

WSCF Laboratory

RECEIVED FEBRUARY 17, 2011

0099603

PO Box 650 S3-30
Richland, WA 99352



February 16, 2011

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

Dear Michael Neely,

FINAL RESULT FOR SAMPLE DELIVERY GROUP WSCF111418

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

This letter contains the following information for sample delivery group WSCF111418

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

Very truly yours,

A handwritten signature in black ink, appearing to read "Joseph Hale", is written over a horizontal line.

Electronically signed by Joseph Hale

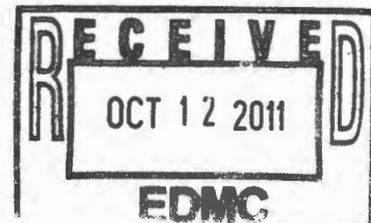
For Lab Manager

WSCF Analytical Lab

(509) 373-7495

Attachments 4

CC: w/Attachments



File/LB

ATTACHMENT 1

COVER SHEET

Consisting of 2 pages
Including cover page

WSCF SAF Number Cross Reference

Group # WSCF111418
Data Deliverable Date 02/18/11

SAF #	Sample ID	Sample #	Matrix	Sampled	Received
F11-001	B29M55	111418001	WATER	02/03/11	02/03/11

ATTACHMENT 2

NARRATIVE

Consisting of 3 pages
Including cover page

Introduction

A sample was received at the WSCF laboratory as referenced on the WSCF SAF Number Cross Reference table included in the final report. The sample was 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, U 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

Anions – Hold time requirements for this analysis were met. A Duplicate, Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group. Analytical Note(s):

- Sulfate – Matrix Spike and/or Matrix Spike Duplicate recoveries are outside established laboratory limits. Affected sample results in this batch were "N" flagged.

- Sulfate – MS / MSD Relative Percent Difference (RPD) is outside established laboratory limits. The quality control report was flagged for RPD failure.
- 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 Technetium), Blank and Laboratory Control Sample were analyzed with this delivery group. Analytical Note(s):

- Gamma Energy Analysis:
 - All applicable QC controls are within the established limits.
- Gross Alpha / Gross Beta:
 - All applicable QC controls are within the established limits.
- Technetium-99:
 - 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.

ATTACHMENT 3

ANALYTICAL RESULTS

Consisting of 14 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 # WSCF111418
Report Date February 16, 2011

Analytical: Electronically signed by Joseph Hale

Client Services: Electronically signed by Richard Barker

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) 373-7020 or (509) 531-8004. Information designation of this report is the responsibility of the customer.

Batch QC List

Attention Michael Neely
Department Inorganic

Group # WSCF111418

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
176061	176061	2	BLANK	48400	BLANK		Anions by Ion Chromatography (Water)
176061	176061	3	LCS	48401	LCS		Anions by Ion Chromatography (Water)
176061	176061	4	DUP	48402	B26RV2(111405001DUP)	111405001	Anions by Ion Chromatography (Water)
176061	176061	5	MS	48403	B26RV2(111405001MS)	111405001	Anions by Ion Chromatography (Water)
176061	176061	6	MSD	48404	B26RV2(111405001MSD)	111405001	Anions by Ion Chromatography (Water)
176061	176061	14	SAMPLE	111418001	B29M55		Anions by Ion Chromatography (Water)

Batch QC List

Attention Michael Neely
 Department Radiochemistry

Group # WSCF111418

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
176151	176283	1	BLANK	48442	BLANK		Gross Alpha/Gross Beta
176151	176283	2	LCS	48443	LCS		Gross Alpha/Gross Beta
176151	176283	5	DUP	48444	B290C0(111254001DUP)	111254001	Gross Alpha/Gross Beta
176151	176283	10	SAMPLE	111418001	B29M55		Gross Alpha/Gross Beta
176151	176283	11	SAMPLE	111418001	B29M55		Gross Alpha/Gross Beta
176254	176292	1	IBLANK	48552	IBLANK		Gamma Energy Analysis-general
176254	176292	2	LCS	48553	LCS		Gamma Energy Analysis-general
176254	176292	3	DUP	48554	B29M55(111418001DUP)	111418001	Gamma Energy Analysis-general
176254	176292	4	SAMPLE	111418001	B29M55		Gamma Energy Analysis-general
176278	176770	1	BLANK	48611	BLANK		TC99 by Liquid Scintillation
176278	176770	2	LCS	48612	LCS		TC99 by Liquid Scintillation
176278	176770	3	SAMPLE	111418001	B29M55		TC99 by Liquid Scintillation
176278	176770	4	DUP	48613	B29M55(111418001DUP)	111418001	TC99 by Liquid Scintillation
176278	176770	5	MS	48614	B29M55(111418001MS)	111418001	TC99 by Liquid Scintillation

Method Reference

Attention Michael Neely
Department Inorganic

Group # WSCF111418

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-533-410	Anion Analysis by Ion Chromatography		Determination of Inorganic Anions by Ion Chromatography
	EPA-600/R-94-111	300.0	
	HEIS	300.0_ANIONS_IC	Determination of Inorganic Anions by Ion Chromatography

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 Michael Neely
Department Radiochemistry

Group # WSCF111418

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-508-481	Gamma Energy Analysis using the Canberra Genie Ssystem		
	HEIS	GAMMA_GS	Gamma Energy Analysis
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
LA-508-415	Operation Of The Protean 2-Inch Alpha/Beta Counting System For Gross Alpha/ Beta Samples		
	HEIS	ALPHA_GPC	Gross Alpha by GPC
	HEIS	BETA_GPC	Gross Beta by GPC
	HEIS	SRTOT_SEP_PRECIP_GPC	Strontium beta isotopic, GPC

Note: A complete list of WSCF analytical procedures and reference regulatory or industry methods is available online at <http://www7.r1.gov/rapidweb/AS-DOL/index.cfm>

WSCF Analytical Results Report

Attention Michael Neely
 Department Inorganic

Group # WSCF111418

Sample # 111418001
 SAF# F11-001
 Sample ID B29M55

Matrix WATER
 Sampled 02/03/11
 Received 02/03/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										02/03/11
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<0.088		ug/mL	2	0.088	0.40	02/03/11
Chloride	16887-00-6	LA-533-410	UD	<0.084		ug/mL	2	0.084	0.80	02/03/11
Nitrite-N	NO2-N	LA-533-410	UD	<0.036		ug/mL	2	0.036	0.20	02/03/11
Bromide	24959-67-9	LA-533-410	UD	<0.11		ug/mL	2	0.11	1.0	02/03/11
Nitrate-N	NO3-N	LA-533-410	UD	<0.019		ug/mL	2	0.019	0.20	02/03/11
Phosphate-P	PO4-P	LA-533-410	UD	<0.14		ug/mL	2	0.14	0.80	02/03/11
Sulfate	14808-79-8	LA-533-410	UD	<0.17		ug/mL	2	0.17	2.0	02/03/11

MDL = Minimum Detection
 RQ = Result Qualifier
 TP Err = Total Propagated
 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 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.
 PQL is equivalent to Estimated Quantitation Limit (EQL)

WSCF Analytical Results Report

Group # WSCF111418

Attention Michael Neely
 Department Radiochemistry

Sample # 111418001
 SAF# F11-001
 Sample ID B29M55

Matrix WATER
 Sampled 02/03/11
 Received 02/03/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alpha/Beta Prep										02/08/11
Gross Alpha/Beta										
Gross Alpha	12587-46-1	LA-508-415	U	-1.2	.76	pCi/L	1	1.9		02/11/11
Gross Beta	12587-47-2	LA-508-415		6.4	2.1	pCi/L	1	2.8		02/11/11
GEA Prep										02/08/11
GEA										
Cesium-137	10045-97-3	LA-508-481	U	7.0	6.9	pCi/L	1	12		02/09/11
Cobalt-60	10198-40-0	LA-508-481	U	0.42	6.4	pCi/L	1	11		02/09/11
Europium-152	14683-23-9	LA-508-481	U	6.7	19	pCi/L	1	32		02/09/11
Europium-154	15585-10-1	LA-508-481	U	-0.039	18	pCi/L	1	31		02/09/11
Europium-155	14391-16-3	LA-508-481	U	-11	19	pCi/L	1	32		02/09/11
Tc-99										02/08/11
TRI-CARB LSC										
Technetium-99	14133-76-7	LA-508-421	U	3.7	4.8	pCi/L	1	7.8		02/15/11

MDL = Minimum Detection
 RQ = Result Qualifier
 TP Err = Total Propagated
 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.

Quality Control Report

Attention Michael Neely
 Department Inorganic

Group # WSCF111418

QC Batch 176061 Test Anions by Ion Chromatography (Water)
 Associated Samples 111418001

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK		QC Sample #48400								
Fluoride	16984-48-8		<0.044	ug/mL					U	02/03/11
Chloride	16887-00-6		<0.042	ug/mL					U	02/03/11
Nitrite-N	NO2-N		<0.018	ug/mL					U	02/03/11
Bromide	24959-67-9		<0.054	ug/mL					U	02/03/11
Nitrate-N	NO3-N		<9.7E-3	ug/mL					U	02/03/11
Phosphate-P	PO4-P		<0.072	ug/mL					U	02/03/11
Sulfate	14808-79-8		<0.083	ug/mL					U	02/03/11
LCS		QC Sample #48401								
Fluoride	16984-48-8		0.920	ug/mL	92.9	90 - 110				02/03/11
Chloride	16887-00-6		1.95	ug/mL	98.6	90 - 110				02/03/11
Nitrite-N	NO2-N		0.984	ug/mL	100.6	90 - 110				02/03/11
Bromide	24959-67-9		3.97	ug/mL	101.2	90 - 110				02/03/11
Nitrate-N	NO3-N		0.925	ug/mL	104.5	90 - 110				02/03/11
Phosphate-P	PO4-P		1.93	ug/mL	101.1	90 - 110				02/03/11
Sulfate	14808-79-8		4.06	ug/mL	103.4	90 - 110				02/03/11
DUP		QC Sample #48402								
		Original 111405001								
Fluoride	16984-48-8		0.297	ug/mL			1.70	20	BD	02/03/11

Quality Control Report

Attention Michael Neely
 Department Inorganic

Group # WSCF111418

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Chloride	16887-00-6		5.05	ug/mL			1.00	20	D	02/03/11
Nitrite-N	NO2-N		<0.036	ug/mL			0.00	20	UD	02/03/11
Bromide	24959-67-9		<0.11	ug/mL			0.00	20	UD	02/03/11
Nitrate-N	NO3-N		0.940	ug/mL			1.70	20	D	02/03/11
Phosphate-P	PO4-P		<0.14	ug/mL			0.00	20	UD	02/03/11
Sulfate	14808-79-8		25.9	ug/mL			1.60	20	D	02/03/11
MS		QC Sample #48403								
		Original 111405001								
Fluoride	16984-48-8		0.970	ug/mL	97	80 - 120			D	02/03/11
Chloride	16887-00-6		1.96	ug/mL	98.1	80 - 120			D	02/03/11
Nitrite-N	NO2-N		1.01	ug/mL	102.5	80 - 120			D	02/03/11
Bromide	24959-67-9		3.84	ug/mL	96.8	80 - 120			D	02/03/11
Nitrate-N	NO3-N		0.899	ug/mL	100.6	80 - 120			D	02/03/11
Phosphate-P	PO4-P		2.00	ug/mL	103.4	80 - 120			D	02/03/11
Sulfate	14808-79-8		3.72	ug/mL	93.8	80 - 120			D	02/03/11
MSD		QC Sample #48404								
		Original 111405001								
		Paired 48403								
Fluoride	16984-48-8		0.946	ug/mL	94.6	80 - 120	2.50	20	D	02/03/11
Chloride	16887-00-6		1.91	ug/mL	95.6	80 - 120	2.60	20	D	02/03/11
Nitrite-N	NO2-N		1.18	ug/mL	119.1	80 - 120	15.00	20	D	02/03/11
Bromide	24959-67-9		4.32	ug/mL	109	80 - 120	11.90	20	D	02/03/11
Nitrate-N	NO3-N		0.921	ug/mL	103	80 - 120	2.40	20	D	02/03/11
Phosphate-P	PO4-P		1.93	ug/mL	100.1	80 - 120	3.20	20	D	02/03/11
Sulfate	14808-79-8		3.04	ug/mL	76.7	80 - 120	20.10	20	* DNX	02/03/11

Quality Control Report

Attention Michael Neely
 Department Radiochemistry

Group # WSCF111418

QC Batch 176151 Test Gross Alpha/Gross Beta
 Associated Samples 111418001

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK		QC Sample #48442								
Gross Alpha	12587-46-1		-0.53	pCi/L					U	02/11/11
Gross Beta	12587-47-2		0.52	pCi/L					U	02/11/11
LCS		QC Sample #48443								
Gross Alpha	12587-46-1		79	pCi/L	96.6	80 - 120				02/11/11
Gross Beta	12587-47-2		250	pCi/L	115.1	80 - 120				02/11/11
DUP		QC Sample #48444								
		Original 111254001								
Gross Alpha	12587-46-1		-0.64	pCi/L			497.70	20	* U	02/11/11
Gross Beta	12587-47-2		18	pCi/L			0.00	20		02/11/11

Quality Control Report

Attention Michael Neely
 Department Radiochemistry

Group # WSCF111418

QC Batch 176254 Test Gamma Energy Analysis-general
 Associated Samples 111418001

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
IBLANK		QC Sample #48552								
Cesium-137	10045-97-3		4.1	pCi/L					U	02/09/11
Cobalt-60	10198-40-0		8.3	pCi/L					U	02/09/11
Europium-152	14683-23-9		-15	pCi/L					U	02/09/11
Europium-154	15585-10-1		1.8	pCi/L					U	02/09/11
Europium-155	14391-16-3		15	pCi/L					U	02/09/11
LCS		QC Sample #48553								
Cesium-137	10045-97-3		6500	pCi/sample	107.1	80 - 120				02/09/11
Cobalt-60	10198-40-0		10000	pCi/sample	102.3	80 - 120				02/09/11
DUP		QC Sample #48554								
		Original 111418001								
Cesium-137	10045-97-3	7.0	1.9	pCi/L			114.60	20	* U	02/09/11
Cobalt-60	10198-40-0	0.42	1.1	pCi/L			89.50	20	* U	02/09/11
Europium-152	14683-23-9	6.7	14	pCi/L			70.50	20	* U	02/09/11
Europium-154	15585-10-1	-0.039	-21	pCi/L			-199.30	20	* U	02/09/11
Europium-155	14391-16-3	-11	-13	pCi/L			-16.70	20	U	02/09/11

Quality Control Report

Attention Michael Neely
 Department Radiochemistry

Group # WSCF111418

QC Batch 176278 Test TC99 by Liquid Scintillation
 Associated Samples 111418001

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK										
			QC Sample #48611							
Technetium-99	14133-76-7		-5.1	pCi/L					U	02/15/11
LCS										
			QC Sample #48612							
Technetium-99	14133-76-7		230	pCi/L	104.1	80 - 120				02/15/11
DUP										
			QC Sample #48613							
			Original 111418001							
Technetium-99	14133-76-7	3.7	0.20	pCi/L			179.50	20	* U	02/15/11
MS										
			QC Sample #48614							
			Original 111418001							
Technetium-99	14133-76-7	3.7	940	pCi/L	108.7	75 - 125				02/15/11

Analytical Comment Report

Attention: Michael Neely

Group #

WSCF111418

Quality Control Comments

Department Inorganic

48404

B26RV2(111405001MSD)

Analyte Sulfate - Anions by Ion Chromatography (Water)

[1] Matrix Spike RPD outside established laboratory limits No flags assigned.

ATTACHMENT4

SAMPLE RECEIPT

Consisting of 3 pages
Including cover page

Sample Receipt

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 650 S3-30
Richland, WA 99352

ATTN: Michael Neely

Customer Code: CHPRC
PO #: 402415
Work Order #: 111418
Profile #: F11-001-002
Proj. Mgr.:
Phone:

The following samples were received from you on 2/3/2011 2:35:00 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				
111418001	B29M55	WATER	2/3/2011 13:24	2/3/2011 14:35
GAB-AO-W; GAB-BO-W; GEA-M; IC-W; TC99-W				

Test Acronym Description

Test Acronym	Description
GAB-AO-W	Gross Alpha/Beta (A only)(W)
GAB-BO-W	Gross Alpha/Beta (B only)(W)
GEA-M	Gamma Energy Analysis (M)
IC-W	Anions by IC (W)
TC99-W	Technetium-99 (W)

01/20/11 7:08:54 PM
 Page 2 of 2

CH2M HILL Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F11-001-002

PAGE 1 OF 1

COLLECTOR
 D. WOOD, D. WILLIAMS
SAMPLING LOCATION
 CRD Ext. Well 2/9E1365 SAMPLE 2
ICE CHEST NO.
 N/A
SHIPPED TO
 Waste Sampling & Characterization

COMPANY CONTACT
 EVANS, RT
TELEPHONE NO.
 373-7974
PROJECT DESIGNATION
 200-DC-1 Soil Desiccation Prod Test - Water
FIELD LOGBOOK NO.
 HNF-N-585-10/6/
ACTUAL SAMPLE DEPTH
 N/A
OFFSITE PROPERTY NO.
 N/A

PROJECT COORDINATOR
 EVANS, RT
SAF NO.
 F11-001
AIR QUALITY
 17
METHOD OF SHIPMENT
 GOVERNMENT VEHICLE
BILL OF LADING/AIR BILL NO.
 N/A
PRICE CODE 78
DATA TURNOVER
 7 Days / 15 Days

MATRIX*
 A=Air
 DL=Drum
 L=Liquid
 DS=Drum
 S=Soil
 T=Topsoil
 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)
 111418
SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	COB-60	HM-137	HM-152	HM-154	HM-155
48 Hours	6 Months	6 Months	6 Months	6 Months	6 Months
HOLDING TIME					
TYPE OF CONTAINER	GP	GP	GP	GP	GP
NO. OF CONTAINER(S)	1	1	1	1	1
VOLUME	500ML	500ML	500ML	500ML	500ML
SAMPLE ANALYSIS	IC Anom PROC. (Per Com vman)	SEE ITEM #1 IN SPECIAL INSTRUCTIONS	SEE ITEM #2 IN SPECIAL INSTRUCTIONS	Technetium 99 (Technetium 99)	

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	COB-60	HM-137	HM-152	HM-154	HM-155
B29M55	WATER	2-3-11	15:24	X	X	X	X	

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
D. WOOD/D. WILLIAMS	2-3-11/14:35	K. BERRY	2-3-11/14:35
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

** The CACN for WSCF Analytical is currently being determined. Once the CACN is established it will be distributed for use by the laboratory.
 ** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GCI applies to this SAF.
 (1) Gamma Spectroscopy (Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155);
 (2) Gross Alpha (Gross alpha); Gross Beta (Gross beta);

ORIGINAL

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