

April 14, 2015

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: TARK

Data Package Contains 7 Pages

Report No.: 65352

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.
WC0052	F15-033	B30T28	J5D130419-1	M6K0A1AA	M6K0A1AA	5104024
		B30T28 DUP	J5D130419-1	M6K0A1AD	M6K0A1AD	5104024

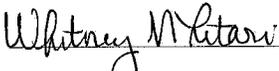
Sample Date: 4/13/2015

Receipt Date: 4/13/2015

Data Deliverable: 4/14/2015

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:

  
Project Manager

April 14, 2015

**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

April 14, 2015

Attention: Scot Fitzgerald

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SAF Number	:	F15-033
Date SDG Closed	:	April 14, 2015
Number of Samples	:	One (1)
Sample Type	:	Water
SDG Number	:	WC0052
Data Deliverable	:	24HR / Summary

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### CASE NARRATIVE

#### **I. Introduction**

April 13, 2015, one sample was received at TestAmerica (TARL). Upon receipt, the sample was assigned laboratory ID numbers to correspond with the CH2M specific IDs.

#### **II. Sample Receipt**

The sample was 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**

Anions, Ion Chromatography by EPA method 300.0

#### **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

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in the "Comments" section.

QC and sample results are reported in the same units.

**V. Comments**  
**Chemical Analysis**

Anions, Ion Chromatography by EPA method 300.0

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.

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Sample Results Summary

Date: 14-Apr-15

TestAmerica Inc TARL

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

Report No. : 65352

SDG No: WC0052

Batch Client ID	Date Sampled	Work Order No.	Parameter	Result	Qual	Units	MDL	RL	Date Analyzed	Dil Fct
5104024	300.0	ANIONS_IC	WATER							
B30T28	04/13/15 13:20	M6K0A1AA	Nitrate as N	26.3	D	mg/L	0.14	0.28	04/14/15 12:34	10

No. of Results: 1

TestAmerica Inc D Qual - The reported value is from a dilution

rptTALRchSample  
SumC2 V5.3.6.8  
A2002

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QC Results Summary

Date: 14-Apr-15

TestAmerica Inc TARL

Ordered by Method, Batch No, QC Type,.

Report No. : 65352

SDG No.: WC0052

Batch	Work Work No.	Parameter	Result	Qual	Units	LCS Recovery	MDL	RL	RPD	Dil Fct
<b>300.0_ANIONS_IC</b>										
5104024 MS, B30T28	M6K0A1AC	Nitrate as N	2.43		mg/L	100%	0.014	0.028		1
5104024 DUP, B30T28 DUP	M6K0A1AD	Nitrate as N	26.3 D		mg/L		0.14	0.28	0.0	10
5104024 BLANK,	M6K3L1AA	Nitrate as N	<0.0140 U		mg/L		0.014	0.028		1
5104024 LCS,	M6K3L1AC	Nitrate as N	0.541		mg/L	96%	0.014	0.028		1
No. of Results: 4										

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CH2MHill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F15-033-002	PAGE 1 OF 1
COLLECTOR <i>J. Aguilera</i>	COMPANY CONTACT SUMNER, LC	TELEPHONE NO. 376-3922	PROJECT COORDINATOR TODAK, D	PRICE CODE C02	DATA TURNAROUND 24 Hours / 24 Hours
SAMPLING LOCATION C9447, I-001	PROJECT DESIGNATION 200 East M-24 Wells C9447 & C9448 Sampling and Analysis - Water	SAF NO. F15-033	COA 302898	AIR QUALITY <input type="checkbox"/>	METHOD OF SHIPMENT GOVERNMENT VEHICLE
ICE CHEST NO.	FIELD LOGBOOK NO. <i>HNF-N-645-2/pg 21</i>	ACTUAL SAMPLE DEPTH <i>365'.5"</i>	BILL OF LADING/AIR BILL NO.	<b>ORIGINAL</b>	
SHIPPED TO TestAmerica Incorporated, Richland					

MATRIX* A=Air DL=Drum L=Liquid 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.	PRESERVATION Cool <=6C	HOLDING TIME 48 Hours	TYPE OF CONTAINER P	NO. OF CONTAINER(S) 1	VOLUME 500ml	SAMPLE ANALYSIS 300.0 ANIONS, IC: COMMON {Nitrogen in Nitrate};
SPECIAL HANDLING AND/OR STORAGE N/A							
SAMPLE NO. B30T28	MATRIX* WATER	SAMPLE DATE <i>4-13-15</i>	SAMPLE TIME <i>1320</i>	<p><i>SSD130419</i></p> <p><i>WCO052</i></p> <p><i>Due 4-14-15</i></p> <p><i>MLKOA</i></p>			



CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM <i>J. Aguilera</i>	DATE/TIME <i>4-13-15 1400</i>	RECEIVED BY/STORED IN C.C. HOFFMAN/CHPRC	DATE/TIME <i>4-13-15 1400</i>	TRVL-15-052; ** Nitrate results are needed within 24 hours to accommodate screen setting. All such requests will be on a separate chain of custody and be assigned a unique sample number.	
RELINQUISHED BY/REMOVED FROM <i>J. Aguilera</i>	DATE/TIME <i>APR 13 2015 1515</i>	RECEIVED BY/STORED IN J. Friesz, TARI	DATE/TIME <i>APR 13 2015</i>	TRVL-15-052	
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	

Date/Time Received: 4-13-15/1515 Container GM Screen Result: (Airlock) 40 cpm Initials B  
Sample GM Screen Result (Sample Receiving) 0 cpm Initials B

Client: FLH SDG #: WC0052 SAF #: F15-033 NA [ ]

Lot Number: J55D130419

Chain of Custody # F13-033-002

Shipping Container ID or Air Bill Number : \_\_\_\_\_ NA B ]

Samples received inside shipping container/cooler/box Yes B ] 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 B ]
- 2. Custody Seals dated and signed? Yes [ ] No [ ] No Custody Seal B ]
- 3. Cooler temperature: 4.6 °C Ice NA [ ]
- 4. Vermiculite/packing materials is NA B ] Wet [ ] Dry [ ]

Item 5 through 16 for samples. Initial appropriate response.

- 5. Chain of Custody record present? Yes B ] No [ ]
- 6. Number of samples received (Each sample may contain multiple bottles): 1
- 7. Containers received: 1 x 500ml

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

11. Samples: B 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 B ] No [ ] NA [ ]  
(If acidification is necessary go to pH area & document sample ID, initial pH, amount of HNO<sub>3</sub> added and pH after addition on table)
- 13. Were any anomalies identified in sample receipt? Yes [ ] No B ]
- 14. Description of anomalies (include sample numbers): NA B ] \_\_\_\_\_

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

16. Additional Information: N/A

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

Sample Check-in List completed by Sample Custodian:

Signature: [Signature] Date: 4-13-15

Client Notification needed? Yes [ ] No NA Date: \_\_\_\_\_  
By: \_\_\_\_\_  
Person contacted: \_\_\_\_\_

NA No action necessary; process as is

Project Manager [Signature] Date 4/14/15