0080206

RECEIVED JANUARY 15, 2009

WSCF Laboratory

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

Memorandum

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

Date: January 14, 2009

From: WSCF Laboratory
WSCF Analytical Chemistry

CC:

Subject: FINAL RESULT FOR SAMPLE DELIVERY GROUP WSCF80109

Reference: (1) MOA-FH-CHPRC-2008
(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 WCSF80109

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

Electronically signed by Scot Fitzgerald
For Lab Manager

Attachments 4

RECEIVED
FEB 0 3 2009
EDMC

ATTACHMENT 1

COVER SHEET

Consisting of 2 pages
Including cover page

WSCF SAF Number Cross Reference

Group # WSCF80109
Data Deliverable Date 12/25/08

SAF #	Sample ID	Sample #	Matrix	Sampled	Received
W09-011	B1XMY4	80109001	WATER	11/10/08	11/10/08
W09-011	B1XMX8	80109002	WATER	11/10/08	11/10/08
W09-011	B1XMY0	80109003	WATER	11/10/08	11/10/08
W09-011	B1XMY5	80109004	WATER	11/10/08	11/10/08
W09-011	B1XMY7	80109005	WATER	11/10/08	11/10/08
W09-011	B1XMX9	80109006	WATER	11/10/08	11/10/08
W09-011	B1XMY1	80109007	WATER	11/10/08	11/10/08
W09-011	B1XMY6	80109008	WATER	11/10/08	11/10/08
W09-011	B1XMY8	80109009	WATER	11/10/08	11/10/08
I09-005	B1XJ67	80109010	WATER	11/10/08	11/10/08
I09-005	B1XJX0	80109011	WATER	11/10/08	11/10/08
I09-005	B1XHW9	80109012	WATER	11/10/08	11/10/08
I09-005	B1XHX1	80109013	WATER	11/10/08	11/10/08
I09-005	B1XHX2	80109014	WATER	11/10/08	11/10/08
I09-005	B1XHY3	80109015	WATER	11/10/08	11/10/08
I09-005	B1XJ08	80109016	WATER	11/10/08	11/10/08
I09-005	B1XJ09	80109017	WATER	11/10/08	11/10/08
I09-005	B1XJ12	80109018	WATER	11/10/08	11/10/08
I09-005	B1XJ27	80109019	WATER	11/10/08	11/10/08

ATTACHMENT 2

NARRATIVE

Consisting of 3 pages
Including cover page

Attachment 2
Narrative
WSCF80109

Introduction

Nineteen (19) groundwater samples were received at the WSCF Laboratory on November 10, 2008. Samples were analyzed for the analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Memorandum of Agreement (MOA-FH-CHPRC-2008, Rev.0)*, 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 transport container.

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):

- Sample results were D flagged if dilution(s) were required.
- Sample results that were less than the reportable limit, however greater than the method detection limit were B flagged.

All QC controls are within the established limits.

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):

- Sample results that were less than the reportable limit, however greater than the method detection limit were B flagged.
- Calcium, Magnesium and Sodium – Sample concentrations exceeded spiking levels by a factor of > 4. Spike recoveries are not valid. High/check standard was analyzed to ensure linearity, because the sample concentrations were greater than the calibration standard.

All other QC controls are within the established limits.

1

Attachment 2
Narrative
WSCF80109

ICP-MS 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.

All QC controls are within the established limits.

Total Alkalinity – The hold time requirement for this analysis was met. A Duplicate and Laboratory Control Sample were analyzed with this delivery group.

All QC controls are within the established limits.

Radiochemistry Comments

Rad Chem – There are no hold times associated with WSCF's radiochemical methods. A Duplicate, Matrix Spike, Blank and Laboratory Control Sample were analyzed with this delivery group. Analytical Note(s):

- Gross Alpha/Gross Beta – Duplicate Relative Percent Difference (RPD) exceeded established laboratory limits due to low sample activity. No flags issued.
- Strontium-89/90 – Duplicate Relative Percent Difference (RPD) exceeded established laboratory limits due to low sample activity. No flags issued.
- Technetium-99 – Duplicate RPD exceeded established laboratory limits due to low sample activity. No flags issued
- Tritium – Duplicate RPD exceeded established laboratory limits due to low sample activity. No flags issued.

All other QC controls are within the established limits.

I certify that this data package is in compliance with the MOA, 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 Laboratory Analytical Manager and Client Services.

ATTACHMENT 3

ANALYTICAL RESULTS

Consisting of 79 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 #	WSCF80109
Report Date	January 14, 2009

Analytical: Electronically signed by Scot Fitzgerald

Client Services: Electronically signed by Andrew Kopriva

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 # WSCF80109
Project Number W09-011

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
6484	6484	1	BLANK	2389	BLANK		Anions by Ion Chromatography (Water)
6484	6484	3	LCS	2391	LCS		Anions by Ion Chromatography (Water)
6484	6484	5	DUP	2392	B1W5J5(80107004DUP)	80107004	Anions by Ion Chromatography (Water)
6484	6484	6	MS	2393	B1W5J5(80107004MS)	80107004	Anions by Ion Chromatography (Water)
6484	6484	7	MSD	2394	B1W5J5(80107004MSD)	80107004	Anions by Ion Chromatography (Water)
6484	6484	8	SAMPLE	80109012	B1XHW9		Anions by Ion Chromatography (Water)
6484	6484	10	SAMPLE	80109016	B1XJ08		Anions by Ion Chromatography (Water)
6484	6484	11	SAMPLE	80109017	B1XJ09		Anions by Ion Chromatography (Water)
6484	6484	12	SAMPLE	80109018	B1XJ12		Anions by Ion Chromatography (Water)
6484	6484	13	SAMPLE	80109013	B1XHX1		Anions by Ion Chromatography (Water)
6484	6484	14	SAMPLE	80109014	B1XHX2		Anions by Ion Chromatography (Water)
6484	6484	15	SAMPLE	80109015	B1XHY3		Anions by Ion Chromatography (Water)
6484	6484	16	SAMPLE	80109019	B1XJ27		Anions by Ion Chromatography (Water)
9384	9384	1	BLANK	2506	BLANK		Anions by Ion Chromatography (Water)
9384	9384	3	LCS	2508	LCS		Anions by Ion Chromatography (Water)
9384	9384	5	DUP	2509	B1XJ67(80109010DUP)	80109010	Anions by Ion Chromatography (Water)
9384	9384	6	MS	2510	B1XJ67(80109010MS)	80109010	Anions by Ion Chromatography (Water)
9384	9384	7	MSD	2511	B1XJ67(80109010MSD)	80109010	Anions by Ion Chromatography (Water)
9384	9384	8	SAMPLE	80109010	B1XJ67		Anions by Ion Chromatography (Water)
10084	16291	1	MS	2521	B1XMX8(80109002MS)	80109002	ICP-6010 - All possible metals
10084	16291	2	BLANK	2519	BLANK		ICP-6010 - All possible metals
10084	16291	3	LCS	2520	LCS		ICP-6010 - All possible metals
10084	16291	4	MSD	2522	B1XMX8(80109002MSD)	80109002	ICP-6010 - All possible metals

Batch QC List

Attention Michael Neely
Department Inorganic

Group # WSCF80109
Project Number W09-011

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
10084	16291	5	SAMPLE	80109002	B1XMX8		ICP-6010 - All possible metals
10084	16291	6	SAMPLE	80109003	B1XMY0		ICP-6010 - All possible metals
10084	16291	7	SAMPLE	80109004	B1XMY5		ICP-6010 - All possible metals
10084	16291	8	SAMPLE	80109005	B1XMY7		ICP-6010 - All possible metals
10084	16291	9	SAMPLE	80109006	B1XMX9		ICP-6010 - All possible metals
10084	16291	10	SAMPLE	80109007	B1XMY1		ICP-6010 - All possible metals
10084	16291	11	SAMPLE	80109008	B1XMY6		ICP-6010 - All possible metals
10084	16291	12	SAMPLE	80109009	B1XMY8		ICP-6010 - All possible metals
10084	16291	13	SAMPLE	80109010	B1XJ67		ICP-6010 - All possible metals
10084	16291	14	SAMPLE	80109011	B1XJX0		ICP-6010 - All possible metals
14887	14988	6	BLANK	2857	BLANK		ICP-2008 MS All possible metal
14887	14988	9	LCS	2860	LCS		ICP-2008 MS All possible metal
14887	14988	43	MS	2865	B1W5J5(80107004MS)	80107004	ICP-2008 MS All possible metal
14887	14988	44	MSD	2866	B1W5J5(80107004MSD)	80107004	ICP-2008 MS All possible metal
14887	14988	45	SAMPLE	80109001	B1XMY4		ICP-2008 MS All possible metal
14887	14988	46	SAMPLE	80109012	B1XHW9		ICP-2008 MS All possible metal
14887	14988	47	SAMPLE	80109013	B1XHX1		ICP-2008 MS All possible metal
14887	14988	48	SAMPLE	80109014	B1XHX2		ICP-2008 MS All possible metal
14887	14988	49	SAMPLE	80109015	B1XHY3		ICP-2008 MS All possible metal
14887	14988	50	SAMPLE	80109016	B1XJ08		ICP-2008 MS All possible metal
14887	14988	51	SAMPLE	80109017	B1XJ09		ICP-2008 MS All possible metal
14887	14988	54	SAMPLE	80109018	B1XJ12		ICP-2008 MS All possible metal
14887	14988	55	SAMPLE	80109019	B1XJ27		ICP-2008 MS All possible metal

Batch QC List

Attention Michael Neely
Department Radiochemistry

Group # WSCF80109
Project Number W09-011

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
7184	13987	1	BLANK	2421	BLANK		Strontium 89/90 (GPC/GEA)
7184	13987	2	LCS	2422	LCS		Strontium 89/90 (GPC/GEA)
7184	13987	3	DUP	2423	B1XKC4(80106005DUP)	80106005	Strontium 89/90 (GPC/GEA)
7184	13987	9	SAMPLE	80109012	B1XHW9		Strontium 89/90 (GPC/GEA)
7184	13987	10	SAMPLE	80109013	B1XHX1		Strontium 89/90 (GPC/GEA)
7184	13987	11	SAMPLE	80109014	B1XHX2		Strontium 89/90 (GPC/GEA)
7184	13987	12	SAMPLE	80109015	B1XHY3		Strontium 89/90 (GPC/GEA)
7184	13987	13	SAMPLE	80109016	B1XJ08		Strontium 89/90 (GPC/GEA)
7284	13887	1	BLANK	2424	BLANK		Strontium 89/90 (GPC/GEA)
7284	13887	2	LCS	2425	LCS		Strontium 89/90 (GPC/GEA)
7284	13887	3	DUP	2426	B1XJ09(80109017DUP)	80109017	Strontium 89/90 (GPC/GEA)
7284	13887	4	SAMPLE	80109017	B1XJ09		Strontium 89/90 (GPC/GEA)
7284	13887	5	SAMPLE	80109018	B1XJ12		Strontium 89/90 (GPC/GEA)
7284	13887	6	SAMPLE	80109019	B1XJ27		Strontium 89/90 (GPC/GEA)
7984	10793	1	BLANK	2437	BLANK		Tritium by LSC
7984	10793	2	LCS	2438	LCS		Tritium by LSC
7984	10793	3	DUP	2439	B1XJ67(80109010DUP)	80109010	Tritium by LSC
7984	10793	4	MS	2440	B1XJ67(80109010MS)	80109010	Tritium by LSC
7984	10793	5	SAMPLE	80109010	B1XJ67		Tritium by LSC
7984	10793	6	SAMPLE	80109012	B1XHW9		Tritium by LSC
7984	10793	7	SAMPLE	80109013	B1XHX1		Tritium by LSC
7984	10793	8	SAMPLE	80109014	B1XHX2		Tritium by LSC
7984	10793	9	SAMPLE	80109015	B1XHY3		Tritium by LSC

Batch QC List

Attention Michael Neely
Department Radiochemistry

Group # WSCF80109
Project Number W09-011

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
7984	10793	10	SAMPLE	80109016	B1XJ08		Tritium by LSC
7984	10793	11	SAMPLE	80109017	B1XJ09		Tritium by LSC
7984	10793	12	SAMPLE	80109018	B1XJ12		Tritium by LSC
7984	10793	13	SAMPLE	80109019	B1XJ27		Tritium by LSC
10284	11204	1	BLANK	2526	BLANK		TC99 by Liquid Scintillation
10284	11204	2	LCS	2527	LCS		TC99 by Liquid Scintillation
10284	11204	3	DUP	2528	B1XKC4(80106005DUP)	80106005	TC99 by Liquid Scintillation
10284	11204	4	MS	2529	B1XKC4(80106005MS)	80106005	TC99 by Liquid Scintillation
10284	11204	9	SAMPLE	80109001	B1XMY4		TC99 by Liquid Scintillation
10284	11204	10	SAMPLE	80109012	B1XHW9		TC99 by Liquid Scintillation
10284	11204	11	SAMPLE	80109013	B1XHX1		TC99 by Liquid Scintillation
10284	11204	12	SAMPLE	80109014	B1XHX2		TC99 by Liquid Scintillation
10284	11204	13	SAMPLE	80109015	B1XHY3		TC99 by Liquid Scintillation
10284	11204	14	SAMPLE	80109016	B1XJ08		TC99 by Liquid Scintillation
10284	11204	15	SAMPLE	80109017	B1XJ09		TC99 by Liquid Scintillation
10284	11204	16	SAMPLE	80109018	B1XJ12		TC99 by Liquid Scintillation
10387	10987	1	BLANK	2558	BLANK		TC99 by Liquid Scintillation
10387	10987	2	LCS	2559	LCS		TC99 by Liquid Scintillation
10387	10987	3	DUP	2560	B1XJ27(80109019DUP)	80109019	TC99 by Liquid Scintillation
10387	10987	4	MS	2561	B1XJ27(80109019MS)	80109019	TC99 by Liquid Scintillation
10387	10987	5	SAMPLE	80109019	B1XJ27		TC99 by Liquid Scintillation
15287	15687	1	BLANK	2889	BLANK		Gross Alpha/Gross Beta
15287	15687	2	LCS	2890	LCS		Gross Alpha/Gross Beta

Batch QC List

Attention Michael Neely
Department Radiochemistry

Group # WSCF80109
Project Number W09-011

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
15287	15687	3	DUP	2891	B1XJ67(80109010DUP)	80109010	Gross Alpha/Gross Beta
15287	15687	4	SAMPLE	80109010	B1XJ67		Gross Alpha/Gross Beta
15287	15687	5	SAMPLE	80109010	B1XJ67		Gross Alpha/Gross Beta

Batch QC List

Attention Michael Neely
Department Wet Chemistry

Group # WSCF80109
Project Number W09-011

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
	8784	4	DUP	2460	B1X722(80099013DUP)	80099013	Total Alkalinity as mg/L CaCO3 (Water)
	8784	14	LCS	2461	LCS		Total Alkalinity as mg/L CaCO3 (Water)
	8784	22	SAMPLE	80109001	B1XMY4		Total Alkalinity as mg/L CaCO3 (Water)
	8784	23	SAMPLE	80109008	B1XMY6		Total Alkalinity as mg/L CaCO3 (Water)
	8784	24	LCS	2462	LCS		Total Alkalinity as mg/L CaCO3 (Water)
	12187	1	LCS	2762	LCS		Total Alkalinity as mg/L CaCO3 (Water)
	12187	2	SAMPLE	80109009	B1XMY8		Total Alkalinity as mg/L CaCO3 (Water)
	12187	3	DUP	2763	B1XMY8(80109009DUP)	80109009	Total Alkalinity as mg/L CaCO3 (Water)
	12187	4	SAMPLE	80109006	B1XMX9		Total Alkalinity as mg/L CaCO3 (Water)
	12187	5	SAMPLE	80109007	B1XMY1		Total Alkalinity as mg/L CaCO3 (Water)
	12187	13	LCS	2764	LCS		Total Alkalinity as mg/L CaCO3 (Water)

Method Reference

Attention	Michael Neely	**Group #**	WSCF80109
Department	Inorganic	**Project Number**	W09-011

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 Emmision Spectrometry
	HEIS	6010_METALS_ICP	Inductively Coupled Plasma-Atomic Emmision Spectrometry
LA-505-412	Determination of Trace Elements in Waters & Wastes by ICP-Mass Spectrometry		
	EPA-600/R-94-111	200.8	Determination of Trace Elements in Waters and Waste by Inductively Coupled Plasma
	HEIS	200.8_METALS_ICPMS	Determination of Trace Elements in Waters and Waste by Inductively Coupled Plasma, Mass Spec.
LA-533-410	Anion Analysis by Ion Chromatography		
	EPA-600/R-94-111	300.0	Determination of Inorganic Anions by Ion Chromatography
	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	**Group #**	WSCF80109
Department	Radiochemistry	**Project Number**	W09-011

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-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-508-415	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
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

Method Reference

Attention	Michael Neely	**Group #**	WSCF80109
Department	Wet Chemistry	**Project Number**	W09-011

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-531-411	Alkalinity		
	EPA-600/4-79-020	310.1	Alkalinity
	HEIS	2320_ALKALINITY	Alkalinity

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 # WSCF80109
Project Number W09-011

Sample # 80109001
SAF# W09-011
Sample ID B1XMY4

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICPMS Prep										**11/25/08**
ICP-MS										
Uranium	7440-61-1	LA-505-412		1.80		ug/L	1	0.05	0.20	11/25/08

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 sample recovery outside control limits.

M - Duplicate precision criteria not met.
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 # WSCF80109
Project Number W09-011

Sample # 80109002
SAF# W09-011
Sample ID B1XMX8

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICP Prep										**11/11/08**
ICP-AES										
Antimony	7440-36-0	LA-505-411	U	<60		ug/L	1	60	280	12/11/08
Barium	7440-39-3	LA-505-411		64.0		ug/L	1	4	20	12/11/08
Beryllium	7440-41-7	LA-505-411	U	<4		ug/L	1	4	20	12/11/08
Cadmium	7440-43-9	LA-505-411	U	<4		ug/L	1	4	20	12/11/08
Calcium	7440-70-2	LA-505-411		56800		ug/L	1	70	360	12/11/08
Chromium	7440-47-3	LA-505-411	B	15.6		ug/L	1	10	20	12/11/08
Cobalt	7440-48-4	LA-505-411	U	<5		ug/L	1	5	25	12/11/08
Copper	7440-50-8	LA-505-411	U	<6		ug/L	1	6	30	12/11/08
Iron	7439-89-6	LA-505-411	U	<20		ug/L	1	20	120	12/11/08
Magnesium	7439-95-4	LA-505-411		9100		ug/L	1	50	250	12/11/08
Manganese	7439-96-5	LA-505-411	U	<4		ug/L	1	4	20	12/11/08
Nickel	7440-02-0	LA-505-411	U	<6		ug/L	1	6	30	12/11/08
Potassium	7440-09-7	LA-505-411		5130		ug/L	1	200	850	12/11/08
Silver	7440-22-4	LA-505-411	U	<5		ug/L	1	5	25	12/11/08
Sodium	7440-23-5	LA-505-411		17600		ug/L	1	50	260	12/11/08
Strontium	7440-24-6	LA-505-411		360		ug/L	1	4	20	12/11/08
Vanadium	7440-62-2	LA-505-411	U	<10		ug/L	1	10	60	12/11/08

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 sample recovery outside control limits.

M - Duplicate precision criteria not met.
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 # WSCF80109
Project Number W09-011

Sample # 80109002
SAF# W09-011
Sample ID B1XMX8

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Zinc	7440-66-6	LA-505-411	U	<9		ug/L	1	9	45	12/11/08

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 sample recovery outside control limits.

M - Duplicate precision criteria not met.
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 # WSCF80109
Project Number W09-011

Sample # 80109003
SAF# W09-011
Sample ID B1XMY0

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICP Prep										**11/11/08**
ICP-AES										
Antimony	7440-36-0	LA-505-411	U	<60		ug/L	1	60	280	12/11/08
Barium	7440-39-3	LA-505-411		65.0		ug/L	1	4	20	12/11/08
Beryllium	7440-41-7	LA-505-411	U	<4		ug/L	1	4	20	12/11/08
Cadmium	7440-43-9	LA-505-411	U	<4		ug/L	1	4	20	12/11/08
Calcium	7440-70-2	LA-505-411		53800		ug/L	1	70	360	12/11/08
Chromium	7440-47-3	LA-505-411	B	15.6		ug/L	1	10	20	12/11/08
Cobalt	7440-48-4	LA-505-411	U	<5		ug/L	1	5	25	12/11/08
Copper	7440-50-8	LA-505-411	U	<6		ug/L	1	6	30	12/11/08
Iron	7439-89-6	LA-505-411	U	<20		ug/L	1	20	120	12/11/08
Magnesium	7439-95-4	LA-505-411		9650		ug/L	1	50	250	12/11/08
Manganese	7439-96-5	LA-505-411	U	<4		ug/L	1	4	20	12/11/08
Nickel	7440-02-0	LA-505-411	U	<6		ug/L	1	6	30	12/11/08
Potassium	7440-09-7	LA-505-411		5460		ug/L	1	200	850	12/11/08
Silver	7440-22-4	LA-505-411	U	<5		ug/L	1	5	25	12/11/08
Sodium	7440-23-5	LA-505-411		19200		ug/L	1	50	260	12/11/08
Strontium	7440-24-6	LA-505-411		370		ug/L	1	4	20	12/11/08
Vanadium	7440-62-2	LA-505-411	U	<10		ug/L	1	10	60	12/11/08

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 sample recovery outside control limits.

M - Duplicate precision criteria not met.
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 # WSCF80109
Project Number W09-011

Sample # 80109003
SAF# W09-011
Sample ID B1XMY0

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Zinc	7440-66-6	LA-505-411	U	<9		ug/L	1	9	45	12/11/08

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 sample recovery outside control limits.

M - Duplicate precision criteria not met.
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 # WSCF80109
Project Number W09-011

Sample # 80109004
SAF# W09-011
Sample ID B1XMY5

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICP Prep										**11/11/08**
ICP-AES										
Antimony	7440-36-0	LA-505-411	U	<60		ug/L	1	60	280	12/11/08
Barium	7440-39-3	LA-505-411		37.8		ug/L	1	4	20	12/11/08
Beryllium	7440-41-7	LA-505-411	U	<4		ug/L	1	4	20	12/11/08
Cadmium	7440-43-9	LA-505-411	U	<4		ug/L	1	4	20	12/11/08
Calcium	7440-70-2	LA-505-411		57900		ug/L	1	70	360	12/11/08
Chromium	7440-47-3	LA-505-411	U	<10		ug/L	1	10	20	12/11/08
Cobalt	7440-48-4	LA-505-411	U	<5		ug/L	1	5	25	12/11/08
Copper	7440-50-8	LA-505-411	U	<6		ug/L	1	6	30	12/11/08
Iron	7439-89-6	LA-505-411	U	<20		ug/L	1	20	120	12/11/08
Magnesium	7439-95-4	LA-505-411		10800		ug/L	1	50	250	12/11/08
Manganese	7439-96-5	LA-505-411	U	<4		ug/L	1	4	20	12/11/08
Nickel	7440-02-0	LA-505-411	U	<6		ug/L	1	6	30	12/11/08
Potassium	7440-09-7	LA-505-411		5390		ug/L	1	200	850	12/11/08
Silver	7440-22-4	LA-505-411	U	<5		ug/L	1	5	25	12/11/08
Sodium	7440-23-5	LA-505-411		22800		ug/L	1	50	260	12/11/08
Strontium	7440-24-6	LA-505-411		390		ug/L	1	4	20	12/11/08
Vanadium	7440-62-2	LA-505-411	U	<10		ug/L	1	10	60	12/11/08

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 sample recovery outside control limits.

M - Duplicate precision criteria not met.
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 # WSCF80109
Project Number W09-011

Sample # 80109004
SAF# W09-011
Sample ID B1XMY5

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Zinc	7440-66-6	LA-505-411	U	<9		ug/L	1	9	45	12/11/08

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 sample recovery outside control limits.

M - Duplicate precision criteria not met.
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 # WSCF80109
Project Number W09-011

Sample # 80109005
SAF# W09-011
Sample ID B1XMY7

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICP Prep										**11/11/08**
ICP-AES										
Antimony	7440-36-0	LA-505-411	U	<60		ug/L	1	60	280	12/11/08
Barium	7440-39-3	LA-505-411		37.5		ug/L	1	4	20	12/11/08
Beryllium	7440-41-7	LA-505-411	U	<4		ug/L	1	4	20	12/11/08
Cadmium	7440-43-9	LA-505-411	U	<4		ug/L	1	4	20	12/11/08
Calcium	7440-70-2	LA-505-411		58500		ug/L	1	70	360	12/11/08
Chromium	7440-47-3	LA-505-411	B	11.3		ug/L	1	10	20	12/11/08
Cobalt	7440-48-4	LA-505-411	U	<5		ug/L	1	5	25	12/11/08
Copper	7440-50-8	LA-505-411	U	<6		ug/L	1	6	30	12/11/08
Iron	7439-89-6	LA-505-411	U	<20		ug/L	1	20	120	12/11/08
Magnesium	7439-95-4	LA-505-411		10400		ug/L	1	50	250	12/11/08
Manganese	7439-96-5	LA-505-411	U	<4		ug/L	1	4	20	12/11/08
Nickel	7440-02-0	LA-505-411	U	<6		ug/L	1	6	30	12/11/08
Potassium	7440-09-7	LA-505-411		5000		ug/L	1	200	850	12/11/08
Silver	7440-22-4	LA-505-411	U	<5		ug/L	1	5	25	12/11/08
Sodium	7440-23-5	LA-505-411		20800		ug/L	1	50	260	12/11/08
Strontium	7440-24-6	LA-505-411		388		ug/L	1	4	20	12/11/08
Vanadium	7440-62-2	LA-505-411	U	<10		ug/L	1	10	60	12/11/08

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 dilution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

M - Duplicate precision criteria not met.
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 # WSCF80109
Project Number W09-011

Sample # 80109005
SAF# W09-011
Sample ID B1XMY7

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Zinc	7440-66-6	LA-505-411	U	<9		ug/L	1	9	45	12/11/08

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 sample recovery outside control limits.

M - Duplicate precision criteria not met.
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 # WSCF80109
Project Number W09-011

Sample # 80109006
SAF# W09-011
Sample ID B1XMX9

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICP Prep										**11/11/08**
ICP-AES										
Antimony	7440-36-0	LA-505-411	U	<60		ug/L	1	60	280	12/11/08
Barium	7440-39-3	LA-505-411		67.2		ug/L	1	4	20	12/11/08
Beryllium	7440-41-7	LA-505-411	U	<4		ug/L	1	4	20	12/11/08
Cadmium	7440-43-9	LA-505-411	U	<4		ug/L	1	4	20	12/11/08
Calcium	7440-70-2	LA-505-411		54700		ug/L	1	70	360	12/11/08
Chromium	7440-47-3	LA-505-411	B	15.9		ug/L	1	10	20	12/11/08
Cobalt	7440-48-4	LA-505-411	U	<5		ug/L	1	5	25	12/11/08
Copper	7440-50-8	LA-505-411	B	9.30		ug/L	1	6	30	12/11/08
Iron	7439-89-6	LA-505-411	U	<20		ug/L	1	20	120	12/11/08
Magnesium	7439-95-4	LA-505-411		9890		ug/L	1	50	250	12/11/08
Manganese	7439-96-5	LA-505-411	U	<4		ug/L	1	4	20	12/11/08
Nickel	7440-02-0	LA-505-411	U	<6		ug/L	1	6	30	12/11/08
Potassium	7440-09-7	LA-505-411		5580		ug/L	1	200	850	12/11/08
Silver	7440-22-4	LA-505-411	U	<5		ug/L	1	5	25	12/11/08
Sodium	7440-23-5	LA-505-411		19500		ug/L	1	50	260	12/11/08
Strontium	7440-24-6	LA-505-411		374		ug/L	1	4	20	12/11/08
Vanadium	7440-62-2	LA-505-411	U	<10		ug/L	1	10	60	12/11/08

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 sample recovery outside control limits.

M - Duplicate precision criteria not met.
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 # WSCF80109
Project Number W09-011

Sample # 80109006
SAF# W09-011
Sample ID B1XMX9

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Zinc	7440-66-6	LA-505-411	U	<9		ug/L	1	9	45	12/11/08

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 dilution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

M - Duplicate precision criteria not met.
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 # WSCF80109
Project Number W09-011

Sample # 80109007
SAF# W09-011
Sample ID B1XMY1

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICP Prep										**11/11/08**
ICP-AES										
Antimony	7440-36-0	LA-505-411	U	<60		ug/L	1	60	280	12/11/08
Barium	7440-39-3	LA-505-411		62.0		ug/L	1	4	20	12/11/08
Beryllium	7440-41-7	LA-505-411	U	<4		ug/L	1	4	20	12/11/08
Cadmium	7440-43-9	LA-505-411	U	<4		ug/L	1	4	20	12/11/08
Calcium	7440-70-2	LA-505-411		53700		ug/L	1	70	360	12/11/08
Chromium	7440-47-3	LA-505-411	B	15.7		ug/L	1	10	20	12/11/08
Cobalt	7440-48-4	LA-505-411	U	<5		ug/L	1	5	25	12/11/08
Copper	7440-50-8	LA-505-411	U	<6		ug/L	1	6	30	12/11/08
Iron	7439-89-6	LA-505-411	U	<20		ug/L	1	20	120	12/11/08
Magnesium	7439-95-4	LA-505-411		9080		ug/L	1	50	250	12/11/08
Manganese	7439-96-5	LA-505-411	U	<4		ug/L	1	4	20	12/11/08
Nickel	7440-02-0	LA-505-411	U	<6		ug/L	1	6	30	12/11/08
Potassium	7440-09-7	LA-505-411		5250		ug/L	1	200	850	12/11/08
Silver	7440-22-4	LA-505-411	U	<5		ug/L	1	5	25	12/11/08
Sodium	7440-23-5	LA-505-411		18300		ug/L	1	50	260	12/11/08
Strontium	7440-24-6	LA-505-411		350		ug/L	1	4	20	12/11/08
Vanadium	7440-62-2	LA-505-411	U	<10		ug/L	1	10	60	12/11/08

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 dilution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

M - Duplicate precision criteria not met.
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 # WSCF80109
Project Number W09-011

Sample # 80109007
SAF# W09-011
Sample ID B1XMY1

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Zinc	7440-66-6	LA-505-411	U	<9		ug/L	1	9	45	12/11/08

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 sample recovery outside control limits.

M - Duplicate precision criteria not met.
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 # WSCF80109
Project Number W09-011

Sample # 80109008
SAF# W09-011
Sample ID B1XMY6

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICP Prep										**11/11/08**
ICP-AES										
Antimony	7440-36-0	LA-505-411	U	<60		ug/L	1	60	280	12/11/08
Barium	7440-39-3	LA-505-411		36.2		ug/L	1	4	20	12/11/08
Beryllium	7440-41-7	LA-505-411	U	<4		ug/L	1	4	20	12/11/08
Cadmium	7440-43-9	LA-505-411	U	<4		ug/L	1	4	20	12/11/08
Calcium	7440-70-2	LA-505-411		58900		ug/L	1	70	360	12/11/08
Chromium	7440-47-3	LA-505-411	U	<10		ug/L	1	10	20	12/11/08
Cobalt	7440-48-4	LA-505-411	U	<5		ug/L	1	5	25	12/11/08
Copper	7440-50-8	LA-505-411	U	<6		ug/L	1	6	30	12/11/08
Iron	7439-89-6	LA-505-411	U	<20		ug/L	1	20	120	12/11/08
Magnesium	7439-95-4	LA-505-411		9780		ug/L	1	50	250	12/11/08
Manganese	7439-96-5	LA-505-411	U	<4		ug/L	1	4	20	12/11/08
Nickel	7440-02-0	LA-505-411	U	<6		ug/L	1	6	30	12/11/08
Potassium	7440-09-7	LA-505-411		4660		ug/L	1	200	850	12/11/08
Silver	7440-22-4	LA-505-411	U	<5		ug/L	1	5	25	12/11/08
Sodium	7440-23-5	LA-505-411		19100		ug/L	1	50	260	12/11/08
Strontium	7440-24-6	LA-505-411		382		ug/L	1	4	20	12/11/08
Vanadium	7440-62-2	LA-505-411	U	<10		ug/L	1	10	60	12/11/08

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 sample recovery outside control limits.

M - Duplicate precision criteria not met.
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 # WSCF80109
Project Number W09-011

Sample # 80109008
SAF# W09-011
Sample ID B1XMY6

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Zinc	7440-66-6	LA-505-411	U	<9		ug/L	1	9	45	12/11/08

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 sample recovery outside control limits.

M - Duplicate precision criteria not met.
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 # WSCF80109
Project Number W09-011

Sample # 80109009
SAF# W09-011
Sample ID B1XMY8

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICP Prep										**11/11/08**
ICP-AES										
Antimony	7440-36-0	LA-505-411	U	<60		ug/L	1	60	280	12/11/08
Barium	7440-39-3	LA-505-411		36.2		ug/L	1	4	20	12/11/08
Beryllium	7440-41-7	LA-505-411	U	<4		ug/L	1	4	20	12/11/08
Cadmium	7440-43-9	LA-505-411	U	<4		ug/L	1	4	20	12/11/08
Calcium	7440-70-2	LA-505-411		60100		ug/L	1	70	360	12/11/08
Chromium	7440-47-3	LA-505-411	U	<10		ug/L	1	10	20	12/11/08
Cobalt	7440-48-4	LA-505-411	U	<5		ug/L	1	5	25	12/11/08
Copper	7440-50-8	LA-505-411	U	<6		ug/L	1	6	30	12/11/08
Iron	7439-89-6	LA-505-411	U	<20		ug/L	1	20	120	12/11/08
Magnesium	7439-95-4	LA-505-411		10100		ug/L	1	50	250	12/11/08
Manganese	7439-96-5	LA-505-411	U	<4		ug/L	1	4	20	12/11/08
Nickel	7440-02-0	LA-505-411	U	<6		ug/L	1	6	30	12/11/08
Potassium	7440-09-7	LA-505-411		4930		ug/L	1	200	850	12/11/08
Silver	7440-22-4	LA-505-411	U	<5		ug/L	1	5	25	12/11/08
Sodium	7440-23-5	LA-505-411		20200		ug/L	1	50	260	12/11/08
Strontium	7440-24-6	LA-505-411		382		ug/L	1	4	20	12/11/08
Vanadium	7440-62-2	LA-505-411	U	<10		ug/L	1	10	60	12/11/08

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 sample recovery outside control limits.

M - Duplicate precision criteria not met.
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 # WSCF80109
Project Number W09-011

Sample # 80109009
SAF# W09-011
Sample ID B1XMY8

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Zinc	7440-66-6	LA-505-411	U	<9		ug/L	1	9	45	12/11/08

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 dilution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

M - Duplicate precision criteria not met.
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 # WSCF80109
Project Number W09-011

Sample # 80109010
SAF# I09-005
Sample ID B1XJ67

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**11/11/08**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<0.05		ug/mL	2	0.05	0.40	11/11/08
Chloride	16887-00-6	LA-533-410	D	2.45		ug/mL	2	0.09	0.80	11/11/08
Nitrite-N	NO2-N	LA-533-410	UD	<0.03		ug/mL	2	0.03	0.20	11/11/08
Nitrate-N	NO3-N	LA-533-410	D	1.12		ug/mL	2	0.02	0.20	11/11/08
Sulfate	14808-79-8	LA-533-410	D	24.0		ug/mL	2	0.3	2.0	11/11/08
ICP Prep										**11/11/08**
ICP-AES										
Iron	7439-89-6	LA-505-411	U	<20		ug/L	1	20	120	12/11/08
Magnesium	7439-95-4	LA-505-411		10500		ug/L	1	50	250	12/11/08
Manganese	7439-96-5	LA-505-411	U	<4		ug/L	1	4	20	12/11/08
Nickel	7440-02-0	LA-505-411	U	<6		ug/L	1	6	30	12/11/08
Potassium	7440-09-7	LA-505-411		4690		ug/L	1	200	850	12/11/08
Silver	7440-22-4	LA-505-411	U	<5		ug/L	1	5	25	12/11/08
Sodium	7440-23-5	LA-505-411		3740		ug/L	1	50	260	12/11/08
Antimony	7440-36-0	LA-505-411	U	<60		ug/L	1	60	280	12/11/08
Barium	7440-39-3	LA-505-411		51.7		ug/L	1	4	20	12/11/08
Cadmium	7440-43-9	LA-505-411	U	<4		ug/L	1	4	20	12/11/08

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 sample recovery outside control limits.

M - Duplicate precision criteria not met.
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 # WSCF80109
Project Number W09-011

Sample # 80109010
SAF# I09-005
Sample ID B1XJ67

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Chromium	7440-47-3	LA-505-411		82.2		ug/L	1	10	20	12/11/08
Cobalt	7440-48-4	LA-505-411	U	<5		ug/L	1	5	25	12/11/08
Copper	7440-50-8	LA-505-411	U	<6		ug/L	1	6	30	12/11/08
Vanadium	7440-62-2	LA-505-411	B	20.2		ug/L	1	10	60	12/11/08
Zinc	7440-66-6	LA-505-411	U	<9		ug/L	1	9	45	12/11/08
Calcium	7440-70-2	LA-505-411		32200		ug/L	1	70	360	12/11/08
Strontium	7440-24-6	LA-505-411		268		ug/L	1	4	20	12/11/08
Beryllium	7440-41-7	LA-505-411	U	<4		ug/L	1	4	20	12/11/08

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 sample recovery outside control limits.

M - Duplicate precision criteria not met.
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 # WSCF80109
Project Number W09-011

Sample # 80109011
SAF# I09-005
Sample ID B1XJX0

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICP Prep										**11/11/08**
ICP-AES										
Antimony	7440-36-0	LA-505-411	U	<60		ug/L	1	60	280	12/11/08
Barium	7440-39-3	LA-505-411		51.8		ug/L	1	4	20	12/11/08
Beryllium	7440-41-7	LA-505-411	U	<4		ug/L	1	4	20	12/11/08
Cadmium	7440-43-9	LA-505-411	U	<4		ug/L	1	4	20	12/11/08
Calcium	7440-70-2	LA-505-411		32500		ug/L	1	70	360	12/11/08
Chromium	7440-47-3	LA-505-411		86.3		ug/L	1	10	20	12/11/08
Cobalt	7440-48-4	LA-505-411	U	<5		ug/L	1	5	25	12/11/08
Copper	7440-50-8	LA-505-411	U	<6		ug/L	1	6	30	12/11/08
Iron	7439-89-6	LA-505-411	U	<20		ug/L	1	20	120	12/11/08
Magnesium	7439-95-4	LA-505-411		10700		ug/L	1	50	250	12/11/08
Manganese	7439-96-5	LA-505-411	U	<4		ug/L	1	4	20	12/11/08
Nickel	7440-02-0	LA-505-411	U	<6		ug/L	1	6	30	12/11/08
Potassium	7440-09-7	LA-505-411		4800		ug/L	1	200	850	12/11/08
Silver	7440-22-4	LA-505-411	U	<5		ug/L	1	5	25	12/11/08
Sodium	7440-23-5	LA-505-411		3800		ug/L	1	50	260	12/11/08
Strontium	7440-24-6	LA-505-411		271		ug/L	1	4	20	12/11/08
Vanadium	7440-62-2	LA-505-411	B	22.8		ug/L	1	10	60	12/11/08

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 sample recovery outside control limits.

M - Duplicate precision criteria not met.
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 # WSCF80109
Project Number W09-011

Sample # 80109011
SAF# I09-005
Sample ID B1XJX0

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Zinc	7440-66-6	LA-505-411	U	<9		ug/L	1	9	45	12/11/08

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 sample recovery outside control limits.

M - Duplicate precision criteria not met.
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 # WSCF80109
Project Number W09-011

Sample # 80109012
SAF# I09-005
Sample ID B1XHW9

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**11/10/08**
Anions by IC										
Chloride	16887-00-6	LA-533-410	D	21.1		ug/mL	2	0.09	0.80	11/10/08
Fluoride	16984-48-8	LA-533-410	UD	<0.05		ug/mL	2	0.05	0.40	11/10/08
Nitrate-N	NO3-N	LA-533-410	D	6.67		ug/mL	2	0.02	0.20	11/10/08
Nitrite-N	NO2-N	LA-533-410	UD	<0.03		ug/mL	2	0.03	0.20	11/10/08
Sulfate	14808-79-8	LA-533-410	D	63.0		ug/mL	2	0.3	2.0	11/10/08
ICPMS Prep										**11/25/08**
ICP-MS										
Uranium	7440-61-1	LA-505-412		1.11		ug/L	1	0.05	0.20	11/25/08

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 sample recovery outside control limits.

M - Duplicate precision criteria not met.
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 # WSCF80109
Project Number W09-011

Sample # 80109013
SAF# I09-005
Sample ID B1XHX1

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**11/10/08**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<0.05		ug/mL	2	0.05	0.40	11/10/08
Chloride	16887-00-6	LA-533-410	D	20.6		ug/mL	2	0.09	0.80	11/10/08
Nitrite-N	NO2-N	LA-533-410	UD	<0.03		ug/mL	2	0.03	0.20	11/10/08
Nitrate-N	NO3-N	LA-533-410	D	6.72		ug/mL	2	0.02	0.20	11/10/08
Sulfate	14808-79-8	LA-533-410	D	47.9		ug/mL	2	0.3	2.0	11/10/08
ICPMS Prep										**11/25/08**
ICP-MS										
Uranium	7440-61-1	LA-505-412		6.36		ug/L	1	0.05	0.20	11/25/08

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 sample recovery outside control limits.

M - Duplicate precision criteria not met.
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 # WSCF80109
Project Number W09-011

Sample # 80109014
SAF# I09-005
Sample ID B1XHX2

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**11/10/08**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<0.05		ug/mL	2	0.05	0.40	11/10/08
Chloride	16887-00-6	LA-533-410	D	20.5		ug/mL	2	0.09	0.80	11/10/08
Nitrite-N	NO2-N	LA-533-410	UD	<0.03		ug/mL	2	0.03	0.20	11/10/08
Nitrate-N	NO3-N	LA-533-410	D	6.68		ug/mL	2	0.02	0.20	11/10/08
Sulfate	14808-79-8	LA-533-410	D	47.8		ug/mL	2	0.3	2.0	11/10/08
ICPMS Prep										**11/25/08**
ICP-MS										
Uranium	7440-61-1	LA-505-412		6.20		ug/L	1	0.05	0.20	11/25/08

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 sample recovery outside control limits.

M - Duplicate precision criteria not met.
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 # WSCF80109
Project Number W09-011

Sample # 80109015
SAF# I09-005
Sample ID B1XHY3

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**11/10/08**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<0.05		ug/mL	2	0.05	0.40	11/10/08
Chloride	16887-00-6	LA-533-410	D	26.0		ug/mL	2	0.09	0.80	11/10/08
Nitrite-N	NO2-N	LA-533-410	UD	<0.03		ug/mL	2	0.03	0.20	11/10/08
Nitrate-N	NO3-N	LA-533-410	D	5.27		ug/mL	2	0.02	0.20	11/10/08
Sulfate	14808-79-8	LA-533-410	D	48.6		ug/mL	2	0.3	2.0	11/10/08
ICPMS Prep										**11/25/08**
ICP-MS										
Uranium	7440-61-1	LA-505-412		0.614		ug/L	1	0.05	0.20	11/25/08

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 sample recovery outside control limits.

M - Duplicate precision criteria not met.
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 # WSCF80109
Project Number W09-011

Sample # 80109016
SAF# I09-005
Sample ID B1XJ08

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**11/10/08**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<0.05		ug/mL	2	0.05	0.40	11/10/08
Chloride	16887-00-6	LA-533-410	D	28.1		ug/mL	2	0.09	0.80	11/10/08
Nitrite-N	NO2-N	LA-533-410	UD	<0.03		ug/mL	2	0.03	0.20	11/10/08
Nitrate-N	NO3-N	LA-533-410	D	9.00		ug/mL	2	0.02	0.20	11/10/08
Sulfate	14808-79-8	LA-533-410	D	57.3		ug/mL	2	0.3	2.0	11/10/08
ICPMS Prep										**11/25/08**
ICP-MS										
Uranium	7440-61-1	LA-505-412		7.69		ug/L	1	0.05	0.20	11/25/08

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 sample recovery outside control limits.

M - Duplicate precision criteria not met.
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 # WSCF80109
Project Number W09-011

Sample # 80109017
SAF# I09-005
Sample ID B1XJ09

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**11/10/08**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<0.05		ug/mL	2	0.05	0.40	11/10/08
Chloride	16887-00-6	LA-533-410	D	28.2		ug/mL	2	0.09	0.80	11/10/08
Nitrite-N	NO2-N	LA-533-410	UD	<0.03		ug/mL	2	0.03	0.20	11/10/08
Nitrate-N	NO3-N	LA-533-410	D	8.75		ug/mL	2	0.02	0.20	11/10/08
Sulfate	14808-79-8	LA-533-410	D	57.6		ug/mL	2	0.3	2.0	11/10/08
ICPMS Prep										**11/25/08**
ICP-MS										
Uranium	7440-61-1	LA-505-412		7.70		ug/L	1	0.05	0.20	11/25/08

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 sample recovery outside control limits.

M - Duplicate precision criteria not met.
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 # WSCF80109
Project Number W09-011

Sample # 80109018
SAF# I09-005
Sample ID B1XJ12

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**11/10/08**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<0.05		ug/mL	2	0.05	0.40	11/10/08
Chloride	16887-00-6	LA-533-410	D	21.6		ug/mL	2	0.09	0.80	11/10/08
Nitrite-N	NO2-N	LA-533-410	UD	<0.03		ug/mL	2	0.03	0.20	11/10/08
Nitrate-N	NO3-N	LA-533-410	D	6.47		ug/mL	2	0.02	0.20	11/10/08
Sulfate	14808-79-8	LA-533-410	D	49.8		ug/mL	2	0.3	2.0	11/10/08
ICPMS Prep										**11/25/08**
ICP-MS										
Uranium	7440-61-1	LA-505-412		5.48		ug/L	1	0.05	0.20	11/25/08

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 sample recovery outside control limits.

M - Duplicate precision criteria not met.
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 # WSCF80109
Project Number W09-011

Sample # 80109019
SAF# I09-005
Sample ID B1XJ27

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**11/10/08**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<0.05		ug/mL	2	0.05	0.40	11/10/08
Chloride	16887-00-6	LA-533-410	D	18.4		ug/mL	2	0.09	0.80	11/10/08
Nitrite-N	NO2-N	LA-533-410	UD	<0.03		ug/mL	2	0.03	0.20	11/10/08
Nitrate-N	NO3-N	LA-533-410	D	5.47		ug/mL	2	0.02	0.20	11/10/08
Sulfate	14808-79-8	LA-533-410	D	45.1		ug/mL	2	0.3	2.0	11/10/08
ICPMS Prep										**11/25/08**
ICP-MS										
Uranium	7440-61-1	LA-505-412		2.15		ug/L	1	0.05	0.20	11/25/08

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 sample recovery outside control limits.

M - Duplicate precision criteria not met.
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 Radiochemistry

Group # WSCF80109
Project Number W09-011

Sample # 80109001
SAF# W09-011
Sample ID B1XMY4

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Tc-99										**11/12/08**
TRI-CARB LSC										
Technetium-99	14133-76-7	LA-508-421	U	-1.20	3.6	pCi/L	1	6.1		11/14/08

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.

WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF80109
Project Number W09-011

Sample # 80109010
SAF# I09-005
Sample ID B1XJ67

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alpha/Beta Prep										**12/02/08**
Gross Alpha/Beta										
Gross Alpha	12587-46-1	LA-508-415	U	1.63	1.33	pCi/L	1	2.0		12/09/08
Gross Beta	12587-47-2	LA-508-415		4.98	1.82	pCi/L	1	2.5		12/09/08
H3 EICHROM										**11/11/08**
TRI-CARB LSC										
Tritium	10028-17-8	LA-508-421	U	78.4	140	pCi/L	1	210		11/11/08

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.

WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF80109
Project Number W09-011

Sample # 80109012
SAF# I09-005
Sample ID B1XHW9

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
H3 EICHROM										**11/11/08**
TRI-CARB LSC										
Tritium	10028-17-8	LA-508-421		2900	615	pCi/L	1	210		11/11/08
SR-89/90										**11/11/08**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406		5.43	1.38	pCi/L	1	1.0		12/05/08
Tc-99										**11/12/08**
TRI-CARB LSC										
Technetium-99	14133-76-7	LA-508-421	U	-2.10	3.6	pCi/L	1	6.1		11/14/08

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.

WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF80109
Project Number W09-011

Sample # 80109013
SAF# I09-005
Sample ID B1XHX1

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
H3 EICHROM										**11/11/08**
TRI-CARB LSC										
Tritium	10028-17-8	LA-508-421		2200	478	pCi/L	1	210		11/11/08
SR-89/90										**11/11/08**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-0.691	1.22	pCi/L	1	1.2		12/05/08
Tc-99										**11/12/08**
TRI-CARB LSC										
Technetium-99	14133-76-7	LA-508-421		23.0	6.2	pCi/L	1	6.1		11/14/08

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.

WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF80109
Project Number W09-011

Sample # 80109014
SAF# I09-005
Sample ID B1XHX2

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
H3 EICHROM										**11/11/08**
TRI-CARB LSC										
Tritium	10028-17-8	LA-508-421		2110	462	pCi/L	1	210		11/11/08
SR-89/90										**11/11/08**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-1.33	1.29	pCi/L	1	1.4		12/05/08
Tc-99										**11/12/08**
TRI-CARB LSC										
Technetium-99	14133-76-7	LA-508-421		24.0	6.3	pCi/L	1	6.1		11/14/08

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.

WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF80109
Project Number W09-011

Sample # 80109015
SAF# I09-005
Sample ID B1XHY3

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
H3 EICHROM										**11/11/08**
TRI-CARB LSC										
Tritium	10028-17-8	LA-508-421		2600	558	pCi/L	1	210		11/11/08
SR-89/90										**11/11/08**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-0.686	1.17	pCi/L	1	1.2		12/05/08
Tc-99										**11/12/08**
TRI-CARB LSC										
Technetium-99	14133-76-7	LA-508-421	U	-2.00	3.6	pCi/L	1	6.1		11/14/08

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.

WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF80109
Project Number W09-011

Sample # 80109016
SAF# I09-005
Sample ID B1XJ08

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
H3 EICHROM										**11/11/08**
TRI-CARB LSC										
Tritium	10028-17-8	LA-508-421		2790	595	pCi/L	1	210		11/11/08
SR-89/90										**11/11/08**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-0.600	1.13	pCi/L	1	1.2		12/05/08
Tc-99										**11/12/08**
TRI-CARB LSC										
Technetium-99	14133-76-7	LA-508-421		45.0	10	pCi/L	1	6.1		11/14/08

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.

WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF80109
Project Number W09-011

Sample # 80109017
SAF# I09-005
Sample ID B1XJ09

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
H3 EICHROM										**11/11/08**
TRI-CARB LSC										
Tritium	10028-17-8	LA-508-421		2910	616	pCi/L	1	210		11/11/08
SR-89/90										**11/11/08**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-2.10	1.21	pCi/L	1	1.0		12/03/08
Tc-99										**11/12/08**
TRI-CARB LSC										
Technetium-99	14133-76-7	LA-508-421		45.0	10	pCi/L	1	6.1		11/14/08

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.

WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF80109
Project Number W09-011

Sample # 80109018
SAF# I09-005
Sample ID B1XJ12

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
H3 EICHROM										**11/11/08**
TRI-CARB LSC										
Tritium	10028-17-8	LA-508-421		2220	483	pCi/L	1	210		11/11/08
SR-89/90										**11/11/08**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	0.158	1.14	pCi/L	1	1.0		12/03/08
Tc-99										**11/12/08**
TRI-CARB LSC										
Technetium-99	14133-76-7	LA-508-421		17.0	5.2	pCi/L	1	6.1		11/14/08

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.

WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF80109
Project Number W09-011

Sample # 80109019
SAF# I09-005
Sample ID B1XJ27

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
H3 EICHROM										**11/11/08**
TRI-CARB LSC										
Tritium	10028-17-8	LA-508-421		1870	415	pCi/L	1	210		11/11/08
SR-89/90										**11/11/08**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406		20.9	3.18	pCi/L	1	1.0		12/03/08
Tc-99										**11/12/08**
TRI-CARB LSC										
Technetium-99	14133-76-7	LA-508-421	U	-0.900	3.4	pCi/L	1	5.7		11/15/08

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.

WSCF Analytical Results Report

Attention Michael Neely
Department Wet Chemistry

Group # WSCF80109
Project Number W09-011

Sample # 80109001
SAF# W09-011
Sample ID B1XMY4

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alkalinity										
Total Alkalinity as CaCO3	ALKALINITY	LA-531-411		100		mg/L	1	1.0	10	11/11/08

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.
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
N - MS and/or MSD sample recovery outside control limits.
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.

WSCF Analytical Results Report

Attention Michael Neely
Department Wet Chemistry

Group # WSCF80109
Project Number W09-011

Sample # 80109006
SAF# W09-011
Sample ID B1XMX9

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alkalinity										
Total Alkalinity as CaCO3	ALKALINITY	LA-531-411		110		mg/L	1	1.0	10	11/18/08

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.
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
N - MS and/or MSD sample recovery outside control limits.
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.

WSCF Analytical Results Report

Attention Michael Neely
Department Wet Chemistry

Group # WSCF80109
Project Number W09-011

Sample # 80109007
SAF# W09-011
Sample ID B1XMY1

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alkalinity										
Total Alkalinity as CaCO3	ALKALINITY	LA-531-411		110		mg/L	1	1.0	10	11/18/08

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.
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
N - MS and/or MSD sample recovery outside control limits.
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.

WSCF Analytical Results Report

Attention Michael Neely
Department Wet Chemistry

Group # WSCF80109
Project Number W09-011

Sample # 80109008
SAF# W09-011
Sample ID B1XMY6

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alkalinity										
Total Alkalinity as CaCO3	ALKALINITY	LA-531-411		96.0		mg/L	1	1.0	10	11/11/08

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.
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
N - MS and/or MSD sample recovery outside control limits.
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.

WSCF Analytical Results Report

Attention Michael Neely
Department Wet Chemistry

Group # WSCF80109
Project Number W09-011

Sample # 80109009
SAF# W09-011
Sample ID B1XMY8

Matrix WATER
Sampled 11/10/08
Received 11/10/08

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alkalinity										
Total Alkalinity as CaCO3	ALKALINITY	LA-531-411		96.0		mg/L	1	1.0	10	11/18/08

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.
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
N - MS and/or MSD sample recovery outside control limits.
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 # WSCF80109
Project Number W09-011

QC Batch 6484 **Test** Anions by Ion Chromatography (Water)
Associated Samples 80109012, 80109013, 80109014, 80109015, 80109016, 80109017, 80109018, 80109019

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #2389**							
Fluoride	16984-48-8		<0.023	ug/mL					U	11/10/08
Chloride	16887-00-6		<0.047	ug/mL					U	11/10/08
Nitrite-N	NO2-N		<0.013	ug/mL					U	11/10/08
Nitrate-N	NO3-N		<0.012	ug/mL					U	11/10/08
Sulfate	14808-79-8		<0.13	ug/mL					U	11/10/08
LCS			**QC Sample #2391**							
Fluoride	16984-48-8		1.04	ug/mL	102	90 - 110				11/10/08
Chloride	16887-00-6		1.88	ug/mL	94.4	90 - 110				11/10/08
Nitrite-N	NO2-N		0.961	ug/mL	96.2	90 - 110				11/10/08
Nitrate-N	NO3-N		0.870	ug/mL	96.8	90 - 110				11/10/08
Sulfate	14808-79-8		3.64	ug/mL	91.1	90 - 110				11/10/08
DUP			**QC Sample #2392**							
			Original 80107004							
Fluoride	16984-48-8		0.297	ug/mL			2.73	20	BD	11/10/08
Chloride	16887-00-6		4.04	ug/mL			0.50	20	D	11/10/08
Nitrite-N	NO2-N		<0.026	ug/mL			0.00	20	UD	11/10/08
Nitrate-N	NO3-N		0.286	ug/mL			2.08	20	D	11/10/08
Sulfate	14808-79-8		5.45	ug/mL			0.73	20	D	11/10/08
MS			**QC Sample #2393**							
			Original 80107004							

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF80109
Project Number W09-011

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Fluoride	16984-48-8		1.30	ug/mL	98.9	80 - 120			D	11/10/08
Chloride	16887-00-6		5.73	ug/mL	86.1	80 - 120			D	11/10/08
Nitrite-N	NO2-N		0.954	ug/mL	95.5	80 - 120			D	11/10/08
Nitrate-N	NO3-N		1.14	ug/mL	94.1	80 - 120			D	11/10/08
Sulfate	14808-79-8		9.19	ug/mL	92.6	80 - 120			D	11/10/08
MSD			**QC Sample #2394**							
			Original 80107004					**Paired**	**2393**	
Fluoride	16984-48-8		1.24	ug/mL	92.8	80 - 120	6.36	20	D	11/10/08
Chloride	16887-00-6		5.73	ug/mL	86	80 - 120	0.12	20	D	11/10/08
Nitrite-N	NO2-N		0.982	ug/mL	98.3	80 - 120	2.89	20	D	11/10/08
Nitrate-N	NO3-N		1.10	ug/mL	90.2	80 - 120	4.23	20	D	11/10/08
Sulfate	14808-79-8		9.26	ug/mL	94.3	80 - 120	1.82	20	D	11/10/08

Quality Control Report

Attention Michael Neely
Department Wet Chemistry

Group # WSCF80109
Project Number W09-011

QC Batch 8784
Associated Samples 80109001, 80109008

Test Total Alkalinity as mg/L CaCO3 (Water)

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
DUP			**QC Sample #2460**							
			Original 80099013							
Total Alkalinity as	ALKALINITY		230	mg/L			0.00	20		11/11/08
LCS			**QC Sample #2461**							
Total Alkalinity as	ALKALINITY		31.7	mg/L	106	80 - 120				11/11/08
LCS			**QC Sample #2462**							
Total Alkalinity as	ALKALINITY		31.7	mg/L	106	80 - 120				11/11/08

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF80109
Project Number W09-011

QC Batch 9384
Associated Samples 80109010

Test Anions by Ion Chromatography (Water)

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #2506**							
Fluoride	16984-48-8		<0.023	ug/mL					U	11/11/08
Chloride	16887-00-6		<0.047	ug/mL					U	11/11/08
Nitrite-N	NO2-N		<0.013	ug/mL					U	11/11/08
Nitrate-N	NO3-N		<0.012	ug/mL					U	11/11/08
Sulfate	14808-79-8		<0.13	ug/mL					U	11/11/08
LCS			**QC Sample #2508**							
Fluoride	16984-48-8		1.08	ug/mL	106	90 - 110				11/11/08
Chloride	16887-00-6		1.84	ug/mL	92.7	90 - 110				11/11/08
Nitrite-N	NO2-N		0.911	ug/mL	91.2	90 - 110				11/11/08
Nitrate-N	NO3-N		0.845	ug/mL	94	90 - 110				11/11/08
Sulfate	14808-79-8		3.78	ug/mL	94.4	90 - 110				11/11/08
DUP			**QC Sample #2509**							
			Original 80109010							
Fluoride	16984-48-8	0	<0.046	ug/mL			0.00	20	UD	11/11/08
Chloride	16887-00-6	2.45	2.41	ug/mL			1.65	20	D	11/11/08
Nitrite-N	NO2-N	0	<0.026	ug/mL			0.00	20	UD	11/11/08
Nitrate-N	NO3-N	1.12	1.09	ug/mL			2.71	20	D	11/11/08
Sulfate	14808-79-8	24	23.8	ug/mL			0.84	20	D	11/11/08
MS			**QC Sample #2510**							
			Original 80109010							

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF80109
Project Number W09-011

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Fluoride	16984-48-8	0	1.01	ug/mL	99.3	80 - 120			D	11/11/08
Chloride	16887-00-6	2.45	4.32	ug/mL	94.3	80 - 120			D	11/11/08
Nitrite-N	NO2-N	0	0.851	ug/mL	85.1	80 - 120			D	11/11/08
Nitrate-N	NO3-N	1.12	1.95	ug/mL	92.6	80 - 120			D	11/11/08
Sulfate	14808-79-8	24	27.6	ug/mL	88.7	80 - 120			D	11/11/08
MSD			**QC Sample #2511**							
			Original 80109010					**Paired**	**2510**	
Fluoride	16984-48-8	0	1.05	ug/mL	103	80 - 120	3.66	20	D	11/11/08
Chloride	16887-00-6	2.45	4.33	ug/mL	94.8	80 - 120	0.53	20	D	11/11/08
Nitrite-N	NO2-N	0	0.848	ug/mL	84.9	80 - 120	0.24	20	D	11/11/08
Nitrate-N	NO3-N	1.12	2.00	ug/mL	97.8	80 - 120	5.46	20	D	11/11/08
Sulfate	14808-79-8	24	27.7	ug/mL	91.1	80 - 120	2.67	20	D	11/11/08

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF80109
Project Number W09-011

QC Batch 10084 **Test** ICP-6010 - All possible metals
Associated Samples 80109002, 80109003, 80109004, 80109005, 80109006, 80109007, 80109008, 80109009, 80109010, 80109011

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #2519**							
Iron	7439-89-6		<25	ug/L					U	12/11/08
Magnesium	7439-95-4		<50	ug/L					U	12/11/08
Manganese	7439-96-5		<4.0	ug/L					U	12/11/08
Nickel	7440-02-0		<6.0	ug/L					U	12/11/08
Potassium	7440-09-7		<170	ug/L					U	12/11/08
Silver	7440-22-4		<5.0	ug/L					U	12/11/08
Sodium	7440-23-5		<51	ug/L					U	12/11/08
Antimony	7440-36-0		<56	ug/L					U	12/11/08
Barium	7440-39-3		<4.0	ug/L					U	12/11/08
Cadmium	7440-43-9		<4.0	ug/L					U	12/11/08
Chromium	7440-47-3		<13	ug/L					U	12/11/08
Cobalt	7440-48-4		<5.0	ug/L					U	12/11/08
Copper	7440-50-8		<6.0	ug/L					U	12/11/08
Vanadium	7440-62-2		<12	ug/L					U	12/11/08
Zinc	7440-66-6		<9.0	ug/L					U	12/11/08
Calcium	7440-70-2		<73	ug/L					U	12/11/08
Strontium	7440-24-6		<4.0	ug/L					U	12/11/08
Beryllium	7440-41-7		<4.0	ug/L					U	12/11/08
LCS			**QC Sample #2520**							
Iron	7439-89-6		977	ug/L	97.7	80 - 120				12/11/08

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF80109
Project Number W09-011

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Magnesium	7439-95-4		954	ug/L	95.4	80 - 120				12/11/08
Manganese	7439-96-5		991	ug/L	99.1	80 - 120				12/11/08
Nickel	7440-02-0		1020	ug/L	102	80 - 120				12/11/08
Potassium	7440-09-7		10300	ug/L	103	80 - 120				12/11/08
Silver	7440-22-4		957	ug/L	95.7	80 - 120				12/11/08
Sodium	7440-23-5		982	ug/L	98.2	80 - 120				12/11/08
Antimony	7440-36-0		993	ug/L	99.3	80 - 120				12/11/08
Barium	7440-39-3		462	ug/L	92.5	80 - 120				12/11/08
Cadmium	7440-43-9		1020	ug/L	102	80 - 120				12/11/08
Chromium	7440-47-3		979	ug/L	97.9	80 - 120				12/11/08
Cobalt	7440-48-4		1010	ug/L	101	80 - 120				12/11/08
Copper	7440-50-8		957	ug/L	95.7	80 - 120				12/11/08
Vanadium	7440-62-2		979	ug/L	97.9	80 - 120				12/11/08
Zinc	7440-66-6		1020	ug/L	102	80 - 120				12/11/08
Calcium	7440-70-2		1110	ug/L	111	80 - 120				12/11/08
Strontium	7440-24-6		494	ug/L	98.8	80 - 120				12/11/08
Beryllium	7440-41-7		530	ug/L	106	80 - 120				12/11/08
MS			**QC Sample #2521**							
			Original 80109002							
Iron	7439-89-6	18.2	980	ug/L	98	75 - 125				12/11/08
Magnesium	7439-95-4	9100	10200	ug/L	107	75 - 125				12/11/08
Manganese	7439-96-5	.3	991	ug/L	99.1	75 - 125				12/11/08
Nickel	7440-02-0	-1.8	980	ug/L	98	75 - 125				12/11/08
Potassium	7440-09-7	5130	15700	ug/L	106	75 - 125				12/11/08
Silver	7440-22-4	.9	960	ug/L	96	75 - 125				12/11/08
Sodium	7440-23-5	17600	18900	ug/L	127	75 - 125				12/11/08
Antimony	7440-36-0	21.4	962	ug/L	96.2	75 - 125				12/11/08
Barium	7440-39-3	64	536	ug/L	94.4	75 - 125				12/11/08

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF80109
Project Number W09-011

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Cadmium	7440-43-9	1.2	998	ug/L	99.8	75 - 125				12/11/08
Chromium	7440-47-3	15.6	984	ug/L	96.8	75 - 125				12/11/08
Cobalt	7440-48-4	1.5	976	ug/L	97.6	75 - 125				12/11/08
Copper	7440-50-8	4.4	957	ug/L	95.7	75 - 125				12/11/08
Vanadium	7440-62-2	0	968	ug/L	96.8	75 - 125				12/11/08
Zinc	7440-66-6	3.6	1000	ug/L	100	75 - 125				12/11/08
Calcium	7440-70-2	56800	57300	ug/L	44	75 - 125				12/11/08
Strontium	7440-24-6	360	867	ug/L	101	75 - 125				12/11/08
Beryllium	7440-41-7	.2	519	ug/L	104	75 - 125				12/11/08
MSD			**QC Sample #2522**							
			Original 80109002						**Paired 2521**	
Iron	7439-89-6	18.2	978	ug/L	97.8	75 - 125	0.20	20		12/11/08
Magnesium	7439-95-4	9100	10300	ug/L	120	75 - 125	11.50	20		12/11/08
Manganese	7439-96-5	.3	1000	ug/L	100	75 - 125	0.90	20		12/11/08
Nickel	7440-02-0	-1.8	993	ug/L	99.3	75 - 125	1.32	20		12/11/08
Potassium	7440-09-7	5130	16000	ug/L	108	75 - 125	1.87	20		12/11/08
Silver	7440-22-4	.9	981	ug/L	98.1	75 - 125	2.16	20		12/11/08
Sodium	7440-23-5	17600	19300	ug/L	171	75 - 125	29.50	20	*	12/11/08
Antimony	7440-36-0	21.4	998	ug/L	99.8	75 - 125	3.67	20		12/11/08
Barium	7440-39-3	64	543	ug/L	95.8	75 - 125	1.47	20		12/11/08
Cadmium	7440-43-9	1.2	1020	ug/L	102	75 - 125	2.18	20		12/11/08
Chromium	7440-47-3	15.6	992	ug/L	97.6	75 - 125	0.82	20		12/11/08
Cobalt	7440-48-4	1.5	989	ug/L	98.9	75 - 125	1.32	20		12/11/08
Copper	7440-50-8	4.4	975	ug/L	97.5	75 - 125	1.86	20		12/11/08
Vanadium	7440-62-2	0	987	ug/L	98.7	75 - 125	1.94	20		12/11/08
Zinc	7440-66-6	3.6	1030	ug/L	103	75 - 125	2.96	20		12/11/08
Calcium	7440-70-2	56800	56500	ug/L	-29	75 - 125	973.00	20	*	12/11/08
Strontium	7440-24-6	360	871	ug/L	102	75 - 125	0.99	20		12/11/08

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF80109
Project Number W09-011

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Beryllium	7440-41-7	.2	528	ug/L	106	75 - 125	1.90	20		12/11/08

Quality Control Report

Attention Michael Neely
Department Wet Chemistry

Group # WSCF80109
Project Number W09-011

QC Batch 12187
Associated Samples 80109006, 80109007, 80109009

Test Total Alkalinity as mg/L CaCO3 (Water)

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
LCS			**QC Sample #2762**							
Total Alkalinity as	ALKALINITY		30.6	mg/L	102	80 - 120				11/18/08
DUP			**QC Sample #2763**							
			Original 80109009							
Total Alkalinity as	ALKALINITY	96	97.0	mg/L			1.04	20		11/18/08
LCS			**QC Sample #2764**							
Total Alkalinity as	ALKALINITY		31.4	mg/L	105	80 - 120				11/18/08

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF80109
Project Number W09-011

QC Batch 14887 **Test** ICP-2008 MS All possible metal
Associated Samples 80109001, 80109012, 80109013, 80109014, 80109015, 80109016, 80109017, 80109018, 80109019

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #2857**							
Uranium	7440-61-1		<0.050	ug/L					U	11/25/08
LCS			**QC Sample #2860**							
Uranium	7440-61-1		40.1	ug/L	100	85 - 115				11/25/08
MS			**QC Sample #2865**							
			Original 80107004							
Uranium	7440-61-1		41.7	ug/L	103	70 - 130				11/25/08
MSD			**QC Sample #2866**							
			Original 80107004					**Paired**	**2865**	
Uranium	7440-61-1		41.4	ug/L	103	70 - 130	0.00	20		11/25/08

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF80109
Project Number W09-011

QC Batch 7184
Associated Samples 80109012, 80109013, 80109014, 80109015, 80109016

Test Strontium 89/90 (GPC/GEA)

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #2421**								
Strontium-89/90	SR-RAD		-1.66	pCi/L						U	12/05/08
LCS			**QC Sample #2422**								
Strontium-89/90	SR-RAD		127	pCi/L	92.3	80 - 120					12/05/08
DUP			**QC Sample #2423**								
			Original 80106005								
Strontium-89/90	SR-RAD		-1.78	pCi/L			-55.20	-20 - 20	*	U1	12/05/08

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF80109
Project Number W09-011

QC Batch 7284
Associated Samples 80109017, 80109018, 80109019

Test Strontium 89/90 (GPC/GEA)

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #2424**							
Strontium-89/90	SR-RAD		-3.00	pCi/L					U	12/03/08
LCS			**QC Sample #2425**							
Strontium-89/90	SR-RAD		125	pCi/L	90.5	80 - 120				12/03/08
DUP			**QC Sample #2426**							
			Original 80109017							
Strontium-89/90	SR-RAD	-2.1	-1.84	pCi/L			-13.20	-20 - 20	U	12/03/08

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF80109
Project Number W09-011

QC Batch 7984 **Test** Tritium by LSC
Associated Samples 80109010, 80109012, 80109013, 80109014, 80109015, 80109016, 80109017, 80109018, 80109019

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #2437**								
Tritium	10028-17-8		26.1	pCi/L							11/11/08
LCS			**QC Sample #2438**								
Tritium	10028-17-8		2810	pCi/L	97.76	80 - 120					11/11/08
DUP			**QC Sample #2439**								
			Original 80109010								
Tritium	10028-17-8	78.4	122	pCi/L			43.51	-20 - 20	*	1	11/11/08
MS			**QC Sample #2440**								
			Original 80109010								
Tritium	10028-17-8	78.4	19000	pCi/L	84.99	75 - 125					11/11/08

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF80109
Project Number W09-011

QC Batch 10284 **Test** TC99 by Liquid Scintillation
Associated Samples 80109001, 80109012, 80109013, 80109014, 80109015, 80109016, 80109017, 80109018

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #2526**							
Technetium-99	14133-76-7		-2.20	pCi/L					U	11/14/08
LCS			**QC Sample #2527**							
Technetium-99	14133-76-7		171	pCi/L	107.56	80 - 120				11/14/08
DUP			**QC Sample #2528**							
			Original 80106005							
Technetium-99	14133-76-7		-2.60	pCi/L			-10.91	-20 - 20	U	11/14/08
MS			**QC Sample #2529**							
			Original 80106005							
Technetium-99	14133-76-7		695	pCi/L	109.16	75 - 125				11/14/08

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF80109
Project Number W09-011

QC Batch 10387
Associated Samples 80109019

Test TC99 by Liquid Scintillation

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #2558**								
Technetium-99	14133-76-7		3.50	pCi/L							11/15/08
LCS			**QC Sample #2559**								
Technetium-99	14133-76-7		163	pCi/L	102.6	80 - 120					11/15/08
DUP			**QC Sample #2560**								
			Original 80109019								
Technetium-99	14133-76-7	-.9	5.10	pCi/L			285.71	-20 - 20	*	1	11/15/08
MS			**QC Sample #2561**								
			Original 80109019								
Technetium-99	14133-76-7	-.9	658	pCi/L	103.41	75 - 125					11/15/08

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF80109
Project Number W09-011

QC Batch 15287
Associated Samples 80109010

Test Gross Alpha/Gross Beta

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #2889**								
Gross Alpha	12587-46-1		-0.0450	pCi/L						U	12/09/08
Gross Beta	12587-47-2		0.106	pCi/L							12/09/08
LCS			**QC Sample #2890**								
Gross Alpha	12587-46-1		39.8	pCi/L	102.71	80 - 120					12/09/08
Gross Beta	12587-47-2		128	pCi/L	114.29	80 - 120					12/09/08
DUP			**QC Sample #2891**								
			Original 80109010								
Gross Alpha	12587-46-1	1.63	0.652	pCi/L			85.71	-20 - 20	*	1	12/09/08
Gross Beta	12587-47-2	4.98	16.0	pCi/L			105.05	-20 - 20	*	1	12/09/08

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF80109
Project Number W09-011

QC Batch 7184
Associated Samples 80109012, 80109013, 80109014, 80109015, 80109016

Test Strontium 89/90 (GPC/GEA)

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #2421**							
Strontium-85	13967-73-2				87.2	25 - 102.5				12/05/08
LCS			**QC Sample #2422**							
Strontium-85	13967-73-2				97	25 - 102.5				12/05/08
DUP			**QC Sample #2423**							
			Original 80106005							
Strontium-85	13967-73-2				86.3	25 - 102.5	5.41			12/05/08
SAMPLE			**Sample #80109012**							
Strontium-85	13967-73-2				91.9	25 - 102.5				12/05/08
SAMPLE			**Sample #80109013**							
Strontium-85	13967-73-2				79.6	25 - 102.5				12/05/08
SAMPLE			**Sample #80109014**							
Strontium-85	13967-73-2				65.6	25 - 102.5				12/05/08
SAMPLE			**Sample #80109015**							
Strontium-85	13967-73-2				79.6	25 - 102.5				12/05/08
SAMPLE			**Sample #80109016**							

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF80109
Project Number W09-011

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Strontium-85	13967-73-2				81.4	25 - 102.5				12/05/08

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF80109
Project Number W09-011

QC Batch 7284
Associated Samples 80109017, 80109018, 80109019

Test Strontium 89/90 (GPC/GEA)

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #2424**							
Strontium-85	13967-73-2				94.3	25 - 102.5				12/03/08
LCS			**QC Sample #2425**							
Strontium-85	13967-73-2				97.9	25 - 102.5				12/03/08
DUP			**QC Sample #2426**							
			Original 80109017							
Strontium-85	13967-73-2				89.2	25 - 102.5	5.23			12/03/08
SAMPLE			**Sample #80109017**							
Strontium-85	13967-73-2				84.6	25 - 102.5				12/03/08
SAMPLE			**Sample #80109018**							
Strontium-85	13967-73-2				83.5	25 - 102.5				12/03/08
SAMPLE			**Sample #80109019**							
Strontium-85	13967-73-2				86.3	25 - 102.5				12/03/08

Analytical Comment Report

Attention Michael Neely

Group # WSCF80109
Project Number W09-011

80109002 **B1XMX8**

ICP-AES: High/Check standard used to ensure linearity
due to sample results exceeding the calibration standard
for the following elements: sodium and calcium.
ICP-AES: The following elements sample concentraton
exceed spiking level by a factor of 4. Spike recoveries
are not valid: magnesium, sodium, and calcium.

80109003 **B1XMY0**

ICP-AES: High/Check standard used to ensure linearity
due to sample results exceeding the calibration standard
for the following elements: sodium and calcium.
ICP-AES: The following elements sample concentraton
exceed spiking level by a factor of 4. Spike recoveries
are not valid: magnesium, sodium, and calcium.

80109004 **B1XMY5**

ICP-AES: High/Check standard used to ensure linearity
due to sample results exceeding the calibration standard
for the following elements: magnesium, sodium, and calcium.
ICP-AES: The following elements sample concentraton
exceed spiking level by a factor of 4. Spike recoveries
are not valid: magnesium, sodium, and calcium.

80109005 **B1XMY7**

ICP-AES: High/Check standard used to ensure linearity
due to sample results exceeding the calibration standard
for the following elements: magnesium, sodium, and calcium.
ICP-AES: The following elements sample concentraton
exceed spiking level by a factor of 4. Spike recoveries
are not valid: magnesium, sodium, and calcium.

80109006 **B1XMX9**

Attention Michael Neely

Group # WSCF80109
Project Number W09-011

ICP-AES: High/Check standard used to ensure linearity
due to sample results exceeding the calibration standard
for the following elements: sodium and calcium.
ICP-AES: The following elements sample concentraton
exceed spiking level by a factor of 4. Spike recoveries
are not valid: magnesium, sodium, and calcium.

80109007	B1XMY1

ICP-AES: High/Check standard used to ensure linearity
due to sample results exceeding the calibration standard
for the following elements: sodium and calcium.
ICP-AES: The following elements sample concentraton
exceed spiking level by a factor of 4. Spike recoveries
are not valid: magnesium, sodium, and calcium.

80109008	B1XMY6

ICP-AES: High/Check standard used to ensure linearity
due to sample results exceeding the calibration standard
for the following elements: sodium and calcium.
ICP-AES: The following elements sample concentraton
exceed spiking level by a factor of 4. Spike recoveries
are not valid: magnesium, sodium, and calcium,

80109009	B1XMY8

ICP-AES: High/Check standard used to ensure linearity
due to sample results exceeding the calibration standard
for the following elements: magnesium, sodium, and calcium.
ICP-AES: The following elements sample concentraton
exceed spiking level by a factor of 4. Spike recoveries
are not valid: magnesium, sodium, and calcium.

80109010	B1XJ67

Analytical Comment Report

Attention Michael Neely

Group # WSCF80109
Project Number W09-011

ICP-AES: High/Check standard used to ensure linearity
due to sample results exceeding the calibration standard
for the following elements: magnesium and calcium.
ICP-AES: The following elements sample concentraton
exceed spiking level by a factor of 4. Spike recoveries
are not valid: magnesium, sodium, and calcium.

80109011 **B1XJX0**

ICP-AES: High/Check standard used to ensure linearity
due to sample results exceeding the calibration standard
for the following elements: magnesium and calcium.
ICP-AES: The following elements sample concentraton
exceed spiking level by a factor of 4. Spike recoveries
are not valid: magnesium, sodium, and calcium.

Quality Control Comments

Department Radiochemistry

2423 B1XKC4(80106005DUP)

Analyte Strontium-89/90 - Strontium 89/90 (GPC/GEA)
[1] Duplicate RPD out-of-limits. RPD limit does not apply to results near the Minimum Detectable Concentration.

Department Radiochemistry

2439 B1XJ67(80109010DUP)

Analyte Tritium - Tritium by LSC
[1] Duplicate RPD out-of-limits. RPD limit does not apply to results near the Minimum Detectable Concentration.

Department Radiochemistry

2560 B1XJ27(80109019DUP)

Analyte Technetium-99 - TC99 by Liquid Scintillation
[1] Duplicate RPD out-of-limits. RPD limit does not apply to results near the Minimum Detectable Concentration.

Department Radiochemistry

Analytical Comment Report

Attention Michael Neely

Group # WSCF80109
Project Number W09-011

2891 B1XJ67(80109010DUP)

Analyte Gross Alpha - Gross Alpha/Gross Beta
[1] Duplicate RPD out-of-limits. RPD limit does not apply to results near the Minimum Detectable Concentration.

2891 B1XJ67(80109010DUP)

Analyte Gross Beta - Gross Alpha/Gross Beta
[1] Duplicate RPD out-of-limits. RPD limit does not apply to results near the Minimum Detectable Concentration.

ATTACHMENT4

SAMPLE RECEIPT

Consisting of 17 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 #:	300071
Work Order #:	80109
Profile #:	W09-011-6
Proj. Mgr.:	
Phone:	

The following samples were received from you on 11/10/2008 1:05:00 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		
80109001	B1XMY4	WATER	11/10/2008 10:22	11/10/2008 13
		2008-W; ALK-W; TC99-W		
80109002	B1XMX8	WATER	11/10/2008 11:43	11/10/2008 13
		6010-W		
80109003	B1XMY0	WATER	11/10/2008 11:43	11/10/2008 13
		6010-W		
80109004	B1XMY5	WATER	11/10/2008 11:01	11/10/2008 13
		6010-W		
80109005	B1XMY7	WATER	11/10/2008 11:01	11/10/2008 13
		6010-W		
80109006	B1XMX9	WATER	11/10/2008 11:43	11/10/2008 13
		6010-W; ALK-W		
80109007	B1XMY1	WATER	11/10/2008 11:43	11/10/2008 13
		6010-W; ALK-W		
80109008	B1XMY6	WATER	11/10/2008 11:01	11/10/2008 13
		6010-W; ALK-W		
80109009	B1XMY8	WATER	11/10/2008 11:01	11/10/2008 13
		6010-W; ALK-W		
80109010	B1XJ67	WATER	11/10/2008 10:22	11/10/2008 13
		6010-W; GAB-AO-W; GAB-BO-W; H3-COL-W; IC-W		
80109011	B1XJX0	WATER	11/10/2008 10:22	11/10/2008 13
		6010-W		

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

80109012	B1XHW9	WATER	11/10/2008 08:43	11/10/2008 13
		2008-W; H3-COL-W; IC-W; SR89/90-W; TC99-W		
80109013	B1XHX1	WATER	11/10/2008 11:43	11/10/2008 13
		2008-W; H3-COL-W; IC-W; SR89/90-W; TC99-W		
80109014	B1XHX2	WATER	11/10/2008 11:43	11/10/2008 13
		2008-W; H3-COL-W; IC-W; SR89/90-W; TC99-W		
80109015	B1XHY3	WATER	11/10/2008 12:06	11/10/2008 13
		2008-W; H3-COL-W; IC-W; SR89/90-W; TC99-W		
80109016	B1XJ08	WATER	11/10/2008 11:01	11/10/2008 13
		2008-W; H3-COL-W; IC-W; SR89/90-W; TC99-W		
80109017	B1XJ09	WATER	11/10/2008 11:01	11/10/2008 13
		2008-W; H3-COL-W; IC-W; SR89/90-W; TC99-W		
80109018	B1XJ12	WATER	11/10/2008 11:01	11/10/2008 13
		2008-W; H3-COL-W; IC-W; SR89/90-W; TC99-W		
80109019	B1XJ27	WATER	11/10/2008 12:18	11/10/2008 13
		2008-W; H3-COL-W; IC-W; SR89/90-W; TC99-W		

Test Acronym Description

Test Acronym	Description
2008-W	ICP-MS (W)
6010-W	ICP-AES (W)
ALK-W	Total Alkalinity (W)
GAB-AO-W	Gross Alpha/Beta (A only)(W)
GAB-BO-W	Gross Alpha/Beta (B only)(W)
H3-COL-W	Tritium by EICHROM Column (W)
IC-W	Anions by IC (W)
SR89/90-W	Strontium 89/90 (GPC) (W)
TC99-W	Technetium-99 (W)

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # W09-011-6
		Page 1 of 1

Collector	Contact/Requester: Mike Neely	Telephone No. 509-373-0654 MSIN FAX
SAF No. W09-011 Roy Sickle	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA NOVEMBER 2008	HNF-N-506/6	Ice Chest No. GW3-029 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

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)

80:c9

SPECIAL INSTRUCTIONS Hold Time — Total Activity Exemption: Yes ☑ No ☐
FY08 and FY09 samples cannot be in the same SDG
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1XMY4	001	W	11/10/08	1022	1x250-mL G/P	2320_ALKALINITY: Alkalinity (1)	14 Days	Cool-4C
B1XMY4		W	↓	↓	1x500-mL G/P	200.8_METALS_ICPMS: Uranium (1)	6 Months	HNO3 to pH <2
B1XMY4		W	↓	↓	1x1000-mL G/P	TC99_3MDSK_LSC: Tc-99 (1)	6 Months	HCl to pH <2

ICED

Relinquished By	Date/Time	Received By	Date/Time
Print: Roy Sickle Sign: [signature]	1305 NOV 10 2008	Print: [illegible] Sign: [signature]	1305 NOV 10 2008
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		DS = Drum Solid	
SR = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I09-005-330
		Page 1 of 1

Collector: Roy Sickle	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: I09-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 100HR31AM(1/2) NOVEMBER 2008	HWF-U-50616	Ice Chest No.: GWS-024 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

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 ☑ No ☐
FY08 and FY09 samples cannot be in the same SDG.
100 Area Generator Knowledge Information Form applies

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1XHY3	015	W	11/10/08	1206	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	28 Days/48 Hours	Cool-4C
B1XHY3		W			1x1-L G/P	Strontium-89,90 – Total Sr	6 Months	HNO3 to pH <2
B1XHY3		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	6 Months	None
B1XHY3		W			1x500-mL G/P	200.8_METALS_ICPMS: Uranium (1)	6 Months	HNO3 to pH <2
B1XHY3		W			1x1000-mL G/P	TC99_3MDSK_LSC: Tc-99 (1)	6 Months	HCl to pH <2

ICED

Relinquished By	Date/Time	Received By	Date/Time
Roy Sickle Print / Sign	1305 NOV 10 2008	Print / Sign	1305 NOV 10 2008
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		DS = Drum Solid	
SF = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C.# I09-005-360
		Page 1 of 1

Collector Roy Sickle	Contact/Requester Mike Neely	Telephone No. 509-373-0654 MSIN FAX
SAF No. 109-005	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title 100HR3IAM(1/2) NOVEMBER 2008	HW FN-506/6	Ice Chest No. GW3039 Temp.
Shipped To (Lab) Waste Sampling & Characterization	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol CERCLA	Priority: 45 Days	Offsite Property No.

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 ☑ No ☐
FY08 and FY09 samples cannot be in the same SDG.
100 Area Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1XJ08	016	W	11/10/08	1101	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	28 Days/48 Hours	Cool-4C
B1XJ08		W	↓	↓	1x1-L G/P	Strontium-89,90 – Total Sr	6 Months	HNO3 to pH <2
B1XJ08		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	6 Months	None
B1XJ08		W			1x500-mL G/P	200.8_METALS_ICPMS: Uranium (1)	6 Months	HNO3 to pH <2
B1XJ08		W			1x1000-mL G/P	TC99_3MDSK_LSC: Tc-99 (1)	6 Months	HCl to pH <2

ICED

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Roy Sickle			1305 NOV 10 2008				1305 NOV 10 2008
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	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liquid
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I09-005-361
		Page 1 of 1

Collector Roy Sickle	Contact/Requester Mike Neely	Telephone No. 509-373-0654 MSIN FAX
SAF No. 109-005	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title 100HR3IAM(1/2) NOVEMBER 2008	HNF-N-506/6	Ice Chest No. GW5429 Temp.
Shipped To (Lab) Waste Sampling & Characterization	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol CERCLA	Priority: 45 Days	Offsite Property No.

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 (11/90/1993)

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption Yes ☑ No ☐
FY08 and FY09 samples cannot be in the same SDG.
100 Area Generator Knowledge Information Form applies

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1XJ09	017	W	11/10/08	1101	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	28 Days/48 Hours	Cool~4C
B1XJ09		W			1x1-L G/P	Strontium-89,90 -- Total Sr	6 Months	HNO3 to pH <2
B1XJ09		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	6 Months	None
B1XJ09		W			1x500-mL G/P	200.8_METALS_ICPMS: Uranium (1)	6 Months	HNO3 to pH <2
B1XJ09		W			1x1000-mL G/P	TC99_3MDSK_LSC: Tc-99 (1)	6 Months	HCl to pH <2

ICED

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Roy Sickle			1305 NOV 10 2008				1305 NOV 10 2008
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	DS	= Drum Solid
SF	= Sediment	DL	= Drum Liquid
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I09-005-364
		Page 1 of 1

Collector: Roy Sickle	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: 109-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 100HR3IAM(1/2) NOVEMBER 2008	HNF-N-506-16	Ice Chest No.: 665529 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

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 ☑ No ☐
FY08 and FY09 samples cannot be in the same SDG
100 Area Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1XJ12	018	W	11/10/08	1126	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	28 Days/48 Hours	Cool-4C
B1XJ12		W			1x1-L G/P	Strontium-89,90 - Total Sr	6 Months	HNO3 to pH <2
B1XJ12		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	6 Months	None
B1XJ12		W			1x500-mL G/P	200.8_METALS_ICPMS: Uranium (1)	6 Months	HNO3 to pH <2
B1XJ12		W			1x1000-mL G/P	TC99_3MDSK_LSC: Tc-99 (1)	6 Months	HCl to pH <2

ICED

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	Roy Sickle		1305 NOV 10 2008		Victor Bins		1305 NOV 10 2008
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		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C.# 109-005-392 Page 1 of 1

Collector: Roy Sickle	Contact/Requester: Mike Negly	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: 109-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 100IR3IAM(1/2) NOVEMBER 2008	HWF-N50-16	Ice Chest No.: 6W5029 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

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 ☑ No ☐
FY08 and FY09 samples cannot be in the same SDG.
100 Area Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1XJ27	019	W	11/10/08	1218	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	28 Days/48 Hours	Cool-4C
B1XJ27		W			1x1-L G/P	Strontium-89,90 – Total Sr	6 Months	HNO3 to pH <2
B1XJ27		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	6 Months	None
B1XJ27		W			1x500-mL G/P	200.8_METALS_ICPMS: Uranium (1)	6 Months	HNO3 to pH <2
B1XJ27		W			1x1000-mL G/P	TC99_3MDSK_LSC: Tc-99 (1)	6 Months	HCl to pH <2

ICED

Relinquished By	Date/Time	Received By	Date/Time
Roy Sickle Print / Sign	1305 NOV 10 2008	Print / Sign 1305	NOV 10 2008
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		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # W09-011-2 Page 1 of 1

Collector: Roy Sickle	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: W09-011	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA NOVEMBER 2008	HWF-N-50611	Ice Chest No.: 6W5029 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

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 ☑ No ☐
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1XM08 (F)	002	W	11/10/08	1147	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	6 Months	HNO3 to pH <2
B1XM09	006	W	↓	↓	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	6 Months	HNO3 to pH <2
B1XM09		W	↓	↓	1x250-mL G/P	2320_ALKALINITY: Alkalinity (1)	14 Days	Cool~4C

ICED

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Roy Sickle		1305	NOV 10 2008			1305	NOV 10 2008
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		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C.# W09-011-3 Page 1 of 1

Collector: Roy Sickle	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: W09-011	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA NOVEMBER 2008	HNF-N-306/16	Ice Chest No.: 6w5024 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

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 ☑ No ☐
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1XMY0 (F)	003	W	11/10/08	1143	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	6 Months	HNO3 to pH <2
B1XMY1	007	W	↓	↓	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	6 Months	HNO3 to pH <2
B1XMY1		W	↓	↓	1x250-mL G/P	2320_ALKALINITY: Alkalinity (1)	14 Days	Cool-4C

ICED

Relinquished By	Date/Time	Received By	Date/Time
Print: Roy Sickle Sign: [signature] 1305	NOV 10 2008	Print: [illegible] Sign: [signature] 1305	NOV 10 2008
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		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # W09-011-10 Page 1 of 1

Collector: Roy Sickle	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: W09-011	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA NOVEMBER 2008	HWF-W 30611	Ice Chest No.: GW5C29 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

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 ☑ No ☐
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1XMY5 (F)	0C4	W	11/10/08	1101	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	6 Months	HNO3 to pH <2
B1XMY6	0C5	W	↓	↓	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	6 Months	HNO3 to pH <2
B1XMY8		W	↓	↓	1x250-mL G/P	2320_ALKALINITY: Alkalinity (1)	14 Days	Cool~4C

ICED

Relinquished By	Date/Time	Received By	Date/Time
Print: Roy Sickle Sign: [signature] 1305	NOV 10 2008	Print: [illegible] Sign: [signature] 1305	NOV 10 2008
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	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liquid
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # W09-011-11 Page 1 of 1

Collector: Roy Sickle	Contact/Requester: Mike Neely	Telephone No.: 509-373-0651 MSIN FAX
SAF No.: W09-011	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA NOVEMBER 2008	HWF-W-506.16	Ice Chest No.: 6WSV29 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

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 (;990/1993)

SPECIAL INSTRUCTIONS Hold Time — Total Activity Exemption: Yes ☑ No ☐
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1XMY7 (F)	003	W	11/10/08	1101	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	6 Months	HNO3 to pH <2
B1XMY8	009	W	↓	↓	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	6 Months	HNO3 to pH <2
B1XMY8		W	↓	↓	1x250-mL G/P	2320_ALKALINITY: Alkalinity (1)	14 Days	Cool~4C

ICED

Relinquished By	Received By
Print: Roy Sickle Sign: [signature] 1305 Date/Time: NOV 10 2008	Print: [signature] Sign: [signature] 1305 Date/Time: NOV 10 2008
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	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liquid
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

CHPRC

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # 109-005-322

Page 1 of 1

Collector: Roy Sickle	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: 109-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 100HR3IAM(1/2) NOVEMBER 2008	HWF-W-50616	Ice Chest No.: GWS-29 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

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
FY08 and FY09 samples cannot be in the same SDG.
100 Area Generator Knowledge Information Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1XJ67	010	W	11/10/08	1022	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	6 Months	HNO3 to pH <2
B1XJ67		W			1x500-mL P	300.0_ANIONS_IC: List-1 (5)	28 Days/48 Hours	Cool~4C
B1XJ67		W			1x500-mL G/P	ALPHABETA_GPC: Alpha discrete + Beta (2); ALPHABETA_GPC: Alpha discrete + Beta (2)	6 Months	HNO3 to pH <2
B1XJ67		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	6 Months	None
B1XJX0 (F)	011	W			1x500-mL G/P	6010_METALS_ICP: List-3 (18)	6 Months	HNO3 to pH <2

ICED

NOV 10 2008

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Roy Sickle			1305 NOV	Victor Bias			1305 NOV 10 2008
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	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liquid
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I09-005-304 Page 1 of 1

Collector: Roy Sickle	Contact/Requester: Mike Neely	Telephone No.: 509-371-0654 MSIN FAX
SAF No.: 109-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 100HR3IAM(1/2) NOVEMBER 2008	HNF-N.506-16	Ice Chest No.: 6WS029 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

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 ☑ No ☐
FY08 and FY09 samples cannot be in the same SDG.
100 Area Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1XHW9	012	W	11/10/08	0847	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	28 Days/48 Hours	Cool~4C
B1XHW9		W			1x1-L G/P	Strontium-89,90 – Total Sr	6 Months	HNO3 to pH <2
B1XHW9		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	6 Months	None
B1XHW9		W			1x500-mL G/P	200.8_METALS_ICPMS: Uranium (1)	6 Months	HNO3 to pH <2
B1XHW9		W			1x1000-mL G/P	TC99_3MDSK_LSC: Tc-99 (1)	6 Months	HCl to pH <2

ICED

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
Roy Sickle	1305 NOV 10 2008	Victor Jones	1305 NOV 10 2008
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		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # 109-005-308
		Page 1 of 1

Collector: Roy Sickle	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: 109-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 100HR3IAM(1/2) NOVEMBER 2008	HWF-N-5646	Ice Chest No.: 643029 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

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
FY08 and FY09 samples cannot be in the same SDG.
100 Area Generator Knowledge Information Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1XH-X1	013	W	11/10/08	1143	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	28 Days/48 Hours	Cool-4C
B1XH-X1		W	↓	↓	1x1-L G/P	Strontium-89,90 -- Total Sr	6 Months	HNO3 to pH <2
B1XH-X1		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	6 Months	None
B1XH-X1		W			1x500-mL G/P	200.8_METALS_ICPMS: Uranium (1)	6 Months	HNO3 to pH <2
B1XH-X1		W			1x1000-mL G/P	TC99_3MDSK_LSC: Tc-99 (1)	6 Months	HCl to pH <2

ICED

Relinquished By	Received By
Print: Roy Sickle Sign: [signature] Date/Time: NOV 10 2008 1305	Print: Victor Bus Sign: [signature] Date/Time: NOV 10 2008 1305
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	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liquid
SD	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

CHPRC

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I09-005-309

Page 1 of 1

Collector: Roy Sickle	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: 109-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 100HR3IAM(1/2) NOVEMBER 2008	HNF-N-JOB/6	Ice Chest No.: 6W3-C29 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

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
FY08 and FY09 samples cannot be in the same SDG
100 Area Generator Knowledge Information Form applies

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1XHX2	014	W	11/10/08	1N3	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	28 Days/48 Hours	Cool~4C
B1XHX2		W	↓	↓	1x1-L G/P	Strontium-89,90 – Total Sr	6 Months	HNO3 to pH <2
B1XHX2		W			1x250-mL G	TRITIUM_E/E_LSC: Tritium (1)	6 Months	None
B1XHX2		W			1x500-mL G/P	200.8_METALS_ICPMS: Uranium (1)	6 Months	HNO3 to pH <2
B1XHX2		W			1x1000-mL G/P	TC99_3MDSK_LSC: Tc-99 (1)	6 Months	HCl to pH <2

ICED

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	Roy Sickle		1200 NOV 10 2008		Victor Bins		1305 NOV 10 2008
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		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	