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 -07'00'

Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

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

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.

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 AIR QUALITY ☐	DATA TURNAROUND 30 Days / 30 Days
SAMPLING LOCATION C8796, Interval ~~21~~ 25 REQ Jlf 6/4/15	PROJECT DESIGNATION 100-KE Characterization Boreholes - Water		SAF NO. F15-028		
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-645-3	ACTUAL SAMPLE DEPTH 70.06 FT	COA 303581	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO TestAmerica Incorporated, Richland	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

4 of 7

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.

SPECIAL HANDLING AND/OR STORAGE
~~RADIOACTIVE TIE TO: B30RP2~~
Jlf 6/4/15

PRESERVATION	Cool <=6C
HOLDING TIME	24 Hours
TYPE OF CONTAINER	aG
NO. OF CONTAINER(S)	1
VOLUME	60mL
SAMPLE ANALYSIS	7196_CR6: COMMON;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B30RP3	WATER	6-9-15	1153	✓

June 28 2015

J5F090426

M61V5

J5F090426
SDG# WC0087

Page 4 of 7

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

TRVL -15-037

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

PRINTED ON 3/17/2015

A-6003-618 (REV 2)

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Sample Check-in List

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

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

Lot Number: ~~JSF090~~ JF 6/9/15 JSF090426

Chain of Custody # F15-028-004

Shipping Container ID or Air Bill Number : _____ NA [JF]

Samples received inside shipping container/cooler/box — Yes [JF] 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 [JF]
2. Custody Seals dated and signed? Yes [ ] No [ ] No Custody Seal [JF]
3. Cooler temperature: 3.2 on ICE NA [ ]
4. Vermiculite/packing materials is NA [JF] Wet [ ] Dry [ ]

Item 5 through 16 for samples. Initial appropriate response.

5. Chain of Custody record present? Yes [JF] No [ ]
6. Number of samples received (Each sample may contain multiple bottles): 1
7. Containers received: 1x60mleg
8. Sample holding times exceeded? NA [ ] Yes [ ] No [JF]
9. Samples have: ____ tape ____ hazard labels JF custody seals JF appropriate sample labels
10. Matrix: ____ A (FLT, Wipe, Solid, Soil) JF I (Water) ____ S (Air, Niosh 7400) ____ T (Biological, Ni-63)
11. Samples:
JF are in good condition ____ are leaking ____ are broken
____ have air bubbles (Only for samples requiring no head space) ____ Other ____
12. Sample pH appropriate for analysis requested Yes [JF] No [ ] NA [ ]
(If acidification is necessary go to pH area & document sample ID, initial pH, amount of HNO_3 added and pH after addition on table)
13. Were any anomalies identified in sample receipt? Yes [ ] No [JF]
14. Description of anomalies (include sample numbers): NA [JF] _____
15. Sample Location, Sample Collector Listed on COC? * Yes [ ] No [JF]
*For documentation only. No corrective action needed.
16. Additional Information: N/A

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

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

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

JF No action necessary; process as is

Project Manager Stan Cygan 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

U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

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

U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.