

RECEIVED AUGUST 11, 2008

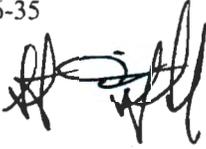
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Fluor Hanford
WSCF Analytical Lab
P.O. Box 1000
Richland, WA 99352
Telephone 373-7495
Telefax 372-0456

FLUOR

Memorandum

To: H. Hampt E6-35 Date: M4W41-SLF-08-798
August 11, 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 WSCF20081599 – SAF NUMBER F08-002

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 WSCF20081599:

- 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#: WSCF20081599
Data Deliverable Date: 01-aug-2008
Data Deliverable: Cover Sheet

SAF#	Sample ID	WSCF#	Matrix
F08-002	B1W9R4	W08GR03067	WATER

M4W41-SLF-08-798

ATTACHMENT 2

NARRATIVE

Consisting of 2 pages
Including cover page

Introduction

One S&GRP sample was received at the WSCF Laboratory on July 31, 2008. This 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

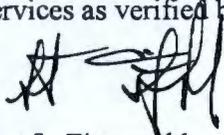
Refer to *WSCF Method References Report*, page 9, for a complete listing of approved analytical methods.

Inorganic Comments

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

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



Andrew J. Kopriva
WSCF Client Services

M4W41-SLF-08-798

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 8-11-08

Client Services:

A. Kopriva 8-8-08

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#: WSCF20081599

Report Date: 6-aug-2008

Report WGPP/ver. 5.2

Groundwater Remediation Program

W13q Worklist/Batch/QC Report for Group# WSCF20081599

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
37379	3	37804	42180	BLANK		Hexavalent chromium
37379	12	37804	42180	BLANK		Hexavalent chromium
37379	4	37804	42180	LCS		Hexavalent chromium
37379	6	37804	42180	DUP	W08GR03067	Hexavalent chromium
37379	7	37804	42180	MS	W08GR03067	Hexavalent chromium
37379	8	37804	42180	MSD	W08GR03067	Hexavalent chromium
37379	5	37804	42180	SAMPLE	W08GR03067	Hexavalent chromium
37379	8	37804	42180	SPK-RPD	W08GR03067	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: 6-aug-2008
Report#: WSCF20081599
Report WGPPM/5.2

WSCF ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-002
Sample # W08GR03067
Client ID: B1W9R4

TRENT
 WSCF

Matrix: WATER

Group #: WSCF20081599
Department: Inorganic
Sampled: 07/31/08
Received: 07/31/08

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	B	3.80e-03	mg/L			1.00	2.0e-03		07/31/08

MDL=Minimum Detection Limit B - The analyte < the RDL but > = the IDL/MDL (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

10 of 14

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081599
 Matrix: WATER
 Test: Hexavalent chromium

Sample Date: 07/31/08
 Receive Date: 07/31/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR03067											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Hexavalent chromium	18540-29-9	0.0038		RPD			0.000	15.000		07/31/08
MS	Hexavalent chromium	18540-29-9	0.0553	103.172	% Recov	85.000	115.000				07/31/08
MSD	Hexavalent chromium	18540-29-9	0.0553	103.172	% Recov	85.000	115.000				07/31/08
SPK-RPD	Hexavalent chromium	18540-29-9	103.172		RPD			0.000	20.000		07/31/08
BATCH QC											
BLANK	Hexavalent chromium	18540-29-9	<0.002	n/a	mg/L	0.000	2.000			U	07/31/08
BLANK	Hexavalent chromium	18540-29-9	<0.002	n/a	mg/L	0.000	2.000			U	07/31/08
LCS	Hexavalent chromium	18540-29-9	0.0523	103.770	% Recov	80.000	120.000				07/31/08

M4W41-SLF-08-798

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

Groundwater Remediation Program

Richland, WA 99354
Attn: Steve Trent

Customer Code: GPP
PO#: 122636/ES10
Group#: 20081599
Project#: F08-002
Proj Mgr: Steve Trent E6-35
Phone: 373-5869

08/01/08

TSJ



The following samples were received from you on 07/31/08. 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
W08GR03067	B1W9R4	TRENT CR+6	Water	07/31/08

Test Acronym Description

Test Acronym	Description
CR+6	Hexavalent chromium

COLLECTOR NCO Sampler <i>Kausz, McIntyre</i>		COMPANY CONTACT TRENT, SJ		TELEPHONE NO. 373-5869		PROJECT COORDINATOR TRENT, SJ		PRICE CODE 1A		DATA TURNAROUND 24 Hours / 15 Days	
SAMPLING LOCATION C6744 I-003		PROJECT DESIGNATION 100-KR-4 Pump & Treat Expansion - Water				SAF NO. F08-002		AIR QUALITY <input type="checkbox"/>			
ICE CHEST NO.		FIELD LOGBOOK NO. <i>PB 49</i> <i>HNF-N-585-5</i>		ACTUAL SAMPLE DEPTH <i>81.74</i>		COA 122636E10		METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Waste Sampling & Characterization <i>20081599</i>		OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A							
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 None	TYPE OF CONTAINER eGs*	NO. OF CONTAINER(S) 1	VOLUME 60mL	SPECIAL HANDLING AND/OR STORAGE	SAMPLE ANALYSIS Chromium - Hex (Hexavalent Chromium) <i>024870</i>			
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME								
<i>B1W9R4</i> <i>W08GRO3067</i>	<i>WATER</i>	<i>07-31-08</i>	<i>12:11</i>								
CHAIN OF POSSESSION				SIGN/ PRINT NAMES				SPECIAL INSTRUCTIONS			
RELINQUISHED BY/REMOVED FROM <i>Ed Kausz</i>		DATE/TIME <i>7-31-08 1255</i>		RECEIVED BY/STORED IN <i>TAPRAZIM Jones</i>		DATE/TIME <i>7-31-08 1255</i>		** WSCF will be performing the quick turn, field method for Hex Chrome. <i>pH 7.12</i> <i>Temp 25.2</i> <i>Cond 388</i> <i>Turb 0.95</i>			
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	
FINAL SAMPLE DISPOSITION		DISPOSAL METHOD				DISPOSED BY				DATE/TIME	

14 OF 14