

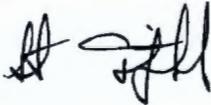
RECEIVED SEPTEMBER 24, 2008

Fluor Hanford
 WSCF Analytical Lab
 P.O. Box 1000
 Richland, WA 99352
 Telephone 373-7495
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FLUOR**Memorandum**

M4W41-SLF-08-1058

To: H. Hampt E6-35 Date: September 24, 2008

From: S. L. Fitzgerald, Manager 
 WSCF Analytical Lab

cc: w/Attachments
 T. F. Dale S3-30 J. E. Trechter S3-30
 A. J. Kopriva S3-30 S. J. Trent E6-35
 H. K. Meznarich S3-30 File/LB
 P. D. Mix S3-30

Subject: FINAL RESULTS FOR SAMPLE DELIVERY GROUP WSCF20081972 – SAF NUMBER F08-146

Reference: (1) Groundwater Protection Program-Letter of Instruction, FH-EIS-2003-MEM-001, October 31, 2002
 (2) HNF-SD-CD-QAPP-017, Rev. 9, Waste Sampling & Characterization Facility Quality Assurance Plan

This letter contains the following information for sample delivery group WSCF20081972:

- Cover Sheet (Attachment 1)
- Narrative (Attachment 2)
- Analytical Results (Attachment 3)
- Sample Receipt Information (Attachment 4)

SLF/grf

Attachments 4

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ATTACHMENT 1

COVER SHEET

Consisting of 2 pages
Including cover page

WSCF SAF NUMBER CROSS REFERENCE

Group#: WSCF20081972
Data Deliverable Date: 24-oct-2008
Data Deliverable: Cover Sheet

SAF#	Sample ID	WSCF#	Matrix
F08-146	B1X219	W08GR03697	WATER

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ATTACHMENT 2

NARRATIVE

Consisting of 2 pages
Including cover page

Introduction

One S&GRP sample was received at the WSCF Laboratory on September 11, 2008. Sample was analyzed for the analyte indicated on the attached copy of the chain of custody (COC) form in accordance with the *Groundwater Remediation Program – Letter of Instruction*, referenced in the cover letter.

The narrative (Attachment 2) will address sample characteristics, analyses requested and general information in performance of the analytical methods. A Data Summary Report (Attachment 3) includes analytical results, a comment report detailing method abnormalities, tentatively identified peaks if applicable, method references, and Laboratory QC information as applicable. Copies of the chain of custody and sample receipt documentation are included as Attachment 4.

It should be noted that the attached chain of custody was stamped “ICED” by the WSCF Laboratory Sample Custodian during sample receiving, indicating the presence of ice in the sample container.

Analytical Methodology for Requested Analyses

Refer to *WSCF Method References Report*, page 9, for a complete listing of approved analytical methods.

Inorganic Comments

Hexavalent Chromium – The holding time requirement for this analysis was met. A Sample Duplicate, Matrix Spike, Blank and Laboratory Control Sample were analyzed with this delivery group per the GRP Letter of Instruction. See page 11 for QC details. Analytical Note(s):

- Duplicate and Matrix Spike were analyzed on sample# B1TPP0 (SDG# 20081970, SAF# F08-081).
- Sample result was D flagged (dilution).

All QC controls are within the established limits.

I certify that this data package is in compliance with the LOI, 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 Analytical Manager and Client Services as verified by the following signatures.



Scot L. Fitzgerald
WSCF Analytical Laboratory Manager



Pauline D. Mix
WSCF Client Services

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ATTACHMENT 3

ANALYTICAL RESULTS

Consisting of 6 pages
Including cover page

WSCF
ANALYTICAL RESULTS REPORT

for

Groundwater Remediation Program

Richland, WA 99354

Attention: Steve Trent

Analytical:

S. Fitzgerald 9/24/08

Client Services:

G.W. P.O. Mij 9/23/2008

All results are reported on an "as received" basis unless otherwise noted in the comment section.

This information is intended for the use of the addressee only. If the reader of this report is not the intended recipient or is not authorized by the recipient to receive the report, you are hereby notified that any dissemination, distribution or copying of this report is strictly prohibited. If you have received this report in error, please notify WSCF Laboratory immediately by telephone at (509) 373-7020 or (509) 531-8004. Information designation of this report is the responsibility of the customer.

Contract#: FH-EIS-2003-MEM-001

Report#: WSCF20081972

Report Date: 22-sep-2008

Report WGPP/ver. 5.2

Groundwater Remediation Program

Page 1

W13q Worklist/Batch/QC Report for Group# WSCF20081972

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
37984	4	38406	42820	BLANK		Hexavalent chromium
37984	18	38406	42820	BLANK		Hexavalent chromium
37984	22	38406	42820	BLANK		Hexavalent chromium
37984	5	38406	42820	LCS		Hexavalent chromium
37984	8	38406	42820	DUP	W08GR03687	Hexavalent chromium
37984	9	38406	42820	MS	W08GR03687	Hexavalent chromium
37984	20	38406	42820	SAMPLE	W08GR03697	Hexavalent chromium

WSCF

METHOD REFERENCES REPORT

Department: Inorganic

The results provided in this report were generated using the following WSCF Laboratory procedures. For your convenience, this table provides a listing of the regulatory or industry methods that are referenced by each of these WSCF procedures. Please note that the most recent version of the regulatory or industry method is listed here even though the WSCF procedure may reference an older version of the method. Also, a reference to a regulatory or industry method here does not necessarily indicate a verbatim implementation of that method.

LA-265-403	LA-265-403: Hexavalent Chromium analysis by Spectrophotometer
EPA SW-846 7196A	HEXAVALENT CHROMIUM
HEIS 7196_CR6	Hexavalent Chromium

Note: A complete list of WSCF analytical procedures and referenced regulatory or industry methods is available online at <http://www2.rl.gov/phmc/as-dol>.

Report Date: 22-sep-2008

Report#: WSCF20081972

Report WGPPM/5.2

Page 1

WSCF ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-146
Sample # W08GR03697
Client ID: B1X219

TRENT
WSCF

Matrix: WATER

Group #: WSCF20081972
Department: Inorganic
Sampled: 09/11/08
Received: 09/11/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Hexavalent Chromium											
Hexavalent Chromium	18540-29-9	LA-265-403	D	1.71	mg/L			10.00	0.020		09/12/08

MDL=Minimum Detection Limit D - Analyte was identified at a secondary dilution factor(inorg)
RQ=Result Qualifier
TP Err=Total Propagated Error
DF=Dilution Factor

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

Report WGPP/ver. 5.2
 Groundwater Remediation Program

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081972
 Matrix: WATER
 Test: Hexavalent chromium

Sample Date: 09/11/08
 Receive Date: 09/11/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR03687											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Hexavalent chromium	18540-29-9	0.0078		RPD			5.263	15.000		09/12/08
MS	Hexavalent chromium	18540-29-9	0.0413	103.250	% Recov	85.000	115.000				09/12/08
BATCH QC											
BLANK	Hexavalent chromium	18540-29-9	<0.002	n/a	mg/L	0.000	2.000			U	09/12/08
BLANK	Hexavalent chromium	18540-29-9	<0.002	n/a	mg/L	0.000	2.000			U	09/12/08
BLANK	Hexavalent chromium	18540-29-9	<0.002	n/a	mg/L	0.000	2.000			U	09/12/08
LCS	Hexavalent chromium	18540-29-9	0.0490	98.000	% Recov	80.000	120.000				09/12/08

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ATTACHMENT 4

SAMPLE RECEIPT INFORMATION

Consisting of 3 pages
Including cover page

Waste Sampling and Characterization Facility
P.O. BOX 1970 S3-30, Richland, WA 99352
PHONE: (509) 373-7004/FAX: (509) 373-7134

File

ACKNOWLEDGMENT OF SAMPLES RECEIVED

10/24/08
td

Groundwater Remediation Program

Richland, WA 99354
Attn: Steve Trent

Customer Code: GPP
PO#: 123630/ES10
Group#: 20081972
Project#: F08-146
Proj Mgr: Steve Trent E6-35
Phone: 373-5869

The following samples were received from you on 09/11/08. They have been scheduled for the tests listed beside each sample. If this information is incorrect, please contact your service representative. Thank you for using Waste Sampling and Characterization Facility.

Sample#	Sample Id	Tests Scheduled	Matrix	Sample Date
W08GR03697	B1X219	TRENT CR+6	Water	09/11/08

Test Acronym Description

Test Acronym	Description
CR+6	Hexavalent chromium

Fluor Hanford Inc. 10/24/08

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F08-146-140

PAGE 1 OF 1

COLLECTOR Fulton	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 7N	DATA TURNAROUND 45 Days / 45 Days
SAMPLING LOCATION C6451 I-012	PROJECT DESIGNATION K-West Characterization - Groundwater		SAF NO. F08-146	AIR QUALITY <input type="checkbox"/>	
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-595-10	ACTUAL SAMPLE DEPTH 97.5'	COA 123630ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO Waste Sampling & Characterization	OFFSITE PROPERTY NO. 20081972		BILL OF LADING/AIR BILL NO.		

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 may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)	PRESERVATION Cool~4C																				
		TYPE OF CONTAINER eG																				
		NO. OF CONTAINER(S) 1																				
		SPECIAL HANDLING AND/OR STORAGE Radioactive tile to B1WMP1	VOLUME 500mL																			
		SAMPLE ANALYSIS Chromium Hex - 7196;																				

029908

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME																			
B1X219 W08G-R03697	WATER	9-11-08	1300	/																		

ICEL

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS																	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME																		
C. Fulton	9-11-08 1310	[Signature]	9/11/08 1310																		
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																		

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

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