

0081394

TestAmerica St. Louis

RECEIVED JUNE 23 2008

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

F08-120

Lot #: F8E230359

SDG #: W05401

Steve Trent

Fluor Hanford Inc
PO Box 1000 T6-03
Richland, WA 99352

RECEIVED
JAN 22 2009

EDMC

TESTAMERICA LABORATORIES, INC.



Michael C. Franks
Project Manager

June 23, 2008

TestAmerica

CASE NARRATIVE

THE LEADER IN ENVIRONMENTAL TESTING

Fluor Hanford, Inc.
 P.O. Box 1000
 MSIN E6-35
 Richland, Washington 99352
 June 23, 2008
 Attention: Steve Trent

SDG	: W05401
Number of Samples	: sample
Sample Matrix	: soil
Data Deliverable	: Summary
Date SDG Closed	: May 23, 2008

II. Introduction

On May 23, 2008, one soil sample was received by TestAmerica - St. Louis for chemical analysis. The samples were received within temperature criteria. See the COC and CUR forms for documentation of any variations on receipt conditions and temperature. Upon receipt, the samples were given laboratory Ids to correspond with specific client Ids. Please refer to the Sample Summary sheets attached to this case narrative. This report is incomplete without the narrative.

III. Analytical Results/ Methodology

The analytical results for this report are presented by analytical test. Each set of data includes sample identification information, analytical results and the appropriate detection limits. All results are based upon samples as they were received, i.e. wet weight, unless otherwise noted on the data sheets. See the attached Methods Summary Form for the methods used in this SDG.

Deviation from Request: None

IV. Definitions

QCBLK-	Quality Control Blank, Method Blank
QCLCS-	Quality Control Laboratory Control Sample, Blank Spike
DUP--	Laboratory Duplicate
MS-	Matrix Spike
MSD-	Matrix Spike Duplicate

V. Comments

General

The following SAFs are associated with this SDG: F08-120

The term "Detection Limit" used in the analytical data report refers to either the lab's standard reporting limits or contractually required reporting limits, whichever is applicable.

MS/MSD/Dup analysis was done per the client requirements. Analytical batches that did not contain matrix QC were analyzed with a LCS/LCS duplicate.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Fluor Hanford Inc.

June 23, 2008

SDG: W05401

ICP Metals

Batch: 8150060

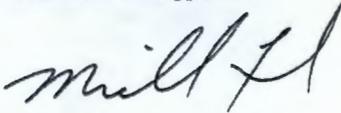
The samples were analyzed at a dilution for Boron due to high concentrations of interfering analytes. The reporting limit has been adjusted only for those targets reported from the dilution run.

Affected Samples:

F8E230359 (1): B1VD63

I certify that this Summary Package is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. The Laboratory Manager or a designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Reviewed and approved:



Michael Franks
St. Louis Project Manager

METHODS SUMMARY

F8E230359

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Percent Moisture	MCAWW 160.3 MOD	MCAWW 160.3 MOD
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B	

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes",
EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical
Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

F8E230359

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
KNT53	001	B1VD63	05/13/08	10:54

NOTE(S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability; layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

5160
5401

5160

Fluor Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F08-120-003	PAGE 1 OF 1
COLLECTOR Fulton/Webb	COMPANY CONTACT WIDRIG, DL	TELEPHONE NO. 376-2858	PROJECT COORDINATOR WIDRIG, DL		PRICE CODE 8H	DATA TURNAROUND 30 Days / 30 Days
SAMPLING LOCATION MUM MW1-07-046/0037339 C5515	PROJECT DESIGNATION 216-A-2 and 216-A-21 - Waste Management (C5515 Saturated)		SAF NO. F08-120		AIR QUALITY <input type="checkbox"/>	
ICE CHEST NO. GRP-08-07	FIELD LOGBOOK NO. HNF-N-585-5	ACTUAL SAMPLE DEPTH 310'	COA 122868ES10		METHOD OF SHIPMENT FEDERAL EXPRESS	
SHIPPED TO TestAmerica St. Louis		OFFSITE PROPERTY NO.		BILL OF LADING/AIR BILL NO. 7910-7256-7603		

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	PRESERVATION	None
		TYPE OF CONTAINER	G/P
		NO. OF CONTAINER(S)	1
		VOLUME	120mL
	SPECIAL HANDLING AND/OR STORAGE	SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B1VD63	SOIL	5-13-08	1054	✓

CHAIN OF POSSESSION	SIGN/ PRINT NAMES
RELINQUISHED BY/REMOVED FROM Chris Fulton/John	DATE/TIME 5-13-08/1430
RECEIVED BY/STORED IN MC 745 FRIDGE #1	DATE/TIME 5-13-08/1430
RELINQUISHED BY/REMOVED FROM MO 745 FRIDGE #1	DATE/TIME 5-22-08 0900
RECEIVED BY/STORED IN D Connolly/DJ	DATE/TIME 5-22-08 0900
RELINQUISHED BY/REMOVED FROM D Connolly/DJ	DATE/TIME 5-22-08 1400
RECEIVED BY/STORED IN Fed Ex	DATE/TIME
RELINQUISHED BY/REMOVED FROM Fed Ex	DATE/TIME
RECEIVED BY/STORED IN Amelia Swan	DATE/TIME 5-23-08 9:30
RELINQUISHED BY/REMOVED FROM	DATE/TIME
RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME
RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
 (1) ICP Metals - 6010A (Supertrace Add-On) (Beryllium, Bismuth, Boron)

Sample @ 310 ft.
 Drum MW1-07-046/0037339
 Radio Active tie to B1VD62

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

TestAmerica St. Louis

Track Shipments/FedEx Kinko's Orders
Detailed Results

Tracking number	791072567603	Reference	M8200 122868
Signed for by	B.DANIELS	Destination	EARTH CITH, MO
Ship date	May 22, 2008	Delivered to	Shipping/Receiving
Delivery date	May 23, 2008 9:29 AM	Service type	Priority Overnight
		Weight	5.0 lbs.
Status	Delivered		
Signature image available	Yes		

Date/Time	Activity	Location
May 23, 2008	9:29 AM Delivered	EARTH CITH, MO
	8:09 AM On FedEx vehicle for delivery	EARTH CITH, MO
	7:07 AM At local FedEx facility	EARTH CITH, MO
	5:50 AM At dest sort facility	BERKELEY, MO
	4:11 AM Departed FedEx location	MEMPHIS, TN
	1:39 AM Arrived at FedEx location	MEMPHIS, TN
May 22, 2008	5:40 PM Left origin	PASCO, WA
	3:35 PM Package data transmitted to FedEx	
	3:29 PM Picked up	PASCO, WA

Subscribe to tracking updates (optional)

Your name:

Your e-mail address:

E-mail address	Language	Exception updates
	English	<input type="checkbox"/>

Select format: HTML Text Wireless

Add personal message:

Not available for Wireless or non-English characters.

By selecting this check box and the Submit button, I agree to these Terms and Conditions

Fluor Hanford Inc

Client Sample ID: B1VD63

TOTAL Metals

Lot-Sample #...: F8E230359-001
 Date Sampled...: 05/13/08
 % Moisture.....: 3.8

Date Received...: 05/23/08

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...	8150060					
Beryllium	0.23 B	0.52	mg/kg	SW846 6010B	05/29/08	KNT531AF
		Dilution Factor: 1		MDL.....: 0.18		
Bismuth	ND	20.8	mg/kg	SW846 6010B	05/29/08	KNT531AD
		Dilution Factor: 1		MDL.....: 5.7		
Boron	ND D	20.8	mg/kg	SW846 6010B	05/29/08	KNT531AE
		Dilution Factor: 2		MDL.....: 3.1		

NOTE(S) :

- Results and reporting limits have been adjusted for dry weight.
- B Estimated result. Result is less than RL.
- D Result was obtained from the analysis of a dilution.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #....: F8E230359

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: F8E290000-060 Prep Batch #...: 8150060						
Beryllium	ND	0.50	mg/kg	SW846 6010B	05/29/08	KN1WX1AD
		Dilution Factor: 1				
Bismuth	ND	20.0	mg/kg	SW846 6010B	05/29/08	KN1WX1AA
		Dilution Factor: 1				
Boron	3.0 B	10.0	mg/kg	SW846 6010B	05/29/08	KN1WX1AC
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: F8E230359

Matrix.....: SOLID

<u>PARAMETER</u>	<u>SPIKE AMOUNT</u>	<u>MEASURED AMOUNT</u>	<u>UNITS</u>	<u>PERCNT RECVRY</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>	
LCS Lot-Sample#: F8E290000-060 Prep Batch #...: 8150060								
Bismuth	100	93.4	mg/kg	93	SW846 6010B	05/29/08	KN1WX1AE	
			Dilution Factor: 1					
Boron	94.8	106	mg/kg	111	SW846 6010B	05/29/08	KN1WX1AF	
			Dilution Factor: 1					
Beryllium	51.0	51.3	mg/kg	101	SW846 6010B	05/29/08	KN1WX1AG	
			Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: F8E230359

Matrix.....: SOLID

Date Sampled...: 05/13/08

Date Received...: 05/23/08

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
-----------	---------------	-----------	---------------	-------	---------------	-----	--------	----------------------------	--------------

MS Lot-Sample #: F8E230359-001 Prep Batch #...: 8150060

% Moisture.....: 3.8

Beryllium

0.23	2.60	3.01	mg/kg	107			SW846 6010B	05/29/08	KNT531AL
0.23	2.60	3.06	mg/kg	109	1.6		SW846 6010B	05/29/08	KNT531AM

Dilution Factor: 1

Bismuth

ND	104	107	mg/kg	103			SW846 6010B	05/29/08	KNT531AG
ND	104	110	mg/kg	106	2.9		SW846 6010B	05/29/08	KNT531AH

Dilution Factor: 1

Boron

ND	104	114 D	mg/kg	110			SW846 6010B	05/29/08	KNT531AJ
ND	104	117 D	mg/kg	113	2.8		SW846 6010B	05/29/08	KNT531AK

Dilution Factor: 2

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

D Result was obtained from the analysis of a dilution.

Fluor Hanford Inc

Client Sample ID: B1VD63

General Chemistry

Lot-Sample #...: F8E230359-001
Date Sampled...: 05/13/08
% Moisture.....: 3.8

Work Order #...: KNT53
Date Received...: 05/23/08

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Moisture	3.8	0.10	%	MCAWW 160.3 MOD	05/23-05/30/08	8150374

Dilution Factor: 1 MDL.....: