

JANUARY 14, 2014

WSCF Laboratory

PO Box 650 S3-30
Richland, WA 99352



January 14, 2014

Scot Fitzgerald
CH2M-HILL PRC
PO Box 1600
Richland, WA 99352

Dear Scot Fitzgerald,

FINAL RESULT FOR SAMPLE DELIVERY GROUP WSCF131598

Reference: (1) SOW, Mod 2, #36587, Release 3
(2) MSC-SD-CD-QAPP-017, current version, Waste Sampling & Characterization Facility Quality Assurance Program Plan

This letter contains the following information for sample delivery group WSCF131598

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

Very truly yours,

Electronically signed by Joseph Hale

For Lab Manager, Dan T. Smith

WSCF Analytical Lab

(509) 373-4804

Attachments 4

CC: w/Attachments

File/LB

ATTACHMENT 1

COVER SHEET

Consisting of 2 pages
Including cover page

WSCF SAF Number Cross Reference

Group # WSCF131598
Data Deliverable Date 01/14/14

SAF #	Sample ID	Sample #	Matrix	Sampled	Received
F13-051	B2RYN9	131598001	WATER	12/30/13	12/30/13
F13-051	B2RYP0	131598002	WATER	12/30/13	12/30/13

ATTACHMENT 2

NARRATIVE

Consisting of 3 pages
Including cover page

Introduction

Samples were received at the WSCF laboratory as referenced on the WSCF SAF Number Cross Reference table included in the final report. 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)*, to Contract 39818, Revision 4, "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, C, D, J and U) 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.
- **C** – Analyte was detected in the blank and was evaluated. Affected sample results in the batch were C flagged (applies to inorganic and wet chemical analyses).
- **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.
- **B (organic analyses)** – Analyte was detected in the blank and was evaluated. Affected sample results in the batch were B flagged.
- **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.
- **o** – LCS recovery outside established laboratory acceptance limits.

Analytical Methodology for Requested Analyses

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

Inorganic Comments

ICP-AES Metals – The hold time requirements for this analysis were met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group. Analytical Note(s):

- Potassium and Sodium were detected in the Blank and evaluated.
- All other applicable QC controls are within the established limits.

Radiochemistry Comments

Rad Chem – The hold time requirement for this analysis was met. A Duplicate, Matrix Spike (Matrix Spikes apply only to Tritium), Blank and Laboratory Control Sample were analyzed with this delivery group. Analytical Note(s):

Tracers are used to determine chemical yield. RPD is monitored in sample duplicate and is not required for tracer recovery per SOW.

Strontium-89/90:

- All applicable QC controls are within the established limits.

Tritium:

- All applicable 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.

JANUARY 14, 2014

ATTACHMENT 3

ANALYTICAL RESULTS

Consisting of 13 pages
Including cover page

JANUARY 14, 2014

WSCF ANALYTICAL RESULTS REPORT

For

CH2M Hill Plateau Remediation

PO Box 1600
Richland, WA 99352

Attention: Scot Fitzgerald

Contract # MOA-FH-CHPRC-2008
Group # WSCF131598
Report Date January 14, 2014

Analytical: Electronically signed by Joseph Hale

Client Services: Electronically signed by Heather Medley

Solid samples results that have a 'Percent Solid' test are reported on a "dry weight basis", except results of TCLP, Percent Solid, and Total Activity. If no 'Percent Solid' test is reported then the 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) 373-7005. Information designation of this report is the responsibility of the customer.

Batch QC List

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF131598

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
225811	226131	5	BLANK	103357	BLANK		ICP-6010 - All possible metals
225811	226131	7	LCS	103359	LCS		ICP-6010 - All possible metals
225811	226131	9	MS	103360	B2TLL6(131526007MS)	131526007	ICP-6010 - All possible metals
225811	226131	10	MSD	103361	B2TLL6(131526007MSD)	131526007	ICP-6010 - All possible metals
225811	226131	16	SAMPLE	131598001	B2RYN9		ICP-6010 - All possible metals

Batch QC List

Attention Scot Fitzgerald
Department Radiochemistry

Group # WSCF131598

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
225435	225600	1	BLANK	103109	BLANK		Tritium by LSC
225435	225600	2	LCS	103110	LCS		Tritium by LSC
225435	225600	4	DUP	103111	B2TFW6(131578009DUP)	131578009	Tritium by LSC
225435	225600	5	MSPK	103112	B2TFW6(131578009MSP)		Tritium by LSC
225435	225600	17	SAMPLE	131598002	B2RYP0		Tritium by LSC
225500	225810	1	BLANK	103206	BLANK		Strontium 89/90 (GPC/GEA)
225500	225810	2	LCS	103207	LCS		Strontium 89/90 (GPC/GEA)
225500	225810	3	DUP	103208	B2RYP0(131598002DUP)	131598002	Strontium 89/90 (GPC/GEA)
225500	225810	4	SAMPLE	131598002	B2RYP0		Strontium 89/90 (GPC/GEA)

Method Reference

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF131598

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-505-411	Elemental Analysis by ICP Atomic Emission Spectroscopy (ICP AES)		
	EPA SW-846	6010C	Inductively Coupled Plasma-Atomic Emmission Spectrometry
	HEIS	6010_METALS_ICP	Inductively Coupled Plasma-Atomic Emmission Spectrometry

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>

Method Reference

Attention Scot Fitzgerald
Department Radiochemistry

Group # WSCF131598

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-218-413	Tritium By Ion Removal Using Eichrom Resin Columns (Prep)		
	N/A	PREP METHOD	
LA-220-406	Strontium-89 and 90 in Aqueous Samples by SR-SPEC Separation		
	HEIS	SRTOT_SEP_PRECIP_GPC	Strontium 89/90, by Sr-Spec Sep.
LA-508-421	Operation of the Tri-Carb Model 2500TR Liquid Scintillation Analyzer		
	HEIS	ALPHA_LSC	A/B Liquid Scintillation
	HEIS	BETA_LSC	A/B Liquid Scintillation
	HEIS	TC99_3MDSK_LSC	TC99 by Liquid Scintillation
	HEIS	TRITIUM_EIE_LSC	Tritium, by Eichrome ion exchange, LSC

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>

Attention Scot Fitzgerald
 Department Inorganic

Group # WSCF131598

Sample # 131598001
 SAF# F13-051
 Sample ID B2RYN9

Matrix WATER
 Sampled 12/30/13
 Received 12/30/13

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICPAES Prep (W)										01/08/14
ICP-6010 - All possible metals										
Iron	7439-89-6	LA-505-411		65.9		ug/L	1	40	50	01/09/14
Magnesium	7439-95-4	LA-505-411		8630		ug/L	1	60	750	01/09/14
Manganese	7439-96-5	LA-505-411		51.0		ug/L	1	4.0	5.0	01/09/14
Potassium	7440-09-7	LA-505-411	C	5940		ug/L	1	250	4000	01/09/14
Sodium	7440-23-5	LA-505-411		13200		ug/L	1	100	500	01/09/14
Chromium	7440-47-3	LA-505-411	B	5.00		ug/L	1	5.0	10	01/09/14
Cobalt	7440-48-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	01/09/14
Calcium	7440-70-2	LA-505-411		39400		ug/L	1	50	1000	01/09/14

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

B - Analyte < the PQL(or EQL)but >= the IDL/MDL(Inorganic)
 C - Analyte was found in the Associated Blank. (Inorganic)
 D - Analyte was reported at a secondary dilution 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.
 PQL is equivalent to Estimated Quantitation Limit (EQL)
 o - LCS recovery outside established laboratory acceptance limits.
 o - LCS recovery outside established laboratory acceptance limits.

Attention Scot Fitzgerald
 Department Radiochemistry

Group # WSCF131598

Sample # 131598002
 SAF# F13-051
 Sample ID B2RYP0

Matrix WATER
 Sampled 12/30/13
 Received 12/30/13

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Strontium 89/90 WATER/LIQUID PREP										01/02/14
Strontium 89/90 (GPC/GEA)										
Strontium-89_90	SR-RAD	LA-220-406	U	-0.37	.74	pCi/L	1	1.3		01/06/14
Tritium by LSC EICHROM WA/LIQ PREP										12/31/13
Tritium by LSC										
Tritium	10028-17-8	LA-508-421		2900	650	pCi/L	1	290		01/07/14

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

B - Analyte was detected in both the BLANK and SAMPLE
 U - Analyzed for but not detected above limiting criteria.
 N - Spike Recovery is Outside Control Limits.
 X,Y or Z - See comment detail and/or narrative.
 PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

Quality Control Report

Attention Scot Fitzgerald
Department Radiochemistry

Group # WSCF131598

Analytical Batch 225600 (QC Batch: 225435)
Associated Samples 131598002

Test Tritium by LSC

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK										
Tritium LCS	10028-17-8		49	pCi/L					U	01/07/14
Tritium DUP	10028-17-8		3200	pCi/L	96.2	80 - 120				01/07/14
Tritium MSPK	10028-17-8		8700	pCi/L			0.70	20		01/07/14
Tritium	10028-17-8		28000	pCi/L	94.6	75 - 125				01/07/14

* - QC result out of range

n/a - Not Applicable

Quality Control Report

Attention Scot Fitzgerald
Department Radiochemistry

Group # WSCF131598

Analytical Batch 225810 (QC Batch: 225500)
Associated Samples 131598002

Test Strontium 89/90 (GPC/GEA)

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK		QC Sample #103206								
Strontium-89_90	SR-RAD		-0.65	pCi/L					U	01/06/14
LCS		QC Sample #103207								
Strontium-89_90	SR-RAD		87	pCi/L	93.6	80 - 120				01/06/14
DUP		QC Sample #103208								
		Original 131598002								
Strontium-89_90	SR-RAD	-0.37	-0.26	pCi/L			-36.30	20	* U	01/06/14

* - QC result out of range

n/a - Not Applicable

Quality Control Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF131598

Analytical Batch 226131 (QC Batch: 225811)
Associated Samples 131598001

Test ICP-6010 - All possible metals

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK		QC Sample #103357								
Iron	7439-89-6	<40		ug/L					U	01/09/14
Magnesium	7439-95-4	<60		ug/L					U	01/09/14
Manganese	7439-96-5	<4.0		ug/L					U	01/09/14
Potassium	7440-09-7	382		ug/L					B	01/09/14
Sodium	7440-23-5	221		ug/L					B	01/09/14
Chromium	7440-47-3	<5.0		ug/L					U	01/09/14
Cobalt	7440-48-4	<4.0		ug/L					U	01/09/14
Calcium	7440-70-2	<50		ug/L					U	01/09/14
LCS		QC Sample #103359								
Iron	7439-89-6	1080		ug/L	108	80 - 120				01/09/14
Magnesium	7439-95-4	10400		ug/L	103.9	80 - 120				01/09/14
Manganese	7439-96-5	1040		ug/L	103.9	80 - 120				01/09/14
Potassium	7440-09-7	11200		ug/L	112	80 - 120				01/09/14
Sodium	7440-23-5	10700		ug/L	106.9	80 - 120				01/09/14
Chromium	7440-47-3	1020		ug/L	102.4	80 - 120				01/09/14
Cobalt	7440-48-4	1020		ug/L	101.5	80 - 120				01/09/14

* - QC result out of range

n/a - Not Applicable

Quality Control Report

Attention Scot Fitzgerald
 Department Inorganic

Group # WSCF131598

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Calcium	7440-70-2		21000	ug/L	104.8	80 - 120				01/09/14
MS			QC Sample #103360							
			Original 131526007							
Iron	7439-89-6		1020	ug/L	102.3	75 - 125				01/09/14
Magnesium	7439-95-4		10200	ug/L	102.5	75 - 125				01/09/14
Manganese	7439-96-5		1010	ug/L	101.3	75 - 125				01/09/14
Potassium	7440-09-7		10700	ug/L	106.7	75 - 125				01/09/14
Sodium	7440-23-5		10500	ug/L	104.9	75 - 125				01/09/14
Chromium	7440-47-3		1000	ug/L	100	75 - 125				01/09/14
Cobalt	7440-48-4		979	ug/L	97.9	75 - 125				01/09/14
Calcium	7440-70-2		19000	ug/L	95	75 - 125				01/09/14
MSD			QC Sample #103361							
			Original 131526007						Paired 103360	
Iron	7439-89-6		1000	ug/L	100	75 - 125	2.30	20		01/09/14
Magnesium	7439-95-4		10000	ug/L	100.4	75 - 125	0.70	20		01/09/14
Manganese	7439-96-5		990	ug/L	99	75 - 125	2.30	20		01/09/14
Potassium	7440-09-7		10200	ug/L	102.1	75 - 125	2.40	20		01/09/14
Sodium	7440-23-5		9750	ug/L	97.5	75 - 125	2.70	20		01/09/14
Chromium	7440-47-3		977	ug/L	97.7	75 - 125	2.40	20		01/09/14
Cobalt	7440-48-4		951	ug/L	95.1	75 - 125	3.00	20		01/09/14
Calcium	7440-70-2		19800	ug/L	99.1	75 - 125	0.90	20		01/09/14

* - QC result out of range

n/a - Not Applicable

Quality Control Report

Attention Scot Fitzgerald
Department Radiochemistry

Group # WSCF131598

Analytical Batch 225810 (QC Batch: 225500)
Associated Samples 131598002

Test Strontium 89/90 (GPC/GEA)

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK										
			QC Sample #103206							
Strontium Nitrate	10042-76-9			mg	55.4	25 - 105				01/06/14
LCS			QC Sample #103207							
Strontium Nitrate	10042-76-9			mg	72.7	25 - 105				01/06/14
DUP			QC Sample #103208							
			Original 131598002							
Strontium Nitrate	10042-76-9	9.2		mg	75.2	25 - 105	n/a			01/06/14
SAMPLE			Sample #131598002							
Strontium Nitrate	10042-76-9			mg	76	25 - 105				01/06/14

* - QC result out of range

n/a - Not Applicable

ATTACHMENT4

SAMPLE RECEIPT

Consisting of 4 pages
Including cover page

Waste Sampling and Characterization Facility
P.O. Box 650 S3-30, Richland WA 99352
Phone: (509) 373-7005/FAX: (509) 372-0456

ACKNOWLEDGEMENT OF SAMPLES RECEIVED

WSCF Laboratory

PO Box 650 S3-30
 Richland, WA 99352

ATTN: Scot Fitzgerald

Customer Code: CHPRC
CA CN: 404401
Work Order #: 131598
Customer Work ID: F13-051-306
Due Date: 01/14/2014

The following samples were received from you on 12/30/2013 12:30:00 PM. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact WSCF Client Services. Thank you for using Waste Sampling and Characterization Facility.

Sample #	Sample ID	Matrix	Collected	Received
131598001	B2RYN9	WATER	12/30/2013 11:38	12/30/2013 12:30
Procedure		Compound List		
ICP-6010 - All possible metals		Fe, Mg, Mn, K, Na, Cr, Co, Ca		
Sample #	Sample ID	Matrix	Collected	Received
131598002	B2RYP0	WATER	12/30/2013 11:38	12/30/2013 12:30
Procedure		Compound List		
Strontium 89/90 (GPC/GEA)		SR89/90		
Tritium by LSC		H3		

Chain of Custody

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		PAGE 1 OF 1	
COLLECTOR R Crew	COMPANY CONTACT TODAK, D	TELEPHONE NO. 376-6427	PROJECT COORDINATOR TODAK, D	PRICE CODE 7C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION CR76, I-003	PROJECT DESIGNATION Sampling and Analysis of New Wells in 100-BC Area - Water	FIELD LOGBOOK NO. HMF-N-50729/50	SAF NO. F13-051	AIR QUALITY <input type="checkbox"/>	METHOD OF SHIPMENT GOVERNMENT VEHICLE ORIGINAL
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HMF-N-50729/50	ACTUAL SAMPLE DEPTH 125.3	COA 30320JES10	BILL OF LADING/AIR BILL NO. N/A	
SHIPPED TO Waste Sampling & Characterization		OFFSITE PROPERTY NO. N/A			

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS	PRESERVATION	HOLDING TIME	TYPE OF CONTAINER	NO. OF CONTAINER(S)	VOLUME	SPECIAL HANDLING AND/OR STORAGE
A-Air DL-Drum Liquids OS-Oil Solids L-Liquid O-Oil S-Soil SE-Sediment T-Tissue VE-Vegetation W-Water M-Metal X-Other	**Contaminants Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR/147A Dangerous Goods Regulations but are NOT releasable per DCE Order 458.1.**	<2	6 Months	CRP	1	500 mL	
B2RYN9	WATER						131598
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME				
		12-30-13	1138				

FILTER

CHAIN OF POSSESSION	SIGN/ PRINT NAMES	SPECIAL INSTRUCTIONS
REINQUISHED BY/REMOVED FROM R Crew/R Crew	RECEIVED BY/STORER KHILBY	** The CACN for WSCF Analytical is 404401.□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. TRVL-13-109 (1) 6010_METALS_ICP: COMMON (Calcium, Chromium, Cobalt, Iron, Magnesium, Manganese, Potassium, Sodium);
DATE/TIME 12-30-13 12:30	DATE/TIME 12-30-13 12:30	
REINQUISHED BY/REMOVED FROM	RECEIVED BY/STORER	
DATE/TIME	DATE/TIME	
REINQUISHED BY/REMOVED FROM	RECEIVED BY/STORER	
DATE/TIME	DATE/TIME	
REINQUISHED BY/REMOVED FROM	RECEIVED BY/STORER	
DATE/TIME	DATE/TIME	
REINQUISHED BY/REMOVED FROM	RECEIVED BY/STORER	
DATE/TIME	DATE/TIME	

FILTER

TRVL-13-109

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

PRINTED ON: 9/24/2013

A-0603-008 (REV 4)

Chain of Custody

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				F13-051-307	PAGE 1 OF 1
COLLECTOR <i>R Crow</i>	COMPANY CONTACT TODAK, D	TELEPHONE NO. 376-6427	PROJECT COORDINATOR TODAK, D	PRICE CODE 7C	DATA TURNAROUND 15 Days / 15 DAYS		
SAMPLING LOCATION C0776-1-003	PROJECT DESIGNATION Sampling and Analysis of New Wells in 100-BC Area - Water	FIELD LOGBOOK NO. HNF-50729/50	ACTUAL SAMPLE DEPTH 125.3	AIR QUALITY <input type="checkbox"/>			
ICE CHEST NO. N/A	OFFSITE PROPERTY NO. N/A	COA 30320E310	BILL OF LADING/AIR BILL NO. N/A	METHOD OF SHIPMENT (GOVERNMENT VEHICLE)	ORIGINAL		
SHIPPED TO Waste Sampling & Characterization							

MATRIX*	POSSIBLE SAMPLE HAZARDS/REMARKS ***Criteria Media/active Material at concentrations that may or may not be regulated for transportation per 49 CFR/ATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.**	PRESERVATION		HOLDING TIME		TYPE OF CONTAINER		NO. OF CONTAINER(S)		VOLUME		SAMPLE ANALYSIS	
		1ND3 to pH <2	None	6 Months	6 Months	G/P	G	1	1	1L	25mL	SECTION 202 JM ELEC. GPC COMMON	TITRIM. DEC J SC COMMON
BRYPO	WATER	12-30-13	1138	✓	✓								

CHAIN OF POSSESSION		SIGN/PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM <i>R Crow</i>	DATE/TIME 12-30-13 12:130	RECEIVED BY/STORED IN <i>K Fluhler</i>	DATE/TIME 12-30-13 12:130	** The CACN for WSCF Analytical is 404401.□** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. TRVL-13-109	
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		

PRINTED ON 9/24/2013

TRVL-13-109