

July 28, 2016

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Richland

2800 George Washington Way

Richland, WA 99352

Tel: (509)375-3131

TestAmerica Job ID: 300-3432-1

TestAmerica Sample Delivery Group: WC1239

Client Project/Site: F16-002

For:

CH2M Hill Plateau Remediation Company

PO BOX 1600

Mail Stop R3-50

Richland, Washington 99352

Attn: CPP Sample Management



Authorized for release by:

7/28/2016 2:30:36 PM

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Designee for

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I certify that this Certificate of Analysis is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed in this package. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager, or a designee as verified by the attached signature.

The laboratory is accredited to EPA 7196A in Solid and Chemical Materials, per Washington State Department of Ecology this is approved for non-discharge water samples. The sample/ sample duplicate RPD agreement is not applicable if one or both results are less than five times the MDL.



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Qualifiers

General Chemistry

Qualifier	Qualifier Description
B	Estimated result. Result is less than the RL, but greater than MDL
D	The reported value is from a dilution.
U	Analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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)

Client: CH2M Hill Plateau Remediation Company
Project/Site: F16-002

TestAmerica Job ID: 300-3432-1
SDG: WC1239

Job ID: 300-3432-1

Laboratory: TestAmerica Richland

Narrative

**Job Narrative
300-3432-1**

Comments

This job is associated to SDG W07539 for Rad analysis.

Receipt

The samples were received on 7/7/2016 2:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 7.2° C.

General Chemistry

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

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COLLECTOR Frank Hill /CHPRC	COMPANY CONTACT TODAK, D	TELEPHONE NO. 376-6427	PROJECT COORDINATOR TODAK, D	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 100-K-105, Sample 1	PROJECT DESIGNATION FY15 100-K AB Waste Sites - Soil	FIELD LOGBOOK NO. HNF-N-527-34	SAF NO. F16-002	AIR QUALITY <input type="checkbox"/>	METHOD OF SHIPMENT GOVERNMENT VEHICLE
ICE CHEST NO. N/A	OFFSITE PROPERTY NO. N/A	ACTUAL SAMPLE DEPTH SURFACE	COA 303808	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO TestAmerica Incorporated, Richland			BILL OF LADING/AIR BILL NO. N/A		

TestAmerica Incorporated, Richland

MATRIX*	SPECIAL HANDLING AND/OR STORAGE	PRESERVATION	HOLDING TIME	TYPE OF CONTAINER	NO. OF CONTAINER(S)	VOLUME	SPECIAL ANALYSIS		
							7196, CR6, COMMON (Chlorine, Chromium)	GAMA, GS, COMMON	SRTOT, SEP, PR, EQP, GPC, COMMON
A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil SE=Sediment T=Tissue V=Vegetation W=Water WI=Water X=Other	*Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/DATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1. N/A	Cool <=6C	30 Days	G/P	1	60ml	1	1	1

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	✓	✓	✓
B35WN8	SOIL	JUL 07 2016	0803	✓	✓	✓

July 28, 2016

300-3432 COC



#3432
WE1239
Due: 07/22/16
Lk 7/8/16

CHAIN OF POSSESSION SIGN/ PRINT NAMES SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Frank Hill /CHPRC	JUL 07 2016 0855	Janelle Zunker /CHPRC	JUL 07 2016 0855	RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Janelle Zunker	JUL 07 2016 1400	J. Bock, TARL	JUL 07 2016 1400	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
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

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

July 28, 2016

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		FIG-002-077	PAGE 1 OF 1
COLLECTOR Frank Heit /CHPRC	COMPANY CONTACT TODAK, D	TELEPHONE NO. 376-6427	PROJECT COORDINATOR TODAK, D	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 100-K-105, Sample 1 DUP	PROJECT DESIGNATION F15 100-K-AB Waste Sites - Soil	FIELD LOGBOOK NO. HMF-N-507-34	ACTUAL SAMPLE DEPTH 1.0m SURFACE	SAF NO. F16-002	AIR QUALITY <input type="checkbox"/>
ICE CHEST NO. N/A	OFFSITE PROPERTY NO. N/A	BILL OF LADING/AIR BILL NO. N/A	COA 303808	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO TestAmerica Incorporated, Richland					

WCR 1239
#3432
DOE: 07/22/16

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS	PRESERVATION	HOLDING TIME	TYPE OF CONTAINER	NO. OF CONTAINER(S)	VOLUME	SAMPLE ANALYSIS
A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Segment T=Tissue V=Vegetation W=Water WT=Wipe X=Other	*Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/DATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1. N/A	Cool <=6C None None	30 Days 6 Months 6 Months	G/P G/P G/P	1 1 1	60ml 1L 60ml	7196, CR6- COMMON (Hexavalent Chromium)? GAMMA CS- COMMON SRTOT SEP PR EQUIP, SRC COMMON
SAMPLE NO. B35W/P0	MATRIX*	SAMPLE DATE	SAMPLE TIME				
		JUL 07 2016	0803				

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
Frank Heit	JUL 07 2016 0855	Janelle Zunker	JUL 07 2016 0855		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
Janelle Zunker	JUL 07 2016 1400	J. Bock, TARK	JUL 07 2016 1400		
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		
LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME		
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME		

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		PROJECT COORDINATOR	PRICE CODE	DATA TURNAROUND
COLLECTOR	COMPANY CONTACT	TODAK, D	8C	15 Days / 15 Days
Frank Hall AHPRC	TODAK, D	376-6427		
SAMPLING LOCATION	PROJECT DESIGNATION	SAF NO.	AIR QUALITY	<input type="checkbox"/>
100-K-105, Sample 2	FY15 100-K AB Waste Sites - Soil	F16-002		
ICE CHEST NO.	FIELD LOGBOOK NO.	COA	METHOD OF SHIPMENT	GOVERNMENT VEHICLE
N/A	HNF-A-507-34	303808		ORIGINAL
SHIPPED TO	OFFSITE PROPERTY NO.	BILL OF LADING/AIR BILL NO.		
TestAmerica Incorporated, Richland	N/A	N/A		

MATRIX*	SPECIAL HANDLING AND/OR STORAGE	PRESERVATION	HOLDING TIME	TYPE OF CONTAINER	NO. OF CONTAINER(S)			VOLUME	SAMPLE ANALYSIS
					1	1	1		
*Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/DATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1. N/A A=Air DL=Drum L=Liquid DS=Drum Solids L=Liquid O=Oil S=Soil SF=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	SOIL	Cool <=6C	30 Days	G/P	1	1	60ml	7196 C&B: COPMON (Hexavalent Chromium);	
B35WP2	SOIL	None	6 Months	G/P	1	1	1L	GARMA, GS: COPMON;	
		None	6 Months	G/P	1	1	60ml	SRTOT_SEP_PR ECP, GFC: COPMON;	

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	DATE/TIME	DATE/TIME	TITLE
B35WP2	SOIL	JUL 07 2016	0815			

July 28, 2016

WCS 1231
#3432
DUE: 07/22/16

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	SPECIAL INSTRUCTIONS
Frank Hall AHPRC	JUL 07 2016 0855	Janelle Zunker AHPRC	JUL 07 2016 0855	
Janelle Zunker AHPRC	JUL 07 2016 1400	J. Bock, TARR AHPRC	JUL 07 2016 1400	
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	
LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME	
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME	

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CH2M Hill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

COLLECTOR: Frank Heit / ACHPRC

COMPANY CONTACT: TODAK, D / 376-6427

PROJECT COORDINATOR: TODAK, D

PRICE CODE: 8C

DATA TURNAROUND: 15 Days / 15 Days

SAMPLING LOCATION: 100-K-105, Sample 2 B8

PROJECT DESIGNATION: FY15 100-K-AB Waste Sites - Soil

SAF NO.: F16-002

AIR QUALITY:

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

ICE CHEST NO.: N/A

FIELD LOGBOOK NO.: HNF-N 507-34

ACTUAL SAMPLE DEPTH: Surface

COA: 303808

SHIPMENT: ORIGINAL

SHIPPED TO: TestAmerica Incorporated, Richland

OFFSITE PROPERTY NO.: N/A

BILL OF LADING/AIR BILL NO.: N/A

F16-002-081

PAGE 1 OF 1

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	PRESERVATION			HOLDING TIME	TYPE OF CONTAINER	NO. OF CONTAINER(S)	VOLUME	SPECIAL HANDLING AND/OR STORAGE
				Cool <=6C	None	None					
B35WMP4	SOIL	JUL 07 2016	0715	✓	✓	✓					
MATRIX* POSSIBLE SAMPLE HAZARDS/ REMARKS A=Air DI=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 be regulated for transportation per 49 CFR/JATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1. N/A											
7196 CMC: COMMON Chromium? GAMMA CS: COMMON SRTOT_SEP_PR ECTE GRC: COMMON											

#3432
 W51231 4607539 7/6/16
 DUE: 07/22/16

July 28, 2016

CHAIN OF POSSESSION	SIGN/ PRINT NAMES	SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM Frank Heit	RECEIVED BY/STORED IN JUL 07 2016 0735 JUL 07 2016 0735	DATE/TIME JUL 07 2016 0735
RELINQUISHED BY/REMOVED FROM Lasty Heit	RECEIVED BY/STORED IN JUL 07 2016 1400 J. Bock, TARL	DATE/TIME JUL 07 2016 1400
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	DATE/TIME

LABORATORY SECTION RECEIVED BY

FINAL SAMPLE DISPOSITION DISPOSAL METHOD

TITLE

DATE/TIME

DISPOSED BY

DATE/TIME

PRINTED ON 5/26/2016

FSR ID = FSR32959

TRVL NUM = TRVL-16-159

A-6003-618 (REV 2)



CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		FI16-002-083	PAGE 1 OF 1
COLLECTOR <i>Frank Heft ICHPSC</i>	COMPANY CONTACT TODAK, D	TELEPHONE NO. 376-6427	PROJECT COORDINATOR TODAK, D	PRICE CODE 8C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 100-K-105, Sample 3	PROJECT DESIGNATION FY15 100-K AB Waste Sites - Soil	FIELD LOGBOOK NO. HNF-N-507-34	SAF NO. FI6-002	AIR QUALITY <input type="checkbox"/>	ORIGINAL
ICE CHEST NO. N/A	OFFSITE PROPERTY NO. N/A	ACTUAL SAMPLE DEPTH <i>5 SURFACES</i>	COA 303808	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO TestAmerica Incorporated, Richland			BILL OF LADING/AIR BILL NO. N/A		

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS	PRESERVATION			SPECIAL HANDLING AND/OR STORAGE		
		NO. OF CONTAINER(S)	VOLUME	NO. OF CONTAINER(S)	VOLUME	NO. OF CONTAINER(S)	VOLUME
A=Air D1=Drum Liquids DS=Drum Solids L=Liquid O=Oil SE=Sediment T=Issue V=Vegetation W=Water WI=Wipe X=Other	*Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/JATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1. N/A	1	60mL	1	1L	1	60mL
B35WMP6	SOIL	1	0.825	1	0.825	1	0.825

*WCU1239
#3432
DUE: 07/22/16
7/18/16*

July 28, 2016

CHAIN OF POSSESSION	SIGN/ PRINT NAMES	SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM <i>Frank Heft</i>	RECEIVED BY/STORED IN <i>Janelle Zinke</i>	
RELINQUISHED BY/REMOVED FROM <i>Janelle Zinke</i>	RECEIVED BY/STORED IN <i>J. Bock</i>	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	

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

PRINTED ON 5/26/2016 FSR ID = FSR32960 TRVL NUM = TRVL-16-159 A-6003-618 (REV 2)

July 28, 2016
Detection Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: F16-002

TestAmerica Job ID: 300-3432-1
SDG: WC1239

Client Sample ID: B35WN8

Lab Sample ID: 300-3432-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.23	B	2.0	0.15	mg/Kg	1		7196A	Total/NA

Client Sample ID: B35WP0

Lab Sample ID: 300-3432-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.29	B	2.0	0.15	mg/Kg	1		7196A	Total/NA

Client Sample ID: B35WP2

Lab Sample ID: 300-3432-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.23	B	2.0	0.15	mg/Kg	1		7196A	Total/NA

Client Sample ID: B35WP4

Lab Sample ID: 300-3432-4

No Detections.

Client Sample ID: B35WP6

Lab Sample ID: 300-3432-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.16	B	2.0	0.15	mg/Kg	1		7196A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Richland

July 28, 2016
Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: F16-002

TestAmerica Job ID: 300-3432-1
SDG: WC1239

Client Sample ID: B35WN8

Lab Sample ID: 300-3432-1

Date Collected: 07/07/16 08:03

Matrix: Soil

Date Received: 07/07/16 14:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.23	B	2.0	0.15	mg/Kg		07/14/16 12:08	07/15/16 09:00	1

Client Sample ID: B35WP0

Lab Sample ID: 300-3432-2

Date Collected: 07/07/16 08:03

Matrix: Soil

Date Received: 07/07/16 14:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.29	B	2.0	0.15	mg/Kg		07/14/16 12:08	07/15/16 09:00	1

Client Sample ID: B35WP2

Lab Sample ID: 300-3432-3

Date Collected: 07/07/16 08:15

Matrix: Soil

Date Received: 07/07/16 14:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.23	B	2.0	0.15	mg/Kg		07/14/16 12:08	07/15/16 09:00	1

Client Sample ID: B35WP4

Lab Sample ID: 300-3432-4

Date Collected: 07/07/16 07:15

Matrix: Soil

Date Received: 07/07/16 14:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.15	U	2.0	0.15	mg/Kg		07/14/16 12:08	07/15/16 09:00	1

Client Sample ID: B35WP6

Lab Sample ID: 300-3432-5

Date Collected: 07/07/16 08:25

Matrix: Soil

Date Received: 07/07/16 14:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.16	B	2.0	0.15	mg/Kg		07/14/16 12:08	07/15/16 09:00	1

Client: CH2M Hill Plateau Remediation Company
Project/Site: F16-002

TestAmerica Job ID: 300-3432-1
SDG: WC1239

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 300-4880/1-A
Matrix: Solid
Analysis Batch: 5081

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4880

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.15	U	2.0	0.15	mg/Kg		07/14/16 12:08	07/15/16 09:00	1

Lab Sample ID: LCS 300-4880/2-A
Matrix: Solid
Analysis Batch: 5081

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4880

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	20.0	18.91		mg/Kg		95	85 - 115

Lab Sample ID: 300-3432-1 MS
Matrix: Soil
Analysis Batch: 5081

Client Sample ID: B35WN8
Prep Type: Total/NA
Prep Batch: 4880

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	0.23	B	30.0	25.30		mg/Kg		84	75 - 125

Lab Sample ID: 300-3432-1 MSI
Matrix: Soil
Analysis Batch: 5081

Client Sample ID: B35WN8
Prep Type: Total/NA
Prep Batch: 4880

Analyte	Sample Result	Sample Qualifier	Spike Added	MSI Result	MSI Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	0.23	B	675	706.3	D	mg/Kg		105	

Lab Sample ID: 300-3432-1 DU
Matrix: Soil
Analysis Batch: 5081

Client Sample ID: B35WN8
Prep Type: Total/NA
Prep Batch: 4880

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cr (VI)	0.23	B	0.228	B	mg/Kg		0	35

July 28, 2016
QC Association Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: F16-002

TestAmerica Job ID: 300-3432-1
SDG: WC1239

General Chemistry

Prep Batch: 4880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-3432-1	B35WN8	Total/NA	Soil	3060A	
300-3432-2	B35WP0	Total/NA	Soil	3060A	
300-3432-3	B35WP2	Total/NA	Soil	3060A	
300-3432-4	B35WP4	Total/NA	Soil	3060A	
300-3432-5	B35WP6	Total/NA	Soil	3060A	
MB 300-4880/1-A	Method Blank	Total/NA	Solid	3060A	
LCS 300-4880/2-A	Lab Control Sample	Total/NA	Solid	3060A	
300-3432-1 MS	B35WN8	Total/NA	Soil	3060A	
300-3432-1 MSI	B35WN8	Total/NA	Soil	3060A	
300-3432-1 DU	B35WN8	Total/NA	Soil	3060A	

Analysis Batch: 5081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-3432-1	B35WN8	Total/NA	Soil	7196A	4880
300-3432-2	B35WP0	Total/NA	Soil	7196A	4880
300-3432-3	B35WP2	Total/NA	Soil	7196A	4880
300-3432-4	B35WP4	Total/NA	Soil	7196A	4880
300-3432-5	B35WP6	Total/NA	Soil	7196A	4880
MB 300-4880/1-A	Method Blank	Total/NA	Solid	7196A	4880
LCS 300-4880/2-A	Lab Control Sample	Total/NA	Solid	7196A	4880
300-3432-1 MS	B35WN8	Total/NA	Soil	7196A	4880
300-3432-1 MSI	B35WN8	Total/NA	Soil	7196A	4880
300-3432-1 DU	B35WN8	Total/NA	Soil	7196A	4880

Client: CH2M Hill Plateau Remediation Company
Project/Site: F16-002

TestAmerica Job ID: 300-3432-1
SDG: WC1239

Client Sample ID: B35WN8

Lab Sample ID: 300-3432-1

Date Collected: 07/07/16 08:03

Matrix: Soil

Date Received: 07/07/16 14:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.5083 g	100 mL	4880	07/14/16 12:08	HR	TAL RCH
Total/NA	Analysis	7196A		1			5081	07/15/16 09:00	HR	TAL RCH

Client Sample ID: B35WP0

Lab Sample ID: 300-3432-2

Date Collected: 07/07/16 08:03

Matrix: Soil

Date Received: 07/07/16 14:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.5043 g	100 mL	4880	07/14/16 12:08	HR	TAL RCH
Total/NA	Analysis	7196A		1			5081	07/15/16 09:00	HR	TAL RCH

Client Sample ID: B35WP2

Lab Sample ID: 300-3432-3

Date Collected: 07/07/16 08:15

Matrix: Soil

Date Received: 07/07/16 14:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.5078 g	100 mL	4880	07/14/16 12:08	HR	TAL RCH
Total/NA	Analysis	7196A		1			5081	07/15/16 09:00	HR	TAL RCH

Client Sample ID: B35WP4

Lab Sample ID: 300-3432-4

Date Collected: 07/07/16 07:15

Matrix: Soil

Date Received: 07/07/16 14:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.507 g	100 mL	4880	07/14/16 12:08	HR	TAL RCH
Total/NA	Analysis	7196A		1			5081	07/15/16 09:00	HR	TAL RCH

Client Sample ID: B35WP6

Lab Sample ID: 300-3432-5

Date Collected: 07/07/16 08:25

Matrix: Soil

Date Received: 07/07/16 14:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.4998 g	100 mL	4880	07/14/16 12:08	HR	TAL RCH
Total/NA	Analysis	7196A		1			5081	07/15/16 09:00	HR	TAL RCH

Client Sample ID: Method Blank

Lab Sample ID: MB 300-4880/1-A

Date Collected: N/A

Matrix: Solid

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	Prep	3060A			2.5 g	100 mL	4880	07/14/16 12:08	HR	TAL RCH
Total/NA	Analysis	7196A		1			5081	07/15/16 09:00	HR	TAL RCH

Client: CH2M Hill Plateau Remediation Company
Project/Site: F16-002

TestAmerica Job ID: 300-3432-1
SDG: WC1239

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 300-4880/2-A

Date Collected: N/A

Matrix: Solid

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	Prep	3060A			2.5 g	100 mL	4880	07/14/16 12:08	HR	TAL RCH
Total/NA	Analysis	7196A		1			5081	07/15/16 09:00	HR	TAL RCH

Client Sample ID: B35WN8

Lab Sample ID: 300-3432-1 MS

Date Collected: 07/07/16 08:03

Matrix: Soil

Date Received: 07/07/16 14:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.5007 g	100 mL	4880	07/14/16 12:08	HR	TAL RCH
Total/NA	Analysis	7196A		1			5081	07/15/16 09:00	HR	TAL RCH

Client Sample ID: B35WN8

Lab Sample ID: 300-3432-1 MSI

Date Collected: 07/07/16 08:03

Matrix: Soil

Date Received: 07/07/16 14:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.5039 g	100 mL	4880	07/14/16 12:08	HR	TAL RCH
Total/NA	Analysis	7196A		20			5081	07/15/16 09:00	HR	TAL RCH

Laboratory References:

TAL RCH = TestAmerica Richland, 2800 George Washington Way, Richland, WA 99352, TEL (509)375-3131

Client: CH2M Hill Plateau Remediation Company
Project/Site: F16-002

TestAmerica Job ID: 300-3432-1
SDG: WC1239

Method	Method Description	Protocol	Laboratory
7196A	Chromium, Hexavalent	SW846	TAL RCH

Protocol References:

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

Laboratory References:

TAL RCH = TestAmerica Richland, 2800 George Washington Way, Richland, WA 99352, TEL (509)375-3131



July 28, 2016
Sample Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: F16-002

TestAmerica Job ID: 300-3432-1
SDG: WC1239

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
300-3432-1	B35WN8	Soil	07/07/16 08:03	07/07/16 14:00
300-3432-2	B35WP0	Soil	07/07/16 08:03	07/07/16 14:00
300-3432-3	B35WP2	Soil	07/07/16 08:15	07/07/16 14:00
300-3432-4	B35WP4	Soil	07/07/16 07:15	07/07/16 14:00
300-3432-5	B35WP6	Soil	07/07/16 08:25	07/07/16 14:00

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Login Sample Receipt Checklist

Client: CH2M Hill Plateau Remediation Company

Job Number: 300-3432-1

SDG Number: WC1239

Login Number: 3432

List Number: 1

Creator: Anderson, Lori F

List Source: TestAmerica Richland

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.	N/A	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

