



## Certificate of Analysis

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

October 21, 2013

Attention: Scot Fitzgerald

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SAF Number	:	W13-007
Date SDG Closed	:	October 3, 2013
Number of Samples	:	Two (2)
Sample Type	:	Water
SDG Number	:	W06578A
Data Deliverable	:	15-Day / Summary

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### CASE NARRATIVE

#### I. Introduction

On October 3, 2013 a request for a data recheck (Order Number: 131003TARL-R8024) of two water samples was received at TestAmerica. Upon receipt, the samples were assigned the following laboratory ID number to correspond with the CH2M specific IDs:

<u>CH2M ID#</u>	<u>TARL ID#</u>	<u>MATRIX</u>	<u>DATE OF RECEIPT</u>
B2PFD0	M16KN (M1CJ2)	WATER	10/03/13
B2PFD1	M16K1 (M1CJ7)	WATER	10/03/13

#### 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.

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The requested analysis recheck was:

**Chemical Analysis**  
Total Coliform by method 9223

**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**

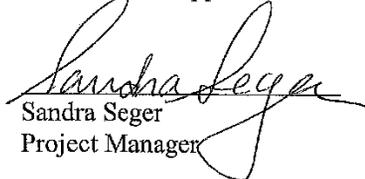
**Chemical Analysis**  
Total Coliform by method 9223

The data was reviewed for typographical, calculation and reporting errors. Sample B2PFD0 was initially read as 23.8 MPN. Re-evaluation indicates the MPN is 26.9. The relative percent difference between the sample and duplicate was originally reported as unacceptable at 43%. The relative percent difference is still not acceptable at 31%. No other data discrepancies or anomalies were found regarding samples B2PFD0 and B2PFD1, as reported in the original report sent on August 23, 2013 and the amended report sent on September 17, 2013.

The September 17, 2013 amended report will be revised to reflect the correction for sample B2PFD0.

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:

  
Sandra Seger  
Project Manager

OCTOBER 21, 2013

RECHECK, RECOUNT, OR REANALYSIS ORDER

10/03/2013

Order Number: 131003TARL-R8024

TestAmerica Incorporated, Richland  
2800 George Washington Way  
Richland, WA 99354

Sample Delivery Group:W06578

Sample(s):

Method Name:9223\_COLIFORM

Lab Sample ID	RDR Action Start Date	Constituent	Action	TAT (Hardcopy/EDD)
9M1CJ210	10/3/2013 11:16:36 AM	Coliform Bacteria	RECHECK	15 Days / 15 Days
Special Instructions: Results are off trend by an order of magnitude. SLF 10/03/2013				

Lab Sample ID	RDR Action Start Date	Constituent	Action	TAT (Hardcopy/EDD)
9M1CJ710	10/3/2013 11:16:36 AM	Coliform Bacteria	RECHECK	15 Days / 15 Days
Special Instructions: Results are off trend by an order of magnitude. SLF 10/03/2013				

W06578A  
Due 10/18/13

Deliver Report Results to:CHPRC  
P.O. Box 1600  
Richland, WA 99352  
C/O Mr.Scot Fitzgerald

J3J040427  
Due 10-18-13



**Seger, Sandra**

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**From:** Fitzgerald, Scot L [Scot\_L\_Fitzgerald@rl.gov]  
**Sent:** Thursday, October 03, 2013 11:17 AM  
**To:** Seger, Sandra  
**Cc:** Ayres, Doris E; Douglas, James G (Jim); Evans, Robert T; Faught, William R; Fitzgerald, Scot L; Todak, David; Trent, Stephen J; Waters-husted, Karen S  
**Subject:** Request for Recheck, or Reanalysis Order / R8024 SAF W13-007  
**Attachments:** RDR8024\_LabOrder.rtf  
See Attachment

10/3/2013

CH2M HILL Plateau Remediation Company		<b>CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST</b>				C.O.C.# <b>W13-007-078</b>	
Collector <b>SCOTT KING</b>		Contact/Requester <b>Karen Waters-Husted</b>	Telephone No. <b>509-376-4650</b>		Page 1 of 1		
SAF No. <b>W13-007</b>		Sampling Origin <b>Hamford Site</b>	Purchase Order/Charge Code <b>300071ES20</b>				
Project Title <b>RCRA, JULY 2013</b>		Logbook No. <b>HNF-N-506 55/64</b>	Ice Chest No. <b>N/A</b>				
Shipped To (Lab) <b>TestAmerica Incorporated, Richland</b>		Method of Shipment <b>GOVERNMENT VEHICLE</b>	Bill of Lading/Air Bill No. <b>N/A</b>				
Protocol <b>RCRA</b>		Priority: <b>30 Days</b>	Offsite Property No. <b>N/A</b>				
<p><b>POSSIBLE SAMPLE HAZARDS/REMARKS</b></p> <p><small>see 49 CFR 191.103 - Contaminants: Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1995)</small></p>		<p><b>SPECIAL INSTRUCTIONS</b></p> <p>Site Wide Generator Knowledge Information Form applies. The CACN for all analytical work at WSCF is 401647.</p>		<p>Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>			
Sample No.	Filter	Date	Time	No/Type Container	Sample Analysis	Hold Time	Preservative
B2PF00	N	JUL 11 2013	6:24	1x500-mL P	9223_COLIFORM: COMMON	6 Hours	Na2S2O3/Cool-4C
B2PF00	N	W ↓		1x20-mL P	Activity Scan	6 Months	None



58110426  
W00518

Relinquished By <b>SCOTT KING</b>	Print <i>[Signature]</i>	Sign	Date/Time <b>JUL 11 2013 1030</b>	Received By <b>DAVID HUSTED</b>	Print <i>[Signature]</i>	Sign	Date/Time <b>JUL 11 2013 1030</b>	Matrix *
Relinquished By <b>DW BARNARD</b>	Print <i>[Signature]</i>	Sign	Date/Time <b>7-11-13 1110</b>	Received By <b>J. Book</b>	Print <i>[Signature]</i>	Sign	Date/Time <b>7-11-13 1110</b>	S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air DS = Drum Solids DL = Drum Liquids T = Tissue WI = Wire L = Liquid V = Vegetation X = Other
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	
FINAL SAMPLE DISPOSITION				Disposal Method (e.g., Return to customer, per lab procedure, used in process)				Date/Time

A-6004-842 (REV 2)

PRINTED ON 5/29/2013

CH2M HILL Plateau Remediation Company		<b>CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST</b>				C.O.C.# <b>W13-007-079</b>
Collector	SCOTT KING	Contact/Requester	Karen Waters-Husted		Telephone No.	509-376-4650
SAF No.	W13-007	Sampling Origin	Hanford Site		Purchase Order/Charge Code	300071ES20
Project Title	RCRA, JULY 2013	Logbook No.	HNF-N-506 <b>55169</b>		Ice Chest No.	N/A
Shipped To (Lab)	TestAmerica Incorporated, Richland	Method of Shipment	GOVERNMENT VEHICLE		Bill of Lading/Air Bill No.	N/A
Protocol	RCRA	Priority:	30 Days		Offsite Property No.	N/A
<b>POSSIBLE SAMPLE HAZARDS/REMARKS</b>		<b>SPECIAL INSTRUCTIONS</b>		Hold Time	Total Activity Exemption: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
49 CFR Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5600.5 (1990/1995)		Site Wide Generator Knowledge Information Form applies. The CACN for all analytical work at WSCF is 401647.				
Sample No.	Filter	Date	Time	No/Type Container	Sample Analysis	Holding Time
B2PFD1	N	W 11 2013	0824	1x500-ml P	9223_COLLIFORM: COMMON	6 Hours
B2PFD1	N	W 11 2013	↓	1x20-ml P	Activity Scan	6 Months

*55110249  
W006584*

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
SCOTT KING	<i>Scott King</i>		JUL 11 2013 1030	BROTHERMAN	<i>Brotherman</i>		JUL 11 2013
Relinquished By			Date/Time	Received By			Date/Time
<i>Scott King</i>			7-11-13 1110	<i>Scott King</i>			7-11-13 1110
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Matrix *							
S	Soil	DS	Drum Solids	S	Soil	DS	Drum Solids
SE	Sediment	DL	Drum Liquids	SE	Sediment	DL	Drum Liquids
SO	Solid	T	Tissue	SO	Solid	T	Tissue
SL	Sludge	WI	Wipe	SL	Sludge	WI	Wipe
W	Water	L	Liquid	W	Water	L	Liquid
O	Oil	V	Vegetation	O	Oil	V	Vegetation
A	Air	X	Other	A	Air	X	Other
Disposal Method (e.g., Return to customer, per lab procedure, used in process)				Disposed By			

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 7-11-13 / 1110 Container GM Screen Result: (Airlock) 40 cpm Initials [B]
Sample GM Screen Result (Sample Receiving) 20 cpm Initials [B]

Client: Pkw SDG #: W06578 SAF #: W13-007 NA [ ]

Lot Number: J36110426

Chain of Custody # W13-007-078; 079; 080; 081; 082

Shipping Container ID or Air Bill Number: Hand del. NA [SKS]

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: 4.0 c on ice NA [ ]
4. Vermiculite/packing materials is NA [ ] Wet [ ] Dry [ ]

Item 5 through 16 for samples. Initial appropriate response.

- 5. Chain of Custody record present? Yes [SKS] No [ ]
6. Number of samples received (Each sample may contain multiple bottles): 5
7. Containers received: 5x 20; 5x 500 mlp

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

11. Samples: 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 [SKS] No [ ] NA [ ] SKS 7-15-13
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. [SKS] Client/Courier unpack cooler.

Sample Check-in List completed by Sample Custodian:
Signature: [Signature] Date: 7-11-13

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

[SKS] No action necessary, process as is
Project Manager: [Signature] Date: 7-15-13