TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921
Tel: (865)291-3000

TestAmerica Job ID: 140-1367-1
TestAmerica Sample Delivery Group: W06760
Client Project/Site: F11-150
Revision: 2

For:
CH2M Hill Plateau Remediation Company
PO BOX 1600
Mail Stop R3-50
Richland, Washington 99352

Attn: Mr. Scot Fitzgerald

Authorized for release by:
2/25/2015 1:17:04 PM

Jamie McKinney, Senior Project Manager
(865)291-3000
jamie.mckinney@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
Definitions/Glossary 3
Case Narrative 4
Detection Summary 8
Client Sample Results 9
Surrogate Summary 11
QC Sample Results 12
QC Association Summary 13
Lab Chronicle 14
Certification Summary 16
Method Summary 17
Sample Summary 18
Chain of Custody 19
Receipt Checklists 27

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
U	Analyzed for but not detected.
D	The reported value is from a dilution.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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)

Job ID: 140-1367-1

Laboratory: TestAmerica Knoxville

Narrative

Job Narrative
140-1367-1
REVISED
REVISED 02/25/15

Comments
This report has been revised. The P&D and SIR have been resolved and added to the report.

02/25/15 - This report has been revised. The Hanford approved qualifiers have been used.

Receipt
The samples were received on 5/16/2014 10:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

Air - GC/MS VOA
Qualifier Description

U: Analyzed for but not detected.
J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
D: The reported value is from a dilution.

Method(s) TO 14A, TO-14A, TO-14A Low: EPA methods TO-14A and TO-15 specify the use of humidified “zero air” as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of “zero air” by TestAmerica Knoxville.

EPA methods TO-14 and TO-14A specify that the relative accuracy of the field sampler or sample delivery system must meet 90-110% for a standard at 8 ppb(v/v). The laboratory control sample (LCS) summary data in this report is evaluated against alternate acceptance criteria based on the laboratory procedure for methods TO-14 and TO-14A. Please refer to the LCS summary report for the actual observed recoveries and acceptance criteria for the LCS.

Method(s) TO-14A Low: The method blank for batch 1230 contained acetone above the method detection limit (MDL), but less than the reporting limit. There is no impact to the data.

Method(s) TO 15 LL, TO-14A Low: The dilution factor field in TALS is used to show the dilution performed on the canister (in-can or serial dilution). In addition to dilution factors on the canister, it is necessary to examine the lab chronicle in the report to see the volume of sample analyzed. The default volume is 500 mL. A volume other that 500 mL will be used to adjust the results on the final report.

For example, if a canister did not have a dilution performed on it, but only 50 mL was analyzed, then the results, the reporting limits and the method detection limits will increase by a factor of 10, while the dilution factor will remain 1.

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

Problem and Discrepancy Report

TAKN

SDG W06760

02/02/15

The data package has the following issues:

- The non-detects values are reported as ND. Please report the non –detects as < the MDL and apply U flags.

Resolution: The report and EDD were re-issued with the Hanford qualifiers.

Lab Response:

Please correct the issue and resubmit the hard copy and electronic data package.

Provide a resolution to each issue noted on the report

Page **1** of **1**

Problem and Discrepancy Report

TAKN

SDG W06760

6/2/14

---

1. The data package has the following issues:

a) Please discuss in the narrative the positive acetone result in the blank.

Resolution: The narrative has been updated..

Lab Response:

Please correct the issues and resubmit the hard copy data package.

Provide a resolution to each issue noted on the report

Page **1** of **1**

SAMPLE ISSUE RESOLUTION

SIR NUM	SDR14-197
REV NUM	0
DATE INITIATED	5/29/2014

SAMPLE EVENT INFORMATION

SAF NUM(S)	F11-150
OPERABLE UNIT(S)	200-PW-1
PROJECT(S)	CPP 200 Area
SAMPLE EVENT TITLE(S)	200-PW-1 Monitoring
LABORATORY	TestAmerica Knoxville

SAMPLING INFORMATION

NUMBER OF SAMPLES	4
SAMPLE NUMBERS	B2WJB2, B2WJB3, B2WJB4, B2WJB5
SAMPLE MATRIX	GASEOUS
COLLECTION DATE	5/14/2014 - 5/15/2014
SDG NUM	W06760

ISSUE BACKGROUND

CLASS	Laboratory Issue
TYPE	Chain of Custody Issue
DESCRIPTION	Samples B2WJB2, B2WJB3, B2WJB4, B2WJB5; FedEx is not documented as having relinquished and the lab received in the incorrect section. Samples B2WJB2, B2WJB3, B2WJB4, B2WJB5; Lab did not print recipients name upon receipt Sample B2WJB5; Second relinquish date reads 5/5/2014. It should be 5/15/2014.

DISPOSITION

DESCRIPTION	PROPOSED DISPOSITION: Request the lab correct the COC, insert SIR into the data package and resubmit the hardcopy data package.
JUSTIFICATION	ACCEPTED DISPOSITION: SUBMITTED BY: Sara Champoux/CHPRC DATE: 5/29/14 ACCEPTED BY: DATE:

A-6003-640 (03/30)

PAGE 1 of 1

Detection Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: F11-150

TestAmerica Job ID: 140-1367-1
SDG: W06760

Client Sample ID: B2WJB2 — Lab Sample ID: 140-1367-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon tetrachloride	5130	D	58.3	10.9	ppb v/v	29.15		TO-14A Low	Total/NA
Chloroform	40.6	J D	58.3	10.9	ppb v/v	29.15		TO-14A Low	Total/NA
Trichloroethene	62.0	D	29.2	10.2	ppb v/v	29.15		TO-14A Low	Total/NA

Client Sample ID: B2WJB3 — Lab Sample ID: 140-1367-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon tetrachloride	1690	D	19.7	3.69	ppb v/v	9.83		TO-14A Low	Total/NA
Chloroform	68.2	D	19.7	3.69	ppb v/v	9.83		TO-14A Low	Total/NA
Tetrachloroethene	15.1	J D	19.7	3.93	ppb v/v	9.83		TO-14A Low	Total/NA
Trichloroethene	7.18	J D	9.83	3.44	ppb v/v	9.83		TO-14A Low	Total/NA

Client Sample ID: B2WJB4 — Lab Sample ID: 140-1367-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon tetrachloride	3150	D	24.7	4.63	ppb v/v	9.27		TO-14A Low	Total/NA
Chloroform	60.6	D	24.7	4.63	ppb v/v	9.27		TO-14A Low	Total/NA
Tetrachloroethene	6.85	J D	24.7	4.94	ppb v/v	9.27		TO-14A Low	Total/NA
Trichloroethene	7.43	J D	12.4	4.33	ppb v/v	9.27		TO-14A Low	Total/NA

Client Sample ID: B2WJB5 — Lab Sample ID: 140-1367-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon tetrachloride	144000	D	1590	298	ppb v/v	9132.65		TO-14A Low	Total/NA
Chloroform	776	J D	1590	298	ppb v/v	9132.65		TO-14A Low	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: F11-150

TestAmerica Job ID: 140-1367-1
SDG: W06760

Client Sample ID: B2WJB2

Lab Sample ID: 140-1367-1
Matrix: Air

Date Collected: 05/14/14 09:48
Date Received: 05/16/14 10:30
Sample Container: Summa Canister 6L

Method: TO-14A Low - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	58.3	U	292	58.3	ppb v/v			05/20/14 00:41	29.15
Acetone	394	U	1460	394	ppb v/v			05/20/14 00:41	29.15
Carbon tetrachloride	**5130**	**D**	58.3	10.9	ppb v/v			05/20/14 00:41	29.15
Chloroform	**40.6**	**J D**	58.3	10.9	ppb v/v			05/20/14 00:41	29.15
Methylene Chloride	94.7	U	146	94.7	ppb v/v			05/20/14 00:41	29.15
Tetrachloroethene	11.7	U	58.3	11.7	ppb v/v			05/20/14 00:41	29.15
Trichloroethene	**62.0**	**D**	29.2	10.2	ppb v/v			05/20/14 00:41	29.15

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*60 - 140*		*05/20/14 00:41*	*29.15*

Client Sample ID: B2WJB3

Lab Sample ID: 140-1367-2
Matrix: Air

Date Collected: 05/14/14 12:27
Date Received: 05/16/14 10:30
Sample Container: Summa Canister 6L

Method: TO-14A Low - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	19.7	U	98.3	19.7	ppb v/v			05/20/14 01:35	9.83
Acetone	133	U	492	133	ppb v/v			05/20/14 01:35	9.83
Carbon tetrachloride	**1690**	**D**	19.7	3.69	ppb v/v			05/20/14 01:35	9.83
Chloroform	**68.2**	**D**	19.7	3.69	ppb v/v			05/20/14 01:35	9.83
Methylene Chloride	31.9	U	49.2	31.9	ppb v/v			05/20/14 01:35	9.83
Tetrachloroethene	**15.1**	**J D**	19.7	3.93	ppb v/v			05/20/14 01:35	9.83
Trichloroethene	**7.18**	**J D**	9.83	3.44	ppb v/v			05/20/14 01:35	9.83

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*60 - 140*		*05/20/14 01:35*	*9.83*

Client Sample ID: B2WJB4

Lab Sample ID: 140-1367-3
Matrix: Air

Date Collected: 05/15/14 08:50
Date Received: 05/16/14 10:30
Sample Container: Summa Canister 6L

Method: TO-14A Low - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	24.7	U	124	24.7	ppb v/v			05/20/14 02:30	9.27
Acetone	167	U	618	167	ppb v/v			05/20/14 02:30	9.27
Carbon tetrachloride	**3150**	**D**	24.7	4.63	ppb v/v			05/20/14 02:30	9.27
Chloroform	**60.6**	**D**	24.7	4.63	ppb v/v			05/20/14 02:30	9.27
Methylene Chloride	40.2	U	61.8	40.2	ppb v/v			05/20/14 02:30	9.27
Tetrachloroethene	**6.85**	**J D**	24.7	4.94	ppb v/v			05/20/14 02:30	9.27
Trichloroethene	**7.43**	**J D**	12.4	4.33	ppb v/v			05/20/14 02:30	9.27

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*60 - 140*		*05/20/14 02:30*	*9.27*

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: F11-150

TestAmerica Job ID: 140-1367-1
SDG: W06760

Client Sample ID: B2WJB5
Date Collected: 05/15/14 10:20
Date Received: 05/16/14 10:30
Sample Container: Summa Canister 6L

Lab Sample ID: 140-1367-4
Matrix: Air

Method: TO-14A Low - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	1590	U	7940	1590	ppb v/v			05/20/14 03:24	9132.65
Acetone	10700	U	39700	10700	ppb v/v			05/20/14 03:24	9132.65
Carbon tetrachloride	**144000**	**D**	1590	298	ppb v/v			05/20/14 03:24	9132.65
Chloroform	**776**	**J D**	1590	298	ppb v/v			05/20/14 03:24	9132.65
Methylene Chloride	2580	U	3970	2580	ppb v/v			05/20/14 03:24	9132.65
Tetrachloroethene	318	U	1590	318	ppb v/v			05/20/14 03:24	9132.65
Trichloroethene	278	U	794	278	ppb v/v			05/20/14 03:24	9132.65

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*60 - 140*		*05/20/14 03:24*	*9132.65*

Surrogate Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: F11-150

TestAmerica Job ID: 140-1367-1
SDG: W06760

Method: TO-14A Low - Volatile Organic Compounds in Ambient Air

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

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	**Client Sample ID**	**BFB (60-140)**							
140-1367-1	B2WJB2	92							
140-1367-2	B2WJB3	92							
140-1367-3	B2WJB4	95							
140-1367-4	B2WJB5	97							
LCS 140-1230/1002	Lab Control Sample	107							
MB 140-1230/1004	Method Blank	100							

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: F11-150

TestAmerica Job ID: 140-1367-1
SDG: W06760

Method: TO-14A Low - Volatile Organic Compounds in Ambient Air

Lab Sample ID: MB 140-1230/1004
Matrix: Air
Analysis Batch: 1230

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	0.080	U	0.40	0.080	ppb v/v			05/19/14 14:00	1
Acetone	0.569	J	2.00	0.54	ppb v/v			05/19/14 14:00	1
Carbon tetrachloride	0.015	U	0.080	0.015	ppb v/v			05/19/14 14:00	1
Chloroform	0.015	U	0.080	0.015	ppb v/v			05/19/14 14:00	1
Methylene Chloride	0.13	U	0.20	0.13	ppb v/v			05/19/14 14:00	1
Tetrachloroethene	0.016	U	0.080	0.016	ppb v/v			05/19/14 14:00	1
Trichloroethene	0.014	U	0.040	0.014	ppb v/v			05/19/14 14:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*60 - 140*		*05/19/14 14:00*	*1*

Lab Sample ID: LCS 140-1230/1002
Matrix: Air
Analysis Batch: 1230

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Butanone (MEK)	2.00	2.372		ppb v/v		119	60 - 140
Acetone	6.00	4.929		ppb v/v		82	60 - 140
Carbon tetrachloride	2.00	2.017		ppb v/v		101	70 - 130
Chloroform	2.00	2.262		ppb v/v		113	70 - 130
Methylene Chloride	2.00	2.115		ppb v/v		106	70 - 130
Tetrachloroethene	2.00	2.060		ppb v/v		103	70 - 130
Trichloroethene	2.00	2.003		ppb v/v		100	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*60 - 140*

QC Association Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: F11-150

TestAmerica Job ID: 140-1367-1
SDG: W06760

Air - GC/MS VOA

Analysis Batch: 1230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-1367-1	B2WJB2	Total/NA	Air	TO-14A Low	
140-1367-2	B2WJB3	Total/NA	Air	TO-14A Low	
140-1367-3	B2WJB4	Total/NA	Air	TO-14A Low	
140-1367-4	B2WJB5	Total/NA	Air	TO-14A Low	
LCS 140-1230/1002	Lab Control Sample	Total/NA	Air	TO-14A Low	
MB 140-1230/1004	Method Blank	Total/NA	Air	TO-14A Low	

Client: CH2M Hill Plateau Remediation Company
Project/Site: F11-150

TestAmerica Job ID: 140-1367-1
SDG: W06760

Client Sample ID: B2WJB2 — Lab Sample ID: 140-1367-1

Date Collected: 05/14/14 09:48 — **Matrix: Air**
Date Received: 05/16/14 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-14A Low		29.15	20 mL	500 mL	1230	05/20/14 00:41	HMT	TAL KNX
	Instrument ID: MJ									

Client Sample ID: B2WJB3 — Lab Sample ID: 140-1367-2

Date Collected: 05/14/14 12:27 — **Matrix: Air**
Date Received: 05/16/14 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-14A Low		9.83	20 mL	500 mL	1230	05/20/14 01:35	HMT	TAL KNX
	Instrument ID: MJ									

Client Sample ID: B2WJB4 — Lab Sample ID: 140-1367-3

Date Collected: 05/15/14 08:50 — **Matrix: Air**
Date Received: 05/16/14 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-14A Low		9.27	15 mL	500 mL	1230	05/20/14 02:30	HMT	TAL KNX
	Instrument ID: MJ									

Client Sample ID: B2WJB5 — Lab Sample ID: 140-1367-4

Date Collected: 05/15/14 10:20 — **Matrix: Air**
Date Received: 05/16/14 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-14A Low		9132.65	230 mL	500 mL	1230	05/20/14 03:24	HMT	TAL KNX
	Instrument ID: MJ									

Client Sample ID: Lab Control Sample — Lab Sample ID: LCS 140-1230/1002

Date Collected: N/A — **Matrix: Air**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-14A Low		1	100 mL	100 mL	1230	05/19/14 11:42	HMT	TAL KNX
	Instrument ID: MJ									

Client Sample ID: Method Blank — Lab Sample ID: MB 140-1230/1004

Date Collected: N/A — **Matrix: Air**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-14A Low		1	500 mL	500 mL	1230	05/19/14 14:00	HMT	TAL KNX
	Instrument ID: MJ									

Laboratory References:

TAL KNX = TestAmerica Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Certification Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: F11-150

TestAmerica Job ID: 140-1367-1
SDG: W06760

Laboratory: TestAmerica Knoxville

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

Authority	Program	EPA Region	Certification ID	Expiration Date
	AFCEE		N/A	
Arkansas DEQ	State Program	6	88-0688	06-17-15
California	State Program	9	2423	06-30-16
Colorado	State Program	8	N/A	02-28-15
Connecticut	State Program	1	PH-0223	09-30-15
Florida	NELAP	4	E87177	06-30-15
Georgia	State Program	4	906	04-13-17
Hawaii	State Program	9	N/A	04-13-15
Iowa	State Program	7	375	08-01-14
Kentucky (DW)	State Program	4	90101	12-31-15
L-A-B	DoD ELAP		L2311	02-13-16
Louisiana	NELAP	6	LA110001	12-31-15
Maryland	State Program	3	277	03-31-16
Michigan	State Program	5	9933	04-13-17
Nevada	State Program	9	TN00009	07-31-15
New Jersey	NELAP	2	TN001	06-30-15
New York	NELAP	2	10781	03-31-15
North Carolina (DW)	State Program	4	21705	07-31-15
North Carolina (WW/SW)	State Program	4	64	12-31-15
Ohio VAP	State Program	5	CL0059	01-16-17
Oklahoma	State Program	6	9415	08-31-15
Pennsylvania	NELAP	3	68-00576	12-31-15
South Carolina	State Program	4	84001	06-30-15
Tennessee	State Program	4	2014	04-13-17
Texas	NELAP	6	T104704380-TX	08-31-15
USDA	Federal		P330-13-00260	08-29-16
Utah	NELAP	8	QUAN3	07-31-15
Virginia	State Program	3	165	06-30-15
Washington	State Program	10	C593	01-19-16
West Virginia (DW)	State Program	3	9955C	12-31-15
West Virginia DEP	State Program	3	345	04-30-15
Wisconsin	State Program	5	998044300	08-31-15

Method Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: F11-150

TestAmerica Job ID: 140-1367-1
SDG: W06760

Method	Method Description	Protocol	Laboratory
TO-14A Low	Volatile Organic Compounds in Ambient Air	EPA-21	TAL KNX

Protocol References:

EPA-21 = "Compendium Of Methods For The Determination Of Toxic Organic Compounds In Ambient Air", Second Edition, EPA/625/R-96/010B, January 1999

Laboratory References:

TAL KNX = TestAmerica Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: F11-150

TestAmerica Job ID: 140-1367-1
SDG: W06760

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
140-1367-1	B2WJB2	Air	05/14/14 09:48	05/16/14 10:30
140-1367-2	B2WJB3	Air	05/14/14 12:27	05/16/14 10:30
140-1367-3	B2WJB4	Air	05/15/14 08:50	05/16/14 10:30
140-1367-4	B2WJB5	Air	05/15/14 10:20	05/16/14 10:30

30lbs

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F11-150-001	PAGE 1 OF 1

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 9C	DATA TURNAROUND
J. Aguilar	EVANS, RT	373-7924	EVANS, RT	AIR QUALITY ☐	15 Days / 15 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
200-PW-1, Probe CPT-7A	200-PW-1 SVE Trailers Operational Monitoring - Gaseous		F11-150		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
FB-2	HNF-N-491-1/109	N/A	302858ES10	FEDERAL EXPRESS	**ORIGINAL**
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
TestAmerica Knoxville	SEE PTR		~~SEE PTR~~ 7988 7566 5150		

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 regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None
HOLDING TIME	30 Days
TYPE OF CONTAINER	Summa Canister
NO. OF CONTAINER(S)	1
VOLUME	6L
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B2WJB2	GASEOUS	5-14-14	0948	✓

RW 5/15/14

Received @ ambient
Custody seal intact
1 box
KW 5/16/14
fedex PO
trk# 7988 7566 5150
4 cans
1 gauge

140-1367 Chain of Custody

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J. Aguilar	5-14-14 1240	[signature]	5-14-14 1240
[signature]	5-14-14 1310	SSU#1	5-14-14 1310
SSU-1	MAY 15 2014 1230	L.D. Wall CHPRC [signature]	MAY 15 2014 1230
L.D. Wall CHPRC [signature]	MAY 15 2014 1400	FEDEX	

SPECIAL INSTRUCTIONS
** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. TRVL-14-076
(1) VOA - T0-14 {2-Butanone, Acetone, Carbon tetrachloride, Chloroform, Methylene chloride, Tetrachloroethene, Trichloroethene};

TRVL- 14- 076

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
	KW	5/16/H	1030
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

PRINTED ON 4/17/2014

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-150-002	PAGE 1 OF 1
COLLECTOR: J. Aguilar	COMPANY CONTACT: EVANS, RT	TELEPHONE NO.: 373-7924	PROJECT COORDINATOR: EVANS, RT	PRICE CODE: 9C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 200-PW-1, Probe CPT-1A	PROJECT DESIGNATION: 200-PW-1 SVE Trailers Operational Monitoring - Gaseous		SAF NO.: F11-150	AIR QUALITY ☐	
ICE CHEST NO.: FB-2	FIELD LOGBOOK NO.: HNF-N-491-1/109	ACTUAL SAMPLE DEPTH: N/A	COA: 302858ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	ORIGINAL
SHIPPED TO: TestAmerica Knoxville	OFFSITE PROPERTY NO.: SEE PTR		BILL OF LADING/AIR BILL NO.: ~~SEE PTR~~ 798875665150		

LW 5/15/14

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 regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

PRESERVATION	None
HOLDING TIME	30 Days
TYPE OF CONTAINER	Summa Canister
NO. OF CONTAINER(S)	1
VOLUME	6L
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SPECIAL HANDLING AND/OR STORAGE

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B2WJB3	GASEOUS	5-14-14	1227	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: J. Aguilar	DATE/TIME: 5-14-14 1240	RECEIVED BY/STORED IN: SSU#1 Fulton	DATE/TIME: 5-14-14 1240
RELINQUISHED BY/REMOVED FROM: Fulton	DATE/TIME: 5-14-14 1310	RECEIVED BY/STORED IN: SSU#1	DATE/TIME: 5-14-14 1310
RELINQUISHED BY/REMOVED FROM: SSU-1	DATE/TIME: MAY 15 2014 MAY 14 2014 1230	RECEIVED BY/STORED IN: L.D. Wall CHPRC	DATE/TIME: MAY 15 2014 MAY 14 2014 1230
RELINQUISHED BY/REMOVED FROM: L.D. Wall CHPRC	DATE/TIME: MAY 15 2014 MAY 14 2014 1400	RECEIVED BY/STORED IN: FEDEX	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
** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. TRVL-14-076
(1) VOA - T0-14 {2-Butanone, Acetone, Carbon tetrachloride, Chloroform, Methylene chloride, Tetrachloroethene, Trichloroethene};

TRVL-14-076

LABORATORY SECTION	RECEIVED BY: [signature]	TITLE	DATE/TIME: 5/16/14 1030
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

PRINTED ON 4/17/2014 A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F11-150-003	PAGE 1 OF 1

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 9C	DATA TURNAROUND
J. Aguilar	EVANS, RT	373-7924	EVANS, RT	AIR QUALITY ☐	15 Days / 15 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
200-PW-1, Well 299-W15-219U	200-PW-1 SVE Trailers Operational Monitoring - Gaseous		F11-150		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
FB-2	HNF-N-491-1/110	N/A	302858ES10	FEDERAL EXPRESS	**ORIGINAL**
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
TestAmerica Knoxville	SEE PTR		~~SEE PTR~~ 7988875665150		

AW 5/16/14

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 regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None
HOLDING TIME	30 Days
TYPE OF CONTAINER	Summa Canister
NO. OF CONTAINER(S)	1
VOLUME	6L
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B2WJB4	GASEOUS	5-15-14	0850	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J. Aguilar	5-15-14 1155	Clifton	5-15-14 1155
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Clifton	5-15-14 1400	FEDEX	
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
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. TRVL-14-076
(1) VOA - T0-14 {2-Butanone, Acetone, Carbon tetrachloride, Chloroform, Methylene chloride, Tetrachloroethene, Trichloroethene};

TRVL 14- 076

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME 5/16/14 1030
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

PRINTED ON 4/17/2014

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F11-150-004	PAGE 1 OF 1

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 9C	DATA TURNAROUND
J. Aguilar	EVANS, RT	373-7924	EVANS, RT	AIR QUALITY ☐	15 Days / 15 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
200-PW-1, Probe CPT-21A	200-PW-1 SVE Trailers Operational Monitoring - Gaseous		F11-150		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
FB-2	HNF-N-491-1/110	N/A	302858ES10	FEDERAL EXPRESS	**ORIGINAL**
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
TestAmerica Knoxville	SEE PTR		~~SEE PTR~~ 7988875665150 RW 5/15/14		

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 regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None
HOLDING TIME	30 Days
TYPE OF CONTAINER	Summa Canister
NO. OF CONTAINER(S)	1
VOLUME	6L
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B2WJB5	GASEOUS	5-15-14	1020	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J. Aguilar	5-15-14 1155	Guthon	5-15-14 1155
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Guthon	5-5-14 1400	FEDEX	
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
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. TRVL-14-076
(1) VOA - T0-14 {2-Butanone, Acetone, Carbon tetrachloride, Chloroform, Methylene chloride, Tetrachloroethene, Trichloroethene};

TRVL 14- 076

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME 5/16/14 1030
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

PRINTED ON 4/17/2014

A-6003-618 (REV 2)

30 lbs

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-150-001	PAGE 1 OF 1
COLLECTOR: J. Aguilar	COMPANY CONTACT: EVANS, RT	TELEPHONE NO.: 373-7924	PROJECT COORDINATOR: EVANS, RT	PRICE CODE: 9C	DATA TURNAROUND: 15 Days / 15 Days
SAMPLING LOCATION: 200-PW-1, Probe CPT-7A	PROJECT DESIGNATION: 200-PW-1 SVE Trailers Operational Monitoring - Gaseous		SAF NO.: F11-150	AIR QUALITY: ☐	
ICE CHEST NO.: FB-2	FIELD LOGBOOK NO.: HNF-N-491-1/109	ACTUAL SAMPLE DEPTH: N/A	COA: 302858ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	ORIGINAL
SHIPPED TO: TestAmerica Knoxville	OFFSITE PROPERTY NO.: SEE PTR		BILL OF LADING/AIR BILL NO.: ~~SEE PTR~~ 7988 7566 5150		

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 regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None
HOLDING TIME	30 Days
TYPE OF CONTAINER	Summa Canister
NO. OF CONTAINER(S)	1
VOLUME	6L
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B2WJB2	GASEOUS	5-14-14	0948	✓

LRO 5/15/14

Received @ ambient
Custody seal intact
1 box
KW 5/16/14
Fedex PO
trk# 7988 7566 5150
4 cans
1 gauge W06760

140-1367 Chain of Custody

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J. Aguilar	5-14-14 1240	[signature]	5-14-14 1240
[signature]	5-14-14 1310	SSU#1	5-14-14 1310
SSU-1	MAY 15 2014 1230	L.D. Wall CHPRC [signature]	MAY 15 2014 1230
L.D. Wall CHPRC [signature]	MAY 15 2014 1400	FEDEX	
		Ken Wilson	5/16/14 1030

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. TRVL-14-076
(1) VOA - T0-14 {2-Butanone, Acetone, Carbon tetrachloride, Chloroform, Methylene chloride, Tetrachloroethene, Trichloroethene};

TRVL-14-076

LABORATORY SECTION	RECEIVED BY: KW 5/16	TITLE	DATE/TIME: 5/16/14 1030 KW 6/3/14
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

PRINTED ON 4/17/2014

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-150-002	PAGE 1 OF 1
COLLECTOR: J. Aguilar	COMPANY CONTACT: EVANS, RT	TELEPHONE NO.: 373-7924	PROJECT COORDINATOR: EVANS, RT	PRICE CODE: 9C	DATA TURNAROUND
SAMPLING LOCATION: 200-PW-1, Probe CPT-1A	PROJECT DESIGNATION: 200-PW-1 SVE Trailers Operational Monitoring - Gaseous		SAF NO.: F11-150	AIR QUALITY ☐	15 Days / 15 Days
ICE CHEST NO.: FB-2	FIELD LOGBOOK NO.: HNF-N-491-1/109	ACTUAL SAMPLE DEPTH: N/A	COA: 302858ES10	METHOD OF SHIPMENT: FEDERAL EXPRESS	ORIGINAL
SHIPPED TO: TestAmerica Knoxville	OFFSITE PROPERTY NO.: SEE PTR		BILL OF LADING/AIR BILL NO.: ~~SEE PTR~~ 798875665150		

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 regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

PRESERVATION	None
HOLDING TIME	30 Days
TYPE OF CONTAINER	Summa Canister
NO. OF CONTAINER(S)	1
VOLUME	6L
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SPECIAL HANDLING AND/OR STORAGE

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B2WJB3	GASEOUS	5-14-14	1227	✓

W06760

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: J. Aguilar	DATE/TIME: 5-14-14 1240	RECEIVED BY/STORED IN: SSU#1 Fulton	DATE/TIME: 5-14-14 1240
RELINQUISHED BY/REMOVED FROM: Fulton	DATE/TIME: 5-14-14 1310	RECEIVED BY/STORED IN: SSU#1	DATE/TIME: 5-14-14 1310
RELINQUISHED BY/REMOVED FROM: SSU-1	DATE/TIME: MAY 15 2014 1230	RECEIVED BY/STORED IN: L.D. Wall CHPRC R.D. Wall	DATE/TIME: MAY 15 2014 1230
RELINQUISHED BY/REMOVED FROM: L.D. Wall CHPRC R.D. Wall	DATE/TIME: MAY 15 2014 1400	RECEIVED BY/STORED IN: FEDEX	DATE/TIME:
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN: Ken Wilson	DATE/TIME: 5/16/14 1030
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
** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. TRVL-14-076
(1) VOA - T0-14 {2-Butanone, Acetone, Carbon tetrachloride, Chloroform, Methylene chloride, Tetrachloroethene, Trichloroethene};

TRVL-14-076

LABORATORY SECTION	RECEIVED BY: [signature]	TITLE	DATE/TIME: 5/16/14 1030 KW 6/3/14
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

PRINTED ON 4/17/2014 A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-150-003	PAGE 1 OF 1
COLLECTOR J. Aguilar	COMPANY CONTACT EVANS, RT	TELEPHONE NO. 373-7924	PROJECT COORDINATOR EVANS, RT	PRICE CODE 9C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 200-PW-1, Well 299-W15-219U	PROJECT DESIGNATION 200-PW-1 SVE Trailers Operational Monitoring - Gaseous		SAF NO. F11-150		
ICE CHEST NO. FB-2	FIELD LOGBOOK NO. HNF-N-491-1/110	ACTUAL SAMPLE DEPTH N/A	COA 302858ES10	METHOD OF SHIPMENT FEDERAL EXPRESS	ORIGINAL
SHIPPED TO TestAmerica Knoxville	OFFSITE PROPERTY NO. SEE PTR		BILL OF LADING/AIR BILL NO. ~~SEE PTR~~ 798887566 5150 KW 5/16/14		

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS		
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	Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1	PRESERVATION	None
		HOLDING TIME	30 Days
		TYPE OF CONTAINER	Summa Canister
		NO. OF CONTAINER(S)	1
		VOLUME	6L
	SPECIAL HANDLING AND/OR STORAGE	SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B2WJB4	GASEOUS	5-15-14	0850	✓

W06760

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM J. Aguilar	DATE/TIME 5-15-14 1155	RECEIVED BY/STORED IN Clifton	DATE/TIME 5-15-14 1155
RELINQUISHED BY/REMOVED FROM Clifton	DATE/TIME 5-15-14 1400	RECEIVED BY/STORED IN FEDEX	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN Ken Wilson	DATE/TIME 5/16/14 1030
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

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. TRVL-14-076
(1) VOA - T0-14 {2-Butanone, Acetone, Carbon tetrachloride, Chloroform, Methylene chloride, Tetrachloroethene, Trichloroethene};

TRVL 14- 076

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME 5/16/14 1030	KW 6/3/14
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME	

PRINTED ON 4/17/2014

A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F11-150-004	PAGE 1 OF 1
COLLECTOR J. Aguilar	COMPANY CONTACT EVANS, RT	TELEPHONE NO. 373-7924	PROJECT COORDINATOR EVANS, RT	PRICE CODE 9C AIR QUALITY ☐	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 200-PW-1, Probe CPT-21A	PROJECT DESIGNATION 200-PW-1 SVE Trailers Operational Monitoring - Gaseous		SAF NO. F11-150		
ICE CHEST NO. FB-2	FIELD LOGBOOK NO. HNF-N-491-1/110	ACTUAL SAMPLE DEPTH N/A	COA 302858ES10	METHOD OF SHIPMENT FEDERAL EXPRESS	ORIGINAL
SHIPPED TO TestAmerica Knoxville	OFFSITE PROPERTY NO. SEE PTR		BILL OF LADING/AIR BILL NO. ~~SEE PTR~~ 798875665150 RW 5/15/14		

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS		
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	Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1	PRESERVATION	None
		HOLDING TIME	30 Days
		TYPE OF CONTAINER	Summa Canister
		NO. OF CONTAINER(S)	1
		VOLUME	6L
	SPECIAL HANDLING AND/OR STORAGE	SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B2WJB5	GASEOUS	5-15-14	1020	✓

W06760

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM J. Aguilar	DATE/TIME 5-15-14 1155	RECEIVED BY/STORED IN Fulton Wilson	DATE/TIME 5-15-14 1155
RELINQUISHED BY/REMOVED FROM Fulton Wilson	DATE/TIME 5-5-14 1400	RECEIVED BY/STORED IN FEDEX	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN Ken Wilson	DATE/TIME 5/16/14 1030
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

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. TRVL-14-076
(1) VOA - T0-14 {2-Butanone, Acetone, Carbon tetrachloride, Chloroform, Methylene chloride, Tetrachloroethene, Trichloroethene};

TRVL 14- 076

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME 5/16/14 1030	KW 6/3/14
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME	

PRINTED ON 4/17/2014

A-6003-618 (REV 2)

Login Sample Receipt Checklist

Client: CH2M Hill Plateau Remediation Company

Job Number: 140-1367-1
SDG Number: W06760

Login Number: 1367
List Number: 1
Creator: Wilson, Ken

List Source: TestAmerica Knoxville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	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.	N/A	
Cooler Temperature is acceptable.	N/A	
Cooler Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	Refer to Job Narrative for details.
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.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	N/A	This is checked in the lab.
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	N/A	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	