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August 26, 2015 **VIA PRIVATE CARRIER**

Mr. James R. Carroll
Program Administrator
Land Restoration Program
Land Management Administration
Maryland Department of the Environment
1800 Washington Boulevard, Suite 625
Baltimore, Maryland 21230

Subject:

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2.1 HUMAN HEALTH RISK SCREENING EVALUATION 2-1

Acronyms

AET	apparent effects threshold
BaPEq	benzo[a]pyrene equivalents
cPAHs	carcinogenic polycyclic aromatic hydrocarbons
DRO	diesel-range organics
GRO	gasoline-range organics
Lockheed Martin	Lockheed Martin Corporation
MDE	Maryland Department of the Environment
µg/kg	microgram per kilogram
mg/kg	milligrams per kilogram
NOAA	National Oceanic and Atmospheric Administration
PAHs	polycyclic aromatic hydrocarbons
PEC	probable effects concentration
PEL	probable effects level
RAP	remedial action plan
RSL	regional screening level
SEL	severe effects level
SVOCs	semi-volatile organic compounds
Tetra Tech	Tetra Tech, Inc.
TPH	Total petroleum hydrocarbon
USEPA	

Section 1
Introduction

During the week of June 22, 2015, a team of ecologists surveying Cow Pen Creek and Dark Head Cove for submerged aquatic vegetation noticed a small sheen on water behind the bulkhead, in the eastern corner of Block D, near its intersection with the Block D panhandle. The sheen was tracked to a small breakout in the soil near an

at the MDE cumulative cancer risk benchmark of $1x10^{-5}$ (i.e., a one in one hundred thousand probability of developing cancer). Therefore, the residual risk analysis conducted using MDE guidelines in the Block D RAP would not have targeted this location for remediation based on worker exposure (Tetra Tech, Inc. [Tetra Tech], 2013).

Total petroleum hydrocarbon (TPH)–gasoline-range organics (GRO) were not detected in the soil sample collected. TPH–diesel-range organics (DRO) were detected at 95 milligrams perTj -0.002 e2-3

Table 2-1

Soil Sample from Oily Sheen Compared to Human Health Screening Criteria, Block D
Middle River Complex, Middle River, Maryland

SAMPLE **LAB ID** **SAMPLE DATE**			
Volatile organic compounds (µg/kg)			
1,2,4-Trimethylbenzene	17 J	5800 N	24000 N
Naphthalene	1300 B	3800 C	17000 C
Semivolatile organic compounds (µg/kg)			
Dibenz(a,h)anthracene	**190**	16 C	290 C
Dibenzofuran	190	7300 N	100000 N
Fluoranthene	1700	240000 N	3000000 N
Bis(2-ethylhexyl) phthalate	81 J B	39000 C	160000 C
Carbazole	290	NA	NA
Chrysene	930	16000 C	290000 C
Fluorene	230	240000 N	3000000 N
Pyrene	1500	180000 N	2300000 N
Indeno[1,2,3-cd]pyrene	**620**	160 C	2900 C
Naphthalene	620	3800 C	17000 C
Phenanthrene	1100	180000 N(2)	2300000 N(2)
1,1'-Biphenyl	25 J	4700 N	

Table 2-2

Soil/Sediment Sample from Oily Sheen Compared to Sediment Benchmarks, Block D
Middle River Complex, Middle River, Maryland

[redacted]

Section 3
Continuing Actions and Proposed Cleanup Activities

The following sections detail the proposed continuing action and cleanup activities for the area where the sheen was observed in Block D.

3.1 CONTINUING ACTIONS

Three tiers of oil sorbent logs have been placed below the sheen location and above high tide elevation. These sorbent logs are inspected each weekday and are replaced as necessary. If continuing inspections show that the size 0(t of)3(t)-2(ht)-6(s)-1(h4-6(e)4(1(i)-ons)-12(i)-2(n)-9.c)or.1-2(e) andth( )]TJ 0 Tc 0 Tw Oowilontolo3-2(og)1(or)6(4-m(l)2-,4( )]TJ -0.004 Tc 0.004 T

A photoionization detector will be used continuously to evaluate the presence of volatile organic compounds (VOCs) during excavation.

The soil will be stockpiled on-site using poly sheeting, and will be covered with plastic.

If an oil source other than the treated wood is observed after soil excavation, an additional foot of soil will be excavated in the direction of the apparent source until the source is found and removed. If the treated wood of a bulkhead tieback anchor is the only source, it will remain in place.

The storm drain will be repaired as proposed in the soil remedial action design for the Lockheed Martin Middle River Complex (Tetra Tech, 2015).

Stockpiled soil will be sampled to determine if excavated soil should be sent offsite for disposal, or can be used as backfill in the same area.

APPENDIX A—ANALYTICAL REPORTS FROM TESTAMERICA

ANALYTICAL REPORT

Job Number: 240-52297-1

Job Description: LM MRC Excavation Waste-Blocks

For:
Tetra Tech, Inc.
20251 Century Blvd
Suite 200
Germantown, MD 20874

Attention: Tony Apanavage

Approved for release.
John McFadden
Project Manager I
6/26/2015 4:40 PM

John McFadden, Project Manager I
4101 Shuffel Street NW, North Canton, OH, 44720
john.mcfadden@testamericainc.com
06/26/2015

cc: Samantha Brenner
Kelly Carper
Tobrena Sedlmyer

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GC Semi VOA . . . . . .

CASE NARRATIVE

Client: Tetra Tech, Inc.

Project: LM MRC Excavation Waste-Blocks

Report Number: 240-52297-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT
The sample was received on 6/23/2015 9:30 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.2º C.

VOLATILE ORGANIC COMPOUNDS (GCMS)
Sample MRC-DPAN-062215 (240-52297-1) was analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The sample was analyzed on 06/24/2015.

Naphthalene was detected in method blank MB 240-186440/1-A at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

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

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)
Sample MRC-DPAN-062215 (240-52297-1) was analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270D. The sample was prepared on 06/24/2015 and analyzed on 06/26/2015.

Bis(2-ethylhexyl) phthalate, Caprolactam and Di-n-butyl phthalate were detected in method blank MB 240-186497/5-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Sample MRC-DPAN-062215 (240-52297-1)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

GASOLINE RANGE ORGANICS
Sample MRC-DPAN-062215 (240-52297-1) was analyzed for gasoline range organics in accordance with EPA SW-846 Method 8015C - GRO. The sample was prepared and analyzed on 06/26/2015.

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

DIESEL RANGE ORGANICS (DRO)
Sample MRC-DPAN-062215 (240-52297-1) was analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The sample was prepared on 06/24/2015 and analyzed on 06/25/2015.

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

PERCENT SOLIDS
Sample MRC-DPAN-062215 (240-52297-1) was analyzed for percent solids in accordance with EPA Method 160.3 MOD. The sample was analyzed on 06/23/2015.

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

SAMPLE SUMMARY

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received

EXECUTIVE SUMMARY - Detections

Analyte	Result	Re o tin □□ - - Result

Client: Tetra Tech, Inc. Job Number: 240-52297-1

Lab Sample ID:	240-52297-1			Date Sampled:	06/22/2015 1100
Client Matrix:	Solid	% Moisture:	20.2	Date Received:	06/23/2015 0930

Analysis Method:	8260B	Analysis Batch:	240-186444	Instrument ID:	A3UX8
Prep Method:	5030B	Prep Batch:	240-186440	Lab File ID:	UX88133.D
Dilution:	1.0			Initial Weight/Volume:	5.31 g
Analysis Date:	06/24/2015 0837			Final Weight/Volume:	5 mL
Prep Date:	06/23/2015 2010				

Analyte DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	58	U	58	300
1,1,1-Trichloroethane	50	U	50	300
1,1,2,2-Tetrachloroethane	51	U	51	300
1,1,2-Trichloro-1,2,2-trifluoroethane	50	U	50	300
1,1-Dichloroethane	41	U	41	300
1,1-Dichloroethene	35	U	35	300
1,1-Dichloropropene	45	U	45	300
1,2,3-Trichlorobenzene	46	U	46	300
1,2,3-Trichloropropane	120	U	120	300
	15	U	1	300

U
1,1-Dic2221A18

Client: Tetra Tech, Inc.

Job Number: 240-52297-1

Lab Sample ID:	240-52297-1			Date Sampled:	06/22/2015 1100
Client Matrix:	Solid	% Moisture:	20.2	Date Received:	06/23/2015 0930

Analysis Method:	8260B	Analysis Batch:	240-186444	Instrument ID:	A3UX8
Prep Method:	5030B	Prep Batch:	240-186440	Lab File ID:	UX88133.D
Dilution:	1.0			Initial Weight/Volume:	5.31 g
Analysis Date:	06/24/2015 0837			Final Weight/Volume:	5 mL
Prep Date:	06/23/2015 2010				

Analyte

Client: Tetra Tech, Inc.

Job Number: 240-52297-1

Lab Sample ID:	240-52297-1			Date Sampled: 06/22/2015 1100
Client Matrix:	Solid	% Moisture:	20.2	Date Received: 06/23/2015 0930

Client: Tetra Tech, Inc. Job Number: 240-52297-1

Lab Sample ID:	240-52297-1			Date Sampled:	06/22/2015 1100
Client Matrix:	Solid	% Moisture:	20.2	Date Received:	06/23/2015 0930

Analysis Method:	8270D	Analysis Batch:	240-186915	Instrument ID:	A4HP7
Prep Method:	3540C	Prep Batch:	240-186497	Lab File ID:	50626007.D
Dilution:	2.0			Initial Weight/Volume:	29.85 g
Analysis Date:	06/26/2015 1240			Final Weight/Volume:	2 mL
Prep Date:	06/24/2015 0922			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Di-n-butyl phthalate		38	U	38	180
Di-n-octyl phthalate		20	U	20	180
Fluoranthene		1700		1.4	17
Fluorene		230		1.3	17
Hexachlorobenzene		5.3	U	5.3	17
Hexachlorobutadiene		14	U	14	130
Hexachlorocyclopentadiene		20	U F1	20	830
Hexachloroethane		23	U	23	130
Indeno[1,2,3-cd]pyrene		620		0.88	17
Isophorone		33	U	33	130
N-Nitrosodi-n-propylamine		16	U	16	130
N-Nitrosodiphenylamine		53	U	53	130
Naphthalene		620		2.1	17
Nitrobenzene		5.5	U	5.5	250
Pentachlorophenol		23	U	23	380
Phenanthrene		1100		1.8	17
Phenol		18	U	18	130
Pyrene		1500		1.1	17
3 & 4 Methylphenol		50	U	50	1000

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (Surr)	76		36 - 110
Phenol-d5 (Surr)	76		26 - 110
Nitrobenzene-d5 (Surr)	65		20 - 110
2-Fluorophenol (Surr)	70		24 - 110
2-Fluorobiphenyl (Surr)	73		24 - 110
2,4,6-Tribromophenol (Surr)	43		10 - 110

Client: Tetra Tech, Inc. Job Number: 240-52297-1

Lab Sample ID:	240-52297-1			Date Sampled:	06/22/2015 1100
Client Matrix:	Solid	% Moisture:	20.2	Date Received:	06/23/2015 0930

Analysis Method:	8015C	Analysis Batch:	240-186787	Instrument ID:	A2HP5F
Prep Method:	3540C	Prep Batch:	240-186501	Initial Weight/Volume:	30.30 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	06/25/2015 2247			Injection Volume:	1 uL
Prep Date:	06/24/2015 0933			Result Type:	PRIMARY

Analyte DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Total Petroleum Hydrocarbons (C10-C32)	95		7.9	21

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl (Surr)	68		40 - 160

Lab Sample ID: 240-52297-1 Date Sampled: 06/22/2015 1100
Client Matrix: Solid Date Received: 06/23/2015 0930

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Solids	80		%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-186275	Analysis Date: 06/23/2015 1119						DryWt Corrected: N
Percent Moisture	20		%	0.10	0.10	1.0	Moisture
Analysis Batch: 240-186275	Analysis Date: 06/23/2015 1119						DryWt Corrected: N

Client: Tetra Tech, Inc. Job Number: 240-52297-1

Lab Sample ID:	MB 240-186440/1-A	Analysis Batch:	240-186444	Instrument ID:	A3UX8
Client Matrix:	Solid	Prep Batch:	240-186440	Lab File ID:	UX88125.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5.00 g
Analysis Date:	06/24/2015 0547	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	06/23/2015 2010				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,1,1,2-Tetrachloroethane	49	U	49	250
1,1,1-Trichloroethane	42	U	42	250
1,1,2,2-Tetrachloroethane	43	U	43	250
1,1,2-Trichloro-1,2,2-trifluoroethane	42	U	42	250
1,1-Dichloroethane	35	U	35	250
1,1-Dichloroethene	30	U	30	250
1,1-Dichloropropene	38	U	38	250
1,2,3-Trichlorobenzene	39	U	39	250
1,2,3-Trichloropropane	100	U	100	250
1,2,3-Trimethylbenzene	13	U	13	250
1,2,4-Trichlorobenzene	30	U	30	250
1,2,4-Trimethylbenzene	13	U	13	250
1,2-Dibromo-3-Chloropropane	71	U	71	500
1,2-Dichlorobenzene	19	U	19	250
1,2-Dichloroethane	53	U	53	250
1,2-Dichloropropane	32	U	32	250
1,3-Dichlorobenzene	30	U	30	250
1,3-Dichloropropane	23	U	23	250
1,4-Dichlorobenzene	41	U	41	250
2,2-Dichloropropane	52	U	52	250
2-Chloroethyl vinyl ether	78	U	78	1000
96 0 Td 8 Td (250)Tj -64.5 0 Td (41)Tj -396 0 Td (1,4-Dichlorobenzene)Tj 234 -11.05 Td (52)Tj llEb21Td (30)Td (41)Tj -396 0 Td (1,4	41	U	41	250
	71	U	30	250

Lab Sample ID:	MB 240-186440/1-A	Analysis Batch:	240-186444	Instrument ID:	A3UX8
Client Matrix:	Solid	Prep Batch:	240-186440	Lab File ID:	UX88125.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5.00 g
Analysis Date:	06/24/2015 0547	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	06/23/2015 2010				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Diisopropyl ether	52	U	52	500
Naphthalene	34.1	J	26	250
m-Xylene & p-Xylene	20	U	20	250
n-Butylbenzene	21	U	21	250
Isopropylbenzene	13	U	13	250
N-Propylbenzene	61	U	61	250
2-Butanone (MEK)	73	U	73	1000
4-Methyl-2-pentanone (MIBK)	56	U	56	1000
sec-Butylbenzene	16	U	16	250
Methyl tert-butyl ether	30	U	30	250
Tert-amyl methyl ether	42	U	42	250
Methylene Chloride	85	U	85	250
o-Xylene	17	U	17	250
Styrene	27	U	27	250
Ethyl-t-butyl ether (ETBE)	16	U	16	250
tert-Butylbenzene	34	U	34	250
Tetrachloroethene	27	U	27	250
Toluene	10	U	10	250
trans-1,2-Dichloroethene	26	U	26	250
trans-1,3-Dichloropropene	26	U	26	250
Trichloroethene	39	U	39	250
Trichlorofluoromethane	35	U	35	250
Vinyl acetate	100	U	100	500
Vinyl chloride	56	U	56	250
tert-Butyl alcohol (TBA)	840	U	840	10000
Xylenes, Total	32	U	32	500
Dibromochloromethane	46	U	46	250

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	106	39 - 128
4-Bromofluorobenzene (Surr)	99	26 - 141
Toluene-d8 (Surr)	96	33 - 134
Dibromofluoromethane (Surr)	92	30 - 122

Solid
1.0

Client: Tetra Tech, Inc. Job Number: 240-52297-1

		Instrument ID:	
Client Matrix:	Solid	Lab File ID:	UX88134.D
Dilution:	1.0	Initial Weight/Volume:	5.91 g
		Final Weight/Volume:	5T*mVolume:
			5.91 g
			5T*mVolume:
			5.91 g
		Instrument ID:	5T*mVolume:
Client Matrix:	Solid	Lab File ID:	5.:
Dilution:	1.0	Initial Weight/Volume:	5.:6 245.29.91 g
		Final Weight/Volume:	5T*mVolume:
			LabA3j - 0 -:
			Fin%Clic 0 1 42 -222 cm

Client: Tetra Tech, Inc. Job Number: 240-52297-1

MS Lab Sample ID:	240-52297-1	Analysis Batch:	240-186444	Instrument ID:	A3UX8
Client Matrix:	Solid	Prep Batch:	240-186440	Lab File ID:	UX88134.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5.91 g
Analysis Date:	06/24/2015 0858			Final Weight/Volume:	5 mL
Prep Date:	06/23/2015 2010				5 mL
Leach Date:	N/A				

MSD Lab Sample ID:	240-52297-1	Analysis Batch:	240-186444	Instrument ID:	A3UX8
Client Matrix:	Solid	Prep Batch:	240-186440	Lab File ID:	UX88135.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5.29 g
Analysis Date:	06/24/2015 0919			Final Weight/Volume:	5 mL
Prep Date:	06/23/2015 2010				5 mL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Chloroethane	71	69	10 - 168	9	30		
Chloroform	85	81	51 - 120	6	30		
Chloromethane	70	69	16 - 120	9	30		
cis-1,2-Dichloroethene	85	84	34 - 137	11	30		
cis-1,3-Dichloropropene	56	58	19 - 121	14	30		
Hexachlorobutadiene	81	74	10 - 134	3	30		
Dibromomethane	87	79	45 - 121	1	30		
Bromodichloromethane	50	53	18 - 133	18	30		
Dichlorodifluoromethane	37	38	10 - 120	14	30		
Ethylbenzene	86	82	27 - 143	6	30		
1,2-Dibromoethane	66	68	32 - 127	14	30		
Naphthalene	106	76	10 - 199	10	30		
m-Xylene & p-Xylene	86	81	14 - 151	4	30		
n-Butylbenzene	83	78	13 - 154	5	30		
Isopropylbenzene	88	80	39 - 126	2	30		
N-Propylbenzene	84	78	41 - 135	4	30		
2-Butanone (MEK)	83	80	10 - 172	7	30		
4-Methyl-2-pentanone (MIBK)	87	81	19 - 151	3	30		
sec-Butylbenzene	89	83	41 - 133	5	30		
Methyl tert-butyl ether	91	86	26 - 159	5	30		
Methylene Chloride	98	95	10 - 148	8	30		
o-Xylene	89	87	18 - 151	9	30		
Styrene	81	77	31 - 137	6	30		
tert-Butylbenzene	85	82	45 - 132	8	30		
	79	75	19 - 153	6	30		

MS Lab Sample ID:	240-52297-1	Analysis Batch:	240-186444	Instrument ID:	A3UX8
Client Matrix:	Solid	Prep Batch:	240-186440	Lab File ID:	UX88134.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5.91 g
Analysis Date:	06/24/2015 0858			Final Weight/Volume:	5 mL
Prep Date:	06/23/2015 2010				5 mL
Leach Date:	N/A				

MSD Lab Sample ID:	240-52297-1	Analysis Batch:	240-186444	Instrument ID:	A3UX8
Client Matrix:	Solid	Prep Batch:	240-186440	Lab File ID:	UX88135.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5.29 g
Analysis Date:	06/24/2015 0919			Final Weight/Volume:	5 mL
Prep Date:	06/23/2015 2010				5 mL
Leach Date:	N/A				

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Xylenes, Total	88	84	16 - 150	7	30		
Dibromochloromethane	44	48	10 - 128	20	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	94	92	39 - 128
4-Bromofluorobenzene (Surr)	87	86	26 - 141
Toluene-d8 (Surr)	86	85	33 - 134
Dibromofluoromethane (Surr)	83	82	30 - 122

Client: Tetra Tech, Inc.

Job Number: 240-52297-1

MS Lab Sample ID:	240-52297-1	Units: ug/Kg	MSD Lab Sample ID:	240-52297-1
Client Matrix:	Solid		Client Matrix:	Solid
Dilution:	1.0		Dilution:	1.0
Analysis Date:	06/24/2015 0858			06/24/2015 0919
Prep Date:				

Client: Tetra Tech, Inc. Job Number: 240-52297-1

Lab Sample ID:	MB 240-186497/5-A	Analysis Batch:		Instrument ID:	A4HP7
Client Matrix:	Solid	Prep Batch:		Lab File ID:	50626003.D
Dilution:	1.0	Leach Batch:		Initial Weight/Volume:	30 g
Analysis Date:	06/26/2015 1100	Units:	ug/Kg	Final Weight/Volume:	2 mL

Lab Sample ID:	MB 240-186497/5-A	Analysis Batch:	240-186915	Instrument ID:	A4HP7
Client Matrix:	Solid	Prep Batch:	240-186497	Lab File ID:	50626003.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 g
Analysis Date:	06/26/2015 1100	Units:	ug/Kg	Final Weight/Volume:	2 mL
Prep Date:	06/24/2015 0922			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Dimethyl phthalate	17	U	17	70
Di-n-butyl phthalate	25.0	J	15	70
Di-n-octyl phthalate	7.9	U	7.9	70
Fluoranthene	0.55	U	0.55	6.7
Fluorene	0.53	U	0.53	6.7
Hexachlorobenzene	2.1	U	2.1	6.7
Hexachlorobutadiene	5.6	U	5.6	50
Hexachlorocyclopentadiene	8.1	U	8.1	330
Hexachloroethane	9.0	U	9.0	50
Indeno[1,2,3-cd]pyrene	0.35	U	0.35	6.7
Isophorone	13	U	13	50
N-Nitrosodi-n-propylamine	6.3	U	6.3	50
N-Nitrosodiphenylamine	21	U	21	50
Naphthalene	0.82	U	0.82	6.7
Nitrobenzene	2.2	U	2.2	100
Pentachlorophenol	9.1	U	9.1	150
Phenanthrene	0.73	U	0.73	6.7
Phenol	7.3	U	7.3	50
Pyrene	0.44	U	0.44	6.7
3 & 4 Methylphenol	20	U	20	400

Surrogate	% Rec	Acceptance Limits
Terphenyl-d14 (Surr)	95	36 - 110
Phenol-d5 (Surr)	86	26 - 110
Nitrobenzene-d5 (Surr)	85	20 - 110
2-Fluorophenol (Surr)	80	24 - 110
2-Fluorobiphenyl (Surr)	83	24 - 110
2,4,6-Tribromophenol (Surr)	56	10 - 110

Client: Tetra Tech, Inc. Job Number: 240-52297-1

Lab Sample ID:	LCS 240-186497/6-A	Analysis Batch:	240-186915	Instrument ID:	A4HP7
Client Matrix:	Solid	Prep Batch:	240-186497	Lab File ID:	50626004.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 g
Analysis Date:	06/26/2015 1125	Units:	ug/Kg	Final Weight/Volume:	2 mL
Prep Date:	06/24/2015 0922			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1'-Biphenyl	667	480	72	35 - 110	
bis (2-chloroisopropyl) ether	667	498	75	29 - 110	
2,4,5-Trichlorophenol	667	383	57	25 - 110	
2,4,6-Trichlorophenol	667	415	62	12 - 110	
2,4-Dichlorophenol	667	481	72	39 - 110	
2,4-Dimethylphenol	667	415	62	29 - 110	
2,4-Dinitrophenol	1330	899	67	10 - 110	
2,4-Dinitrotoluene	667	556	83	48 - 110	
2,6-Dinitrotoluene	667	551	83	45 - 110	
2-Chloronaphthalene	667	477	71	32 - 110	
2-Chlorophenol	667	457	69	37 - 110	
2-Methylnaphthalene	667	468	70	36 - 110	
2-Methylphenol	667	484	73	41 - 110	
2-Nitroaniline	667	584	88	45 - 110	
2-Nitrophenol	667	470	71	34 - 110	
	1330	1020	76	28 - 110	

Lab Sample ID:	LCS 240-186497/6-A	Analysis Batch:	240-186915	Instrument ID:	A4HP7
Client Matrix:	Solid	Prep Batch:	240-186497	Lab File ID:	50626004.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 g
Analysis Date:	06/26/2015 1125	Units:	ug/Kg	Final Weight/Volume:	2 mL
Prep Date:	06/24/2015 0922			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Di-n-butyl phthalate	667	651	98	51 - 110	
Di-n-octyl phthalate	667	592	89	48 - 110	
Fluoranthene	667	592	89	51 - 110	
Fluorene	667	502	75	46 - 110	
Hexachlorobenzene	667	460	69	43 - 110	
Hexachlorobutadiene	667	398	60	29 - 110	
Hexachlorocyclopentadiene	667	188	28	12 - 110	J
Hexachloroethane	667	387	58	30 - 110	
Indeno[1,2,3-cd]pyrene	667	583	87	50 - 110	
Isophorone	667	499	75	36 - 110	
N-Nitrosodi-n-propylamine	667	512	77	38 - 110	
N-Nitrosodiphenylamine	1330	1040	78	46 - 110	
Naphthalene	667	446	67	36 - 110	
Nitrobenzene	667	452	68	32 - 110	
Pentachlorophenol	1330	782	59	10 - 110	
Phenanthrene	667	527	79	49 - 110	
Phenol	667	489	73	38 - 110	
Pyrene	667	600	90	49 - 110	
3 & 4 Methylphenol	667	520	78	40 - 110	

Surrogate	% Rec	Acceptance Limits
Terphenyl-d14 (Surr)	83	36 - 110
Phenol-d5 (Surr)	78	26 - 110
Nitrobenzene-d5 (Surr)	71	20 - 110
2-Fluorophenol (Surr)	73	24 - 110
2-Fluorobiphenyl (Surr)	74	24 - 110
2,4,6-Tribromophenol (Surr)	68	10 - 110

Client: Tetra Tech, Inc. Job Number: 240-52297-1

MS Lab Sample ID:	240-52297-1	Analysis Batch:	240-186915	Instrument ID:	A4HP7
Client Matrix:	Solid	Prep Batch:	240-186497	Lab File ID:	50626008.D
Dilution:	2.0	Leach Batch:	N/A	Initial Weight/Volume:	30.10 g
Analysis Date:	06/26/2015 1305			Final Weight/Volume:	2 mL
Prep Date:	06/24/2015 0922			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	240-52297-1	Analysis Batch:	240-186915	Instrument ID:	A4HP7
Client Matrix:	Solid	Prep Batch:	240-186497	Lab File ID:	50626009.D
Dilution:	2.0	Leach Batch:	N/A	Initial Weight/Volume:	29.94 g
Analysis Date:	06/26/2015 1330			Final Weight/Volume:	2 mL
Prep Date:	06/24/2015 0922			Injection Volume:	1 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
1,1'-Biphenyl	71	74	32 - 110	5	32		
bis (2-chloroisopropyl) ether	78	84	11 - 110	8	42		
2,4,5-Trichlorophenol	64	62	10 - 117	1	99		
2,4,6-Trichlorophenol	62	59	10 - 110	5	38		
2,4-Dichlorophenol	70	76	10 - 110	8	34		
2,4-Dimethylphenol	69	76	10 - 110	11	31		
2,4-Dinitrophenol	43	25	10 - 110	53	99	J	J
2,4-Dinitrotoluene	74	82	32 - 110	10	30		
2,6Analysis Date:	75	83	35 - 110	11	30		
Prepysis Date:							

Client: Tetra Tech, Inc. Job Number: 240-52297-1

MS Lab Sample ID:	240-52297-1	Analysis Batch:	240-186915	Instrument ID:	A4HP7
Client Matrix:	Solid	Prep Batch:	240-186497	Lab File ID:	50626008.D
Dilution:	2.0	Leach Batch:	N/A	Initial Weight/Volume:	30.10 g
Analysis Date:	06/26/2015 1305			Final Weight/Volume:	2 mL
Prep Date:	06/24/2015 0922			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	240-52297-1	Analysis Batch:	240-186915	Instrument ID:	A4HP7
Client Matrix:	Solid	Prep Batch:	240-186497	Lab File ID:	50626009.D
Dilution:	2.0	Leach Batch:	N/A	Initial Weight/Volume:	29.94 g
Analysis Date:	06/26/2015 1330			Final Weight/Volume:	2 mL
Prep Date:	06/24/2015 0922			Injection Volume:	1 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Benzo[g,h,i]perylene	20	24	10 - 117	4	99		
Benzo[k]fluoranthene	70	73	10 - 121	3	99		
Bis(2-chloroethoxy)methane	74	78	26 - 110	6	37		
Bis(2-chloroethyl)ether	73	79	21 - 110	8	55		
Bis(2-ethylhexyl) phthalate	73	81	40 - 110	9	30		
Butyl benzyl phthalate	77	83	44 - 110	8	30		
Caprolactam	87	98	10 - 134	13	32		
Carbazole	71	67	34 - 110	4	30		
Chrysene	79	96	10 - 125	9	99		
Dibenz(a,h)anthracene	46	55	14 - 113	12	99		
Dibenzofuran	64	61	29 - 110	3	30		
Diethyl phthalate	76	84	42 - 110	10	30		
Dimethyl phthalate	75	79	41 - 110	6	30		
Di-n-butyl phthalate	87	95	43 - 110	10	30		
Di-n-octyl phthalate	84	90	24 - 119	7	30		
Fluoranthene	89	76	10 - 110	4	99		
Fluorene	68	62	23 - 110	6	99		
Hexachlorobenzene	57	64	34 - 110	12	30		
Hexachlorobutadiene	65	69	25 - 110	6	34		
Hexachlorocyclopentadiene	0	0	10 - 110	NC	79	U F1	U F1
Hexachloroethane	57	59	12 - 110	3	50		

Client: Tetra Tech, Inc. Job Number: 240-52297-1

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Terphenyl-d14 (Surr)	69	75	36 - 110
Phenol-d5 (Surr)	75	83	26 - 110
Nitrobenzene-d5 (Surr)	73	76	20 - 110
2-Fluorophenol (Surr)	75	77	24 - 110
2-Fluorobiphenyl (Surr)	74	76	24 - 110
2,4,6-Tribromophenol (Surr)	62	59	10 - 110

MS Lab Sample ID:	240-52297-1	Units:	ug/Kg	MSD Lab Sample ID:	240-52297-1
Client Matrix:	Solid			Client Matrix:	Solid
Dilution:	2.0			Dilution:	2.0
Analysis Date:	06/26/2015 1305			Analysis Date:	06/26/2015 1330
Prep Date:	06/24/2015 0922			Prep Date:	06/24/2015 0922
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual		MSD Result/Qual	
Dibenzofuran	190		833	838	723		703	
Diethyl phthalate	40	U	833	838	633		699	
Dimethyl phthalate	43	U	833	838	621		658	
Di-n-butyl phthalate	38	U	833	838	724		798	
Di-n-octyl phthalate	20	U	833	838	703		758	
Fluoranthene	1700		833	838	2490		2380	
Fluorene	230		833	838	789		744	
Hexachlorobenzene	5.3	U	833	838	475		538	
Hexachlorobutadiene	14	U	833	838	541		575	
Hexachlorocyclopentadiene	20	U	833	838	20	U F1	20	U F1
Hexachloroethane	23	U	833	838	474		490	
Indeno[1,2,3-cd]pyrene	620		833	838	883		929	
Isophorone	33	U	833	838	640		690	
N-Nitrosodi-n-propylamine	16	U	833	838	656		704	
N-Nitrosodiphenylamine	53	U	1670	1680	1200		1320	
Naphthalene	620		833	838	1160		1160	
Nitrobenzene	5.5	U	833	838	609		641	
Pentachlorophenol	23	U	1670	1680	633		617	
Phenanthrene	1100		833	838	1750		1450	
Phenol	18	U	833	838	610		673	
Pyrene	1500		833	838	2290		2490	
3 & 4 Methylphenol	50	U	833	838	643	J	727	J

Lab Sample ID:	MB 240-186849/1-A	Analysis Batch:	240-186851	Instrument ID:	AFID
Client Matrix:	Solid	Prep Batch:	240-186849	Lab File ID:	A0062605.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 g
Analysis Date:	06/26/2015 0750	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	06/26/2015 0534			Injection Volume:	5 mL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Gasoline Range Organics [C6 - C10]	46	U	46	100

Surrogate	% Rec	Acceptance Limits
Trifluorotoluene (Surr)	64	40 - 139

Surrogate	% Rec	Acceptance Limits
Trifluorotoluene (Surr)	85	40 - 139

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Trifluorotoluene (Surr)	47	43	40 - 139

Lab Sample ID:	MB 240-186501/5-A	Analysis Batch:	240-186787	Instrument ID:	A2HP5F
Client Matrix:	Solid	Prep Batch:	240-186501	Lab File ID:	P5F62507.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 g
Analysis Date:	06/25/2015 1631	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	06/24/2015 0933			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Total Petroleum Hydrocarbons (C10-C32)	6.4	U	6.4	17

Surrogate	% Rec	Acceptance Limits
o-Terphenyl (Surr)	72	40 - 160

Lab Sample ID:	LCS 240-186501/6-A	Analysis Batch:	240-186787	Instrument ID:	A2HP5F
Client Matrix:	Solid	Prep Batch:	240-186501	Lab File ID:	P5F62508.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 g
Analysis Date:	06/25/2015 1702	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	06/24/2015 0933			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Diesel	83.3	63.7	76	52 - 120	

Surrogate	% Rec	Acceptance Limits
o-Terphenyl (Surr)	67	40 - 160

Lab Sample ID:	240-52281-A-293 DU	Analysis Batch:	240-186275	Instrument ID:	No Equipment Assigned
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	06/23/2015 1107	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

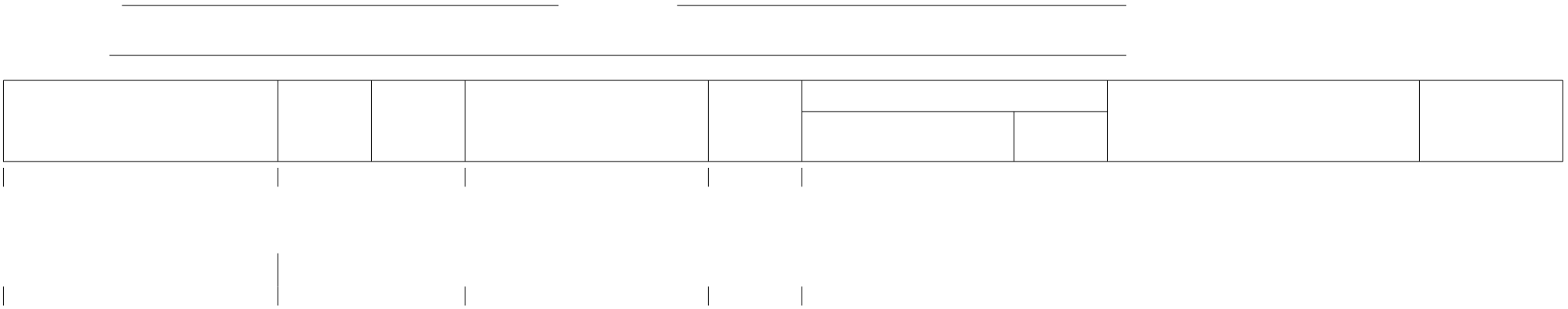
Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Solids	94	94	0.4	20	
Percent Moisture	5.7	6.1	7	20	

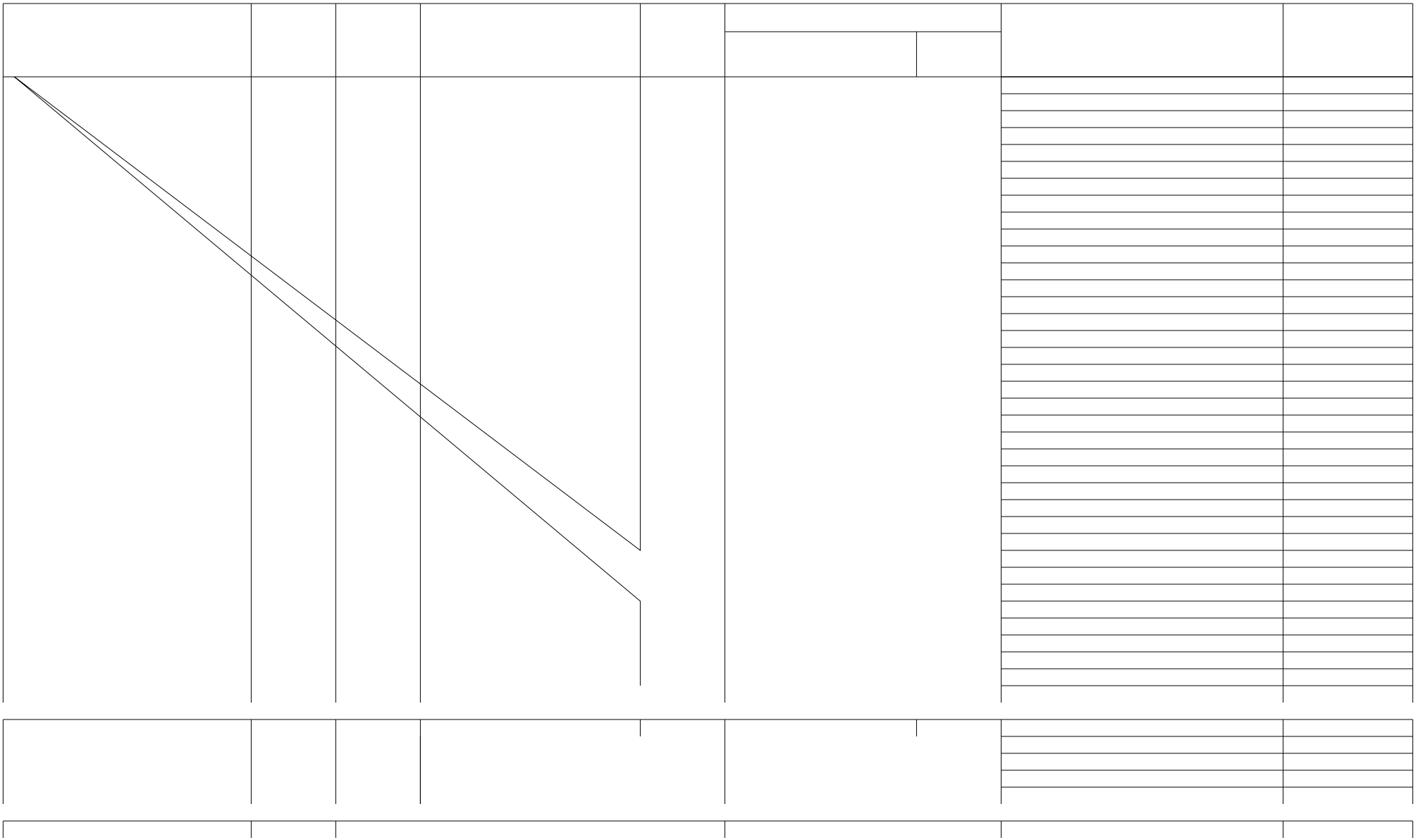
LCS 240-186440/2-A	Lab Control Sample	T	Solid	5030B	
MB 240-186440/1-A	Method Blank	T	Solid	5030B	
240-52297-1	MRC-DPAN-062215	T	Solid	5030B	
240-52297-1MS	Matrix Spike	T	Solid	5030B	
240-52297-1MSD	Matrix Spike Duplicate	T	Solid	5030B	
LCS 240-186440/2-A	Lab Control Sample	T	Solid	8260B	240-186440
MB 240-186440/1-A	Method Blank	T	Solid	8260B	240-186440
240-52297-1	MRC-DPAN-062215	T	Solid	8260B	240-186440
240-52297-1MS	Matrix Spike	T	Solid	8260B	240-186440
240-52297-1MSD	Matrix Spike Duplicate	T	Solid	8260B	240-186440

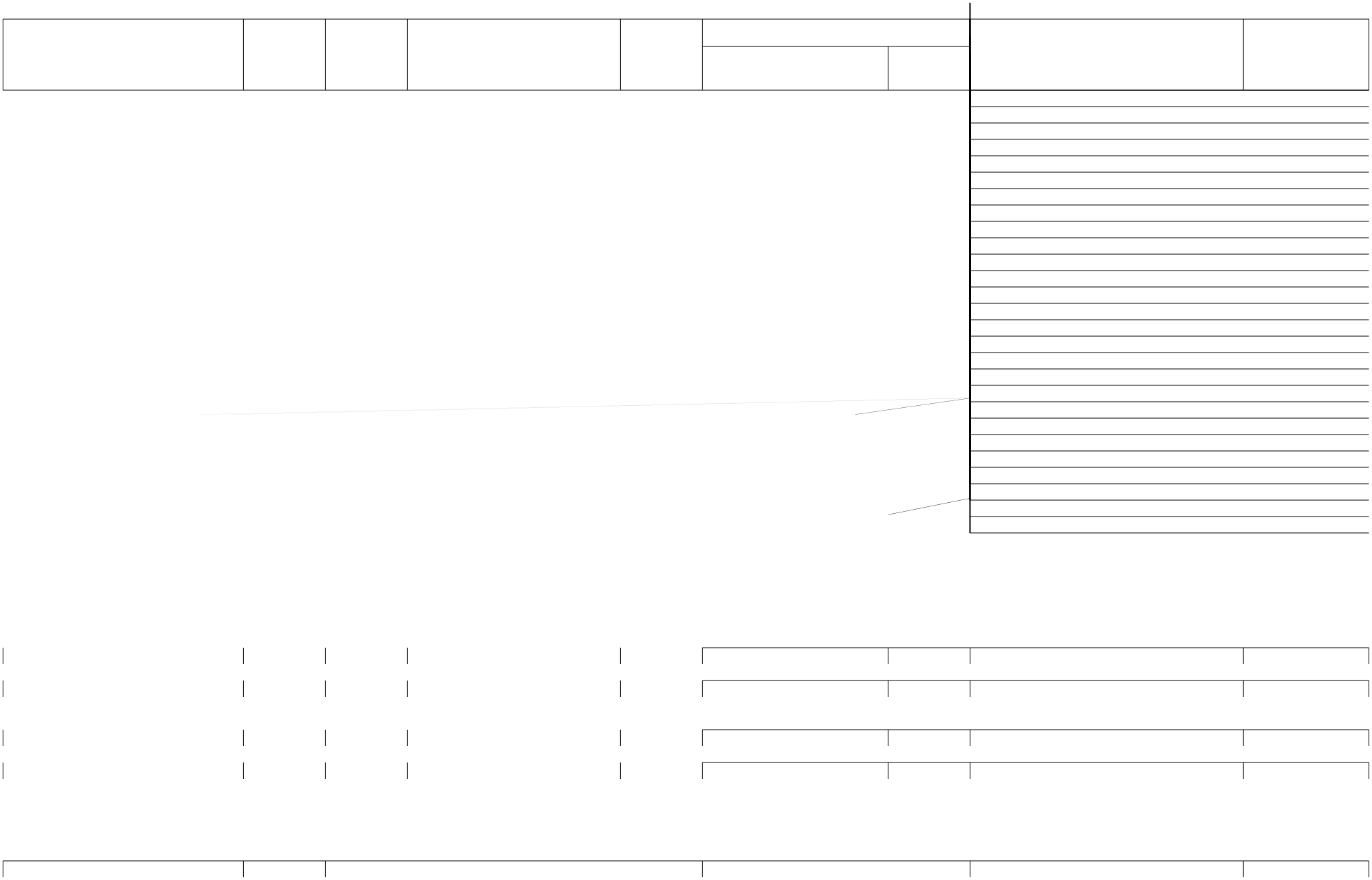
T = Total

LCS 240-186497/6-A	Lab Control Sample	T	Solid	3540C	
MB 240-186497/5-A	Method Blank	T	Solid	3540C	
240-52297-1	MRC-DPAN-062215	T	Solid	3540C	
240-52297-1MS	Matrix Spike	T	Solid	3540C	
240-52297-1MSD	Matrix Spike Duplicate	T	Solid	3540C	
LCS 240-186497/6-A	Lab Control Sample	T	Solid	8270D	240-186497
MB 240-186497/5-A	Method Blank	T	Solid	8270D	240-186497
240-52297-1	MRC-DPAN-062215	T	Solid	8270D	240-186497
240-52297-1MS	Matrix Spike	T	Solid	8270D	240-186497
240-52297-1MSD	Matrix Spike Duplicate	T	Solid	8270D	240-186497

T = Total







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Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-52297-1

SDG No.:

Matrix: Solid Level: Medium Lab File ID: UX88126.D

Lab ID: LCS 240-186440/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	1000	604	60	27-121	
1,1,1-Trichloroethane	1000	794	79	38-122	
1,1,2,2-Tetrachloroethane	1000	918	92	54-121	
1,1,2-Trichloro-1,2,2-trifluoroethane	1000	922	92	48-151	
1,1-Dichloroethane	1000	1010	101	63-120	
1,1-Dichloroethene	1000	861	86	44-143	
1,1-Dichloropropene	1000	1060	106	60-123	
1,2,3-Trichlorobenzene	1000	858	86	43-129	
1,2,3-Trichloropropane	1000	943	94	74-124	
1,2,4-Trichlorobenzene	1000	868	87	41-135	
1,2,4-Trimethylbenzene	1000	961	96	62-133	
1,2-Dibromo-3-Chloropropane	1000	531	53	10-129	
1,2-Dichlorobenzene	1000	982	98	68-120	
1,2-Dichloroethane	1000	1030	103	68-120	
1,2-Dichloropropane	1000	1030	103	73-120	
1,3-Dichlorobenzene	1000	943	94	66-121	
1,3-Dichloropropane	1000	974	97	74-120	
1,4-Dichlorobenzene	1000	913	91	65-120	
2,2-Dichloropropane	1000	590	59	25-123	
2-Chloroethyl vinyl ether	1000	966 J	97	25-140	
2-Chlorotoluene	1000	968	97	68-122	
2-Hexanone	2000	1810	91	43-130	
Bromobenzene	1000	926	93	72-120	
Bromochloromethane	1000	1010	101	56-128	
4-Chlorotoluene	1000	951	95	68-122	
p-Isopropyltoluene	1000	986	99	56-136	
Acetone	2000	2000	100	16-156	
Benzene	1000	1010	101	70-120	
Bromoform	1000	628	63	10-120	
Bromomethane	1000	861	86	10-120	
Carbon disulfide	1000	793	79	10-132	
Carbon tetrachloride	1000	621	62	29-120	
Chlorobenzene	1000	968	97	71-120	
Chloroethane	1000	841	84	10-120	
Chloroform	1000	985	99	63-120	
Chloromethane	1000	938	94	25-120	
cis-1,2-Dichloroethene	1000	984	98	60-125	
cis-1,3-Dichloropropene	1000	777	78	25-120	
Hexachlorobutadiene	1000	938	94	34-135	
Dibromomethane	1000	986	99	68-120	
Bromodichloromethane	1000	785	79	28-123	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-52297-1

SDG No.:

Matrix: Solid Level: Medium Lab File ID: UX88134.D

Lab ID: 240-52297-1 MS Client ID: MRC-DPAN-062215 MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	1060	58 U	381	36	19-124	
1,1,1-Trichloroethane	1060	50 U	587	55	10-159	
1,1,2,2-Tetrachloroethane	1060	51 U	780	74	16-158	
1,1,2-Trichloro-1,2,2-trifluoroethane	1060	50 U	758	71	23-168	
1,1-Dichloroethane	1060	41 U	918	87	18-160	
1,1-Dichloroethene	1060	35 U	790	74	10-179	
1,1-Dichloropropene	1060	45 U	926	87	42-126	
1,2,3-Trichlorobenzene	1060	46 U	766	72	10-123	
1,2,3-Trichloropropane	1060	120 U	914	86	54-142	
1,2,4-Trichlorobenzene	1060	35 U	792	75	10-136	
1,2,4-Trimethylbenzene	1060	17 J	933	86	10-199	
1,2-Dibromo-3-Chloropropane	1060	84 U	416 J	39	10-153	
1,2-Dichlorobenzene	1060	22 U	896	84	27-126	
1,2-Dichloroethane	1060	63 U	941	89	25-150	
1,2-Dichloropropane	1060	38 U	969	91	58-120	
1,3-Dichlorobenzene	1060	35 U	843	79	29-124	
1,3-Dichloropropane	1060	27 U	934	88	58-120	
1,4-Dichlorobenzene	1060	48 U	842	79	30-123	
2,2-Dichloropropane	1060	61 U	478	45	26-127	
2-Chloroethyl vinyl ether	1060	92 U	921 J	87	10-137	
2-Chlorotoluene	1060	48 U	874	82	51-120	
2-Hexanone	2120	99 U	1710	81	21-141	
Bromobenzene	1060	15 U	885	83	49-120	
Bromochloromethane	1060	83 U	919	87	42-123	
4-Chlorotoluene	1060	31 U	863	81	43-120	
p-Isopropyltoluene	1060	30 U	896	85	33-139	
Acetone	2120	270 U	1630	77	10-142	
Benzene	1060	11 U	932	88	10-199	
Bromoform	1060	72 U	455	43	10-147	
Bromomethane	1060	60 U	659	62	10-151	
Carbon disulfide	1060	66 U	621	59	10-155	
Carbon tetrachloride	1060	57 U	383	36	12-135	
Chlorobenzene	1060	48 U	893	84	47-120	
Chloroethane	1060	60 U	748	71	10-168	
Chloroform	1060	42 U	896	85	51-120	
Chloromethane	1060	57 U	745	70	16-120	
cis-1,2-Dichloroethene	1060	45 U	900	85	34-137	
cis-1,3-Dichloropropene	1060	26 U	597	56	19-121	
Hexachlorobutadiene	1060	52 U	855	81	10-134	
Dibromomethane	1060	59 U	923	87	45-121	
Bromodichloromethane	1060	45 U	526	50	18-133	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-52297-1

SDG No.:

Matrix: Solid Level: Medium Lab File ID: UX88134.D

Lab ID: 240-52297-1 MS Client ID: MRC-DPAN-062215 MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	1060	72 U	393	37	10-120	
Ethylbenzene	1060	41 U	908	86	27-143	
1,2-Dibromoethane	1060		700	6e	32-127	
:EtTd (1,2-Dibromoet8anS)-4200(MSl 0 10 0 Tug17060		7060-450 0 -252 l 0 -264		l 0 -	l45088 Tug17	
omoethane 908-4200(MSl 0 60)60 908						

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-52297-1

SDG No.:

Matrix: Solid Level: Medium Lab File ID: UX88135.D

Lab ID: 240-52297-1 MSD Client ID: MRC-DPAN-062215 MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	1190	465	39	20	30	19-124	
1,1,1-Trichloroethane	1190	656	55	11	30	10-159	
1,1,2,2-Tetrachloroethane	1190	839	71	7	30	16-158	
1,1,2-Trichloro-1,2,2-trifluoroethane	1190	791	67	4	30	23-168	
1,1-Dichloroethane	1190	964	81	5	30	18-160	
1,1-Dichloroethene	1190	836	71	6	30	10-179	
1,1-Dichloropropene	1190	1020	86	10	30	42-126	
1,2,3-Trichlorobenzene	1190	830	70	8	30	10-123	
1,2,3-Trichloropropane	1190	906	76	1	30	54-142	
1,2,4-Trichlorobenzene	1190	820	69	4	30	10-136	
1,2,4-Trimethylbenzene	1190	971	81	4	30	10-199	
1,2-Dibromo-3-Chloropropane	1190	469 J	40	12	30	10-153	
1,2-Dichlorobenzene	1190	960	81	7	30	27-126	
1,2-Dichloroethane	1190	1030	87	9	30	25-150	
1,2-Dichloropropane	1190	1020	86	5	30	58-120	
1,3-Dichlorobenzene	1190	915	77	8	30	29-124	
1,3-Dichloropropane	1190	969	82	4	30	58-120	
1,4-Dichlorobenzene	1190	918	77	9	30	30-123	
2,2-Dichloropropane	1190	602	51	23	30	26-127	
2-Chloroethyl vinyl ether	1190	914 J	77	1	30	10-137	
2-Chlorotoluene	1190	955	81	9	30	51-120	
2-Hexanone	2370	1820	77	6	30	21-141	
Bromobenzene	1190	941	79	6	30	49-120	
Bromochloromethane	1190	995	84	8	30	42-123	
4-Chlorotoluene	1190	935	79	8	30	43-120	
p-Isopropyltoluene	1190	945	80	5	30	33-139	
Acetone	2370	1700	72	4	30	10-142	
Benzene	1190	992	84	6	30	10-199	
Bromoform	1190	517	44	13	30	10-147	
Bromomethane	1190	734	62	11	30	10-151	
Carbon disulfide	1190	680	57	9	30	10-155	
Carbon tetrachloride	1190	451	38	16	30	12-135	
Chlorobenzene	1190	945	80	6	30	47-120	
Chloroethane	1190	816	69	9	30	10-168	
Chloroform	1190	956	81	6	30	51-120	
Chloromethane	1190	818	69	9	30	16-120	
cis-1,2-Dichloroethene	1190	1000	84	11	30	34-137	
cis-1,3-Dichloropropene	1190	688	58	14	30	19-121	
Hexachlorobutadiene	1190	880	74	3	30	10-134	
Dibromomethane	1190	934	79	1	30	45-121	
Bromodichloromethane	1190	629	53	18	30	18-133	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-52297-1

SDG No.:

Matrix: Solid Level: Medium Lab File ID: UX88135.D

Lab ID: 240-52297-1 MSD Client ID: MRC-DPAN-062215 MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Dichlorodifluoromethane	1190	453	38	14	30	10-120	
Ethylbenzene	1190	967	82	6	30	27-143	
1,2-Dibromoethane	1190	802	68	14	30	32-127	
Naphthalene	1190	2170	76	10	30	10-199	
m-Xylene & p-Xylene	1190	955	81	4	30	14-151	
n-Butylbenzene	1190	925	78	5	30	13-154	
Isopropylbenzene	1190	946	80	2	30	39-126	
N-Propylbenzene	1190	924	78	4	30	41-135	
2-Butanone (MEK)	2370	1890	80	7	30	10-172	
4-Methyl-2-pentanone (MIBK)	2370	1910	81	3	30	19-151	
sec-Butylbenzene	1190	984	83	5	30	41-133	
Methyl tert-butyl ether	1190	1010	86	5	30	26-159	
Methylene Chloride	1190	1120	95	8	30	10-148	
o-Xylene	1190	1040	87	9	30	18-151	
Styrene	1190	917	77	6	30	31-137	
tert-Butylbenzene	1190	976	82	8	30	45-132	
Tetrachloroethene	1190	889	75	6	30	19-153	
Toluene	1190	981	83	7	30	10-168	
trans-1,2-Dichloroethene	1190	925	78	7	30	40-126	
trans-1,3-Dichloropropene	1190	571	48	17	30	10-136	
Trichloroethene	1190	938	79	5	30	10-193	
Trichlorofluoromethane	1190	714	60	6	30	10-157	
Vinyl acetate	1190	799	67	16	30	70-130	F1
Vinyl chloride	1190	818	69	14	30	15-123	
tert-Butyl alcohol (TBA)	11900	7240 J	61	6	30	70-130	F1
Xylenes, Total	2370	2000	84	7	30	16-150	
Dibromochloromethane	1190	569	48	20	30	10-128	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-52297-1

SDG No.:

Lab File ID: UX88125.D Lab Sample ID: MB 240-186440/1-A

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: A3UX8 Date Analyzed: 06/24/2015 05:47

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-186440/2-A	UX88126.D	06/24/2015 06:08
MRC-DPAN-062215	240-52297-1	UX88133.D	06/24/2015 08:37
MRC-DPAN-062215 MS	240-52297-1 MS	UX88134.D	06/24/2015 08:58
MRC-DPAN-062215 MSD	240-52297-1 MSD	UX88135.D	06/24/2015 09:19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-52297-1

SDG No.:

Client Sample ID: MRC-DPAN-062215 | Lab Sample ID: 240-52297-1

Matrix: Solid | Lab File ID: UX88133.D

Analysis Method: 8260B | Date Collected: 06/22/2015 11:00

Sample wt/vol: 5.31(g) | Date Analyzed: 06/24/2015 08:37

Soil Aliquot Vol: 100 (uL) | Dilution Factor: 1

Soil Extract Vol.: 5(mL) | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 20.2 | Level: (low/med) Medium

Analysis Batch No.: 186444 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	58	U	300	58
71-55-6	1,1,1-Trichloroethane	50	U	300	50
79-34-5	1,1,2,2-Tetrachloroethane	51	U	300	51
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	50	U	300	50
75-34-3	1,1-Dichloroethane	41	U	300	41
75-35-4	1,1-Dichloroethene	35	U	300	35
563-58-6	1,1-Dichloropropene	45	U	300	45
87-61-6	1,2,3-Trichlorobenzene	46	U	300	46
96-18-4	1,2,3-Trichloropropane	120	U	300	120
526-73-8	1,2,3-Trimethylbenzene	15	U	300	15
120-82-1	1,2,4-Trichlorobenzene	35	U	300	35
95-63-6	1,2,4-Trimethylbenzene	17	J	300	15
96-12-8	1,2-Dibromo-3-Chloropropane	84	U	590	84
95-50-1	1,2-Dichlorobenzene	22	U	300	22
107-06-2	1,2-Dichloroethane	63	U	300	63
78-87-5	1,2-Dichloropropane	38	U	300	38
541-73-1	1,3-Dichlorobenzene	35	U	300	35
142-28-9	1,3-Dichloropropane	27	U	300	27
106-46-7	1,4-Dichlorobenzene	48	U	300	48
594-20-7	2,2-Dichloropropane	61	U	300	61
110-75-8	2-Chloroethyl vinyl ether	92	U	1200	92
95-49-8	2-Chlorotoluene	48	U	300	48
591-78-6	2-Hexanone	99	U	1200	99
108-86-1	Bromobenzene	15	U	300	15
74-97-5	Bromochloromethane	83	U	300	83
106-43-4	4-Chlorotoluene	31	U	300	31
99-87-6	p-Isopropyltoluene	30	U	300	30
67-64-1	Acetone	270	U	1200	270
71-43-2	Benzene	11	U	300	11
75-25-2	Bromoform	72	U	300	72
74-83-9	Bromomethane	60	U	300	60
75-15-0	Carbon disulfide	66	U	300	66
56-23-5	Carbon tetrachloride	57	U	300	57
108-90-7	Chlorobenzene	48	U	300	48
75-00-3	Chloroethane	60	U	300	60

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton
Job No.: 240-52297-1
SDG No.:
Client Sample ID: MRC-DPAN-062215
Lab Sample ID: 240-52297-1
Matrix: Solid
Lab File ID: UX88133.D
Analysis Method: 8260B
Date Collected: 06/22/2015 11:00
Sample wt/vol: 5.31(g)
Date Analyzed: 06/24/2015 08:37
Soil Aliquot Vol: 100 (uL)
Dilution Factor: 1
Soil Extract Vol.: 5(mL)
GC Column: DB-624 ID: 0.18(mm)
% Moisture: 20.2
Level: (low/med) Medium
Analysis Batch No.: 186444
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	42	U	300	42
74-87-3	Chloromethane	57	U	300	57
156-59-2	cis-1,2-Dichloroethene	45	U	300	45
10061-01-5	cis-1,3-Dichloropropene	26	U	300	26
87-68-3	Hexachlorobutadiene	52	U	300	52
74-95-3	Dibromomethane	59	U	300	59
75-27-4	Bromodichloromethane	45	U	300	45
75-71-8	Dichlorodifluoromethane	72	U	300	72
100-41-4	Ethylbenzene	41	U	300	41
106-93-4	1,2-Dibromoethane	38	U	300	38
108-20-3	Diisopropyl ether	61	U	590	61
91-20-3	Naphthalene	1300	B	300	31
179601-23-1	m-Xylene & p-Xylene	24	U	300	24
104-51-8	n-Butylbenzene	25	U	300	25
98-82-8	Isopropylbenzene	15	U	300	15
103-65-1	N-Propylbenzene	72	U	300	72
78-93-3	2-Butanone (MEK)	86	U	1200	86
108-10-1	4-Methyl-2-pentanone (MIBK)	66	U	1200	66
135-98-8	sec-Butylbenzene	19	U	300	19
1634-04-4	Methyl tert-butyl ether	35	U	300	35
994-05-8	Tert-amyl methyl ether	50	U	300	50
75-09-2	Methylene Chloride	100	U	300	100
95-47-6	o-Xylene	20	U	300	20
100-42-5	Styrene	32	U	300	32
637-92-3	Ethyl-t-butyl ether (ETBE)	19	U	300	19
98-06-6	tert-Butylbenzene	40	U	300	40
127-18-4	Tetrachloroethene	32	U	300	32
108-88-3	Toluene	12	U	300	12
156-60-5	trans-1,2-Dichloroethene	31	U	300	31
10061-02-6	trans-1,3-Dichloropropene	31	U	300	31
79-01-6	Trichloroethene	46	U	300	46
75-69-4	Trichlorofluoromethane	41	U	300	41
108-05-4	Vinyl acetate	120	U F1	590	120
75-01-4	Vinyl chloride	66	U	300	66
75-65-0	tert-Butyl alcohol (TBA)	990	U F1	12000	990
1330-20-7	Xylenes, Total	38	U	590	38

FORM I 8260B

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-52297-1 Analy Batch No.: 184260

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/09/2015 01:53 Calibration End Date: 06/09/2015 04:23 Calibration ID: 28897

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-184260/10	UX87986.D
Level 2	STD8260 240-184260/9	UX87985.D
Level 3	STD8260 240-184260/8	UX87984.D
Level 4	STD8260 240-184260/7	UX87983.D
Level 5	ICIS 240-184260/6	UX87982.D
Level 6	STD8260 240-184260/5	UX87981.D
Level 7	STD8260 240-184260/4	UX87980.D
Level 8	STD8260 240-184260/3	UX87979.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2196 0.2240	0.2095 0.2302	0.2128 0.2438	0.2503	0.2403	Ave		0.2288				6.5		15.0			
Chloromethane	0.4989 0.4453	0.4628 0.4475	0.4165 0.4589	0.4756	0.4594	Ave		0.4581			0.1000	5.2		15.0			
Vinyl chloride	0.2631 0.2679	0.2534 0.2716	0.2549 0.2823	0.2911	0.2770	Ave		0.2701				4.8		15.0			
Butadiene	0.3770 0.3716	0.3675 0.3786	0.3319 0.3951	0.3962	0.3917	Ave		0.3762				5.6		15.0			
Bromomethane	0.1187 0.1043	0.1039 0.0923	0.1002 0.0847	0.1086	0.1061	Ave		0.1024				10.1		15.0			
Chloroethane	0.1745 0.1495	0.1687 0.1490	0.1484 0.1564	0.1554	0.1559	Ave		0.1572				6.1		15.0			
Dichlorofluoromethane	0.3261 0.3211	0.3518 0.3184	0.3130 0.3257	0.3524	0.3266	Ave		0.3294				4.5		15.0			
Trichlorofluoromethane	0.3083 0.2954	0.2834 0.2990	0.2827 0.3010	0.3269	0.3243	Ave		0.3026				5.5		15.0			
Ethyl ether	0.3514 0.2673	0.2849 0.2756	0.2895 0.2643	0.2886	0.2938	Ave		0.2894				9.4		15.0			
Acrolein	0.0513 0.0464	0.0548 0.0463	0.0579 0.0419	0.0421	0.0557	Ave		0.0496				12.6		15.0			
1,1-Dichloroethene	0.2034 0.2035	0.1894 0.2139	0.2104 0.2091	0.2340	0.2479	Ave		0.2140				8.7		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1613 0.1680	0.1231 0.1675	0.1719 0.1757	0.1880	0.1949	Ave		0.1688				12.8		15.0			
Acetone	+++++ 0.2371	0.4780 0.2151	0.3101 0.2078	0.2724	0.2718	Lin1	1.1711	0.2106							0.9970		0.9900
Iodomethane	0.3949 0.3505	0.3581 0.3580	0.3535 0.3560	0.3871	0.3941	Ave		0.3690				5.2		15.0			

FORM VI

Lab Name: _____ Job No.: _____ _____

SDG No.: _____

Instrument ID: _____ _____ _____ _____

_____ _____ Calibration ID: _____

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-52297-1 Analy Batch No.: 184260

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/09/2015 01:53 Calibration End Date: 06/09/2015 04:23 Calibration ID: 28897

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Carbon tetrachloride	+++++ 0.2250	+++++ 0.2466	0.1824 0.2449	0.2214	0.2356	Ave		0.2260				10.5		15.0			
Isobutyl alcohol	+++++ 0.0149	0.0106 0.0141	0.0104 0.0139	0.0127	0.0144	Ave		0.0130				14.0		15.0			
1,2-Dichloroethane	0.5397 0.5012	0.4924 0.5045	0.4695 0.4952	0.5431	0.5413	Ave		0.5109				5.4		15.0			
Benzene	1.1848 0.9781	1.0241 1.0108	1.0130 1.0139	1.0830	1.0974	Ave		1.0506				6.4		15.0			
n-Heptane	+++++ 0.0682	+++++ 0.0727	0.0701 0.0787	0.0797	0.0785	Ave		0.0747				6.7		15.0			
Trichloroethene	0.2725 0.2349	0.2523 0.2455	0.2435 0.2476	0.2592	0.2647	Ave		0.2525				4.9		15.0			
Methylcyclohexane	0.4164 0.4221	0.2975 0.4365	0.4502 0.4343	0.4743	0.4879	Ave		0.4274				13.6		15.0			
1,2-Dichloropropane	0.3124 0.2976	0.2921 0.3129	0.2915 0.3116	0.3312	0.3272	Ave		0.3096				4.9		15.0			
Dibromomethane	0.1368 0.1529	0.1538 0.1514	0.1486 0.1503	0.1579	0.1690	Ave		0.1526				5.9		15.0			
1,4-Dioxane	0.0025 0.0029	0.0025 0.0028	0.0030 0.0026	0.0033	0.0034	Ave		0.0029				11.5		15.0			
Bromodichloromethane	0.3032 0.3168	0.2313 0.3414	0.2446 0.3394	0.2922	0.3201	Ave		0.2986				13.7		15.0			
2-Chloroethyl vinyl ether	0.1042 0.1034	0.0906 0.1089	0.0946 0.1211	0.1117	0.1055	Ave		0.1050				9.1		15.0			
cis-1,3-Dichloropropene	0.2977 0.3536	0.2901 0.3882	0.2932 0.3987	0.3485	0.3664	Ave		0.3421				12.7		15.0			
4-Methyl-2-pentanone (MIBK)	0.5085 0.5352	0.5253 0.5149	0.4910 0.5269	0.5369	0.5540	Ave		0.5241				3.7		15.0			
Toluene	1.4327 1.2738	1.3015 1.3572	1.3061 1.3662	1.4747	1.4416	Ave		1.3692				5.4		15.0			
trans-1,3-Dichloropropene	+++++ 0.3812	+++++ 0.4251	0.3002 0.4304	0.3562	0.3797	Ave		0.3788				12.7		15.0			
Ethyl methacrylate	+++++ 0.3842	+++++ 0.4037	0.2770 0.4128	0.3371	0.3622	Ave		0.3628				13.9		15.0			
1,1,2-Trichloroethane	0.2890 0.2698	0.2642 0.2714	0.2742 0.2678	0.2938	0.2909	Ave		0.2776				4.2		15.0			
1,3-Dichloropropane	0.6040 0.5012	0.5243 0.5117	0.4987 0.5050	0.5439	0.5382	Ave		0.5284				6.6		15.0			
Tetrachloroethene	0.2845 0.2536	0.2406 0.2627	0.2673 0.2582	0.2925	0.2905	Ave		0.2687				7.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI

Lab Name: _____ Job No.: _____ _____

_____

_____ _____ _____ _____

_____ _____ _____

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-52297-1 Analy Batch No.: 184260

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/09/2015 01:53 Calibration End Date: 06/09/2015 04:23 Calibration ID: 28897

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#		LVLGo65NT					
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-52297-1 Analy Batch No.: 184260

SDG No.: Y

Instrument ID: A3UX8 Heated Purge: (Y/N) Y

Calibration Start Date: 06/09/2015 01:53 Calibration End Date: Calibration ID: 28897

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-52297-1 Analy Batch No.: 184260

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/09/2015 01:53 Calibration End Date: 06/09/2015 04:23 Calibration ID: 28897

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
3-Chloro-1-propene	FB	Ave	2483 128998	4548 276277	12370 505080	28350	59332	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Methyl acetate	FB	Ave	40706 1992752	77712 3769676	184427 7552567	393562	816809	5.00 250	10.0 500	25.0 1000	50.0	100
Methylene Chloride	FB	Lin1	+++++ 265585	31344 519998	45628 983357	71572	123997	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
tert-Butyl alcohol (TBA)	FB	Ave	5396 375138	11814 648272	31205 1009719	62744	153490	10.0 500	20.0 1000	50.0 2000	100	200
Acrylonitrile	FB	Ave	37473 1757677	69259 3308904	169677 6667965	353812	735461	10.0 500	20.0 1000	50.0 2000	100	200
trans-1,2-Dichloroethene	FB	Ave	5050 224688	9530 468202	24394 898373	50779	104194	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Methyl tert-butyl ether	FB	Ave	15639 784264	30913 1506745	73240 2827493	164085	324476	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Hexane	FB	Ave	+++++ 64263	2562 138513	8088 287991	15968	34921	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
1,1-Dichloroethane	FB	Ave	12820 531870	21749 1110294	53039 2207621	116928	230631	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Vinyl acetate	FB	Ave	+++++ 608641	+++++ 1325235	51672 2503855	117077	244436	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
2-Butanone (MEK)	FB	Ave	13070 565266	25943 1058859	57609 2192567	116551	243658	2.00 100	4.00 200	10.0 400	20.0	40.0
cis-1,2-Dichloroethene	FB	Ave	5727 254695	9857 518959	25376 1011505	58798	111479	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2,2-Dichloropropane	FB	Ave	4521 222796	7136 447640	20129 771109	46531	99268	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromochloromethane	FB	Ave	2792 122411	4276 244344	11745 485597	25958	52956	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Tetrahydrofuran	FB	Ave	6834 337087	14234 626608	32081 1263399	70149	135419	2.00 100	4.00 200	10.0 400	20.0	40.0
Chloroform	FB	Ave	9821 425351	16512 861086	41047 1707231	92274	184423	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	5586	8996	27541	65309	131501					

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-52297-1 Analy Batch No.: 184260

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/09/2015 01:53 Calibration End Date: 06/09/2015 04:23 Calibration ID: 28897

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-52297-1 Analy Batch No.: 184260

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/09/2015 01:53 Calibration End Date: 06/09/2015 04:23 Calibration ID: 28897

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chlorobenzene	CBZ	Ave	15118 610777	25323 1322990	65583 2664110	151279	269135	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,1,2-Tetrachloroethane	CBZ	Lin1	2679 180934	4585 409340	12566 811482	31732	68494	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Ethylbenzene	CBZ	Ave	7554 328140	13077 709193	33193 1435496	79312	150260	1.00 50.0	2.00 100	5.00 200	10.0	20.0
m-Xylene & p-Xylene	CBZ	Ave	8483 399476	15677 869355	41796 1767591	98456	181177	1.00 50.0	2.00 100	5.00 200	10.0	20.0
o-Xylene	CBZ	Ave	8720 403522	14930 857009	39630 1616904	95792	181945	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Styrene	CBZ	Ave	15210 703681	25361 1472403	65361 2915249	162077	304273	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromoform	CBZ	Qua	+++++ 108874	+++++ 255314	6463 550866	15706	39634	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Isopropylbenzene	CBZ	Ave	23658 1088256	37826 2299921	107381 4561497	260043	483056	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,2,2-Tetrachloroethane	DCB	Ave	5439 271351	8703 535379	25160 1042940	54112	111917	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromobenzene	DCB	Ave	5998 260818	11550 543942	26125 1042120	61728	115906	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2,3-Trichloropropane	DCB	Ave	1668 87108	3596 177212	9982 336119	20252	39578	1.00 50.0	2.00 100	5.00 200	10.0	20.0
trans-1,4-Dichloro-2-butene	DCB	Ave	+++++ 126435	4073 267975	11554 558864	24399	52364	+++++ 501000	2.00 1000	5.00 2000	10.0 5000	20.0 10.0	20.0
N-Propylbenzene	DCB	Ave	6086	10012	2 (D52d [1.00)0)-3750B558120			.001.00	7091	0931824110	2120	200	DCB	A

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-52297-1 Analy Batch No.: 184260

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/09/2015 01:53 Calibration End Date: 06/09/2015 04:23 Calibration ID: 28897

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dichlorobenzene	DCB	Ave	13885 526234	23466 1071071	56625 2041718	125138	239566	1.00 50.0	2.00 100	5.00 200	10.0	20.0
n-Butylbenzene	DCB	Ave	17812 915903	31049 1877969	88512 3624573	204765	413703	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichlorobenzene	DCB	Ave	11221 502797	21771 1011172	54075 1903813	115155	229451	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCB	Lin1	+++++ 50027	+++++ 101936	2564 208335	6675	15440	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,2,4-Trichlorobenzene	DCB	Ave	8473 380342	15678 750629	38879 1432693	84281	165109	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Hexachlorobutadiene	DCB	Ave	4077 216900	7659 427771	20998 842882	46935	94297	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Naphthalene	DCB	Ave	18618 881530	35436 1651957	85862 3046208	173368	368321	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2,3-Trichlorobenzene	DCB	Ave	7961 365739	16740 714215	37391 1327289	78882	160560	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Dibromofluoromethane (Surr)	FB	Lin1	14312 224420	16853 437851	30443 880668	59389	107431	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Lin1	25029 350382	29190 691861	52201 1436245	99636	173219	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Toluene-d8 (Surr)	CBZ	Lin1	56001 812534	63238 1610950	115201 3336725	232588	373603	1.00 50.0	2.00 100	5.00 200	10.0	20.0
4-Bromofluorobenzene (Surr)	CBZ	Lin1	24675 323237	30086 645487	49752 1299244	100995	157259	1.00 50.0	2.00 100	5.00 200	10.0	20.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-52297-1

SDG No.:

Lab Sample ID: CCV 240-186444/5 Calibration Date: 06/24/2015 02:57

Instrument ID: A3UX8 Calib Start Date: 11/11/2014 07:28

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 11/11/2014 09:14

Lab File ID: UX88117.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Pentachloroethane	Qua		0.1998			0.0400		50.0

FORM VII 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: _____ Job No.: 240-52297-1

SDG No.: _____

Client Sample ID: MRC-DPAN-062215 MS Lab Sample ID: 240-52297-1 MS

Matrix: _____ Lab File ID: UX88134.D

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

FORM I

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-52297-1

SDG No.:

Client Sample ID: MRC-DPAN-062215 MSD | Lab Sample ID: 240-52297-1 MSD

Matrix: Solid | Lab File ID: UX88135.D

Analysis Method: 8260B | Date Collected: 06/22/2015 11:00

Sample wt/vol: 5.29(g) | Date Analyzed: 06/24/2015 09:19

Soil Aliquot Vol: 100 (uL) | Dilution Factor: 1

Soil Extract Vol.: 5(mL) | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 20.2 | Level: (low/med) Medium

Analysis Batch No.: 186444 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	465		300	58
71-55-6	1,1,1-Trichloroethane	656		300	50
79-34-5	1,1,2,2-Tetrachloroethane	839		300	51
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	791		300	50
75-34-3	1,1-Dichloroethane	964		300	41
75-35-4	1,1-Dichloroethene	836		300	36
563-58-6	1,1-Dichloropropene	1020		300	45
87-61-6	1,2,3-Trichlorobenzene	830		300	46
96-18-4	1,2,3-Trichloropropane	906		300	120
120-82-1	1,2,4-Trichlorobenzene	820		300	36
95-63-6	1,2,4-Trimethylbenzene	971		300	15
96-12-8	1,2-Dibromo-3-Chloropropane	469	J	590	84
95-50-1	1,2-Dichlorobenzene	960		300	23
107-06-2	1,2-Dichloroethane	1030		300	63
78-87-5	1,2-Dichloropropane	1020		300	38
541-73-1	1,3-Dichlorobenzene	915		300	36
142-28-9	1,3-Dichloropropane	969		300	27
106-46-7	1,4-Dichlorobenzene	918		300	49
594-20-7	2,2-Dichloropropane	602		300	62
110-75-8	2-Chloroethyl vinyl ether	914	J	1200	92
95-49-8	2-Chlorotoluene	955		300	49
591-78-6	2-Hexanone	1820		1200	100
108-86-1	Bromobenzene	941		300	15
74-97-5	Bromochloromethane	995		300	83
106-43-4	4-Chlorotoluene	935		300	31
99-87-6	p-Isopropyltoluene	945		300	30
67-64-1	Acetone	1700		1200	270
71-43-2	Benzene	992		300	11
75-25-2	Bromoform	517		300	72
74-83-9	Bromomethane	734		300	60
75-15-0	Carbon disulfide	680		300	66
56-23-5	Carbon tetrachloride	451		300	57
108-90-7	Chlorobenzene	945		300	49
75-00-3	Chloroethane	816		300	60
67-66-3	Chloroform	956		300	43

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton

Job No.: 240-52297-1

SDG No.:

Client Sample ID: MRC-DPAN-062215 MSD

Lab Sample ID: 240-52297-1 MSD

Matrix: Solid

Lab File ID: UX88135.D

Analysis Method: 8260B

Date Collected: 06/22/2015 11:00

Sample wt/vol:

GDilm7.8 Td 2on BLab File ID:

Soil Extract V1Nc826Ld:Date Collected:low/medDate Analyzed:72 Medium Td (88mple wt/v5.29(

% Moisture:

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-52297-1

SDG No.:

Instrument ID: A3UX8 Start Date: 06/06/2015 02:22

Analysis Batch Number: 184004 End Date: 06/06/2015 06:58

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-184004/1		06/06/2015 02:22	1	BFB8824.D	DB-624 0.18(mm)
STDA9 240-184004/4 IC		06/06/2015 03:26	1	UX87966.D	DB-624 0.18(mm)
STDA9 240-184004/5 IC		06/06/2015 03:47	1	UX87967.D	DB-624 0.18(mm)
STDA9 240-184004/6 IC		06/06/2015 04:08	1	UX87968.D	DB-624 0.18(mm)
STDA9 240-184004/7 IC		06/06/2015 04:30	1	UX87969.D	DB-624 0.18(mm)
STDA9 240-184004/8 IC		06/06/2015 04:51	1	UX87970.D	DB-624 0.18(mm)
STDA9 240-184004/9 IC		06/06/2015 05:12	1	UX87971.D	DB-624 0.18(mm)
ICV 240-184004/11		06/06/2015 05:54	1		DB-624 0.18(mm)
ZZZZZ		06/06/2015 06:58	1		DB-624 0.18(mm)

8260B

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-52297-1

SDG No.:

Instrument ID: A3UX8 Start Date: 06/24/2015 02:03

Analysis Batch Number: 186444 End Date: 06/24/2015 09:19

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-186444/1		06/24/2015 02:03	1	BFB8832.D	DB-624 0.18(mm)
CCVIS 240-186444/4		06/24/2015 02:35	1	UX88116.D	DB-624 0.18(mm)
CCV 240-186444/5		06/24/2015 02:57	1	UX88117.D	DB-624 0.18(mm)
ZZZZZ		06/24/2015 03:18	1		DB-624 0.18(mm)
ZZZZZ		06/24/2015 04:01	1		DB-624 0.18(mm)
ZZZZZ		06/24/2015 04:22	1		DB-624 0.18(mm)
ZZZZZ		06/24/2015 04:43	1		DB-624 0.18(mm)
ZZZZZ		06/24/2015 05:05	1		DB-624 0.18(mm)
ZZZZZ		06/24/2015 05:26	1		DB-624 0.18(mm)
MB 240-186440/1-A		06/24/2015 05:47	1	UX88125.D	DB-624 0.18(mm)
LCS 240-186440/2-A		06/24/2015 06:08	1	UX88126.D	DB-624 0.18(mm)
ZZZZZ		06/24/2015 06:30	33.333		DB-624 0.18(mm)
ZZZZZ		06/24/2015 06:51	11.111		DB-624 0.18(mm)
ZZZZZ		06/24/2015 07:12	16.667		DB-624 0.18(mm)
240-52297-1	MRC-DPAN-062215	06/24/2015 08:37	1	UX88133.D	DB-624 0.18(mm)
240-52297-1 MS	MRC-DPAN-062215 MS	06/24/2015 08:58	1	UX88134.D	DB-624 0.18(mm)
240-52297-1 MSD	MRC-DPAN-062215 MSD	06/24/2015 09:19	1	UX88135.D	DB-624 0.18(mm)

8260B

[redacted]

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-52297-1

SDG No.:

Sample No.: STD6 240-185312/10 Date Analyzed: 06/16/2015 18:08

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 50616010.D Heated Purge: (Y/N) N

Calibration ID: 28939

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		233565	6.29	916394	7.40	520035	8.87
UPPER LIMIT		467130	6.79	1832788	7.90	1040070	9.37
LOWER LIMIT		116783	5.79	458197	6.90	260018	8.37
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-185312/11		257605	6.29	995437	7.40	574040	8.87
CCV 240-186915/2 CCVIS		177883	6.15	699731	7.26	391308	8.73

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-52297-1

SDG No.:

Sample No.: STD6 240-185312/10 Date Analyzed: 06/16/2015 18:08

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 50616010.D Heated Purge: (Y/N) N

Calibration ID: 28939

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		747250	10.10	983668	12.56	890885	14.47
UPPER LIMIT		1494500	10.60	1967336	13.06	1781770	14.97
LOWER LIMIT		373625	9.60	491834	12.06	445443	13.97
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-185312/11		852547	10.10	1102573	12.57	987604	14.48
CCV 240-186915/2 CCVIS		652465	9.96	751771	12.36	647164	14.21

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton
Job No.: 240-52297-1
SDG No.:
Client Sample ID: MRC-DPAN-062215 MS
Lab Sample ID: 240-52297-1 MS
Matrix: Solid
Lab File ID: 50626008.D
Analysis Method: 8270D
Date Collected: 06/22/2015 11:00
Extract. Method: 3540C
Date Extracted: 06/24/2015 09:22
Sample wt/vol: 30.10(g)
Date Analyzed: 06/26/2015 13:05
Con. Extract Vol.: 2(mL)
Dilution Factor: 2
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture: 20.2
GPC Cleanup:(Y/N) N
Analysis Batch No.: 186915
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	617		120	8.7
108-60-1	bis (2-chloroisopropyl) ether	646		250	24
95-95-4	2,4,5-Trichlorophenol	529		370	62
88-06-2	2,4,6-Trichlorophenol	519		370	22
120-83-2	2,4-Dichlorophenol	586		370	50
105-67-9	2,4-Dimethylphenol	573		370	50
51-28-5	2,4-Dinitrophenol	720	J	820	52
121-14-2	2,4-Dinitrotoluene	620		500	42
606-20-2	2,6-Dinitrotoluene	622		500	52
91-58-7	2-Chloronaphthalene	588		120	1.1
95-57-8	2-Chlorophenol	569		120	20
91-57-6	2-Methylnaphthalene	670		17	1.2
95-48-7	2-Methylphenol	643		500	27
88-74-4	2-Nitroaniline	655		500	23
88-75-5	2-Nitrophenol	608		120	21
91-94-1	3,3'-Dichlorobenzidine	722		250	45
99-09-2	3-Nitroaniline	515		500	40
534-52-1	4,6-Dinitro-2-methylphenol	760		370	23
101-55-3	4-Bromophenyl phenyl ether	583		120	32
59-50-7	4-Chloro-3-methylphenol	586		370	52
106-47-8	4-Chloroaniline	453		370	42
7005-72-3	4-Chlorophenyl phenyl ether	582		120	32
100-01-6	4-Nitroaniline	548		500	65
100-02-7	4-Nitrophenol	1250		820	42
83-32-9	Acenaphthene	899		17	1.9
208-96-8	Acenaphthylene	631		17	0.87
98-86-2	Acetophenone	618		250	23
120-12-7	Anthracene	930		17	1.9
1912-24-9	Atrazine	1380		500	23
100-52-7	Benzaldehyde	1310		250	30
56-55-3	Benzo[a]anthracene	1430		17	1.6
50-32-8	Benzo[a]pyrene	1470		17	1.6
205-99-2	Benzo[b]fluoranthene	1770		17	1.5
191-24-2	Benzo[g,h,i]perylene	861		17	0.87

FORM II
GC VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-52297-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): RTX-VRX ID: 0.45(mm)

Client Sample ID	Lab Sample ID	TFT1 #
MRC-DPAN-062215	240-52297-1	67
	MB 240-186849/1-A	64
	LCS 240-186849/2-A	85
MRC-DPAN-062215 MS	240-52297-1 MS	47
MRC-DPAN-062215 MSD	240-52297-1 MSD	43

	QC LIMITS
TFT = Trifluorotoluene (Surr)	40-139

Column to be used to flag recovery values

FORM II 8015C

FORM VIII
GC VOA ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-52297-1

SDG No.:

Sample No.: STD4 240-172938/7 Date Analyzed: 03/20/2015 17:15

Instrument ID: AFID GC Column: RTX-VRX ID: 0.45(mm)

Lab File ID (Standard): A0032007.D Heated Purge: (Y/N) N

Calibration ID: 27457

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TFT		
				RT #		
INITIAL CALIBRATION SURROGATE				10.35		
UPPER LIMIT				10.45		
LOWER LIMIT				10.25		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			

FORM VIII
GC VOA ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-52297-1

SDG No.:

Sample No.: CCVRT 240-186851/4 Date Analyzed: 06/26/2015 07:11

Instrument ID: AFID GC Column: RTX-VRX ID:

Lab File ID (Standard): A0062604.D

FORM VI
GC VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-52297-1 Analy Batch No.: 172938

SDG No.:

Instrument ID: AFID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/20/2015 15:23 Calibration End Date: 03/20/2015 18:32 Calibration ID: 27457

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-172938/4	A0032004.D
Level 2	STD2 240-172938/5	A0032005.D
Level 3	STD3 240-172938/6	A0032006.D
Level 4	STD4 240-172938/7	A0032007.D
Level 5	STD5 240-172938/8	A0032008.D
Level 6	STD6 240-172938/9	A0032009.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
Gasoline Range Organics [C6 - C10]	11.475	11.475	11.475	11.475	11.475	11.475					5.806 - 17.144	11.475
C6-C12	12.711	12.711	12.711	12.711	12.711	12.711					5.806 - 19.616	12.711
Trifluorotoluene (Surr)	10.349	10.351	10.348	10.346	10.347	10.343					10.295 - 10.395	10.347

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-52297-1

SDG No.:

Lab Sample ID: ICV 240-172938/10 Calibration Date: 03/20/2015 19:08

Instrument ID: AFID Calib Start Date: 03/20/2015 15:23

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 03/20/2015 18:32

Lab File ID: A0032010.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Gasoline Range Organics [C6 - C10]	11.48	5.81	17.14
C6-C12	12.71	5.81	19.62
Trifluorotoluene (Surr)	10.34	10.30	10.40

Form VII 8015C

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FOR

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F

R R

F

	R	F	F	F	O	O		
R O								

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name:

Job No.: 240-52297-1

SDG No.:

Client Sample ID: MRC-DPAN-062215 MS

Lab Sample ID:

FORM III
DIESEL RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-52297-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P5F62508.D

Lab ID: LCS 240-186501/6-A Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
Diesel	83.3	63.7	76	52-120	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM III
DIESEL RANGE ORGANICS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-52297-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P5F62520.D

Lab ID: 240-52297-1 MS Client ID: MRC-DPAN-062215 MS

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONCENTRATION (mg/Kg)	MS CONCENTRATION (mg/Kg)	MS % REC	QC LIMITS REC	#
Diesel	103	65	184	115	10-124	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM III
DIESEL RANGE ORGANICS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-52297-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P5F62521.D

Lab ID: 240-52297-1 MSD Client ID: MRC-DPAN-062215 MSD

COMPOUND	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Diesel	103	152	84	19	40	10-124	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM IV

DIESEL RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: _____ _____

SDG No.: _____

_____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____ _____ _____

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-52297-1 Analy Batch No.: 183956

SDG No.:

Instrument ID: A2HP5F GC Column: ID: Heated Purge: (Y/N) N

Calibration Start Date: 06/05/2015 17:44 Calibration End Date: 06/05/2015 19:49 Calibration ID: 28880

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-183956/7	P5F60507.D
Level 2	STD2 240-183956/8	P5F60508.D
Level 3	STD3 240-183956/9	P5F60509.D
Level 4	STD4 240-183956/10	P5F60510.D
Level 5	STD5 240-183956/11	P5F60511.D

																MIN R^2

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-52297-1 Analy Batch No.: 183956

SDG No.:

Instrument ID: A2HP5F GC Column: ID: Heated Purge: (Y/N) N

Calibration Start Date: 06/05/2015 17:44 Calibration End Date: 06/05/2015 19:49 Calibration ID: 28880

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-183956/7	P5F60507.D
Level 2	STD2 240-183956/8	P5F60508.D
Level 3	STD3 240-183956/9	P5F60509.D
Level 4	STD4 240-183956/10	P5F60510.D
Level 5	STD5 240-183956/11	P5F60511.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
Diesel Range Organics [C10 - C28]ANALYTE											

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-52297-1

SDG No.:

Lab Sample ID: ICV 240-183956/12 Calibration Date: 06/05/2015 20:21

Instrument ID: A2HP5F Calib Start Date: 06/05/2015 17:44

GC Column: ID: Calib End Date: 06/05/2015 19:49

Lab File ID: P5F60512.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10 - C28]	9.35	5.14	13.55

Form VII 8015C

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-52297-1

SDG No.:

Lab Sample ID: CCV 240-186787/13 Calibration Date: 06/25/2015 19:39

Instrument ID: A2HP5F Calib Start Date: 06/05/2015 17:44

GC Column: ID: Calib End Date: 06/05/2015 19:49

Lab File ID: P5F62513.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel Range Organics [C10 - C28]	Ave	197539	209637		531	500	6.1	20.0
o-Terphenyl (Surr)	Ave	263451	251293		38.2	40.0	-4.6	20.0

FORM VII 8015C

DIESEL RANGE ORGANICS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-52297-1

SDG No.:

Batch Number: 186501 Batch Start Date: 06/24/15 12:40 Batch Analyst: Earle, Steve

Batch Method: 3540C Batch End Date: 06/25/15 04:40

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	exDIESELspkw 00065	exOTPSURRW 00003		
240-52297-D-1	MRC-DPAN-062215	3540C, 8015C	T	30.30 g	5 mL		1 mL		
240-52297-D-1 MS	MRC-DPAN-062215	3540C, 8015C	T	30.49 g	5 mL	1 mL	1 mL		
240-52297-D-1 MSD	MRC-DPAN-062215	3540C, 8015C	T	30.44 g	5 mL	1 mL	1 mL		
MB 240-186501/5		3540C, 8015C		30 g	5 mL		1 mL		
LCS 240-186501/6		3540C, 8015C		30 g	5 mL	1 mL	1 mL		

Batch Notes	
Balance ID	1339912
Na2SO4 Lot Number	2028838
Prep Solvent Lot #	2056881

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-52297-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture RL Date: 01/28/2010 09:24

Analyte	Wavelength/ Mass	RL (%)	
Percent Moisture		0.1	
Percent Solids		0.1	

FORM IX - IN

Shipping and Receiving Documents

ANALYTICAL REPORT

Job Number: 240-54148-1

Job Description: MRC Block D Oil Sheen

For:
Tetra Tech, Inc.
Foster Plaza 7
661 Anderson Drive
Pittsburgh, PA 15220-2745

Attention: Mr. Scott Nesbit

Approved for release.
John McFadden
Project Manager I
8/13/2015 4:34 PM

John McFadden, Project Manager I
4101 Shuffel Street NW, North Canton, OH, 44720
john.mcfadden@testamericainc.com
08/13/2015

cc: Tony Apanavage
Samantha Brenner
Kelly Carper
Tobrena Sedlmyer

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of TestAmerica and its client. All questions regarding this report should be directed to the TestAmerica Project Manager who has signed this report.

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SAMPLE SUMMARY

Clien e e n e

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
		li		

Percent Solids	80	0.10	%	Moisture
Percent Moisture	20	0.10	%	Moisture

Client Sample ID: **D-SEEP-080715**

8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

General Chemistry

Client Sample ID: **D-SEEP-080715**

Laboratory Chronicle

Lab ID: 240-54148-1 **Client ID:** D-SEEP-080715

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst

Lab ID: MB **Client ID:** N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst

Lab ID: LCS **Client ID:** N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst

Lab ID: MS **Client ID:** N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst

Lab ID: MSD **Client ID:** N/A

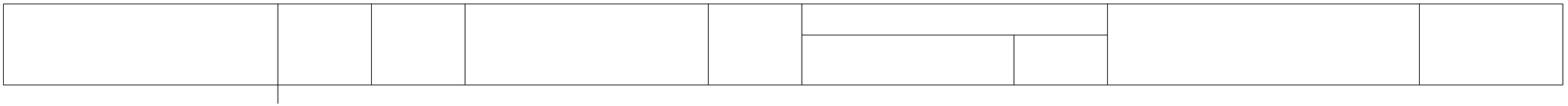
Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst

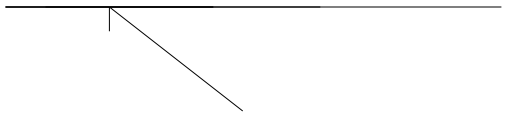
EX10PPMSPK_00017

SG1248@1.0ppm_00011								
SG1248@2.0ppm_00012								
SG1660@.05PPM_00014								

SG1660ICV@1.0_00008								
SG1660ICV@1.0_00008								

SG2154@1.0PPM_00011								





TestAmerica Canton	California	State Program	9	2927
TestAmerica Canton	Connecticut	State Program	1	PH-0590
TestAmerica Canton	Illinois	NELAP	5	200004
TestAmerica Canton	Kansas	NELAP	7	E-10336
TestAmerica Canton	Kentucky (UST)	State Program	4	58
TestAmerica Canton	Kentucky (WW)	State Program	4	98016
TestAmerica Canton	L-A-B	DoD ELAP		L2315
TestAmerica Canton	Minnesota	NELAP	5	039-999-348
TestAmerica Canton	Nevada	State Program	9	OH-000482008A
TestAmerica Canton	New Jersey	NELAP	2	OH001
TestAmerica Canton	New York	NELAP	2	10975
TestAmerica Canton	Ohio VAP	State Program	5	CL0024
TestAmerica Canton	Oregon	NELAP	10	4062
TestAmerica Canton	Pennsylvania	NELAP	3	68-00340
TestAmerica Canton	Texas	NELAP	6	
TestAmerica Canton	USDA	Federal		P330-13-00319
TestAmerica Canton	Virginia	NELAP	3	460175
TestAmerica Canton	Washington	State Program	10	C971
TestAmerica Canton	West Virginia DEP	State Program	3	210
TestAmerica Canton	Wisconsin	State Program	5	999518190

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

FORM II
PCBS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-54148-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): CLP-2 GC Column (1):

FORM VIII
PCBS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-54148-1

SDG No.:

Sample No.: CCV 240-193033/3 Date Analyzed: 08/13/2015 06:46

Instrument ID: A2HP13 GC Column: CLP-2 ID: 0.53(mm)

Lab File ID (Standard): P1300003.D Heated Purge: (Y/N) N

Calibration ID: 29936

		BNB					
		#	RT #	#	RT #	#	RT #

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton
Job No.: 240-54148-1
SDG No.:
Client Sample ID: D-SEEP-080715
Lab Sample ID: 240-54148-1
Matrix: Solid
Lab File ID: P1300010.D
Analysis Method: 8082A
Date Collected: 08/07/2015 12:00
Extraction Method: 3550C
Date Extracted: 08/12/2015 09:39
Sample wt/vol: 29.54(g)
Date Analyzed: 08/13/2015 08:45
Con. Extract Vol.: 10(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: CLP-2 ID: 0.53(mm)
% Moisture: 19.7
GPC Cleanup:(Y/N) N
Analysis Batch No.: 193033
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	15	U	42	15
11104-28-2	Aroclor-1221	20	U	42	20
11141-16-5	Aroclor-1232	25	U	42	25
53469-21-9	Aroclor-1242	14	U	42	14
12672-29-6	Aroclor-1248	10	U	42	10
11097-69-1	Aroclor-1254	18	U	42	18
11096-82-5	Aroclor-1260	11	U	42	11

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	93		10-152
2051-24-3	DCB Decachlorobiphenyl	166		10-176

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-54148-1 Analy Batch No.: 191314

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/30/2015 11:18 Calibration End Date: 07/30/2015 12:43 Calibration ID: 29912

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-191314/4	P1300004.D
Level 2	STD01 240-191314/5	P1300005.D
Level 3	STD02 240-191314/6	P1300006.D
Level 4	STD05 240-191314/7	P1300007.D
Level 5	STD1 240-191314/8	P1300008.D
Level 6	STD2 240-191314/9	P1300009.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1221 Peak 1	BNB	Lin1	496881 14929078	997316	1784800	4239865	7929486	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1221 Peak 2	BNB	Lin1	350891 9867943	710443	1267051	2911024	5378891	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1221 Peak 3	BNB	Lin1	1260740 36538253	2470596	4397288	10225421	19354605	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1254 Peak 1	BNB	Lin1	1459068 48471766	2920363	5301983	12861830	25230141	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1254 Peak 2	BNB	Lin1	1574611 51882418	3190160	5775796	13866643	27123013	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1254 Peak 3	BNB	Lin1	2456193 87029724	4988765	9059867	22500359	44768205	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1254 Peak 4	BNB	Lin1	1617074 56599943	3274114	6032200	14683646	29532776	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1254 Peak 5	BNB	Lin1	2048739 74872854	4267346	7905436	19600275	38797125	0.0500 2.00	0.100	0.200	0.500	1.00

Curve Type Legend:
Lin1 = Linear 1/conc ISTD

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-54148-1 Analy Batch No.: 191314

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/30/2015 15:04 Calibration End Date: 07/30/2015 16:29 Calibration ID: 29924

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-191314/16	P1300016.D
Level 2	STD01 240-191314/17	P1300017.D
Level 3	STD02 240-191314/18	P1300018.D
Level 4	STD05 240-191314/19	P1300019.D
Level 5	STD1 240-191314/20	P1300020.D
Level 6	STD2 240-191314/21	P1300021.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1242 Peak 1	0.0196 0.0132	0.0186	0.0170	0.0155	0.0143	Lin1	0.0004	0.0135							0.9960		0.9900
PCB-1242 Peak 2	0.0352 0.0249	0.0335	0.0308	0.0281	0.0263	Lin1	0.0007	0.0253							0.9980		0.9900
PCB-1242 Peak 3	0.0625 0.0553	0.0613	0.0574	0.0560	0.0551	Lin1	0.0005	0.0550							1.0000		0.9900
PCB-1242 Peak 4	0.0274 0.0220	0.0271	0.0268	0.0243	0.0229	Lin1	0.0004	0.0223							0.9980		0.9900
PCB-1242 Peak 5	0.0210 0.0162	0.0203	0.0188	0.0175	0.0167	Lin1	0.0003	0.0163							0.9990		0.9900
PCB-1268 Peak 1	0.1169 0.1163	0.1156	0.1113	0.1103	0.1103	Lin1	0	0.1138							0.9990		0.9900
PCB-1268 Peak 2	0.1149 0.1143	0.1146	0.1114	0.1097	0.1090	Lin1	0	0.1122							0.9990		0.9900
PCB-1268 Peak 3	0.1006 0.0975	0.0997	0.0954	0.0937	0.0932	Lin1	0.0002	0.0956							0.9990		0.9900
PCB-1268 Peak 4	0.0417 0.0385	0.0419	0.0400	0.0384	0.0377	Lin1	0.0002	0.0381							1.0000		0.9900
PCB-1268 Peak 5	0.3010 0.3311	0.3056	0.2994	0.3035	0.3096	Lin1	-0.002	0.3227							0.9980		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
S ON IN ING LI R ION D

Lab Name: e me a an on Job No.:

SDG No.:

Lab Sam e ID: I V a b a on Da e: :

In men ID: a b S a Da e: :

G o mn: L ID: . mm a b n Da e: :

Lab F e ID: .D on . n : n L

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ea	L n		.		.	.	.	.
ea	L n		.		.	.	.	.
ea	L n		.		.	.	.	.
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FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: _____ Job No.: 240-54148-1

SDG No.: _____

Lab Sample ID: CCV 240-108/13/2IME SU4M 0 eI:0.4Calibration Date: 08/07/2015 Time: 0:00 461 410.4 -225.

Instrument ID: A2HP13 Calib Start Date: 07/30/2015 18:39

GC Column: _____ ID: 0.53(mm) Calib End Date: 07/30/2015 20:04

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-54148-1

SDG No.:

Lab Sample ID: CCV 240-193033/4 Calibration Date: 08/13/2015 07:03

Instrument ID: A2HP13 Calib Start Date: 07/30/2015 13:21

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 07/30/2015 14:47

Lab File ID: P1300004.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1232 Peak 1	Lin1		0.0208		0.498	0.500	-0.4	20.0
PCB-1232 Peak 2	Lin1		0.0173		0.511	0.500	2.2	20.0
PCB-1232 Peak 3	Lin1		0.0304		0.481	0.500	-3.9	20.0
PCB-1232 Peak 4	Lin1		0.0136		0.479	0.500	-4.1	20.0
PCB-1232 Peak 5	Lin1		0.0090		0.490	0.500	-2.0	20.0
PCB-1262 Peak 1	Lin1		0.0328		0.485	0.500	-3.0	20.0
PCB-1262 Peak 2	Lin1		0.0478		0.474	0.500	-5.3	20.0
PCB-1262 Peak 3	Lin1		0.0425		0.479	0.500	-4.3	20.0
PCB-1262 Peak 4	Lin1		0.0916		0.477	0.500	-4.6	20.0
PCB-1262 Peak 5	Lin1		0.0642		0.480	0.500	-3.9	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-54148-1

SDG No.:

Lab Sample ID: CCV 240-193033/4 Calibration Date: 08/13/2015 07:03

Instrument ID: A2HP13 Calib Start Date: 07/30/2015 13:21

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 07/30/2015 14:47

Lab File ID: P1300004.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1232 Peak 1	5.48	5.45	5.51
PCB-1232 Peak 2	6.16	6.13	6.19
PCB-1232 Peak 3	6.83	6.80	6.86
PCB-1232 Peak 4	7.00	6.97	7.03
PCB-1232 Peak 5	7.57	7.54	7.60
PCB-1262 Peak 1	9.03	9.00	9.06
PCB-1262 Peak 2	9.43	9.40	9.46
PCB-1262 Peak 3	9.68	9.65	9.71
PCB-1262 Peak 4	9.89	9.86	9.92
PCB-1262 Peak 5	10.19	10.16	10.22

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-54148-1

SDG No.:

Lab Sample ID: CCV 240-193033/7 Calibration Date: 08/13/2015 07:54

Instrument ID: A2HP13 Calib Start Date: 07/30/2015 11:18

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 07/30/2015 12:43

Lab File ID: P1300007.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1221 Peak 1	Lin1		0.0098		0.495	0.500	-1.1	20.0
PCB-1221 Peak 2	Lin1		0.0067		0.504	0.500	0.9	20.0
PCB-1221 Peak 3	Lin1		0.0238		0.493	0.500	-1.4	20.0
PCB-1254 Peak 1	Lin1		0.0295		0.474	0.500	-5.1	20.0
PCB-1254 Peak 2	Lin1		0.0325		0.486	0.500	-2.9	20.0
PCB-1254 Peak 3	Lin1		0.0526		0.477	0.500	-4.6	20.0
PCB-1254 Peak 4	Lin1		0.0347		0.482	0.500	-3.6	20.0
PCB-1254 Peak 5	Lin1		0.0457		0.481	0.500	-3.8	20.0

FORM VII

Lab Name: _____ Job No.: _____

SDG No.: _____

Lab Sample ID: _____ Calibration Date: _____

Instrument ID: _____ Calib Start Date: _____

_____ _____ Calib End Date: _____

_____

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-54148-1

SDG No.:

Instrument ID: A2HP13 Start Date: 07/30/2015 11:18

Analysis Batch Number: 191314 End Date: 07/30/2015 22:20

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD005 240-191314/4 IC		07/30/2015 11:18	1		CLP-1 0.53(mm)
STD005 240-191314/4 IC		07/30/2015 11:18	1	P1300004.D	CLP-2 0.53(mm)
STD01 240-191314/5 IC		07/30/2015 11:35	1		CLP-1 0.53(mm)
STD01 240-191314/5 IC		07/30/2015 11:35	1	P1300005.D	CLP-2 0.53(mm)
STD02 240-191314/6 IC		07/30/2015 11:52	1		CLP-1 0.53(mm)
STD02 240-191314/6 IC		07/30/2015 11:52	1	P1300006.D	CLP-2 0.53(mm)
STD05 240-191314/7 IC		07/30/2015 12:09	1		CLP-1 0.53(mm)
STD05 240-191314/7 IC		07/30/2015 12:09	1	P1300007.D	CLP-2 0.53(mm)
STD1 240-191314/8 IC		07/30/2015 12:26	1		CLP-1 0.53(mm)
STD1 240-191314/8 IC		07/30/2015 12:26	1	P1300008.D	CLP-2 0.53(mm)
STD2 240-191314/9 IC		07/30/2015 12:43	1		CLP-1 0.53(mm)
STD2 240-191314/9 IC		07/30/2015 12:43	1	P1300009.D	CLP-2 0.53(mm)
STD005 240-191314/10 IC		07/30/2015 13:21	1		CLP-1 0.53(mm)
STD005 240-191314/10 IC		07/30/2015 13:21	1	P1300010.D	CLP-2 0.53(mm)
STD01 240-191314/11 IC		07/30/2015 13:38	1		CLP-1 0.53(mm)
STD01 240-191314/11 IC		07/30/2015 13:38	1	P1300011.D	CLP-2 0.53(mm)
STD02 240-191314/12 IC		07/30/2015 13:56	1		CLP-1 0.53(mm)
STD02 240-191314/12 IC		07/30/2015 13:56	1	P1300012.D	CLP-2 0.53(mm)
STD05 240-191314/13 IC		07/30/2015 14:13	1		CLP-1 0.53(mm)
STD05 240-191314/13 IC		07/30/2015 14:13	1	P1300013.D	CLP-2 0.53(mm)
STD1 240-191314/14 IC		07/30/2015 14:30	1		CLP-1 0.53(mm)
STD1 240-191314/14 IC		07/30/2015 14:30	1	P1300014.D	CLP-2 0.53(mm)
STD2 240-191314/15 IC		07/30/2015 14:47	1		CLP-1 0.53(mm)
STD2 240-191314/15 IC		07/30/2015 14:47	1	P1300015.D	CLP-2 0.53(mm)
STD005 240-191314/16 IC		07/30/2015 15:04	1		CLP-1 0.53(mm)
STD005 240-191314/16 IC		07/30/2015 15:04	1	P1300016.D	CLP-2 0.53(mm)
STD01 240-191314/17 IC		07/30/2015 15:21	1		CLP-1 0.53(mm)
STD01 240-191314/17 IC		07/30/2015 15:21	1	P1300017.D	CLP-2 0.53(mm)
STD02 240-191314/18 IC		07/30/2015 15:38	1		CLP-1 0.53(mm)
STD02 240-191314/18 IC		07/30/2015 15:38	1	P1300018.D	CLP-2 0.53(mm)
STD05 240-191314/19 IC		07/30/2015 15:55	1		CLP-1 0.53(mm)
STD05 240-191314/19 IC		07/30/2015 15:55	1	P1300019.D	CLP-2 0.53(mm)
STD1 240-191314/20 IC		07/30/2015 16:12	1		CLP-1 0.53(mm)

8082A

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-54148-1

SDG No.:

Instrument ID: A2HP13 Start Date: 07/30/2015 11:18

Analysis Batch Number: 191314 End Date: 07/30/2015 22:20

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD1 240-191314/20 IC		07/30/2015 16:12	1	P1300020.D	CLP-2 0.53(mm)
STD2 240-191314/21 IC		07/30/2015 16:29	1		CLP-1 0.53(mm)
STD2 240-191314/21 IC		07/30/2015 16:29	1	P1300021.D	CLP-2 0.53(mm)
STD005 240-191314/22 IC		07/30/2015 16:46	1		CLP-1 0.53(mm)
STD005 240-191314/22 IC		07/30/2015 16:46	1	P1300022.D	CLP-2 0.53(mm)
STD01 240-191314/23 IC		07/30/2015 17:03	1		CLP-1 0.53(mm)
STD01 240-191314/23 IC		07/30/2015 17:03	1	P1300023.D	CLP-2 0.53(mm)
STD02 240-191314/24 IC		07/30/2015 17:20	1		CLP-1 0.53(mm)
STD02 240-191314/24 IC		07/30/2015 17:20	1	P1300024.D	CLP-2 0.53(mm)
STD05 240-191314/25 IC		07/30/2015 17:37	1		CLP-1 0.53(mm)
STD05 240-191314/25 IC		07/30/2015 17:37	1	P1300025.D	CLP-2 0.53(mm)
STD1 240-191314/26 IC		07/30/2015 17:54	1		CLP-1 0.53(mm)
STD1 240-191314/26 IC		07/30/2015 17:54	1	P1300026.D	CLP-2 0.53(mm)
STD2 240-191314/27 IC		07/30/2015 18:11	1		CLP-1 0.53(mm)
STD2 240-191314/27 IC		07/30/2015 18:11	1	P1300027.D	CLP-2 0.53(mm)
STD005 240-191314/28 IC		07/30/2015 18:39	1		CLP-1 0.53(mm)
STD005 240-191314/28 IC		07/30/2015 18:39	1	P1300028.D	CLP-2 0.53(mm)
STD01 240-191314/29 IC		07/30/2015 18:56	1		CLP-1 0.53(mm)
STD01 240-191314/29 IC		07/30/2015 18:56	1	P1300029.D	CLP-2 0.53(mm)
STD02 240-191314/30 IC		07/30/2015 19:13	1		CLP-1 0.53(mm)
STD02 240-191314/30 IC		07/30/2015 19:13	1	P1300030.D	CLP-2 0.53(mm)
STD05 240-191314/31 ICIS		07/30/2015 19:30	1		CLP-1 0.53(mm)
STD05 240-191314/31 ICIS		07/30/2015 19:30	1	P1300031.D	CLP-2 0.53(mm)
STD1 240-191314/32 IC		07/30/2015 19:47	1		CLP-1 0.53(mm)
STD1 240-191314/32 IC		07/30/2015 19:47	1	P1300032.D	CLP-2 0.53(mm)
STD2 240-191314/33 IC		07/30/2015 20:04	1		CLP-1 0.53(mm)
STD2 240-191314/33 IC		07/30/2015 20:04	1	P1300033.D	CLP-2 0.53(mm)
ICV 240-191314/34		07/30/2015 20:21	1		CLP-1 0.53(mm)
ICV 240-191314/34		07/30/2015 20:21	1		CLP-2 0.53(mm)
ICV 240-191314/35		07/30/2015 20:38	1		CLP-1 0.53(mm)
ICV 240-191314/35		07/30/2015 20:38	1		CLP-2 0.53(mm)
ICV 240-191314/36		07/30/2015 20:55	1		CLP-1 0.53(mm)
ICV 240-191314/36		07/30/2015 20:55	1		CLP-2 0.53(mm)

8082A

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-54148-1

SDG No.:

Instrument ID: A2HP13 Start Date: 07/30/2015 11:18

Analysis Batch Number: 191314 End Date: 07/30/2015 22:20

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ICV 240-191314/37		07/30/2015 21:12	1		CLP-1 0.53(mm)
ICV 240-191314/37		07/30/2015 21:12	1		CLP-2 0.53(mm)
ICV 240-191314/38		07/30/2015 21:29	1		CLP-1 0.53(mm)
ICV 240-191314/38		07/30/2015 21:29	1		CLP-2 0.53(mm)
ICV 240-191314/39		07/30/2015 21:46	1		CLP-1 0.53(mm)
ICV 240-191314/39		07/30/2015 21:46	1	P1300039.D	CLP-2 0.53(mm)
ICV 240-191314/40		07/30/2015 22:03	1		CLP-1 0.53(mm)
ICV 240-191314/40		07/30/2015 22:03	1		CLP-2 0.53(mm)
ICV 240-191314/41		07/30/2015 22:20	1		CLP-1 0.53(mm)
ICV 240-191314/41		07/30/2015 22:20	1		CLP-2 0.53(mm)

8082A

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-54148-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture RL Date: 01/28/2010 09:24

Analyte	Wavelength/ Mass	RL (%)	
Percent Moisture		0.1	
Percent Solids		0.1	

FORM IX - IN

240-54148-1

Instrument ID: NOEQUIP

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-54148-1

SDG No.:

Instrument ID: NOEQUIP Method: Moisture

Start Date: 08/10/2015 06:18 End Date: 08/10/2015 11:14

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-54148-1

SDG No.:

Instrument ID: NOEQUIP Method: Moisture

Start Date: 08/10/2015 06:18 End Date: 08/10/2015 11:14

Lab Sample ID	D/F	Type	Time	Analytes																			
				% Sol	Moist																		
ZZZZZZ			06:18																				
ZZZZZZ			06:18																				
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ZZZZZZ			07:10																				
ZZZZZZ			11:14																				

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-54148-1

SDG No.:

Instrument ID: NOEQUIP Method: Moisture

Start Date: 08/10/2015 06:18 End Date: 08/10/2015 11:14

Lab Sample ID	D/F	Type	Time	Analytes																			
				% Sol	Moist																		
ZZZZZZ			11:14																				
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Prep Types
T = Total/NA

Shipping and Receiving Documents