

Analytical Data Package Prepared For
CH2M Hill Plateau Remediation

Chemical Analysis By
TestAmerica Inc

2800 G. W. Way, Richland Wa, 99354, (509)-375-3131.

Assigned Laboratory Code: TARL

Data Package Contains 7 Pages

Report No.: 66234

Results in this report relate only to the sample(s) analyzed.

SDG No.	Order No.	Client Sample ID (List Order)	Lot-Sa No.	Work Order	Report DB ID	Batch No.
WC0087	F15-028	B30RP3	J5F090426-1	M61V51AA	M61V51AA	5160081
		B30RP3 DUP	J5F090426-1	M61V51AC	M61V51AC	5160081

Sample Date: 6/9/2015

Receipt Date: 6/9/2015

Data Deliverable: 6/28/2015

I certify that this Certificate of Analysis is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. 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 following signature.

Reviewed and Approved:

 Digitally signed by Whitney
Ritari
Date: 2015.06.28 20:03:10
-0700

Project Manager



Certificate of Analysis

CH2M Hill Plateau Remediation Company
 P.O. Box 1600
 Mail Stop – R3-60
 Richland, WA 99352

June 28, 2015

Attention: Scot Fitzgerald

SAF Number	:	F15-028
Date SDG Closed	:	June 9, 2015
Number of Samples	:	One (1)
Sample Type	:	Water
SDG Number	:	WC0087
Data Deliverable	:	30-Day / Summary

CASE NARRATIVE

I. Introduction

On June 9, 2015, six samples were received at TestAmerica (TARL). Upon receipt, the samples were assigned laboratory ID numbers to correspond with the CH2M specific IDs.

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

The requested analyses were:

Chemical Analysis
 Hexavalent Chromium by EPA method 7196A

IV. Quality Control

The analytical results for each analysis performed includes a minimum of one laboratory control sample (LCS), one method (reagent) blank, and one duplicate sample analysis. Any exceptions have been noted

CH2M Hill Plateau Remediation Company
June 28, 2015

in the "Comments" section.

QC and sample results are reported in the same units.

V. Comments

Chemical Analysis

Hexavalent Chromium by EPA method 7196A

No analytical or quality issues were noted. The sample results and associated batch QC results are within contractual requirements.

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 signatures on this report.

SAMPLE ISSUE RESOLUTION

SIR NUM	SIR15-427
REV NUM	0
DATE INITIATED	8/20/2015

SAMPLE EVENT INFORMATION

SAF NUM(S) F15-028

OPERABLE UNIT(S) 100-KR-2

PROJECT(S) 100-KE FSB

SAMPLE EVENT TITLE(S) Characterization Boreholes in UPR-100-K-1 and 1116-KE-3 Waste Sites

LABORATORY TestAmerica Incorporated, Richland

SAMPLING INFORMATION

NUMBER OF SAMPLES 1

SAMPLE NUMBERS B30RP3

SAMPLE MATRIX WATER

COLLECTION DATE 6/9/2015 - 6/9/2015

SDG NUM WC0087

ISSUE BACKGROUND

CLASS Chain of Custody Issue (Field)

TYPE Incorrect Relinquish/Receipt Date/Time

DESCRIPTION COC F15-028-004, SAMPLE B30RP3.
INCORRECT RELINQUISHED/RECEIVED DATE.

DISPOSITION

DESCRIPTION DOCUMENT AND CLOSE

JUSTIFICATION DOCUMENT AND CLOSE

SUBMITTED BY: Bruce Hey DATE: 08/19/2015
ACCEPTED BY: Kirsten Killand DATE: 08/20/2015

CH2MHill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F15-028-004	PAGE 1 OF 1
COLLECTOR FLOYD	COMPANY CONTACT SUMNER, LC	TELEPHONE NO. 376-3922	PROJECT COORDINATOR TODAK, D	PRICE CODE 7H	DATA TURNAROUND 30 Days / 30 Days
SAMPLING LOCATION C8796, Interval 24 ²⁵ Reqs <i>Just below</i>	PROJECT DESIGNATION 100-KE Characterization Boreholes - Water	FIELD LOGBOOK NO. <i>HV-E-N-445-3</i>	SAF NO. F15-028	AIR QUALITY <input type="checkbox"/>	METHOD OF SHIPMENT GOVERNMENT VEHICLE
ICE CHEST NO. <i>N/A</i>	OFFSITE PROPERTY NO. <i>N/A</i>	ACTUAL SAMPLE DEPTH <i>70.06</i>	COA 303581	BILL OF LADING/AIR BILL NO. <i>N/A</i>	
SHIPPED TO TestAmerica Incorporated, Richland		TRVL-15-037			

MATRIX*	PRESERVATION	HOLDING TIME	TYPE OF CONTAINER	NO. OF CONTAINER(S)	VOLUME	SPECIAL HANDLING AND/OR STORAGE	SAMPLE DATE	SAMPLE TIME	75% CRG. COMMON
MATRIX* A=Air DL=Drum L=Liquid DS=Drum Solids L=Liquid O=Oil 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/LATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.	24 Hours	2G	1	60mL	<i>Set below</i>	<i>6-9-15</i>	<i>1:53</i>	<input checked="" type="checkbox"/>
B30RP3									

M61V5

J5F090426
SDS# W00087



CHAIN OF POSSESSION	SIGN/ PRINT NAMES	SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM D.L. Floyd/CHPRC	RECEIVED BY/STORED IN K.C. Paterson/CHPRC	TRVL-15-037
DATE/TIME MAY 09 2015 1300	DATE/TIME MAY 09 2015 1300	
RELINQUISHED BY/REMOVED FROM K.C. Paterson/CHPRC	RECEIVED BY/STORED IN J. F. Friesz, MARD	
DATE/TIME JUN 09 2015 1355	DATE/TIME JUN 09 2015 1355	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
DATE/TIME	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
DATE/TIME	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
DATE/TIME	DATE/TIME	

TRVL - 15-037

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

TestAmerica

Sample Check-in List

Date/Time Received: 6/9/15 1355 Container GM Screen Result: (Airlock) 40 cpm Initials [J]
Sample GM Screen Result (Sample Receiving) 0 cpm Initials [J]

Client: FLH SDG #: WC0087 SAF #: F15-028 NA []

Lot Number: J5F090 J5F090426

Chain of Custody # F15-028-004

Shipping Container ID or Air Bill Number : NA [J]

Samples received inside shipping container/cooler/box Yes [J] Continue with 1 through 4. Initial appropriate response. No [] Go to 5, add comment to #16.

- 1. Custody Seals on shipping container intact? Yes [] No [] No Custody Seal [J]
2. Custody Seals dated and signed? Yes [] No [] No Custody Seal [J]
3. Cooler temperature: 3.2 AIR ICE NA []
4. Vermiculite/packing materials is NA [J] Wet [] Dry []

Item 5 through 16 for samples. Initial appropriate response.

- 5. Chain of Custody record present? Yes [J] No []
6. Number of samples received (Each sample may contain multiple bottles): 1
7. Containers received: 1x60ml bag

- 8. Sample holding times exceeded? NA [] Yes [] No [J]
9. Samples have: tape hazard labels J custody seals J appropriate sample labels
10. Matrix: A (FLT, Wipe, Solid, Soil) J I (Water) S (Air, Niosh 7400) T (Biological, Ni-63)

- 11. Samples: J are in good condition are leaking are broken
J have air bubbles (Only for samples requiring no head space) Other

- 12. Sample pH appropriate for analysis requested Yes [J] No [] NA []
(If acidification is necessary go to pH area & document sample ID, initial pH, amount of HNO3 added and pH after addition on table)

- 13. Were any anomalies identified in sample receipt? Yes [] No [J]

- 14. Description of anomalies (include sample numbers): NA [J]

- 15. Sample Location, Sample Collector Listed on COC? * Yes [] No [J]
*For documentation only. No corrective action needed.

- 16. Additional Information: N/A

[] Client/Courier denied temperature check. [J] Client/Courier unpack cooler.

Sample Check-in List completed by Sample Custodian:
Signature: [Signature] Date: 6/9/15

Client Notification needed? Yes [] No [J] Date:
By:
Person contacted:

[J] No action necessary; process as is

Project Manager [Signature] Date 6/10/15

Sample Results Summary

Date: 28-Jun-15

TestAmerica Inc TARL

Ordered by Method, Batch No., Client Sample ID.

Report No. : 66234

SDG No: WC0087

Batch Client ID	Date Sampled	Work Order No.	Parameter	Result	Qual	Units	MDL	RL	Date Analyzed	Dil Fct
5160081 7196_CR6 ,WATER										
B30RP3	06/09/15 11:53	M61V51AA	HEXCHROME	<0.00150	U	mg/L	0.0015	0.004	06/09/15 18:00	1

No. of Results: 1

QC Results Summary

Date: 28-Jun-15

TestAmerica Inc TARL

Ordered by Method, Batch No, QC Type,.

Report No. : 66234

SDG No.: WC0087

Batch	Work Work No.	Parameter	Result	Qual	Units	LCS Recovery	MDL	RL	RPD	Dil Fct
7196_CR6										
5160081 DUP, B30RP3 DUP	M61V51AC	HEXCHROME	<0.00150 U		mg/L		0.0015	0.004	-66.7	1
5160081 MS, B31BT9	M61VH1AC	HEXCHROME	0.0512		mg/L	102%	0.0015	0.004		1
5160081 BLANK,	M610F1AA	HEXCHROME	<0.00150 U		mg/L		0.0015	0.004		1
5160081 LCS,	M610F1AC	HEXCHROME	0.263		mg/L	105%	0.0015	0.004		1
No. of Results: 4										