WSCF Laboratory

PO Box 1000 S3-30
Richland, WA 99352
(509) 373-7005
(509) 372-0456

RECEIVED APRIL 28, 2010

0092825

Memorandum

To: Michael Neely
CH2M-HILL PRC
PO Box 1600
Richland, WA 99352

Date: April 27, 2010

From: WSCF Laboratory
WSCF Analytical Chemistry

CC:

Subject: FINAL RESULT FOR SAMPLE DELIVERY GROUP WSCF100846

Reference: (1) SOW, Mod 2, #36587, Release 3
(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 WSCF100846

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

Electronically signed by Markus Stauffer
For Lab Manager

Attachments 4

RECEIVED
DEC 21 2010
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ATTACHMENT 1

COVER SHEET

Consisting of 2 pages
Including cover page

WSCF SAF Number Cross Reference

Group # WSCF100846
Data Deliverable Date 05/07/10

SAF #	Sample ID	Sample #	Matrix	Sampled	Received
I10-025	B24KW0	100846001	WATER	04/22/10	04/22/10
I10-025	B24KW1	100846002	WATER	04/22/10	04/22/10
I10-025	B24KC2	100846003	WATER	04/22/10	04/22/10
I10-025	B24KF5	100846004	WATER	04/22/10	04/22/10
S10-004	B24MC9	100846005	WATER	04/22/10	04/22/10
S10-004	B24MD0	100846006	WATER	04/22/10	04/22/10
S10-004	B24MD1	100846007	WATER	04/22/10	04/22/10
S10-004	B24MD2	100846008	WATER	04/22/10	04/22/10
I10-024	B25B91	100846009	WATER	04/22/10	04/22/10
I10-024	B25B92	100846010	WATER	04/22/10	04/22/10

ATTACHMENT 2

NARRATIVE

Consisting of 3 pages
Including cover page

Attachment 2
Narrative
WSCF100846

Introduction

Ten (10) Groundwater samples were received at the WSCF Laboratory on April 22nd, 2010. The samples were analyzed for the analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Statement of Work (SOW), Modification No. 2 to Agreement 36587, Release 3, "FH WSCF ANALYTICAL SERVICES FOR GROUNDWATER."*

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 not stamped "ICED" by the WSCF Laboratory Sample Custodian during sample receiving. However, based on procedure LO-090-403 form "NOTICE OF IMPROPER SAMPLE SUBMITTAL" was not submitted and was not stamped "NOT ICED". No anomaly was noted during sample receipt.

The following generic data qualifiers (i.e., B, D, and J) may be applicable to this report, as appropriate

- **B** – Sample results with a concentration greater than the MDL but less than the PQL are B flagged (applies to inorganic and wet chemical analyses), as appropriate.
- **D** – Sample results are D flagged if dilution(s) were required, as appropriate.
- **J** – Sample results with a concentration greater than the MDL but less than the PQL are J flagged (applies to organic analyses), as appropriate.
- **U** – Analyzed for but not detected above limiting criteria. Relative Percent Difference (RPD) values associated with an analyte qualified with a "U" are not applicable.

Analytical Methodology for Requested Analyses

Refer to *WSCF Method References Report* 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. Analytical Note(s):

- Batch QC 117284 analyzed on sample# B24086 (100851001)
- Batch QC 117284 analyzed on sample# B23PX6 (100842001)

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Attachment 2
Narrative
WSCF100846

All QC controls are within the established limits.

We certify that this data package 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 data package has been authorized by the Analytical Laboratory Manager (or designee) and the Client Services representative as verified by electronic signatures shown on the WSCF ANALYTICAL RESULTS REPORT.

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ATTACHMENT 3

ANALYTICAL RESULTS

Consisting of 16 pages
Including cover page

WSCF ANALYTICAL RESULTS REPORT

For

CH2M Hill Plateau Remediation

PO Box 1600
Richland, WA 99352

Attention: Michael Neely

Contract #	MOA-FH-CHPRC-2008
Group #	WSCF100846
Report Date	April 27, 2010

Analytical: Electronically signed by Markus Stauffer

Client Services: Electronically signed by Richard Barker

All radiochemistry results are reported on an "as received" basis.

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.

Batch QC List

Attention Michael Neely
Department Inorganic

Group # WSCF100846

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
117284	117284	1	BLANK	27557	BLANK		Hexavalent chromium Discrete Analyzer
117284	117284	3	LCS	27559	LCS		Hexavalent chromium Discrete Analyzer
117284	117284	4	DUP	27560	B23PX6(100842001DUP)	100842001	Hexavalent chromium Discrete Analyzer
117284	117284	5	MS	27561	B23PX6(100842001MS)	100842001	Hexavalent chromium Discrete Analyzer
117284	117284	7	SAMPLE	100846001	B24KW0		Hexavalent chromium Discrete Analyzer
117284	117284	8	SAMPLE	100846002	B24KW1		Hexavalent chromium Discrete Analyzer
117284	117284	9	SAMPLE	100846003	B24KC2		Hexavalent chromium Discrete Analyzer
117284	117284	10	SAMPLE	100846004	B24KF5		Hexavalent chromium Discrete Analyzer
117284	117284	11	SAMPLE	100846005	B24MC9		Hexavalent chromium Discrete Analyzer
117284	117284	12	SAMPLE	100846006	B24MD0		Hexavalent chromium Discrete Analyzer
117284	117284	13	SAMPLE	100846007	B24MD1		Hexavalent chromium Discrete Analyzer
117284	117284	14	SAMPLE	100846008	B24MD2		Hexavalent chromium Discrete Analyzer
117284	117284	15	SAMPLE	100846009	B25B91		Hexavalent chromium Discrete Analyzer
117284	117284	17	LCS	27563	LCS		Hexavalent chromium Discrete Analyzer
117284	117284	18	BLANK	27564	BLANK		Hexavalent chromium Discrete Analyzer
117284	117284	19	DUP	27565	B24086(100851001DUP)	100851001	Hexavalent chromium Discrete Analyzer
117284	117284	20	MS	27566	B24086(100851001MS)	100851001	Hexavalent chromium Discrete Analyzer
117284	117284	21	SAMPLE	100846010	B25B92		Hexavalent chromium Discrete Analyzer

Method Reference

Attention Michael Neely
Department Inorganic

Group # WSCF100846

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, industry methods or HEIS 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 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	Hexavalent Chromium Analysis		
	EPA SW-846	7196A	Hexavalent Chromium
	HEIS	7196_CR6	Hexavalent Chromium

Note: A complete list of WSCF analytical procedures and reference regulatory or industry methods is available online at http://www7.rl.gov/rapidweb/AS-DOL/index.cfm

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF100846

Sample # 100846001
SAF# I10-025
Sample ID B24KW0

Matrix WATER
Sampled 04/22/10
Received 04/22/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**04/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403		0.0462		mg/L	1	0.0020	0.0050	04/22/10

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF100846

Sample # 100846002
SAF# I10-025
Sample ID B24KW1

Matrix WATER
Sampled 04/22/10
Received 04/22/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**04/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403		0.0439		mg/L	1	0.0020	0.0050	04/22/10

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF100846

Sample # 100846003
SAF# I10-025
Sample ID B24KC2

Matrix WATER
Sampled 04/22/10
Received 04/22/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**04/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403		0.0432		mg/L	1	0.0020	0.0050	04/22/10

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF100846

Sample # 100846004
SAF# I10-025
Sample ID B24KF5

Matrix WATER
Sampled 04/22/10
Received 04/22/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**04/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403		0.0407		mg/L	1	0.0020	0.0050	04/22/10

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF100846

Sample # 100846005
SAF# S10-004
Sample ID B24MC9

Matrix WATER
Sampled 04/22/10
Received 04/22/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**04/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403		0.00560		mg/L	1	0.0020	0.0050	04/22/10

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF100846

Sample # 100846006
SAF# S10-004
Sample ID B24MD0

Matrix WATER
Sampled 04/22/10
Received 04/22/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**04/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403		0.00540		mg/L	1	0.0020	0.0050	04/22/10

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF100846

Sample # 100846007
SAF# S10-004
Sample ID B24MD1

Matrix WATER
Sampled 04/22/10
Received 04/22/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**04/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.0020		mg/L	1	0.0020	0.0050	04/22/10

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF100846

Sample # 100846008
SAF# S10-004
Sample ID B24MD2

Matrix WATER
Sampled 04/22/10
Received 04/22/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**04/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.0020		mg/L	1	0.0020	0.0050	04/22/10

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF100846

Sample # 100846009
SAF# I10-024
Sample ID B25B91

Matrix WATER
Sampled 04/22/10
Received 04/22/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**04/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403		0.914		mg/L	1	0.0020	0.0050	04/22/10

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF100846

Sample # 100846010
SAF# I10-024
Sample ID B25B92

Matrix WATER
Sampled 04/22/10
Received 04/22/10

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**04/22/10**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403		0.920		mg/L	1	0.0020	0.0050	04/22/10

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF100846

QC Batch 117284 **Test** Hexavalent chromium Discrete Analyzer
Associated Samples 100846001, 100846002, 100846003, 100846004, 100846005, 100846006, 100846007, 100846008, 100846009, 100846010

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #27557**							
Hexavalent chromium	18540-29-9		<0.0020	mg/L					U	04/22/10
LCS			**QC Sample #27559**							
Hexavalent chromium	18540-29-9		0.0506	mg/L	101.2	90 - 110				04/22/10
DUP			**QC Sample #27560**							
			Original 100842001							
Hexavalent chromium	18540-29-9		0.148	mg/L			0.00	20		04/22/10
MS			**QC Sample #27561**							
			Original 100842001							
Hexavalent chromium	18540-29-9		0.0381	mg/L	95.2	85 - 115				04/22/10
LCS			**QC Sample #27563**							
Hexavalent chromium	18540-29-9		0.0506	mg/L	101.2	90 - 110				04/22/10
BLANK			**QC Sample #27564**							
Hexavalent chromium	18540-29-9		<0.0020	mg/L					U	04/22/10
DUP			**QC Sample #27565**							
			Original 100851001							
Hexavalent chromium	18540-29-9		<0.0020	mg/L			-16.90	20	U	04/22/10

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF100846

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
MS			**QC Sample #27566**							
			Original 100851001							
Hexavalent chromium	18540-29-9		0.0374	mg/L	93.5	85 - 115				04/22/10

ATTACHMENT4

SAMPLE RECEIPT

Consisting of 8 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

ACKNOWLEDGEMENT OF SAMPLES RECEIVED

WSCF Laboratory
PO Box 1000 S3-30
Richland, WA 99352

ATTN: Michael Neely

Customer Code: CHPRC
PO #: 401647
Work Order #: 100846
Profile #: 110-025-72
Proj. Mgr.:
Phone:

The following samples were received from you on 4/22/2010 2:30:00 PM. 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	Matrix	Collected	Received
		Tests scheduled		
100846001	B24KW0	WATER	4/22/2010 08:56	4/22/2010 14:30
		CR6DA-W		
100846002	B24KW1	WATER	4/22/2010 08:56	4/22/2010 14:30
		CR6DA-W		
100846003	B24KC2	WATER	4/22/2010 08:56	4/22/2010 14:30
		CR6DA-W		
100846004	B24KF5	WATER	4/22/2010 08:56	4/22/2010 14:30
		CR6DA-W		
100846005	B24MC9	WATER	4/22/2010 13:52	4/22/2010 14:50
		CR6DA-W		
100846006	B24MD0	WATER	4/22/2010 13:52	4/22/2010 14:50
		CR6DA-W		
100846007	B24MD1	WATER	4/22/2010 07:15	4/22/2010 14:50
		CR6DA-W		
100846008	B24MD2	WATER	4/22/2010 07:15	4/22/2010 14:50
		CR6DA-W		
100846009	B25B91	WATER	4/22/2010 09:40	4/22/2010 14:50
		CR6DA-W		
100846010	B25B92	WATER	4/22/2010 09:40	4/22/2010 14:50
		CR6DA-W		

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

Test Acronym Description

Test Acronym	Description
CR6DA-W	Cr6 (W,Discrete analyzer)

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # 110-025-72 Page 1 of 1

Collector: S.J. Southerland CHPRC	Contact/Requester: Canal Water-Hosted	Telephone No.: 376-4650
SAF No.: 110-025	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 3000210520
Project Title: 2271-LOL APRIL 2010	Logbook No.: HNF-N-506 31/14/14	Ice Chest No.: N/A
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 24 Hours **PRIORITY**	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993).

SPECIAL INSTRUCTIONS Hold Time — Total Activity Exemption: Yes X No ☐
200 Area Generator Knowledge Information from applies. The CAGN for all analytical work at WSCF is 80164.

100846

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B24KW0	1 Y	W	4/24/10	0856	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool~4C
B24KW1	2 N	W	↓	↓	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool~4C

4/22/10

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
S.J. Southerland CHPRC	[signature]		APR 22 2010 1430	M D Kessler	[signature]		APR 22 2010 1430
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *: S = Soil; SE = Sediment; SO = Solid; SL = Sludge; W = Water; O = Oil; A = Air; OS = Oven Solid; OL = Oven Liquid; T = Tissue; WI = Wipe; L = Liquid; V = Vegetation; X = Other

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) — Disposed By — Date/Time

CHPRC

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C.# 110-025-71

Page 1 of 1

Collector: S.J. Southerland, CHPRC	Contact/Requester: Fawn Waters-Hasted	Telephone No: 376-1850
SAF No: 110-025	Sampling Origin: Banded Site	Purchase Order/Charge Code: 30807115370
Project Title: 2010 CH APRR 2010	Logbook No: HNF-N-506 31 / 44	Ice Chest No: N/A
Shipment To (Lab): Waste Sampling & Characterization	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No: N/A
Project: CERCLA	Priority: 24 Hours **PRIORITY**	Offsite Property No: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** Chrome Hexavalent Material at concentrations that are not regulated for transportation per 49 CFR but are not allowed per DOE Order 5400.5 (1986/1990).

SPECIAL INSTRUCTIONS Hold Time
200 Area Generator Knowledge Information Form applies.
The COC# for all analytical work is WSCF # 100847.

Total Activity Exemption: Yes ✓ No

Sample No.	Filter *		Date	Time	No. Type Container	Sample Analysis	Holding Time	Preservative
B24KC2	Y	W	4/20/10	0850	1x500 mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool~4C
B24KF5	N	W	↓	↓	1x500 mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool~4C

4/22/10

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
S.J. Southerland, CHPRC			APR 22 2010 1430	M D Kessler			APR 22 2010 1430
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *: A = Air; W = Aqueous; SO = Soil; SE = Sediment; W = Water; O = Oil; A = Air; DS = Drum Solids; DL = Drum Liquid; S = Solid; Wi = Wipe; L = Liquid; V = Vegetation; X = Other

FINAL SAMPLE DISPOSITION: Disposal Method (e.g., Return to source or, per lab procedure, send to process) | Disposed By | Date/Time

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	COC # S10-004-2 Page 1 of 1

Collector: RA Shepard CHPRC	Contact/Requester: Knox, Warren-Rushed	Telephone No.: 376-4630
SAF No.: S10-204	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 320071, S20
Project Title: SUSV, APRIL 2010	Logbook No.: HNF-N-506 22 P.185	Tee Chest No.: N/A
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: SUSV	Priority: 24 Hours PRIORITY	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** Contains Radioactive Material at concentrations that are not exempted for transportation per 49 CFR but can be transported per DOE Order 460.1 (1/9/01)

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐
Site-Wide Overtime Knowledge Form applies. Use DACN for all samples taken in SUSV is 20150.

Sample No.	Filter	*	Date	Time	Net/Type Container	Sample Analysis	Holding Time	Preservative
S24KC9	Y	W	4/22/10	1352	1x500 mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool<4C
S24KD0	N	W	↓	↓	1x500 mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool<4C

RAS 4/22/10

Relinquished By: RA Shepard CHPRC	Date/Time: APR 22 2010 1450	Received By: M D Kessler	Date/Time: APR 22 2010 1450
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:

Matrix *
A = Air; AQ = Aqueous; SO = Solid; SL = Sludge; W = Water; OL = Oil; O = Other; DS = Drum Solid; DL = Drum Liquid; T = Tissue; WI = Wipe; L = Liquid; V = Vegetation; X = Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By:	Date/Time:

CHPRC

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

COC #: S10-004-3

Page 1 of 1

Collector: ~~RA Shepard~~ CHPRC	Contact/Requester: Karen Waters-Baxter	Telephone No.: 372-1653
SAF No.: S10-004	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300CHUS20
Project Title: SURV, APRIL 2010	Logbook No.: HNF-N-506 25 / 155	Ice Chest No.: N/A
Shipment To (Lab): Waste Sampling & Characterization	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: SURV	Priority: 24 Hours **PRIORITY**	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS: ** Contains Radioactive Material in concentrations that are exempt for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993).

SPECIAL INSTRUCTIONS: Hold Time — Site-Wide Protocol. Immediately Form applies. The Cof Note: all analytical work is WCF's to do. Total Activity Determination: Yes ☑ No ☐

Sample No.	Filter *		Date	Time	No/Type/Container	Sample Analysis	Holding Time	Preservative
824M01	Y	W	4/22/10	07:15	1x500-mL 2G	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool-4C
824M02	N	W	↓	↓	1x500-mL 2G	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool-4C

Relinquished By	Date/Time	Received By	Date/Time
RA Shepard, CHPRC	APR 22 2010 1450	M D Kessler	APR 22 2010 1450

Matrix *: S = Solid; SE = Sediment; SL = Sludge; W = Water; O = Oil; A = Air; DS = Dried Solid; DL = Dried Liquid; V = Vegetation; O = Other

FINAL SAMPLE DISPOSITION: Disposal Method (e.g., Return to customer, per lab procedure, sent to process) — Disposed By — Date/Time

CHPRC

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I10-024-46

Page 1 of 1

Collector: RA Shepard CHPRC	Contact/Requester: Karen Waterstrat/Justed	Telephone No. N/A
SAF No. 116-024	Sample Origin: Hanford Site	Purchase Order/Charge Code 300STH.S.SS
Project Title: 100KR4SAR11.1.16 APRIL 2010	Logbook No: HNF-N-506 23/35	Ice Chest No. N/A
Shipped To/Lab: Pacific Northwest National Laboratory	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No. N/A
Protocol: CTRCLA	Priority: 24 Hours PRIORITY	ORBIT Primavera No. N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** Contains Radioactive Material at concentrations that are unregulated by transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990-1993)

SPECIAL INSTRUCTIONS Hold Time: Total Activity Exemption: Yes ✓ No
100 Area Generator Knowledge Information Form applies. Use GACS for all analytical work at WSCF to 48 DGT

Sample No.	Filter *	Matrix	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B25691	Y	W	4/22/10	0945	1x500-mL aG	7196_CR6 Hexavalent Chromium (1)	24 Hours	Cool-4C
B25692	N	W	↓	↓	1x500-mL aG	7196_CR6 Hexavalent Chromium (1)	24 Hours	Cool-4C

Relinquished By	Date/Time	Received By	Date/Time
RA Shepard CHPRC	APR 22 2010	M D Kessler	APR 22 2010

Matrix *
S = Soil; SD = Sediment; SS = Solid; SL = Sludge; W = Water; O = Oil; A = Air; DS = Drum Solids; DL = Drum Liquid; T = Tissue; WI = Wipe; L = Liquid; V = Vegetation; X = Other

FINAL SAMPLE DISPOSITION: Disposal Method (e.g., Return to customer, per lab procedure, used in process) | Disposed By | Date/Time