0.57
108-05-4	Vinyl acetate	ND	*	18	4.4
75-01-4	Vinyl chloride	ND	*	4.4	0.64
1330-20-7	Xylenes, Total	ND		4.4	1.1
594-20-7	2,2-Dichloropropane	ND	*	4.4	1.8
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND	*	220	88

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-I11S-3.5-4 Lab Sample ID: 720-88263-14

Matrix: Solid Lab File ID: 08301846.D

Analysis Method: 8260B Date Collected: 08/27/2018 11:10

Sample wt/vol: 5.688(g) Date Analyzed: 08/31/2018 05:11

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250625 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	68	*	45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	130	*	60-140
2037-26-5	Toluene-d8 (Surr)	82	*	58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301846.D
Lims ID: 720-88263-A-14-A
Client ID: DG-I11S--3.5-4
Sample Type: Client
Inject. Date: 31-Aug-2018 05:11:30 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-A-14
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:32:23 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 08:36:13

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	79178	250.0	s
* 2 Fluorobenzene	96	10.720	10.709	0.011	98	426860	25.0	s
* 4 Chlorobenzene-d5	117	14.564	14.554	0.010	85	275492	25.0	s
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	67567	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.305	9.303	0.011	91	31621	8.75	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.811	9.821	-0.001	0	37889	9.75	
$ 10 Toluene-d8 (Surr)	98	12.821	12.834	-0.001	94	103726	6.12	
$ 11 4-Bromofluorobenzene	95	16.053	16.065	0.000	91	21928	5.11	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	83	13622	5.76	
28 Acetone	58	6.474	6.481	0.000	97	3983	12.1	
59 Benzene	78	10.487	10.498	-0.001	1	332	0.0216	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	178787	5.43	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	68407	2.08	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	77316	2.35	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	252510	7.66	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	83263	NC	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	83263	2.53	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	231608	7.03	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	158425	4.81	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	28830	0.8751	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	110528	3.36	

QC Flag Legend

Processing Flags
NC - Not Calibrated
s - Failed ISTD Recovery Test

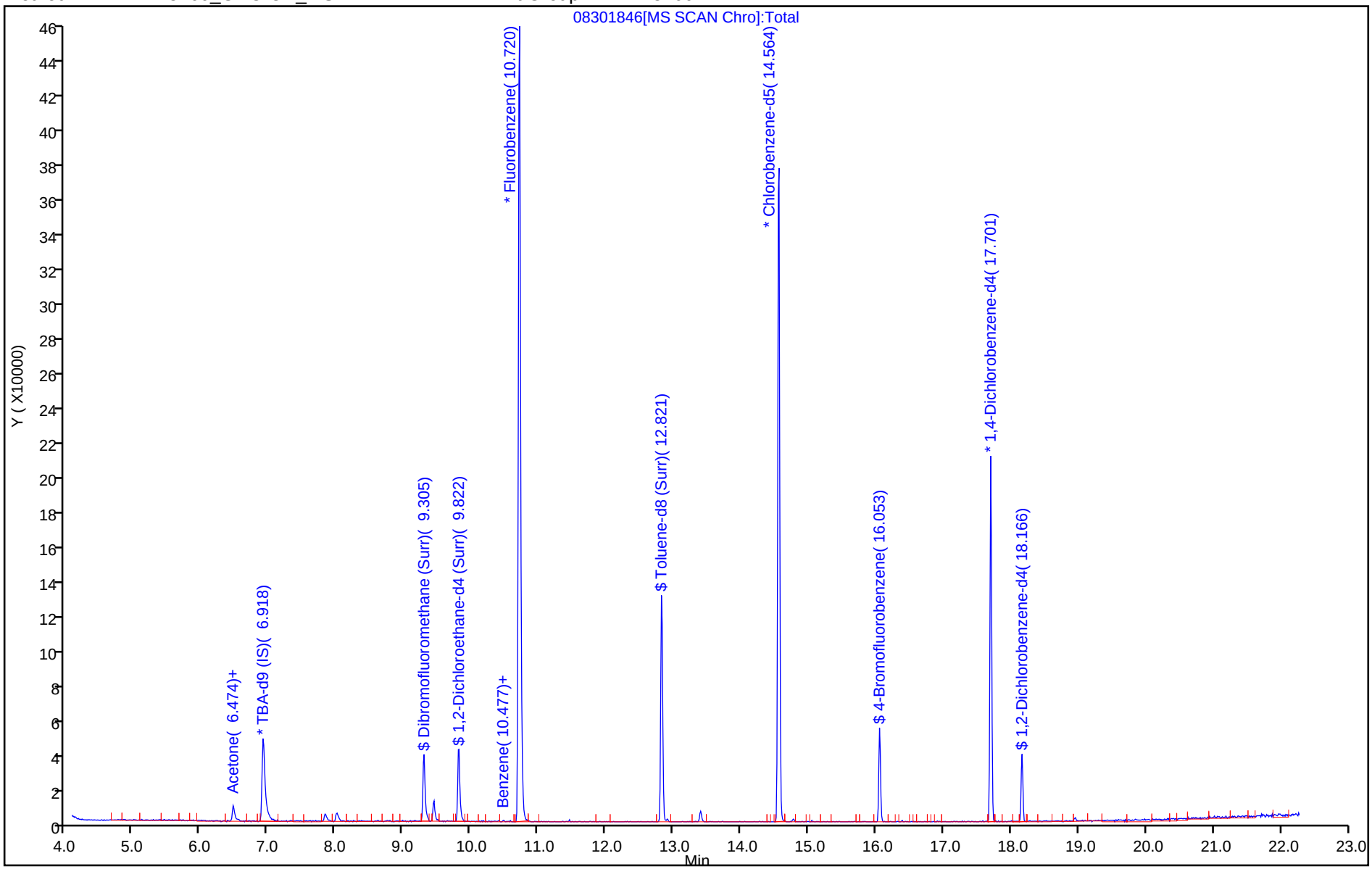
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 08:36:14 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301846.D				
Injection Date:	31-Aug-2018 05:11:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88263-A-14-A	Lab Sample ID:	720-88263-14	Worklist Smp#:	24
Client ID:	DG-I11S--3.5-4				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301846.D
Lims ID: 720-88263-A-14-A
Client ID: DG-I11S--3.5-4
Sample Type: Client
Inject. Date: 31-Aug-2018 05:11:30 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-A-14
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:32:23 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 08:36:13

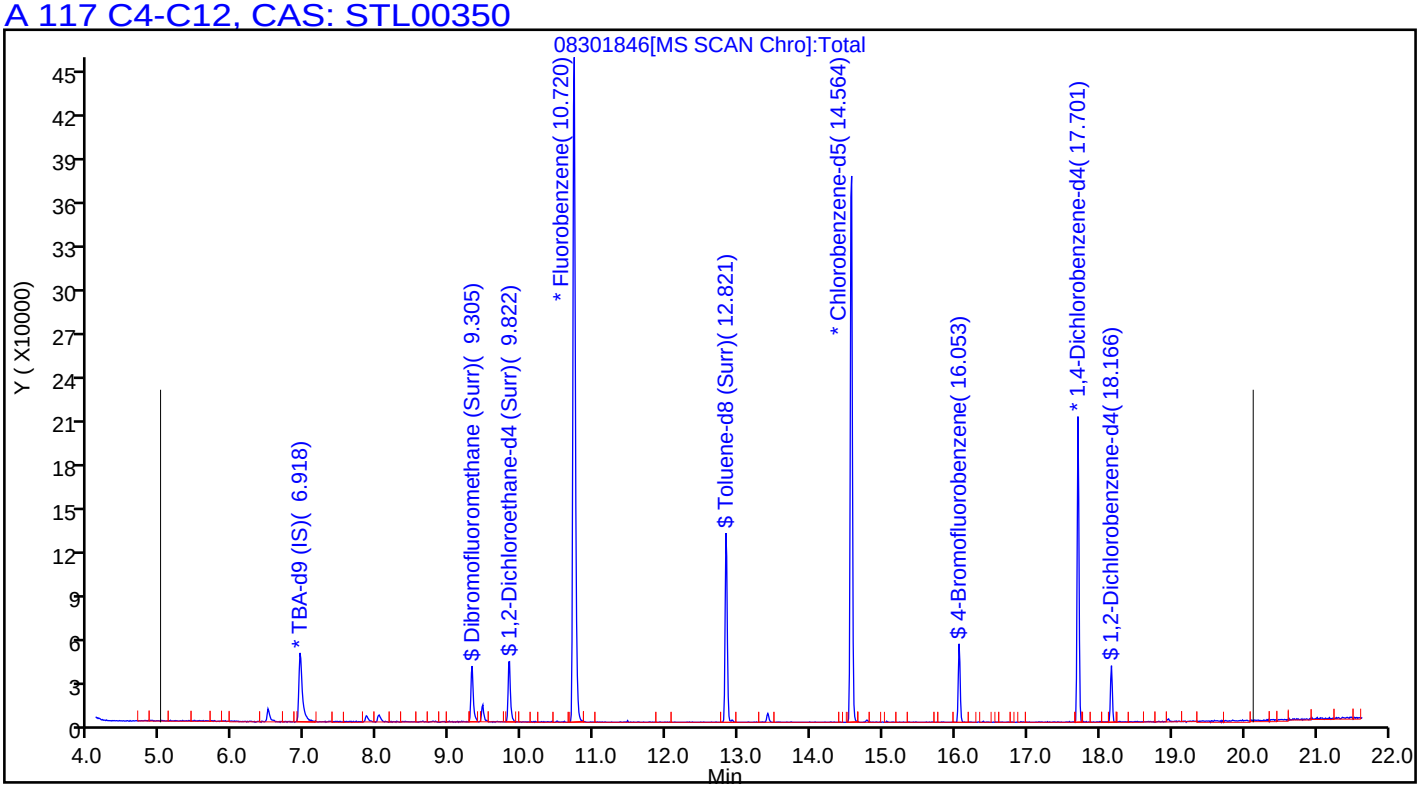
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	9.75	130.05
$ 10 Toluene-d8 (Surr)	7.50	6.12	81.60
$ 11 4-Bromofluorobenzene	7.50	5.11	68.15
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 31-Aug-2018 08:36:14 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301846.D				
Injection Date:	31-Aug-2018 05:11:30	Instrument ID:	CHMSV2		
Lims ID:	720-88263-A-14-A	Lab Sample ID:	720-88263-14		
Client ID:	DG-I11S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton | Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-I11S-9.5-10 | Lab Sample ID: 720-88263-15

Matrix: Solid | Lab File ID: 08301847.D

Analysis Method: 8260B | Date Collected: 08/27/2018 11:10

Sample wt/vol: 4.009(g) | Date Analyzed: 08/31/2018 05:39

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-VRX ID: 250(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 250625 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND	*	6.2	1.5
67-64-1	Acetone	160	*	62	47
71-43-2	Benzene	ND	*	6.2	0.81
75-27-4	Dichlorobromomethane	ND	*	6.2	0.90
108-86-1	Bromobenzene	ND	*	6.2	0.99
74-97-5	Chlorobromomethane	ND	*	25	0.90
75-25-2	Bromoform	ND	*	6.2	2.5
74-83-9	Bromomethane	ND	*	12	0.99
78-93-3	2-Butanone (MEK)	ND	*	62	26
104-51-8	n-Butylbenzene	ND	*	6.2	1.2
135-98-8	sec-Butylbenzene	ND	*	6.2	0.90
98-06-6	tert-Butylbenzene	ND	*	6.2	0.91
75-15-0	Carbon disulfide	4.3	J *	6.2	2.5
56-23-5	Carbon tetrachloride	ND	*	6.2	0.77
108-90-7	Chlorobenzene	ND	*	6.2	0.86
75-00-3	Chloroethane	ND	*	12	0.70
67-66-3	Chloroform	ND	*	6.2	0.82
74-87-3	Chloromethane	ND	*	12	0.99
95-49-8	2-Chlorotoluene	ND	*	6.2	0.81
106-43-4	4-Chlorotoluene	ND	*	6.2	0.85
124-48-1	Chlorodibromomethane	ND	*	6.2	0.89
95-50-1	1,2-Dichlorobenzene	ND	*	6.2	0.85
541-73-1	1,3-Dichlorobenzene	ND	*	6.2	0.90
106-46-7	1,4-Dichlorobenzene	ND	*	6.2	0.89
142-28-9	1,3-Dichloropropane	ND	*	6.2	0.91
563-58-6	1,1-Dichloropropene	ND	*	6.2	0.86
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	12	2.1
106-93-4	Ethylene Dibromide	ND	*	6.2	1.8
74-95-3	Dibromomethane	ND	*	12	1.1
75-71-8	Dichlorodifluoromethane	ND	*	12	0.99
75-34-3	1,1-Dichloroethane	ND	*	6.2	0.85
107-06-2	1,2-Dichloroethane	ND	*	6.2	0.95
75-35-4	1,1-Dichloroethene	ND	*	6.2	0.77
156-59-2	cis-1,2-Dichloroethene	ND	*	6.2	0.85
156-60-5	trans-1,2-Dichloroethene	ND	*	6.2	0.94
78-87-5	1,2-Dichloropropane	ND	*	6.2	0.79

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-I11S-9.5-10 Lab Sample ID: 720-88263-15

Matrix: Solid Lab File ID: 08301847.D

Analysis Method: 8260B Date Collected: 08/27/2018 11:10

Sample wt/vol: 4.009(g) Date Analyzed: 08/31/2018 05:39

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250625 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND	*	6.2	0.86
10061-02-6	trans-1,3-Dichloropropene	ND	*	6.2	0.84
100-41-4	Ethylbenzene	ND	*	6.2	0.94
87-68-3	Hexachlorobutadiene	ND	*	6.2	1.1
591-78-6	2-Hexanone	ND	*	62	12
98-82-8	Isopropylbenzene	ND	*	6.2	0.85
99-87-6	4-Isopropyltoluene	ND	*	6.2	3.1
75-09-2	Methylene Chloride	ND	*	12	7.0
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	*	62	12
91-20-3	Naphthalene	ND	*	12	1.9
103-65-1	N-Propylbenzene	ND	*	6.2	0.82
100-42-5	Styrene	ND	*	6.2	0.79
630-20-6	1,1,1,2-Tetrachloroethane	ND	*	6.2	0.95
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	6.2	0.94
127-18-4	Tetrachloroethene	ND	*	6.2	0.84
108-88-3	Toluene	ND	*	6.2	0.89
87-61-6	1,2,3-Trichlorobenzene	ND	*	6.2	0.92
120-82-1	1,2,4-Trichlorobenzene	ND	*	6.2	0.89
71-55-6	1,1,1-Trichloroethane	ND	*	6.2	0.76
79-00-5	1,1,2-Trichloroethane	ND	*	6.2	0.87
79-01-6	Trichloroethene	ND	*	6.2	0.79
75-69-4	Trichlorofluoromethane	ND	*	6.2	0.70
96-18-4	1,2,3-Trichloropropane	ND	*	6.2	0.96
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	6.2	2.6
95-63-6	1,2,4-Trimethylbenzene	ND	*	6.2	2.0
108-67-8	1,3,5-Trimethylbenzene	ND	*	6.2	0.81
108-05-4	Vinyl acetate	ND	*	25	6.2
75-01-4	Vinyl chloride	ND	*	6.2	0.91
1330-20-7	Xylenes, Total	ND		6.2	1.5
594-20-7	2,2-Dichloropropane	ND	*	6.2	2.5
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND	*	310	120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-I11S-9.5-10 Lab Sample ID: 720-88263-15

Matrix: Solid Lab File ID: 08301847.D

Analysis Method: 8260B Date Collected: 08/27/2018 11:10

Sample wt/vol: 4.009(g) Date Analyzed: 08/31/2018 05:39

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250625 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	73	*	45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	125	*	60-140
2037-26-5	Toluene-d8 (Surr)	82	*	58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301847.D
Lims ID: 720-88263-A-15-A
Client ID: DG-I11S--9.5-10
Sample Type: Client
Inject. Date: 31-Aug-2018 05:39:30 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-A-15
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:32:23 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 08:36:18

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	145862	250.0	
* 2 Fluorobenzene	96	10.709	10.709	0.000	98	618255	25.0	s
* 4 Chlorobenzene-d5	117	14.564	14.554	0.010	85	361213	25.0	s
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	95	111136	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.305	9.303	0.011	93	44653	8.53	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.812	9.821	0.000	0	52808	9.39	
$ 10 Toluene-d8 (Surr)	98	12.822	12.834	0.000	95	151264	6.16	
$ 11 4-Bromofluorobenzene	95	16.053	16.065	0.000	93	30946	5.50	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	83	23622	6.07	
28 Acetone	58	6.474	6.481	0.000	97	31325	65.9	
37 Carbon disulfide	76	7.520	7.527	0.000	99	20419	1.73	
44 2-Butanone (MEK)	72	8.755	8.753	0.010	95	2943	7.76	
59 Benzene	78	10.477	10.498	-0.011	1	687	0.0308	
131 Butyl Ether	87	14.775	14.786	-0.001	91	482	0.1572	
124 Butane	43	5.006	4.996	0.010	95	10980	NR	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	612007	12.8	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	163241	3.42	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	179463	3.76	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	664544	13.9	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	208166	NC	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	208166	4.36	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	614737	12.9	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	261199	5.47	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	64265	1.35	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	127594	2.67	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard
NC - Not Calibrated
s - Failed ISTD Recovery Test

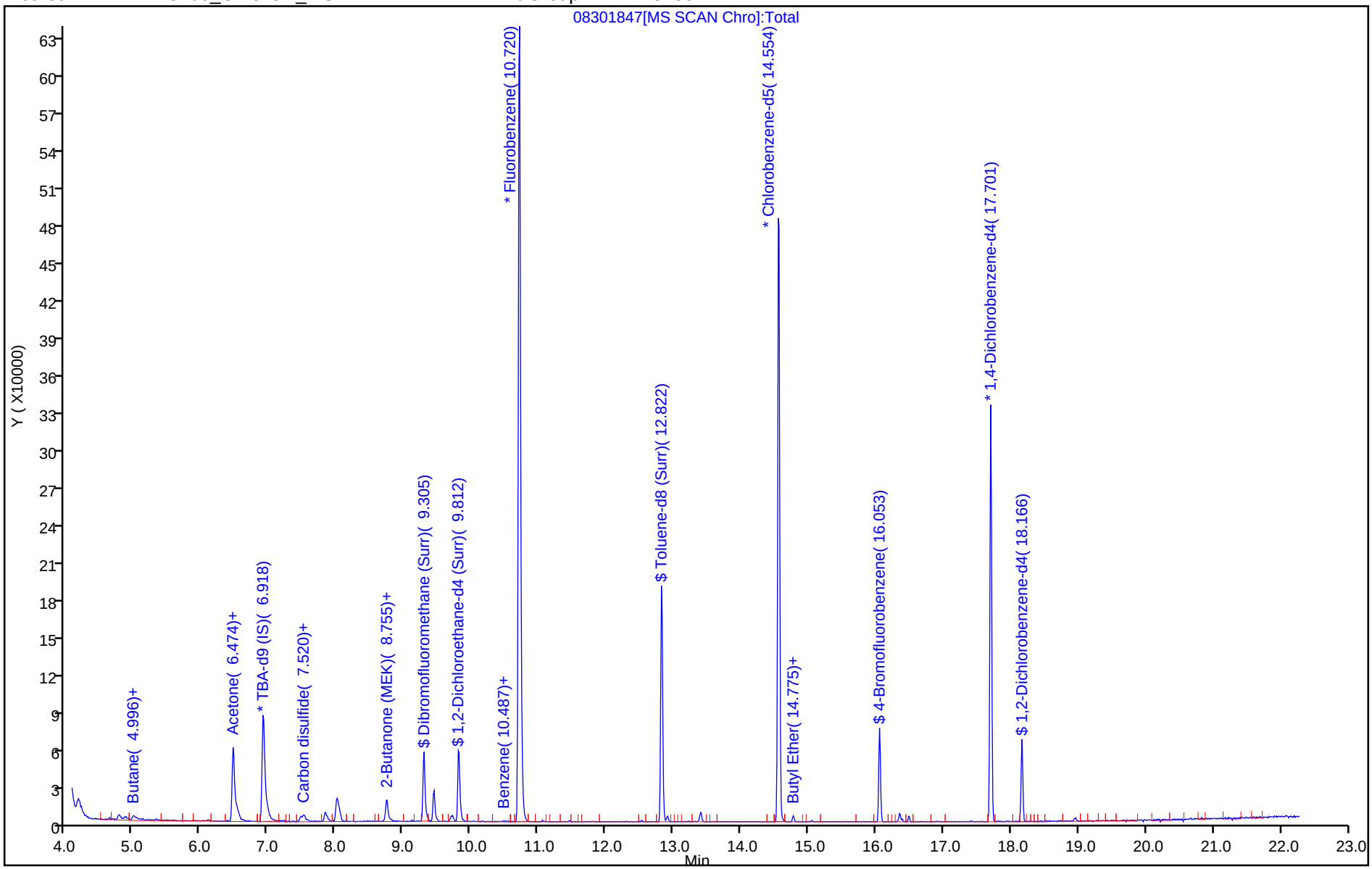
Reagents:

I_IS/SS_00092	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 31-Aug-2018 08:36:18 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301847.D				
Injection Date:	31-Aug-2018 05:39:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88263-A-15-A	Lab Sample ID:	720-88263-15	Worklist Smp#:	25
Client ID:	DG-I11S--9.5-10				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301847.D
Lims ID: 720-88263-A-15-A
Client ID: DG-I11S--9.5-10
Sample Type: Client
Inject. Date: 31-Aug-2018 05:39:30 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-A-15
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:32:23 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 08:36:18

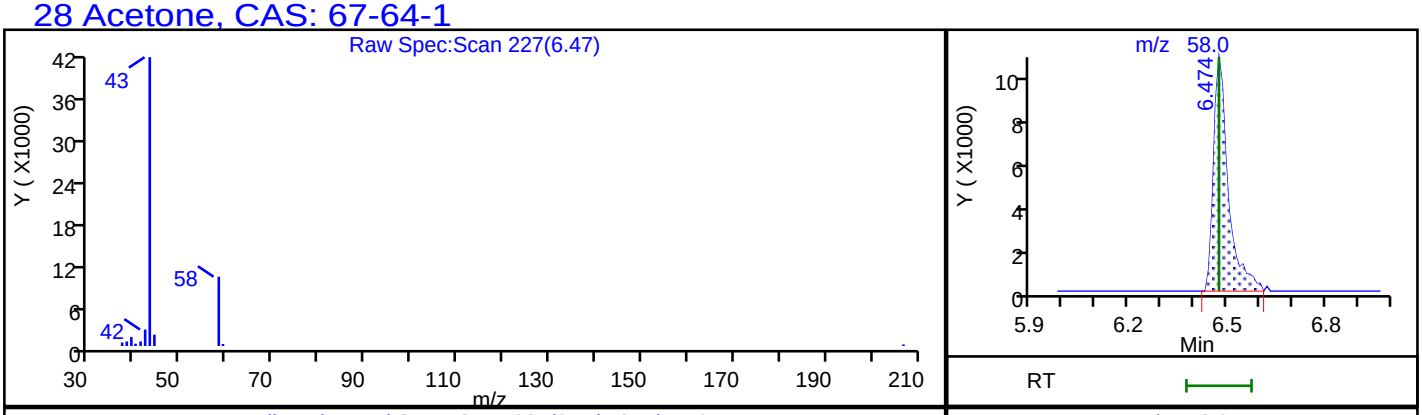
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	9.39	125.15
$ 10 Toluene-d8 (Surr)	7.50	6.16	82.16
$ 11 4-Bromofluorobenzene	7.50	5.50	73.36
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

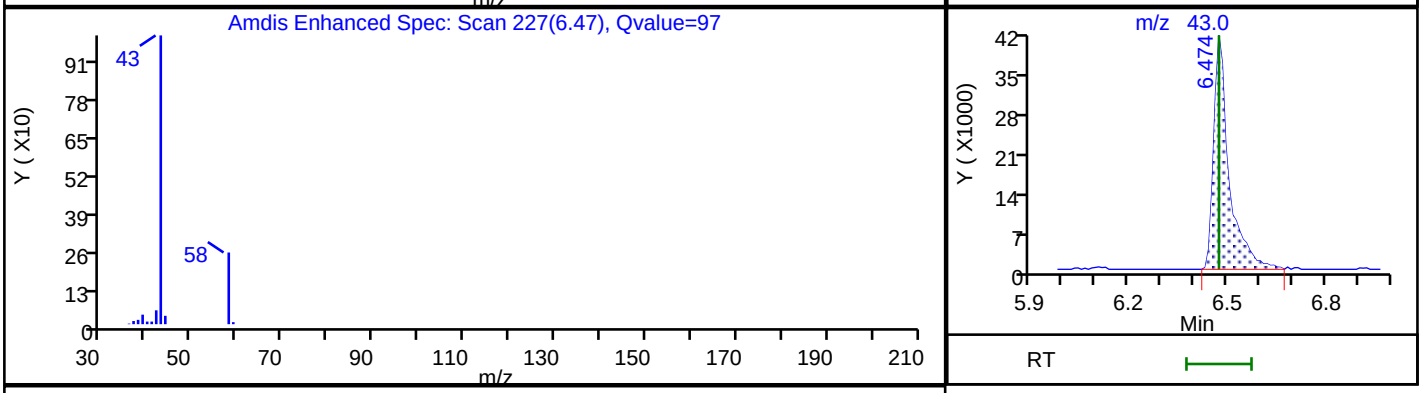
Report Date: 31-Aug-2018 08:36:18 Chrom Revision: 2.3 19-Jul-2018 15:14:50

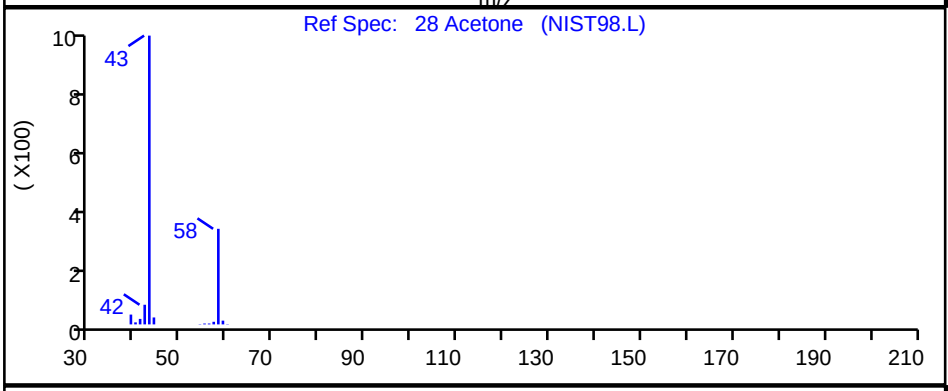
TestAmerica Pleasanton

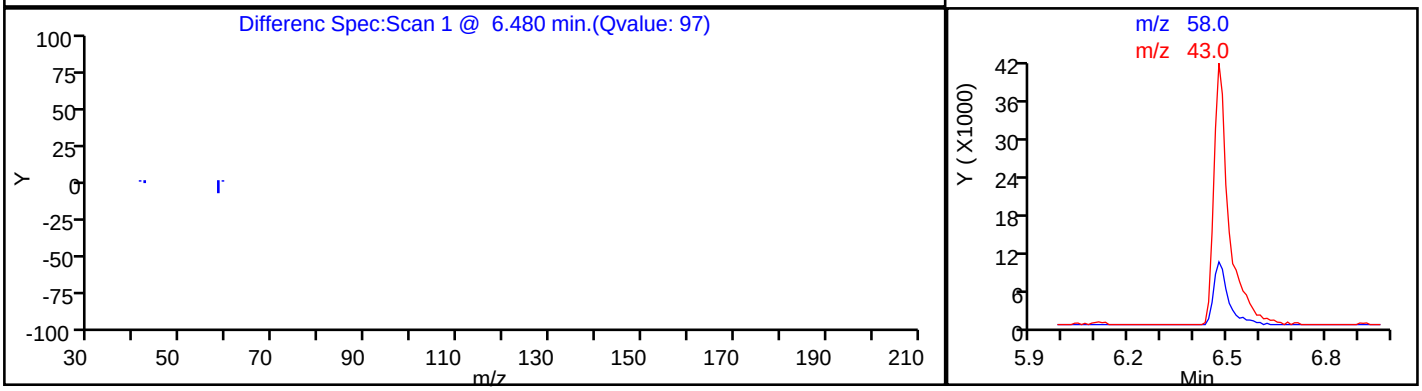
Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301847.D				
Injection Date:	31-Aug-2018 05:39:30	Instrument ID:	CHMSV2		
Lims ID:	720-88263-A-15-A	Lab Sample ID:	720-88263-15		
Client ID:	DG-I11S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1







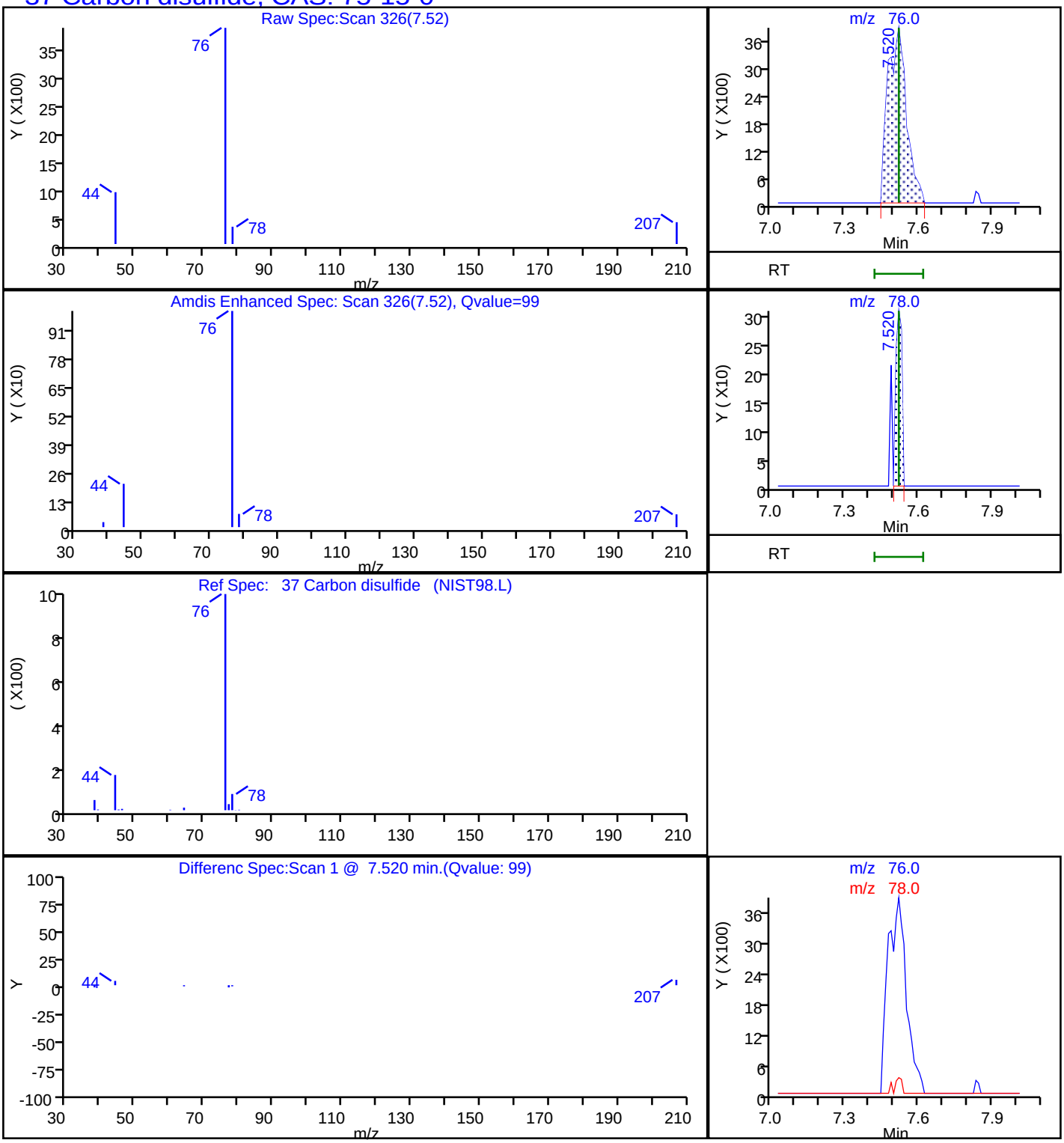


Report Date: 31-Aug-2018 08:36:18 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301847.D				
Injection Date:	31-Aug-2018 05:39:30	Instrument ID:	CHMSV2		
Lims ID:	720-88263-A-15-A	Lab Sample ID:	720-88263-15		
Client ID:	DG-I11S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

37 Carbon disulfide, CAS: 75-15-0

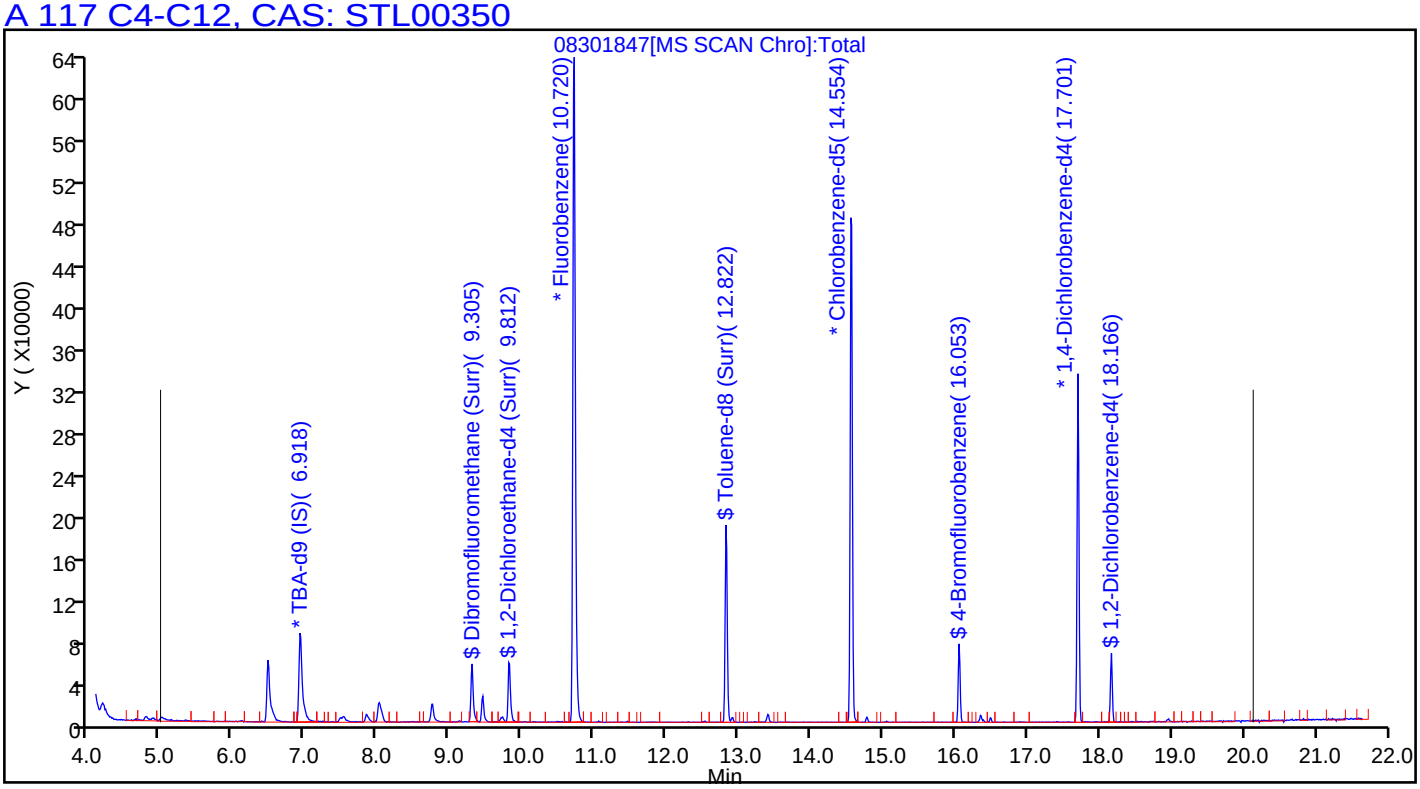


Report Date: 31-Aug-2018 08:36:18 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301847.D				
Injection Date:	31-Aug-2018 05:39:30	Instrument ID:	CHMSV2		
Lims ID:	720-88263-A-15-A	Lab Sample ID:	720-88263-15		
Client ID:	DG-I11S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-E11S-0.5-1
Lab Sample ID: 720-88263-16
Matrix: Solid
Lab File ID: 08301831.D
Analysis Method: 8260B
Date Collected: 08/27/2018 11:50
Sample wt/vol: 6.139(g)
Date Analyzed: 08/30/2018 22:21
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250626
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.1	0.98
67-64-1	Acetone	57		41	31
71-43-2	Benzene	ND		4.1	0.53
75-27-4	Dichlorobromomethane	ND		4.1	0.59
108-86-1	Bromobenzene	ND		4.1	0.64
74-97-5	Chlorobromomethane	ND		16	0.59
75-25-2	Bromoform	ND		4.1	1.6
74-83-9	Bromomethane	ND		8.1	0.64
78-93-3	2-Butanone (MEK)	ND		41	17
104-51-8	n-Butylbenzene	ND		4.1	0.81
135-98-8	sec-Butylbenzene	ND		4.1	0.59
98-06-6	tert-Butylbenzene	ND		4.1	0.59
75-15-0	Carbon disulfide	ND		4.1	1.6
56-23-5	Carbon tetrachloride	ND		4.1	0.50
108-90-7	Chlorobenzene	ND		4.1	0.56
75-00-3	Chloroethane	ND		8.1	0.46
67-66-3	Chloroform	ND		4.1	0.54
74-87-3	Chloromethane	ND		8.1	0.64
95-49-8	2-Chlorotoluene	ND		4.1	0.53
106-43-4	4-Chlorotoluene	ND		4.1	0.55
124-48-1	Chlorodibromomethane	ND		4.1	0.58
95-50-1	1,2-Dichlorobenzene	ND		4.1	0.55
541-73-1	1,3-Dichlorobenzene	ND		4.1	0.59
106-46-7	1,4-Dichlorobenzene	ND		4.1	0.58
142-28-9	1,3-Dichloropropane	ND		4.1	0.59
563-58-6	1,1-Dichloropropene	ND		4.1	0.56
96-12-8	1,2-Dibromo-3-Chloropropane	ND		8.1	1.4
106-93-4	Ethylene Dibromide	ND		4.1	1.2
74-95-3	Dibromomethane	ND		8.1	0.70
75-71-8	Dichlorodifluoromethane	ND		8.1	0.64
75-34-3	1,1-Dichloroethane	ND		4.1	0.55
107-06-2	1,2-Dichloroethane	ND		4.1	0.62
75-35-4	1,1-Dichloroethene	ND	*	4.1	0.50
156-59-2	cis-1,2-Dichloroethene	ND		4.1	0.55
156-60-5	trans-1,2-Dichloroethene	ND		4.1	0.61
78-87-5	1,2-Dichloropropane	ND		4.1	0.51

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton | Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-E11S-0.5-1 | Lab Sample ID: 720-88263-16

Matrix: Solid | Lab File ID: 08301831.D

Analysis Method: 8260B | Date Collected: 08/27/2018 11:50

Sample wt/vol: 6.139(g) | Date Analyzed: 08/30/2018 22:21

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-VRX ID: 250(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 250626 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.1	0.56
10061-02-6	trans-1,3-Dichloropropene	ND		4.1	0.55
100-41-4	Ethylbenzene	ND		4.1	0.61
87-68-3	Hexachlorobutadiene	ND		4.1	0.73
591-78-6	2-Hexanone	ND		41	8.1
98-82-8	Isopropylbenzene	ND		4.1	0.55
99-87-6	4-Isopropyltoluene	ND		4.1	2.0
75-09-2	Methylene Chloride	ND		8.1	4.6
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		41	8.1
91-20-3	Naphthalene	ND		8.1	1.2
103-65-1	N-Propylbenzene	ND		4.1	0.54
100-42-5	Styrene	ND		4.1	0.51
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.1	0.62
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.1	0.61
127-18-4	Tetrachloroethene	ND		4.1	0.55
108-88-3	Toluene	ND		4.1	0.58
87-61-6	1,2,3-Trichlorobenzene	ND		4.1	0.60
120-82-1	1,2,4-Trichlorobenzene	ND		4.1	0.58
71-55-6	1,1,1-Trichloroethane	ND		4.1	0.50
79-00-5	1,1,2-Trichloroethane	ND		4.1	0.57
79-01-6	Trichloroethene	ND		4.1	0.51
75-69-4	Trichlorofluoromethane	ND		4.1	0.46
96-18-4	1,2,3-Trichloropropane	ND		4.1	0.63
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.1	1.7
95-63-6	1,2,4-Trimethylbenzene	ND		4.1	1.3
108-67-8	1,3,5-Trimethylbenzene	ND		4.1	0.53
108-05-4	Vinyl acetate	ND		16	4.1
75-01-4	Vinyl chloride	ND		4.1	0.59
1330-20-7	Xylenes, Total	ND		4.1	0.99
594-20-7	2,2-Dichloropropane	ND		4.1	1.6
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		200	81

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-E11S-0.5-1 Lab Sample ID: 720-88263-16

Matrix: Solid Lab File ID: 08301831.D

Analysis Method: 8260B Date Collected: 08/27/2018 11:50

Sample wt/vol: 6.139(g) Date Analyzed: 08/30/2018 22:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250626 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	97		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		60-140
2037-26-5	Toluene-d8 (Surr)	94		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301831.D
Lims ID: 720-88263-A-16-A
Client ID: DG-E11S--0.5-1
Sample Type: Client
Inject. Date: 30-Aug-2018 22:21:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-A-16
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 31-Aug-2018 05:46:19 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 09:31:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.825	6.813	0.012	0	280702	250.0	
* 2 Fluorobenzene	96	10.605	10.598	0.007	99	1072280	25.0	
* 4 Chlorobenzene-d5	117	14.445	14.439	0.006	87	831238	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.585	17.579	0.006	95	449015	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.196	9.184	0.012	94	87169	7.24	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.708	9.702	0.006	0	106291	7.05	
$ 10 Toluene-d8 (Surr)	98	12.708	12.702	0.006	93	305044	7.03	
$ 11 4-Bromofluorobenzene	95	15.939	15.939	0.006	94	117198	7.25	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.048	0.000	84	103325	5.94	
$ 6 BFB	95	9.343	6.446	2.897	0	441	NR	
27 Isopropyl alcohol	45	6.453	6.282	0.177	1	333	0.4423	
28 Acetone	58	6.380	6.361	0.019	99	43644	34.7	
32 2-Methyl-2-propanol	59	6.928	6.922	0.012	98	7797	6.69	
52 Tert-butyl ethyl ether	59	9.099	9.099	0.000	92	1434	0.0345	
150 t-Amyl alcohol	59	9.574	9.564	0.018	1	521	0.5428	
59 Benzene	78	10.385	10.367	0.018	88	1139	0.0250	
75 Toluene	92	12.799	12.792	0.012	96	2178	0.0797	
149 1-Chlorohexane	55	14.439	14.354	0.085	33	8841	0.6464	
128 Butyl Ether	87	14.665	14.665	0.006	96	466	0.0563	
105 4-Isopropyltoluene	119	17.646	17.646	0.006	94	3733	0.0747	
107 n-Butylbenzene	91	18.176	18.170	0.012	85	785	0.0179	
112 Naphthalene	128	20.749	20.750	0.006	92	3888	0.0841	
29 Pentane	43	6.380	6.410	-0.030	69	146547	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	1126018	11.5	
A 154 C6-C8	1	10.855	(8.556-13.153)		0	232827	2.37	
A 155 C6-C9	1	11.845	(8.556-15.134)		0	312951	3.18	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	1522330	15.5	
A 119 C6-C10	1	12.735	(8.556-16.914)		0	602624	6.13	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	1489734	15.2	
A 120 C6-C12	1	14.281	(8.556-20.005)		0	998936	10.2	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	376584	3.83	

Report Date: 31-Aug-2018 09:31:49 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301831.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
A 121 C7-C12	1	15.448	(10.891-20.005)		0	827532	8.42	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

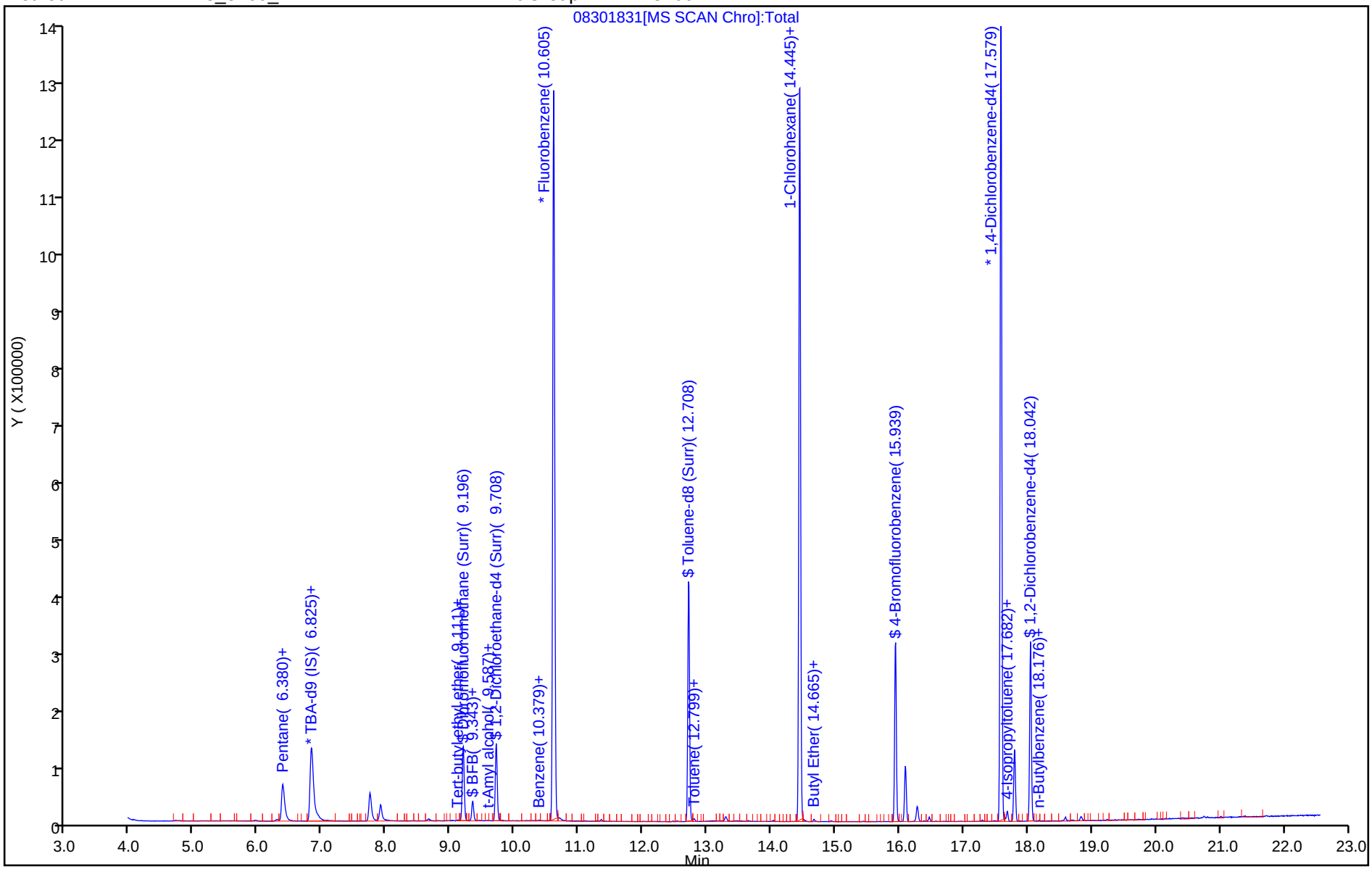
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 09:31:49 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301831.D				
Injection Date:	30-Aug-2018 22:21:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88263-A-16-A	Lab Sample ID:	720-88263-16	Worklist Smp#:	10
Client ID:	DG-E11S--0.5-1				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301831.D
Lims ID: 720-88263-A-16-A
Client ID: DG-E11S--0.5-1
Sample Type: Client
Inject. Date: 30-Aug-2018 22:21:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-A-16
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 31-Aug-2018 05:46:19 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 09:31:48

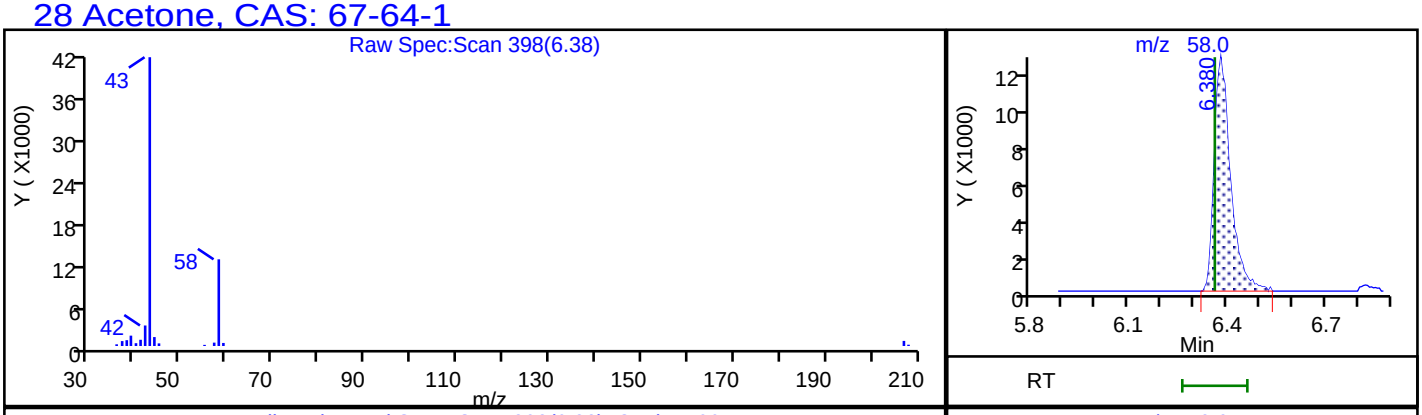
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.05	94.00
$ 10 Toluene-d8 (Surr)	7.50	7.03	93.79
$ 11 4-Bromofluorobenzene	7.50	7.25	96.66
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00
$ 6 BFB	0.0	0	0.00

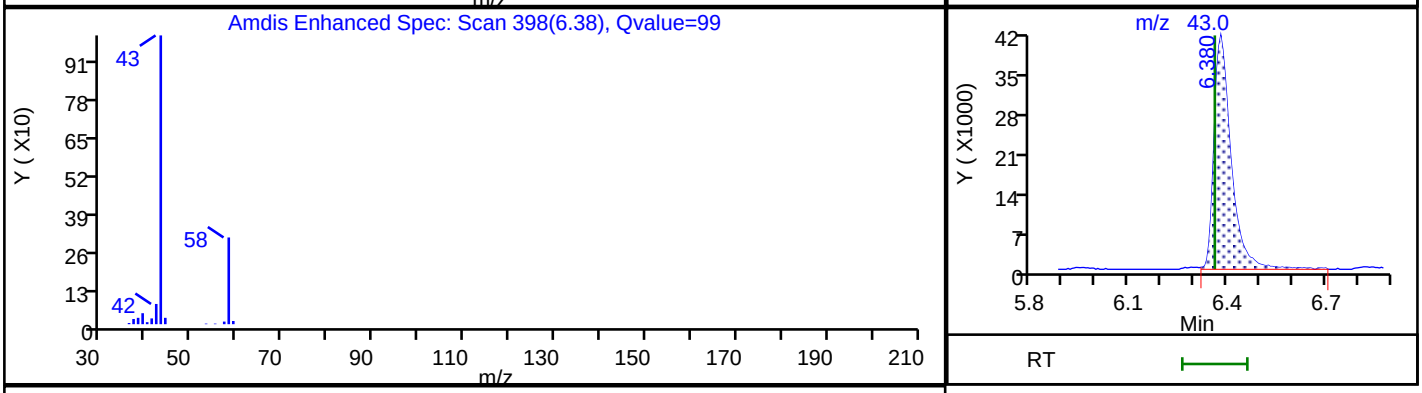
Report Date: 31-Aug-2018 09:31:49 Chrom Revision: 2.3 19-Jul-2018 15:14:50

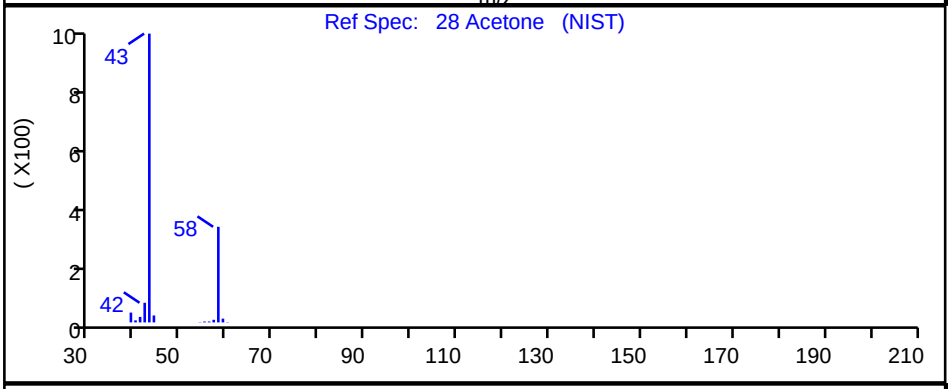
TestAmerica Pleasanton

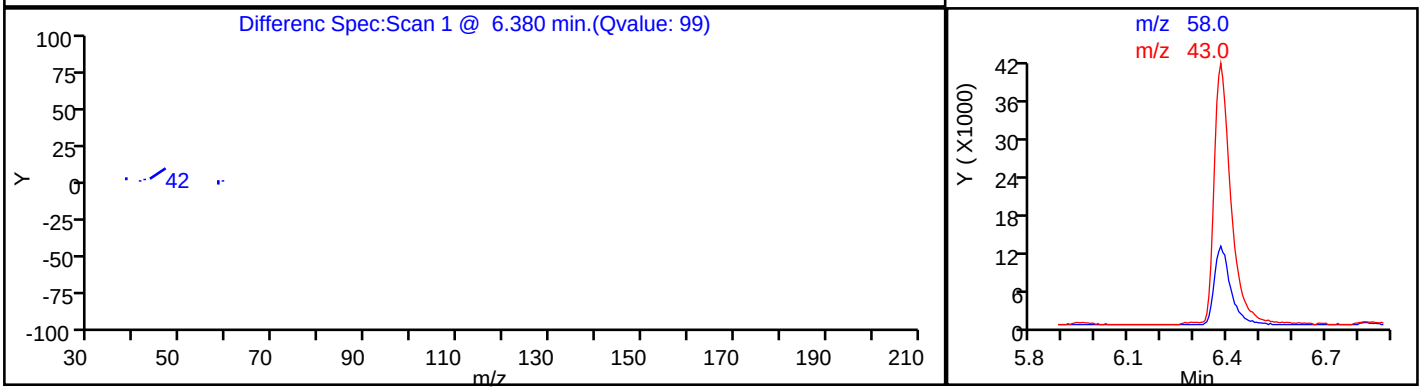
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301831.D				
Injection Date:	30-Aug-2018 22:21:30	Instrument ID:	HP13		
Lims ID:	720-88263-A-16-A	Lab Sample ID:	720-88263-16		
Client ID:	DG-E11S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1







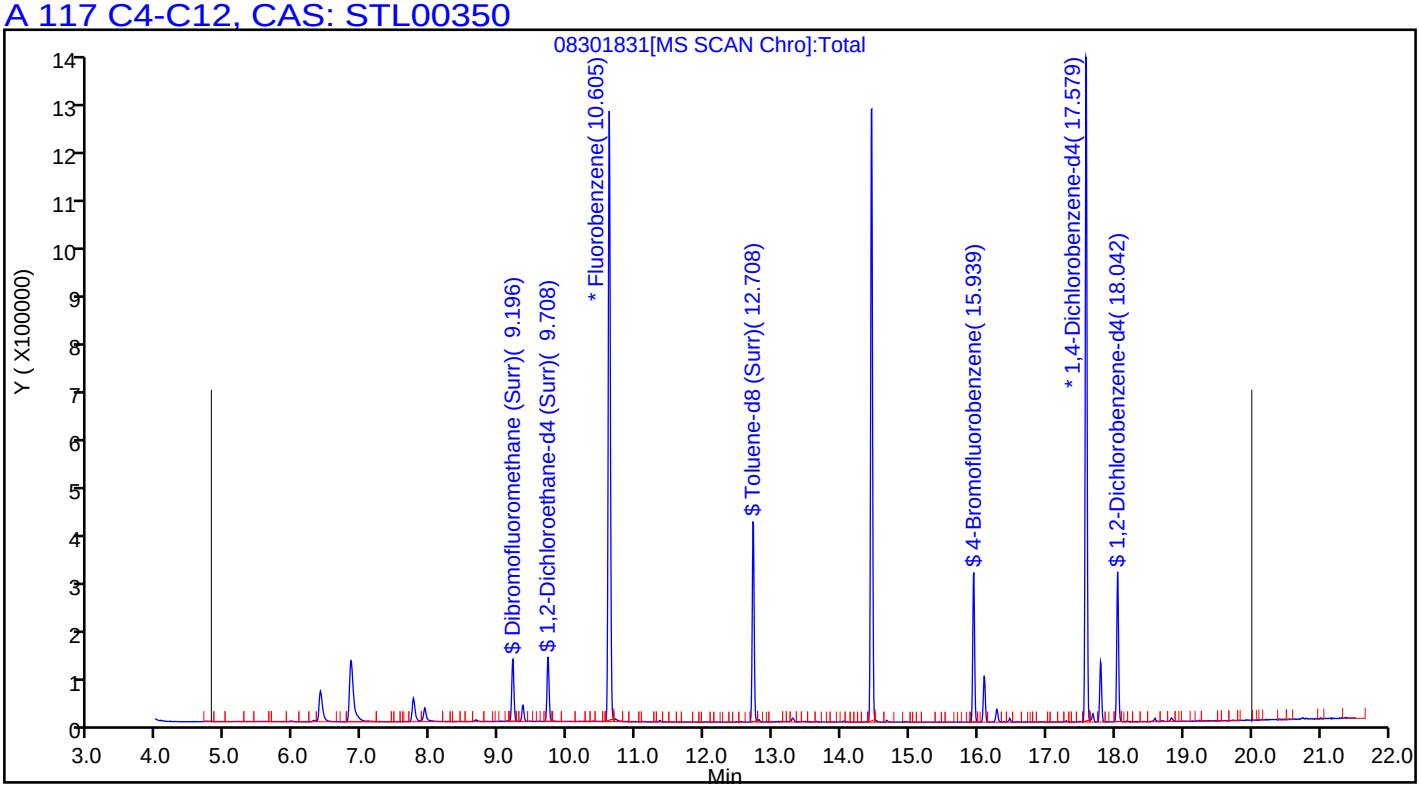


Report Date: 31-Aug-2018 09:31:51 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301831.D				
Injection Date:	30-Aug-2018 22:21:30	Instrument ID:	HP13		
Lims ID:	720-88263-A-16-A	Lab Sample ID:	720-88263-16		
Client ID:	DG-E11S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton | Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-E11S-3.5-4 | Lab Sample ID: 720-88263-17

Matrix: Solid | Lab File ID: 08301832.D

Analysis Method: 8260B | Date Collected: 08/27/2018 11:50

Sample wt/vol: 4.171(g) | Date Analyzed: 08/30/2018 22:50

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-VRX ID: 250(um)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 250626 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		6.0	1.4
67-64-1	Acetone	490		60	46
71-43-2	Benzene	ND		6.0	0.78
75-27-4	Dichlorobromomethane	ND		6.0	0.86
108-86-1	Bromobenzene	ND		6.0	0.95
74-97-5	Chlorobromomethane	ND		24	0.86
75-25-2	Bromoform	ND		6.0	2.4
74-83-9	Bromomethane	ND		12	0.95
78-93-3	2-Butanone (MEK)	79		60	25
104-51-8	n-Butylbenzene	ND		6.0	1.2
135-98-8	sec-Butylbenzene	ND		6.0	0.86
98-06-6	tert-Butylbenzene	ND		6.0	0.88
75-15-0	Carbon disulfide	ND		6.0	2.4
56-23-5	Carbon tetrachloride	ND		6.0	0.74
108-90-7	Chlorobenzene	ND		6.0	0.83
75-00-3	Chloroethane	ND		12	0.67
67-66-3	Chloroform	ND		6.0	0.79
74-87-3	Chloromethane	ND		12	0.95
95-49-8	2-Chlorotoluene	ND		6.0	0.78
106-43-4	4-Chlorotoluene	ND		6.0	0.82
124-48-1	Chlorodibromomethane	ND		6.0	0.85
95-50-1	1,2-Dichlorobenzene	ND		6.0	0.82
541-73-1	1,3-Dichlorobenzene	ND		6.0	0.86
106-46-7	1,4-Dichlorobenzene	ND		6.0	0.85
142-28-9	1,3-Dichloropropane	ND		6.0	0.88
563-58-6	1,1-Dichloropropene	ND		6.0	0.83
96-12-8	1,2-Dibromo-3-Chloropropane	ND		12	2.0
106-93-4	Ethylene Dibromide	ND		6.0	1.7
74-95-3	Dibromomethane	ND		12	1.0
75-71-8	Dichlorodifluoromethane	ND		12	0.95
75-34-3	1,1-Dichloroethane	ND		6.0	0.82
107-06-2	1,2-Dichloroethane	ND		6.0	0.91
75-35-4	1,1-Dichloroethene	ND	*	6.0	0.74
156-59-2	cis-1,2-Dichloroethene	ND		6.0	0.82
156-60-5	trans-1,2-Dichloroethene	ND		6.0	0.90
78-87-5	1,2-Dichloropropane	ND		6.0	0.76

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-E11S-3.5-4 Lab Sample ID: 720-88263-17

Matrix: Solid Lab File ID: 08301832.D

Analysis Method: 8260B Date Collected: 08/27/2018 11:50

Sample wt/vol: 4.171(g) Date Analyzed: 08/30/2018 22:50

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250626 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		6.0	0.83
10061-02-6	trans-1,3-Dichloropropene	ND		6.0	0.80
100-41-4	Ethylbenzene	ND		6.0	0.90
87-68-3	Hexachlorobutadiene	ND		6.0	1.1
591-78-6	2-Hexanone	16	J	60	12
98-82-8	Isopropylbenzene	ND		6.0	0.82
99-87-6	4-Isopropyltoluene	ND		6.0	3.0
75-09-2	Methylene Chloride	ND		12	6.7
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		60	12
91-20-3	Naphthalene	ND		12	1.8
103-65-1	N-Propylbenzene	ND		6.0	0.79
100-42-5	Styrene	ND		6.0	0.76
630-20-6	1,1,1,2-Tetrachloroethane	ND		6.0	0.91
79-34-5	1,1,2,2-Tetrachloroethane	ND		6.0	0.90
127-18-4	Tetrachloroethene	ND		6.0	0.80
108-88-3	Toluene	ND		6.0	0.85
87-61-6	1,2,3-Trichlorobenzene	ND		6.0	0.89
120-82-1	1,2,4-Trichlorobenzene	ND		6.0	0.85
71-55-6	1,1,1-Trichloroethane	ND		6.0	0.73
79-00-5	1,1,2-Trichloroethane	ND		6.0	0.84
79-01-6	Trichloroethene	ND		6.0	0.76
75-69-4	Trichlorofluoromethane	ND		6.0	0.67
96-18-4	1,2,3-Trichloropropane	ND		6.0	0.92
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.0	2.5
95-63-6	1,2,4-Trimethylbenzene	ND		6.0	2.0
108-67-8	1,3,5-Trimethylbenzene	ND		6.0	0.78
108-05-4	Vinyl acetate	ND		24	6.0
75-01-4	Vinyl chloride	ND		6.0	0.88
1330-20-7	Xylenes, Total	ND		6.0	1.5
594-20-7	2,2-Dichloropropane	ND		6.0	2.4
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		300	120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-E11S-3.5-4 Lab Sample ID: 720-88263-17

Matrix: Solid Lab File ID: 08301832.D

Analysis Method: 8260B Date Collected: 08/27/2018 11:50

Sample wt/vol: 4.171(g) Date Analyzed: 08/30/2018 22:50

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250626 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	93		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		60-140
2037-26-5	Toluene-d8 (Surr)	93		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301832.D
Lims ID: 720-88263-A-17-A
Client ID: DG-E11S--3.5-4
Sample Type: Client
Inject. Date: 30-Aug-2018 22:50:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-A-17
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 31-Aug-2018 05:46:19 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 09:32:01

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.825	6.813	0.012	0	312565	250.0	
* 2 Fluorobenzene	96	10.605	10.598	0.007	99	894248	25.0	
* 4 Chlorobenzene-d5	117	14.445	14.439	0.006	87	666342	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.579	0.000	95	305846	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.196	9.184	0.012	94	60742	6.05	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.708	9.702	0.006	0	97400	7.75	
$ 10 Toluene-d8 (Surr)	98	12.708	12.702	0.006	93	251538	6.96	
$ 11 4-Bromofluorobenzene	95	15.939	15.939	0.006	94	90250	6.96	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.048	0.000	84	72224	6.10	
$ 6 BFB	95	9.343	6.446	2.897	0	296	NR	
28 Acetone	58	6.380	6.361	0.019	99	215994	205.8	
32 2-Methyl-2-propanol	59	6.929	6.922	0.013	98	6890	5.31	
45 2-Butanone (MEK)	72	8.642	8.629	0.013	99	39240	32.8	
52 Tert-butyl ethyl ether	59	9.099	9.099	0.000	45	857	0.0247	
150 t-Amyl alcohol	59	9.568	9.564	0.012	1	215	0.2012	
146 n-Butanol	56	10.044	9.955	0.098	55	206	0.5477	
59 Benzene	78	10.373	10.367	0.006	96	2790	0.0733	
71 4-Methyl-2-pentanone (MIBK	43	12.001	11.982	0.019	96	3993	0.3254	
75 Toluene	92	12.799	12.792	0.012	97	3027	0.1382	
78 2-Hexanone	43	13.007	12.994	0.013	99	58328	6.68	
149 1-Chlorohexane	55	14.439	14.354	0.085	33	7367	0.6459	
128 Butyl Ether	87	14.677	14.665	0.018	93	138	0.0208	
29 Pentane	43	6.380	6.410	-0.030	69	727053	NR	
135 n-Nonane	57	15.000	15.055	-0.055	70	1082	NR	
99 n-Decane	57	16.713	16.829	-0.116	85	1665	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	2626864	32.0	
A 154 C6-C8	1	10.855	(8.556-13.153)		0	782251	9.54	
A 155 C6-C9	1	11.845	(8.556-15.134)		0	990097	12.1	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	2750089	33.5	
A 119 C6-C10	1	12.735	(8.556-16.914)		0	1102147	13.4	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	2653761	32.4	

Report Date: 31-Aug-2018 09:32:02 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301832.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
A 120 C6-C12	1	14.281	(8.556-20.005)		0	1225372	14.9	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	461385	5.63	
A 121 C7-C12	1	15.448	(10.891-20.005)		0	776715	9.47	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

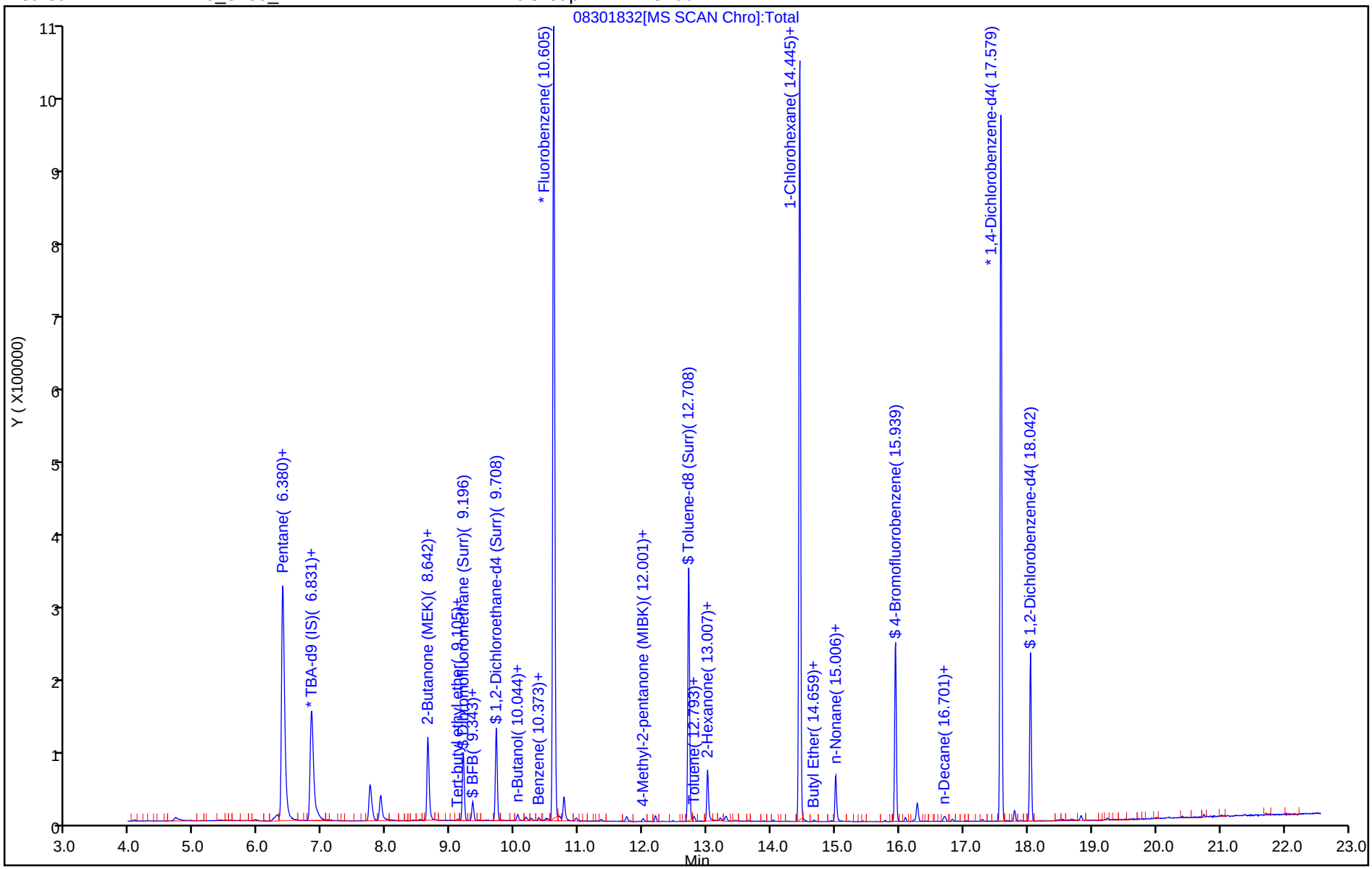
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 09:32:02 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301832.D				
Injection Date:	30-Aug-2018 22:50:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88263-A-17-A	Lab Sample ID:	720-88263-17	Worklist Smp#:	11
Client ID:	DG-E11S--3.5-4				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301832.D
Lims ID: 720-88263-A-17-A
Client ID: DG-E11S--3.5-4
Sample Type: Client
Inject. Date: 30-Aug-2018 22:50:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-A-17
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 31-Aug-2018 05:46:19 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 09:32:01

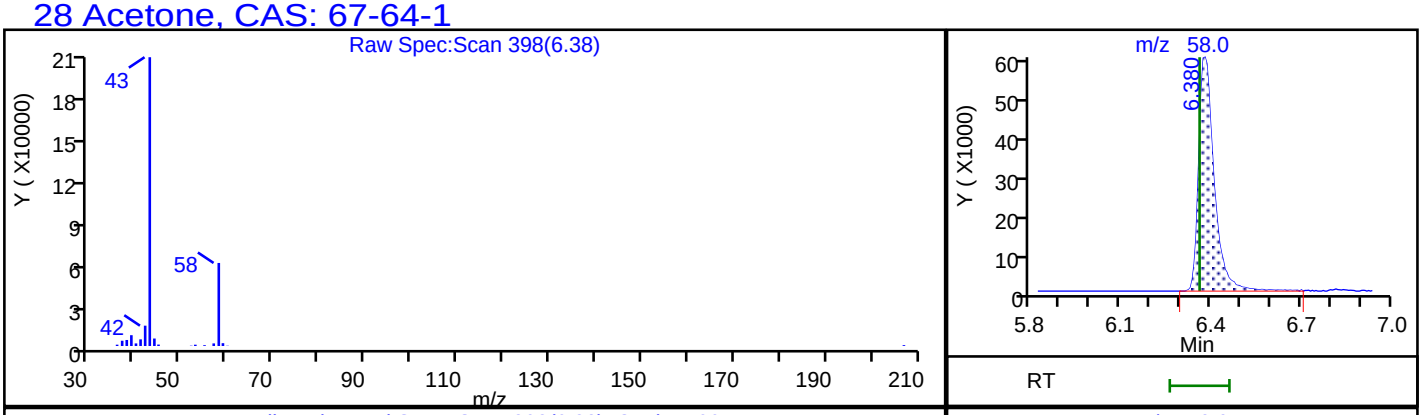
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.75	103.28
$ 10 Toluene-d8 (Surr)	7.50	6.96	92.73
$ 11 4-Bromofluorobenzene	7.50	6.96	92.86
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00
$ 6 BFB	0.0	0	0.00

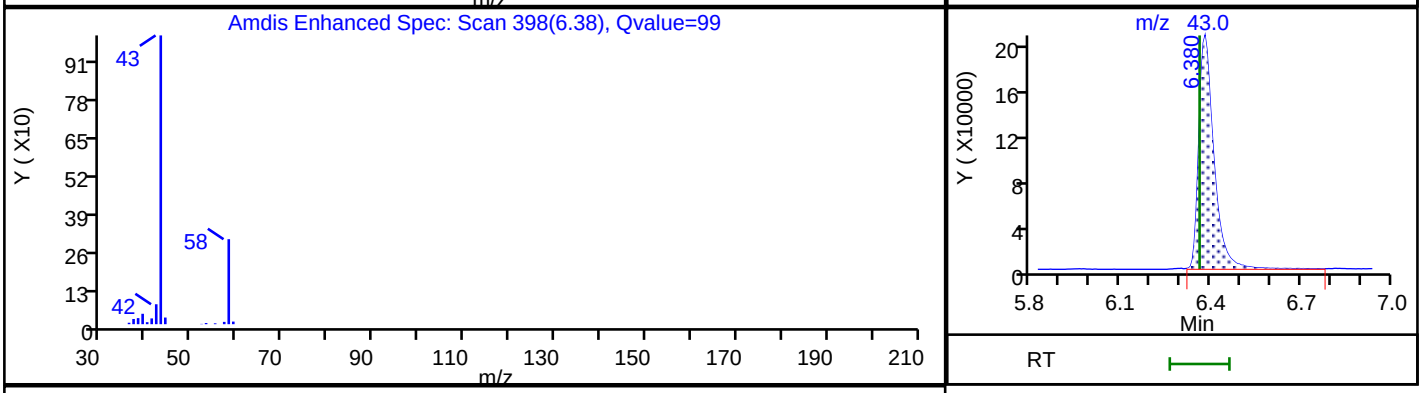
Report Date: 31-Aug-2018 09:32:02 Chrom Revision: 2.3 19-Jul-2018 15:14:50

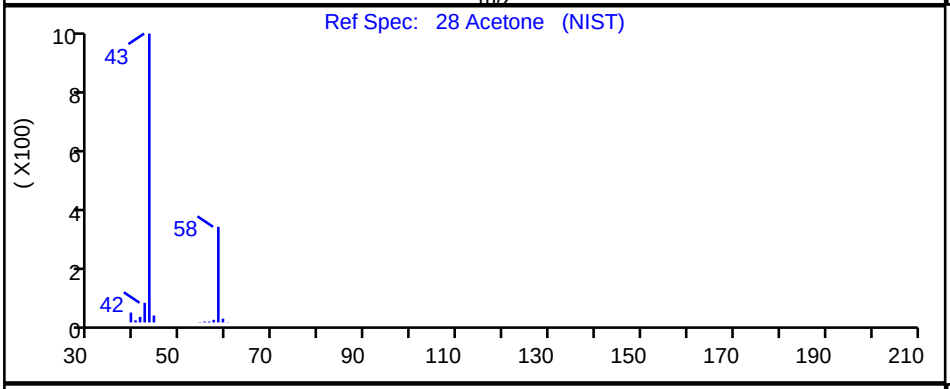
TestAmerica Pleasanton

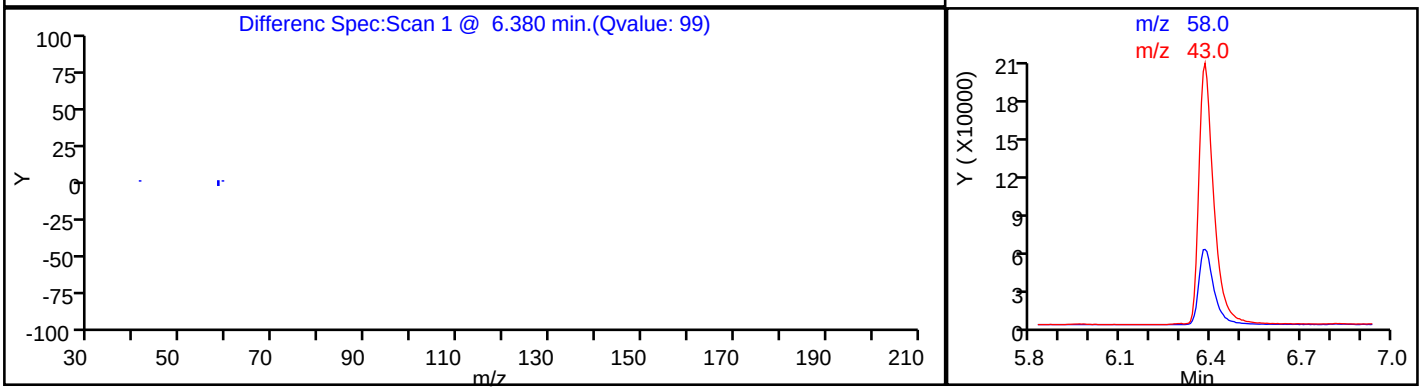
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301832.D				
Injection Date:	30-Aug-2018 22:50:30	Instrument ID:	HP13		
Lims ID:	720-88263-A-17-A	Lab Sample ID:	720-88263-17		
Client ID:	DG-E11S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1







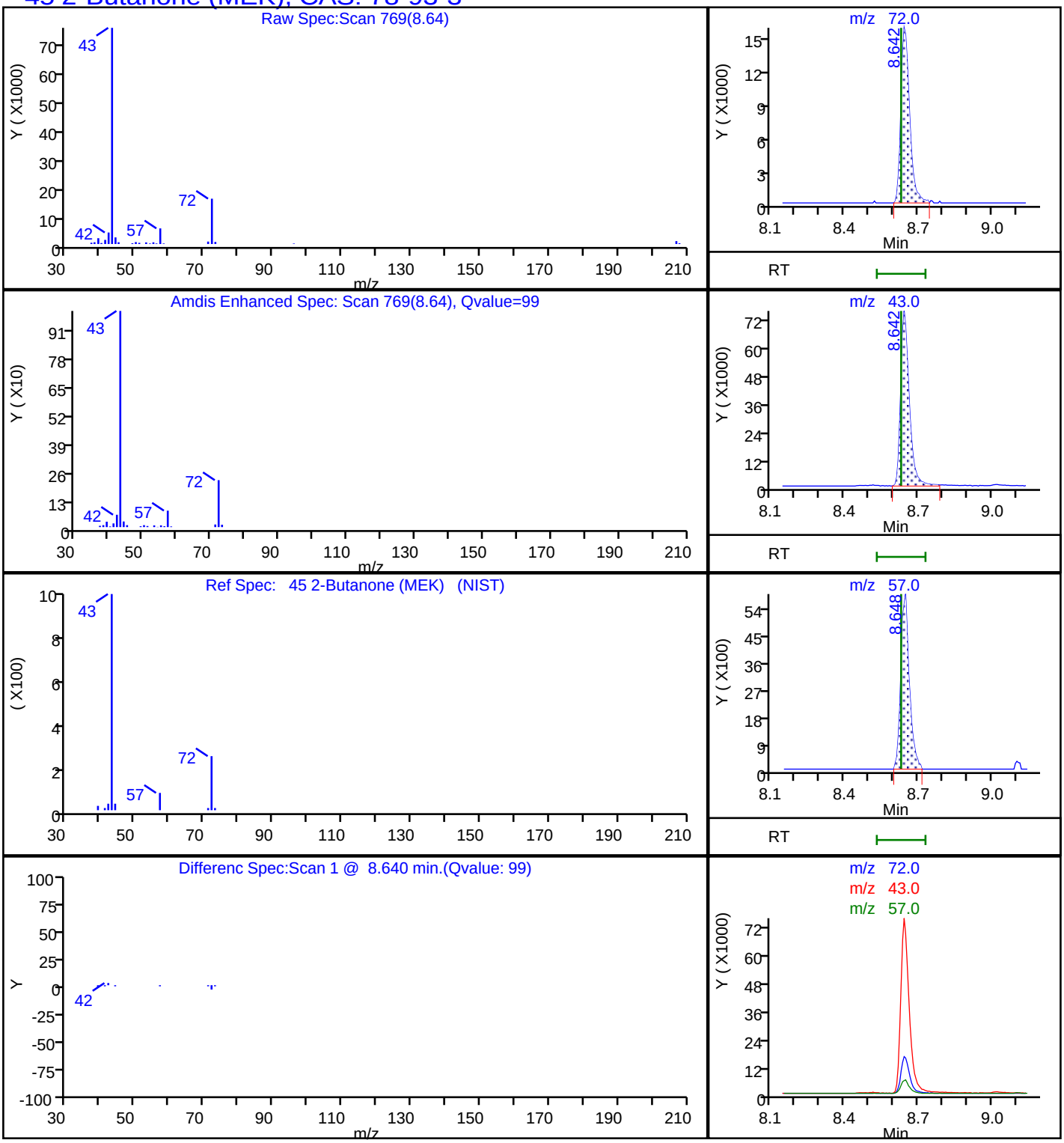


Report Date: 31-Aug-2018 09:32:02 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301832.D				
Injection Date:	30-Aug-2018 22:50:30	Instrument ID:	HP13		
Lims ID:	720-88263-A-17-A	Lab Sample ID:	720-88263-17		
Client ID:	DG-E11S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

45 2-Butanone (MEK), CAS: 78-93-3

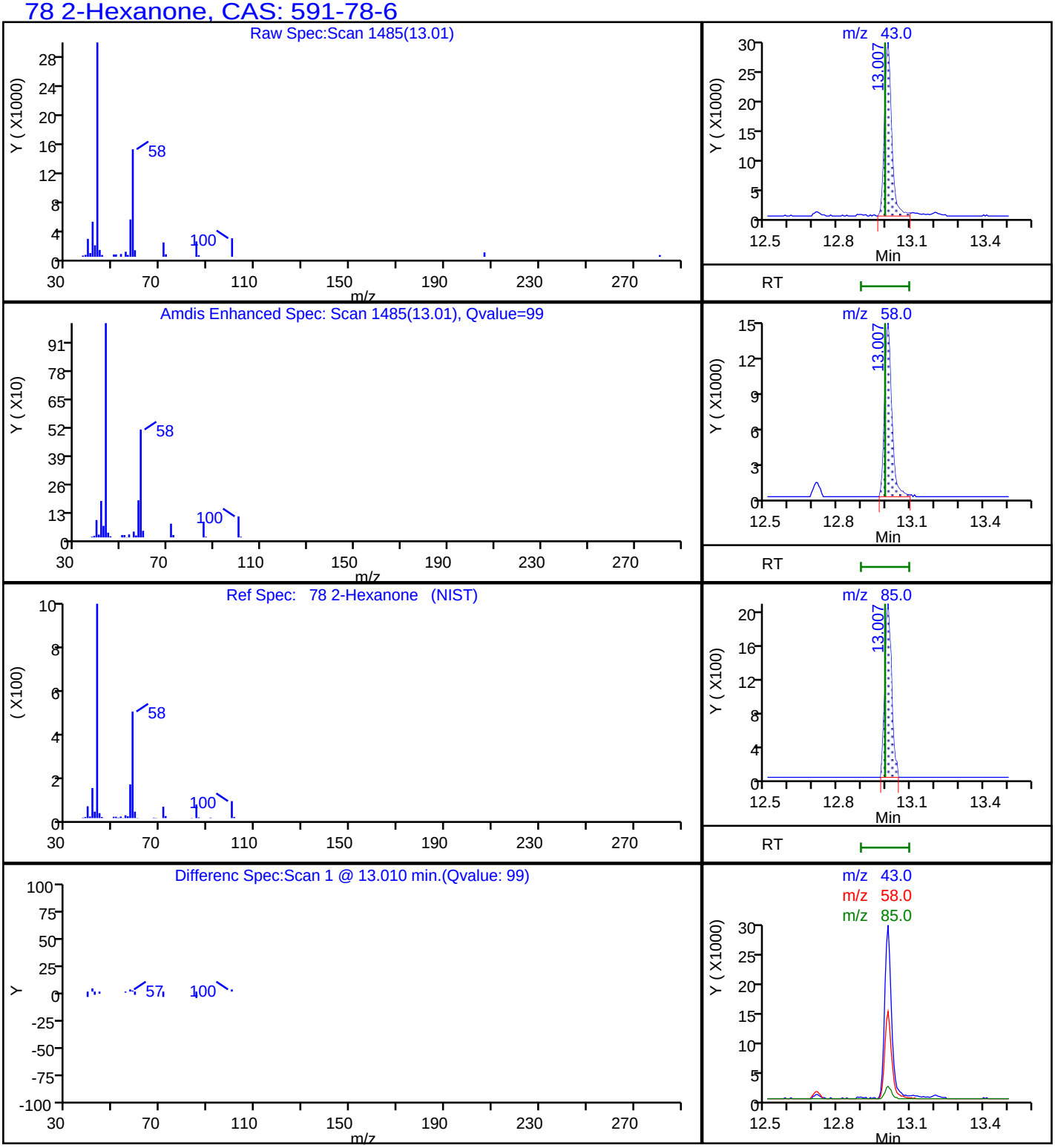


Report Date: 31-Aug-2018 09:32:03 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301832.D				
Injection Date:	30-Aug-2018 22:50:30	Instrument ID:	HP13		
Lims ID:	720-88263-A-17-A	Lab Sample ID:	720-88263-17		
Client ID:	DG-E11S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

78 2-Hexanone, CAS: 591-78-6

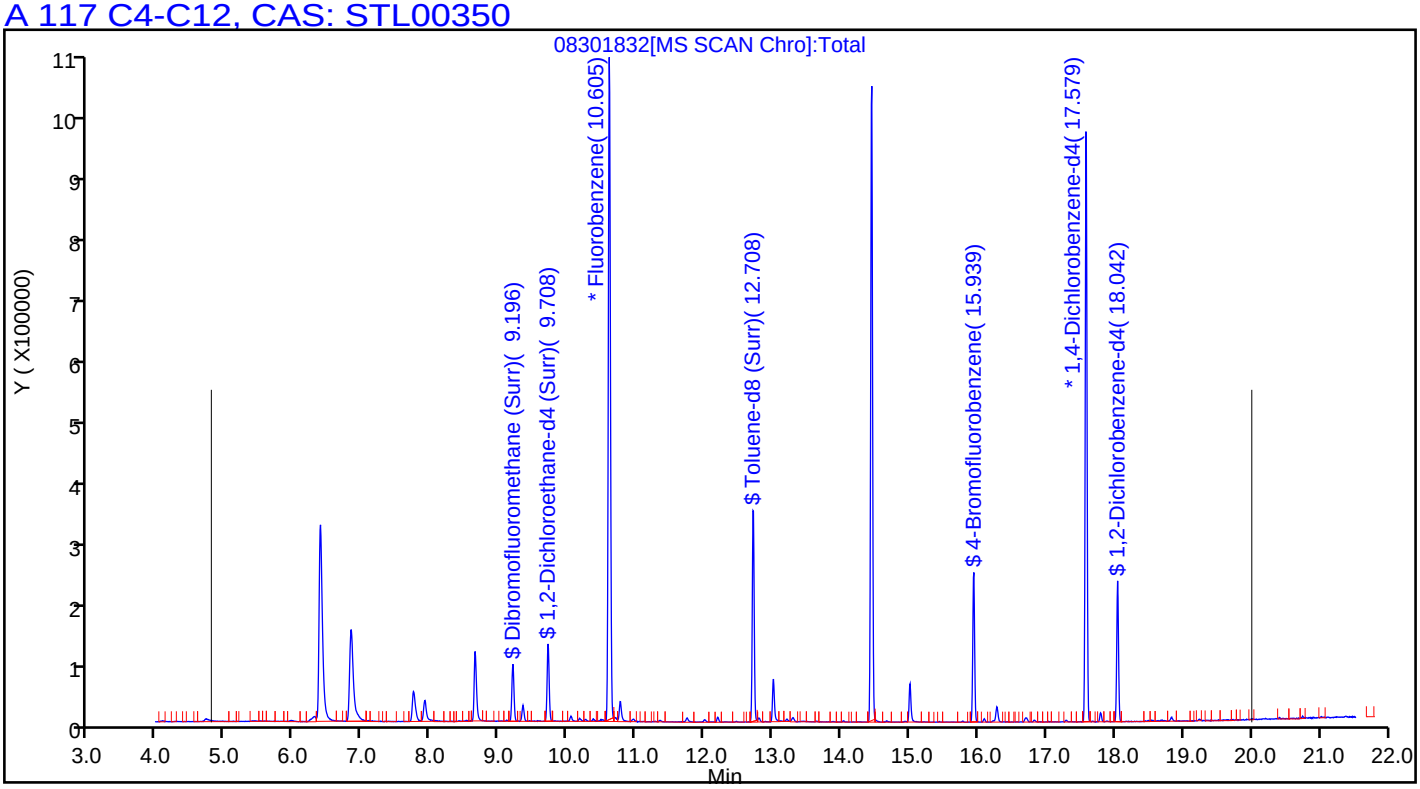


Report Date: 31-Aug-2018 09:32:04 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301832.D				
Injection Date:	30-Aug-2018 22:50:30	Instrument ID:	HP13		
Lims ID:	720-88263-A-17-A	Lab Sample ID:	720-88263-17		
Client ID:	DG-E11S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-E11S-9.5-10
Lab Sample ID: 720-88263-18
Matrix: Solid
Lab File ID: 08301833.D
Analysis Method: 8260B
Date Collected: 08/27/2018 11:50
Sample wt/vol: 5.322(g)
Date Analyzed: 08/30/2018 23:19
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250626
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.7	1.1
67-64-1	Acetone	140		47	36
71-43-2	Benzene	ND		4.7	0.61
75-27-4	Dichlorobromomethane	ND		4.7	0.68
108-86-1	Bromobenzene	ND		4.7	0.74
74-97-5	Chlorobromomethane	ND		19	0.68
75-25-2	Bromoform	ND		4.7	1.9
74-83-9	Bromomethane	ND		9.4	0.74
78-93-3	2-Butanone (MEK)	34	J	47	20
104-51-8	n-Butylbenzene	ND		4.7	0.94
135-98-8	sec-Butylbenzene	ND		4.7	0.68
98-06-6	tert-Butylbenzene	ND		4.7	0.69
75-15-0	Carbon disulfide	ND		4.7	1.9
56-23-5	Carbon tetrachloride	ND		4.7	0.58
108-90-7	Chlorobenzene	ND		4.7	0.65
75-00-3	Chloroethane	ND		9.4	0.53
67-66-3	Chloroform	ND		4.7	0.62
74-87-3	Chloromethane	ND		9.4	0.74
95-49-8	2-Chlorotoluene	ND		4.7	0.61
106-43-4	4-Chlorotoluene	ND		4.7	0.64
124-48-1	Chlorodibromomethane	ND		4.7	0.67
95-50-1	1,2-Dichlorobenzene	ND		4.7	0.64
541-73-1	1,3-Dichlorobenzene	ND		4.7	0.68
106-46-7	1,4-Dichlorobenzene	ND		4.7	0.67
142-28-9	1,3-Dichloropropane	ND		4.7	0.69
563-58-6	1,1-Dichloropropene	ND		4.7	0.65
96-12-8	1,2-Dibromo-3-Chloropropane	ND		9.4	1.6
106-93-4	Ethylene Dibromide	ND		4.7	1.3
74-95-3	Dibromomethane	ND		9.4	0.81
75-71-8	Dichlorodifluoromethane	ND		9.4	0.74
75-34-3	1,1-Dichloroethane	ND		4.7	0.64
107-06-2	1,2-Dichloroethane	ND		4.7	0.71
75-35-4	1,1-Dichloroethene	ND	*	4.7	0.58
156-59-2	cis-1,2-Dichloroethene	ND		4.7	0.64
156-60-5	trans-1,2-Dichloroethene	ND		4.7	0.70
78-87-5	1,2-Dichloropropane	ND		4.7	0.59

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88263-1
SDG No.:
Client Sample ID: DG-E11S-9.5-10
Lab Sample ID: 720-88263-18
Matrix: Solid
Lab File ID: 08301833.D
Analysis Method: 8260B
Date Collected: 08/27/2018 11:50
Sample wt/vol: 5.322(g)
Date Analyzed: 08/30/2018 23:19
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250626
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.7	0.65
10061-02-6	trans-1,3-Dichloropropene	ND		4.7	0.63
100-41-4	Ethylbenzene	ND		4.7	0.70
87-68-3	Hexachlorobutadiene	ND		4.7	0.85
591-78-6	2-Hexanone	ND		47	9.4
98-82-8	Isopropylbenzene	ND		4.7	0.64
99-87-6	4-Isopropyltoluene	ND		4.7	2.3
75-09-2	Methylene Chloride	ND		9.4	5.3
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		47	9.4
91-20-3	Naphthalene	ND		9.4	1.4
103-65-1	N-Propylbenzene	ND		4.7	0.62
100-42-5	Styrene	ND		4.7	0.59
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.7	0.71
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.7	0.70
127-18-4	Tetrachloroethene	ND		4.7	0.63
108-88-3	Toluene	ND		4.7	0.67
87-61-6	1,2,3-Trichlorobenzene	ND		4.7	0.70
120-82-1	1,2,4-Trichlorobenzene	ND		4.7	0.67
71-55-6	1,1,1-Trichloroethane	ND		4.7	0.57
79-00-5	1,1,2-Trichloroethane	ND		4.7	0.66
79-01-6	Trichloroethene	ND		4.7	0.59
75-69-4	Trichlorofluoromethane	ND		4.7	0.53
96-18-4	1,2,3-Trichloropropane	ND		4.7	0.72
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.7	2.0
95-63-6	1,2,4-Trimethylbenzene	ND		4.7	1.5
108-67-8	1,3,5-Trimethylbenzene	ND		4.7	0.61
108-05-4	Vinyl acetate	ND		19	4.7
75-01-4	Vinyl chloride	ND		4.7	0.69
1330-20-7	Xylenes, Total	ND		4.7	1.1
594-20-7	2,2-Dichloropropane	ND		4.7	1.9
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		230	94

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88263-1

SDG No.:

Client Sample ID: DG-E11S-9.5-10 Lab Sample ID: 720-88263-18

Matrix: Solid Lab File ID: 08301833.D

Analysis Method: 8260B Date Collected: 08/27/2018 11:50

Sample wt/vol: 5.322(g) Date Analyzed: 08/30/2018 23:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250626 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	91		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		60-140
2037-26-5	Toluene-d8 (Surr)	92		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301833.D
Lims ID: 720-88263-A-18-A
Client ID: DG-E11S--9.5-10
Sample Type: Client
Inject. Date: 30-Aug-2018 23:19:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-A-18
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 31-Aug-2018 05:46:19 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 09:32:15

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.831	6.813	0.018	0	274148	250.0	
* 2 Fluorobenzene	96	10.605	10.598	0.007	98	895779	25.0	
* 4 Chlorobenzene-d5	117	14.445	14.439	0.006	87	661806	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.585	17.579	0.006	95	313481	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.196	9.184	0.012	94	74663	7.43	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.709	9.702	0.006	0	95601	7.59	
$ 10 Toluene-d8 (Surr)	98	12.708	12.702	0.006	93	251012	6.93	
$ 11 4-Bromofluorobenzene	95	15.933	15.939	0.000	94	88191	6.85	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.048	0.000	84	73218	6.03	
$ 6 BFB	95	9.337	6.446	2.891	0	617	NR	
27 Isopropyl alcohol	45	6.368	6.282	0.092	8	1300	1.77	
28 Acetone	58	6.380	6.361	0.019	99	78902	75.1	
32 2-Methyl-2-propanol	59	6.929	6.922	0.013	97	5070	4.46	
144 Methyl acetate	43	7.136	7.117	0.019	96	3032	0.3960	
39 Methyl tert-butyl ether	73	7.989	7.989	0.000	1	383	0.0134	
45 2-Butanone (MEK)	72	8.642	8.629	0.013	99	21862	18.2	
52 Tert-butyl ethyl ether	59	9.105	9.099	0.006	98	1491	0.0429	
46 Isobutyl alcohol	43	9.160	9.131	0.037	1	1227	1.77	
75 Toluene	92	12.793	12.792	0.006	97	2958	0.1360	
149 1-Chlorohexane	55	14.439	14.354	0.085	33	7409	0.6485	
128 Butyl Ether	87	14.671	14.665	0.012	94	503	0.0764	
29 Pentane	43	6.380	6.410	-0.030	69	263535	NR	
131 n-Octane	43	13.104	13.110	-0.006	13	400	NR	
135 n-Nonane	57	15.055	15.055	0.000	1	58	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	1516832	18.5	
A 154 C6-C8	1	10.855	(8.556-13.153)		0	408035	4.97	
A 155 C6-C9	1	11.845	(8.556-15.134)		0	502358	6.12	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	1770925	21.6	
A 119 C6-C10	1	12.735	(8.556-16.914)		0	581011	7.07	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	1628258	19.8	
A 120 C6-C12	1	14.281	(8.556-20.005)		0	836202	10.2	

Report Date: 31-Aug-2018 09:32:15 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301833.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
A 156 C8-C10	1	14.982	(13.049-16.914)		0	181151	2.21	
A 121 C7-C12	1	15.448	(10.891-20.005)		0	499681	6.08	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

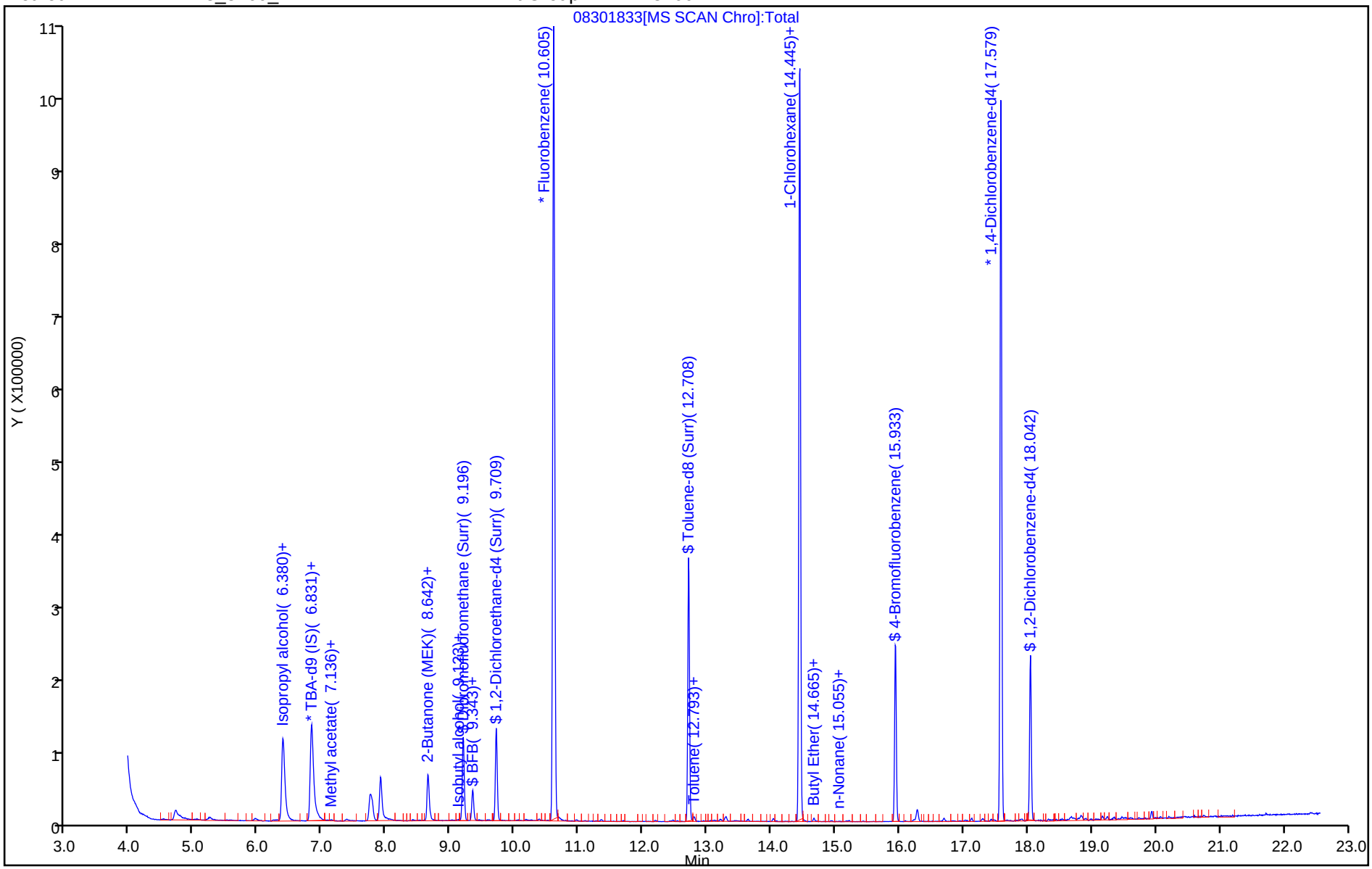
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 09:32:16 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301833.D				
Injection Date:	30-Aug-2018 23:19:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88263-A-18-A	Lab Sample ID:	720-88263-18	Worklist Smp#:	12
Client ID:	DG-E11S--9.5-10				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301833.D
Lims ID: 720-88263-A-18-A
Client ID: DG-E11S--9.5-10
Sample Type: Client
Inject. Date: 30-Aug-2018 23:19:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88263-A-18
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 31-Aug-2018 05:46:19 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 09:32:15

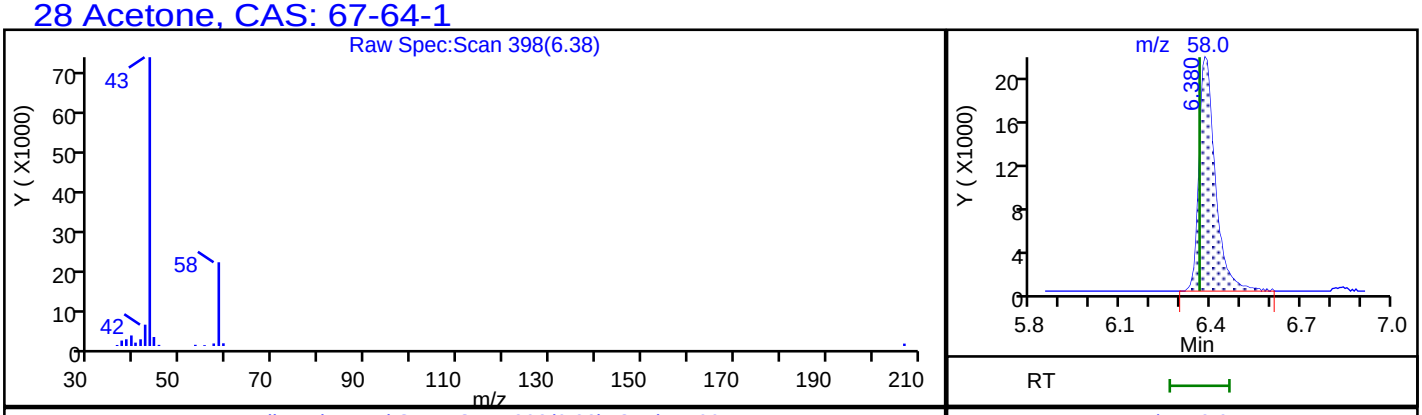
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.59	101.20
$ 10 Toluene-d8 (Surr)	7.50	6.93	92.38
$ 11 4-Bromofluorobenzene	7.50	6.85	91.36
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00
$ 6 BFB	0.0	0	0.00

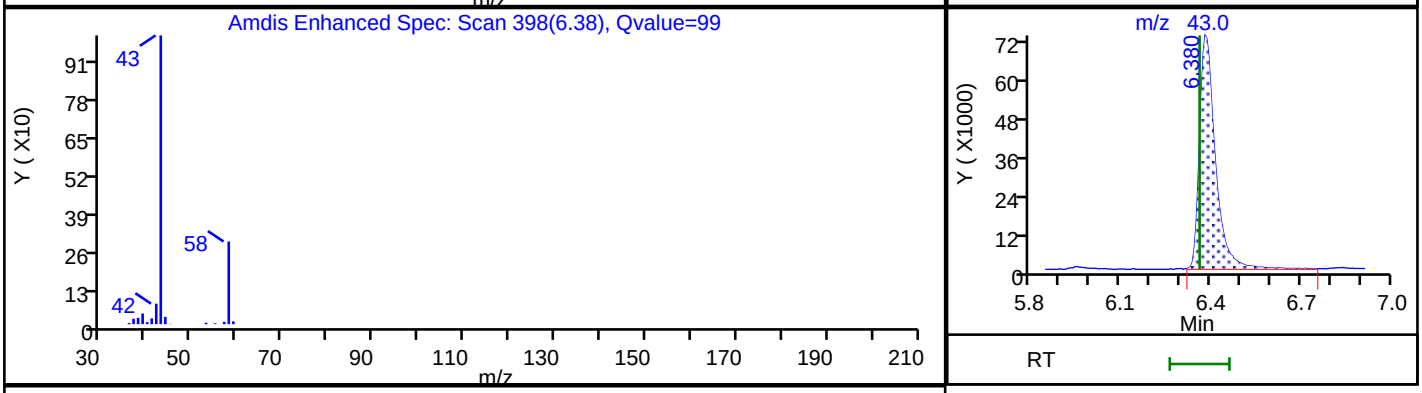
Report Date: 31-Aug-2018 09:32:16 Chrom Revision: 2.3 19-Jul-2018 15:14:50

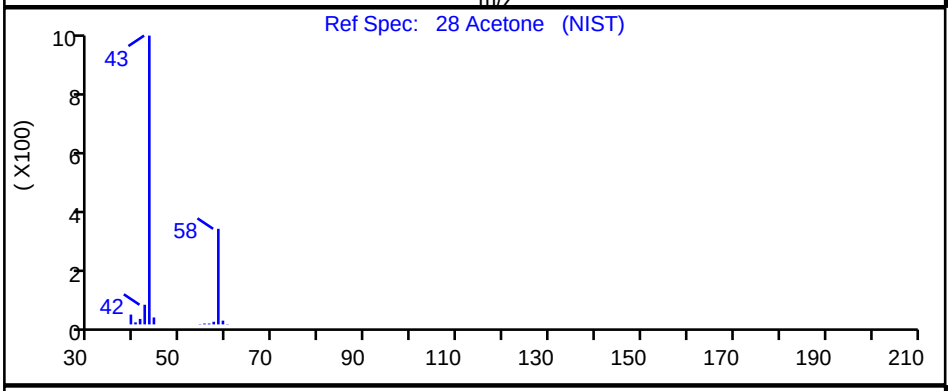
TestAmerica Pleasanton

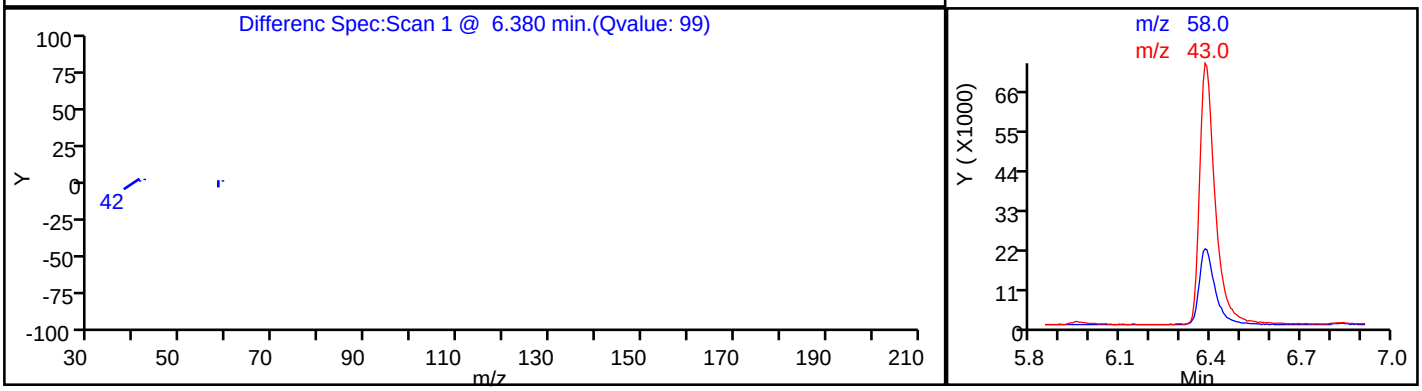
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301833.D				
Injection Date:	30-Aug-2018 23:19:30	Instrument ID:	HP13		
Lims ID:	720-88263-A-18-A	Lab Sample ID:	720-88263-18		
Client ID:	DG-E11S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1







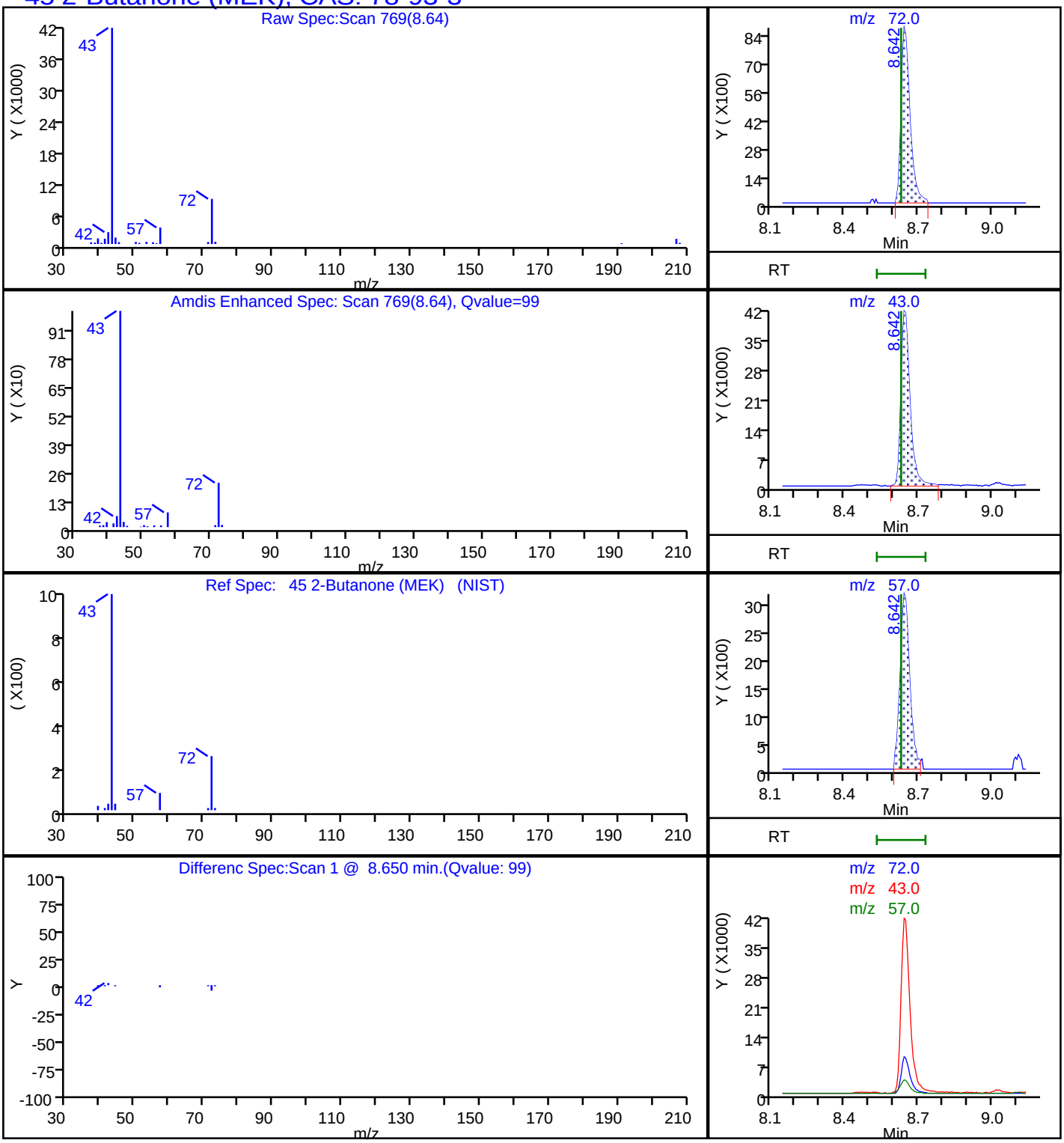


Report Date: 31-Aug-2018 09:32:16 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301833.D				
Injection Date:	30-Aug-2018 23:19:30	Instrument ID:	HP13		
Lims ID:	720-88263-A-18-A	Lab Sample ID:	720-88263-18		
Client ID:	DG-E11S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

45 2-Butanone (MEK), CAS: 78-93-3

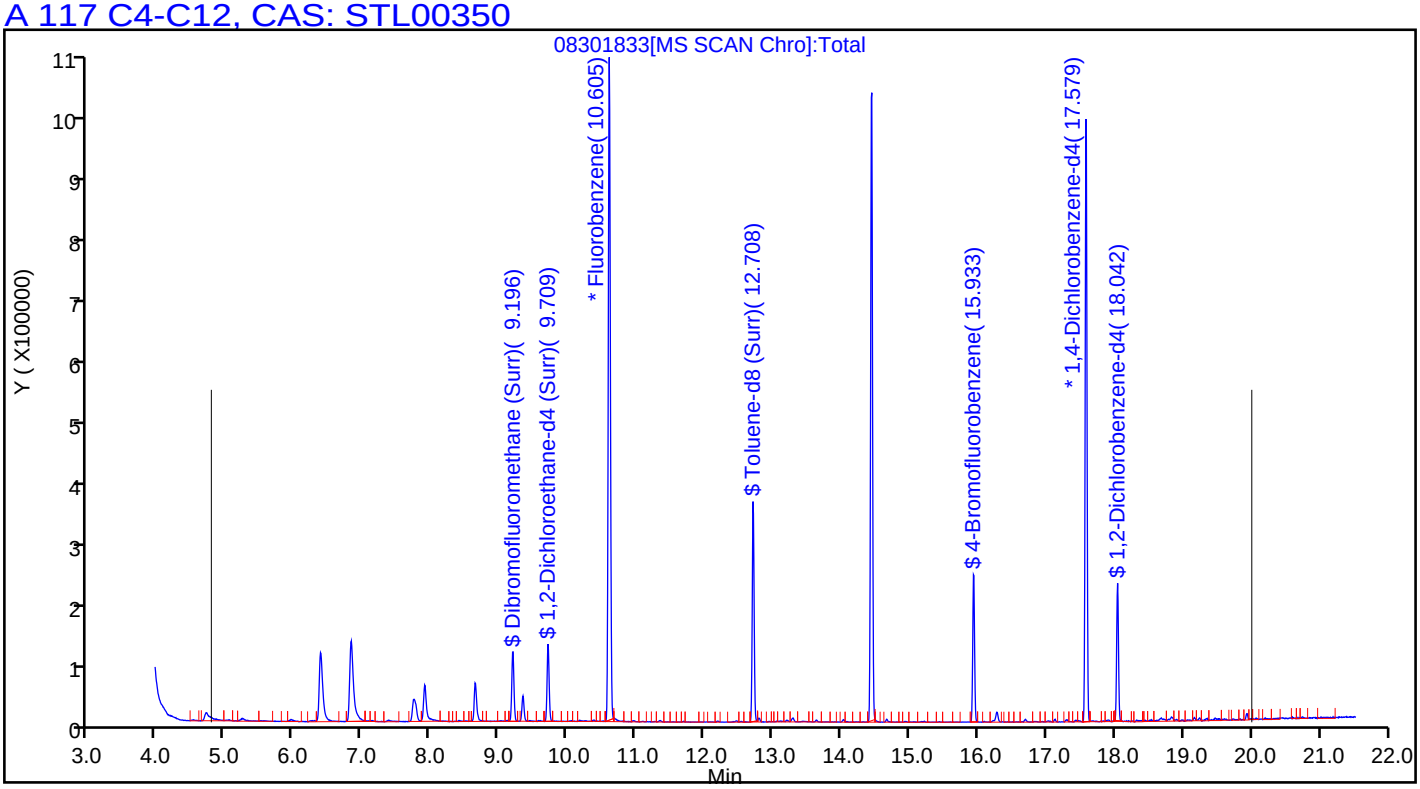


Report Date: 31-Aug-2018 09:32:17 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301833.D				
Injection Date:	30-Aug-2018 23:19:30	Instrument ID:	HP13		
Lims ID:	720-88263-A-18-A	Lab Sample ID:	720-88263-18		
Client ID:	DG-E11S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DCA	TOL
Lab Sample ID	Client Sample ID	(45-131)	(60-140)	(58-140)
720-88244-A-4-O MS	Matrix Spike	88	90	95
720-88244-A-4-P MSD	Matrix Spike Duplicate	90	87	92
720-88263-1	DG-FG910S-0.5-1	88	116	92
720-88263-2	DG-F910S-3.5-4	81	98	92
720-88263-3	DG-H9S-0.5-1	84	114	91
720-88263-4	DG-H9S-3.5-4	84 *	119 *	95 *
720-88263-5	DG-H9S-9.5-10	95	106	91
720-88263-6	DG-L9S-0.5-1	94	115	92
720-88263-7	DG-L9S-3.5-4	82	84	92
720-88263-7	DG-L9S-3.5-4	86	100	98
720-88263-8	DG-M11S-0.5-1	95	109	91
720-88263-9	DG-M11S-3.5-4	74	114	88
720-88263-10	DG-K11S-0.5-1	91	120	92
720-88263-11	DG-K11S-3.5-4	87	116	92
720-88263-12	DG-K11S-9.5-10	82	105	88
720-88263-13	DG-I11S-0.5-1	82	122	84
720-88263-14	DG-I11S-3.5-4	68 *	130 *	82 *
720-88263-15	DG-I11S-9.5-10	73 *	125 *	82 *
720-88263-16	DG-E11S-0.5-1	97	94	94
720-88263-17	DG-E11S-3.5-4	93	103	93
720-88263-18	DG-E11S-9.5-10	91	101	92
720-88310-D-1-F MS	Matrix Spike	107	102	108
720-88310-D-1-G MSD	Matrix Spike Duplicate	104	106	106
LCS 720-250625/5	Lab Control Sample	94	98	96
LCS 720-250625/7	Lab Control Sample	98	99	98
LCS 720-250626/5	Lab Control Sample	97	95	96
LCS 720-250626/7	Lab Control Sample	98	93	96
LCS 720-250644/5	Lab Control Sample	98	103	97
LCS 720-250644/7	Lab Control Sample	101	100	96
LCS 720-250750/5	Lab Control Sample	96	90	99
LCS 720-250750/7	Lab Control Sample	98	90	94
LCS 720-250946/5	Lab Control Sample	112	107	109
LCS 720-250946/7	Lab Control Sample	105	101	103
LCSD 720-250625/6	Lab Control Sample Dup	97	100	98
LCSD 720-250625/8	Lab Control Sample Dup	97	99	97
LCSD 720-250626/6	Lab Control Sample Dup	97	91	98
LCSD 720-250626/8	Lab Control Sample Dup	97	93	95
LCSD 720-250644/6	Lab Control Sample Dup	99	100	97
LCSD 720-250644/8	Lab Control Sample Dup	101	100	97
LCSD 720-250750/6	Lab Control Sample Dup	93	83	101
LCSD 720-250750/8	Lab Control Sample Dup	95	87	92
LCSD 720-250946/6	Lab Control Sample Dup	109	110	108
LCSD 720-250946/8	Lab Control Sample Dup	102	101	103
MB 720-250625/4	Method Blank	96	104	97
MB 720-250626/4	Method Blank	101	102	96
MB 720-250644/4	Method Blank	98	97	96
MB 720-250750/4	Method Blank	95	95	95
MB 720-250946/4	Method Blank	100	101	102

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Surrogate Legend

BFB = 4-Bromofluorobenzene
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	FBP (33-120)	TPHL (35-146)					
720-88242-D-13-H MS	Matrix Spike	39	55					
720-88242-D-13-I MSD	Matrix Spike Duplicate	37	54					
720-88263-1	DG-FG910S-0.5-1	46	69					
720-88263-2	DG-F910S-3.5-4	44	60					
720-88263-3	DG-H9S-0.5-1	53	66					
720-88263-4	DG-H9S-3.5-4	52	70					
720-88263-5	DG-H9S-9.5-10	51	64					
720-88263-6	DG-L9S-0.5-1	73	67					
720-88263-7	DG-L9S-3.5-4	51	70					
720-88263-8	DG-M11S-0.5-1	73	97					
720-88263-9	DG-M11S-3.5-4	54	88					
720-88263-10	DG-K11S-0.5-1	54	87					
720-88263-10 MS	DG-K11S-0.5-1	59	105					
720-88263-10 MSD	DG-K11S-0.5-1	60	105					
720-88263-11	DG-K11S-3.5-4	52	82					
720-88263-12	DG-K11S-9.5-10	65	92					
720-88263-13	DG-I11S-0.5-1	81	113					
720-88263-14	DG-I11S-3.5-4	88	130					
720-88263-15	DG-I11S-9.5-10	0 X	0 X					
720-88263-16	DG-E11S-0.5-1	0 X	0 X					
720-88263-17	DG-E11S-3.5-4	0 X	0 X					
720-88263-18	DG-E11S-9.5-10	74	95					
LCS 720-250580/2-A	Lab Control Sample	75	90					
LCS 720-250607/2-A	Lab Control Sample	68	89					
MB 720-250580/1-A	Method Blank	79	93					
MB 720-250607/1-A	Method Blank	68	99					

Surrogate Legend

FBP = 2-Fluorobiphenyl
TPHL = Terphenyl-d14

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	TPH1 (40-130)						
720-88263-1	DG-FG910S-0.5-1	56						
720-88263-2	DG-F910S-3.5-4	102						
720-88263-3	DG-H9S-0.5-1	69						
720-88263-4	DG-H9S-3.5-4	89						
720-88263-5	DG-H9S-9.5-10	97						
720-88263-6	DG-L9S-0.5-1	0 D X						
720-88263-7	DG-L9S-3.5-4	97						

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Solid **Prep Type: Total/NA**

Lab Sample ID	Client Sample ID	TPH1 (40-130)
720-88263-8	DG-M11S-0.5-1	100
720-88263-9	DG-M11S-3.5-4	113
720-88263-10	DG-K11S-0.5-1	93
720-88263-11	DG-K11S-3.5-4	113
720-88263-12	DG-K11S-9.5-10	73
720-88263-13	DG-I11S-0.5-1	97
720-88263-14	DG-I11S-3.5-4	0 X D
720-88263-15	DG-I11S-9.5-10	0 X D
720-88263-16	DG-E11S-0.5-1	0 X D
720-88263-16 MS	DG-E11S-0.5-1	0 X D
720-88263-16 MSD	DG-E11S-0.5-1	0 X D
720-88263-17	DG-E11S-3.5-4	0 X D
720-88263-18	DG-E11S-9.5-10	89
LCS 720-250566/2-A	Lab Control Sample	81
MB 720-250566/1-A	Method Blank	88

Percent Surrogate Recovery (Acceptance Limits)

Surrogate Legend

TPH = p-Terphenyl

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

Lab Sample ID	Client Sample ID	DCBP2 (21-136)	TCX2 (21-145)
720-88239-D-13-H MS	Matrix Spike	80	93
720-88263-4	DG-H9S-3.5-4	113	76
720-88263-5	DG-H9S-9.5-10	91	78
720-88263-6	DG-L9S-0.5-1	94	80
720-88263-7	DG-L9S-3.5-4	92	84
720-88263-8	DG-M11S-0.5-1	88	74
720-88263-9	DG-M11S-3.5-4	87	84
720-88263-16	DG-E11S-0.5-1	77	83
720-88291-D-3-B MS	Matrix Spike	86	72
720-88291-D-3-C MSD	Matrix Spike Duplicate	94	78
LCS 720-250531/2-A	Lab Control Sample	98	83
LCS 720-250595/2-A	Lab Control Sample	107	82
LCS 720-250674/2-A	Lab Control Sample	113	85
MB 720-250531/1-A	Method Blank	87	83
MB 720-250595/1-A	Method Blank	99	82
MB 720-250674/1-A	Method Blank	111	89

Percent Surrogate Recovery (Acceptance Limits)

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCBP1 (21-136)	TCX1 (21-145)
720-88239-D-13-I MSD	Matrix Spike Duplicate	105	94
720-88263-3	DG-H9S-0.5-1	96	82
720-88263-10	DG-K11S-0.5-1	83 p	75
720-88263-11	DG-K11S-3.5-4	101	94
720-88263-12	DG-K11S-9.5-10	92	70
720-88263-15	DG-I11S-9.5-10	0 D X	0 D X

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCBP1 (21-136)	TCX2 (21-145)
720-88263-13	DG-I11S-0.5-1	108	88
720-88263-14	DG-I11S-3.5-4	77	81
720-88263-17	DG-E11S-3.5-4	69	80
720-88264-D-5-A MS	Matrix Spike	105	90

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCBP2 (21-136)	TCX1 (21-145)
720-88263-18	DG-E11S-9.5-10	75	79
720-88264-D-5-B MSD	Matrix Spike Duplicate	90	87

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	TCX1 (14-128)	DCBP1 (10-132)
720-88263-1	DG-FG910S-0.5-1	77	77
720-88263-2	DG-F910S-3.5-4	73	80
720-88263-3	DG-H9S-0.5-1	78	90
720-88263-4	DG-H9S-3.5-4	73	107
720-88263-5	DG-H9S-9.5-10	66	79

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	TCX1 (14-128)	DCBP1 (10-132)						
720-88263-6	DG-L9S-0.5-1	71	86						
720-88263-7	DG-L9S-3.5-4	68	92						
720-88263-8	DG-M11S-0.5-1	75	82						
720-88263-9	DG-M11S-3.5-4	72	99						
720-88263-10	DG-K11S-0.5-1	67	60 p						
720-88263-11	DG-K11S-3.5-4	83	63						
720-88263-12	DG-K11S-9.5-10	69	88						
720-88263-13	DG-I11S-0.5-1	72	75						
720-88263-14	DG-I11S-3.5-4	64	68						
720-88263-15	DG-I11S-9.5-10	51	50 p						
720-88263-16	DG-E11S-0.5-1	79	80						
720-88263-17	DG-E11S-3.5-4	39	32 p						
720-88263-18	DG-E11S-9.5-10	66	58						
720-88263-18 MS	DG-E11S-9.5-10	81	87						
720-88263-18 MSD	DG-E11S-9.5-10	72	66						
LCS 240-343157/24-A	Lab Control Sample	78	81						
MB 240-343157/23-A	Method Blank	78	81						

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 720-250625/4
Matrix: Solid
Analysis Batch: 250625

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/30/18 19:41	1
Acetone	ND		50	38	ug/Kg			08/30/18 19:41	1
Benzene	ND		5.0	0.65	ug/Kg			08/30/18 19:41	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/30/18 19:41	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/30/18 19:41	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/30/18 19:41	1
Bromoform	ND		5.0	2.0	ug/Kg			08/30/18 19:41	1
Bromomethane	ND		10	0.79	ug/Kg			08/30/18 19:41	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/30/18 19:41	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/30/18 19:41	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/30/18 19:41	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/30/18 19:41	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/30/18 19:41	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/30/18 19:41	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/30/18 19:41	1
Chloroethane	ND		10	0.56	ug/Kg			08/30/18 19:41	1
Chloroform	ND		5.0	0.66	ug/Kg			08/30/18 19:41	1
Chloromethane	ND		10	0.79	ug/Kg			08/30/18 19:41	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/30/18 19:41	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/30/18 19:41	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/30/18 19:41	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/30/18 19:41	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/30/18 19:41	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/30/18 19:41	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/30/18 19:41	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/30/18 19:41	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/30/18 19:41	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/30/18 19:41	1
Dibromomethane	ND		10	0.86	ug/Kg			08/30/18 19:41	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/30/18 19:41	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/30/18 19:41	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/30/18 19:41	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/30/18 19:41	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/30/18 19:41	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/30/18 19:41	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/30/18 19:41	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/30/18 19:41	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/30/18 19:41	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/30/18 19:41	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/30/18 19:41	1
2-Hexanone	ND		50	10	ug/Kg			08/30/18 19:41	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/30/18 19:41	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/30/18 19:41	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/30/18 19:41	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/30/18 19:41	1
Naphthalene	ND		10	1.5	ug/Kg			08/30/18 19:41	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/30/18 19:41	1
Styrene	ND		5.0	0.63	ug/Kg			08/30/18 19:41	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250625/4
Matrix: Solid
Analysis Batch: 250625

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/30/18 19:41	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/30/18 19:41	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/30/18 19:41	1
Toluene	ND		5.0	0.71	ug/Kg			08/30/18 19:41	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/30/18 19:41	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/30/18 19:41	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/30/18 19:41	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/30/18 19:41	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/30/18 19:41	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/30/18 19:41	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/30/18 19:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/30/18 19:41	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/30/18 19:41	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/30/18 19:41	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/30/18 19:41	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/30/18 19:41	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/30/18 19:41	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/30/18 19:41	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/30/18 19:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*45 - 131*		*08/30/18 19:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*60 - 140*		*08/30/18 19:41*	*1*
Toluene-d8 (Surr)	*97*		*58 - 140*		*08/30/18 19:41*	*1*

Lab Sample ID: LCS 720-250625/5
Matrix: Solid
Analysis Batch: 250625

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	55.6		ug/Kg		111	70 - 144
Acetone	250	204		ug/Kg		81	30 - 162
Benzene	50.0	51.0		ug/Kg		102	70 - 130
Dichlorobromomethane	50.0	55.1		ug/Kg		110	70 - 140
Bromobenzene	50.0	50.0		ug/Kg		100	70 - 130
Chlorobromomethane	50.0	56.7		ug/Kg		113	70 - 130
Bromoform	50.0	52.1		ug/Kg		104	59 - 158
Bromomethane	50.0	51.1		ug/Kg		102	59 - 132
2-Butanone (MEK)	250	219		ug/Kg		88	59 - 159
n-Butylbenzene	50.0	47.4		ug/Kg		95	70 - 142
sec-Butylbenzene	50.0	48.0		ug/Kg		96	70 - 136
tert-Butylbenzene	50.0	49.1		ug/Kg		98	70 - 130
Carbon disulfide	50.0	67.8		ug/Kg		136	60 - 140
Carbon tetrachloride	50.0	60.3		ug/Kg		121	70 - 142
Chlorobenzene	50.0	51.0		ug/Kg		102	70 - 130
Chloroethane	50.0	45.4		ug/Kg		91	65 - 130
Chloroform	50.0	54.0		ug/Kg		108	77 - 127

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250625/5
Matrix: Solid
Analysis Batch: 250625

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	50.0	41.9		ug/Kg		84	55 - 140
2-Chlorotoluene	50.0	48.9		ug/Kg		98	70 - 138
4-Chlorotoluene	50.0	48.8		ug/Kg		98	70 - 136
Chlorodibromomethane	50.0	54.8		ug/Kg		110	70 - 146
1,2-Dichlorobenzene	50.0	51.1		ug/Kg		102	70 - 130
1,3-Dichlorobenzene	50.0	51.8		ug/Kg		104	70 - 131
1,4-Dichlorobenzene	50.0	50.1		ug/Kg		100	70 - 130
1,3-Dichloropropane	50.0	50.5		ug/Kg		101	70 - 140
1,1-Dichloropropene	50.0	54.1		ug/Kg		108	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	50.1		ug/Kg		100	60 - 145
Ethylene Dibromide	50.0	54.0		ug/Kg		108	70 - 140
Dibromomethane	50.0	52.3		ug/Kg		105	70 - 139
Dichlorodifluoromethane	50.0	48.7		ug/Kg		97	37 - 158
1,1-Dichloroethane	50.0	53.0		ug/Kg		106	70 - 130
1,2-Dichloroethane	50.0	55.2		ug/Kg		110	70 - 130
1,1-Dichloroethene	50.0	65.9	*	ug/Kg		132	74 - 122
cis-1,2-Dichloroethene	50.0	52.8		ug/Kg		106	70 - 138
trans-1,2-Dichloroethene	50.0	59.1		ug/Kg		118	67 - 130
1,2-Dichloropropane	50.0	51.2		ug/Kg		102	73 - 127
cis-1,3-Dichloropropene	50.0	52.6		ug/Kg		105	68 - 147
trans-1,3-Dichloropropene	50.0	50.8		ug/Kg		102	70 - 155
Ethylbenzene	50.0	49.7		ug/Kg		99	80 - 137
Hexachlorobutadiene	50.0	53.0		ug/Kg		106	70 - 132
2-Hexanone	250	214		ug/Kg		86	62 - 158
Isopropylbenzene	50.0	52.2		ug/Kg		104	70 - 130
4-Isopropyltoluene	50.0	49.7		ug/Kg		99	70 - 133
Methylene Chloride	50.0	50.8		ug/Kg		102	70 - 134
4-Methyl-2-pentanone (MIBK)	250	213		ug/Kg		85	60 - 160
Naphthalene	50.0	49.5		ug/Kg		99	60 - 147
N-Propylbenzene	50.0	47.9		ug/Kg		96	70 - 130
Styrene	50.0	47.4		ug/Kg		95	70 - 130
1,1,1,2-Tetrachloroethane	50.0	54.6		ug/Kg		109	70 - 130
1,1,2,2-Tetrachloroethane	50.0	46.2		ug/Kg		92	70 - 146
Tetrachloroethene	50.0	57.4		ug/Kg		115	70 - 132
Toluene	50.0	49.1		ug/Kg		98	75 - 120
1,2,3-Trichlorobenzene	50.0	51.9		ug/Kg		104	60 - 140
1,2,4-Trichlorobenzene	50.0	52.0		ug/Kg		104	60 - 140
1,1,1-Trichloroethane	50.0	59.5		ug/Kg		119	70 - 130
1,1,2-Trichloroethane	50.0	51.5		ug/Kg		103	70 - 130
Trichloroethene	50.0	56.2		ug/Kg		112	70 - 133
Trichlorofluoromethane	50.0	55.2		ug/Kg		110	60 - 140
1,2,3-Trichloropropane	50.0	49.5		ug/Kg		99	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	70.7	*	ug/Kg		141	60 - 140
1,2,4-Trimethylbenzene	50.0	50.2		ug/Kg		100	70 - 130
1,3,5-Trimethylbenzene	50.0	49.8		ug/Kg		100	70 - 131
Vinyl acetate	50.0	45.5		ug/Kg		91	38 - 176
Vinyl chloride	50.0	46.0		ug/Kg		92	58 - 125

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250625/5
Matrix: Solid
Analysis Batch: 250625

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
m-Xylene & p-Xylene	50.0	51.1		ug/Kg		102	70 - 146
o-Xylene	50.0	51.3		ug/Kg		103	70 - 140
2,2-Dichloropropane	50.0	62.6		ug/Kg		125	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*98*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCS 720-250625/7
Matrix: Solid
Analysis Batch: 250625

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	1060		ug/Kg		106	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*99*		*60 - 140*
Toluene-d8 (Surr)	*98*		*58 - 140*

Lab Sample ID: LCSD 720-250625/6
Matrix: Solid
Analysis Batch: 250625

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	57.2		ug/Kg		114	70 - 144	3	20
Acetone	250	221		ug/Kg		89	30 - 162	8	30
Benzene	50.0	50.6		ug/Kg		101	70 - 130	1	20
Dichlorobromomethane	50.0	55.2		ug/Kg		110	70 - 140	0	20
Bromobenzene	50.0	49.3		ug/Kg		99	70 - 130	1	20
Chlorobromomethane	50.0	56.6		ug/Kg		113	70 - 130	0	20
Bromoform	50.0	54.1		ug/Kg		108	59 - 158	4	20
Bromomethane	50.0	52.5		ug/Kg		105	59 - 132	3	20
2-Butanone (MEK)	250	238		ug/Kg		95	59 - 159	8	20
n-Butylbenzene	50.0	48.2		ug/Kg		96	70 - 142	2	20
sec-Butylbenzene	50.0	47.9		ug/Kg		96	70 - 136	0	20
tert-Butylbenzene	50.0	48.6		ug/Kg		97	70 - 130	1	20
Carbon disulfide	50.0	67.9		ug/Kg		136	60 - 140	0	20
Carbon tetrachloride	50.0	59.7		ug/Kg		119	70 - 142	1	20
Chlorobenzene	50.0	50.7		ug/Kg		101	70 - 130	1	20
Chloroethane	50.0	46.6		ug/Kg		93	65 - 130	3	20
Chloroform	50.0	53.6		ug/Kg		107	77 - 127	1	20
Chloromethane	50.0	43.4		ug/Kg		87	55 - 140	3	20
2-Chlorotoluene	50.0	48.3		ug/Kg		97	70 - 138	1	20
4-Chlorotoluene	50.0	48.8		ug/Kg		98	70 - 136	0	20
Chlorodibromomethane	50.0	55.6		ug/Kg		111	70 - 146	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250625/6
Matrix: Solid
Analysis Batch: 250625

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene	50.0	51.2		ug/Kg		102	70 - 130	0	20
1,3-Dichlorobenzene	50.0	51.7		ug/Kg		103	70 - 131	0	20
1,4-Dichlorobenzene	50.0	50.7		ug/Kg		101	70 - 130	1	20
1,3-Dichloropropane	50.0	51.4		ug/Kg		103	70 - 140	2	20
1,1-Dichloropropene	50.0	53.9		ug/Kg		108	70 - 130	0	20
1,2-Dibromo-3-Chloropropane	50.0	51.5		ug/Kg		103	60 - 145	3	20
Ethylene Dibromide	50.0	56.9		ug/Kg		114	70 - 140	5	20
Dibromomethane	50.0	54.4		ug/Kg		109	70 - 139	4	20
Dichlorodifluoromethane	50.0	50.5		ug/Kg		101	37 - 158	4	20
1,1-Dichloroethane	50.0	53.2		ug/Kg		106	70 - 130	0	20
1,2-Dichloroethane	50.0	55.7		ug/Kg		111	70 - 130	1	20
1,1-Dichloroethene	50.0	65.9	*	ug/Kg		132	74 - 122	0	20
cis-1,2-Dichloroethene	50.0	52.2		ug/Kg		104	70 - 138	1	20
trans-1,2-Dichloroethene	50.0	59.1		ug/Kg		118	67 - 130	0	20
1,2-Dichloropropane	50.0	51.0		ug/Kg		102	73 - 127	0	20
cis-1,3-Dichloropropene	50.0	53.4		ug/Kg		107	68 - 147	2	20
trans-1,3-Dichloropropene	50.0	52.5		ug/Kg		105	70 - 155	3	20
Ethylbenzene	50.0	49.8		ug/Kg		100	80 - 137	0	20
Hexachlorobutadiene	50.0	52.8		ug/Kg		106	70 - 132	0	20
2-Hexanone	250	234		ug/Kg		94	62 - 158	9	20
Isopropylbenzene	50.0	52.5		ug/Kg		105	70 - 130	1	20
4-Isopropyltoluene	50.0	50.1		ug/Kg		100	70 - 133	1	20
Methylene Chloride	50.0	51.1		ug/Kg		102	70 - 134	1	20
4-Methyl-2-pentanone (MIBK)	250	230		ug/Kg		92	60 - 160	8	20
Naphthalene	50.0	51.4		ug/Kg		103	60 - 147	4	20
N-Propylbenzene	50.0	47.1		ug/Kg		94	70 - 130	2	20
Styrene	50.0	48.1		ug/Kg		96	70 - 130	1	20
1,1,1,2-Tetrachloroethane	50.0	55.4		ug/Kg		111	70 - 130	1	20
1,1,2,2-Tetrachloroethane	50.0	46.8		ug/Kg		94	70 - 146	1	20
Tetrachloroethene	50.0	57.1		ug/Kg		114	70 - 132	1	20
Toluene	50.0	48.8		ug/Kg		98	75 - 120	1	20
1,2,3-Trichlorobenzene	50.0	53.0		ug/Kg		106	60 - 140	2	20
1,2,4-Trichlorobenzene	50.0	53.9		ug/Kg		108	60 - 140	4	20
1,1,1-Trichloroethane	50.0	58.5		ug/Kg		117	70 - 130	2	20
1,1,2-Trichloroethane	50.0	53.6		ug/Kg		107	70 - 130	4	20
Trichloroethene	50.0	56.1		ug/Kg		112	70 - 133	0	20
Trichlorofluoromethane	50.0	54.8		ug/Kg		110	60 - 140	1	20
1,2,3-Trichloropropane	50.0	51.3		ug/Kg		103	70 - 146	3	20
1,1,2-Trichloro-1,2,2-trifluoroetha ne	50.0	70.7	*	ug/Kg		141	60 - 140	0	20
1,2,4-Trimethylbenzene	50.0	50.1		ug/Kg		100	70 - 130	0	20
1,3,5-Trimethylbenzene	50.0	49.3		ug/Kg		99	70 - 131	1	20
Vinyl acetate	50.0	46.7		ug/Kg		93	38 - 176	3	20
Vinyl chloride	50.0	48.5		ug/Kg		97	58 - 125	5	20
m-Xylene & p-Xylene	50.0	51.9		ug/Kg		104	70 - 146	2	20
o-Xylene	50.0	51.7		ug/Kg		103	70 - 140	1	20
2,2-Dichloropropane	50.0	64.9		ug/Kg		130	70 - 162	4	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250625/6
Matrix: Solid
Analysis Batch: 250625

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*100*		*60 - 140*
Toluene-d8 (Surr)	*98*		*58 - 140*

Lab Sample ID: LCSD 720-250625/8
Matrix: Solid
Analysis Batch: 250625

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	1040		ug/Kg		104	70 - 122	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*99*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: MB 720-250626/4
Matrix: Solid
Analysis Batch: 250626

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/30/18 19:38	1
Acetone	ND		50	38	ug/Kg			08/30/18 19:38	1
Benzene	ND		5.0	0.65	ug/Kg			08/30/18 19:38	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/30/18 19:38	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/30/18 19:38	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/30/18 19:38	1
Bromoform	ND		5.0	2.0	ug/Kg			08/30/18 19:38	1
Bromomethane	ND		10	0.79	ug/Kg			08/30/18 19:38	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/30/18 19:38	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/30/18 19:38	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/30/18 19:38	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/30/18 19:38	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/30/18 19:38	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/30/18 19:38	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/30/18 19:38	1
Chloroethane	ND		10	0.56	ug/Kg			08/30/18 19:38	1
Chloroform	ND		5.0	0.66	ug/Kg			08/30/18 19:38	1
Chloromethane	ND		10	0.79	ug/Kg			08/30/18 19:38	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/30/18 19:38	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/30/18 19:38	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/30/18 19:38	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/30/18 19:38	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/30/18 19:38	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/30/18 19:38	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/30/18 19:38	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/30/18 19:38	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250626/4
Matrix: Solid
Analysis Batch: 250626

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/30/18 19:38	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/30/18 19:38	1
Dibromomethane	ND		10	0.86	ug/Kg			08/30/18 19:38	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/30/18 19:38	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/30/18 19:38	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/30/18 19:38	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/30/18 19:38	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/30/18 19:38	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/30/18 19:38	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/30/18 19:38	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/30/18 19:38	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/30/18 19:38	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/30/18 19:38	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/30/18 19:38	1
2-Hexanone	ND		50	10	ug/Kg			08/30/18 19:38	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/30/18 19:38	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/30/18 19:38	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/30/18 19:38	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/30/18 19:38	1
Naphthalene	ND		10	1.5	ug/Kg			08/30/18 19:38	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/30/18 19:38	1
Styrene	ND		5.0	0.63	ug/Kg			08/30/18 19:38	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/30/18 19:38	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/30/18 19:38	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/30/18 19:38	1
Toluene	ND		5.0	0.71	ug/Kg			08/30/18 19:38	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/30/18 19:38	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/30/18 19:38	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/30/18 19:38	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/30/18 19:38	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/30/18 19:38	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/30/18 19:38	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/30/18 19:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/30/18 19:38	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/30/18 19:38	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/30/18 19:38	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/30/18 19:38	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/30/18 19:38	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/30/18 19:38	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/30/18 19:38	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/30/18 19:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*45 - 131*		*08/30/18 19:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*60 - 140*		*08/30/18 19:38*	*1*
Toluene-d8 (Surr)	*96*		*58 - 140*		*08/30/18 19:38*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250626/5
Matrix: Solid
Analysis Batch: 250626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	48.7		ug/Kg		97	70 - 144
Acetone	250	242		ug/Kg		97	30 - 162
Benzene	50.0	49.9		ug/Kg		100	70 - 130
Dichlorobromomethane	50.0	49.0		ug/Kg		98	70 - 140
Bromobenzene	50.0	48.9		ug/Kg		98	70 - 130
Chlorobromomethane	50.0	53.1		ug/Kg		106	70 - 130
Bromoform	50.0	52.7		ug/Kg		105	59 - 158
Bromomethane	50.0	51.8		ug/Kg		104	59 - 132
2-Butanone (MEK)	250	240		ug/Kg		96	59 - 159
n-Butylbenzene	50.0	51.2		ug/Kg		102	70 - 142
sec-Butylbenzene	50.0	50.0		ug/Kg		100	70 - 136
tert-Butylbenzene	50.0	50.1		ug/Kg		100	70 - 130
Carbon disulfide	50.0	67.7		ug/Kg		135	60 - 140
Carbon tetrachloride	50.0	55.4		ug/Kg		111	70 - 142
Chlorobenzene	50.0	50.9		ug/Kg		102	70 - 130
Chloroethane	50.0	49.2		ug/Kg		98	65 - 130
Chloroform	50.0	50.5		ug/Kg		101	77 - 127
Chloromethane	50.0	51.2		ug/Kg		102	55 - 140
2-Chlorotoluene	50.0	47.2		ug/Kg		94	70 - 138
4-Chlorotoluene	50.0	47.0		ug/Kg		94	70 - 136
Chlorodibromomethane	50.0	51.0		ug/Kg		102	70 - 146
1,2-Dichlorobenzene	50.0	50.1		ug/Kg		100	70 - 130
1,3-Dichlorobenzene	50.0	49.0		ug/Kg		98	70 - 131
1,4-Dichlorobenzene	50.0	49.0		ug/Kg		98	70 - 130
1,3-Dichloropropane	50.0	47.1		ug/Kg		94	70 - 140
1,1-Dichloropropene	50.0	51.9		ug/Kg		104	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	52.2		ug/Kg		104	60 - 145
Ethylene Dibromide	50.0	49.0		ug/Kg		98	70 - 140
Dibromomethane	50.0	48.9		ug/Kg		98	70 - 139
Dichlorodifluoromethane	50.0	47.8		ug/Kg		96	37 - 158
1,1-Dichloroethane	50.0	52.3		ug/Kg		105	70 - 130
1,2-Dichloroethane	50.0	50.8		ug/Kg		102	70 - 130
1,1-Dichloroethene	50.0	63.5	*	ug/Kg		127	74 - 122
cis-1,2-Dichloroethene	50.0	51.5		ug/Kg		103	70 - 138
trans-1,2-Dichloroethene	50.0	55.3		ug/Kg		111	67 - 130
1,2-Dichloropropane	50.0	49.6		ug/Kg		99	73 - 127
cis-1,3-Dichloropropene	50.0	50.3		ug/Kg		101	68 - 147
trans-1,3-Dichloropropene	50.0	47.6		ug/Kg		95	70 - 155
Ethylbenzene	50.0	49.5		ug/Kg		99	80 - 137
Hexachlorobutadiene	50.0	53.3		ug/Kg		107	70 - 132
2-Hexanone	250	232		ug/Kg		93	62 - 158
Isopropylbenzene	50.0	51.3		ug/Kg		103	70 - 130
4-Isopropyltoluene	50.0	50.9		ug/Kg		102	70 - 133
Methylene Chloride	50.0	51.5		ug/Kg		103	70 - 134
4-Methyl-2-pentanone (MIBK)	250	231		ug/Kg		93	60 - 160
Naphthalene	50.0	48.1		ug/Kg		96	60 - 147
N-Propylbenzene	50.0	48.8		ug/Kg		98	70 - 130
Styrene	50.0	48.4		ug/Kg		97	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250626/5
Matrix: Solid
Analysis Batch: 250626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	52.3		ug/Kg		105	70 - 130
1,1,2,2-Tetrachloroethane	50.0	46.2		ug/Kg		92	70 - 146
Tetrachloroethene	50.0	52.6		ug/Kg		105	70 - 132
Toluene	50.0	50.4		ug/Kg		101	75 - 120
1,2,3-Trichlorobenzene	50.0	50.3		ug/Kg		101	60 - 140
1,2,4-Trichlorobenzene	50.0	51.2		ug/Kg		102	60 - 140
1,1,1-Trichloroethane	50.0	54.4		ug/Kg		109	70 - 130
1,1,2-Trichloroethane	50.0	47.7		ug/Kg		95	70 - 130
Trichloroethene	50.0	53.2		ug/Kg		106	70 - 133
Trichlorofluoromethane	50.0	55.7		ug/Kg		111	60 - 140
1,2,3-Trichloropropane	50.0	48.9		ug/Kg		98	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	69.2		ug/Kg		138	60 - 140
1,2,4-Trimethylbenzene	50.0	47.9		ug/Kg		96	70 - 130
1,3,5-Trimethylbenzene	50.0	48.3		ug/Kg		97	70 - 131
Vinyl acetate	50.0	45.9		ug/Kg		92	38 - 176
Vinyl chloride	50.0	47.9		ug/Kg		96	58 - 125
m-Xylene & p-Xylene	50.0	49.0		ug/Kg		98	70 - 146
o-Xylene	50.0	49.7		ug/Kg		99	70 - 140
2,2-Dichloropropane	50.0	54.5		ug/Kg		109	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCS 720-250626/7
Matrix: Solid
Analysis Batch: 250626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	936		ug/Kg		94	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*93*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCSD 720-250626/6
Matrix: Solid
Analysis Batch: 250626

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	46.5		ug/Kg		93	70 - 144	5	20
Acetone	250	231		ug/Kg		92	30 - 162	5	30
Benzene	50.0	48.7		ug/Kg		97	70 - 130	2	20
Dichlorobromomethane	50.0	47.5		ug/Kg		95	70 - 140	3	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250626/6
Matrix: Solid
Analysis Batch: 250626

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromobenzene	50.0	48.6		ug/Kg		97	70 - 130	0	20
Chlorobromomethane	50.0	51.0		ug/Kg		102	70 - 130	4	20
Bromoform	50.0	51.9		ug/Kg		104	59 - 158	1	20
Bromomethane	50.0	49.6		ug/Kg		99	59 - 132	4	20
2-Butanone (MEK)	250	240		ug/Kg		96	59 - 159	0	20
n-Butylbenzene	50.0	52.8		ug/Kg		106	70 - 142	3	20
sec-Butylbenzene	50.0	50.5		ug/Kg		101	70 - 136	1	20
tert-Butylbenzene	50.0	49.2		ug/Kg		98	70 - 130	2	20
Carbon disulfide	50.0	68.0		ug/Kg		136	60 - 140	0	20
Carbon tetrachloride	50.0	55.5		ug/Kg		111	70 - 142	0	20
Chlorobenzene	50.0	50.6		ug/Kg		101	70 - 130	1	20
Chloroethane	50.0	47.4		ug/Kg		95	65 - 130	4	20
Chloroform	50.0	49.2		ug/Kg		98	77 - 127	3	20
Chloromethane	50.0	49.1		ug/Kg		98	55 - 140	4	20
2-Chlorotoluene	50.0	47.6		ug/Kg		95	70 - 138	1	20
4-Chlorotoluene	50.0	48.3		ug/Kg		97	70 - 136	3	20
Chlorodibromomethane	50.0	50.7		ug/Kg		101	70 - 146	1	20
1,2-Dichlorobenzene	50.0	49.0		ug/Kg		98	70 - 130	2	20
1,3-Dichlorobenzene	50.0	49.3		ug/Kg		99	70 - 131	1	20
1,4-Dichlorobenzene	50.0	49.7		ug/Kg		99	70 - 130	1	20
1,3-Dichloropropane	50.0	47.1		ug/Kg		94	70 - 140	0	20
1,1-Dichloropropene	50.0	52.3		ug/Kg		105	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	50.0	52.1		ug/Kg		104	60 - 145	0	20
Ethylene Dibromide	50.0	49.4		ug/Kg		99	70 - 140	1	20
Dibromomethane	50.0	46.9		ug/Kg		94	70 - 139	4	20
Dichlorodifluoromethane	50.0	44.9		ug/Kg		90	37 - 158	6	20
1,1-Dichloroethane	50.0	52.1		ug/Kg		104	70 - 130	0	20
1,2-Dichloroethane	50.0	48.5		ug/Kg		97	70 - 130	5	20
1,1-Dichloroethene	50.0	62.3	*	ug/Kg		125	74 - 122	2	20
cis-1,2-Dichloroethene	50.0	49.8		ug/Kg		100	70 - 138	3	20
trans-1,2-Dichloroethene	50.0	54.7		ug/Kg		109	67 - 130	1	20
1,2-Dichloropropane	50.0	49.2		ug/Kg		98	73 - 127	1	20
cis-1,3-Dichloropropene	50.0	50.4		ug/Kg		101	68 - 147	0	20
trans-1,3-Dichloropropene	50.0	47.7		ug/Kg		95	70 - 155	0	20
Ethylbenzene	50.0	50.3		ug/Kg		101	80 - 137	2	20
Hexachlorobutadiene	50.0	54.2		ug/Kg		108	70 - 132	2	20
2-Hexanone	250	236		ug/Kg		94	62 - 158	2	20
Isopropylbenzene	50.0	51.3		ug/Kg		103	70 - 130	0	20
4-Isopropyltoluene	50.0	51.6		ug/Kg		103	70 - 133	1	20
Methylene Chloride	50.0	50.1		ug/Kg		100	70 - 134	3	20
4-Methyl-2-pentanone (MIBK)	250	231		ug/Kg		92	60 - 160	0	20
Naphthalene	50.0	48.9		ug/Kg		98	60 - 147	2	20
N-Propylbenzene	50.0	49.7		ug/Kg		99	70 - 130	2	20
Styrene	50.0	48.3		ug/Kg		97	70 - 130	0	20
1,1,1,2-Tetrachloroethane	50.0	50.9		ug/Kg		102	70 - 130	3	20
1,1,2,2-Tetrachloroethane	50.0	45.5		ug/Kg		91	70 - 146	1	20
Tetrachloroethene	50.0	54.4		ug/Kg		109	70 - 132	3	20
Toluene	50.0	50.2		ug/Kg		100	75 - 120	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250626/6
Matrix: Solid
Analysis Batch: 250626

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichlorobenzene			50.0	51.2		ug/Kg		102	60 - 140	2	20
1,2,4-Trichlorobenzene			50.0	52.6		ug/Kg		105	60 - 140	3	20
1,1,1-Trichloroethane			50.0	53.6		ug/Kg		107	70 - 130	1	20
1,1,2-Trichloroethane			50.0	47.7		ug/Kg		95	70 - 130	0	20
Trichloroethene			50.0	52.8		ug/Kg		106	70 - 133	1	20
Trichlorofluoromethane			50.0	53.3		ug/Kg		107	60 - 140	4	20
1,2,3-Trichloropropane			50.0	48.6		ug/Kg		97	70 - 146	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	68.0		ug/Kg		136	60 - 140	2	20
1,2,4-Trimethylbenzene			50.0	47.9		ug/Kg		96	70 - 130	0	20
1,3,5-Trimethylbenzene			50.0	48.6		ug/Kg		97	70 - 131	1	20
Vinyl acetate			50.0	44.5		ug/Kg		89	38 - 176	3	20
Vinyl chloride			50.0	46.8		ug/Kg		94	58 - 125	2	20
m-Xylene & p-Xylene			50.0	49.4		ug/Kg		99	70 - 146	1	20
o-Xylene			50.0	49.1		ug/Kg		98	70 - 140	1	20
2,2-Dichloropropane			50.0	53.3		ug/Kg		107	70 - 162	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*91*		*60 - 140*
Toluene-d8 (Surr)	*98*		*58 - 140*

Lab Sample ID: LCSD 720-250626/8
Matrix: Solid
Analysis Batch: 250626

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	929		ug/Kg		93	70 - 122	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*93*		*60 - 140*
Toluene-d8 (Surr)	*95*		*58 - 140*

Lab Sample ID: MB 720-250644/4
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/31/18 07:18	1
Acetone	ND		50	38	ug/Kg			08/31/18 07:18	1
Benzene	ND		5.0	0.65	ug/Kg			08/31/18 07:18	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/31/18 07:18	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/31/18 07:18	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/31/18 07:18	1
Bromoform	ND		5.0	2.0	ug/Kg			08/31/18 07:18	1
Bromomethane	ND		10	0.79	ug/Kg			08/31/18 07:18	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250644/4
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		50	21	ug/Kg			08/31/18 07:18	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/31/18 07:18	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/31/18 07:18	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/31/18 07:18	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/31/18 07:18	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/31/18 07:18	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/31/18 07:18	1
Chloroethane	ND		10	0.56	ug/Kg			08/31/18 07:18	1
Chloroform	ND		5.0	0.66	ug/Kg			08/31/18 07:18	1
Chloromethane	ND		10	0.79	ug/Kg			08/31/18 07:18	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/31/18 07:18	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/31/18 07:18	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/31/18 07:18	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/31/18 07:18	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/31/18 07:18	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/31/18 07:18	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/31/18 07:18	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/31/18 07:18	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/31/18 07:18	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/31/18 07:18	1
Dibromomethane	ND		10	0.86	ug/Kg			08/31/18 07:18	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/31/18 07:18	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/31/18 07:18	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/31/18 07:18	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/31/18 07:18	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/31/18 07:18	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/31/18 07:18	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/31/18 07:18	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/31/18 07:18	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/31/18 07:18	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/31/18 07:18	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/31/18 07:18	1
2-Hexanone	ND		50	10	ug/Kg			08/31/18 07:18	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/31/18 07:18	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/31/18 07:18	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/31/18 07:18	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/31/18 07:18	1
Naphthalene	ND		10	1.5	ug/Kg			08/31/18 07:18	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/31/18 07:18	1
Styrene	ND		5.0	0.63	ug/Kg			08/31/18 07:18	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/31/18 07:18	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/31/18 07:18	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/31/18 07:18	1
Toluene	ND		5.0	0.71	ug/Kg			08/31/18 07:18	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/31/18 07:18	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/31/18 07:18	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/31/18 07:18	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/31/18 07:18	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250644/4
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		5.0	0.63	ug/Kg			08/31/18 07:18	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/31/18 07:18	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/31/18 07:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/31/18 07:18	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/31/18 07:18	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/31/18 07:18	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/31/18 07:18	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/31/18 07:18	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/31/18 07:18	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/31/18 07:18	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/31/18 07:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*45 - 131*		*08/31/18 07:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*60 - 140*		*08/31/18 07:18*	*1*
Toluene-d8 (Surr)	*96*		*58 - 140*		*08/31/18 07:18*	*1*

Lab Sample ID: LCS 720-250644/5
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	54.5		ug/Kg		109	70 - 144
Acetone	250	280		ug/Kg		112	30 - 162
Benzene	50.0	50.9		ug/Kg		102	70 - 130
Dichlorobromomethane	50.0	52.7		ug/Kg		105	70 - 140
Bromobenzene	50.0	49.4		ug/Kg		99	70 - 130
Chlorobromomethane	50.0	56.3		ug/Kg		113	70 - 130
Bromoform	50.0	58.4		ug/Kg		117	59 - 158
Bromomethane	50.0	48.8		ug/Kg		98	59 - 132
2-Butanone (MEK)	250	278		ug/Kg		111	59 - 159
n-Butylbenzene	50.0	53.3		ug/Kg		107	70 - 142
sec-Butylbenzene	50.0	50.1		ug/Kg		100	70 - 136
tert-Butylbenzene	50.0	49.7		ug/Kg		99	70 - 130
Carbon disulfide	50.0	68.5		ug/Kg		137	60 - 140
Carbon tetrachloride	50.0	59.3		ug/Kg		119	70 - 142
Chlorobenzene	50.0	51.7		ug/Kg		103	70 - 130
Chloroethane	50.0	46.2		ug/Kg		92	65 - 130
Chloroform	50.0	52.8		ug/Kg		106	77 - 127
Chloromethane	50.0	48.2		ug/Kg		96	55 - 140
2-Chlorotoluene	50.0	47.5		ug/Kg		95	70 - 138
4-Chlorotoluene	50.0	47.9		ug/Kg		96	70 - 136
Chlorodibromomethane	50.0	57.2		ug/Kg		114	70 - 146
1,2-Dichlorobenzene	50.0	51.6		ug/Kg		103	70 - 130
1,3-Dichlorobenzene	50.0	50.2		ug/Kg		100	70 - 131
1,4-Dichlorobenzene	50.0	50.9		ug/Kg		102	70 - 130
1,3-Dichloropropane	50.0	52.5		ug/Kg		105	70 - 140

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250644/5
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloropropene	50.0	54.7		ug/Kg		109	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	57.6		ug/Kg		115	60 - 145
Ethylene Dibromide	50.0	55.6		ug/Kg		111	70 - 140
Dibromomethane	50.0	53.7		ug/Kg		107	70 - 139
Dichlorodifluoromethane	50.0	42.1		ug/Kg		84	37 - 158
1,1-Dichloroethane	50.0	54.1		ug/Kg		108	70 - 130
1,2-Dichloroethane	50.0	56.4		ug/Kg		113	70 - 130
1,1-Dichloroethene	50.0	64.6	*	ug/Kg		129	74 - 122
cis-1,2-Dichloroethene	50.0	53.0		ug/Kg		106	70 - 138
trans-1,2-Dichloroethene	50.0	56.8		ug/Kg		114	67 - 130
1,2-Dichloropropane	50.0	51.7		ug/Kg		103	73 - 127
cis-1,3-Dichloropropene	50.0	54.4		ug/Kg		109	68 - 147
trans-1,3-Dichloropropene	50.0	53.3		ug/Kg		107	70 - 155
Ethylbenzene	50.0	50.7		ug/Kg		101	80 - 137
Hexachlorobutadiene	50.0	56.1		ug/Kg		112	70 - 132
2-Hexanone	250	288		ug/Kg		115	62 - 158
Isopropylbenzene	50.0	53.1		ug/Kg		106	70 - 130
4-Isopropyltoluene	50.0	51.7		ug/Kg		103	70 - 133
Methylene Chloride	50.0	52.6		ug/Kg		105	70 - 134
4-Methyl-2-pentanone (MIBK)	250	282		ug/Kg		113	60 - 160
Naphthalene	50.0	53.4		ug/Kg		107	60 - 147
N-Propylbenzene	50.0	48.9		ug/Kg		98	70 - 130
Styrene	50.0	49.9		ug/Kg		100	70 - 130
1,1,1,2-Tetrachloroethane	50.0	54.3		ug/Kg		109	70 - 130
1,1,2,2-Tetrachloroethane	50.0	49.0		ug/Kg		98	70 - 146
Tetrachloroethene	50.0	57.1		ug/Kg		114	70 - 132
Toluene	50.0	50.7		ug/Kg		101	75 - 120
1,2,3-Trichlorobenzene	50.0	55.4		ug/Kg		111	60 - 140
1,2,4-Trichlorobenzene	50.0	55.6		ug/Kg		111	60 - 140
1,1,1-Trichloroethane	50.0	58.0		ug/Kg		116	70 - 130
1,1,2-Trichloroethane	50.0	53.6		ug/Kg		107	70 - 130
Trichloroethene	50.0	55.2		ug/Kg		110	70 - 133
Trichlorofluoromethane	50.0	56.1		ug/Kg		112	60 - 140
1,2,3-Trichloropropane	50.0	52.9		ug/Kg		106	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	74.5	*	ug/Kg		149	60 - 140
1,2,4-Trimethylbenzene	50.0	48.1		ug/Kg		96	70 - 130
1,3,5-Trimethylbenzene	50.0	48.5		ug/Kg		97	70 - 131
Vinyl acetate	50.0	52.1		ug/Kg		104	38 - 176
Vinyl chloride	50.0	46.0		ug/Kg		92	58 - 125
m-Xylene & p-Xylene	50.0	50.7		ug/Kg		101	70 - 146
o-Xylene	50.0	51.3		ug/Kg		103	70 - 140
2,2-Dichloropropane	50.0	57.5		ug/Kg		115	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Lab Sample ID: LCS 720-250644/7
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	981		ug/Kg		98	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*100*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCSD 720-250644/6
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	53.0		ug/Kg		106	70 - 144	3	20
Acetone	250	260		ug/Kg		104	30 - 162	7	30
Benzene	50.0	50.0		ug/Kg		100	70 - 130	2	20
Dichlorobromomethane	50.0	52.5		ug/Kg		105	70 - 140	0	20
Bromobenzene	50.0	49.3		ug/Kg		99	70 - 130	0	20
Chlorobromomethane	50.0	55.0		ug/Kg		110	70 - 130	2	20
Bromoform	50.0	57.3		ug/Kg		115	59 - 158	2	20
Bromomethane	50.0	48.9		ug/Kg		98	59 - 132	0	20
2-Butanone (MEK)	250	266		ug/Kg		106	59 - 159	4	20
n-Butylbenzene	50.0	52.4		ug/Kg		105	70 - 142	2	20
sec-Butylbenzene	50.0	49.6		ug/Kg		99	70 - 136	1	20
tert-Butylbenzene	50.0	49.0		ug/Kg		98	70 - 130	1	20
Carbon disulfide	50.0	67.2		ug/Kg		134	60 - 140	2	20
Carbon tetrachloride	50.0	56.7		ug/Kg		113	70 - 142	5	20
Chlorobenzene	50.0	51.1		ug/Kg		102	70 - 130	1	20
Chloroethane	50.0	46.4		ug/Kg		93	65 - 130	0	20
Chloroform	50.0	51.5		ug/Kg		103	77 - 127	2	20
Chloromethane	50.0	47.0		ug/Kg		94	55 - 140	2	20
2-Chlorotoluene	50.0	47.3		ug/Kg		95	70 - 138	0	20
4-Chlorotoluene	50.0	47.9		ug/Kg		96	70 - 136	0	20
Chlorodibromomethane	50.0	55.6		ug/Kg		111	70 - 146	3	20
1,2-Dichlorobenzene	50.0	51.5		ug/Kg		103	70 - 130	0	20
1,3-Dichlorobenzene	50.0	49.9		ug/Kg		100	70 - 131	1	20
1,4-Dichlorobenzene	50.0	50.7		ug/Kg		101	70 - 130	0	20
1,3-Dichloropropane	50.0	51.5		ug/Kg		103	70 - 140	2	20
1,1-Dichloropropene	50.0	53.1		ug/Kg		106	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	50.0	57.1		ug/Kg		114	60 - 145	1	20
Ethylene Dibromide	50.0	53.9		ug/Kg		108	70 - 140	3	20
Dibromomethane	50.0	52.9		ug/Kg		106	70 - 139	2	20
Dichlorodifluoromethane	50.0	39.6		ug/Kg		79	37 - 158	6	20
1,1-Dichloroethane	50.0	52.2		ug/Kg		104	70 - 130	3	20
1,2-Dichloroethane	50.0	54.0		ug/Kg		108	70 - 130	4	20
1,1-Dichloroethene	50.0	62.4	*	ug/Kg		125	74 - 122	3	20
cis-1,2-Dichloroethene	50.0	52.1		ug/Kg		104	70 - 138	2	20
trans-1,2-Dichloroethene	50.0	56.1		ug/Kg		112	67 - 130	1	20
1,2-Dichloropropane	50.0	51.5		ug/Kg		103	73 - 127	0	20
cis-1,3-Dichloropropene	50.0	53.4		ug/Kg		107	68 - 147	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250644/6
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,3-Dichloropropene	50.0	51.6		ug/Kg		103	70 - 155	3	20
Ethylbenzene	50.0	49.8		ug/Kg		100	80 - 137	2	20
Hexachlorobutadiene	50.0	56.2		ug/Kg		112	70 - 132	0	20
2-Hexanone	250	270		ug/Kg		108	62 - 158	7	20
Isopropylbenzene	50.0	51.8		ug/Kg		104	70 - 130	2	20
4-Isopropyltoluene	50.0	51.0		ug/Kg		102	70 - 133	1	20
Methylene Chloride	50.0	52.0		ug/Kg		104	70 - 134	1	20
4-Methyl-2-pentanone (MIBK)	250	268		ug/Kg		107	60 - 160	5	20
Naphthalene	50.0	53.5		ug/Kg		107	60 - 147	0	20
N-Propylbenzene	50.0	48.7		ug/Kg		97	70 - 130	0	20
Styrene	50.0	49.2		ug/Kg		98	70 - 130	1	20
1,1,1,2-Tetrachloroethane	50.0	53.4		ug/Kg		107	70 - 130	2	20
1,1,2,2-Tetrachloroethane	50.0	49.5		ug/Kg		99	70 - 146	1	20
Tetrachloroethene	50.0	55.0		ug/Kg		110	70 - 132	4	20
Toluene	50.0	50.0		ug/Kg		100	75 - 120	1	20
1,2,3-Trichlorobenzene	50.0	55.1		ug/Kg		110	60 - 140	0	20
1,2,4-Trichlorobenzene	50.0	56.0		ug/Kg		112	60 - 140	1	20
1,1,1-Trichloroethane	50.0	55.3		ug/Kg		111	70 - 130	5	20
1,1,2-Trichloroethane	50.0	52.2		ug/Kg		104	70 - 130	3	20
Trichloroethene	50.0	53.9		ug/Kg		108	70 - 133	2	20
Trichlorofluoromethane	50.0	54.0		ug/Kg		108	60 - 140	4	20
1,2,3-Trichloropropane	50.0	51.9		ug/Kg		104	70 - 146	2	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	70.0		ug/Kg		140	60 - 140	6	20
1,2,4-Trimethylbenzene	50.0	48.1		ug/Kg		96	70 - 130	0	20
1,3,5-Trimethylbenzene	50.0	48.2		ug/Kg		96	70 - 131	1	20
Vinyl acetate	50.0	50.5		ug/Kg		101	38 - 176	3	20
Vinyl chloride	50.0	44.8		ug/Kg		90	58 - 125	3	20
m-Xylene & p-Xylene	50.0	49.4		ug/Kg		99	70 - 146	2	20
o-Xylene	50.0	50.0		ug/Kg		100	70 - 140	2	20
2,2-Dichloropropane	50.0	55.4		ug/Kg		111	70 - 162	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*100*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: LCSD 720-250644/8
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12	1000	974		ug/Kg		97	70 - 122	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*100*		*60 - 140*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250644/8
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: MB 720-250750/4
Matrix: Solid
Analysis Batch: 250750

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			09/04/18 09:06	1
Acetone	ND		50	38	ug/Kg			09/04/18 09:06	1
Benzene	ND		5.0	0.65	ug/Kg			09/04/18 09:06	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			09/04/18 09:06	1
Bromobenzene	ND		5.0	0.79	ug/Kg			09/04/18 09:06	1
Chlorobromomethane	ND		20	0.72	ug/Kg			09/04/18 09:06	1
Bromoform	ND		5.0	2.0	ug/Kg			09/04/18 09:06	1
Bromomethane	ND		10	0.79	ug/Kg			09/04/18 09:06	1
2-Butanone (MEK)	ND		50	21	ug/Kg			09/04/18 09:06	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			09/04/18 09:06	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			09/04/18 09:06	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			09/04/18 09:06	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			09/04/18 09:06	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			09/04/18 09:06	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			09/04/18 09:06	1
Chloroethane	ND		10	0.56	ug/Kg			09/04/18 09:06	1
Chloroform	ND		5.0	0.66	ug/Kg			09/04/18 09:06	1
Chloromethane	ND		10	0.79	ug/Kg			09/04/18 09:06	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			09/04/18 09:06	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			09/04/18 09:06	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			09/04/18 09:06	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			09/04/18 09:06	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			09/04/18 09:06	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			09/04/18 09:06	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			09/04/18 09:06	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			09/04/18 09:06	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			09/04/18 09:06	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			09/04/18 09:06	1
Dibromomethane	ND		10	0.86	ug/Kg			09/04/18 09:06	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			09/04/18 09:06	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			09/04/18 09:06	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			09/04/18 09:06	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			09/04/18 09:06	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			09/04/18 09:06	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			09/04/18 09:06	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			09/04/18 09:06	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			09/04/18 09:06	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			09/04/18 09:06	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			09/04/18 09:06	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			09/04/18 09:06	1
2-Hexanone	ND		50	10	ug/Kg			09/04/18 09:06	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250750/4
Matrix: Solid
Analysis Batch: 250750

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		5.0	0.68	ug/Kg			09/04/18 09:06	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			09/04/18 09:06	1
Methylene Chloride	ND		10	5.6	ug/Kg			09/04/18 09:06	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			09/04/18 09:06	1
Naphthalene	ND		10	1.5	ug/Kg			09/04/18 09:06	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			09/04/18 09:06	1
Styrene	ND		5.0	0.63	ug/Kg			09/04/18 09:06	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			09/04/18 09:06	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			09/04/18 09:06	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			09/04/18 09:06	1
Toluene	ND		5.0	0.71	ug/Kg			09/04/18 09:06	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			09/04/18 09:06	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			09/04/18 09:06	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			09/04/18 09:06	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			09/04/18 09:06	1
Trichloroethene	ND		5.0	0.63	ug/Kg			09/04/18 09:06	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			09/04/18 09:06	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			09/04/18 09:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			09/04/18 09:06	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			09/04/18 09:06	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			09/04/18 09:06	1
Vinyl acetate	ND		20	5.0	ug/Kg			09/04/18 09:06	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			09/04/18 09:06	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			09/04/18 09:06	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			09/04/18 09:06	1
C4-C10	ND		250	100	ug/Kg			09/04/18 09:06	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			09/04/18 09:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*45 - 131*		*09/04/18 09:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*		*09/04/18 09:06*	*1*
Toluene-d8 (Surr)	*95*		*58 - 140*		*09/04/18 09:06*	*1*

Lab Sample ID: LCS 720-250750/5
Matrix: Solid
Analysis Batch: 250750

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C4-C12			1000	1120		ug/Kg		112	70 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*90*		*60 - 140*
Toluene-d8 (Surr)	*99*		*58 - 140*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250750/7
Matrix: Solid
Analysis Batch: 250750

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	53.9		ug/Kg		108	70 - 144
Acetone	250	278		ug/Kg		111	30 - 162
Benzene	50.0	48.4		ug/Kg		97	70 - 130
Dichlorobromomethane	50.0	45.9		ug/Kg		92	70 - 140
Bromobenzene	50.0	47.5		ug/Kg		95	70 - 130
Chlorobromomethane	50.0	51.0		ug/Kg		102	70 - 130
Bromoform	50.0	47.0		ug/Kg		94	59 - 158
Bromomethane	50.0	54.5		ug/Kg		109	59 - 132
2-Butanone (MEK)	250	242		ug/Kg		97	59 - 159
n-Butylbenzene	50.0	50.2		ug/Kg		100	70 - 142
sec-Butylbenzene	50.0	50.7		ug/Kg		101	70 - 136
tert-Butylbenzene	50.0	49.6		ug/Kg		99	70 - 130
Carbon disulfide	50.0	70.4	*	ug/Kg		141	60 - 140
Carbon tetrachloride	50.0	51.8		ug/Kg		104	70 - 142
Chlorobenzene	50.0	46.5		ug/Kg		93	70 - 130
Chloroethane	50.0	52.9		ug/Kg		106	65 - 130
Chloroform	50.0	48.1		ug/Kg		96	77 - 127
Chloromethane	50.0	53.1		ug/Kg		106	55 - 140
2-Chlorotoluene	50.0	49.8		ug/Kg		100	70 - 138
4-Chlorotoluene	50.0	49.4		ug/Kg		99	70 - 136
Chlorodibromomethane	50.0	46.1		ug/Kg		92	70 - 146
1,2-Dichlorobenzene	50.0	47.9		ug/Kg		96	70 - 130
1,3-Dichlorobenzene	50.0	47.8		ug/Kg		96	70 - 131
1,4-Dichlorobenzene	50.0	47.8		ug/Kg		96	70 - 130
1,3-Dichloropropane	50.0	42.8		ug/Kg		86	70 - 140
1,1-Dichloropropene	50.0	50.9		ug/Kg		102	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	49.9		ug/Kg		100	60 - 145
Ethylene Dibromide	50.0	44.3		ug/Kg		89	70 - 140
Dibromomethane	50.0	45.1		ug/Kg		90	70 - 139
Dichlorodifluoromethane	50.0	48.3		ug/Kg		97	37 - 158
1,1-Dichloroethane	50.0	52.8		ug/Kg		106	70 - 130
1,2-Dichloroethane	50.0	46.6		ug/Kg		93	70 - 130
1,1-Dichloroethene	50.0	60.0		ug/Kg		120	74 - 122
cis-1,2-Dichloroethene	50.0	51.9		ug/Kg		104	70 - 138
trans-1,2-Dichloroethene	50.0	59.5		ug/Kg		119	67 - 130
1,2-Dichloropropane	50.0	49.9		ug/Kg		100	73 - 127
cis-1,3-Dichloropropene	50.0	49.2		ug/Kg		98	68 - 147
trans-1,3-Dichloropropene	50.0	46.0		ug/Kg		92	70 - 155
Ethylbenzene	50.0	48.4		ug/Kg		97	80 - 137
Hexachlorobutadiene	50.0	47.8		ug/Kg		96	70 - 132
2-Hexanone	250	246		ug/Kg		98	62 - 158
Isopropylbenzene	50.0	54.0		ug/Kg		108	70 - 130
4-Isopropyltoluene	50.0	50.6		ug/Kg		101	70 - 133
Methylene Chloride	50.0	54.5		ug/Kg		109	70 - 134
4-Methyl-2-pentanone (MIBK)	250	245		ug/Kg		98	60 - 160
Naphthalene	50.0	51.0		ug/Kg		102	60 - 147
N-Propylbenzene	50.0	49.9		ug/Kg		100	70 - 130
Styrene	50.0	47.8		ug/Kg		96	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250750/7
Matrix: Solid
Analysis Batch: 250750

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	49.4		ug/Kg		99	70 - 130
1,1,2,2-Tetrachloroethane	50.0	42.9		ug/Kg		86	70 - 146
Tetrachloroethene	50.0	49.8		ug/Kg		100	70 - 132
Toluene	50.0	47.0		ug/Kg		94	75 - 120
1,2,3-Trichlorobenzene	50.0	49.9		ug/Kg		100	60 - 140
1,2,4-Trichlorobenzene	50.0	53.4		ug/Kg		107	60 - 140
1,1,1-Trichloroethane	50.0	52.6		ug/Kg		105	70 - 130
1,1,2-Trichloroethane	50.0	46.0		ug/Kg		92	70 - 130
Trichloroethene	50.0	48.0		ug/Kg		96	70 - 133
Trichlorofluoromethane	50.0	54.5		ug/Kg		109	60 - 140
1,2,3-Trichloropropane	50.0	42.2		ug/Kg		84	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	66.5		ug/Kg		133	60 - 140
1,2,4-Trimethylbenzene	50.0	51.8		ug/Kg		104	70 - 130
1,3,5-Trimethylbenzene	50.0	50.9		ug/Kg		102	70 - 131
Vinyl acetate	50.0	55.4		ug/Kg		111	38 - 176
Vinyl chloride	50.0	50.3		ug/Kg		101	58 - 125
m-Xylene & p-Xylene	50.0	49.0		ug/Kg		98	70 - 146
o-Xylene	50.0	51.0		ug/Kg		102	70 - 140
2,2-Dichloropropane	50.0	58.3		ug/Kg		117	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*90*		*60 - 140*
Toluene-d8 (Surr)	*94*		*58 - 140*

Lab Sample ID: LCSD 720-250750/6
Matrix: Solid
Analysis Batch: 250750

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12	1000	1150		ug/Kg		115	70 - 122	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*93*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*83*		*60 - 140*
Toluene-d8 (Surr)	*101*		*58 - 140*

Lab Sample ID: LCSD 720-250750/8
Matrix: Solid
Analysis Batch: 250750

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	51.8		ug/Kg		104	70 - 144	4	20
Acetone	250	269		ug/Kg		108	30 - 162	3	30
Benzene	50.0	49.3		ug/Kg		99	70 - 130	2	20
Dichlorobromomethane	50.0	45.6		ug/Kg		91	70 - 140	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250750/8
Matrix: Solid
Analysis Batch: 250750

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromobenzene	50.0	49.0		ug/Kg		98	70 - 130	3	20
Chlorobromomethane	50.0	52.3		ug/Kg		105	70 - 130	3	20
Bromoform	50.0	46.0		ug/Kg		92	59 - 158	2	20
Bromomethane	50.0	54.2		ug/Kg		108	59 - 132	1	20
2-Butanone (MEK)	250	237		ug/Kg		95	59 - 159	2	20
n-Butylbenzene	50.0	51.3		ug/Kg		103	70 - 142	2	20
sec-Butylbenzene	50.0	51.8		ug/Kg		104	70 - 136	2	20
tert-Butylbenzene	50.0	51.1		ug/Kg		102	70 - 130	3	20
Carbon disulfide	50.0	69.2		ug/Kg		138	60 - 140	2	20
Carbon tetrachloride	50.0	52.1		ug/Kg		104	70 - 142	0	20
Chlorobenzene	50.0	47.7		ug/Kg		95	70 - 130	3	20
Chloroethane	50.0	51.9		ug/Kg		104	65 - 130	2	20
Chloroform	50.0	48.2		ug/Kg		96	77 - 127	0	20
Chloromethane	50.0	52.5		ug/Kg		105	55 - 140	1	20
2-Chlorotoluene	50.0	50.5		ug/Kg		101	70 - 138	1	20
4-Chlorotoluene	50.0	49.6		ug/Kg		99	70 - 136	1	20
Chlorodibromomethane	50.0	45.0		ug/Kg		90	70 - 146	2	20
1,2-Dichlorobenzene	50.0	49.6		ug/Kg		99	70 - 130	3	20
1,3-Dichlorobenzene	50.0	47.9		ug/Kg		96	70 - 131	0	20
1,4-Dichlorobenzene	50.0	47.1		ug/Kg		94	70 - 130	1	20
1,3-Dichloropropane	50.0	41.3		ug/Kg		83	70 - 140	4	20
1,1-Dichloropropene	50.0	51.1		ug/Kg		102	70 - 130	0	20
1,2-Dibromo-3-Chloropropane	50.0	50.7		ug/Kg		101	60 - 145	1	20
Ethylene Dibromide	50.0	43.4		ug/Kg		87	70 - 140	2	20
Dibromomethane	50.0	44.4		ug/Kg		89	70 - 139	2	20
Dichlorodifluoromethane	50.0	47.8		ug/Kg		96	37 - 158	1	20
1,1-Dichloroethane	50.0	54.4		ug/Kg		109	70 - 130	3	20
1,2-Dichloroethane	50.0	46.0		ug/Kg		92	70 - 130	1	20
1,1-Dichloroethene	50.0	62.3	*	ug/Kg		125	74 - 122	4	20
cis-1,2-Dichloroethene	50.0	52.0		ug/Kg		104	70 - 138	0	20
trans-1,2-Dichloroethene	50.0	61.6		ug/Kg		123	67 - 130	4	20
1,2-Dichloropropane	50.0	49.9		ug/Kg		100	73 - 127	0	20
cis-1,3-Dichloropropene	50.0	49.0		ug/Kg		98	68 - 147	0	20
trans-1,3-Dichloropropene	50.0	43.2		ug/Kg		86	70 - 155	6	20
Ethylbenzene	50.0	49.8		ug/Kg		100	80 - 137	3	20
Hexachlorobutadiene	50.0	50.8		ug/Kg		102	70 - 132	6	20
2-Hexanone	250	229		ug/Kg		92	62 - 158	7	20
Isopropylbenzene	50.0	55.5		ug/Kg		111	70 - 130	3	20
4-Isopropyltoluene	50.0	51.8		ug/Kg		104	70 - 133	2	20
Methylene Chloride	50.0	55.4		ug/Kg		111	70 - 134	2	20
4-Methyl-2-pentanone (MIBK)	250	232		ug/Kg		93	60 - 160	6	20
Naphthalene	50.0	53.6		ug/Kg		107	60 - 147	5	20
N-Propylbenzene	50.0	50.7		ug/Kg		101	70 - 130	2	20
Styrene	50.0	48.0		ug/Kg		96	70 - 130	0	20
1,1,1,2-Tetrachloroethane	50.0	52.3		ug/Kg		105	70 - 130	6	20
1,1,2,2-Tetrachloroethane	50.0	41.8		ug/Kg		84	70 - 146	3	20
Tetrachloroethene	50.0	48.4		ug/Kg		97	70 - 132	3	20
Toluene	50.0	48.8		ug/Kg		98	75 - 120	4	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250750/8
Matrix: Solid
Analysis Batch: 250750

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichlorobenzene			50.0	54.9		ug/Kg		110	60 - 140	9	20
1,2,4-Trichlorobenzene			50.0	56.1		ug/Kg		112	60 - 140	5	20
1,1,1-Trichloroethane			50.0	52.3		ug/Kg		105	70 - 130	0	20
1,1,2-Trichloroethane			50.0	44.3		ug/Kg		89	70 - 130	4	20
Trichloroethene			50.0	49.5		ug/Kg		99	70 - 133	3	20
Trichlorofluoromethane			50.0	53.4		ug/Kg		107	60 - 140	2	20
1,2,3-Trichloropropane			50.0	42.4		ug/Kg		85	70 - 146	0	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	65.4		ug/Kg		131	60 - 140	2	20
1,2,4-Trimethylbenzene			50.0	52.0		ug/Kg		104	70 - 130	0	20
1,3,5-Trimethylbenzene			50.0	52.2		ug/Kg		104	70 - 131	2	20
Vinyl acetate			50.0	53.2		ug/Kg		106	38 - 176	4	20
Vinyl chloride			50.0	49.6		ug/Kg		99	58 - 125	1	20
m-Xylene & p-Xylene			50.0	50.4		ug/Kg		101	70 - 146	3	20
o-Xylene			50.0	51.1		ug/Kg		102	70 - 140	0	20
2,2-Dichloropropane			50.0	58.4		ug/Kg		117	70 - 162	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*87*		*60 - 140*
Toluene-d8 (Surr)	*92*		*58 - 140*

Lab Sample ID: 720-88244-A-4-O MS
Matrix: Solid
Analysis Batch: 250750

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250795

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methyl tert-butyl ether	ND		47.7	51.3		ug/Kg		108	69 - 130		
Acetone	ND		239	262		ug/Kg		110	37 - 150		
Benzene	ND		47.7	48.4		ug/Kg		101	70 - 130		
Dichlorobromomethane	ND		47.7	46.8		ug/Kg		98	64 - 135		
Bromobenzene	ND		47.7	53.2		ug/Kg		112	70 - 130		
Chlorobromomethane	ND		47.7	51.8		ug/Kg		109	65 - 130		
Bromoform	ND		47.7	45.5		ug/Kg		95	58 - 132		
Bromomethane	ND		47.7	50.3		ug/Kg		105	56 - 130		
2-Butanone (MEK)	ND		239	217		ug/Kg		91	41 - 150		
n-Butylbenzene	ND		47.7	51.3		ug/Kg		107	60 - 145		
sec-Butylbenzene	ND		47.7	55.3		ug/Kg		116	64 - 137		
tert-Butylbenzene	ND		47.7	55.6		ug/Kg		117	63 - 134		
Carbon disulfide	ND	*	47.7	62.2		ug/Kg		130	10 - 150		
Carbon tetrachloride	ND		47.7	49.1		ug/Kg		103	54 - 130		
Chlorobenzene	ND		47.7	45.9		ug/Kg		96	70 - 130		
Chloroethane	ND		47.7	49.1		ug/Kg		103	61 - 130		
Chloroform	ND		47.7	49.5		ug/Kg		104	67 - 130		
Chloromethane	ND		47.7	48.3		ug/Kg		101	50 - 131		
2-Chlorotoluene	ND		47.7	54.6		ug/Kg		114	70 - 130		
4-Chlorotoluene	ND		47.7	53.1		ug/Kg		111	70 - 130		
Chlorodibromomethane	ND		47.7	47.2		ug/Kg		99	60 - 141		

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88244-A-4-O MS
Matrix: Solid
Analysis Batch: 250750

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250795

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	ND		47.7	47.3		ug/Kg		99	70 - 130
1,3-Dichlorobenzene	ND		47.7	47.7		ug/Kg		100	70 - 130
1,4-Dichlorobenzene	ND		47.7	47.1		ug/Kg		99	70 - 130
1,3-Dichloropropane	ND		47.7	44.5		ug/Kg		93	70 - 130
1,1-Dichloropropene	ND		47.7	49.9		ug/Kg		105	67 - 130
1,2-Dibromo-3-Chloropropane	ND		47.7	52.7		ug/Kg		110	57 - 130
Ethylene Dibromide	ND		47.7	44.1		ug/Kg		92	66 - 135
Dibromomethane	ND		47.7	44.6		ug/Kg		93	65 - 131
Dichlorodifluoromethane	ND		47.7	42.9		ug/Kg		90	38 - 130
1,1-Dichloroethane	ND		47.7	54.2		ug/Kg		114	67 - 130
1,2-Dichloroethane	ND		47.7	45.7		ug/Kg		96	70 - 130
1,1-Dichloroethene	ND	*	47.7	56.3		ug/Kg		118	64 - 130
cis-1,2-Dichloroethene	ND		47.7	52.2		ug/Kg		110	68 - 131
trans-1,2-Dichloroethene	ND		47.7	57.9		ug/Kg		121	70 - 130
1,2-Dichloropropane	ND		47.7	49.9		ug/Kg		105	65 - 133
cis-1,3-Dichloropropene	ND		47.7	49.7		ug/Kg		104	46 - 139
trans-1,3-Dichloropropene	ND		47.7	45.6		ug/Kg		96	55 - 131
Ethylbenzene	ND		47.7	48.8		ug/Kg		102	65 - 130
Hexachlorobutadiene	ND		47.7	44.5		ug/Kg		93	58 - 132
2-Hexanone	ND		239	232		ug/Kg		97	44 - 150
Isopropylbenzene	ND		47.7	51.4		ug/Kg		108	65 - 130
4-Isopropyltoluene	ND		47.7	55.4		ug/Kg		116	69 - 134
Methylene Chloride	ND		47.7	55.7		ug/Kg		117	63 - 130
4-Methyl-2-pentanone (MIBK)	ND		239	231		ug/Kg		97	51 - 140
Naphthalene	ND		47.7	35.5		ug/Kg		74	45 - 146
N-Propylbenzene	ND		47.7	56.3		ug/Kg		118	70 - 130
Styrene	ND		47.7	45.4		ug/Kg		95	58 - 135
1,1,1,2-Tetrachloroethane	ND		47.7	50.0		ug/Kg		105	64 - 133
1,1,2,2-Tetrachloroethane	ND		47.7	48.3		ug/Kg		101	70 - 131
Tetrachloroethene	ND		47.7	48.3		ug/Kg		101	67 - 130
Toluene	ND		47.7	47.8		ug/Kg		100	70 - 130
1,2,3-Trichlorobenzene	ND		47.7	36.7		ug/Kg		77	58 - 138
1,2,4-Trichlorobenzene	ND		47.7	39.9		ug/Kg		84	49 - 144
1,1,1-Trichloroethane	ND		47.7	49.5		ug/Kg		104	57 - 133
1,1,2-Trichloroethane	ND		47.7	46.6		ug/Kg		98	68 - 132
Trichloroethene	ND		47.7	48.5		ug/Kg		102	66 - 130
Trichlorofluoromethane	ND		47.7	50.8		ug/Kg		106	61 - 130
1,2,3-Trichloropropane	ND		47.7	49.9		ug/Kg		105	62 - 150
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		47.7	60.8		ug/Kg		127	52 - 130
1,2,4-Trimethylbenzene	ND		47.7	57.1		ug/Kg		120	64 - 140
1,3,5-Trimethylbenzene	ND		47.7	57.3		ug/Kg		120	67 - 134
Vinyl acetate	ND		47.7	38.2		ug/Kg		80	52 - 150
Vinyl chloride	ND		47.7	44.5		ug/Kg		93	62 - 130
m-Xylene & p-Xylene	ND		47.7	49.0		ug/Kg		103	70 - 130
o-Xylene	ND		47.7	50.0		ug/Kg		105	68 - 130
2,2-Dichloropropane	ND		47.7	54.1		ug/Kg		113	63 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88244-A-4-O MS
Matrix: Solid
Analysis Batch: 250750

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250795

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene	88		45 - 131
1,2-Dichloroethane-d4 (Surr)	90		60 - 140
Toluene-d8 (Surr)	95		58 - 140

Lab Sample ID: 720-88244-A-4-P MSD
Matrix: Solid
Analysis Batch: 250750

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250795

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	ND		46.3	49.9		ug/Kg		108	69 - 130	3	20
Acetone	ND		231	272		ug/Kg		117	37 - 150	3	20
Benzene	ND		46.3	48.6		ug/Kg		105	70 - 130	1	20
Dichlorobromomethane	ND		46.3	47.0		ug/Kg		102	64 - 135	1	20
Bromobenzene	ND		46.3	53.1		ug/Kg		115	70 - 130	0	20
Chlorobromomethane	ND		46.3	49.3		ug/Kg		106	65 - 130	5	20
Bromoform	ND		46.3	43.5		ug/Kg		94	58 - 132	5	20
Bromomethane	ND		46.3	50.0		ug/Kg		108	56 - 130	1	20
2-Butanone (MEK)	ND		231	200		ug/Kg		86	41 - 150	8	20
n-Butylbenzene	ND		46.3	54.6		ug/Kg		118	60 - 145	6	20
sec-Butylbenzene	ND		46.3	58.0		ug/Kg		125	64 - 137	5	20
tert-Butylbenzene	ND		46.3	59.7		ug/Kg		129	63 - 134	7	20
Carbon disulfide	ND	*	46.3	61.0		ug/Kg		132	10 - 150	2	20
Carbon tetrachloride	ND		46.3	49.0		ug/Kg		106	54 - 130	0	20
Chlorobenzene	ND		46.3	46.8		ug/Kg		101	70 - 130	2	20
Chloroethane	ND		46.3	47.2		ug/Kg		102	61 - 130	4	20
Chloroform	ND		46.3	47.6		ug/Kg		103	67 - 130	4	20
Chloromethane	ND		46.3	47.9		ug/Kg		103	50 - 131	1	20
2-Chlorotoluene	ND		46.3	55.8		ug/Kg		120	70 - 130	2	20
4-Chlorotoluene	ND		46.3	54.3		ug/Kg		117	70 - 130	2	20
Chlorodibromomethane	ND		46.3	44.6		ug/Kg		96	60 - 141	6	20
1,2-Dichlorobenzene	ND		46.3	49.7		ug/Kg		107	70 - 130	5	20
1,3-Dichlorobenzene	ND		46.3	49.3		ug/Kg		107	70 - 130	3	20
1,4-Dichlorobenzene	ND		46.3	49.0		ug/Kg		106	70 - 130	4	20
1,3-Dichloropropane	ND		46.3	40.8		ug/Kg		88	70 - 130	9	20
1,1-Dichloropropene	ND		46.3	49.8		ug/Kg		108	67 - 130	0	20
1,2-Dibromo-3-Chloropropane	ND		46.3	50.8		ug/Kg		110	57 - 130	4	20
Ethylene Dibromide	ND		46.3	41.3		ug/Kg		89	66 - 135	7	20
Dibromomethane	ND		46.3	45.3		ug/Kg		98	65 - 131	1	20
Dichlorodifluoromethane	ND		46.3	43.4		ug/Kg		94	38 - 130	1	20
1,1-Dichloroethane	ND		46.3	52.7		ug/Kg		114	67 - 130	3	20
1,2-Dichloroethane	ND		46.3	45.5		ug/Kg		98	70 - 130	0	20
1,1-Dichloroethene	ND	*	46.3	55.3		ug/Kg		119	64 - 130	2	20
cis-1,2-Dichloroethene	ND		46.3	50.8		ug/Kg		110	68 - 131	3	20
trans-1,2-Dichloroethene	ND		46.3	56.8		ug/Kg		123	70 - 130	2	20
1,2-Dichloropropane	ND		46.3	48.7		ug/Kg		105	65 - 133	2	20
cis-1,3-Dichloropropene	ND		46.3	48.1		ug/Kg		104	46 - 139	3	20
trans-1,3-Dichloropropene	ND		46.3	43.1		ug/Kg		93	55 - 131	6	20
Ethylbenzene	ND		46.3	49.7		ug/Kg		107	65 - 130	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88244-A-4-P MSD
Matrix: Solid
Analysis Batch: 250750

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250795

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hexachlorobutadiene	ND		46.3	50.3		ug/Kg		109	58 - 132	12	20
2-Hexanone	ND		231	216		ug/Kg		93	44 - 150	7	20
Isopropylbenzene	ND		46.3	54.5		ug/Kg		118	65 - 130	6	20
4-Isopropyltoluene	ND		46.3	58.4		ug/Kg		126	69 - 134	5	20
Methylene Chloride	ND		46.3	52.9		ug/Kg		114	63 - 130	5	20
4-Methyl-2-pentanone (MIBK)	ND		231	224		ug/Kg		97	51 - 140	3	20
Naphthalene	ND		46.3	41.6		ug/Kg		90	45 - 146	16	20
N-Propylbenzene	ND		46.3	57.1		ug/Kg		123	70 - 130	2	20
Styrene	ND		46.3	45.9		ug/Kg		99	58 - 135	1	20
1,1,1,2-Tetrachloroethane	ND		46.3	52.3		ug/Kg		113	64 - 133	5	20
1,1,2,2-Tetrachloroethane	ND		46.3	47.5		ug/Kg		103	70 - 131	2	20
Tetrachloroethene	ND		46.3	48.8		ug/Kg		105	67 - 130	1	20
Toluene	ND		46.3	50.3		ug/Kg		109	70 - 130	5	20
1,2,3-Trichlorobenzene	ND		46.3	42.8		ug/Kg		92	58 - 138	15	20
1,2,4-Trichlorobenzene	ND		46.3	47.0		ug/Kg		102	49 - 144	16	20
1,1,1-Trichloroethane	ND		46.3	48.8		ug/Kg		105	57 - 133	1	20
1,1,2-Trichloroethane	ND		46.3	43.9		ug/Kg		95	68 - 132	6	20
Trichloroethene	ND		46.3	48.3		ug/Kg		104	66 - 130	0	20
Trichlorofluoromethane	ND		46.3	50.6		ug/Kg		109	61 - 130	0	20
1,2,3-Trichloropropane	ND		46.3	47.9		ug/Kg		103	62 - 150	4	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		46.3	60.4		ug/Kg		130	52 - 130	1	20
1,2,4-Trimethylbenzene	ND		46.3	58.7		ug/Kg		127	64 - 140	3	20
1,3,5-Trimethylbenzene	ND		46.3	59.2		ug/Kg		128	67 - 134	3	20
Vinyl acetate	ND		46.3	37.0		ug/Kg		80	52 - 150	3	20
Vinyl chloride	ND		46.3	44.3		ug/Kg		96	62 - 130	0	20
m-Xylene & p-Xylene	ND		46.3	50.1		ug/Kg		108	70 - 130	2	20
o-Xylene	ND		46.3	51.7		ug/Kg		112	68 - 130	3	20
2,2-Dichloropropane	ND		46.3	53.9		ug/Kg		116	63 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*90*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*87*		*60 - 140*
Toluene-d8 (Surr)	*92*		*58 - 140*

Lab Sample ID: MB 720-250946/4
Matrix: Solid
Analysis Batch: 250946

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			09/05/18 22:03	1
Acetone	ND		50	38	ug/Kg			09/05/18 22:03	1
Benzene	ND		5.0	0.65	ug/Kg			09/05/18 22:03	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			09/05/18 22:03	1
Bromobenzene	ND		5.0	0.79	ug/Kg			09/05/18 22:03	1
Chlorobromomethane	ND		20	0.72	ug/Kg			09/05/18 22:03	1
Bromoform	ND		5.0	2.0	ug/Kg			09/05/18 22:03	1
Bromomethane	ND		10	0.79	ug/Kg			09/05/18 22:03	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250946/4
Matrix: Solid
Analysis Batch: 250946

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		50	21	ug/Kg			09/05/18 22:03	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			09/05/18 22:03	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			09/05/18 22:03	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			09/05/18 22:03	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			09/05/18 22:03	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			09/05/18 22:03	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			09/05/18 22:03	1
Chloroethane	ND		10	0.56	ug/Kg			09/05/18 22:03	1
Chloroform	ND		5.0	0.66	ug/Kg			09/05/18 22:03	1
Chloromethane	ND		10	0.79	ug/Kg			09/05/18 22:03	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			09/05/18 22:03	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			09/05/18 22:03	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			09/05/18 22:03	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			09/05/18 22:03	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			09/05/18 22:03	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			09/05/18 22:03	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			09/05/18 22:03	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			09/05/18 22:03	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			09/05/18 22:03	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			09/05/18 22:03	1
Dibromomethane	ND		10	0.86	ug/Kg			09/05/18 22:03	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			09/05/18 22:03	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			09/05/18 22:03	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			09/05/18 22:03	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			09/05/18 22:03	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			09/05/18 22:03	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			09/05/18 22:03	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			09/05/18 22:03	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			09/05/18 22:03	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			09/05/18 22:03	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			09/05/18 22:03	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			09/05/18 22:03	1
2-Hexanone	ND		50	10	ug/Kg			09/05/18 22:03	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			09/05/18 22:03	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			09/05/18 22:03	1
Methylene Chloride	ND		10	5.6	ug/Kg			09/05/18 22:03	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			09/05/18 22:03	1
Naphthalene	ND		10	1.5	ug/Kg			09/05/18 22:03	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			09/05/18 22:03	1
Styrene	ND		5.0	0.63	ug/Kg			09/05/18 22:03	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			09/05/18 22:03	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			09/05/18 22:03	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			09/05/18 22:03	1
Toluene	ND		5.0	0.71	ug/Kg			09/05/18 22:03	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			09/05/18 22:03	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			09/05/18 22:03	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			09/05/18 22:03	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			09/05/18 22:03	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250946/4
Matrix: Solid
Analysis Batch: 250946

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		5.0	0.63	ug/Kg			09/05/18 22:03	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			09/05/18 22:03	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			09/05/18 22:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			09/05/18 22:03	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			09/05/18 22:03	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			09/05/18 22:03	1
Vinyl acetate	ND		20	5.0	ug/Kg			09/05/18 22:03	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			09/05/18 22:03	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			09/05/18 22:03	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			09/05/18 22:03	1
C4-C10	ND		250	100	ug/Kg			09/05/18 22:03	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			09/05/18 22:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*45 - 131*		*09/05/18 22:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*60 - 140*		*09/05/18 22:03*	*1*
Toluene-d8 (Surr)	*102*		*58 - 140*		*09/05/18 22:03*	*1*

Lab Sample ID: LCS 720-250946/5
Matrix: Solid
Analysis Batch: 250946

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	55.5		ug/Kg		111	70 - 144
Acetone	250	274		ug/Kg		109	30 - 162
Benzene	50.0	53.6		ug/Kg		107	70 - 130
Dichlorobromomethane	50.0	55.6		ug/Kg		111	70 - 140
Bromobenzene	50.0	50.9		ug/Kg		102	70 - 130
Chlorobromomethane	50.0	54.0		ug/Kg		108	70 - 130
Bromoform	50.0	56.6		ug/Kg		113	59 - 158
Bromomethane	50.0	56.8		ug/Kg		114	59 - 132
2-Butanone (MEK)	250	282		ug/Kg		113	59 - 159
n-Butylbenzene	50.0	56.1		ug/Kg		112	70 - 142
sec-Butylbenzene	50.0	54.7		ug/Kg		109	70 - 136
tert-Butylbenzene	50.0	52.8		ug/Kg		106	70 - 130
Carbon disulfide	50.0	51.9		ug/Kg		104	60 - 140
Carbon tetrachloride	50.0	55.0		ug/Kg		110	70 - 142
Chlorobenzene	50.0	53.7		ug/Kg		107	70 - 130
Chloroethane	50.0	56.3		ug/Kg		113	65 - 130
Chloroform	50.0	53.3		ug/Kg		107	77 - 127
Chloromethane	50.0	61.8		ug/Kg		124	55 - 140
2-Chlorotoluene	50.0	53.0		ug/Kg		106	70 - 138
4-Chlorotoluene	50.0	54.0		ug/Kg		108	70 - 136
Chlorodibromomethane	50.0	55.1		ug/Kg		110	70 - 146
1,2-Dichlorobenzene	50.0	51.5		ug/Kg		103	70 - 130
1,3-Dichlorobenzene	50.0	52.2		ug/Kg		104	70 - 131
1,4-Dichlorobenzene	50.0	51.9		ug/Kg		104	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250946/5
Matrix: Solid
Analysis Batch: 250946

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichloropropane	50.0	55.2		ug/Kg		110	70 - 140
1,1-Dichloropropene	50.0	55.1		ug/Kg		110	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	54.4		ug/Kg		109	60 - 145
Ethylene Dibromide	50.0	56.3		ug/Kg		113	70 - 140
Dibromomethane	50.0	55.5		ug/Kg		111	70 - 139
Dichlorodifluoromethane	50.0	64.4		ug/Kg		129	37 - 158
1,1-Dichloroethane	50.0	54.2		ug/Kg		108	70 - 130
1,2-Dichloroethane	50.0	53.5		ug/Kg		107	70 - 130
1,1-Dichloroethene	50.0	50.6		ug/Kg		101	74 - 122
cis-1,2-Dichloroethene	50.0	54.3		ug/Kg		109	70 - 138
trans-1,2-Dichloroethene	50.0	52.0		ug/Kg		104	67 - 130
1,2-Dichloropropane	50.0	56.0		ug/Kg		112	73 - 127
cis-1,3-Dichloropropene	50.0	57.3		ug/Kg		115	68 - 147
trans-1,3-Dichloropropene	50.0	58.7		ug/Kg		117	70 - 155
Ethylbenzene	50.0	56.3		ug/Kg		113	80 - 137
Hexachlorobutadiene	50.0	51.1		ug/Kg		102	70 - 132
2-Hexanone	250	304		ug/Kg		122	62 - 158
Isopropylbenzene	50.0	54.5		ug/Kg		109	70 - 130
4-Isopropyltoluene	50.0	54.6		ug/Kg		109	70 - 133
Methylene Chloride	50.0	52.6		ug/Kg		105	70 - 134
4-Methyl-2-pentanone (MIBK)	250	304		ug/Kg		122	60 - 160
Naphthalene	50.0	53.3		ug/Kg		107	60 - 147
N-Propylbenzene	50.0	55.0		ug/Kg		110	70 - 130
Styrene	50.0	56.3		ug/Kg		113	70 - 130
1,1,1,2-Tetrachloroethane	50.0	55.0		ug/Kg		110	70 - 130
1,1,2,2-Tetrachloroethane	50.0	52.7		ug/Kg		105	70 - 146
Tetrachloroethene	50.0	54.0		ug/Kg		108	70 - 132
Toluene	50.0	53.7		ug/Kg		107	75 - 120
1,2,3-Trichlorobenzene	50.0	51.3		ug/Kg		103	60 - 140
1,2,4-Trichlorobenzene	50.0	53.4		ug/Kg		107	60 - 140
1,1,1-Trichloroethane	50.0	53.2		ug/Kg		106	70 - 130
1,1,2-Trichloroethane	50.0	55.0		ug/Kg		110	70 - 130
Trichloroethene	50.0	52.2		ug/Kg		104	70 - 133
Trichlorofluoromethane	50.0	60.6		ug/Kg		121	60 - 140
1,2,3-Trichloropropane	50.0	52.9		ug/Kg		106	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	54.6		ug/Kg		109	60 - 140
1,2,4-Trimethylbenzene	50.0	54.5		ug/Kg		109	70 - 130
1,3,5-Trimethylbenzene	50.0	54.1		ug/Kg		108	70 - 131
Vinyl acetate	50.0	61.1		ug/Kg		122	38 - 176
Vinyl chloride	50.0	58.4		ug/Kg		117	58 - 125
m-Xylene & p-Xylene	50.0	55.6		ug/Kg		111	70 - 146
o-Xylene	50.0	55.7		ug/Kg		111	70 - 140
2,2-Dichloropropane	50.0	57.2		ug/Kg		114	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*112*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*107*		*60 - 140*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250946/5
Matrix: Solid
Analysis Batch: 250946

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*109*		*58 - 140*

Lab Sample ID: LCS 720-250946/7
Matrix: Solid
Analysis Batch: 250946

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	1040		ug/Kg		104	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*101*		*60 - 140*
Toluene-d8 (Surr)	*103*		*58 - 140*

Lab Sample ID: LCSD 720-250946/6
Matrix: Solid
Analysis Batch: 250946

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	54.1		ug/Kg		108	70 - 144	3	20
Acetone	250	259		ug/Kg		104	30 - 162	6	30
Benzene	50.0	53.6		ug/Kg		107	70 - 130	0	20
Dichlorobromomethane	50.0	55.0		ug/Kg		110	70 - 140	1	20
Bromobenzene	50.0	52.0		ug/Kg		104	70 - 130	2	20
Chlorobromomethane	50.0	53.3		ug/Kg		107	70 - 130	1	20
Bromoform	50.0	54.2		ug/Kg		108	59 - 158	4	20
Bromomethane	50.0	57.2		ug/Kg		114	59 - 132	1	20
2-Butanone (MEK)	250	270		ug/Kg		108	59 - 159	4	20
n-Butylbenzene	50.0	56.2		ug/Kg		112	70 - 142	0	20
sec-Butylbenzene	50.0	55.3		ug/Kg		111	70 - 136	1	20
tert-Butylbenzene	50.0	54.1		ug/Kg		108	70 - 130	2	20
Carbon disulfide	50.0	51.9		ug/Kg		104	60 - 140	0	20
Carbon tetrachloride	50.0	55.4		ug/Kg		111	70 - 142	1	20
Chlorobenzene	50.0	53.4		ug/Kg		107	70 - 130	1	20
Chloroethane	50.0	56.1		ug/Kg		112	65 - 130	0	20
Chloroform	50.0	53.6		ug/Kg		107	77 - 127	1	20
Chloromethane	50.0	61.9		ug/Kg		124	55 - 140	0	20
2-Chlorotoluene	50.0	53.9		ug/Kg		108	70 - 138	2	20
4-Chlorotoluene	50.0	54.9		ug/Kg		110	70 - 136	2	20
Chlorodibromomethane	50.0	54.7		ug/Kg		109	70 - 146	1	20
1,2-Dichlorobenzene	50.0	52.3		ug/Kg		105	70 - 130	2	20
1,3-Dichlorobenzene	50.0	52.6		ug/Kg		105	70 - 131	1	20
1,4-Dichlorobenzene	50.0	52.6		ug/Kg		105	70 - 130	1	20
1,3-Dichloropropane	50.0	53.6		ug/Kg		107	70 - 140	3	20
1,1-Dichloropropene	50.0	54.9		ug/Kg		110	70 - 130	0	20
1,2-Dibromo-3-Chloropropane	50.0	51.8		ug/Kg		104	60 - 145	5	20
Ethylene Dibromide	50.0	55.0		ug/Kg		110	70 - 140	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250946/6
Matrix: Solid
Analysis Batch: 250946

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dibromomethane			50.0	53.5		ug/Kg		107	70 - 139	4	20
Dichlorodifluoromethane			50.0	64.7		ug/Kg		129	37 - 158	1	20
1,1-Dichloroethane			50.0	53.9		ug/Kg		108	70 - 130	1	20
1,2-Dichloroethane			50.0	52.6		ug/Kg		105	70 - 130	2	20
1,1-Dichloroethene			50.0	50.2		ug/Kg		100	74 - 122	1	20
cis-1,2-Dichloroethene			50.0	54.0		ug/Kg		108	70 - 138	0	20
trans-1,2-Dichloroethene			50.0	52.7		ug/Kg		105	67 - 130	1	20
1,2-Dichloropropane			50.0	55.0		ug/Kg		110	73 - 127	2	20
cis-1,3-Dichloropropene			50.0	56.6		ug/Kg		113	68 - 147	1	20
trans-1,3-Dichloropropene			50.0	57.3		ug/Kg		115	70 - 155	2	20
Ethylbenzene			50.0	55.8		ug/Kg		112	80 - 137	1	20
Hexachlorobutadiene			50.0	51.6		ug/Kg		103	70 - 132	1	20
2-Hexanone			250	283		ug/Kg		113	62 - 158	7	20
Isopropylbenzene			50.0	54.3		ug/Kg		109	70 - 130	0	20
4-Isopropyltoluene			50.0	55.2		ug/Kg		110	70 - 133	1	20
Methylene Chloride			50.0	52.7		ug/Kg		105	70 - 134	0	20
4-Methyl-2-pentanone (MIBK)			250	287		ug/Kg		115	60 - 160	6	20
Naphthalene			50.0	52.4		ug/Kg		105	60 - 147	2	20
N-Propylbenzene			50.0	55.8		ug/Kg		112	70 - 130	1	20
Styrene			50.0	55.8		ug/Kg		112	70 - 130	1	20
1,1,1,2-Tetrachloroethane			50.0	54.9		ug/Kg		110	70 - 130	0	20
1,1,2,2-Tetrachloroethane			50.0	51.5		ug/Kg		103	70 - 146	2	20
Tetrachloroethene			50.0	54.3		ug/Kg		109	70 - 132	1	20
Toluene			50.0	53.2		ug/Kg		106	75 - 120	1	20
1,2,3-Trichlorobenzene			50.0	51.1		ug/Kg		102	60 - 140	1	20
1,2,4-Trichlorobenzene			50.0	53.3		ug/Kg		107	60 - 140	0	20
1,1,1-Trichloroethane			50.0	53.8		ug/Kg		108	70 - 130	1	20
1,1,2-Trichloroethane			50.0	54.4		ug/Kg		109	70 - 130	1	20
Trichloroethene			50.0	52.2		ug/Kg		104	70 - 133	0	20
Trichlorofluoromethane			50.0	61.3		ug/Kg		123	60 - 140	1	20
1,2,3-Trichloropropane			50.0	51.0		ug/Kg		102	70 - 146	4	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	55.5		ug/Kg		111	60 - 140	2	20
1,2,4-Trimethylbenzene			50.0	55.0		ug/Kg		110	70 - 130	1	20
1,3,5-Trimethylbenzene			50.0	55.2		ug/Kg		110	70 - 131	2	20
Vinyl acetate			50.0	57.2		ug/Kg		114	38 - 176	7	20
Vinyl chloride			50.0	58.9		ug/Kg		118	58 - 125	1	20
m-Xylene & p-Xylene			50.0	54.8		ug/Kg		110	70 - 146	1	20
o-Xylene			50.0	55.2		ug/Kg		110	70 - 140	1	20
2,2-Dichloropropane			50.0	57.3		ug/Kg		115	70 - 162	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*109*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*110*		*60 - 140*
Toluene-d8 (Surr)	*108*		*58 - 140*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250946/8
Matrix: Solid
Analysis Batch: 250946

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	1050		ug/Kg		105	70 - 122	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*101*		*60 - 140*
Toluene-d8 (Surr)	*103*		*58 - 140*

Lab Sample ID: 720-88310-D-1-F MS
Matrix: Solid
Analysis Batch: 250946

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250958

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	0.000		48.3	49.6		ug/Kg		103	69 - 130
Acetone	5.14		241	224		ug/Kg		93	37 - 150
Benzene	0.000		48.3	53.1		ug/Kg		110	70 - 130
Dichlorobromomethane	0.000		48.3	52.9		ug/Kg		110	64 - 135
Bromobenzene	0.000		48.3	58.7		ug/Kg		122	70 - 130
Chlorobromomethane	0.000		48.3	51.2		ug/Kg		106	65 - 130
Bromoform	0.000		48.3	48.8		ug/Kg		101	58 - 132
Bromomethane	0.000		48.3	56.1		ug/Kg		116	56 - 130
2-Butanone (MEK)	0.000		241	224		ug/Kg		93	41 - 150
n-Butylbenzene	0.000		48.3	45.4		ug/Kg		94	60 - 145
sec-Butylbenzene	0.000		48.3	51.2		ug/Kg		106	64 - 137
tert-Butylbenzene	0.000		48.3	54.1		ug/Kg		112	63 - 134
Carbon disulfide	0.000		48.3	51.0		ug/Kg		106	10 - 150
Carbon tetrachloride	0.000		48.3	54.3		ug/Kg		113	54 - 130
Chlorobenzene	0.000		48.3	52.3		ug/Kg		108	70 - 130
Chloroethane	0.000		48.3	56.6		ug/Kg		117	61 - 130
Chloroform	0.000		48.3	53.4		ug/Kg		111	67 - 130
Chloromethane	0.000		48.3	62.7		ug/Kg		130	50 - 131
2-Chlorotoluene	0.000		48.3	58.8		ug/Kg		122	70 - 130
4-Chlorotoluene	0.000		48.3	58.4		ug/Kg		121	70 - 130
Chlorodibromomethane	0.000		48.3	49.2		ug/Kg		102	60 - 141
1,2-Dichlorobenzene	0.000		48.3	50.4		ug/Kg		104	70 - 130
1,3-Dichlorobenzene	0.000		48.3	52.0		ug/Kg		108	70 - 130
1,4-Dichlorobenzene	0.000		48.3	50.6		ug/Kg		105	70 - 130
1,3-Dichloropropane	0.000		48.3	48.8		ug/Kg		101	70 - 130
1,1-Dichloropropene	0.000		48.3	53.7		ug/Kg		111	67 - 130
1,2-Dibromo-3-Chloropropane	0.000		48.3	56.4		ug/Kg		117	57 - 130
Ethylene Dibromide	0.000		48.3	48.7		ug/Kg		101	66 - 135
Dibromomethane	0.000		48.3	49.8		ug/Kg		103	65 - 131
Dichlorodifluoromethane	0.000		48.3	65.4	F1	ug/Kg		136	38 - 130
1,1-Dichloroethane	0.000		48.3	54.2		ug/Kg		112	67 - 130
1,2-Dichloroethane	0.000		48.3	49.7		ug/Kg		103	70 - 130
1,1-Dichloroethene	0.000		48.3	50.4		ug/Kg		105	64 - 130
cis-1,2-Dichloroethene	0.000		48.3	53.3		ug/Kg		110	68 - 131
trans-1,2-Dichloroethene	0.000		48.3	51.7		ug/Kg		107	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88310-D-1-F MS
Matrix: Solid
Analysis Batch: 250946

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250958

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	0.000		48.3	54.0		ug/Kg		112	65 - 133
cis-1,3-Dichloropropene	0.000		48.3	51.9		ug/Kg		108	46 - 139
trans-1,3-Dichloropropene	0.000		48.3	50.1		ug/Kg		104	55 - 131
Ethylbenzene	0.000		48.3	54.5		ug/Kg		113	65 - 130
Hexachlorobutadiene	0.000		48.3	17.8	F1	ug/Kg		37	58 - 132
2-Hexanone	0.000		241	215		ug/Kg		89	44 - 150
Isopropylbenzene	0.000		48.3	49.7		ug/Kg		103	65 - 130
4-Isopropyltoluene	0.000		48.3	48.9		ug/Kg		101	69 - 134
Methylene Chloride	1.74		48.3	52.3		ug/Kg		108	63 - 130
4-Methyl-2-pentanone (MIBK)	0.000		241	243		ug/Kg		101	51 - 140
Naphthalene	0.000		48.3	38.5		ug/Kg		80	45 - 146
N-Propylbenzene	0.000		48.3	59.9		ug/Kg		124	70 - 130
Styrene	0.000		48.3	52.8		ug/Kg		109	58 - 135
1,1,1,2-Tetrachloroethane	0.000		48.3	54.0		ug/Kg		112	64 - 133
1,1,2,2-Tetrachloroethane	14.5		48.3	92.8	F1	ug/Kg		162	70 - 131
Tetrachloroethene	0.000		48.3	49.9		ug/Kg		103	67 - 130
Toluene	0.000		48.3	54.2		ug/Kg		112	70 - 130
1,2,3-Trichlorobenzene	0.000		48.3	25.2	F1	ug/Kg		52	58 - 138
1,2,4-Trichlorobenzene	0.000		48.3	28.6		ug/Kg		59	49 - 144
1,1,1-Trichloroethane	0.000		48.3	53.3		ug/Kg		110	57 - 133
1,1,2-Trichloroethane	0.000		48.3	49.9		ug/Kg		103	68 - 132
Trichloroethene	0.000		48.3	51.0		ug/Kg		106	66 - 130
Trichlorofluoromethane	0.000		48.3	61.5		ug/Kg		127	61 - 130
1,2,3-Trichloropropane	0.000		48.3	62.2		ug/Kg		129	62 - 150
1,1,2-Trichloro-1,2,2-trifluoroethane	0.000		48.3	54.6		ug/Kg		113	52 - 130
1,2,4-Trimethylbenzene	0.000		48.3	49.7		ug/Kg		103	64 - 140
1,3,5-Trimethylbenzene	0.000		48.3	56.4		ug/Kg		117	67 - 134
Vinyl acetate	0.000		48.3	44.1		ug/Kg		91	52 - 150
Vinyl chloride	0.000		48.3	58.8		ug/Kg		122	62 - 130
m-Xylene & p-Xylene	0.000		48.3	49.0		ug/Kg		102	70 - 130
o-Xylene	0.000		48.3	52.9		ug/Kg		110	68 - 130
2,2-Dichloropropane	0.000		48.3	53.2		ug/Kg		110	63 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*107*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*102*		*60 - 140*
Toluene-d8 (Surr)	*108*		*58 - 140*

Lab Sample ID: 720-88310-D-1-G MSD
Matrix: Solid
Analysis Batch: 250946

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250958

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	0.000		50.0	54.4		ug/Kg		109	69 - 130	9	20
Acetone	5.14		250	259		ug/Kg		104	37 - 150	15	20
Benzene	0.000		50.0	53.9		ug/Kg		108	70 - 130	1	20
Dichlorobromomethane	0.000		50.0	54.1		ug/Kg		108	64 - 135	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88310-D-1-G MSD
Matrix: Solid
Analysis Batch: 250946

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250958

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromobenzene	0.000		50.0	57.9		ug/Kg		116	70 - 130	1	20
Chlorobromomethane	0.000		50.0	54.1		ug/Kg		108	65 - 130	6	20
Bromoform	0.000		50.0	52.3		ug/Kg		105	58 - 132	7	20
Bromomethane	0.000		50.0	57.8		ug/Kg		116	56 - 130	3	20
2-Butanone (MEK)	0.000		250	264		ug/Kg		106	41 - 150	16	20
n-Butylbenzene	0.000		50.0	45.8		ug/Kg		92	60 - 145	1	20
sec-Butylbenzene	0.000		50.0	50.3		ug/Kg		101	64 - 137	2	20
tert-Butylbenzene	0.000		50.0	52.6		ug/Kg		105	63 - 134	3	20
Carbon disulfide	0.000		50.0	51.3		ug/Kg		103	10 - 150	1	20
Carbon tetrachloride	0.000		50.0	55.9		ug/Kg		112	54 - 130	3	20
Chlorobenzene	0.000		50.0	52.3		ug/Kg		105	70 - 130	0	20
Chloroethane	0.000		50.0	57.4		ug/Kg		115	61 - 130	1	20
Chloroform	0.000		50.0	54.2		ug/Kg		108	67 - 130	2	20
Chloromethane	0.000		50.0	62.6		ug/Kg		125	50 - 131	0	20
2-Chlorotoluene	0.000		50.0	56.7		ug/Kg		113	70 - 130	4	20
4-Chlorotoluene	0.000		50.0	57.0		ug/Kg		114	70 - 130	2	20
Chlorodibromomethane	0.000		50.0	54.2		ug/Kg		108	60 - 141	10	20
1,2-Dichlorobenzene	0.000		50.0	51.1		ug/Kg		102	70 - 130	1	20
1,3-Dichlorobenzene	0.000		50.0	51.9		ug/Kg		104	70 - 130	0	20
1,4-Dichlorobenzene	0.000		50.0	50.9		ug/Kg		102	70 - 130	0	20
1,3-Dichloropropane	0.000		50.0	53.6		ug/Kg		107	70 - 130	9	20
1,1-Dichloropropene	0.000		50.0	54.1		ug/Kg		108	67 - 130	1	20
1,2-Dibromo-3-Chloropropane	0.000		50.0	64.2		ug/Kg		128	57 - 130	13	20
Ethylene Dibromide	0.000		50.0	55.1		ug/Kg		110	66 - 135	12	20
Dibromomethane	0.000		50.0	54.3		ug/Kg		109	65 - 131	9	20
Dichlorodifluoromethane	0.000		50.0	64.8		ug/Kg		130	38 - 130	1	20
1,1-Dichloroethane	0.000		50.0	55.3		ug/Kg		111	67 - 130	2	20
1,2-Dichloroethane	0.000		50.0	52.8		ug/Kg		106	70 - 130	6	20
1,1-Dichloroethene	0.000		50.0	50.5		ug/Kg		101	64 - 130	0	20
cis-1,2-Dichloroethene	0.000		50.0	53.9		ug/Kg		108	68 - 131	1	20
trans-1,2-Dichloroethene	0.000		50.0	51.1		ug/Kg		102	70 - 130	1	20
1,2-Dichloropropane	0.000		50.0	56.7		ug/Kg		113	65 - 133	5	20
cis-1,3-Dichloropropene	0.000		50.0	55.1		ug/Kg		110	46 - 139	6	20
trans-1,3-Dichloropropene	0.000		50.0	54.7		ug/Kg		109	55 - 131	9	20
Ethylbenzene	0.000		50.0	53.5		ug/Kg		107	65 - 130	2	20
Hexachlorobutadiene	0.000		50.0	19.2	F1	ug/Kg		38	58 - 132	8	20
2-Hexanone	0.000		250	250		ug/Kg		100	44 - 150	15	20
Isopropylbenzene	0.000		50.0	48.7		ug/Kg		97	65 - 130	2	20
4-Isopropyltoluene	0.000		50.0	49.0		ug/Kg		98	69 - 134	0	20
Methylene Chloride	1.74		50.0	54.5		ug/Kg		109	63 - 130	4	20
4-Methyl-2-pentanone (MIBK)	0.000		250	279		ug/Kg		112	51 - 140	14	20
Naphthalene	0.000		50.0	43.6		ug/Kg		87	45 - 146	12	20
N-Propylbenzene	0.000		50.0	57.4		ug/Kg		115	70 - 130	4	20
Styrene	0.000		50.0	53.6		ug/Kg		107	58 - 135	1	20
1,1,1,2-Tetrachloroethane	0.000		50.0	70.5	F1 F2	ug/Kg		141	64 - 133	26	20
1,1,2,2-Tetrachloroethane	14.5		50.0	88.2	F1	ug/Kg		148	70 - 131	5	20
Tetrachloroethene	0.000		50.0	49.4		ug/Kg		99	67 - 130	1	20
Toluene	0.000		50.0	52.6		ug/Kg		105	70 - 130	3	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88310-D-1-G MSD
Matrix: Solid
Analysis Batch: 250946

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250958

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichlorobenzene	0.000		50.0	27.6	F1	ug/Kg		55	58 - 138	9	20
1,2,4-Trichlorobenzene	0.000		50.0	35.3	F2	ug/Kg		71	49 - 144	21	20
1,1,1-Trichloroethane	0.000		50.0	54.5		ug/Kg		109	57 - 133	2	20
1,1,2-Trichloroethane	0.000		50.0	52.9		ug/Kg		106	68 - 132	6	20
Trichloroethene	0.000		50.0	52.4		ug/Kg		105	66 - 130	3	20
Trichlorofluoromethane	0.000		50.0	62.2		ug/Kg		124	61 - 130	1	20
1,2,3-Trichloropropane	0.000		50.0	65.0		ug/Kg		130	62 - 150	4	20
1,1,2-Trichloro-1,2,2-trifluoroethane	0.000		50.0	55.9		ug/Kg		112	52 - 130	2	20
1,2,4-Trimethylbenzene	0.000		50.0	50.2		ug/Kg		100	64 - 140	1	20
1,3,5-Trimethylbenzene	0.000		50.0	54.6		ug/Kg		109	67 - 134	3	20
Vinyl acetate	0.000		50.0	51.3		ug/Kg		103	52 - 150	15	20
Vinyl chloride	0.000		50.0	58.1		ug/Kg		116	62 - 130	1	20
m-Xylene & p-Xylene	0.000		50.0	48.9		ug/Kg		98	70 - 130	0	20
o-Xylene	0.000		50.0	52.3		ug/Kg		105	68 - 130	1	20
2,2-Dichloropropane	0.000		50.0	53.4		ug/Kg		107	63 - 130	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*104*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*106*		*60 - 140*
Toluene-d8 (Surr)	*106*		*58 - 140*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 720-250580/1-A
Matrix: Solid
Analysis Batch: 250742

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250580

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		10	5.0	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Acenaphthene	ND		5.0	2.8	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Anthracene	ND		5.0	2.0	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Benzo[a]anthracene	ND		5.0	1.5	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Benzo[a]pyrene	ND		5.0	1.9	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Benzo[b]fluoranthene	ND		5.0	2.1	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Benzo[g,h,i]perylene	ND		5.0	4.3	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Benzo[k]fluoranthene	ND		5.0	2.1	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Chrysene	ND		5.0	1.4	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Fluoranthene	ND		5.0	1.4	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Fluorene	ND		5.0	2.2	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Indeno[1,2,3-cd]pyrene	ND		5.0	4.2	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Naphthalene	ND		5.0	3.5	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Phenanthrene	ND		5.0	1.8	ug/Kg		08/30/18 10:18	09/01/18 14:14	1
Pyrene	ND		5.0	1.7	ug/Kg		08/30/18 10:18	09/01/18 14:14	1

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 720-250580/1-A
Matrix: Solid
Analysis Batch: 250742

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250580

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	79		33 - 120	08/30/18 10:18	09/01/18 14:14	1
Terphenyl-d14	93		35 - 146	08/30/18 10:18	09/01/18 14:14	1

Lab Sample ID: LCS 720-250580/2-A
Matrix: Solid
Analysis Batch: 250742

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250580

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	667	478		ug/Kg		72	46 - 110
Acenaphthene	667	535		ug/Kg		80	46 - 106
Acenaphthylene	667	523		ug/Kg		78	46 - 108
Anthracene	667	518		ug/Kg		78	55 - 103
Benzo[a]anthracene	667	594		ug/Kg		89	54 - 110
Benzo[a]pyrene	667	559		ug/Kg		84	62 - 111
Benzo[b]fluoranthene	667	578		ug/Kg		87	60 - 109
Benzo[g,h,i]perylene	667	572		ug/Kg		86	52 - 114
Benzo[k]fluoranthene	667	539		ug/Kg		81	58 - 109
Chrysene	667	562		ug/Kg		84	54 - 108
Dibenz(a,h)anthracene	667	599		ug/Kg		90	58 - 112
Fluoranthene	667	521		ug/Kg		78	59 - 109
Fluorene	667	549		ug/Kg		82	52 - 106
Indeno[1,2,3-cd]pyrene	667	603		ug/Kg		90	55 - 120
Naphthalene	667	480		ug/Kg		72	49 - 110
Phenanthrene	667	520		ug/Kg		78	57 - 110
Pyrene	667	579		ug/Kg		87	50 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	75		33 - 120
Terphenyl-d14	90		35 - 146

Lab Sample ID: 720-88242-D-13-H MS
Matrix: Solid
Analysis Batch: 250745

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250580

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	ND	F1	637	233	F1	ug/Kg		37	46 - 110
Acenaphthene	ND	F1	637	278	F1	ug/Kg		44	46 - 106
Acenaphthylene	8.4	F1	637	276	F1	ug/Kg		42	46 - 108
Anthracene	14	F1	637	327	F1	ug/Kg		49	55 - 103
Benzo[a]anthracene	110		637	473		ug/Kg		57	54 - 110
Benzo[a]pyrene	180	F1	637	554	F1	ug/Kg		59	62 - 111
Benzo[b]fluoranthene	200	F1	637	537	F1	ug/Kg		52	60 - 109
Benzo[g,h,i]perylene	100	F1	637	399	F1	ug/Kg		47	52 - 114
Benzo[k]fluoranthene	86		637	460		ug/Kg		59	58 - 109
Chrysene	120	F1	637	460	F1	ug/Kg		53	54 - 108
Dibenz(a,h)anthracene	32	F1	637	371	F1	ug/Kg		53	58 - 112
Fluoranthene	130	F1	637	459	F1	ug/Kg		52	59 - 109
Fluorene	ND	F1	637	295	F1	ug/Kg		46	52 - 106

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 720-88242-D-13-H MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250745 — **Prep Batch: 250580**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Indeno[1,2,3-cd]pyrene	94	F1	637	442		ug/Kg		55	55 - 120
Naphthalene	ND	F1	637	228	F1	ug/Kg		36	49 - 110
Phenanthrene	37	F1	637	331	F1	ug/Kg		46	57 - 110
Pyrene	150		637	497		ug/Kg		54	50 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*39*		*33 - 120*
Terphenyl-d14	*55*		*35 - 146*

Lab Sample ID: 720-88242-D-13-I MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250745 — **Prep Batch: 250580**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	ND	F1	637	207	F1	ug/Kg		33	46 - 110	12	35
Acenaphthene	ND	F1	637	271	F1	ug/Kg		42	46 - 106	3	35
Acenaphthylene	8.4	F1	637	258	F1	ug/Kg		39	46 - 108	7	35
Anthracene	14	F1	637	338	F1	ug/Kg		51	55 - 103	3	35
Benzo[a]anthracene	110		637	471		ug/Kg		56	54 - 110	0	35
Benzo[a]pyrene	180	F1	637	535	F1	ug/Kg		56	62 - 111	4	35
Benzo[b]fluoranthene	200	F1	637	531	F1	ug/Kg		51	60 - 109	1	35
Benzo[g,h,i]perylene	100	F1	637	356	F1	ug/Kg		40	52 - 114	11	35
Benzo[k]fluoranthene	86		637	467		ug/Kg		60	58 - 109	2	35
Chrysene	120	F1	637	440	F1	ug/Kg		50	54 - 108	5	35
Dibenz(a,h)anthracene	32	F1	637	348	F1	ug/Kg		50	58 - 112	6	35
Fluoranthene	130	F1	637	447	F1	ug/Kg		50	59 - 109	3	35
Fluorene	ND	F1	637	294	F1	ug/Kg		46	52 - 106	0	35
Indeno[1,2,3-cd]pyrene	94	F1	637	408	F1	ug/Kg		49	55 - 120	8	35
Naphthalene	ND	F1	637	201	F1	ug/Kg		32	49 - 110	13	35
Phenanthrene	37	F1	637	342	F1	ug/Kg		48	57 - 110	3	35
Pyrene	150		637	487		ug/Kg		52	50 - 120	2	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*37*		*33 - 120*
Terphenyl-d14	*54*		*35 - 146*

Lab Sample ID: MB 720-250607/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250799 — **Prep Batch: 250607**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		10	5.0	ug/Kg		08/30/18 14:15	09/04/18 12:21	1
Acenaphthene	ND		5.0	2.8	ug/Kg		08/30/18 14:15	09/04/18 12:21	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		08/30/18 14:15	09/04/18 12:21	1
Anthracene	ND		5.0	2.0	ug/Kg		08/30/18 14:15	09/04/18 12:21	1
Benzo[a]anthracene	ND		5.0	1.5	ug/Kg		08/30/18 14:15	09/04/18 12:21	1
Benzo[a]pyrene	ND		5.0	1.9	ug/Kg		08/30/18 14:15	09/04/18 12:21	1
Benzo[b]fluoranthene	ND		5.0	2.1	ug/Kg		08/30/18 14:15	09/04/18 12:21	1

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 720-250607/1-A
Matrix: Solid
Analysis Batch: 250799

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250607

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		5.0	4.3	ug/Kg		08/30/18 14:15	09/04/18 12:21	1
Benzo[k]fluoranthene	ND		5.0	2.1	ug/Kg		08/30/18 14:15	09/04/18 12:21	1
Chrysene	ND		5.0	1.4	ug/Kg		08/30/18 14:15	09/04/18 12:21	1
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		08/30/18 14:15	09/04/18 12:21	1
Fluoranthene	ND		5.0	1.4	ug/Kg		08/30/18 14:15	09/04/18 12:21	1
Fluorene	ND		5.0	2.2	ug/Kg		08/30/18 14:15	09/04/18 12:21	1
Indeno[1,2,3-cd]pyrene	ND		5.0	4.2	ug/Kg		08/30/18 14:15	09/04/18 12:21	1
Naphthalene	ND		5.0	3.5	ug/Kg		08/30/18 14:15	09/04/18 12:21	1
Phenanthrene	ND		5.0	1.8	ug/Kg		08/30/18 14:15	09/04/18 12:21	1
Pyrene	ND		5.0	1.7	ug/Kg		08/30/18 14:15	09/04/18 12:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*33 - 120*	*08/30/18 14:15*	*09/04/18 12:21*	*1*
Terphenyl-d14	*99*		*35 - 146*	*08/30/18 14:15*	*09/04/18 12:21*	*1*

Lab Sample ID: LCS 720-250607/2-A
Matrix: Solid
Analysis Batch: 250799

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250607

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	667	437		ug/Kg		66	46 - 110
Acenaphthene	667	527		ug/Kg		79	46 - 106
Acenaphthylene	667	510		ug/Kg		76	46 - 108
Anthracene	667	539		ug/Kg		81	55 - 103
Benzo[a]anthracene	667	587		ug/Kg		88	54 - 110
Benzo[a]pyrene	667	574		ug/Kg		86	62 - 111
Benzo[b]fluoranthene	667	563		ug/Kg		84	60 - 109
Benzo[g,h,i]perylene	667	557		ug/Kg		84	52 - 114
Benzo[k]fluoranthene	667	563		ug/Kg		84	58 - 109
Chrysene	667	597		ug/Kg		89	54 - 108
Dibenz(a,h)anthracene	667	568		ug/Kg		85	58 - 112
Fluoranthene	667	536		ug/Kg		80	59 - 109
Fluorene	667	541		ug/Kg		81	52 - 106
Indeno[1,2,3-cd]pyrene	667	588		ug/Kg		88	55 - 120
Naphthalene	667	450		ug/Kg		68	49 - 110
Phenanthrene	667	532		ug/Kg		80	57 - 110
Pyrene	667	586		ug/Kg		88	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*68*		*33 - 120*
Terphenyl-d14	*89*		*35 - 146*

Lab Sample ID: 720-88263-10 MS
Matrix: Solid
Analysis Batch: 250799

Client Sample ID: DG-K11S-0.5-1
Prep Type: Total/NA
Prep Batch: 250607

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	6.4	J	652	398		ug/Kg		60	46 - 110

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 720-88263-10 MS — **Client Sample ID: DG-K11S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250799 — **Prep Batch: 250607**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	ND		652	463		ug/Kg		71	46 - 106
Acenaphthylene	3.2	J	652	440		ug/Kg		67	46 - 108
Anthracene	5.8		652	507		ug/Kg		77	55 - 103
Benzo[a]anthracene	16		652	627		ug/Kg		94	54 - 110
Benzo[a]pyrene	21		652	694	*	ug/Kg		103	62 - 111
Benzo[b]fluoranthene	33	F1	652	771	F1 *	ug/Kg		113	60 - 109
Benzo[g,h,i]perylene	9.4	F1	652	335	F1 *	ug/Kg		50	52 - 114
Benzo[k]fluoranthene	14	F1	652	731	F1 *	ug/Kg		110	58 - 109
Chrysene	25		652	670		ug/Kg		99	54 - 108
Dibenz(a,h)anthracene	ND	F1	652	328	F1 *	ug/Kg		50	58 - 112
Fluoranthene	24		652	594		ug/Kg		87	59 - 109
Fluorene	ND		652	484		ug/Kg		74	52 - 106
Indeno[1,2,3-cd]pyrene	8.7	F1	652	375	*	ug/Kg		56	55 - 120
Naphthalene	4.5	J	652	384		ug/Kg		58	49 - 110
Phenanthrene	19		652	564		ug/Kg		83	57 - 110
Pyrene	29		652	798		ug/Kg		118	50 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*59*		*33 - 120*
Terphenyl-d14	*105*		*35 - 146*

Lab Sample ID: 720-88263-10 MSD — **Client Sample ID: DG-K11S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250799 — **Prep Batch: 250607**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	6.4	J	651	376		ug/Kg		57	46 - 110	6	35
Acenaphthene	ND		651	449		ug/Kg		69	46 - 106	3	35
Acenaphthylene	3.2	J	651	439		ug/Kg		67	46 - 108	0	35
Anthracene	5.8		651	515		ug/Kg		78	55 - 103	1	35
Benzo[a]anthracene	16		651	602		ug/Kg		90	54 - 110	4	35
Benzo[a]pyrene	21		651	572	*	ug/Kg		85	62 - 111	19	35
Benzo[b]fluoranthene	33	F1	651	679	*	ug/Kg		99	60 - 109	13	35
Benzo[g,h,i]perylene	9.4	F1	651	248	F1 *	ug/Kg		37	52 - 114	30	35
Benzo[k]fluoranthene	14	F1	651	670	*	ug/Kg		101	58 - 109	9	35
Chrysene	25		651	629		ug/Kg		93	54 - 108	6	35
Dibenz(a,h)anthracene	ND	F1	651	301	F1 *	ug/Kg		46	58 - 112	8	35
Fluoranthene	24		651	569		ug/Kg		84	59 - 109	4	35
Fluorene	ND		651	480		ug/Kg		74	52 - 106	1	35
Indeno[1,2,3-cd]pyrene	8.7	F1	651	298	F1 *	ug/Kg		44	55 - 120	23	35
Naphthalene	4.5	J	651	346		ug/Kg		53	49 - 110	10	35
Phenanthrene	19		651	539		ug/Kg		80	57 - 110	4	35
Pyrene	29		651	745		ug/Kg		110	50 - 120	7	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*60*		*33 - 120*
Terphenyl-d14	*105*		*35 - 146*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-250566/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250884 — **Prep Batch: 250566**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		2000	750	ug/Kg		08/30/18 08:54	09/05/18 11:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*88*		*40 - 130*	*08/30/18 08:54*	*09/05/18 11:03*	*1*

Lab Sample ID: LCS 720-250566/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250885 — **Prep Batch: 250566**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	167000	135000		ug/Kg		81	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*81*		*40 - 130*

Lab Sample ID: 720-88263-16 MS — **Client Sample ID: DG-E11S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250885 — **Prep Batch: 250566**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	130000		162000	323000		ug/Kg		121	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
p-Terphenyl	*0*	*X D*	*40 - 130*

Lab Sample ID: 720-88263-16 MSD — **Client Sample ID: DG-E11S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250885 — **Prep Batch: 250566**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	130000		162000	271000		ug/Kg		89	50 - 150	17	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
p-Terphenyl	*0*	*X D*	*40 - 130*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 720-250531/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250746 — **Prep Batch: 250531**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.61	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/29/18 17:11	09/03/18 14:01	1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 720-250531/1-A
Matrix: Solid
Analysis Batch: 250746

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250531

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Aldrin	ND		2.0	0.50	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
alpha-BHC	ND		2.0	0.55	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Dieldrin	ND		2.0	0.59	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Endrin	ND		2.0	0.46	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Endrin aldehyde	ND		2.0	0.63	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Methoxychlor	ND		2.0	0.68	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
Toxaphene	ND		40	6.8	ug/Kg		08/29/18 17:11	09/03/18 14:01	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/29/18 17:11	09/03/18 14:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*87*		*21 - 136*	*08/29/18 17:11*	*09/03/18 14:01*	*1*
Tetrachloro-m-xylene	*83*		*21 - 145*	*08/29/18 17:11*	*09/03/18 14:01*	*1*

Lab Sample ID: LCS 720-250531/2-A
Matrix: Solid
Analysis Batch: 250746

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250531

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	16.5		ug/Kg		99	75 - 128
4,4'-DDE	16.7	15.3		ug/Kg		92	76 - 126
4,4'-DDT	16.7	14.9		ug/Kg		89	63 - 127
Aldrin	16.7	13.7		ug/Kg		82	65 - 120
alpha-BHC	16.7	11.0		ug/Kg		66	46 - 122
beta-BHC	16.7	15.9		ug/Kg		95	78 - 136
cis-Chlordane	16.7	15.1		ug/Kg		90	70 - 120
delta-BHC	16.7	13.9		ug/Kg		83	43 - 125
Dieldrin	16.7	14.9		ug/Kg		89	72 - 120
Endosulfan I	16.7	14.9		ug/Kg		89	62 - 120
Endosulfan II	16.7	15.9		ug/Kg		95	65 - 120
Endosulfan sulfate	16.7	15.3		ug/Kg		92	72 - 121
Endrin	16.7	15.6		ug/Kg		94	68 - 120
Endrin aldehyde	16.7	16.0		ug/Kg		96	68 - 120
Endrin ketone	16.7	16.0		ug/Kg		96	75 - 136
gamma-BHC (Lindane)	16.7	14.1		ug/Kg		84	72 - 120
Heptachlor	16.7	14.6		ug/Kg		87	69 - 120
Heptachlor epoxide	16.7	15.1		ug/Kg		91	68 - 120

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 720-250531/2-A
Matrix: Solid
Analysis Batch: 250746

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250531

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methoxychlor	16.7	17.2		ug/Kg		103	71 - 132
trans-Chlordane	16.7	15.1		ug/Kg		91	68 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*98*		*21 - 136*
Tetrachloro-m-xylene	*83*		*21 - 145*

Lab Sample ID: 720-88239-D-13-H MS
Matrix: Solid
Analysis Batch: 250746

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250531

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		15.8	14.2		ug/Kg		89	40 - 120
4,4'-DDE	ND		15.8	14.4		ug/Kg		91	40 - 120
4,4'-DDT	ND		15.8	14.8		ug/Kg		94	17 - 144
Aldrin	ND	F2	15.8	12.8		ug/Kg		81	53 - 120
alpha-BHC	ND		15.8	10.8		ug/Kg		68	40 - 120
beta-BHC	ND		15.8	9.48	J	ug/Kg		60	40 - 120
cis-Chlordane	ND		15.8	13.8		ug/Kg		87	40 - 120
delta-BHC	ND	F2	15.8	11.1		ug/Kg		70	40 - 120
Dieldrin	ND		15.8	13.7		ug/Kg		86	46 - 130
Endosulfan I	ND		15.8	14.7		ug/Kg		93	40 - 120
Endosulfan II	ND		15.8	14.0		ug/Kg		88	40 - 120
Endosulfan sulfate	ND		15.8	11.1		ug/Kg		70	40 - 120
Endrin	ND		15.8	15.5		ug/Kg		98	32 - 143
Endrin aldehyde	ND	F2	15.8	9.82	p	ug/Kg		62	40 - 120
Endrin ketone	ND		15.8	12.5		ug/Kg		79	40 - 120
gamma-BHC (Lindane)	ND		15.8	12.6		ug/Kg		80	58 - 120
Heptachlor	ND		15.8	14.1		ug/Kg		89	52 - 120
Heptachlor epoxide	ND		15.8	14.3		ug/Kg		90	40 - 120
Methoxychlor	ND	F2	15.8	16.5		ug/Kg		104	40 - 120
trans-Chlordane	ND	F1	15.8	14.9		ug/Kg		94	40 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*80*		*21 - 136*
Tetrachloro-m-xylene	*93*		*21 - 145*

Lab Sample ID: 720-88239-D-13-I MSD
Matrix: Solid
Analysis Batch: 250746

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250531

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		15.8	14.0		ug/Kg		89	40 - 120	1	20
4,4'-DDE	ND		15.8	14.5		ug/Kg		92	40 - 120	0	20
4,4'-DDT	ND		15.8	17.4		ug/Kg		110	17 - 144	16	20
Aldrin	ND	F2	15.8	15.8	F2	ug/Kg		100	53 - 120	21	20
alpha-BHC	ND		15.8	11.6		ug/Kg		73	40 - 120	8	20
beta-BHC	ND		15.8	11.6		ug/Kg		74	40 - 120	20	20

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 720-88239-D-13-I MSD
Matrix: Solid
Analysis Batch: 250746

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250531

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-Chlordane	ND		15.8	15.4		ug/Kg		97	40 - 120	11	20
delta-BHC	ND	F2	15.8	13.9	F2	ug/Kg		88	40 - 120	23	20
Dieldrin	ND		15.8	16.4		ug/Kg		104	46 - 130	18	20
Endosulfan I	ND		15.8	15.0		ug/Kg		95	40 - 120	2	20
Endosulfan II	ND		15.8	16.3		ug/Kg		103	40 - 120	15	30
Endosulfan sulfate	ND		15.8	13.2		ug/Kg		84	40 - 120	18	20
Endrin	ND		15.8	18.4		ug/Kg		117	32 - 143	17	20
Endrin aldehyde	ND	F2	15.8	13.0	F2	ug/Kg		82	40 - 120	28	20
Endrin ketone	ND		15.8	14.8		ug/Kg		94	40 - 120	17	20
gamma-BHC (Lindane)	ND		15.8	13.6		ug/Kg		86	58 - 120	8	20
Heptachlor	ND		15.8	14.2		ug/Kg		90	52 - 120	0	20
Heptachlor epoxide	ND		15.8	15.6		ug/Kg		99	40 - 120	9	20
Methoxychlor	ND	F2	15.8	13.4	F2	ug/Kg		84	40 - 120	21	20
trans-Chlordane	ND	F1	15.8	15.6		ug/Kg		99	40 - 120	5	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*105*		*21 - 136*
Tetrachloro-m-xylene	*94*		*21 - 145*

Lab Sample ID: MB 720-250595/1-A
Matrix: Solid
Analysis Batch: 250868

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250595

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.61	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
Aldrin	ND		2.0	0.50	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
alpha-BHC	ND		2.0	0.55	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
Dieldrin	ND		2.0	0.59	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
Endrin	ND		2.0	0.46	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
Endrin aldehyde	ND		2.0	0.63	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
Methoxychlor	ND		2.0	0.68	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
Toxaphene	ND		40	6.8	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/30/18 12:52	09/05/18 05:43	1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 720-250595/1-A
Matrix: Solid
Analysis Batch: 250868

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250595

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	99		21 - 136	08/30/18 12:52	09/05/18 05:43	1
Tetrachloro-m-xylene	82		21 - 145	08/30/18 12:52	09/05/18 05:43	1

Lab Sample ID: LCS 720-250595/2-A
Matrix: Solid
Analysis Batch: 250868

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250595

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	17.6		ug/Kg		105	75 - 128
4,4'-DDE	16.7	17.2		ug/Kg		103	76 - 126
4,4'-DDT	16.7	16.7		ug/Kg		100	63 - 127
Aldrin	16.7	14.2		ug/Kg		85	65 - 120
alpha-BHC	16.7	11.3		ug/Kg		68	46 - 122
beta-BHC	16.7	16.4		ug/Kg		99	78 - 136
cis-Chlordane	16.7	16.2		ug/Kg		97	70 - 120
delta-BHC	16.7	14.2		ug/Kg		85	43 - 125
Dieldrin	16.7	16.2		ug/Kg		97	72 - 120
Endosulfan I	16.7	16.1		ug/Kg		97	62 - 120
Endosulfan II	16.7	17.2		ug/Kg		103	65 - 120
Endosulfan sulfate	16.7	16.3		ug/Kg		98	72 - 121
Endrin	16.7	17.1		ug/Kg		103	68 - 120
Endrin aldehyde	16.7	16.6		ug/Kg		99	68 - 120
Endrin ketone	16.7	16.8		ug/Kg		101	75 - 136
gamma-BHC (Lindane)	16.7	14.8		ug/Kg		89	72 - 120
Heptachlor	16.7	15.6		ug/Kg		94	69 - 120
Heptachlor epoxide	16.7	16.1		ug/Kg		97	68 - 120
Methoxychlor	16.7	18.2		ug/Kg		109	71 - 132
trans-Chlordane	16.7	16.1		ug/Kg		97	68 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	107		21 - 136
Tetrachloro-m-xylene	82		21 - 145

Lab Sample ID: 720-88264-D-5-A MS
Matrix: Solid
Analysis Batch: 250868

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250595

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND	F1	16.3	18.3		ug/Kg		112	40 - 120
4,4'-DDE	ND		16.3	15.7		ug/Kg		96	40 - 120
4,4'-DDT	ND	F2	16.3	14.3		ug/Kg		88	17 - 144
Aldrin	ND		16.3	14.4		ug/Kg		88	53 - 120
alpha-BHC	ND		16.3	12.4		ug/Kg		76	40 - 120
beta-BHC	ND	F2	16.3	15.7		ug/Kg		96	40 - 120
cis-Chlordane	ND		16.3	15.7		ug/Kg		96	40 - 120
delta-BHC	ND	F2	16.3	12.5		ug/Kg		76	40 - 120
Dieldrin	ND		16.3	15.6		ug/Kg		96	46 - 130
Endosulfan I	ND		16.3	16.4		ug/Kg		101	40 - 120

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 720-88264-D-5-A MS
Matrix: Solid
Analysis Batch: 250868

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250595

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Endosulfan II	ND		16.3	16.9		ug/Kg		104	40 - 120
Endosulfan sulfate	ND	F2	16.3	16.0		ug/Kg		98	40 - 120
Endrin	ND		16.3	18.4		ug/Kg		113	32 - 143
Endrin aldehyde	ND		16.3	15.6		ug/Kg		96	40 - 120
Endrin ketone	ND	F2	16.3	16.3		ug/Kg		100	40 - 120
gamma-BHC (Lindane)	ND		16.3	15.6		ug/Kg		96	58 - 120
Heptachlor	ND		16.3	15.4		ug/Kg		94	52 - 120
Heptachlor epoxide	ND		16.3	16.1		ug/Kg		99	40 - 120
Methoxychlor	ND	F2	16.3	17.2		ug/Kg		105	40 - 120
trans-Chlordane	ND	F1	16.3	16.5		ug/Kg		101	40 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*105*		*21 - 136*
Tetrachloro-m-xylene	*90*		*21 - 145*

Lab Sample ID: 720-88264-D-5-B MSD
Matrix: Solid
Analysis Batch: 250868

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250595

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND	F1	16.3	17.3		ug/Kg		106	40 - 120	6	20
4,4'-DDE	ND		16.3	14.9		ug/Kg		91	40 - 120	5	20
4,4'-DDT	ND	F2	16.3	10.2	F2	ug/Kg		62	17 - 144	34	20
Aldrin	ND		16.3	13.4		ug/Kg		82	53 - 120	7	20
alpha-BHC	ND		16.3	12.7		ug/Kg		78	40 - 120	3	20
beta-BHC	ND	F2	16.3	12.1	F2	ug/Kg		74	40 - 120	26	20
cis-Chlordane	ND		16.3	14.2		ug/Kg		87	40 - 120	10	20
delta-BHC	ND	F2	16.3	10.0	F2	ug/Kg		61	40 - 120	22	20
Dieldrin	ND		16.3	14.3		ug/Kg		88	46 - 130	9	20
Endosulfan I	ND		16.3	15.4		ug/Kg		95	40 - 120	6	20
Endosulfan II	ND		16.3	14.9		ug/Kg		91	40 - 120	13	30
Endosulfan sulfate	ND	F2	16.3	12.7	F2	ug/Kg		78	40 - 120	23	20
Endrin	ND		16.3	16.6		ug/Kg		102	32 - 143	10	20
Endrin aldehyde	ND		16.3	12.2	F2	ug/Kg		75	40 - 120	24	20
Endrin ketone	ND	F2	16.3	12.8	F2	ug/Kg		79	40 - 120	24	20
gamma-BHC (Lindane)	ND		16.3	13.9		ug/Kg		85	58 - 120	11	20
Heptachlor	ND		16.3	14.1		ug/Kg		87	52 - 120	8	20
Heptachlor epoxide	ND		16.3	16.0		ug/Kg		98	40 - 120	1	20
Methoxychlor	ND	F2	16.3	11.8	F2	ug/Kg		72	40 - 120	37	20
trans-Chlordane	ND	F1	16.3	15.3		ug/Kg		94	40 - 120	7	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*90*		*21 - 136*
Tetrachloro-m-xylene	*87*		*21 - 145*

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 720-250674/1-A
Matrix: Solid
Analysis Batch: 250868

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250674

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.61	ug/Kg		08/31/18 09:53	09/05/18 06:16	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/31/18 09:53	09/05/18 06:16	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/31/18 09:53	09/05/18 06:16	1
Aldrin	ND		2.0	0.50	ug/Kg		08/31/18 09:53	09/05/18 06:16	1
alpha-BHC	ND		2.0	0.55	ug/Kg		08/31/18 09:53	09/05/18 06:16	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/31/18 09:53	09/05/18 06:16	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/31/18 09:53	09/05/18 06:16	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/31/18 09:53	09/05/18 06:16	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/31/18 09:53	09/05/18 06:16	1
Dieldrin	ND		2.0	0.59	ug/Kg		08/31/18 09:53	09/05/18 06:16	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/31/18 09:53	09/05/18 06:16	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/31/18 09:53	09/05/18 06:16	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/31/18 09:53	09/05/18 06:16	1
Endrin	ND		2.0	0.46	ug/Kg		08/31/18 09:53	09/05/18 06:16	1
Endrin aldehyde	ND		2.0	0.63	ug/Kg		08/31/18 09:53	09/05/18 06:16	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/31/18 09:53	09/05/18 06:16	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		08/31/18 09:53	09/05/18 06:16	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/31/18 09:53	09/05/18 06:16	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/31/18 09:53	09/05/18 06:16	1
Methoxychlor	ND		2.0	0.68	ug/Kg		08/31/18 09:53	09/05/18 06:16	1
Toxaphene	ND		40	6.8	ug/Kg		08/31/18 09:53	09/05/18 06:16	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/31/18 09:53	09/05/18 06:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*111*		*21 - 136*	*08/31/18 09:53*	*09/05/18 06:16*	*1*
Tetrachloro-m-xylene	*89*		*21 - 145*	*08/31/18 09:53*	*09/05/18 06:16*	*1*

Lab Sample ID: LCS 720-250674/2-A
Matrix: Solid
Analysis Batch: 250868

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250674

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	18.2		ug/Kg		109	75 - 128
4,4'-DDE	16.7	17.8		ug/Kg		107	76 - 126
4,4'-DDT	16.7	17.8		ug/Kg		107	63 - 127
Aldrin	16.7	14.7		ug/Kg		88	65 - 120
alpha-BHC	16.7	11.7		ug/Kg		70	46 - 122
beta-BHC	16.7	17.0		ug/Kg		102	78 - 136
cis-Chlordane	16.7	16.8		ug/Kg		101	70 - 120
delta-BHC	16.7	14.7		ug/Kg		88	43 - 125
Dieldrin	16.7	16.8		ug/Kg		101	72 - 120
Endosulfan I	16.7	16.9		ug/Kg		102	62 - 120
Endosulfan II	16.7	18.0		ug/Kg		108	65 - 120
Endosulfan sulfate	16.7	17.1		ug/Kg		102	72 - 121
Endrin	16.7	17.9		ug/Kg		107	68 - 120
Endrin aldehyde	16.7	17.1		ug/Kg		102	68 - 120
Endrin ketone	16.7	18.1		ug/Kg		109	75 - 136
gamma-BHC (Lindane)	16.7	15.3		ug/Kg		92	72 - 120

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 720-250674/2-A
Matrix: Solid
Analysis Batch: 250868

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250674

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Heptachlor	16.7	16.2		ug/Kg		97	69 - 120
Heptachlor epoxide	16.7	16.6		ug/Kg		100	68 - 120
Methoxychlor	16.7	19.2		ug/Kg		115	71 - 132
trans-Chlordane	16.7	16.7		ug/Kg		100	68 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*113*		*21 - 136*
Tetrachloro-m-xylene	*85*		*21 - 145*

Lab Sample ID: 720-88291-D-3-B MS
Matrix: Solid
Analysis Batch: 250891

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250674

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		16.2	14.8		ug/Kg		92	40 - 120
4,4'-DDE	ND		16.2	14.4		ug/Kg		89	40 - 120
4,4'-DDT	ND		16.2	13.9		ug/Kg		86	17 - 144
Aldrin	ND		16.2	12.2		ug/Kg		76	53 - 120
alpha-BHC	ND		16.2	11.4		ug/Kg		70	40 - 120
beta-BHC	ND		16.2	15.9		ug/Kg		98	40 - 120
cis-Chlordane	ND		16.2	14.5		ug/Kg		90	40 - 120
delta-BHC	ND		16.2	12.9		ug/Kg		80	40 - 120
Dieldrin	ND		16.2	14.4		ug/Kg		89	46 - 130
Endosulfan I	ND		16.2	14.6		ug/Kg		90	40 - 120
Endosulfan II	ND		16.2	15.2		ug/Kg		94	40 - 120
Endosulfan sulfate	ND		16.2	15.3		ug/Kg		95	40 - 120
Endrin	ND		16.2	15.3		ug/Kg		95	32 - 143
Endrin aldehyde	ND		16.2	15.1		ug/Kg		93	40 - 120
Endrin ketone	ND		16.2	14.5		ug/Kg		90	40 - 120
gamma-BHC (Lindane)	ND		16.2	13.0		ug/Kg		80	58 - 120
Heptachlor	ND		16.2	13.1		ug/Kg		81	52 - 120
Heptachlor epoxide	ND		16.2	14.3		ug/Kg		88	40 - 120
Methoxychlor	ND		16.2	13.6		ug/Kg		84	40 - 120
trans-Chlordane	ND		16.2	14.2		ug/Kg		88	40 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*86*		*21 - 136*
Tetrachloro-m-xylene	*72*		*21 - 145*

Lab Sample ID: 720-88291-D-3-C MSD
Matrix: Solid
Analysis Batch: 250891

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250674

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		16.2	15.5		ug/Kg		96	40 - 120	4	20
4,4'-DDE	ND		16.2	14.6		ug/Kg		90	40 - 120	1	20
4,4'-DDT	ND		16.2	14.1		ug/Kg		87	17 - 144	1	20
Aldrin	ND		16.2	12.7		ug/Kg		79	53 - 120	4	20

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 720-88291-D-3-C MSD
Matrix: Solid
Analysis Batch: 250891

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250674

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
alpha-BHC	ND		16.2	11.8		ug/Kg		73	40 - 120	4	20
beta-BHC	ND		16.2	15.8		ug/Kg		98	40 - 120	0	20
cis-Chlordane	ND		16.2	14.7		ug/Kg		91	40 - 120	1	20
delta-BHC	ND		16.2	12.9		ug/Kg		80	40 - 120	0	20
Dieldrin	ND		16.2	14.4		ug/Kg		89	46 - 130	0	20
Endosulfan I	ND		16.2	14.8		ug/Kg		91	40 - 120	1	20
Endosulfan II	ND		16.2	15.5		ug/Kg		96	40 - 120	2	30
Endosulfan sulfate	ND		16.2	15.2		ug/Kg		94	40 - 120	1	20
Endrin	ND		16.2	15.4		ug/Kg		96	32 - 143	1	20
Endrin aldehyde	ND		16.2	16.0		ug/Kg		99	40 - 120	6	20
Endrin ketone	ND		16.2	15.0		ug/Kg		93	40 - 120	3	20
gamma-BHC (Lindane)	ND		16.2	13.2		ug/Kg		82	58 - 120	2	20
Heptachlor	ND		16.2	13.6		ug/Kg		84	52 - 120	3	20
Heptachlor epoxide	ND		16.2	14.4		ug/Kg		89	40 - 120	1	20
Methoxychlor	ND		16.2	14.4		ug/Kg		89	40 - 120	6	20
trans-Chlordane	ND		16.2	14.4		ug/Kg		89	40 - 120	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*94*		*21 - 136*
Tetrachloro-m-xylene	*78*		*21 - 145*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-343157/23-A
Matrix: Solid
Analysis Batch: 343540

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 343157

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/30/18 06:48	09/01/18 11:44	1
Aroclor-1221	ND		50	24	ug/Kg		08/30/18 06:48	09/01/18 11:44	1
Aroclor-1232	ND		50	23	ug/Kg		08/30/18 06:48	09/01/18 11:44	1
Aroclor-1242	ND		50	19	ug/Kg		08/30/18 06:48	09/01/18 11:44	1
Aroclor-1248	ND		50	24	ug/Kg		08/30/18 06:48	09/01/18 11:44	1
Aroclor-1254	ND		50	23	ug/Kg		08/30/18 06:48	09/01/18 11:44	1
Aroclor-1260	ND		50	22	ug/Kg		08/30/18 06:48	09/01/18 11:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*14 - 128*	*08/30/18 06:48*	*09/01/18 11:44*	*1*
DCB Decachlorobiphenyl	*81*		*10 - 132*	*08/30/18 06:48*	*09/01/18 11:44*	*1*

Lab Sample ID: LCS 240-343157/24-A
Matrix: Solid
Analysis Batch: 343540

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 343157

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	1000	667		ug/Kg		67	47 - 120
Aroclor-1260	1000	792		ug/Kg		79	46 - 120

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 240-343157/24-A
Matrix: Solid
Analysis Batch: 343540

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 343157

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*78*		*14 - 128*
DCB Decachlorobiphenyl	*81*		*10 - 132*

Lab Sample ID: 720-88263-18 MS
Matrix: Solid
Analysis Batch: 343584

Client Sample ID: DG-E11S-9.5-10
Prep Type: Total/NA
Prep Batch: 343157

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	ND		990	737		ug/Kg		74	31 - 120
Aroclor-1260	ND		990	774		ug/Kg		78	21 - 122

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*81*		*14 - 128*
DCB Decachlorobiphenyl	*87*		*10 - 132*

Lab Sample ID: 720-88263-18 MSD
Matrix: Solid
Analysis Batch: 343584

Client Sample ID: DG-E11S-9.5-10
Prep Type: Total/NA
Prep Batch: 343157

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	ND		996	647		ug/Kg		65	31 - 120	13	30
Aroclor-1260	ND		996	660		ug/Kg		66	21 - 122	16	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*72*		*14 - 128*
DCB Decachlorobiphenyl	*66*		*10 - 132*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-250513/1-A
Matrix: Solid
Analysis Batch: 250635

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250513

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Arsenic	ND		1.0	0.085	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Barium	ND		0.50	0.071	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Beryllium	ND		0.10	0.033	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Cadmium	ND		0.13	0.012	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Chromium	ND		0.50	0.053	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Cobalt	ND		0.20	0.020	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Copper	ND		1.5	0.71	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Lead	ND		0.50	0.11	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Nickel	ND		0.50	0.051	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Selenium	ND		1.0	0.15	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Silver	ND		0.25	0.051	mg/Kg		08/29/18 15:55	08/30/18 15:54	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 720-250513/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250635 — **Prep Batch: 250513**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		0.50	0.15	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Vanadium	ND		0.50	0.068	mg/Kg		08/29/18 15:55	08/30/18 15:54	1
Zinc	ND		1.5	0.64	mg/Kg		08/29/18 15:55	08/30/18 15:54	1

Lab Sample ID: LCS 720-250513/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250635 — **Prep Batch: 250513**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	46.9		mg/Kg		94	80 - 120
Arsenic	50.0	47.0		mg/Kg		94	80 - 120
Barium	50.0	52.1		mg/Kg		104	80 - 120
Beryllium	50.0	51.6		mg/Kg		103	80 - 120
Cadmium	50.0	47.1		mg/Kg		94	80 - 120
Chromium	50.0	47.6		mg/Kg		95	80 - 120
Cobalt	50.0	48.7		mg/Kg		97	80 - 120
Copper	50.0	47.1		mg/Kg		94	80 - 120
Lead	50.0	48.0		mg/Kg		96	80 - 120
Molybdenum	50.0	48.1		mg/Kg		96	80 - 120
Nickel	50.0	47.6		mg/Kg		95	80 - 120
Selenium	50.0	45.8		mg/Kg		92	80 - 120
Silver	25.0	23.8		mg/Kg		95	80 - 120
Thallium	50.0	47.9		mg/Kg		96	80 - 120
Vanadium	50.0	47.3		mg/Kg		95	80 - 120
Zinc	50.0	47.3		mg/Kg		95	80 - 120

Lab Sample ID: 720-88260-A-2-A MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250635 — **Prep Batch: 250513**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.2	J F1	48.1	10.9	F1	mg/Kg		20	75 - 125
Arsenic	1.6	J	48.1	57.1		mg/Kg		115	75 - 125
Barium	27	F1	48.1	85.1		mg/Kg		120	75 - 125
Beryllium	ND	F1	48.1	57.4		mg/Kg		119	75 - 125
Cadmium	0.19	J	48.1	54.3		mg/Kg		113	75 - 125
Chromium	9.9		48.1	67.8		mg/Kg		120	75 - 125
Cobalt	17		48.1	75.3		mg/Kg		120	75 - 125
Copper	120	F1	48.1	201	F1	mg/Kg		175	75 - 125
Lead	120	F1	48.1	237	F1	mg/Kg		239	75 - 125
Molybdenum	ND		48.1	53.2		mg/Kg		111	75 - 125
Nickel	5.8		48.1	60.7		mg/Kg		114	75 - 125
Selenium	ND		48.1	52.4		mg/Kg		109	75 - 125
Silver	0.24	J F1	24.0	30.4		mg/Kg		125	75 - 125
Thallium	1.1	J	48.1	52.4		mg/Kg		107	75 - 125
Vanadium	120	F1	48.1	192	F1	mg/Kg		157	75 - 125
Zinc	100	F1	48.1	181	F1	mg/Kg		163	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88260-A-2-B MSD
Matrix: Solid
Analysis Batch: 250635

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250513

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	1.2	J F1	48.5	9.31	F1	mg/Kg		17	75 - 125	15	20
Arsenic	1.6	J	48.5	57.7		mg/Kg		116	75 - 125	1	20
Barium	27	F1	48.5	104	F1	mg/Kg		158	75 - 125	20	20
Beryllium	ND	F1	48.5	63.4	F1	mg/Kg		131	75 - 125	10	20
Cadmium	0.19	J	48.5	55.7		mg/Kg		114	75 - 125	3	20
Chromium	9.9		48.5	70.4		mg/Kg		125	75 - 125	4	20
Cobalt	17		48.5	75.6		mg/Kg		120	75 - 125	0	20
Copper	120	F1	48.5	201	F1	mg/Kg		172	75 - 125	0	20
Lead	120	F1	48.5	258	F1	mg/Kg		280	75 - 125	9	20
Molybdenum	ND		48.5	54.1		mg/Kg		112	75 - 125	2	20
Nickel	5.8		48.5	61.0		mg/Kg		114	75 - 125	0	20
Selenium	ND		48.5	54.0		mg/Kg		111	75 - 125	3	20
Silver	0.24	J F1	24.3	32.1	F1	mg/Kg		131	75 - 125	5	20
Thallium	1.1	J	48.5	54.4		mg/Kg		110	75 - 125	4	20
Vanadium	120	F1	48.5	200	F1	mg/Kg		171	75 - 125	4	20
Zinc	100	F1	48.5	163		mg/Kg		123	75 - 125	11	20

Lab Sample ID: MB 720-250563/1-A
Matrix: Solid
Analysis Batch: 250655

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250563

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/30/18 08:40	08/30/18 23:12	1
Arsenic	ND		1.0	0.085	mg/Kg		08/30/18 08:40	08/30/18 23:12	1
Barium	ND		0.50	0.071	mg/Kg		08/30/18 08:40	08/30/18 23:12	1
Beryllium	ND		0.10	0.033	mg/Kg		08/30/18 08:40	08/30/18 23:12	1
Cadmium	ND		0.13	0.012	mg/Kg		08/30/18 08:40	08/30/18 23:12	1
Chromium	ND		0.50	0.053	mg/Kg		08/30/18 08:40	08/30/18 23:12	1
Cobalt	ND		0.20	0.020	mg/Kg		08/30/18 08:40	08/30/18 23:12	1
Copper	ND		1.5	0.71	mg/Kg		08/30/18 08:40	08/30/18 23:12	1
Lead	ND		0.50	0.11	mg/Kg		08/30/18 08:40	08/30/18 23:12	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/30/18 08:40	08/30/18 23:12	1
Nickel	ND		0.50	0.051	mg/Kg		08/30/18 08:40	08/30/18 23:12	1
Selenium	ND		1.0	0.15	mg/Kg		08/30/18 08:40	08/30/18 23:12	1
Silver	ND		0.25	0.051	mg/Kg		08/30/18 08:40	08/30/18 23:12	1
Thallium	ND		0.50	0.15	mg/Kg		08/30/18 08:40	08/30/18 23:12	1
Vanadium	ND		0.50	0.068	mg/Kg		08/30/18 08:40	08/30/18 23:12	1
Zinc	ND		1.5	0.64	mg/Kg		08/30/18 08:40	08/30/18 23:12	1

Lab Sample ID: LCS 720-250563/2-A
Matrix: Solid
Analysis Batch: 250655

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250563

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	47.4		mg/Kg		95	80 - 120
Arsenic	50.0	47.5		mg/Kg		95	80 - 120
Barium	50.0	49.0		mg/Kg		98	80 - 120
Beryllium	50.0	48.3		mg/Kg		97	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 720-250563/2-A
Matrix: Solid
Analysis Batch: 250655

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250563

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	50.0	48.2		mg/Kg		96	80 - 120
Chromium	50.0	48.0		mg/Kg		96	80 - 120
Cobalt	50.0	48.9		mg/Kg		98	80 - 120
Copper	50.0	48.2		mg/Kg		96	80 - 120
Lead	50.0	48.7		mg/Kg		97	80 - 120
Molybdenum	50.0	48.7		mg/Kg		97	80 - 120
Nickel	50.0	48.8		mg/Kg		98	80 - 120
Selenium	50.0	46.3		mg/Kg		93	80 - 120
Silver	25.0	24.1		mg/Kg		96	80 - 120
Thallium	50.0	48.7		mg/Kg		97	80 - 120
Vanadium	50.0	48.3		mg/Kg		97	80 - 120
Zinc	50.0	48.0		mg/Kg		96	80 - 120

Lab Sample ID: 720-88263-16 MS
Matrix: Solid
Analysis Batch: 250655

Client Sample ID: DG-E11S-0.5-1
Prep Type: Total/NA
Prep Batch: 250563

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.33	J F1	34.0	7.98	F1	mg/Kg		22	75 - 125
Arsenic	2.6	J	34.0	45.2		mg/Kg		125	75 - 125
Barium	36	F1	34.0	89.3	F1	mg/Kg		156	75 - 125
Beryllium	ND	F1	34.0	46.0	F1	mg/Kg		135	75 - 125
Cadmium	0.077	J	34.0	41.7		mg/Kg		122	75 - 125
Chromium	12	F1	34.0	58.0	F1	mg/Kg		137	75 - 125
Cobalt	12	F1	34.0	54.8	F1	mg/Kg		127	75 - 125
Copper	130	F1 F2	34.0	226	F1	mg/Kg		284	75 - 125
Lead	32	F1	34.0	76.7	F1	mg/Kg		131	75 - 125
Molybdenum	ND		34.0	39.9		mg/Kg		117	75 - 125
Nickel	6.2		34.0	48.1		mg/Kg		123	75 - 125
Selenium	ND		34.0	40.9		mg/Kg		120	75 - 125
Silver	0.20	J F1	17.0	23.8	F1	mg/Kg		139	75 - 125
Thallium	1.0	J	34.0	40.0		mg/Kg		115	75 - 125
Vanadium	110	F1	34.0	182	F1	mg/Kg		216	75 - 125
Zinc	55	F1	34.0	105	F1	mg/Kg		148	75 - 125

Lab Sample ID: 720-88263-16 MSD
Matrix: Solid
Analysis Batch: 250655

Client Sample ID: DG-E11S-0.5-1
Prep Type: Total/NA
Prep Batch: 250563

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.33	J F1	34.0	7.29	F1	mg/Kg		20	75 - 125	9	20
Arsenic	2.6	J	34.0	39.6		mg/Kg		109	75 - 125	13	20
Barium	36	F1	34.0	89.2	F1	mg/Kg		155	75 - 125	0	20
Beryllium	ND	F1	34.0	39.2		mg/Kg		115	75 - 125	16	20
Cadmium	0.077	J	34.0	36.4		mg/Kg		107	75 - 125	14	20
Chromium	12	F1	34.0	49.1		mg/Kg		110	75 - 125	17	20
Cobalt	12	F1	34.0	48.1		mg/Kg		107	75 - 125	13	20
Copper	130	F1 F2	34.0	163	F2	mg/Kg		99	75 - 125	32	20
Lead	32	F1	34.0	70.9		mg/Kg		114	75 - 125	8	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88263-16 MSD — **Client Sample ID: DG-E11S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250655 — **Prep Batch: 250563**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Molybdenum	ND		34.0	34.8		mg/Kg		102	75 - 125	14	20
Nickel	6.2		34.0	41.3		mg/Kg		103	75 - 125	15	20
Selenium	ND		34.0	35.7		mg/Kg		105	75 - 125	13	20
Silver	0.20	J F1	17.0	20.3		mg/Kg		118	75 - 125	16	20
Thallium	1.0	J	34.0	35.0		mg/Kg		100	75 - 125	13	20
Vanadium	110	F1	34.0	162	F1	mg/Kg		155	75 - 125	12	20
Zinc	55	F1	34.0	92.7		mg/Kg		110	75 - 125	13	20

Lab Sample ID: MB 720-250633/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250732 — **Prep Batch: 250633**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Arsenic	ND		1.0	0.085	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Barium	ND		0.50	0.071	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Beryllium	ND		0.10	0.033	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Cadmium	ND		0.13	0.012	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Chromium	ND		0.50	0.053	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Cobalt	ND		0.20	0.020	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Copper	ND		1.5	0.71	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Lead	ND		0.50	0.11	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Nickel	ND		0.50	0.051	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Selenium	ND		1.0	0.15	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Silver	ND		0.25	0.051	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Thallium	ND		0.50	0.15	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Vanadium	ND		0.50	0.068	mg/Kg		08/30/18 18:17	08/31/18 13:03	1
Zinc	ND		1.5	0.64	mg/Kg		08/30/18 18:17	08/31/18 13:03	1

Lab Sample ID: LCS 720-250633/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250732 — **Prep Batch: 250633**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	47.0		mg/Kg		94	80 - 120
Arsenic	50.0	46.9		mg/Kg		94	80 - 120
Barium	50.0	49.1		mg/Kg		98	80 - 120
Beryllium	50.0	49.2		mg/Kg		98	80 - 120
Cadmium	50.0	47.1		mg/Kg		94	80 - 120
Chromium	50.0	48.2		mg/Kg		96	80 - 120
Cobalt	50.0	48.3		mg/Kg		97	80 - 120
Copper	50.0	47.8		mg/Kg		96	80 - 120
Lead	50.0	47.8		mg/Kg		96	80 - 120
Molybdenum	50.0	48.3		mg/Kg		97	80 - 120
Nickel	50.0	47.8		mg/Kg		96	80 - 120
Selenium	50.0	45.3		mg/Kg		91	80 - 120
Silver	25.0	23.4		mg/Kg		94	80 - 120
Thallium	50.0	48.0		mg/Kg		96	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 720-250633/2-A
Matrix: Solid
Analysis Batch: 250732

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250633

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	50.0	47.4		mg/Kg		95	80 - 120
Zinc	50.0	47.4		mg/Kg		95	80 - 120

Lab Sample ID: 720-88261-A-7-D MS
Matrix: Solid
Analysis Batch: 250732

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250633

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	4.8	F1	45.5	17.1	F1	mg/Kg		27	75 - 125
Arsenic	25		45.5	69.5		mg/Kg		98	75 - 125
Barium	77	F1	45.5	184	F1	mg/Kg		236	75 - 125
Beryllium	0.24	J F1	45.5	63.6	F1	mg/Kg		139	75 - 125
Cadmium	0.28	J	45.5	56.8		mg/Kg		124	75 - 125
Chromium	34	F1	45.5	97.3	F1	mg/Kg		139	75 - 125
Cobalt	21		45.5	68.7		mg/Kg		105	75 - 125
Copper	240		45.5	153	4	mg/Kg		-190	75 - 125
Lead	120	F1 F2	45.5	410	F1	mg/Kg		638	75 - 125
Molybdenum	1.5	J	45.5	55.6		mg/Kg		119	75 - 125
Nickel	58		45.5	107		mg/Kg		108	75 - 125
Selenium	0.66	J	45.5	55.8		mg/Kg		121	75 - 125
Silver	0.57	J F1	22.7	28.1		mg/Kg		121	75 - 125
Thallium	0.89	J	45.5	48.3		mg/Kg		104	75 - 125
Vanadium	44	F1 F2	45.5	102	F1	mg/Kg		127	75 - 125
Zinc	83	F1	45.5	141	F1	mg/Kg		126	75 - 125

Lab Sample ID: 720-88261-A-7-E MSD
Matrix: Solid
Analysis Batch: 250732

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250633

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	4.8	F1	45.9	15.6	F1	mg/Kg		24	75 - 125	9	20
Arsenic	25		45.9	65.7		mg/Kg		89	75 - 125	6	20
Barium	77	F1	45.9	179	F1	mg/Kg		223	75 - 125	3	20
Beryllium	0.24	J F1	45.9	69.8	F1	mg/Kg		152	75 - 125	9	20
Cadmium	0.28	J	45.9	56.4		mg/Kg		122	75 - 125	1	20
Chromium	34	F1	45.9	93.7	F1	mg/Kg		130	75 - 125	4	20
Cobalt	21		45.9	70.1		mg/Kg		107	75 - 125	2	20
Copper	240		45.9	167	4	mg/Kg		-157	75 - 125	9	20
Lead	120	F1 F2	45.9	278	F1 F2	mg/Kg		345	75 - 125	38	20
Molybdenum	1.5	J	45.9	54.7		mg/Kg		116	75 - 125	2	20
Nickel	58		45.9	93.6		mg/Kg		78	75 - 125	13	20
Selenium	0.66	J	45.9	55.6		mg/Kg		120	75 - 125	0	20
Silver	0.57	J F1	22.9	31.0	F1	mg/Kg		133	75 - 125	10	20
Thallium	0.89	J	45.9	50.6		mg/Kg		108	75 - 125	5	20
Vanadium	44	F1 F2	45.9	135	F1 F2	mg/Kg		198	75 - 125	28	20
Zinc	83	F1	45.9	137		mg/Kg		117	75 - 125	3	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-250621/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250770 — **Prep Batch: 250621**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/30/18 16:17	08/31/18 18:10	1

Lab Sample ID: LCS 720-250621/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250770 — **Prep Batch: 250621**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.821		mg/Kg		99	80 - 120

Lab Sample ID: 720-88261-A-7-A MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250770 — **Prep Batch: 250621**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.10		0.806	0.969		mg/Kg		108	75 - 125

Lab Sample ID: 720-88261-A-7-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250770 — **Prep Batch: 250621**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.10		0.833	1.05		mg/Kg		114	75 - 125	8	20

Lab Sample ID: MB 720-250662/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250923 — **Prep Batch: 250662**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		09/04/18 21:32	09/05/18 10:32	1

Lab Sample ID: LCS 720-250662/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250923 — **Prep Batch: 250662**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.832		mg/Kg		100	80 - 120

Lab Sample ID: 720-88263-3 MS — **Client Sample ID: DG-H9S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250923 — **Prep Batch: 250662**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.18		0.714	0.828		mg/Kg		91	75 - 125

Lab Sample ID: 720-88263-3 MSD — **Client Sample ID: DG-H9S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250923 — **Prep Batch: 250662**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.18		0.694	0.828		mg/Kg		93	75 - 125	0	20

QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

GC/MS VOA

Prep Batch: 250602

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-1	DG-FG910S-0.5-1	Total/NA	Solid	5035	
720-88263-2	DG-F910S-3.5-4	Total/NA	Solid	5035	
720-88263-3	DG-H9S-0.5-1	Total/NA	Solid	5035	
720-88263-4	DG-H9S-3.5-4	Total/NA	Solid	5035	
720-88263-6	DG-L9S-0.5-1	Total/NA	Solid	5035	
720-88263-9	DG-M11S-3.5-4	Total/NA	Solid	5035	
720-88263-10	DG-K11S-0.5-1	Total/NA	Solid	5035	
720-88263-11	DG-K11S-3.5-4	Total/NA	Solid	5035	
720-88263-14	DG-I11S-3.5-4	Total/NA	Solid	5035	
720-88263-15	DG-I11S-9.5-10	Total/NA	Solid	5035	
720-88263-16	DG-E11S-0.5-1	Total/NA	Solid	5035	
720-88263-17	DG-E11S-3.5-4	Total/NA	Solid	5035	
720-88263-18	DG-E11S-9.5-10	Total/NA	Solid	5035	

Analysis Batch: 250625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-1	DG-FG910S-0.5-1	Total/NA	Solid	8260B	250602
720-88263-2	DG-F910S-3.5-4	Total/NA	Solid	8260B	250602
720-88263-3	DG-H9S-0.5-1	Total/NA	Solid	8260B	250602
720-88263-4	DG-H9S-3.5-4	Total/NA	Solid	8260B	250602
720-88263-6	DG-L9S-0.5-1	Total/NA	Solid	8260B	250602
720-88263-9	DG-M11S-3.5-4	Total/NA	Solid	8260B	250602
720-88263-10	DG-K11S-0.5-1	Total/NA	Solid	8260B	250602
720-88263-11	DG-K11S-3.5-4	Total/NA	Solid	8260B	250602
720-88263-14	DG-I11S-3.5-4	Total/NA	Solid	8260B	250602
720-88263-15	DG-I11S-9.5-10	Total/NA	Solid	8260B	250602
MB 720-250625/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250625/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250625/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250625/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250625/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 250626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-16	DG-E11S-0.5-1	Total/NA	Solid	8260B	250602
720-88263-17	DG-E11S-3.5-4	Total/NA	Solid	8260B	250602
720-88263-18	DG-E11S-9.5-10	Total/NA	Solid	8260B	250602
MB 720-250626/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250626/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250626/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250626/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250626/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 250644

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-5	DG-H9S-9.5-10	Total/NA	Solid	8260B	250666
720-88263-8	DG-M11S-0.5-1	Total/NA	Solid	8260B	250666
720-88263-12	DG-K11S-9.5-10	Total/NA	Solid	8260B	250666
720-88263-13	DG-I11S-0.5-1	Total/NA	Solid	8260B	250666
MB 720-250644/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250644/5	Lab Control Sample	Total/NA	Solid	8260B	

GC/MS VOA (Continued)

Analysis Batch: 250644 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-250644/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250644/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250644/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 250666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-5	DG-H9S-9.5-10	Total/NA	Solid	5035	
720-88263-8	DG-M11S-0.5-1	Total/NA	Solid	5035	
720-88263-12	DG-K11S-9.5-10	Total/NA	Solid	5035	
720-88263-13	DG-I11S-0.5-1	Total/NA	Solid	5035	

Analysis Batch: 250750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-7	DG-L9S-3.5-4	Total/NA	Solid	8260B	250783
MB 720-250750/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250750/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250750/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250750/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250750/8	Lab Control Sample Dup	Total/NA	Solid	8260B	
720-88244-A-4-O MS	Matrix Spike	Total/NA	Solid	8260B	250795
720-88244-A-4-P MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	250795

Prep Batch: 250783

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-7	DG-L9S-3.5-4	Total/NA	Solid	5030B	

Prep Batch: 250795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88244-A-4-O MS	Matrix Spike	Total/NA	Solid	5030B	
720-88244-A-4-P MSD	Matrix Spike Duplicate	Total/NA	Solid	5030B	

Analysis Batch: 250946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-7	DG-L9S-3.5-4	Total/NA	Solid	8260B	250958
MB 720-250946/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250946/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250946/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250946/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250946/8	Lab Control Sample Dup	Total/NA	Solid	8260B	
720-88310-D-1-F MS	Matrix Spike	Total/NA	Solid	8260B	250958
720-88310-D-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	250958

Prep Batch: 250958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-7	DG-L9S-3.5-4	Total/NA	Solid	5030B	
720-88310-D-1-F MS	Matrix Spike	Total/NA	Solid	5030B	
720-88310-D-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5030B	

QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

GC/MS Semi VOA

Prep Batch: 250580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-1	DG-FG910S-0.5-1	Total/NA	Solid	3546	
720-88263-2	DG-F910S-3.5-4	Total/NA	Solid	3546	
720-88263-3	DG-H9S-0.5-1	Total/NA	Solid	3546	
720-88263-4	DG-H9S-3.5-4	Total/NA	Solid	3546	
720-88263-5	DG-H9S-9.5-10	Total/NA	Solid	3546	
720-88263-6	DG-L9S-0.5-1	Total/NA	Solid	3546	
720-88263-7	DG-L9S-3.5-4	Total/NA	Solid	3546	
MB 720-250580/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250580/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88242-D-13-H MS	Matrix Spike	Total/NA	Solid	3546	
720-88242-D-13-I MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Prep Batch: 250607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-8	DG-M11S-0.5-1	Total/NA	Solid	3546	
720-88263-9	DG-M11S-3.5-4	Total/NA	Solid	3546	
720-88263-10	DG-K11S-0.5-1	Total/NA	Solid	3546	
720-88263-11	DG-K11S-3.5-4	Total/NA	Solid	3546	
720-88263-12	DG-K11S-9.5-10	Total/NA	Solid	3546	
720-88263-13	DG-I11S-0.5-1	Total/NA	Solid	3546	
720-88263-14	DG-I11S-3.5-4	Total/NA	Solid	3546	
720-88263-15	DG-I11S-9.5-10	Total/NA	Solid	3546	
720-88263-16	DG-E11S-0.5-1	Total/NA	Solid	3546	
720-88263-17	DG-E11S-3.5-4	Total/NA	Solid	3546	
720-88263-18	DG-E11S-9.5-10	Total/NA	Solid	3546	
MB 720-250607/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250607/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88263-10 MS	DG-K11S-0.5-1	Total/NA	Solid	3546	
720-88263-10 MSD	DG-K11S-0.5-1	Total/NA	Solid	3546	

Analysis Batch: 250742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250580/1-A	Method Blank	Total/NA	Solid	8270C SIM	250580
LCS 720-250580/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	250580

Analysis Batch: 250745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88242-D-13-H MS	Matrix Spike	Total/NA	Solid	8270C SIM	250580
720-88242-D-13-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8270C SIM	250580

Analysis Batch: 250749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-1	DG-FG910S-0.5-1	Total/NA	Solid	8270C SIM	250580
720-88263-2	DG-F910S-3.5-4	Total/NA	Solid	8270C SIM	250580
720-88263-3	DG-H9S-0.5-1	Total/NA	Solid	8270C SIM	250580
720-88263-4	DG-H9S-3.5-4	Total/NA	Solid	8270C SIM	250580
720-88263-5	DG-H9S-9.5-10	Total/NA	Solid	8270C SIM	250580
720-88263-6	DG-L9S-0.5-1	Total/NA	Solid	8270C SIM	250580
720-88263-7	DG-L9S-3.5-4	Total/NA	Solid	8270C SIM	250580

GC/MS Semi VOA (Continued)

Analysis Batch: 250799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-9	DG-M11S-3.5-4	Total/NA	Solid	8270C SIM	250607
720-88263-10	DG-K11S-0.5-1	Total/NA	Solid	8270C SIM	250607
720-88263-11	DG-K11S-3.5-4	Total/NA	Solid	8270C SIM	250607
MB 720-250607/1-A	Method Blank	Total/NA	Solid	8270C SIM	250607
LCS 720-250607/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	250607
720-88263-10 MS	DG-K11S-0.5-1	Total/NA	Solid	8270C SIM	250607
720-88263-10 MSD	DG-K11S-0.5-1	Total/NA	Solid	8270C SIM	250607

Analysis Batch: 250960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-8	DG-M11S-0.5-1	Total/NA	Solid	8270C SIM	250607
720-88263-12	DG-K11S-9.5-10	Total/NA	Solid	8270C SIM	250607
720-88263-14	DG-I11S-3.5-4	Total/NA	Solid	8270C SIM	250607
720-88263-18	DG-E11S-9.5-10	Total/NA	Solid	8270C SIM	250607

Analysis Batch: 251008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-13	DG-I11S-0.5-1	Total/NA	Solid	8270C SIM	250607
720-88263-15	DG-I11S-9.5-10	Total/NA	Solid	8270C SIM	250607
720-88263-16	DG-E11S-0.5-1	Total/NA	Solid	8270C SIM	250607
720-88263-17	DG-E11S-3.5-4	Total/NA	Solid	8270C SIM	250607

GC Semi VOA

Prep Batch: 250531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-3	DG-H9S-0.5-1	Total/NA	Solid	3546	
720-88263-4	DG-H9S-3.5-4	Total/NA	Solid	3546	
720-88263-5	DG-H9S-9.5-10	Total/NA	Solid	3546	
MB 720-250531/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250531/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88239-D-13-H MS	Matrix Spike	Total/NA	Solid	3546	
720-88239-D-13-I MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Prep Batch: 250566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-1	DG-FG910S-0.5-1	Total/NA	Solid	3546	
720-88263-2	DG-F910S-3.5-4	Total/NA	Solid	3546	
720-88263-3	DG-H9S-0.5-1	Total/NA	Solid	3546	
720-88263-4	DG-H9S-3.5-4	Total/NA	Solid	3546	
720-88263-5	DG-H9S-9.5-10	Total/NA	Solid	3546	
720-88263-6	DG-L9S-0.5-1	Total/NA	Solid	3546	
720-88263-7	DG-L9S-3.5-4	Total/NA	Solid	3546	
720-88263-8	DG-M11S-0.5-1	Total/NA	Solid	3546	
720-88263-9	DG-M11S-3.5-4	Total/NA	Solid	3546	
720-88263-10	DG-K11S-0.5-1	Total/NA	Solid	3546	
720-88263-11	DG-K11S-3.5-4	Total/NA	Solid	3546	
720-88263-12	DG-K11S-9.5-10	Total/NA	Solid	3546	
720-88263-13	DG-I11S-0.5-1	Total/NA	Solid	3546	
720-88263-14	DG-I11S-3.5-4	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 250566 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-15	DG-I11S-9.5-10	Total/NA	Solid	3546	
720-88263-16	DG-E11S-0.5-1	Total/NA	Solid	3546	
720-88263-17	DG-E11S-3.5-4	Total/NA	Solid	3546	
720-88263-18	DG-E11S-9.5-10	Total/NA	Solid	3546	
MB 720-250566/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250566/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88263-16 MS	DG-E11S-0.5-1	Total/NA	Solid	3546	
720-88263-16 MSD	DG-E11S-0.5-1	Total/NA	Solid	3546	

Prep Batch: 250595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-6	DG-L9S-0.5-1	Total/NA	Solid	3546	
720-88263-7	DG-L9S-3.5-4	Total/NA	Solid	3546	
720-88263-8	DG-M11S-0.5-1	Total/NA	Solid	3546	
720-88263-9	DG-M11S-3.5-4	Total/NA	Solid	3546	
720-88263-15	DG-I11S-9.5-10	Total/NA	Solid	3546	
720-88263-16	DG-E11S-0.5-1	Total/NA	Solid	3546	
720-88263-17	DG-E11S-3.5-4	Total/NA	Solid	3546	
720-88263-18	DG-E11S-9.5-10	Total/NA	Solid	3546	
MB 720-250595/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250595/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88264-D-5-A MS	Matrix Spike	Total/NA	Solid	3546	
720-88264-D-5-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Prep Batch: 250674

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-10	DG-K11S-0.5-1	Total/NA	Solid	3546	
720-88263-11	DG-K11S-3.5-4	Total/NA	Solid	3546	
720-88263-12	DG-K11S-9.5-10	Total/NA	Solid	3546	
720-88263-13	DG-I11S-0.5-1	Total/NA	Solid	3546	
720-88263-14	DG-I11S-3.5-4	Total/NA	Solid	3546	
MB 720-250674/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250674/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88291-D-3-B MS	Matrix Spike	Total/NA	Solid	3546	
720-88291-D-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 250746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-3	DG-H9S-0.5-1	Total/NA	Solid	8081A	250531
720-88263-4	DG-H9S-3.5-4	Total/NA	Solid	8081A	250531
MB 720-250531/1-A	Method Blank	Total/NA	Solid	8081A	250531
LCS 720-250531/2-A	Lab Control Sample	Total/NA	Solid	8081A	250531
720-88239-D-13-H MS	Matrix Spike	Total/NA	Solid	8081A	250531
720-88239-D-13-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8081A	250531

Analysis Batch: 250762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-1	DG-FG910S-0.5-1	Total/NA	Solid	8015B	250566
720-88263-3	DG-H9S-0.5-1	Total/NA	Solid	8015B	250566
720-88263-12	DG-K11S-9.5-10	Total/NA	Solid	8015B	250566

GC Semi VOA (Continued)

Analysis Batch: 250765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-5	DG-H9S-9.5-10	Total/NA	Solid	8081A	250531
720-88263-16	DG-E11S-0.5-1	Total/NA	Solid	8081A	250595
720-88263-17	DG-E11S-3.5-4	Total/NA	Solid	8081A	250595
720-88263-18	DG-E11S-9.5-10	Total/NA	Solid	8081A	250595

Analysis Batch: 250868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250595/1-A	Method Blank	Total/NA	Solid	8081A	250595
MB 720-250674/1-A	Method Blank	Total/NA	Solid	8081A	250674
LCS 720-250595/2-A	Lab Control Sample	Total/NA	Solid	8081A	250595
LCS 720-250674/2-A	Lab Control Sample	Total/NA	Solid	8081A	250674
720-88264-D-5-A MS	Matrix Spike	Total/NA	Solid	8081A	250595
720-88264-D-5-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8081A	250595

Analysis Batch: 250884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-7	DG-L9S-3.5-4	Total/NA	Solid	8015B	250566
720-88263-8	DG-M11S-0.5-1	Total/NA	Solid	8015B	250566
720-88263-9	DG-M11S-3.5-4	Total/NA	Solid	8015B	250566
720-88263-18	DG-E11S-9.5-10	Total/NA	Solid	8015B	250566
MB 720-250566/1-A	Method Blank	Total/NA	Solid	8015B	250566

Analysis Batch: 250885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-2	DG-F910S-3.5-4	Total/NA	Solid	8015B	250566
720-88263-5	DG-H9S-9.5-10	Total/NA	Solid	8015B	250566
720-88263-10	DG-K11S-0.5-1	Total/NA	Solid	8015B	250566
720-88263-11	DG-K11S-3.5-4	Total/NA	Solid	8015B	250566
720-88263-13	DG-I11S-0.5-1	Total/NA	Solid	8015B	250566
720-88263-14	DG-I11S-3.5-4	Total/NA	Solid	8015B	250566
720-88263-15	DG-I11S-9.5-10	Total/NA	Solid	8015B	250566
720-88263-16	DG-E11S-0.5-1	Total/NA	Solid	8015B	250566
720-88263-17	DG-E11S-3.5-4	Total/NA	Solid	8015B	250566
LCS 720-250566/2-A	Lab Control Sample	Total/NA	Solid	8015B	250566
720-88263-16 MS	DG-E11S-0.5-1	Total/NA	Solid	8015B	250566
720-88263-16 MSD	DG-E11S-0.5-1	Total/NA	Solid	8015B	250566

Analysis Batch: 250891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-6	DG-L9S-0.5-1	Total/NA	Solid	8081A	250595
720-88263-7	DG-L9S-3.5-4	Total/NA	Solid	8081A	250595
720-88263-8	DG-M11S-0.5-1	Total/NA	Solid	8081A	250595
720-88263-9	DG-M11S-3.5-4	Total/NA	Solid	8081A	250595
720-88263-10	DG-K11S-0.5-1	Total/NA	Solid	8081A	250674
720-88263-11	DG-K11S-3.5-4	Total/NA	Solid	8081A	250674
720-88263-12	DG-K11S-9.5-10	Total/NA	Solid	8081A	250674
720-88263-13	DG-I11S-0.5-1	Total/NA	Solid	8081A	250674
720-88263-14	DG-I11S-3.5-4	Total/NA	Solid	8081A	250674
720-88263-15	DG-I11S-9.5-10	Total/NA	Solid	8081A	250595
720-88291-D-3-B MS	Matrix Spike	Total/NA	Solid	8081A	250674
720-88291-D-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8081A	250674

QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Analysis Batch: 250980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-4	DG-H9S-3.5-4	Total/NA	Solid	8015B	250566
720-88263-6	DG-L9S-0.5-1	Total/NA	Solid	8015B	250566

Prep Batch: 343157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-1	DG-FG910S-0.5-1	Total/NA	Solid	3540C	
720-88263-2	DG-F910S-3.5-4	Total/NA	Solid	3540C	
720-88263-3	DG-H9S-0.5-1	Total/NA	Solid	3540C	
720-88263-4	DG-H9S-3.5-4	Total/NA	Solid	3540C	
720-88263-5	DG-H9S-9.5-10	Total/NA	Solid	3540C	
720-88263-6	DG-L9S-0.5-1	Total/NA	Solid	3540C	
720-88263-7	DG-L9S-3.5-4	Total/NA	Solid	3540C	
720-88263-8	DG-M11S-0.5-1	Total/NA	Solid	3540C	
720-88263-9	DG-M11S-3.5-4	Total/NA	Solid	3540C	
720-88263-10	DG-K11S-0.5-1	Total/NA	Solid	3540C	
720-88263-11	DG-K11S-3.5-4	Total/NA	Solid	3540C	
720-88263-12	DG-K11S-9.5-10	Total/NA	Solid	3540C	
720-88263-13	DG-I11S-0.5-1	Total/NA	Solid	3540C	
720-88263-14	DG-I11S-3.5-4	Total/NA	Solid	3540C	
720-88263-15	DG-I11S-9.5-10	Total/NA	Solid	3540C	
720-88263-16	DG-E11S-0.5-1	Total/NA	Solid	3540C	
720-88263-17	DG-E11S-3.5-4	Total/NA	Solid	3540C	
720-88263-18	DG-E11S-9.5-10	Total/NA	Solid	3540C	
MB 240-343157/23-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-343157/24-A	Lab Control Sample	Total/NA	Solid	3540C	
720-88263-18 MS	DG-E11S-9.5-10	Total/NA	Solid	3540C	
720-88263-18 MSD	DG-E11S-9.5-10	Total/NA	Solid	3540C	

Analysis Batch: 343540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-1	DG-FG910S-0.5-1	Total/NA	Solid	8082	343157
720-88263-2	DG-F910S-3.5-4	Total/NA	Solid	8082	343157
720-88263-3	DG-H9S-0.5-1	Total/NA	Solid	8082	343157
720-88263-4	DG-H9S-3.5-4	Total/NA	Solid	8082	343157
720-88263-5	DG-H9S-9.5-10	Total/NA	Solid	8082	343157
720-88263-6	DG-L9S-0.5-1	Total/NA	Solid	8082	343157
720-88263-7	DG-L9S-3.5-4	Total/NA	Solid	8082	343157
720-88263-8	DG-M11S-0.5-1	Total/NA	Solid	8082	343157
720-88263-9	DG-M11S-3.5-4	Total/NA	Solid	8082	343157
720-88263-10	DG-K11S-0.5-1	Total/NA	Solid	8082	343157
720-88263-11	DG-K11S-3.5-4	Total/NA	Solid	8082	343157
720-88263-12	DG-K11S-9.5-10	Total/NA	Solid	8082	343157
720-88263-14	DG-I11S-3.5-4	Total/NA	Solid	8082	343157
MB 240-343157/23-A	Method Blank	Total/NA	Solid	8082	343157
LCS 240-343157/24-A	Lab Control Sample	Total/NA	Solid	8082	343157

Analysis Batch: 343584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-15	DG-I11S-9.5-10	Total/NA	Solid	8082	343157
720-88263-16	DG-E11S-0.5-1	Total/NA	Solid	8082	343157
720-88263-17	DG-E11S-3.5-4	Total/NA	Solid	8082	343157
720-88263-18	DG-E11S-9.5-10	Total/NA	Solid	8082	343157
720-88263-18 MS	DG-E11S-9.5-10	Total/NA	Solid	8082	343157

GC Semi VOA (Continued)

Analysis Batch: 343584 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-18 MSD	DG-E11S-9.5-10	Total/NA	Solid	8082	343157

Analysis Batch: 343618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-13	DG-I11S-0.5-1	Total/NA	Solid	8082	343157

Metals

Prep Batch: 250513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-5	DG-H9S-9.5-10	Total/NA	Solid	3050B	
720-88263-6	DG-L9S-0.5-1	Total/NA	Solid	3050B	
720-88263-7	DG-L9S-3.5-4	Total/NA	Solid	3050B	
720-88263-8	DG-M11S-0.5-1	Total/NA	Solid	3050B	
720-88263-9	DG-M11S-3.5-4	Total/NA	Solid	3050B	
720-88263-10	DG-K11S-0.5-1	Total/NA	Solid	3050B	
720-88263-11	DG-K11S-3.5-4	Total/NA	Solid	3050B	
720-88263-12	DG-K11S-9.5-10	Total/NA	Solid	3050B	
720-88263-13	DG-I11S-0.5-1	Total/NA	Solid	3050B	
720-88263-14	DG-I11S-3.5-4	Total/NA	Solid	3050B	
MB 720-250513/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250513/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88260-A-2-A MS	Matrix Spike	Total/NA	Solid	3050B	
720-88260-A-2-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Prep Batch: 250563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-15	DG-I11S-9.5-10	Total/NA	Solid	3050B	
720-88263-16	DG-E11S-0.5-1	Total/NA	Solid	3050B	
720-88263-17	DG-E11S-3.5-4	Total/NA	Solid	3050B	
720-88263-18	DG-E11S-9.5-10	Total/NA	Solid	3050B	
MB 720-250563/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250563/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88263-16 MS	DG-E11S-0.5-1	Total/NA	Solid	3050B	
720-88263-16 MSD	DG-E11S-0.5-1	Total/NA	Solid	3050B	

Prep Batch: 250621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-1	DG-FG910S-0.5-1	Total/NA	Solid	7471A	
MB 720-250621/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250621/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88261-A-7-A MS	Matrix Spike	Total/NA	Solid	7471A	
720-88261-A-7-B MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	

Prep Batch: 250633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-1	DG-FG910S-0.5-1	Total/NA	Solid	3050B	
720-88263-2	DG-F910S-3.5-4	Total/NA	Solid	3050B	
720-88263-3	DG-H9S-0.5-1	Total/NA	Solid	3050B	
720-88263-4	DG-H9S-3.5-4	Total/NA	Solid	3050B	

Metals (Continued)

Prep Batch: 250633 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250633/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250633/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88261-A-7-D MS	Matrix Spike	Total/NA	Solid	3050B	
720-88261-A-7-E MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Analysis Batch: 250635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-5	DG-H9S-9.5-10	Total/NA	Solid	6010B	250513
720-88263-6	DG-L9S-0.5-1	Total/NA	Solid	6010B	250513
720-88263-7	DG-L9S-3.5-4	Total/NA	Solid	6010B	250513
720-88263-8	DG-M11S-0.5-1	Total/NA	Solid	6010B	250513
720-88263-9	DG-M11S-3.5-4	Total/NA	Solid	6010B	250513
720-88263-10	DG-K11S-0.5-1	Total/NA	Solid	6010B	250513
720-88263-11	DG-K11S-3.5-4	Total/NA	Solid	6010B	250513
720-88263-12	DG-K11S-9.5-10	Total/NA	Solid	6010B	250513
720-88263-13	DG-I11S-0.5-1	Total/NA	Solid	6010B	250513
720-88263-14	DG-I11S-3.5-4	Total/NA	Solid	6010B	250513
MB 720-250513/1-A	Method Blank	Total/NA	Solid	6010B	250513
LCS 720-250513/2-A	Lab Control Sample	Total/NA	Solid	6010B	250513
720-88260-A-2-A MS	Matrix Spike	Total/NA	Solid	6010B	250513
720-88260-A-2-B MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250513

Analysis Batch: 250655

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-15	DG-I11S-9.5-10	Total/NA	Solid	6010B	250563
720-88263-16	DG-E11S-0.5-1	Total/NA	Solid	6010B	250563
720-88263-17	DG-E11S-3.5-4	Total/NA	Solid	6010B	250563
720-88263-18	DG-E11S-9.5-10	Total/NA	Solid	6010B	250563
MB 720-250563/1-A	Method Blank	Total/NA	Solid	6010B	250563
LCS 720-250563/2-A	Lab Control Sample	Total/NA	Solid	6010B	250563
720-88263-16 MS	DG-E11S-0.5-1	Total/NA	Solid	6010B	250563
720-88263-16 MSD	DG-E11S-0.5-1	Total/NA	Solid	6010B	250563

Prep Batch: 250662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-2	DG-F910S-3.5-4	Total/NA	Solid	7471A	
720-88263-3	DG-H9S-0.5-1	Total/NA	Solid	7471A	
720-88263-4	DG-H9S-3.5-4	Total/NA	Solid	7471A	
720-88263-5	DG-H9S-9.5-10	Total/NA	Solid	7471A	
720-88263-6	DG-L9S-0.5-1	Total/NA	Solid	7471A	
720-88263-7	DG-L9S-3.5-4	Total/NA	Solid	7471A	
720-88263-8	DG-M11S-0.5-1	Total/NA	Solid	7471A	
720-88263-9	DG-M11S-3.5-4	Total/NA	Solid	7471A	
720-88263-10	DG-K11S-0.5-1	Total/NA	Solid	7471A	
720-88263-11	DG-K11S-3.5-4	Total/NA	Solid	7471A	
720-88263-12	DG-K11S-9.5-10	Total/NA	Solid	7471A	
720-88263-13	DG-I11S-0.5-1	Total/NA	Solid	7471A	
720-88263-14	DG-I11S-3.5-4	Total/NA	Solid	7471A	
720-88263-15	DG-I11S-9.5-10	Total/NA	Solid	7471A	
720-88263-16	DG-E11S-0.5-1	Total/NA	Solid	7471A	
720-88263-17	DG-E11S-3.5-4	Total/NA	Solid	7471A	

Metals (Continued)

Prep Batch: 250662 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-18	DG-E11S-9.5-10	Total/NA	Solid	7471A	
MB 720-250662/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250662/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88263-3 MS	DG-H9S-0.5-1	Total/NA	Solid	7471A	
720-88263-3 MSD	DG-H9S-0.5-1	Total/NA	Solid	7471A	

Analysis Batch: 250732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-1	DG-FG910S-0.5-1	Total/NA	Solid	6010B	250633
720-88263-2	DG-F910S-3.5-4	Total/NA	Solid	6010B	250633
720-88263-3	DG-H9S-0.5-1	Total/NA	Solid	6010B	250633
720-88263-4	DG-H9S-3.5-4	Total/NA	Solid	6010B	250633
MB 720-250633/1-A	Method Blank	Total/NA	Solid	6010B	250633
LCS 720-250633/2-A	Lab Control Sample	Total/NA	Solid	6010B	250633
720-88261-A-7-D MS	Matrix Spike	Total/NA	Solid	6010B	250633
720-88261-A-7-E MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250633

Analysis Batch: 250770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-1	DG-FG910S-0.5-1	Total/NA	Solid	7471A	250621
MB 720-250621/1-A	Method Blank	Total/NA	Solid	7471A	250621
LCS 720-250621/2-A	Lab Control Sample	Total/NA	Solid	7471A	250621
720-88261-A-7-A MS	Matrix Spike	Total/NA	Solid	7471A	250621
720-88261-A-7-B MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	250621

Analysis Batch: 250878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-9	DG-M11S-3.5-4	Total/NA	Solid	6010B	250513

Analysis Batch: 250923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-2	DG-F910S-3.5-4	Total/NA	Solid	7471A	250662
720-88263-3	DG-H9S-0.5-1	Total/NA	Solid	7471A	250662
720-88263-4	DG-H9S-3.5-4	Total/NA	Solid	7471A	250662
720-88263-5	DG-H9S-9.5-10	Total/NA	Solid	7471A	250662
720-88263-6	DG-L9S-0.5-1	Total/NA	Solid	7471A	250662
720-88263-7	DG-L9S-3.5-4	Total/NA	Solid	7471A	250662
720-88263-8	DG-M11S-0.5-1	Total/NA	Solid	7471A	250662
720-88263-9	DG-M11S-3.5-4	Total/NA	Solid	7471A	250662
720-88263-10	DG-K11S-0.5-1	Total/NA	Solid	7471A	250662
720-88263-11	DG-K11S-3.5-4	Total/NA	Solid	7471A	250662
720-88263-12	DG-K11S-9.5-10	Total/NA	Solid	7471A	250662
720-88263-13	DG-I11S-0.5-1	Total/NA	Solid	7471A	250662
720-88263-14	DG-I11S-3.5-4	Total/NA	Solid	7471A	250662
720-88263-15	DG-I11S-9.5-10	Total/NA	Solid	7471A	250662
720-88263-16	DG-E11S-0.5-1	Total/NA	Solid	7471A	250662
720-88263-17	DG-E11S-3.5-4	Total/NA	Solid	7471A	250662
720-88263-18	DG-E11S-9.5-10	Total/NA	Solid	7471A	250662
MB 720-250662/1-A	Method Blank	Total/NA	Solid	7471A	250662
LCS 720-250662/2-A	Lab Control Sample	Total/NA	Solid	7471A	250662
720-88263-3 MS	DG-H9S-0.5-1	Total/NA	Solid	7471A	250662

Metals (Continued)

Analysis Batch: 250923 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88263-3 MSD	DG-H9S-0.5-1	Total/NA	Solid	7471A	250662

Client Sample ID: DG-FG910S-0.5-1 — Lab Sample ID: 720-88263-1

Date Collected: 08/27/18 07:50 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250602	08/27/18 02:30	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250625	08/30/18 23:29	JRM	TAL PLS
Total/NA	Prep	3546			250580	08/30/18 10:18	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250749	09/03/18 22:02	LPL	TAL PLS
Total/NA	Prep	3546			250566	08/30/18 08:54	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250762	09/05/18 03:51	JXL	TAL PLS
Total/NA	Prep	3540C			343157	08/30/18 06:48	DVT	TAL CAN
Total/NA	Analysis	8082		1	343540	09/01/18 12:43	KMG	TAL CAN
Total/NA	Prep	3050B			250633	08/30/18 18:17	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250732	08/31/18 15:07	BKR	TAL PLS
Total/NA	Prep	7471A			250621	08/30/18 16:17	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250770	08/31/18 19:13	OBI	TAL PLS

Client Sample ID: DG-F910S-3.5-4 — Lab Sample ID: 720-88263-2

Date Collected: 08/27/18 07:50 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250602	08/27/18 02:30	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250625	08/30/18 23:57	JRM	TAL PLS
Total/NA	Prep	3546			250580	08/30/18 10:18	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250749	09/03/18 22:25	LPL	TAL PLS
Total/NA	Prep	3546			250566	08/30/18 08:54	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250885	09/05/18 13:26	JXL	TAL PLS
Total/NA	Prep	3540C			343157	08/30/18 06:48	DVT	TAL CAN
Total/NA	Analysis	8082		1	343540	09/01/18 12:57	KMG	TAL CAN
Total/NA	Prep	3050B			250633	08/30/18 18:17	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250732	08/31/18 15:12	BKR	TAL PLS
Total/NA	Prep	7471A			250662	09/04/18 21:32	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250923	09/05/18 10:44	OBI	TAL PLS

Client Sample ID: DG-H9S-0.5-1 — Lab Sample ID: 720-88263-3

Date Collected: 08/27/18 08:25 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250602	08/27/18 02:30	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250625	08/31/18 00:26	JRM	TAL PLS
Total/NA	Prep	3546			250580	08/30/18 10:18	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		2	250749	09/03/18 22:49	LPL	TAL PLS
Total/NA	Prep	3546			250566	08/30/18 08:54	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250762	09/05/18 04:40	JXL	TAL PLS
Total/NA	Prep	3546			250531	08/29/18 17:11	MAB	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-H9S-0.5-1 — Lab Sample ID: 720-88263-3

Date Collected: 08/27/18 08:25
Date Received: 08/27/18 14:25
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8081A		1	250746	09/03/18 19:01	JZT	TAL PLS
Total/NA	Prep	3540C			343157	08/30/18 06:48	DVT	TAL CAN
Total/NA	Analysis	8082		1	343540	09/01/18 13:12	KMG	TAL CAN
Total/NA	Prep	3050B			250633	08/30/18 18:17	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250732	08/31/18 15:17	BKR	TAL PLS
Total/NA	Prep	7471A			250662	09/04/18 21:32	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250923	09/05/18 10:42	OBI	TAL PLS

Client Sample ID: DG-H9S-3.5-4 — Lab Sample ID: 720-88263-4

Date Collected: 08/27/18 08:25
Date Received: 08/27/18 14:25
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250602	08/27/18 02:30	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250625	08/31/18 00:55	JRM	TAL PLS
Total/NA	Prep	3546			250580	08/30/18 10:18	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250749	09/03/18 23:13	LPL	TAL PLS
Total/NA	Prep	3546			250566	08/30/18 08:54	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250980	09/06/18 14:56	JXL	TAL PLS
Total/NA	Prep	3546			250531	08/29/18 17:11	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250746	09/03/18 19:18	JZT	TAL PLS
Total/NA	Prep	3540C			343157	08/30/18 06:48	DVT	TAL CAN
Total/NA	Analysis	8082		1	343540	09/01/18 13:26	KMG	TAL CAN
Total/NA	Prep	3050B			250633	08/30/18 18:17	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250732	08/31/18 15:22	BKR	TAL PLS
Total/NA	Prep	7471A			250662	09/04/18 21:32	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250923	09/05/18 10:47	OBI	TAL PLS

Client Sample ID: DG-H9S-9.5-10 — Lab Sample ID: 720-88263-5

Date Collected: 08/27/18 08:25
Date Received: 08/27/18 14:25
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250666	08/27/18 02:30	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250644	08/31/18 14:42	JRM	TAL PLS
Total/NA	Prep	3546			250580	08/30/18 10:18	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250749	09/03/18 23:36	LPL	TAL PLS
Total/NA	Prep	3546			250566	08/30/18 08:54	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250885	09/05/18 13:51	JXL	TAL PLS
Total/NA	Prep	3546			250531	08/29/18 17:11	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250765	09/04/18 15:38	MQL	TAL PLS
Total/NA	Prep	3540C			343157	08/30/18 06:48	DVT	TAL CAN
Total/NA	Analysis	8082		1	343540	09/01/18 13:41	KMG	TAL CAN

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-H9S-9.5-10 — Lab Sample ID: 720-88263-5

Date Collected: 08/27/18 08:25 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250513	08/29/18 15:55	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250635	08/30/18 16:51	OBI	TAL PLS
Total/NA	Prep	7471A			250662	09/04/18 21:32	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250923	09/05/18 10:49	OBI	TAL PLS

Client Sample ID: DG-L9S-0.5-1 — Lab Sample ID: 720-88263-6

Date Collected: 08/27/18 09:10 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250602	08/27/18 02:30	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250625	08/31/18 01:52	JRM	TAL PLS
Total/NA	Prep	3546			250580	08/30/18 10:18	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250749	09/04/18 00:00	LPL	TAL PLS
Total/NA	Prep	3546			250566	08/30/18 08:54	MAB	TAL PLS
Total/NA	Analysis	8015B		5	250980	09/06/18 14:32	JXL	TAL PLS
Total/NA	Prep	3546			250595	08/30/18 12:52	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250891	09/05/18 18:26	MQL	TAL PLS
Total/NA	Prep	3540C			343157	08/30/18 06:48	DVT	TAL CAN
Total/NA	Analysis	8082		1	343540	09/01/18 13:56	KMG	TAL CAN
Total/NA	Prep	3050B			250513	08/29/18 15:55	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250635	08/30/18 16:56	OBI	TAL PLS
Total/NA	Prep	7471A			250662	09/04/18 21:32	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250923	09/05/18 10:51	OBI	TAL PLS

Client Sample ID: DG-L9S-3.5-4 — Lab Sample ID: 720-88263-7

Date Collected: 08/27/18 09:10 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			250958	09/05/18 19:02	CTD	TAL PLS
Total/NA	Analysis	8260B		1	250946	09/06/18 00:38	MJK	TAL PLS
Total/NA	Prep	5030B			250783	09/04/18 09:47	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250750	09/04/18 13:55	JRM	TAL PLS
Total/NA	Prep	3546			250580	08/30/18 10:18	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250749	09/04/18 00:24	LPL	TAL PLS
Total/NA	Prep	3546			250566	08/30/18 08:54	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250884	09/05/18 18:20	JXL	TAL PLS
Total/NA	Prep	3546			250595	08/30/18 12:52	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250891	09/05/18 18:44	MQL	TAL PLS
Total/NA	Prep	3540C			343157	08/30/18 06:48	DVT	TAL CAN
Total/NA	Analysis	8082		1	343540	09/01/18 14:10	KMG	TAL CAN
Total/NA	Prep	3050B			250513	08/29/18 15:55	GLL	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-L9S-3.5-4 — Lab Sample ID: 720-88263-7

Date Collected: 08/27/18 09:10 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		4	250635	08/30/18 17:01	OBI	TAL PLS
Total/NA	Prep	7471A			250662	09/04/18 21:32	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250923	09/05/18 10:54	OBI	TAL PLS

Client Sample ID: DG-M11S-0.5-1 — Lab Sample ID: 720-88263-8

Date Collected: 08/27/18 10:00 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250666	08/27/18 02:30	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250644	08/31/18 15:15	JRM	TAL PLS
Total/NA	Prep	3546			250607	08/30/18 14:15	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250960	09/06/18 06:54	LPL	TAL PLS
Total/NA	Prep	3546			250566	08/30/18 08:54	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250884	09/05/18 18:44	JXL	TAL PLS
Total/NA	Prep	3546			250595	08/30/18 12:52	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250891	09/05/18 19:01	MQL	TAL PLS
Total/NA	Prep	3540C			343157	08/30/18 06:48	DVT	TAL CAN
Total/NA	Analysis	8082		1	343540	09/01/18 14:25	KMG	TAL CAN
Total/NA	Prep	3050B			250513	08/29/18 15:55	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250635	08/30/18 17:06	OBI	TAL PLS
Total/NA	Prep	7471A			250662	09/04/18 21:32	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250923	09/05/18 11:01	OBI	TAL PLS

Client Sample ID: DG-M11S-3.5-4 — Lab Sample ID: 720-88263-9

Date Collected: 08/27/18 10:00 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250602	08/27/18 02:30	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250625	08/31/18 02:48	JRM	TAL PLS
Total/NA	Prep	3546			250607	08/30/18 14:15	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250799	09/04/18 19:06	LPL	TAL PLS
Total/NA	Prep	3546			250566	08/30/18 08:54	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250884	09/05/18 17:55	JXL	TAL PLS
Total/NA	Prep	3546			250595	08/30/18 12:52	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250891	09/05/18 19:19	MQL	TAL PLS
Total/NA	Prep	3540C			343157	08/30/18 06:48	DVT	TAL CAN
Total/NA	Analysis	8082		1	343540	09/01/18 14:40	KMG	TAL CAN
Total/NA	Prep	3050B			250513	08/29/18 15:55	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250878	09/04/18 21:01	OBI	TAL PLS
Total/NA	Prep	3050B			250513	08/29/18 15:55	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250635	08/30/18 17:10	OBI	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-M11S-3.5-4 — Lab Sample ID: 720-88263-9

Date Collected: 08/27/18 10:00 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			250662	09/04/18 21:32	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250923	09/05/18 11:03	OBI	TAL PLS

Client Sample ID: DG-K11S-0.5-1 — Lab Sample ID: 720-88263-10

Date Collected: 08/27/18 10:35 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250602	08/27/18 02:30	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250625	08/31/18 03:17	JRM	TAL PLS
Total/NA	Prep	3546			250607	08/30/18 14:15	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250799	09/04/18 18:18	LPL	TAL PLS
Total/NA	Prep	3546			250566	08/30/18 08:54	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250885	09/05/18 18:20	JXL	TAL PLS
Total/NA	Prep	3546			250674	08/31/18 09:53	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250891	09/05/18 20:47	MQL	TAL PLS
Total/NA	Prep	3540C			343157	08/30/18 06:48	DVT	TAL CAN
Total/NA	Analysis	8082		1	343540	09/01/18 14:54	KMG	TAL CAN
Total/NA	Prep	3050B			250513	08/29/18 15:55	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250635	08/30/18 17:15	OBI	TAL PLS
Total/NA	Prep	7471A			250662	09/04/18 21:32	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250923	09/05/18 11:05	OBI	TAL PLS

Client Sample ID: DG-K11S-3.5-4 — Lab Sample ID: 720-88263-11

Date Collected: 08/27/18 10:35 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250602	08/27/18 02:30	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250625	08/31/18 03:45	JRM	TAL PLS
Total/NA	Prep	3546			250607	08/30/18 14:15	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250799	09/04/18 19:29	LPL	TAL PLS
Total/NA	Prep	3546			250566	08/30/18 08:54	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250885	09/05/18 18:44	JXL	TAL PLS
Total/NA	Prep	3546			250674	08/31/18 09:53	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250891	09/05/18 21:05	MQL	TAL PLS
Total/NA	Prep	3540C			343157	08/30/18 06:48	DVT	TAL CAN
Total/NA	Analysis	8082		1	343540	09/01/18 15:09	KMG	TAL CAN
Total/NA	Prep	3050B			250513	08/29/18 15:55	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250635	08/30/18 17:20	OBI	TAL PLS
Total/NA	Prep	7471A			250662	09/04/18 21:32	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250923	09/05/18 11:08	OBI	TAL PLS

Client Sample ID: DG-K11S-9.5-10 — Lab Sample ID: 720-88263-12

Date Collected: 08/27/18 10:35 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250666	08/27/18 02:30	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250644	08/31/18 16:54	JRM	TAL PLS
Total/NA	Prep	3546			250607	08/30/18 14:15	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250960	09/06/18 10:49	LPL	TAL PLS
Total/NA	Prep	3546			250566	08/30/18 08:54	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250762	09/05/18 04:16	JXL	TAL PLS
Total/NA	Prep	3546			250674	08/31/18 09:53	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250891	09/05/18 21:22	MQL	TAL PLS
Total/NA	Prep	3540C			343157	08/30/18 06:48	DVT	TAL CAN
Total/NA	Analysis	8082		1	343540	09/01/18 15:24	KMG	TAL CAN
Total/NA	Prep	3050B			250513	08/29/18 15:55	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250635	08/30/18 17:25	OBI	TAL PLS
Total/NA	Prep	7471A			250662	09/04/18 21:32	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250923	09/05/18 11:10	OBI	TAL PLS

Client Sample ID: DG-I11S-0.5-1 — Lab Sample ID: 720-88263-13

Date Collected: 08/27/18 11:10 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250666	08/27/18 02:30	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250644	08/31/18 17:28	JRM	TAL PLS
Total/NA	Prep	3546			250607	08/30/18 14:15	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		2	251008	09/06/18 16:36	LPL	TAL PLS
Total/NA	Prep	3546			250566	08/30/18 08:54	MAB	TAL PLS
Total/NA	Analysis	8015B		3	250885	09/05/18 15:53	JXL	TAL PLS
Total/NA	Prep	3546			250674	08/31/18 09:53	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250891	09/05/18 21:40	MQL	TAL PLS
Total/NA	Prep	3540C			343157	08/30/18 06:48	DVT	TAL CAN
Total/NA	Analysis	8082		1	343618	09/04/18 10:57	KMG	TAL CAN
Total/NA	Prep	3050B			250513	08/29/18 15:55	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250635	08/30/18 17:29	OBI	TAL PLS
Total/NA	Prep	7471A			250662	09/04/18 21:32	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250923	09/05/18 11:12	OBI	TAL PLS

Client Sample ID: DG-I11S-3.5-4 — Lab Sample ID: 720-88263-14

Date Collected: 08/27/18 11:10 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250602	08/27/18 02:30	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250625	08/31/18 05:11	JRM	TAL PLS
Total/NA	Prep	3546			250607	08/30/18 14:15	MAB	TAL PLS

Client Sample ID: DG-I11S-3.5-4 — Lab Sample ID: 720-88263-14

Date Collected: 08/27/18 11:10 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C SIM		4	250960	09/06/18 11:37	LPL	TAL PLS
Total/NA	Prep	3546			250566	08/30/18 08:54	MAB	TAL PLS
Total/NA	Analysis	8015B		10	250885	09/05/18 16:17	JXL	TAL PLS
Total/NA	Prep	3546			250674	08/31/18 09:53	MAB	TAL PLS
Total/NA	Analysis	8081A		2	250891	09/05/18 21:58	MQL	TAL PLS
Total/NA	Prep	3540C			343157	08/30/18 06:48	DVT	TAL CAN
Total/NA	Analysis	8082		1	343540	09/01/18 15:53	KMG	TAL CAN
Total/NA	Prep	3050B			250513	08/29/18 15:55	GLL	TAL PLS
Total/NA	Analysis	6010B		4	250635	08/30/18 17:34	OBI	TAL PLS
Total/NA	Prep	7471A			250662	09/04/18 21:32	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250923	09/05/18 11:15	OBI	TAL PLS

Client Sample ID: DG-I11S-9.5-10 — Lab Sample ID: 720-88263-15

Date Collected: 08/27/18 11:10 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250602	08/27/18 02:30	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250625	08/31/18 05:39	JRM	TAL PLS
Total/NA	Prep	3546			250607	08/30/18 14:15	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		10	251008	09/06/18 17:00	LPL	TAL PLS
Total/NA	Prep	3546			250566	08/30/18 08:54	MAB	TAL PLS
Total/NA	Analysis	8015B		10	250885	09/05/18 15:28	JXL	TAL PLS
Total/NA	Prep	3546			250595	08/30/18 12:52	MAB	TAL PLS
Total/NA	Analysis	8081A		10	250891	09/05/18 18:09	MQL	TAL PLS
Total/NA	Prep	3540C			343157	08/30/18 06:48	DVT	TAL CAN
Total/NA	Analysis	8082		1	343584	09/02/18 15:03	KMG	TAL CAN
Total/NA	Prep	3050B			250563	08/30/18 08:40	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250655	08/30/18 23:55	OBI	TAL PLS
Total/NA	Prep	7471A			250662	09/04/18 21:32	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250923	09/05/18 11:17	OBI	TAL PLS

Client Sample ID: DG-E11S-0.5-1 — Lab Sample ID: 720-88263-16

Date Collected: 08/27/18 11:50 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250602	08/27/18 02:30	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250626	08/30/18 22:21	JRM	TAL PLS
Total/NA	Prep	3546			250607	08/30/18 14:15	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		10	251008	09/06/18 17:24	LPL	TAL PLS
Total/NA	Prep	3546			250566	08/30/18 08:54	MAB	TAL PLS
Total/NA	Analysis	8015B		5	250885	09/05/18 17:06	JXL	TAL PLS

Client Sample ID: DG-E11S-0.5-1 — Lab Sample ID: 720-88263-16

Date Collected: 08/27/18 11:50 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			250595	08/30/18 12:52	MAB	TAL PLS
Total/NA	Analysis	8081A		2	250765	09/04/18 18:31	MQL	TAL PLS
Total/NA	Prep	3540C			343157	08/30/18 06:48	DVT	TAL CAN
Total/NA	Analysis	8082		1	343584	09/02/18 15:18	KMG	TAL CAN
Total/NA	Prep	3050B			250563	08/30/18 08:40	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250655	08/30/18 23:50	OBI	TAL PLS
Total/NA	Prep	7471A			250662	09/04/18 21:32	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250923	09/05/18 11:19	OBI	TAL PLS

Client Sample ID: DG-E11S-3.5-4 — Lab Sample ID: 720-88263-17

Date Collected: 08/27/18 11:50 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250602	08/27/18 02:30	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250626	08/30/18 22:50	JRM	TAL PLS
Total/NA	Prep	3546			250607	08/30/18 14:15	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		10	251008	09/06/18 17:47	LPL	TAL PLS
Total/NA	Prep	3546			250566	08/30/18 08:54	MAB	TAL PLS
Total/NA	Analysis	8015B		20	250885	09/05/18 16:42	JXL	TAL PLS
Total/NA	Prep	3546			250595	08/30/18 12:52	MAB	TAL PLS
Total/NA	Analysis	8081A		2	250765	09/04/18 18:48	MQL	TAL PLS
Total/NA	Prep	3540C			343157	08/30/18 06:48	DVT	TAL CAN
Total/NA	Analysis	8082		1	343584	09/02/18 15:32	KMG	TAL CAN
Total/NA	Prep	3050B			250563	08/30/18 08:40	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250655	08/30/18 23:59	OBI	TAL PLS
Total/NA	Prep	7471A			250662	09/04/18 21:32	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250923	09/05/18 11:21	OBI	TAL PLS

Client Sample ID: DG-E11S-9.5-10 — Lab Sample ID: 720-88263-18

Date Collected: 08/27/18 11:50 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250602	08/27/18 02:30	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250626	08/30/18 23:19	JRM	TAL PLS
Total/NA	Prep	3546			250607	08/30/18 14:15	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250960	09/06/18 07:17	LPL	TAL PLS
Total/NA	Prep	3546			250566	08/30/18 08:54	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250884	09/05/18 19:09	JXL	TAL PLS
Total/NA	Prep	3546			250595	08/30/18 12:52	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250765	09/04/18 19:06	MQL	TAL PLS
Total/NA	Prep	3540C			343157	08/30/18 06:48	DVT	TAL CAN

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Client Sample ID: DG-E11S-9.5-10

Lab Sample ID: 720-88263-18

Date Collected: 08/27/18 11:50

Matrix: Solid

Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082		1	343584	09/02/18 15:47	KMG	TAL CAN
Total/NA	Prep	3050B			250563	08/30/18 08:40	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250655	08/31/18 00:04	OBI	TAL PLS
Total/NA	Prep	7471A			250662	09/04/18 21:32	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250923	09/05/18 11:28	OBI	TAL PLS

Laboratory References:

= Asbestos TEM Laboratories, Inc., 630 BANCROFT WAY, Berkeley, CA 94710

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Laboratory: TestAmerica Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-19
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19
Illinois	NELAP	5	200004	07-31-19
Kansas	NELAP	7	E-10336	01-31-19
Kentucky (UST)	State Program	4	58	02-23-19
Kentucky (WW)	State Program	4	98016	12-31-18 *
Minnesota	NELAP	5	039-999-348	12-31-18 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19
New York	NELAP	2	10975	03-31-19
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-19
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-18-10	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19
Washington	State Program	10	C971	01-12-19
West Virginia DEP	State Program	3	210	12-31-18 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PLS
8270C SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
8081A	Organochlorine Pesticides (GC)	SW846	TAL PLS
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS
Subcontract	Asbestos - CARB 435	None	
3050B	Preparation, Metals	SW846	TAL PLS
3540C	Soxhlet Extraction	SW846	TAL CAN
3546	Microwave Extraction	SW846	TAL PLS
5030B	Purge and Trap	SW846	TAL PLS
5035	Closed System Purge and Trap	SW846	TAL PLS
7471A	Preparation, Mercury	SW846	TAL PLS

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

= Asbestos TEM Laboratories, Inc., 630 BANCROFT WAY, Berkeley, CA 94710

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88263-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-88263-1	DG-FG910S-0.5-1	Solid	08/27/18 07:50	08/27/18 14:25
720-88263-2	DG-F910S-3.5-4	Solid	08/27/18 07:50	08/27/18 14:25
720-88263-3	DG-H9S-0.5-1	Solid	08/27/18 08:25	08/27/18 14:25
720-88263-4	DG-H9S-3.5-4	Solid	08/27/18 08:25	08/27/18 14:25
720-88263-5	DG-H9S-9.5-10	Solid	08/27/18 08:25	08/27/18 14:25
720-88263-6	DG-L9S-0.5-1	Solid	08/27/18 09:10	08/27/18 14:25
720-88263-7	DG-L9S-3.5-4	Solid	08/27/18 09:10	08/27/18 14:25
720-88263-8	DG-M11S-0.5-1	Solid	08/27/18 10:00	08/27/18 14:25
720-88263-9	DG-M11S-3.5-4	Solid	08/27/18 10:00	08/27/18 14:25
720-88263-10	DG-K11S-0.5-1	Solid	08/27/18 10:35	08/27/18 14:25
720-88263-11	DG-K11S-3.5-4	Solid	08/27/18 10:35	08/27/18 14:25
720-88263-12	DG-K11S-9.5-10	Solid	08/27/18 10:35	08/27/18 14:25
720-88263-13	DG-I11S-0.5-1	Solid	08/27/18 11:10	08/27/18 14:25
720-88263-14	DG-I11S-3.5-4	Solid	08/27/18 11:10	08/27/18 14:25
720-88263-15	DG-I11S-9.5-10	Solid	08/27/18 11:10	08/27/18 14:25
720-88263-16	DG-E11S-0.5-1	Solid	08/27/18 11:50	08/27/18 14:25
720-88263-17	DG-E11S-3.5-4	Solid	08/27/18 11:50	08/27/18 14:25
720-88263-18	DG-E11S-9.5-10	Solid	08/27/18 11:50	08/27/18 14:25

ASBESTOS TEM LABORATORIES, INC.

CARB Method 435
Polarized Light Microscopy
Analytical Report

Laboratory Job # 1283-01210

630 Bancroft Way
Berkeley, CA 94710
(510) 704-8930
FAX (510) 704-8429

ASBESTOS TEM LABORATORIES, INC

CA DPH ELAP
Lab No. 1866

NVLAP Lab Code: 101891-0
Berkeley, CA

Sep/05/2018

Micah Smith
TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

RE: LABORATORY JOB # 1283-01210
Polarized light microscopy analytical results for 18 bulk sample(s).
Job Site: 720-88263-1
Job No.: UPC-OU-SM

Enclosed please find the bulk material analytical results for one or more samples submitted for asbestos analysis. The analyses were performed in accordance with the California Air Resources Board (ARB) Method 435 for the determination of asbestos in serpentine aggregate samples.

Prior to analysis, samples are logged-in and all data pertinent to the sample recorded. The samples are checked for damage or disruption of any chain-of-custody seals. A unique laboratory ID number is assigned to each sample. A hard copy log-in sheet containing all pertinent information concerning the sample is generated. This and all other relevant paper work are kept with the sample throughout the analytical procedures to assure proper analysis.

Sample preparation follows a standard CARB 435 prep method. The entire sample is dried at 135-150 C and then crushed to ~3/8" gravel size using a Bico Chipmunk crusher. If the submitted sample is >1 pint, the sample was split using a 1/2" riffle splitter following ASTM Method C-702-98 to obtain a 1 pint aliquot. The entire 1 pint aliquot, or entire original sample, is then pulverized in a Bico Braun disc pulverizer calibrated to produce a nominal 200 mesh final product. If necessary, additional homogenization steps are undertaken using a 3/8" riffle splitter. Small aliquots are collected from throughout the pulverized material to create three separate microsope slide mounts containing the appropriate refractive index oil. The prepared slides are placed under a polarizing light microscope where standard mineralogical techniques are used to analyze the various materials present, including asbestos. If asbestos is identified and of less than 10% concentration by visual area estimate then an additional five sample mounts are prepared. Quantification of asbestos concentration is obtained using the standard CAL ARB Method 435 point count protocol. For samples observed to contain visible asbestos of less than 10% concentration, a point counting techinique is used with 50 points counted on each of eight sample mounts for a total of 400 points. The data is then compiled into standard report format and subjected to a thorough quality assurance check before the information is released to the client.

While the CARB 435 method has much to commend it, there are a number of situations where it fails to provide sufficient accuracy to make a definitive determination of the presence/absence of asbestos and/or an accurate count of the asbestos concentration present in a given sample. These problems include, but are not limited to, 1) statistical uncertainty with samples containing <1% asbestos when too few particles are counted, 2) definitive identification and discrimination between various fibrous amphibole minerals such as tremolite/actinolite/hornblende and the "Libby amphiboles" such as tremolite/winchite/richterite/arfvedsonite, and C) small asbestiform fibers which are near or below the resolution limit of the PLM microscope such as those found in various California coast range serpentine bodies. In these cases, further analysis by transmission electron microscopy is recommended to obtain a more accurate result.

Sincerely Yours,

Lab Manager
ASBESTOS TEM LABORATORIES, INC.

--- These results relate only to the samples tested and must not be reproduced, except in full, without the approval of the laboratory. ---

630 BANCROFT WAY ▪ BERKELEY, CA 94710 ▪ PH. (510) 704-8930 ▪ FAX (510) 704-8429
With Branch Offices Located At: 1350 FREEPORT BLVD. UNIT 104, SPARKS, NV 89431

POLARIZED LIGHT MICROSCOPY
CARB 435 ANALYTICAL REPORT

Contact: Micah Smith

Address: TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

Samples Submitted: 18
Samples Analyzed: 18
Job Site / No. UPC-OU-SM
720-88263-1

Report No. **359923**
Date Submitted: Aug-28-18
Date Reported: Sep-05-18

SAMPLE ID	POINTS COUNTED	ASBESTOS %	ASBESTOS TYPE	LOCATION / DESCRIPTION
DG-FG910S-0.5-1 Lab ID # 1283-01210-001	**400** - Total Points	**<0.25%**	**None Detected**	720-88263-1 No Asbestos Detected
DG-F910S-3.5-4 Lab ID # 1283-01210-002	**400** - Total Points	**<0.25%**	**None Detected**	720-88263-2 No Asbestos Detected
DG-H9S-0.5-1 Lab ID # 1283-01210-003	**400** - Total Points	**<0.25%**	**None Detected**	720-88263-3 No Asbestos Detected
DG-H9S-3.5-4 Lab ID # 1283-01210-004	**400** - Total Points	**<0.25%**	**None Detected**	720-88263-4 No Asbestos Detected
DG-H9S-9.5-10 Lab ID # 1283-01210-005	**400** - Total Points	**<0.25%**	**None Detected**	720-88263-5 No Asbestos Detected
DG-L9S-0.5-1 Lab ID # 1283-01210-006	**400** - Total Points	**<0.25%**	**None Detected**	720-88263-6 No Asbestos Detected
DG-L9S-3.5-4 Lab ID # 1283-01210-007	**400** - Total Points	**<0.25%**	**None Detected**	720-88263-7 No Asbestos Detected
DG-M11S-0.5-1 Lab ID # 1283-01210-008	**400** - Total Points	**<0.25%**	**None Detected**	720-88263-8 No Asbestos Detected
DG-M11S-3.5-4 Lab ID # 1283-01210-009	**400** - Total Points	**<0.25%**	**None Detected**	720-88263-9 No Asbestos Detected
DG-K11S-0.5-1 Lab ID # 1283-01210-010	**400** - Total Points	**<0.25%**	**None Detected**	720-88263-10 No Asbestos Detected

QC Reviewer _____ **Analys** _____

POLARIZED LIGHT MICROSCOPY
CARB 435 ANALYTICAL REPORT

Contact: Micah Smith

Address: TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

Samples Submitted: 18
Samples Analyzed: 18
Job Site / No. UPC-OU-SM
720-88263-1

Report No. **359923**
Date Submitted: Aug-28-18
Date Reported: Sep-05-18

SAMPLE ID	POINTS COUNTED	ASBESTOS %	ASBESTOS TYPE	LOCATION / DESCRIPTION
DG-K11S-3.5-4 Lab ID # 1283-01210-011	**400** - Total Points	**<0.25%**	**None Detected**	720-88263-11 No Asbestos Detected
DG-K11S-9.5-10 Lab ID # 1283-01210-012	**400** - Total Points	**<0.25%**	**None Detected**	720-88263-12 No Asbestos Detected
DG-I11S-0.5-1 Lab ID # 1283-01210-013	**400** - Total Points	**<0.25%**	**None Detected**	720-88263-13 No Asbestos Detected
DG-I11S-3.5-4 Lab ID # 1283-01210-014	**400** - Total Points	**<0.25%**	**None Detected**	720-88263-14 No Asbestos Detected
DG-I11S-9.5-10 Lab ID # 1283-01210-015	**400** - Total Points	**<0.25%**	**None Detected**	720-88263-15 No Asbestos Detected
DG-E11S-0.5-1 Lab ID # 1283-01210-016	**400** - Total Points	**<0.25%**	**None Detected**	720-88263-16 No Asbestos Detected
DG-E11S-3.5-4 Lab ID # 1283-01210-017	**400** - Total Points	**<0.25%**	**None Detected**	720-88263-17 No Asbestos Detected
DG-E11S-9.5-10 Lab ID # 1283-01210-018	**400** - Total Points	**<0.25%**	**None Detected**	720-88263-18 No Asbestos Detected
Lab ID #	- Total Points			
Lab ID #	- Total Points			

QC Reviewer _____ **Analys** _____

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

359923

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39437.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 2
Company: Asbestos TEM Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88263-1
Address: 630 BANCROFT WAY, ,	Due Date Requested: 9/4/2018			
City: Berkeley	TAT Requested (days):			
State, Zip: CA, 94710				
Phone:	PO #:			
Email:	WO #:			
Project Name: UPC DU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Asbestos - CARB 435)	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X		X	
DG-FG910S--0.5-1 (720-88263-1)	8/27/18	07:50 Pacific		Solid			X	1	
DG-F910S--3.5-4 (720-88263-2)	8/27/18	07:50 Pacific		Solid			X	1	
DG-H9S--0.5-1 (720-88263-3)	8/27/18	08:25 Pacific		Solid			X	1	
DG-H9S--3.5-4 (720-88263-4)	8/27/18	08:25 Pacific		Solid			X	1	
DG-H9S--9.5-10 (720-88263-5)	8/27/18	08:25 Pacific		Solid			X	1	
DG-L9S--0.5-1 (720-88263-6)	8/27/18	09:10 Pacific		Solid			X	1	
DG-L9S--3.5-4 (720-88263-7)	8/27/18	09:10 Pacific		Solid			X	1	
DG-M11S--0.5-1 (720-88263-8)	8/27/18	10:00 Pacific		Solid			X	1	
DG-M11S--3.5-4 (720-88263-9)	8/27/18	10:00 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	8/28/18 1245	TA	MB	AUG28 '18 12:46PM	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39437.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 2 of 2
Company: Asbestos TEM Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88263-1
Address: 630 BANCROFT WAY, ,	Due Date Requested: 9/4/2018			
City: Berkeley	TAT Requested (days):			
State, Zip: CA, 94710				
Phone:	PO #:			
Email:	WO #:			
Project Name: UPC OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Asbestos - CARB 435)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-K11S--0.5-1 (720-88263-10)	8/27/18	10:35 Pacific		Solid			X	1	
DG-K11S--3.5-4 (720-88263-11)	8/27/18	10:35 Pacific		Solid			X	1	
DG-K11S--9.5-10 (720-88263-12)	8/27/18	10:35 Pacific		Solid			X	1	
DG-I11S--0.5-1 (720-88263-13)	8/27/18	11:10 Pacific		Solid			X	1	
DG-I11S--3.5-4 (720-88263-14)	8/27/18	11:10 Pacific		Solid			X	1	
DG-I11S--9.5-10 (720-88263-15)	8/27/18	11:10 Pacific		Solid			X	1	
DG-E11S--0.5-1 (720-88263-16)	8/27/18	11:50 Pacific		Solid			X	1	
DG-E11S--3.5-4 (720-88263-17)	8/27/18	11:50 Pacific		Solid			X	1	
DG-E11S--9.5-10 (720-88263-18)	8/27/18	11:50 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. I

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 8/28/18 1245	Company: TA	Received by: MB	Date/Time: AUG29 '18 12:48PM	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

Smith, Micah

From: Miranda Kahrilas <MKahrilas@Geosyntec.com>
Sent: Friday, August 31, 2018 1:50 PM
To: Smith, Micah
Subject: Brisbane: Cancel OCP Analysis
Attachments: COC 720-88239 (201808250532).pdf; COC 720-88263 (201808280054).pdf; Std_Tal_Login_Ack for 720-88239-1.pdf; Std_Tal_Login_Ack for 720-88263-1.pdf

-External Email-

Hi Micah,

Going through the logins and I noticed a few samples had added analysis that we did not request, please cancel the following if that is still possible.

Cancel OCP analysis for the following samples:
720-88239
DG-DE89-0.5-1DG-DE89-3.5-4DG-DE89-9.5-10
720-88263
DG-FG910-0.5-1DG-FG910-3.5-4

I have attached the COCs and sample logins for reference.

Miranda Kahrilas
Staff Engineer

1111 Broadway, 6th Floor

Oakland, California 94607

Phone: 847.530.7602

Direct: 510.285.2685

www.geosyntec.com

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

720-88263

TESTAMERICA
1220 Quarry Lar ... dy
Phone: (925) ... 6 ... 2

720-88263 Chain of Custody

Reference #: 185131

Date 8/27 Page 1 of 2

port To

: MIRANDA KAHRILAS
npany: GEOSYNTEC
ress: 1111 BROADWAY 6TH FLOOR
ail: mkahrilas@geosyntec.com
To: GEOSYNTEC
Sampled By: A. SMITH
Phone:

Analysis Request

Sample ID	Date	Time	Qty	Matrix	Volatile Organics GC/MS (VOCs) ☒ EPA 8260B ☒ 624	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☐ Motor Oil ☐ Other	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☒ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides/ PCBs ☒ EPA 8081 ☒ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Metals: ☐ 6020 ☐ 200.8 (ICP-MS):	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_2 ☐ F ☐ Br ☐ NO_3 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	Asbestos (CARB 435)
DG-FG10S-0.5-1	8/27	750	S	V	X			X		X		X	X										X
DG-FG10S-3.5-4		750			X			X		X		X	X										X
DG-H9S-0.5-1		825			X			X		X		X	X										X
DG-H9S-3.5-4		825			X			X		X		X	X										X
DG-H9S-9.5-10		825			X			X		X		X	X										X
DG-L9S-0.5-1		910			X			X		X		X	X										X
DG-L9S-3.5-4		910			X			X		X		X	X										X
DG-M11S-0.5-1		1000			X			X		X		X	X										X
DG-M11S-3.5-4		1000			X			X		X		X	X										X
DG-K11S-0.5-1	V	1035	V	V	X			X		X		X	X										X

Project Info.
ct Name/ #: RC OU-SM
WG2565/02

Sample Receipt
# of Containers:
Head Space:
Temp:

it Card
/N: If yes, please call with payment information ASAP

10 Day | 5 Day | 4 Day | 3 Day | 2 Day | 1 Day | Other:

* no pesticides analysis for FG10 samples.

rt: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
al Instructions / Comments: ☐ Global ID _____

1.7°C

ns and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: M K — Time: 1255	Signature: — Time: 1425	Signature: — Time:
Printed Name: MIRANDA KAHRILAS — Date: 8/27	Printed Name: Robert — Date: 8/27/18	Printed Name: — Date:
Company: GEOSYNTEC	Company: TA	Company:

1) Received by:	2) Received by:	3) Received by:
Signature: — Time: 1300	Signature: — Time: 1425	Signature: — Time:
Printed Name: Robert — Date: 8/27/18	Printed Name: Dennis Arp — Date: 8/27/18	Printed Name: — Date:
Company: TA	Company: TA-72	Company:

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TSC-88263

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 185131

Date 8/27 Page 2 of 2

Report To
: MIRANDA KAHRILAS
mpany: GEOSYNTEC
ress: 1111 BROADWAY 6TH FLOOR
ail: mkahrilas@geosyntec.com
To: GEOSYNTEC
Sampled By: A. SMITH
Phone:

Analysis Request

Sample ID	Date	Time	Matrix	Preservative	Volatile Organics GC/MS (VOCs) ☒ EPA 8260B + 1,4-D	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☐ Motor Oil ☐ Other	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☒ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☒ EPA 8081 PCBs ☒ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Metals: ☐ 6020 ☐ 200.8 (ICP-MS):	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH: ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	Asbestos (CARB 435)
DG-K11S-3.5-4	8/27	1035	S	V	X			X		X		X	X										X
DG-K11S-9.5-10	↓	1035	↓	↓	X			X		X		X	X										X
DG-I11S-0.5-1		1110			X			X		X		X	X										X
DG-I11S-3.5-4		1110			X			X		X		X	X										X
DG-I11S-9.5-10		1110			X			X		X		X	X										X
DG-E11S-0.5-1		1150			X			X		X		X	X										X
DG-E11S-3.5-4		1150			X			X		X		X	X										X
DG-E11S-9.5-10	↓	1150	↓	↓	X			X		X		X	X										X

Project Info.
ct Name/ #: RC OU-SM
WG2565/02

Sample Receipt
# of Containers:
Head Space:
Temp:

t Card
N: If yes, please call with payment information ASAP

10 Day	5 Day	4 Day	3 Day	2 Day	1 Day	Other:

t: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
al Instructions / Comments: ☐ Global ID _____

ns and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [signature] Time: 1255	Signature: [signature] Time: 1425	Signature: Time:
Printed Name: MIRANDA KAHRILAS Date: 8/27	Printed Name: Robert Date: 8/27/18	Printed Name: Date:
Company: GEOSYNTEC	Company: TA	Company:

1) Received by:	2) Received by:	3) Received by:
Signature: [signature] Time: 1300	Signature: [signature] Time: 1425	Signature: Time:
Printed Name: Robert Date: 8/27/18	Printed Name: [illegible] Date: 8/27/18	Printed Name: Date:
Company: TA	Company: TASCE	Company:

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

0.2/08

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39438.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88263-1
Address: 4101 Shuffel Street NW, ,	Due Date Requested: 9/4/2018			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: UPC OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

C209

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8082/3540C (MOD) PCB 7 Aroclors	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-FG910S--0.5-1 (720-88263-1)	8/27/18	07:50 Pacific		Solid			X	1	
DG-F910S--3.5-4 (720-88263-2)	8/27/18	07:50 Pacific		Solid			X	1	
DG-H9S--0.5-1 (720-88263-3)	8/27/18	08:25 Pacific		Solid			X	1	
DG-H9S--3.5-4 (720-88263-4)	8/27/18	08:25 Pacific		Solid			X	1	
DG-H9S--9.5-10 (720-88263-5)	8/27/18	08:25 Pacific		Solid			X	1	
DG-L9S--0.5-1 (720-88263-6)	8/27/18	09:10 Pacific		Solid			X	1	
DG-L9S--3.5-4 (720-88263-7)	8/27/18	09:10 Pacific		Solid			X	1	
DG-M11S--0.5-1 (720-88263-8)	8/27/18	10:00 Pacific		Solid			X	1	
DG-M11S--3.5-4 (720-88263-9)	8/27/18	10:00 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	8/28/18 1237	TAPO		8/29/18 935	TAP
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39438.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88263-1
Address: 4101 Shuffel Street NW, ,	Due Date Requested: 9/4/2018			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: UPC OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8082/3540C (MOD) PCB 7 Aroclors	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-K11S--0.5-1 (720-88263-10)	8/27/18	10:35 Pacific		Solid			X	1	
DG-K11S--3.5-4 (720-88263-11)	8/27/18	10:35 Pacific		Solid			X	1	
DG-K11S--9.5-10 (720-88263-12)	8/27/18	10:35 Pacific		Solid			X	1	
DG-I11S--0.5-1 (720-88263-13)	8/27/18	11:10 Pacific		Solid			X	1	
DG-I11S--3.5-4 (720-88263-14)	8/27/18	11:10 Pacific		Solid			X	1	
DG-I11S--9.5-10 (720-88263-15)	8/27/18	11:10 Pacific		Solid			X	1	
DG-E11S--0.5-1 (720-88263-16)	8/27/18	11:50 Pacific		Solid			X	1	
DG-E11S--3.5-4 (720-88263-17)	8/27/18	11:50 Pacific		Solid			X	1	
DG-E11S--9.5-10 (720-88263-18)	8/27/18	11:50 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. I

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:		Method of Shipment:	
Relinquished by:	Date/Time: 8/28/18 1237	Company: TA-PLS	Received by:	Date/Time: 8/29/18 935	Company: TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		

Ver: 09/20/2016

TestAmerica Canton Sample Receipt Form/Narrative **Login # :**_____
Canton Facility

Client TA Pleasanton Site Name_____ Cooler unpacked by:
Cooler Received on 8/29/18 Opened on 8/29/18
FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other_____

Receipt After-hours: Drop-off Date/Time_____ Storage Location_____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other_____
Packing material used: Bubble Wrap Foam Plastic Bag None Other_____
COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF +0 °C) Observed Cooler Temp. 0.8 °C Corrected Cooler Temp. 0.8 °C
   IR GUN #36 (CF -0.3°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   -Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
   -Were tamper/custody seals intact and uncompromised? Yes No NA
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No
    If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC849151**
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____ Yes No
16. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

_____
_____
_____
_____
_____

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s):_____.

WI-NC-099

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88263-1

Login Number: 88263
List Number: 1
Creator: Bullock, Tracy

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	False	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-88264-1
Client Project/Site: UPC OU-SM
Revision: 1

For:
Geosyntec Consultants, Inc.
201 N. Civic Drive
Suite 245
Walnut Creek, California 94596

Attn: Mr. Krys Jesionek

Authorized for release by:
11/21/2018 7:13:18 PM

Micah Smith, Project Manager II
(925)484-1919
micah.smith@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 5
Detection Summary 7
Client Sample Results 12
Surrogate Summary 174
QC Sample Results 177
QC Association Summary 206
Lab Chronicle 212
Certification Summary 216
Method Summary 217
Sample Summary 218
Subcontract Data 219
Chain of Custody 223
Receipt Checklists 226

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	ISTD response or retention time outside acceptable limits
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	ISTD response or retention time outside acceptable limits
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 720-88264-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-88264-1

Comments
This report was revised on 11/21/18 to change the units for the metals data to report in mg/Kg, as requested.

Receipt
The samples were received on 8/27/2018 2:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.8º C.

Several samples have no time of collection indicated on the chain of custody (COC).

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250625 recovered outside control limits for the following analytes: 1,1-Dichloroethene and 1,1,2-Trichloro-1,2,2-trifluoroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250626 recovered outside control limits for the following analytes: 1,1-Dichloroethene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250644 recovered outside control limits for the following analytes: 1,1-Dichloroethene and 1,1,2-Trichloro-1,2,2-trifluoroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The Gasoline Range Organics (GRO) concentration reported for the following sample is due to the presence of discrete peaks: DUP-32 (720-88264-5).

Method(s) 8260B: Internal standard (ISTD) response for the following sample was outside control limits: DUP-23 (720-88264-1). The sample was re-extracted and/or re-analyzed with concurring results, and the second set of data has been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method(s) 8270C SIM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250607 and analytical batch 720-250799 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8270C SIM: Internal standard responses were outside of acceptance limits for the following samples: (720-88263-E-10-B MS) and (720-88263-E-10-C MSD). The samples show evidence of matrix interference.

Method(s) 8270C SIM: The following samples were diluted due to the abundance of non-target analytes: DUP-22 (720-88264-2), DUP-31 (720-88264-4), DUP-32 (720-88264-5), and DG-G11S-9.5-10 (720-88264-8). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8081A: The matrix spike / matrix spike duplicate(MS/MSD) precision for preparation batch 720-250595 and analytical batch 720-250868 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) was within acceptance limits. Several analytes are flagged as having out of control recoveries. These analytes were out of control on the confirmation column only, which is not reported.

Method(s) 8081A: The following samples were diluted due to the abundance of non-target analytes: DUP-31 (720-88264-4) and DUP-32 (720-88264-5). Elevated reporting limits (RLs) are provided.

Job ID: 720-88264-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

Method(s) 8081A: The %RPD between the primary and confirmation column / detector exceeded 40% for cis-Chlordane for the following sample: DG-G11S-0.5-1 (720-88264-6). The lower value has been reported and qualified in accordance with the laboratory's SOP.

Method(s) 8015B: The following samples required a dilution due to the nature of the sample matrix: DUP-22 (720-88264-2), DUP-31 (720-88264-4), DUP-32 (720-88264-5), (720-88264-D-5-E MS) and (720-88264-D-5-F MSD). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation may not provide useful information. Elevated reporting limits (RLs) are provided.

Method(s) 8015B: Due to the high concentration of Diesel Range Organics [C10-C28], the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 720-250619 and analytical batch 720-250884 may not provide useful information. The associated laboratory control sample (LCS) met acceptance criteria.

Method(s) 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: DUP-30 (720-88264-3), DUP-32 (720-88264-5), and DG-G11S-9.5-10 (720-88264-8).

Method(s) 8082: Batch 240-344018 is reported without a matrix spike/matrix spike duplicate (MS/MSD). The batch MS/MSD was originally performed on another client's sample, and this test is rerunning. This MS/MSD result does not have immediate bearing on any samples except for the actual sample spiked. The associated laboratory control sample (LCS) met acceptance criteria and provides long-term precision and accuracy for this batch.

Method(s) 8082: Surrogate recovery for the following sample was outside the upper control limit: DUP-30 (720-88264-3). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 720-250563 and analytical batch 720-250655 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) precision was within acceptance limits.

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 720-250637 and analytical batch 720-250761 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) precision was within acceptance limits.

Method(s) 6010B: The following samples were diluted due to the abundance of non-target analytes: DUP-23 (720-88264-1), DUP-22 (720-88264-2), DUP-30 (720-88264-3), DUP-31(720-88264-4), DUP-32 (720-88264-5), DG-G11S-0.5-1 (720-88264-6), DG-G11S-3.5-4 (720-88264-7), and DG-G11S-9.5-10 (720-88264-8). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Subcontract Work
Method Asbestos - CARB 435: This method was subcontracted to ASBESTOS TEM LABORATORIES, INC.. The subcontract laboratory certification is different from that of the facility issuing the final report.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88264-1

Client Sample ID: DUP-23 — Lab Sample ID: 720-88264-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	32	J *	39	30	ug/Kg	1		8260B	Total/NA
Benzo[b]fluoranthene	2.2	J	4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	1.3	J	4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	2.1	J	4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	2.8	J	4.8	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	1.7	J	4.8	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	4600		1900	730	ug/Kg	1		8015B	Total/NA
Antimony	0.34	J	1.9	0.32	mg/Kg	4		6010B	Total/NA
Arsenic	1.3	J	3.8	0.33	mg/Kg	4		6010B	Total/NA
Barium	42		1.9	0.27	mg/Kg	4		6010B	Total/NA
Beryllium	0.19	J	0.38	0.13	mg/Kg	4		6010B	Total/NA
Chromium	23		1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	4.1		0.77	0.077	mg/Kg	4		6010B	Total/NA
Copper	4.6	J	5.8	2.7	mg/Kg	4		6010B	Total/NA
Lead	4.4		1.9	0.40	mg/Kg	4		6010B	Total/NA
Nickel	18		1.9	0.20	mg/Kg	4		6010B	Total/NA
Vanadium	17		1.9	0.26	mg/Kg	4		6010B	Total/NA
Zinc	17		5.8	2.4	mg/Kg	4		6010B	Total/NA
Mercury	0.037		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DUP-22 — Lab Sample ID: 720-88264-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	54		45	34	ug/Kg	1		8260B	Total/NA
Benzo[a]anthracene	13		10	3.0	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]pyrene	18		10	3.8	ug/Kg	2		8270C SIM	Total/NA
Benzo[b]fluoranthene	29		10	4.2	ug/Kg	2		8270C SIM	Total/NA
Benzo[g,h,i]perylene	11		10	8.6	ug/Kg	2		8270C SIM	Total/NA
Benzo[k]fluoranthene	12		10	4.2	ug/Kg	2		8270C SIM	Total/NA
Chrysene	17		10	2.8	ug/Kg	2		8270C SIM	Total/NA
Fluoranthene	22		10	2.8	ug/Kg	2		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	9.7	J	10	8.4	ug/Kg	2		8270C SIM	Total/NA
Phenanthrene	19		10	3.6	ug/Kg	2		8270C SIM	Total/NA
Pyrene	27		10	3.4	ug/Kg	2		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	760000		9800	3700	ug/Kg	5		8015B	Total/NA
Antimony	2.2		1.9	0.32	mg/Kg	4		6010B	Total/NA
Arsenic	7.0		3.8	0.32	mg/Kg	4		6010B	Total/NA
Barium	100		1.9	0.27	mg/Kg	4		6010B	Total/NA
Beryllium	0.30	J	0.38	0.12	mg/Kg	4		6010B	Total/NA
Cadmium	0.15	J	0.48	0.047	mg/Kg	4		6010B	Total/NA
Chromium	21		1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	8.7		0.76	0.076	mg/Kg	4		6010B	Total/NA
Copper	41		5.7	2.7	mg/Kg	4		6010B	Total/NA
Lead	640		1.9	0.40	mg/Kg	4		6010B	Total/NA
Nickel	8.1		1.9	0.19	mg/Kg	4		6010B	Total/NA
Thallium	0.64	J	1.9	0.55	mg/Kg	4		6010B	Total/NA
Vanadium	55		1.9	0.26	mg/Kg	4		6010B	Total/NA
Zinc	120		5.7	2.4	mg/Kg	4		6010B	Total/NA
Mercury	0.099		0.017	0.0025	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88264-1

Client Sample ID: DUP-30 — Lab Sample ID: 720-88264-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	120		9.5	4.8	ug/Kg	1		8270C SIM	Total/NA
Acenaphthene	4.4	J	4.8	2.7	ug/Kg	1		8270C SIM	Total/NA
Anthracene	5.0		4.8	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	21		4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	23		4.8	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	42		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	13		4.8	4.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	9.6		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	43		4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Dibenz(a,h)anthracene	5.4		4.8	3.3	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	25		4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluorene	34		4.8	2.1	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	9.3		4.8	4.0	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	40		4.8	3.3	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	120		4.8	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	50		4.8	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	34000		1900	730	ug/Kg	1		8015B	Total/NA
delta-BHC	0.96	J	1.9	0.43	ug/Kg	1		8081A	Total/NA
Antimony	2.1		1.8	0.30	mg/Kg	4		6010B	Total/NA
Arsenic	5.0		3.7	0.31	mg/Kg	4		6010B	Total/NA
Barium	140		1.8	0.26	mg/Kg	4		6010B	Total/NA
Beryllium	0.22	J	0.37	0.12	mg/Kg	4		6010B	Total/NA
Chromium	150		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	24		0.73	0.073	mg/Kg	4		6010B	Total/NA
Copper	42		5.5	2.6	mg/Kg	4		6010B	Total/NA
Lead	45		1.8	0.39	mg/Kg	4		6010B	Total/NA
Molybdenum	0.28	J	1.8	0.23	mg/Kg	4		6010B	Total/NA
Nickel	160		1.8	0.19	mg/Kg	4		6010B	Total/NA
Silver	0.53	J	0.92	0.19	mg/Kg	4		6010B	Total/NA
Thallium	1.7	J	1.8	0.53	mg/Kg	4		6010B	Total/NA
Vanadium	100		1.8	0.25	mg/Kg	4		6010B	Total/NA
Zinc	87		5.5	2.3	mg/Kg	4		6010B	Total/NA
Mercury	0.16		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DUP-31 — Lab Sample ID: 720-88264-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	30	J	38	29	ug/Kg	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	1200000		38000	14000	ug/Kg	20		8015B	Total/NA
Antimony	0.48	J	1.7	0.29	mg/Kg	4		6010B	Total/NA
Arsenic	2.1	J	3.4	0.29	mg/Kg	4		6010B	Total/NA
Barium	50		1.7	0.24	mg/Kg	4		6010B	Total/NA
Chromium	56		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	6.8		0.69	0.069	mg/Kg	4		6010B	Total/NA
Copper	8.6		5.2	2.5	mg/Kg	4		6010B	Total/NA
Lead	5.4		1.7	0.36	mg/Kg	4		6010B	Total/NA
Nickel	32		1.7	0.18	mg/Kg	4		6010B	Total/NA
Thallium	0.55	J	1.7	0.50	mg/Kg	4		6010B	Total/NA
Vanadium	44		1.7	0.23	mg/Kg	4		6010B	Total/NA
Zinc	23		5.2	2.2	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP-31 (Continued) — Lab Sample ID: 720-88264-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.016		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DUP-32 — Lab Sample ID: 720-88264-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	45		40	31	ug/Kg	1		8260B	Total/NA
Gasoline Range Organics (GRO) -C4-C12	120	J	200	81	ug/Kg	1		8260B	Total/NA
Acenaphthylene	27	J	49	23	ug/Kg	10		8270C SIM	Total/NA
Anthracene	450		49	20	ug/Kg	10		8270C SIM	Total/NA
Benzo[a]pyrene	48	J	49	19	ug/Kg	10		8270C SIM	Total/NA
Benzo[b]fluoranthene	66		49	21	ug/Kg	10		8270C SIM	Total/NA
Benzo[g,h,i]perylene	76		49	42	ug/Kg	10		8270C SIM	Total/NA
Benzo[k]fluoranthene	33	J	49	21	ug/Kg	10		8270C SIM	Total/NA
Chrysene	38	J	49	14	ug/Kg	10		8270C SIM	Total/NA
Fluoranthene	38	J	49	14	ug/Kg	10		8270C SIM	Total/NA
Naphthalene	41	J	49	34	ug/Kg	10		8270C SIM	Total/NA
Phenanthrene	64		49	18	ug/Kg	10		8270C SIM	Total/NA
Pyrene	57		49	17	ug/Kg	10		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	850000	F2	38000	14000	ug/Kg	20		8015B	Total/NA
Arsenic	2.5	J	2.6	0.23	mg/Kg	4		6010B	Total/NA
Barium	40		1.3	0.19	mg/Kg	4		6010B	Total/NA
Chromium	16		1.3	0.14	mg/Kg	4		6010B	Total/NA
Cobalt	13		0.53	0.053	mg/Kg	4		6010B	Total/NA
Copper	120		4.0	1.9	mg/Kg	4		6010B	Total/NA
Lead	26		1.3	0.28	mg/Kg	4		6010B	Total/NA
Nickel	10		1.3	0.14	mg/Kg	4		6010B	Total/NA
Silver	0.17	J	0.66	0.13	mg/Kg	4		6010B	Total/NA
Thallium	1.2	J	1.3	0.38	mg/Kg	4		6010B	Total/NA
Vanadium	130		1.3	0.18	mg/Kg	4		6010B	Total/NA
Zinc	57		4.0	1.7	mg/Kg	4		6010B	Total/NA
Mercury	0.15		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-G11S-0.5-1 — Lab Sample ID: 720-88264-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	6.5	J	9.8	4.9	ug/Kg	1		8270C SIM	Total/NA
Acenaphthylene	5.6		4.9	2.4	ug/Kg	1		8270C SIM	Total/NA
Anthracene	6.6		4.9	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	29		4.9	1.5	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	41		4.9	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	62		4.9	2.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	17		4.9	4.2	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	20		4.9	2.1	ug/Kg	1		8270C SIM	Total/NA
Chrysene	40		4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Dibenz(a,h)anthracene	5.5		4.9	3.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	47		4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	15		4.9	4.1	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	4.5	J	4.9	3.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	29		4.9	1.8	ug/Kg	1		8270C SIM	Total/NA
Pyrene	84		4.9	1.7	ug/Kg	1		8270C SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-G11S-0.5-1 (Continued) — Lab Sample ID: 720-88264-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	19000		1900	730	ug/Kg	1		8015B	Total/NA
Chlordane (technical)	6.5	J	39	3.1	ug/Kg	1		8081A	Total/NA
cis-Chlordane	0.41	J p	2.0	0.39	ug/Kg	1		8081A	Total/NA
Antimony	0.91	J	1.5	0.25	mg/Kg	4		6010B	Total/NA
Arsenic	2.9	J	3.0	0.26	mg/Kg	4		6010B	Total/NA
Barium	49		1.5	0.22	mg/Kg	4		6010B	Total/NA
Cadmium	0.16	J	0.38	0.038	mg/Kg	4		6010B	Total/NA
Chromium	31		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	14		0.61	0.061	mg/Kg	4		6010B	Total/NA
Copper	130		4.5	2.2	mg/Kg	4		6010B	Total/NA
Lead	83		1.5	0.32	mg/Kg	4		6010B	Total/NA
Nickel	15		1.5	0.15	mg/Kg	4		6010B	Total/NA
Silver	0.30	J	0.76	0.15	mg/Kg	4		6010B	Total/NA
Thallium	0.94	J	1.5	0.44	mg/Kg	4		6010B	Total/NA
Vanadium	110		1.5	0.21	mg/Kg	4		6010B	Total/NA
Zinc	130		4.5	1.9	mg/Kg	4		6010B	Total/NA
Mercury	0.057		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-G11S-3.5-4 — Lab Sample ID: 720-88264-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	52		46	35	ug/Kg	1		8260B	Total/NA
Benzo[b]fluoranthene	2.8	J	5.0	2.1	ug/Kg	1		8270C SIM	Total/NA
Chrysene	1.4	J	5.0	1.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	1.7	J	5.0	1.4	ug/Kg	1		8270C SIM	Total/NA
Pyrene	2.3	J	5.0	1.7	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	2100		2000	740	ug/Kg	1		8015B	Total/NA
Antimony	0.39	J	1.7	0.28	mg/Kg	4		6010B	Total/NA
Arsenic	2.6	J	3.4	0.29	mg/Kg	4		6010B	Total/NA
Barium	51		1.7	0.24	mg/Kg	4		6010B	Total/NA
Beryllium	0.17	J	0.34	0.11	mg/Kg	4		6010B	Total/NA
Chromium	52		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	6.5		0.68	0.068	mg/Kg	4		6010B	Total/NA
Copper	9.4		5.1	2.4	mg/Kg	4		6010B	Total/NA
Lead	5.7		1.7	0.36	mg/Kg	4		6010B	Total/NA
Nickel	27		1.7	0.17	mg/Kg	4		6010B	Total/NA
Silver	0.19	J	0.85	0.17	mg/Kg	4		6010B	Total/NA
Vanadium	44		1.7	0.23	mg/Kg	4		6010B	Total/NA
Zinc	25		5.1	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.015		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-G11S-9.5-10 — Lab Sample ID: 720-88264-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	59		40	30	ug/Kg	1		8260B	Total/NA
Benzo[a]pyrene	9.9	J	24	9.1	ug/Kg	5		8270C SIM	Total/NA
Benzo[b]fluoranthene	19	J	24	10	ug/Kg	5		8270C SIM	Total/NA
Chrysene	11	J	24	6.7	ug/Kg	5		8270C SIM	Total/NA
Fluoranthene	21	J	24	6.7	ug/Kg	5		8270C SIM	Total/NA
Phenanthrene	21	J	24	8.6	ug/Kg	5		8270C SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88264-1

Client Sample ID: DG-G11S-9.5-10 (Continued) — Lab Sample ID: 720-88264-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pyrene	17	J	24	8.2	ug/Kg	5		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	100000		1900	730	ug/Kg	1		8015B	Total/NA
Arsenic	2.4	J	3.3	0.28	mg/Kg	4		6010B	Total/NA
Barium	75		1.7	0.24	mg/Kg	4		6010B	Total/NA
Cadmium	0.047	J	0.42	0.041	mg/Kg	4		6010B	Total/NA
Chromium	43		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	7.9		0.67	0.067	mg/Kg	4		6010B	Total/NA
Copper	12		5.0	2.4	mg/Kg	4		6010B	Total/NA
Lead	7.5		1.7	0.35	mg/Kg	4		6010B	Total/NA
Nickel	33		1.7	0.17	mg/Kg	4		6010B	Total/NA
Selenium	0.50	J	3.3	0.50	mg/Kg	4		6010B	Total/NA
Silver	0.23	J	0.83	0.17	mg/Kg	4		6010B	Total/NA
Vanadium	33		1.7	0.23	mg/Kg	4		6010B	Total/NA
Zinc	32		5.0	2.1	mg/Kg	4		6010B	Total/NA
Mercury	0.044		0.016	0.0023	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88264-1

Client Sample ID: DUP-23

Date Collected: 08/27/18 00:00
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88264-1

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND	*	3.9	0.95	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
Acetone	**32**	**J ***	39	30	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
Benzene	ND	*	3.9	0.51	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
Dichlorobromomethane	ND	*	3.9	0.57	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
Bromobenzene	ND	*	3.9	0.62	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
Chlorobromomethane	ND	*	16	0.57	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
Bromoform	ND	*	3.9	1.6	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
Bromomethane	ND	*	7.9	0.62	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
2-Butanone (MEK)	ND	*	39	17	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
n-Butylbenzene	ND	*	3.9	0.79	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
sec-Butylbenzene	ND	*	3.9	0.57	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
tert-Butylbenzene	ND	*	3.9	0.58	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
Carbon disulfide	ND	*	3.9	1.6	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
Carbon tetrachloride	ND	*	3.9	0.49	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
Chlorobenzene	ND	*	3.9	0.54	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
Chloroethane	ND	*	7.9	0.44	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
Chloroform	ND	*	3.9	0.52	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
Chloromethane	ND	*	7.9	0.62	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
2-Chlorotoluene	ND	*	3.9	0.51	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
4-Chlorotoluene	ND	*	3.9	0.54	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
Chlorodibromomethane	ND	*	3.9	0.56	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
1,2-Dichlorobenzene	ND	*	3.9	0.54	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
1,3-Dichlorobenzene	ND	*	3.9	0.57	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
1,4-Dichlorobenzene	ND	*	3.9	0.56	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
1,3-Dichloropropane	ND	*	3.9	0.58	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
1,1-Dichloropropene	ND	*	3.9	0.54	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
1,2-Dibromo-3-Chloropropane	ND	*	7.9	1.3	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
Ethylene Dibromide	ND	*	3.9	1.1	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
Dibromomethane	ND	*	7.9	0.68	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
Dichlorodifluoromethane	ND	*	7.9	0.62	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
1,1-Dichloroethane	ND	*	3.9	0.54	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
1,2-Dichloroethane	ND	*	3.9	0.60	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
1,1-Dichloroethene	ND	*	3.9	0.49	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
cis-1,2-Dichloroethene	ND	*	3.9	0.54	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
trans-1,2-Dichloroethene	ND	*	3.9	0.59	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
1,2-Dichloropropane	ND	*	3.9	0.50	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
cis-1,3-Dichloropropene	ND	*	3.9	0.54	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
trans-1,3-Dichloropropene	ND	*	3.9	0.53	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
Ethylbenzene	ND	*	3.9	0.59	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
Hexachlorobutadiene	ND	*	3.9	0.71	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
2-Hexanone	ND	*	39	7.9	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
Isopropylbenzene	ND	*	3.9	0.54	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
4-Isopropyltoluene	ND	*	3.9	2.0	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
Methylene Chloride	ND	*	7.9	4.4	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
4-Methyl-2-pentanone (MIBK)	ND	*	39	7.9	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
Naphthalene	ND	*	7.9	1.2	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
N-Propylbenzene	ND	*	3.9	0.52	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
Styrene	ND	*	3.9	0.50	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
1,1,1,2-Tetrachloroethane	ND	*	3.9	0.60	ug/Kg		08/27/18 02:30	08/31/18 13:36	1

Client Sample ID: DUP-23

Date Collected: 08/27/18 00:00
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88264-1

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	3.9	0.59	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
Tetrachloroethene	ND	*	3.9	0.53	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
Toluene	ND	*	3.9	0.56	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
1,2,3-Trichlorobenzene	ND	*	3.9	0.58	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
1,2,4-Trichlorobenzene	ND	*	3.9	0.56	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
1,1,1-Trichloroethane	ND	*	3.9	0.48	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
1,1,2-Trichloroethane	ND	*	3.9	0.55	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
Trichloroethene	ND	*	3.9	0.50	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
Trichlorofluoromethane	ND	*	3.9	0.44	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
1,2,3-Trichloropropane	ND	*	3.9	0.61	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	3.9	1.6	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
1,2,4-Trimethylbenzene	ND	*	3.9	1.3	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
1,3,5-Trimethylbenzene	ND	*	3.9	0.51	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
Vinyl acetate	ND	*	16	3.9	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
Vinyl chloride	ND	*	3.9	0.58	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
Xylenes, Total	ND		3.9	0.96	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
2,2-Dichloropropane	ND	*	3.9	1.6	ug/Kg		08/27/18 02:30	08/31/18 13:36	1
Gasoline Range Organics (GRO) -C4-C12	ND	*	200	79	ug/Kg		08/27/18 02:30	08/31/18 13:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*	*	*45 - 131*	*08/27/18 02:30*	*08/31/18 13:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*84*	*	*60 - 140*	*08/27/18 02:30*	*08/31/18 13:36*	*1*
Toluene-d8 (Surr)	*90*	*	*58 - 140*	*08/27/18 02:30*	*08/31/18 13:36*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.5	4.8	ug/Kg		08/30/18 14:15	09/04/18 20:41	1
Acenaphthene	ND		4.8	2.7	ug/Kg		08/30/18 14:15	09/04/18 20:41	1
Acenaphthylene	ND		4.8	2.3	ug/Kg		08/30/18 14:15	09/04/18 20:41	1
Anthracene	ND		4.8	1.9	ug/Kg		08/30/18 14:15	09/04/18 20:41	1
Benzo[a]anthracene	ND		4.8	1.4	ug/Kg		08/30/18 14:15	09/04/18 20:41	1
Benzo[a]pyrene	ND		4.8	1.8	ug/Kg		08/30/18 14:15	09/04/18 20:41	1
Benzo[b]fluoranthene	**2.2**	**J**	4.8	2.0	ug/Kg		08/30/18 14:15	09/04/18 20:41	1
Benzo[g,h,i]perylene	ND		4.8	4.1	ug/Kg		08/30/18 14:15	09/04/18 20:41	1
Benzo[k]fluoranthene	ND		4.8	2.0	ug/Kg		08/30/18 14:15	09/04/18 20:41	1
Chrysene	**1.3**	**J**	4.8	1.3	ug/Kg		08/30/18 14:15	09/04/18 20:41	1
Dibenz(a,h)anthracene	ND		4.8	3.3	ug/Kg		08/30/18 14:15	09/04/18 20:41	1
Fluoranthene	**2.1**	**J**	4.8	1.3	ug/Kg		08/30/18 14:15	09/04/18 20:41	1
Fluorene	ND		4.8	2.1	ug/Kg		08/30/18 14:15	09/04/18 20:41	1
Indeno[1,2,3-cd]pyrene	ND		4.8	4.0	ug/Kg		08/30/18 14:15	09/04/18 20:41	1
Naphthalene	ND		4.8	3.3	ug/Kg		08/30/18 14:15	09/04/18 20:41	1
Phenanthrene	**2.8**	**J**	4.8	1.7	ug/Kg		08/30/18 14:15	09/04/18 20:41	1
Pyrene	**1.7**	**J**	4.8	1.6	ug/Kg		08/30/18 14:15	09/04/18 20:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*33 - 120*	*08/30/18 14:15*	*09/04/18 20:41*	*1*
Terphenyl-d14	*90*		*35 - 146*	*08/30/18 14:15*	*09/04/18 20:41*	*1*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88264-1

Client Sample ID: DUP-23

Date Collected: 08/27/18 00:00
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88264-1

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	4600		1900	730	ug/Kg		08/30/18 15:54	09/05/18 17:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*92*		*40 - 130*	*08/30/18 15:54*	*09/05/18 17:31*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.58	ug/Kg		08/30/18 12:52	09/04/18 19:23	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/30/18 12:52	09/04/18 19:23	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/30/18 12:52	09/04/18 19:23	1
Aldrin	ND		1.9	0.47	ug/Kg		08/30/18 12:52	09/04/18 19:23	1
alpha-BHC	ND		1.9	0.52	ug/Kg		08/30/18 12:52	09/04/18 19:23	1
beta-BHC	ND		1.9	0.34	ug/Kg		08/30/18 12:52	09/04/18 19:23	1
Chlordane (technical)	ND		38	3.0	ug/Kg		08/30/18 12:52	09/04/18 19:23	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/30/18 12:52	09/04/18 19:23	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/30/18 12:52	09/04/18 19:23	1
Dieldrin	ND		1.9	0.56	ug/Kg		08/30/18 12:52	09/04/18 19:23	1
Endosulfan I	ND		1.9	0.30	ug/Kg		08/30/18 12:52	09/04/18 19:23	1
Endosulfan II	ND		1.9	0.46	ug/Kg		08/30/18 12:52	09/04/18 19:23	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/30/18 12:52	09/04/18 19:23	1
Endrin	ND		1.9	0.43	ug/Kg		08/30/18 12:52	09/04/18 19:23	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/30/18 12:52	09/04/18 19:23	1
Endrin ketone	ND		1.9	0.31	ug/Kg		08/30/18 12:52	09/04/18 19:23	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/30/18 12:52	09/04/18 19:23	1
Heptachlor	ND		1.9	0.43	ug/Kg		08/30/18 12:52	09/04/18 19:23	1
Heptachlor epoxide	ND		1.9	0.33	ug/Kg		08/30/18 12:52	09/04/18 19:23	1
Methoxychlor	ND		1.9	0.64	ug/Kg		08/30/18 12:52	09/04/18 19:23	1
Toxaphene	ND		38	6.4	ug/Kg		08/30/18 12:52	09/04/18 19:23	1
trans-Chlordane	ND		1.9	0.43	ug/Kg		08/30/18 12:52	09/04/18 19:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*65*		*21 - 136*	*08/30/18 12:52*	*09/04/18 19:23*	*1*
Tetrachloro-m-xylene	*67*		*21 - 145*	*08/30/18 12:52*	*09/04/18 19:23*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		51	22	ug/Kg		08/30/18 09:28	09/01/18 14:50	1
Aroclor-1221	ND		51	24	ug/Kg		08/30/18 09:28	09/01/18 14:50	1
Aroclor-1232	ND		51	23	ug/Kg		08/30/18 09:28	09/01/18 14:50	1
Aroclor-1242	ND		51	19	ug/Kg		08/30/18 09:28	09/01/18 14:50	1
Aroclor-1248	ND		51	24	ug/Kg		08/30/18 09:28	09/01/18 14:50	1
Aroclor-1254	ND		51	23	ug/Kg		08/30/18 09:28	09/01/18 14:50	1
Aroclor-1260	ND		51	22	ug/Kg		08/30/18 09:28	09/01/18 14:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*62*		*14 - 128*	*08/30/18 09:28*	*09/01/18 14:50*	*1*
DCB Decachlorobiphenyl	*78*		*10 - 132*	*08/30/18 09:28*	*09/01/18 14:50*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.34	J	1.9	0.32	mg/Kg		08/30/18 08:40	08/31/18 00:09	4

Client Sample ID: DUP-23

Lab Sample ID: 720-88264-1

Date Collected: 08/27/18 00:00

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.3	J	3.8	0.33	mg/Kg		08/30/18 08:40	08/31/18 00:09	4
Barium	42		1.9	0.27	mg/Kg		08/30/18 08:40	08/31/18 00:09	4
Beryllium	0.19	J	0.38	0.13	mg/Kg		08/30/18 08:40	08/31/18 00:09	4
Cadmium	ND		0.48	0.048	mg/Kg		08/30/18 08:40	08/31/18 00:09	4
Chromium	23		1.9	0.20	mg/Kg		08/30/18 08:40	08/31/18 00:09	4
Cobalt	4.1		0.77	0.077	mg/Kg		08/30/18 08:40	08/31/18 00:09	4
Copper	4.6	J	5.8	2.7	mg/Kg		08/30/18 08:40	08/31/18 00:09	4
Lead	4.4		1.9	0.40	mg/Kg		08/30/18 08:40	08/31/18 00:09	4
Molybdenum	ND		1.9	0.25	mg/Kg		08/30/18 08:40	08/31/18 00:09	4
Nickel	18		1.9	0.20	mg/Kg		08/30/18 08:40	08/31/18 00:09	4
Selenium	ND		3.8	0.58	mg/Kg		08/30/18 08:40	08/31/18 00:09	4
Silver	ND		0.96	0.19	mg/Kg		08/30/18 08:40	08/31/18 00:09	4
Thallium	ND		1.9	0.56	mg/Kg		08/30/18 08:40	08/31/18 00:09	4
Vanadium	17		1.9	0.26	mg/Kg		08/30/18 08:40	08/31/18 00:09	4
Zinc	17		5.8	2.4	mg/Kg		08/30/18 08:40	08/31/18 00:09	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.037		0.016	0.0024	mg/Kg		09/04/18 21:32	09/05/18 11:33	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88264-1

Client Sample ID: DUP-22

Date Collected: 08/27/18 00:00
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88264-2

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.5	1.1	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
Acetone	**54**		45	34	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
Benzene	ND		4.5	0.58	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
Dichlorobromomethane	ND		4.5	0.65	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
Bromobenzene	ND		4.5	0.71	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
Chlorobromomethane	ND		18	0.65	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
Bromoform	ND		4.5	1.8	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
Bromomethane	ND		9.0	0.71	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
2-Butanone (MEK)	ND		45	19	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
n-Butylbenzene	ND		4.5	0.90	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
sec-Butylbenzene	ND		4.5	0.65	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
tert-Butylbenzene	ND		4.5	0.66	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
Carbon disulfide	ND		4.5	1.8	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
Carbon tetrachloride	ND		4.5	0.56	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
Chlorobenzene	ND		4.5	0.62	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
Chloroethane	ND		9.0	0.50	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
Chloroform	ND		4.5	0.59	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
Chloromethane	ND		9.0	0.71	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
2-Chlorotoluene	ND		4.5	0.58	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
4-Chlorotoluene	ND		4.5	0.61	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
Chlorodibromomethane	ND		4.5	0.64	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
1,2-Dichlorobenzene	ND		4.5	0.61	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
1,3-Dichlorobenzene	ND		4.5	0.65	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
1,4-Dichlorobenzene	ND		4.5	0.64	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
1,3-Dichloropropane	ND		4.5	0.66	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
1,1-Dichloropropene	ND		4.5	0.62	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
1,2-Dibromo-3-Chloropropane	ND		9.0	1.5	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
Ethylene Dibromide	ND		4.5	1.3	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
Dibromomethane	ND		9.0	0.77	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
Dichlorodifluoromethane	ND		9.0	0.71	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
1,1-Dichloroethane	ND		4.5	0.61	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
1,2-Dichloroethane	ND		4.5	0.68	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
1,1-Dichloroethene	ND	*	4.5	0.56	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
cis-1,2-Dichloroethene	ND		4.5	0.61	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
trans-1,2-Dichloroethene	ND		4.5	0.67	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
1,2-Dichloropropane	ND		4.5	0.57	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
cis-1,3-Dichloropropene	ND		4.5	0.62	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
trans-1,3-Dichloropropene	ND		4.5	0.60	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
Ethylbenzene	ND		4.5	0.67	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
Hexachlorobutadiene	ND		4.5	0.81	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
2-Hexanone	ND		45	9.0	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
Isopropylbenzene	ND		4.5	0.61	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
4-Isopropyltoluene	ND		4.5	2.2	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
Methylene Chloride	ND		9.0	5.0	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
4-Methyl-2-pentanone (MIBK)	ND		45	9.0	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
Naphthalene	ND		9.0	1.3	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
N-Propylbenzene	ND		4.5	0.59	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
Styrene	ND		4.5	0.57	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
1,1,1,2-Tetrachloroethane	ND		4.5	0.68	ug/Kg		08/27/18 02:30	08/31/18 00:19	1

Client Sample ID: DUP-22

Date Collected: 08/27/18 00:00
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88264-2

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.5	0.67	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
Tetrachloroethene	ND		4.5	0.60	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
Toluene	ND		4.5	0.64	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
1,2,3-Trichlorobenzene	ND		4.5	0.67	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
1,2,4-Trichlorobenzene	ND		4.5	0.64	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
1,1,1-Trichloroethane	ND		4.5	0.55	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
1,1,2-Trichloroethane	ND		4.5	0.63	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
Trichloroethene	ND		4.5	0.57	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
Trichlorofluoromethane	ND		4.5	0.50	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
1,2,3-Trichloropropane	ND		4.5	0.69	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.5	1.9	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
1,2,4-Trimethylbenzene	ND		4.5	1.5	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
1,3,5-Trimethylbenzene	ND		4.5	0.58	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
Vinyl acetate	ND		18	4.5	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
Vinyl chloride	ND		4.5	0.66	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
Xylenes, Total	ND		4.5	1.1	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
2,2-Dichloropropane	ND		4.5	1.8	ug/Kg		08/27/18 02:30	08/31/18 00:19	1
Gasoline Range Organics (GRO) -C4-C12	ND		220	90	ug/Kg		08/27/18 02:30	08/31/18 00:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*45 - 131*	*08/27/18 02:30*	*08/31/18 00:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*60 - 140*	*08/27/18 02:30*	*08/31/18 00:19*	*1*
Toluene-d8 (Surr)	*92*		*58 - 140*	*08/27/18 02:30*	*08/31/18 00:19*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		20	10	ug/Kg		08/30/18 14:15	09/06/18 18:11	2
Acenaphthene	ND		10	5.6	ug/Kg		08/30/18 14:15	09/06/18 18:11	2
Acenaphthylene	ND		10	4.8	ug/Kg		08/30/18 14:15	09/06/18 18:11	2
Anthracene	ND		10	4.0	ug/Kg		08/30/18 14:15	09/06/18 18:11	2
Benzo[a]anthracene	**13**		10	3.0	ug/Kg		08/30/18 14:15	09/06/18 18:11	2
Benzo[a]pyrene	**18**		10	3.8	ug/Kg		08/30/18 14:15	09/06/18 18:11	2
Benzo[b]fluoranthene	**29**		10	4.2	ug/Kg		08/30/18 14:15	09/06/18 18:11	2
Benzo[g,h,i]perylene	**11**		10	8.6	ug/Kg		08/30/18 14:15	09/06/18 18:11	2
Benzo[k]fluoranthene	**12**		10	4.2	ug/Kg		08/30/18 14:15	09/06/18 18:11	2
Chrysene	**17**		10	2.8	ug/Kg		08/30/18 14:15	09/06/18 18:11	2
Dibenz(a,h)anthracene	ND		10	7.0	ug/Kg		08/30/18 14:15	09/06/18 18:11	2
Fluoranthene	**22**		10	2.8	ug/Kg		08/30/18 14:15	09/06/18 18:11	2
Fluorene	ND		10	4.4	ug/Kg		08/30/18 14:15	09/06/18 18:11	2
Indeno[1,2,3-cd]pyrene	**9.7**	**J**	10	8.4	ug/Kg		08/30/18 14:15	09/06/18 18:11	2
Naphthalene	ND		10	7.0	ug/Kg		08/30/18 14:15	09/06/18 18:11	2
Phenanthrene	**19**		10	3.6	ug/Kg		08/30/18 14:15	09/06/18 18:11	2
Pyrene	**27**		10	3.4	ug/Kg		08/30/18 14:15	09/06/18 18:11	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*103*		*33 - 120*	*08/30/18 14:15*	*09/06/18 18:11*	*2*
Terphenyl-d14	*102*		*35 - 146*	*08/30/18 14:15*	*09/06/18 18:11*	*2*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88264-1

Client Sample ID: DUP-22

Date Collected: 08/27/18 00:00
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88264-2

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	760000		9800	3700	ug/Kg		08/30/18 15:54	09/05/18 14:15	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*0*	*X D*	*40 - 130*	*08/30/18 15:54*	*09/05/18 14:15*	*5*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/30/18 12:52	09/04/18 19:41	1
4,4'-DDE	ND		1.9	0.41	ug/Kg		08/30/18 12:52	09/04/18 19:41	1
4,4'-DDT	ND		1.9	0.40	ug/Kg		08/30/18 12:52	09/04/18 19:41	1
Aldrin	ND		1.9	0.49	ug/Kg		08/30/18 12:52	09/04/18 19:41	1
alpha-BHC	ND		1.9	0.54	ug/Kg		08/30/18 12:52	09/04/18 19:41	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/30/18 12:52	09/04/18 19:41	1
Chlordane (technical)	ND		39	3.1	ug/Kg		08/30/18 12:52	09/04/18 19:41	1
cis-Chlordane	ND		1.9	0.39	ug/Kg		08/30/18 12:52	09/04/18 19:41	1
delta-BHC	ND		1.9	0.43	ug/Kg		08/30/18 12:52	09/04/18 19:41	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/30/18 12:52	09/04/18 19:41	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/30/18 12:52	09/04/18 19:41	1
Endosulfan II	ND		1.9	0.48	ug/Kg		08/30/18 12:52	09/04/18 19:41	1
Endosulfan sulfate	ND		1.9	0.37	ug/Kg		08/30/18 12:52	09/04/18 19:41	1
Endrin	ND		1.9	0.45	ug/Kg		08/30/18 12:52	09/04/18 19:41	1
Endrin aldehyde	ND		1.9	0.61	ug/Kg		08/30/18 12:52	09/04/18 19:41	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/30/18 12:52	09/04/18 19:41	1
gamma-BHC (Lindane)	ND		1.9	0.61	ug/Kg		08/30/18 12:52	09/04/18 19:41	1
Heptachlor	ND		1.9	0.45	ug/Kg		08/30/18 12:52	09/04/18 19:41	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/30/18 12:52	09/04/18 19:41	1
Methoxychlor	ND		1.9	0.66	ug/Kg		08/30/18 12:52	09/04/18 19:41	1
Toxaphene	ND		39	6.6	ug/Kg		08/30/18 12:52	09/04/18 19:41	1
trans-Chlordane	ND		1.9	0.45	ug/Kg		08/30/18 12:52	09/04/18 19:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*74*		*21 - 136*	*08/30/18 12:52*	*09/04/18 19:41*	*1*
Tetrachloro-m-xylene	*77*		*21 - 145*	*08/30/18 12:52*	*09/04/18 19:41*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		48	21	ug/Kg		08/30/18 09:28	09/01/18 15:11	1
Aroclor-1221	ND		48	23	ug/Kg		08/30/18 09:28	09/01/18 15:11	1
Aroclor-1232	ND		48	22	ug/Kg		08/30/18 09:28	09/01/18 15:11	1
Aroclor-1242	ND		48	18	ug/Kg		08/30/18 09:28	09/01/18 15:11	1
Aroclor-1248	ND		48	23	ug/Kg		08/30/18 09:28	09/01/18 15:11	1
Aroclor-1254	ND		48	22	ug/Kg		08/30/18 09:28	09/01/18 15:11	1
Aroclor-1260	ND		48	21	ug/Kg		08/30/18 09:28	09/01/18 15:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*90*		*14 - 128*	*08/30/18 09:28*	*09/01/18 15:11*	*1*
DCB Decachlorobiphenyl	*120*		*10 - 132*	*08/30/18 09:28*	*09/01/18 15:11*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.2		1.9	0.32	mg/Kg		08/30/18 08:40	08/31/18 00:14	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88264-1

Client Sample ID: DUP-22

Date Collected: 08/27/18 00:00
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88264-2

Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.0		3.8	0.32	mg/Kg		08/30/18 08:40	08/31/18 00:14	4
Barium	100		1.9	0.27	mg/Kg		08/30/18 08:40	08/31/18 00:14	4
Beryllium	0.30	J	0.38	0.12	mg/Kg		08/30/18 08:40	08/31/18 00:14	4
Cadmium	0.15	J	0.48	0.047	mg/Kg		08/30/18 08:40	08/31/18 00:14	4
Chromium	21		1.9	0.20	mg/Kg		08/30/18 08:40	08/31/18 00:14	4
Cobalt	8.7		0.76	0.076	mg/Kg		08/30/18 08:40	08/31/18 00:14	4
Copper	41		5.7	2.7	mg/Kg		08/30/18 08:40	08/31/18 00:14	4
Lead	640		1.9	0.40	mg/Kg		08/30/18 08:40	08/31/18 00:14	4
Molybdenum	ND		1.9	0.24	mg/Kg		08/30/18 08:40	08/31/18 00:14	4
Nickel	8.1		1.9	0.19	mg/Kg		08/30/18 08:40	08/31/18 00:14	4
Selenium	ND		3.8	0.57	mg/Kg		08/30/18 08:40	08/31/18 00:14	4
Silver	ND		0.95	0.19	mg/Kg		08/30/18 08:40	08/31/18 00:14	4
Thallium	0.64	J	1.9	0.55	mg/Kg		08/30/18 08:40	08/31/18 00:14	4
Vanadium	55		1.9	0.26	mg/Kg		08/30/18 08:40	08/31/18 00:14	4
Zinc	120		5.7	2.4	mg/Kg		08/30/18 08:40	08/31/18 00:14	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.099		0.017	0.0025	mg/Kg		09/04/18 21:32	09/05/18 11:35	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88264-1

Client Sample ID: DUP-30

Date Collected: 08/27/18 00:00
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88264-3

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.9	1.2	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
Acetone	ND		49	37	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
Benzene	ND		4.9	0.64	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
Dichlorobromomethane	ND		4.9	0.71	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
Bromobenzene	ND		4.9	0.78	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
Chlorobromomethane	ND		20	0.71	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
Bromoform	ND		4.9	2.0	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
Bromomethane	ND		9.8	0.78	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
2-Butanone (MEK)	ND		49	21	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
n-Butylbenzene	ND		4.9	0.98	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
sec-Butylbenzene	ND		4.9	0.71	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
tert-Butylbenzene	ND		4.9	0.72	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
Carbon disulfide	ND		4.9	2.0	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
Carbon tetrachloride	ND		4.9	0.61	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
Chlorobenzene	ND		4.9	0.68	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
Chloroethane	ND		9.8	0.55	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
Chloroform	ND		4.9	0.65	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
Chloromethane	ND		9.8	0.78	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
2-Chlorotoluene	ND		4.9	0.64	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
4-Chlorotoluene	ND		4.9	0.67	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
Chlorodibromomethane	ND		4.9	0.70	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
1,2-Dichlorobenzene	ND		4.9	0.67	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
1,3-Dichlorobenzene	ND		4.9	0.71	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
1,4-Dichlorobenzene	ND		4.9	0.70	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
1,3-Dichloropropane	ND		4.9	0.72	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
1,1-Dichloropropene	ND		4.9	0.68	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
1,2-Dibromo-3-Chloropropane	ND		9.8	1.7	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
Ethylene Dibromide	ND		4.9	1.4	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
Dibromomethane	ND		9.8	0.85	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
Dichlorodifluoromethane	ND		9.8	0.78	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
1,1-Dichloroethane	ND		4.9	0.67	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
1,2-Dichloroethane	ND		4.9	0.75	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
1,1-Dichloroethene	ND	*	4.9	0.61	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
cis-1,2-Dichloroethene	ND		4.9	0.67	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
trans-1,2-Dichloroethene	ND		4.9	0.74	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
1,2-Dichloropropane	ND		4.9	0.62	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
cis-1,3-Dichloropropene	ND		4.9	0.68	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
trans-1,3-Dichloropropene	ND		4.9	0.66	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
Ethylbenzene	ND		4.9	0.74	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
Hexachlorobutadiene	ND		4.9	0.88	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
2-Hexanone	ND		49	9.8	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
Isopropylbenzene	ND		4.9	0.67	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
4-Isopropyltoluene	ND		4.9	2.5	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
Methylene Chloride	ND		9.8	5.5	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
4-Methyl-2-pentanone (MIBK)	ND		49	9.8	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
Naphthalene	ND		9.8	1.5	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
N-Propylbenzene	ND		4.9	0.65	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
Styrene	ND		4.9	0.62	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
1,1,1,2-Tetrachloroethane	ND		4.9	0.75	ug/Kg		08/27/18 02:30	08/31/18 00:50	1

Client Sample ID: DUP-30

Date Collected: 08/27/18 00:00
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88264-3

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.9	0.74	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
Tetrachloroethene	ND		4.9	0.66	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
Toluene	ND		4.9	0.70	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
1,2,3-Trichlorobenzene	ND		4.9	0.73	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
1,2,4-Trichlorobenzene	ND		4.9	0.70	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
1,1,1-Trichloroethane	ND		4.9	0.60	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
1,1,2-Trichloroethane	ND		4.9	0.69	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
Trichloroethene	ND		4.9	0.62	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
Trichlorofluoromethane	ND		4.9	0.55	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
1,2,3-Trichloropropane	ND		4.9	0.76	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.9	2.0	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
1,2,4-Trimethylbenzene	ND		4.9	1.6	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
1,3,5-Trimethylbenzene	ND		4.9	0.64	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
Vinyl acetate	ND		20	4.9	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
Vinyl chloride	ND		4.9	0.72	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
Xylenes, Total	ND		4.9	1.2	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
2,2-Dichloropropane	ND		4.9	2.0	ug/Kg		08/27/18 02:30	08/31/18 00:50	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	98	ug/Kg		08/27/18 02:30	08/31/18 00:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*45 - 131*	*08/27/18 02:30*	*08/31/18 00:50*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*	*08/27/18 02:30*	*08/31/18 00:50*	*1*
Toluene-d8 (Surr)	*94*		*58 - 140*	*08/27/18 02:30*	*08/31/18 00:50*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**120**		9.5	4.8	ug/Kg		08/30/18 14:15	09/06/18 18:35	1
Acenaphthene	**4.4**	**J**	4.8	2.7	ug/Kg		08/30/18 14:15	09/06/18 18:35	1
Acenaphthylene	ND		4.8	2.3	ug/Kg		08/30/18 14:15	09/06/18 18:35	1
Anthracene	**5.0**		4.8	1.9	ug/Kg		08/30/18 14:15	09/06/18 18:35	1
Benzo[a]anthracene	**21**		4.8	1.4	ug/Kg		08/30/18 14:15	09/06/18 18:35	1
Benzo[a]pyrene	**23**		4.8	1.8	ug/Kg		08/30/18 14:15	09/06/18 18:35	1
Benzo[b]fluoranthene	**42**		4.8	2.0	ug/Kg		08/30/18 14:15	09/06/18 18:35	1
Benzo[g,h,i]perylene	**13**		4.8	4.1	ug/Kg		08/30/18 14:15	09/06/18 18:35	1
Benzo[k]fluoranthene	**9.6**		4.8	2.0	ug/Kg		08/30/18 14:15	09/06/18 18:35	1
Chrysene	**43**		4.8	1.3	ug/Kg		08/30/18 14:15	09/06/18 18:35	1
Dibenz(a,h)anthracene	**5.4**		4.8	3.3	ug/Kg		08/30/18 14:15	09/06/18 18:35	1
Fluoranthene	**25**		4.8	1.3	ug/Kg		08/30/18 14:15	09/06/18 18:35	1
Fluorene	**34**		4.8	2.1	ug/Kg		08/30/18 14:15	09/06/18 18:35	1
Indeno[1,2,3-cd]pyrene	**9.3**		4.8	4.0	ug/Kg		08/30/18 14:15	09/06/18 18:35	1
Naphthalene	**40**		4.8	3.3	ug/Kg		08/30/18 14:15	09/06/18 18:35	1
Phenanthrene	**120**		4.8	1.7	ug/Kg		08/30/18 14:15	09/06/18 18:35	1
Pyrene	**50**		4.8	1.6	ug/Kg		08/30/18 14:15	09/06/18 18:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*66*		*33 - 120*	*08/30/18 14:15*	*09/06/18 18:35*	*1*
Terphenyl-d14	*94*		*35 - 146*	*08/30/18 14:15*	*09/06/18 18:35*	*1*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88264-1

Client Sample ID: DUP-30

Date Collected: 08/27/18 00:00
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88264-3

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	34000		1900	730	ug/Kg		08/30/18 15:54	09/05/18 14:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*98*		*40 - 130*	*08/30/18 15:54*	*09/05/18 14:40*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/30/18 12:52	09/04/18 19:58	1
4,4'-DDE	ND		1.9	0.41	ug/Kg		08/30/18 12:52	09/04/18 19:58	1
4,4'-DDT	ND		1.9	0.40	ug/Kg		08/30/18 12:52	09/04/18 19:58	1
Aldrin	ND		1.9	0.48	ug/Kg		08/30/18 12:52	09/04/18 19:58	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/30/18 12:52	09/04/18 19:58	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/30/18 12:52	09/04/18 19:58	1
Chlordane (technical)	ND		39	3.1	ug/Kg		08/30/18 12:52	09/04/18 19:58	1
cis-Chlordane	ND		1.9	0.39	ug/Kg		08/30/18 12:52	09/04/18 19:58	1
delta-BHC	0.96	J	1.9	0.43	ug/Kg		08/30/18 12:52	09/04/18 19:58	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/30/18 12:52	09/04/18 19:58	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/30/18 12:52	09/04/18 19:58	1
Endosulfan II	ND		1.9	0.48	ug/Kg		08/30/18 12:52	09/04/18 19:58	1
Endosulfan sulfate	ND		1.9	0.37	ug/Kg		08/30/18 12:52	09/04/18 19:58	1
Endrin	ND		1.9	0.45	ug/Kg		08/30/18 12:52	09/04/18 19:58	1
Endrin aldehyde	ND		1.9	0.61	ug/Kg		08/30/18 12:52	09/04/18 19:58	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/30/18 12:52	09/04/18 19:58	1
gamma-BHC (Lindane)	ND		1.9	0.61	ug/Kg		08/30/18 12:52	09/04/18 19:58	1
Heptachlor	ND		1.9	0.45	ug/Kg		08/30/18 12:52	09/04/18 19:58	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/30/18 12:52	09/04/18 19:58	1
Methoxychlor	ND		1.9	0.66	ug/Kg		08/30/18 12:52	09/04/18 19:58	1
Toxaphene	ND		39	6.6	ug/Kg		08/30/18 12:52	09/04/18 19:58	1
trans-Chlordane	ND		1.9	0.45	ug/Kg		08/30/18 12:52	09/04/18 19:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*62*		*21 - 136*	*08/30/18 12:52*	*09/04/18 19:58*	*1*
Tetrachloro-m-xylene	*91*		*21 - 145*	*08/30/18 12:52*	*09/04/18 19:58*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		48	21	ug/Kg		09/05/18 14:28	09/06/18 14:01	1
Aroclor-1221	ND		48	23	ug/Kg		09/05/18 14:28	09/06/18 14:01	1
Aroclor-1232	ND		48	22	ug/Kg		09/05/18 14:28	09/06/18 14:01	1
Aroclor-1242	ND		48	18	ug/Kg		09/05/18 14:28	09/06/18 14:01	1
Aroclor-1248	ND		48	23	ug/Kg		09/05/18 14:28	09/06/18 14:01	1
Aroclor-1254	ND		48	22	ug/Kg		09/05/18 14:28	09/06/18 14:01	1
Aroclor-1260	ND		48	21	ug/Kg		09/05/18 14:28	09/06/18 14:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*79*		*14 - 128*	*09/05/18 14:28*	*09/06/18 14:01*	*1*
DCB Decachlorobiphenyl	*207*	*X*	*10 - 132*	*09/05/18 14:28*	*09/06/18 14:01*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.1		1.8	0.30	mg/Kg		08/30/18 08:40	08/31/18 00:28	4

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88264-1

Client Sample ID: DUP-30

Date Collected: 08/27/18 00:00
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88264-3

Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.0		3.7	0.31	mg/Kg		08/30/18 08:40	08/31/18 00:28	4
Barium	140		1.8	0.26	mg/Kg		08/30/18 08:40	08/31/18 00:28	4
Beryllium	0.22	J	0.37	0.12	mg/Kg		08/30/18 08:40	08/31/18 00:28	4
Cadmium	ND		0.46	0.046	mg/Kg		08/30/18 08:40	08/31/18 00:28	4
Chromium	150		1.8	0.19	mg/Kg		08/30/18 08:40	08/31/18 00:28	4
Cobalt	24		0.73	0.073	mg/Kg		08/30/18 08:40	08/31/18 00:28	4
Copper	42		5.5	2.6	mg/Kg		08/30/18 08:40	08/31/18 00:28	4
Lead	45		1.8	0.39	mg/Kg		08/30/18 08:40	08/31/18 00:28	4
Molybdenum	0.28	J	1.8	0.23	mg/Kg		08/30/18 08:40	08/31/18 00:28	4
Nickel	160		1.8	0.19	mg/Kg		08/30/18 08:40	08/31/18 00:28	4
Selenium	ND		3.7	0.55	mg/Kg		08/30/18 08:40	08/31/18 00:28	4
Silver	0.53	J	0.92	0.19	mg/Kg		08/30/18 08:40	08/31/18 00:28	4
Thallium	1.7	J	1.8	0.53	mg/Kg		08/30/18 08:40	08/31/18 00:28	4
Vanadium	100		1.8	0.25	mg/Kg		08/30/18 08:40	08/31/18 00:28	4
Zinc	87		5.5	2.3	mg/Kg		08/30/18 08:40	08/31/18 00:28	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.16		0.015	0.0022	mg/Kg		08/31/18 08:40	09/05/18 13:28	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88264-1

Client Sample ID: DUP-31

Date Collected: 08/27/18 00:00
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88264-4

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.8	0.92	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
Acetone	**30**	**J**	38	29	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
Benzene	ND		3.8	0.50	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
Dichlorobromomethane	ND		3.8	0.55	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
Bromobenzene	ND		3.8	0.61	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
Chlorobromomethane	ND		15	0.55	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
Bromoform	ND		3.8	1.5	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
Bromomethane	ND		7.7	0.61	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
2-Butanone (MEK)	ND		38	16	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
n-Butylbenzene	ND		3.8	0.77	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
sec-Butylbenzene	ND		3.8	0.55	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
tert-Butylbenzene	ND		3.8	0.56	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
Carbon disulfide	ND		3.8	1.5	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
Carbon tetrachloride	ND		3.8	0.48	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
Chlorobenzene	ND		3.8	0.53	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
Chloroethane	ND		7.7	0.43	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
Chloroform	ND		3.8	0.51	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
Chloromethane	ND		7.7	0.61	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
2-Chlorotoluene	ND		3.8	0.50	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
4-Chlorotoluene	ND		3.8	0.52	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
Chlorodibromomethane	ND		3.8	0.55	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
1,2-Dichlorobenzene	ND		3.8	0.52	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
1,3-Dichlorobenzene	ND		3.8	0.55	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
1,4-Dichlorobenzene	ND		3.8	0.55	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
1,3-Dichloropropane	ND		3.8	0.56	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
1,1-Dichloropropene	ND		3.8	0.53	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
1,2-Dibromo-3-Chloropropane	ND		7.7	1.3	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
Ethylene Dibromide	ND		3.8	1.1	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
Dibromomethane	ND		7.7	0.66	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
Dichlorodifluoromethane	ND		7.7	0.61	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
1,1-Dichloroethane	ND		3.8	0.52	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
1,2-Dichloroethane	ND		3.8	0.58	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
1,1-Dichloroethene	ND	*	3.8	0.48	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
cis-1,2-Dichloroethene	ND		3.8	0.52	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
trans-1,2-Dichloroethene	ND		3.8	0.58	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
1,2-Dichloropropane	ND		3.8	0.48	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
cis-1,3-Dichloropropene	ND		3.8	0.53	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
trans-1,3-Dichloropropene	ND		3.8	0.52	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
Ethylbenzene	ND		3.8	0.58	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
Hexachlorobutadiene	ND		3.8	0.69	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
2-Hexanone	ND		38	7.7	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
Isopropylbenzene	ND		3.8	0.52	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
4-Isopropyltoluene	ND		3.8	1.9	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
Methylene Chloride	ND		7.7	4.3	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
4-Methyl-2-pentanone (MIBK)	ND		38	7.7	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
Naphthalene	ND		7.7	1.2	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
N-Propylbenzene	ND		3.8	0.51	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
Styrene	ND		3.8	0.48	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
1,1,1,2-Tetrachloroethane	ND		3.8	0.58	ug/Kg		08/27/18 02:30	08/31/18 01:21	1

Client Sample ID: DUP-31

Date Collected: 08/27/18 00:00
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88264-4

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		3.8	0.58	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
Tetrachloroethene	ND		3.8	0.52	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
Toluene	ND		3.8	0.55	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
1,2,3-Trichlorobenzene	ND		3.8	0.57	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
1,2,4-Trichlorobenzene	ND		3.8	0.55	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
1,1,1-Trichloroethane	ND		3.8	0.47	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
1,1,2-Trichloroethane	ND		3.8	0.54	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
Trichloroethene	ND		3.8	0.48	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
Trichlorofluoromethane	ND		3.8	0.43	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
1,2,3-Trichloropropane	ND		3.8	0.59	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.8	1.6	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
1,2,4-Trimethylbenzene	ND		3.8	1.3	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
1,3,5-Trimethylbenzene	ND		3.8	0.50	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
Vinyl acetate	ND		15	3.8	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
Vinyl chloride	ND		3.8	0.56	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
Xylenes, Total	ND		3.8	0.94	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
2,2-Dichloropropane	ND		3.8	1.5	ug/Kg		08/27/18 02:30	08/31/18 01:21	1
Gasoline Range Organics (GRO) -C4-C12	ND		190	77	ug/Kg		08/27/18 02:30	08/31/18 01:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*45 - 131*	*08/27/18 02:30*	*08/31/18 01:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*60 - 140*	*08/27/18 02:30*	*08/31/18 01:21*	*1*
Toluene-d8 (Surr)	*90*		*58 - 140*	*08/27/18 02:30*	*08/31/18 01:21*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		240	120	ug/Kg		08/30/18 14:15	09/07/18 08:56	5
Acenaphthene	ND		120	69	ug/Kg		08/30/18 14:15	09/07/18 08:56	5
Acenaphthylene	ND		120	59	ug/Kg		08/30/18 14:15	09/07/18 08:56	5
Anthracene	ND		120	49	ug/Kg		08/30/18 14:15	09/07/18 08:56	5
Benzo[a]anthracene	ND		120	37	ug/Kg		08/30/18 14:15	09/07/18 08:56	5
Benzo[a]pyrene	ND		120	47	ug/Kg		08/30/18 14:15	09/07/18 08:56	5
Benzo[b]fluoranthene	ND		120	51	ug/Kg		08/30/18 14:15	09/07/18 08:56	5
Benzo[g,h,i]perylene	ND		120	110	ug/Kg		08/30/18 14:15	09/07/18 08:56	5
Benzo[k]fluoranthene	ND		120	51	ug/Kg		08/30/18 14:15	09/07/18 08:56	5
Chrysene	ND		120	34	ug/Kg		08/30/18 14:15	09/07/18 08:56	5
Dibenz(a,h)anthracene	ND		120	86	ug/Kg		08/30/18 14:15	09/07/18 08:56	5
Fluoranthene	ND		120	34	ug/Kg		08/30/18 14:15	09/07/18 08:56	5
Fluorene	ND		120	54	ug/Kg		08/30/18 14:15	09/07/18 08:56	5
Indeno[1,2,3-cd]pyrene	ND		120	100	ug/Kg		08/30/18 14:15	09/07/18 08:56	5
Naphthalene	ND		120	86	ug/Kg		08/30/18 14:15	09/07/18 08:56	5
Phenanthrene	ND		120	44	ug/Kg		08/30/18 14:15	09/07/18 08:56	5
Pyrene	ND		120	42	ug/Kg		08/30/18 14:15	09/07/18 08:56	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*102*		*33 - 120*	*08/30/18 14:15*	*09/07/18 08:56*	*5*
Terphenyl-d14	*132*		*35 - 146*	*08/30/18 14:15*	*09/07/18 08:56*	*5*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88264-1

Client Sample ID: DUP-31

Date Collected: 08/27/18 00:00
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88264-4

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1200000		38000	14000	ug/Kg		08/30/18 15:54	09/05/18 15:04	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*0*	*X D*	*40 - 130*	*08/30/18 15:54*	*09/05/18 15:04*	*20*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		9.6	2.9	ug/Kg		08/30/18 12:52	09/04/18 20:16	5
4,4'-DDE	ND		9.6	2.0	ug/Kg		08/30/18 12:52	09/04/18 20:16	5
4,4'-DDT	ND		9.6	2.0	ug/Kg		08/30/18 12:52	09/04/18 20:16	5
Aldrin	ND		9.6	2.4	ug/Kg		08/30/18 12:52	09/04/18 20:16	5
alpha-BHC	ND		9.6	2.6	ug/Kg		08/30/18 12:52	09/04/18 20:16	5
beta-BHC	ND		9.6	1.7	ug/Kg		08/30/18 12:52	09/04/18 20:16	5
Chlordane (technical)	ND		190	15	ug/Kg		08/30/18 12:52	09/04/18 20:16	5
cis-Chlordane	ND		9.6	1.9	ug/Kg		08/30/18 12:52	09/04/18 20:16	5
delta-BHC	ND		9.6	2.1	ug/Kg		08/30/18 12:52	09/04/18 20:16	5
Dieldrin	ND		9.6	2.8	ug/Kg		08/30/18 12:52	09/04/18 20:16	5
Endosulfan I	ND		9.6	1.5	ug/Kg		08/30/18 12:52	09/04/18 20:16	5
Endosulfan II	ND		9.6	2.3	ug/Kg		08/30/18 12:52	09/04/18 20:16	5
Endosulfan sulfate	ND		9.6	1.8	ug/Kg		08/30/18 12:52	09/04/18 20:16	5
Endrin	ND		9.6	2.2	ug/Kg		08/30/18 12:52	09/04/18 20:16	5
Endrin aldehyde	ND		9.6	3.0	ug/Kg		08/30/18 12:52	09/04/18 20:16	5
Endrin ketone	ND		9.6	1.6	ug/Kg		08/30/18 12:52	09/04/18 20:16	5
gamma-BHC (Lindane)	ND		9.6	3.0	ug/Kg		08/30/18 12:52	09/04/18 20:16	5
Heptachlor	ND		9.6	2.2	ug/Kg		08/30/18 12:52	09/04/18 20:16	5
Heptachlor epoxide	ND		9.6	1.7	ug/Kg		08/30/18 12:52	09/04/18 20:16	5
Methoxychlor	ND		9.6	3.3	ug/Kg		08/30/18 12:52	09/04/18 20:16	5
Toxaphene	ND		190	33	ug/Kg		08/30/18 12:52	09/04/18 20:16	5
trans-Chlordane	ND		9.6	2.2	ug/Kg		08/30/18 12:52	09/04/18 20:16	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*68*		*21 - 136*	*08/30/18 12:52*	*09/04/18 20:16*	*5*
Tetrachloro-m-xylene	*82*		*21 - 145*	*08/30/18 12:52*	*09/04/18 20:16*	*5*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/30/18 09:28	09/01/18 15:32	1
Aroclor-1221	ND		50	24	ug/Kg		08/30/18 09:28	09/01/18 15:32	1
Aroclor-1232	ND		50	23	ug/Kg		08/30/18 09:28	09/01/18 15:32	1
Aroclor-1242	ND		50	19	ug/Kg		08/30/18 09:28	09/01/18 15:32	1
Aroclor-1248	ND		50	24	ug/Kg		08/30/18 09:28	09/01/18 15:32	1
Aroclor-1254	ND		50	23	ug/Kg		08/30/18 09:28	09/01/18 15:32	1
Aroclor-1260	ND		50	22	ug/Kg		08/30/18 09:28	09/01/18 15:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*74*		*14 - 128*	*08/30/18 09:28*	*09/01/18 15:32*	*1*
DCB Decachlorobiphenyl	*103*		*10 - 132*	*08/30/18 09:28*	*09/01/18 15:32*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.48	J	1.7	0.29	mg/Kg		08/30/18 08:40	08/31/18 00:33	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88264-1

Client Sample ID: DUP-31

Date Collected: 08/27/18 00:00
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88264-4

Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.1	J	3.4	0.29	mg/Kg		08/30/18 08:40	08/31/18 00:33	4
Barium	50		1.7	0.24	mg/Kg		08/30/18 08:40	08/31/18 00:33	4
Beryllium	ND		0.34	0.11	mg/Kg		08/30/18 08:40	08/31/18 00:33	4
Cadmium	ND		0.43	0.043	mg/Kg		08/30/18 08:40	08/31/18 00:33	4
Chromium	56		1.7	0.18	mg/Kg		08/30/18 08:40	08/31/18 00:33	4
Cobalt	6.8		0.69	0.069	mg/Kg		08/30/18 08:40	08/31/18 00:33	4
Copper	8.6		5.2	2.5	mg/Kg		08/30/18 08:40	08/31/18 00:33	4
Lead	5.4		1.7	0.36	mg/Kg		08/30/18 08:40	08/31/18 00:33	4
Molybdenum	ND		1.7	0.22	mg/Kg		08/30/18 08:40	08/31/18 00:33	4
Nickel	32		1.7	0.18	mg/Kg		08/30/18 08:40	08/31/18 00:33	4
Selenium	ND		3.4	0.52	mg/Kg		08/30/18 08:40	08/31/18 00:33	4
Silver	ND		0.86	0.17	mg/Kg		08/30/18 08:40	08/31/18 00:33	4
Thallium	0.55	J	1.7	0.50	mg/Kg		08/30/18 08:40	08/31/18 00:33	4
Vanadium	44		1.7	0.23	mg/Kg		08/30/18 08:40	08/31/18 00:33	4
Zinc	23		5.2	2.2	mg/Kg		08/30/18 08:40	08/31/18 00:33	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.016		0.015	0.0022	mg/Kg		08/31/18 08:40	09/05/18 13:31	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88264-1

Client Sample ID: DUP-32

Date Collected: 08/27/18 00:00
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88264-5

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.0	0.97	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
Acetone	**45**		40	31	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
Benzene	ND		4.0	0.53	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
Dichlorobromomethane	ND		4.0	0.58	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
Bromobenzene	ND		4.0	0.64	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
Chlorobromomethane	ND		16	0.58	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
Bromoform	ND		4.0	1.6	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
Bromomethane	ND		8.1	0.64	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
2-Butanone (MEK)	ND		40	17	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
n-Butylbenzene	ND		4.0	0.81	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
sec-Butylbenzene	ND		4.0	0.58	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
tert-Butylbenzene	ND		4.0	0.59	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
Carbon disulfide	ND		4.0	1.6	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
Carbon tetrachloride	ND		4.0	0.50	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
Chlorobenzene	ND		4.0	0.56	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
Chloroethane	ND		8.1	0.45	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
Chloroform	ND		4.0	0.53	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
Chloromethane	ND		8.1	0.64	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
2-Chlorotoluene	ND		4.0	0.53	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
4-Chlorotoluene	ND		4.0	0.55	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
Chlorodibromomethane	ND		4.0	0.57	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
1,2-Dichlorobenzene	ND		4.0	0.55	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
1,3-Dichlorobenzene	ND		4.0	0.58	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
1,4-Dichlorobenzene	ND		4.0	0.57	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
1,3-Dichloropropane	ND		4.0	0.59	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
1,1-Dichloropropene	ND		4.0	0.56	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
1,2-Dibromo-3-Chloropropane	ND		8.1	1.4	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
Ethylene Dibromide	ND		4.0	1.2	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
Dibromomethane	ND		8.1	0.70	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
Dichlorodifluoromethane	ND		8.1	0.64	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
1,1-Dichloroethane	ND		4.0	0.55	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
1,2-Dichloroethane	ND		4.0	0.62	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
1,1-Dichloroethene	ND	*	4.0	0.50	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
cis-1,2-Dichloroethene	ND		4.0	0.55	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
trans-1,2-Dichloroethene	ND		4.0	0.61	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
1,2-Dichloropropane	ND		4.0	0.51	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
cis-1,3-Dichloropropene	ND		4.0	0.56	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
trans-1,3-Dichloropropene	ND		4.0	0.54	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
Ethylbenzene	ND		4.0	0.61	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
Hexachlorobutadiene	ND		4.0	0.73	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
2-Hexanone	ND		40	8.1	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
Isopropylbenzene	ND		4.0	0.55	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
4-Isopropyltoluene	ND		4.0	2.0	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
Methylene Chloride	ND		8.1	4.5	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
4-Methyl-2-pentanone (MIBK)	ND		40	8.1	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
Naphthalene	ND		8.1	1.2	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
N-Propylbenzene	ND		4.0	0.53	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
Styrene	ND		4.0	0.51	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
1,1,1,2-Tetrachloroethane	ND		4.0	0.62	ug/Kg		08/27/18 02:30	08/30/18 22:32	1

Client Sample ID: DUP-32

Date Collected: 08/27/18 00:00
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88264-5

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.0	0.61	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
Tetrachloroethene	ND		4.0	0.54	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
Toluene	ND		4.0	0.57	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
1,2,3-Trichlorobenzene	ND		4.0	0.60	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
1,2,4-Trichlorobenzene	ND		4.0	0.57	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
1,1,1-Trichloroethane	ND		4.0	0.49	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
1,1,2-Trichloroethane	ND		4.0	0.57	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
Trichloroethene	ND		4.0	0.51	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
Trichlorofluoromethane	ND		4.0	0.45	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
1,2,3-Trichloropropane	ND		4.0	0.62	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.0	1.7	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
1,2,4-Trimethylbenzene	ND		4.0	1.3	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
1,3,5-Trimethylbenzene	ND		4.0	0.53	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
Vinyl acetate	ND		16	4.0	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
Vinyl chloride	ND		4.0	0.59	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
Xylenes, Total	ND		4.0	0.99	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
2,2-Dichloropropane	ND		4.0	1.6	ug/Kg		08/27/18 02:30	08/30/18 22:32	1
Gasoline Range Organics (GRO) -C4-C12	**120**	**J**	200	81	ug/Kg		08/27/18 02:30	08/30/18 22:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*45 - 131*	*08/27/18 02:30*	*08/30/18 22:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*60 - 140*	*08/27/18 02:30*	*08/30/18 22:32*	*1*
Toluene-d8 (Surr)	*96*		*58 - 140*	*08/27/18 02:30*	*08/30/18 22:32*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		98	49	ug/Kg		08/30/18 14:15	09/07/18 09:20	10
Acenaphthene	ND		49	27	ug/Kg		08/30/18 14:15	09/07/18 09:20	10
Acenaphthylene	**27**	**J**	49	23	ug/Kg		08/30/18 14:15	09/07/18 09:20	10
Anthracene	**450**		49	20	ug/Kg		08/30/18 14:15	09/07/18 09:20	10
Benzo[a]anthracene	ND		49	15	ug/Kg		08/30/18 14:15	09/07/18 09:20	10
Benzo[a]pyrene	**48**	**J**	49	19	ug/Kg		08/30/18 14:15	09/07/18 09:20	10
Benzo[b]fluoranthene	**66**		49	21	ug/Kg		08/30/18 14:15	09/07/18 09:20	10
Benzo[g,h,i]perylene	**76**		49	42	ug/Kg		08/30/18 14:15	09/07/18 09:20	10
Benzo[k]fluoranthene	**33**	**J**	49	21	ug/Kg		08/30/18 14:15	09/07/18 09:20	10
Chrysene	**38**	**J**	49	14	ug/Kg		08/30/18 14:15	09/07/18 09:20	10
Dibenz(a,h)anthracene	ND		49	34	ug/Kg		08/30/18 14:15	09/07/18 09:20	10
Fluoranthene	**38**	**J**	49	14	ug/Kg		08/30/18 14:15	09/07/18 09:20	10
Fluorene	ND		49	22	ug/Kg		08/30/18 14:15	09/07/18 09:20	10
Indeno[1,2,3-cd]pyrene	ND		49	41	ug/Kg		08/30/18 14:15	09/07/18 09:20	10
Naphthalene	**41**	**J**	49	34	ug/Kg		08/30/18 14:15	09/07/18 09:20	10
Phenanthrene	**64**		49	18	ug/Kg		08/30/18 14:15	09/07/18 09:20	10
Pyrene	**57**		49	17	ug/Kg		08/30/18 14:15	09/07/18 09:20	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*88*		*33 - 120*	*08/30/18 14:15*	*09/07/18 09:20*	*10*
Terphenyl-d14	*114*		*35 - 146*	*08/30/18 14:15*	*09/07/18 09:20*	*10*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88264-1

Client Sample ID: DUP-32

Date Collected: 08/27/18 00:00
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88264-5

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	850000	F2	38000	14000	ug/Kg		08/30/18 15:54	09/05/18 14:40	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*0*	*X D*	*40 - 130*	*08/30/18 15:54*	*09/05/18 14:40*	*20*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND	F1	3.9	1.2	ug/Kg		08/30/18 12:52	09/05/18 10:43	2
4,4'-DDE	ND		3.9	0.82	ug/Kg		08/30/18 12:52	09/05/18 10:43	2
4,4'-DDT	ND	F2	3.9	0.80	ug/Kg		08/30/18 12:52	09/05/18 10:43	2
Aldrin	ND		3.9	0.98	ug/Kg		08/30/18 12:52	09/05/18 10:43	2
alpha-BHC	ND		3.9	1.1	ug/Kg		08/30/18 12:52	09/05/18 10:43	2
beta-BHC	ND	F2	3.9	0.70	ug/Kg		08/30/18 12:52	09/05/18 10:43	2
Chlordane (technical)	ND		78	6.3	ug/Kg		08/30/18 12:52	09/05/18 10:43	2
cis-Chlordane	ND		3.9	0.78	ug/Kg		08/30/18 12:52	09/05/18 10:43	2
delta-BHC	ND	F2	3.9	0.86	ug/Kg		08/30/18 12:52	09/05/18 10:43	2
Dieldrin	ND		3.9	1.2	ug/Kg		08/30/18 12:52	09/05/18 10:43	2
Endosulfan I	ND		3.9	0.63	ug/Kg		08/30/18 12:52	09/05/18 10:43	2
Endosulfan II	ND		3.9	0.96	ug/Kg		08/30/18 12:52	09/05/18 10:43	2
Endosulfan sulfate	ND	F2	3.9	0.74	ug/Kg		08/30/18 12:52	09/05/18 10:43	2
Endrin	ND		3.9	0.90	ug/Kg		08/30/18 12:52	09/05/18 10:43	2
Endrin aldehyde	ND		3.9	1.2	ug/Kg		08/30/18 12:52	09/05/18 10:43	2
Endrin ketone	ND	F2	3.9	0.65	ug/Kg		08/30/18 12:52	09/05/18 10:43	2
gamma-BHC (Lindane)	ND		3.9	1.2	ug/Kg		08/30/18 12:52	09/05/18 10:43	2
Heptachlor	ND		3.9	0.90	ug/Kg		08/30/18 12:52	09/05/18 10:43	2
Heptachlor epoxide	ND		3.9	0.68	ug/Kg		08/30/18 12:52	09/05/18 10:43	2
Methoxychlor	ND	F2	3.9	1.3	ug/Kg		08/30/18 12:52	09/05/18 10:43	2
Toxaphene	ND		78	13	ug/Kg		08/30/18 12:52	09/05/18 10:43	2
trans-Chlordane	ND	F1	3.9	0.90	ug/Kg		08/30/18 12:52	09/05/18 10:43	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*113*		*21 - 136*	*08/30/18 12:52*	*09/05/18 10:43*	*2*
Tetrachloro-m-xylene	*84*		*21 - 145*	*08/30/18 12:52*	*09/05/18 10:43*	*2*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/30/18 09:28	09/01/18 15:53	1
Aroclor-1221	ND		50	24	ug/Kg		08/30/18 09:28	09/01/18 15:53	1
Aroclor-1232	ND		50	23	ug/Kg		08/30/18 09:28	09/01/18 15:53	1
Aroclor-1242	ND		50	19	ug/Kg		08/30/18 09:28	09/01/18 15:53	1
Aroclor-1248	ND		50	24	ug/Kg		08/30/18 09:28	09/01/18 15:53	1
Aroclor-1254	ND		50	23	ug/Kg		08/30/18 09:28	09/01/18 15:53	1
Aroclor-1260	ND		50	22	ug/Kg		08/30/18 09:28	09/01/18 15:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*59*		*14 - 128*	*08/30/18 09:28*	*09/01/18 15:53*	*1*
DCB Decachlorobiphenyl	*76*		*10 - 132*	*08/30/18 09:28*	*09/01/18 15:53*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.3	0.22	mg/Kg		08/30/18 08:40	08/31/18 00:38	4

Client Sample ID: DUP-32

Lab Sample ID: 720-88264-5

Date Collected: 08/27/18 00:00

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.5	J	2.6	0.23	mg/Kg		08/30/18 08:40	08/31/18 00:38	4
Barium	40		1.3	0.19	mg/Kg		08/30/18 08:40	08/31/18 00:38	4
Beryllium	ND		0.26	0.086	mg/Kg		08/30/18 08:40	08/31/18 00:38	4
Cadmium	ND		0.33	0.033	mg/Kg		08/30/18 08:40	08/31/18 00:38	4
Chromium	16		1.3	0.14	mg/Kg		08/30/18 08:40	08/31/18 00:38	4
Cobalt	13		0.53	0.053	mg/Kg		08/30/18 08:40	08/31/18 00:38	4
Copper	120		4.0	1.9	mg/Kg		08/30/18 08:40	08/31/18 00:38	4
Lead	26		1.3	0.28	mg/Kg		08/30/18 08:40	08/31/18 00:38	4
Molybdenum	ND		1.3	0.17	mg/Kg		08/30/18 08:40	08/31/18 00:38	4
Nickel	10		1.3	0.14	mg/Kg		08/30/18 08:40	08/31/18 00:38	4
Selenium	ND		2.6	0.40	mg/Kg		08/30/18 08:40	08/31/18 00:38	4
Silver	0.17	J	0.66	0.13	mg/Kg		08/30/18 08:40	08/31/18 00:38	4
Thallium	1.2	J	1.3	0.38	mg/Kg		08/30/18 08:40	08/31/18 00:38	4
Vanadium	130		1.3	0.18	mg/Kg		08/30/18 08:40	08/31/18 00:38	4
Zinc	57		4.0	1.7	mg/Kg		08/30/18 08:40	08/31/18 00:38	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.15		0.017	0.0025	mg/Kg		08/31/18 08:40	09/05/18 13:33	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88264-1

Client Sample ID: DG-G11S-0.5-1

Date Collected: 08/27/18 12:25
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88264-6

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.7	1.1	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
Acetone	ND		47	36	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
Benzene	ND		4.7	0.61	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
Dichlorobromomethane	ND		4.7	0.68	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
Bromobenzene	ND		4.7	0.75	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
Chlorobromomethane	ND		19	0.68	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
Bromoform	ND		4.7	1.9	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
Bromomethane	ND		9.5	0.75	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
2-Butanone (MEK)	ND		47	20	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
n-Butylbenzene	ND		4.7	0.95	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
sec-Butylbenzene	ND		4.7	0.68	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
tert-Butylbenzene	ND		4.7	0.69	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
Carbon disulfide	ND		4.7	1.9	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
Carbon tetrachloride	ND		4.7	0.59	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
Chlorobenzene	ND		4.7	0.65	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
Chloroethane	ND		9.5	0.53	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
Chloroform	ND		4.7	0.62	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
Chloromethane	ND		9.5	0.75	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
2-Chlorotoluene	ND		4.7	0.61	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
4-Chlorotoluene	ND		4.7	0.64	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
Chlorodibromomethane	ND		4.7	0.67	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
1,2-Dichlorobenzene	ND		4.7	0.64	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
1,3-Dichlorobenzene	ND		4.7	0.68	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
1,4-Dichlorobenzene	ND		4.7	0.67	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
1,3-Dichloropropane	ND		4.7	0.69	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
1,1-Dichloropropene	ND		4.7	0.65	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
1,2-Dibromo-3-Chloropropane	ND		9.5	1.6	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
Ethylene Dibromide	ND		4.7	1.4	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
Dibromomethane	ND		9.5	0.81	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
Dichlorodifluoromethane	ND		9.5	0.75	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
1,1-Dichloroethane	ND		4.7	0.64	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
1,2-Dichloroethane	ND		4.7	0.72	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
1,1-Dichloroethene	ND	*	4.7	0.59	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
cis-1,2-Dichloroethene	ND		4.7	0.64	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
trans-1,2-Dichloroethene	ND		4.7	0.71	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
1,2-Dichloropropane	ND		4.7	0.60	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
cis-1,3-Dichloropropene	ND		4.7	0.65	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
trans-1,3-Dichloropropene	ND		4.7	0.63	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
Ethylbenzene	ND		4.7	0.71	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
Hexachlorobutadiene	ND		4.7	0.85	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
2-Hexanone	ND		47	9.5	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
Isopropylbenzene	ND		4.7	0.64	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
4-Isopropyltoluene	ND		4.7	2.4	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
Methylene Chloride	ND		9.5	5.3	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
4-Methyl-2-pentanone (MIBK)	ND		47	9.5	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
Naphthalene	ND		9.5	1.4	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
N-Propylbenzene	ND		4.7	0.62	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
Styrene	ND		4.7	0.60	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
1,1,1,2-Tetrachloroethane	ND		4.7	0.72	ug/Kg		08/27/18 02:30	08/31/18 01:53	1

Client Sample ID: DG-G11S-0.5-1

Lab Sample ID: 720-88264-6

Date Collected: 08/27/18 12:25

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.7	0.71	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
Tetrachloroethene	ND		4.7	0.63	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
Toluene	ND		4.7	0.67	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
1,2,3-Trichlorobenzene	ND		4.7	0.70	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
1,2,4-Trichlorobenzene	ND		4.7	0.67	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
1,1,1-Trichloroethane	ND		4.7	0.58	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
1,1,2-Trichloroethane	ND		4.7	0.66	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
Trichloroethene	ND		4.7	0.60	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
Trichlorofluoromethane	ND		4.7	0.53	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
1,2,3-Trichloropropane	ND		4.7	0.73	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.7	2.0	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
1,2,4-Trimethylbenzene	ND		4.7	1.5	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
1,3,5-Trimethylbenzene	ND		4.7	0.61	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
Vinyl acetate	ND		19	4.7	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
Vinyl chloride	ND		4.7	0.69	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
Xylenes, Total	ND		4.7	1.2	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
2,2-Dichloropropane	ND		4.7	1.9	ug/Kg		08/27/18 02:30	08/31/18 01:53	1
Gasoline Range Organics (GRO) -C4-C12	ND		240	95	ug/Kg		08/27/18 02:30	08/31/18 01:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*		*45 - 131*	*08/27/18 02:30*	*08/31/18 01:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*60 - 140*	*08/27/18 02:30*	*08/31/18 01:53*	*1*
Toluene-d8 (Surr)	*90*		*58 - 140*	*08/27/18 02:30*	*08/31/18 01:53*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**6.5**	**J**	9.8	4.9	ug/Kg		08/30/18 14:15	09/06/18 19:47	1
Acenaphthene	ND		4.9	2.7	ug/Kg		08/30/18 14:15	09/06/18 19:47	1
Acenaphthylene	**5.6**		4.9	2.4	ug/Kg		08/30/18 14:15	09/06/18 19:47	1
Anthracene	**6.6**		4.9	2.0	ug/Kg		08/30/18 14:15	09/06/18 19:47	1
Benzo[a]anthracene	**29**		4.9	1.5	ug/Kg		08/30/18 14:15	09/06/18 19:47	1
Benzo[a]pyrene	**41**		4.9	1.9	ug/Kg		08/30/18 14:15	09/06/18 19:47	1
Benzo[b]fluoranthene	**62**		4.9	2.1	ug/Kg		08/30/18 14:15	09/06/18 19:47	1
Benzo[g,h,i]perylene	**17**		4.9	4.2	ug/Kg		08/30/18 14:15	09/06/18 19:47	1
Benzo[k]fluoranthene	**20**		4.9	2.1	ug/Kg		08/30/18 14:15	09/06/18 19:47	1
Chrysene	**40**		4.9	1.4	ug/Kg		08/30/18 14:15	09/06/18 19:47	1
Dibenz(a,h)anthracene	**5.5**		4.9	3.4	ug/Kg		08/30/18 14:15	09/06/18 19:47	1
Fluoranthene	**47**		4.9	1.4	ug/Kg		08/30/18 14:15	09/06/18 19:47	1
Fluorene	ND		4.9	2.2	ug/Kg		08/30/18 14:15	09/06/18 19:47	1
Indeno[1,2,3-cd]pyrene	**15**		4.9	4.1	ug/Kg		08/30/18 14:15	09/06/18 19:47	1
Naphthalene	**4.5**	**J**	4.9	3.4	ug/Kg		08/30/18 14:15	09/06/18 19:47	1
Phenanthrene	**29**		4.9	1.8	ug/Kg		08/30/18 14:15	09/06/18 19:47	1
Pyrene	**84**		4.9	1.7	ug/Kg		08/30/18 14:15	09/06/18 19:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*33 - 120*	*08/30/18 14:15*	*09/06/18 19:47*	*1*
Terphenyl-d14	*107*		*35 - 146*	*08/30/18 14:15*	*09/06/18 19:47*	*1*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88264-1

Client Sample ID: DG-G11S-0.5-1

Date Collected: 08/27/18 12:25
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88264-6

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	19000		1900	730	ug/Kg		08/29/18 13:41	08/31/18 16:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*109*		*40 - 130*	*08/29/18 13:41*	*08/31/18 16:43*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.60	ug/Kg		08/30/18 12:52	09/05/18 08:46	1
4,4'-DDE	ND		2.0	0.41	ug/Kg		08/30/18 12:52	09/05/18 08:46	1
4,4'-DDT	ND		2.0	0.40	ug/Kg		08/30/18 12:52	09/05/18 08:46	1
Aldrin	ND		2.0	0.49	ug/Kg		08/30/18 12:52	09/05/18 08:46	1
alpha-BHC	ND		2.0	0.54	ug/Kg		08/30/18 12:52	09/05/18 08:46	1
beta-BHC	ND		2.0	0.35	ug/Kg		08/30/18 12:52	09/05/18 08:46	1
Chlordane (technical)	6.5	J	39	3.1	ug/Kg		08/30/18 12:52	09/05/18 08:46	1
cis-Chlordane	0.41	J p	2.0	0.39	ug/Kg		08/30/18 12:52	09/05/18 08:46	1
delta-BHC	ND		2.0	0.43	ug/Kg		08/30/18 12:52	09/05/18 08:46	1
Dieldrin	ND		2.0	0.58	ug/Kg		08/30/18 12:52	09/05/18 08:46	1
Endosulfan I	ND		2.0	0.31	ug/Kg		08/30/18 12:52	09/05/18 08:46	1
Endosulfan II	ND		2.0	0.48	ug/Kg		08/30/18 12:52	09/05/18 08:46	1
Endosulfan sulfate	ND		2.0	0.37	ug/Kg		08/30/18 12:52	09/05/18 08:46	1
Endrin	ND		2.0	0.45	ug/Kg		08/30/18 12:52	09/05/18 08:46	1
Endrin aldehyde	ND		2.0	0.62	ug/Kg		08/30/18 12:52	09/05/18 08:46	1
Endrin ketone	ND		2.0	0.32	ug/Kg		08/30/18 12:52	09/05/18 08:46	1
gamma-BHC (Lindane)	ND		2.0	0.62	ug/Kg		08/30/18 12:52	09/05/18 08:46	1
Heptachlor	ND		2.0	0.45	ug/Kg		08/30/18 12:52	09/05/18 08:46	1
Heptachlor epoxide	ND		2.0	0.34	ug/Kg		08/30/18 12:52	09/05/18 08:46	1
Methoxychlor	ND		2.0	0.67	ug/Kg		08/30/18 12:52	09/05/18 08:46	1
Toxaphene	ND		39	6.7	ug/Kg		08/30/18 12:52	09/05/18 08:46	1
trans-Chlordane	ND		2.0	0.45	ug/Kg		08/30/18 12:52	09/05/18 08:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*107*		*21 - 136*	*08/30/18 12:52*	*09/05/18 08:46*	*1*
Tetrachloro-m-xylene	*86*		*21 - 145*	*08/30/18 12:52*	*09/05/18 08:46*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		49	21	ug/Kg		09/05/18 14:28	09/06/18 14:25	1
Aroclor-1221	ND		49	23	ug/Kg		09/05/18 14:28	09/06/18 14:25	1
Aroclor-1232	ND		49	22	ug/Kg		09/05/18 14:28	09/06/18 14:25	1
Aroclor-1242	ND		49	19	ug/Kg		09/05/18 14:28	09/06/18 14:25	1
Aroclor-1248	ND		49	23	ug/Kg		09/05/18 14:28	09/06/18 14:25	1
Aroclor-1254	ND		49	22	ug/Kg		09/05/18 14:28	09/06/18 14:25	1
Aroclor-1260	ND		49	21	ug/Kg		09/05/18 14:28	09/06/18 14:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*77*		*14 - 128*	*09/05/18 14:28*	*09/06/18 14:25*	*1*
DCB Decachlorobiphenyl	*100*		*10 - 132*	*09/05/18 14:28*	*09/06/18 14:25*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.91	J	1.5	0.25	mg/Kg		08/30/18 08:40	08/31/18 00:42	4

Client Sample ID: DG-G11S-0.5-1

Lab Sample ID: 720-88264-6

Date Collected: 08/27/18 12:25

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.9	J	3.0	0.26	mg/Kg		08/30/18 08:40	08/31/18 00:42	4
Barium	49		1.5	0.22	mg/Kg		08/30/18 08:40	08/31/18 00:42	4
Beryllium	ND		0.30	0.098	mg/Kg		08/30/18 08:40	08/31/18 00:42	4
Cadmium	0.16	J	0.38	0.038	mg/Kg		08/30/18 08:40	08/31/18 00:42	4
Chromium	31		1.5	0.16	mg/Kg		08/30/18 08:40	08/31/18 00:42	4
Cobalt	14		0.61	0.061	mg/Kg		08/30/18 08:40	08/31/18 00:42	4
Copper	130		4.5	2.2	mg/Kg		08/30/18 08:40	08/31/18 00:42	4
Lead	83		1.5	0.32	mg/Kg		08/30/18 08:40	08/31/18 00:42	4
Molybdenum	ND		1.5	0.19	mg/Kg		08/30/18 08:40	08/31/18 00:42	4
Nickel	15		1.5	0.15	mg/Kg		08/30/18 08:40	08/31/18 00:42	4
Selenium	ND		3.0	0.45	mg/Kg		08/30/18 08:40	08/31/18 00:42	4
Silver	0.30	J	0.76	0.15	mg/Kg		08/30/18 08:40	08/31/18 00:42	4
Thallium	0.94	J	1.5	0.44	mg/Kg		08/30/18 08:40	08/31/18 00:42	4
Vanadium	110		1.5	0.21	mg/Kg		08/30/18 08:40	08/31/18 00:42	4
Zinc	130		4.5	1.9	mg/Kg		08/30/18 08:40	08/31/18 00:42	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.057		0.016	0.0023	mg/Kg		08/31/18 08:40	09/05/18 13:35	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88264-1

Client Sample ID: DG-G11S-3.5-4

Date Collected: 08/27/18 12:25
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88264-7

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.6	1.1	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
Acetone	**52**		46	35	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
Benzene	ND		4.6	0.59	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
Dichlorobromomethane	ND		4.6	0.66	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
Bromobenzene	ND		4.6	0.72	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
Chlorobromomethane	ND		18	0.66	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
Bromoform	ND		4.6	1.8	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
Bromomethane	ND		9.1	0.72	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
2-Butanone (MEK)	ND		46	19	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
n-Butylbenzene	ND		4.6	0.91	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
sec-Butylbenzene	ND		4.6	0.66	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
tert-Butylbenzene	ND		4.6	0.66	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
Carbon disulfide	ND		4.6	1.8	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
Carbon tetrachloride	ND		4.6	0.56	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
Chlorobenzene	ND		4.6	0.63	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
Chloroethane	ND		9.1	0.51	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
Chloroform	ND		4.6	0.60	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
Chloromethane	ND		9.1	0.72	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
2-Chlorotoluene	ND		4.6	0.59	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
4-Chlorotoluene	ND		4.6	0.62	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
Chlorodibromomethane	ND		4.6	0.65	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
1,2-Dichlorobenzene	ND		4.6	0.62	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
1,3-Dichlorobenzene	ND		4.6	0.66	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
1,4-Dichlorobenzene	ND		4.6	0.65	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
1,3-Dichloropropane	ND		4.6	0.66	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
1,1-Dichloropropene	ND		4.6	0.63	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
1,2-Dibromo-3-Chloropropane	ND		9.1	1.5	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
Ethylene Dibromide	ND		4.6	1.3	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
Dibromomethane	ND		9.1	0.78	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
Dichlorodifluoromethane	ND		9.1	0.72	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
1,1-Dichloroethane	ND		4.6	0.62	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
1,2-Dichloroethane	ND		4.6	0.69	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
1,1-Dichloroethene	ND	*	4.6	0.56	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
cis-1,2-Dichloroethene	ND		4.6	0.62	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
trans-1,2-Dichloroethene	ND		4.6	0.68	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
1,2-Dichloropropane	ND		4.6	0.57	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
cis-1,3-Dichloropropene	ND		4.6	0.63	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
trans-1,3-Dichloropropene	ND		4.6	0.61	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
Ethylbenzene	ND		4.6	0.68	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
Hexachlorobutadiene	ND		4.6	0.82	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
2-Hexanone	ND		46	9.1	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
Isopropylbenzene	ND		4.6	0.62	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
4-Isopropyltoluene	ND		4.6	2.3	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
Methylene Chloride	ND		9.1	5.1	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
4-Methyl-2-pentanone (MIBK)	ND		46	9.1	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
Naphthalene	ND		9.1	1.4	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
N-Propylbenzene	ND		4.6	0.60	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
Styrene	ND		4.6	0.57	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
1,1,1,2-Tetrachloroethane	ND		4.6	0.69	ug/Kg		08/27/18 02:30	08/31/18 02:25	1

Client Sample ID: DG-G11S-3.5-4

Lab Sample ID: 720-88264-7

Date Collected: 08/27/18 12:25

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.6	0.68	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
Tetrachloroethene	ND		4.6	0.61	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
Toluene	ND		4.6	0.65	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
1,2,3-Trichlorobenzene	ND		4.6	0.67	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
1,2,4-Trichlorobenzene	ND		4.6	0.65	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
1,1,1-Trichloroethane	ND		4.6	0.56	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
1,1,2-Trichloroethane	ND		4.6	0.64	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
Trichloroethene	ND		4.6	0.57	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
Trichlorofluoromethane	ND		4.6	0.51	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
1,2,3-Trichloropropane	ND		4.6	0.70	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.6	1.9	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
1,2,4-Trimethylbenzene	ND		4.6	1.5	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
1,3,5-Trimethylbenzene	ND		4.6	0.59	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
Vinyl acetate	ND		18	4.6	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
Vinyl chloride	ND		4.6	0.66	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
Xylenes, Total	ND		4.6	1.1	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
2,2-Dichloropropane	ND		4.6	1.8	ug/Kg		08/27/18 02:30	08/31/18 02:25	1
Gasoline Range Organics (GRO) -C4-C12	ND		230	91	ug/Kg		08/27/18 02:30	08/31/18 02:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*45 - 131*	*08/27/18 02:30*	*08/31/18 02:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*60 - 140*	*08/27/18 02:30*	*08/31/18 02:25*	*1*
Toluene-d8 (Surr)	*93*		*58 - 140*	*08/27/18 02:30*	*08/31/18 02:25*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.9	5.0	ug/Kg		08/30/18 14:15	09/06/18 20:10	1
Acenaphthene	ND		5.0	2.8	ug/Kg		08/30/18 14:15	09/06/18 20:10	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		08/30/18 14:15	09/06/18 20:10	1
Anthracene	ND		5.0	2.0	ug/Kg		08/30/18 14:15	09/06/18 20:10	1
Benzo[a]anthracene	ND		5.0	1.5	ug/Kg		08/30/18 14:15	09/06/18 20:10	1
Benzo[a]pyrene	ND		5.0	1.9	ug/Kg		08/30/18 14:15	09/06/18 20:10	1
Benzo[b]fluoranthene	**2.8**	**J**	5.0	2.1	ug/Kg		08/30/18 14:15	09/06/18 20:10	1
Benzo[g,h,i]perylene	ND		5.0	4.3	ug/Kg		08/30/18 14:15	09/06/18 20:10	1
Benzo[k]fluoranthene	ND		5.0	2.1	ug/Kg		08/30/18 14:15	09/06/18 20:10	1
Chrysene	**1.4**	**J**	5.0	1.4	ug/Kg		08/30/18 14:15	09/06/18 20:10	1
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		08/30/18 14:15	09/06/18 20:10	1
Fluoranthene	**1.7**	**J**	5.0	1.4	ug/Kg		08/30/18 14:15	09/06/18 20:10	1
Fluorene	ND		5.0	2.2	ug/Kg		08/30/18 14:15	09/06/18 20:10	1
Indeno[1,2,3-cd]pyrene	ND		5.0	4.2	ug/Kg		08/30/18 14:15	09/06/18 20:10	1
Naphthalene	ND		5.0	3.5	ug/Kg		08/30/18 14:15	09/06/18 20:10	1
Phenanthrene	ND		5.0	1.8	ug/Kg		08/30/18 14:15	09/06/18 20:10	1
Pyrene	**2.3**	**J**	5.0	1.7	ug/Kg		08/30/18 14:15	09/06/18 20:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*73*		*33 - 120*	*08/30/18 14:15*	*09/06/18 20:10*	*1*
Terphenyl-d14	*103*		*35 - 146*	*08/30/18 14:15*	*09/06/18 20:10*	*1*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88264-1

Client Sample ID: DG-G11S-3.5-4

Date Collected: 08/27/18 12:25
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88264-7

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2100		2000	740	ug/Kg		08/29/18 13:41	08/31/18 15:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*94*		*40 - 130*	*08/29/18 13:41*	*08/31/18 15:30*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.58	ug/Kg		08/30/18 12:52	09/05/18 09:03	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/30/18 12:52	09/05/18 09:03	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/30/18 12:52	09/05/18 09:03	1
Aldrin	ND		1.9	0.47	ug/Kg		08/30/18 12:52	09/05/18 09:03	1
alpha-BHC	ND		1.9	0.52	ug/Kg		08/30/18 12:52	09/05/18 09:03	1
beta-BHC	ND		1.9	0.34	ug/Kg		08/30/18 12:52	09/05/18 09:03	1
Chlordane (technical)	ND		38	3.0	ug/Kg		08/30/18 12:52	09/05/18 09:03	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/30/18 12:52	09/05/18 09:03	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/30/18 12:52	09/05/18 09:03	1
Dieldrin	ND		1.9	0.56	ug/Kg		08/30/18 12:52	09/05/18 09:03	1
Endosulfan I	ND		1.9	0.30	ug/Kg		08/30/18 12:52	09/05/18 09:03	1
Endosulfan II	ND		1.9	0.46	ug/Kg		08/30/18 12:52	09/05/18 09:03	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/30/18 12:52	09/05/18 09:03	1
Endrin	ND		1.9	0.43	ug/Kg		08/30/18 12:52	09/05/18 09:03	1
Endrin aldehyde	ND		1.9	0.59	ug/Kg		08/30/18 12:52	09/05/18 09:03	1
Endrin ketone	ND		1.9	0.31	ug/Kg		08/30/18 12:52	09/05/18 09:03	1
gamma-BHC (Lindane)	ND		1.9	0.59	ug/Kg		08/30/18 12:52	09/05/18 09:03	1
Heptachlor	ND		1.9	0.43	ug/Kg		08/30/18 12:52	09/05/18 09:03	1
Heptachlor epoxide	ND		1.9	0.33	ug/Kg		08/30/18 12:52	09/05/18 09:03	1
Methoxychlor	ND		1.9	0.64	ug/Kg		08/30/18 12:52	09/05/18 09:03	1
Toxaphene	ND		38	6.4	ug/Kg		08/30/18 12:52	09/05/18 09:03	1
trans-Chlordane	ND		1.9	0.43	ug/Kg		08/30/18 12:52	09/05/18 09:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*103*		*21 - 136*	*08/30/18 12:52*	*09/05/18 09:03*	*1*
Tetrachloro-m-xylene	*80*		*21 - 145*	*08/30/18 12:52*	*09/05/18 09:03*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		51	22	ug/Kg		08/30/18 09:28	09/01/18 16:15	1
Aroclor-1221	ND		51	24	ug/Kg		08/30/18 09:28	09/01/18 16:15	1
Aroclor-1232	ND		51	23	ug/Kg		08/30/18 09:28	09/01/18 16:15	1
Aroclor-1242	ND		51	19	ug/Kg		08/30/18 09:28	09/01/18 16:15	1
Aroclor-1248	ND		51	24	ug/Kg		08/30/18 09:28	09/01/18 16:15	1
Aroclor-1254	ND		51	23	ug/Kg		08/30/18 09:28	09/01/18 16:15	1
Aroclor-1260	ND		51	22	ug/Kg		08/30/18 09:28	09/01/18 16:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*67*		*14 - 128*	*08/30/18 09:28*	*09/01/18 16:15*	*1*
DCB Decachlorobiphenyl	*95*		*10 - 132*	*08/30/18 09:28*	*09/01/18 16:15*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.39	J	1.7	0.28	mg/Kg		08/30/18 08:40	08/31/18 00:47	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88264-1

Client Sample ID: DG-G11S-3.5-4

Lab Sample ID: 720-88264-7

Date Collected: 08/27/18 12:25

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.6	J	3.4	0.29	mg/Kg		08/30/18 08:40	08/31/18 00:47	4
Barium	51		1.7	0.24	mg/Kg		08/30/18 08:40	08/31/18 00:47	4
Beryllium	0.17	J	0.34	0.11	mg/Kg		08/30/18 08:40	08/31/18 00:47	4
Cadmium	ND		0.42	0.042	mg/Kg		08/30/18 08:40	08/31/18 00:47	4
Chromium	52		1.7	0.18	mg/Kg		08/30/18 08:40	08/31/18 00:47	4
Cobalt	6.5		0.68	0.068	mg/Kg		08/30/18 08:40	08/31/18 00:47	4
Copper	9.4		5.1	2.4	mg/Kg		08/30/18 08:40	08/31/18 00:47	4
Lead	5.7		1.7	0.36	mg/Kg		08/30/18 08:40	08/31/18 00:47	4
Molybdenum	ND		1.7	0.22	mg/Kg		08/30/18 08:40	08/31/18 00:47	4
Nickel	27		1.7	0.17	mg/Kg		08/30/18 08:40	08/31/18 00:47	4
Selenium	ND		3.4	0.51	mg/Kg		08/30/18 08:40	08/31/18 00:47	4
Silver	0.19	J	0.85	0.17	mg/Kg		08/30/18 08:40	08/31/18 00:47	4
Thallium	ND		1.7	0.49	mg/Kg		08/30/18 08:40	08/31/18 00:47	4
Vanadium	44		1.7	0.23	mg/Kg		08/30/18 08:40	08/31/18 00:47	4
Zinc	25		5.1	2.2	mg/Kg		08/30/18 08:40	08/31/18 00:47	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.015		0.015	0.0022	mg/Kg		08/31/18 08:40	09/05/18 13:38	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88264-1

Client Sample ID: DG-G11S-9.5-10

Lab Sample ID: 720-88264-8

Date Collected: 08/27/18 12:25
Matrix: Solid
Date Received: 08/27/18 14:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.0	0.96	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
Acetone	**59**		40	30	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
Benzene	ND		4.0	0.52	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
Dichlorobromomethane	ND		4.0	0.58	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
Bromobenzene	ND		4.0	0.63	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
Chlorobromomethane	ND		16	0.58	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
Bromoform	ND		4.0	1.6	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
Bromomethane	ND		8.0	0.63	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
2-Butanone (MEK)	ND		40	17	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
n-Butylbenzene	ND		4.0	0.80	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
sec-Butylbenzene	ND		4.0	0.58	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
tert-Butylbenzene	ND		4.0	0.59	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
Carbon disulfide	ND		4.0	1.6	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
Carbon tetrachloride	ND		4.0	0.50	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
Chlorobenzene	ND		4.0	0.55	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
Chloroethane	ND		8.0	0.45	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
Chloroform	ND		4.0	0.53	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
Chloromethane	ND		8.0	0.63	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
2-Chlorotoluene	ND		4.0	0.52	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
4-Chlorotoluene	ND		4.0	0.55	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
Chlorodibromomethane	ND		4.0	0.57	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
1,2-Dichlorobenzene	ND		4.0	0.55	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
1,3-Dichlorobenzene	ND		4.0	0.58	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
1,4-Dichlorobenzene	ND		4.0	0.57	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
1,3-Dichloropropane	ND		4.0	0.59	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
1,1-Dichloropropene	ND		4.0	0.55	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
1,2-Dibromo-3-Chloropropane	ND		8.0	1.4	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
Ethylene Dibromide	ND		4.0	1.1	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
Dibromomethane	ND		8.0	0.69	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
Dichlorodifluoromethane	ND		8.0	0.63	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
1,1-Dichloroethane	ND		4.0	0.55	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
1,2-Dichloroethane	ND		4.0	0.61	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
1,1-Dichloroethene	ND	*	4.0	0.50	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
cis-1,2-Dichloroethene	ND		4.0	0.55	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
trans-1,2-Dichloroethene	ND		4.0	0.60	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
1,2-Dichloropropane	ND		4.0	0.50	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
cis-1,3-Dichloropropene	ND		4.0	0.55	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
trans-1,3-Dichloropropene	ND		4.0	0.54	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
Ethylbenzene	ND		4.0	0.60	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
Hexachlorobutadiene	ND		4.0	0.72	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
2-Hexanone	ND		40	8.0	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
Isopropylbenzene	ND		4.0	0.55	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
4-Isopropyltoluene	ND		4.0	2.0	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
Methylene Chloride	ND		8.0	4.5	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
4-Methyl-2-pentanone (MIBK)	ND		40	8.0	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
Naphthalene	ND		8.0	1.2	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
N-Propylbenzene	ND		4.0	0.53	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
Styrene	ND		4.0	0.50	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
1,1,1,2-Tetrachloroethane	ND		4.0	0.61	ug/Kg		08/27/18 02:30	08/30/18 23:00	1

Client Sample ID: DG-G11S-9.5-10

Lab Sample ID: 720-88264-8

Date Collected: 08/27/18 12:25

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.0	0.60	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
Tetrachloroethene	ND		4.0	0.54	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
Toluene	ND		4.0	0.57	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
1,2,3-Trichlorobenzene	ND		4.0	0.59	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
1,2,4-Trichlorobenzene	ND		4.0	0.57	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
1,1,1-Trichloroethane	ND		4.0	0.49	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
1,1,2-Trichloroethane	ND		4.0	0.56	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
Trichloroethene	ND		4.0	0.50	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
Trichlorofluoromethane	ND		4.0	0.45	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
1,2,3-Trichloropropane	ND		4.0	0.62	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.0	1.7	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
1,2,4-Trimethylbenzene	ND		4.0	1.3	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
1,3,5-Trimethylbenzene	ND		4.0	0.52	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
Vinyl acetate	ND		16	4.0	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
Vinyl chloride	ND		4.0	0.59	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
Xylenes, Total	ND		4.0	0.98	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
2,2-Dichloropropane	ND		4.0	1.6	ug/Kg		08/27/18 02:30	08/30/18 23:00	1
Gasoline Range Organics (GRO) -C4-C12	ND		200	80	ug/Kg		08/27/18 02:30	08/30/18 23:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*87*		*45 - 131*	*08/27/18 02:30*	*08/30/18 23:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*60 - 140*	*08/27/18 02:30*	*08/30/18 23:00*	*1*
Toluene-d8 (Surr)	*94*		*58 - 140*	*08/27/18 02:30*	*08/30/18 23:00*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		48	24	ug/Kg		08/30/18 14:15	09/07/18 09:44	5
Acenaphthene	ND		24	13	ug/Kg		08/30/18 14:15	09/07/18 09:44	5
Acenaphthylene	ND		24	12	ug/Kg		08/30/18 14:15	09/07/18 09:44	5
Anthracene	ND		24	9.6	ug/Kg		08/30/18 14:15	09/07/18 09:44	5
Benzo[a]anthracene	ND		24	7.2	ug/Kg		08/30/18 14:15	09/07/18 09:44	5
Benzo[a]pyrene	**9.9**	**J**	24	9.1	ug/Kg		08/30/18 14:15	09/07/18 09:44	5
Benzo[b]fluoranthene	**19**	**J**	24	10	ug/Kg		08/30/18 14:15	09/07/18 09:44	5
Benzo[g,h,i]perylene	ND		24	21	ug/Kg		08/30/18 14:15	09/07/18 09:44	5
Benzo[k]fluoranthene	ND		24	10	ug/Kg		08/30/18 14:15	09/07/18 09:44	5
Chrysene	**11**	**J**	24	6.7	ug/Kg		08/30/18 14:15	09/07/18 09:44	5
Dibenz(a,h)anthracene	ND		24	17	ug/Kg		08/30/18 14:15	09/07/18 09:44	5
Fluoranthene	**21**	**J**	24	6.7	ug/Kg		08/30/18 14:15	09/07/18 09:44	5
Fluorene	ND		24	11	ug/Kg		08/30/18 14:15	09/07/18 09:44	5
Indeno[1,2,3-cd]pyrene	ND		24	20	ug/Kg		08/30/18 14:15	09/07/18 09:44	5
Naphthalene	ND		24	17	ug/Kg		08/30/18 14:15	09/07/18 09:44	5
Phenanthrene	**21**	**J**	24	8.6	ug/Kg		08/30/18 14:15	09/07/18 09:44	5
Pyrene	**17**	**J**	24	8.2	ug/Kg		08/30/18 14:15	09/07/18 09:44	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*66*		*33 - 120*	*08/30/18 14:15*	*09/07/18 09:44*	*5*
Terphenyl-d14	*100*		*35 - 146*	*08/30/18 14:15*	*09/07/18 09:44*	*5*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88264-1

Client Sample ID: DG-G11S-9.5-10

Date Collected: 08/27/18 12:25
Date Received: 08/27/18 14:25

Lab Sample ID: 720-88264-8

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	100000		1900	730	ug/Kg		08/29/18 13:41	08/31/18 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*54*		*40 - 130*	*08/29/18 13:41*	*08/31/18 14:16*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/30/18 12:52	09/05/18 09:19	1
4,4'-DDE	ND		1.9	0.41	ug/Kg		08/30/18 12:52	09/05/18 09:19	1
4,4'-DDT	ND		1.9	0.40	ug/Kg		08/30/18 12:52	09/05/18 09:19	1
Aldrin	ND		1.9	0.48	ug/Kg		08/30/18 12:52	09/05/18 09:19	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/30/18 12:52	09/05/18 09:19	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/30/18 12:52	09/05/18 09:19	1
Chlordane (technical)	ND		39	3.1	ug/Kg		08/30/18 12:52	09/05/18 09:19	1
cis-Chlordane	ND		1.9	0.39	ug/Kg		08/30/18 12:52	09/05/18 09:19	1
delta-BHC	ND		1.9	0.43	ug/Kg		08/30/18 12:52	09/05/18 09:19	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/30/18 12:52	09/05/18 09:19	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/30/18 12:52	09/05/18 09:19	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/30/18 12:52	09/05/18 09:19	1
Endosulfan sulfate	ND		1.9	0.37	ug/Kg		08/30/18 12:52	09/05/18 09:19	1
Endrin	ND		1.9	0.44	ug/Kg		08/30/18 12:52	09/05/18 09:19	1
Endrin aldehyde	ND		1.9	0.61	ug/Kg		08/30/18 12:52	09/05/18 09:19	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/30/18 12:52	09/05/18 09:19	1
gamma-BHC (Lindane)	ND		1.9	0.61	ug/Kg		08/30/18 12:52	09/05/18 09:19	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/30/18 12:52	09/05/18 09:19	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/30/18 12:52	09/05/18 09:19	1
Methoxychlor	ND		1.9	0.66	ug/Kg		08/30/18 12:52	09/05/18 09:19	1
Toxaphene	ND		39	6.6	ug/Kg		08/30/18 12:52	09/05/18 09:19	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/30/18 12:52	09/05/18 09:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*108*		*21 - 136*	*08/30/18 12:52*	*09/05/18 09:19*	*1*
Tetrachloro-m-xylene	*83*	*p*	*21 - 145*	*08/30/18 12:52*	*09/05/18 09:19*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		51	22	ug/Kg		08/30/18 09:28	09/01/18 16:36	1
Aroclor-1221	ND		51	24	ug/Kg		08/30/18 09:28	09/01/18 16:36	1
Aroclor-1232	ND		51	23	ug/Kg		08/30/18 09:28	09/01/18 16:36	1
Aroclor-1242	ND		51	19	ug/Kg		08/30/18 09:28	09/01/18 16:36	1
Aroclor-1248	ND		51	24	ug/Kg		08/30/18 09:28	09/01/18 16:36	1
Aroclor-1254	ND		51	23	ug/Kg		08/30/18 09:28	09/01/18 16:36	1
Aroclor-1260	ND		51	22	ug/Kg		08/30/18 09:28	09/01/18 16:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*54*		*14 - 128*	*08/30/18 09:28*	*09/01/18 16:36*	*1*
DCB Decachlorobiphenyl	*66*		*10 - 132*	*08/30/18 09:28*	*09/01/18 16:36*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.7	0.28	mg/Kg		08/30/18 19:34	08/31/18 22:08	4

Client Sample ID: DG-G11S-9.5-10

Lab Sample ID: 720-88264-8

Date Collected: 08/27/18 12:25

Matrix: Solid

Date Received: 08/27/18 14:25

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.4	J	3.3	0.28	mg/Kg		08/30/18 19:34	08/31/18 22:08	4
Barium	75		1.7	0.24	mg/Kg		08/30/18 19:34	08/31/18 22:08	4
Beryllium	ND		0.33	0.11	mg/Kg		08/30/18 19:34	08/31/18 22:08	4
Cadmium	0.047	J	0.42	0.041	mg/Kg		08/30/18 19:34	08/31/18 22:08	4
Chromium	43		1.7	0.18	mg/Kg		08/30/18 19:34	08/31/18 22:08	4
Cobalt	7.9		0.67	0.067	mg/Kg		08/30/18 19:34	08/31/18 22:08	4
Copper	12		5.0	2.4	mg/Kg		08/30/18 19:34	08/31/18 22:08	4
Lead	7.5		1.7	0.35	mg/Kg		08/30/18 19:34	08/31/18 22:08	4
Molybdenum	ND		1.7	0.21	mg/Kg		08/30/18 19:34	08/31/18 22:08	4
Nickel	33		1.7	0.17	mg/Kg		08/30/18 19:34	08/31/18 22:08	4
Selenium	0.50	J	3.3	0.50	mg/Kg		08/30/18 19:34	08/31/18 22:08	4
Silver	0.23	J	0.83	0.17	mg/Kg		08/30/18 19:34	08/31/18 22:08	4
Thallium	ND		1.7	0.48	mg/Kg		08/30/18 19:34	08/31/18 22:08	4
Vanadium	33		1.7	0.23	mg/Kg		08/30/18 19:34	08/31/18 22:08	4
Zinc	32		5.0	2.1	mg/Kg		08/30/18 19:34	08/31/18 22:08	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.044		0.016	0.0023	mg/Kg		08/31/18 08:40	09/05/18 13:40	1

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88264-1

SDG No.:

Client Sample ID: DUP-23 Lab Sample ID: 720-88264-1

Matrix: Solid Lab File ID: FID1000023.D

Analysis Method: 8015B Date Collected: 08/27/2018 00:00

Extraction Method: 3546 Date Extracted: 08/30/2018 15:54

Sample wt/vol: 15.42(g) Date Analyzed: 09/05/2018 17:31

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250884 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	4600		1900	730

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	92		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000023.D
Lims ID: 720-88264-D-1-C
Client ID: DUP-23
Sample Type: Client
Inject. Date: 05-Sep-2018 17:31:20 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053661-023
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\DRO6_A.m
Limit Group: DRO
Last Update: 06-Sep-2018 12:56:19 Calib Date: 05-Sep-2018 09:01:58
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK007

First Level Reviewer: luj Date: 06-Sep-2018 16:58:00

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane	1.140	1.229	-0.089	54928	NC	
23 n-Decane	2.113	2.116	-0.003	19343	NC	
A 1 C9-C13	2.734	(1.229-4.240)		9201906	5.18	
A 21 Stoddard Solvent	2.734	(1.229-4.240)		9201906	5.17	
A 57 C10-C12	2.865	(2.116-3.613)		7863445	5.10	
24 Dodecane	3.607	3.613	-0.006	51472	NC	
A 3 C9 - C17	3.780	(1.229-6.331)		11218787	5.75	
A 60 C10-C16	3.983	(2.116-5.850)		10047280	5.75	
A 47 C9 - C18	4.005	(1.229-6.782)		11658316	7.22	
A 15 Kerosene	4.220	(1.229-7.212)		12699623	7.86	
A 25 C9-C19	4.220	(1.229-7.212)		12699623	6.48	
26 C13		4.240			ND	
$ 27 n-Decanoic Acid (Surr)		4.608			ND	U
A 59 C12-C16	4.732	(3.613-5.850)		2235307	1.45	
A 62 C10-C20	4.871	(2.116-7.625)		17637893	11.4	
A 28 C9-C24	5.172	(1.229-9.115)		34345591	22.3	
A 29 C9-C25	5.341	(1.229-9.453)		40641115	26.3	
A 54 C10-C23	5.440	(2.116-8.764)		29320836	19.0	
A 4 C10-C24	5.616	(2.116-9.115)		33574367	21.8	
A 16 C10-C25	5.785	(2.116-9.453)		39869891	25.8	
45 Hexadecane	5.833	5.850	-0.017	93803	NC	
A 14 C10-C26	5.948	(2.116-9.780)		41421982	26.9	
A 67 C12-C22	6.006	(3.613-8.400)		18301206	11.9	
A 32 C10-C28	6.258	(2.116-10.400)		54427565	35.3	
A 5 Diesel	6.258	(2.116-10.400)		54427565	35.3	
A 12 Unknown Hydrocarbons	6.258	(2.116-10.400)		54427565	NC	
A 30 C13-C22	6.320	(4.240-8.400)		18030460	11.7	
44 Heptadecane	6.314	6.331	-0.017	217859	NC	
A 31 C12-C24	6.364	(3.613-9.115)		25762394	16.7	
51 n-Octadecane	6.861	6.782	0.079	562486	NC	
A 9 Crude Oil Range Organics (	6.880	(1.229-12.531)		141562885	NC	
A 11 Bunker Range Organics (C9-	6.880	(1.229-12.531)		141562885	NC	

Report Date: 06-Sep-2018 16:58:02 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000023.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.880	(1.229-12.531)		141562885	80.0	
33 C19		7.212			ND	
A 64 C13-C28	7.320	(4.240-10.400)		46344846	30.0	
A 17 C10-C36	7.324	(2.116-12.531)		140791661	91.3	
A 68 Crude Oil Range Organics (	7.391	(1.229-13.553)		179325984	NC	
A 13 C9-C40	7.391	(1.229-13.553)		179325984	133.0	
A 58 C16-C24	7.483	(5.850-9.115)		23620890	15.3	
61 icosane	7.607	7.625	-0.018	1010490	NC	
A 6 C10-C40	7.835	(2.116-13.553)		178554760	132.5	
$ 34 p-Terphenyl	8.091	8.110	-0.019	44074600	23.0	
35 n-Docosane	8.395	8.400	-0.005	688453	NC	
A 18 C12-C40	8.583	(3.613-13.553)		170742787	127.1	
36 Tricosane	8.775	8.764	0.011	1497493	NC	
A 66 C13-C40	8.897	(4.240-13.553)		170472041	127.0	
37 n-Tetracosane	9.131	9.115	0.016	1425351	NC	
A 2 C16-C36 ORO	9.191	(5.850-12.531)		205982636	180.6	
38 C25	9.451	9.453	-0.002	4023815	NC	
A 19 C16-C40	9.702	(5.850-13.553)		168601283	126.1	
46 n-Hexacosane	9.794	9.780	0.014	2248588	NC	
A 20 C19-C36	9.872	(7.212-12.531)		201713731	151.8	
A 55 C23-C32	10.146	(8.764-11.528)		64827074	93.4	
39 n-Octacosane	10.409	10.400	0.009	3203726	NC	
65 C29	10.692	10.695	-0.003	9329098	NC	
A 40 C24-C36	10.823	(9.115-12.531)		88995275	99.9	
A 7 Motor Oil	10.823	(9.115-12.531)		88995275	99.9	
A 10 C22-C40	10.977	(8.400-13.553)		127805534	102.8	
A 49 C25-C36	10.992	(9.453-12.531)		104945585	117.2	
A 41 C23-C40	11.159	(8.764-13.553)		149233924	116.8	
A 8 C24-C40	11.334	(9.115-13.553)		144980393	119.1	
56 Dotriacontane	11.540	11.528	0.012	5505388	NC	
A 50 C28-C40	11.977	(10.400-13.553)		124127195	130.8	
A 63 C29-C40	12.124	(10.695-13.553)		118548964	136.8	
42 n-Hexatriacontane	12.605	12.531	0.074	3869818	NC	
43 C40		13.553			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

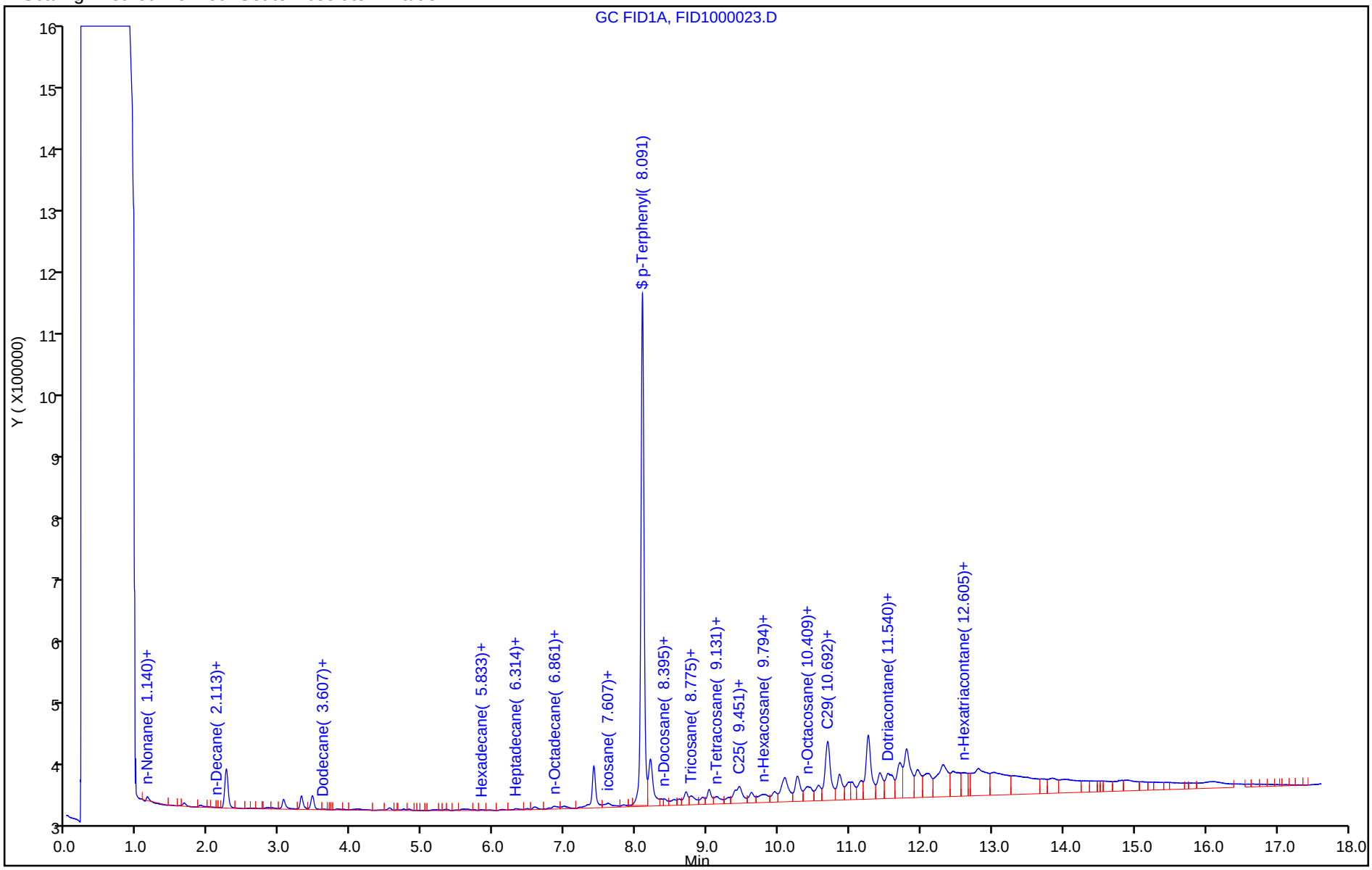
Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

Report Date: 06-Sep-2018 16:58:02 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000023.D				
Injection Date:	05-Sep-2018 17:31:20	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88264-D-1-C	Lab Sample ID:	720-88264-1	Worklist Smp#:	23
Client ID:	DUP-23				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000023.D
Lims ID: 720-88264-D-1-C
Client ID: DUP-23
Sample Type: Client
Inject. Date: 05-Sep-2018 17:31:20 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053661-023
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\DRO6_A.m
Limit Group: DRO
Last Update: 06-Sep-2018 12:56:19 Calib Date: 05-Sep-2018 09:01:58
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK007

First Level Reviewer: luj Date: 06-Sep-2018 16:58:00

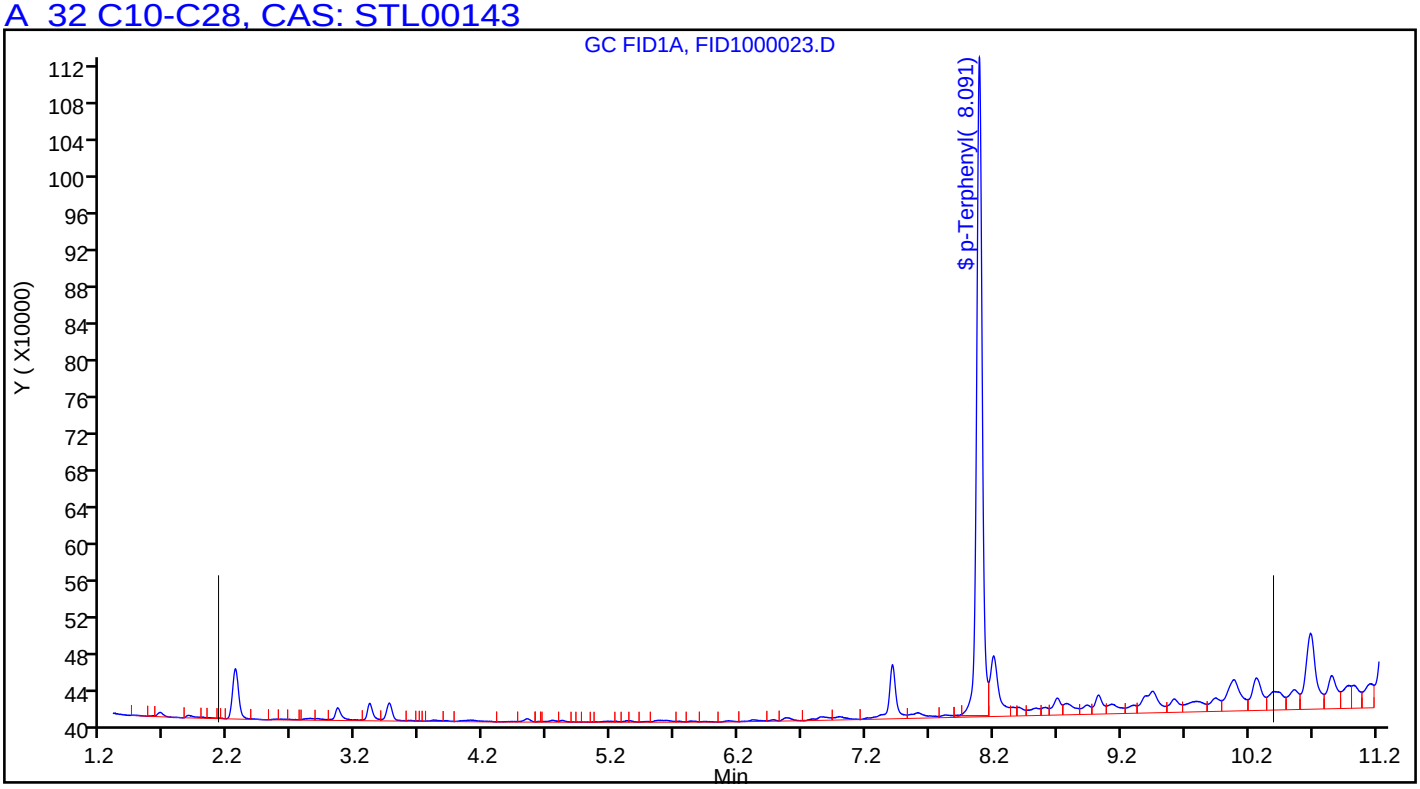
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	23.0	91.80

Report Date: 06-Sep-2018 16:58:03 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000023.D				
Injection Date:	05-Sep-2018 17:31:20	Instrument ID:	CHDRO6		
Lims ID:	720-88264-D-1-C	Lab Sample ID:	720-88264-1		
Client ID:	DUP-23				
Operator ID:	DCH	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88264-1

SDG No.:

Client Sample ID: DUP-22 Lab Sample ID: 720-88264-2

Matrix: Solid Lab File ID: FID2000015.D

Analysis Method: 8015B Date Collected: 08/27/2018 00:00

Extraction Method: 3546 Date Extracted: 08/30/2018 15:54

Sample wt/vol: 15.30(g) Date Analyzed: 09/05/2018 14:15

Con. Extract Vol.: 2(mL) Dilution Factor: 5

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250885 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	760000		9800	3700

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	0	X D	40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000015.D
Lims ID: 720-88264-E-2-C
Client ID: DUP-22
Sample Type: Client
Inject. Date: 05-Sep-2018 14:15:30 ALS Bottle#: 65 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 5.0000
Sample Info: 720-0053662-015
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\DRO6_B.m
Limit Group: DRO
Last Update: 05-Sep-2018 15:40:05 Calib Date: 05-Sep-2018 11:27:56
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000009.D

Column 1 : Det: GC FID1A
Process Host: XAWRK002

First Level Reviewer: luj Date: 05-Sep-2018 15:40:05

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.305			ND	
23 n-Decane	2.229	2.168	0.061	8658822	NC	M
A 1 C9-C13	2.774	(1.305-4.243)		2274386952	1042.6	M
A 21 Stoddard Solvent	2.774	(1.305-4.243)		2274386952	NC	M
A 57 C10-C12	2.898	(2.168-3.628)		1941978173	1106.9	M
24 Dodecane		3.628			ND	
A 3 C9 - C17	3.805	(1.305-6.306)		2317612740	1015.2	M
A 60 C10-C16	3.999	(2.168-5.830)		2004488858	988.6	M
A 47 C9 - C18	4.028	(1.305-6.750)		2319137053	1224.7	M
A 25 C9-C19	4.240	(1.305-7.174)		2320512408	1008.1	M
A 15 Kerosene	4.240	(1.305-7.174)		2320512408	1222.6	M
26 C13	4.242	4.243	-0.001	6016107	NC	M
$ 27 n-Decanoic Acid (Surr)		4.643			ND	U
A 59 C12-C16	4.729	(3.628-5.830)		1331342782	761.1	M
A 61 C10-C20	4.875	(2.168-7.582)		2013648313	1147.5	M
A 28 C9-C24	5.178	(1.305-9.051)		2336766380	1330.4	M
A 29 C9-C25	5.344	(1.305-9.384)		2339773080	1332.1	M
A 54 C10-C23	5.437	(2.168-8.705)		2025802626	1154.4	M
A 4 C10-C24	5.610	(2.168-9.051)		2029432152	1156.4	M
A 16 C10-C25	5.776	(2.168-9.384)		2032438852	1158.1	M
45 Hexadecane	5.756	5.830	-0.074	11761630	NC	M
A 14 C10-C26	5.937	(2.168-9.705)		2035098703	1159.6	M
A 67 C12-C22	5.987	(3.628-8.346)		1352656550	773.2	M
A 32 C10-C28	6.242	(2.168-10.315)		2044044849	1164.7	M
A 5 Diesel	6.242	(2.168-10.315)		2044044849	1164.7	M
A 12 Unknown Hydrocarbons	6.242	(2.168-10.315)		2044044849	NC	M
A 30 C13-C22	6.294	(4.243-8.346)		64766009	44.0	M
44 Heptadecane	6.341	6.306	0.035	423439	NC	M
A 31 C12-C24	6.339	(3.628-9.051)		1356286076	775.3	M
49 n-Octadecane	6.776	6.750	0.026	426417	NC	M
A 9 Crude Oil Range Organics (	6.857	(1.305-12.408)		2427346662	NC	M
A 11 Bunker Range Organics (C9-	6.857	(1.305-12.408)		2427346662	NC	M

Report Date: 05-Sep-2018 15:40:05 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000015.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.857	(1.305-12.408)		2427346662	1149.8	M
33 C19	7.162	7.174	-0.012	338539	NC	M
A 64 C13-C28	7.279	(4.243-10.315)		83008232	54.3	M
A 17 C10-C36	7.288	(2.168-12.408)		2120012434	1207.7	M
A 68 Crude Oil Range Organics (	7.347	(1.305-13.389)		2497076976	NC	M
A 13 C9-C40	7.347	(1.305-13.389)		2497076976	1598.3	M
A 58 C16-C24	7.440	(5.830-9.051)		36704924	28.1	M
62 icosane	7.583	7.582	0.001	419045	NC	M
A 6 C10-C40	7.779	(2.168-13.389)		2189742748	1403.1	M
$ 34 p-Terphenyl		8.086			ND	U
35 n-Docosane		8.346			ND	
A 18 C12-C40	8.508	(3.628-13.389)		1516596672	974.5	M
36 Tricosane	8.708	8.705	0.003	2066409	NC	M
A 66 C13-C40	8.816	(4.243-13.389)		228706131	147.1	M
37 n-Tetracosane	9.065	9.051	0.014	1171219	NC	M
A 2 C16-C36 ORO	9.119	(5.830-12.408)		127285206	107.6	M
38 C25	9.388	9.384	0.004	2659851	NC	M
A 19 C16-C40	9.610	(5.830-13.389)		197015520	127.2	M
46 n-Hexacosane	9.714	9.705	0.009	2121870	NC	M
A 20 C19-C36						
A 55 C23-C32	10.064	(8.705-11.424)		49306807	63.7	M
39 n-Octacosane	10.372	10.315	0.057	6737588	NC	M
65 C29	10.617	10.606	0.011	8489840	NC	M
A 40 C24-C36	10.729	(9.051-12.408)		91384217	93.2	M
A 7 Motor Oil	10.729	(9.051-12.408)		23343712	23.8	
A 10 C22-C40	10.867	(8.346-13.389)		62236330	44.8	
A 50 C25-C36	10.896	(9.384-12.408)		27803845	30.2	
A 41 C23-C40	11.047	(8.705-13.389)		67024290	49.0	
A 8 C24-C40	11.220	(9.051-13.389)		67698630	50.5	
56 Dotriacontane	11.487	11.424	0.063	11229072	NC	M
A 51 C28-C40	11.852	(10.315-13.389)		81165399	74.8	
A 63 C29-C40	11.997	(10.606-13.389)		81175579	81.2	
42 n-Hexatriacontane		12.408			ND	
43 C40	13.356	13.389	-0.033	11088549	NC	M
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- 7 - Failed Limit of Detection

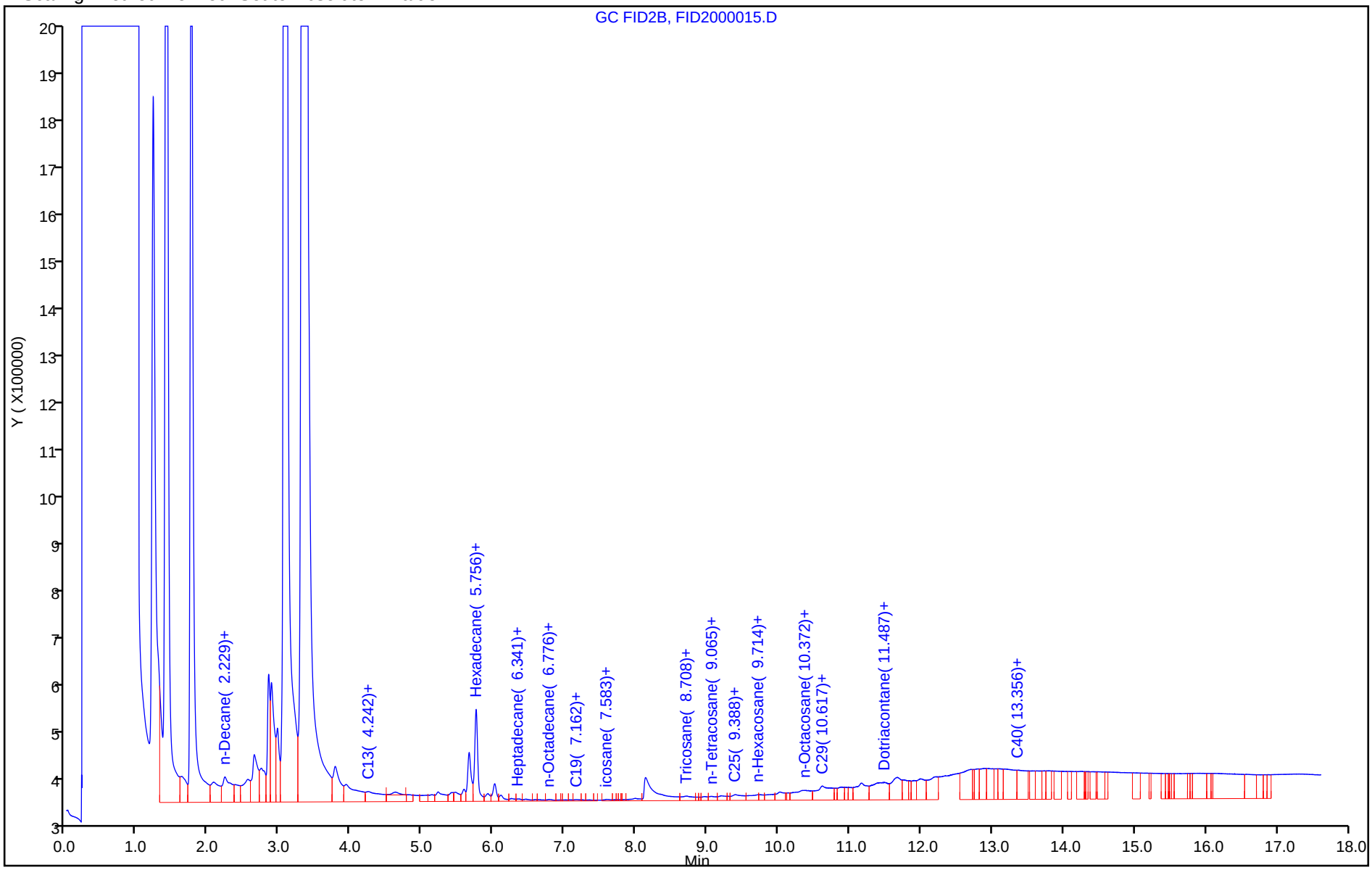
Review Flags
- M - Manually Integrated
- U - Marked Undetected

Report Date: 05-Sep-2018 15:40:05 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000015.D				
Injection Date:	05-Sep-2018 14:15:30	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88264-E-2-C	Lab Sample ID:	720-88264-2	Worklist Smp#:	15
Client ID:	DUP-22				
Injection Vol:	1.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	65
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value

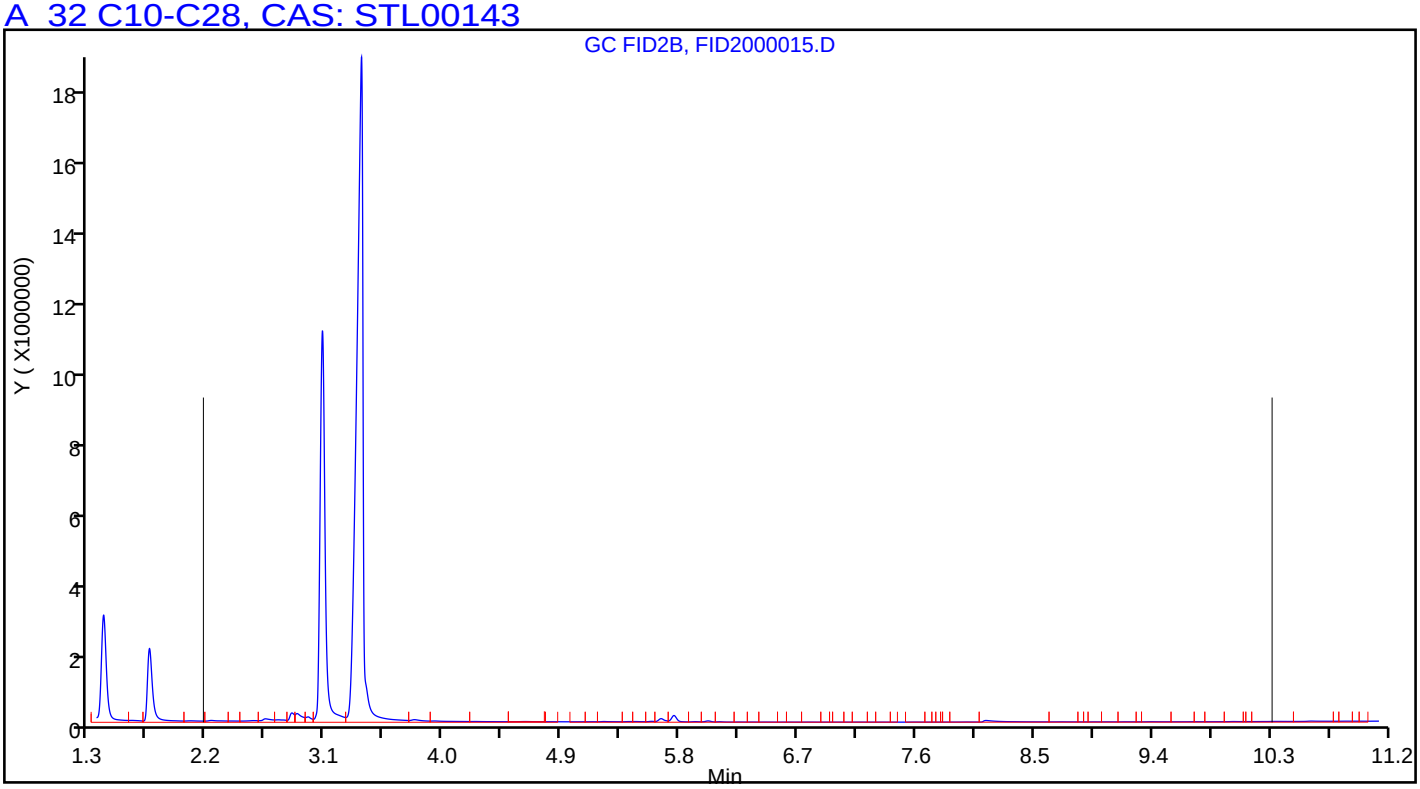


Report Date: 05-Sep-2018 15:40:08 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000015.D				
Injection Date:	05-Sep-2018 14:15:30	Instrument ID:	CHDRO6		
Lims ID:	720-88264-E-2-C	Lab Sample ID:	720-88264-2		
Client ID:	DUP-22				
Operator ID:	DCH	ALS Bottle#:	65	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

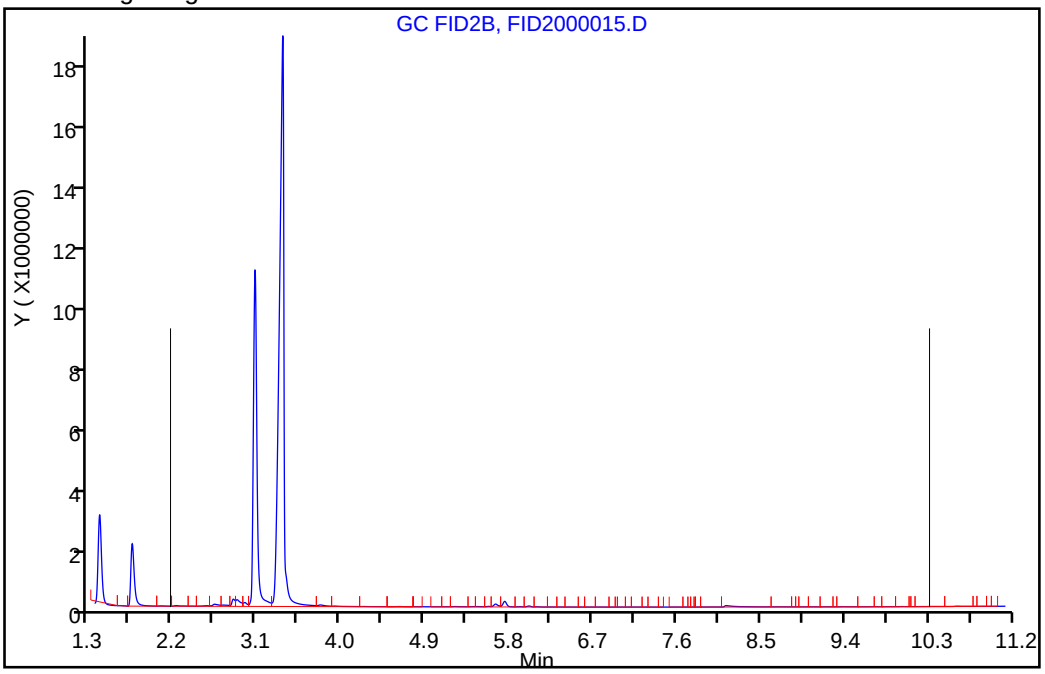
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000015.D				
Injection Date:	05-Sep-2018 14:15:30	Instrument ID:	CHDRO6		
Lims ID:	720-88264-E-2-C	Lab Sample ID:	720-88264-2		
Client ID:	DUP-22				
Operator ID:	DCH	ALS Bottle#:	65	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.242, CAS: STL00143

Signal: 1

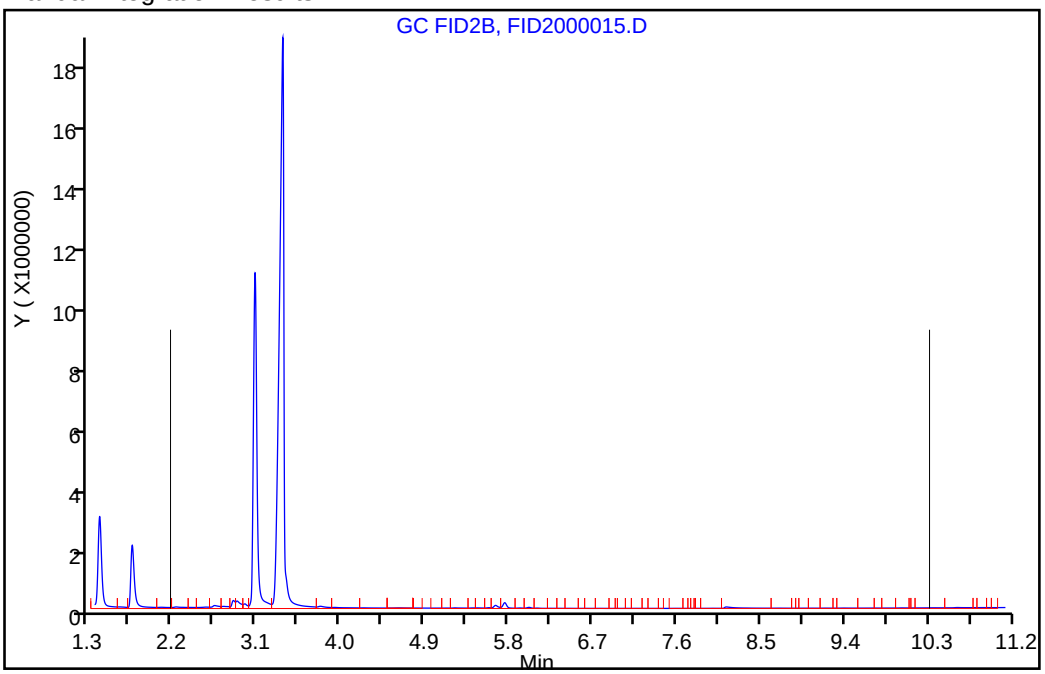
Processing Integration Results

RT: 6.24
Response: 1922744613
Amount: 1095.9967



Manual Integration Results

RT: 6.24
Response: 2044044849
Amount: 1164.6793



Reviewer: luj, 05-Sep-2018 15:39:37

Audit Action: Assigned New Baseline Audit Reason: Wrong Peak

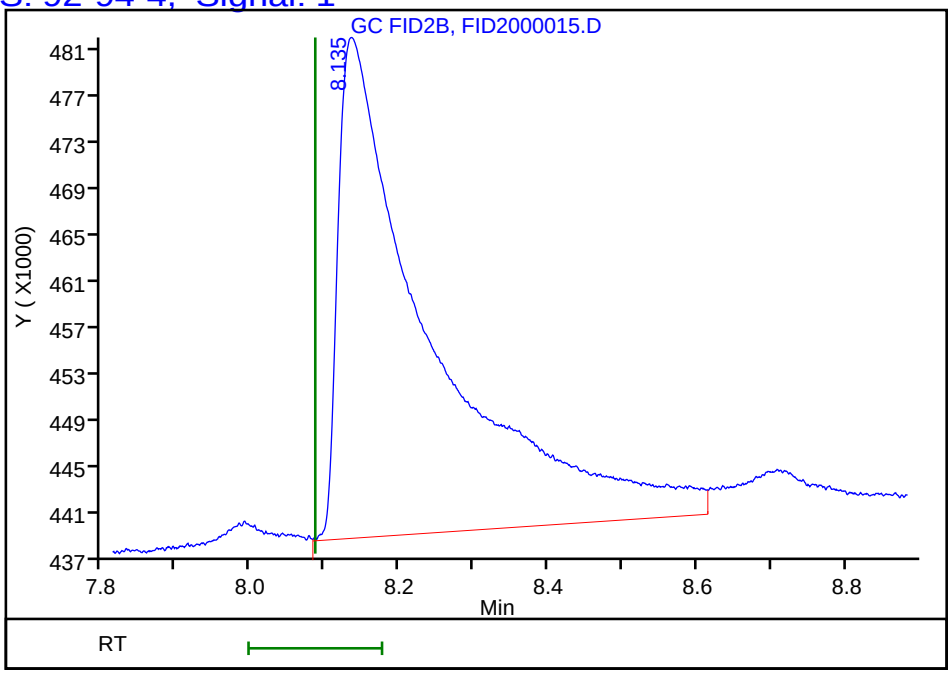
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000015.D				
Injection Date:	05-Sep-2018 14:15:30	Instrument ID:	CHDRO6		
Lims ID:	720-88264-E-2-C	Lab Sample ID:	720-88264-2		
Client ID:	DUP-22				
Operator ID:	DCH	ALS Bottle#:	65	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4, Signal: 1

RT: 8.14
Response: 7543028
Amount: 3.799068



Reviewer: luj, 05-Sep-2018 15:40:05
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88264-1
SDG No.:
Client Sample ID: DUP-30
Lab Sample ID: 720-88264-3
Matrix: Solid
Lab File ID: FID2000016.D
Analysis Method: 8015B
Date Collected: 08/27/2018 00:00
Extraction Method: 3546
Date Extracted: 08/30/2018 15:54
Sample wt/vol: 15.46(g)
Date Analyzed: 09/05/2018 14:40
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: MXT-1
ID: 530(um)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 250885
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	34000		1900	730

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	98		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000016.D
Lims ID: 720-88264-E-3-C
Client ID: DUP-30
Sample Type: Client
Inject. Date: 05-Sep-2018 14:40:08 ALS Bottle#: 66 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053662-016
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\DRO6_B.m
Limit Group: DRO
Last Update: 05-Sep-2018 15:41:08 Calib Date: 05-Sep-2018 11:27:56
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000009.D

Column 1 : Det: GC FID1A
Process Host: XAWRK002

First Level Reviewer: luj Date: 05-Sep-2018 15:41:08

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.305			ND	
23 n-Decane	2.177	2.168	0.009	868750	NC	M
A 1 C9-C13	2.774	(1.305-4.243)		28044787	12.9	M
A 21 Stoddard Solvent	2.774	(1.305-4.243)		28044787	NC	M
A 57 C10-C12	2.898	(2.168-3.628)		16533403	16.7	M
24 Dodecane	3.656	3.628	0.028	257728	NC	M
A 3 C9 - C17	3.805	(1.305-6.306)		53306652	23.4	M
A 60 C10-C16	3.999	(2.168-5.830)		46080170	22.7	M
A 47 C9 - C18	4.028	(1.305-6.750)		60523684	32.0	M
A 25 C9-C19	4.240	(1.305-7.174)		81281728	35.3	M
A 15 Kerosene	4.240	(1.305-7.174)		81281728	42.8	M
26 C13	4.223	4.243	-0.020	6532208	NC	M
$ 27 n-Decanoic Acid (Surr)		4.643			ND	U
A 59 C12-C16	4.729	(3.628-5.830)		33056872	26.0	M
A 61 C10-C20	4.875	(2.168-7.582)		101392738	64.7	M
A 28 C9-C24	5.178	(1.305-9.051)		232417005	138.9	M
A 29 C9-C25	5.344	(1.305-9.384)		282826740	167.4	M
A 54 C10-C23	5.437	(2.168-8.705)		169225076	103.1	M
A 4 C10-C24	5.610	(2.168-9.051)		230561909	137.8	M
A 16 C10-C25	5.776	(2.168-9.384)		280971644	166.4	M
45 Hexadecane	5.854	5.830	0.024	2020534	NC	M
A 14 C10-C26	5.937	(2.168-9.705)		333460864	196.1	M
A 67 C12-C22	5.987	(3.628-8.346)		146837565	90.4	M
A 32 C10-C28	6.242	(2.168-10.315)		456099618	265.6	M
A 5 Diesel	6.242	(2.168-10.315)		456099618	265.6	M
A 12 Unknown Hydrocarbons	6.242	(2.168-10.315)		456099618	NC	M
A 30 C13-C22	6.294	(4.243-8.346)		140203380	86.7	M
44 Heptadecane	6.325	6.306	0.019	3537691	NC	M
A 31 C12-C24	6.339	(3.628-9.051)		217538611	130.5	M
49 n-Octadecane	6.757	6.750	0.007	4389848	NC	M
A 9 Crude Oil Range Organics (	6.857	(1.305-12.408)		759392285	NC	M
A 11 Bunker Range Organics (C9-	6.857	(1.305-12.408)		759392285	NC	M

Report Date: 05-Sep-2018 15:41:09 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000016.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.857	(1.305-12.408)		759392285	359.7	M
33 C19		7.174			ND	
A 64 C13-C28	7.279	(4.243-10.315)		436442135	254.4	M
A 17 C10-C36	7.288	(2.168-12.408)		757537189	436.2	M
A 68 Crude Oil Range Organics (	7.347	(1.305-13.389)		858402690	NC	M
A 13 C9-C40	7.347	(1.305-13.389)		858402690	549.4	M
A 58 C16-C24	7.440	(5.830-9.051)		184481739	111.8	M
62 icosane	7.579	7.582	-0.003	21966106	NC	M
A 6 C10-C40	7.779	(2.168-13.389)		856547594	548.8	M
$ 34 p-Terphenyl	8.071	8.086	-0.015	48455424	24.4	
35 n-Docosane	8.345	8.346	-0.001	14069369	NC	M
A 18 C12-C40	8.508	(3.628-13.389)		843524296	542.0	M
36 Tricosane	8.776	8.705	0.071	38534380	NC	M
A 66 C13-C40	8.816	(4.243-13.389)		836890111	538.4	M
37 n-Tetracosane	9.082	9.051	0.031	19032194	NC	M
A 2 C16-C36 ORO	9.119	(5.830-12.408)		711457019	601.7	M
38 C25	9.398	9.384	0.014	34556793	NC	M
A 19 C16-C40	9.610	(5.830-13.389)		810467424	523.1	M
46 n-Hexacosane	9.751	9.705	0.046	28283918	NC	M
A 20 C19-C36	9.791	(7.174-12.408)		543008329	398.9	
A 55 C23-C32	10.064	(8.705-11.424)		471352435	609.1	M
39 n-Octacosane	10.365	10.315	0.050	37277090	NC	M
65 C29	10.610	10.606	0.004	47623615	NC	M
A 40 C24-C36	10.729	(9.051-12.408)		511326515	521.6	M
A 7 Motor Oil	10.729	(9.051-12.408)		446951295	455.9	
A 10 C22-C40	10.867	(8.346-13.389)		580856550	417.9	
A 50 C25-C36	10.896	(9.384-12.408)		390013164	423.4	
A 41 C23-C40	11.047	(8.705-13.389)		549458125	402.0	
A 8 C24-C40	11.220	(9.051-13.389)		511195080	381.1	
56 Dotriacontane	11.495	11.424	0.071	12166661	NC	M
A 51 C28-C40	11.852	(10.315-13.389)		321138482	296.0	
A 63 C29-C40	11.997	(10.606-13.389)		274493857	274.7	
42 n-Hexatriacontane	12.402	12.408	-0.006	15796288	NC	M
43 C40	13.370	13.389	-0.019	24473598	NC	M
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

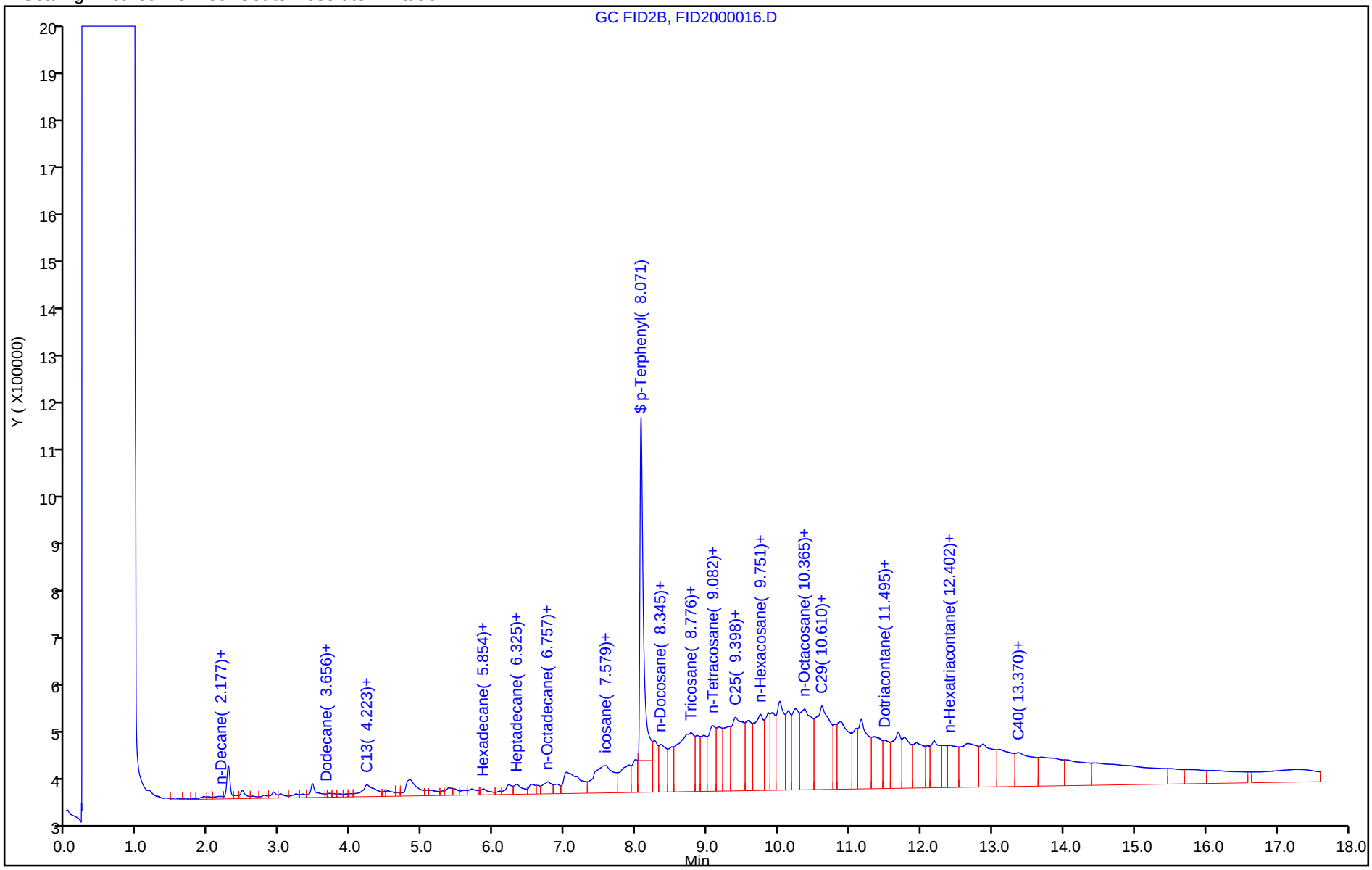
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 05-Sep-2018 15:41:09 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000016.D				
Injection Date:	05-Sep-2018 14:40:08	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88264-E-3-C	Lab Sample ID:	720-88264-3	Worklist Smp#:	16
Client ID:	DUP-30				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	66
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000016.D
Lims ID: 720-88264-E-3-C
Client ID: DUP-30
Sample Type: Client
Inject. Date: 05-Sep-2018 14:40:08 ALS Bottle#: 66 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053662-016
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\DRO6_B.m
Limit Group: DRO
Last Update: 05-Sep-2018 15:41:08 Calib Date: 05-Sep-2018 11:27:56
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000009.D

Column 1 : Det: GC FID1A
Process Host: XAWRK002

First Level Reviewer: luj Date: 05-Sep-2018 15:41:08

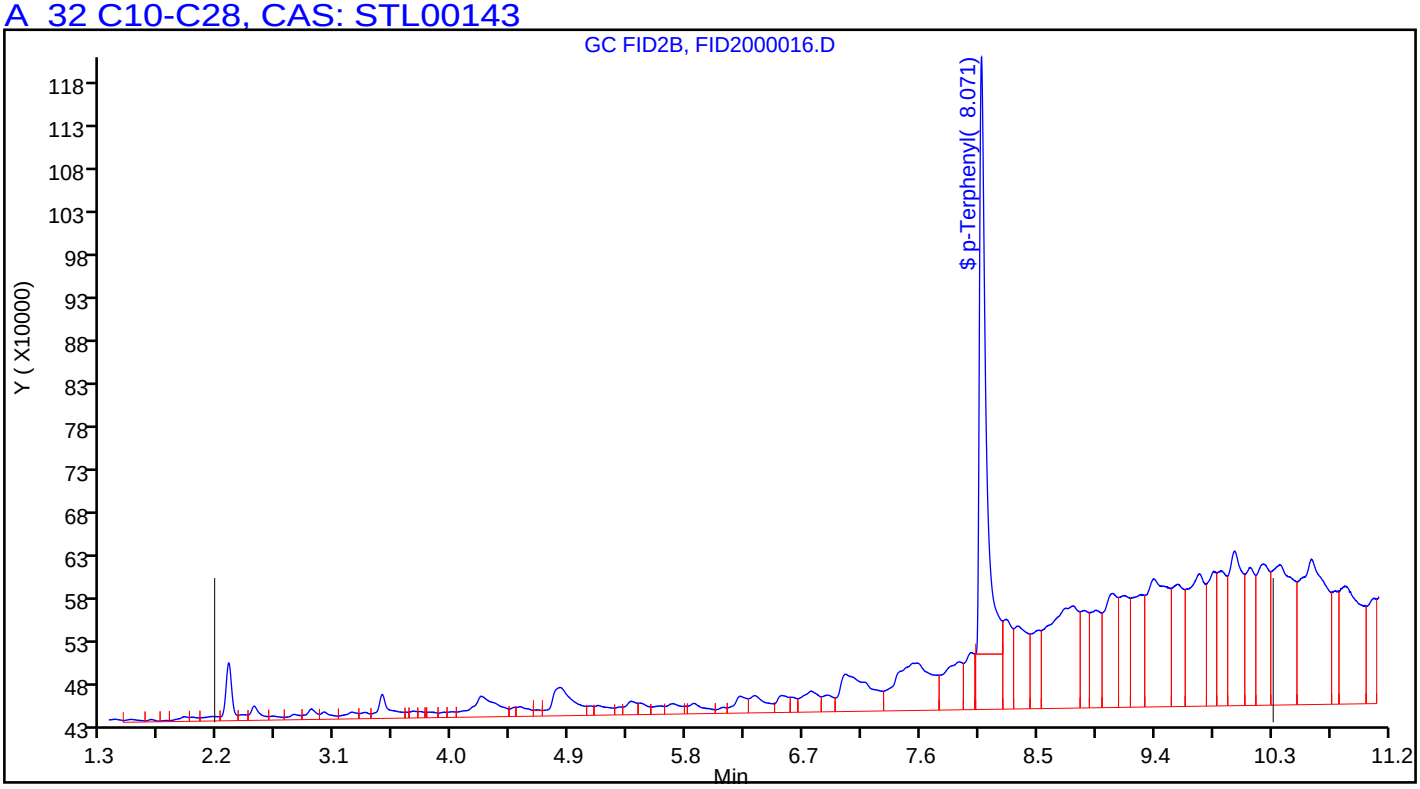
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	24.4	97.62

Report Date: 05-Sep-2018 15:41:12 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000016.D				
Injection Date:	05-Sep-2018 14:40:08	Instrument ID:	CHDRO6		
Lims ID:	720-88264-E-3-C	Lab Sample ID:	720-88264-3		
Client ID:	DUP-30				
Operator ID:	DCH	ALS Bottle#:	66	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

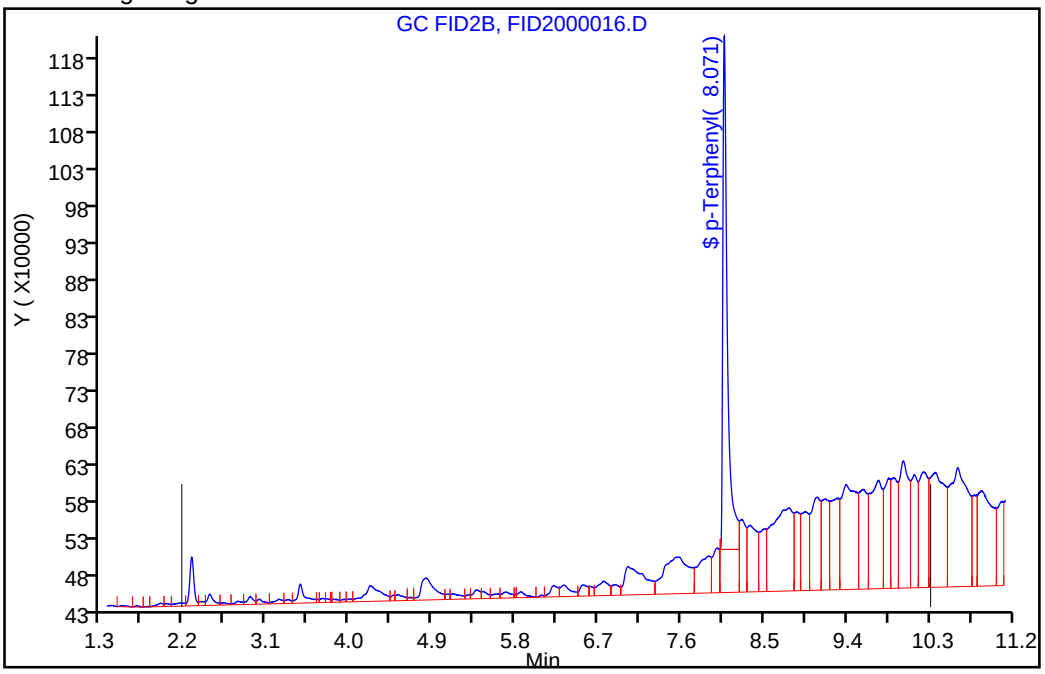
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000016.D				
Injection Date:	05-Sep-2018 14:40:08	Instrument ID:	CHDRO6		
Lims ID:	720-88264-E-3-C	Lab Sample ID:	720-88264-3		
Client ID:	DUP-30				
Operator ID:	DCH	ALS Bottle#:	66	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.242, CAS: STL00143

Signal: 1

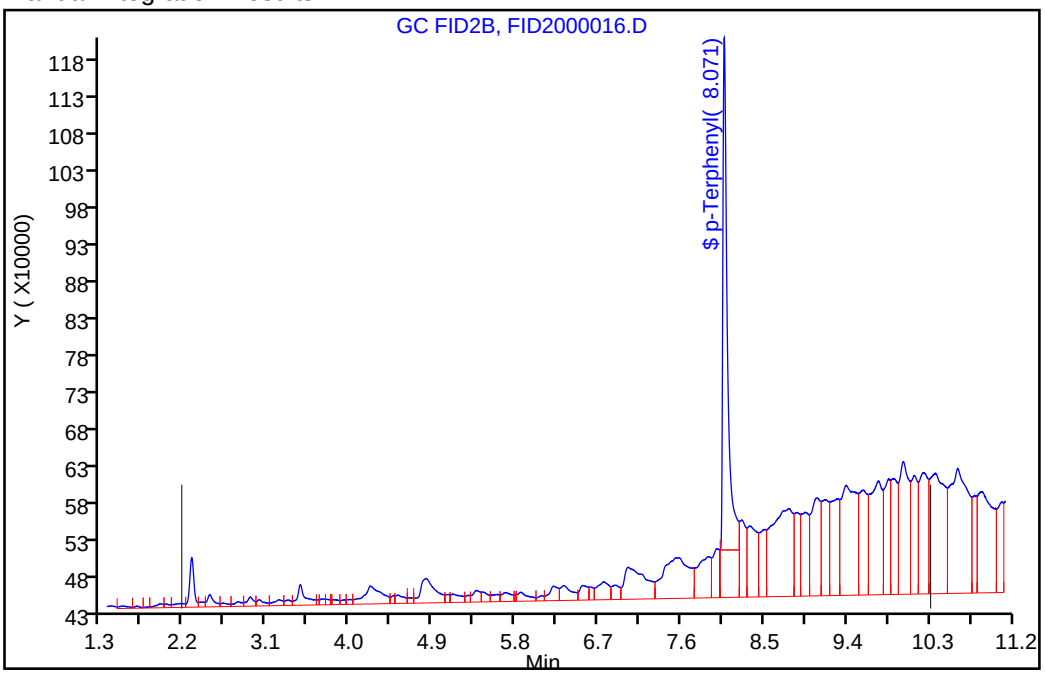
Processing Integration Results

RT: 6.24
Response: 409324497
Amount: 239.0672



Manual Integration Results

RT: 6.24
Response: 456099618
Amount: 265.5522



Reviewer: luj, 05-Sep-2018 15:40:40

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88264-1

SDG No.:

Client Sample ID: DUP-31 Lab Sample ID: 720-88264-4

Matrix: Solid Lab File ID: FID2000017.D

Analysis Method: 8015B Date Collected: 08/27/2018 00:00

Extraction Method: 3546 Date Extracted: 08/30/2018 15:54

Sample wt/vol: 15.66(g) Date Analyzed: 09/05/2018 15:04

Con. Extract Vol.: 2(mL) Dilution Factor: 20

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250885 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	1200000		38000	14000

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	0	X D	40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000017.D
Lims ID: 720-88264-E-4-C
Client ID: DUP-31
Sample Type: Client
Inject. Date: 05-Sep-2018 15:04:35 ALS Bottle#: 67 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 20.0000
Sample Info: 720-0053662-017
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\DRO6_B.m
Limit Group: DRO
Last Update: 05-Sep-2018 15:42:05 Calib Date: 05-Sep-2018 11:27:56
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000009.D

Column 1 : Det: GC FID1A
Process Host: XAWRK002

First Level Reviewer: luj Date: 05-Sep-2018 15:42:05

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.305			ND	
23 n-Decane	2.093	2.168	-0.075	46832	NC	
A 1 C9-C13	2.774	(1.305-4.243)		4133347	1.89	M
A 21 Stoddard Solvent	2.774	(1.305-4.243)		4133347	NC	M
A 57 C10-C12	2.898	(2.168-3.628)		3019698	9.01	M
24 Dodecane	3.632	3.628	0.004	78913	NC	M
A 3 C9 - C17	3.805	(1.305-6.306)		50284025	22.0	M
A 60 C10-C16	3.999	(2.168-5.830)		27805666	13.7	M
A 47 C9 - C18	4.028	(1.305-6.750)		92392234	48.8	M
A 25 C9-C19	4.240	(1.305-7.174)		128223211	55.7	M
A 15 Kerosene	4.240	(1.305-7.174)		128223211	67.6	M
26 C13	4.233	4.243	-0.010	120952	NC	M
$ 27 n-Decanoic Acid (Surr)		4.643			ND	U
A 59 C12-C16	4.729	(3.628-5.830)		24785968	21.3	M
A 61 C10-C20	4.875	(2.168-7.582)		174097173	105.9	M
A 28 C9-C24	5.178	(1.305-9.051)		446209764	260.0	M
A 29 C9-C25	5.344	(1.305-9.384)		519543220	301.5	M
A 54 C10-C23	5.437	(2.168-8.705)		387680265	226.8	M
A 4 C10-C24	5.610	(2.168-9.051)		446059719	259.9	M
A 16 C10-C25	5.776	(2.168-9.384)		519393175	301.4	M
45 Hexadecane	5.731	5.830	-0.099	6455335	NC	M
A 14 C10-C26	5.937	(2.168-9.705)		519393175	301.4	M
A 67 C12-C22	5.987	(3.628-8.346)		305426136	180.2	M
A 32 C10-C28	6.242	(2.168-10.315)		803526872	462.3	M
A 5 Diesel	6.242	(2.168-10.315)		803526872	462.3	M
A 12 Unknown Hydrocarbons	6.242	(2.168-10.315)		803526872	NC	M
A 30 C13-C22	6.294	(4.243-8.346)		304583484	179.8	M
44 Heptadecane	6.326	6.306	0.020	10942403	NC	M
A 31 C12-C24	6.339	(3.628-9.051)		443040021	258.2	M
49 n-Octadecane	6.709	6.750	-0.041	17332739	NC	M
A 9 Crude Oil Range Organics (	6.857	(1.305-12.408)		1596006097	NC	M
A 11 Bunker Range Organics (C9-	6.857	(1.305-12.408)		1596006097	NC	M

Report Date: 05-Sep-2018 15:42:06 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000017.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.857	(1.305-12.408)		1596006097	756.0	M
33 C19	7.184	7.174	0.010	12372622	NC	M
A 64 C13-C28	7.279	(4.243-10.315)		799664522	460.1	M
A 17 C10-C36	7.288	(2.168-12.408)		1595856052	910.9	M
A 68 Crude Oil Range Organics (	7.347	(1.305-13.389)		2217130997	NC	M
A 13 C9-C40	7.347	(1.305-13.389)		2217130997	1419.1	M
A 58 C16-C24	7.440	(5.830-9.051)		418254053	244.1	M
62 icosane	7.586	7.582	0.004	20111702	NC	M
A 6 C10-C40	7.779	(2.168-13.389)		2216980952	1420.6	M
$ 34 p-Terphenyl		8.086			ND	U
35 n-Docosane	8.394	8.346	0.048	26811143	NC	M
A 18 C12-C40	8.508	(3.628-13.389)		2213961254	1422.6	M
36 Tricosane	8.647	8.705	-0.058	24616286	NC	M
A 66 C13-C40	8.816	(4.243-13.389)		2213118602	1423.7	M
37 n-Tetracosane	9.061	9.051	0.010	24298417	NC	M
A 2 C16-C36 ORO	9.119	(5.830-12.408)		1568050386	1326.1	M
38 C25	9.313	9.384	-0.071	12844004	NC	M
A 19 C16-C40	9.610	(5.830-13.389)		2189175286	1412.9	M
46 n-Hexacosane		9.705			ND	
A 20 C19-C36	9.791	(7.174-12.408)		1029893206	756.5	
A 55 C23-C32	10.064	(8.705-11.424)		884590819	1143.1	M
39 n-Octacosane	10.257	10.315	-0.058	51959407	NC	M
65 C29	10.642	10.606	0.036	34730109	NC	M
A 40 C24-C36	10.729	(9.051-12.408)		1130192902	1152.8	M
A 7 Motor Oil	10.729	(9.051-12.408)		938354827	957.1	
A 10 C22-C40	10.867	(8.346-13.389)		1217852818	876.2	
A 50 C25-C36	10.896	(9.384-12.408)		821997116	892.3	
A 41 C23-C40	11.047	(8.705-13.389)		1178852469	862.5	
A 8 C24-C40	11.220	(9.051-13.389)		1156153146	862.0	
56 Dotriacontane	11.438	11.424	0.014	35021814	NC	M
A 51 C28-C40	11.852	(10.315-13.389)		908315747	837.4	
A 63 C29-C40	11.997	(10.606-13.389)		810577666	811.1	
42 n-Hexatriacontane	12.357	12.408	-0.051	46150633	NC	M
43 C40		13.389			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

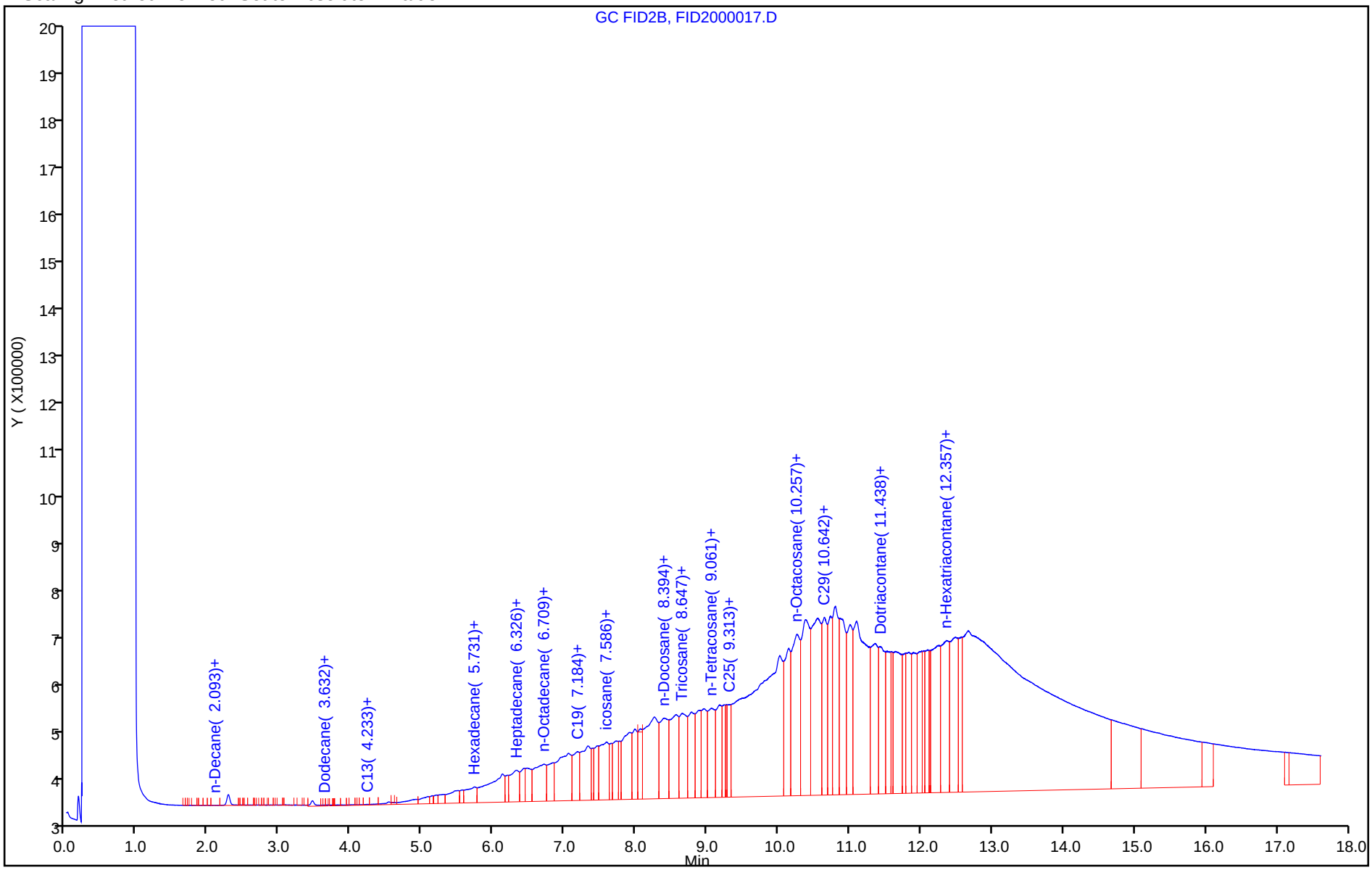
Report Date: 05-Sep-2018 15:42:06 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000017.D

Injection Date:	05-Sep-2018 15:04:35	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88264-E-4-C	Lab Sample ID:	720-88264-4	Worklist Smp#:	17
Client ID:	DUP-31				
Injection Vol:	1.0 ul	Dil. Factor:	20.0000	ALS Bottle#:	67
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value

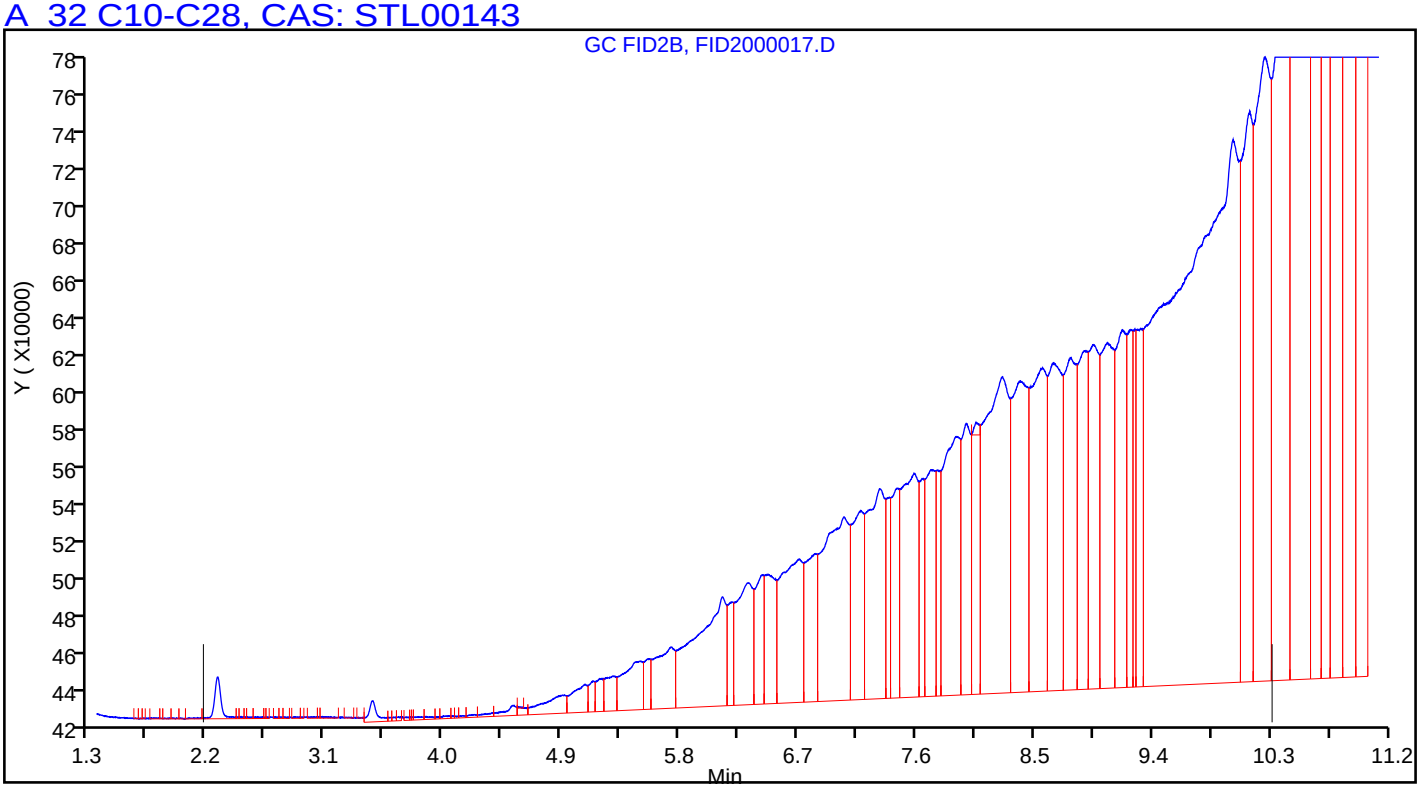


Report Date: 05-Sep-2018 15:42:09 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000017.D				
Injection Date:	05-Sep-2018 15:04:35	Instrument ID:	CHDRO6		
Lims ID:	720-88264-E-4-C	Lab Sample ID:	720-88264-4		
Client ID:	DUP-31				
Operator ID:	DCH	ALS Bottle#:	67	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	20.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

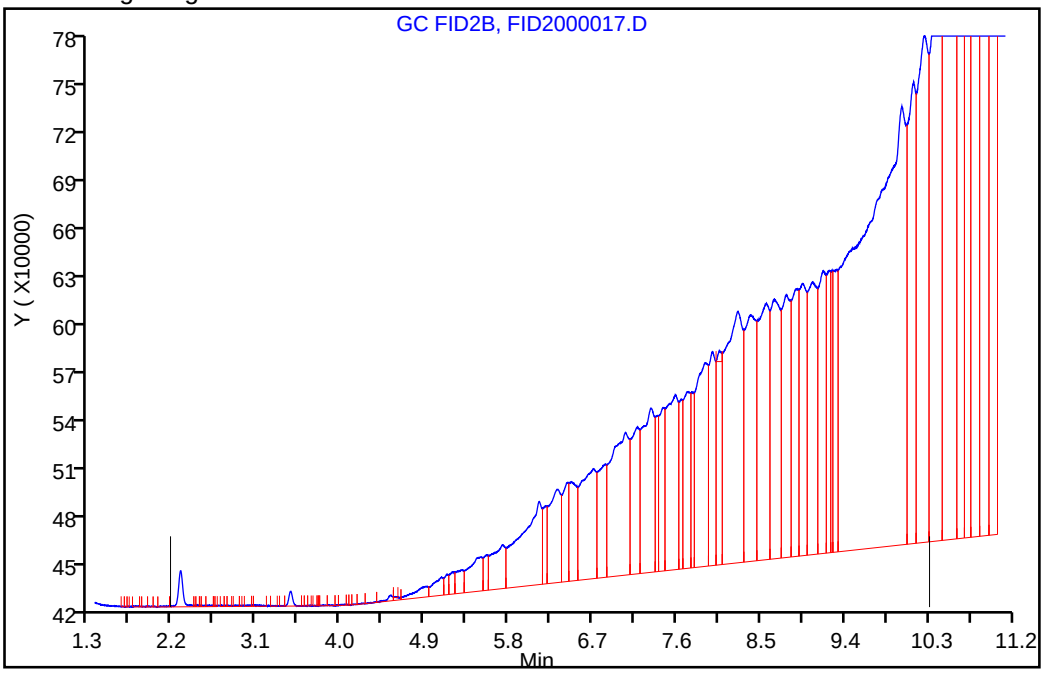
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000017.D				
Injection Date:	05-Sep-2018 15:04:35	Instrument ID:	CHDRO6		
Lims ID:	720-88264-E-4-C	Lab Sample ID:	720-88264-4		
Client ID:	DUP-31				
Operator ID:	DCH	ALS Bottle#:	67	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	20.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.242, CAS: STL00143

Signal: 1

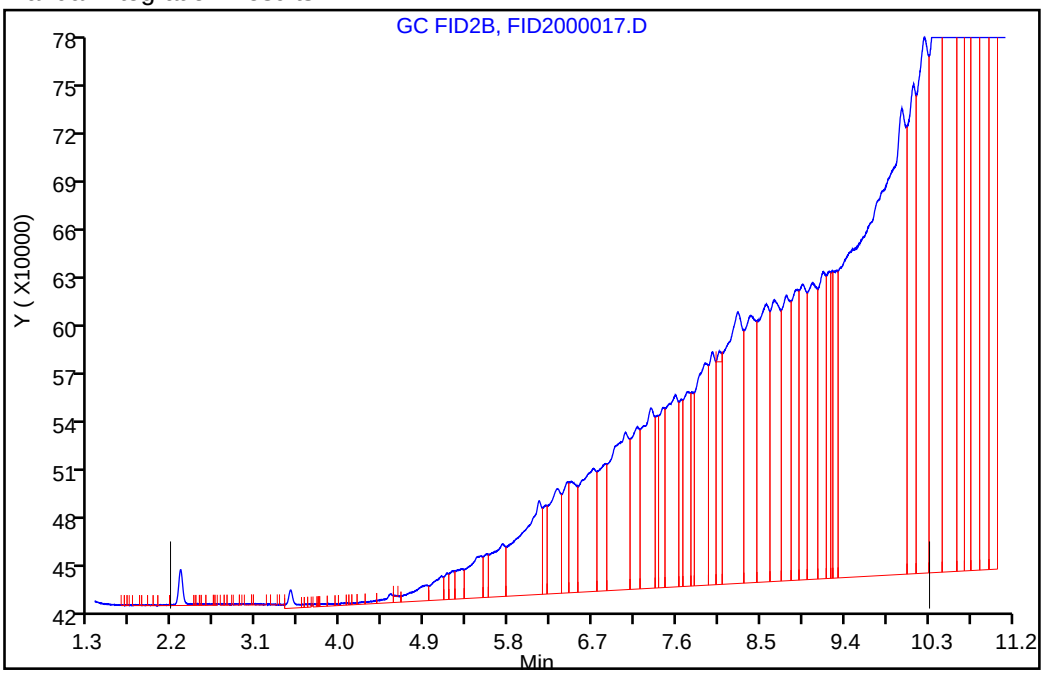
Processing Integration Results

RT: 6.24
Response: 723025635
Amount: 416.6912



Manual Integration Results

RT: 6.24
Response: 803526872
Amount: 462.2727



Reviewer: luj, 05-Sep-2018 15:41:57

Audit Action: Assigned New Baseline Audit Reason: Wrong Peak

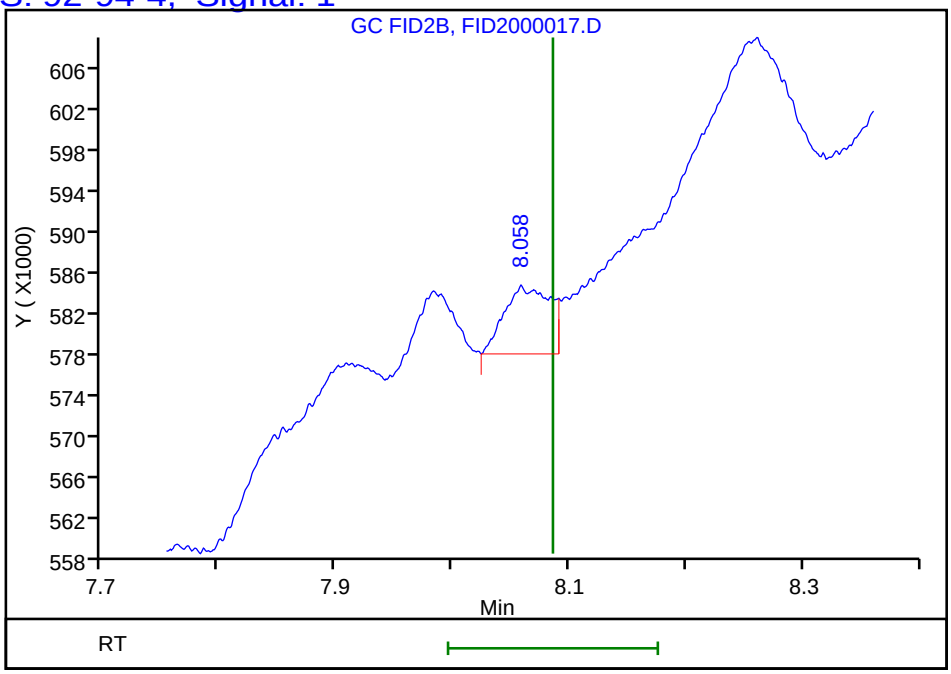
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53662.b\FID2000017.D				
Injection Date:	05-Sep-2018 15:04:35	Instrument ID:	CHDRO6		
Lims ID:	720-88264-E-4-C	Lab Sample ID:	720-88264-4		
Client ID:	DUP-31				
Operator ID:	DCH	ALS Bottle#:	67	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	20.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4, Signal: 1

RT: 8.06
Response: 357531
Amount: 0.180072



Reviewer: luj, 05-Sep-2018 15:42:05
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88264-1

SDG No.:

Client Sample ID: DUP-32 Lab Sample ID: 720-88264-5

Matrix: Solid Lab File ID: FID1000016.D

Analysis Method: 8015B Date Collected: 08/27/2018 00:00

Extraction Method: 3546 Date Extracted: 08/30/2018 15:54

Sample wt/vol: 15.60(g) Date Analyzed: 09/05/2018 14:40

Con. Extract Vol.: 2(mL) Dilution Factor: 20

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250884 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	850000	F2	38000	14000

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	0	X D	40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000016.D
Lims ID: 720-88264-D-5-G
Client ID: DUP-32
Sample Type: Client
Inject. Date: 05-Sep-2018 14:40:08 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 20.0000
Sample Info: 720-0053661-016
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\DRO6_A.m
Limit Group: DRO
Last Update: 05-Sep-2018 15:08:06 Calib Date: 05-Sep-2018 09:01:58
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK002

First Level Reviewer: luj Date: 05-Sep-2018 15:08:06

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane	1.280	1.229	0.051	7871	NC	
23 n-Decane	2.046	2.116	-0.070	183580	NC	
A 1 C9-C13	2.734	(1.229-4.240)		3502529	1.97	M
A 21 Stoddard Solvent	2.734	(1.229-4.240)		3502529	1.97	M
A 57 C10-C12	2.865	(2.116-3.613)		1974340	1.28	M
24 Dodecane	3.670	3.613	0.057	265289	NC	M
A 3 C9 - C17	3.780	(1.229-6.331)		19301759	9.89	M
A 60 C10-C16	3.983	(2.116-5.850)		15019713	8.60	M
A 47 C9 - C18	4.005	(1.229-6.782)		31234738	19.3	M
A 15 Kerosene	4.220	(1.229-7.212)		48196040	29.8	M
A 25 C9-C19	4.220	(1.229-7.212)		48196040	24.6	M
26 C13	4.249	4.240	0.009	98647	NC	M
$ 27 n-Decanoic Acid (Surr)		4.608			ND	U
A 59 C12-C16	4.732	(3.613-5.850)		13045373	8.46	M
A 62 C10-C20	4.871	(2.116-7.625)		69941933	45.3	M
A 28 C9-C24	5.172	(1.229-9.115)		233256864	151.2	M
A 29 C9-C25	5.341	(1.229-9.453)		271744199	176.2	M
A 54 C10-C23	5.440	(2.116-8.764)		189179565	122.7	M
A 4 C10-C24	5.616	(2.116-9.115)		232840341	151.0	M
A 16 C10-C25	5.785	(2.116-9.453)		271327676	175.9	M
45 Hexadecane	5.845	5.850	-0.005	1110634	NC	M
A 14 C10-C26	5.948	(2.116-9.780)		333918686	216.5	M
A 67 C12-C22	6.006	(3.613-8.400)		147309683	95.5	M
A 32 C10-C28	6.258	(2.116-10.400)		512856017	332.5	M
A 5 Diesel	6.258	(2.116-10.400)		512856017	332.5	M
A 12 Unknown Hydrocarbons	6.258	(2.116-10.400)		512856017	NC	M
A 30 C13-C22	6.320	(4.240-8.400)		146198017	94.8	M
44 Heptadecane	6.376	6.331	0.045	2760428	NC	M
A 31 C12-C24	6.364	(3.613-9.115)		230866001	149.7	M
51 n-Octadecane	6.837	6.782	0.055	4320862	NC	M
A 9 Crude Oil Range Organics (	6.880	(1.229-12.531)		1421633591	NC	M
A 11 Bunker Range Organics (C9-	6.880	(1.229-12.531)		1421633591	NC	M

Report Date: 05-Sep-2018 15:08:07 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000016.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.880	(1.229-12.531)		1421633591	802.9	M
33 C19	7.198	7.212	-0.014	4467339	NC	M
A 64 C13-C28	7.320	(4.240-10.400)		509770011	330.5	M
A 17 C10-C36	7.324	(2.116-12.531)		1421217068	921.4	M
A 68 Crude Oil Range Organics (	7.391	(1.229-13.553)		2580693161	NC	M
A 13 C9-C40	7.391	(1.229-13.553)		2580693161	1913.9	M
A 58 C16-C24	7.483	(5.850-9.115)		218931262	141.9	M
61 icosane	7.626	7.625	0.001	7554722	NC	M
A 6 C10-C40	7.835	(2.116-13.553)		2580276638	1914.9	M
$ 34 p-Terphenyl		8.110			ND	U
35 n-Docosane	8.389	8.400	-0.011	8089995	NC	M
A 18 C12-C40	8.583	(3.613-13.553)		2578302298	1918.7	M
36 Tricosane	8.721	8.764	-0.043	15215429	NC	M
A 66 C13-C40	8.897	(4.240-13.553)		2577190632	1920.0	M
37 n-Tetracosane	9.143	9.115	0.028	17424676	NC	M
A 2 C16-C36 ORO	9.191	(5.850-12.531)		1501371597	1316.2	
38 C25	9.522	9.453	0.069	40950991	NC	M
A 19 C16-C40	9.702	(5.850-13.553)		2566367559	1919.5	M
46 n-Hexacosane		9.780			ND	
A 20 C19-C36	9.872	(7.212-12.531)		1450494118	1091.3	
A 55 C23-C32	10.146	(8.764-11.528)		844151720	1215.9	M
39 n-Octacosane	10.352	10.400	-0.048	75087508	NC	M
65 C29	10.713	10.695	0.018	91521574	NC	M
A 40 C24-C36	10.823	(9.115-12.531)		1178801135	1323.8	M
A 7 Motor Oil	10.823	(9.115-12.531)		861512916	967.5	
A 10 C22-C40	10.977	(8.400-13.553)		1280808639	1030.0	
A 49 C25-C36	10.992	(9.453-12.531)		1149889392	1284.5	M
A 41 C23-C40	11.159	(8.764-13.553)		2406312502	1882.7	M
A 8 C24-C40	11.334	(9.115-13.553)		2347436297	1928.3	M
56 Dotriacontane	11.482	11.528	-0.046	97260911	NC	M
A 50 C28-C40	11.977	(10.400-13.553)		2067420621	2178.1	M
A 63 C29-C40	12.124	(10.695-13.553)		2013352426	2323.3	M
42 n-Hexatriacontane	12.471	12.531	-0.060	100038264	NC	M
43 C40	13.546	13.553	-0.007	684669382	NC	M
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

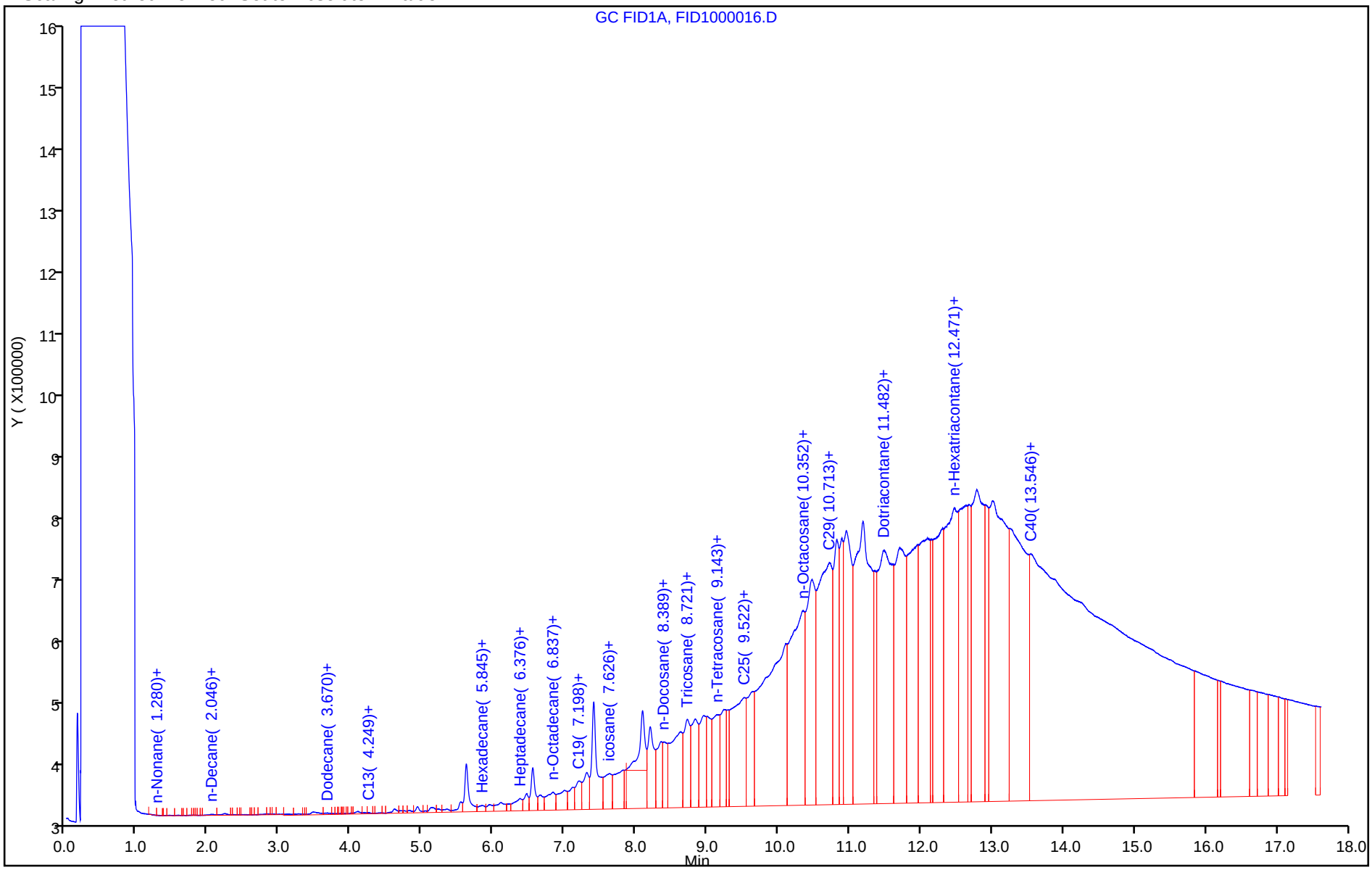
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 05-Sep-2018 15:08:07 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000016.D				
Injection Date:	05-Sep-2018 14:40:08	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88264-D-5-G	Lab Sample ID:	720-88264-5	Worklist Smp#:	16
Client ID:	DUP-32				
Injection Vol:	1.0 ul	Dil. Factor:	20.0000	ALS Bottle#:	16
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value

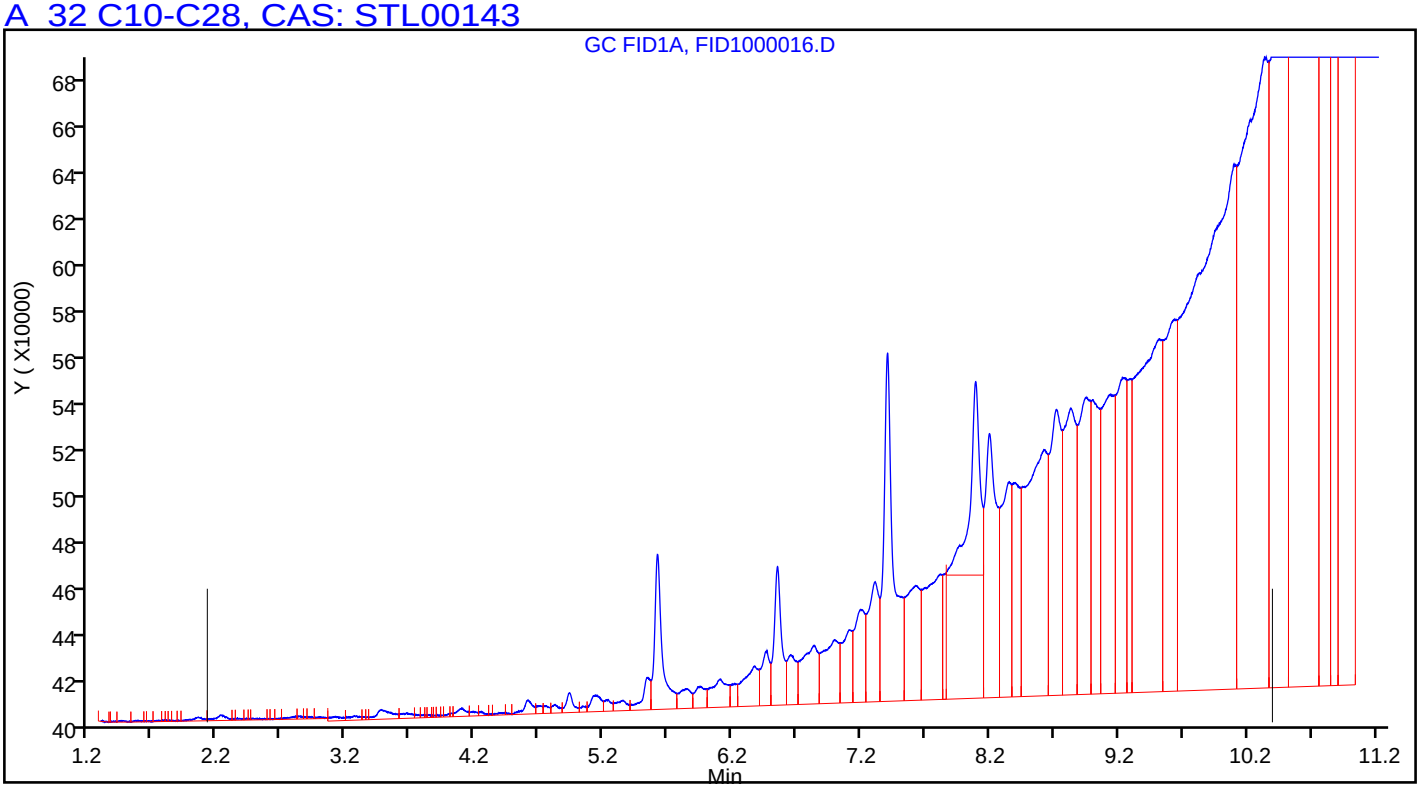


Report Date: 05-Sep-2018 15:08:11 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000016.D				
Injection Date:	05-Sep-2018 14:40:08	Instrument ID:	CHDRO6		
Lims ID:	720-88264-D-5-G	Lab Sample ID:	720-88264-5		
Client ID:	DUP-32				
Operator ID:	DCH	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	20.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

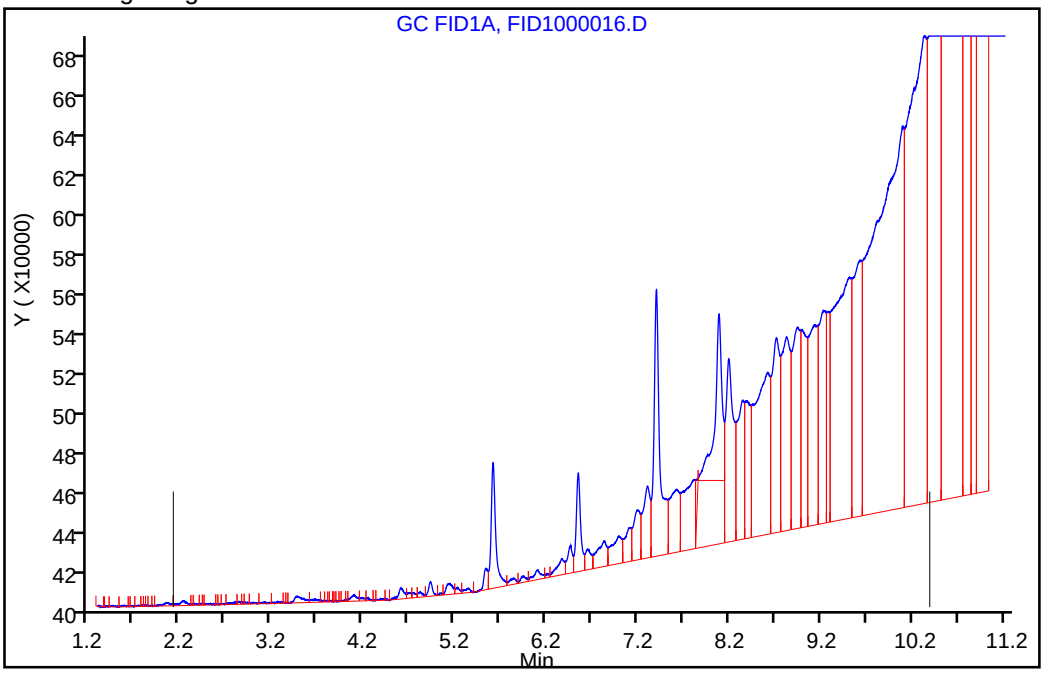
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000016.D				
Injection Date:	05-Sep-2018 14:40:08	Instrument ID:	CHDRO6		
Lims ID:	720-88264-D-5-G	Lab Sample ID:	720-88264-5		
Client ID:	DUP-32				
Operator ID:	DCH	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	20.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.258, CAS: STL00143

Signal: 1

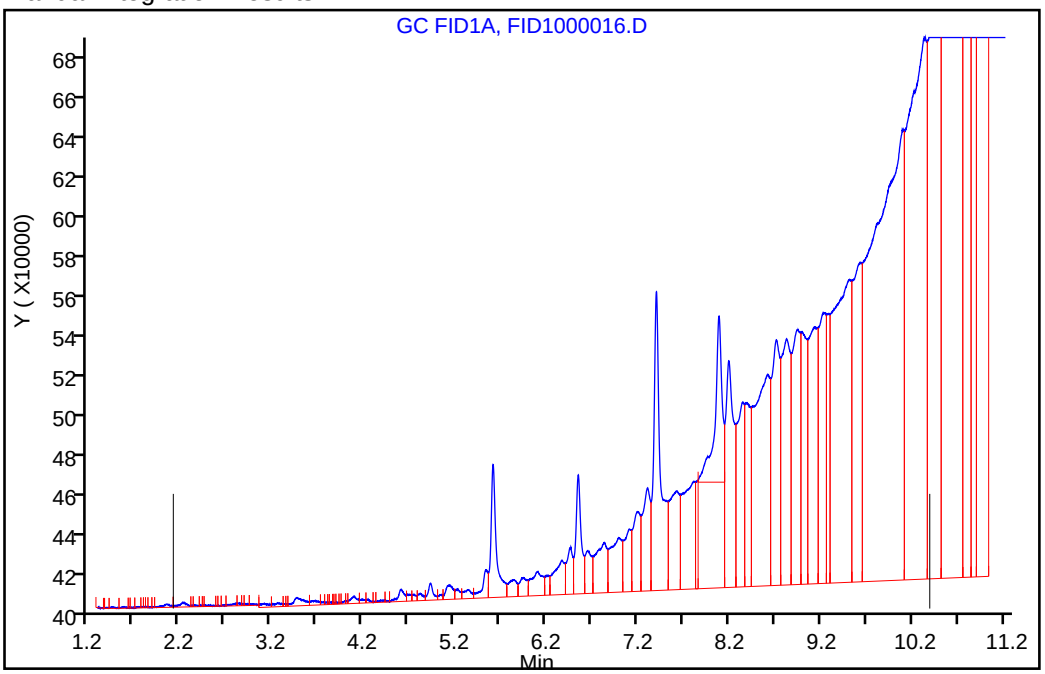
Processing Integration Results

RT: 6.26
Response: 381036129
Amount: 247.0397



Manual Integration Results

RT: 6.26
Response: 512856017
Amount: 332.5034



Reviewer: luj, 05-Sep-2018 15:07:54

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

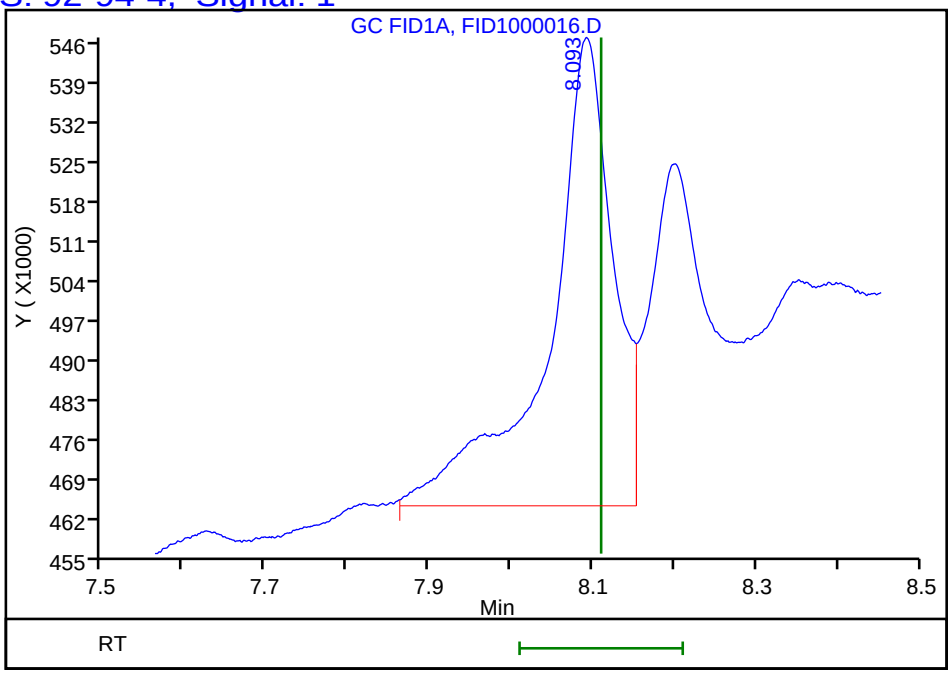
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180905-53661.b\FID1000016.D				
Injection Date:	05-Sep-2018 14:40:08	Instrument ID:	CHDRO6		
Lims ID:	720-88264-D-5-G	Lab Sample ID:	720-88264-5		
Client ID:	DUP-32				
Operator ID:	DCH	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	20.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4, Signal: 1

RT: 8.09
Response: 9147115
Amount: 4.763229



Reviewer: luj, 05-Sep-2018 15:08:06
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88264-1

SDG No.:

Client Sample ID: DG-G11S-0.5-1 Lab Sample ID: 720-88264-6

Matrix: Solid Lab File ID: FID2000019.D

Analysis Method: 8015B Date Collected: 08/27/2018 12:25

Extraction Method: 3546 Date Extracted: 08/29/2018 13:41

Sample wt/vol: 15.40(g) Date Analyzed: 08/31/2018 16:43

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250656 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	19000		1900	730

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	109		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000019.D
Lims ID: 720-88264-D-6-A
Client ID: DG-G115--0.5-1
Sample Type: Client
Inject. Date: 31-Aug-2018 16:43:57 ALS Bottle#: 69 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053602-019
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\DRO6_B.m
Limit Group: DRO
Last Update: 31-Aug-2018 17:36:29 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 17:36:29

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.307			ND	
23 n-Decane	2.265	2.169	0.096	1407072	NC	
A 1 C9-C13	2.775	(1.307-4.243)		3661540	1.68	
A 21 Stoddard Solvent	2.775	(1.307-4.243)		3661540	NC	
A 57 C10-C12	2.898	(2.169-3.628)		3020452	9.01	
24 Dodecane	3.618	3.628	-0.010	42524	NC	
A 3 C9 - C17	3.806	(1.307-6.306)		16805578	7.36	M
A 60 C10-C16	4.000	(2.169-5.830)		15575966	7.68	M
A 47 C9 - C18	4.028	(1.307-6.750)		22130584	11.7	M
A 25 C9-C19	4.240	(1.307-7.174)		25654391	11.1	M
A 15 Kerosene	4.240	(1.307-7.174)		25654391	13.5	M
26 C13		4.243			ND	
$ 27 n-Decanoic Acid (Surr)		4.632			ND	MU
A 59 C12-C16	4.729	(3.628-5.830)		12598038	14.4	M
A 61 C10-C20	4.875	(2.169-7.581)		46341283	33.5	M
A 28 C9-C24	5.179	(1.307-9.051)		142887762	88.2	M
A 29 C9-C25	5.345	(1.307-9.384)		151151112	92.9	M
A 54 C10-C23	5.437	(2.169-8.705)		102206112	65.2	M
A 4 C10-C24	5.610	(2.169-9.051)		142523408	88.0	M
A 16 C10-C25	5.777	(2.169-9.384)		150786758	92.7	M
45 Hexadecane	5.770	5.830	-0.060	6349931	NC	M
A 14 C10-C26	5.937	(2.169-9.705)		182350077	110.5	M
A 67 C12-C22	5.986	(3.628-8.345)		94782535	61.0	M
A 32 C10-C28	6.243	(2.169-10.317)		247163236	147.2	M
A 5 Diesel	6.243	(2.169-10.317)		247163236	147.2	M
A 12 Unknown Hydrocarbons	6.243	(2.169-10.317)		247163236	NC	M
A 30 C13-C22	6.294	(4.243-8.345)		94463277	60.8	M
44 Heptadecane	6.338	6.306	0.032	2097523	NC	M
A 31 C12-C24	6.339	(3.628-9.051)		139545480	86.3	M
49 n-Octadecane	6.802	6.750	0.052	2107171	NC	M
A 9 Crude Oil Range Organics (	6.859	(1.307-12.411)		580406324	NC	M
A 11 Bunker Range Organics (C9-	6.859	(1.307-12.411)		580406324	NC	M

Report Date: 31-Aug-2018 17:36:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000019.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.859	(1.307-12.411)		580406324	274.9	M
33 C19	7.177	7.174	0.003	6288197	NC	M
A 64 C13-C28	7.280	(4.243-10.317)		243866050	145.4	M
A 17 C10-C36	7.290	(2.169-12.411)		580041970	335.7	M
A 68 Crude Oil Range Organics (	7.349	(1.307-13.391)		798990562	NC	M
A 13 C9-C40	7.349	(1.307-13.391)		798990562	511.4	M
A 58 C16-C24	7.441	(5.830-9.051)		133297373	82.8	M
62 icosane	7.592	7.581	0.011	9188218	NC	M
A 6 C10-C40	7.780	(2.169-13.391)		798626208	511.7	M
$ 34 p-Terphenyl	8.062	8.077	-0.015	47382309	27.4	M
35 n-Docosane	8.344	8.345	-0.001	9150586	NC	M
A 18 C12-C40	8.509	(3.628-13.391)		795648280	511.3	M
36 Tricosane	8.712	8.705	0.007	13219242	NC	M
A 66 C13-C40	8.817	(4.243-13.391)		795329022	511.6	M
37 n-Tetracosane	9.047	9.051	-0.004	18011645	NC	M
A 2 C16-C36 ORO	9.120	(5.830-12.411)		570815935	482.7	M
38 C25	9.386	9.384	0.002	18592314	NC	M
A 19 C16-C40	9.611	(5.830-13.391)		789400173	509.5	M
46 n-Hexacosane	9.732	9.705	0.027	12429764	NC	M
A 20 C19-C36	9.792	(7.174-12.411)		241421327	177.3	
A 55 C23-C32	10.065	(8.705-11.426)		299844102	387.5	M
39 n-Octacosane	10.362	10.317	0.045	22442963	NC	M
65 C29	10.610	10.607	0.003	32500863	NC	M
A 40 C24-C36	10.731	(9.051-12.411)		429800266	438.4	M
A 7 Motor Oil	10.731	(9.051-12.411)		262696944	268.0	
A 10 C22-C40	10.868	(8.345-13.391)		391594688	281.7	
A 50 C25-C36	10.898	(9.384-12.411)		244264448	265.2	
A 41 C23-C40	11.048	(8.705-13.391)		392064577	286.9	
A 8 C24-C40	11.221	(9.051-13.391)		400098648	298.3	
56 Dotriacontane	11.457	11.426	0.031	22853174	NC	M
A 51 C28-C40	11.854	(10.317-13.391)		357323875	329.4	
A 63 C29-C40	11.999	(10.607-13.391)		336077732	336.3	
42 n-Hexatriacontane	12.352	12.411	-0.059	26257515	NC	M
43 C40		13.391		ND		
$ 69 Stearic Acid (Surr)		0.000		ND		

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

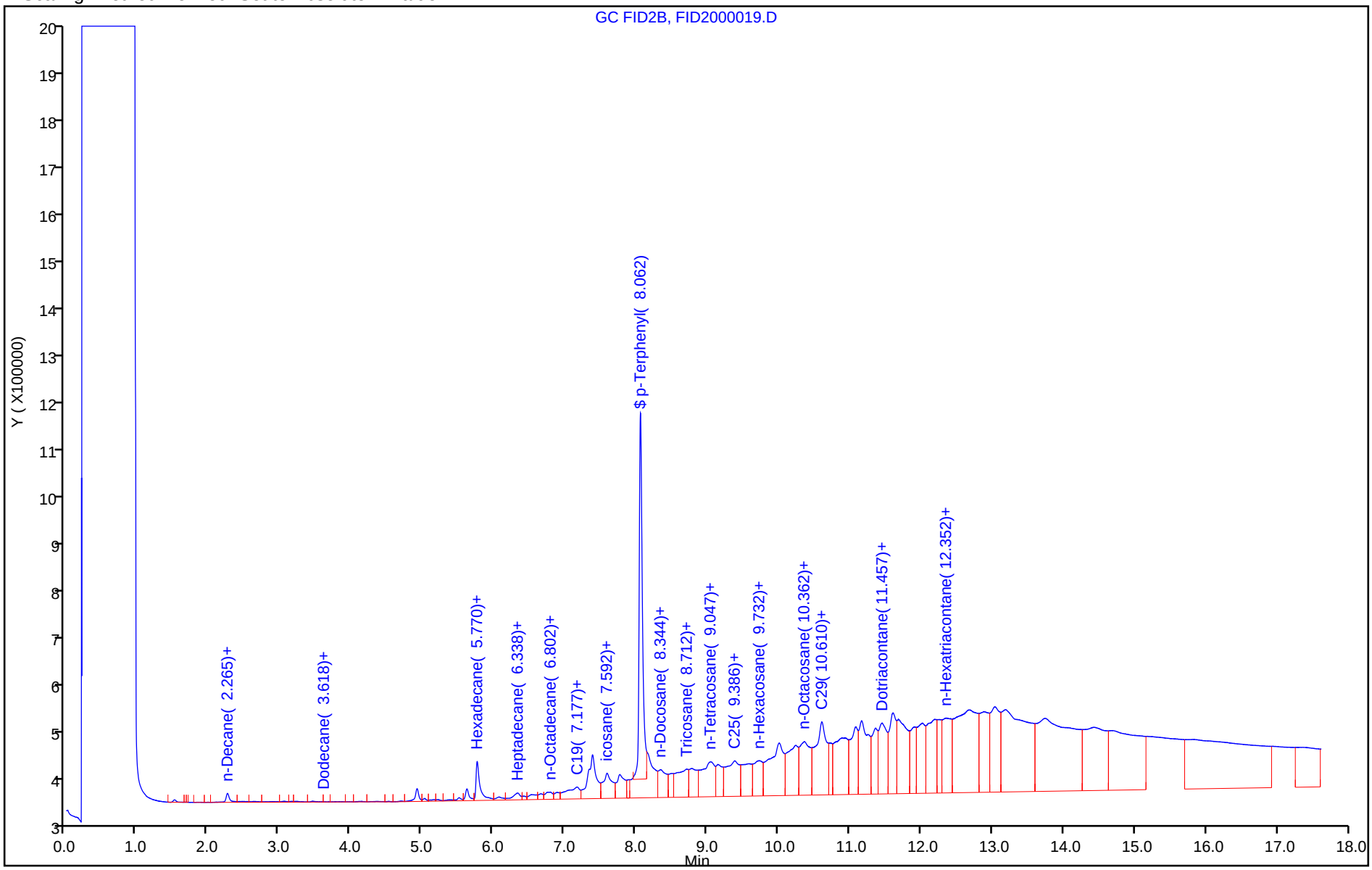
Report Date: 31-Aug-2018 17:36:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000019.D

Injection Date:	31-Aug-2018 16:43:57	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88264-D-6-A	Lab Sample ID:	720-88264-6	Worklist Smp#:	19
Client ID:	DG-G115--0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	69
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000019.D
Lims ID: 720-88264-D-6-A
Client ID: DG-G115--0.5-1
Sample Type: Client
Inject. Date: 31-Aug-2018 16:43:57 ALS Bottle#: 69 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053602-019
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\DRO6_B.m
Limit Group: DRO
Last Update: 31-Aug-2018 17:36:29 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 17:36:29

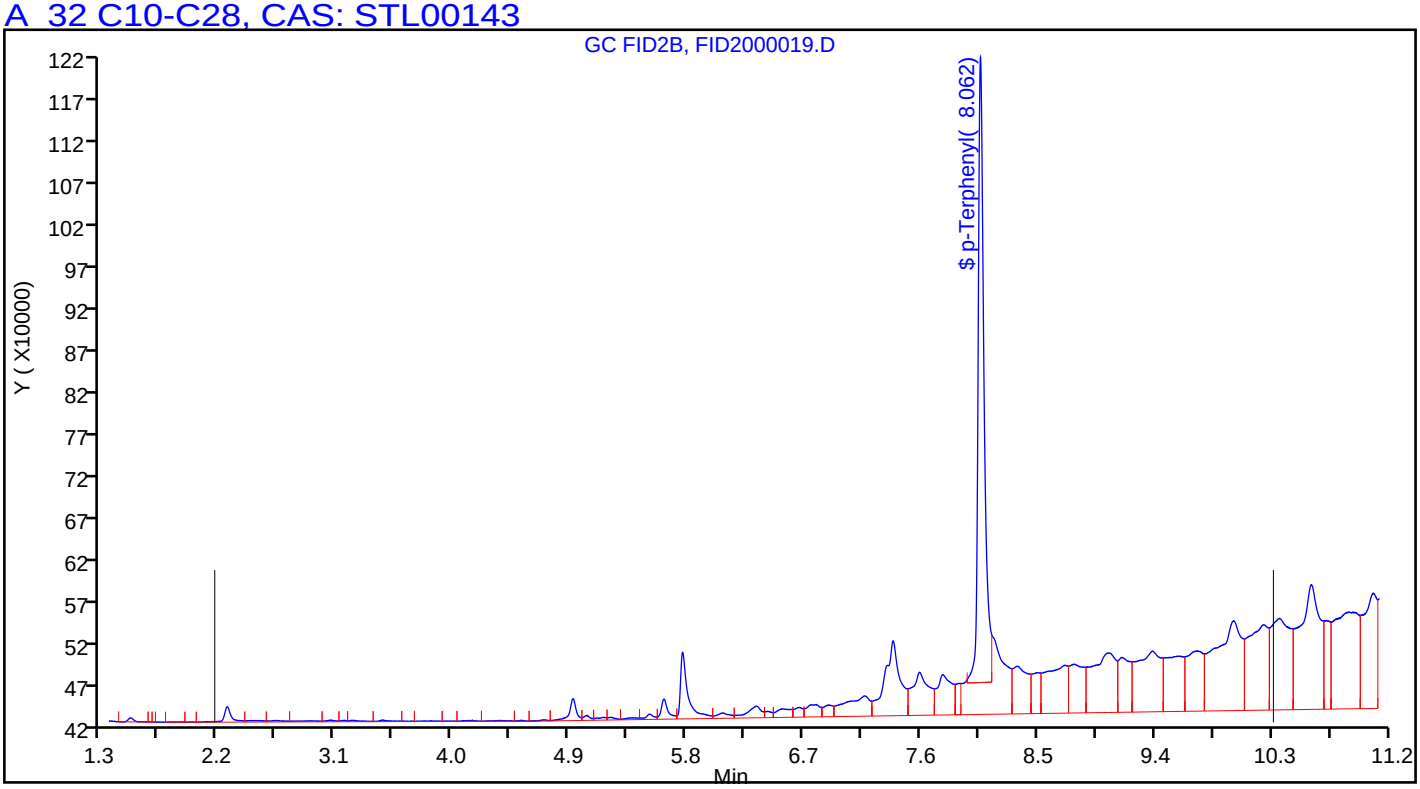
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	27.4	109.41

Report Date: 31-Aug-2018 17:36:33 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000019.D				
Injection Date:	31-Aug-2018 16:43:57	Instrument ID:	CHDRO6		
Lims ID:	720-88264-D-6-A	Lab Sample ID:	720-88264-6		
Client ID:	DG-G115--0.5-1				
Operator ID:	DCH	ALS Bottle#:	69	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

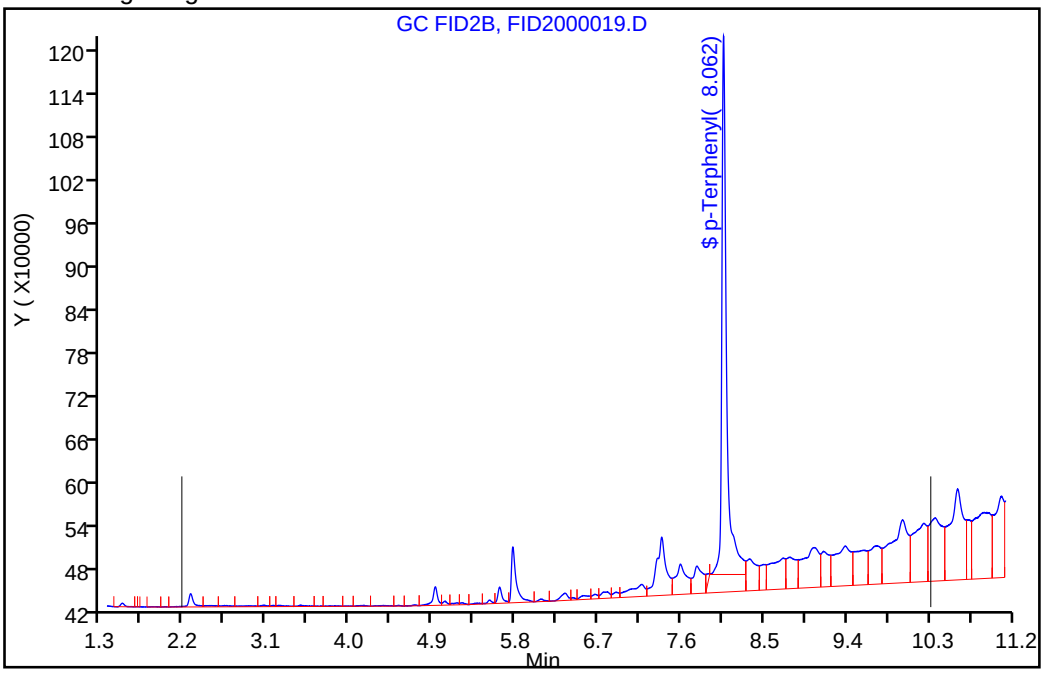
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000019.D				
Injection Date:	31-Aug-2018 16:43:57	Instrument ID:	CHDRO6		
Lims ID:	720-88264-D-6-A	Lab Sample ID:	720-88264-6		
Client ID:	DG-G115--0.5-1				
Operator ID:	DCH	ALS Bottle#:	69	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.243, CAS: STL00143

Signal: 1

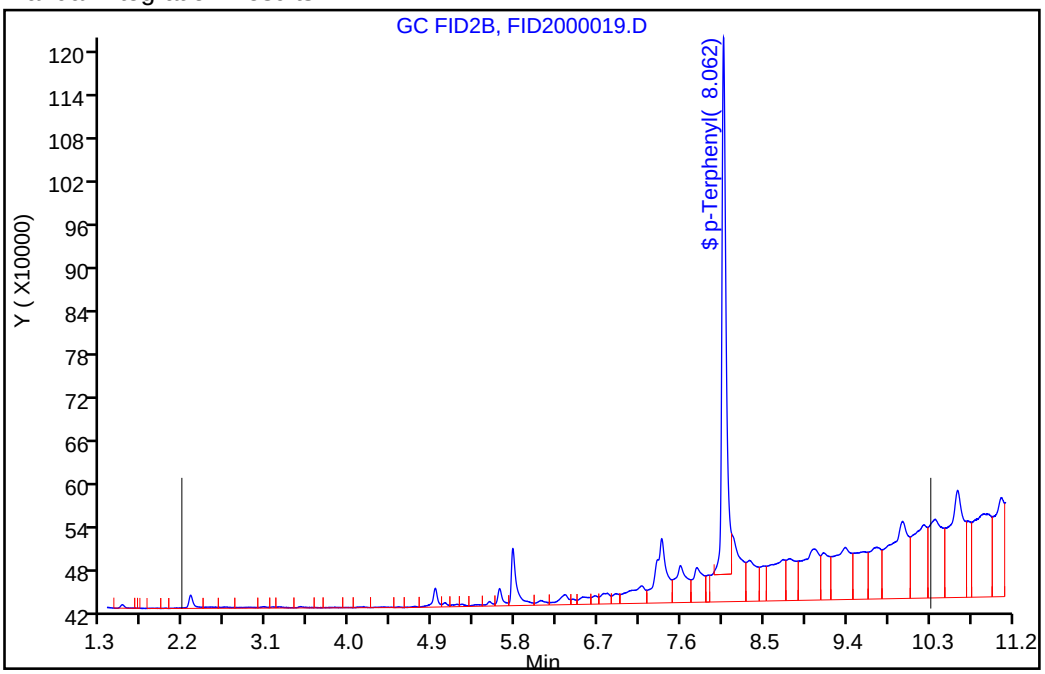
Processing Integration Results

RT: 6.24
Response: 178617381
Amount: 108.4361



Manual Integration Results

RT: 6.24
Response: 247163236
Amount: 147.2482



Reviewer: luj, 31-Aug-2018 17:35:51

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

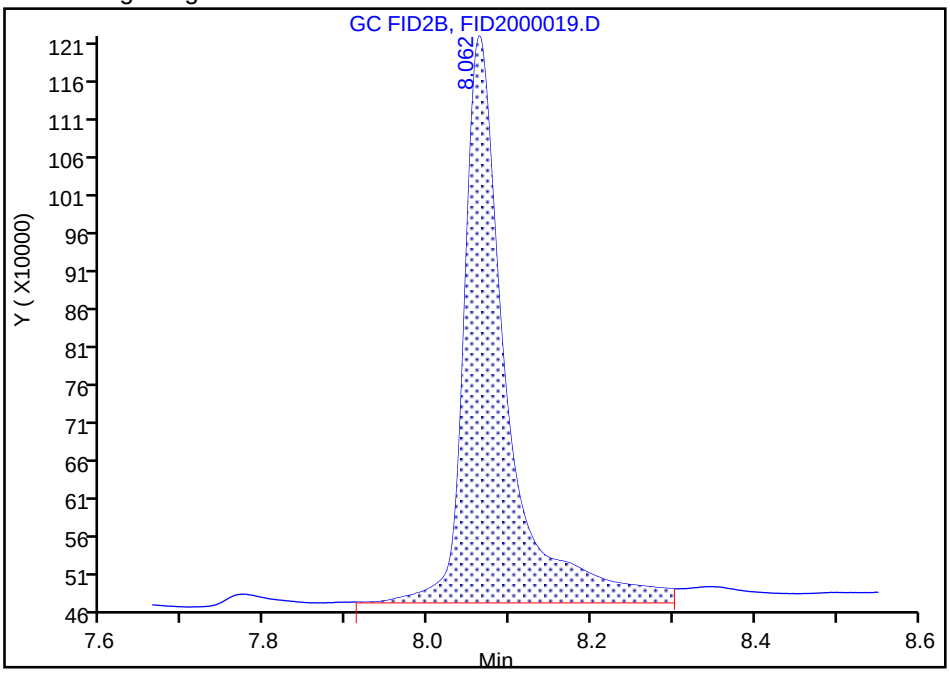
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000019.D				
Injection Date:	31-Aug-2018 16:43:57	Instrument ID:	CHDRO6		
Lims ID:	720-88264-D-6-A	Lab Sample ID:	720-88264-6		
Client ID:	DG-G115--0.5-1				
Operator ID:	DCH	ALS Bottle#:	69	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

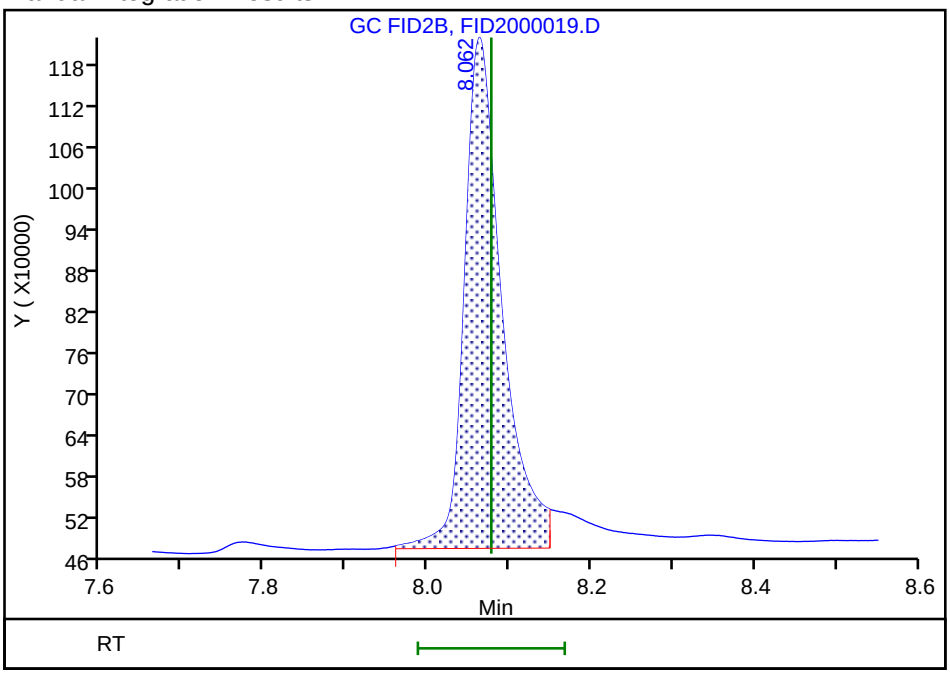
Processing Integration Results

RT: 8.06
Area: 54059905
Amount: 31.207345
Amount Units: mg/L



Manual Integration Results

RT: 8.06
Area: 47382309
Amount: 27.352547
Amount Units: mg/L



Reviewer: luj, 31-Aug-2018 17:36:11

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88264-1

SDG No.:

Client Sample ID: DG-G11S-3.5-4 Lab Sample ID: 720-88264-7

Matrix: Solid Lab File ID: FID1000016.D

Analysis Method: 8015B Date Collected: 08/27/2018 12:25

Extraction Method: 3546 Date Extracted: 08/29/2018 13:41

Sample wt/vol: 15.20(g) Date Analyzed: 08/31/2018 15:30

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250653 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	2100		2000	740

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	94		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000016.D
Lims ID: 720-88264-D-7-A
Client ID: DG-G115--3.5-4
Sample Type: Client
Inject. Date: 31-Aug-2018 15:30:25 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053601-016
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\DRO6_A.m
Limit Group: DRO
Last Update: 31-Aug-2018 18:28:53 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 18:28:53

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.229			ND	
23 n-Decane	2.125	2.116	0.009	36095	NC	
A 21 Stoddard Solvent	2.735	(1.229-4.240)		1925500	1.08	
A 1 C9-C13	2.735	(1.229-4.240)		1925500	1.08	
A 57 C10-C12	2.864	(2.116-3.612)		1132202	0.7340	
24 Dodecane	3.659	3.612	0.047	24784	NC	
A 3 C9 - C17	3.780	(1.229-6.332)		5840338	2.99	
A 60 C10-C16	3.983	(2.116-5.850)		5125589	2.93	
A 47 C9 - C18	4.006	(1.229-6.783)		6258051	3.88	
A 25 C9-C19	4.221	(1.229-7.212)		6665060	3.40	
A 15 Kerosene	4.221	(1.229-7.212)		6665060	4.13	
26 C13	4.253	4.240	0.013	25558	NC	
$ 27 n-Decanoic Acid (Surr)		4.611			ND	U
A 59 C12-C16	4.731	(3.612-5.850)		4016686	2.60	
A 62 C10-C20	4.871	(2.116-7.625)		9383855	6.08	
A 28 C9-C24	5.172	(1.229-9.115)		16500846	10.7	
A 29 C9-C25	5.341	(1.229-9.454)		17303234	11.2	
A 54 C10-C23	5.440	(2.116-8.764)		15297074	9.92	
A 4 C10-C24	5.616	(2.116-9.115)		16170270	10.5	
A 16 C10-C25	5.785	(2.116-9.454)		16972658	11.0	
45 Hexadecane	5.831	5.850	-0.019	167742	NC	
A 14 C10-C26	5.948	(2.116-9.781)		18450073	12.0	
A 67 C12-C22	6.006	(3.612-8.399)		13783130	8.94	
A 12 Unknown Hydrocarbons	6.259	(2.116-10.402)		24216124	NC	
A 5 Diesel	6.259	(2.116-10.402)		24216124	15.7	
A 32 C10-C28	6.259	(2.116-10.402)		24216124	15.7	
A 30 C13-C22	6.320	(4.240-8.399)		13297109	8.62	
44 Heptadecane	6.320	6.332	-0.012	150847	NC	
A 31 C12-C24	6.364	(3.612-9.115)		15061367	9.76	
51 n-Octadecane	6.783	6.783	0.000	65386	NC	
A 52 Mineral oil	6.881	(1.229-12.534)		77598543	43.8	
A 11 Bunker Range Organics (C9-	6.881	(1.229-12.534)		77598543	NC	

Report Date: 31-Aug-2018 18:28:55 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000016.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 9 Crude Oil Range Organics (	6.881	(1.229-12.534)		77598543	NC	
33 C19	7.227	7.212	0.015	55084	NC	
A 64 C13-C28	7.321	(4.240-10.402)		22621200	14.7	
A 17 C10-C36	7.325	(2.116-12.534)		77267967	50.1	
A 13 C9-C40	7.391	(1.229-13.554)		103191168	76.5	
A 68 Crude Oil Range Organics (	7.391	(1.229-13.554)		103191168	NC	
A 58 C16-C24	7.483	(5.850-9.115)		11212423	7.27	
61 icosane	7.620	7.625	-0.005	346670	NC	
A 6 C10-C40	7.835	(2.116-13.554)		102860592	76.3	
$ 34 p-Terphenyl	8.094	8.102	-0.008	45328104	23.6	
35 n-Docosane	8.398	8.399	-0.001	833073	NC	
A 18 C12-C40	8.583	(3.612-13.554)		101751689	75.7	
36 Tricosane	8.775	8.764	0.011	556042	NC	
A 66 C13-C40	8.897	(4.240-13.554)		101265668	75.4	
37 n-Tetracosane	9.145	9.115	0.030	768214	NC	
A 2 C16-C36 ORO	9.192	(5.850-12.534)		111717040	97.9	
38 C25	9.457	9.454	0.003	1149861	NC	
A 19 C16-C40	9.702	(5.850-13.554)		97902745	73.2	
46 n-Hexacosane	9.792	9.781	0.011	490131	NC	
A 20 C19-C36	9.873	(7.212-12.534)		109715245	82.5	
A 55 C23-C32	10.147	(8.764-11.531)		33251446	47.9	
39 n-Octacosane	10.416	10.402	0.014	2324283	NC	
65 C29	10.699	10.697	0.002	6401308	NC	
A 7 Motor Oil	10.824	(9.115-12.534)		45353418	50.9	
A 40 C24-C36	10.824	(9.115-12.534)		45353418	50.9	
A 10 C22-C40	10.976	(8.399-13.554)		66884553	53.8	
A 49 C25-C36	10.994	(9.454-12.534)		60295309	67.4	
A 41 C23-C40	11.159	(8.764-13.554)		87563518	68.5	
A 8 C24-C40	11.334	(9.115-13.554)		86690322	71.2	
56 Dotriacontane	11.541	11.531	0.010	1597881	NC	
A 50 C28-C40	11.978	(10.402-13.554)		78644468	82.9	
A 63 C29-C40	12.125	(10.697-13.554)		75193742	86.8	
42 n-Hexatriacontane	12.596	12.534	0.062	2053206	NC	
43 C40	13.498	13.554	-0.056	4112656	NC	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

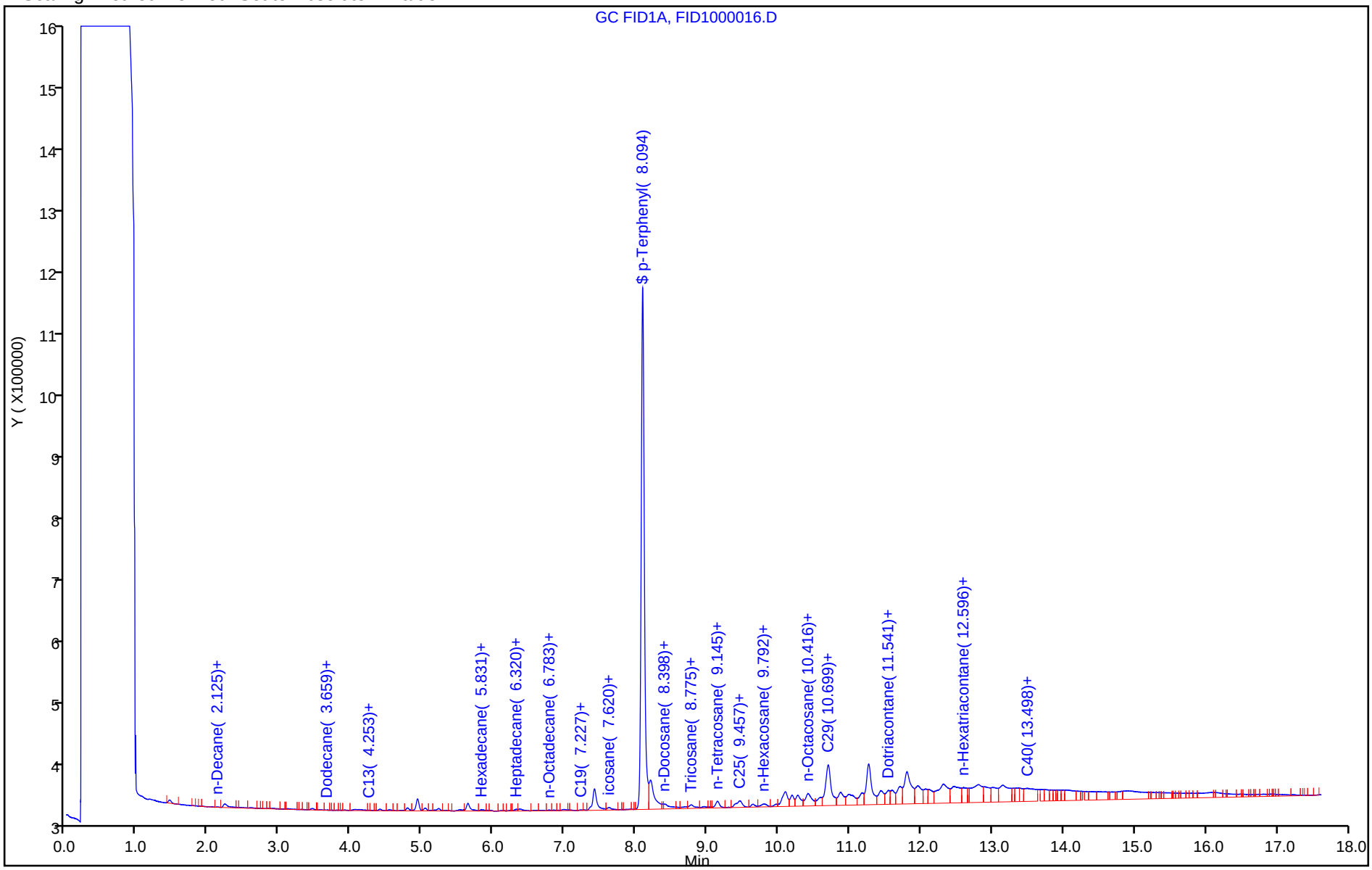
Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

Report Date: 31-Aug-2018 18:28:55 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000016.D				
Injection Date:	31-Aug-2018 15:30:25	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88264-D-7-A	Lab Sample ID:	720-88264-7	Worklist Smp#:	16
Client ID:	DG-G115--3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000016.D
Lims ID: 720-88264-D-7-A
Client ID: DG-G115--3.5-4
Sample Type: Client
Inject. Date: 31-Aug-2018 15:30:25 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053601-016
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\DRO6_A.m
Limit Group: DRO
Last Update: 31-Aug-2018 18:28:53 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 18:28:53

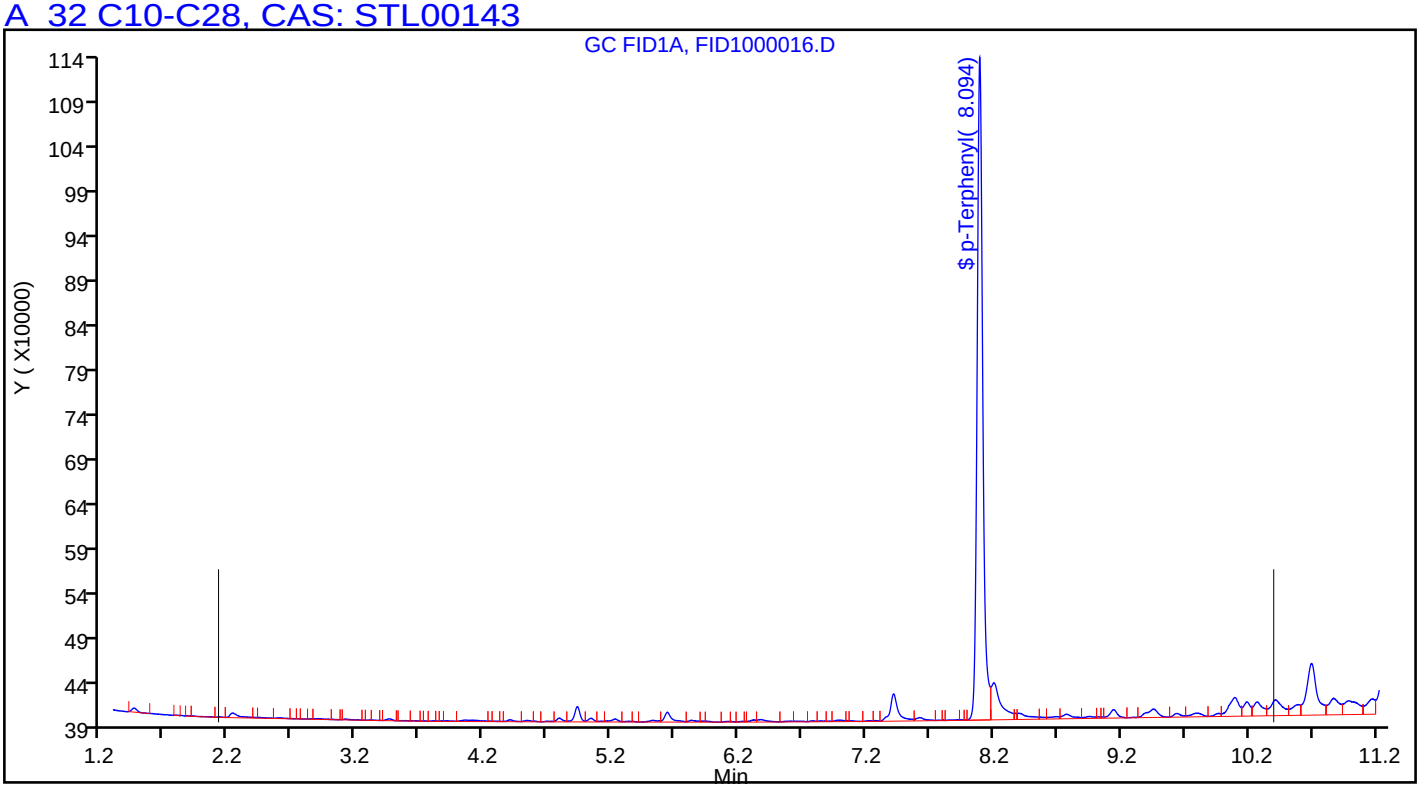
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	23.6	94.42

Report Date: 31-Aug-2018 18:28:59 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53601.b\FID1000016.D				
Injection Date:	31-Aug-2018 15:30:25	Instrument ID:	CHDRO6		
Lims ID:	720-88264-D-7-A	Lab Sample ID:	720-88264-7		
Client ID:	DG-G115--3.5-4				
Operator ID:	DCH	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88264-1

SDG No.:

Client Sample ID: DG-G11S-9.5-10 Lab Sample ID: 720-88264-8

Matrix: Solid Lab File ID: FID2000013.D

Analysis Method: 8015B Date Collected: 08/27/2018 12:25

Extraction Method: 3546 Date Extracted: 08/29/2018 13:41

Sample wt/vol: 15.43(g) Date Analyzed: 08/31/2018 14:16

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250656 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	100000		1900	730

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	54		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000013.D
Lims ID: 720-88264-D-8-A
Client ID: DG-G115--9.5-10
Sample Type: Client
Inject. Date: 31-Aug-2018 14:16:52 ALS Bottle#: 63 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053602-013
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\DRO6_B.m
Limit Group: DRO
Last Update: 31-Aug-2018 18:06:13 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 18:06:13

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.307			ND	
23 n-Decane		2.169			ND	
A 1 C9-C13	2.775	(1.307-4.243)		71399216	32.7	M
A 21 Stoddard Solvent	2.775	(1.307-4.243)		71399216	NC	M
A 57 C10-C12	2.898	(2.169-3.628)		42678776	31.5	M
24 Dodecane	3.651	3.628	0.023	3512571	NC	M
A 3 C9 - C17	3.806	(1.307-6.306)		285650609	125.1	M
A 60 C10-C16	4.000	(2.169-5.830)		170278360	84.0	M
A 47 C9 - C18	4.028	(1.307-6.750)		329970471	174.3	M
A 25 C9-C19	4.240	(1.307-7.174)		414272381	180.0	M
A 15 Kerosene	4.240	(1.307-7.174)		414272381	218.3	M
26 C13	4.153	4.243	-0.090	8375417	NC	M
$ 27 n-Decanoic Acid (Surr)		4.632			ND	U
A 59 C12-C16	4.729	(3.628-5.830)		127599584	79.5	M
A 61 C10-C20	4.875	(2.169-7.581)		510721746	296.5	M
A 28 C9-C24	5.179	(1.307-9.051)		819676903	471.4	M
A 29 C9-C25	5.345	(1.307-9.384)		1007451180	577.7	M
A 54 C10-C23	5.437	(2.169-8.705)		750441485	432.2	M
A 4 C10-C24	5.610	(2.169-9.051)		817094239	470.0	M
A 16 C10-C25	5.777	(2.169-9.384)		1004868516	576.3	M
45 Hexadecane	5.795	5.830	-0.035	7481322	NC	M
A 14 C10-C26	5.937	(2.169-9.705)		1081163412	619.5	M
A 67 C12-C22	5.986	(3.628-8.345)		621327150	359.1	M
A 32 C10-C28	6.243	(2.169-10.317)		1350293447	771.9	M
A 5 Diesel	6.243	(2.169-10.317)		1350293447	771.9	M
A 12 Unknown Hydrocarbons	6.243	(2.169-10.317)		1350293447	NC	M
A 30 C13-C22	6.294	(4.243-8.345)		603564791	349.1	M
44 Heptadecane	6.277	6.306	-0.029	47531383	NC	M
A 31 C12-C24	6.339	(3.628-9.051)		774415463	445.8	M
49 n-Octadecane	6.730	6.750	-0.020	18741638	NC	M
A 9 Crude Oil Range Organics (	6.859	(1.307-12.411)		3660877150	NC	M
A 11 Bunker Range Organics (C9-	6.859	(1.307-12.411)		3660877150	NC	M

Report Date: 31-Aug-2018 18:06:16 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000013.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.859	(1.307-12.411)		3660877150	1734.1	M
33 C19	7.168	7.174	-0.006	13890233	NC	M
A 64 C13-C28	7.280	(4.243-10.317)		1289852312	737.6	M
A 17 C10-C36	7.290	(2.169-12.411)		3658294486	2078.7	M
A 68 Crude Oil Range Organics (	7.349	(1.307-13.391)		4354931992	NC	M
A 13 C9-C40	7.349	(1.307-13.391)		4354931992	2787.5	M
A 58 C16-C24	7.441	(5.830-9.051)		646815879	373.5	M
62 icosane	7.586	7.581	0.005	28415007	NC	M
A 6 C10-C40	7.780	(2.169-13.391)		4352349328	2788.8	M
$ 34 p-Terphenyl	8.059	8.077	-0.018	23409672	13.5	
35 n-Docosane	8.368	8.345	0.023	40432022	NC	M
A 18 C12-C40	8.509	(3.628-13.391)		4309670552	2769.3	M
36 Tricosane	8.718	8.705	0.013	23909709	NC	M
A 66 C13-C40	8.817	(4.243-13.391)		4291908193	2761.0	M
37 n-Tetracosane	9.077	9.051	0.026	76503629	NC	M
A 2 C16-C36 ORO	9.120	(5.830-12.411)		3488016126	2949.8	M
38 C25	9.332	9.384	-0.052	88096530	NC	M
A 19 C16-C40	9.611	(5.830-13.391)		4182070968	2699.2	M
46 n-Hexacosane	9.669	9.705	-0.036	21496817	NC	M
A 20 C19-C36	9.792	(7.174-12.411)		2282670060	1676.8	
A 55 C23-C32	10.065	(8.705-11.426)		1519497804	1963.5	M
39 n-Octacosane	10.367	10.317	0.050	95087617	NC	M
65 C29	10.596	10.607	-0.011	129487857	NC	M
A 40 C24-C36	10.731	(9.051-12.411)		2702242157	2756.3	M
A 7 Motor Oil	10.731	(9.051-12.411)		2187088919	2230.8	
A 10 C22-C40	10.868	(8.345-13.391)		2829651998	2035.7	
A 50 C25-C36	10.898	(9.384-12.411)		2078153249	2255.9	
A 41 C23-C40	11.048	(8.705-13.391)		2806136649	2053.2	
A 8 C24-C40	11.221	(9.051-13.391)		2798272151	2086.3	
56 Dotriacontane	11.489	11.426	0.063	159487203	NC	M
A 51 C28-C40	11.854	(10.317-13.391)		2462962576	2270.5	
A 63 C29-C40	11.999	(10.607-13.391)		2331508930	2333.0	
42 n-Hexatriacontane	12.381	12.411	-0.030	158495106	NC	M
43 C40	13.293	13.391	-0.098	230156066	NC	M
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

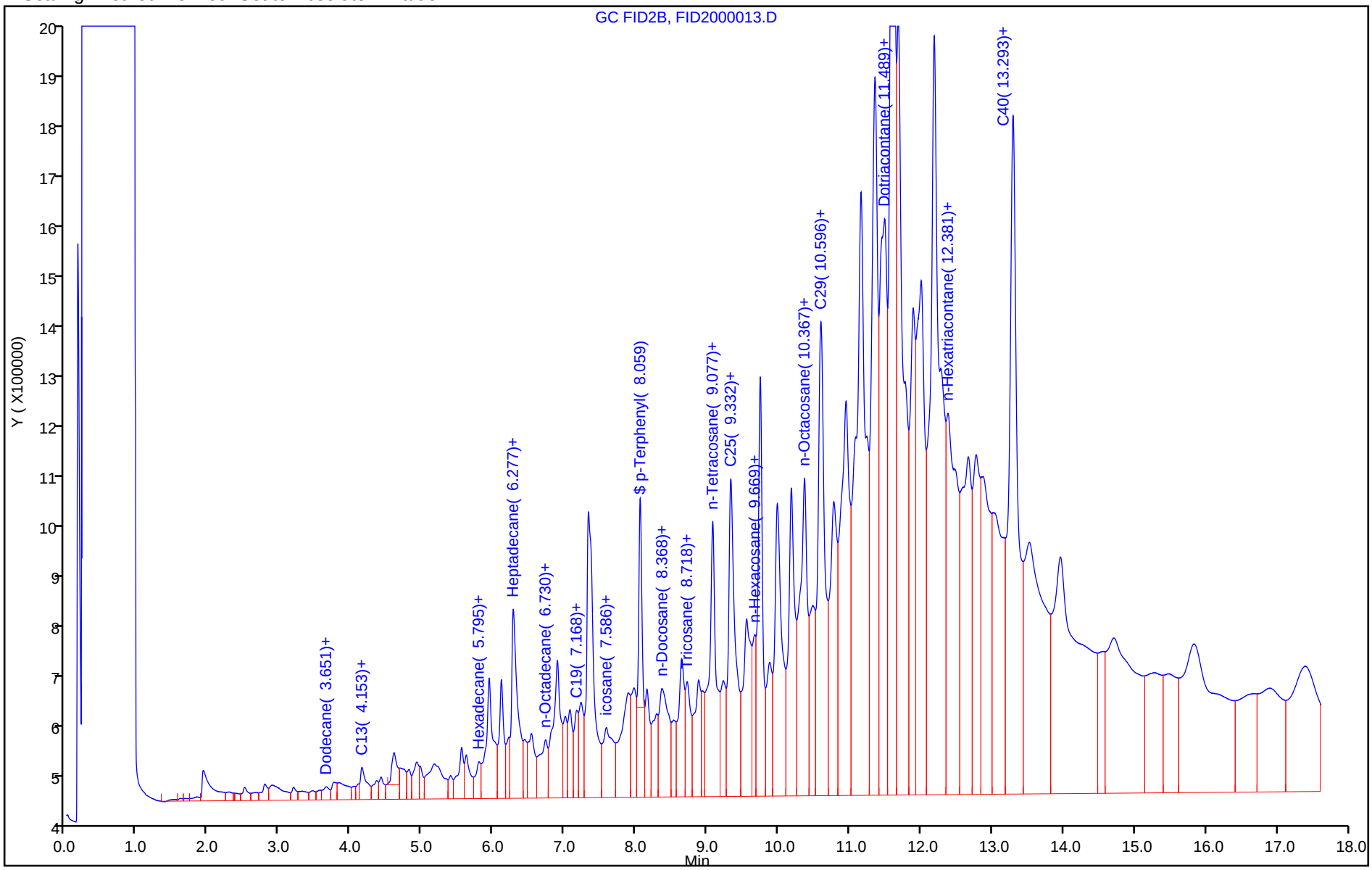
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 31-Aug-2018 18:06:17 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000013.D				
Injection Date:	31-Aug-2018 14:16:52	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88264-D-8-A	Lab Sample ID:	720-88264-8	Worklist Smp#:	13
Client ID:	DG-G115--9.5-10				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	63
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000013.D
Lims ID: 720-88264-D-8-A
Client ID: DG-G115--9.5-10
Sample Type: Client
Inject. Date: 31-Aug-2018 14:16:52 ALS Bottle#: 63 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053602-013
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\DRO6_B.m
Limit Group: DRO
Last Update: 31-Aug-2018 18:06:13 Calib Date: 31-Aug-2018 08:43:29
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK020

First Level Reviewer: luj Date: 31-Aug-2018 18:06:13

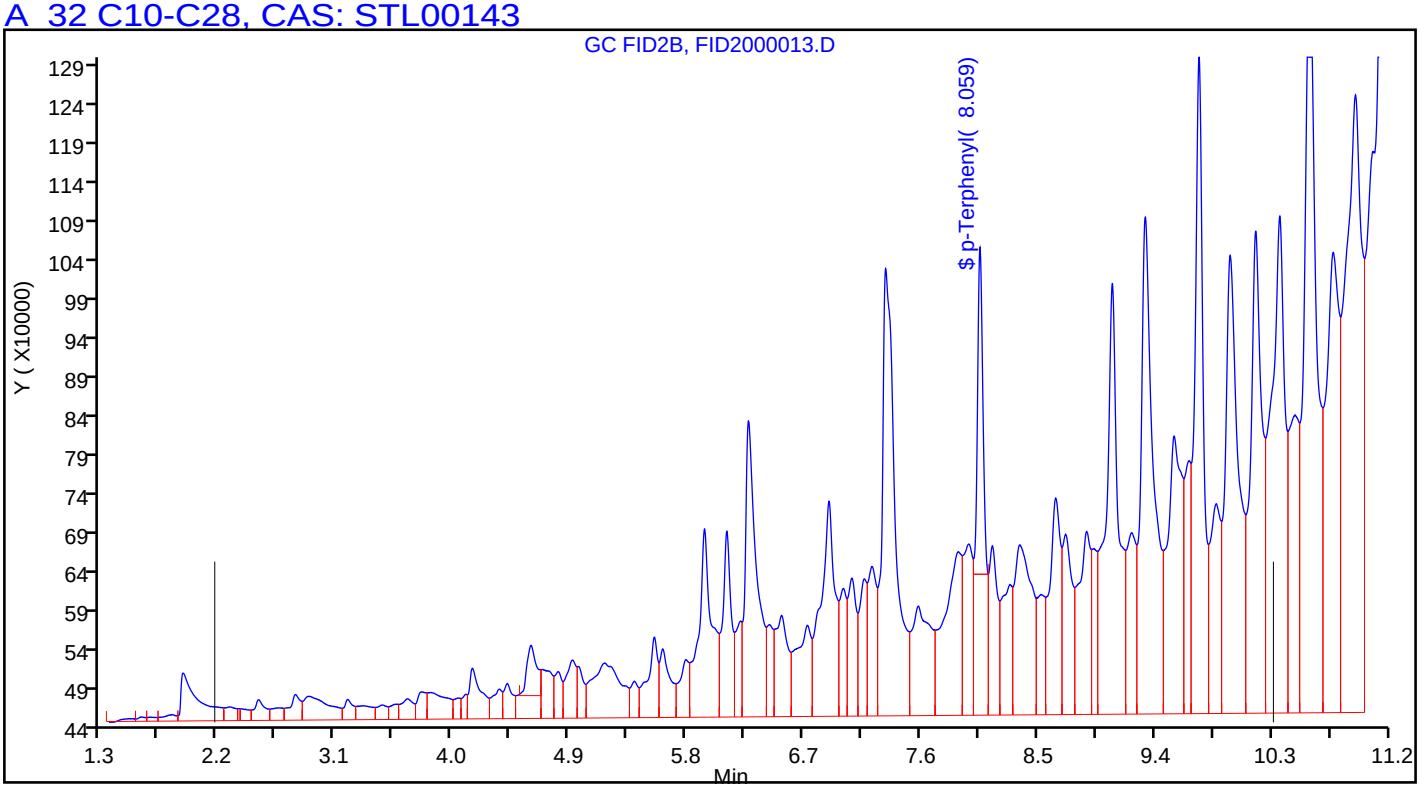
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	13.5	54.06

Report Date: 31-Aug-2018 18:06:26 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000013.D				
Injection Date:	31-Aug-2018 14:16:52	Instrument ID:	CHDRO6		
Lims ID:	720-88264-D-8-A	Lab Sample ID:	720-88264-8		
Client ID:	DG-G115--9.5-10				
Operator ID:	DCH	ALS Bottle#:	63	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

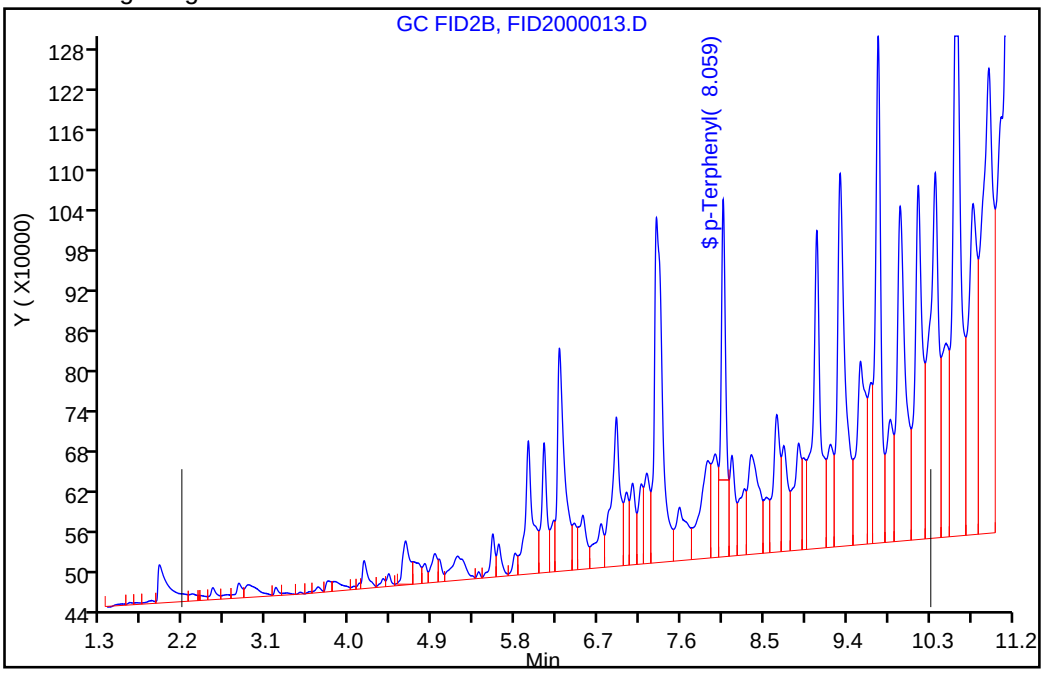
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180831-53602.b\FID2000013.D				
Injection Date:	31-Aug-2018 14:16:52	Instrument ID:	CHDRO6		
Lims ID:	720-88264-D-8-A	Lab Sample ID:	720-88264-8		
Client ID:	DG-G115--9.5-10				
Operator ID:	DCH	ALS Bottle#:	63	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.243, CAS: STL00143

Signal: 1

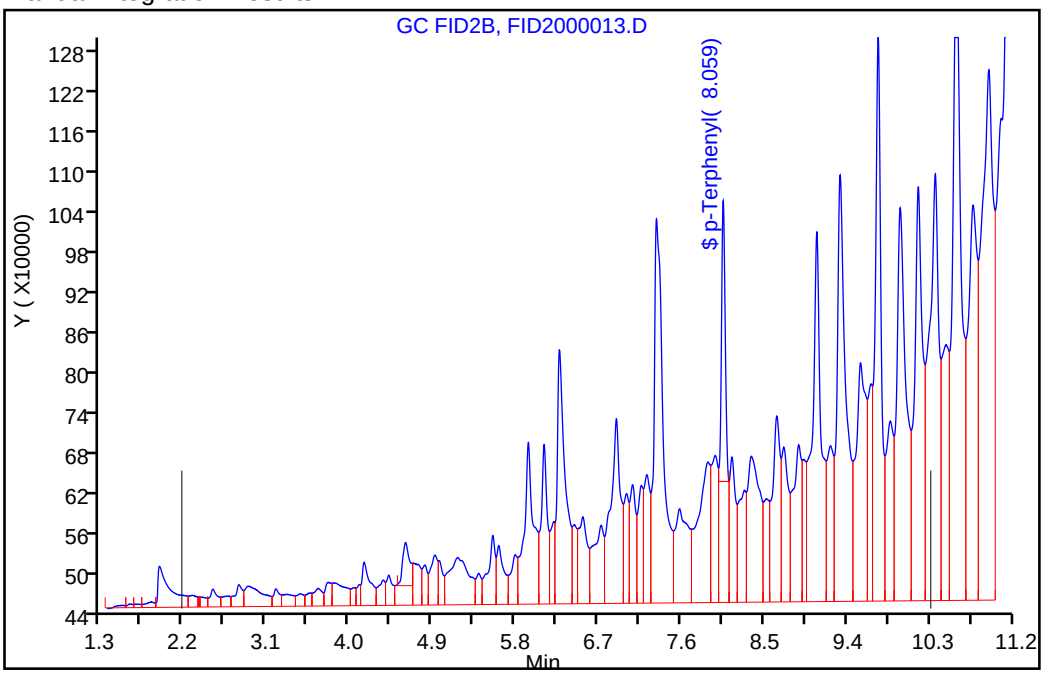
Processing Integration Results

RT: 6.24
Response: 885886788
Amount: 508.9065



Manual Integration Results

RT: 6.24
Response: 1350293447
Amount: 771.8631



Reviewer: luj, 31-Aug-2018 18:05:48

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton | Job No.: 720-88264-1
SDG No.:
Client Sample ID: DUP-23 | Lab Sample ID: 720-88264-1
Matrix: Solid | Lab File ID: 08311817.D
Analysis Method: 8260B | Date Collected: 08/27/2018 00:00
Sample wt/vol: 6.334(g) | Date Analyzed: 08/31/2018 13:36
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: DB-VRX ID: 250(um)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 250644 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND	*	3.9	0.95
67-64-1	Acetone	32	J *	39	30
71-43-2	Benzene	ND	*	3.9	0.51
75-27-4	Dichlorobromomethane	ND	*	3.9	0.57
108-86-1	Bromobenzene	ND	*	3.9	0.62
74-97-5	Chlorobromomethane	ND	*	16	0.57
75-25-2	Bromoform	ND	*	3.9	1.6
74-83-9	Bromomethane	ND	*	7.9	0.62
78-93-3	2-Butanone (MEK)	ND	*	39	17
104-51-8	n-Butylbenzene	ND	*	3.9	0.79
135-98-8	sec-Butylbenzene	ND	*	3.9	0.57
98-06-6	tert-Butylbenzene	ND	*	3.9	0.58
75-15-0	Carbon disulfide	ND	*	3.9	1.6
56-23-5	Carbon tetrachloride	ND	*	3.9	0.49
108-90-7	Chlorobenzene	ND	*	3.9	0.54
75-00-3	Chloroethane	ND	*	7.9	0.44
67-66-3	Chloroform	ND	*	3.9	0.52
74-87-3	Chloromethane	ND	*	7.9	0.62
95-49-8	2-Chlorotoluene	ND	*	3.9	0.51
106-43-4	4-Chlorotoluene	ND	*	3.9	0.54
124-48-1	Chlorodibromomethane	ND	*	3.9	0.56
95-50-1	1,2-Dichlorobenzene	ND	*	3.9	0.54
541-73-1	1,3-Dichlorobenzene	ND	*	3.9	0.57
106-46-7	1,4-Dichlorobenzene	ND	*	3.9	0.56
142-28-9	1,3-Dichloropropane	ND	*	3.9	0.58
563-58-6	1,1-Dichloropropene	ND	*	3.9	0.54
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	7.9	1.3
106-93-4	Ethylene Dibromide	ND	*	3.9	1.1
74-95-3	Dibromomethane	ND	*	7.9	0.68
75-71-8	Dichlorodifluoromethane	ND	*	7.9	0.62
75-34-3	1,1-Dichloroethane	ND	*	3.9	0.54
107-06-2	1,2-Dichloroethane	ND	*	3.9	0.60
75-35-4	1,1-Dichloroethene	ND	*	3.9	0.49
156-59-2	cis-1,2-Dichloroethene	ND	*	3.9	0.54
156-60-5	trans-1,2-Dichloroethene	ND	*	3.9	0.59
78-87-5	1,2-Dichloropropane	ND	*	3.9	0.50

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88264-1
SDG No.:
Client Sample ID: DUP-23
Lab Sample ID: 720-88264-1
Matrix: Solid
Lab File ID: 08311817.D
Analysis Method: 8260B
Date Collected: 08/27/2018 00:00
Sample wt/vol: 6.334(g)
Date Analyzed: 08/31/2018 13:36
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250644
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND	*	3.9	0.54
10061-02-6	trans-1,3-Dichloropropene	ND	*	3.9	0.53
100-41-4	Ethylbenzene	ND	*	3.9	0.59
87-68-3	Hexachlorobutadiene	ND	*	3.9	0.71
591-78-6	2-Hexanone	ND	*	39	7.9
98-82-8	Isopropylbenzene	ND	*	3.9	0.54
99-87-6	4-Isopropyltoluene	ND	*	3.9	2.0
75-09-2	Methylene Chloride	ND	*	7.9	4.4
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	*	39	7.9
91-20-3	Naphthalene	ND	*	7.9	1.2
103-65-1	N-Propylbenzene	ND	*	3.9	0.52
100-42-5	Styrene	ND	*	3.9	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND	*	3.9	0.60
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	3.9	0.59
127-18-4	Tetrachloroethene	ND	*	3.9	0.53
108-88-3	Toluene	ND	*	3.9	0.56
87-61-6	1,2,3-Trichlorobenzene	ND	*	3.9	0.58
120-82-1	1,2,4-Trichlorobenzene	ND	*	3.9	0.56
71-55-6	1,1,1-Trichloroethane	ND	*	3.9	0.48
79-00-5	1,1,2-Trichloroethane	ND	*	3.9	0.55
79-01-6	Trichloroethene	ND	*	3.9	0.50
75-69-4	Trichlorofluoromethane	ND	*	3.9	0.44
96-18-4	1,2,3-Trichloropropane	ND	*	3.9	0.61
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	3.9	1.6
95-63-6	1,2,4-Trimethylbenzene	ND	*	3.9	1.3
108-67-8	1,3,5-Trimethylbenzene	ND	*	3.9	0.51
108-05-4	Vinyl acetate	ND	*	16	3.9
75-01-4	Vinyl chloride	ND	*	3.9	0.58
1330-20-7	Xylenes, Total	ND		3.9	0.96
594-20-7	2,2-Dichloropropane	ND	*	3.9	1.6
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND	*	200	79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88264-1

SDG No.:

Client Sample ID: DUP-23 Lab Sample ID: 720-88264-1

Matrix: Solid Lab File ID: 08311817.D

Analysis Method: 8260B Date Collected: 08/27/2018 00:00

Sample wt/vol: 6.334(g) Date Analyzed: 08/31/2018 13:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250644 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	91	*	45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84	*	60-140
2037-26-5	Toluene-d8 (Surr)	90	*	58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311817.D
Lims ID: 720-88264-B-1-A
Client ID: DUP-23
Sample Type: Client
Inject. Date: 31-Aug-2018 13:36:30 ALS Bottle#: 16 Worklist Smp#: 18
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88264-B-1 RR
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 31-Aug-2018 14:11:34 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: salgadoa Date: 31-Aug-2018 14:11:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.819	6.819	0.000	0	82194	250.0	s
* 2 Fluorobenzene	96	10.605	10.599	0.006	98	255643	25.0	s
* 4 Chlorobenzene-d5	117	14.439	14.445	-0.006	87	182044	25.0	s
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.585	-0.006	95	88465	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.190	9.195	0.000	93	19452	6.78	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.708	9.714	0.000	0	22655	6.30	
$ 10 Toluene-d8 (Surr)	98	12.708	12.715	0.000	93	69711	6.74	
$ 11 4-Bromofluorobenzene	95	15.933	15.926	0.000	93	24104	6.81	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.036	0.000	85	19739	5.76	
28 Acetone	58	6.380	6.377	0.006	99	6137	20.5	
34 Methylene Chloride	84	7.081	7.081	0.006	51	223	0.0806	a
59 Benzene	78	10.373	10.379	0.000	79	642	0.0590	
75 Toluene	92	12.793	12.793	0.000	98	889	0.1486	a
128 Butyl Ether	87	14.665	14.652	0.006	94	502	0.2771	
107 n-Butylbenzene	91	18.170	18.170	0.000	94	791	0.0914	a
142 1,3,5-Trichlorobenzene	180	19.737	19.737	0.012	1	297	0.0697	a
111 1,2,4-Trichlorobenzene	180	20.408	20.408	-0.006	82	635	0.1630	a
112 Naphthalene	128	20.749	20.749	0.000	92	3064	0.3364	a
113 Hexachlorobutadiene	225	20.804	20.804	0.000	1	286	0.1249	a
114 1,2,3-Trichlorobenzene	180	21.017	21.010	0.000	88	906	0.2467	
29 Pentane	43	6.380	6.410	-0.030	70	23176	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	365007	15.6	
A 154 C6-C8	1	10.852	(8.550-13.153)		0	130124	5.55	
A 155 C6-C9	1	11.842	(8.550-15.134)		0	171184	7.30	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	426974	18.2	
A 119 C6-C10	1	12.732	(8.550-16.914)		0	204225	8.71	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	399292	17.0	
A 120 C6-C12	1	14.278	(8.550-20.005)		0	266192	11.4	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	80846	3.45	
A 121 C7-C12	1	15.451	(10.897-20.005)		0	180947	7.72	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

s - Failed ISTD Recovery Test

Review Flags

a - User Assigned ID

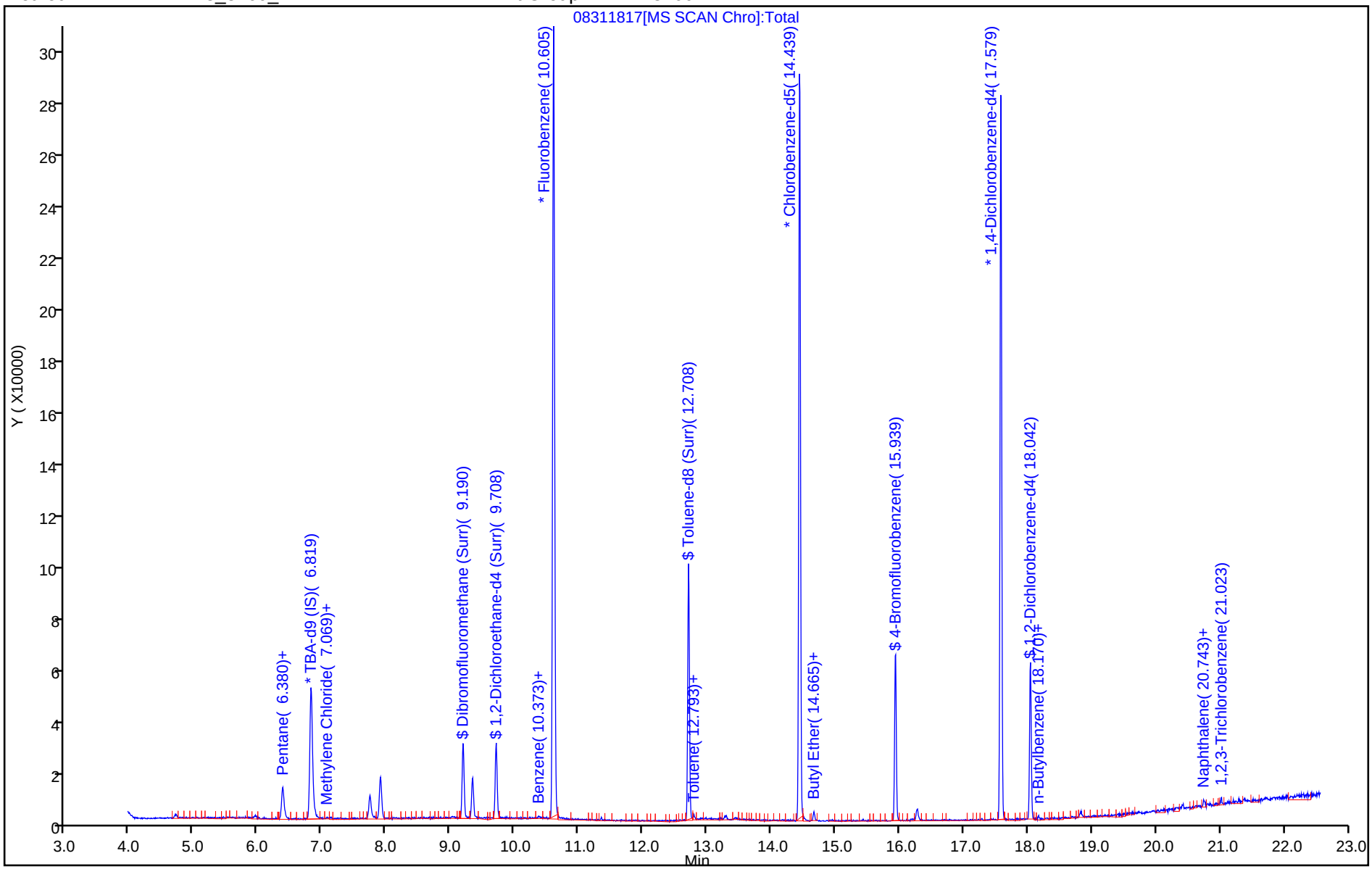
Reagents:

I_IS/SS_00092	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 31-Aug-2018 14:11:34 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311817.D				
Injection Date:	31-Aug-2018 13:36:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88264-B-1-A	Lab Sample ID:	720-88264-1	Worklist Smp#:	18
Client ID:	DUP-23				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311817.D
Lims ID: 720-88264-B-1-A
Client ID: DUP-23
Sample Type: Client
Inject. Date: 31-Aug-2018 13:36:30 ALS Bottle#: 16 Worklist Smp#: 18
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88264-B-1 RR
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 31-Aug-2018 14:11:34 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: salgadoa Date: 31-Aug-2018 14:11:34

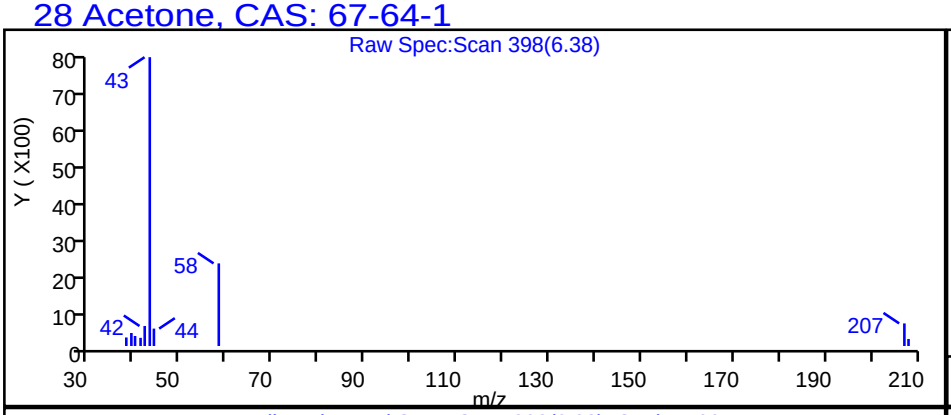
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	6.30	84.04
$ 10 Toluene-d8 (Surr)	7.50	6.74	89.90
$ 11 4-Bromofluorobenzene	7.50	6.81	90.78
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

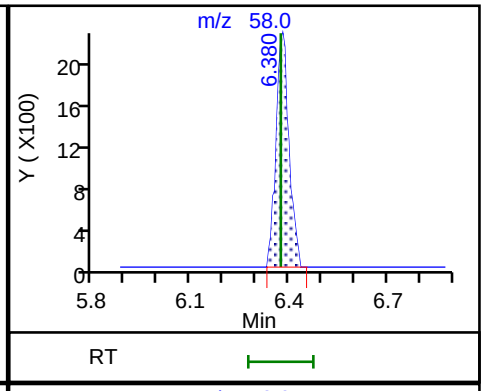
Report Date: 31-Aug-2018 14:11:34 Chrom Revision: 2.3 19-Jul-2018 15:14:50

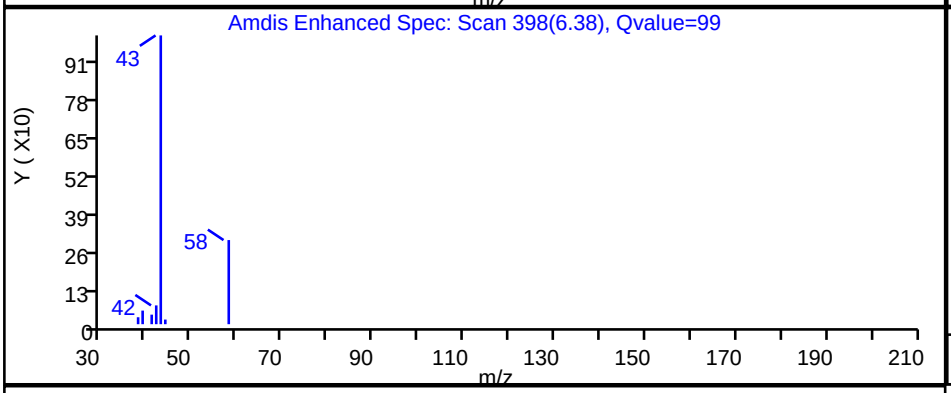
TestAmerica Pleasanton

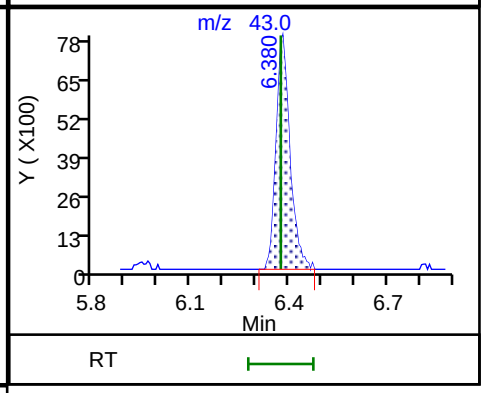
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311817.D				
Injection Date:	31-Aug-2018 13:36:30	Instrument ID:	HP13		
Lims ID:	720-88264-B-1-A	Lab Sample ID:	720-88264-1		
Client ID:	DUP-23				
Operator ID:	VOA	ALS Bottle#:	16	Worklist Smp#:	18
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

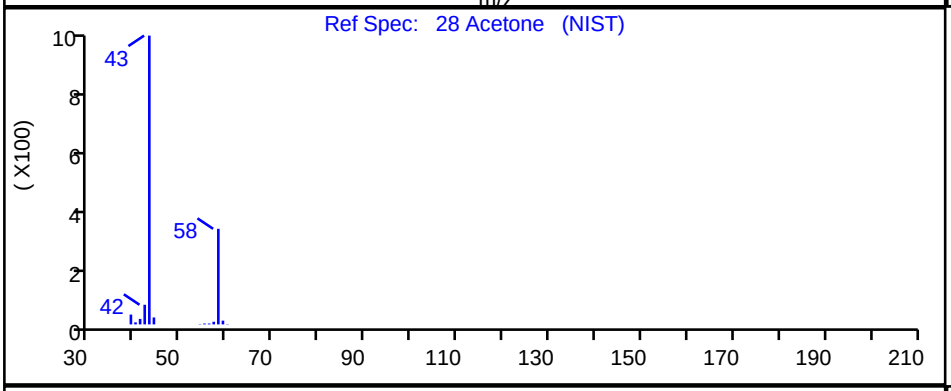
28 Acetone, CAS: 67-64-1

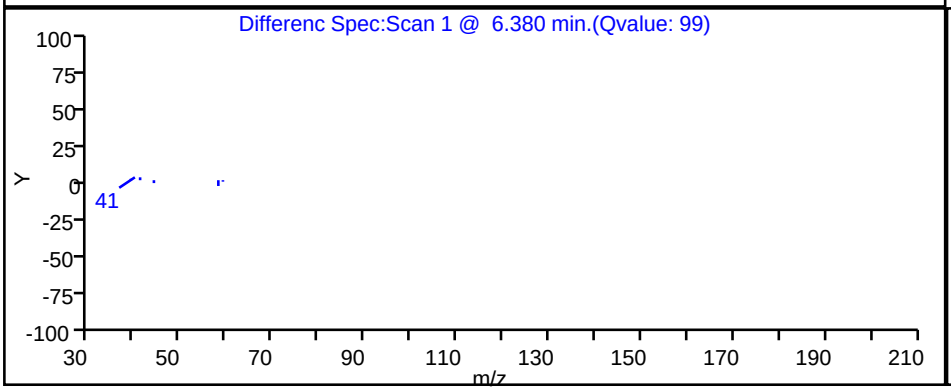


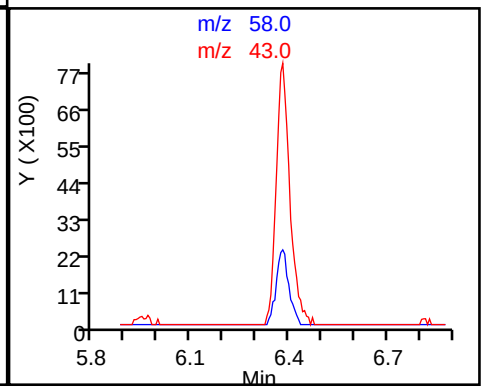










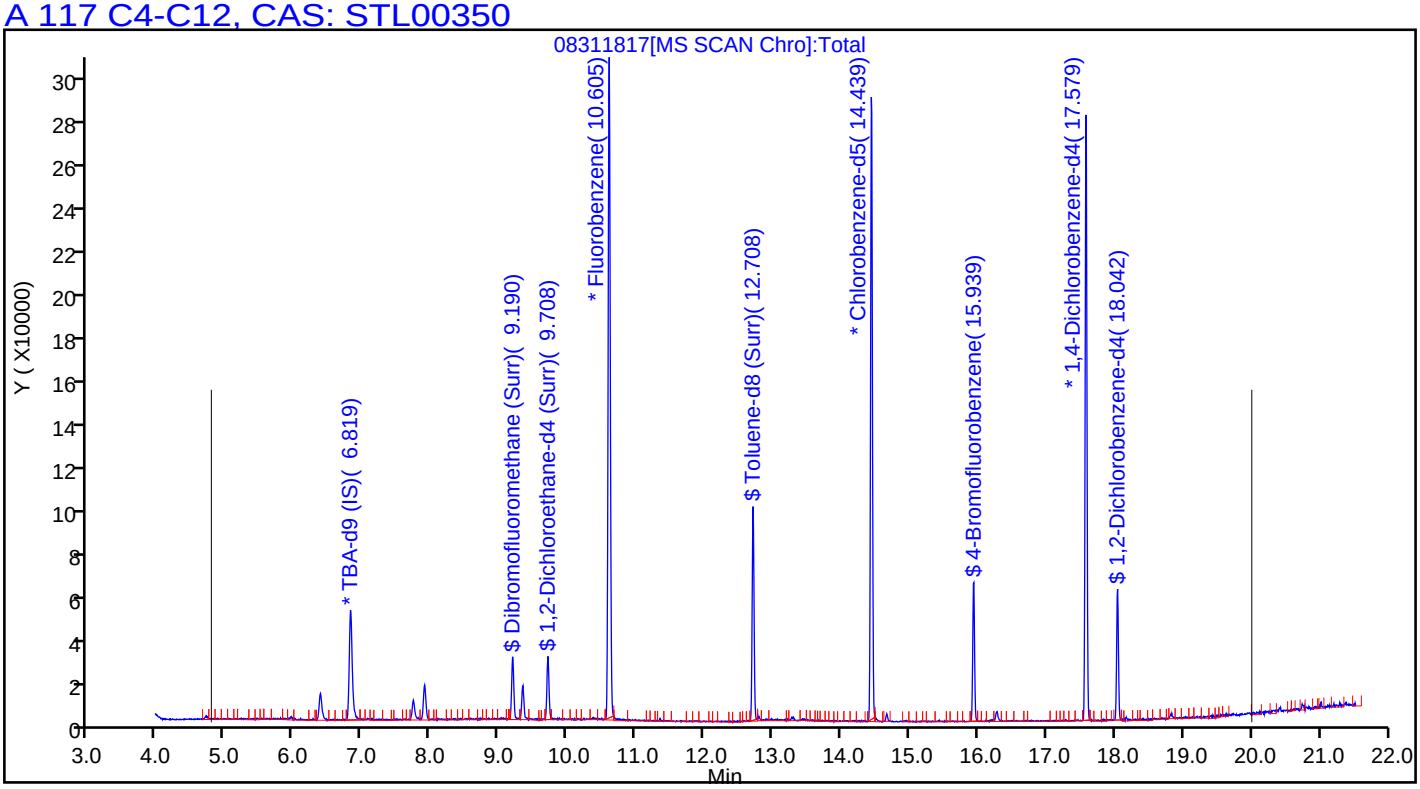


Report Date: 31-Aug-2018 14:11:35 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311817.D				
Injection Date:	31-Aug-2018 13:36:30	Instrument ID:	HP13		
Lims ID:	720-88264-B-1-A	Lab Sample ID:	720-88264-1		
Client ID:	DUP-23				
Operator ID:	VOA	ALS Bottle#:	16	Worklist Smp#:	18
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

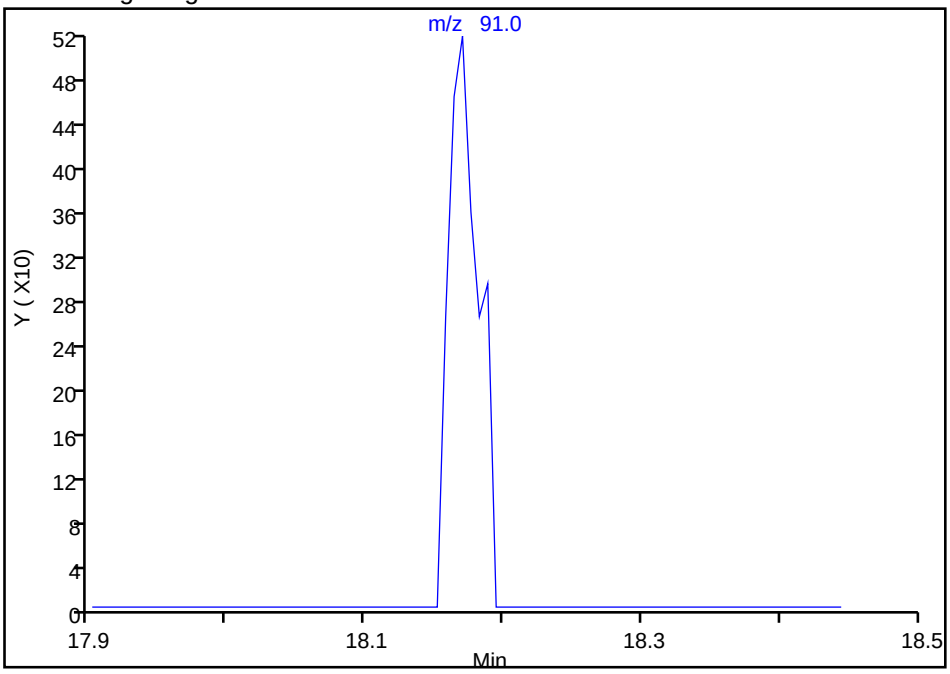
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311817.D				
Injection Date:	31-Aug-2018 13:36:30	Instrument ID:	HP13		
Lims ID:	720-88264-B-1-A	Lab Sample ID:	720-88264-1		
Client ID:	DUP-23				
Operator ID:	VOA	ALS Bottle#:	16	Worklist Smp#:	18
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

107 n-Butylbenzene, CAS: 104-51-8

Signal: 1

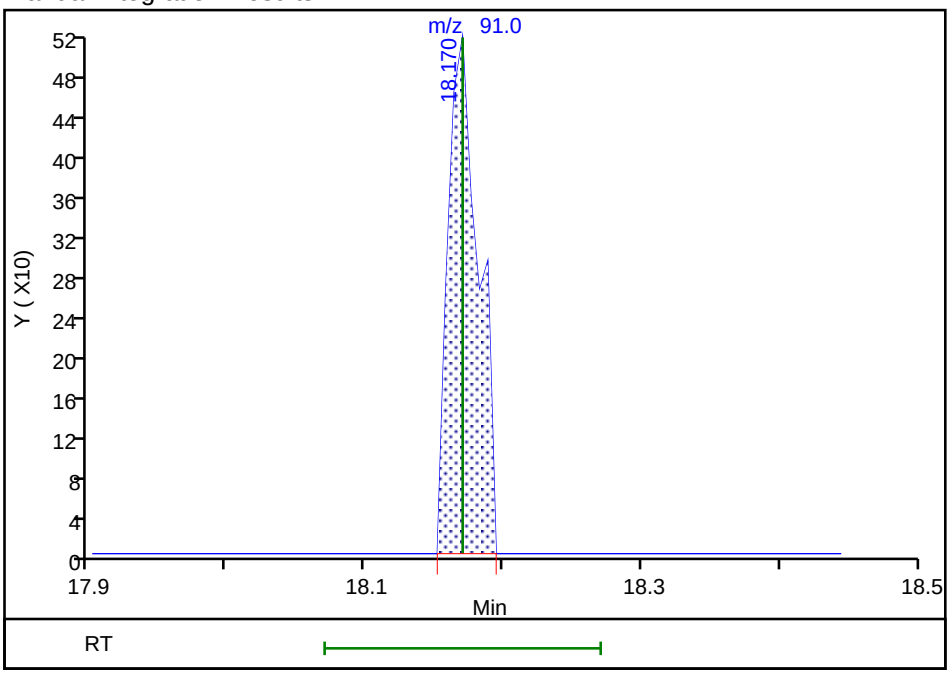
Processing Integration Results

Not Detected
Expected RT: 18.17



Manual Integration Results

RT: 18.17
Area: 791
Amount: 0.091365
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 14:11:06
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

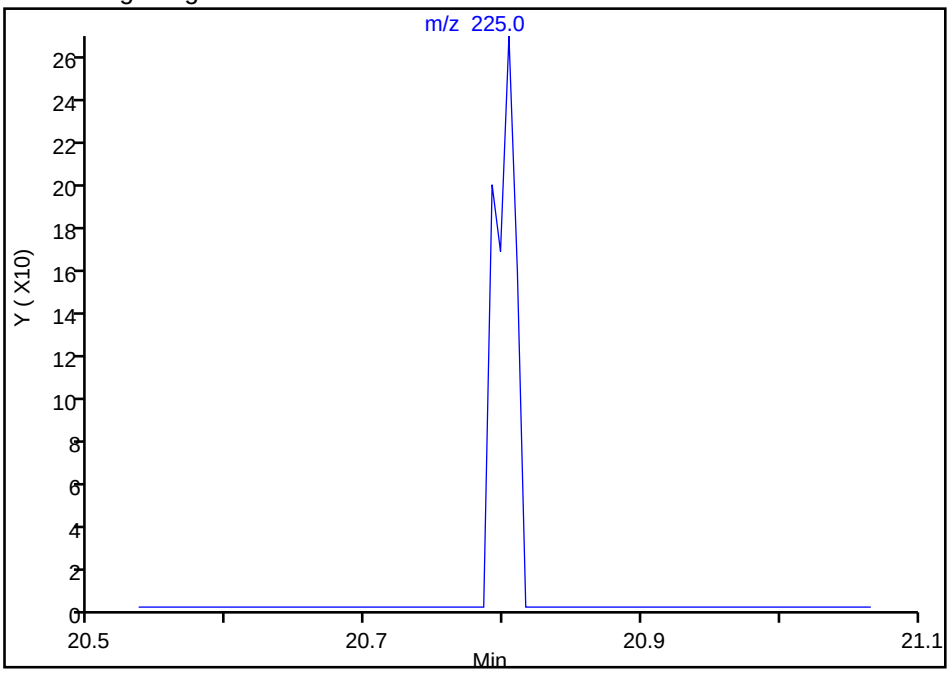
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311817.D				
Injection Date:	31-Aug-2018 13:36:30	Instrument ID:	HP13		
Lims ID:	720-88264-B-1-A	Lab Sample ID:	720-88264-1		
Client ID:	DUP-23				
Operator ID:	VOA	ALS Bottle#:	16	Worklist Smp#:	18
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

113 Hexachlorobutadiene, CAS: 87-68-3

Signal: 1

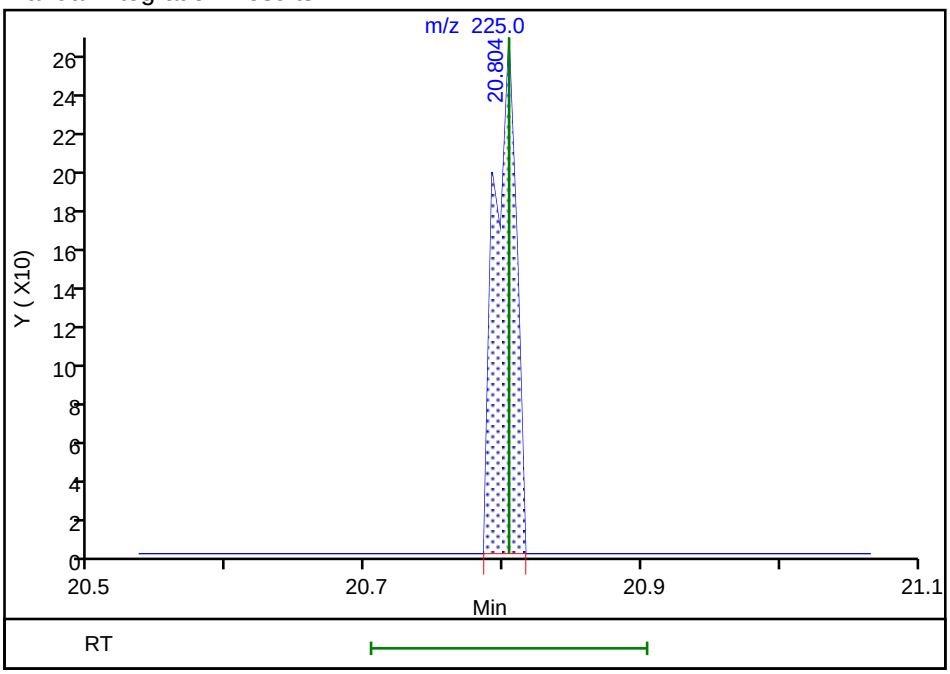
Processing Integration Results

Not Detected
Expected RT: 20.80



Manual Integration Results

RT: 20.80
Area: 286
Amount: 0.124899
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 14:11:20
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

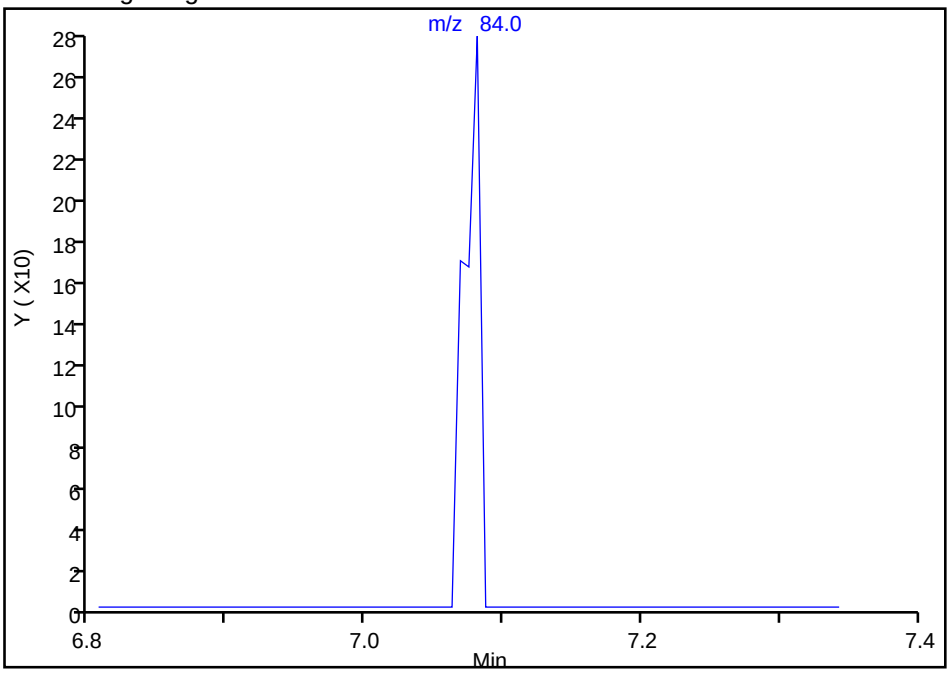
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311817.D				
Injection Date:	31-Aug-2018 13:36:30	Instrument ID:	HP13		
Lims ID:	720-88264-B-1-A	Lab Sample ID:	720-88264-1		
Client ID:	DUP-23				
Operator ID:	VOA	ALS Bottle#:	16	Worklist Smp#:	18
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

34 Methylene Chloride, CAS: 75-09-2

Signal: 1

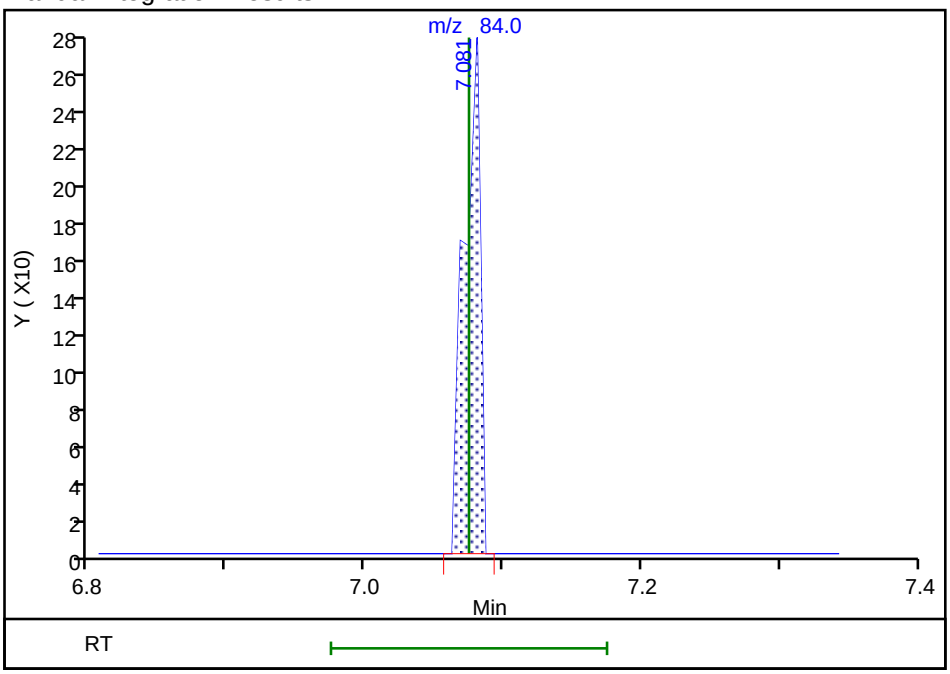
Processing Integration Results

Not Detected
Expected RT: 7.07



Manual Integration Results

RT: 7.08
Area: 223
Amount: 0.080611
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 14:10:40
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

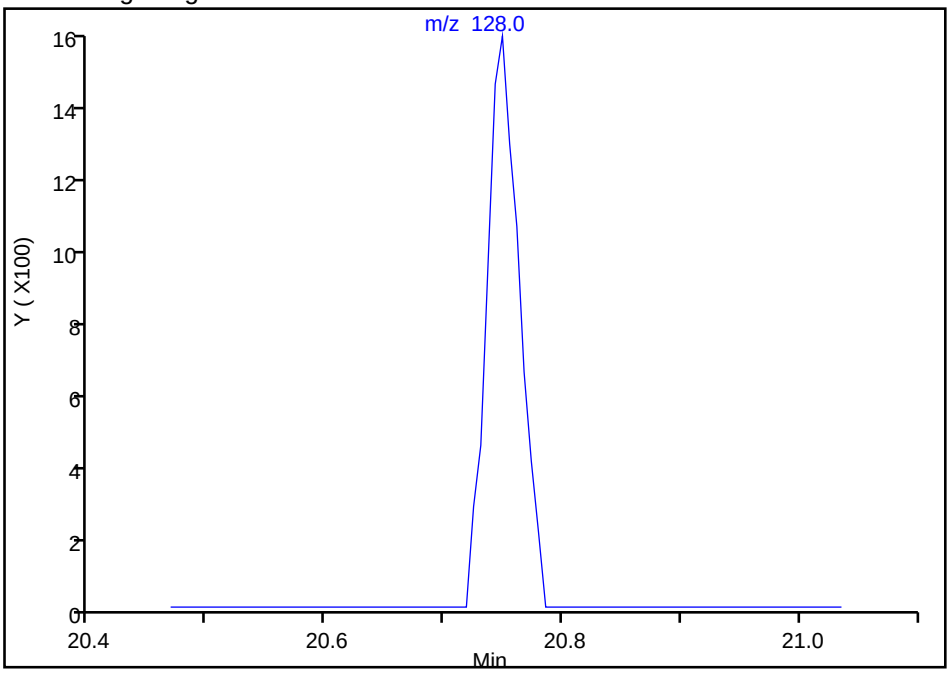
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311817.D				
Injection Date:	31-Aug-2018 13:36:30	Instrument ID:	HP13		
Lims ID:	720-88264-B-1-A	Lab Sample ID:	720-88264-1		
Client ID:	DUP-23				
Operator ID:	VOA	ALS Bottle#:	16	Worklist Smp#:	18
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

112 Naphthalene, CAS: 91-20-3

Signal: 1

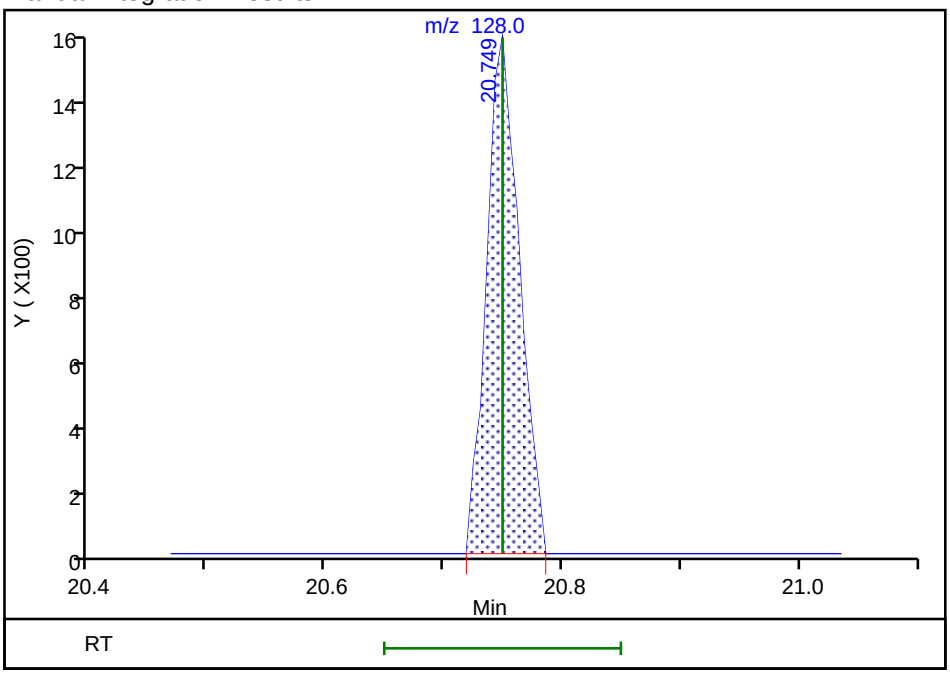
Processing Integration Results

Not Detected
Expected RT: 20.75



Manual Integration Results

RT: 20.75
Area: 3064
Amount: 0.336421
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 14:11:25
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

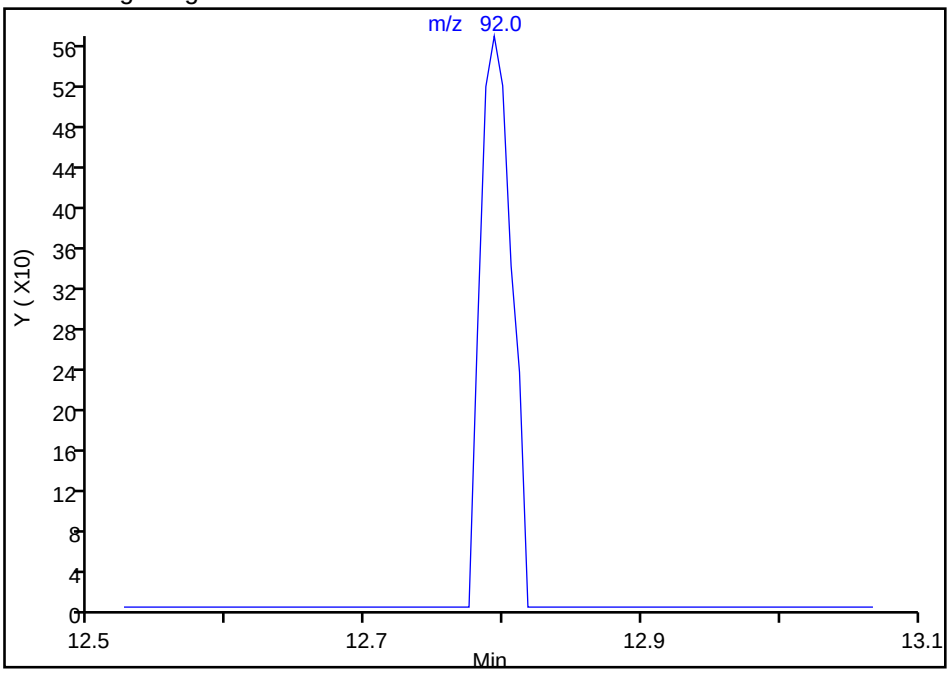
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311817.D				
Injection Date:	31-Aug-2018 13:36:30	Instrument ID:	HP13		
Lims ID:	720-88264-B-1-A	Lab Sample ID:	720-88264-1		
Client ID:	DUP-23				
Operator ID:	VOA	ALS Bottle#:	16	Worklist Smp#:	18
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

75 Toluene, CAS: 108-88-3

Signal: 1

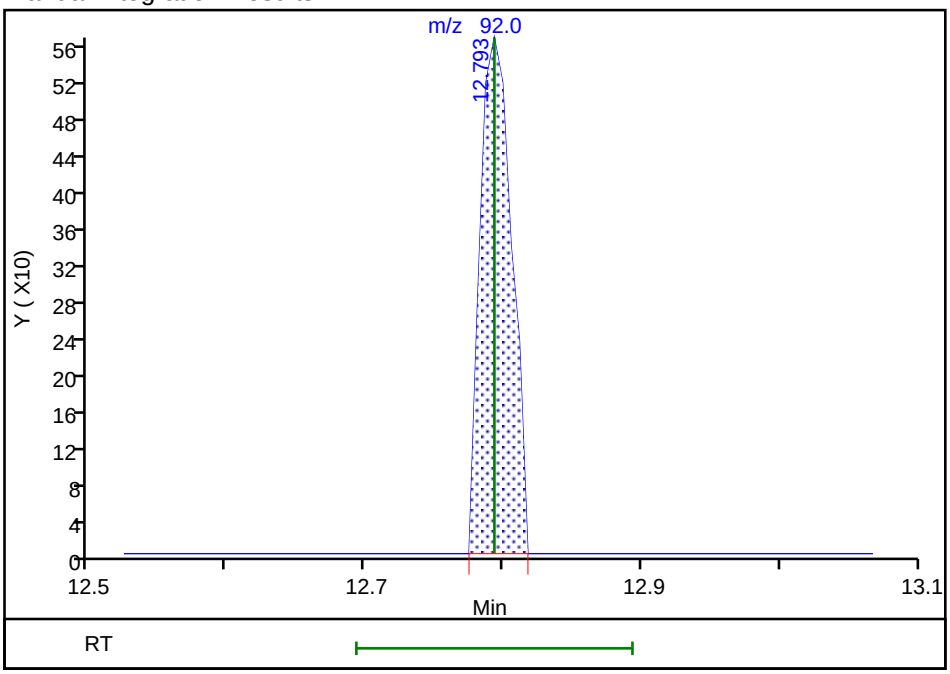
Not Detected
Expected RT: 12.79

Processing Integration Results



Manual Integration Results

RT: 12.79
Area: 889
Amount: 0.148558
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 14:10:53
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

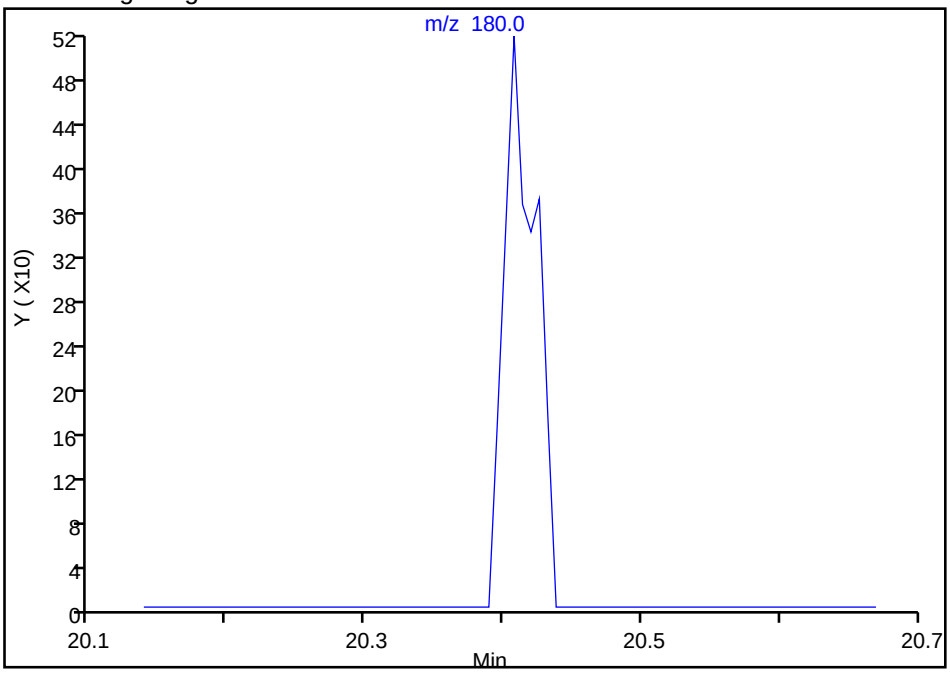
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311817.D				
Injection Date:	31-Aug-2018 13:36:30	Instrument ID:	HP13		
Lims ID:	720-88264-B-1-A	Lab Sample ID:	720-88264-1		
Client ID:	DUP-23				
Operator ID:	VOA	ALS Bottle#:	16	Worklist Smp#:	18
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

111 1,2,4-Trichlorobenzene, CAS: 120-82-1

Signal: 1

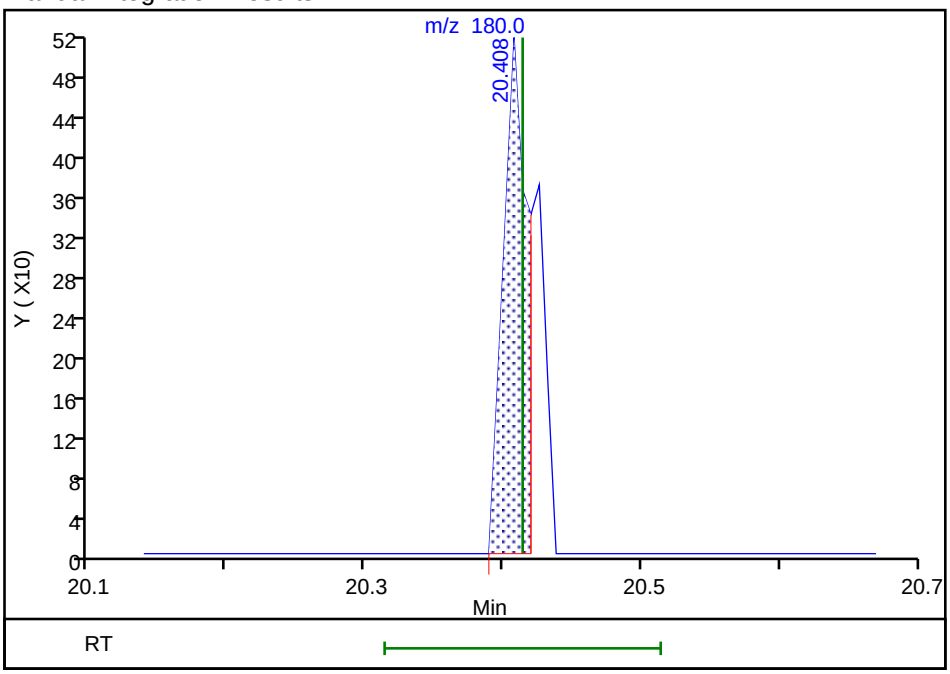
Processing Integration Results

Not Detected
Expected RT: 20.41



Manual Integration Results

RT: 20.41
Area: 635
Amount: 0.163047
Amount Units: ug/L



Reviewer: salgadoa, 31-Aug-2018 14:11:14
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88264-1
SDG No.:
Client Sample ID: DUP-22
Lab Sample ID: 720-88264-2
Matrix: Solid
Lab File ID: 08301835.D
Analysis Method: 8260B
Date Collected: 08/27/2018 00:00
Sample wt/vol: 5.561(g)
Date Analyzed: 08/31/2018 00:19
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250626
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.5	1.1
67-64-1	Acetone	54		45	34
71-43-2	Benzene	ND		4.5	0.58
75-27-4	Dichlorobromomethane	ND		4.5	0.65
108-86-1	Bromobenzene	ND		4.5	0.71
74-97-5	Chlorobromomethane	ND		18	0.65
75-25-2	Bromoform	ND		4.5	1.8
74-83-9	Bromomethane	ND		9.0	0.71
78-93-3	2-Butanone (MEK)	ND		45	19
104-51-8	n-Butylbenzene	ND		4.5	0.90
135-98-8	sec-Butylbenzene	ND		4.5	0.65
98-06-6	tert-Butylbenzene	ND		4.5	0.66
75-15-0	Carbon disulfide	ND		4.5	1.8
56-23-5	Carbon tetrachloride	ND		4.5	0.56
108-90-7	Chlorobenzene	ND		4.5	0.62
75-00-3	Chloroethane	ND		9.0	0.50
67-66-3	Chloroform	ND		4.5	0.59
74-87-3	Chloromethane	ND		9.0	0.71
95-49-8	2-Chlorotoluene	ND		4.5	0.58
106-43-4	4-Chlorotoluene	ND		4.5	0.61
124-48-1	Chlorodibromomethane	ND		4.5	0.64
95-50-1	1,2-Dichlorobenzene	ND		4.5	0.61
541-73-1	1,3-Dichlorobenzene	ND		4.5	0.65
106-46-7	1,4-Dichlorobenzene	ND		4.5	0.64
142-28-9	1,3-Dichloropropane	ND		4.5	0.66
563-58-6	1,1-Dichloropropene	ND		4.5	0.62
96-12-8	1,2-Dibromo-3-Chloropropane	ND		9.0	1.5
106-93-4	Ethylene Dibromide	ND		4.5	1.3
74-95-3	Dibromomethane	ND		9.0	0.77
75-71-8	Dichlorodifluoromethane	ND		9.0	0.71
75-34-3	1,1-Dichloroethane	ND		4.5	0.61
107-06-2	1,2-Dichloroethane	ND		4.5	0.68
75-35-4	1,1-Dichloroethene	ND	*	4.5	0.56
156-59-2	cis-1,2-Dichloroethene	ND		4.5	0.61
156-60-5	trans-1,2-Dichloroethene	ND		4.5	0.67
78-87-5	1,2-Dichloropropane	ND		4.5	0.57

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88264-1
SDG No.:
Client Sample ID: DUP-22
Lab Sample ID: 720-88264-2
Matrix: Solid
Lab File ID: 08301835.D
Analysis Method: 8260B
Date Collected: 08/27/2018 00:00
Sample wt/vol: 5.561(g)
Date Analyzed: 08/31/2018 00:19
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250626
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.5	0.62
10061-02-6	trans-1,3-Dichloropropene	ND		4.5	0.60
100-41-4	Ethylbenzene	ND		4.5	0.67
87-68-3	Hexachlorobutadiene	ND		4.5	0.81
591-78-6	2-Hexanone	ND		45	9.0
98-82-8	Isopropylbenzene	ND		4.5	0.61
99-87-6	4-Isopropyltoluene	ND		4.5	2.2
75-09-2	Methylene Chloride	ND		9.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		45	9.0
91-20-3	Naphthalene	ND		9.0	1.3
103-65-1	N-Propylbenzene	ND		4.5	0.59
100-42-5	Styrene	ND		4.5	0.57
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.5	0.68
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.5	0.67
127-18-4	Tetrachloroethene	ND		4.5	0.60
108-88-3	Toluene	ND		4.5	0.64
87-61-6	1,2,3-Trichlorobenzene	ND		4.5	0.67
120-82-1	1,2,4-Trichlorobenzene	ND		4.5	0.64
71-55-6	1,1,1-Trichloroethane	ND		4.5	0.55
79-00-5	1,1,2-Trichloroethane	ND		4.5	0.63
79-01-6	Trichloroethene	ND		4.5	0.57
75-69-4	Trichlorofluoromethane	ND		4.5	0.50
96-18-4	1,2,3-Trichloropropane	ND		4.5	0.69
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.5	1.9
95-63-6	1,2,4-Trimethylbenzene	ND		4.5	1.5
108-67-8	1,3,5-Trimethylbenzene	ND		4.5	0.58
108-05-4	Vinyl acetate	ND		18	4.5
75-01-4	Vinyl chloride	ND		4.5	0.66
1330-20-7	Xylenes, Total	ND		4.5	1.1
594-20-7	2,2-Dichloropropane	ND		4.5	1.8
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		220	90

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88264-1

SDG No.:

Client Sample ID: DUP-22 Lab Sample ID: 720-88264-2

Matrix: Solid Lab File ID: 08301835.D

Analysis Method: 8260B Date Collected: 08/27/2018 00:00

Sample wt/vol: 5.561(g) Date Analyzed: 08/31/2018 00:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250626 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	96		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		60-140
2037-26-5	Toluene-d8 (Surr)	92		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301835.D
Lims ID: 720-88264-A-2-A
Client ID: DUP-22
Sample Type: Client
Inject. Date: 31-Aug-2018 00:19:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88264-A-2
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 31-Aug-2018 09:32:42 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 09:32:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.825	6.813	0.012	0	339362	250.0	
* 2 Fluorobenzene	96	10.605	10.598	0.007	98	922013	25.0	
* 4 Chlorobenzene-d5	117	14.439	14.439	0.000	87	706278	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.585	17.579	0.006	95	362179	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.190	9.184	0.006	94	76334	7.38	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.709	9.702	0.007	0	98565	7.60	
$ 10 Toluene-d8 (Surr)	98	12.708	12.702	0.006	93	258600	6.94	
$ 11 4-Bromofluorobenzene	95	15.939	15.939	0.006	94	99308	7.23	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.048	0.000	84	84254	6.01	
$ 6 BFB	95	9.343	6.446	2.897	0	1579	NR	
27 Isopropyl alcohol	45	6.368	6.282	0.092	8	461	0.5065	
28 Acetone	58	6.380	6.361	0.019	99	32417	30.0	
34 Methylene Chloride	84	7.075	7.069	0.006	88	439	0.0440	
144 Methyl acetate	43	7.136	7.117	0.019	98	2515	0.3192	
45 2-Butanone (MEK)	72	8.642	8.629	0.013	64	281	0.2275	
140 Ethyl acetate	43	9.014	8.995	0.019	98	5774	0.4729	
59 Benzene	78	10.379	10.367	0.012	93	2918	0.0744	
75 Toluene	92	12.799	12.792	0.012	97	5038	0.2170	
149 1-Chlorohexane	55	14.439	14.354	0.085	33	7487	0.6366	
128 Butyl Ether	87	14.665	14.665	0.006	95	2872	0.4087	
29 Pentane	43	6.380	6.410	-0.030	70	114737	NR	
99 n-Decane	57	16.713	16.829	-0.116	86	3711	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	1021168	12.1	
A 154 C6-C8	1	10.855	(8.556-13.153)		0	376563	4.45	
A 155 C6-C9	1	11.845	(8.556-15.134)		0	460317	5.44	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	1103812	13.1	
A 119 C6-C10	1	12.735	(8.556-16.914)		0	521744	6.17	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	1067580	12.6	
A 120 C6-C12	1	14.281	(8.556-20.005)		0	605686	7.16	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	147243	1.74	
A 121 C7-C12	1	15.448	(10.891-20.005)		0	291228	3.44	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

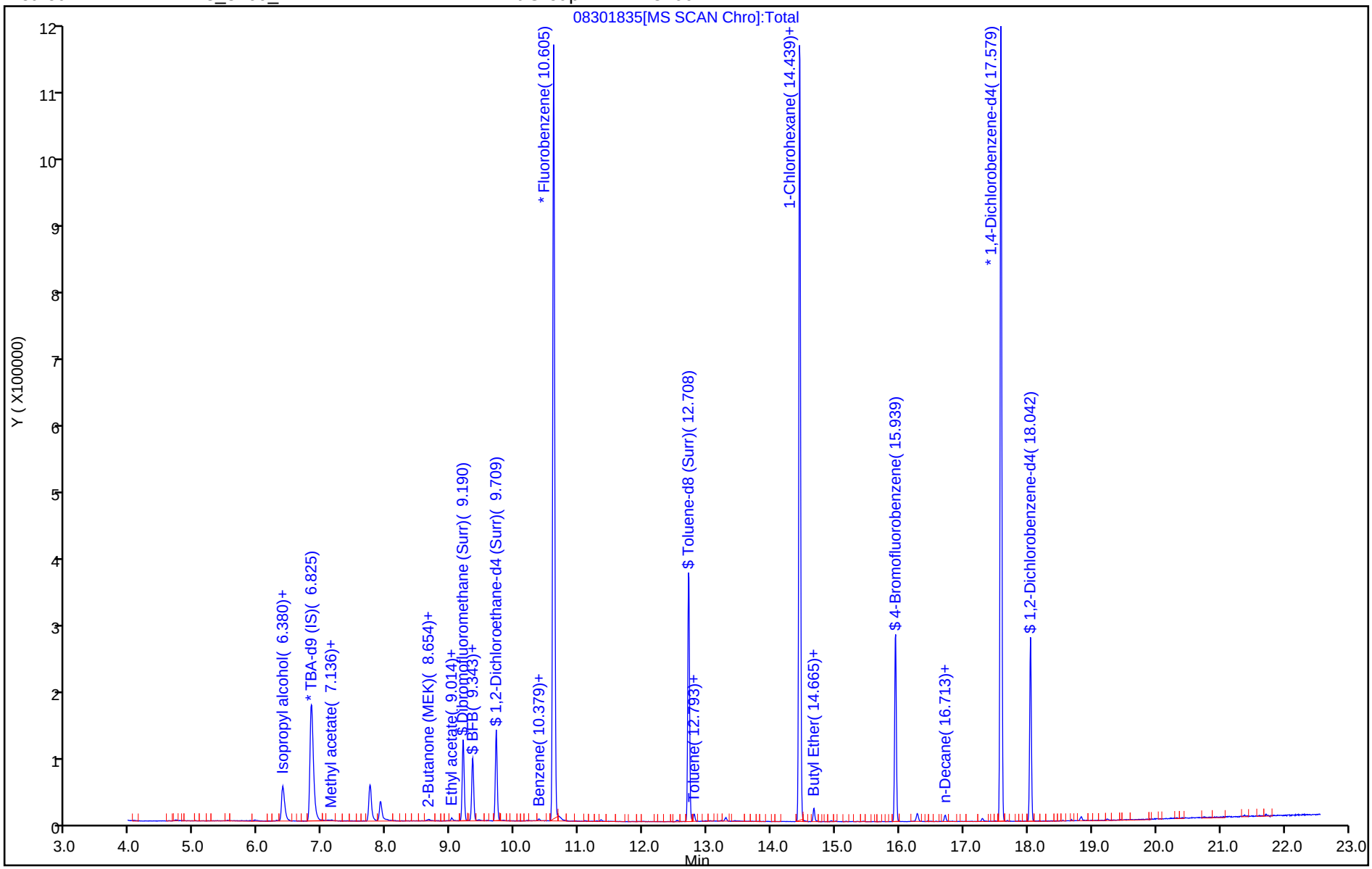
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 09:32:53 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301835.D				
Injection Date:	31-Aug-2018 00:19:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88264-A-2-A	Lab Sample ID:	720-88264-2	Worklist Smp#:	14
Client ID:	DUP-22				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301835.D
Lims ID: 720-88264-A-2-A
Client ID: DUP-22
Sample Type: Client
Inject. Date: 31-Aug-2018 00:19:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88264-A-2
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 31-Aug-2018 09:32:42 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 09:32:52

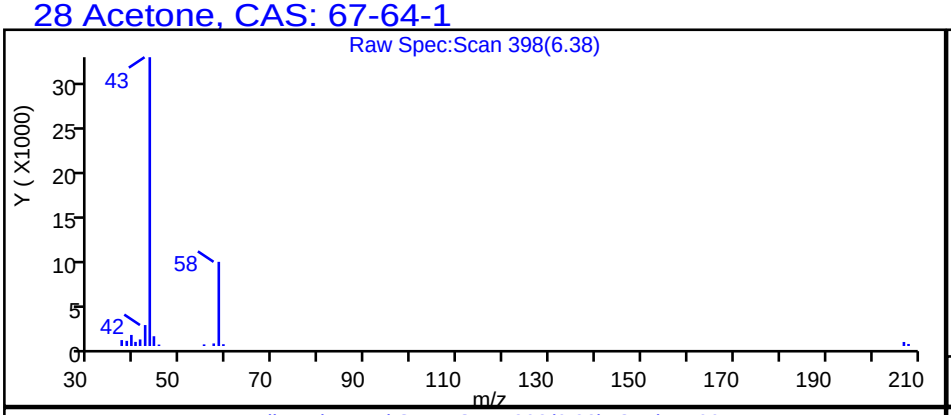
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.60	101.37
$ 10 Toluene-d8 (Surr)	7.50	6.94	92.47
$ 11 4-Bromofluorobenzene	7.50	7.23	96.40
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00
$ 6 BFB	0.0	0	0.00

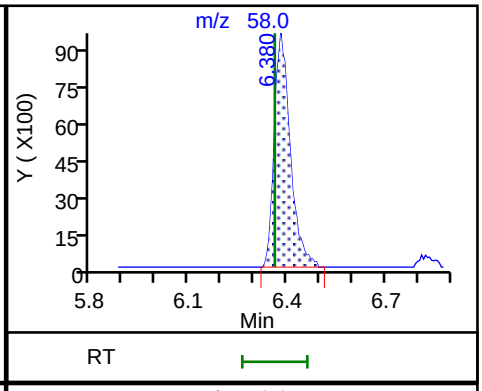
Report Date: 31-Aug-2018 09:32:53 Chrom Revision: 2.3 19-Jul-2018 15:14:50

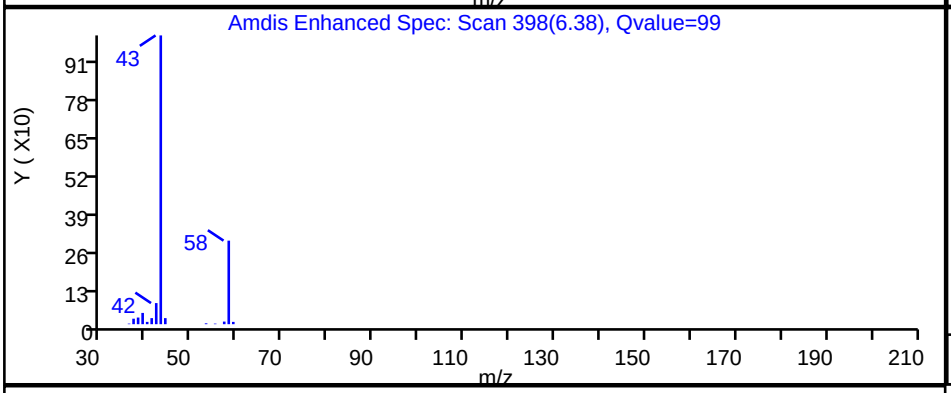
TestAmerica Pleasanton

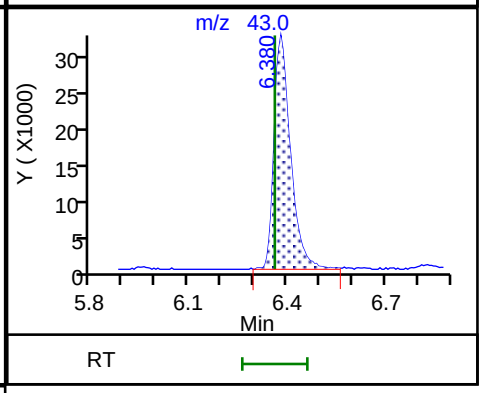
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301835.D				
Injection Date:	31-Aug-2018 00:19:30	Instrument ID:	HP13		
Lims ID:	720-88264-A-2-A	Lab Sample ID:	720-88264-2		
Client ID:	DUP-22				
Operator ID:	VOA	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

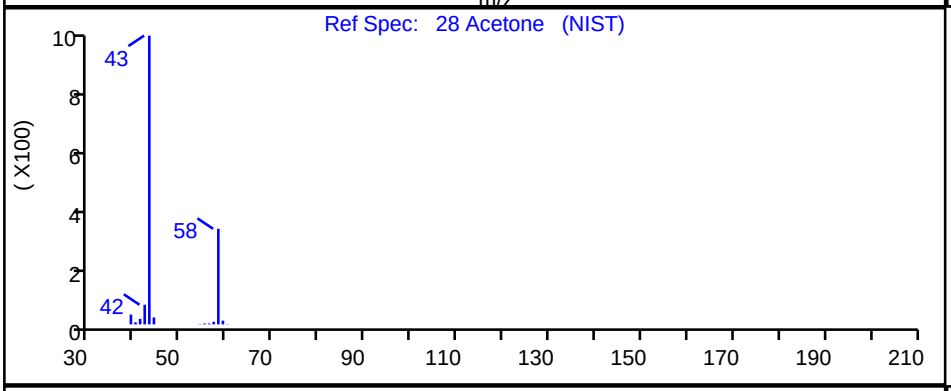
28 Acetone, CAS: 67-64-1

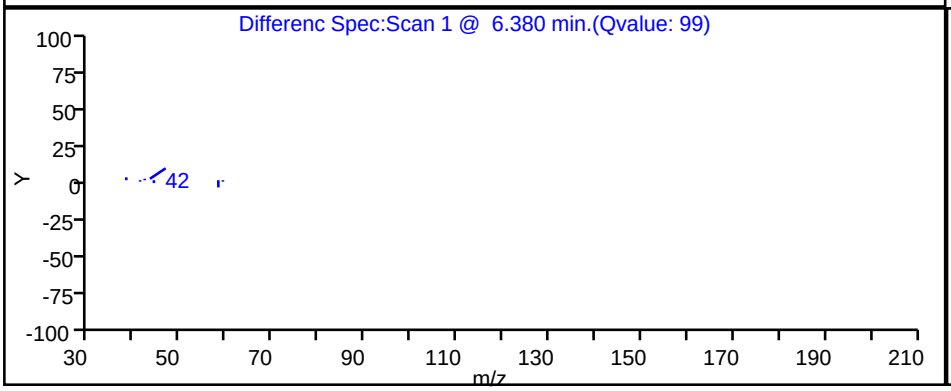


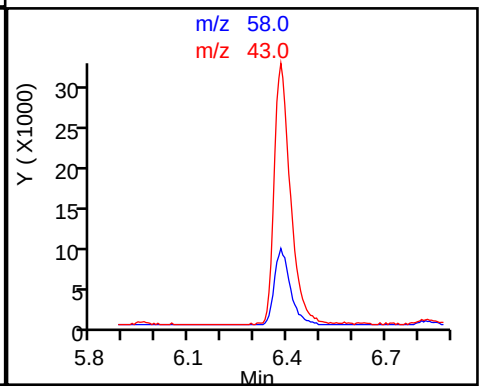










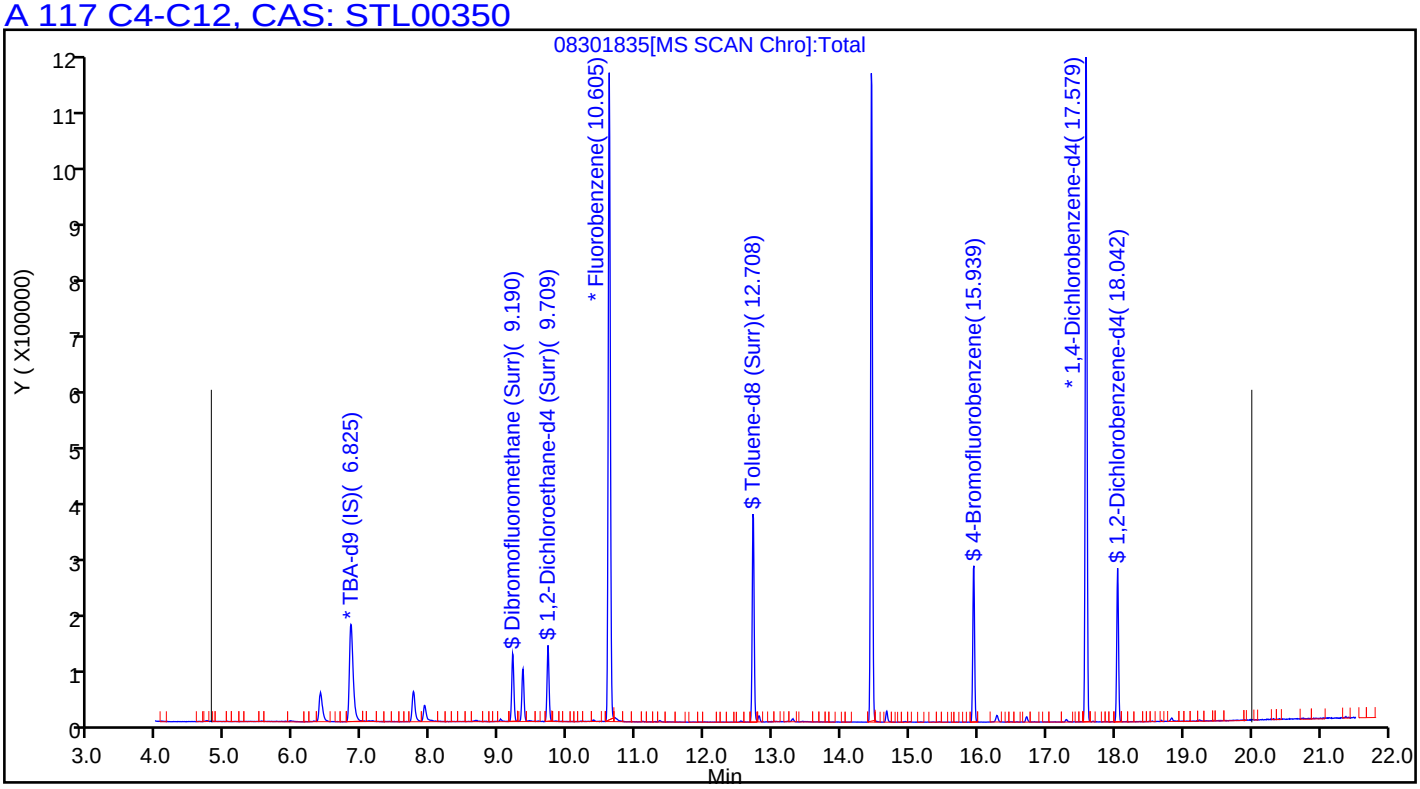


Report Date: 31-Aug-2018 09:32:54 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301835.D				
Injection Date:	31-Aug-2018 00:19:30	Instrument ID:	HP13		
Lims ID:	720-88264-A-2-A	Lab Sample ID:	720-88264-2		
Client ID:	DUP-22				
Operator ID:	VOA	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88264-1

SDG No.:

Client Sample ID: DUP-30 Lab Sample ID: 720-88264-3

Matrix: Solid Lab File ID: 08301836.D

Analysis Method: 8260B Date Collected: 08/27/2018 00:00

Sample wt/vol: 5.086(g) Date Analyzed: 08/31/2018 00:50

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250626 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.9	1.2
67-64-1	Acetone	ND		49	37
71-43-2	Benzene	ND		4.9	0.64
75-27-4	Dichlorobromomethane	ND		4.9	0.71
108-86-1	Bromobenzene	ND		4.9	0.78
74-97-5	Chlorobromomethane	ND		20	0.71
75-25-2	Bromoform	ND		4.9	2.0
74-83-9	Bromomethane	ND		9.8	0.78
78-93-3	2-Butanone (MEK)	ND		49	21
104-51-8	n-Butylbenzene	ND		4.9	0.98
135-98-8	sec-Butylbenzene	ND		4.9	0.71
98-06-6	tert-Butylbenzene	ND		4.9	0.72
75-15-0	Carbon disulfide	ND		4.9	2.0
56-23-5	Carbon tetrachloride	ND		4.9	0.61
108-90-7	Chlorobenzene	ND		4.9	0.68
75-00-3	Chloroethane	ND		9.8	0.55
67-66-3	Chloroform	ND		4.9	0.65
74-87-3	Chloromethane	ND		9.8	0.78
95-49-8	2-Chlorotoluene	ND		4.9	0.64
106-43-4	4-Chlorotoluene	ND		4.9	0.67
124-48-1	Chlorodibromomethane	ND		4.9	0.70
95-50-1	1,2-Dichlorobenzene	ND		4.9	0.67
541-73-1	1,3-Dichlorobenzene	ND		4.9	0.71
106-46-7	1,4-Dichlorobenzene	ND		4.9	0.70
142-28-9	1,3-Dichloropropane	ND		4.9	0.72
563-58-6	1,1-Dichloropropene	ND		4.9	0.68
96-12-8	1,2-Dibromo-3-Chloropropane	ND		9.8	1.7
106-93-4	Ethylene Dibromide	ND		4.9	1.4
74-95-3	Dibromomethane	ND		9.8	0.85
75-71-8	Dichlorodifluoromethane	ND		9.8	0.78
75-34-3	1,1-Dichloroethane	ND		4.9	0.67
107-06-2	1,2-Dichloroethane	ND		4.9	0.75
75-35-4	1,1-Dichloroethene	ND	*	4.9	0.61
156-59-2	cis-1,2-Dichloroethene	ND		4.9	0.67
156-60-5	trans-1,2-Dichloroethene	ND		4.9	0.74
78-87-5	1,2-Dichloropropane	ND		4.9	0.62

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88264-1
SDG No.:
Client Sample ID: DUP-30
Lab Sample ID: 720-88264-3
Matrix: Solid
Lab File ID: 08301836.D
Analysis Method: 8260B
Date Collected: 08/27/2018 00:00
Sample wt/vol: 5.086(g)
Date Analyzed: 08/31/2018 00:50
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250626
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.9	0.68
10061-02-6	trans-1,3-Dichloropropene	ND		4.9	0.66
100-41-4	Ethylbenzene	ND		4.9	0.74
87-68-3	Hexachlorobutadiene	ND		4.9	0.88
591-78-6	2-Hexanone	ND		49	9.8
98-82-8	Isopropylbenzene	ND		4.9	0.67
99-87-6	4-Isopropyltoluene	ND		4.9	2.5
75-09-2	Methylene Chloride	ND		9.8	5.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		49	9.8
91-20-3	Naphthalene	ND		9.8	1.5
103-65-1	N-Propylbenzene	ND		4.9	0.65
100-42-5	Styrene	ND		4.9	0.62
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.9	0.75
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.9	0.74
127-18-4	Tetrachloroethene	ND		4.9	0.66
108-88-3	Toluene	ND		4.9	0.70
87-61-6	1,2,3-Trichlorobenzene	ND		4.9	0.73
120-82-1	1,2,4-Trichlorobenzene	ND		4.9	0.70
71-55-6	1,1,1-Trichloroethane	ND		4.9	0.60
79-00-5	1,1,2-Trichloroethane	ND		4.9	0.69
79-01-6	Trichloroethene	ND		4.9	0.62
75-69-4	Trichlorofluoromethane	ND		4.9	0.55
96-18-4	1,2,3-Trichloropropane	ND		4.9	0.76
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.9	2.0
95-63-6	1,2,4-Trimethylbenzene	ND		4.9	1.6
108-67-8	1,3,5-Trimethylbenzene	ND		4.9	0.64
108-05-4	Vinyl acetate	ND		20	4.9
75-01-4	Vinyl chloride	ND		4.9	0.72
1330-20-7	Xylenes, Total	ND		4.9	1.2
594-20-7	2,2-Dichloropropane	ND		4.9	2.0
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		250	98

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88264-1

SDG No.:

Client Sample ID: DUP-30 Lab Sample ID: 720-88264-3

Matrix: Solid Lab File ID: 08301836.D

Analysis Method: 8260B Date Collected: 08/27/2018 00:00

Sample wt/vol: 5.086(g) Date Analyzed: 08/31/2018 00:50

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250626 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	96		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		60-140
2037-26-5	Toluene-d8 (Surr)	94		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301836.D
Lims ID: 720-88264-A-3-A
Client ID: DUP-30
Sample Type: Client
Inject. Date: 31-Aug-2018 00:50:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88264-A-3
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 31-Aug-2018 09:32:42 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 09:33:04

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.825	6.813	0.012	0	323660	250.0	
* 2 Fluorobenzene	96	10.605	10.598	0.007	98	918164	25.0	
* 4 Chlorobenzene-d5	117	14.445	14.439	0.006	87	715028	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.585	17.579	0.006	95	377029	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.196	9.184	0.012	94	77585	7.53	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.708	9.702	0.006	0	99752	7.73	
$ 10 Toluene-d8 (Surr)	98	12.708	12.702	0.006	94	262269	7.06	
$ 11 4-Bromofluorobenzene	95	15.939	15.939	0.006	93	100572	7.23	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.048	0.000	84	88999	6.10	
$ 6 BFB	95	9.343	6.446	2.897	0	412	NR	
28 Acetone	58	6.386	6.361	0.025	99	15939	14.8	
140 Ethyl acetate	43	9.020	8.995	0.025	97	3464	0.2849	
59 Benzene	78	10.373	10.367	0.006	94	2209	0.0565	
75 Toluene	92	12.799	12.792	0.012	97	3121	0.1328	
149 1-Chlorohexane	55	14.439	14.354	0.085	33	7571	0.6465	
128 Butyl Ether	87	14.665	14.665	0.006	95	1290	0.1813	
29 Pentane	43	6.380	6.410	-0.030	70	57798	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	616959	7.33	
A 154 C6-C8	1	10.855	(8.556-13.153)		0	209575	2.49	
A 155 C6-C9	1	11.845	(8.556-15.134)		0	278877	3.31	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	689959	8.20	
A 119 C6-C10	1	12.735	(8.556-16.914)		0	324980	3.86	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	655523	7.79	
A 120 C6-C12	1	14.281	(8.556-20.005)		0	397980	4.73	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	117133	1.39	
A 121 C7-C12	1	15.448	(10.891-20.005)		0	264358	3.14	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

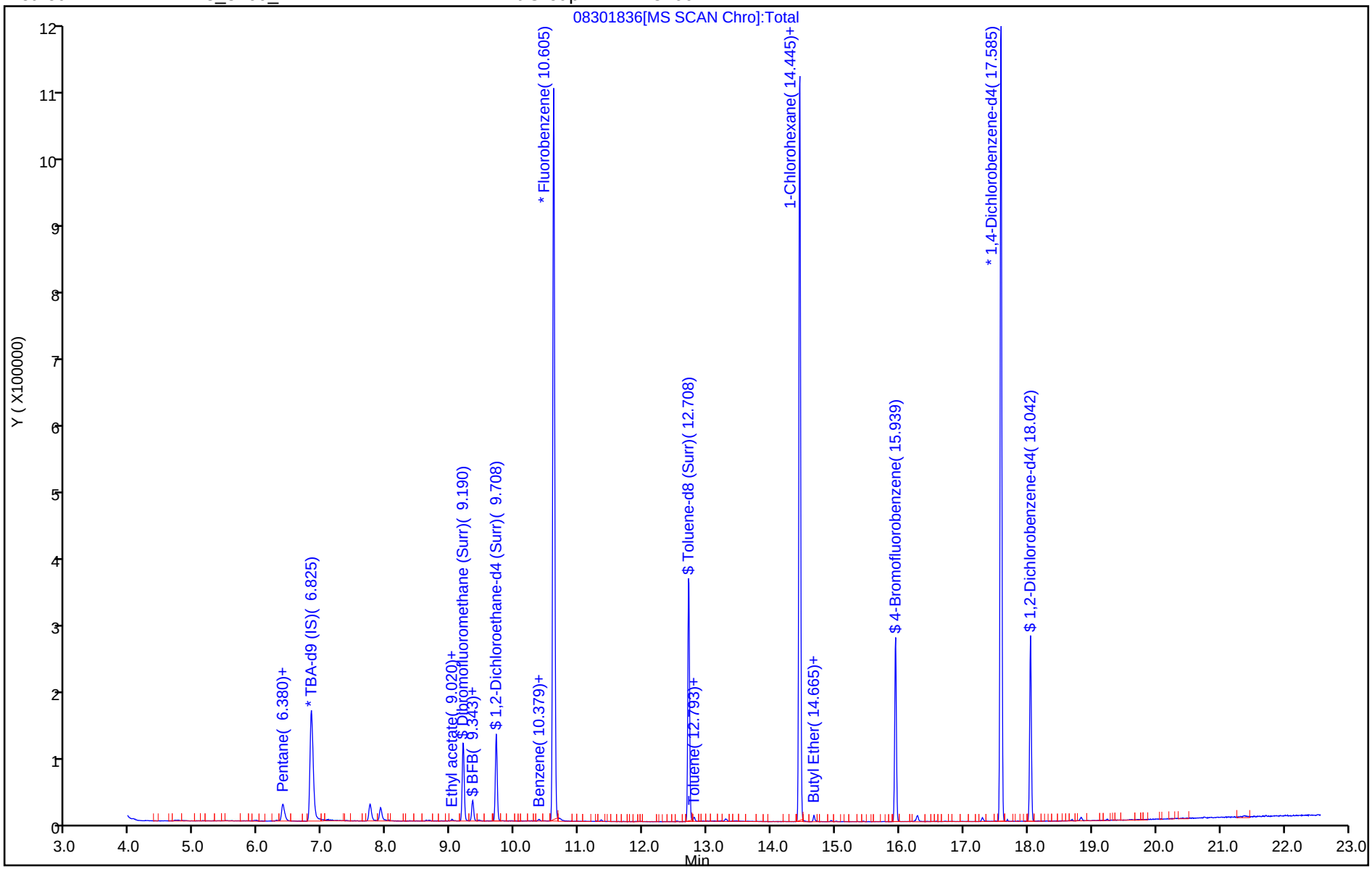
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 09:33:04 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301836.D				
Injection Date:	31-Aug-2018 00:50:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88264-A-3-A	Lab Sample ID:	720-88264-3	Worklist Smp#:	15
Client ID:	DUP-30				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301836.D
Lims ID: 720-88264-A-3-A
Client ID: DUP-30
Sample Type: Client
Inject. Date: 31-Aug-2018 00:50:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88264-A-3
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 31-Aug-2018 09:32:42 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 09:33:04

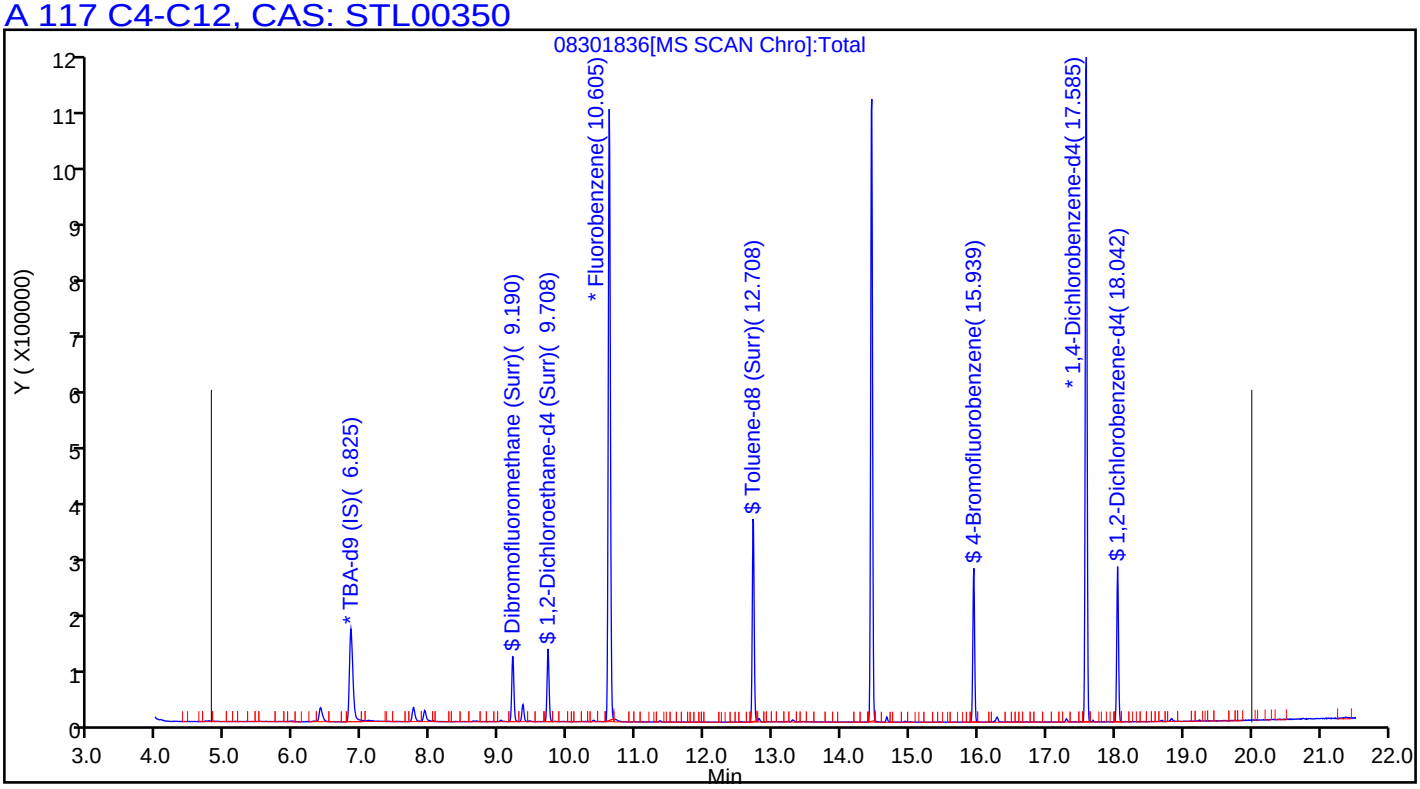
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.73	103.02
$ 10 Toluene-d8 (Surr)	7.50	7.06	94.17
$ 11 4-Bromofluorobenzene	7.50	7.23	96.43
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00
$ 6 BFB	0.0	0	0.00

Report Date: 31-Aug-2018 09:33:05 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301836.D				
Injection Date:	31-Aug-2018 00:50:30	Instrument ID:	HP13		
Lims ID:	720-88264-A-3-A	Lab Sample ID:	720-88264-3		
Client ID:	DUP-30				
Operator ID:	VOA	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88264-1
SDG No.:
Client Sample ID: DUP-31
Lab Sample ID: 720-88264-4
Matrix: Solid
Lab File ID: 08301837.D
Analysis Method: 8260B
Date Collected: 08/27/2018 00:00
Sample wt/vol: 6.496(g)
Date Analyzed: 08/31/2018 01:21
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250626
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		3.8	0.92
67-64-1	Acetone	30	J	38	29
71-43-2	Benzene	ND		3.8	0.50
75-27-4	Dichlorobromomethane	ND		3.8	0.55
108-86-1	Bromobenzene	ND		3.8	0.61
74-97-5	Chlorobromomethane	ND		15	0.55
75-25-2	Bromoform	ND		3.8	1.5
74-83-9	Bromomethane	ND		7.7	0.61
78-93-3	2-Butanone (MEK)	ND		38	16
104-51-8	n-Butylbenzene	ND		3.8	0.77
135-98-8	sec-Butylbenzene	ND		3.8	0.55
98-06-6	tert-Butylbenzene	ND		3.8	0.56
75-15-0	Carbon disulfide	ND		3.8	1.5
56-23-5	Carbon tetrachloride	ND		3.8	0.48
108-90-7	Chlorobenzene	ND		3.8	0.53
75-00-3	Chloroethane	ND		7.7	0.43
67-66-3	Chloroform	ND		3.8	0.51
74-87-3	Chloromethane	ND		7.7	0.61
95-49-8	2-Chlorotoluene	ND		3.8	0.50
106-43-4	4-Chlorotoluene	ND		3.8	0.52
124-48-1	Chlorodibromomethane	ND		3.8	0.55
95-50-1	1,2-Dichlorobenzene	ND		3.8	0.52
541-73-1	1,3-Dichlorobenzene	ND		3.8	0.55
106-46-7	1,4-Dichlorobenzene	ND		3.8	0.55
142-28-9	1,3-Dichloropropane	ND		3.8	0.56
563-58-6	1,1-Dichloropropene	ND		3.8	0.53
96-12-8	1,2-Dibromo-3-Chloropropane	ND		7.7	1.3
106-93-4	Ethylene Dibromide	ND		3.8	1.1
74-95-3	Dibromomethane	ND		7.7	0.66
75-71-8	Dichlorodifluoromethane	ND		7.7	0.61
75-34-3	1,1-Dichloroethane	ND		3.8	0.52
107-06-2	1,2-Dichloroethane	ND		3.8	0.58
75-35-4	1,1-Dichloroethene	ND	*	3.8	0.48
156-59-2	cis-1,2-Dichloroethene	ND		3.8	0.52
156-60-5	trans-1,2-Dichloroethene	ND		3.8	0.58
78-87-5	1,2-Dichloropropane	ND		3.8	0.48

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88264-1
SDG No.:
Client Sample ID: DUP-31
Lab Sample ID: 720-88264-4
Matrix: Solid
Lab File ID: 08301837.D
Analysis Method: 8260B
Date Collected: 08/27/2018 00:00
Sample wt/vol: 6.496(g)
Date Analyzed: 08/31/2018 01:21
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250626
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		3.8	0.53
10061-02-6	trans-1,3-Dichloropropene	ND		3.8	0.52
100-41-4	Ethylbenzene	ND		3.8	0.58
87-68-3	Hexachlorobutadiene	ND		3.8	0.69
591-78-6	2-Hexanone	ND		38	7.7
98-82-8	Isopropylbenzene	ND		3.8	0.52
99-87-6	4-Isopropyltoluene	ND		3.8	1.9
75-09-2	Methylene Chloride	ND		7.7	4.3
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		38	7.7
91-20-3	Naphthalene	ND		7.7	1.2
103-65-1	N-Propylbenzene	ND		3.8	0.51
100-42-5	Styrene	ND		3.8	0.48
630-20-6	1,1,1,2-Tetrachloroethane	ND		3.8	0.58
79-34-5	1,1,2,2-Tetrachloroethane	ND		3.8	0.58
127-18-4	Tetrachloroethene	ND		3.8	0.52
108-88-3	Toluene	ND		3.8	0.55
87-61-6	1,2,3-Trichlorobenzene	ND		3.8	0.57
120-82-1	1,2,4-Trichlorobenzene	ND		3.8	0.55
71-55-6	1,1,1-Trichloroethane	ND		3.8	0.47
79-00-5	1,1,2-Trichloroethane	ND		3.8	0.54
79-01-6	Trichloroethene	ND		3.8	0.48
75-69-4	Trichlorofluoromethane	ND		3.8	0.43
96-18-4	1,2,3-Trichloropropane	ND		3.8	0.59
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.8	1.6
95-63-6	1,2,4-Trimethylbenzene	ND		3.8	1.3
108-67-8	1,3,5-Trimethylbenzene	ND		3.8	0.50
108-05-4	Vinyl acetate	ND		15	3.8
75-01-4	Vinyl chloride	ND		3.8	0.56
1330-20-7	Xylenes, Total	ND		3.8	0.94
594-20-7	2,2-Dichloropropane	ND		3.8	1.5
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		190	77

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88264-1

SDG No.:

Client Sample ID: DUP-31 Lab Sample ID: 720-88264-4

Matrix: Solid Lab File ID: 08301837.D

Analysis Method: 8260B Date Collected: 08/27/2018 00:00

Sample wt/vol: 6.496(g) Date Analyzed: 08/31/2018 01:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250626 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	91		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	110		60-140
2037-26-5	Toluene-d8 (Surr)	90		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301837.D				
Lims ID:	720-88264-A-4-A				
Client ID:	DUP-31				
Sample Type:	Client				
Inject. Date:	31-Aug-2018 01:21:30	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Sample Info:	88264-A-4				
Misc. Info.:	HP13				
Operator ID:	VOA	Instrument ID:	HP13		
Method:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\HP13_8260_LL.m				
Limit Group:	8260B				
Last Update:	31-Aug-2018 09:32:42	Calib Date:	25-Aug-2018 20:24:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK005				
First Level Reviewer: medinaj		Date:	31-Aug-2018 09:33:15		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.831	6.813	0.018	0	310316	250.0	
* 2 Fluorobenzene	96	10.605	10.598	0.007	98	793107	25.0	
* 4 Chlorobenzene-d5	117	14.445	14.439	0.006	87	568755	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.579	0.000	95	245984	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.196	9.184	0.012	94	68907	7.74	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.709	9.702	0.007	0	92262	8.27	
$ 10 Toluene-d8 (Surr)	98	12.708	12.702	0.006	94	216352	6.75	
$ 11 4-Bromofluorobenzene	95	15.933	15.939	0.000	94	75133	6.79	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.048	0.000	84	57900	6.08	
$ 6 BFB	95	9.343	6.446	2.897	0	217	NR	
28 Acetone	58	6.380	6.361	0.019	99	18203	19.6	
32 2-Methyl-2-propanol	59	6.923	6.922	0.007	97	6076	4.72	
144 Methyl acetate	43	7.136	7.117	0.019	97	2011	0.2967	
39 Methyl tert-butyl ether	73	8.008	7.989	0.019	1	311	0.0123	
52 Tert-butyl ethyl ether	59	9.111	9.099	0.012	93	1702	0.0553	
150 t-Amyl alcohol	59	9.568	9.564	0.012	1	188	0.1772	
59 Benzene	78	10.379	10.367	0.012	86	1076	0.0319	
75 Toluene	92	12.793	12.792	0.006	97	1908	0.1021	
149 1-Chlorohexane	55	14.439	14.354	0.085	33	6279	0.6207	
128 Butyl Ether	87	14.665	14.665	0.006	93	290	0.0512	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	886103	12.2	
A 154 C6-C8	1	10.855	(8.556-13.153)		0	193017	2.65	
A 155 C6-C9	1	11.845	(8.556-15.134)		0	268372	3.69	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	968380	13.3	
A 119 C6-C10	1	12.735	(8.556-16.914)		0	329346	4.53	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	904532	12.4	
A 120 C6-C12	1	14.281	(8.556-20.005)		0	411623	5.66	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	138853	1.91	
A 121 C7-C12	1	15.448	(10.891-20.005)		0	271408	3.73	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

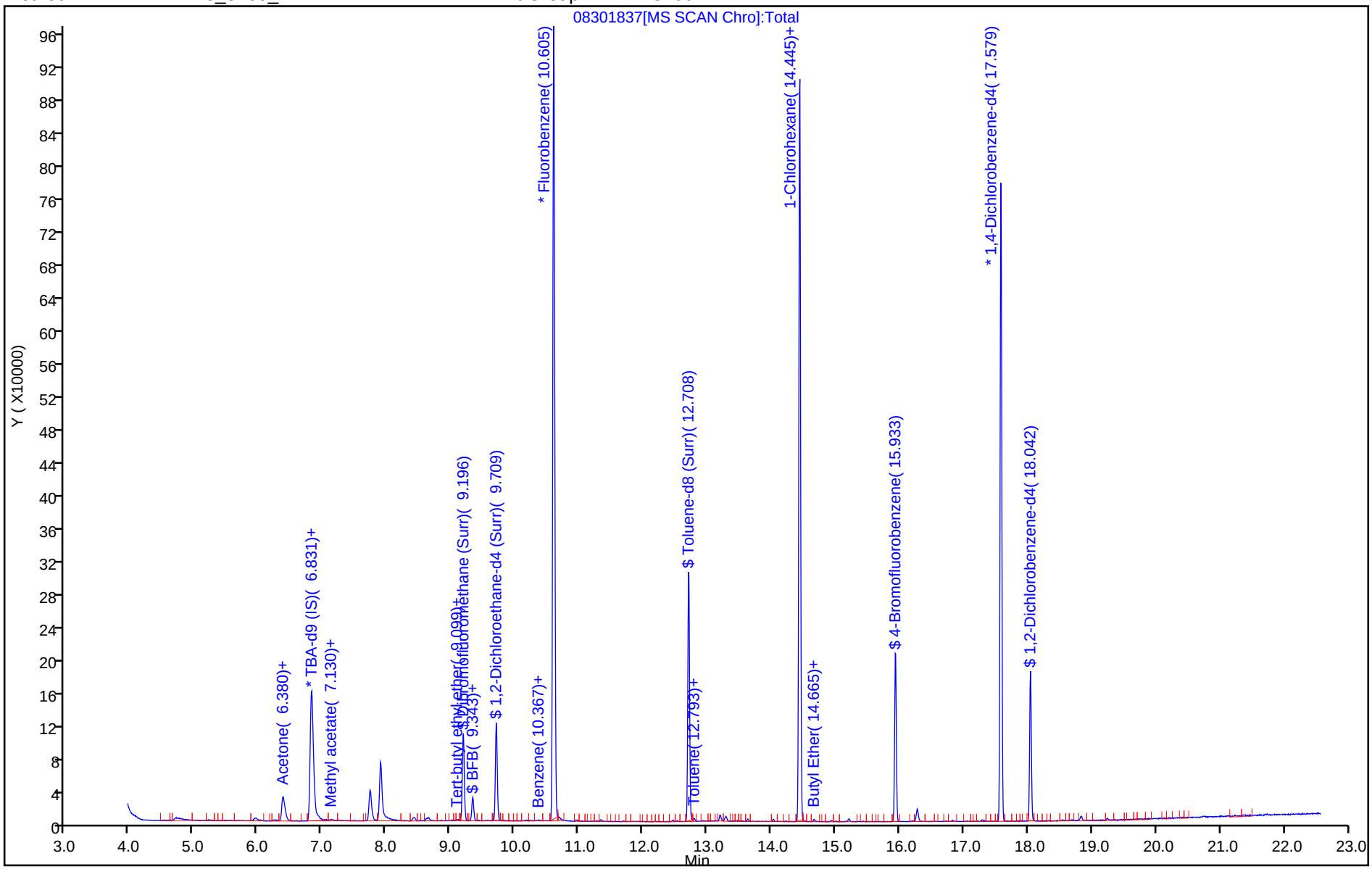
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 09:33:16 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301837.D				
Injection Date:	31-Aug-2018 01:21:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88264-A-4-A	Lab Sample ID:	720-88264-4	Worklist Smp#:	16
Client ID:	DUP-31				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301837.D
Lims ID: 720-88264-A-4-A
Client ID: DUP-31
Sample Type: Client
Inject. Date: 31-Aug-2018 01:21:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88264-A-4
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 31-Aug-2018 09:32:42 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 09:33:15

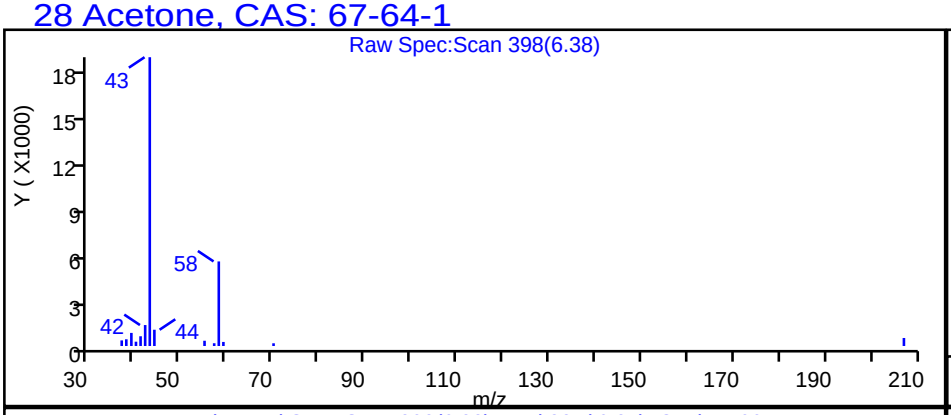
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.27	110.31
$ 10 Toluene-d8 (Surr)	7.50	6.75	89.93
$ 11 4-Bromofluorobenzene	7.50	6.79	90.57
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00
$ 6 BFB	0.0	0	0.00

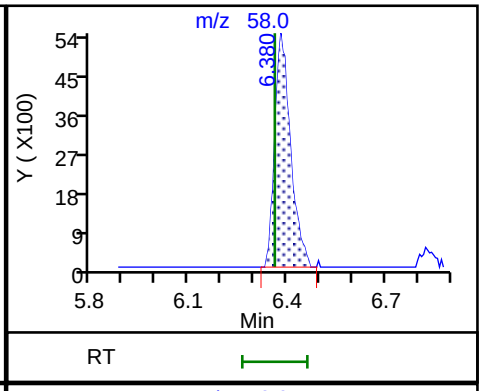
Report Date: 31-Aug-2018 09:33:16 Chrom Revision: 2.3 19-Jul-2018 15:14:50

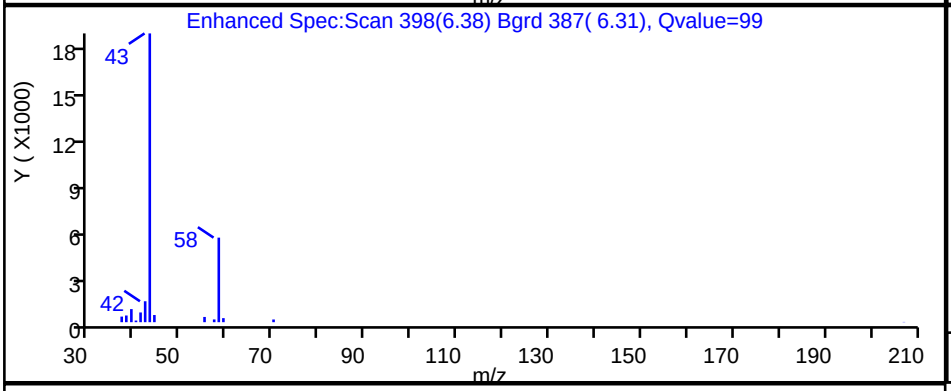
TestAmerica Pleasanton

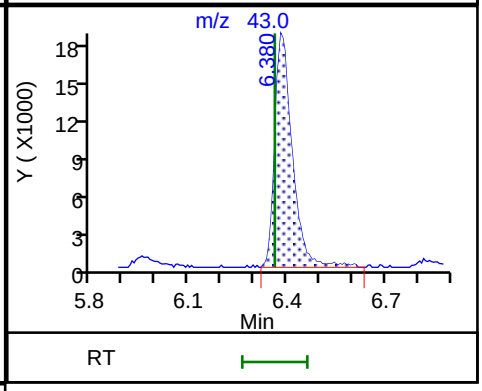
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301837.D				
Injection Date:	31-Aug-2018 01:21:30	Instrument ID:	HP13		
Lims ID:	720-88264-A-4-A	Lab Sample ID:	720-88264-4		
Client ID:	DUP-31				
Operator ID:	VOA	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

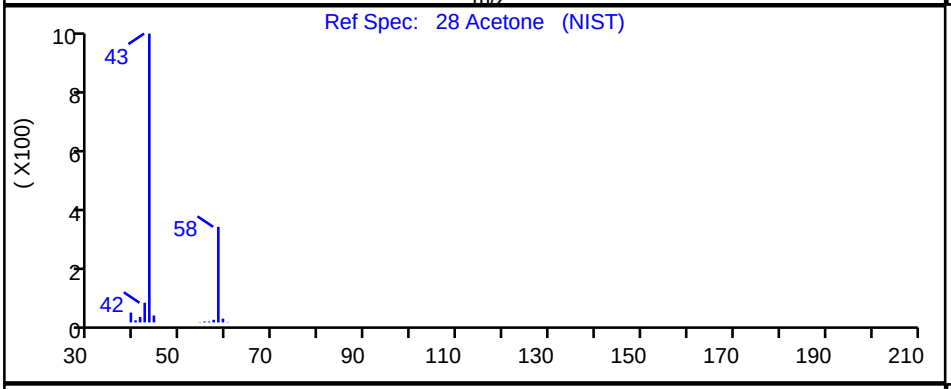
28 Acetone, CAS: 67-64-1

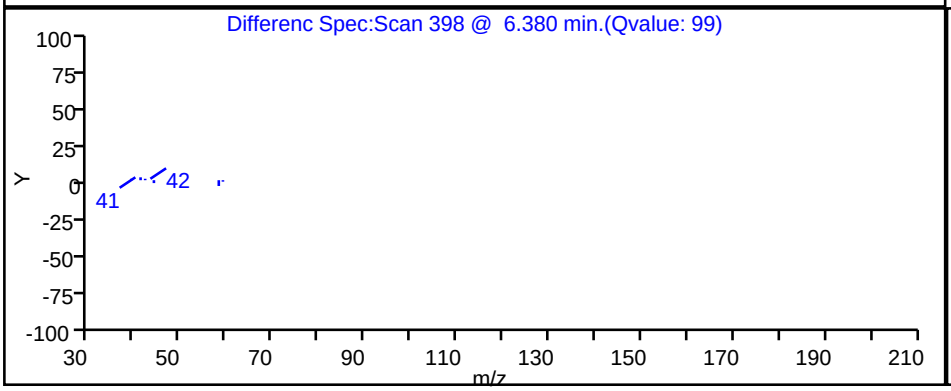


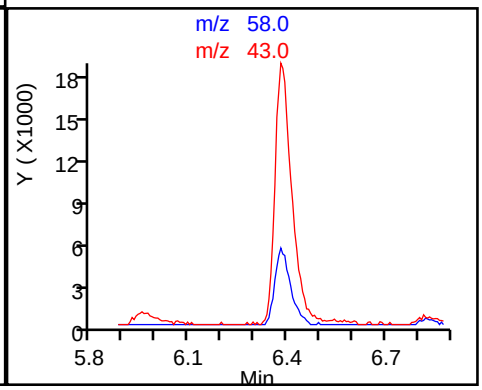










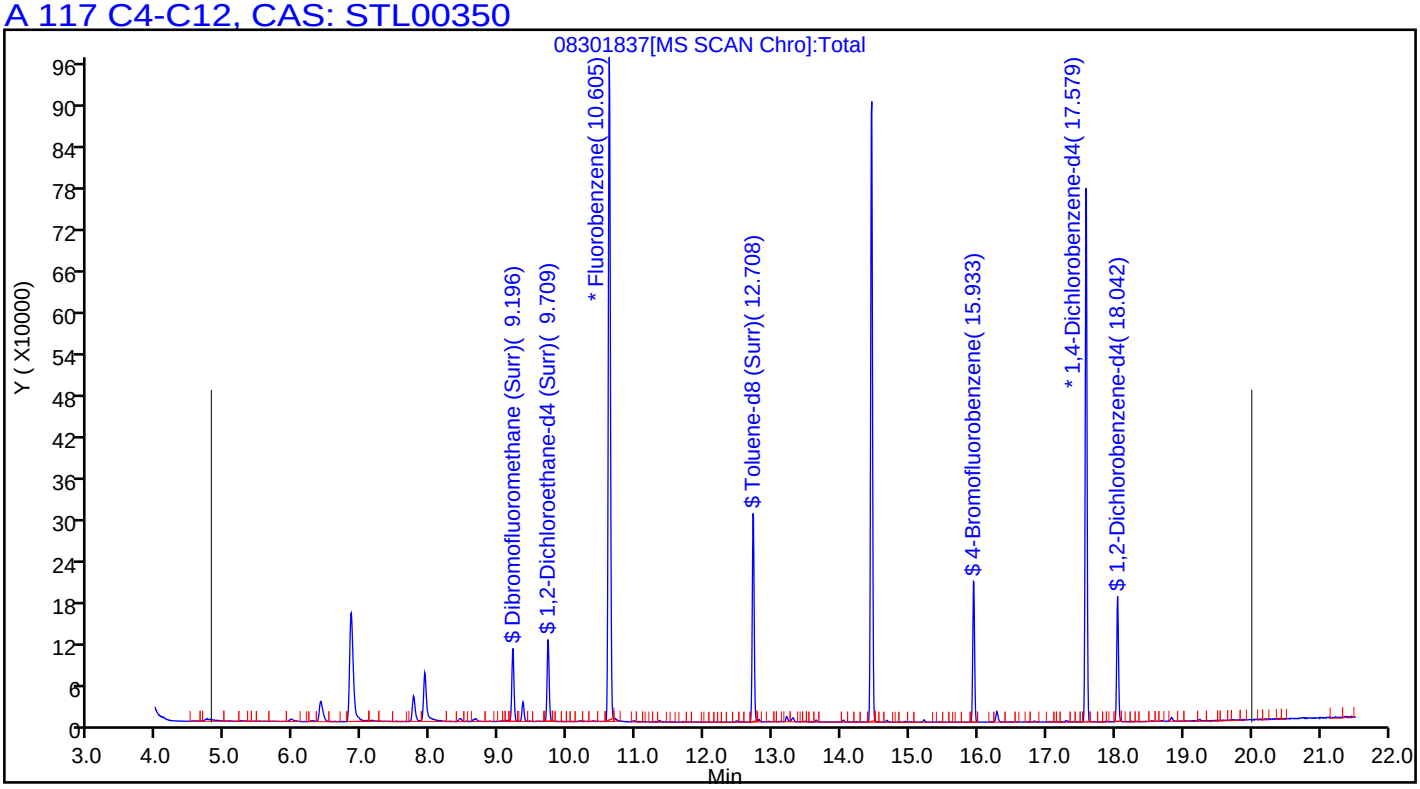


Report Date: 31-Aug-2018 09:33:16 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301837.D				
Injection Date:	31-Aug-2018 01:21:30	Instrument ID:	HP13		
Lims ID:	720-88264-A-4-A	Lab Sample ID:	720-88264-4		
Client ID:	DUP-31				
Operator ID:	VOA	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88264-1
SDG No.:
Client Sample ID: DUP-32
Lab Sample ID: 720-88264-5
Matrix: Solid
Lab File ID: 08301832.D
Analysis Method: 8260B
Date Collected: 08/27/2018 00:00
Sample wt/vol: 6.178(g)
Date Analyzed: 08/30/2018 22:32
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250625
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.0	0.97
67-64-1	Acetone	45		40	31
71-43-2	Benzene	ND		4.0	0.53
75-27-4	Dichlorobromomethane	ND		4.0	0.58
108-86-1	Bromobenzene	ND		4.0	0.64
74-97-5	Chlorobromomethane	ND		16	0.58
75-25-2	Bromoform	ND		4.0	1.6
74-83-9	Bromomethane	ND		8.1	0.64
78-93-3	2-Butanone (MEK)	ND		40	17
104-51-8	n-Butylbenzene	ND		4.0	0.81
135-98-8	sec-Butylbenzene	ND		4.0	0.58
98-06-6	tert-Butylbenzene	ND		4.0	0.59
75-15-0	Carbon disulfide	ND		4.0	1.6
56-23-5	Carbon tetrachloride	ND		4.0	0.50
108-90-7	Chlorobenzene	ND		4.0	0.56
75-00-3	Chloroethane	ND		8.1	0.45
67-66-3	Chloroform	ND		4.0	0.53
74-87-3	Chloromethane	ND		8.1	0.64
95-49-8	2-Chlorotoluene	ND		4.0	0.53
106-43-4	4-Chlorotoluene	ND		4.0	0.55
124-48-1	Chlorodibromomethane	ND		4.0	0.57
95-50-1	1,2-Dichlorobenzene	ND		4.0	0.55
541-73-1	1,3-Dichlorobenzene	ND		4.0	0.58
106-46-7	1,4-Dichlorobenzene	ND		4.0	0.57
142-28-9	1,3-Dichloropropane	ND		4.0	0.59
563-58-6	1,1-Dichloropropene	ND		4.0	0.56
96-12-8	1,2-Dibromo-3-Chloropropane	ND		8.1	1.4
106-93-4	Ethylene Dibromide	ND		4.0	1.2
74-95-3	Dibromomethane	ND		8.1	0.70
75-71-8	Dichlorodifluoromethane	ND		8.1	0.64
75-34-3	1,1-Dichloroethane	ND		4.0	0.55
107-06-2	1,2-Dichloroethane	ND		4.0	0.62
75-35-4	1,1-Dichloroethene	ND	*	4.0	0.50
156-59-2	cis-1,2-Dichloroethene	ND		4.0	0.55
156-60-5	trans-1,2-Dichloroethene	ND		4.0	0.61
78-87-5	1,2-Dichloropropane	ND		4.0	0.51

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88264-1

SDG No.:

Client Sample ID: DUP-32 Lab Sample ID: 720-88264-5

Matrix: Solid Lab File ID: 08301832.D

Analysis Method: 8260B Date Collected: 08/27/2018 00:00

Sample wt/vol: 6.178(g) Date Analyzed: 08/30/2018 22:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250625 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.0	0.56
10061-02-6	trans-1,3-Dichloropropene	ND		4.0	0.54
100-41-4	Ethylbenzene	ND		4.0	0.61
87-68-3	Hexachlorobutadiene	ND		4.0	0.73
591-78-6	2-Hexanone	ND		40	8.1
98-82-8	Isopropylbenzene	ND		4.0	0.55
99-87-6	4-Isopropyltoluene	ND		4.0	2.0
75-09-2	Methylene Chloride	ND		8.1	4.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		40	8.1
91-20-3	Naphthalene	ND		8.1	1.2
103-65-1	N-Propylbenzene	ND		4.0	0.53
100-42-5	Styrene	ND		4.0	0.51
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.0	0.62
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.0	0.61
127-18-4	Tetrachloroethene	ND		4.0	0.54
108-88-3	Toluene	ND		4.0	0.57
87-61-6	1,2,3-Trichlorobenzene	ND		4.0	0.60
120-82-1	1,2,4-Trichlorobenzene	ND		4.0	0.57
71-55-6	1,1,1-Trichloroethane	ND		4.0	0.49
79-00-5	1,1,2-Trichloroethane	ND		4.0	0.57
79-01-6	Trichloroethene	ND		4.0	0.51
75-69-4	Trichlorofluoromethane	ND		4.0	0.45
96-18-4	1,2,3-Trichloropropane	ND		4.0	0.62
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.0	1.7
95-63-6	1,2,4-Trimethylbenzene	ND		4.0	1.3
108-67-8	1,3,5-Trimethylbenzene	ND		4.0	0.53
108-05-4	Vinyl acetate	ND		16	4.0
75-01-4	Vinyl chloride	ND		4.0	0.59
1330-20-7	Xylenes, Total	ND		4.0	0.99
594-20-7	2,2-Dichloropropane	ND		4.0	1.6
STL00350	Gasoline Range Organics (GRO)-C4-C12	120	J	200	81

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88264-1

SDG No.:

Client Sample ID: DUP-32 Lab Sample ID: 720-88264-5

Matrix: Solid Lab File ID: 08301832.D

Analysis Method: 8260B Date Collected: 08/27/2018 00:00

Sample wt/vol: 6.178(g) Date Analyzed: 08/30/2018 22:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250625 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	93		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	110		60-140
2037-26-5	Toluene-d8 (Surr)	96		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301832.D
Lims ID: 720-88264-A-5-A
Client ID: DUP-32
Sample Type: Client
Inject. Date: 30-Aug-2018 22:32:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88264-A-5 1 VOA
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:32:23 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 08:32:23

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	223699	250.0	
* 2 Fluorobenzene	96	10.709	10.709	0.000	98	1169035	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.554	0.010	85	983373	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	475993	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.305	9.303	0.011	92	76698	7.75	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.821	0.010	0	87908	8.26	
$ 10 Toluene-d8 (Surr)	98	12.822	12.834	0.000	94	333291	7.18	
$ 11 4-Bromofluorobenzene	95	16.053	16.065	0.000	92	106972	6.99	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	83	98559	5.92	
28 Acetone	58	6.474	6.481	0.000	97	24739	27.5	
105 4-Isopropyltoluene	119	17.764	17.764	0.000	96	14350	0.2030	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	1203261	13.3	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	147822	1.64	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	166153	1.84	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	6729818	74.6	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	831808	NC	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	831808	9.22	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	6705813	74.3	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	6358365	70.5	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	704947	7.81	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	6242067	69.2	

QC Flag Legend

Processing Flags
NC - Not Calibrated

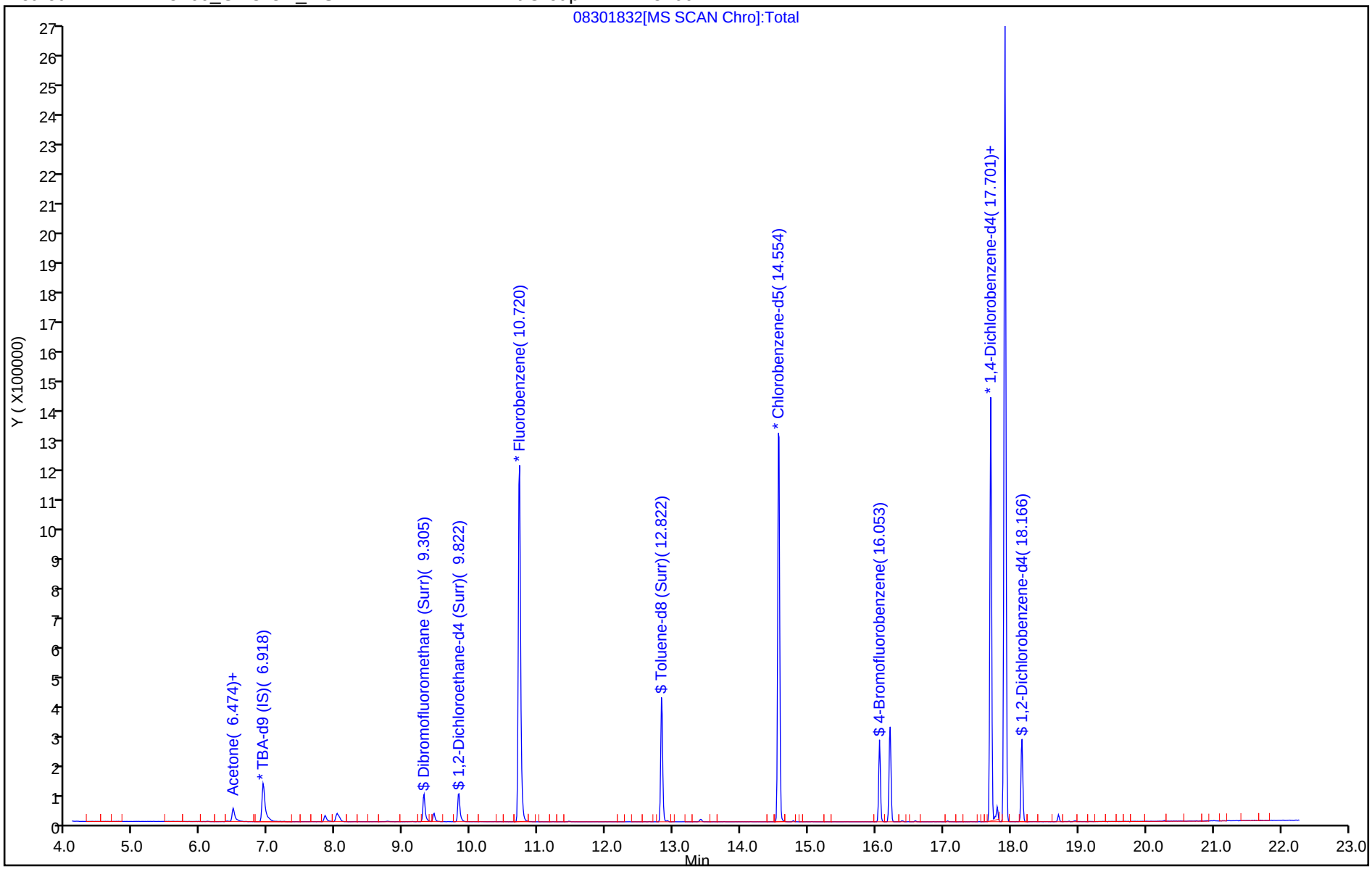
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 08:32:24 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301832.D				
Injection Date:	30-Aug-2018 22:32:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88264-A-5-A	Lab Sample ID:	720-88264-5	Worklist Smp#:	10
Client ID:	DUP-32				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301832.D
Lims ID: 720-88264-A-5-A
Client ID: DUP-32
Sample Type: Client
Inject. Date: 30-Aug-2018 22:32:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88264-A-5 1 VOA
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:32:23 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 08:32:23

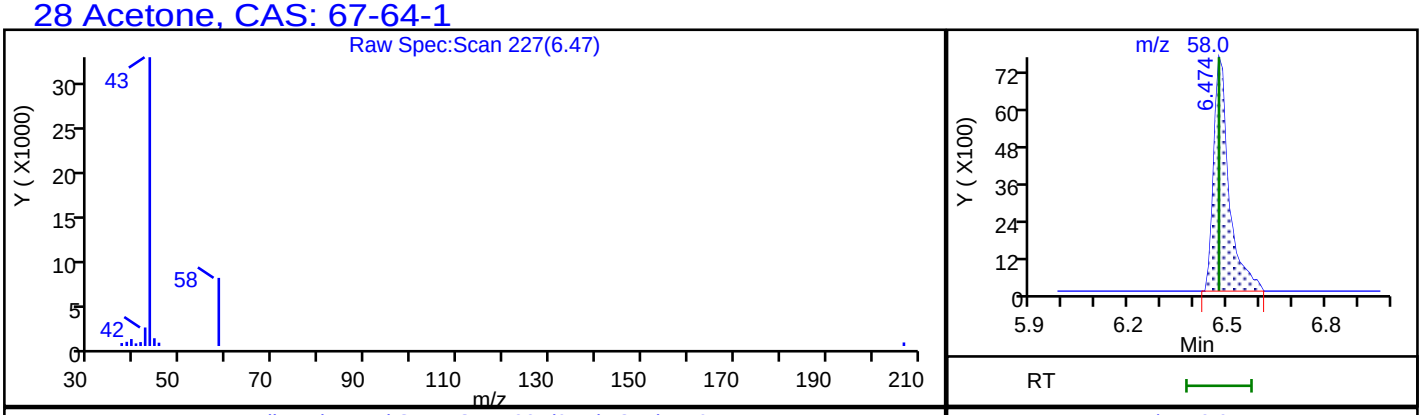
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.26	110.18
$ 10 Toluene-d8 (Surr)	7.50	7.18	95.74
$ 11 4-Bromofluorobenzene	7.50	6.99	93.14
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

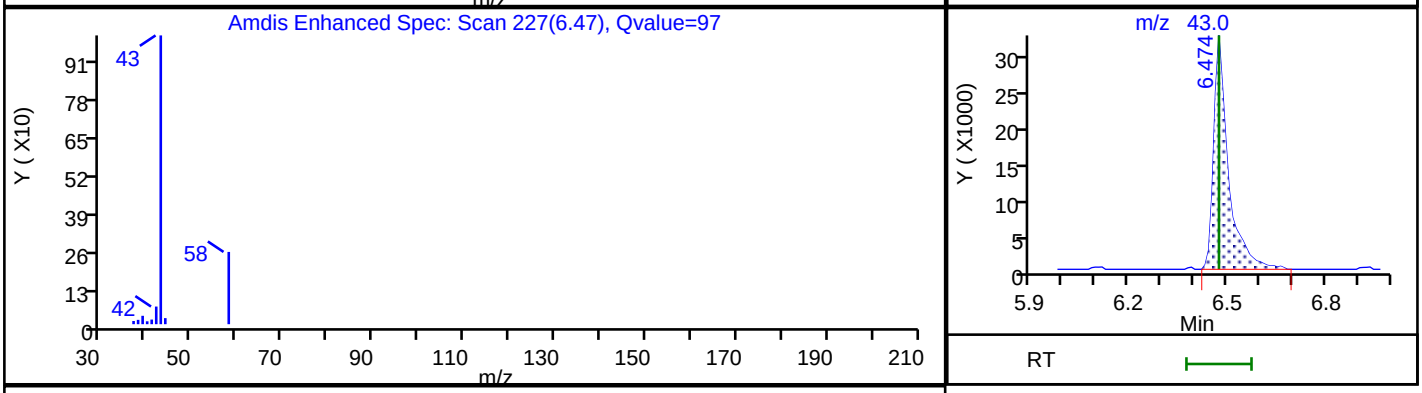
Report Date: 31-Aug-2018 08:32:24 Chrom Revision: 2.3 19-Jul-2018 15:14:50

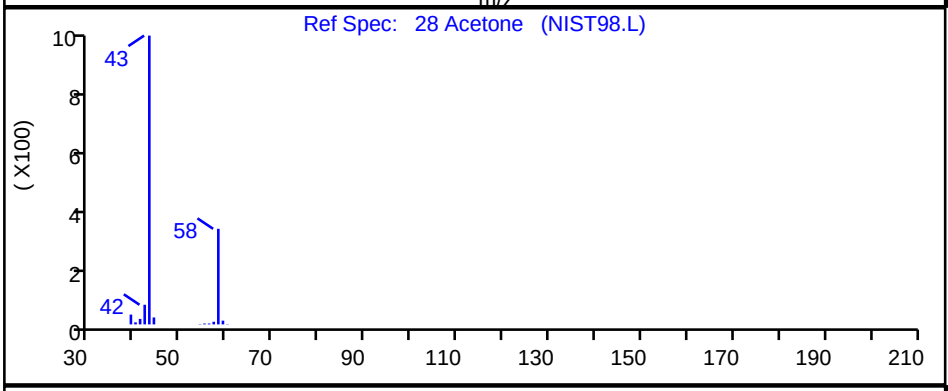
TestAmerica Pleasanton

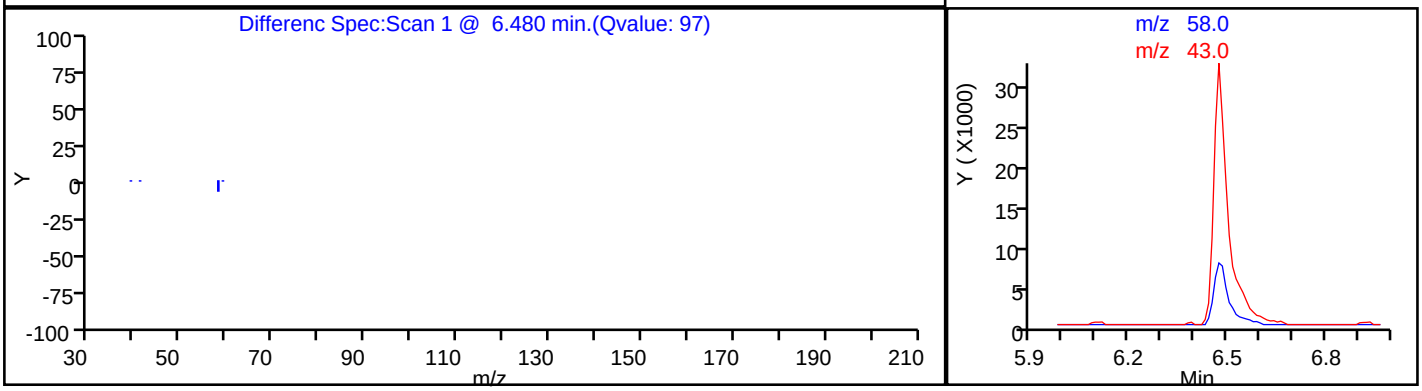
Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301832.D				
Injection Date:	30-Aug-2018 22:32:30	Instrument ID:	CHMSV2		
Lims ID:	720-88264-A-5-A	Lab Sample ID:	720-88264-5		
Client ID:	DUP-32				
Operator ID:	VOA	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1







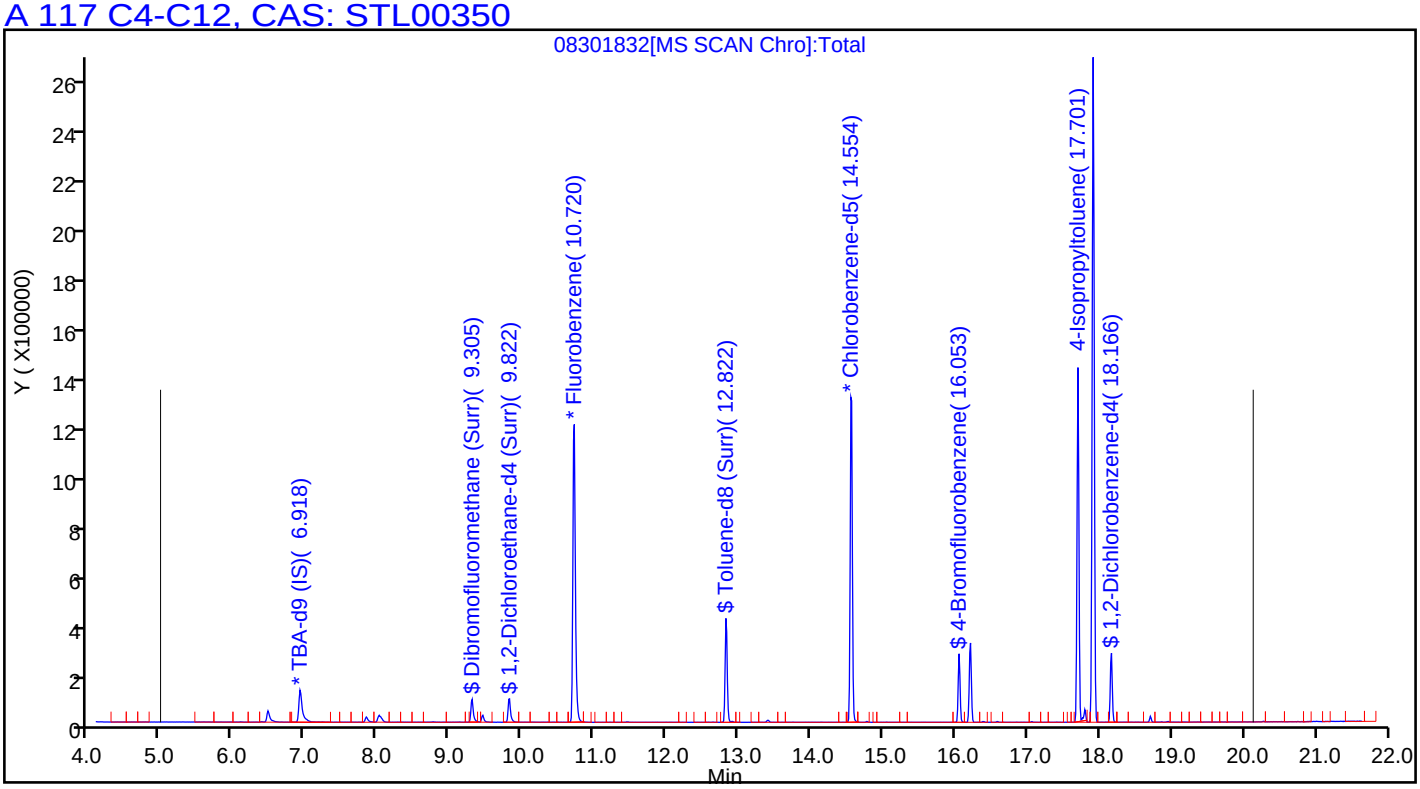


Report Date: 31-Aug-2018 08:32:25 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301832.D				
Injection Date:	30-Aug-2018 22:32:30	Instrument ID:	CHMSV2		
Lims ID:	720-88264-A-5-A	Lab Sample ID:	720-88264-5		
Client ID:	DUP-32				
Operator ID:	VOA	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88264-1
SDG No.:
Client Sample ID: DG-G11S-0.5-1
Lab Sample ID: 720-88264-6
Matrix: Solid
Lab File ID: 08301838.D
Analysis Method: 8260B
Date Collected: 08/27/2018 12:25
Sample wt/vol: 5.291(g)
Date Analyzed: 08/31/2018 01:53
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250626
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.7	1.1
67-64-1	Acetone	ND		47	36
71-43-2	Benzene	ND		4.7	0.61
75-27-4	Dichlorobromomethane	ND		4.7	0.68
108-86-1	Bromobenzene	ND		4.7	0.75
74-97-5	Chlorobromomethane	ND		19	0.68
75-25-2	Bromoform	ND		4.7	1.9
74-83-9	Bromomethane	ND		9.5	0.75
78-93-3	2-Butanone (MEK)	ND		47	20
104-51-8	n-Butylbenzene	ND		4.7	0.95
135-98-8	sec-Butylbenzene	ND		4.7	0.68
98-06-6	tert-Butylbenzene	ND		4.7	0.69
75-15-0	Carbon disulfide	ND		4.7	1.9
56-23-5	Carbon tetrachloride	ND		4.7	0.59
108-90-7	Chlorobenzene	ND		4.7	0.65
75-00-3	Chloroethane	ND		9.5	0.53
67-66-3	Chloroform	ND		4.7	0.62
74-87-3	Chloromethane	ND		9.5	0.75
95-49-8	2-Chlorotoluene	ND		4.7	0.61
106-43-4	4-Chlorotoluene	ND		4.7	0.64
124-48-1	Chlorodibromomethane	ND		4.7	0.67
95-50-1	1,2-Dichlorobenzene	ND		4.7	0.64
541-73-1	1,3-Dichlorobenzene	ND		4.7	0.68
106-46-7	1,4-Dichlorobenzene	ND		4.7	0.67
142-28-9	1,3-Dichloropropane	ND		4.7	0.69
563-58-6	1,1-Dichloropropene	ND		4.7	0.65
96-12-8	1,2-Dibromo-3-Chloropropane	ND		9.5	1.6
106-93-4	Ethylene Dibromide	ND		4.7	1.4
74-95-3	Dibromomethane	ND		9.5	0.81
75-71-8	Dichlorodifluoromethane	ND		9.5	0.75
75-34-3	1,1-Dichloroethane	ND		4.7	0.64
107-06-2	1,2-Dichloroethane	ND		4.7	0.72
75-35-4	1,1-Dichloroethene	ND	*	4.7	0.59
156-59-2	cis-1,2-Dichloroethene	ND		4.7	0.64
156-60-5	trans-1,2-Dichloroethene	ND		4.7	0.71
78-87-5	1,2-Dichloropropane	ND		4.7	0.60

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88264-1

SDG No.:

Client Sample ID: DG-G11S-0.5-1 Lab Sample ID: 720-88264-6

Matrix: Solid Lab File ID: 08301838.D

Analysis Method: 8260B Date Collected: 08/27/2018 12:25

Sample wt/vol: 5.291(g) Date Analyzed: 08/31/2018 01:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250626 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.7	0.65
10061-02-6	trans-1,3-Dichloropropene	ND		4.7	0.63
100-41-4	Ethylbenzene	ND		4.7	0.71
87-68-3	Hexachlorobutadiene	ND		4.7	0.85
591-78-6	2-Hexanone	ND		47	9.5
98-82-8	Isopropylbenzene	ND		4.7	0.64
99-87-6	4-Isopropyltoluene	ND		4.7	2.4
75-09-2	Methylene Chloride	ND		9.5	5.3
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		47	9.5
91-20-3	Naphthalene	ND		9.5	1.4
103-65-1	N-Propylbenzene	ND		4.7	0.62
100-42-5	Styrene	ND		4.7	0.60
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.7	0.72
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.7	0.71
127-18-4	Tetrachloroethene	ND		4.7	0.63
108-88-3	Toluene	ND		4.7	0.67
87-61-6	1,2,3-Trichlorobenzene	ND		4.7	0.70
120-82-1	1,2,4-Trichlorobenzene	ND		4.7	0.67
71-55-6	1,1,1-Trichloroethane	ND		4.7	0.58
79-00-5	1,1,2-Trichloroethane	ND		4.7	0.66
79-01-6	Trichloroethene	ND		4.7	0.60
75-69-4	Trichlorofluoromethane	ND		4.7	0.53
96-18-4	1,2,3-Trichloropropane	ND		4.7	0.73
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.7	2.0
95-63-6	1,2,4-Trimethylbenzene	ND		4.7	1.5
108-67-8	1,3,5-Trimethylbenzene	ND		4.7	0.61
108-05-4	Vinyl acetate	ND		19	4.7
75-01-4	Vinyl chloride	ND		4.7	0.69
1330-20-7	Xylenes, Total	ND		4.7	1.2
594-20-7	2,2-Dichloropropane	ND		4.7	1.9
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		240	95

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88264-1

SDG No.:

Client Sample ID: DG-G11S-0.5-1 Lab Sample ID: 720-88264-6

Matrix: Solid Lab File ID: 08301838.D

Analysis Method: 8260B Date Collected: 08/27/2018 12:25

Sample wt/vol: 5.291(g) Date Analyzed: 08/31/2018 01:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250626 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	86		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		60-140
2037-26-5	Toluene-d8 (Surr)	90		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301838.D
Lims ID: 720-88264-A-6-A
Client ID: DG-G115--0.5-1
Sample Type: Client
Inject. Date: 31-Aug-2018 01:53:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88264-A-6
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 31-Aug-2018 09:32:42 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 09:33:23

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.825	6.813	0.012	0	296717	250.0	
* 2 Fluorobenzene	96	10.605	10.598	0.007	98	800464	25.0	
* 4 Chlorobenzene-d5	117	14.445	14.439	0.006	87	544879	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.585	17.579	0.006	95	228212	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.190	9.184	0.006	94	67903	7.56	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.708	9.702	0.006	0	88175	7.83	
$ 10 Toluene-d8 (Surr)	98	12.714	12.702	0.012	94	218513	6.75	
$ 11 4-Bromofluorobenzene	95	15.939	15.939	0.006	95	68538	6.47	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.048	0.000	84	62178	7.04	
$ 6 BFB	95	9.336	6.446	2.890	0	139	NR	
28 Acetone	58	6.380	6.361	0.019	98	15079	16.1	
39 Methyl tert-butyl ether	73	7.995	7.989	0.006	1	114	0.004464	7
52 Tert-butyl ethyl ether	59	9.111	9.099	0.012	93	1662	0.0535	
46 Isobutyl alcohol	43	9.111	9.131	-0.012	31	241	0.3206	
59 Benzene	78	10.373	10.367	0.006	91	1847	0.0542	
75 Toluene	92	12.793	12.792	0.006	98	2034	0.1136	
149 1-Chlorohexane	55	14.439	14.354	0.085	33	6316	0.6186	
128 Butyl Ether	87	14.671	14.665	0.012	93	288	0.0531	
105 4-Isopropyltoluene	119	17.646	17.646	0.006	92	2156	0.0849	
29 Pentane	43	6.386	6.410	-0.024	69	56757	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	847064	11.5	
A 154 C6-C8	1	10.855	(8.556-13.153)		0	157254	2.14	
A 155 C6-C9	1	11.845	(8.556-15.134)		0	226280	3.08	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	1043272	14.2	
A 119 C6-C10	1	12.735	(8.556-16.914)		0	349958	4.77	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	1007634	13.7	
A 120 C6-C12	1	14.281	(8.556-20.005)		0	546166	7.44	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	195798	2.67	
A 121 C7-C12	1	15.448	(10.891-20.005)		0	438098	5.97	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

7 - Failed Limit of Detection

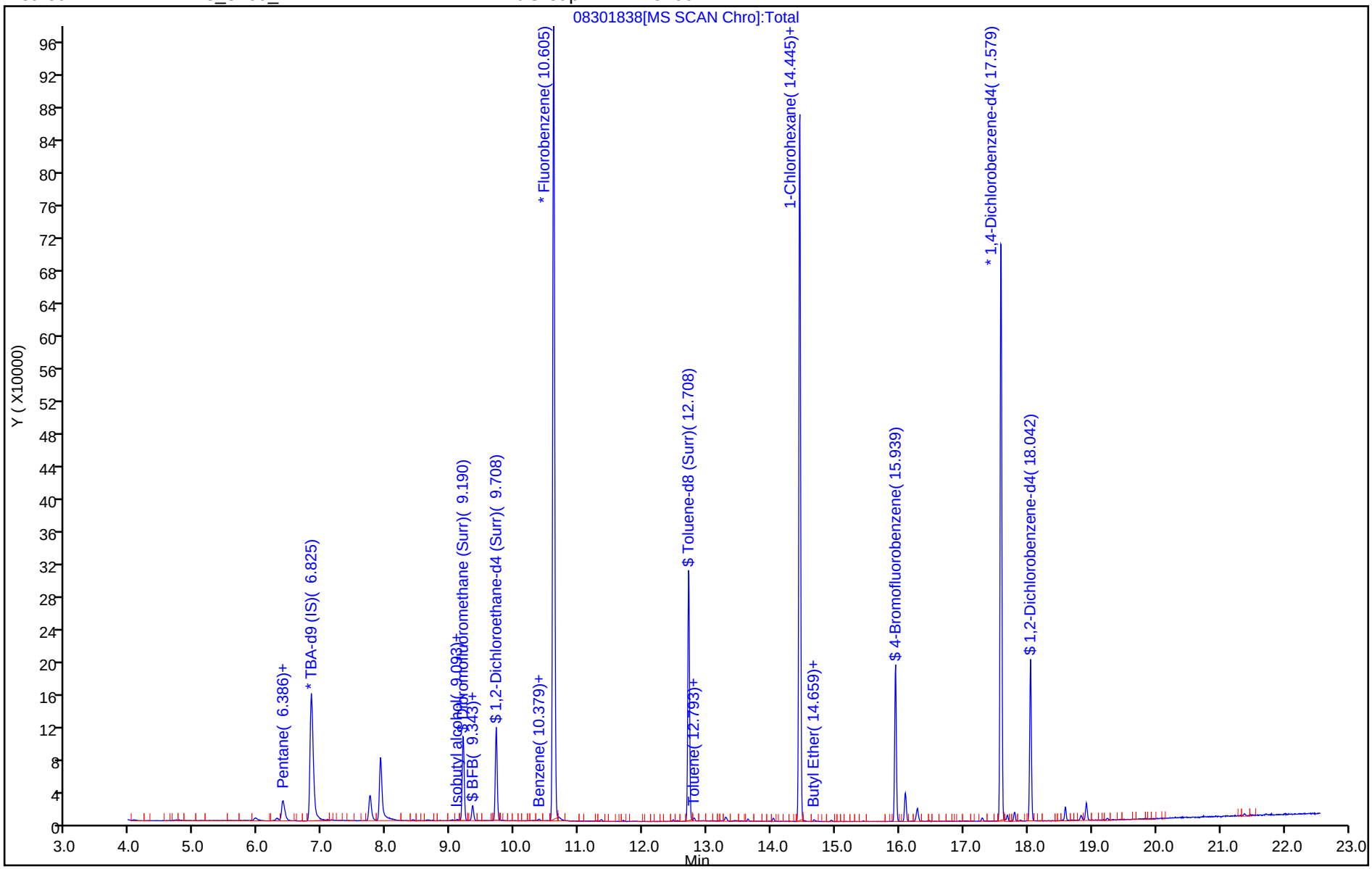
Reagents:

I_IS/SS_00092	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 31-Aug-2018 09:33:24 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301838.D				
Injection Date:	31-Aug-2018 01:53:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88264-A-6-A	Lab Sample ID:	720-88264-6	Worklist Smp#:	17
Client ID:	DG-G115--0.5-1				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301838.D
Lims ID: 720-88264-A-6-A
Client ID: DG-G115--0.5-1
Sample Type: Client
Inject. Date: 31-Aug-2018 01:53:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88264-A-6
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 31-Aug-2018 09:32:42 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 09:33:23

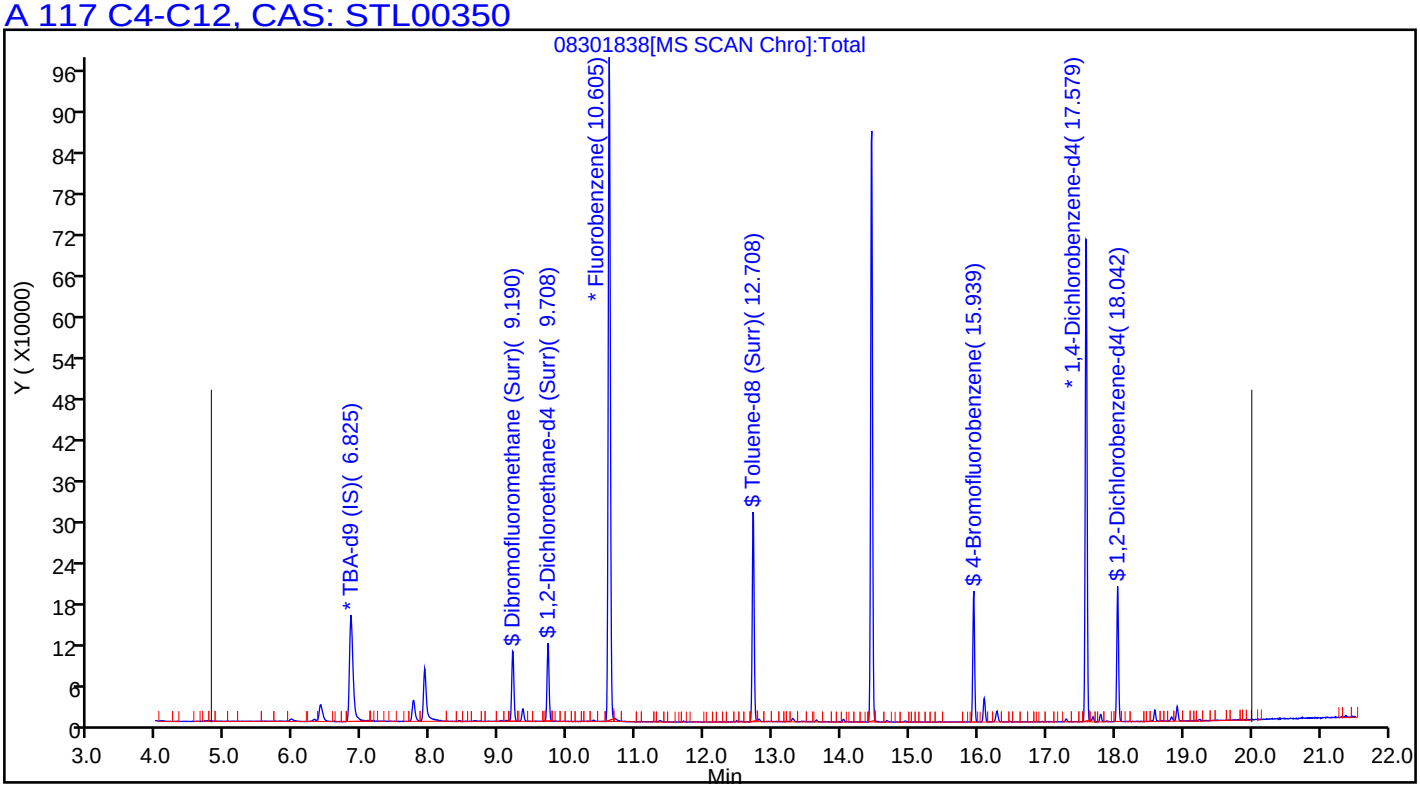
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.83	104.46
$ 10 Toluene-d8 (Surr)	7.50	6.75	90.00
$ 11 4-Bromofluorobenzene	7.50	6.47	86.24
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00
$ 6 BFB	0.0	0	0.00

Report Date: 31-Aug-2018 09:33:25 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301838.D				
Injection Date:	31-Aug-2018 01:53:30	Instrument ID:	HP13		
Lims ID:	720-88264-A-6-A	Lab Sample ID:	720-88264-6		
Client ID:	DG-G115--0.5-1				
Operator ID:	VOA	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton
Job No.: 720-88264-1
SDG No.:
Client Sample ID: DG-G11S-3.5-4
Lab Sample ID: 720-88264-7
Matrix: Solid
Lab File ID: 08301839.D
Analysis Method: 8260B
Date Collected: 08/27/2018 12:25
Sample wt/vol: 5.492(g)
Date Analyzed: 08/31/2018 02:25
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-VRX ID: 250(um)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 250626
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.6	1.1
67-64-1	Acetone	52		46	35
71-43-2	Benzene	ND		4.6	0.59
75-27-4	Dichlorobromomethane	ND		4.6	0.66
108-86-1	Bromobenzene	ND		4.6	0.72
74-97-5	Chlorobromomethane	ND		18	0.66
75-25-2	Bromoform	ND		4.6	1.8
74-83-9	Bromomethane	ND		9.1	0.72
78-93-3	2-Butanone (MEK)	ND		46	19
104-51-8	n-Butylbenzene	ND		4.6	0.91
135-98-8	sec-Butylbenzene	ND		4.6	0.66
98-06-6	tert-Butylbenzene	ND		4.6	0.66
75-15-0	Carbon disulfide	ND		4.6	1.8
56-23-5	Carbon tetrachloride	ND		4.6	0.56
108-90-7	Chlorobenzene	ND		4.6	0.63
75-00-3	Chloroethane	ND		9.1	0.51
67-66-3	Chloroform	ND		4.6	0.60
74-87-3	Chloromethane	ND		9.1	0.72
95-49-8	2-Chlorotoluene	ND		4.6	0.59
106-43-4	4-Chlorotoluene	ND		4.6	0.62
124-48-1	Chlorodibromomethane	ND		4.6	0.65
95-50-1	1,2-Dichlorobenzene	ND		4.6	0.62
541-73-1	1,3-Dichlorobenzene	ND		4.6	0.66
106-46-7	1,4-Dichlorobenzene	ND		4.6	0.65
142-28-9	1,3-Dichloropropane	ND		4.6	0.66
563-58-6	1,1-Dichloropropene	ND		4.6	0.63
96-12-8	1,2-Dibromo-3-Chloropropane	ND		9.1	1.5
106-93-4	Ethylene Dibromide	ND		4.6	1.3
74-95-3	Dibromomethane	ND		9.1	0.78
75-71-8	Dichlorodifluoromethane	ND		9.1	0.72
75-34-3	1,1-Dichloroethane	ND		4.6	0.62
107-06-2	1,2-Dichloroethane	ND		4.6	0.69
75-35-4	1,1-Dichloroethene	ND	*	4.6	0.56
156-59-2	cis-1,2-Dichloroethene	ND		4.6	0.62
156-60-5	trans-1,2-Dichloroethene	ND		4.6	0.68
78-87-5	1,2-Dichloropropane	ND		4.6	0.57

FORM I 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88264-1

SDG No.:

Client Sample ID: DG-G11S-3.5-4 Lab Sample ID: 720-88264-7

Matrix: Solid Lab File ID: 08301839.D

Analysis Method: 8260B Date Collected: 08/27/2018 12:25

Sample wt/vol: 5.492(g) Date Analyzed: 08/31/2018 02:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250626 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.6	0.63
10061-02-6	trans-1,3-Dichloropropene	ND		4.6	0.61
100-41-4	Ethylbenzene	ND		4.6	0.68
87-68-3	Hexachlorobutadiene	ND		4.6	0.82
591-78-6	2-Hexanone	ND		46	9.1
98-82-8	Isopropylbenzene	ND		4.6	0.62
99-87-6	4-Isopropyltoluene	ND		4.6	2.3
75-09-2	Methylene Chloride	ND		9.1	5.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		46	9.1
91-20-3	Naphthalene	ND		9.1	1.4
103-65-1	N-Propylbenzene	ND		4.6	0.60
100-42-5	Styrene	ND		4.6	0.57
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.6	0.69
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.6	0.68
127-18-4	Tetrachloroethene	ND		4.6	0.61
108-88-3	Toluene	ND		4.6	0.65
87-61-6	1,2,3-Trichlorobenzene	ND		4.6	0.67
120-82-1	1,2,4-Trichlorobenzene	ND		4.6	0.65
71-55-6	1,1,1-Trichloroethane	ND		4.6	0.56
79-00-5	1,1,2-Trichloroethane	ND		4.6	0.64
79-01-6	Trichloroethene	ND		4.6	0.57
75-69-4	Trichlorofluoromethane	ND		4.6	0.51
96-18-4	1,2,3-Trichloropropane	ND		4.6	0.70
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.6	1.9
95-63-6	1,2,4-Trimethylbenzene	ND		4.6	1.5
108-67-8	1,3,5-Trimethylbenzene	ND		4.6	0.59
108-05-4	Vinyl acetate	ND		18	4.6
75-01-4	Vinyl chloride	ND		4.6	0.66
1330-20-7	Xylenes, Total	ND		4.6	1.1
594-20-7	2,2-Dichloropropane	ND		4.6	1.8
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		230	91

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88264-1

SDG No.:

Client Sample ID: DG-G11S-3.5-4 Lab Sample ID: 720-88264-7

Matrix: Solid Lab File ID: 08301839.D

Analysis Method: 8260B Date Collected: 08/27/2018 12:25

Sample wt/vol: 5.492(g) Date Analyzed: 08/31/2018 02:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250626 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	94		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		60-140
2037-26-5	Toluene-d8 (Surr)	93		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301839.D
Lims ID: 720-88264-A-7-A
Client ID: DG-G115--3.5-4
Sample Type: Client
Inject. Date: 31-Aug-2018 02:25:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88264-A-7
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 31-Aug-2018 09:32:42 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 09:33:31

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.825	6.813	0.012	0	253787	250.0	
* 2 Fluorobenzene	96	10.605	10.598	0.007	98	811946	25.0	
* 4 Chlorobenzene-d5	117	14.445	14.439	0.006	87	614508	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.585	17.579	0.006	95	312508	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.190	9.184	0.006	94	70726	7.76	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.708	9.702	0.006	0	93298	8.17	
$ 10 Toluene-d8 (Surr)	98	12.714	12.702	0.012	93	228884	6.97	
$ 11 4-Bromofluorobenzene	95	15.939	15.939	0.006	94	84572	7.08	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.048	0.000	84	73206	6.05	
$ 6 BFB	95	9.355	6.446	2.909	0	393	NR	
28 Acetone	58	6.380	6.361	0.019	99	27070	28.4	
34 Methylene Chloride	84	7.075	7.069	0.006	91	999	0.1137	
144 Methyl acetate	43	7.142	7.117	0.025	97	1785	0.2572	
39 Methyl tert-butyl ether	73	7.983	7.989	-0.006	1	128	0.004941	7
45 2-Butanone (MEK)	72	8.654	8.629	0.025	98	653	0.6004	
59 Benzene	78	10.379	10.367	0.012	88	1557	0.0451	
75 Toluene	92	12.799	12.792	0.012	97	2606	0.1290	
149 1-Chlorohexane	55	14.439	14.354	0.085	38	6762	0.6529	
128 Butyl Ether	87	14.671	14.665	0.012	94	779	0.1274	
101 1,2,4-Trimethylbenzene	105	17.292	17.286	0.012	89	602	0.0179	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	1036403	13.9	
A 154 C6-C8	1	10.855	(8.556-13.153)		0	199645	2.68	
A 155 C6-C9	1	11.845	(8.556-15.134)		0	271834	3.65	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	1161375	15.6	
A 119 C6-C10	1	12.735	(8.556-16.914)		0	338048	4.54	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	1108461	14.9	
A 120 C6-C12	1	14.281	(8.556-20.005)		0	463020	6.22	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	141412	1.90	
A 121 C7-C12	1	15.448	(10.891-20.005)		0	320992	4.31	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

7 - Failed Limit of Detection

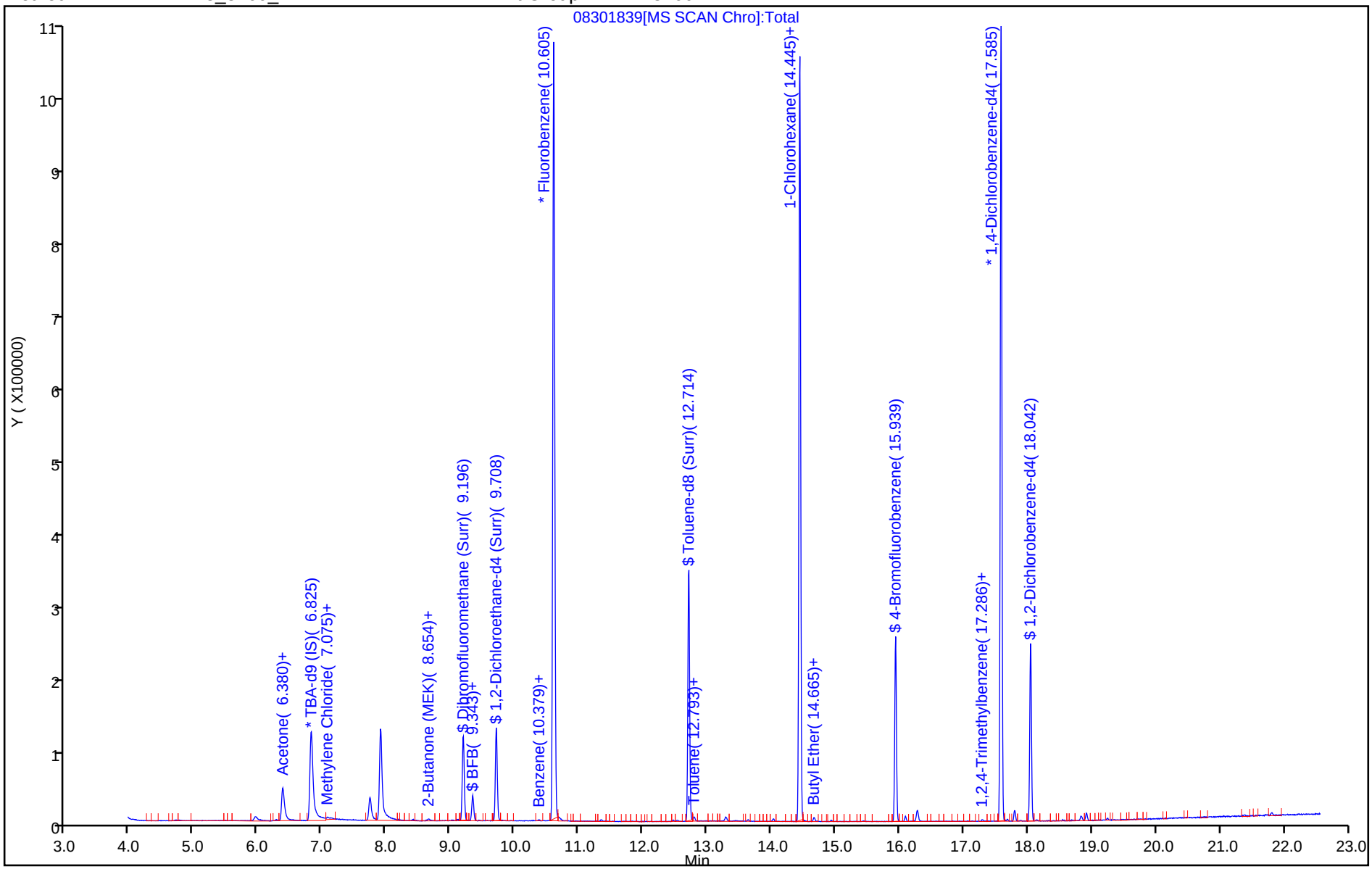
Reagents:

I_IS/SS_00092	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 31-Aug-2018 09:33:32 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301839.D				
Injection Date:	31-Aug-2018 02:25:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88264-A-7-A	Lab Sample ID:	720-88264-7	Worklist Smp#:	18
Client ID:	DG-G115--3.5-4				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301839.D
Lims ID: 720-88264-A-7-A
Client ID: DG-G115--3.5-4
Sample Type: Client
Inject. Date: 31-Aug-2018 02:25:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88264-A-7
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 31-Aug-2018 09:32:42 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 09:33:31

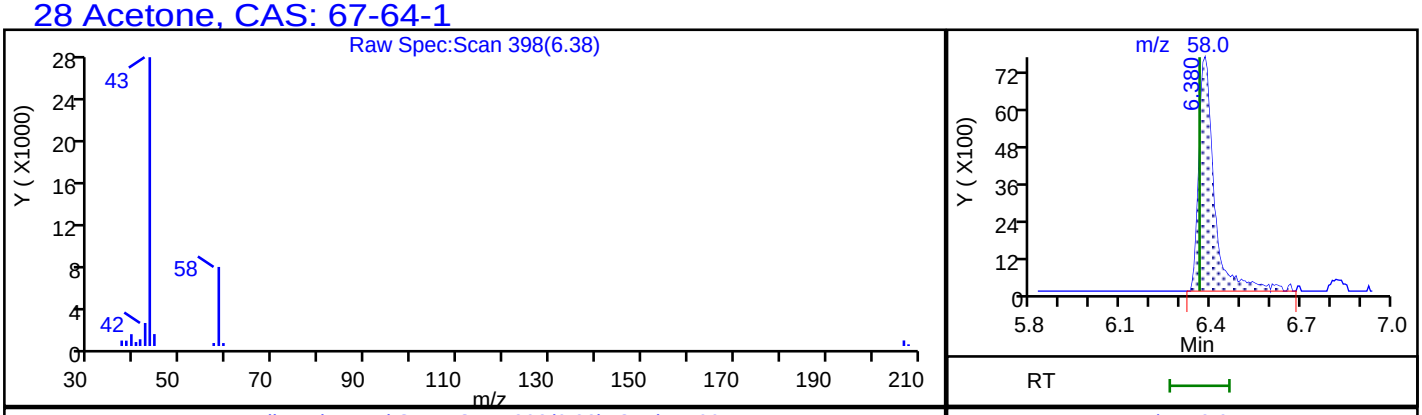
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.17	108.96
$ 10 Toluene-d8 (Surr)	7.50	6.97	92.94
$ 11 4-Bromofluorobenzene	7.50	7.08	94.36
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00
$ 6 BFB	0.0	0	0.00

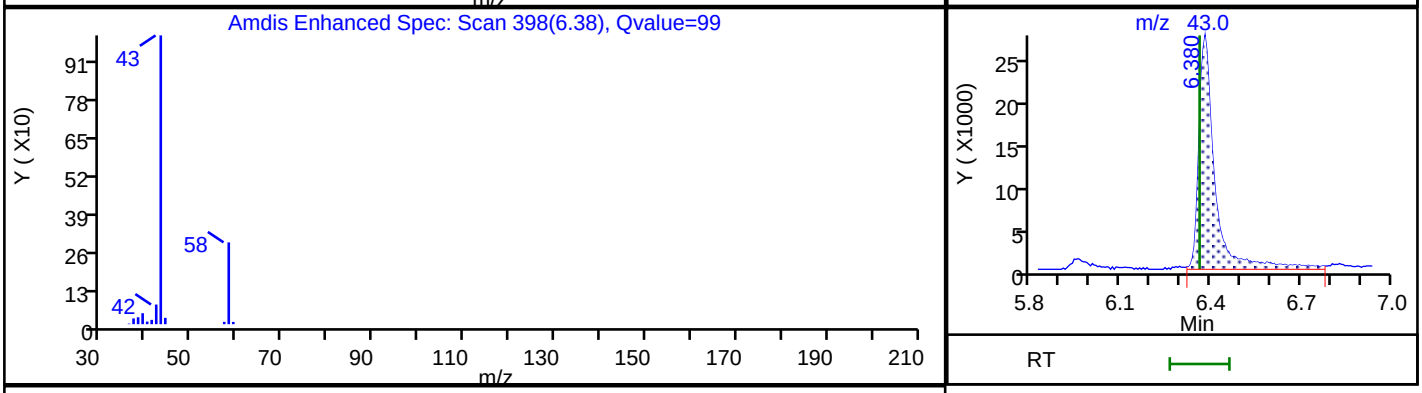
Report Date: 31-Aug-2018 09:33:32 Chrom Revision: 2.3 19-Jul-2018 15:14:50

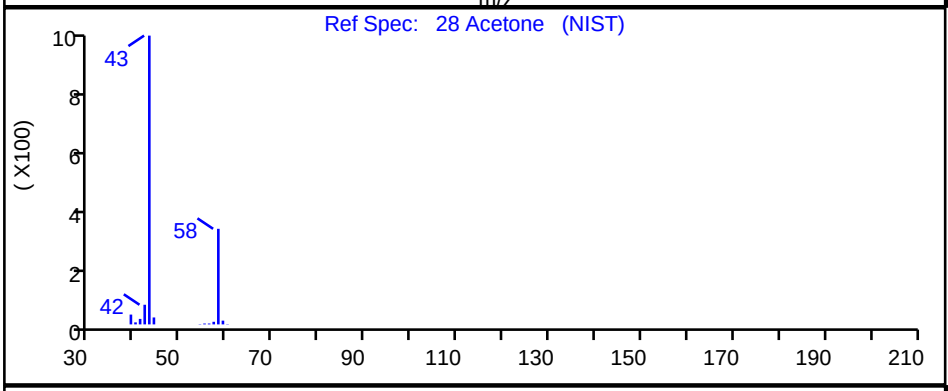
TestAmerica Pleasanton

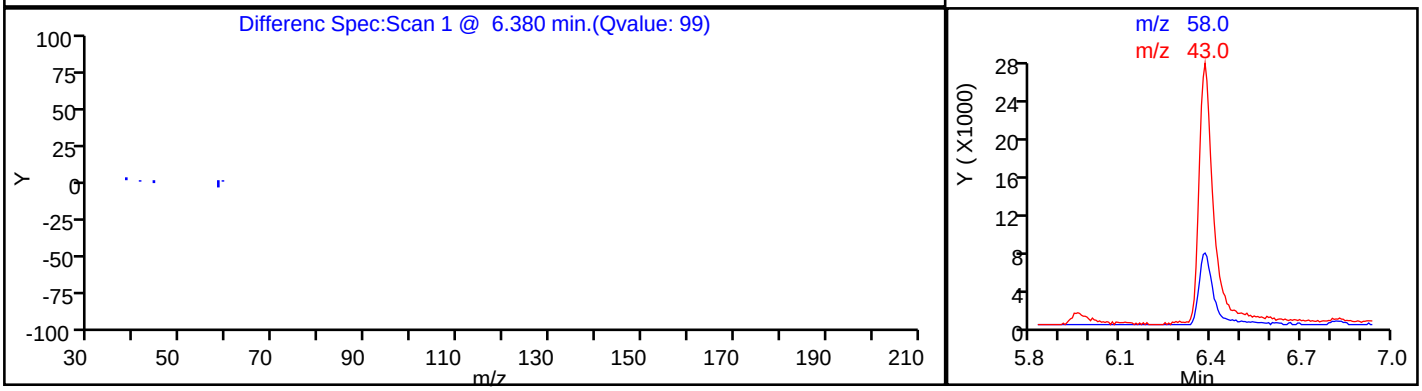
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301839.D				
Injection Date:	31-Aug-2018 02:25:30	Instrument ID:	HP13		
Lims ID:	720-88264-A-7-A	Lab Sample ID:	720-88264-7		
Client ID:	DG-G115--3.5-4				
Operator ID:	VOA	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1







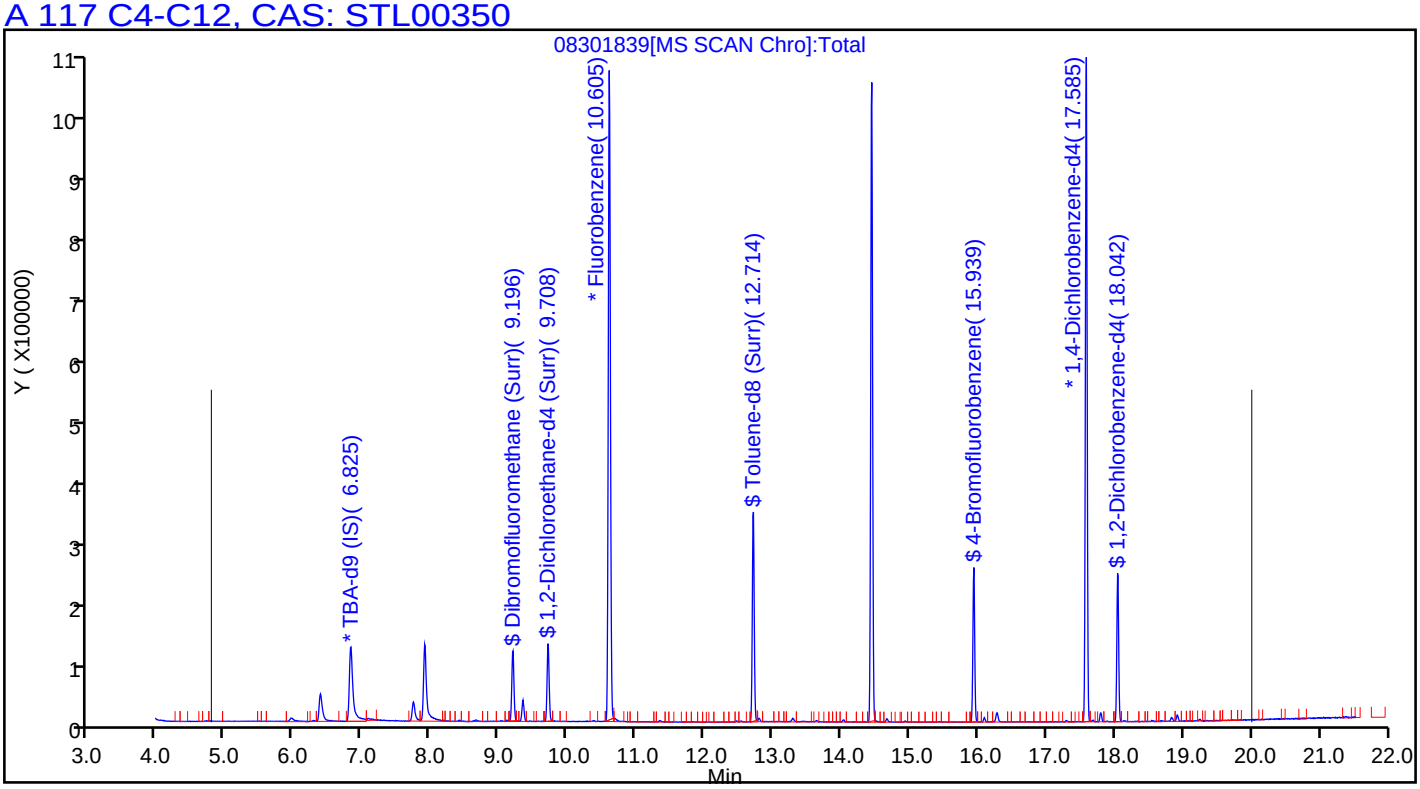


Report Date: 31-Aug-2018 09:33:33 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53587.b\08301839.D				
Injection Date:	31-Aug-2018 02:25:30	Instrument ID:	HP13		
Lims ID:	720-88264-A-7-A	Lab Sample ID:	720-88264-7		
Client ID:	DG-G115--3.5-4				
Operator ID:	VOA	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88264-1

SDG No.:

Client Sample ID: DG-G11S-9.5-10 Lab Sample ID: 720-88264-8

Matrix: Solid Lab File ID: 08301833.D

Analysis Method: 8260B Date Collected: 08/27/2018 12:25

Sample wt/vol: 6.238(g) Date Analyzed: 08/30/2018 23:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250625 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.0	0.96
67-64-1	Acetone	59		40	30
71-43-2	Benzene	ND		4.0	0.52
75-27-4	Dichlorobromomethane	ND		4.0	0.58
108-86-1	Bromobenzene	ND		4.0	0.63
74-97-5	Chlorobromomethane	ND		16	0.58
75-25-2	Bromoform	ND		4.0	1.6
74-83-9	Bromomethane	ND		8.0	0.63
78-93-3	2-Butanone (MEK)	ND		40	17
104-51-8	n-Butylbenzene	ND		4.0	0.80
135-98-8	sec-Butylbenzene	ND		4.0	0.58
98-06-6	tert-Butylbenzene	ND		4.0	0.59
75-15-0	Carbon disulfide	ND		4.0	1.6
56-23-5	Carbon tetrachloride	ND		4.0	0.50
108-90-7	Chlorobenzene	ND		4.0	0.55
75-00-3	Chloroethane	ND		8.0	0.45
67-66-3	Chloroform	ND		4.0	0.53
74-87-3	Chloromethane	ND		8.0	0.63
95-49-8	2-Chlorotoluene	ND		4.0	0.52
106-43-4	4-Chlorotoluene	ND		4.0	0.55
124-48-1	Chlorodibromomethane	ND		4.0	0.57
95-50-1	1,2-Dichlorobenzene	ND		4.0	0.55
541-73-1	1,3-Dichlorobenzene	ND		4.0	0.58
106-46-7	1,4-Dichlorobenzene	ND		4.0	0.57
142-28-9	1,3-Dichloropropane	ND		4.0	0.59
563-58-6	1,1-Dichloropropene	ND		4.0	0.55
96-12-8	1,2-Dibromo-3-Chloropropane	ND		8.0	1.4
106-93-4	Ethylene Dibromide	ND		4.0	1.1
74-95-3	Dibromomethane	ND		8.0	0.69
75-71-8	Dichlorodifluoromethane	ND		8.0	0.63
75-34-3	1,1-Dichloroethane	ND		4.0	0.55
107-06-2	1,2-Dichloroethane	ND		4.0	0.61
75-35-4	1,1-Dichloroethene	ND	*	4.0	0.50
156-59-2	cis-1,2-Dichloroethene	ND		4.0	0.55
156-60-5	trans-1,2-Dichloroethene	ND		4.0	0.60
78-87-5	1,2-Dichloropropane	ND		4.0	0.50

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88264-1

SDG No.:

Client Sample ID: DG-G11S-9.5-10 Lab Sample ID: 720-88264-8

Matrix: Solid Lab File ID: 08301833.D

Analysis Method: 8260B Date Collected: 08/27/2018 12:25

Sample wt/vol: 6.238(g) Date Analyzed: 08/30/2018 23:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250625 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.0	0.55
10061-02-6	trans-1,3-Dichloropropene	ND		4.0	0.54
100-41-4	Ethylbenzene	ND		4.0	0.60
87-68-3	Hexachlorobutadiene	ND		4.0	0.72
591-78-6	2-Hexanone	ND		40	8.0
98-82-8	Isopropylbenzene	ND		4.0	0.55
99-87-6	4-Isopropyltoluene	ND		4.0	2.0
75-09-2	Methylene Chloride	ND		8.0	4.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		40	8.0
91-20-3	Naphthalene	ND		8.0	1.2
103-65-1	N-Propylbenzene	ND		4.0	0.53
100-42-5	Styrene	ND		4.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.0	0.61
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.0	0.60
127-18-4	Tetrachloroethene	ND		4.0	0.54
108-88-3	Toluene	ND		4.0	0.57
87-61-6	1,2,3-Trichlorobenzene	ND		4.0	0.59
120-82-1	1,2,4-Trichlorobenzene	ND		4.0	0.57
71-55-6	1,1,1-Trichloroethane	ND		4.0	0.49
79-00-5	1,1,2-Trichloroethane	ND		4.0	0.56
79-01-6	Trichloroethene	ND		4.0	0.50
75-69-4	Trichlorofluoromethane	ND		4.0	0.45
96-18-4	1,2,3-Trichloropropane	ND		4.0	0.62
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.0	1.7
95-63-6	1,2,4-Trimethylbenzene	ND		4.0	1.3
108-67-8	1,3,5-Trimethylbenzene	ND		4.0	0.52
108-05-4	Vinyl acetate	ND		16	4.0
75-01-4	Vinyl chloride	ND		4.0	0.59
1330-20-7	Xylenes, Total	ND		4.0	0.98
594-20-7	2,2-Dichloropropane	ND		4.0	1.6
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		200	80

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88264-1

SDG No.:

Client Sample ID: DG-G11S-9.5-10 Lab Sample ID: 720-88264-8

Matrix: Solid Lab File ID: 08301833.D

Analysis Method: 8260B Date Collected: 08/27/2018 12:25

Sample wt/vol: 6.238(g) Date Analyzed: 08/30/2018 23:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250625 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	87		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		60-140
2037-26-5	Toluene-d8 (Surr)	94		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301833.D
Lims ID: 720-88264-A-8-A
Client ID: DG-G115--9.5-10
Sample Type: Client
Inject. Date: 30-Aug-2018 23:00:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88264-A-8
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:32:23 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 08:32:31

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	180836	250.0	
* 2 Fluorobenzene	96	10.709	10.709	0.000	99	880823	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.554	0.010	85	697818	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	95	285612	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.305	9.303	0.011	92	59153	7.93	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.821	0.010	0	67261	8.39	
$ 10 Toluene-d8 (Surr)	98	12.822	12.834	0.000	95	245327	7.01	
$ 11 4-Bromofluorobenzene	95	16.053	16.065	0.000	92	70893	6.52	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	84	60148	6.02	
28 Acetone	58	6.474	6.481	0.000	97	24964	36.9	
59 Benzene	78	10.488	10.498	0.000	1	631	0.0199	
124 Butane	43	4.985	4.996	-0.011	1	412	NR	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	893261	13.1	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	173962	2.56	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	194918	2.87	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	980533	14.4	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	212346	NC	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	212346	3.12	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	929094	13.7	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	298458	4.39	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	64435	0.9479	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	163949	2.41	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

NC - Not Calibrated

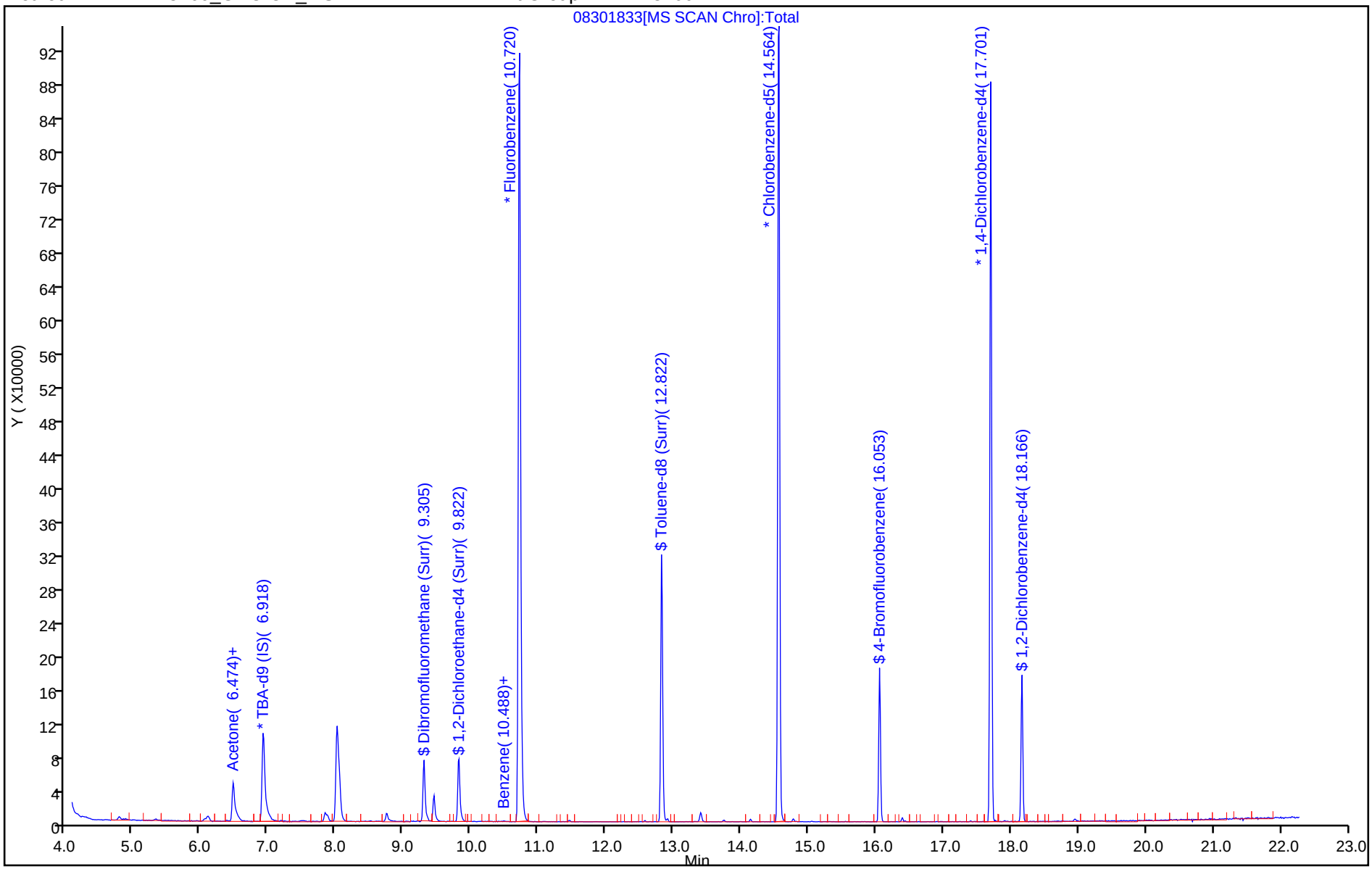
Reagents:

I_IS/SS_00092	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 31-Aug-2018 08:32:31 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301833.D				
Injection Date:	30-Aug-2018 23:00:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88264-A-8-A	Lab Sample ID:	720-88264-8	Worklist Smp#:	11
Client ID:	DG-G115--9.5-10				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301833.D
Lims ID: 720-88264-A-8-A
Client ID: DG-G115--9.5-10
Sample Type: Client
Inject. Date: 30-Aug-2018 23:00:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88264-A-8
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:32:23 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 08:32:31

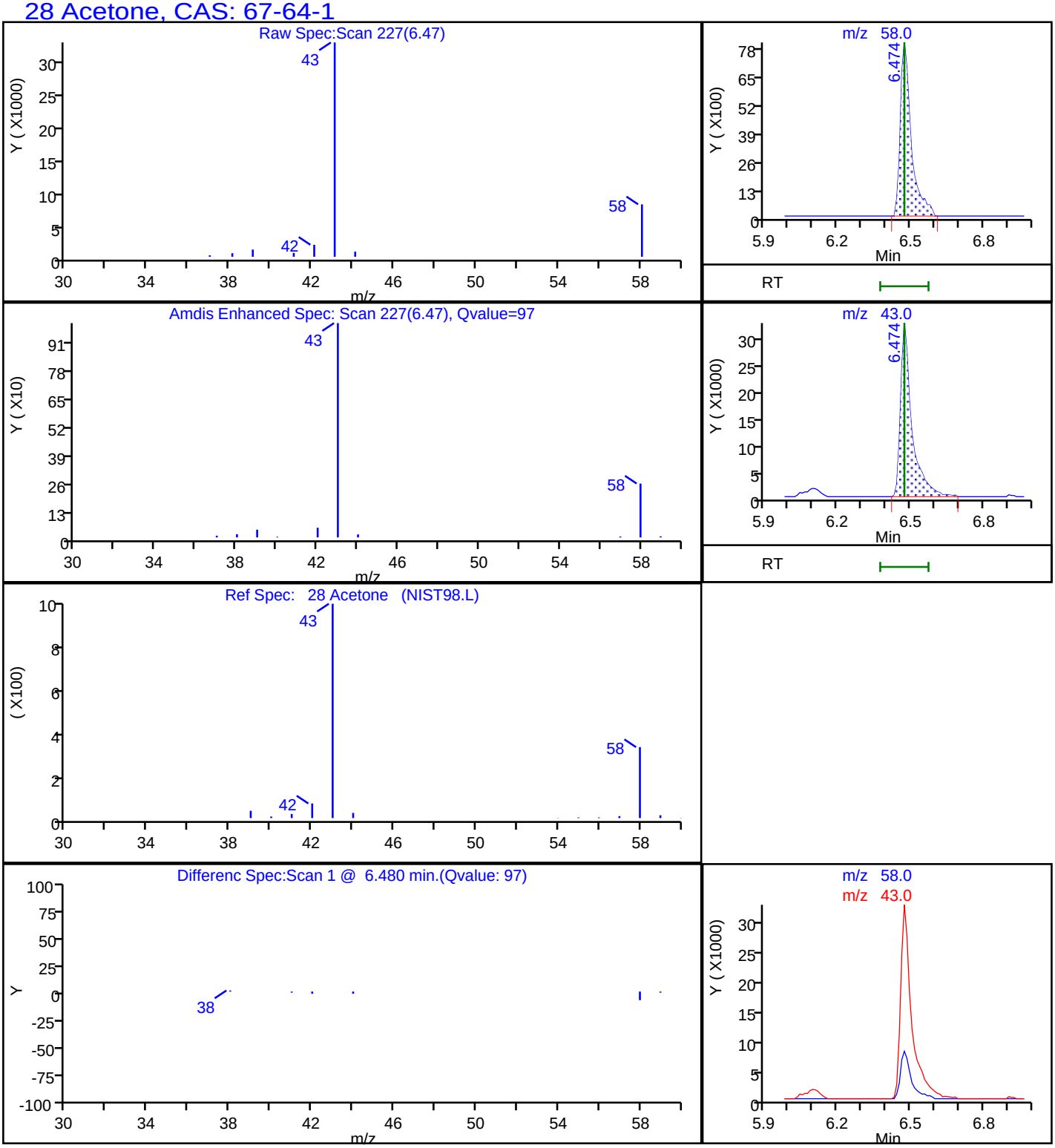
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.39	111.88
$ 10 Toluene-d8 (Surr)	7.50	7.01	93.53
$ 11 4-Bromofluorobenzene	7.50	6.52	86.99
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 31-Aug-2018 08:32:31 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301833.D				
Injection Date:	30-Aug-2018 23:00:30	Instrument ID:	CHMSV2		
Lims ID:	720-88264-A-8-A	Lab Sample ID:	720-88264-8		
Client ID:	DG-G115--9.5-10				
Operator ID:	VOA	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1

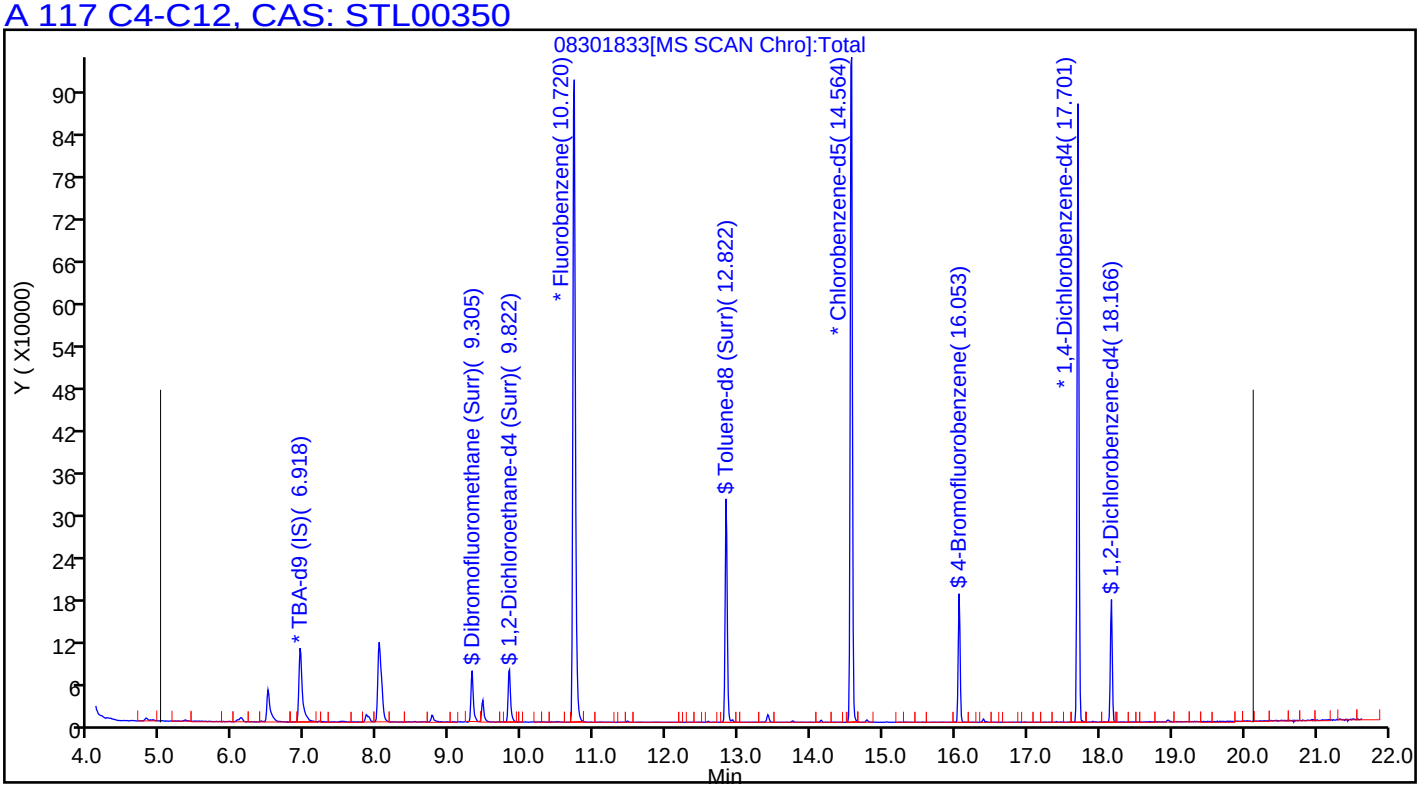


Report Date: 31-Aug-2018 08:32:31 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301833.D				
Injection Date:	30-Aug-2018 23:00:30	Instrument ID:	CHMSV2		
Lims ID:	720-88264-A-8-A	Lab Sample ID:	720-88264-8		
Client ID:	DG-G115--9.5-10				
Operator ID:	VOA	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88264-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DCA	TOL
Lab Sample ID	Client Sample ID	(45-131)	(60-140)	(58-140)
720-88264-1	DUP-23	91 *	84 *	90 *
720-88264-2	DUP-22	96	101	92
720-88264-3	DUP-30	96	103	94
720-88264-4	DUP-31	91	110	90
720-88264-5	DUP-32	93	110	96
720-88264-6	DG-G11S-0.5-1	86	104	90
720-88264-7	DG-G11S-3.5-4	94	109	93
720-88264-8	DG-G11S-9.5-10	87	112	94
LCS 720-250625/5	Lab Control Sample	94	98	96
LCS 720-250625/7	Lab Control Sample	98	99	98
LCS 720-250626/5	Lab Control Sample	97	95	96
LCS 720-250626/7	Lab Control Sample	98	93	96
LCS 720-250644/5	Lab Control Sample	98	103	97
LCS 720-250644/7	Lab Control Sample	101	100	96
LCSD 720-250625/6	Lab Control Sample Dup	97	100	98
LCSD 720-250625/8	Lab Control Sample Dup	97	99	97
LCSD 720-250626/6	Lab Control Sample Dup	97	91	98
LCSD 720-250626/8	Lab Control Sample Dup	97	93	95
LCSD 720-250644/6	Lab Control Sample Dup	99	100	97
LCSD 720-250644/8	Lab Control Sample Dup	101	100	97
MB 720-250625/4	Method Blank	96	104	97
MB 720-250626/4	Method Blank	101	102	96
MB 720-250644/4	Method Blank	98	97	96

Surrogate Legend

BFB = 4-Bromofluorobenzene
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		FBP	TPHL
Lab Sample ID	Client Sample ID	(33-120)	(35-146)
720-88263-E-10-B MS	Matrix Spike	59	105
720-88263-E-10-C MSD	Matrix Spike Duplicate	60	105
720-88264-1	DUP-23	58	90
720-88264-2	DUP-22	103	102
720-88264-3	DUP-30	66	94
720-88264-4	DUP-31	102	132
720-88264-5	DUP-32	88	114
720-88264-6	DG-G11S-0.5-1	68	107
720-88264-7	DG-G11S-3.5-4	73	103
720-88264-8	DG-G11S-9.5-10	66	100
LCS 720-250607/2-A	Lab Control Sample	68	89
MB 720-250607/1-A	Method Blank	68	99

Surrogate Legend

FBP = 2-Fluorobiphenyl

TPHL = Terphenyl-d14

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	TPH1 (40-130)						
720-88239-D-12-E MS	Matrix Spike	92						
720-88239-D-12-F MSD	Matrix Spike Duplicate	86						
720-88264-1	DUP-23	92						
720-88264-2	DUP-22	0 X D						
720-88264-3	DUP-30	98						
720-88264-4	DUP-31	0 X D						
720-88264-5	DUP-32	0 X D						
720-88264-5 MS	DUP-32	0 X D						
720-88264-5 MSD	DUP-32	0 X D						
720-88264-6	DG-G11S-0.5-1	109						
720-88264-7	DG-G11S-3.5-4	94						
720-88264-8	DG-G11S-9.5-10	54						
LCS 720-250498/2-A	Lab Control Sample	88						
LCS 720-250619/2-A	Lab Control Sample	94						
MB 720-250498/1-A	Method Blank	91						
MB 720-250619/1-A	Method Blank	90						

Surrogate Legend

TPH = p-Terphenyl

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	DCBP2 (21-136)	TCX1 (21-145)					
720-88264-1	DUP-23	65	67					
720-88264-3	DUP-30	62	91					
720-88264-5 MSD	DUP-32	90	87					
720-88264-6	DG-G11S-0.5-1	107	86					

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	DCBP2 (21-136)	TCX2 (21-145)					
720-88264-2	DUP-22	74	77					
720-88264-7	DG-G11S-3.5-4	103	80					
LCS 720-250595/2-A	Lab Control Sample	107	82					
MB 720-250595/1-A	Method Blank	99	82					

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCBP1 (21-136)	TCX1 (21-145)
720-88264-4	DUP-31	68	82
720-88264-8	DG-G11S-9.5-10	108	83 p

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCBP1 (21-136)	TCX2 (21-145)
720-88264-5	DUP-32	113	84
720-88264-5 MS	DUP-32	105	90

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	TCX2 (14-128)	DCBP2 (10-132)
720-88264-1	DUP-23	62	78
720-88264-2	DUP-22	90	120
720-88264-3	DUP-30	79	207 X
720-88264-4	DUP-31	74	103
720-88264-5	DUP-32	59	76
720-88264-6	DG-G11S-0.5-1	77	100
720-88264-7	DG-G11S-3.5-4	67	95
720-88264-8	DG-G11S-9.5-10	54	66
LCS 240-343206/21-A	Lab Control Sample	68	78
LCS 240-343944/21-A	Lab Control Sample	84	113
MB 240-343206/20-A	Method Blank	73	90
MB 240-343944/20-A	Method Blank	65	98

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 720-250625/4
Matrix: Solid
Analysis Batch: 250625

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/30/18 19:41	1
Acetone	ND		50	38	ug/Kg			08/30/18 19:41	1
Benzene	ND		5.0	0.65	ug/Kg			08/30/18 19:41	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/30/18 19:41	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/30/18 19:41	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/30/18 19:41	1
Bromoform	ND		5.0	2.0	ug/Kg			08/30/18 19:41	1
Bromomethane	ND		10	0.79	ug/Kg			08/30/18 19:41	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/30/18 19:41	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/30/18 19:41	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/30/18 19:41	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/30/18 19:41	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/30/18 19:41	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/30/18 19:41	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/30/18 19:41	1
Chloroethane	ND		10	0.56	ug/Kg			08/30/18 19:41	1
Chloroform	ND		5.0	0.66	ug/Kg			08/30/18 19:41	1
Chloromethane	ND		10	0.79	ug/Kg			08/30/18 19:41	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/30/18 19:41	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/30/18 19:41	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/30/18 19:41	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/30/18 19:41	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/30/18 19:41	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/30/18 19:41	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/30/18 19:41	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/30/18 19:41	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/30/18 19:41	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/30/18 19:41	1
Dibromomethane	ND		10	0.86	ug/Kg			08/30/18 19:41	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/30/18 19:41	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/30/18 19:41	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/30/18 19:41	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/30/18 19:41	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/30/18 19:41	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/30/18 19:41	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/30/18 19:41	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/30/18 19:41	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/30/18 19:41	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/30/18 19:41	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/30/18 19:41	1
2-Hexanone	ND		50	10	ug/Kg			08/30/18 19:41	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/30/18 19:41	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/30/18 19:41	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/30/18 19:41	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/30/18 19:41	1
Naphthalene	ND		10	1.5	ug/Kg			08/30/18 19:41	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/30/18 19:41	1
Styrene	ND		5.0	0.63	ug/Kg			08/30/18 19:41	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250625/4
Matrix: Solid
Analysis Batch: 250625

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/30/18 19:41	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/30/18 19:41	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/30/18 19:41	1
Toluene	ND		5.0	0.71	ug/Kg			08/30/18 19:41	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/30/18 19:41	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/30/18 19:41	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/30/18 19:41	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/30/18 19:41	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/30/18 19:41	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/30/18 19:41	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/30/18 19:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/30/18 19:41	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/30/18 19:41	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/30/18 19:41	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/30/18 19:41	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/30/18 19:41	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/30/18 19:41	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/30/18 19:41	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/30/18 19:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*45 - 131*		*08/30/18 19:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*60 - 140*		*08/30/18 19:41*	*1*
Toluene-d8 (Surr)	*97*		*58 - 140*		*08/30/18 19:41*	*1*

Lab Sample ID: LCS 720-250625/5
Matrix: Solid
Analysis Batch: 250625

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	55.6		ug/Kg		111	70 - 144
Acetone	250	204		ug/Kg		81	30 - 162
Benzene	50.0	51.0		ug/Kg		102	70 - 130
Dichlorobromomethane	50.0	55.1		ug/Kg		110	70 - 140
Bromobenzene	50.0	50.0		ug/Kg		100	70 - 130
Chlorobromomethane	50.0	56.7		ug/Kg		113	70 - 130
Bromoform	50.0	52.1		ug/Kg		104	59 - 158
Bromomethane	50.0	51.1		ug/Kg		102	59 - 132
2-Butanone (MEK)	250	219		ug/Kg		88	59 - 159
n-Butylbenzene	50.0	47.4		ug/Kg		95	70 - 142
sec-Butylbenzene	50.0	48.0		ug/Kg		96	70 - 136
tert-Butylbenzene	50.0	49.1		ug/Kg		98	70 - 130
Carbon disulfide	50.0	67.8		ug/Kg		136	60 - 140
Carbon tetrachloride	50.0	60.3		ug/Kg		121	70 - 142
Chlorobenzene	50.0	51.0		ug/Kg		102	70 - 130
Chloroethane	50.0	45.4		ug/Kg		91	65 - 130
Chloroform	50.0	54.0		ug/Kg		108	77 - 127

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250625/5
Matrix: Solid
Analysis Batch: 250625

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	50.0	41.9		ug/Kg		84	55 - 140
2-Chlorotoluene	50.0	48.9		ug/Kg		98	70 - 138
4-Chlorotoluene	50.0	48.8		ug/Kg		98	70 - 136
Chlorodibromomethane	50.0	54.8		ug/Kg		110	70 - 146
1,2-Dichlorobenzene	50.0	51.1		ug/Kg		102	70 - 130
1,3-Dichlorobenzene	50.0	51.8		ug/Kg		104	70 - 131
1,4-Dichlorobenzene	50.0	50.1		ug/Kg		100	70 - 130
1,3-Dichloropropane	50.0	50.5		ug/Kg		101	70 - 140
1,1-Dichloropropene	50.0	54.1		ug/Kg		108	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	50.1		ug/Kg		100	60 - 145
Ethylene Dibromide	50.0	54.0		ug/Kg		108	70 - 140
Dibromomethane	50.0	52.3		ug/Kg		105	70 - 139
Dichlorodifluoromethane	50.0	48.7		ug/Kg		97	37 - 158
1,1-Dichloroethane	50.0	53.0		ug/Kg		106	70 - 130
1,2-Dichloroethane	50.0	55.2		ug/Kg		110	70 - 130
1,1-Dichloroethene	50.0	65.9	*	ug/Kg		132	74 - 122
cis-1,2-Dichloroethene	50.0	52.8		ug/Kg		106	70 - 138
trans-1,2-Dichloroethene	50.0	59.1		ug/Kg		118	67 - 130
1,2-Dichloropropane	50.0	51.2		ug/Kg		102	73 - 127
cis-1,3-Dichloropropene	50.0	52.6		ug/Kg		105	68 - 147
trans-1,3-Dichloropropene	50.0	50.8		ug/Kg		102	70 - 155
Ethylbenzene	50.0	49.7		ug/Kg		99	80 - 137
Hexachlorobutadiene	50.0	53.0		ug/Kg		106	70 - 132
2-Hexanone	250	214		ug/Kg		86	62 - 158
Isopropylbenzene	50.0	52.2		ug/Kg		104	70 - 130
4-Isopropyltoluene	50.0	49.7		ug/Kg		99	70 - 133
Methylene Chloride	50.0	50.8		ug/Kg		102	70 - 134
4-Methyl-2-pentanone (MIBK)	250	213		ug/Kg		85	60 - 160
Naphthalene	50.0	49.5		ug/Kg		99	60 - 147
N-Propylbenzene	50.0	47.9		ug/Kg		96	70 - 130
Styrene	50.0	47.4		ug/Kg		95	70 - 130
1,1,1,2-Tetrachloroethane	50.0	54.6		ug/Kg		109	70 - 130
1,1,2,2-Tetrachloroethane	50.0	46.2		ug/Kg		92	70 - 146
Tetrachloroethene	50.0	57.4		ug/Kg		115	70 - 132
Toluene	50.0	49.1		ug/Kg		98	75 - 120
1,2,3-Trichlorobenzene	50.0	51.9		ug/Kg		104	60 - 140
1,2,4-Trichlorobenzene	50.0	52.0		ug/Kg		104	60 - 140
1,1,1-Trichloroethane	50.0	59.5		ug/Kg		119	70 - 130
1,1,2-Trichloroethane	50.0	51.5		ug/Kg		103	70 - 130
Trichloroethene	50.0	56.2		ug/Kg		112	70 - 133
Trichlorofluoromethane	50.0	55.2		ug/Kg		110	60 - 140
1,2,3-Trichloropropane	50.0	49.5		ug/Kg		99	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	70.7	*	ug/Kg		141	60 - 140
1,2,4-Trimethylbenzene	50.0	50.2		ug/Kg		100	70 - 130
1,3,5-Trimethylbenzene	50.0	49.8		ug/Kg		100	70 - 131
Vinyl acetate	50.0	45.5		ug/Kg		91	38 - 176
Vinyl chloride	50.0	46.0		ug/Kg		92	58 - 125

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250625/5
Matrix: Solid
Analysis Batch: 250625

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
m-Xylene & p-Xylene	50.0	51.1		ug/Kg		102	70 - 146
o-Xylene	50.0	51.3		ug/Kg		103	70 - 140
2,2-Dichloropropane	50.0	62.6		ug/Kg		125	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*98*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCS 720-250625/7
Matrix: Solid
Analysis Batch: 250625

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	1060		ug/Kg		106	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*99*		*60 - 140*
Toluene-d8 (Surr)	*98*		*58 - 140*

Lab Sample ID: LCSD 720-250625/6
Matrix: Solid
Analysis Batch: 250625

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	57.2		ug/Kg		114	70 - 144	3	20
Acetone	250	221		ug/Kg		89	30 - 162	8	30
Benzene	50.0	50.6		ug/Kg		101	70 - 130	1	20
Dichlorobromomethane	50.0	55.2		ug/Kg		110	70 - 140	0	20
Bromobenzene	50.0	49.3		ug/Kg		99	70 - 130	1	20
Chlorobromomethane	50.0	56.6		ug/Kg		113	70 - 130	0	20
Bromoform	50.0	54.1		ug/Kg		108	59 - 158	4	20
Bromomethane	50.0	52.5		ug/Kg		105	59 - 132	3	20
2-Butanone (MEK)	250	238		ug/Kg		95	59 - 159	8	20
n-Butylbenzene	50.0	48.2		ug/Kg		96	70 - 142	2	20
sec-Butylbenzene	50.0	47.9		ug/Kg		96	70 - 136	0	20
tert-Butylbenzene	50.0	48.6		ug/Kg		97	70 - 130	1	20
Carbon disulfide	50.0	67.9		ug/Kg		136	60 - 140	0	20
Carbon tetrachloride	50.0	59.7		ug/Kg		119	70 - 142	1	20
Chlorobenzene	50.0	50.7		ug/Kg		101	70 - 130	1	20
Chloroethane	50.0	46.6		ug/Kg		93	65 - 130	3	20
Chloroform	50.0	53.6		ug/Kg		107	77 - 127	1	20
Chloromethane	50.0	43.4		ug/Kg		87	55 - 140	3	20
2-Chlorotoluene	50.0	48.3		ug/Kg		97	70 - 138	1	20
4-Chlorotoluene	50.0	48.8		ug/Kg		98	70 - 136	0	20
Chlorodibromomethane	50.0	55.6		ug/Kg		111	70 - 146	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250625/6
Matrix: Solid
Analysis Batch: 250625

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene	50.0	51.2		ug/Kg		102	70 - 130	0	20
1,3-Dichlorobenzene	50.0	51.7		ug/Kg		103	70 - 131	0	20
1,4-Dichlorobenzene	50.0	50.7		ug/Kg		101	70 - 130	1	20
1,3-Dichloropropane	50.0	51.4		ug/Kg		103	70 - 140	2	20
1,1-Dichloropropene	50.0	53.9		ug/Kg		108	70 - 130	0	20
1,2-Dibromo-3-Chloropropane	50.0	51.5		ug/Kg		103	60 - 145	3	20
Ethylene Dibromide	50.0	56.9		ug/Kg		114	70 - 140	5	20
Dibromomethane	50.0	54.4		ug/Kg		109	70 - 139	4	20
Dichlorodifluoromethane	50.0	50.5		ug/Kg		101	37 - 158	4	20
1,1-Dichloroethane	50.0	53.2		ug/Kg		106	70 - 130	0	20
1,2-Dichloroethane	50.0	55.7		ug/Kg		111	70 - 130	1	20
1,1-Dichloroethene	50.0	65.9	*	ug/Kg		132	74 - 122	0	20
cis-1,2-Dichloroethene	50.0	52.2		ug/Kg		104	70 - 138	1	20
trans-1,2-Dichloroethene	50.0	59.1		ug/Kg		118	67 - 130	0	20
1,2-Dichloropropane	50.0	51.0		ug/Kg		102	73 - 127	0	20
cis-1,3-Dichloropropene	50.0	53.4		ug/Kg		107	68 - 147	2	20
trans-1,3-Dichloropropene	50.0	52.5		ug/Kg		105	70 - 155	3	20
Ethylbenzene	50.0	49.8		ug/Kg		100	80 - 137	0	20
Hexachlorobutadiene	50.0	52.8		ug/Kg		106	70 - 132	0	20
2-Hexanone	250	234		ug/Kg		94	62 - 158	9	20
Isopropylbenzene	50.0	52.5		ug/Kg		105	70 - 130	1	20
4-Isopropyltoluene	50.0	50.1		ug/Kg		100	70 - 133	1	20
Methylene Chloride	50.0	51.1		ug/Kg		102	70 - 134	1	20
4-Methyl-2-pentanone (MIBK)	250	230		ug/Kg		92	60 - 160	8	20
Naphthalene	50.0	51.4		ug/Kg		103	60 - 147	4	20
N-Propylbenzene	50.0	47.1		ug/Kg		94	70 - 130	2	20
Styrene	50.0	48.1		ug/Kg		96	70 - 130	1	20
1,1,1,2-Tetrachloroethane	50.0	55.4		ug/Kg		111	70 - 130	1	20
1,1,2,2-Tetrachloroethane	50.0	46.8		ug/Kg		94	70 - 146	1	20
Tetrachloroethene	50.0	57.1		ug/Kg		114	70 - 132	1	20
Toluene	50.0	48.8		ug/Kg		98	75 - 120	1	20
1,2,3-Trichlorobenzene	50.0	53.0		ug/Kg		106	60 - 140	2	20
1,2,4-Trichlorobenzene	50.0	53.9		ug/Kg		108	60 - 140	4	20
1,1,1-Trichloroethane	50.0	58.5		ug/Kg		117	70 - 130	2	20
1,1,2-Trichloroethane	50.0	53.6		ug/Kg		107	70 - 130	4	20
Trichloroethene	50.0	56.1		ug/Kg		112	70 - 133	0	20
Trichlorofluoromethane	50.0	54.8		ug/Kg		110	60 - 140	1	20
1,2,3-Trichloropropane	50.0	51.3		ug/Kg		103	70 - 146	3	20
1,1,2-Trichloro-1,2,2-trifluoroetha ne	50.0	70.7	*	ug/Kg		141	60 - 140	0	20
1,2,4-Trimethylbenzene	50.0	50.1		ug/Kg		100	70 - 130	0	20
1,3,5-Trimethylbenzene	50.0	49.3		ug/Kg		99	70 - 131	1	20
Vinyl acetate	50.0	46.7		ug/Kg		93	38 - 176	3	20
Vinyl chloride	50.0	48.5		ug/Kg		97	58 - 125	5	20
m-Xylene & p-Xylene	50.0	51.9		ug/Kg		104	70 - 146	2	20
o-Xylene	50.0	51.7		ug/Kg		103	70 - 140	1	20
2,2-Dichloropropane	50.0	64.9		ug/Kg		130	70 - 162	4	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250625/6
Matrix: Solid
Analysis Batch: 250625

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	97		45 - 131
1,2-Dichloroethane-d4 (Surr)	100		60 - 140
Toluene-d8 (Surr)	98		58 - 140

Lab Sample ID: LCSD 720-250625/8
Matrix: Solid
Analysis Batch: 250625

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	1040		ug/Kg		104	70 - 122	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	97		45 - 131
1,2-Dichloroethane-d4 (Surr)	99		60 - 140
Toluene-d8 (Surr)	97		58 - 140

Lab Sample ID: MB 720-250626/4
Matrix: Solid
Analysis Batch: 250626

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/30/18 19:38	1
Acetone	ND		50	38	ug/Kg			08/30/18 19:38	1
Benzene	ND		5.0	0.65	ug/Kg			08/30/18 19:38	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/30/18 19:38	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/30/18 19:38	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/30/18 19:38	1
Bromoform	ND		5.0	2.0	ug/Kg			08/30/18 19:38	1
Bromomethane	ND		10	0.79	ug/Kg			08/30/18 19:38	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/30/18 19:38	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/30/18 19:38	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/30/18 19:38	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/30/18 19:38	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/30/18 19:38	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/30/18 19:38	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/30/18 19:38	1
Chloroethane	ND		10	0.56	ug/Kg			08/30/18 19:38	1
Chloroform	ND		5.0	0.66	ug/Kg			08/30/18 19:38	1
Chloromethane	ND		10	0.79	ug/Kg			08/30/18 19:38	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/30/18 19:38	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/30/18 19:38	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/30/18 19:38	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/30/18 19:38	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/30/18 19:38	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/30/18 19:38	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/30/18 19:38	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/30/18 19:38	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250626/4
Matrix: Solid
Analysis Batch: 250626

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/30/18 19:38	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/30/18 19:38	1
Dibromomethane	ND		10	0.86	ug/Kg			08/30/18 19:38	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/30/18 19:38	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/30/18 19:38	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/30/18 19:38	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/30/18 19:38	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/30/18 19:38	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/30/18 19:38	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/30/18 19:38	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/30/18 19:38	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/30/18 19:38	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/30/18 19:38	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/30/18 19:38	1
2-Hexanone	ND		50	10	ug/Kg			08/30/18 19:38	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/30/18 19:38	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/30/18 19:38	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/30/18 19:38	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/30/18 19:38	1
Naphthalene	ND		10	1.5	ug/Kg			08/30/18 19:38	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/30/18 19:38	1
Styrene	ND		5.0	0.63	ug/Kg			08/30/18 19:38	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/30/18 19:38	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/30/18 19:38	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/30/18 19:38	1
Toluene	ND		5.0	0.71	ug/Kg			08/30/18 19:38	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/30/18 19:38	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/30/18 19:38	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/30/18 19:38	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/30/18 19:38	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/30/18 19:38	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/30/18 19:38	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/30/18 19:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/30/18 19:38	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/30/18 19:38	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/30/18 19:38	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/30/18 19:38	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/30/18 19:38	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/30/18 19:38	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/30/18 19:38	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/30/18 19:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*45 - 131*		*08/30/18 19:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*60 - 140*		*08/30/18 19:38*	*1*
Toluene-d8 (Surr)	*96*		*58 - 140*		*08/30/18 19:38*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250626/5
Matrix: Solid
Analysis Batch: 250626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	48.7		ug/Kg		97	70 - 144
Acetone	250	242		ug/Kg		97	30 - 162
Benzene	50.0	49.9		ug/Kg		100	70 - 130
Dichlorobromomethane	50.0	49.0		ug/Kg		98	70 - 140
Bromobenzene	50.0	48.9		ug/Kg		98	70 - 130
Chlorobromomethane	50.0	53.1		ug/Kg		106	70 - 130
Bromoform	50.0	52.7		ug/Kg		105	59 - 158
Bromomethane	50.0	51.8		ug/Kg		104	59 - 132
2-Butanone (MEK)	250	240		ug/Kg		96	59 - 159
n-Butylbenzene	50.0	51.2		ug/Kg		102	70 - 142
sec-Butylbenzene	50.0	50.0		ug/Kg		100	70 - 136
tert-Butylbenzene	50.0	50.1		ug/Kg		100	70 - 130
Carbon disulfide	50.0	67.7		ug/Kg		135	60 - 140
Carbon tetrachloride	50.0	55.4		ug/Kg		111	70 - 142
Chlorobenzene	50.0	50.9		ug/Kg		102	70 - 130
Chloroethane	50.0	49.2		ug/Kg		98	65 - 130
Chloroform	50.0	50.5		ug/Kg		101	77 - 127
Chloromethane	50.0	51.2		ug/Kg		102	55 - 140
2-Chlorotoluene	50.0	47.2		ug/Kg		94	70 - 138
4-Chlorotoluene	50.0	47.0		ug/Kg		94	70 - 136
Chlorodibromomethane	50.0	51.0		ug/Kg		102	70 - 146
1,2-Dichlorobenzene	50.0	50.1		ug/Kg		100	70 - 130
1,3-Dichlorobenzene	50.0	49.0		ug/Kg		98	70 - 131
1,4-Dichlorobenzene	50.0	49.0		ug/Kg		98	70 - 130
1,3-Dichloropropane	50.0	47.1		ug/Kg		94	70 - 140
1,1-Dichloropropene	50.0	51.9		ug/Kg		104	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	52.2		ug/Kg		104	60 - 145
Ethylene Dibromide	50.0	49.0		ug/Kg		98	70 - 140
Dibromomethane	50.0	48.9		ug/Kg		98	70 - 139
Dichlorodifluoromethane	50.0	47.8		ug/Kg		96	37 - 158
1,1-Dichloroethane	50.0	52.3		ug/Kg		105	70 - 130
1,2-Dichloroethane	50.0	50.8		ug/Kg		102	70 - 130
1,1-Dichloroethene	50.0	63.5	*	ug/Kg		127	74 - 122
cis-1,2-Dichloroethene	50.0	51.5		ug/Kg		103	70 - 138
trans-1,2-Dichloroethene	50.0	55.3		ug/Kg		111	67 - 130
1,2-Dichloropropane	50.0	49.6		ug/Kg		99	73 - 127
cis-1,3-Dichloropropene	50.0	50.3		ug/Kg		101	68 - 147
trans-1,3-Dichloropropene	50.0	47.6		ug/Kg		95	70 - 155
Ethylbenzene	50.0	49.5		ug/Kg		99	80 - 137
Hexachlorobutadiene	50.0	53.3		ug/Kg		107	70 - 132
2-Hexanone	250	232		ug/Kg		93	62 - 158
Isopropylbenzene	50.0	51.3		ug/Kg		103	70 - 130
4-Isopropyltoluene	50.0	50.9		ug/Kg		102	70 - 133
Methylene Chloride	50.0	51.5		ug/Kg		103	70 - 134
4-Methyl-2-pentanone (MIBK)	250	231		ug/Kg		93	60 - 160
Naphthalene	50.0	48.1		ug/Kg		96	60 - 147
N-Propylbenzene	50.0	48.8		ug/Kg		98	70 - 130
Styrene	50.0	48.4		ug/Kg		97	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250626/5
Matrix: Solid
Analysis Batch: 250626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	52.3		ug/Kg		105	70 - 130
1,1,2,2-Tetrachloroethane	50.0	46.2		ug/Kg		92	70 - 146
Tetrachloroethene	50.0	52.6		ug/Kg		105	70 - 132
Toluene	50.0	50.4		ug/Kg		101	75 - 120
1,2,3-Trichlorobenzene	50.0	50.3		ug/Kg		101	60 - 140
1,2,4-Trichlorobenzene	50.0	51.2		ug/Kg		102	60 - 140
1,1,1-Trichloroethane	50.0	54.4		ug/Kg		109	70 - 130
1,1,2-Trichloroethane	50.0	47.7		ug/Kg		95	70 - 130
Trichloroethene	50.0	53.2		ug/Kg		106	70 - 133
Trichlorofluoromethane	50.0	55.7		ug/Kg		111	60 - 140
1,2,3-Trichloropropane	50.0	48.9		ug/Kg		98	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	69.2		ug/Kg		138	60 - 140
1,2,4-Trimethylbenzene	50.0	47.9		ug/Kg		96	70 - 130
1,3,5-Trimethylbenzene	50.0	48.3		ug/Kg		97	70 - 131
Vinyl acetate	50.0	45.9		ug/Kg		92	38 - 176
Vinyl chloride	50.0	47.9		ug/Kg		96	58 - 125
m-Xylene & p-Xylene	50.0	49.0		ug/Kg		98	70 - 146
o-Xylene	50.0	49.7		ug/Kg		99	70 - 140
2,2-Dichloropropane	50.0	54.5		ug/Kg		109	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCS 720-250626/7
Matrix: Solid
Analysis Batch: 250626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	936		ug/Kg		94	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*93*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCSD 720-250626/6
Matrix: Solid
Analysis Batch: 250626

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	46.5		ug/Kg		93	70 - 144	5	20
Acetone	250	231		ug/Kg		92	30 - 162	5	30
Benzene	50.0	48.7		ug/Kg		97	70 - 130	2	20
Dichlorobromomethane	50.0	47.5		ug/Kg		95	70 - 140	3	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250626/6
Matrix: Solid
Analysis Batch: 250626

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromobenzene	50.0	48.6		ug/Kg		97	70 - 130	0	20
Chlorobromomethane	50.0	51.0		ug/Kg		102	70 - 130	4	20
Bromoform	50.0	51.9		ug/Kg		104	59 - 158	1	20
Bromomethane	50.0	49.6		ug/Kg		99	59 - 132	4	20
2-Butanone (MEK)	250	240		ug/Kg		96	59 - 159	0	20
n-Butylbenzene	50.0	52.8		ug/Kg		106	70 - 142	3	20
sec-Butylbenzene	50.0	50.5		ug/Kg		101	70 - 136	1	20
tert-Butylbenzene	50.0	49.2		ug/Kg		98	70 - 130	2	20
Carbon disulfide	50.0	68.0		ug/Kg		136	60 - 140	0	20
Carbon tetrachloride	50.0	55.5		ug/Kg		111	70 - 142	0	20
Chlorobenzene	50.0	50.6		ug/Kg		101	70 - 130	1	20
Chloroethane	50.0	47.4		ug/Kg		95	65 - 130	4	20
Chloroform	50.0	49.2		ug/Kg		98	77 - 127	3	20
Chloromethane	50.0	49.1		ug/Kg		98	55 - 140	4	20
2-Chlorotoluene	50.0	47.6		ug/Kg		95	70 - 138	1	20
4-Chlorotoluene	50.0	48.3		ug/Kg		97	70 - 136	3	20
Chlorodibromomethane	50.0	50.7		ug/Kg		101	70 - 146	1	20
1,2-Dichlorobenzene	50.0	49.0		ug/Kg		98	70 - 130	2	20
1,3-Dichlorobenzene	50.0	49.3		ug/Kg		99	70 - 131	1	20
1,4-Dichlorobenzene	50.0	49.7		ug/Kg		99	70 - 130	1	20
1,3-Dichloropropane	50.0	47.1		ug/Kg		94	70 - 140	0	20
1,1-Dichloropropene	50.0	52.3		ug/Kg		105	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	50.0	52.1		ug/Kg		104	60 - 145	0	20
Ethylene Dibromide	50.0	49.4		ug/Kg		99	70 - 140	1	20
Dibromomethane	50.0	46.9		ug/Kg		94	70 - 139	4	20
Dichlorodifluoromethane	50.0	44.9		ug/Kg		90	37 - 158	6	20
1,1-Dichloroethane	50.0	52.1		ug/Kg		104	70 - 130	0	20
1,2-Dichloroethane	50.0	48.5		ug/Kg		97	70 - 130	5	20
1,1-Dichloroethene	50.0	62.3	*	ug/Kg		125	74 - 122	2	20
cis-1,2-Dichloroethene	50.0	49.8		ug/Kg		100	70 - 138	3	20
trans-1,2-Dichloroethene	50.0	54.7		ug/Kg		109	67 - 130	1	20
1,2-Dichloropropane	50.0	49.2		ug/Kg		98	73 - 127	1	20
cis-1,3-Dichloropropene	50.0	50.4		ug/Kg		101	68 - 147	0	20
trans-1,3-Dichloropropene	50.0	47.7		ug/Kg		95	70 - 155	0	20
Ethylbenzene	50.0	50.3		ug/Kg		101	80 - 137	2	20
Hexachlorobutadiene	50.0	54.2		ug/Kg		108	70 - 132	2	20
2-Hexanone	250	236		ug/Kg		94	62 - 158	2	20
Isopropylbenzene	50.0	51.3		ug/Kg		103	70 - 130	0	20
4-Isopropyltoluene	50.0	51.6		ug/Kg		103	70 - 133	1	20
Methylene Chloride	50.0	50.1		ug/Kg		100	70 - 134	3	20
4-Methyl-2-pentanone (MIBK)	250	231		ug/Kg		92	60 - 160	0	20
Naphthalene	50.0	48.9		ug/Kg		98	60 - 147	2	20
N-Propylbenzene	50.0	49.7		ug/Kg		99	70 - 130	2	20
Styrene	50.0	48.3		ug/Kg		97	70 - 130	0	20
1,1,1,2-Tetrachloroethane	50.0	50.9		ug/Kg		102	70 - 130	3	20
1,1,2,2-Tetrachloroethane	50.0	45.5		ug/Kg		91	70 - 146	1	20
Tetrachloroethene	50.0	54.4		ug/Kg		109	70 - 132	3	20
Toluene	50.0	50.2		ug/Kg		100	75 - 120	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250626/6
Matrix: Solid
Analysis Batch: 250626

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichlorobenzene			50.0	51.2		ug/Kg		102	60 - 140	2	20
1,2,4-Trichlorobenzene			50.0	52.6		ug/Kg		105	60 - 140	3	20
1,1,1-Trichloroethane			50.0	53.6		ug/Kg		107	70 - 130	1	20
1,1,2-Trichloroethane			50.0	47.7		ug/Kg		95	70 - 130	0	20
Trichloroethene			50.0	52.8		ug/Kg		106	70 - 133	1	20
Trichlorofluoromethane			50.0	53.3		ug/Kg		107	60 - 140	4	20
1,2,3-Trichloropropane			50.0	48.6		ug/Kg		97	70 - 146	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	68.0		ug/Kg		136	60 - 140	2	20
1,2,4-Trimethylbenzene			50.0	47.9		ug/Kg		96	70 - 130	0	20
1,3,5-Trimethylbenzene			50.0	48.6		ug/Kg		97	70 - 131	1	20
Vinyl acetate			50.0	44.5		ug/Kg		89	38 - 176	3	20
Vinyl chloride			50.0	46.8		ug/Kg		94	58 - 125	2	20
m-Xylene & p-Xylene			50.0	49.4		ug/Kg		99	70 - 146	1	20
o-Xylene			50.0	49.1		ug/Kg		98	70 - 140	1	20
2,2-Dichloropropane			50.0	53.3		ug/Kg		107	70 - 162	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*91*		*60 - 140*
Toluene-d8 (Surr)	*98*		*58 - 140*

Lab Sample ID: LCSD 720-250626/8
Matrix: Solid
Analysis Batch: 250626

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	929		ug/Kg		93	70 - 122	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*93*		*60 - 140*
Toluene-d8 (Surr)	*95*		*58 - 140*

Lab Sample ID: MB 720-250644/4
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/31/18 07:18	1
Acetone	ND		50	38	ug/Kg			08/31/18 07:18	1
Benzene	ND		5.0	0.65	ug/Kg			08/31/18 07:18	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/31/18 07:18	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/31/18 07:18	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/31/18 07:18	1
Bromoform	ND		5.0	2.0	ug/Kg			08/31/18 07:18	1
Bromomethane	ND		10	0.79	ug/Kg			08/31/18 07:18	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250644/4
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		50	21	ug/Kg			08/31/18 07:18	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/31/18 07:18	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/31/18 07:18	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/31/18 07:18	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/31/18 07:18	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/31/18 07:18	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/31/18 07:18	1
Chloroethane	ND		10	0.56	ug/Kg			08/31/18 07:18	1
Chloroform	ND		5.0	0.66	ug/Kg			08/31/18 07:18	1
Chloromethane	ND		10	0.79	ug/Kg			08/31/18 07:18	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/31/18 07:18	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/31/18 07:18	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/31/18 07:18	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/31/18 07:18	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/31/18 07:18	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/31/18 07:18	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/31/18 07:18	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/31/18 07:18	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/31/18 07:18	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/31/18 07:18	1
Dibromomethane	ND		10	0.86	ug/Kg			08/31/18 07:18	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/31/18 07:18	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/31/18 07:18	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/31/18 07:18	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/31/18 07:18	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/31/18 07:18	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/31/18 07:18	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/31/18 07:18	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/31/18 07:18	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/31/18 07:18	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/31/18 07:18	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/31/18 07:18	1
2-Hexanone	ND		50	10	ug/Kg			08/31/18 07:18	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/31/18 07:18	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/31/18 07:18	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/31/18 07:18	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/31/18 07:18	1
Naphthalene	ND		10	1.5	ug/Kg			08/31/18 07:18	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/31/18 07:18	1
Styrene	ND		5.0	0.63	ug/Kg			08/31/18 07:18	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/31/18 07:18	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/31/18 07:18	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/31/18 07:18	1
Toluene	ND		5.0	0.71	ug/Kg			08/31/18 07:18	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/31/18 07:18	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/31/18 07:18	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/31/18 07:18	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/31/18 07:18	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250644/4
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		5.0	0.63	ug/Kg			08/31/18 07:18	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/31/18 07:18	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/31/18 07:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/31/18 07:18	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/31/18 07:18	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/31/18 07:18	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/31/18 07:18	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/31/18 07:18	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/31/18 07:18	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/31/18 07:18	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/31/18 07:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*45 - 131*		*08/31/18 07:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*60 - 140*		*08/31/18 07:18*	*1*
Toluene-d8 (Surr)	*96*		*58 - 140*		*08/31/18 07:18*	*1*

Lab Sample ID: LCS 720-250644/5
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	54.5		ug/Kg		109	70 - 144
Acetone	250	280		ug/Kg		112	30 - 162
Benzene	50.0	50.9		ug/Kg		102	70 - 130
Dichlorobromomethane	50.0	52.7		ug/Kg		105	70 - 140
Bromobenzene	50.0	49.4		ug/Kg		99	70 - 130
Chlorobromomethane	50.0	56.3		ug/Kg		113	70 - 130
Bromoform	50.0	58.4		ug/Kg		117	59 - 158
Bromomethane	50.0	48.8		ug/Kg		98	59 - 132
2-Butanone (MEK)	250	278		ug/Kg		111	59 - 159
n-Butylbenzene	50.0	53.3		ug/Kg		107	70 - 142
sec-Butylbenzene	50.0	50.1		ug/Kg		100	70 - 136
tert-Butylbenzene	50.0	49.7		ug/Kg		99	70 - 130
Carbon disulfide	50.0	68.5		ug/Kg		137	60 - 140
Carbon tetrachloride	50.0	59.3		ug/Kg		119	70 - 142
Chlorobenzene	50.0	51.7		ug/Kg		103	70 - 130
Chloroethane	50.0	46.2		ug/Kg		92	65 - 130
Chloroform	50.0	52.8		ug/Kg		106	77 - 127
Chloromethane	50.0	48.2		ug/Kg		96	55 - 140
2-Chlorotoluene	50.0	47.5		ug/Kg		95	70 - 138
4-Chlorotoluene	50.0	47.9		ug/Kg		96	70 - 136
Chlorodibromomethane	50.0	57.2		ug/Kg		114	70 - 146
1,2-Dichlorobenzene	50.0	51.6		ug/Kg		103	70 - 130
1,3-Dichlorobenzene	50.0	50.2		ug/Kg		100	70 - 131
1,4-Dichlorobenzene	50.0	50.9		ug/Kg		102	70 - 130
1,3-Dichloropropane	50.0	52.5		ug/Kg		105	70 - 140

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250644/5
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloropropene	50.0	54.7		ug/Kg		109	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	57.6		ug/Kg		115	60 - 145
Ethylene Dibromide	50.0	55.6		ug/Kg		111	70 - 140
Dibromomethane	50.0	53.7		ug/Kg		107	70 - 139
Dichlorodifluoromethane	50.0	42.1		ug/Kg		84	37 - 158
1,1-Dichloroethane	50.0	54.1		ug/Kg		108	70 - 130
1,2-Dichloroethane	50.0	56.4		ug/Kg		113	70 - 130
1,1-Dichloroethene	50.0	64.6	*	ug/Kg		129	74 - 122
cis-1,2-Dichloroethene	50.0	53.0		ug/Kg		106	70 - 138
trans-1,2-Dichloroethene	50.0	56.8		ug/Kg		114	67 - 130
1,2-Dichloropropane	50.0	51.7		ug/Kg		103	73 - 127
cis-1,3-Dichloropropene	50.0	54.4		ug/Kg		109	68 - 147
trans-1,3-Dichloropropene	50.0	53.3		ug/Kg		107	70 - 155
Ethylbenzene	50.0	50.7		ug/Kg		101	80 - 137
Hexachlorobutadiene	50.0	56.1		ug/Kg		112	70 - 132
2-Hexanone	250	288		ug/Kg		115	62 - 158
Isopropylbenzene	50.0	53.1		ug/Kg		106	70 - 130
4-Isopropyltoluene	50.0	51.7		ug/Kg		103	70 - 133
Methylene Chloride	50.0	52.6		ug/Kg		105	70 - 134
4-Methyl-2-pentanone (MIBK)	250	282		ug/Kg		113	60 - 160
Naphthalene	50.0	53.4		ug/Kg		107	60 - 147
N-Propylbenzene	50.0	48.9		ug/Kg		98	70 - 130
Styrene	50.0	49.9		ug/Kg		100	70 - 130
1,1,1,2-Tetrachloroethane	50.0	54.3		ug/Kg		109	70 - 130
1,1,2,2-Tetrachloroethane	50.0	49.0		ug/Kg		98	70 - 146
Tetrachloroethene	50.0	57.1		ug/Kg		114	70 - 132
Toluene	50.0	50.7		ug/Kg		101	75 - 120
1,2,3-Trichlorobenzene	50.0	55.4		ug/Kg		111	60 - 140
1,2,4-Trichlorobenzene	50.0	55.6		ug/Kg		111	60 - 140
1,1,1-Trichloroethane	50.0	58.0		ug/Kg		116	70 - 130
1,1,2-Trichloroethane	50.0	53.6		ug/Kg		107	70 - 130
Trichloroethene	50.0	55.2		ug/Kg		110	70 - 133
Trichlorofluoromethane	50.0	56.1		ug/Kg		112	60 - 140
1,2,3-Trichloropropane	50.0	52.9		ug/Kg		106	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	74.5	*	ug/Kg		149	60 - 140
1,2,4-Trimethylbenzene	50.0	48.1		ug/Kg		96	70 - 130
1,3,5-Trimethylbenzene	50.0	48.5		ug/Kg		97	70 - 131
Vinyl acetate	50.0	52.1		ug/Kg		104	38 - 176
Vinyl chloride	50.0	46.0		ug/Kg		92	58 - 125
m-Xylene & p-Xylene	50.0	50.7		ug/Kg		101	70 - 146
o-Xylene	50.0	51.3		ug/Kg		103	70 - 140
2,2-Dichloropropane	50.0	57.5		ug/Kg		115	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: LCS 720-250644/7
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C4-C12			1000	981		ug/Kg		98	70 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*100*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCSD 720-250644/6
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether			50.0	53.0		ug/Kg		106	70 - 144	3	20
Acetone			250	260		ug/Kg		104	30 - 162	7	30
Benzene			50.0	50.0		ug/Kg		100	70 - 130	2	20
Dichlorobromomethane			50.0	52.5		ug/Kg		105	70 - 140	0	20
Bromobenzene			50.0	49.3		ug/Kg		99	70 - 130	0	20
Chlorobromomethane			50.0	55.0		ug/Kg		110	70 - 130	2	20
Bromoform			50.0	57.3		ug/Kg		115	59 - 158	2	20
Bromomethane			50.0	48.9		ug/Kg		98	59 - 132	0	20
2-Butanone (MEK)			250	266		ug/Kg		106	59 - 159	4	20
n-Butylbenzene			50.0	52.4		ug/Kg		105	70 - 142	2	20
sec-Butylbenzene			50.0	49.6		ug/Kg		99	70 - 136	1	20
tert-Butylbenzene			50.0	49.0		ug/Kg		98	70 - 130	1	20
Carbon disulfide			50.0	67.2		ug/Kg		134	60 - 140	2	20
Carbon tetrachloride			50.0	56.7		ug/Kg		113	70 - 142	5	20
Chlorobenzene			50.0	51.1		ug/Kg		102	70 - 130	1	20
Chloroethane			50.0	46.4		ug/Kg		93	65 - 130	0	20
Chloroform			50.0	51.5		ug/Kg		103	77 - 127	2	20
Chloromethane			50.0	47.0		ug/Kg		94	55 - 140	2	20
2-Chlorotoluene			50.0	47.3		ug/Kg		95	70 - 138	0	20
4-Chlorotoluene			50.0	47.9		ug/Kg		96	70 - 136	0	20
Chlorodibromomethane			50.0	55.6		ug/Kg		111	70 - 146	3	20
1,2-Dichlorobenzene			50.0	51.5		ug/Kg		103	70 - 130	0	20
1,3-Dichlorobenzene			50.0	49.9		ug/Kg		100	70 - 131	1	20
1,4-Dichlorobenzene			50.0	50.7		ug/Kg		101	70 - 130	0	20
1,3-Dichloropropane			50.0	51.5		ug/Kg		103	70 - 140	2	20
1,1-Dichloropropene			50.0	53.1		ug/Kg		106	70 - 130	3	20
1,2-Dibromo-3-Chloropropane			50.0	57.1		ug/Kg		114	60 - 145	1	20
Ethylene Dibromide			50.0	53.9		ug/Kg		108	70 - 140	3	20
Dibromomethane			50.0	52.9		ug/Kg		106	70 - 139	2	20
Dichlorodifluoromethane			50.0	39.6		ug/Kg		79	37 - 158	6	20
1,1-Dichloroethane			50.0	52.2		ug/Kg		104	70 - 130	3	20
1,2-Dichloroethane			50.0	54.0		ug/Kg		108	70 - 130	4	20
1,1-Dichloroethene			50.0	62.4	*	ug/Kg		125	74 - 122	3	20
cis-1,2-Dichloroethene			50.0	52.1		ug/Kg		104	70 - 138	2	20
trans-1,2-Dichloroethene			50.0	56.1		ug/Kg		112	67 - 130	1	20
1,2-Dichloropropane			50.0	51.5		ug/Kg		103	73 - 127	0	20
cis-1,3-Dichloropropene			50.0	53.4		ug/Kg		107	68 - 147	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250644/6
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,3-Dichloropropene	50.0	51.6		ug/Kg		103	70 - 155	3	20
Ethylbenzene	50.0	49.8		ug/Kg		100	80 - 137	2	20
Hexachlorobutadiene	50.0	56.2		ug/Kg		112	70 - 132	0	20
2-Hexanone	250	270		ug/Kg		108	62 - 158	7	20
Isopropylbenzene	50.0	51.8		ug/Kg		104	70 - 130	2	20
4-Isopropyltoluene	50.0	51.0		ug/Kg		102	70 - 133	1	20
Methylene Chloride	50.0	52.0		ug/Kg		104	70 - 134	1	20
4-Methyl-2-pentanone (MIBK)	250	268		ug/Kg		107	60 - 160	5	20
Naphthalene	50.0	53.5		ug/Kg		107	60 - 147	0	20
N-Propylbenzene	50.0	48.7		ug/Kg		97	70 - 130	0	20
Styrene	50.0	49.2		ug/Kg		98	70 - 130	1	20
1,1,1,2-Tetrachloroethane	50.0	53.4		ug/Kg		107	70 - 130	2	20
1,1,2,2-Tetrachloroethane	50.0	49.5		ug/Kg		99	70 - 146	1	20
Tetrachloroethene	50.0	55.0		ug/Kg		110	70 - 132	4	20
Toluene	50.0	50.0		ug/Kg		100	75 - 120	1	20
1,2,3-Trichlorobenzene	50.0	55.1		ug/Kg		110	60 - 140	0	20
1,2,4-Trichlorobenzene	50.0	56.0		ug/Kg		112	60 - 140	1	20
1,1,1-Trichloroethane	50.0	55.3		ug/Kg		111	70 - 130	5	20
1,1,2-Trichloroethane	50.0	52.2		ug/Kg		104	70 - 130	3	20
Trichloroethene	50.0	53.9		ug/Kg		108	70 - 133	2	20
Trichlorofluoromethane	50.0	54.0		ug/Kg		108	60 - 140	4	20
1,2,3-Trichloropropane	50.0	51.9		ug/Kg		104	70 - 146	2	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	70.0		ug/Kg		140	60 - 140	6	20
1,2,4-Trimethylbenzene	50.0	48.1		ug/Kg		96	70 - 130	0	20
1,3,5-Trimethylbenzene	50.0	48.2		ug/Kg		96	70 - 131	1	20
Vinyl acetate	50.0	50.5		ug/Kg		101	38 - 176	3	20
Vinyl chloride	50.0	44.8		ug/Kg		90	58 - 125	3	20
m-Xylene & p-Xylene	50.0	49.4		ug/Kg		99	70 - 146	2	20
o-Xylene	50.0	50.0		ug/Kg		100	70 - 140	2	20
2,2-Dichloropropane	50.0	55.4		ug/Kg		111	70 - 162	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*100*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: LCSD 720-250644/8
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12	1000	974		ug/Kg		97	70 - 122	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*100*		*60 - 140*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250644/8
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*97*		*58 - 140*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 720-250607/1-A
Matrix: Solid
Analysis Batch: 250799

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250607

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		10	5.0	ug/Kg		08/30/18 14:15	09/04/18 12:21	1
Acenaphthene	ND		5.0	2.8	ug/Kg		08/30/18 14:15	09/04/18 12:21	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		08/30/18 14:15	09/04/18 12:21	1
Anthracene	ND		5.0	2.0	ug/Kg		08/30/18 14:15	09/04/18 12:21	1
Benzo[a]anthracene	ND		5.0	1.5	ug/Kg		08/30/18 14:15	09/04/18 12:21	1
Benzo[a]pyrene	ND		5.0	1.9	ug/Kg		08/30/18 14:15	09/04/18 12:21	1
Benzo[b]fluoranthene	ND		5.0	2.1	ug/Kg		08/30/18 14:15	09/04/18 12:21	1
Benzo[g,h,i]perylene	ND		5.0	4.3	ug/Kg		08/30/18 14:15	09/04/18 12:21	1
Benzo[k]fluoranthene	ND		5.0	2.1	ug/Kg		08/30/18 14:15	09/04/18 12:21	1
Chrysene	ND		5.0	1.4	ug/Kg		08/30/18 14:15	09/04/18 12:21	1
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		08/30/18 14:15	09/04/18 12:21	1
Fluoranthene	ND		5.0	1.4	ug/Kg		08/30/18 14:15	09/04/18 12:21	1
Fluorene	ND		5.0	2.2	ug/Kg		08/30/18 14:15	09/04/18 12:21	1
Indeno[1,2,3-cd]pyrene	ND		5.0	4.2	ug/Kg		08/30/18 14:15	09/04/18 12:21	1
Naphthalene	ND		5.0	3.5	ug/Kg		08/30/18 14:15	09/04/18 12:21	1
Phenanthrene	ND		5.0	1.8	ug/Kg		08/30/18 14:15	09/04/18 12:21	1
Pyrene	ND		5.0	1.7	ug/Kg		08/30/18 14:15	09/04/18 12:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*33 - 120*	*08/30/18 14:15*	*09/04/18 12:21*	*1*
Terphenyl-d14	*99*		*35 - 146*	*08/30/18 14:15*	*09/04/18 12:21*	*1*

Lab Sample ID: LCS 720-250607/2-A
Matrix: Solid
Analysis Batch: 250799

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250607

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	667	437		ug/Kg		66	46 - 110
Acenaphthene	667	527		ug/Kg		79	46 - 106
Acenaphthylene	667	510		ug/Kg		76	46 - 108
Anthracene	667	539		ug/Kg		81	55 - 103
Benzo[a]anthracene	667	587		ug/Kg		88	54 - 110
Benzo[a]pyrene	667	574		ug/Kg		86	62 - 111
Benzo[b]fluoranthene	667	563		ug/Kg		84	60 - 109
Benzo[g,h,i]perylene	667	557		ug/Kg		84	52 - 114
Benzo[k]fluoranthene	667	563		ug/Kg		84	58 - 109
Chrysene	667	597		ug/Kg		89	54 - 108
Dibenz(a,h)anthracene	667	568		ug/Kg		85	58 - 112

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 720-250607/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250799 — **Prep Batch: 250607**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoranthene	667	536		ug/Kg		80	59 - 109
Fluorene	667	541		ug/Kg		81	52 - 106
Indeno[1,2,3-cd]pyrene	667	588		ug/Kg		88	55 - 120
Naphthalene	667	450		ug/Kg		68	49 - 110
Phenanthrene	667	532		ug/Kg		80	57 - 110
Pyrene	667	586		ug/Kg		88	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*68*		*33 - 120*
Terphenyl-d14	*89*		*35 - 146*

Lab Sample ID: 720-88263-E-10-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250799 — **Prep Batch: 250607**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	6.4	J	652	398		ug/Kg		60	46 - 110
Acenaphthene	ND		652	463		ug/Kg		71	46 - 106
Acenaphthylene	3.2	J	652	440		ug/Kg		67	46 - 108
Anthracene	5.8		652	507		ug/Kg		77	55 - 103
Benzo[a]anthracene	16		652	627		ug/Kg		94	54 - 110
Benzo[a]pyrene	21		652	694	*	ug/Kg		103	62 - 111
Benzo[b]fluoranthene	33	F1	652	771	F1 *	ug/Kg		113	60 - 109
Benzo[g,h,i]perylene	9.4	F1	652	335	F1 *	ug/Kg		50	52 - 114
Benzo[k]fluoranthene	14	F1	652	731	F1 *	ug/Kg		110	58 - 109
Chrysene	25		652	670		ug/Kg		99	54 - 108
Dibenz(a,h)anthracene	ND	F1	652	328	F1 *	ug/Kg		50	58 - 112
Fluoranthene	24		652	594		ug/Kg		87	59 - 109
Fluorene	ND		652	484		ug/Kg		74	52 - 106
Indeno[1,2,3-cd]pyrene	8.7	F1	652	375	*	ug/Kg		56	55 - 120
Naphthalene	4.5	J	652	384		ug/Kg		58	49 - 110
Phenanthrene	19		652	564		ug/Kg		83	57 - 110
Pyrene	29		652	798		ug/Kg		118	50 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*59*		*33 - 120*
Terphenyl-d14	*105*		*35 - 146*

Lab Sample ID: 720-88263-E-10-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250799 — **Prep Batch: 250607**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	6.4	J	651	376		ug/Kg		57	46 - 110	6	35
Acenaphthene	ND		651	449		ug/Kg		69	46 - 106	3	35
Acenaphthylene	3.2	J	651	439		ug/Kg		67	46 - 108	0	35
Anthracene	5.8		651	515		ug/Kg		78	55 - 103	1	35
Benzo[a]anthracene	16		651	602		ug/Kg		90	54 - 110	4	35

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 720-88263-E-10-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250799 — **Prep Batch: 250607**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]pyrene	21		651	572	*	ug/Kg		85	62 - 111	19	35
Benzo[b]fluoranthene	33	F1	651	679	*	ug/Kg		99	60 - 109	13	35
Benzo[g,h,i]perylene	9.4	F1	651	248	F1 *	ug/Kg		37	52 - 114	30	35
Benzo[k]fluoranthene	14	F1	651	670	*	ug/Kg		101	58 - 109	9	35
Chrysene	25		651	629		ug/Kg		93	54 - 108	6	35
Dibenz(a,h)anthracene	ND	F1	651	301	F1 *	ug/Kg		46	58 - 112	8	35
Fluoranthene	24		651	569		ug/Kg		84	59 - 109	4	35
Fluorene	ND		651	480		ug/Kg		74	52 - 106	1	35
Indeno[1,2,3-cd]pyrene	8.7	F1	651	298	F1 *	ug/Kg		44	55 - 120	23	35
Naphthalene	4.5	J	651	346		ug/Kg		53	49 - 110	10	35
Phenanthrene	19		651	539		ug/Kg		80	57 - 110	4	35
Pyrene	29		651	745		ug/Kg		110	50 - 120	7	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*60*		*33 - 120*
Terphenyl-d14	*105*		*35 - 146*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-250498/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250653 — **Prep Batch: 250498**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		2000	750	ug/Kg		08/29/18 13:41	08/31/18 13:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*91*		*40 - 130*	*08/29/18 13:41*	*08/31/18 13:52*	*1*

Lab Sample ID: LCS 720-250498/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250653 — **Prep Batch: 250498**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	167000	150000		ug/Kg		90	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*88*		*40 - 130*

Lab Sample ID: 720-88239-D-12-E MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250653 — **Prep Batch: 250498**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	10000		164000	157000		ug/Kg		90	50 - 150

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 720-88239-D-12-E MS
Matrix: Solid
Analysis Batch: 250653

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250498

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
p-Terphenyl	*92*		*40 - 130*

Lab Sample ID: 720-88239-D-12-F MSD
Matrix: Solid
Analysis Batch: 250653

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250498

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	10000		164000	156000		ug/Kg		89	50 - 150	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
p-Terphenyl	*86*		*40 - 130*

Lab Sample ID: MB 720-250619/1-A
Matrix: Solid
Analysis Batch: 250884

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250619

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		2000	750	ug/Kg		08/30/18 15:54	09/05/18 10:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*90*		*40 - 130*	*08/30/18 15:54*	*09/05/18 10:39*	*1*

Lab Sample ID: LCS 720-250619/2-A
Matrix: Solid
Analysis Batch: 250884

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250619

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	167000	167000		ug/Kg		100	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*94*		*40 - 130*

Lab Sample ID: 720-88264-5 MS
Matrix: Solid
Analysis Batch: 250884

Client Sample ID: DUP-32
Prep Type: Total/NA
Prep Batch: 250619

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	850000	F2	160000	995000	4	ug/Kg		89	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
p-Terphenyl	*0*	*X D*	*40 - 130*

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 720-88264-5 MSD — **Client Sample ID: DUP-32**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250884 — **Prep Batch: 250619**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	850000	F2	160000	635000	4 F2	ug/Kg		-136	50 - 150	44	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
p-Terphenyl	*0*	*X D*	*40 - 130*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 720-250595/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250868 — **Prep Batch: 250595**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.61	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
Aldrin	ND		2.0	0.50	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
alpha-BHC	ND		2.0	0.55	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
Dieldrin	ND		2.0	0.59	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
Endrin	ND		2.0	0.46	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
Endrin aldehyde	ND		2.0	0.63	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
Methoxychlor	ND		2.0	0.68	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
Toxaphene	ND		40	6.8	ug/Kg		08/30/18 12:52	09/05/18 05:43	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/30/18 12:52	09/05/18 05:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*99*		*21 - 136*	*08/30/18 12:52*	*09/05/18 05:43*	*1*
Tetrachloro-m-xylene	*82*		*21 - 145*	*08/30/18 12:52*	*09/05/18 05:43*	*1*

Lab Sample ID: LCS 720-250595/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250868 — **Prep Batch: 250595**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	17.6		ug/Kg		105	75 - 128
4,4'-DDE	16.7	17.2		ug/Kg		103	76 - 126

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 720-250595/2-A
Matrix: Solid
Analysis Batch: 250868

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250595

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDT	16.7	16.7		ug/Kg		100	63 - 127
Aldrin	16.7	14.2		ug/Kg		85	65 - 120
alpha-BHC	16.7	11.3		ug/Kg		68	46 - 122
beta-BHC	16.7	16.4		ug/Kg		99	78 - 136
cis-Chlordane	16.7	16.2		ug/Kg		97	70 - 120
delta-BHC	16.7	14.2		ug/Kg		85	43 - 125
Dieldrin	16.7	16.2		ug/Kg		97	72 - 120
Endosulfan I	16.7	16.1		ug/Kg		97	62 - 120
Endosulfan II	16.7	17.2		ug/Kg		103	65 - 120
Endosulfan sulfate	16.7	16.3		ug/Kg		98	72 - 121
Endrin	16.7	17.1		ug/Kg		103	68 - 120
Endrin aldehyde	16.7	16.6		ug/Kg		99	68 - 120
Endrin ketone	16.7	16.8		ug/Kg		101	75 - 136
gamma-BHC (Lindane)	16.7	14.8		ug/Kg		89	72 - 120
Heptachlor	16.7	15.6		ug/Kg		94	69 - 120
Heptachlor epoxide	16.7	16.1		ug/Kg		97	68 - 120
Methoxychlor	16.7	18.2		ug/Kg		109	71 - 132
trans-Chlordane	16.7	16.1		ug/Kg		97	68 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*107*		*21 - 136*
Tetrachloro-m-xylene	*82*		*21 - 145*

Lab Sample ID: 720-88264-5 MS
Matrix: Solid
Analysis Batch: 250868

Client Sample ID: DUP-32
Prep Type: Total/NA
Prep Batch: 250595

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND	F1	16.3	18.3		ug/Kg		112	40 - 120
4,4'-DDE	ND		16.3	15.7		ug/Kg		96	40 - 120
4,4'-DDT	ND	F2	16.3	14.3		ug/Kg		88	17 - 144
Aldrin	ND		16.3	14.4		ug/Kg		88	53 - 120
alpha-BHC	ND		16.3	12.4		ug/Kg		76	40 - 120
beta-BHC	ND	F2	16.3	15.7		ug/Kg		96	40 - 120
cis-Chlordane	ND		16.3	15.7		ug/Kg		96	40 - 120
delta-BHC	ND	F2	16.3	12.5		ug/Kg		76	40 - 120
Dieldrin	ND		16.3	15.6		ug/Kg		96	46 - 130
Endosulfan I	ND		16.3	16.4		ug/Kg		101	40 - 120
Endosulfan II	ND		16.3	16.9		ug/Kg		104	40 - 120
Endosulfan sulfate	ND	F2	16.3	16.0		ug/Kg		98	40 - 120
Endrin	ND		16.3	18.4		ug/Kg		113	32 - 143
Endrin aldehyde	ND		16.3	15.6		ug/Kg		96	40 - 120
Endrin ketone	ND	F2	16.3	16.3		ug/Kg		100	40 - 120
gamma-BHC (Lindane)	ND		16.3	15.6		ug/Kg		96	58 - 120
Heptachlor	ND		16.3	15.4		ug/Kg		94	52 - 120
Heptachlor epoxide	ND		16.3	16.1		ug/Kg		99	40 - 120
Methoxychlor	ND	F2	16.3	17.2		ug/Kg		105	40 - 120
trans-Chlordane	ND	F1	16.3	16.5		ug/Kg		101	40 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl	105		21 - 136
Tetrachloro-m-xylene	90		21 - 145

Lab Sample ID: 720-88264-5 MSD — **Client Sample ID: DUP-32**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250868 — **Prep Batch: 250595**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND	F1	16.3	17.3		ug/Kg		106	40 - 120	6	20
4,4'-DDE	ND		16.3	14.9		ug/Kg		91	40 - 120	5	20
4,4'-DDT	ND	F2	16.3	10.2	F2	ug/Kg		62	17 - 144	34	20
Aldrin	ND		16.3	13.4		ug/Kg		82	53 - 120	7	20
alpha-BHC	ND		16.3	12.7		ug/Kg		78	40 - 120	3	20
beta-BHC	ND	F2	16.3	12.1	F2	ug/Kg		74	40 - 120	26	20
cis-Chlordane	ND		16.3	14.2		ug/Kg		87	40 - 120	10	20
delta-BHC	ND	F2	16.3	10.0	F2	ug/Kg		61	40 - 120	22	20
Dieldrin	ND		16.3	14.3		ug/Kg		88	46 - 130	9	20
Endosulfan I	ND		16.3	15.4		ug/Kg		95	40 - 120	6	20
Endosulfan II	ND		16.3	14.9		ug/Kg		91	40 - 120	13	30
Endosulfan sulfate	ND	F2	16.3	12.7	F2	ug/Kg		78	40 - 120	23	20
Endrin	ND		16.3	16.6		ug/Kg		102	32 - 143	10	20
Endrin aldehyde	ND		16.3	12.2	F2	ug/Kg		75	40 - 120	24	20
Endrin ketone	ND	F2	16.3	12.8	F2	ug/Kg		79	40 - 120	24	20
gamma-BHC (Lindane)	ND		16.3	13.9		ug/Kg		85	58 - 120	11	20
Heptachlor	ND		16.3	14.1		ug/Kg		87	52 - 120	8	20
Heptachlor epoxide	ND		16.3	16.0		ug/Kg		98	40 - 120	1	20
Methoxychlor	ND	F2	16.3	11.8	F2	ug/Kg		72	40 - 120	37	20
trans-Chlordane	ND	F1	16.3	15.3		ug/Kg		94	40 - 120	7	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
DCB Decachlorobiphenyl	90		21 - 136
Tetrachloro-m-xylene	87		21 - 145

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-343206/20-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 343528 — **Prep Batch: 343206**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/30/18 09:28	09/01/18 12:41	1
Aroclor-1221	ND		50	24	ug/Kg		08/30/18 09:28	09/01/18 12:41	1
Aroclor-1232	ND		50	23	ug/Kg		08/30/18 09:28	09/01/18 12:41	1
Aroclor-1242	ND		50	19	ug/Kg		08/30/18 09:28	09/01/18 12:41	1
Aroclor-1248	ND		50	24	ug/Kg		08/30/18 09:28	09/01/18 12:41	1
Aroclor-1254	ND		50	23	ug/Kg		08/30/18 09:28	09/01/18 12:41	1
Aroclor-1260	ND		50	22	ug/Kg		08/30/18 09:28	09/01/18 12:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	73		14 - 128	08/30/18 09:28	09/01/18 12:41	1
DCB Decachlorobiphenyl	90		10 - 132	08/30/18 09:28	09/01/18 12:41	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 240-343206/21-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 343528 — **Prep Batch: 343206**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	1000	608		ug/Kg		61	47 - 120
Aroclor-1260	1000	689		ug/Kg		69	46 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*68*		*14 - 128*
DCB Decachlorobiphenyl	*78*		*10 - 132*

Lab Sample ID: MB 240-343944/20-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 344018 — **Prep Batch: 343944**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		09/05/18 12:35	09/06/18 23:34	1
Aroclor-1221	ND		50	24	ug/Kg		09/05/18 12:35	09/06/18 23:34	1
Aroclor-1232	ND		50	23	ug/Kg		09/05/18 12:35	09/06/18 23:34	1
Aroclor-1242	ND		50	19	ug/Kg		09/05/18 12:35	09/06/18 23:34	1
Aroclor-1248	ND		50	24	ug/Kg		09/05/18 12:35	09/06/18 23:34	1
Aroclor-1254	ND		50	23	ug/Kg		09/05/18 12:35	09/06/18 23:34	1
Aroclor-1260	ND		50	22	ug/Kg		09/05/18 12:35	09/06/18 23:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*65*		*14 - 128*	*09/05/18 12:35*	*09/06/18 23:34*	*1*
DCB Decachlorobiphenyl	*98*		*10 - 132*	*09/05/18 12:35*	*09/06/18 23:34*	*1*

Lab Sample ID: LCS 240-343944/21-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 344018 — **Prep Batch: 343944**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	1000	681		ug/Kg		68	47 - 120
Aroclor-1260	1000	872		ug/Kg		87	46 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*84*		*14 - 128*
DCB Decachlorobiphenyl	*113*		*10 - 132*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-250563/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250655 — **Prep Batch: 250563**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/30/18 08:40	08/30/18 23:12	1
Arsenic	ND		1.0	0.085	mg/Kg		08/30/18 08:40	08/30/18 23:12	1
Barium	ND		0.50	0.071	mg/Kg		08/30/18 08:40	08/30/18 23:12	1
Beryllium	ND		0.10	0.033	mg/Kg		08/30/18 08:40	08/30/18 23:12	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 720-250563/1-A
Matrix: Solid
Analysis Batch: 250655

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250563

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.13	0.012	mg/Kg		08/30/18 08:40	08/30/18 23:12	1
Chromium	ND		0.50	0.053	mg/Kg		08/30/18 08:40	08/30/18 23:12	1
Cobalt	ND		0.20	0.020	mg/Kg		08/30/18 08:40	08/30/18 23:12	1
Copper	ND		1.5	0.71	mg/Kg		08/30/18 08:40	08/30/18 23:12	1
Lead	ND		0.50	0.11	mg/Kg		08/30/18 08:40	08/30/18 23:12	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/30/18 08:40	08/30/18 23:12	1
Nickel	ND		0.50	0.051	mg/Kg		08/30/18 08:40	08/30/18 23:12	1
Selenium	ND		1.0	0.15	mg/Kg		08/30/18 08:40	08/30/18 23:12	1
Silver	ND		0.25	0.051	mg/Kg		08/30/18 08:40	08/30/18 23:12	1
Thallium	ND		0.50	0.15	mg/Kg		08/30/18 08:40	08/30/18 23:12	1
Vanadium	ND		0.50	0.068	mg/Kg		08/30/18 08:40	08/30/18 23:12	1
Zinc	ND		1.5	0.64	mg/Kg		08/30/18 08:40	08/30/18 23:12	1

Lab Sample ID: LCS 720-250563/2-A
Matrix: Solid
Analysis Batch: 250655

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250563

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	47.4		mg/Kg		95	80 - 120
Arsenic	50.0	47.5		mg/Kg		95	80 - 120
Barium	50.0	49.0		mg/Kg		98	80 - 120
Beryllium	50.0	48.3		mg/Kg		97	80 - 120
Cadmium	50.0	48.2		mg/Kg		96	80 - 120
Chromium	50.0	48.0		mg/Kg		96	80 - 120
Cobalt	50.0	48.9		mg/Kg		98	80 - 120
Copper	50.0	48.2		mg/Kg		96	80 - 120
Lead	50.0	48.7		mg/Kg		97	80 - 120
Molybdenum	50.0	48.7		mg/Kg		97	80 - 120
Nickel	50.0	48.8		mg/Kg		98	80 - 120
Selenium	50.0	46.3		mg/Kg		93	80 - 120
Silver	25.0	24.1		mg/Kg		96	80 - 120
Thallium	50.0	48.7		mg/Kg		97	80 - 120
Vanadium	50.0	48.3		mg/Kg		97	80 - 120
Zinc	50.0	48.0		mg/Kg		96	80 - 120

Lab Sample ID: 720-88263-D-16-A MS
Matrix: Solid
Analysis Batch: 250655

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250563

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.33	J F1	34.0	7.98	F1	mg/Kg		22	75 - 125
Arsenic	2.6	J	34.0	45.2		mg/Kg		125	75 - 125
Barium	36	F1	34.0	89.3	F1	mg/Kg		156	75 - 125
Beryllium	ND	F1	34.0	46.0	F1	mg/Kg		135	75 - 125
Cadmium	0.077	J	34.0	41.7		mg/Kg		122	75 - 125
Chromium	12	F1	34.0	58.0	F1	mg/Kg		137	75 - 125
Cobalt	12	F1	34.0	54.8	F1	mg/Kg		127	75 - 125
Copper	130	F1 F2	34.0	226	F1	mg/Kg		284	75 - 125
Lead	32	F1	34.0	76.7	F1	mg/Kg		131	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88263-D-16-A MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250655 — **Prep Batch: 250563**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Molybdenum	ND		34.0	39.9		mg/Kg		117	75 - 125
Nickel	6.2		34.0	48.1		mg/Kg		123	75 - 125
Selenium	ND		34.0	40.9		mg/Kg		120	75 - 125
Silver	0.20	J F1	17.0	23.8	F1	mg/Kg		139	75 - 125
Thallium	1.0	J	34.0	40.0		mg/Kg		115	75 - 125
Vanadium	110	F1	34.0	182	F1	mg/Kg		216	75 - 125
Zinc	55	F1	34.0	105	F1	mg/Kg		148	75 - 125

Lab Sample ID: 720-88263-D-16-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250655 — **Prep Batch: 250563**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.33	J F1	34.0	7.29	F1	mg/Kg		20	75 - 125	9	20
Arsenic	2.6	J	34.0	39.6		mg/Kg		109	75 - 125	13	20
Barium	36	F1	34.0	89.2	F1	mg/Kg		155	75 - 125	0	20
Beryllium	ND	F1	34.0	39.2		mg/Kg		115	75 - 125	16	20
Cadmium	0.077	J	34.0	36.4		mg/Kg		107	75 - 125	14	20
Chromium	12	F1	34.0	49.1		mg/Kg		110	75 - 125	17	20
Cobalt	12	F1	34.0	48.1		mg/Kg		107	75 - 125	13	20
Copper	130	F1 F2	34.0	163	F2	mg/Kg		99	75 - 125	32	20
Lead	32	F1	34.0	70.9		mg/Kg		114	75 - 125	8	20
Molybdenum	ND		34.0	34.8		mg/Kg		102	75 - 125	14	20
Nickel	6.2		34.0	41.3		mg/Kg		103	75 - 125	15	20
Selenium	ND		34.0	35.7		mg/Kg		105	75 - 125	13	20
Silver	0.20	J F1	17.0	20.3		mg/Kg		118	75 - 125	16	20
Thallium	1.0	J	34.0	35.0		mg/Kg		100	75 - 125	13	20
Vanadium	110	F1	34.0	162	F1	mg/Kg		155	75 - 125	12	20
Zinc	55	F1	34.0	92.7		mg/Kg		110	75 - 125	13	20

Lab Sample ID: MB 720-250637/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250761 — **Prep Batch: 250637**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/30/18 19:34	08/31/18 21:02	1
Arsenic	ND		1.0	0.085	mg/Kg		08/30/18 19:34	08/31/18 21:02	1
Barium	ND		0.50	0.071	mg/Kg		08/30/18 19:34	08/31/18 21:02	1
Beryllium	ND		0.10	0.033	mg/Kg		08/30/18 19:34	08/31/18 21:02	1
Cadmium	ND		0.13	0.012	mg/Kg		08/30/18 19:34	08/31/18 21:02	1
Chromium	ND		0.50	0.053	mg/Kg		08/30/18 19:34	08/31/18 21:02	1
Cobalt	ND		0.20	0.020	mg/Kg		08/30/18 19:34	08/31/18 21:02	1
Copper	ND		1.5	0.71	mg/Kg		08/30/18 19:34	08/31/18 21:02	1
Lead	ND		0.50	0.11	mg/Kg		08/30/18 19:34	08/31/18 21:02	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/30/18 19:34	08/31/18 21:02	1
Nickel	ND		0.50	0.051	mg/Kg		08/30/18 19:34	08/31/18 21:02	1
Selenium	ND		1.0	0.15	mg/Kg		08/30/18 19:34	08/31/18 21:02	1
Silver	ND		0.25	0.051	mg/Kg		08/30/18 19:34	08/31/18 21:02	1
Thallium	ND		0.50	0.15	mg/Kg		08/30/18 19:34	08/31/18 21:02	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 720-250637/1-A
Matrix: Solid
Analysis Batch: 250761

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250637

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	ND		0.50	0.068	mg/Kg		08/30/18 19:34	08/31/18 21:02	1
Zinc	ND		1.5	0.64	mg/Kg		08/30/18 19:34	08/31/18 21:02	1

Lab Sample ID: LCS 720-250637/2-A
Matrix: Solid
Analysis Batch: 250761

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250637

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	45.8		mg/Kg		92	80 - 120
Arsenic	50.0	46.7		mg/Kg		93	80 - 120
Barium	50.0	47.8		mg/Kg		96	80 - 120
Beryllium	50.0	46.2		mg/Kg		92	80 - 120
Cadmium	50.0	46.6		mg/Kg		93	80 - 120
Chromium	50.0	46.3		mg/Kg		93	80 - 120
Cobalt	50.0	49.1		mg/Kg		98	80 - 120
Copper	50.0	45.6		mg/Kg		91	80 - 120
Lead	50.0	47.6		mg/Kg		95	80 - 120
Molybdenum	50.0	47.8		mg/Kg		96	80 - 120
Nickel	50.0	46.4		mg/Kg		93	80 - 120
Selenium	50.0	44.8		mg/Kg		90	80 - 120
Silver	25.0	24.2		mg/Kg		97	80 - 120
Thallium	50.0	47.4		mg/Kg		95	80 - 120
Vanadium	50.0	46.9		mg/Kg		94	80 - 120
Zinc	50.0	47.8		mg/Kg		96	80 - 120

Lab Sample ID: 720-88313-D-1-A MS
Matrix: Solid
Analysis Batch: 250761

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250637

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.91	J F1	49.0	15.1	F1	mg/Kg		29	75 - 125
Arsenic	6.5		49.0	49.3		mg/Kg		87	75 - 125
Barium	190	F1	49.0	231		mg/Kg		76	75 - 125
Beryllium	ND		49.0	46.9		mg/Kg		96	75 - 125
Cadmium	0.12	J	49.0	46.2		mg/Kg		94	75 - 125
Chromium	49		49.0	95.3		mg/Kg		94	75 - 125
Cobalt	15		49.0	60.1		mg/Kg		93	75 - 125
Copper	21		49.0	67.9		mg/Kg		96	75 - 125
Lead	140	F1 F2	49.0	187		mg/Kg		88	75 - 125
Molybdenum	ND		49.0	42.8		mg/Kg		87	75 - 125
Nickel	39		49.0	86.1		mg/Kg		97	75 - 125
Selenium	ND		49.0	42.7		mg/Kg		87	75 - 125
Silver	0.66	J	24.5	25.0		mg/Kg		99	75 - 125
Thallium	ND		49.0	45.5		mg/Kg		93	75 - 125
Vanadium	44		49.0	91.3		mg/Kg		97	75 - 125
Zinc	110	F1	49.0	138	F1	mg/Kg		51	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88313-D-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250761 — **Prep Batch: 250637**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.91	J F1	48.5	13.6	F1	mg/Kg		26	75 - 125	10	20
Arsenic	6.5		48.5	50.3		mg/Kg		90	75 - 125	2	20
Barium	190	F1	48.5	227	F1	mg/Kg		70	75 - 125	2	20
Beryllium	ND		48.5	47.5		mg/Kg		98	75 - 125	1	20
Cadmium	0.12	J	48.5	45.7		mg/Kg		94	75 - 125	1	20
Chromium	49		48.5	90.1		mg/Kg		84	75 - 125	6	20
Cobalt	15		48.5	60.0		mg/Kg		94	75 - 125	0	20
Copper	21		48.5	68.2		mg/Kg		98	75 - 125	0	20
Lead	140	F1 F2	48.5	235	F1 F2	mg/Kg		187	75 - 125	23	20
Molybdenum	ND		48.5	42.7		mg/Kg		88	75 - 125	0	20
Nickel	39		48.5	85.4		mg/Kg		96	75 - 125	1	20
Selenium	ND		48.5	42.2		mg/Kg		87	75 - 125	1	20
Silver	0.66	J	24.3	24.6		mg/Kg		99	75 - 125	1	20
Thallium	ND		48.5	44.9		mg/Kg		92	75 - 125	2	20
Vanadium	44		48.5	88.8		mg/Kg		92	75 - 125	3	20
Zinc	110	F1	48.5	142	F1	mg/Kg		60	75 - 125	3	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-250662/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250923 — **Prep Batch: 250662**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		09/04/18 21:32	09/05/18 10:32	1

Lab Sample ID: LCS 720-250662/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250923 — **Prep Batch: 250662**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.832		mg/Kg		100	80 - 120

Lab Sample ID: 720-88263-D-3-E MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250923 — **Prep Batch: 250662**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.18		0.714	0.828		mg/Kg		91	75 - 125

Lab Sample ID: 720-88263-D-3-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250923 — **Prep Batch: 250662**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.18		0.694	0.828		mg/Kg		93	75 - 125	0	20

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: MB 720-250663/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250929 — **Prep Batch: 250663**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/31/18 08:40	09/05/18 12:51	1

Lab Sample ID: LCS 720-250663/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250929 — **Prep Batch: 250663**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.803		mg/Kg		96	80 - 120

Lab Sample ID: 720-88313-D-5-B MS ^4 — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250929 — **Prep Batch: 250663**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.27		0.769	1.01		mg/Kg		96	75 - 125

Lab Sample ID: 720-88313-D-5-C MSD ^4 — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250929 — **Prep Batch: 250663**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.27		0.794	0.968		mg/Kg		88	75 - 125	4	20

QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88264-1

GC/MS VOA

Prep Batch: 250602

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88264-2	DUP-22	Total/NA	Solid	5035	
720-88264-3	DUP-30	Total/NA	Solid	5035	
720-88264-4	DUP-31	Total/NA	Solid	5035	
720-88264-5	DUP-32	Total/NA	Solid	5035	
720-88264-6	DG-G11S-0.5-1	Total/NA	Solid	5035	
720-88264-7	DG-G11S-3.5-4	Total/NA	Solid	5035	
720-88264-8	DG-G11S-9.5-10	Total/NA	Solid	5035	

Analysis Batch: 250625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88264-5	DUP-32	Total/NA	Solid	8260B	250602
720-88264-8	DG-G11S-9.5-10	Total/NA	Solid	8260B	250602
MB 720-250625/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250625/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250625/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250625/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250625/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 250626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88264-2	DUP-22	Total/NA	Solid	8260B	250602
720-88264-3	DUP-30	Total/NA	Solid	8260B	250602
720-88264-4	DUP-31	Total/NA	Solid	8260B	250602
720-88264-6	DG-G11S-0.5-1	Total/NA	Solid	8260B	250602
720-88264-7	DG-G11S-3.5-4	Total/NA	Solid	8260B	250602
MB 720-250626/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250626/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250626/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250626/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250626/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 250644

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88264-1	DUP-23	Total/NA	Solid	8260B	250682
MB 720-250644/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250644/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250644/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250644/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250644/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 250682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88264-1	DUP-23	Total/NA	Solid	5035	

GC/MS Semi VOA

Prep Batch: 250607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88264-1	DUP-23	Total/NA	Solid	3546	
720-88264-2	DUP-22	Total/NA	Solid	3546	

GC/MS Semi VOA (Continued)

Prep Batch: 250607 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88264-3	DUP-30	Total/NA	Solid	3546	
720-88264-4	DUP-31	Total/NA	Solid	3546	
720-88264-5	DUP-32	Total/NA	Solid	3546	
720-88264-6	DG-G11S-0.5-1	Total/NA	Solid	3546	
720-88264-7	DG-G11S-3.5-4	Total/NA	Solid	3546	
720-88264-8	DG-G11S-9.5-10	Total/NA	Solid	3546	
MB 720-250607/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250607/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88263-E-10-B MS	Matrix Spike	Total/NA	Solid	3546	
720-88263-E-10-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 250799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88264-1	DUP-23	Total/NA	Solid	8270C SIM	250607
MB 720-250607/1-A	Method Blank	Total/NA	Solid	8270C SIM	250607
LCS 720-250607/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	250607
720-88263-E-10-B MS	Matrix Spike	Total/NA	Solid	8270C SIM	250607
720-88263-E-10-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8270C SIM	250607

Analysis Batch: 251008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88264-2	DUP-22	Total/NA	Solid	8270C SIM	250607
720-88264-3	DUP-30	Total/NA	Solid	8270C SIM	250607
720-88264-6	DG-G11S-0.5-1	Total/NA	Solid	8270C SIM	250607
720-88264-7	DG-G11S-3.5-4	Total/NA	Solid	8270C SIM	250607

Analysis Batch: 251043

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88264-4	DUP-31	Total/NA	Solid	8270C SIM	250607
720-88264-5	DUP-32	Total/NA	Solid	8270C SIM	250607
720-88264-8	DG-G11S-9.5-10	Total/NA	Solid	8270C SIM	250607

GC Semi VOA

Prep Batch: 250498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88264-6	DG-G11S-0.5-1	Total/NA	Solid	3546	
720-88264-7	DG-G11S-3.5-4	Total/NA	Solid	3546	
720-88264-8	DG-G11S-9.5-10	Total/NA	Solid	3546	
MB 720-250498/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250498/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88239-D-12-E MS	Matrix Spike	Total/NA	Solid	3546	
720-88239-D-12-F MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Prep Batch: 250595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88264-1	DUP-23	Total/NA	Solid	3546	
720-88264-2	DUP-22	Total/NA	Solid	3546	
720-88264-3	DUP-30	Total/NA	Solid	3546	
720-88264-4	DUP-31	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 250595 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88264-5	DUP-32	Total/NA	Solid	3546	
720-88264-6	DG-G11S-0.5-1	Total/NA	Solid	3546	
720-88264-7	DG-G11S-3.5-4	Total/NA	Solid	3546	
720-88264-8	DG-G11S-9.5-10	Total/NA	Solid	3546	
MB 720-250595/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250595/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88264-5 MS	DUP-32	Total/NA	Solid	3546	
720-88264-5 MSD	DUP-32	Total/NA	Solid	3546	

Prep Batch: 250619

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88264-1	DUP-23	Total/NA	Solid	3546	
720-88264-2	DUP-22	Total/NA	Solid	3546	
720-88264-3	DUP-30	Total/NA	Solid	3546	
720-88264-4	DUP-31	Total/NA	Solid	3546	
720-88264-5	DUP-32	Total/NA	Solid	3546	
MB 720-250619/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250619/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88264-5 MS	DUP-32	Total/NA	Solid	3546	
720-88264-5 MSD	DUP-32	Total/NA	Solid	3546	

Analysis Batch: 250653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88264-7	DG-G11S-3.5-4	Total/NA	Solid	8015B	250498
MB 720-250498/1-A	Method Blank	Total/NA	Solid	8015B	250498
LCS 720-250498/2-A	Lab Control Sample	Total/NA	Solid	8015B	250498
720-88239-D-12-E MS	Matrix Spike	Total/NA	Solid	8015B	250498
720-88239-D-12-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	250498

Analysis Batch: 250656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88264-6	DG-G11S-0.5-1	Total/NA	Solid	8015B	250498
720-88264-8	DG-G11S-9.5-10	Total/NA	Solid	8015B	250498

Analysis Batch: 250765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88264-1	DUP-23	Total/NA	Solid	8081A	250595
720-88264-2	DUP-22	Total/NA	Solid	8081A	250595
720-88264-3	DUP-30	Total/NA	Solid	8081A	250595
720-88264-4	DUP-31	Total/NA	Solid	8081A	250595

Analysis Batch: 250868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88264-5	DUP-32	Total/NA	Solid	8081A	250595
720-88264-6	DG-G11S-0.5-1	Total/NA	Solid	8081A	250595
720-88264-7	DG-G11S-3.5-4	Total/NA	Solid	8081A	250595
720-88264-8	DG-G11S-9.5-10	Total/NA	Solid	8081A	250595
MB 720-250595/1-A	Method Blank	Total/NA	Solid	8081A	250595
LCS 720-250595/2-A	Lab Control Sample	Total/NA	Solid	8081A	250595
720-88264-5 MS	DUP-32	Total/NA	Solid	8081A	250595
720-88264-5 MSD	DUP-32	Total/NA	Solid	8081A	250595

QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88264-1

Analysis Batch: 250884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88264-1	DUP-23	Total/NA	Solid	8015B	250619
720-88264-5	DUP-32	Total/NA	Solid	8015B	250619
MB 720-250619/1-A	Method Blank	Total/NA	Solid	8015B	250619
LCS 720-250619/2-A	Lab Control Sample	Total/NA	Solid	8015B	250619
720-88264-5 MS	DUP-32	Total/NA	Solid	8015B	250619
720-88264-5 MSD	DUP-32	Total/NA	Solid	8015B	250619

Analysis Batch: 250885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88264-2	DUP-22	Total/NA	Solid	8015B	250619
720-88264-3	DUP-30	Total/NA	Solid	8015B	250619
720-88264-4	DUP-31	Total/NA	Solid	8015B	250619

Prep Batch: 343206

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88264-1	DUP-23	Total/NA	Solid	3540C	
720-88264-2	DUP-22	Total/NA	Solid	3540C	
720-88264-4	DUP-31	Total/NA	Solid	3540C	
720-88264-5	DUP-32	Total/NA	Solid	3540C	
720-88264-7	DG-G11S-3.5-4	Total/NA	Solid	3540C	
720-88264-8	DG-G11S-9.5-10	Total/NA	Solid	3540C	
MB 240-343206/20-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-343206/21-A	Lab Control Sample	Total/NA	Solid	3540C	

Analysis Batch: 343528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88264-1	DUP-23	Total/NA	Solid	8082	343206
720-88264-2	DUP-22	Total/NA	Solid	8082	343206
720-88264-4	DUP-31	Total/NA	Solid	8082	343206
720-88264-5	DUP-32	Total/NA	Solid	8082	343206
720-88264-7	DG-G11S-3.5-4	Total/NA	Solid	8082	343206
720-88264-8	DG-G11S-9.5-10	Total/NA	Solid	8082	343206
MB 240-343206/20-A	Method Blank	Total/NA	Solid	8082	343206
LCS 240-343206/21-A	Lab Control Sample	Total/NA	Solid	8082	343206

Prep Batch: 343944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88264-3	DUP-30	Total/NA	Solid	3540C	
720-88264-6	DG-G11S-0.5-1	Total/NA	Solid	3540C	
MB 240-343944/20-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-343944/21-A	Lab Control Sample	Total/NA	Solid	3540C	

Analysis Batch: 344018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88264-3	DUP-30	Total/NA	Solid	8082	343944
720-88264-6	DG-G11S-0.5-1	Total/NA	Solid	8082	343944
MB 240-343944/20-A	Method Blank	Total/NA	Solid	8082	343944
LCS 240-343944/21-A	Lab Control Sample	Total/NA	Solid	8082	343944

QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88264-1

Metals

Prep Batch: 250563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88264-1	DUP-23	Total/NA	Solid	3050B	
720-88264-2	DUP-22	Total/NA	Solid	3050B	
720-88264-3	DUP-30	Total/NA	Solid	3050B	
720-88264-4	DUP-31	Total/NA	Solid	3050B	
720-88264-5	DUP-32	Total/NA	Solid	3050B	
720-88264-6	DG-G11S-0.5-1	Total/NA	Solid	3050B	
720-88264-7	DG-G11S-3.5-4	Total/NA	Solid	3050B	
MB 720-250563/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250563/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88263-D-16-A MS	Matrix Spike	Total/NA	Solid	3050B	
720-88263-D-16-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Prep Batch: 250637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88264-8	DG-G11S-9.5-10	Total/NA	Solid	3050B	
MB 720-250637/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250637/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88313-D-1-A MS	Matrix Spike	Total/NA	Solid	3050B	
720-88313-D-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Analysis Batch: 250655

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88264-1	DUP-23	Total/NA	Solid	6010B	250563
720-88264-2	DUP-22	Total/NA	Solid	6010B	250563
720-88264-3	DUP-30	Total/NA	Solid	6010B	250563
720-88264-4	DUP-31	Total/NA	Solid	6010B	250563
720-88264-5	DUP-32	Total/NA	Solid	6010B	250563
720-88264-6	DG-G11S-0.5-1	Total/NA	Solid	6010B	250563
720-88264-7	DG-G11S-3.5-4	Total/NA	Solid	6010B	250563
MB 720-250563/1-A	Method Blank	Total/NA	Solid	6010B	250563
LCS 720-250563/2-A	Lab Control Sample	Total/NA	Solid	6010B	250563
720-88263-D-16-A MS	Matrix Spike	Total/NA	Solid	6010B	250563
720-88263-D-16-B MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250563

Prep Batch: 250662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88264-1	DUP-23	Total/NA	Solid	7471A	
720-88264-2	DUP-22	Total/NA	Solid	7471A	
MB 720-250662/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250662/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88263-D-3-E MS	Matrix Spike	Total/NA	Solid	7471A	
720-88263-D-3-F MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	

Prep Batch: 250663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88264-3	DUP-30	Total/NA	Solid	7471A	
720-88264-4	DUP-31	Total/NA	Solid	7471A	
720-88264-5	DUP-32	Total/NA	Solid	7471A	
720-88264-6	DG-G11S-0.5-1	Total/NA	Solid	7471A	
720-88264-7	DG-G11S-3.5-4	Total/NA	Solid	7471A	
720-88264-8	DG-G11S-9.5-10	Total/NA	Solid	7471A	

Metals (Continued)

Prep Batch: 250663 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250663/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250663/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88313-D-5-B MS ^4	Matrix Spike	Total/NA	Solid	7471A	
720-88313-D-5-C MSD ^4	Matrix Spike Duplicate	Total/NA	Solid	7471A	

Analysis Batch: 250761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88264-8	DG-G11S-9.5-10	Total/NA	Solid	6010B	250637
MB 720-250637/1-A	Method Blank	Total/NA	Solid	6010B	250637
LCS 720-250637/2-A	Lab Control Sample	Total/NA	Solid	6010B	250637
720-88313-D-1-A MS	Matrix Spike	Total/NA	Solid	6010B	250637
720-88313-D-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250637

Analysis Batch: 250923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88264-1	DUP-23	Total/NA	Solid	7471A	250662
720-88264-2	DUP-22	Total/NA	Solid	7471A	250662
MB 720-250662/1-A	Method Blank	Total/NA	Solid	7471A	250662
LCS 720-250662/2-A	Lab Control Sample	Total/NA	Solid	7471A	250662
720-88263-D-3-E MS	Matrix Spike	Total/NA	Solid	7471A	250662
720-88263-D-3-F MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	250662

Analysis Batch: 250929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88264-3	DUP-30	Total/NA	Solid	7471A	250663
720-88264-4	DUP-31	Total/NA	Solid	7471A	250663
720-88264-5	DUP-32	Total/NA	Solid	7471A	250663
720-88264-6	DG-G11S-0.5-1	Total/NA	Solid	7471A	250663
720-88264-7	DG-G11S-3.5-4	Total/NA	Solid	7471A	250663
720-88264-8	DG-G11S-9.5-10	Total/NA	Solid	7471A	250663
MB 720-250663/1-A	Method Blank	Total/NA	Solid	7471A	250663
LCS 720-250663/2-A	Lab Control Sample	Total/NA	Solid	7471A	250663
720-88313-D-5-B MS ^4	Matrix Spike	Total/NA	Solid	7471A	250663
720-88313-D-5-C MSD ^4	Matrix Spike Duplicate	Total/NA	Solid	7471A	250663

Client Sample ID: DUP-23 — Lab Sample ID: 720-88264-1

Date Collected: 08/27/18 00:00 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250682	08/27/18 02:30	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250644	08/31/18 13:36	JRM	TAL PLS
Total/NA	Prep	3546			250607	08/30/18 14:15	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250799	09/04/18 20:41	LPL	TAL PLS
Total/NA	Prep	3546			250619	08/30/18 15:54	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250884	09/05/18 17:31	JXL	TAL PLS
Total/NA	Prep	3546			250595	08/30/18 12:52	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250765	09/04/18 19:23	MQL	TAL PLS
Total/NA	Prep	3540C			343206	08/30/18 09:28	AMT	TAL CAN
Total/NA	Analysis	8082		1	343528	09/01/18 14:50	KMG	TAL CAN
Total/NA	Prep	3050B			250563	08/30/18 08:40	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250655	08/31/18 00:09	OBI	TAL PLS
Total/NA	Prep	7471A			250662	09/04/18 21:32	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250923	09/05/18 11:33	OBI	TAL PLS

Client Sample ID: DUP-22 — Lab Sample ID: 720-88264-2

Date Collected: 08/27/18 00:00 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250602	08/27/18 02:30	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250626	08/31/18 00:19	JRM	TAL PLS
Total/NA	Prep	3546			250607	08/30/18 14:15	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		2	251008	09/06/18 18:11	LPL	TAL PLS
Total/NA	Prep	3546			250619	08/30/18 15:54	MAB	TAL PLS
Total/NA	Analysis	8015B		5	250885	09/05/18 14:15	JXL	TAL PLS
Total/NA	Prep	3546			250595	08/30/18 12:52	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250765	09/04/18 19:41	MQL	TAL PLS
Total/NA	Prep	3540C			343206	08/30/18 09:28	AMT	TAL CAN
Total/NA	Analysis	8082		1	343528	09/01/18 15:11	KMG	TAL CAN
Total/NA	Prep	3050B			250563	08/30/18 08:40	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250655	08/31/18 00:14	OBI	TAL PLS
Total/NA	Prep	7471A			250662	09/04/18 21:32	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250923	09/05/18 11:35	OBI	TAL PLS

Client Sample ID: DUP-30 — Lab Sample ID: 720-88264-3

Date Collected: 08/27/18 00:00 — **Matrix: Solid**
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250602	08/27/18 02:30	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250626	08/31/18 00:50	JRM	TAL PLS
Total/NA	Prep	3546			250607	08/30/18 14:15	MAB	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88264-1

Client Sample ID: DUP-30

Lab Sample ID: 720-88264-3
Date Collected: 08/27/18 00:00
Matrix: Solid
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C SIM		1	251008	09/06/18 18:35	LPL	TAL PLS
Total/NA	Prep	3546			250619	08/30/18 15:54	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250885	09/05/18 14:40	JXL	TAL PLS
Total/NA	Prep	3546			250595	08/30/18 12:52	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250765	09/04/18 19:58	MQL	TAL PLS
Total/NA	Prep	3540C			343944	09/05/18 14:28	DVT	TAL CAN
Total/NA	Analysis	8082		1	344018	09/06/18 14:01	LSH	TAL CAN
Total/NA	Prep	3050B			250563	08/30/18 08:40	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250655	08/31/18 00:28	OBI	TAL PLS
Total/NA	Prep	7471A			250663	08/31/18 08:40	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250929	09/05/18 13:28	OBI	TAL PLS

Client Sample ID: DUP-31

Lab Sample ID: 720-88264-4
Date Collected: 08/27/18 00:00
Matrix: Solid
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250602	08/27/18 02:30	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250626	08/31/18 01:21	JRM	TAL PLS
Total/NA	Prep	3546			250607	08/30/18 14:15	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		5	251043	09/07/18 08:56	LPL	TAL PLS
Total/NA	Prep	3546			250619	08/30/18 15:54	MAB	TAL PLS
Total/NA	Analysis	8015B		20	250885	09/05/18 15:04	JXL	TAL PLS
Total/NA	Prep	3546			250595	08/30/18 12:52	MAB	TAL PLS
Total/NA	Analysis	8081A		5	250765	09/04/18 20:16	MQL	TAL PLS
Total/NA	Prep	3540C			343206	08/30/18 09:28	AMT	TAL CAN
Total/NA	Analysis	8082		1	343528	09/01/18 15:32	KMG	TAL CAN
Total/NA	Prep	3050B			250563	08/30/18 08:40	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250655	08/31/18 00:33	OBI	TAL PLS
Total/NA	Prep	7471A			250663	08/31/18 08:40	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250929	09/05/18 13:31	OBI	TAL PLS

Client Sample ID: DUP-32

Lab Sample ID: 720-88264-5
Date Collected: 08/27/18 00:00
Matrix: Solid
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250602	08/27/18 02:30	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250625	08/30/18 22:32	JRM	TAL PLS
Total/NA	Prep	3546			250607	08/30/18 14:15	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		10	251043	09/07/18 09:20	LPL	TAL PLS
Total/NA	Prep	3546			250619	08/30/18 15:54	MAB	TAL PLS
Total/NA	Analysis	8015B		20	250884	09/05/18 14:40	JXL	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88264-1

Client Sample ID: DUP-32 — Lab Sample ID: 720-88264-5

Date Collected: 08/27/18 00:00
Date Received: 08/27/18 14:25
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			250595	08/30/18 12:52	MAB	TAL PLS
Total/NA	Analysis	8081A		2	250868	09/05/18 10:43	MQL	TAL PLS
Total/NA	Prep	3540C			343206	08/30/18 09:28	AMT	TAL CAN
Total/NA	Analysis	8082		1	343528	09/01/18 15:53	KMG	TAL CAN
Total/NA	Prep	3050B			250563	08/30/18 08:40	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250655	08/31/18 00:38	OBI	TAL PLS
Total/NA	Prep	7471A			250663	08/31/18 08:40	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250929	09/05/18 13:33	OBI	TAL PLS

Client Sample ID: DG-G11S-0.5-1 — Lab Sample ID: 720-88264-6

Date Collected: 08/27/18 12:25
Date Received: 08/27/18 14:25
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250602	08/27/18 02:30	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250626	08/31/18 01:53	JRM	TAL PLS
Total/NA	Prep	3546			250607	08/30/18 14:15	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	251008	09/06/18 19:47	LPL	TAL PLS
Total/NA	Prep	3546			250498	08/29/18 13:41	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250656	08/31/18 16:43	JXL	TAL PLS
Total/NA	Prep	3546			250595	08/30/18 12:52	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250868	09/05/18 08:46	MQL	TAL PLS
Total/NA	Prep	3540C			343944	09/05/18 14:28	DVT	TAL CAN
Total/NA	Analysis	8082		1	344018	09/06/18 14:25	LSH	TAL CAN
Total/NA	Prep	3050B			250563	08/30/18 08:40	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250655	08/31/18 00:42	OBI	TAL PLS
Total/NA	Prep	7471A			250663	08/31/18 08:40	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250929	09/05/18 13:35	OBI	TAL PLS

Client Sample ID: DG-G11S-3.5-4 — Lab Sample ID: 720-88264-7

Date Collected: 08/27/18 12:25
Date Received: 08/27/18 14:25
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250602	08/27/18 02:30	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250626	08/31/18 02:25	JRM	TAL PLS
Total/NA	Prep	3546			250607	08/30/18 14:15	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	251008	09/06/18 20:10	LPL	TAL PLS
Total/NA	Prep	3546			250498	08/29/18 13:41	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250653	08/31/18 15:30	JXL	TAL PLS
Total/NA	Prep	3546			250595	08/30/18 12:52	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250868	09/05/18 09:03	MQL	TAL PLS
Total/NA	Prep	3540C			343206	08/30/18 09:28	AMT	TAL CAN

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88264-1

Client Sample ID: DG-G11S-3.5-4

Lab Sample ID: 720-88264-7

Date Collected: 08/27/18 12:25
Matrix: Solid
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082		1	343528	09/01/18 16:15	KMG	TAL CAN
Total/NA	Prep	3050B			250563	08/30/18 08:40	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250655	08/31/18 00:47	OBI	TAL PLS
Total/NA	Prep	7471A			250663	08/31/18 08:40	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250929	09/05/18 13:38	OBI	TAL PLS

Client Sample ID: DG-G11S-9.5-10

Lab Sample ID: 720-88264-8

Date Collected: 08/27/18 12:25
Matrix: Solid
Date Received: 08/27/18 14:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250602	08/27/18 02:30	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250625	08/30/18 23:00	JRM	TAL PLS
Total/NA	Prep	3546			250607	08/30/18 14:15	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		5	251043	09/07/18 09:44	LPL	TAL PLS
Total/NA	Prep	3546			250498	08/29/18 13:41	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250656	08/31/18 14:16	JXL	TAL PLS
Total/NA	Prep	3546			250595	08/30/18 12:52	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250868	09/05/18 09:19	MQL	TAL PLS
Total/NA	Prep	3540C			343206	08/30/18 09:28	AMT	TAL CAN
Total/NA	Analysis	8082		1	343528	09/01/18 16:36	KMG	TAL CAN
Total/NA	Prep	3050B			250637	08/30/18 19:34	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250761	08/31/18 22:08	OBI	TAL PLS
Total/NA	Prep	7471A			250663	08/31/18 08:40	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250929	09/05/18 13:40	OBI	TAL PLS

Laboratory References:

= Asbestos TEM Laboratories, Inc., 630 BANCROFT WAY, Berkeley, CA 94710

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88264-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Laboratory: TestAmerica Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-19
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19
Illinois	NELAP	5	200004	07-31-19
Kansas	NELAP	7	E-10336	01-31-19
Kentucky (UST)	State Program	4	58	02-23-19
Kentucky (WW)	State Program	4	98016	12-31-18 *
Minnesota	NELAP	5	039-999-348	12-31-18 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19
New York	NELAP	2	10975	03-31-19
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-19
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-18-10	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19
Washington	State Program	10	C971	01-12-19
West Virginia DEP	State Program	3	210	12-31-18 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88264-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PLS
8270C SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
8081A	Organochlorine Pesticides (GC)	SW846	TAL PLS
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS
Subcontract	Asbestos - CARB 435	None	
3050B	Preparation, Metals	SW846	TAL PLS
3540C	Soxhlet Extraction	SW846	TAL CAN
3546	Microwave Extraction	SW846	TAL PLS
5035	Closed System Purge and Trap	SW846	TAL PLS
7471A	Preparation, Mercury	SW846	TAL PLS

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

= Asbestos TEM Laboratories, Inc., 630 BANCROFT WAY, Berkeley, CA 94710

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88264-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-88264-1	DUP-23	Solid	08/27/18 00:00	08/27/18 14:25
720-88264-2	DUP-22	Solid	08/27/18 00:00	08/27/18 14:25
720-88264-3	DUP-30	Solid	08/27/18 00:00	08/27/18 14:25
720-88264-4	DUP-31	Solid	08/27/18 00:00	08/27/18 14:25
720-88264-5	DUP-32	Solid	08/27/18 00:00	08/27/18 14:25
720-88264-6	DG-G11S-0.5-1	Solid	08/27/18 12:25	08/27/18 14:25
720-88264-7	DG-G11S-3.5-4	Solid	08/27/18 12:25	08/27/18 14:25
720-88264-8	DG-G11S-9.5-10	Solid	08/27/18 12:25	08/27/18 14:25

ASBESTOS TEM LABORATORIES, INC.

CARB Method 435
Polarized Light Microscopy
Analytical Report

Laboratory Job # 1283-01209

630 Bancroft Way
Berkeley, CA 94710
(510) 704-8930
FAX (510) 704-8429

ASBESTOS TEM LABORATORIES, INC

CA DPH ELAP
Lab No. 1866

NVLAP Lab Code: 101891-0
Berkeley, CA

Sep/04/2018

Micah Smith
TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

RE: LABORATORY JOB # 1283-01209
Polarized light microscopy analytical results for 8 bulk sample(s).
Job Site: 720-88264-1
Job No.: UPC-OU-SM

Enclosed please find the bulk material analytical results for one or more samples submitted for asbestos analysis. The analyses were performed in accordance with the California Air Resources Board (ARB) Method 435 for the determination of asbestos in serpentine aggregate samples.

Prior to analysis, samples are logged-in and all data pertinent to the sample recorded. The samples are checked for damage or disruption of any chain-of-custody seals. A unique laboratory ID number is assigned to each sample. A hard copy log-in sheet containing all pertinent information concerning the sample is generated. This and all other relevant paper work are kept with the sample throughout the analytical procedures to assure proper analysis.

Sample preparation follows a standard CARB 435 prep method. The entire sample is dried at 135-150 C and then crushed to ~3/8" gravel size using a Bico Chipmunk crusher. If the submitted sample is >1 pint, the sample was split using a 1/2" riffle splitter following ASTM Method C-702-98 to obtain a 1 pint aliquot. The entire 1 pint aliquot, or entire original sample, is then pulverized in a Bico Braun disc pulverizer calibrated to produce a nominal 200 mesh final product. If necessary, additional homogenization steps are undertaken using a 3/8" riffle splitter. Small aliquots are collected from throughout the pulverized material to create three separate microsope slide mounts containing the appropriate refractive index oil. The prepared slides are placed under a polarizing light microscope where standard mineralogical techniques are used to analyze the various materials present, including asbestos. If asbestos is identified and of less than 10% concentration by visual area estimate then an additional five sample mounts are prepared. Quantification of asbestos concentration is obtained using the standard CAL ARB Method 435 point count protocol. For samples observed to contain visible asbestos of less than 10% concentration, a point counting techinique is used with 50 points counted on each of eight sample mounts for a total of 400 points. The data is then compiled into standard report format and subjected to a thorough quality assurance check before the information is released to the client.

While the CARB 435 method has much to commend it, there are a number of situations where it fails to provide sufficient accuracy to make a definitive determination of the presence/absence of asbestos and/or an accurate count of the asbestos concentration present in a given sample. These problems include, but are not limited to, 1) statistical uncertainty with samples containing <1% asbestos when too few particles are counted, 2) definitive identification and discrimination between various fibrous amphibole minerals such as tremolite/actinolite/hornblende and the "Libby amphiboles" such as tremolite/winchite/richterite/arfvedsonite, and C) small asbestiform fibers which are near or below the resolution limit of the PLM microscope such as those found in various California coast range serpentine bodies. In these cases, further analysis by transmission electron microscopy is recommended to obtain a more accurate result.

Sincerely Yours,

Lab Manager
ASBESTOS TEM LABORATORIES, INC.

--- These results relate only to the samples tested and must not be reproduced, except in full, without the approval of the laboratory. ---

630 BANCROFT WAY ▪ BERKELEY, CA 94710 ▪ PH. (510) 704-8930 ▪ FAX (510) 704-8429
With Branch Offices Located At: 1350 FREEPORT BLVD. UNIT 104, SPARKS, NV 89431

POLARIZED LIGHT MICROSCOPY
CARB 435 ANALYTICAL REPORT

Contact: Micah Smith

Address: TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

Samples Submitted: 8
Samples Analyzed: 8
Job Site / No. UPC-OU-SM
720-88264-1

Report No. **359922**
Date Submitted: Aug-28-18
Date Reported: Sep-04-18

SAMPLE ID	POINTS COUNTED	ASBESTOS %	ASBESTOS TYPE	LOCATION / DESCRIPTION
DUP-23 Lab ID # 1283-01209-001	**400** - Total Points	**<0.25%**	**None Detected**	720-88264-1 No Asbestos Detected
DUP-22 Lab ID # 1283-01209-002	**400** - Total Points	**<0.25%**	**None Detected**	720-88264-2 No Asbestos Detected
DUP-30 Lab ID # 1283-01209-003	**400** - Total Points	**<0.25%**	**None Detected**	720-88264-3 No Asbestos Detected
DUP-31 Lab ID # 1283-01209-004	**400** - Total Points	**<0.25%**	**None Detected**	720-88264-4 No Asbestos Detected
DUP-32 Lab ID # 1283-01209-005	**400** - Total Points	**<0.25%**	**None Detected**	720-88264-5 No Asbestos Detected
DG-G115S-0.5-1 Lab ID # 1283-01209-006	**400** - Total Points	**<0.25%**	**None Detected**	720-88264-6 No Asbestos Detected
DG-G115S-3.5-4 Lab ID # 1283-01209-007	**400** - Total Points	**<0.25%**	**None Detected**	720-88264-7 No Asbestos Detected
DG-G115S-9.5-10 Lab ID # 1283-01209-008	**400** - Total Points	**<0.25%**	**None Detected**	720-88264-8 No Asbestos Detected
Lab ID #	- Total Points			
Lab ID #	- Total Points			

QC Reviewer R. McBride **Analys** Jo Ann Hunter

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

359922

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39437.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: Asbestos TEM Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88264-1
Address: 630 BANCROFT WAY,	Due Date Requested: 9/4/2018			
City: Berkeley	TAT Requested (days):			
State, Zip: CA, 94710				
Phone:	PO #:			
Email:	WO #:			
Project Name: UPC CU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Asbestos - CARB 435)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DUP-23 (720-88264-1)	8/27/18	Pacific		Solid			X	1	
DUP-22 (720-88264-2)	8/27/18	Pacific		Solid			X	1	
DUP-30 (720-88264-3)	8/27/18	Pacific		Solid			X	1	
DUP-31 (720-88264-4)	8/27/18	Pacific		Solid			X	1	
DUP-32 (720-88264-5)	8/27/18	Pacific		Solid			X	1	
DG-G115--0.5-1 (720-88264-6)	8/27/18	12:25 Pacific		Solid			X	1	
DG-G115--3.5-4 (720-88264-7)	8/27/18	12:25 Pacific		Solid			X	1	
DG-G115--9.5-10 (720-88264-8)	8/27/18	12:25 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:		Method of Shipment:	
Relinquished by:	Date/Time: 8/28/18 1245	Company: TA	Received by: MB	Date/Time: AUG28 '18 1245PM	Company:
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: -		Cooler Temperature(s) °C and Other Remarks:		

Ver: 09/20/2016

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

720-88264

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 135132

Date 8/27 Page 1 of 1

Report To
Attn: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: mkahrilas@geosyntec.com
To: GEOSYNTEC
Sampled By:
Attn: A. SMITH
Phone:

Analysis Request

Sample ID	Date	Time	# of Containers	Matrix	Volatile Organics GCMS (VOCs) ☒ EPA 8260B ☐ EPA 8260D	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☐ Motor Oil ☐ Other ___	SemiVolatile Organics GCMS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☒ 8270C SIM	Oil and Grease ☐ Petroleum (EPA 1664/9071) ☐ Total	Pesticides ☒ EPA 8081 PCBs ☒ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: ___	Metals: ☐ 6020 ☐ 200.8 (ICP-MS): ___	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	Asbestos (CARB 435)	
DUP-23	8/27		5		X			X		X		X	X										X	
DUP-22					X			X		X		X	X										X	
DUP-30					X			X		X		X	X										X	
DUP-31					X			X		X		X	X										X	
DUP-32					X			X		X		X	X										X	
DG-GIIS-05-1		1225			X			X		X		X	X										X	
DG GIIS-3 5-4		1225			X			X		X		X	X										X	
DG-GIIS-9.5-10		1225			X			X		X		X	X										X	

Project Info.
Project Name/#: UPC OU-SM
#: WG2565/02
Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt
# of Containers:
Head Space:
Temp:

10 Day	5 Day	4 Day	3 Day	2 Day	1 Day	Other:
	(5)					

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID ___
2.8°C

Terms and Conditions on reverse

1) Relinquished by: [signature] Time 1255
Signature
Printed Name: MIRANDA KAHRILAS Date 8/27
Company: GEOSYNTEC

2) Relinquished by: [signature] Time 1425
Signature
Printed Name: [signature] Date 8/27/18
Company: TA

3) Relinquished by:
720-88264 Chain of Custody
Company

1) Received by: [signature] Time 1300
Signature
Printed Name: [signature] Date 8/27/18
Company: TA

2) Received by: [signature] Time 1425
Signature
Printed Name: [signature] Date 8/27/18
Company: NATEC

3) Received by:
Signature Time
Printed Name Date
Company

11/21/2018 (Rev. 1)

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39438.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88264-1
Address: 4101 Shuffel Street NW, ,	Due Date Requested: 9/4/2018			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: UPC OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

C209

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wasteoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8082/3540C (MOD) PCB 7 Aroclors	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DUP-23 (720-88264-1)	8/27/18	Pacific		Solid			X	1	
DUP-22 (720-88264-2)	8/27/18	Pacific		Solid			X	1	
DUP-30 (720-88264-3)	8/27/18	Pacific		Solid			X	1	
DUP-31 (720-88264-4)	8/27/18	Pacific		Solid			X	1	
DUP-32 (720-88264-5)	8/27/18	Pacific		Solid			X	1	
DG-G115--0.5-1 (720-88264-6)	8/27/18	12:25 Pacific		Solid			X	1	
DG-G115--3.5-4 (720-88264-7)	8/27/18	12:25 Pacific		Solid			X	1	
DG-G115--9.5-10 (720-88264-8)	8/27/18	12:25 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 8/28/18 1238	Company: TA	Received by:	Date/Time: 8/29/18 935	Company: TA
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		

Ver: 09/20/2016

TestAmerica Canton Sample Receipt Form/Narrative **Login # :**_____
Canton Facility

Client TA Pleasanton Site Name_____ Cooler unpacked by:
Cooler Received on 8/29/18 Opened on 8/29/18
FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other_____

Receipt After-hours: Drop-off Date/Time_____ Storage Location_____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other_____
Packing material used: Bubble Wrap Foam Plastic Bag None Other_____
COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF +0 °C) Observed Cooler Temp. 0.8 °C Corrected Cooler Temp. 0.8 °C
   IR GUN #36 (CF -0.3°C) Observed Cooler Temp._____ °C Corrected Cooler Temp._____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   -Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
   -Were tamper/custody seals intact and uncompromised? Yes No NA
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No
    If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC849151**
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____ Yes No
16. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____.

WI-NC-099

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88264-1

Login Number: 88264
List Number: 1
Creator: Bullock, Tracy

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	False	No time on COC or sample containers
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	False	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-88272-1
Client Project/Site: UPC OU-SM

For:
Geosyntec Consultants, Inc.
201 N. Civic Drive
Suite 245
Walnut Creek, California 94596

Attn: Mr. Krys Jesionek

Authorized for release by:
9/5/2018 4:34:26 PM
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Designee for

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 5
Client Sample Results 6
Surrogate Summary 17
QC Sample Results 18
QC Association Summary 21
Lab Chronicle 22
Certification Summary 24
Method Summary 25
Sample Summary 26
Chain of Custody 27
Field Data Sheets 32
Receipt Checklists 33

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 720-88272-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-88272-1

Comments
No additional comments.

Receipt
The samples were received on 8/27/2018 6:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.5º C.

GC/MS VOA
Method(s) 8260B: Surrogate recovery for the following sample was outside control limits: DG-L9S-0.5-1 (720-88272-3). Evidence of matrix interference is present. The surrogate is not associated with the requested target analytes, therefore the data has been reported.

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batches 490-540014 and 490-540446.

Method(s) 8260B: The following samples were prepped with a different volume, resulting in an effective dilution due to the nature of the sample matrix: DG-I11S-0.5-1 (720-88272-6) and DG-A8S-0.5-1 (720-88272-9). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88272-1

Client Sample ID: DG-FG910S-0.5-1 — Lab Sample ID: 720-88272-1

No Detections.

Client Sample ID: DG-H9S-0.5-1 — Lab Sample ID: 720-88272-2

No Detections.

Client Sample ID: DG-L9S-0.5-1 — Lab Sample ID: 720-88272-3

No Detections.

Client Sample ID: DG-M11S-0.5-1 — Lab Sample ID: 720-88272-4

No Detections.

Client Sample ID: DG-K11S-0.5-1 — Lab Sample ID: 720-88272-5

No Detections.

Client Sample ID: DG-I11S-0.5-1 — Lab Sample ID: 720-88272-6

No Detections.

Client Sample ID: DG-G11S-0.5-1 — Lab Sample ID: 720-88272-7

No Detections.

Client Sample ID: DG-E11S-0.5-1 — Lab Sample ID: 720-88272-8

No Detections.

Client Sample ID: DG-A8S-0.5-1 — Lab Sample ID: 720-88272-9

No Detections.

Client Sample ID: DUP-32 — Lab Sample ID: 720-88272-10

No Detections.

Client Sample ID: DUP-22 — Lab Sample ID: 720-88272-11

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88272-1

Client Sample ID: DG-FG910S-0.5-1

Lab Sample ID: 720-88272-1

Date Collected: 08/27/18 07:50

Matrix: Solid

Date Received: 08/27/18 18:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0017	0.00047	mg/Kg		08/27/18 09:50	08/31/18 17:15	1
1,2-Dibromo-3-Chloropropane	ND		0.0043	0.00060	mg/Kg		08/27/18 09:50	08/31/18 17:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*	*08/27/18 09:50*	*08/31/18 17:15*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*08/27/18 09:50*	*08/31/18 17:15*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*	*08/27/18 09:50*	*08/31/18 17:15*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*	*08/27/18 09:50*	*08/31/18 17:15*	*1*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88272-1

Client Sample ID: DG-H9S-0.5-1

Date Collected: 08/27/18 08:25
Date Received: 08/27/18 18:00

Lab Sample ID: 720-88272-2

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0017	0.00047	mg/Kg		08/27/18 10:25	08/31/18 17:45	1
1,2-Dibromo-3-Chloropropane	ND		0.0043	0.00060	mg/Kg		08/27/18 10:25	08/31/18 17:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*	*08/27/18 10:25*	*08/31/18 17:45*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*08/27/18 10:25*	*08/31/18 17:45*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*	*08/27/18 10:25*	*08/31/18 17:45*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*	*08/27/18 10:25*	*08/31/18 17:45*	*1*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88272-1

Client Sample ID: DG-L9S-0.5-1

Lab Sample ID: 720-88272-3

Date Collected: 08/27/18 09:10
Matrix: Solid
Date Received: 08/27/18 18:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0021	0.00059	mg/Kg		08/27/18 11:10	08/31/18 18:15	1
1,2-Dibromo-3-Chloropropane	ND		0.0054	0.00075	mg/Kg		08/27/18 11:10	08/31/18 18:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*	*08/27/18 11:10*	*08/31/18 18:15*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*08/27/18 11:10*	*08/31/18 18:15*	*1*
Dibromofluoromethane (Surr)	*25*	*X*	*70 - 130*	*08/27/18 11:10*	*08/31/18 18:15*	*1*
Toluene-d8 (Surr)	*90*		*70 - 130*	*08/27/18 11:10*	*08/31/18 18:15*	*1*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88272-1

Client Sample ID: DG-M11S-0.5-1

Date Collected: 08/27/18 10:00
Date Received: 08/27/18 18:00

Lab Sample ID: 720-88272-4

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0016	0.00045	mg/Kg		08/27/18 12:00	08/31/18 18:45	1
1,2-Dibromo-3-Chloropropane	ND		0.0041	0.00057	mg/Kg		08/27/18 12:00	08/31/18 18:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*	*08/27/18 12:00*	*08/31/18 18:45*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*08/27/18 12:00*	*08/31/18 18:45*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*	*08/27/18 12:00*	*08/31/18 18:45*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*	*08/27/18 12:00*	*08/31/18 18:45*	*1*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88272-1

Client Sample ID: DG-K11S-0.5-1

Date Collected: 08/27/18 10:35
Date Received: 08/27/18 18:00

Lab Sample ID: 720-88272-5

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0017	0.00046	mg/Kg		08/27/18 12:35	08/31/18 19:15	1
1,2-Dibromo-3-Chloropropane	ND		0.0042	0.00059	mg/Kg		08/27/18 12:35	08/31/18 19:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*	*08/27/18 12:35*	*08/31/18 19:15*	*1*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*08/27/18 12:35*	*08/31/18 19:15*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*	*08/27/18 12:35*	*08/31/18 19:15*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*	*08/27/18 12:35*	*08/31/18 19:15*	*1*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88272-1

Client Sample ID: DG-I11S-0.5-1

Date Collected: 08/27/18 11:10
Date Received: 08/27/18 18:00

Lab Sample ID: 720-88272-6

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.10	0.028	mg/Kg		08/29/18 11:54	09/04/18 21:41	1
1,2-Dibromo-3-Chloropropane	ND		0.25	0.035	mg/Kg		08/29/18 11:54	09/04/18 21:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*	*08/29/18 11:54*	*09/04/18 21:41*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*08/29/18 11:54*	*09/04/18 21:41*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 130*	*08/29/18 11:54*	*09/04/18 21:41*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*	*08/29/18 11:54*	*09/04/18 21:41*	*1*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88272-1

Client Sample ID: DG-G11S-0.5-1

Lab Sample ID: 720-88272-7

Date Collected: 08/27/18 12:25
Matrix: Solid
Date Received: 08/27/18 18:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0018	0.00050	mg/Kg		08/27/18 14:25	08/31/18 20:15	1
1,2-Dibromo-3-Chloropropane	ND		0.0045	0.00064	mg/Kg		08/27/18 14:25	08/31/18 20:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*	*08/27/18 14:25*	*08/31/18 20:15*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*08/27/18 14:25*	*08/31/18 20:15*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*	*08/27/18 14:25*	*08/31/18 20:15*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*	*08/27/18 14:25*	*08/31/18 20:15*	*1*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88272-1

Client Sample ID: DG-E11S-0.5-1

Lab Sample ID: 720-88272-8

Date Collected: 08/27/18 11:50
Matrix: Solid
Date Received: 08/27/18 18:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0016	0.00044	mg/Kg		08/27/18 13:50	08/31/18 20:46	1
1,2-Dibromo-3-Chloropropane	ND		0.0040	0.00056	mg/Kg		08/27/18 13:50	08/31/18 20:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*	*08/27/18 13:50*	*08/31/18 20:46*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*08/27/18 13:50*	*08/31/18 20:46*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*	*08/27/18 13:50*	*08/31/18 20:46*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*	*08/27/18 13:50*	*08/31/18 20:46*	*1*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88272-1

Client Sample ID: DG-A8S-0.5-1

Date Collected: 08/27/18 12:50
Date Received: 08/27/18 18:00

Lab Sample ID: 720-88272-9

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.13	0.035	mg/Kg		08/29/18 11:54	09/04/18 22:08	1
1,2-Dibromo-3-Chloropropane	ND		0.31	0.044	mg/Kg		08/29/18 11:54	09/04/18 22:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*122*		*70 - 130*	*08/29/18 11:54*	*09/04/18 22:08*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*08/29/18 11:54*	*09/04/18 22:08*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*	*08/29/18 11:54*	*09/04/18 22:08*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*	*08/29/18 11:54*	*09/04/18 22:08*	*1*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88272-1

Client Sample ID: DUP-32

Date Collected: 08/27/18 00:00
Date Received: 08/27/18 18:00

Lab Sample ID: 720-88272-10

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0012	0.00034	mg/Kg		08/27/18 02:00	08/31/18 21:45	1
1,2-Dibromo-3-Chloropropane	ND		0.0031	0.00043	mg/Kg		08/27/18 02:00	08/31/18 21:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*	*08/27/18 02:00*	*08/31/18 21:45*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*08/27/18 02:00*	*08/31/18 21:45*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*	*08/27/18 02:00*	*08/31/18 21:45*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*	*08/27/18 02:00*	*08/31/18 21:45*	*1*

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88272-1

Client Sample ID: DUP-22

Date Collected: 08/27/18 00:00
Date Received: 08/27/18 18:00

Lab Sample ID: 720-88272-11

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0018	0.00050	mg/Kg		08/27/18 02:00	08/31/18 22:15	1
1,2-Dibromo-3-Chloropropane	ND		0.0045	0.00064	mg/Kg		08/27/18 02:00	08/31/18 22:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*	*08/27/18 02:00*	*08/31/18 22:15*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*08/27/18 02:00*	*08/31/18 22:15*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*	*08/27/18 02:00*	*08/31/18 22:15*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*	*08/27/18 02:00*	*08/31/18 22:15*	*1*

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88272-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
310-137732-A-2-B MS	Matrix Spike	122	93	99	98
310-137732-A-2-B MSD	Matrix Spike Duplicate	120	95	101	98
720-88272-1	DG-FG910S-0.5-1	99	96	97	92
720-88272-2	DG-H9S-0.5-1	104	94	100	92
720-88272-3	DG-L9S-0.5-1	102	93	25 X	90
720-88272-4	DG-M11S-0.5-1	100	95	98	92
720-88272-5	DG-K11S-0.5-1	104	92	100	92
720-88272-6	DG-I11S-0.5-1	116	100	108	98
720-88272-7	DG-G11S-0.5-1	104	103	99	98
720-88272-8	DG-E11S-0.5-1	105	97	100	92
720-88272-9	DG-A8S-0.5-1	122	98	105	96
720-88272-10	DUP-32	100	97	101	93
720-88272-11	DUP-22	103	93	99	91
LCS 490-540014/3	Lab Control Sample	94	96	100	91
LCS 490-540434/3	Lab Control Sample	125	97	103	97
LCSD 490-540014/4	Lab Control Sample Dup	94	95	100	91
LCSD 490-540434/4	Lab Control Sample Dup	123	95	99	96
MB 490-540014/7	Method Blank	96	96	99	92
MB 490-540434/7	Method Blank	120	94	112	99

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: 310-137732-A-2-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 540434 — **Prep Batch: 539776**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	ND		2.41	1.37		mg/Kg		57	10 - 150
1,2-Dibromo-3-Chloropropane	ND		2.41	0.971		mg/Kg		40	10 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*122*		*70 - 130*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Lab Sample ID: 310-137732-A-2-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 540434 — **Prep Batch: 539776**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	ND		2.41	1.02		mg/Kg		42	10 - 150	29	50
1,2-Dibromo-3-Chloropropane	ND		2.41	0.915		mg/Kg		38	10 - 150	6	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*120*		*70 - 130*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Lab Sample ID: MB 490-540014/7 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 540014

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0020	0.00055	mg/Kg			08/31/18 13:44	1
1,2-Dibromo-3-Chloropropane	ND		0.0050	0.00070	mg/Kg			08/31/18 13:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*08/31/18 13:44*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*08/31/18 13:44*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*08/31/18 13:44*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*08/31/18 13:44*	*1*

Lab Sample ID: LCS 490-540014/3 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 540014

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	0.0500	0.0357		mg/Kg		71	60 - 139
1,2-Dibromo-3-Chloropropane	0.0500	0.0370		mg/Kg		74	47 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-540014/3
Matrix: Solid
Analysis Batch: 540014

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*91*		*70 - 130*

Lab Sample ID: LCSD 490-540014/4
Matrix: Solid
Analysis Batch: 540014

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	0.0500	0.0348		mg/Kg		70	60 - 139	2	16
1,2-Dibromo-3-Chloropropane	0.0500	0.0353		mg/Kg		71	47 - 144	5	38

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*91*		*70 - 130*

Lab Sample ID: MB 490-540434/7
Matrix: Solid
Analysis Batch: 540434

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.10	0.028	mg/Kg			09/04/18 15:13	1
1,2-Dibromo-3-Chloropropane	ND		0.25	0.035	mg/Kg			09/04/18 15:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*70 - 130*		*09/04/18 15:13*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*09/04/18 15:13*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*09/04/18 15:13*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*09/04/18 15:13*	*1*

Lab Sample ID: LCS 490-540434/3
Matrix: Solid
Analysis Batch: 540434

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	1.00	1.28		mg/Kg		128	60 - 139
1,2-Dibromo-3-Chloropropane	1.00	1.12		mg/Kg		112	47 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*125*		*70 - 130*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-540434/4
Matrix: Solid
Analysis Batch: 540434

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane			1.00	1.29		mg/Kg		129	60 - 139	1	16
1,2-Dibromo-3-Chloropropane			1.00	1.14		mg/Kg		114	47 - 144	2	38

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*123*		*70 - 130*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*

QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88272-1

GC/MS VOA

Prep Batch: 539465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88272-6	DG-I11S-0.5-1	Total/NA	Solid	5035	
720-88272-9	DG-A8S-0.5-1	Total/NA	Solid	5035	

Prep Batch: 539470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88272-1	DG-FG910S-0.5-1	Total/NA	Solid	5035	
720-88272-2	DG-H9S-0.5-1	Total/NA	Solid	5035	
720-88272-3	DG-L9S-0.5-1	Total/NA	Solid	5035	
720-88272-4	DG-M11S-0.5-1	Total/NA	Solid	5035	
720-88272-5	DG-K11S-0.5-1	Total/NA	Solid	5035	
720-88272-7	DG-G11S-0.5-1	Total/NA	Solid	5035	
720-88272-8	DG-E11S-0.5-1	Total/NA	Solid	5035	
720-88272-10	DUP-32	Total/NA	Solid	5035	
720-88272-11	DUP-22	Total/NA	Solid	5035	

Prep Batch: 539776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-137732-A-2-B MS	Matrix Spike	Total/NA	Solid	5030C	
310-137732-A-2-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5030C	

Analysis Batch: 540014

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88272-1	DG-FG910S-0.5-1	Total/NA	Solid	8260B	539470
720-88272-2	DG-H9S-0.5-1	Total/NA	Solid	8260B	539470
720-88272-3	DG-L9S-0.5-1	Total/NA	Solid	8260B	539470
720-88272-4	DG-M11S-0.5-1	Total/NA	Solid	8260B	539470
720-88272-5	DG-K11S-0.5-1	Total/NA	Solid	8260B	539470
720-88272-7	DG-G11S-0.5-1	Total/NA	Solid	8260B	539470
720-88272-8	DG-E11S-0.5-1	Total/NA	Solid	8260B	539470
720-88272-10	DUP-32	Total/NA	Solid	8260B	539470
720-88272-11	DUP-22	Total/NA	Solid	8260B	539470
MB 490-540014/7	Method Blank	Total/NA	Solid	8260B	
LCS 490-540014/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-540014/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 540434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88272-6	DG-I11S-0.5-1	Total/NA	Solid	8260B	539465
720-88272-9	DG-A8S-0.5-1	Total/NA	Solid	8260B	539465
MB 490-540434/7	Method Blank	Total/NA	Solid	8260B	
LCS 490-540434/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-540434/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
310-137732-A-2-B MS	Matrix Spike	Total/NA	Solid	8260B	539776
310-137732-A-2-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	539776

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88272-1

Client Sample ID: DG-FG910S-0.5-1 — Lab Sample ID: 720-88272-1

Date Collected: 08/27/18 07:50 — **Matrix: Solid**
Date Received: 08/27/18 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			539470	08/27/18 09:50	DHC	TAL NSH
Total/NA	Analysis	8260B		1	540014	08/31/18 17:15	RP	TAL NSH

Client Sample ID: DG-H9S-0.5-1 — Lab Sample ID: 720-88272-2

Date Collected: 08/27/18 08:25 — **Matrix: Solid**
Date Received: 08/27/18 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			539470	08/27/18 10:25	DHC	TAL NSH
Total/NA	Analysis	8260B		1	540014	08/31/18 17:45	RP	TAL NSH

Client Sample ID: DG-L9S-0.5-1 — Lab Sample ID: 720-88272-3

Date Collected: 08/27/18 09:10 — **Matrix: Solid**
Date Received: 08/27/18 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			539470	08/27/18 11:10	DHC	TAL NSH
Total/NA	Analysis	8260B		1	540014	08/31/18 18:15	RP	TAL NSH

Client Sample ID: DG-M11S-0.5-1 — Lab Sample ID: 720-88272-4

Date Collected: 08/27/18 10:00 — **Matrix: Solid**
Date Received: 08/27/18 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			539470	08/27/18 12:00	DHC	TAL NSH
Total/NA	Analysis	8260B		1	540014	08/31/18 18:45	RP	TAL NSH

Client Sample ID: DG-K11S-0.5-1 — Lab Sample ID: 720-88272-5

Date Collected: 08/27/18 10:35 — **Matrix: Solid**
Date Received: 08/27/18 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			539470	08/27/18 12:35	DHC	TAL NSH
Total/NA	Analysis	8260B		1	540014	08/31/18 19:15	RP	TAL NSH

Client Sample ID: DG-I11S-0.5-1 — Lab Sample ID: 720-88272-6

Date Collected: 08/27/18 11:10 — **Matrix: Solid**
Date Received: 08/27/18 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			539465	08/29/18 11:54	DHC	TAL NSH
Total/NA	Analysis	8260B		1	540434	09/04/18 21:41	S1S	TAL NSH

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88272-1

Client Sample ID: DG-G11S-0.5-1 — Lab Sample ID: 720-88272-7

Date Collected: 08/27/18 12:25 — **Matrix: Solid**
Date Received: 08/27/18 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			539470	08/27/18 14:25	DHC	TAL NSH
Total/NA	Analysis	8260B		1	540014	08/31/18 20:15	RP	TAL NSH

Client Sample ID: DG-E11S-0.5-1 — Lab Sample ID: 720-88272-8

Date Collected: 08/27/18 11:50 — **Matrix: Solid**
Date Received: 08/27/18 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			539470	08/27/18 13:50	DHC	TAL NSH
Total/NA	Analysis	8260B		1	540014	08/31/18 20:46	RP	TAL NSH

Client Sample ID: DG-A8S-0.5-1 — Lab Sample ID: 720-88272-9

Date Collected: 08/27/18 12:50 — **Matrix: Solid**
Date Received: 08/27/18 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			539465	08/29/18 11:54	DHC	TAL NSH
Total/NA	Analysis	8260B		1	540434	09/04/18 22:08	S1S	TAL NSH

Client Sample ID: DUP-32 — Lab Sample ID: 720-88272-10

Date Collected: 08/27/18 00:00 — **Matrix: Solid**
Date Received: 08/27/18 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			539470	08/27/18 02:00	DHC	TAL NSH
Total/NA	Analysis	8260B		1	540014	08/31/18 21:45	RP	TAL NSH

Client Sample ID: DUP-22 — Lab Sample ID: 720-88272-11

Date Collected: 08/27/18 00:00 — **Matrix: Solid**
Date Received: 08/27/18 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			539470	08/27/18 02:00	DHC	TAL NSH
Total/NA	Analysis	8260B		1	540014	08/31/18 22:15	RP	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88272-1

Laboratory: TestAmerica Pleasanton

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-19
Alaska (UST)	State Program	10	UST-087	06-30-19
Arizona	State Program	9	AZ0473	05-05-19
Arkansas DEQ	State Program	6	88-0737	04-25-19
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-19
Florida	NELAP	4	E87358	06-30-19
Georgia	State Program	4	NA: NELAP & A2LA	12-31-19
Illinois	NELAP	5	200010	12-09-18
Iowa	State Program	7	131	04-01-20
Kansas	NELAP	7	E-10229	10-31-18
Kentucky (UST)	State Program	4	19	06-30-19
Kentucky (WW)	State Program	4	90038	12-31-18
Louisiana	NELAP	6	30613	06-30-19
Maine	State Program	1	TN00032	11-03-19
Maryland	State Program	3	316	03-31-19
Massachusetts	State Program	1	M-TN032	06-30-19
Minnesota	NELAP	5	047-999-345	12-31-18
Mississippi	State Program	4	N/A	06-30-19
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-19
New Hampshire	NELAP	1	2963	10-09-18
New Jersey	NELAP	2	TN965	06-30-19
New York	NELAP	2	11342	03-31-19
North Carolina (WW/SW)	State Program	4	387	12-31-18
North Dakota	State Program	8	R-146	06-30-19
Ohio VAP	State Program	5	CL0033	07-06-19
Oklahoma	State Program	6	9412	08-31-19
Oregon	NELAP	10	TN200001	04-26-19
Pennsylvania	NELAP	3	68-00585	07-31-19
Rhode Island	State Program	1	LAO00268	12-30-18
South Carolina	State Program	4	84009 (001)	02-28-19
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-19
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-19
Virginia	NELAP	3	460152	06-14-19
Washington	State Program	10	C789	07-19-19
West Virginia DEP	State Program	3	219	02-28-19
Wisconsin	State Program	5	998020430	08-31-19
Wyoming (UST)	A2LA	8	453.07	12-31-19

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88272-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
5035	Closed System Purge and Trap	SW846	TAL NSH

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88272-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-88272-1	DG-FG910S-0.5-1	Solid	08/27/18 07:50	08/27/18 18:00
720-88272-2	DG-H9S-0.5-1	Solid	08/27/18 08:25	08/27/18 18:00
720-88272-3	DG-L9S-0.5-1	Solid	08/27/18 09:10	08/27/18 18:00
720-88272-4	DG-M11S-0.5-1	Solid	08/27/18 10:00	08/27/18 18:00
720-88272-5	DG-K11S-0.5-1	Solid	08/27/18 10:35	08/27/18 18:00
720-88272-6	DG-I11S-0.5-1	Solid	08/27/18 11:10	08/27/18 18:00
720-88272-7	DG-G11S-0.5-1	Solid	08/27/18 12:25	08/27/18 18:00
720-88272-8	DG-E11S-0.5-1	Solid	08/27/18 11:50	08/27/18 18:00
720-88272-9	DG-A8S-0.5-1	Solid	08/27/18 12:50	08/27/18 18:00
720-88272-10	DUP-32	Solid	08/27/18 00:00	08/27/18 18:00
720-88272-11	DUP-22	Solid	08/27/18 00:00	08/27/18 18:00

SAC

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: _____

Date 8/27 Page 1 of 1

Report To

Name: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: mkahrilas@geosyntec.com
To: GEOSYNTEC
Sampled By:
: A SMITH
Phone:

Analysis Request

Sample ID	Date	Time	# of Cont.	Matrix	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☐ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☐ EPA 8081 PCBs ☐ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Metals: ☐ 6020 ☐ 200.8 (ICP-MS):	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	1,2,3-TCP (8260B-SIM/6036)	
DG-FG9105--0.5-1	8/27	750	5	Y																			X	
DG-H9S--0.5-1		825																					X	
DG-L9S--0.5-1		910																					X	
DG-M11S--0.5-1		1000																					X	
DG-K11S--0.5-1		1035																					X	
DG-I11S--0.5-1		1110																					X	
DG-G11S--0.5-1		1225																					X	
DG-E11S--0.5-1		1150																					X	
DG-A9S--0.5-1		1250																					X	
DUP-32		—																					X	
DUP-22		—																					X	

720-88272 Chain of Custody

Project Info.

Project Name/#: RC OU-SM
: WG2565/02
Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt

# of Containers:
Head Space:
Temp:

10 Day	5 Day	4 Day	3 Day	2 Day	1 Day	Other:
	(5)					

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID _____

Terms and Conditions on reverse

1) Relinquished by: [signature] Time 1255
Signature
Printed Name: MIRANDA KAHRILAS Date 8/27
Company: GEOSYNTEC

2) Relinquished by: [signature] Time 1800
Signature
Printed Name: Robert Date 8/27/18
Company: TA

3) Relinquished by:
Signature Time
Printed Name Date
Company

1) Received by: [signature] Time 1350
Signature
Printed Name: Robert Date 8/27/18
Company: TA

2) Received by: [signature] Time 1800
Signature
Printed Name: Maurice Gooch Date 8/27/18
Company: TA-Sac

3) Received by:
Signature Time
Printed Name Date
Company

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

720-88272 Chain of Custody

COOLER RECEIPT FORM

Cooler Received/Opened On 8/29/2018 @ 1005

Time Samples Removed From Cooler 1129 Time Samples Placed In Storage 1133 (2 Hour Window)

1. Tracking # 5640 (last 4 digits, FedEx) Courier: FedEx

   IR Gun ID 17960357 pH Strip Lot NA Chlorine Strip Lot NA

2. Temperature of rep. sample or temp blank when opened: 12 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

   If yes, how many and where:

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) GH

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

   Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

   b. Was there any observable headspace present in any VOA vial? YES...NO...NA

Larger than this.

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #

I certify that I unloaded the cooler and answered questions 7-14 (intial) GH

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

   b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) GH

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) GH

I certify that I attached a label with the unique LIMS number to each container (intial) GH

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#

BIS = Broken in shipment

Loc: 720
88272

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Cooler Received/Opened On 8/29/2018 @ 1005

Time Samples Removed From Cooler 1129 Time Samples Placed In Storage 1133 (2 Hour Window)

1. Tracking # 5690 (last 4 digits, FedEx) Courier: FedEx

   IR Gun ID 17960358 pH Strip Lot NA Chlorine Strip Lot NA

2. Temperature of rep. sample or temp blank when opened: -15.7 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES...NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

   If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) _____

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

   Were these signed and dated correctly? GH 8-29-18 YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

   b. Was there any observable headspace present in any VOA vial? YES...NO...NA

Larger than this.

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (intial) GH

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

   b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) GH

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) GH

I certify that I attached a label with the unique LIMS number to each container (intial) GH

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...# _____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 8/23/17

TestAmerica Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	COC No: 320-127777.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): State Program - California	Job #: 720-88272-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 8/31/2018		
City: Nashville	TAT Requested (days):		
State, Zip: TN, 37204			
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:		
Email:	WO #:		
Project Name: Brisbane Data Gap Invest Work Plan	Project #: 72013717		
Site:	SSOW#:		

California

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B/5035LP_Calc 1,2,3-TCP and 1,2-Dibromo-3-chloropropane	8260B/5035A_M_Calc 1,2,3-TCP and 1,2-Dibromo-3-chloropropane	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
DG-FG9105-0.5-1 (720-88272-1)	8/27/18	07:50 Pacific		Solid			X	X	3	
DG-H95-0.5-1 (720-88272-2)	8/27/18	08:25 Pacific		Solid			X	X	3	
DG-L95-0.5-1 (720-88272-3)	8/27/18	09:10 Pacific		Solid			X	X	3	
DG-M115-0.5-1 (720-88272-4)	8/27/18	10:00 Pacific		Solid			X	X	3	
DG-K115-0.5-1 (720-88272-5)	8/27/18	10:35 Pacific		Solid			X	X	3	
DG-I115-0.5-1 (720-88272-6)	8/27/18	11:10 Pacific		Solid			X	X	3	
DG-G115-0.5-1 (720-88272-7)	8/27/18	12:25 Pacific		Solid			X	X	3	
DG-E115-0.5-1 (720-88272-8)	8/27/18	11:50 Pacific		Solid			X	X	3	
DG-A85-0.5-1 (720-88272-9)	8/27/18	12:50 Pacific		Solid			X	X	3	

Loc: 720
88272

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	8-28-18 1630	Tapper	[signature]	8-29-18/1005	TA-NAS
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 1.2 / -15.7

Ver: 09/20/2016

TestAmerica Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 320-127777.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): State Program - California		Job #: 720-88272-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 8/31/2018			
City: Nashville	TAT Requested (days):			
State, Zip: TN, 37204				
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:			
Email:	WO #:			
Project Name: Brisbane Data Gap Invest Work Plan	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B/5035LP_Calc 1,2,3-TCP and 1,2-Dibromo-3-chloropropane	8260B/5035A_M_Calc 1,2,3-TCP and 1,2-Dibromo-3-chloropropane	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
DUP-32 (720-88272-10)	8/27/18	Pacific		Solid			X	X	3	
DUP-22 (720-88272-11)	8/27/18	Pacific		Solid			X	X	3	

Loc: 720
88272

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 8-28-18 1030	Company	Received by:	Date/Time: 8-29-18 / 1005	Company TA-NAS
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 1.2 / -15.7

Ver: 09/20/2016

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sacramento

Sample Receiving Notes

720-88272 Field Sheet

Job:____

Tracking #_____ SO / PO / FO / 2-Day / Ground / UPS / Courier / GSO / OnTrac / Goldstreak / USPS / Other _____

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations. File in the job folder with the COC.

Notes:_____

Therm. ID: AK-2 / AK-3 / AK-5 / AK-6 / HACCP / Other____ (+0.7°C)

Ice ✓ Wet ✓ Gel _____ Other _____

Cooler Custody Seal: —

Sample Custody Seal: —

Cooler ID: large green

Temp: Observed 1.5 Corrected 1.5

From: Temp Blank ☒ Sample ☐

NCM Filed: Yes ☐ No ☐

	Yes	No	NA
Perchlorate has headspace?	☐	☐	☒
Alkalinity has no headspace?	☐	☐	☒
CoC is complete w/o discrepancies?	☒	☐	☐
Samples received within holding time?	☒	☐	☐
Sample preservatives verified?	☐	☐	☒
Cooler compromised/tampered with?	☒	☐	☐
Samples compromised/tampered with?	☒	☐	☐
Samples w/o discrepancies?	☒	☐	☐
Sample containers have legible labels?	☒	☐	☐
Containers are not broken or leaking?	☒	☐	☐
Sample date/times are provided.	☒	☐	☐
Appropriate containers are used?	☒	☐	☐
Sample bottles are completely filled?	☒	☐	☐
Zero headspace?*	☐	☐	☒
Multiphasic samples are not present?	☒	☐	☐
Sample temp OK?	☒	☐	☐
Sample out of temp?	☐	☒	☐

Initials: MG Date: 8/27/18

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Q:\DOCUMENT-MANAGEMENT\FORMS\QA-812 SAMPLE RECEIVING NOTES.DOC QA-812 BWD 08/09/2018

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88272-1

Login Number: 88272
List Number: 1
Creator: Mullen, Joan

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	