TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
Tel: (303)736-0100

TestAmerica Job ID: 280-84744-1
TestAmerica Sample Delivery Group: DN0007
Client Project/Site: F16-043

For:
CH2M Hill Plateau Remediation Company
PO BOX 1600, MS H8-41
Richland, Washington 99352

Attn: Mr. Scot Fitzgerald

Authorized for release by:
7/20/2016 11:54:38 AM

Kae Yoder, Senior Project Manager
(303)736-0190
kae.yoder@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

Table of Contents

Cover Page 1
Table of Contents 2
Case Narrative 3
Chain of Custody 6
Definitions 10
Method Summary 11
Sample Summary 12
Client Sample Results 13
QC Sample Results 15
QC Association 19
Surrogate Summary 20

Job ID: 280-84744-1

Laboratory: TestAmerica Denver

Narrative

CASE NARRATIVE

Client: CH2M Hill Plateau Remediation Company

Job Number: 280-84744-1

SDG #: DN0007
SAF#(s): F16-043

Date SDG Closed: July 1, 2016
Data Deliverable: 15 Day / Summary

With 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. All laboratory quality control samples analyzed in conjunction with the samples in this project were within established control limits, with any exceptions noted. Calculations are performed before rounding to avoid round-off errors in calculated results.

The results, RLs and MDLs included in this report have been adjusted for dry weight, as appropriate.

LCS/LCSD = Laboratory Control Sample/Laboratory Control Sample Duplicate
MS/MSD = Matrix Spike/Matrix Spike Duplicate

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

For extractable analyses, several analytes are considered poor performers and will not meet CHPRC QC limits. Per CHPRC direction, the lab's statistical limits have been reported. Excursions outside these statistical limits will include a non-conformance in the sections below.

RECEIPT
The samples were received on 6/21/2016 5:35 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.6º C.

Receipt Exceptions

The WTPH_DIESEL_MOTOR OIL volume received at the laboratory for samples B35YC9 and B35YD2 appeared to be compromised. Water was present in both the containers and in the bags holding the containers. The 8270_SVOA_GCMS_SIM volume appeared dry and uncompromised. As instructed by the client on 6/23/2016 (SIR16-444), the laboratory performed the Diesel analyses for samples B35YC9 and B35YD2 using extra volume from the SVOA containers.

8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)
No analytical or quality issues were noted.

NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)
Diesel (C10-C28) was detected in method blank MB 280-332302/1-A at a level that was above the method detection limit (MDL) but below the reporting limit (RL). The value should be considered an estimate, and has been flagged "J". Because the concentration in the method blank was not present at a level greater than half the RL, corrective action is deemed unnecessary. If the associated samples reported a result above the MDL and/or RL and the method blank concentration was greater than 5% of the sample concentration, the result has been flagged "B".

No additional analytical or quality issues were noted.

Job ID: 280-84744-1 (Continued)

Laboratory: TestAmerica Denver (Continued)

We certify that this data package is in compliance with the SOW, both technically and for completeness, including a full description of, explanation of, and corrective actions for, any and all deviations, from either the analyses requested or the case narrative requested. Release of the data contained in this hard copy data package has been authorized by the Laboratory Analytical Manager or designee and the laboratory's client services representative as verified by their signature on this report.

Reviewed and approved:

Kae E. Yoder
Senior Project Manager

SAMPLE ISSUE RESOLUTION

SIR NUM	SIR16-444
REV NUM	0
DATE INITIATED	6/23/2020

SAMPLE EVENT INFORMATION

SAF NUM(S)	F16-043
OPERABLE UNIT(S)	100-NR-2
PROJECT(S)	100-NR-2 GW
SAMPLE EVENT TITLE(S)	100-NR-2 Well Drilling and Installation of Wells
LABORATORY	TestAmerica Denver

SAMPLING INFORMATION

NUMBER OF SAMPLES	2
SAMPLE NUMBERS	B35YC9, B35YD2
SAMPLE MATRIX	SOIL
COLLECTION DATE	-
SDG NUM	DN0007

ISSUE BACKGROUND

CLASS	General Laboratory Direction
TYPE	Other General Laboratory Direction (Specify)
DESCRIPTION	It appears that the WTPH_DIESEL_MOTOR OIL volume submitted for samples B35YC9 and B35YD2 has been compromised. Water was present in both the containers and in the bags holding the containers. The 8270_SVOA_GCMS_SIM volume appeared dry and uncompromised.

DISPOSITION

DESCRIPTION	TADN proposes to analyze for WTPH_DIESEL_MOTOR OIL using uncompromised volume from the 8270_SVOA-GCMS_SIM containers or cancel the WTPH_DIESEL_MOTOR OIL analyses.
JUSTIFICATION	Final Disposition: Accept the first proposed resolution; run Diesel using extra volume form SVOA.

SUBMITTED BY: Kae E. Yoder DATE: 06/22/2016
ACCEPTED BY: Scot Fitzgerald DATE: 06/23/2016

Login Sample Receipt Checklist

Client: CH2M Hill Plateau Remediation Company

Job Number: 280-84744-1
SDG Number: DN0007

Login Number: 84744
List Number: 1
Creator: Muniz, Ashley T

List Source: TestAmerica Denver

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.6 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	False	Water present in DRO containers. Sample volume compromised.
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST 18165			F16-043-076	PAGE 1 OF 1
COLLECTOR Dave Floyd CHPRC DN0007	COMPANY CONTACT TODAK, D	TELEPHONE NO. 376-6427	PROJECT COORDINATOR TODAK, D	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION C9402, I-004	PROJECT DESIGNATION 100-NR-2 Drilling - Soil		SAF NO. F16-043	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. GWS-467	FIELD LOGBOOK NO. HNF-N-645-5 pg 3	ACTUAL SAMPLE DEPTH 59.7 - 61.8	COA 304070	METHOD OF SHIPMENT FEDERAL EXPRESS	ORIGINAL
SHIPPED TO TestAmerica Denver	OFFSITE PROPERTY NO. 6749		BILL OF LADING/AIR BILL NO. 7765 6292 6375		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
*Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1. NA

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool <=6C	Cool <=6C
HOLDING TIME	14/40 Days	14/40 Days
TYPE OF CONTAINER	aG	G
NO. OF CONTAINER(S)	1	1
VOLUME	120mL	120mL
SAMPLE ANALYSIS	8270_SVOA_GC MS_SIM: COMMON,	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B35YC9	SOIL	JUN 2 0 2016	0850	✓	✓

280-84744 Chain of Custody

5.61R5 00
Auo 21Jun16

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM Dave Floyd CHPRC	DATE/TIME JUN 2 0 2016 1250	RECEIVED BY/STORED IN Lesly Wall CHPRC	DATE/TIME JUN 2 0 2016 1250
RELINQUISHED BY/REMOVED FROM Lesly Wall CHPRC	DATE/TIME JUN 2 0 2016 1400	RECEIVED BY/STORED IN FEDEX	DATE/TIME
RELINQUISHED BY/REMOVED FROM FedEx	DATE/TIME	RECEIVED BY/STORED IN Ashley Muniz	DATE/TIME 1735 21Jun16
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SPLIT SPOON PARTS B & A WILL BE COMBINED TO ENSURE ADEQUATE SAMPLE MATERIAL FOR ANALYSIS;
(1) WTPH_DIESEL: COMMON {Total petroleum hydrocarbons - diesel range}; WTPH_MOTOR OIL: COMMON {Total petroleum hydrocarbons - motor oil (high boiling)};

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

PRINTED ON 6/8/2016 FSR ID = FSR33113 TRVL NUM = TRVL-16-168 A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F16-043-079	PAGE 1 OF 1
COLLECTOR Dave Floyd CHPRC DGDN0007	COMPANY CONTACT TODAK, D	TELEPHONE NO. 376-6427	PROJECT COORDINATOR TODAK, D	PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION C9402, I-005	PROJECT DESIGNATION 100-NR-2 Drilling - Soil		SAF NO. F16-043	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO. GWS-467	FIELD LOGBOOK NO. HNF-N-645-5 pg 3	ACTUAL SAMPLE DEPTH 63.4-64.9	COA 304070	METHOD OF SHIPMENT FEDERAL EXPRESS	ORIGINAL
SHIPPED TO TestAmerica Denver	OFFSITE PROPERTY NO. 6749		BILL OF LADING/AIR BILL NO. 7765 6292 6375		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
*Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1. NA

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool <=6C	Cool <=6C
HOLDING TIME	14/40 Days	14/40 Days
TYPE OF CONTAINER	aG	G
NO. OF CONTAINER(S)	1	1
VOLUME	120mL	120mL
SAMPLE ANALYSIS	8270_SVOA_GC MS_SIM. COMMON;	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B35YD2	SOIL	JUN 20 2016	1125	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM Dave Floyd CHPRC	DATE/TIME JUN 20 2016 1250	RECEIVED BY/STORED IN Lesly Wall CHPRC	DATE/TIME JUN 20 2016 1250
RELINQUISHED BY/REMOVED FROM Lesly Wall CHPRC	DATE/TIME JUN 20 2016 1400	RECEIVED BY/STORED IN FEDEX	DATE/TIME
RELINQUISHED BY/REMOVED FROM FedEx	DATE/TIME	RECEIVED BY/STORED IN Ashley Muniz	DATE/TIME 1735 21Jun16
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SPLIT SPOON PARTS B & A WILL BE COMBINED TO ENSURE ADEQUATE SAMPLE MATERIAL FOR ANALYSIS;
(1) WTPH_DIESEL: COMMON {Total petroleum hydrocarbons - diesel range}; WTPH_MOTOR OIL: COMMON {Total petroleum hydrocarbons - motor oil (high boiling)};

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

PRINTED ON 6/8/2016 FSR ID = FSR33114 TRVL NUM = TRVL-16-168 A-6003-618 (REV 2)

FedEx ® Tracking

776562926375

Ship date:
Mon 6/20/2016

Richland, WA US

Delivered
Signed for by: A.MUNIZ

Actual delivery:
Tue 6/21/2016 5:35 pm

ARVADA, CO US

Travel History

Date/Time	Activity	Location
6/21/2016 - Tuesday		
5:35 pm	Delivered	ARVADA, CO
2:50 pm	On FedEx vehicle for delivery	ARVADA, CO
12:07 pm	Delivery exception	ARVADA, CO
12:07 pm	At local FedEx facility	ARVADA, CO
12:01 pm	At local FedEx facility	ARVADA, CO
7:20 am	In transit	DENVER, CO
6:57 am	At local FedEx facility	DENVER, CO
12:24 am	Arrived at FedEx location	MEMPHIS, TN
6/20/2016 - Monday		
4:54 pm	Left FedEx origin facility	PASCO, WA
3:20 pm	Picked up	PASCO, WA
3:10 pm	Shipment information sent to FedEx	

Shipment Facts

Tracking number	776562926375	**Service**	FedEx Priority Overnight
Weight	18 lbs / 8.16 kgs	**Signature services**	Direct signature required
Delivered To	Shipping/Receiving	**Total pieces**	1
Total shipment weight	18 lbs / 8.16 kgs	**Terms**	Third Party
Shipper reference	6749	**Packaging**	Your Packaging
Special handling section	Deliver Weekday, Direct Signature Required		

© FedEx 1995-2016

Definitions/Glossary

Client: CH2M Hill Plateau Remediation Company
Project/Site: F16-043

TestAmerica Job ID: 280-84744-1
SDG: DN0007

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
B	Analyte was found in the associated method blank as well as in the sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Analyzed for but not detected.

Glossary

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

Method Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: F16-043

TestAmerica Job ID: 280-84744-1
SDG: DN0007

Method	Method Description	Protocol	Laboratory
8270D SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL DEN
NWTPH-Dx	Northwest - Semi-Volatile Petroleum Products (GC)	NWTPH	TAL DEN
D 2216	Percent Moisture	ASTM	TAL DEN

Protocol References:

ASTM = ASTM International
NWTPH = Northwest Total Petroleum Hydrocarbon
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: F16-043

TestAmerica Job ID: 280-84744-1
SDG: DN0007

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-84744-1	B35YC9	Soil	06/20/16 08:50	06/21/16 17:35
280-84744-2	B35YD2	Soil	06/20/16 11:25	06/21/16 17:35

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: F16-043

TestAmerica Job ID: 280-84744-1
SDG: DN0007

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

Client Sample ID: B35YC9
Date Collected: 06/20/16 08:50
Date Received: 06/21/16 17:35

Lab Sample ID: 280-84744-1
Matrix: Soil
Percent Solids: 94.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.16	U	5.0	0.16	ug/Kg	☼	07/03/16 10:25	07/17/16 10:31	1
Acenaphthylene	0.17	U	5.0	0.17	ug/Kg	☼	07/03/16 10:25	07/17/16 10:31	1
Anthracene	0.72	U	5.0	0.72	ug/Kg	☼	07/03/16 10:25	07/17/16 10:31	1
Benzo[a]anthracene	0.90	U	5.0	0.90	ug/Kg	☼	07/03/16 10:25	07/17/16 10:31	1
Benzo[a]pyrene	0.74	U	5.0	0.74	ug/Kg	☼	07/03/16 10:25	07/17/16 10:31	1
Benzo[b]fluoranthene	1.2	U	5.0	1.2	ug/Kg	☼	07/03/16 10:25	07/17/16 10:31	1
Benzo[g,h,i]perylene	1.1	U	5.0	1.1	ug/Kg	☼	07/03/16 10:25	07/17/16 10:31	1
Benzo[k]fluoranthene	1.0	U	5.0	1.0	ug/Kg	☼	07/03/16 10:25	07/17/16 10:31	1
Chrysene	1.0	U	5.0	1.0	ug/Kg	☼	07/03/16 10:25	07/17/16 10:31	1
Dibenz[a,h]anthracene	1.3	U	5.0	1.3	ug/Kg	☼	07/03/16 10:25	07/17/16 10:31	1
Fluoranthene	1.0	U	5.0	1.0	ug/Kg	☼	07/03/16 10:25	07/17/16 10:31	1
Fluorene	0.47	U	5.0	0.47	ug/Kg	☼	07/03/16 10:25	07/17/16 10:31	1
Indeno[1,2,3-cd]pyrene	1.1	U	5.0	1.1	ug/Kg	☼	07/03/16 10:25	07/17/16 10:31	1
Naphthalene	0.33	U	5.0	0.33	ug/Kg	☼	07/03/16 10:25	07/17/16 10:31	1
Phenanthrene	1.1	U	5.0	1.1	ug/Kg	☼	07/03/16 10:25	07/17/16 10:31	1
Pyrene	1.1	U	5.0	1.1	ug/Kg	☼	07/03/16 10:25	07/17/16 10:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*94*		*39 - 120*	*07/03/16 10:25*	*07/17/16 10:31*	*1*
Nitrobenzene-d5	*92*		*42 - 120*	*07/03/16 10:25*	*07/17/16 10:31*	*1*
Terphenyl-d14	*82*		*35 - 124*	*07/03/16 10:25*	*07/17/16 10:31*	*1*

Client Sample ID: B35YD2
Date Collected: 06/20/16 11:25
Date Received: 06/21/16 17:35

Lab Sample ID: 280-84744-2
Matrix: Soil
Percent Solids: 97.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.16	U	5.1	0.16	ug/Kg	☼	07/03/16 10:25	07/17/16 14:23	1
Acenaphthylene	0.17	U	5.1	0.17	ug/Kg	☼	07/03/16 10:25	07/17/16 14:23	1
Anthracene	0.73	U	5.1	0.73	ug/Kg	☼	07/03/16 10:25	07/17/16 14:23	1
Benzo[a]anthracene	0.91	U	5.1	0.91	ug/Kg	☼	07/03/16 10:25	07/17/16 14:23	1
Benzo[a]pyrene	0.75	U	5.1	0.75	ug/Kg	☼	07/03/16 10:25	07/17/16 14:23	1
Benzo[b]fluoranthene	1.2	U	5.1	1.2	ug/Kg	☼	07/03/16 10:25	07/17/16 14:23	1
Benzo[g,h,i]perylene	1.1	U	5.1	1.1	ug/Kg	☼	07/03/16 10:25	07/17/16 14:23	1
Benzo[k]fluoranthene	1.0	U	5.1	1.0	ug/Kg	☼	07/03/16 10:25	07/17/16 14:23	1
Chrysene	1.0	U	5.1	1.0	ug/Kg	☼	07/03/16 10:25	07/17/16 14:23	1
Dibenz[a,h]anthracene	1.3	U	5.1	1.3	ug/Kg	☼	07/03/16 10:25	07/17/16 14:23	1
Fluoranthene	1.0	U	5.1	1.0	ug/Kg	☼	07/03/16 10:25	07/17/16 14:23	1
Fluorene	0.48	U	5.1	0.48	ug/Kg	☼	07/03/16 10:25	07/17/16 14:23	1
Indeno[1,2,3-cd]pyrene	1.1	U	5.1	1.1	ug/Kg	☼	07/03/16 10:25	07/17/16 14:23	1
Naphthalene	0.33	U	5.1	0.33	ug/Kg	☼	07/03/16 10:25	07/17/16 14:23	1
Phenanthrene	1.1	U	5.1	1.1	ug/Kg	☼	07/03/16 10:25	07/17/16 14:23	1
Pyrene	1.1	U	5.1	1.1	ug/Kg	☼	07/03/16 10:25	07/17/16 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*89*		*39 - 120*	*07/03/16 10:25*	*07/17/16 14:23*	*1*
Nitrobenzene-d5	*84*		*42 - 120*	*07/03/16 10:25*	*07/17/16 14:23*	*1*
Terphenyl-d14	*83*		*35 - 124*	*07/03/16 10:25*	*07/17/16 14:23*	*1*

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: F16-043

TestAmerica Job ID: 280-84744-1
SDG: DN0007

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Client Sample ID: B35YC9 — **Lab Sample ID: 280-84744-1**
Date Collected: 06/20/16 08:50 — **Matrix: Soil**
Date Received: 06/21/16 17:35 — **Percent Solids: 94.0**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel (C10-C28)	1800	J B	4200	710	ug/Kg	☼	07/04/16 09:30	07/15/16 16:01	1
Motor Oil (C20-C38)	4100	U	13000	4100	ug/Kg	☼	07/04/16 09:30	07/15/16 16:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*100*		*49 - 115*	*07/04/16 09:30*	*07/15/16 16:01*	*1*

Client Sample ID: B35YD2 — **Lab Sample ID: 280-84744-2**
Date Collected: 06/20/16 11:25 — **Matrix: Soil**
Date Received: 06/21/16 17:35 — **Percent Solids: 97.5**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel (C10-C28)	3700	J B	3800	650	ug/Kg	☼	07/04/16 09:30	07/15/16 17:14	1
Motor Oil (C20-C38)	4500	J	12000	3800	ug/Kg	☼	07/04/16 09:30	07/15/16 17:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*97*		*49 - 115*	*07/04/16 09:30*	*07/15/16 17:14*	*1*

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: F16-043

TestAmerica Job ID: 280-84744-1
SDG: DN0007

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

Lab Sample ID: MB 280-332296/1-A
Matrix: Solid
Analysis Batch: 333908

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 332296

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.16	U	5.0	0.16	ug/Kg		07/03/16 10:25	07/17/16 09:40	1
Acenaphthylene	0.17	U	5.0	0.17	ug/Kg		07/03/16 10:25	07/17/16 09:40	1
Anthracene	0.72	U	5.0	0.72	ug/Kg		07/03/16 10:25	07/17/16 09:40	1
Benzo[a]anthracene	0.90	U	5.0	0.90	ug/Kg		07/03/16 10:25	07/17/16 09:40	1
Benzo[a]pyrene	0.74	U	5.0	0.74	ug/Kg		07/03/16 10:25	07/17/16 09:40	1
Benzo[b]fluoranthene	1.2	U	5.0	1.2	ug/Kg		07/03/16 10:25	07/17/16 09:40	1
Benzo[g,h,i]perylene	1.1	U	5.0	1.1	ug/Kg		07/03/16 10:25	07/17/16 09:40	1
Benzo[k]fluoranthene	1.0	U	5.0	1.0	ug/Kg		07/03/16 10:25	07/17/16 09:40	1
Chrysene	1.0	U	5.0	1.0	ug/Kg		07/03/16 10:25	07/17/16 09:40	1
Dibenz[a,h]anthracene	1.3	U	5.0	1.3	ug/Kg		07/03/16 10:25	07/17/16 09:40	1
Fluoranthene	1.0	U	5.0	1.0	ug/Kg		07/03/16 10:25	07/17/16 09:40	1
Fluorene	0.47	U	5.0	0.47	ug/Kg		07/03/16 10:25	07/17/16 09:40	1
Indeno[1,2,3-cd]pyrene	1.1	U	5.0	1.1	ug/Kg		07/03/16 10:25	07/17/16 09:40	1
Naphthalene	0.33	U	5.0	0.33	ug/Kg		07/03/16 10:25	07/17/16 09:40	1
Phenanthrene	1.1	U	5.0	1.1	ug/Kg		07/03/16 10:25	07/17/16 09:40	1
Pyrene	1.1	U	5.0	1.1	ug/Kg		07/03/16 10:25	07/17/16 09:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*96*		*39 - 120*	*07/03/16 10:25*	*07/17/16 09:40*	*1*
Nitrobenzene-d5	*95*		*42 - 120*	*07/03/16 10:25*	*07/17/16 09:40*	*1*
Terphenyl-d14	*85*		*35 - 124*	*07/03/16 10:25*	*07/17/16 09:40*	*1*

Lab Sample ID: LCS 280-332296/2-A
Matrix: Solid
Analysis Batch: 333908

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 332296

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	27.9		ug/Kg		93	35 - 120
Acenaphthylene	30.0	26.3		ug/Kg		88	41 - 120
Anthracene	30.0	28.5		ug/Kg		95	43 - 120
Benzo[a]anthracene	30.0	28.4		ug/Kg		95	36 - 120
Benzo[a]pyrene	30.0	25.2		ug/Kg		84	20 - 120
Benzo[b]fluoranthene	30.0	26.8		ug/Kg		89	37 - 120
Benzo[g,h,i]perylene	30.0	30.3		ug/Kg		101	20 - 123
Benzo[k]fluoranthene	30.0	26.8		ug/Kg		89	46 - 120
Chrysene	30.0	31.5		ug/Kg		105	34 - 120
Dibenz[a,h]anthracene	30.0	29.7		ug/Kg		99	20 - 120
Fluoranthene	30.0	26.9		ug/Kg		90	45 - 120
Fluorene	30.0	27.7		ug/Kg		92	44 - 120
Indeno[1,2,3-cd]pyrene	30.0	29.3		ug/Kg		98	20 - 127
Naphthalene	30.0	29.5		ug/Kg		98	44 - 120
Phenanthrene	30.0	28.5		ug/Kg		95	44 - 120
Pyrene	30.0	26.5		ug/Kg		88	43 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*93*		*39 - 120*
Nitrobenzene-d5	*97*		*42 - 120*

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: F16-043

TestAmerica Job ID: 280-84744-1
SDG: DN0007

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

Lab Sample ID: LCS 280-332296/2-A
Matrix: Solid
Analysis Batch: 333908

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 332296

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*83*		*35 - 124*

Lab Sample ID: 280-84744-1 MS
Matrix: Soil
Analysis Batch: 333908

Client Sample ID: B35YC9
Prep Type: Total/NA
Prep Batch: 332296

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	0.16	U	31.5	28.0		ug/Kg	☼	89	35 - 120
Acenaphthylene	0.17	U	31.5	25.9		ug/Kg	☼	82	41 - 120
Anthracene	0.72	U	31.5	28.4		ug/Kg	☼	90	43 - 120
Benzo[a]anthracene	0.90	U	31.5	28.5		ug/Kg	☼	91	36 - 120
Benzo[a]pyrene	0.74	U	31.5	25.5		ug/Kg	☼	81	20 - 120
Benzo[b]fluoranthene	1.2	U	31.5	28.3		ug/Kg	☼	90	37 - 120
Benzo[g,h,i]perylene	1.1	U	31.5	31.5		ug/Kg	☼	100	20 - 123
Benzo[k]fluoranthene	1.0	U	31.5	27.8		ug/Kg	☼	88	46 - 120
Chrysene	1.0	U	31.5	31.6		ug/Kg	☼	100	34 - 120
Dibenz[a,h]anthracene	1.3	U	31.5	30.2		ug/Kg	☼	96	20 - 120
Fluoranthene	1.0	U	31.5	26.9		ug/Kg	☼	85	45 - 120
Fluorene	0.47	U	31.5	27.8		ug/Kg	☼	88	44 - 120
Indeno[1,2,3-cd]pyrene	1.1	U	31.5	29.6		ug/Kg	☼	94	20 - 127
Naphthalene	0.33	U	31.5	28.3		ug/Kg	☼	90	44 - 120
Phenanthrene	1.1	U	31.5	28.9		ug/Kg	☼	92	44 - 120
Pyrene	1.1	U	31.5	28.1		ug/Kg	☼	89	43 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*89*		*39 - 120*
Nitrobenzene-d5	*88*		*42 - 120*
Terphenyl-d14	*80*		*35 - 124*

Lab Sample ID: 280-84744-1 MSD
Matrix: Soil
Analysis Batch: 333908

Client Sample ID: B35YC9
Prep Type: Total/NA
Prep Batch: 332296

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	0.16	U	30.8	28.5		ug/Kg	☼	93	35 - 120	2	50
Acenaphthylene	0.17	U	30.8	26.6		ug/Kg	☼	86	41 - 120	2	50
Anthracene	0.72	U	30.8	28.6		ug/Kg	☼	93	43 - 120	1	50
Benzo[a]anthracene	0.90	U	30.8	28.6		ug/Kg	☼	93	36 - 120	0	40
Benzo[a]pyrene	0.74	U	30.8	26.7		ug/Kg	☼	87	20 - 120	5	30
Benzo[b]fluoranthene	1.2	U	30.8	28.8		ug/Kg	☼	93	37 - 120	2	28
Benzo[g,h,i]perylene	1.1	U	30.8	32.5		ug/Kg	☼	105	20 - 123	3	30
Benzo[k]fluoranthene	1.0	U	30.8	29.4		ug/Kg	☼	96	46 - 120	6	28
Chrysene	1.0	U	30.8	32.2		ug/Kg	☼	104	34 - 120	2	41
Dibenz[a,h]anthracene	1.3	U	30.8	32.1		ug/Kg	☼	104	20 - 120	6	25
Fluoranthene	1.0	U	30.8	26.9		ug/Kg	☼	87	45 - 120	0	30
Fluorene	0.47	U	30.8	28.6		ug/Kg	☼	93	44 - 120	3	50
Indeno[1,2,3-cd]pyrene	1.1	U	30.8	31.0		ug/Kg	☼	101	20 - 127	5	50
Naphthalene	0.33	U	30.8	28.6		ug/Kg	☼	93	44 - 120	1	50

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: F16-043

TestAmerica Job ID: 280-84744-1
SDG: DN0007

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

Lab Sample ID: 280-84744-1 MSD — **Client Sample ID: B35YC9**
Matrix: Soil — **Prep Type: Total/NA**
Analysis Batch: 333908 — **Prep Batch: 332296**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenanthrene	1.1	U	30.8	29.0		ug/Kg	☼	94	44 - 120	0	42
Pyrene	1.1	U	30.8	28.2		ug/Kg	☼	92	43 - 120	0	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*92*		*39 - 120*
Nitrobenzene-d5	*90*		*42 - 120*
Terphenyl-d14	*85*		*35 - 124*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 280-332302/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 333775 — **Prep Batch: 332302**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel (C10-C28)	1090	J	4000	680	ug/Kg		07/04/16 09:30	07/15/16 14:48	1
Motor Oil (C20-C38)	3900	U	12000	3900	ug/Kg		07/04/16 09:30	07/15/16 14:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*93*		*49 - 115*	*07/04/16 09:30*	*07/15/16 14:48*	*1*

Lab Sample ID: LCS 280-332302/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 333775 — **Prep Batch: 332302**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel (C10-C28)	66700	63300		ug/Kg		95	53 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*101*		*49 - 115*

Lab Sample ID: LCS 280-332302/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 333775 — **Prep Batch: 332302**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Motor Oil (C20-C38)	167000	142000		ug/Kg		85	57 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*102*		*49 - 115*

Lab Sample ID: 280-84744-1 MS — **Client Sample ID: B35YC9**
Matrix: Soil — **Prep Type: Total/NA**
Analysis Batch: 333775 — **Prep Batch: 332302**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel (C10-C28)	1800	J B	70700	65100		ug/Kg	☼	90	56 - 115

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: F16-043

TestAmerica Job ID: 280-84744-1
SDG: DN0007

Surrogate	MS %Recovery	MS Qualifier	Limits
o-Terphenyl	100		49 - 115

Lab Sample ID: 280-84744-1 MSD
Matrix: Soil
Analysis Batch: 333775

Client Sample ID: B35YC9
Prep Type: Total/NA
Prep Batch: 332302

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel (C10-C28)	1800	J B	68400	65800		ug/Kg	☼	93	56 - 115	1	23

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl	102		49 - 115

Lab Sample ID: 280-84744-2 MS
Matrix: Soil
Analysis Batch: 333775

Client Sample ID: B35YD2
Prep Type: Total/NA
Prep Batch: 332302

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Motor Oil (C20-C38)	4500	J	165000	144000		ug/Kg	☼	85	57 - 115		

Surrogate	MS %Recovery	MS Qualifier	Limits
o-Terphenyl	106		49 - 115

Lab Sample ID: 280-84744-2 MSD
Matrix: Soil
Analysis Batch: 333775

Client Sample ID: B35YD2
Prep Type: Total/NA
Prep Batch: 332302

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Motor Oil (C20-C38)	4500	J	171000	149000		ug/Kg	☼	84	57 - 115	3	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl	103		49 - 115

QC Association Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: F16-043

TestAmerica Job ID: 280-84744-1
SDG: DN0007

GC/MS Semi VOA

Prep Batch: 332296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-84744-1	B35YC9	Total/NA	Soil	3546	
280-84744-2	B35YD2	Total/NA	Soil	3546	
MB 280-332296/1-A	Method Blank	Total/NA	Solid	3546	
LCS 280-332296/2-A	Lab Control Sample	Total/NA	Solid	3546	
280-84744-1 MS	B35YC9	Total/NA	Soil	3546	
280-84744-1 MSD	B35YC9	Total/NA	Soil	3546	

Analysis Batch: 333908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-84744-1	B35YC9	Total/NA	Soil	8270D SIM	332296
280-84744-2	B35YD2	Total/NA	Soil	8270D SIM	332296
MB 280-332296/1-A	Method Blank	Total/NA	Solid	8270D SIM	332296
LCS 280-332296/2-A	Lab Control Sample	Total/NA	Solid	8270D SIM	332296
280-84744-1 MS	B35YC9	Total/NA	Soil	8270D SIM	332296
280-84744-1 MSD	B35YC9	Total/NA	Soil	8270D SIM	332296

GC Semi VOA

Prep Batch: 332302

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-84744-1	B35YC9	Total/NA	Soil	3550C	
280-84744-2	B35YD2	Total/NA	Soil	3550C	
MB 280-332302/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 280-332302/2-A	Lab Control Sample	Total/NA	Solid	3550C	
LCS 280-332302/3-A	Lab Control Sample	Total/NA	Solid	3550C	
280-84744-1 MS	B35YC9	Total/NA	Soil	3550C	
280-84744-1 MSD	B35YC9	Total/NA	Soil	3550C	
280-84744-2 MS	B35YD2	Total/NA	Soil	3550C	
280-84744-2 MSD	B35YD2	Total/NA	Soil	3550C	

Analysis Batch: 333775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-84744-1	B35YC9	Total/NA	Soil	NWTPH-Dx	332302
280-84744-2	B35YD2	Total/NA	Soil	NWTPH-Dx	332302
MB 280-332302/1-A	Method Blank	Total/NA	Solid	NWTPH-Dx	332302
LCS 280-332302/2-A	Lab Control Sample	Total/NA	Solid	NWTPH-Dx	332302
LCS 280-332302/3-A	Lab Control Sample	Total/NA	Solid	NWTPH-Dx	332302
280-84744-1 MS	B35YC9	Total/NA	Soil	NWTPH-Dx	332302
280-84744-1 MSD	B35YC9	Total/NA	Soil	NWTPH-Dx	332302
280-84744-2 MS	B35YD2	Total/NA	Soil	NWTPH-Dx	332302
280-84744-2 MSD	B35YD2	Total/NA	Soil	NWTPH-Dx	332302

General Chemistry

Analysis Batch: 332258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-84744-1	B35YC9	Total/NA	Soil	D 2216	
280-84744-2	B35YD2	Total/NA	Soil	D 2216	
280-84744-1 DU	B35YC9	Total/NA	Soil	D 2216	

Surrogate Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: F16-043

TestAmerica Job ID: 280-84744-1
SDG: DN0007

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

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

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPH
Lab Sample ID	Client Sample ID	(39-120)	(42-120)	(35-124)
280-84744-1	B35YC9	94	92	82
280-84744-1 MS	B35YC9	89	88	80
280-84744-1 MSD	B35YC9	92	90	85
280-84744-2	B35YD2	89	84	83

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5
TPH = Terphenyl-d14

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

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

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPH
Lab Sample ID	Client Sample ID	(39-120)	(42-120)	(35-124)
LCS 280-332296/2-A	Lab Control Sample	93	97	83
MB 280-332296/1-A	Method Blank	96	95	85

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5
TPH = Terphenyl-d14

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)
		OTPH
Lab Sample ID	Client Sample ID	(49-115)
280-84744-1	B35YC9	100
280-84744-1 MS	B35YC9	100
280-84744-1 MSD	B35YC9	102
280-84744-2	B35YD2	97
280-84744-2 MS	B35YD2	106
280-84744-2 MSD	B35YD2	103

Surrogate Legend

OTPH = o-Terphenyl

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)
		OTPH
Lab Sample ID	Client Sample ID	(49-115)
LCS 280-332302/2-A	Lab Control Sample	101
LCS 280-332302/3-A	Lab Control Sample	102
MB 280-332302/1-A	Method Blank	93

Surrogate Legend

Surrogate Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: F16-043

TestAmerica Job ID: 280-84744-1
SDG: DN0007

OTPH = o-Terphenyl