

RECEIVED SEPTEMBER 29, 2008

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FLUOR**Memorandum**

M4W41-SLF-08-1092

To: H. Hampt E6-35 Date: September 29, 2008

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

cc: w/Attachments

T. F. Dale	S3-30	P. D. Mix	S3-30
D. Felmy (PNNL)	K6-75	J. E. Trechter	S3-30
A. J. Kopriva	S3-30	S. J. Trent	E6-35
H. K. Meznarich	S3-30	File/LB	

Subject: FINAL RESULTS FOR SAMPLE DELIVERY GROUP WSCF20082076

Reference: 1) Letter of Instruction for Analytical Services for the Groundwater Performance Assessment Project and Analytical Laboratory Transition Plan, FH-0602422, September 19, 2006

2) HNF-SD-CD-QAPP-017, Rev. 9, Waste Sampling & Characterization Facility Quality Assurance Plan

This transmittal contains the following information for sample delivery group WSCF20082076:

- 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#: WSCF20082076
Data Deliverable Date: 09-oct-2008
Data Deliverable: Cover Sheet

SAF#	Sample ID	WSCF#	Matrix
I08-057	B1WTB1	W08P004511	WATER

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ATTACHMENT 2

NARRATIVE

Consisting of 2 pages
Including cover page

Introduction

One groundwater sample was received at the WSCF Laboratory on September 25, 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*, pages 9, for a complete listing of approved analytical methods.

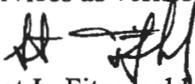
Inorganic Comments

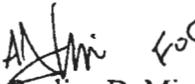
Hexavalent Chromium – The hold time requirement for this analysis was met. A Duplicate, Matrix Spike, Blank and Laboratory Control Sample were analyzed with this delivery group per the GRP Letter of Instruction. See page 11 for QC details. Analytical Note(s):

- Matrix Spike recovery was less than established laboratory limit. Sample result was N flagged.

All other 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 7 pages
Including cover page

WSCF
ANALYTICAL RESULTS REPORT

for

GPAP
Richland, WA 99352

Attention: Steve Trent E6-35

Analytical:

S.F. Fitecraft 9/22/08

Client Services:

P.D. Mier 9/28/2008

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

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Report#: WSCF20082076
Report Date: 26-sep-2008
Report WGPP/ver. 5.2
GPAP

W13q Worklist/Batch/QC Report for Group# WSCF20082076

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
38181	2	38606	43031	BLANK		Hexavalent chromium
38181	7	38606	43031	BLANK		Hexavalent chromium
38181	3	38606	43031	LCS		Hexavalent chromium
38181	5	38606	43031	DUP	W08P004511	Hexavalent chromium
38181	6	38606	43031	MS	W08P004511	Hexavalent chromium
38181	4	38606	43031	SAMPLE	W08P004511	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: 26-sep-2008
Report #: WSCF20082076
Report WGPPM/5.2

WSCF

ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35

SAF Number: I08-057

Sample # W08P004511

Client ID: B1WTB1 PNNL-GPP
WSCF

Matrix: WATER

Group #: WSCF20082076

Department: Inorganic

Sampled: 09/25/08

Received: 09/25/08

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	N	0.150	mg/L			1.00	2.0e-03		09/25/08

MDL = Minimum Detection Limit N - Spike sample recovery is outside control limits. (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

GPAP

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WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Inorganic**

SDG Number: WSCF20082076
 Matrix: WATER
 Test: Hexavalent chromium

Sample Date: 09/25/08
 Receive Date: 09/25/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08P004511											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Hexavalent chromium	18540-29-9	0.1507		RPD			0.532	15.000		09/25/08
MS	Hexavalent chromium	18540-29-9	0.0247	61.750	% Recov	85.000	115.000				09/25/08
BATCH QC											
BLANK	Hexavalent chromium	18540-29-9	<0.002	n/a	mg/L	0.000	2.000			U	09/25/08
BLANK	Hexavalent chromium	18540-29-9	<0.002	n/a	mg/L	0.000	2.000			U	09/25/08
LCS	Hexavalent chromium	18540-29-9	0.0524	104.800	% Recov	80.000	120.000				09/25/08

WSCF ANALYTICAL COMMENT REPORT

Attention: Steve Trent E6-35

Group #: WSCF20082076
Department: Inorganic

Sample #	Client ID	Lab Area	Test	Comment
		VALGROUP		Cr(VI) Matrix Spike Recovery is out of limit low. The sample is nearly 4X the concentration of the spike, which may account for the low recovery. A spike was run on a blank sample for spike concentration verification, results showed normal spike recovery.

Lab Areas: VALGROUP - Group Validation
LOGSAMP - Login for Sample

VALTEST - Test Validation
LOGTEST - Login for Tests

TESTDATA - Test Data Entry

This report may not be reproduced, except in its entirety without the written approval of the WSCF Laboratory.

M4W41-SLF-08-1092

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
09/26/08
td
★

ACKNOWLEDGMENT OF SAMPLES RECEIVED

GPAP

Richland, WA 99352
Attn: Steve Trent E6-35

Customer Code: PNNL-GPP
PO#: 122543
Group#: 20082076

The following samples were received from you on 09/25/08. 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
W08P004511	B1WTB1	PNNL-GPP CR+6	Water	09/25/08

Test Acronym Description

Test Acronym	Description
CR+6	Hexavalent chromium

