WSCF Laboratory

PO Box 650 S3-30
Richland, WA 99352

RECEIVED FEBRUARY 10, 2011

1212576

February 9, 2011

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

Dear Michael Neely,

FINAL RESULT FOR SAMPLE DELIVERY GROUP WSCF111081

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

This letter contains the following information for sample delivery group WSCF111081

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

Very truly yours,

RECEIVED
MAR 20 2012
EDMC

Electronically signed by Joseph Hale
For Lab Manager
WSCF Analytical Lab
(509) 373-7495

Attachments 4

CC: w/Attachments

File/LB

ATTACHMENT 1

COVER SHEET

Consisting of 2 pages
Including cover page

WSCF SAF Number Cross Reference

Group # WSCF111081
Data Deliverable Date 02/08/11

SAF #	Sample ID	Sample #	Matrix	Sampled	Received
X11-016	B29N09	111081001	WATER	01/09/11	01/09/11
X11-016	B29N14	111081002	WATER	01/09/11	01/09/11
X11-016	B29N21	111081003	WATER	01/09/11	01/09/11
X11-016	B29H57	111081004	WATER	01/09/11	01/09/11
X11-016	B29HC1	111081005	WATER	01/09/11	01/09/11
X11-016	B29H81	111081006	WATER	01/09/11	01/09/11
X11-016	B29H58	111081007	WATER	01/09/11	01/09/11
X11-016	B29HC2	111081008	WATER	01/09/11	01/09/11
X11-016	B29H82	111081009	WATER	01/09/11	01/09/11

ATTACHMENT 2

NARRATIVE

Consisting of 6 pages
Including cover page

Attachment 2
Narrative
WSCF111081

Introduction

Samples were received at the WSCF laboratory as referenced on the WSCF SAF Number Cross Reference table included in the final report. The samples were analyzed for the analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Statement of Work (SOW), Modification No. 2 to Agreement 36587, Release 3, "FH WSCF ANALYTICAL SERVICES FOR GROUNDWATER."*

The narrative (Attachment 2) will address sample characteristics, analyses requested and general information in performance of the analytical methods. Also attached is IRF 11-322 dealing with the missed hold time for Phosphorous and Silicon. A Data Summary Report (Attachment 3) includes analytical results, a comment report detailing method abnormalities, tentatively identified peaks if applicable, method references, and Laboratory QC information as applicable. Copies of the chain of custody and sample receipt documentation are included as Attachment 4.

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

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

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

Analytical Methodology for Requested Analyses

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

Inorganic Comments

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

- All applicable QC controls are within the established limits.

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Attachment 2
Narrative
WSCF111081

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

- All applicable QC controls are within the established limits.

ICP-AES Metals – The hold time requirements for this analysis were not met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group. Analytical Note(s):

- Issue Resolution Form **CHPRC TRACKING NUMBER**: 11-322 was created due to Silicon and Phosphorus were analyzed after the 28 day holding time expired.
- Batch QC 175435
  - Sodium – Detected in the Blank and evaluated. No sample results in this batch were affected. "C" Flags not required.
  - Calcium, Magnesium, Potassium, Silicon and Sodium – Exceeded spiking levels by a factor of 4. Spike recoveries and associated RPDs are not valid.
- Batch QC 175436
  - Potassium – Detected in the Blank and evaluated. Affected sample results in this batch were "C" Flagged.
  - Calcium, Magnesium, Silicon and Sodium – Exceeded spiking levels by a factor of 4. Spike recoveries and associated RPDs are not valid.
  - All other applicable QC controls are within the established limits.

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. Analytical Note(s):

- All applicable 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. Analytical Note(s):

- All applicable QC controls are within the established limits.

Organic Comments

Alcohol/Glycols - The hold time requirement for this analysis was met. A Duplicate, Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group. Analytical Note(s):

- All applicable QC controls are within the established limits.

PCB – 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):

- All applicable QC controls are within the established limits.

TPHD-WA – 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):

- All applicable QC controls are within the established limits.

TPHG-WA – The hold time requirement for this analysis was met. A Duplicate, Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group. Analytical Note(s):

- All applicable QC controls are within the established limits.

Radiochemistry Comments

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

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

- Gross Alpha / Gross Beta:
  - All applicable QC controls are within the established limits.
- Isotopic Plutonium analysis:
  - All applicable QC controls are within the established limits.
- Isotopic Uranium analysis:
  - Uranium-238 - The Blank is less than two times the MDC. "B" Flag not required.
    - All other applicable QC controls are within the established limits.
- Strontium-89/90:
  - All applicable QC controls are within the established limits.

Attachment 2
Narrative
WSCF111081

- Tritium:
  - All applicable QC controls are within the established limits.
- Technetium-99:
  - All applicable QC controls are within the established limits.

We certify that this data package is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this data package has been authorized by the Analytical Laboratory Manager (or designee) and the Client Services representative as verified by electronic signatures shown on the WSCF ANALYTICAL RESULTS REPORT.

Attachment 2
Narrative
WSCF111081

ISSUE RESOLUTION FORM

CHPRC TRACKING NUMBER: 11-322

Date: 2/8/20111 SAF No. X11-016

SDG: 111069, 111074, 111077, 111078 & 111081 TEST: ICP-6010 **DUE DATE: 2/7/2011 and 2/8/2011**

TEST: ICP-6010

LOGIN No.: 111069008 through 111069012
111074002 and 111074003
111077005 through 111077010
111078004 through 111078009
111081004

Sample No.(s): B29H96, B29H53, B29HB2, B29HB7 and B29H97
B29H33 and B29H34
B29H43, B29H49, B29H38, B29H44, B29H50 and B29H39
B29H86, B29H91, B29HF1, B29H87, B29H92 and B29HF2
B29H57

Submitted By: M. Avila
Phone No.:
Fax. No.:

Submitted To: S. Champoux
Phone No.: 373-5290
Fax No.:

ISSUE	PROPOSED RESOLUTION
These samples were collected on: 111069 1/7/11 111074 1/9/11 111077 1/9/11 111078 1/9/11 111081 1/9/11 These samples were not analyzed until February 8th, 2011. These were analyzed outside the 28-day regulatory holding time for Silicon and Phosphorus.	Accept results as-is and document in the narrative.

CHPRC/BHI/WMH/PNNL COMMENTS

Accept proposed resolution

Sara Champoux 2/8/2011

Signature and Date

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ATTACHMENT 3

ANALYTICAL RESULTS

Consisting of 98 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 #	WSCF111081
Report Date	February 9, 2011

Analytical: Electronically signed by Joseph Hale

Client Services: Electronically signed by Richard Barker

Solid samples results that have a 'Percent Solid' test are reported on a "dry weight basis", except results of TCLP, Percent Solid, and Total Activity. If no `Percent Solid' test is reported then the results are reported on an "as received" basis.

This information is intended for the use of the addressee only. If the reader of this report is not the intended recipient or is not authorized by the recipient to receive the report, you are hereby notified that any dissemination, distribution or copying of this report is strictly prohibited. If you have received this report in error, please notify WSCF Laboratory immediately by telephone at (509) 373-7020 or (509) 531-8004. Information designation of this report is the responsibility of the customer.

Batch QC List

Attention Michael Neely
Department Inorganic

Group # WSCF111081

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
173800	173800	2	BLANK	46060	BLANK		Anions by Ion Chromatography (Water)
173800	173800	3	LCS	46061	LCS		Anions by Ion Chromatography (Water)
173800	173800	4	DUP	46062	B29LP0(111065002DUP)	111065002	Anions by Ion Chromatography (Water)
173800	173800	5	MS	46063	B29LP0(111065002MS)	111065002	Anions by Ion Chromatography (Water)
173800	173800	6	MSD	46064	B29LP0(111065002MSD)	111065002	Anions by Ion Chromatography (Water)
173800	173800	8	SAMPLE	111081002	B29N14		Anions by Ion Chromatography (Water)
173800	173800	9	SAMPLE	111081002	B29N14		Anions by Ion Chromatography (Water)
173801	173801	2	BLANK	46067	BLANK		Anions by Ion Chromatography (Water)
173801	173801	3	LCS	46068	LCS		Anions by Ion Chromatography (Water)
173801	173801	4	DUP	46069	B29N07(111077002DUP)	111077002	Anions by Ion Chromatography (Water)
173801	173801	5	MS	46070	B29N07(111077002MS)	111077002	Anions by Ion Chromatography (Water)
173801	173801	6	MSD	46071	B29N07(111077002MSD)	111077002	Anions by Ion Chromatography (Water)
173801	173801	10	SAMPLE	111081003	B29N21		Anions by Ion Chromatography (Water)
173801	173801	11	SAMPLE	111081003	B29N21		Anions by Ion Chromatography (Water)
173801	173801	16	SAMPLE	111081001	B29N09		Anions by Ion Chromatography (Water)
174500	174501	4	BLANK	46733	BLANK		ICP-2008 MS All possible metal
174500	174501	5	LCS	46734	LCS		ICP-2008 MS All possible metal
174500	174501	6	MS	46735	B29H86(111078004MS)	111078004	ICP-2008 MS All possible metal
174500	174501	7	MSD	46736	B29H86(111078004MSD)	111078004	ICP-2008 MS All possible metal
174500	174501	16	SAMPLE	111081004	B29H57		ICP-2008 MS All possible metal
174500	174501	17	SAMPLE	111081005	B29HC1		ICP-2008 MS All possible metal
174500	174501	18	SAMPLE	111081006	B29H81		ICP-2008 MS All possible metal
174500	174501	19	SAMPLE	111081007	B29H58		ICP-2008 MS All possible metal

Batch QC List

Attention Michael Neely
Department Inorganic

Group # WSCF111081

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
174500	174501	20	SAMPLE	111081008	B29HC2		ICP-2008 MS All possible metal
174500	174501	21	SAMPLE	111081009	B29H82		ICP-2008 MS All possible metal
175435	176265	1	BLANK	47878	BLANK		ICP-6010 - All possible metals
175435	176265	2	LCS	47879	LCS		ICP-6010 - All possible metals
175435	176265	3	MS	47880	B29H96(111069008MS)	111069008	ICP-6010 - All possible metals
175435	176265	4	MSD	47881	B29H96(111069008MSD)	111069008	ICP-6010 - All possible metals
175435	176265	24	SAMPLE	111081004	B29H57		ICP-6010 - All possible metals
175436	176274	1	BLANK	47882	BLANK		ICP-6010 - All possible metals
175436	176274	2	LCS	47883	LCS		ICP-6010 - All possible metals
175436	176274	3	MS	47884	B29HC1(111081005MS)	111081005	ICP-6010 - All possible metals
175436	176274	4	MSD	47885	B29HC1(111081005MSD)	111081005	ICP-6010 - All possible metals
175436	176274	5	SAMPLE	111081005	B29HC1		ICP-6010 - All possible metals
175436	176274	6	SAMPLE	111081006	B29H81		ICP-6010 - All possible metals
175436	176274	7	SAMPLE	111081007	B29H58		ICP-6010 - All possible metals
175436	176274	8	SAMPLE	111081008	B29HC2		ICP-6010 - All possible metals
175436	176274	9	SAMPLE	111081009	B29H82		ICP-6010 - All possible metals

Batch QC List

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF111081

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
173817	174412	1	BLANK	46117	BLANK		Extractable Diesel and Petroleum
173817	174412	2	LCS	46118	LCS		Extractable Diesel and Petroleum
173817	174412	3	MS	46119	B29HC7(111059014MS)	111059014	Extractable Diesel and Petroleum
173817	174412	4	MSD	46120	B29HC7(111059014MSD)	111059014	Extractable Diesel and Petroleum
173817	174412	12	SAMPLE	111081009	B29H82		Extractable Diesel and Petroleum
173941	174411	1	BLANK	46301	BLANK		Extractable Diesel and Petroleum
173941	174411	2	LCS	46302	LCS		Extractable Diesel and Petroleum
173941	174411	5	MS	46314	B29H39(111077010MS)	111077010	Extractable Diesel and Petroleum
173941	174411	6	MSD	46315	B29H39(111077010MSD)	111077010	Extractable Diesel and Petroleum
173941	174411	9	SAMPLE	111081008	B29HC2		Extractable Diesel and Petroleum
173941	174411	13	SAMPLE	111081007	B29H58		Extractable Diesel and Petroleum
174095	174725	1	BLANK	46349	BLANK		PCBs by EPA SW-846 Method 8082
174095	174725	2	LCS	46350	LCS		PCBs by EPA SW-846 Method 8082
174095	174725	7	MS	46351	B29HD2(111059011MS)	111059011	PCBs by EPA SW-846 Method 8082
174095	174725	8	MSD	46352	B29HD2(111059011MSD)	111059011	PCBs by EPA SW-846 Method 8082
174095	174725	9	SAMPLE	111081009	B29H82		PCBs by EPA SW-846 Method 8082

Batch QC List

Attention Michael Neely
Department Organic, Volatiles

Group # WSCF111081

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
174100	174101	1	BLANK	46358	BLANK		Gasoline Range (W)
174100	174101	2	LCS	46359	LCS		Gasoline Range (W)
174100	174101	3	MS	46360	B29H58(111081007MS)	111081007	Gasoline Range (W)
174100	174101	4	MSD	46361	B29H58(111081007MSD)	111081007	Gasoline Range (W)
174100	174101	5	DUP	46362	B29H58(111081007DUP)	111081007	Gasoline Range (W)
174100	174101	6	SAMPLE	111081007	B29H58		Gasoline Range (W)
174100	174101	7	SAMPLE	111081008	B29HC2		Gasoline Range (W)
174100	174101	8	SAMPLE	111081009	B29H82		Gasoline Range (W)
174215	175993	1	BLANK	46477	BLANK		SW-846 Method 8015 for GPP
174215	175993	2	LCS	46478	LCS		SW-846 Method 8015 for GPP
174215	175993	4	MS	46479	B29H44(111077008MS)	111077008	SW-846 Method 8015 for GPP
174215	175993	5	MSD	46480	B29H44(111077008MSD)	111077008	SW-846 Method 8015 for GPP
174215	175993	6	DUP	46481	B29H44(111077008DUP)	111077008	SW-846 Method 8015 for GPP
174215	175993	12	SAMPLE	111081007	B29H58		SW-846 Method 8015 for GPP
174215	175993	13	SAMPLE	111081008	B29HC2		SW-846 Method 8015 for GPP
174215	175993	14	SAMPLE	111081009	B29H82		SW-846 Method 8015 for GPP

Batch QC List

Attention Michael Neely
Department Radiochemistry

Group # WSCF111081

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
173634	174200	1	BLANK	45971	BLANK		Strontium 89/90 (GPC/GEA)
173634	174200	2	LCS	45972	LCS		Strontium 89/90 (GPC/GEA)
173634	174200	3	DUP	45973	B29H50(111077009DUP)	111077009	Strontium 89/90 (GPC/GEA)
173634	174200	9	SAMPLE	111081007	B29H58		Strontium 89/90 (GPC/GEA)
173634	174200	10	SAMPLE	111081008	B29HC2		Strontium 89/90 (GPC/GEA)
173634	174200	11	SAMPLE	111081009	B29H82		Strontium 89/90 (GPC/GEA)
173642	173933	1	BLANK	45988	BLANK		Tritium by LSC
173642	173933	2	LCS	45989	LCS		Tritium by LSC
173642	173933	4	DUP	45990	B29H97(111069012DUP)	111069012	Tritium by LSC
173642	173933	5	MS	45991	B29H97(111069012MS)	111069012	Tritium by LSC
173642	173933	13	SAMPLE	111081007	B29H58		Tritium by LSC
173642	173933	14	SAMPLE	111081008	B29HC2		Tritium by LSC
173642	173933	15	SAMPLE	111081009	B29H82		Tritium by LSC
173828	173929	1	BLANK	46165	BLANK		TC99 by Liquid Scintillation
173828	173929	2	LCS	46166	LCS		TC99 by Liquid Scintillation
173828	173929	4	DUP	46167	B29H34(111074003DUP)	111074003	TC99 by Liquid Scintillation
173828	173929	5	MS	46168	B29H34(111074003MS)	111074003	TC99 by Liquid Scintillation
173828	173929	12	SAMPLE	111081007	B29H58		TC99 by Liquid Scintillation
173828	173929	13	SAMPLE	111081008	B29HC2		TC99 by Liquid Scintillation
173828	173929	14	SAMPLE	111081009	B29H82		TC99 by Liquid Scintillation
173920	175798	1	BLANK	46258	BLANK		Uranium (AEA)
173920	175798	2	LCS	46259	LCS		Uranium (AEA)
173920	175798	4	DUP	46260	B29H87(111078007DUP)	111078007	Uranium (AEA)

Batch QC List

Attention Michael Neely
Department Radiochemistry

Group # WSCF111081

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
173920	175798	7	SAMPLE	111081007	B29H58		Uranium (AEA)
173920	175798	8	SAMPLE	111081008	B29HC2		Uranium (AEA)
173920	175798	9	SAMPLE	111081009	B29H82		Uranium (AEA)
173920	175801	1	DUP	46260	B29H87(111078007DUP)	111078007	Plutonium (AEA)
173920	175801	5	SAMPLE	111081007	B29H58		Plutonium (AEA)
173920	175801	6	SAMPLE	111081008	B29HC2		Plutonium (AEA)
173920	175801	7	SAMPLE	111081009	B29H82		Plutonium (AEA)
173920	175801	8	BLANK	46258	BLANK		Plutonium (AEA)
173920	175801	9	LCS	46259	LCS		Plutonium (AEA)
174189	174930	1	BLANK	46386	BLANK		Gross Alpha/Gross Beta
174189	174930	2	LCS	46387	LCS		Gross Alpha/Gross Beta
174189	174930	5	DUP	46388	B29H50(111077009DUP)	111077009	Gross Alpha/Gross Beta
174189	174930	14	SAMPLE	111081007	B29H58		Gross Alpha/Gross Beta
174189	174930	15	SAMPLE	111081007	B29H58		Gross Alpha/Gross Beta
174189	174930	16	SAMPLE	111081008	B29HC2		Gross Alpha/Gross Beta
174189	174930	17	SAMPLE	111081008	B29HC2		Gross Alpha/Gross Beta
174190	174929	1	BLANK	46389	BLANK		Gross Alpha/Gross Beta
174190	174929	2	LCS	46390	LCS		Gross Alpha/Gross Beta
174190	174929	3	SAMPLE	111081009	B29H82		Gross Alpha/Gross Beta
174190	174929	4	SAMPLE	111081009	B29H82		Gross Alpha/Gross Beta
174190	174929	5	DUP	46391	B29H82(111081009DUP)	111081009	Gross Alpha/Gross Beta

Batch QC List

Attention Michael Neely
Department Wet Chemistry

Group # WSCF111081

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
174199	174199	1	LCS	46434	LCS		Total Alkalinity as mg/L CaCO3 (Water)
174199	174199	2	DUP	46435	B29H44(111077008DUP)	111077008	Total Alkalinity as mg/L CaCO3 (Water)
174199	174199	9	SAMPLE	111081007	B29H58		Total Alkalinity as mg/L CaCO3 (Water)
174199	174199	10	SAMPLE	111081008	B29HC2		Total Alkalinity as mg/L CaCO3 (Water)
174199	174199	11	SAMPLE	111081009	B29H82		Total Alkalinity as mg/L CaCO3 (Water)
174211	174216	1	BLANK	46460	BLANK		Cyanide by Midi/Spectrophotometer
174211	174216	4	LCS	46462	LCS		Cyanide by Midi/Spectrophotometer
174211	174216	8	MS	46463	B29HH7(111063008MS)	111063008	Cyanide by Midi/Spectrophotometer
174211	174216	9	MSD	46464	B29HH7(111063008MSD)	111063008	Cyanide by Midi/Spectrophotometer
174211	174216	25	SAMPLE	111081007	B29H58		Cyanide by Midi/Spectrophotometer
174211	174216	26	SAMPLE	111081008	B29HC2		Cyanide by Midi/Spectrophotometer
174211	174216	27	SAMPLE	111081009	B29H82		Cyanide by Midi/Spectrophotometer

Method Reference

Attention Michael Neely
Department Inorganic

Group # WSCF111081

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
Department Organic, Semivolatiles

Group # WSCF111081

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-523-427	Polychlorinated Biphenyls (PCB'S) by Gas Chromatography		
	EPA SW-846	3510C	Separatory Funnel Liquid-Liquid Extraction
	EPA SW-846	3545	Pressurized Fluid Extraction (PFE)
	EPA SW-846	3665A	Sulfuric Acid/Permanganate Cleanup
	EPA SW-846	8000B	Determinative Chromatographic Separations
	EPA SW-846	8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography
	HEIS	8082_PCB_GC	Polychlorinated Biphenyls (PCBs) by Gas Chromatography
LA-523-493	NWTPH-Dx, Extractible Diesel and Petroleum Productions Analysis in Soil and Water		
	WDOE	WDOE	Total Petroleum Hydrocarbons in Diesel
	HEIS	WTPH_DIESEL	TPH Diesel

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

Method Reference

Attention Michael Neely
Department Organic, Volatiles

Group # WSCF111081

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-523-443	Gas Chromatography Analysis of Gasoline Range Total Petroleum Hydrocarbons in Water		
	EPA	NWTPH-G	"Analytical Methods for Petroleum Hydrocarbons, June 1997, NWTPH-G, Volatile Petroleum Products Method for Soil and Water
	HEIS	WTPH_GASOLINE	Total Petroleum Hydrocarbons, Gasoline
LA-523-494	Nonhalogenated Organics Using Gas Chromatography/Flame Ionization Detector		
	HEIS	8015_VOA_GC	Volatile Organic Analysis

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

Method Reference

Attention Michael Neely
Department Radiochemistry

Group # WSCF111081

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-508-471	Thorium, Neptunium, Plutonium, Americium, and Uranium In Soil and Water Using Eichrom Column Separation (Prep)		
	HEIS	PUISO_IE_PRECIP_AEA	Isotopic Plutonium, Alpha Spec
LA-508-471	Determination Of Uranium, Plutonium, And Americium		
	HEIS	UISO_IE_PRECIP_AEA	Uranium Iso, Alpha Spec
LA-508-421	Operation of the Tri-Carb Model 2500TR Liquid Scintillation Analyzer		
	HEIS	ALPHA_LSC	A/B Liquid Scintillation
	HEIS	BETA_LSC	A/B Liquid Scintillation
	HEIS	TC99_3MDSK_LSC	TC99 by Liquid Scintillation
	HEIS	TRITIUM_EIE_LSC	Tritium, by Eichrome ion exchange, LSC
LA-508-415	Operation Of The Protean 2-Inch Alpha/Beta Counting System For Gross Alpha/ Beta Samples		
	HEIS	ALPHA_GPC	Gross Alpha by GPC
	HEIS	BETA_GPC	Gross Beta by GPC
	HEIS	SRTOT_SEP_PRECIP_GPC	Strontium beta isotopic, GPC

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

Method Reference

Attention Michael Neely
Department Wet Chemistry

Group # WSCF111081

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
LA-695-402	Determination of Cyanide by Mididistillation and		
	EPA	SW-846 Method 9014/9010	Determination of Cyanide by Midi-Distillation and Spectrophotometric Analysis
	SM	4500 CNE	Cyanide, Total
	HEIS	335.2_CYANIDE	Cyanide, Total

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 # WSCF111081

Sample # 111081001
SAF# X11-016
Sample ID B29N09

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**01/10/11**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<0.088		ug/mL	2	0.088	0.40	01/10/11
Chloride	16887-00-6	LA-533-410	D	1.38		ug/mL	2	0.084	0.80	01/10/11
Nitrite-N	NO2-N	LA-533-410	UD	<0.036		ug/mL	2	0.036	0.20	01/10/11
Bromide	24959-67-9	LA-533-410	BD	0.582		ug/mL	2	0.11	1.0	01/10/11
Nitrate-N	NO3-N	LA-533-410	D	1.35		ug/mL	2	0.019	0.20	01/10/11
Phosphate-P	PO4-P	LA-533-410	D	20.5		ug/mL	2	0.14	0.80	01/10/11
Sulfate	14808-79-8	LA-533-410	D	11.2		ug/mL	2	0.17	2.0	01/10/11

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

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

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Sample # 111081002
SAF# X11-016
Sample ID B29N14

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**01/10/11**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	BD	0.0899		ug/mL	2	0.088	0.40	01/10/11
Chloride	16887-00-6	LA-533-410	D	75.8		ug/mL	5	0.21	2.0	01/10/11
Nitrite-N	NO2-N	LA-533-410	UD	<0.036		ug/mL	2	0.036	0.20	01/10/11
Bromide	24959-67-9	LA-533-410	BD	0.370		ug/mL	2	0.11	1.0	01/10/11
Nitrate-N	NO3-N	LA-533-410	D	18.0		ug/mL	5	0.048	0.50	01/10/11
Phosphate-P	PO4-P	LA-533-410	UD	<0.14		ug/mL	2	0.14	0.80	01/10/11
Sulfate	14808-79-8	LA-533-410	D	123		ug/mL	2	0.17	2.0	01/10/11

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

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

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Sample # 111081003
SAF# X11-016
Sample ID B29N21

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Anions by IC										**01/10/11**
Anions by IC										
Fluoride	16984-48-8	LA-533-410	UD	<0.088		ug/mL	2	0.088	0.40	01/10/11
Chloride	16887-00-6	LA-533-410	D	11.5		ug/mL	2	0.084	0.80	01/10/11
Nitrite-N	NO2-N	LA-533-410	UD	<0.036		ug/mL	2	0.036	0.20	01/10/11
Bromide	24959-67-9	LA-533-410	UD	<0.11		ug/mL	2	0.11	1.0	01/10/11
Nitrate-N	NO3-N	LA-533-410	D	13.4		ug/mL	10	0.097	1.0	01/10/11
Phosphate-P	PO4-P	LA-533-410	UD	<0.14		ug/mL	2	0.14	0.80	01/10/11
Sulfate	14808-79-8	LA-533-410	D	67.3		ug/mL	2	0.17	2.0	01/10/11

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

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

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Sample # 111081004
SAF# X11-016
Sample ID B29H57

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICP Prep										**01/31/11**
ICP-AES										
Aluminum	7429-90-5	LA-505-411		220		ug/L	1	19	95	02/08/11
Iron	7439-89-6	LA-505-411	B	113		ug/L	1	38	190	02/08/11
Magnesium	7439-95-4	LA-505-411		1670		ug/L	1	14	70	02/08/11
Manganese	7439-96-5	LA-505-411	U	<6.0		ug/L	1	6.0	30	02/08/11
Nickel	7440-02-0	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Potassium	7440-09-7	LA-505-411		1080		ug/L	1	73	360	02/08/11
Silver	7440-22-4	LA-505-411	U	<7.0		ug/L	1	7.0	35	02/08/11
Sodium	7440-23-5	LA-505-411		50700		ug/L	1	11	55	02/08/11
Antimony	7440-36-0	LA-505-411	U	<47		ug/L	1	47	240	02/08/11
Barium	7440-39-3	LA-505-411	B	8.00		ug/L	1	4.0	20	02/08/11
Cadmium	7440-43-9	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Chromium	7440-47-3	LA-505-411	U	<14		ug/L	1	14	70	02/08/11
Cobalt	7440-48-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Copper	7440-50-8	LA-505-411	B	5.00		ug/L	1	5.0	25	02/08/11
Vanadium	7440-62-2	LA-505-411	U	<17		ug/L	1	17	85	02/08/11
Zinc	7440-66-6	LA-505-411	B	7.00		ug/L	1	4.0	20	02/08/11
Calcium	7440-70-2	LA-505-411		7380		ug/L	1	28	140	02/08/11

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

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

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Sample # 111081004
SAF# X11-016
Sample ID B29H57

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Lead	7439-92-1	LA-505-411	U	<42		ug/L	1	42	210	02/08/11
Lithium	7439-93-2	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Molybdenum	7439-98-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Strontium	7440-24-6	LA-505-411		30.0		ug/L	1	4.0	20	02/08/11
Thallium	7440-28-0	LA-505-411	U	<49		ug/L	1	49	240	02/08/11
Tin	7440-31-5	LA-505-411	U	<49		ug/L	1	49	240	02/08/11
Arsenic	7440-38-2	LA-505-411	U	<50		ug/L	1	50	250	02/08/11
Beryllium	7440-41-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Boron	7440-42-8	LA-505-411	U	<41		ug/L	1	41	200	02/08/11
Bismuth	7440-69-9	LA-505-411	U	<37		ug/L	1	37	180	02/08/11
Silicon	7440-21-3	LA-505-411	X	7680		ug/L	1	25	120	02/08/11
Phosphorus	7723-14-0	LA-505-411	X	21600		ug/L	1	72	360	02/08/11
Selenium	7782-49-2	LA-505-411	U	<47		ug/L	1	47	240	02/08/11
ICPMS Prep										**01/18/11**
ICP-MS										
Aluminum	7429-90-5	LA-505-412	BD	16.1		ug/L	2	10	200	01/21/11
Silver	7440-22-4	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	01/21/11
Antimony	7440-36-0	LA-505-412	BD	1.63		ug/L	2	0.60	6.0	01/21/11
Barium	7440-39-3	LA-505-412	BD	3.11		ug/L	2	0.40	4.0	01/21/11

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

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C - Analyte was found in the Associated Blank. (Inorganic)
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E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Sample # 111081004
SAF# X11-016
Sample ID B29H57

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Beryllium	7440-41-7	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	01/21/11
Cadmium	7440-43-9	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	01/21/11
Chromium	7440-47-3	LA-505-412	BD	1.30		ug/L	2	1.0	10	01/21/11
Cobalt	7440-48-4	LA-505-412	UD	<0.10		ug/L	2	0.10	0.50	01/21/11
Copper	7440-50-8	LA-505-412	BD	0.821		ug/L	2	0.20	2.0	01/21/11
Lead	7439-92-1	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	01/21/11
Mercury	7439-97-6	LA-505-412	UD	<0.10		ug/L	2	0.10	0.40	01/21/11
Molybdenum	7439-98-7	LA-505-412	D	1.26		ug/L	2	0.10	1.0	01/21/11
Thallium	7440-28-0	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	01/21/11
Tin	7440-31-5	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	01/21/11
Arsenic	7440-38-2	LA-505-412	D	16.5		ug/L	2	0.80	8.0	01/21/11
Selenium	7782-49-2	LA-505-412	UD	<0.60		ug/L	2	0.60	6.0	01/21/11

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

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

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Sample # 111081005
SAF# X11-016
Sample ID B29HC1

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICP Prep										**01/31/11**
ICP-AES										
Aluminum	7429-90-5	LA-505-411	U	<19		ug/L	1	19	95	02/08/11
Iron	7439-89-6	LA-505-411	U	<38		ug/L	1	38	190	02/08/11
Magnesium	7439-95-4	LA-505-411		10200		ug/L	1	14	70	02/08/11
Manganese	7439-96-5	LA-505-411	U	<6.0		ug/L	1	6.0	30	02/08/11
Nickel	7440-02-0	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Potassium	7440-09-7	LA-505-411		2530		ug/L	1	73	360	02/08/11
Silver	7440-22-4	LA-505-411	U	<7.0		ug/L	1	7.0	35	02/08/11
Sodium	7440-23-5	LA-505-411		4750		ug/L	1	11	55	02/08/11
Antimony	7440-36-0	LA-505-411	U	<47		ug/L	1	47	240	02/08/11
Barium	7440-39-3	LA-505-411		34.0		ug/L	1	4.0	20	02/08/11
Cadmium	7440-43-9	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Chromium	7440-47-3	LA-505-411	U	<14		ug/L	1	14	70	02/08/11
Cobalt	7440-48-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Copper	7440-50-8	LA-505-411	U	<5.0		ug/L	1	5.0	25	02/08/11
Vanadium	7440-62-2	LA-505-411	U	<17		ug/L	1	17	85	02/08/11
Zinc	7440-66-6	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Calcium	7440-70-2	LA-505-411		58300		ug/L	1	28	140	02/08/11

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

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

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Sample # 111081005
SAF# X11-016
Sample ID B29HC1

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Lead	7439-92-1	LA-505-411	U	<42		ug/L	1	42	210	02/08/11
Lithium	7439-93-2	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Molybdenum	7439-98-7	LA-505-411	B	6.00		ug/L	1	4.0	20	02/08/11
Strontium	7440-24-6	LA-505-411		307		ug/L	1	4.0	20	02/08/11
Thallium	7440-28-0	LA-505-411	U	<49		ug/L	1	49	240	02/08/11
Tin	7440-31-5	LA-505-411	U	<49		ug/L	1	49	240	02/08/11
Arsenic	7440-38-2	LA-505-411	U	<50		ug/L	1	50	250	02/08/11
Beryllium	7440-41-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Boron	7440-42-8	LA-505-411	U	<41		ug/L	1	41	200	02/08/11
Bismuth	7440-69-9	LA-505-411	U	<37		ug/L	1	37	180	02/08/11
Silicon	7440-21-3	LA-505-411	X	8160		ug/L	1	25	120	02/08/11
Phosphorus	7723-14-0	LA-505-411	UX	<72		ug/L	1	72	360	02/08/11
Selenium	7782-49-2	LA-505-411	U	<47		ug/L	1	47	240	02/08/11
ICPMS Prep										**01/18/11**
ICP-MS										
Aluminum	7429-90-5	LA-505-412	UD	<10		ug/L	2	10	200	01/21/11
Silver	7440-22-4	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	01/21/11
Antimony	7440-36-0	LA-505-412	UD	<0.60		ug/L	2	0.60	6.0	01/21/11
Barium	7440-39-3	LA-505-412	D	30.5		ug/L	2	0.40	4.0	01/21/11

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

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

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Sample # 111081005
SAF# X11-016
Sample ID B29HC1

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Beryllium	7440-41-7	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	01/21/11
Cadmium	7440-43-9	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	01/21/11
Chromium	7440-47-3	LA-505-412	BD	3.41		ug/L	2	1.0	10	01/21/11
Cobalt	7440-48-4	LA-505-412	BD	0.121		ug/L	2	0.10	0.50	01/21/11
Copper	7440-50-8	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	01/21/11
Lead	7439-92-1	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	01/21/11
Mercury	7439-97-6	LA-505-412	UD	<0.10		ug/L	2	0.10	0.40	01/21/11
Molybdenum	7439-98-7	LA-505-412	BD	0.813		ug/L	2	0.10	1.0	01/21/11
Thallium	7440-28-0	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	01/21/11
Tin	7440-31-5	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	01/21/11
Arsenic	7440-38-2	LA-505-412	BD	0.888		ug/L	2	0.80	8.0	01/21/11
Selenium	7782-49-2	LA-505-412	UD	<0.60		ug/L	2	0.60	6.0	01/21/11

MDL = Minimum Detection
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DF = Dilution Factor
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E - Analyte is an estimate, see comment section.
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U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Sample # 111081006
SAF# X11-016
Sample ID B29H81

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICP Prep										**01/31/11**
ICP-AES										
Aluminum	7429-90-5	LA-505-411	U	<19		ug/L	1	19	95	02/08/11
Iron	7439-89-6	LA-505-411	U	<38		ug/L	1	38	190	02/08/11
Magnesium	7439-95-4	LA-505-411		20400		ug/L	1	14	70	02/08/11
Manganese	7439-96-5	LA-505-411	U	<6.0		ug/L	1	6.0	30	02/08/11
Nickel	7440-02-0	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Potassium	7440-09-7	LA-505-411		6170		ug/L	1	73	360	02/08/11
Silver	7440-22-4	LA-505-411	U	<7.0		ug/L	1	7.0	35	02/08/11
Sodium	7440-23-5	LA-505-411		67500		ug/L	1	11	55	02/08/11
Antimony	7440-36-0	LA-505-411	U	<47		ug/L	1	47	240	02/08/11
Barium	7440-39-3	LA-505-411		69.0		ug/L	1	4.0	20	02/08/11
Cadmium	7440-43-9	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Chromium	7440-47-3	LA-505-411	U	<14		ug/L	1	14	70	02/08/11
Cobalt	7440-48-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Copper	7440-50-8	LA-505-411	U	<5.0		ug/L	1	5.0	25	02/08/11
Vanadium	7440-62-2	LA-505-411	U	<17		ug/L	1	17	85	02/08/11
Zinc	7440-66-6	LA-505-411	B	8.00		ug/L	1	4.0	20	02/08/11
Calcium	7440-70-2	LA-505-411		1.05E5		ug/L	1	28	140	02/08/11

MDL = Minimum Detection
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DF = Dilution Factor
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N - MS and/or MSD recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Sample # 111081006
SAF# X11-016
Sample ID B29H81

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Lead	7439-92-1	LA-505-411	U	<42		ug/L	1	42	210	02/08/11
Lithium	7439-93-2	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Molybdenum	7439-98-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Strontium	7440-24-6	LA-505-411		458		ug/L	1	4.0	20	02/08/11
Thallium	7440-28-0	LA-505-411	U	<49		ug/L	1	49	240	02/08/11
Tin	7440-31-5	LA-505-411	U	<49		ug/L	1	49	240	02/08/11
Arsenic	7440-38-2	LA-505-411	U	<50		ug/L	1	50	250	02/08/11
Beryllium	7440-41-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Boron	7440-42-8	LA-505-411	B	45.0		ug/L	1	41	200	02/08/11
Bismuth	7440-69-9	LA-505-411	U	<37		ug/L	1	37	180	02/08/11
Silicon	7440-21-3	LA-505-411	X	13100		ug/L	1	25	120	02/08/11
Phosphorus	7723-14-0	LA-505-411	UX	<72		ug/L	1	72	360	02/08/11
Selenium	7782-49-2	LA-505-411	U	<47		ug/L	1	47	240	02/08/11
ICPMS Prep										**01/18/11**
ICP-MS										
Aluminum	7429-90-5	LA-505-412	UD	<10		ug/L	2	10	200	01/21/11
Silver	7440-22-4	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	01/21/11
Antimony	7440-36-0	LA-505-412	UD	<0.60		ug/L	2	0.60	6.0	01/21/11
Barium	7440-39-3	LA-505-412	D	68.5		ug/L	2	0.40	4.0	01/21/11

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

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C - Analyte was found in the Associated Blank. (Inorganic)
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X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Sample # 111081006
SAF# X11-016
Sample ID B29H81

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Beryllium	7440-41-7	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	01/21/11
Cadmium	7440-43-9	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	01/21/11
Chromium	7440-47-3	LA-505-412	BD	3.83		ug/L	2	1.0	10	01/21/11
Cobalt	7440-48-4	LA-505-412	UD	<0.10		ug/L	2	0.10	0.50	01/21/11
Copper	7440-50-8	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	01/21/11
Lead	7439-92-1	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	01/21/11
Mercury	7439-97-6	LA-505-412	UD	<0.10		ug/L	2	0.10	0.40	01/21/11
Molybdenum	7439-98-7	LA-505-412	D	1.04		ug/L	2	0.10	1.0	01/21/11
Thallium	7440-28-0	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	01/21/11
Tin	7440-31-5	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	01/21/11
Arsenic	7440-38-2	LA-505-412	BD	1.10		ug/L	2	0.80	8.0	01/21/11
Selenium	7782-49-2	LA-505-412	BD	1.23		ug/L	2	0.60	6.0	01/21/11

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

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C - Analyte was found in the Associated Blank. (Inorganic)
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E - Analyte is an estimate, see comment section.
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U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Sample # 111081007
SAF# X11-016
Sample ID B29H58

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICP Prep										**01/31/11**
ICP-AES										
Aluminum	7429-90-5	LA-505-411		669		ug/L	1	19	95	02/08/11
Iron	7439-89-6	LA-505-411		466		ug/L	1	38	190	02/08/11
Magnesium	7439-95-4	LA-505-411		1760		ug/L	1	14	70	02/08/11
Manganese	7439-96-5	LA-505-411		35.0		ug/L	1	6.0	30	02/08/11
Nickel	7440-02-0	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Potassium	7440-09-7	LA-505-411	C	1070		ug/L	1	73	360	02/08/11
Silver	7440-22-4	LA-505-411	U	<7.0		ug/L	1	7.0	35	02/08/11
Sodium	7440-23-5	LA-505-411		47100		ug/L	1	11	55	02/08/11
Antimony	7440-36-0	LA-505-411	U	<47		ug/L	1	47	240	02/08/11
Barium	7440-39-3	LA-505-411		26.0		ug/L	1	4.0	20	02/08/11
Cadmium	7440-43-9	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Chromium	7440-47-3	LA-505-411	U	<14		ug/L	1	14	70	02/08/11
Cobalt	7440-48-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Copper	7440-50-8	LA-505-411	U	<5.0		ug/L	1	5.0	25	02/08/11
Vanadium	7440-62-2	LA-505-411	B	22.0		ug/L	1	17	85	02/08/11
Zinc	7440-66-6	LA-505-411	B	16.0		ug/L	1	4.0	20	02/08/11
Calcium	7440-70-2	LA-505-411		7860		ug/L	1	28	140	02/08/11

MDL = Minimum Detection
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TP Err = Total Propagated
DF = Dilution Factor
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C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
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U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Sample # 111081007
SAF# X11-016
Sample ID B29H58

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Lead	7439-92-1	LA-505-411	U	<42		ug/L	1	42	210	02/08/11
Lithium	7439-93-2	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Molybdenum	7439-98-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Strontium	7440-24-6	LA-505-411		32.0		ug/L	1	4.0	20	02/08/11
Thallium	7440-28-0	LA-505-411	U	<49		ug/L	1	49	240	02/08/11
Tin	7440-31-5	LA-505-411	U	<49		ug/L	1	49	240	02/08/11
Arsenic	7440-38-2	LA-505-411	U	<50		ug/L	1	50	250	02/08/11
Beryllium	7440-41-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Boron	7440-42-8	LA-505-411	U	<41		ug/L	1	41	200	02/08/11
Bismuth	7440-69-9	LA-505-411	U	<37		ug/L	1	37	180	02/08/11
Silicon	7440-21-3	LA-505-411	X	7870		ug/L	1	25	120	02/08/11
Phosphorus	7723-14-0	LA-505-411	X	19900		ug/L	1	72	360	02/08/11
Selenium	7782-49-2	LA-505-411	U	<47		ug/L	1	47	240	02/08/11
ICPMS Prep										**01/18/11**
ICP-MS										
Aluminum	7429-90-5	LA-505-412	D	541		ug/L	2	10	200	01/21/11
Silver	7440-22-4	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	01/21/11
Antimony	7440-36-0	LA-505-412	BD	1.49		ug/L	2	0.60	6.0	01/21/11
Barium	7440-39-3	LA-505-412	D	28.6		ug/L	2	0.40	4.0	01/21/11

MDL = Minimum Detection
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DF = Dilution Factor
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X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Sample # 111081007
SAF# X11-016
Sample ID B29H58

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Beryllium	7440-41-7	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	01/21/11
Cadmium	7440-43-9	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	01/21/11
Chromium	7440-47-3	LA-505-412	BD	3.61		ug/L	2	1.0	10	01/21/11
Cobalt	7440-48-4	LA-505-412	D	0.693		ug/L	2	0.10	0.50	01/21/11
Copper	7440-50-8	LA-505-412	D	3.73		ug/L	2	0.20	2.0	01/21/11
Lead	7439-92-1	LA-505-412	BD	0.991		ug/L	2	0.20	2.0	01/21/11
Mercury	7439-97-6	LA-505-412	UD	<0.10		ug/L	2	0.10	0.40	01/21/11
Molybdenum	7439-98-7	LA-505-412	D	1.08		ug/L	2	0.10	1.0	01/21/11
Thallium	7440-28-0	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	01/21/11
Tin	7440-31-5	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	01/21/11
Uranium	7440-61-1	LA-505-412	UD	<0.10		ug/L	2	0.10	0.40	01/21/11
Arsenic	7440-38-2	LA-505-412	D	16.8		ug/L	2	0.80	8.0	01/21/11
Selenium	7782-49-2	LA-505-412	BD	0.927		ug/L	2	0.60	6.0	01/21/11

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TP Err = Total Propagated
DF = Dilution Factor
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X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Sample # 111081008
SAF# X11-016
Sample ID B29HC2

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICP Prep										**01/31/11**
ICP-AES										
Aluminum	7429-90-5	LA-505-411	B	24.0		ug/L	1	19	95	02/08/11
Iron	7439-89-6	LA-505-411	B	45.0		ug/L	1	38	190	02/08/11
Magnesium	7439-95-4	LA-505-411		10800		ug/L	1	14	70	02/08/11
Manganese	7439-96-5	LA-505-411	U	<6.0		ug/L	1	6.0	30	02/08/11
Nickel	7440-02-0	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Potassium	7440-09-7	LA-505-411		2700		ug/L	1	73	360	02/08/11
Silver	7440-22-4	LA-505-411	U	<7.0		ug/L	1	7.0	35	02/08/11
Sodium	7440-23-5	LA-505-411		5100		ug/L	1	11	55	02/08/11
Antimony	7440-36-0	LA-505-411	U	<47		ug/L	1	47	240	02/08/11
Barium	7440-39-3	LA-505-411		36.0		ug/L	1	4.0	20	02/08/11
Cadmium	7440-43-9	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Chromium	7440-47-3	LA-505-411	U	<14		ug/L	1	14	70	02/08/11
Cobalt	7440-48-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Copper	7440-50-8	LA-505-411	U	<5.0		ug/L	1	5.0	25	02/08/11
Vanadium	7440-62-2	LA-505-411	U	<17		ug/L	1	17	85	02/08/11
Zinc	7440-66-6	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Calcium	7440-70-2	LA-505-411		59800		ug/L	1	28	140	02/08/11

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
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U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Sample # 111081008
SAF# X11-016
Sample ID B29HC2

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Lead	7439-92-1	LA-505-411	U	<42		ug/L	1	42	210	02/08/11
Lithium	7439-93-2	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Molybdenum	7439-98-7	LA-505-411	B	10.0		ug/L	1	4.0	20	02/08/11
Strontium	7440-24-6	LA-505-411		326		ug/L	1	4.0	20	02/08/11
Thallium	7440-28-0	LA-505-411	U	<49		ug/L	1	49	240	02/08/11
Tin	7440-31-5	LA-505-411	U	<49		ug/L	1	49	240	02/08/11
Arsenic	7440-38-2	LA-505-411	U	<50		ug/L	1	50	250	02/08/11
Beryllium	7440-41-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Boron	7440-42-8	LA-505-411	U	<41		ug/L	1	41	200	02/08/11
Bismuth	7440-69-9	LA-505-411	U	<37		ug/L	1	37	180	02/08/11
Silicon	7440-21-3	LA-505-411	X	8660		ug/L	1	25	120	02/08/11
Phosphorus	7723-14-0	LA-505-411	UX	<72		ug/L	1	72	360	02/08/11
Selenium	7782-49-2	LA-505-411	U	<47		ug/L	1	47	240	02/08/11
ICPMS Prep										**01/18/11**
ICP-MS										
Aluminum	7429-90-5	LA-505-412	BD	12.7		ug/L	2	10	200	01/21/11
Silver	7440-22-4	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	01/21/11
Antimony	7440-36-0	LA-505-412	UD	<0.60		ug/L	2	0.60	6.0	01/21/11
Barium	7440-39-3	LA-505-412	D	33.3		ug/L	2	0.40	4.0	01/21/11

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

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

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Sample # 111081008
SAF# X11-016
Sample ID B29HC2

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Beryllium	7440-41-7	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	01/21/11
Cadmium	7440-43-9	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	01/21/11
Chromium	7440-47-3	LA-505-412	BD	6.57		ug/L	2	1.0	10	01/21/11
Cobalt	7440-48-4	LA-505-412	UD	<0.10		ug/L	2	0.10	0.50	01/21/11
Copper	7440-50-8	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	01/21/11
Lead	7439-92-1	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	01/21/11
Mercury	7439-97-6	LA-505-412	UD	<0.10		ug/L	2	0.10	0.40	01/21/11
Molybdenum	7439-98-7	LA-505-412	BD	0.939		ug/L	2	0.10	1.0	01/21/11
Thallium	7440-28-0	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	01/21/11
Tin	7440-31-5	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	01/21/11
Uranium	7440-61-1	LA-505-412	D	0.502		ug/L	2	0.10	0.40	01/21/11
Arsenic	7440-38-2	LA-505-412	BD	0.878		ug/L	2	0.80	8.0	01/21/11
Selenium	7782-49-2	LA-505-412	UD	<0.60		ug/L	2	0.60	6.0	01/21/11

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

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

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Sample # 111081009
SAF# X11-016
Sample ID B29H82

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICP Prep										**01/31/11**
ICP-AES										
Aluminum	7429-90-5	LA-505-411	B	60.0		ug/L	1	19	95	02/08/11
Iron	7439-89-6	LA-505-411		257		ug/L	1	38	190	02/08/11
Magnesium	7439-95-4	LA-505-411		21800		ug/L	1	14	70	02/08/11
Manganese	7439-96-5	LA-505-411	B	25.0		ug/L	1	6.0	30	02/08/11
Nickel	7440-02-0	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Potassium	7440-09-7	LA-505-411		6670		ug/L	1	73	360	02/08/11
Silver	7440-22-4	LA-505-411	U	<7.0		ug/L	1	7.0	35	02/08/11
Sodium	7440-23-5	LA-505-411		72700		ug/L	1	11	55	02/08/11
Antimony	7440-36-0	LA-505-411	U	<47		ug/L	1	47	240	02/08/11
Barium	7440-39-3	LA-505-411		78.0		ug/L	1	4.0	20	02/08/11
Cadmium	7440-43-9	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Chromium	7440-47-3	LA-505-411	U	<14		ug/L	1	14	70	02/08/11
Cobalt	7440-48-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Copper	7440-50-8	LA-505-411	U	<5.0		ug/L	1	5.0	25	02/08/11
Vanadium	7440-62-2	LA-505-411	U	<17		ug/L	1	17	85	02/08/11
Zinc	7440-66-6	LA-505-411	B	9.00		ug/L	1	4.0	20	02/08/11
Calcium	7440-70-2	LA-505-411		1.08E5		ug/L	1	28	140	02/08/11

MDL = Minimum Detection
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TP Err = Total Propagated
DF = Dilution Factor
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C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Sample # 111081009
SAF# X11-016
Sample ID B29H82

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Lead	7439-92-1	LA-505-411	U	<42		ug/L	1	42	210	02/08/11
Lithium	7439-93-2	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Molybdenum	7439-98-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Strontium	7440-24-6	LA-505-411		494		ug/L	1	4.0	20	02/08/11
Thallium	7440-28-0	LA-505-411	U	<49		ug/L	1	49	240	02/08/11
Tin	7440-31-5	LA-505-411	U	<49		ug/L	1	49	240	02/08/11
Arsenic	7440-38-2	LA-505-411	U	<50		ug/L	1	50	250	02/08/11
Beryllium	7440-41-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	02/08/11
Boron	7440-42-8	LA-505-411	B	49.0		ug/L	1	41	200	02/08/11
Bismuth	7440-69-9	LA-505-411	U	<37		ug/L	1	37	180	02/08/11
Silicon	7440-21-3	LA-505-411	X	14000		ug/L	1	25	120	02/08/11
Phosphorus	7723-14-0	LA-505-411	BX	86.0		ug/L	1	72	360	02/08/11
Selenium	7782-49-2	LA-505-411	U	<47		ug/L	1	47	240	02/08/11
ICPMS Prep										**01/18/11**
ICP-MS										
Aluminum	7429-90-5	LA-505-412	BD	39.5		ug/L	2	10	200	01/21/11
Silver	7440-22-4	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	01/21/11
Antimony	7440-36-0	LA-505-412	UD	<0.60		ug/L	2	0.60	6.0	01/21/11
Barium	7440-39-3	LA-505-412	D	67.7		ug/L	2	0.40	4.0	01/21/11

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

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

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Sample # 111081009
SAF# X11-016
Sample ID B29H82

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Beryllium	7440-41-7	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	01/21/11
Cadmium	7440-43-9	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	01/21/11
Chromium	7440-47-3	LA-505-412	BD	4.52		ug/L	2	1.0	10	01/21/11
Cobalt	7440-48-4	LA-505-412	BD	0.109		ug/L	2	0.10	0.50	01/21/11
Copper	7440-50-8	LA-505-412	BD	0.413		ug/L	2	0.20	2.0	01/21/11
Lead	7439-92-1	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	01/21/11
Mercury	7439-97-6	LA-505-412	UD	<0.10		ug/L	2	0.10	0.40	01/21/11
Molybdenum	7439-98-7	LA-505-412	BD	0.946		ug/L	2	0.10	1.0	01/21/11
Thallium	7440-28-0	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	01/21/11
Tin	7440-31-5	LA-505-412	BD	0.156		ug/L	2	0.10	1.0	01/21/11
Uranium	7440-61-1	LA-505-412	D	7.14		ug/L	2	0.10	0.40	01/21/11
Arsenic	7440-38-2	LA-505-412	BD	1.10		ug/L	2	0.80	8.0	01/21/11
Selenium	7782-49-2	LA-505-412	BD	0.943		ug/L	2	0.60	6.0	01/21/11

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
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B - Analyte < the PQL(or EQL)but >= the IDL/MDL(Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)

WSCF Analytical Results Report

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF111081

Sample # 111081007
SAF# X11-016
Sample ID B29H58

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Prep for Water										**01/12/11**
TPHDWA										
Diesel	TPHDIESEL	LA-523-493	U	<80		ug/L	1	80	100	01/14/11

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

B - Analyte was detected in both the BLANK and SAMPLE
D - Analyte was reported at a secondary diltution factor.
E - The calibration exceeds the calibration range (GC/MS).
J - Analyte < lowest calibration but >= MDL.
N - Presumed evidence based on MS library search(GC/MS only)

T - MS/MSD recovery outside control limits(GC/MS only).
U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)

WSCF Analytical Results Report

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF111081

Sample # 111081008
SAF# X11-016
Sample ID B29HC2

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Prep for Water										**01/12/11**
TPHDWA										
Diesel	TPHDIESEL	LA-523-493	U	<80		ug/L	1	80	100	01/14/11

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

B - Analyte was detected in both the BLANK and SAMPLE
D - Analyte was reported at a secondary diltution factor.
E - The calibration exceeds the calibration range (GC/MS).
J - Analyte < lowest calibration but >= MDL.
N - Presumed evidence based on MS library search(GC/MS only)

T - MS/MSD recovery outside control limits(GC/MS only).
U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)

WSCF Analytical Results Report

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF111081

Sample # 111081009
SAF# X11-016
Sample ID B29H82

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Prep for Water										**01/11/11**
TPHDWA										
Diesel	TPHDIESEL	LA-523-493	U	<70		ug/L	1	70	100	01/14/11
SPE										**01/12/11**
PCBs										
Aroclor-1016	12674-11-2	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	01/17/11
Aroclor-1221	11104-28-2	LA-523-427	U	<0.2		ug/L	1	0.2	0.4	01/17/11
Aroclor-1232	11141-16-5	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	01/17/11
Aroclor-1242	53469-21-9	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	01/17/11
Aroclor-1248	12672-29-6	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	01/17/11
Aroclor-1254	11097-69-1	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	01/17/11
Aroclor-1260	11096-82-5	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	01/17/11
Aroclor-1262	37324-23-5	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	01/17/11
Aroclor-1268	11100-14-4	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	01/17/11

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TP Err = Total Propagated
DF = Dilution Factor
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B - Analyte was detected in both the BLANK and SAMPLE
D - Analyte was reported at a secondary diltution factor.
E - The calibration exceeds the calibration range (GC/MS).
J - Analyte < lowest calibration but >= MDL.
N - Presumed evidence based on MS library search(GC/MS only)

T - MS/MSD recovery outside control limits(GC/MS only).
U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)

WSCF Analytical Results Report

Attention Michael Neely
Department Organic, Volatiles

Group # WSCF111081

Sample # 111081007
SAF# X11-016
Sample ID B29H58

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
8015 Prep										**01/14/11**
SW-846 8015B										
Ethanol	64-17-5	LA-523-494	U	<2000		ug/L	1	2000	5000	01/19/11
1-Propanol	71-23-8	LA-523-494	U	<2000		ug/L	1	2000	5000	01/19/11
Ethylene glycol	107-21-1	LA-523-494	U	<2000		ug/L	1	2000	5000	01/19/11
TPHG Prep										**01/13/11**
TPHG										
Gasoline	TPHGASOLIN	LA-523-443	U	<50		ug/L	1	50	200	01/13/11

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

B - Analyte was detected in both the BLANK and SAMPLE
D - Analyte was reported at a secondary diltution factor.
E - The calibration exceeds the calibration range (GC/MS).
J - Analyte < PQL (or EQL) >= MDL.
N - Presumed evidence based on MS library search(GC/MS only)

T - MS/MSD recovery outside control limits(GC/MS only).
U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
N - MS and/or MSD recovery outside control limits.
PQL is equivalent to Estimated Quantitation Limit (EQL)

WSCF Analytical Results Report

Attention Michael Neely
Department Organic, Volatiles

Group # WSCF111081

Sample # 111081008
SAF# X11-016
Sample ID B29HC2

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
8015 Prep										**01/14/11**
SW-846 8015B										
Ethanol	64-17-5	LA-523-494	U	<2000		ug/L	1	2000	5000	01/20/11
1-Propanol	71-23-8	LA-523-494	U	<2000		ug/L	1	2000	5000	01/20/11
Ethylene glycol	107-21-1	LA-523-494	U	<2000		ug/L	1	2000	5000	01/20/11
TPHG Prep										**01/13/11**
TPHG										
Gasoline	TPHGASOLIN	LA-523-443	U	<50		ug/L	1	50	200	01/13/11

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
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B - Analyte was detected in both the BLANK and SAMPLE
D - Analyte was reported at a secondary diltution factor.
E - The calibration exceeds the calibration range (GC/MS).
J - Analyte < PQL (or EQL) >= MDL.
N - Presumed evidence based on MS library search(GC/MS only)

T - MS/MSD recovery outside control limits(GC/MS only).
U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
N - MS and/or MSD recovery outside control limits.
PQL is equivalent to Estimated Quantitation Limit (EQL)

WSCF Analytical Results Report

Attention Michael Neely
Department Organic, Volatiles

Group # WSCF111081

Sample # 111081009
SAF# X11-016
Sample ID B29H82

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
8015 Prep										**01/14/11**
SW-846 8015B										
Ethanol	64-17-5	LA-523-494	U	<2000		ug/L	1	2000	5000	01/20/11
1-Propanol	71-23-8	LA-523-494	U	<2000		ug/L	1	2000	5000	01/20/11
Ethylene glycol	107-21-1	LA-523-494	U	<2000		ug/L	1	2000	5000	01/20/11
TPHG Prep										**01/13/11**
TPHG										
Gasoline	TPHGASOLIN	LA-523-443	U	<50		ug/L	1	50	200	01/13/11

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
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B - Analyte was detected in both the BLANK and SAMPLE
D - Analyte was reported at a secondary diltution factor.
E - The calibration exceeds the calibration range (GC/MS).
J - Analyte < PQL (or EQL) >= MDL.
N - Presumed evidence based on MS library search(GC/MS only)

T - MS/MSD recovery outside control limits(GC/MS only).
U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
N - MS and/or MSD recovery outside control limits.
PQL is equivalent to Estimated Quantitation Limit (EQL)

WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF111081

Sample # 111081007
SAF# X11-016
Sample ID B29H58

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alpha/Beta Prep										**01/20/11**
Gross Alpha/Beta										
Gross Alpha	12587-46-1	LA-508-415	U	-2.0	1.4	pCi/L	1	3.1		02/01/11
Gross Beta	12587-47-2	LA-508-415		400	41	pCi/L	1	1.9		02/01/11
H3 EICHROM										**01/10/11**
TRI-CARB LSC										
Tritium	10028-17-8	LA-508-421	U	98	110	pCi/L	1	210		01/29/11
SR-89/90										**01/12/11**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406		190	25	pCi/L	1	2.2		01/24/11
Tc-99										**01/11/11**
TRI-CARB LSC										
Technetium-99	14133-76-7	LA-508-421	U	-3.1	3.7	pCi/L	1	6.3		01/14/11
Th/Pu/Am/U Teva										**02/01/11**
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	0.053	.18	pCi/L	1	0.31		02/01/11
Plutonium-239/240	PU-239/240	LA-508-471	U	0.018	.044	pCi/L	1	0.082		02/01/11
Uranium Iso										
Uranium-234	U-233/234	LA-508-471		0.12	.085	pCi/L	1	0.088		02/01/11

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF111081

Sample # 111081007
SAF# X11-016
Sample ID B29H58

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-235	15117-96-1	LA-508-471		0.062	.053	pCi/L	1	0.028		02/01/11
Uranium-238	U-238	LA-508-471		0.11	.072	pCi/L	1	0.026		02/01/11

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF111081

Sample # 111081008
SAF# X11-016
Sample ID B29HC2

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alpha/Beta Prep										**01/20/11**
Gross Alpha/Beta										
Gross Alpha	12587-46-1	LA-508-415	U	-2.4	1.5	pCi/L	1	3.4		02/01/11
Gross Beta	12587-47-2	LA-508-415		2.3	1.4	pCi/L	1	2.0		02/01/11
H3 EICHROM										**01/10/11**
TRI-CARB LSC										
Tritium	10028-17-8	LA-508-421		1.2E4	2400	pCi/L	1	210		01/29/11
SR-89/90										**01/12/11**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406	U	-0.72	3.4	pCi/L	1	1.8		01/24/11
Tc-99										**01/11/11**
TRI-CARB LSC										
Technetium-99	14133-76-7	LA-508-421	U	3.8	3.9	pCi/L	1	6.3		01/14/11
Th/Pu/Am/U Teva										**02/01/11**
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	0.10	.2	pCi/L	1	0.33		02/01/11
Plutonium-239/240	PU-239/240	LA-508-471	U	-0.019	.027	pCi/L	1	0.087		02/01/11
Uranium Iso										
Uranium-234	U-233/234	LA-508-471		0.24	.11	pCi/L	1	0.025		02/01/11

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF111081

Sample # 111081008
SAF# X11-016
Sample ID B29HC2

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-235	15117-96-1	LA-508-471		0.030	.036	pCi/L	1	0.027		02/01/11
Uranium-238	U-238	LA-508-471		0.19	.099	pCi/L	1	0.068		02/01/11

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF111081

Sample # 111081009
SAF# X11-016
Sample ID B29H82

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alpha/Beta Prep										**01/20/11**
Gross Alpha/Beta										
Gross Alpha	12587-46-1	LA-508-415	U	3.8	3.3	pCi/L	1	4.9		02/01/11
Gross Beta	12587-47-2	LA-508-415		50	8.1	pCi/L	1	7.0		02/01/11
H3 EICHROM										**01/10/11**
TRI-CARB LSC										
Tritium	10028-17-8	LA-508-421		1200	290	pCi/L	1	210		01/29/11
SR-89/90										**01/12/11**
SR-89/90										
Strontium-89/90	SR-RAD	LA-220-406		21	4.4	pCi/L	1	1.8		01/24/11
Tc-99										**01/11/11**
TRI-CARB LSC										
Technetium-99	14133-76-7	LA-508-421	U	-2.1	3.7	pCi/L	1	6.3		01/14/11
Th/Pu/Am/U Teva										**02/01/11**
AEA Pu-Np										
Plutonium-238	13981-16-3	LA-508-471	U	-0.036	.16	pCi/L	1	0.29		02/01/11
Plutonium-239/240	PU-239/240	LA-508-471	U	-0.036	.052	pCi/L	1	0.13		02/01/11
Uranium Iso										
Uranium-234	U-233/234	LA-508-471		3.0	.84	pCi/L	1	0.069		02/01/11

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF111081

Sample # 111081009
SAF# X11-016
Sample ID B29H82

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Uranium-235	15117-96-1	LA-508-471		0.17	.099	pCi/L	1	0.075		02/01/11
Uranium-238	U-238	LA-508-471		2.0	.59	pCi/L	1	0.025		02/01/11

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

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

WSCF Analytical Results Report

Attention Michael Neely
Department Wet Chemistry

Group # WSCF111081

Sample # 111081007
SAF# X11-016
Sample ID B29H58

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alkalinity										**01/13/11**
Alkalinity										
Total Alkalinity as CaCO3	ALKALINITY	LA-531-411		88		mg/L	1	1	10	01/13/11
Cyanide Prep										**01/12/11**
Cyanide										
Cyanide	57-12-5	LA-695-402	U	<4.0		ug/L	1	4.0	20	01/12/11

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.
PQL is equivalent to Estimated Quantitation Limit (EQL)

WSCF Analytical Results Report

Attention Michael Neely
Department Wet Chemistry

Group # WSCF111081

Sample # 111081008
SAF# X11-016
Sample ID B29HC2

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alkalinity										**01/13/11**
Alkalinity										
Total Alkalinity as CaCO3	ALKALINITY	LA-531-411		66		mg/L	1	1	10	01/13/11
Cyanide Prep										**01/12/11**
Cyanide										
Cyanide	57-12-5	LA-695-402	U	<4.0		ug/L	1	4.0	20	01/12/11

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.
PQL is equivalent to Estimated Quantitation Limit (EQL)

WSCF Analytical Results Report

Attention Michael Neely
Department Wet Chemistry

Group # WSCF111081

Sample # 111081009
SAF# X11-016
Sample ID B29H82

Matrix WATER
Sampled 01/09/11
Received 01/09/11

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Alkalinity										**01/13/11**
Alkalinity										
Total Alkalinity as CaCO3	ALKALINITY	LA-531-411		210		mg/L	1	1	10	01/13/11
Cyanide Prep										**01/12/11**
Cyanide										
Cyanide	57-12-5	LA-695-402	U	<4.0		ug/L	1	4.0	20	01/12/11

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.
PQL is equivalent to Estimated Quantitation Limit (EQL)

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

QC Batch 173800
Associated Samples 111081002

Test Anions by Ion Chromatography (Water)

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #46060**							
Fluoride	16984-48-8		<0.044	ug/mL					U	01/09/11
Chloride	16887-00-6		<0.042	ug/mL					U	01/09/11
Nitrite-N	NO2-N		<0.018	ug/mL					U	01/09/11
Bromide	24959-67-9		<0.054	ug/mL					U	01/09/11
Nitrate-N	NO3-N		<9.7E-3	ug/mL					U	01/09/11
Phosphate-P	PO4-P		<0.072	ug/mL					U	01/09/11
Sulfate	14808-79-8		<0.083	ug/mL					U	01/09/11
LCS			**QC Sample #46061**							
Fluoride	16984-48-8		0.901	ug/mL	91	90 - 110				01/09/11
Chloride	16887-00-6		1.96	ug/mL	98.8	90 - 110				01/09/11
Nitrite-N	NO2-N		0.914	ug/mL	93.5	90 - 110				01/09/11
Bromide	24959-67-9		4.02	ug/mL	102.6	90 - 110				01/09/11
Nitrate-N	NO3-N		0.923	ug/mL	104.2	90 - 110				01/09/11
Phosphate-P	PO4-P		1.86	ug/mL	97.3	90 - 110				01/09/11
Sulfate	14808-79-8		3.92	ug/mL	99.8	90 - 110				01/09/11
DUP			**QC Sample #46062**							
			Original 111065002							
Fluoride	16984-48-8		<0.088	ug/mL			10.20	20	UD	01/09/11

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Chloride	16887-00-6		8.43	ug/mL			0.70	20	D	01/09/11
Nitrite-N	NO2-N		<0.036	ug/mL			0.00	20	UD	01/09/11
Bromide	24959-67-9		<0.11	ug/mL			0.00	20	UD	01/09/11
Nitrate-N	NO3-N		0.212	ug/mL			1.90	20	D	01/09/11
Phosphate-P	PO4-P		<0.14	ug/mL			0.00	20	UD	01/09/11
Sulfate	14808-79-8		9.82	ug/mL			0.00	20	D	01/09/11
MS			**QC Sample #46063**							
			Original 111065002							
Fluoride	16984-48-8		0.961	ug/mL	96.1	80 - 120			D	01/10/11
Chloride	16887-00-6		1.80	ug/mL	89.8	80 - 120			D	01/10/11
Nitrite-N	NO2-N		0.954	ug/mL	96.5	80 - 120			D	01/10/11
Bromide	24959-67-9		4.06	ug/mL	102.4	80 - 120			D	01/10/11
Nitrate-N	NO3-N		0.965	ug/mL	108	80 - 120			D	01/10/11
Phosphate-P	PO4-P		1.90	ug/mL	98.4	80 - 120			D	01/10/11
Sulfate	14808-79-8		3.80	ug/mL	95.8	80 - 120			D	01/10/11
MSD			**QC Sample #46064**							
			Original 111065002					**Paired**	**46063**	
Fluoride	16984-48-8		0.862	ug/mL	86.2	80 - 120	10.90	20	D	01/10/11
Chloride	16887-00-6		1.87	ug/mL	93.6	80 - 120	4.10	20	D	01/10/11
Nitrite-N	NO2-N		0.853	ug/mL	86.4	80 - 120	11.00	20	D	01/10/11
Bromide	24959-67-9		3.60	ug/mL	90.8	80 - 120	12.00	20	D	01/10/11
Nitrate-N	NO3-N		0.836	ug/mL	93.5	80 - 120	14.40	20	D	01/10/11
Phosphate-P	PO4-P		1.70	ug/mL	88	80 - 120	11.20	20	D	01/10/11
Sulfate	14808-79-8		3.84	ug/mL	96.9	80 - 120	1.10	20	D	01/10/11

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

QC Batch 173801
Associated Samples 111081001, 111081003

Test Anions by Ion Chromatography (Water)

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #46067**							
Fluoride	16984-48-8		<0.044	ug/mL					U	01/10/11
Chloride	16887-00-6		<0.042	ug/mL					U	01/10/11
Nitrite-N	NO2-N		<0.018	ug/mL					U	01/10/11
Bromide	24959-67-9		<0.054	ug/mL					U	01/10/11
Nitrate-N	NO3-N		<9.7E-3	ug/mL					U	01/10/11
Phosphate-P	PO4-P		<0.072	ug/mL					U	01/10/11
Sulfate	14808-79-8		<0.083	ug/mL					U	01/10/11
LCS			**QC Sample #46068**							
Fluoride	16984-48-8		0.930	ug/mL	94	90 - 110				01/10/11
Chloride	16887-00-6		1.93	ug/mL	97.6	90 - 110				01/10/11
Nitrite-N	NO2-N		0.937	ug/mL	95.8	90 - 110				01/10/11
Bromide	24959-67-9		3.94	ug/mL	100.5	90 - 110				01/10/11
Nitrate-N	NO3-N		0.894	ug/mL	100.9	90 - 110				01/10/11
Phosphate-P	PO4-P		1.88	ug/mL	98.1	90 - 110				01/10/11
Sulfate	14808-79-8		3.84	ug/mL	98	90 - 110				01/10/11
DUP			**QC Sample #46069**							
			Original 111077002							
Fluoride	16984-48-8		0.188	ug/mL			0.50	20	BD	01/10/11

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Chloride	16887-00-6		8.40	ug/mL			0.20	20	D	01/10/11
Nitrite-N	NO2-N		<0.036	ug/mL			0.00	20	UD	01/10/11
Bromide	24959-67-9		<0.11	ug/mL			0.00	20	UD	01/10/11
Nitrate-N	NO3-N		1.47	ug/mL			2.10	20	D	01/10/11
Phosphate-P	PO4-P		<0.14	ug/mL			0.00	20	UD	01/10/11
Sulfate	14808-79-8		34.5	ug/mL			0.60	20	D	01/10/11
MS			**QC Sample #46070**							
			Original 111077002							
Fluoride	16984-48-8		1.03	ug/mL	102.8	80 - 120			D	01/10/11
Chloride	16887-00-6		2.33	ug/mL	116.4	80 - 120			D	01/10/11
Nitrite-N	NO2-N		0.909	ug/mL	92	80 - 120			D	01/10/11
Bromide	24959-67-9		4.00	ug/mL	101	80 - 120			D	01/10/11
Nitrate-N	NO3-N		0.911	ug/mL	101.9	80 - 120			D	01/10/11
Phosphate-P	PO4-P		1.90	ug/mL	98.5	80 - 120			D	01/10/11
Sulfate	14808-79-8		4.15	ug/mL	104.7	80 - 120			D	01/10/11
MSD			**QC Sample #46071**							
			Original 111077002					**Paired**	**46070**	
Fluoride	16984-48-8		1.01	ug/mL	101.3	80 - 120	1.50	20	D	01/10/11
Chloride	16887-00-6		1.96	ug/mL	98	80 - 120	17.20	20	D	01/10/11
Nitrite-N	NO2-N		0.893	ug/mL	90.4	80 - 120	1.80	20	D	01/10/11
Bromide	24959-67-9		3.98	ug/mL	100.4	80 - 120	0.60	20	D	01/10/11
Nitrate-N	NO3-N		0.860	ug/mL	96.2	80 - 120	5.80	20	D	01/10/11
Phosphate-P	PO4-P		1.89	ug/mL	97.9	80 - 120	0.60	20	D	01/10/11
Sulfate	14808-79-8		3.80	ug/mL	96	80 - 120	8.70	20	D	01/10/11

Quality Control Report

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF111081

QC Batch 173817
Associated Samples 111081009

Test Extractable Diesel and Petroleum

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #46117**							
Diesel	TPHDIESEL		<80	ug/L					U	01/14/11
LCS			**QC Sample #46118**							
Diesel	TPHDIESEL		2300	ug/L	92.8	65 - 128				01/14/11
MS			**QC Sample #46119**							
			Original 111059014							
Diesel	TPHDIESEL		2100	ug/L	89.6	73 - 123				01/14/11
MSD			**QC Sample #46120**							
			Original 111059014					**Paired**	**46119**	
Diesel	TPHDIESEL		2000	ug/L	84.8	73 - 123	5.50	20		01/14/11

Quality Control Report

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF111081

QC Batch 173941
Associated Samples 111081007, 111081008

Test Extractable Diesel and Petroleum

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #46301**							
Diesel	TPHDIESEL		<80	ug/L					U	01/14/11
LCS			**QC Sample #46302**							
Diesel	TPHDIESEL		2300	ug/L	92.7	65 - 128				01/14/11
MS			**QC Sample #46314**							
			Original 111077010							
Diesel	TPHDIESEL		2300	ug/L	92.5	73 - 123				01/14/11
MSD			**QC Sample #46315**							
			Original 111077010					**Paired**	**46314**	
Diesel	TPHDIESEL		2200	ug/L	87.7	73 - 123	5.30	20		01/14/11

Quality Control Report

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF111081

QC Batch 174095
Associated Samples 111081009

Test PCBs by EPA SW-846 Method 8082

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #46349**							
Aroclor-1016	12674-11-2		<0.1	ug/L					U	01/17/11
Aroclor-1221	11104-28-2		<0.2	ug/L					U	01/17/11
Aroclor-1232	11141-16-5		<0.1	ug/L					U	01/17/11
Aroclor-1242	53469-21-9		<0.1	ug/L					U	01/17/11
Aroclor-1248	12672-29-6		<0.1	ug/L					U	01/17/11
Aroclor-1254	11097-69-1		<0.1	ug/L					U	01/17/11
Aroclor-1260	11096-82-5		<0.1	ug/L					U	01/17/11
Aroclor-1262	37324-23-5		<0.1	ug/L					U	01/17/11
Aroclor-1268	11100-14-4		<0.1	ug/L					U	01/17/11
LCS			**QC Sample #46350**							
Aroclor-1254	11097-69-1		1.9	ug/L	93.6	70 - 130				01/17/11
MS			**QC Sample #46351**							
			Original 111059011							
Aroclor-1254	11097-69-1		1.8	ug/L	92.2	60 - 130				01/17/11
MSD			**QC Sample #46352**							
			Original 111059011					**Paired**	**46351**	
Aroclor-1254	11097-69-1		2.3	ug/L	97.1	60 - 130	5.20	20		01/17/11

Quality Control Report

Attention Michael Neely
Department Organic, Volatiles

Group # WSCF111081

QC Batch 174100
Associated Samples 111081007, 111081008, 111081009

Test Gasoline Range (W)

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #46358**							
Gasoline	TPHGASOLI		<50	ug/L					U	01/13/11
LCS			**QC Sample #46359**							
Gasoline	TPHGASOLI		2800	ug/L	112.8	80 - 120				01/13/11
MS			**QC Sample #46360**							
			Original 111081007							
Gasoline	TPHGASOLI	<50	2400	ug/L	95.2	75 - 125				01/13/11
MSD			**QC Sample #46361**							
			Original 111081007					**Paired**	**46360**	
Gasoline	TPHGASOLI	<50	2300	ug/L	93.6	75 - 125	1.70	20		01/13/11
DUP			**QC Sample #46362**							
			Original 111081007							
Gasoline	TPHGASOLI	<50	<50	ug/L			0.00	20	U	01/13/11

Quality Control Report

Attention Michael Neely
Department Wet Chemistry

Group # WSCF111081

QC Batch 174199
Associated Samples 111081007, 111081008, 111081009

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 #46434**							
Total Alkalinity as CaCO3	ALKALINITY		100	mg/L	103.5	80 - 120				01/13/11
DUP			**QC Sample #46435**							
			Original	**111077008**						
Total Alkalinity as CaCO3	ALKALINITY		96	mg/L			1.00	20		01/13/11

Quality Control Report

Attention Michael Neely
Department Wet Chemistry

Group # WSCF111081

QC Batch 174211
Associated Samples 111081007, 111081008, 111081009

Test Cyanide by Midi/Spectrophotometer

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #46460**							
Cyanide	57-12-5		<4.0	ug/L					U	01/12/11
LCS			**QC Sample #46462**							
Cyanide	57-12-5		44.8	ug/L	89.5	85 - 115				01/12/11
MS			**QC Sample #46463**							
			Original 111063008							
Cyanide	57-12-5		33.6	ug/L	84	75 - 125				01/12/11
MSD			**QC Sample #46464**							
			Original 111063008					**Paired**	**46463**	
Cyanide	57-12-5		36.2	ug/L	90.5	75 - 125	7.40	20		01/12/11

Quality Control Report

Attention Michael Neely
Department Organic, Volatiles

Group # WSCF111081

QC Batch 174215
Associated Samples 111081007, 111081008, 111081009

Test SW-846 Method 8015 for GPP

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #46477**							
Ethanol	64-17-5		<2000	ug/L					U	01/19/11
1-Propanol	71-23-8		<2000	ug/L					U	01/19/11
Ethylene glycol	107-21-1		<2000	ug/L					U	01/19/11
LCS			**QC Sample #46478**							
Ethanol	64-17-5		8610	ug/L	109.1	70 - 130				01/19/11
1-Propanol	71-23-8		8920	ug/L	111.5	70 - 130				01/19/11
Ethylene glycol	107-21-1		9150	ug/L	82.1	70 - 130				01/19/11
MS			**QC Sample #46479**							
			Original 111077008							
Ethanol	64-17-5		8440	ug/L	107	70 - 130				01/19/11
1-Propanol	71-23-8		8800	ug/L	110	70 - 130				01/19/11
Ethylene glycol	107-21-1		9650	ug/L	86.6	70 - 130				01/19/11
MSD			**QC Sample #46480**							
			Original 111077008					**Paired**	**46479**	
Ethanol	64-17-5		8810	ug/L	111.7	70 - 130	4.30	20		01/19/11
1-Propanol	71-23-8		8830	ug/L	110.4	70 - 130	0.40	20		01/19/11
Ethylene glycol	107-21-1		10700	ug/L	96.1	70 - 130	10.40	20		01/19/11
DUP			**QC Sample #46481**							
			Original 111077008							

Quality Control Report

Attention Michael Neely
Department Organic, Volatiles

Group # WSCF111081

Analyte	CAS #	Original Found	QC Found	Units	% Recov Limits	RPD	RPD Limit	RQ	Analyzed
Ethanol	64-17-5		<2000	ug/L		0.00	20	U	01/19/11
1-Propanol	71-23-8		<2000	ug/L		0.00	20	U	01/19/11
Ethylene glycol	107-21-1		<2000	ug/L		0.00	20	U	01/19/11

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

QC Batch 174500 **Test** ICP-2008 MS All possible metal
Associated Samples 111081004, 111081005, 111081006, 111081007, 111081008, 111081009

Analyte	CAS #	Original Found	QC Found	Units	% Recov Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #46733**						
Aluminum	7429-90-5		<5.0	ug/L				U	01/21/11
Silver	7440-22-4		<0.10	ug/L				U	01/21/11
Antimony	7440-36-0		<0.30	ug/L				U	01/21/11
Barium	7440-39-3		<0.20	ug/L				U	01/21/11
Beryllium	7440-41-7		<0.10	ug/L				U	01/21/11
Cadmium	7440-43-9		<0.10	ug/L				U	01/21/11
Chromium	7440-47-3		<0.50	ug/L				U	01/21/11
Cobalt	7440-48-4		<0.050	ug/L				U	01/21/11
Copper	7440-50-8		<0.10	ug/L				U	01/21/11
Lead	7439-92-1		<0.10	ug/L				U	01/21/11
Mercury	7439-97-6		<0.050	ug/L				U	01/21/11
Molybdenum	7439-98-7		<0.050	ug/L				U	01/21/11
Thallium	7440-28-0		<0.050	ug/L				U	01/21/11
Tin	7440-31-5		<0.050	ug/L				U	01/21/11
Uranium	7440-61-1		<0.050	ug/L				U	01/21/11
Arsenic	7440-38-2		<0.40	ug/L				U	01/21/11
Selenium	7782-49-2		<0.30	ug/L				U	01/21/11
LCS			**QC Sample #46734**						

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Aluminum	7429-90-5		389	ug/L	97.2	85 - 115				01/21/11
Silver	7440-22-4		40.6	ug/L	101.5	85 - 115				01/21/11
Antimony	7440-36-0		38.2	ug/L	95.4	85 - 115				01/21/11
Barium	7440-39-3		39.6	ug/L	99.1	85 - 115				01/21/11
Beryllium	7440-41-7		37.6	ug/L	94	85 - 115				01/21/11
Cadmium	7440-43-9		38.3	ug/L	95.8	85 - 115				01/21/11
Chromium	7440-47-3		39.1	ug/L	97.7	85 - 115				01/21/11
Cobalt	7440-48-4		37.4	ug/L	93.5	85 - 115				01/21/11
Copper	7440-50-8		37.4	ug/L	93.5	85 - 115				01/21/11
Lead	7439-92-1		40.1	ug/L	100.2	85 - 115				01/21/11
Mercury	7439-97-6		1.90	ug/L	95	85 - 115				01/21/11
Molybdenum	7439-98-7		39.5	ug/L	98.8	85 - 115				01/21/11
Thallium	7440-28-0		39.5	ug/L	98.8	85 - 115				01/21/11
Tin	7440-31-5		38.7	ug/L	96.8	85 - 115				01/21/11
Uranium	7440-61-1		39.8	ug/L	99.4	85 - 115				01/21/11
Arsenic	7440-38-2		37.4	ug/L	93.5	85 - 115				01/21/11
Selenium	7782-49-2		37.2	ug/L	93.1	85 - 115				01/21/11
MS			**QC Sample #46735**							
			Original 111078004							
Aluminum	7429-90-5		379	ug/L	94.7	70 - 130				01/21/11
Silver	7440-22-4		38.0	ug/L	94.9	70 - 130				01/21/11
Antimony	7440-36-0		37.6	ug/L	93.9	70 - 130				01/21/11
Barium	7440-39-3		36.7	ug/L	91.7	70 - 130				01/21/11
Beryllium	7440-41-7		38.7	ug/L	96.7	70 - 130				01/21/11
Cadmium	7440-43-9		36.8	ug/L	91.9	70 - 130				01/21/11

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Chromium	7440-47-3		37.6	ug/L	94	70 - 130				01/21/11
Cobalt	7440-48-4		35.6	ug/L	89.1	70 - 130				01/21/11
Copper	7440-50-8		34.1	ug/L	85.4	70 - 130				01/21/11
Lead	7439-92-1		39.2	ug/L	98.1	70 - 130				01/21/11
Mercury	7439-97-6		1.90	ug/L	95.1	70 - 130				01/21/11
Molybdenum	7439-98-7		38.7	ug/L	96.7	70 - 130				01/21/11
Thallium	7440-28-0		39.2	ug/L	98.1	70 - 130				01/21/11
Tin	7440-31-5		38.0	ug/L	95	70 - 130				01/21/11
Uranium	7440-61-1		40.3	ug/L	100.6	70 - 130				01/21/11
Arsenic	7440-38-2		37.1	ug/L	92.8	70 - 130				01/21/11
Selenium	7782-49-2		36.8	ug/L	91.9	70 - 130				01/21/11
MSD			**QC Sample #46736**							
			Original 111078004						**Paired 46735**	
Aluminum	7429-90-5		383	ug/L	95.7	70 - 130	1.10	20		01/21/11
Silver	7440-22-4		38.3	ug/L	95.7	70 - 130	0.80	20		01/21/11
Antimony	7440-36-0		38.3	ug/L	95.8	70 - 130	2.00	20		01/21/11
Barium	7440-39-3		36.6	ug/L	91.6	70 - 130	0.10	20		01/21/11
Beryllium	7440-41-7		37.8	ug/L	94.5	70 - 130	2.30	20		01/21/11
Cadmium	7440-43-9		37.2	ug/L	93	70 - 130	1.20	20		01/21/11
Chromium	7440-47-3		37.9	ug/L	94.6	70 - 130	0.60	20		01/21/11
Cobalt	7440-48-4		35.9	ug/L	89.8	70 - 130	0.80	20		01/21/11
Copper	7440-50-8		34.7	ug/L	86.9	70 - 130	1.70	20		01/21/11
Lead	7439-92-1		39.7	ug/L	99.3	70 - 130	1.20	20		01/21/11
Mercury	7439-97-6		1.93	ug/L	96.4	70 - 130	1.40	20		01/21/11
Molybdenum	7439-98-7		39.5	ug/L	98.6	70 - 130	1.90	20		01/21/11

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Thallium	7440-28-0		39.6	ug/L	99.1	70 - 130	1.00	20		01/21/11
Tin	7440-31-5		38.6	ug/L	96.6	70 - 130	1.70	20		01/21/11
Uranium	7440-61-1		40.5	ug/L	101.2	70 - 130	0.60	20		01/21/11
Arsenic	7440-38-2		38.8	ug/L	97	70 - 130	4.40	20		01/21/11
Selenium	7782-49-2		39.0	ug/L	97.4	70 - 130	5.80	20		01/21/11

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

QC Batch 175435
Associated Samples 111081004

Test ICP-6010 - All possible metals

Analyte	CAS #	Original Found	QC Found	Units	% Recov Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #47878**						
Aluminum	7429-90-5		<19	ug/L				U	02/08/11
Iron	7439-89-6		<38	ug/L				U	02/08/11
Magnesium	7439-95-4		<14	ug/L				U	02/08/11
Manganese	7439-96-5		<6.0	ug/L				U	02/08/11
Nickel	7440-02-0		<4.0	ug/L				U	02/08/11
Potassium	7440-09-7		<73	ug/L				U	02/08/11
Silver	7440-22-4		<7.0	ug/L				U	02/08/11
Sodium	7440-23-5		25.0	ug/L				B	02/08/11
Antimony	7440-36-0		<47	ug/L				U	02/08/11
Barium	7440-39-3		<4.0	ug/L				U	02/08/11
Cadmium	7440-43-9		<4.0	ug/L				U	02/08/11
Chromium	7440-47-3		<14	ug/L				U	02/08/11
Cobalt	7440-48-4		<4.0	ug/L				U	02/08/11
Copper	7440-50-8		<5.0	ug/L				U	02/08/11
Vanadium	7440-62-2		<17	ug/L				U	02/08/11
Zinc	7440-66-6		<4.0	ug/L				U	02/08/11
Calcium	7440-70-2		<28	ug/L				U	02/08/11
Lead	7439-92-1		<42	ug/L				U	02/08/11
Lithium	7439-93-2		<4.0	ug/L				U	02/08/11

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Molybdenum	7439-98-7		<4.0	ug/L					U	02/08/11
Strontium	7440-24-6		<4.0	ug/L					U	02/08/11
Thallium	7440-28-0		<49	ug/L					U	02/08/11
Tin	7440-31-5		<49	ug/L					U	02/08/11
Arsenic	7440-38-2		<50	ug/L					U	02/08/11
Beryllium	7440-41-7		<4.0	ug/L					U	02/08/11
Boron	7440-42-8		<41	ug/L					U	02/08/11
Bismuth	7440-69-9		<37	ug/L					U	02/08/11
Silicon	7440-21-3		<25	ug/L					U	02/08/11
Phosphorus	7723-14-0		<72	ug/L					U	02/08/11
Selenium	7782-49-2		<47	ug/L					U	02/08/11
LCS			**QC Sample #47879**							
Aluminum	7429-90-5		952	ug/L	95.2	80 - 120				02/08/11
Iron	7439-89-6		974	ug/L	97.4	80 - 120				02/08/11
Magnesium	7439-95-4		937	ug/L	93.7	80 - 120				02/08/11
Manganese	7439-96-5		976	ug/L	97.6	80 - 120				02/08/11
Nickel	7440-02-0		972	ug/L	97.2	80 - 120				02/08/11
Potassium	7440-09-7		1020	ug/L	102	80 - 120				02/08/11
Silver	7440-22-4		931	ug/L	93.1	80 - 120				02/08/11
Sodium	7440-23-5		1030	ug/L	103	80 - 120				02/08/11
Antimony	7440-36-0		987	ug/L	98.7	80 - 120				02/08/11
Barium	7440-39-3		484	ug/L	96.8	80 - 120				02/08/11
Cadmium	7440-43-9		988	ug/L	98.8	80 - 120				02/08/11
Chromium	7440-47-3		938	ug/L	93.8	80 - 120				02/08/11

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Cobalt	7440-48-4		982	ug/L	98.2	80 - 120				02/08/11
Copper	7440-50-8		959	ug/L	95.9	80 - 120				02/08/11
Vanadium	7440-62-2		934	ug/L	93.4	80 - 120				02/08/11
Zinc	7440-66-6		974	ug/L	97.4	80 - 120				02/08/11
Calcium	7440-70-2		977	ug/L	97.7	80 - 120				02/08/11
Lead	7439-92-1		991	ug/L	99.1	80 - 120				02/08/11
Lithium	7439-93-2		496	ug/L	99.2	80 - 120				02/08/11
Molybdenum	7439-98-7		973	ug/L	97.3	80 - 120				02/08/11
Strontium	7440-24-6		491	ug/L	98.2	80 - 120				02/08/11
Thallium	7440-28-0		822	ug/L	82.2	80 - 120				02/08/11
Tin	7440-31-5		975	ug/L	97.5	80 - 120				02/08/11
Arsenic	7440-38-2		967	ug/L	96.7	80 - 120				02/08/11
Beryllium	7440-41-7		494	ug/L	98.8	80 - 120				02/08/11
Boron	7440-42-8		925	ug/L	92.5	80 - 120				02/08/11
Bismuth	7440-69-9		919	ug/L	91.9	80 - 120				02/08/11
Silicon	7440-21-3		998	ug/L	99.8	80 - 120				02/08/11
Phosphorus	7723-14-0		970	ug/L	97	80 - 120				02/08/11
Selenium	7782-49-2		962	ug/L	96.2	80 - 120				02/08/11
MS			**QC Sample #47880**							
			Original 111069008							
Aluminum	7429-90-5		990	ug/L	99	75 - 125				02/08/11
Iron	7439-89-6		990	ug/L	99	75 - 125				02/08/11
Magnesium	7439-95-4		1000	ug/L	100	75 - 125			X	02/08/11
Manganese	7439-96-5		982	ug/L	98.2	75 - 125				02/08/11
Nickel	7440-02-0		969	ug/L	96.9	75 - 125				02/08/11

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Potassium	7440-09-7		1020	ug/L	102	75 - 125			X	02/08/11
Silver	7440-22-4		941	ug/L	94.1	75 - 125				02/08/11
Sodium	7440-23-5		910	ug/L	91	75 - 125			X	02/08/11
Antimony	7440-36-0		992	ug/L	99.2	75 - 125				02/08/11
Barium	7440-39-3		494	ug/L	98.8	75 - 125				02/08/11
Cadmium	7440-43-9		1000	ug/L	100	75 - 125				02/08/11
Chromium	7440-47-3		971	ug/L	97.1	75 - 125				02/08/11
Cobalt	7440-48-4		993	ug/L	99.3	75 - 125				02/08/11
Copper	7440-50-8		968	ug/L	96.8	75 - 125				02/08/11
Vanadium	7440-62-2		952	ug/L	95.2	75 - 125				02/08/11
Zinc	7440-66-6		996	ug/L	99.6	75 - 125				02/08/11
Calcium	7440-70-2		1600	ug/L	160	75 - 125			X	02/08/11
Lead	7439-92-1		993	ug/L	99.3	75 - 125				02/08/11
Lithium	7439-93-2		510	ug/L	102	75 - 125				02/08/11
Molybdenum	7439-98-7		973	ug/L	97.3	75 - 125				02/08/11
Strontium	7440-24-6		506	ug/L	101.2	75 - 125				02/08/11
Thallium	7440-28-0		776	ug/L	77.6	75 - 125				02/08/11
Tin	7440-31-5		944	ug/L	94.4	75 - 125				02/08/11
Arsenic	7440-38-2		999	ug/L	99.9	75 - 125				02/08/11
Beryllium	7440-41-7		503	ug/L	100.6	75 - 125				02/08/11
Boron	7440-42-8		969	ug/L	96.9	75 - 125				02/08/11
Bismuth	7440-69-9		936	ug/L	93.6	75 - 125				02/08/11
Silicon	7440-21-3		1000	ug/L	100	75 - 125			X	02/08/11
Phosphorus	7723-14-0		998	ug/L	99.8	75 - 125				02/08/11
Selenium	7782-49-2		1010	ug/L	101	75 - 125				02/08/11

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
MSD			**QC Sample #47881**								
			Original	**111069008**					**Paired**	**47880**	
Aluminum	7429-90-5		952	ug/L	95.2	75 - 125	3.90	20			02/08/11
Iron	7439-89-6		953	ug/L	95.3	75 - 125	3.80	20			02/08/11
Magnesium	7439-95-4		700	ug/L	70	75 - 125	35.30	20	*	X	02/08/11
Manganese	7439-96-5		949	ug/L	94.9	75 - 125	3.40	20			02/08/11
Nickel	7440-02-0		927	ug/L	92.7	75 - 125	4.40	20			02/08/11
Potassium	7440-09-7		890	ug/L	89	75 - 125	13.60	20		X	02/08/11
Silver	7440-22-4		911	ug/L	91.1	75 - 125	3.20	20			02/08/11
Sodium	7440-23-5		810	ug/L	81	75 - 125	11.60	20		X	02/08/11
Antimony	7440-36-0		968	ug/L	96.8	75 - 125	2.40	20			02/08/11
Barium	7440-39-3		473	ug/L	94.6	75 - 125	4.30	20			02/08/11
Cadmium	7440-43-9		962	ug/L	96.2	75 - 125	3.90	20			02/08/11
Chromium	7440-47-3		925	ug/L	92.5	75 - 125	4.90	20			02/08/11
Cobalt	7440-48-4		950	ug/L	95	75 - 125	4.40	20			02/08/11
Copper	7440-50-8		927	ug/L	92.7	75 - 125	4.30	20			02/08/11
Vanadium	7440-62-2		918	ug/L	91.8	75 - 125	3.60	20			02/08/11
Zinc	7440-66-6		958	ug/L	95.8	75 - 125	3.90	20			02/08/11
Calcium	7440-70-2		900	ug/L	90	75 - 125	56.00	20	*	X	02/08/11
Lead	7439-92-1		964	ug/L	96.4	75 - 125	3.00	20			02/08/11
Lithium	7439-93-2		485	ug/L	97	75 - 125	5.00	20			02/08/11
Molybdenum	7439-98-7		940	ug/L	94	75 - 125	3.50	20			02/08/11
Strontium	7440-24-6		479	ug/L	95.8	75 - 125	5.50	20			02/08/11
Thallium	7440-28-0		777	ug/L	77.7	75 - 125	0.10	20			02/08/11
Tin	7440-31-5		930	ug/L	93	75 - 125	1.50	20			02/08/11

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
Arsenic	7440-38-2		947	ug/L	94.7	75 - 125	5.30	20			02/08/11
Beryllium	7440-41-7		484	ug/L	96.8	75 - 125	3.90	20			02/08/11
Boron	7440-42-8		940	ug/L	94	75 - 125	3.00	20			02/08/11
Bismuth	7440-69-9		905	ug/L	90.5	75 - 125	3.40	20			02/08/11
Silicon	7440-21-3		600	ug/L	60	75 - 125	50.00	20	*	X	02/08/11
Phosphorus	7723-14-0		943	ug/L	94.3	75 - 125	5.70	20			02/08/11
Selenium	7782-49-2		931	ug/L	93.1	75 - 125	8.10	20			02/08/11

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

QC Batch 175436
Associated Samples 111081005, 111081006, 111081007, 111081008, 111081009

Test ICP-6010 - All possible metals

Analyte	CAS #	Original Found	QC Found	Units	% Recov Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #47882**						
Aluminum	7429-90-5		<19	ug/L				U	02/08/11
Iron	7439-89-6		<38	ug/L				U	02/08/11
Magnesium	7439-95-4		<14	ug/L				U	02/08/11
Manganese	7439-96-5		<6.0	ug/L				U	02/08/11
Nickel	7440-02-0		<4.0	ug/L				U	02/08/11
Potassium	7440-09-7		135	ug/L				B	02/08/11
Silver	7440-22-4		<7.0	ug/L				U	02/08/11
Sodium	7440-23-5		<11	ug/L				U	02/08/11
Antimony	7440-36-0		<47	ug/L				U	02/08/11
Barium	7440-39-3		<4.0	ug/L				U	02/08/11
Cadmium	7440-43-9		<4.0	ug/L				U	02/08/11
Chromium	7440-47-3		<14	ug/L				U	02/08/11
Cobalt	7440-48-4		<4.0	ug/L				U	02/08/11
Copper	7440-50-8		<5.0	ug/L				U	02/08/11
Vanadium	7440-62-2		<17	ug/L				U	02/08/11
Zinc	7440-66-6		<4.0	ug/L				U	02/08/11
Calcium	7440-70-2		<28	ug/L				U	02/08/11
Lead	7439-92-1		<42	ug/L				U	02/08/11
Lithium	7439-93-2		<4.0	ug/L				U	02/08/11

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Molybdenum	7439-98-7		<4.0	ug/L					U	02/08/11
Strontium	7440-24-6		<4.0	ug/L					U	02/08/11
Thallium	7440-28-0		<49	ug/L					U	02/08/11
Tin	7440-31-5		<49	ug/L					U	02/08/11
Arsenic	7440-38-2		<50	ug/L					U	02/08/11
Beryllium	7440-41-7		<4.0	ug/L					U	02/08/11
Boron	7440-42-8		<41	ug/L					U	02/08/11
Bismuth	7440-69-9		<37	ug/L					U	02/08/11
Silicon	7440-21-3		<25	ug/L					U	02/08/11
Phosphorus	7723-14-0		<72	ug/L					U	02/08/11
Selenium	7782-49-2		<47	ug/L					U	02/08/11
LCS			**QC Sample #47883**							
Aluminum	7429-90-5		951	ug/L	95.1	80 - 120				02/08/11
Iron	7439-89-6		983	ug/L	98.3	80 - 120				02/08/11
Magnesium	7439-95-4		930	ug/L	93	80 - 120				02/08/11
Manganese	7439-96-5		991	ug/L	99.1	80 - 120				02/08/11
Nickel	7440-02-0		985	ug/L	98.5	80 - 120				02/08/11
Potassium	7440-09-7		1060	ug/L	106	80 - 120				02/08/11
Silver	7440-22-4		945	ug/L	94.5	80 - 120				02/08/11
Sodium	7440-23-5		1020	ug/L	102	80 - 120				02/08/11
Antimony	7440-36-0		996	ug/L	99.6	80 - 120				02/08/11
Barium	7440-39-3		491	ug/L	98.2	80 - 120				02/08/11
Cadmium	7440-43-9		1000	ug/L	100	80 - 120				02/08/11
Chromium	7440-47-3		947	ug/L	94.7	80 - 120				02/08/11

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Cobalt	7440-48-4		1000	ug/L	100	80 - 120				02/08/11
Copper	7440-50-8		950	ug/L	95	80 - 120				02/08/11
Vanadium	7440-62-2		951	ug/L	95.1	80 - 120				02/08/11
Zinc	7440-66-6		983	ug/L	98.3	80 - 120				02/08/11
Calcium	7440-70-2		1010	ug/L	101	80 - 120				02/08/11
Lead	7439-92-1		1020	ug/L	102	80 - 120				02/08/11
Lithium	7439-93-2		496	ug/L	99.2	80 - 120				02/08/11
Molybdenum	7439-98-7		974	ug/L	97.4	80 - 120				02/08/11
Strontium	7440-24-6		495	ug/L	99	80 - 120				02/08/11
Thallium	7440-28-0		914	ug/L	91.4	80 - 120				02/08/11
Tin	7440-31-5		1010	ug/L	101	80 - 120				02/08/11
Arsenic	7440-38-2		967	ug/L	96.7	80 - 120				02/08/11
Beryllium	7440-41-7		502	ug/L	100.4	80 - 120				02/08/11
Boron	7440-42-8		938	ug/L	93.8	80 - 120				02/08/11
Bismuth	7440-69-9		885	ug/L	88.5	80 - 120				02/08/11
Silicon	7440-21-3		1020	ug/L	102	80 - 120				02/08/11
Phosphorus	7723-14-0		1040	ug/L	104	80 - 120				02/08/11
Selenium	7782-49-2		940	ug/L	94	80 - 120				02/08/11
MS			**QC Sample #47884**							
			Original 111081005							
Aluminum	7429-90-5	<19	998	ug/L	99.8	75 - 125				02/08/11
Iron	7439-89-6	<38	1010	ug/L	101	75 - 125				02/08/11
Magnesium	7439-95-4	10200	1000	ug/L	100	75 - 125			X	02/08/11
Manganese	7439-96-5	<6.0	1000	ug/L	100	75 - 125				02/08/11
Nickel	7440-02-0	<4.0	976	ug/L	97.6	75 - 125				02/08/11

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Potassium	7440-09-7	2530	910	ug/L	91	75 - 125				02/08/11
Silver	7440-22-4	<7.0	958	ug/L	95.8	75 - 125				02/08/11
Sodium	7440-23-5	4750	1020	ug/L	102	75 - 125			X	02/08/11
Antimony	7440-36-0	<47	1030	ug/L	103	75 - 125				02/08/11
Barium	7440-39-3	34.0	501	ug/L	100.2	75 - 125				02/08/11
Cadmium	7440-43-9	<4.0	1020	ug/L	102	75 - 125				02/08/11
Chromium	7440-47-3	<14	958	ug/L	95.8	75 - 125				02/08/11
Cobalt	7440-48-4	<4.0	1000	ug/L	100	75 - 125				02/08/11
Copper	7440-50-8	<5.0	955	ug/L	95.5	75 - 125				02/08/11
Vanadium	7440-62-2	<17	968	ug/L	96.8	75 - 125				02/08/11
Zinc	7440-66-6	<4.0	1000	ug/L	100	75 - 125				02/08/11
Calcium	7440-70-2	58300	1700	ug/L	170	75 - 125			X	02/08/11
Lead	7439-92-1	<42	1020	ug/L	102	75 - 125				02/08/11
Lithium	7439-93-2	<4.0	498	ug/L	99.6	75 - 125				02/08/11
Molybdenum	7439-98-7	6.00	979	ug/L	97.9	75 - 125				02/08/11
Strontium	7440-24-6	307	508	ug/L	101.6	75 - 125				02/08/11
Thallium	7440-28-0	<49	902	ug/L	90.2	75 - 125				02/08/11
Tin	7440-31-5	<49	1030	ug/L	103	75 - 125				02/08/11
Arsenic	7440-38-2	<50	981	ug/L	98.1	75 - 125				02/08/11
Beryllium	7440-41-7	<4.0	515	ug/L	103	75 - 125				02/08/11
Boron	7440-42-8	<41	987	ug/L	98.7	75 - 125				02/08/11
Bismuth	7440-69-9	<37	925	ug/L	92.5	75 - 125				02/08/11
Silicon	7440-21-3	8160	1210	ug/L	121	75 - 125			X	02/08/11
Phosphorus	7723-14-0	<72	1080	ug/L	108	75 - 125				02/08/11
Selenium	7782-49-2	<47	983	ug/L	98.3	75 - 125				02/08/11

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
MSD			**QC Sample #47885**								
			Original	**111081005**					**Paired**	**47884**	
Aluminum	7429-90-5	<19	992	ug/L	99.2	75 - 125	0.60	20			02/08/11
Iron	7439-89-6	<38	1000	ug/L	100	75 - 125	1.00	20			02/08/11
Magnesium	7439-95-4	10200	800	ug/L	80	75 - 125	22.20	20	*	X	02/08/11
Manganese	7439-96-5	<6.0	994	ug/L	99.4	75 - 125	0.60	20			02/08/11
Nickel	7440-02-0	<4.0	973	ug/L	97.3	75 - 125	0.30	20			02/08/11
Potassium	7440-09-7	2530	870	ug/L	87	75 - 125	4.50	20			02/08/11
Silver	7440-22-4	<7.0	961	ug/L	96.1	75 - 125	0.30	20			02/08/11
Sodium	7440-23-5	4750	950	ug/L	95	75 - 125	7.10	20		X	02/08/11
Antimony	7440-36-0	<47	1020	ug/L	102	75 - 125	1.00	20			02/08/11
Barium	7440-39-3	34.0	502	ug/L	100.4	75 - 125	0.20	20			02/08/11
Cadmium	7440-43-9	<4.0	1010	ug/L	101	75 - 125	1.00	20			02/08/11
Chromium	7440-47-3	<14	950	ug/L	95	75 - 125	0.80	20			02/08/11
Cobalt	7440-48-4	<4.0	994	ug/L	99.4	75 - 125	0.60	20			02/08/11
Copper	7440-50-8	<5.0	954	ug/L	95.4	75 - 125	0.10	20			02/08/11
Vanadium	7440-62-2	<17	973	ug/L	97.3	75 - 125	0.50	20			02/08/11
Zinc	7440-66-6	<4.0	1000	ug/L	100	75 - 125	0.00	20			02/08/11
Calcium	7440-70-2	58300	600	ug/L	60	75 - 125	95.70	20	*	X	02/08/11
Lead	7439-92-1	<42	1030	ug/L	103	75 - 125	1.00	20			02/08/11
Lithium	7439-93-2	<4.0	499	ug/L	99.8	75 - 125	0.20	20			02/08/11
Molybdenum	7439-98-7	6.00	976	ug/L	97.6	75 - 125	0.30	20			02/08/11
Strontium	7440-24-6	307	504	ug/L	100.8	75 - 125	0.80	20			02/08/11
Thallium	7440-28-0	<49	932	ug/L	93.2	75 - 125	3.30	20			02/08/11
Tin	7440-31-5	<49	1010	ug/L	101	75 - 125	2.00	20			02/08/11

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF111081

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Arsenic	7440-38-2	<50	995	ug/L	99.5	75 - 125	1.40	20		02/08/11
Beryllium	7440-41-7	<4.0	514	ug/L	102.8	75 - 125	0.20	20		02/08/11
Boron	7440-42-8	<41	975	ug/L	97.5	75 - 125	1.20	20		02/08/11
Bismuth	7440-69-9	<37	911	ug/L	91.1	75 - 125	1.50	20		02/08/11
Silicon	7440-21-3	8160	1090	ug/L	109	75 - 125	10.40	20	X	02/08/11
Phosphorus	7723-14-0	<72	1100	ug/L	110	75 - 125	1.80	20		02/08/11
Selenium	7782-49-2	<47	1010	ug/L	101	75 - 125	2.70	20		02/08/11

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF111081

QC Batch 173634
Associated Samples 111081007, 111081008, 111081009

Test Strontium 89/90 (GPC/GEA)

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #45971**							
Strontium-89/90	SR-RAD		-4.7	pCi/L					U	01/24/11
LCS			**QC Sample #45972**							
Strontium-89/90	SR-RAD		82	pCi/L	87.5	80 - 120				01/24/11
DUP			**QC Sample #45973**							
			Original 111077009							
Strontium-89/90	SR-RAD		-4.2	pCi/L			-18.20	20	U	01/24/11

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF111081

QC Batch 173642
Associated Samples 111081007, 111081008, 111081009

Test Tritium by LSC

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #45988**							
Tritium	10028-17-8		-40	pCi/L					U	01/29/11
LCS			**QC Sample #45989**							
Tritium	10028-17-8		3200	pCi/L	100.4	80 - 120				01/29/11
DUP			**QC Sample #45990**							
			Original 111069012							
Tritium	10028-17-8		6400	pCi/L			4.60	20		01/29/11
MS			**QC Sample #45991**							
			Original 111069012							
Tritium	10028-17-8		19000	pCi/L	93.1	75 - 125				01/29/11

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF111081

QC Batch 173828
Associated Samples 111081007, 111081008, 111081009

Test TC99 by Liquid Scintillation

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #46165**								
Technetium-99	14133-76-7		-3.3	pCi/L						U	01/14/11
LCS			**QC Sample #46166**								
Technetium-99	14133-76-7		260	pCi/L	103.8	80 - 120					01/14/11
DUP			**QC Sample #46167**								
			Original 111074003								
Technetium-99	14133-76-7		-4.0	pCi/L			5533.30	20	*	U	01/14/11
MS			**QC Sample #46168**								
			Original 111074003								
Technetium-99	14133-76-7		1000	pCi/L	103.7	75 - 125					01/14/11

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF111081

QC Batch 173920
Associated Samples 111081007, 111081008, 111081009

Test Plutonium (AEA)

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #46258**								
Plutonium-238	13981-16-3		0.058	pCi/L						U	02/01/11
Uranium-234	U-233/234		0.046	pCi/L						U	02/01/11
Plutonium-239/240	PU-239/240		9.6E-3	pCi/L						U	02/01/11
Uranium-235	15117-96-1		0.040	pCi/L						U	02/01/11
Uranium-238	U-238		0.073	pCi/L						X	02/01/11
LCS			**QC Sample #46259**								
Plutonium-239/240	PU-239/240		6.0	pCi/sample	105	80 - 120					02/01/11
Uranium-238	U-238		8.5	pCi/sample	99.8	80 - 120					02/02/11
DUP			**QC Sample #46260**								
			Original 111078007								
Plutonium-238	13981-16-3		0.13	pCi/L			151.40	20	*	U	02/01/11
Plutonium-239/240	PU-239/240		-0.026	pCi/L			-95.50	20	*	U	02/01/11
Uranium-234	U-233/234		1.2	pCi/L			8.00	20			02/02/11
Uranium-235	15117-96-1		0.068	pCi/L			121.80	20	*	U	02/02/11
Uranium-238	U-238		0.86	pCi/L			15.10	20			02/02/11

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF111081

QC Batch 174189
Associated Samples 111081007, 111081008

Test Gross Alpha/Gross Beta

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
BLANK			**QC Sample #46386**								
Gross Alpha	12587-46-1		-1.3	pCi/L						U	02/01/11
Gross Beta	12587-47-2		0.29	pCi/L						U	02/01/11
LCS			**QC Sample #46387**								
Gross Alpha	12587-46-1		75	pCi/L	92.2	80 - 120					02/01/11
Gross Beta	12587-47-2		240	pCi/L	111.3	80 - 120					02/01/11
DUP			**QC Sample #46388**								
			Original 111077009								
Gross Alpha	12587-46-1		-1.1	pCi/L			-128.40	20	*	U	02/01/11
Gross Beta	12587-47-2		4.9	pCi/L			4.20	20			02/01/11

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF111081

QC Batch 174190
Associated Samples 111081009

Test Gross Alpha/Gross Beta

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #46389**							
Gross Alpha	12587-46-1		0.18	pCi/L					U	02/01/11
Gross Beta	12587-47-2		0.51	pCi/L					U	02/01/11
LCS			**QC Sample #46390**							
Gross Alpha	12587-46-1		74	pCi/L	90.6	80 - 120				02/01/11
Gross Beta	12587-47-2		250	pCi/L	116.4	80 - 120				02/01/11
DUP			**QC Sample #46391**							
			Original 111081009							
Gross Alpha	12587-46-1	3.8	3.5	pCi/L			8.20	20	U	02/01/11
Gross Beta	12587-47-2	50	58	pCi/L			14.80	20		02/01/11

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF111081

QC Batch 173634
Associated Samples 111081007, 111081008, 111081009

Test Strontium 89/90 (GPC/GEA)

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #111081007**							
Strontium-85	13967-73-2				62.6	25 - 105				01/24/11
SAMPLE			**Sample #111081008**							
Strontium-85	13967-73-2				79	25 - 105				01/24/11
SAMPLE			**Sample #111081009**							
Strontium-85	13967-73-2				79.2	25 - 105				01/24/11
BLANK			**QC Sample #45971**							
Strontium-85	13967-73-2				64.8	25 - 105				01/24/11
LCS			**QC Sample #45972**							
Strontium-85	13967-73-2				83.7	25 - 105				01/24/11
DUP			**QC Sample #45973**							
			Original 111077009							
Strontium-85	13967-73-2				77.6	25 - 105	8.00			01/24/11

Quality Control Report

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF111081

QC Batch 173817
Associated Samples 111081009

Test Extractable Diesel and Petroleum

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #111081009**							
o-Terphenyl	84-15-1				79.8	70 - 130				01/14/11
BLANK			**QC Sample #46117**							
o-Terphenyl	84-15-1				83.9	70 - 130				01/14/11
LCS			**QC Sample #46118**							
o-Terphenyl	84-15-1				98.9	70 - 130				01/14/11
MS			**QC Sample #46119**							
			Original 111059014							
o-Terphenyl	84-15-1				93	70 - 130				01/14/11
MSD			**QC Sample #46120**							
			Original 111059014						**Paired 46119**	
o-Terphenyl	84-15-1				87	70 - 130	6.70	20		01/14/11

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF111081

QC Batch 173920
Associated Samples 111081007, 111081008, 111081009

Test Uranium (AEA)

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #111081007**							
Uranium-232 Tracer	14158-29-3				86.6	25 - 105				02/01/11
Plutonium-242 Tracer	13982-10-0				93	25 - 105				02/01/11
SAMPLE			**Sample #111081008**							
Uranium-232 Tracer	14158-29-3				87.7	25 - 105				02/01/11
Plutonium-242 Tracer	13982-10-0				93.4	25 - 105				02/01/11
SAMPLE			**Sample #111081009**							
Uranium-232 Tracer	14158-29-3				89.8	25 - 105				02/01/11
Plutonium-242 Tracer	13982-10-0				94.4	25 - 105				02/01/11
BLANK			**QC Sample #46258**							
Uranium-232 Tracer	14158-29-3				89.2	25 - 105				02/01/11
Plutonium-242 Tracer	13982-10-0				91.1	25 - 105				02/01/11
LCS			**QC Sample #46259**							
Uranium-232 Tracer	14158-29-3				60.3	25 - 105				02/02/11
Plutonium-242 Tracer	13982-10-0				77.9	25 - 105				02/01/11
DUP			**QC Sample #46260**							
			Original 111078007							

Quality Control Report

Attention Michael Neely
Department Radiochemistry

Group # WSCF111081

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Uranium-232 Tracer	14158-29-3				94.6	25 - 105	0.00			02/02/11
Plutonium-242 Tracer	13982-10-0				97.4	25 - 105	0.00			02/01/11

Quality Control Report

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF111081

QC Batch 173941
Associated Samples 111081007, 111081008

Test Extractable Diesel and Petroleum

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #111081007**							
o-Terphenyl	84-15-1				83.3	70 - 130				01/14/11
SAMPLE			**Sample #111081008**							
o-Terphenyl	84-15-1				86.2	70 - 130				01/14/11
BLANK			**QC Sample #46301**							
o-Terphenyl	84-15-1				88.1	70 - 130				01/14/11
LCS			**QC Sample #46302**							
o-Terphenyl	84-15-1				96	70 - 130				01/14/11
MS			**QC Sample #46314**							
			Original 111077010							
o-Terphenyl	84-15-1				91	70 - 130				01/14/11
MSD			**QC Sample #46315**							
			Original 111077010						**Paired 46314**	
o-Terphenyl	84-15-1				85.4	70 - 130	6.30	20		01/14/11

Quality Control Report

Attention Michael Neely
Department Organic, Semivolatiles

Group # WSCF111081

QC Batch 174095
Associated Samples 111081009

Test PCBs by EPA SW-846 Method 8082

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #111081009**							
Tetrachloro-m-xylene	877-09-8				79.9	60 - 140				01/17/11
Decachlorobiphenyl	2051-24-3				88.7	60 - 140				01/17/11
BLANK			**QC Sample #46349**							
Tetrachloro-m-xylene	877-09-8				66.2	60 - 140				01/17/11
Decachlorobiphenyl	2051-24-3				82	60 - 140				01/17/11
LCS			**QC Sample #46350**							
Tetrachloro-m-xylene	877-09-8				73.5	60 - 140				01/17/11
Decachlorobiphenyl	2051-24-3				90.5	60 - 140				01/17/11
MS			**QC Sample #46351**							
			Original 111059011							
Tetrachloro-m-xylene	877-09-8				77.5	60 - 140				01/17/11
Decachlorobiphenyl	2051-24-3				86.2	60 - 140				01/17/11
MSD			**QC Sample #46352**							
			Original 111059011					**Paired**	**46351**	
Tetrachloro-m-xylene	877-09-8				81.7	60 - 140	5.30			01/17/11
Decachlorobiphenyl	2051-24-3				92.5	60 - 140	7.10			01/17/11

Quality Control Report

Attention Michael Neely
Department Organic, Volatiles

Group # WSCF111081

QC Batch 174100
Associated Samples 111081007, 111081008, 111081009

Test Gasoline Range (W)

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #111081007**							
4-Bromofluorobenzene	460-00-4				118.4	50 - 150				01/13/11
SAMPLE			**Sample #111081008**							
4-Bromofluorobenzene	460-00-4				113.6	50 - 150				01/13/11
SAMPLE			**Sample #111081009**							
4-Bromofluorobenzene	460-00-4				120	50 - 150				01/13/11
BLANK			**QC Sample #46358**							
4-Bromofluorobenzene	460-00-4				112	50 - 150				01/13/11
LCS			**QC Sample #46359**							
4-Bromofluorobenzene	460-00-4				119.2	50 - 150				01/13/11
MS			**QC Sample #46360**							
			Original 111081007							
4-Bromofluorobenzene	460-00-4				114.8	50 - 150				01/13/11

Quality Control Report

Attention Michael Neely
Department Organic, Volatiles

Group # WSCF111081

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
MSD			**QC Sample #46361**							
			Original 111081007					**Paired**	**46360**	
4-Bromofluorobenzene	460-00-4				117.6	50 - 150	2.40			01/13/11
DUP			**QC Sample #46362**							
			Original 111081007							
4-Bromofluorobenzene	460-00-4				117.6	50 - 150	0.00			01/13/11

Quality Control Report

Attention Michael Neely
Department Organic, Volatiles

Group # WSCF111081

QC Batch 174215
Associated Samples 111081007, 111081008, 111081009

Test SW-846 Method 8015 for GPP

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #111081007**							
2-Bromoethanol	540-51-2				89.8	70 - 130				01/19/11
SAMPLE			**Sample #111081008**							
2-Bromoethanol	540-51-2				81.2	70 - 130				01/20/11
SAMPLE			**Sample #111081009**							
2-Bromoethanol	540-51-2				98.9	70 - 130				01/20/11
BLANK			**QC Sample #46477**							
2-Bromoethanol	540-51-2				94.3	70 - 130				01/19/11
LCS			**QC Sample #46478**							
2-Bromoethanol	540-51-2				89.8	70 - 130				01/19/11
MS			**QC Sample #46479**							
			Original 111077008							
2-Bromoethanol	540-51-2				101.1	70 - 130				01/19/11
MSD			**QC Sample #46480**							
			Original 111077008					**Paired**	**46479**	
2-Bromoethanol	540-51-2				86.9	70 - 130	15.10			01/19/11

Quality Control Report

Attention Michael Neely
Department Organic, Volatiles

Group # WSCF111081

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
DUP			**QC Sample #46481**							
			Original 111077008							
2-Bromoethanol	540-51-2				96.6	70 - 130	2.90			01/19/11

Attention: Michael Neely

Group # WSCF111081

111081004 **B29H57**

Department Inorganic

Analyte Phosphorus - ICP-6010 - All possible metals
[1] Sample analyzed outside holding time.

Analyte Silicon - ICP-6010 - All possible metals
[1] Sample analyzed outside holding time.

111081005 **B29HC1**

Department Inorganic

Analyte Phosphorus - ICP-6010 - All possible metals
[1] Sample analyzed outside holding time.

Analyte Silicon - ICP-6010 - All possible metals
[1] Sample analyzed outside holding time.

111081006 **B29H81**

Department Inorganic

Analyte Phosphorus - ICP-6010 - All possible metals
[1] Sample analyzed outside holding time.

Analyte Silicon - ICP-6010 - All possible metals
[1] Sample analyzed outside holding time.

111081007 **B29H58**

Department Inorganic

Analyte Phosphorus - ICP-6010 - All possible metals
[1] Sample analyzed outside holding time.

Analyte Silicon - ICP-6010 - All possible metals
[1] Sample analyzed outside holding time.

111081008 **B29HC2**

Department Inorganic

Analyte Phosphorus - ICP-6010 - All possible metals
[1] Sample analyzed outside holding time.

Analyte Silicon - ICP-6010 - All possible metals
[1] Sample analyzed outside holding time.

111081009 **B29H82**

Department Inorganic

Analytical Comment Report

Attention: Michael Neely

Group # WSCF111081

Analyte Phosphorus - ICP-6010 - All possible metals
[1] Sample analyzed outside holding time.

Analyte Silicon - ICP-6010 - All possible metals
[1] Sample analyzed outside holding time.

Quality Control Comments

Department Inorganic

47880 B29H96(111069008MS)

Analyte Calcium - ICP-6010 - All possible metals
[1] X5: Sample concentration exceed spiking level by a factor of 4. Spike recoveries are not valid.

Analyte Magnesium - ICP-6010 - All possible metals
[1] X5: Sample concentration exceed spiking level by a factor of 4. Spike recoveries are not valid.

Analyte Potassium - ICP-6010 - All possible metals
[1] X5: Sample concentration exceed spiking level by a factor of 4. Spike recoveries are not valid.

Analyte Silicon - ICP-6010 - All possible metals
[1] X5: Sample concentration exceed spiking level by a factor of 4. Spike recoveries are not valid.

Analyte Sodium - ICP-6010 - All possible metals
[1] X5: Sample concentration exceed spiking level by a factor of 4. Spike recoveries are not valid.

47881 B29H96(111069008MSD)

Analyte Calcium - ICP-6010 - All possible metals
[1] X5: Sample concentration exceed spiking level by a factor of 4. Spike recoveries are not valid.

Analyte Magnesium - ICP-6010 - All possible metals
[1] X5: Sample concentration exceed spiking level by a factor of 4. Spike recoveries are not valid.

Analyte Potassium - ICP-6010 - All possible metals
[1] X5: Sample concentration exceed spiking level by a factor of 4. Spike recoveries are not valid.

Analyte Silicon - ICP-6010 - All possible metals
[1] X5: Sample concentration exceed spiking level by a factor of 4. Spike recoveries are not valid.

Analyte Sodium - ICP-6010 - All possible metals
[1] X5: Sample concentration exceed spiking level by a factor of 4. Spike recoveries are not valid.

47884 B29HC1(111081005MS)

Analyte Calcium - ICP-6010 - All possible metals

Attention: Michael Neely

Group # WSCF111081

Quality Control Comments

[1] X5: Sample concentration exceed spiking level by a factor of 4. Spike recoveries are not valid.

Analyte Magnesium - ICP-6010 - All possible metals
[1] X5: Sample concentration exceed spiking level by a factor of 4. Spike recoveries are not valid.

Analyte Silicon - ICP-6010 - All possible metals
[1] X5: Sample concentration exceed spiking level by a factor of 4. Spike recoveries are not valid.

Analyte Sodium - ICP-6010 - All possible metals
[1] X5: Sample concentration exceed spiking level by a factor of 4. Spike recoveries are not valid.

47885 B29HC1(111081005MSD)

Analyte Calcium - ICP-6010 - All possible metals
[1] X5: Sample concentration exceed spiking level by a factor of 4. Spike recoveries are not valid.

Analyte Magnesium - ICP-6010 - All possible metals
[1] X5: Sample concentration exceed spiking level by a factor of 4. Spike recoveries are not valid.

Analyte Silicon - ICP-6010 - All possible metals
[1] X5: Sample concentration exceed spiking level by a factor of 4. Spike recoveries are not valid.

Analyte Sodium - ICP-6010 - All possible metals
[1] X5: Sample concentration exceed spiking level by a factor of 4. Spike recoveries are not valid.

Analytical Comment Report

Attention: Michael Neely

Group # WSCF111081

Quality Control Comments

Department Radiochemistry

46258 BLANK for HBN 173920 [RADP/455

Analyte Uranium-238 - Uranium (AEA)

[1] The blank is less than 2X the MDC and is acceptable.

ATTACHMENT4

SAMPLE RECEIPT

Consisting of 12 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 650 S3-30
Richland, WA 99352

ATTN: Michael Neely

Customer Code: CHPRC
PO #: 402057
Work Order #: 111081
Profile #: X11-016-209
Proj. Mgr.:
Phone:

The following samples were received from you on 1/9/2011 1:50:00 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		
111081001	B29N09	WATER	1/9/2011 12:55	1/9/2011 13:50
		IC-W		
111081002	B29N14	WATER	1/9/2011 08:54	1/9/2011 13:50
		IC-W		
111081003	B29N21	WATER	1/9/2011 10:43	1/9/2011 13:50
		IC-W		
111081004	B29H57	WATER	1/9/2011 12:55	1/9/2011 13:50
		2008-W; 6010-W		
111081005	B29HC1	WATER	1/9/2011 10:43	1/9/2011 13:50
		2008-W; 6010-W		
111081006	B29H81	WATER	1/9/2011 08:54	1/9/2011 13:50
		2008-W; 6010-W		
111081007	B29H58	WATER	1/9/2011 12:55	1/9/2011 13:50
		2008-W; 6010-W; 8015-W; AEA-PU-W; AEA-U-W; ALK-W; CN-W; GAB-AO-W; GAB-BO-W; H3-COL-W; SR89/90-W; TC99-W; TPHDWA-W; TPHGWA-W		
111081008	B29HC2	WATER	1/9/2011 10:43	1/9/2011 13:50
		2008-W; 6010-W; 8015-W; AEA-PU-W; AEA-U-W; ALK-W; CN-W; GAB-AO-W; GAB-BO-W; H3-COL-W; SR89/90-W; TC99-W; TPHDWA-W; TPHGWA-W		
111081009	B29H82	WATER	1/9/2011 08:54	1/9/2011 13:50
		2008-W; 6010-W; 8015-W; AEA-PU-W; AEA-U-W; ALK-W; CN-W; GAB-AO-W; GAB-BO-W; H3-COL-W; PCB-W; SR89/90-W; TC99-W; TPHDWA-W; TPHGWA-W		

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

Test Acronym Description

Test Acronym	Description
2008-W	ICP-MS (W)
6010-W	ICP-AES (W)
8015-W	8015 (W)
AEA-PU-W	Plutonium (AEA) (W)
AEA-U-W	Uranium Isotopic (AEA) (W)
ALK-W	Total Alkalinity (W)
CN-W	Cyanide (Spectroscopy) (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)
PCB-W	PCB (8082) (W)
SR89/90-W	Strontium 89/90 (GPC) (W)
TC99-W	Technetium-99 (W)
TPHDWA-W	TPHD-WA (W)
TPHGWA-W	TPHG-WA (Water)

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X11-016-209 Page 1 of 1

Collector: SE Hamaker CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: X11-016	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300104ES20
Project Title: NDLSA DECEMBER 2010	Logbook No: HNF-N-506 32 193	Ice Chest No.: N/A
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 30 Days PRIORITY	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR/IATA Dangerous Goods Regulations but are not releasable per DOE order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS Hold Time — Total Activity Exemption: Yes ☑ No ☐
100 Area Generator Knowledge Information Form applies
The CACN for all analytical work at WSCF is 402057
Please report all TICs

111081

Sample No	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B29N09	N	W	01/04/11	1255	1x500-mL P	300.0_ANIONS_IC: List-1 + Brom_Phosp (7)	48 Hours	Cool~4C

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
SE Hamaker CHPRC	[illegible]	[illegible]	1350 JAN 0 4 2011	[illegible]	[illegible]	[illegible]	1350 JAN 0 4 2011
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		

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

A-6004-842 (REV 2)

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X11-016-204 Page 1 of 1

Collector: SE Hamaker CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-1650
SAF No.: X11-016	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300101ES20
Project Title: NDUBA DECEMBER 2010	Logbook No: HNF-N-506 32183	Ice Chest No.: N/A
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 30 Days PRIORITY	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR/IATA Dangerous Goods Regulations but are not releasable per DOE order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS Hold Time — Total Activity Exemption: Yes ☑ No ☐
100 Area Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 402257.
Please report all TICs

Sample No	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B29N14 002	N	W	01/03/11	0854	1x500-mL P	300.0_ANIONS_IC: List-1 + Brom_Phosp (7)	48 Hours	Cool=4C

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
SE Hamaker CHPRC	[signature]	JAN 09 2011 1350	Victor Bingham	[signature]	JAN 09 2011 1350
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; SS = Sediment; SO = Solid; SL = Sludge; W = Water; O = Oil; A = Air; DS = Drum Solid; DL = Drum Liquid; T = Tissue; WI = Wipe; L = Liquid; V = Vegetation; X = Other

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

A-6004-842 (REV 7)

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X11-016-197 Page 1 of 1

Collector: SE Hamaker CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-1650
SAF No.: X11-016	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300104E920
Project Title: SIUURA DECEMBER 2010	Logbook No: HNF-N-506 32 193	Ice Chest No.: N/A
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 30 Days PRIORITY	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR/IATA Dangerous Goods Regulations but are not releasable per DOE order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS Hold Time
100 Area Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 402057
Please report all TICs.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B29N21 063	N	W	01/09/11	1043	1x500-mL P	300.0_ANIONS_IC: List-1 + Brom_Phosp (7)	48 Hours	Cool~4C

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
SE Hamaker CHPRC			1350 JAN 09 2011				1350 JAN 09 2011
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	

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

A-6004-342 (REV 2)

CHPRC

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X11-016-34

Page 1 of 2

Collector: SE Hamaker, CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-1650
SAF No.: S11-016	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300104US20
Project Title: NDURA DECEMBER 2010	Logbook No.: HNF-N-506 3193	Ice Chest No.: N/A
Shipped To/Lab: Waste Sampling & Characterization	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 30 Days PRIORITY	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR/IATA Dangerous Goods Regulations but are not releasable per DOE order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS Hold Time
10% Area Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 40265?.
Please report all TICs.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B29H57 007	Y	W	01/09/11	1255	1x500-mL G	200.8_HG - ICPMS	28 Days	HNO3 to pH <2
B29H57	Y	W			1x500-mL G/P	200.8_METALS_ICPMS: DURA LIST (10)	6 Months	HNO3 to pH <2
B29H57	Y	W			1x500-mL G/P	6010_METALS_ICP: DURA LIST (29)	6 Months	HNO3 to pH <2
B29H58 007	N	W			3x40-mL Gs*	Alcohols, Glycols, & Ketones - 8015	14/40 Days	Cool~6C
B29H58	N	W			1x500-mL G	200.8_HG - ICPMS	28 Days	HNO3 to pH <2
B29H58	N	W			1x500-mL G/P	200.8_METALS_ICPMS: Uranium (1)	6 Months	HNO3 to pH <2
B29H58	N	W			1x500-mL G/P	200.8_METALS_ICPMS: DURA LIST (10)	6 Months	HNO3 to pH <2
B29H58	N	W			1x500-mL G/P	6010_METALS_ICP: DURA LIST (29)	6 Months	HNO3 to pH <2
B29H58	N	W			1x250-mL G/P	2320_ALKALINITY: Alkalinity (1)	14 Days	Cool~4C
B29H58	N	W			1x250-mL P	4500E_CN: Cyanide (1)	14 Days	NaOH to pH >=12
B29H58	N	W			1x500-mL G/P	ALPHABETA_GPC: Alpha discrete + Beta (2) ALPHABETA_GPC: Alpha discrete + Beta (2)	6 Months	HNO3 to pH <2
B29H58	N	W			1x1-L P	PUISO_IE_PRECIP_AEA: Pu-238 + 239/240 (2)	180 Days	HNO3 to pH <2
B29H58	N	W			1x1-L G/P	Strontium-89,90 – Total Sr	6 Months	HNO3 to pH <2
B29H58	N	W			1x1-L G/P	TC99_3MDSK_LSC: Tc-99 (1)	6 Months	HCl to pH <2
B29H58	N	W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	6 Months	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
SE Hamaker, CHPRC			1350 JAN 09 2011				1350 JAN 09 2011
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		

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

A-6004-842 (REV 2)

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C.# X11-016-34
		Page 2 of 2

SAF No.	Contact/Requestor	Telephone No.	MSIN	FAX
X11-016	Karen Waters-Husted	376-1630		

Sample No.	Lab ID	*	Date	Time	No/Type Containers	Sample Analysis	Preservative	
B29H58	N	W	01/09/11	1255	1x1-L G/P	UISO_IE_PRECIP_AEA: List-1 (3)	6 Months	HNO3 to pH <2
B29H58	N	W	↓	↓	3x1-L aG	TPH-Diesel Range - WTPH-D	14/40 Days	HCl to pH <2 Cool~4C
B29H58	N	W	↓	↓	4x40-mL aGs*	TPH-Gasoline Range - WTPH-G	14 Days	HCl to pH <2 Cool~4C

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
SE Hunsaker CHPRC			JAN 09 2011 1330	Victor			JAN 09 2011 1330
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		
SD = Solid	T = Tissue		
SL = Sludge	WI = Wipe		
W = Water	L = Liquid		
O = Oil	V = Vegetation		
A = Air	X = Other		

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

A-6004-842 (REV 2)

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X11-016-114 Page 1 of 2

Collector SE Hamaker CHPRC	Contact/Requester Karen Waters-Hunter	Telephone No. 376-3650
SAF No. X11-016	Sampling Origin Hanford Site	Purchase Order/Charge Code 300104US20
Project Title NDURA DECEMBER 2010	Logbook No: HNF-N-506 52193	Ice Chest No. N/A
Shipped To (Lab) Waste Sampling & Characterization	Method of Shipment Government Vehicle	Bill of Lading/Air Bill No. N/A
Protocol CERCLA	Priority: 30 Days PRIORITY	Offsite Property No. N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR/IATA Dangerous Goods Regulations but are not releasable per DOE order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS Hold Time
100 Area Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 402057
Please report all TICs

Total Activity Exemption: Yes ☑ No ☐

Sample No	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B29HC1 CC5	Y	W	01/09/11	1043	1x500-mL G	200.8_HG - ICPMS	28 Days	HNO3 to pH <2
B29HC1	Y	W			1x500-mL G/P	200.8_METALS_ICPMS: DURA LIST (10)	6 Months	HNO3 to pH <2
B29HC1	Y	W			1x500-mL G/P	6010_METALS_ICP: DURA LIST (29)	6 Months	HNO3 to pH <2
B29HC2 DC4	N	W			3x40-mL Gs*	Alcohols, Glycols, & Ketones - 8015	14/40 Days	Cool~6C
B29HC2	N	W			1x500-mL G	200.8_HG - ICPMS	28 Days	HNO3 to pH <2
B29HC2	N	W			1x500-mL G/P	200.8_METALS_ICPMS: Uranium (1)	6 Months	HNO3 to pH <2
B29HC2	N	W			1x500-mL G/P	200.8_METALS_ICPMS: DURA LIST (10)	6 Months	HNO3 to pH <2
B29HC2	N	W			1x500-mL G/P	6010_METALS_ICP: DURA LIST (29)	6 Months	HNO3 to pH <2
B29HC2	N	W			1x250-mL G/P	2320_ALKALINITY: Alkalinity (1)	14 Days	Cool~4C
B29HC2	N	W			1x250-mL P	4500E_CN: Cyanide (1)	14 Days	NaOH to pH >=12
B29HC2	N	W			1x500-mL G/P	ALPHABETA_GPC: Alpha discrete + Beta (2) ALPHABETA_GPC: Alpha discrete + Beta (2)	6 Months	HNO3 to pH <2
B29HC2	N	W			1x1-L P	PUISO_IE_PRECIP_AEA: Pu-238 + 239/240 (2)	180 Days	HNO3 to pH <2
B29HC2	N	W			1x1-L G/P	Strontium-89 90 -- Total Sr	6 Months	HNO3 to pH <2
B29HC2	N	W			1x1-L G/P	TC99_3MDSK_LSC: Tc-99 (1)	6 Months	HCl to pH <2
B29HC2	N	W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	6 Months	None

Relinquished By	Date/Time	Received By	Date/Time
SE Hamaker CHPRC (Print) Dwt Hamaker (Sign)	JAN 09 2011 1350	Victor Bingham (Print) (Sign)	JAN 09 2011 1350

Matrix *

S = Soil	DS = Drum Solid		
SE = Sediment	DL = Drum Liquid		
SO = Solid	T = Tissue		
SL = Sludge	WT = Waste		
W = Water	L = Liquid		
O = Oil	V = Vegetation		
A = Air	X = Other		

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

A-6004-842 (REV 2)

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X11-016-114 Page 2 of 2

SAF No.	Contact/Requestor	Telephone No.	MSIN	FAX
X11-016	Karen Waters-Husted	376-1656		

Sample No	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative	
B29HC2	N	W	01/07/11	1043	1x1-L G/P	UISO_IE_PRECIP_AEA: List-1 (3)	6 Months	HNO3 to pH <2
B29HC2	N	W	↓	↓	3x1-L aG	TPH-Diesel Range - WTPH-D	14/40 Days	HCl to pH <2 Cool~4C
B29HC2	N	W	↓	↓	4x40-mL aGs*	TPH-Gasoline Range - WTPH-G	14 Days	HCl to pH <2 Cool~4C

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
SE Hamaker CHPRC			1350 JAN 09 2011				1350 JAN 09 2011
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		

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

A-6004-842 (REV 2)

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X11-016-66 Page 1 of 2

Collector: SE Hamaker, CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4630
SAF No.: X11-016	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300104FS20
Project Title: SDURA DECEMBER 2010	Logbook No: HNF-N-506 32 195	Ice Chest No.: N/A
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 30 Days **PRIORITY**	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR/IATA Dangerous Goods Regulations but are not releasable per DOE order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS Hold Time
100 Area Generator Knowledge Information Form applies
The CACN for all analytical work at WSCF is 402057
Please report all TICs

Total Activity Exemption: Yes ☑ No ☐

Sample No	Filter *	Matrix *	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B29H81 004	Y	W	01/09/11	0854	1x500-mL G	200.8_HG - ICPMS	28 Days	HNO3 to pH <2
B29H81	Y	W			1x500-mL G/P	200.8_METALS_ICPMS: DURA LIST (10)	6 Months	HNO3 to pH <2
B29H81	Y	W			1x500-mL G/P	6010_METALS_ICP: DURA LIST (29)	6 Months	HNO3 to pH <2
B29H82 005	N	W			3x40-mL Gs*	Alcohols, Glycols, & Ketones - 8015	14/40 Days	Cool~6C
B29H82	N	W			1x500-mL G	200.8_HG - ICPMS	28 Days	HNO3 to pH <2
B29H82	N	W			1x500-mL G/P	200.8_METALS_ICPMS: Uranium (1)	6 Months	HNO3 to pH <2
B29H82	N	W			1x500-mL G/P	200.8_METALS_ICPMS: DURA LIST (10)	6 Months	HNO3 to pH <2
B29H82	N	W			1x500-mL G/P	6010_METALS_ICP: DURA LIST (29)	6 Months	HNO3 to pH <2
B29H82	N	W			1x250-mL G/P	2320_ALKALINITY: Alkalinity (1)	14 Days	Cool~4C
B29H82	N	W			1x250-mL P	4500E_CN: Cyanide (1)	14 Days	NaOH to pH >=12
B29H82	N	W			1x500-mL G/P	ALPHABETA_GPC: Alpha discrete + Beta (2). ALPHABETA_GPC: Alpha discrete + Beta (2)	6 Months	HNO3 to pH <2
B29H82	N	W			1x1-L P	PUISO_IE_PRECIP_AEA: Pu-238 + 239/240 (2)	180 Days	HNO3 to pH <2
B29H82	N	W			1x1-L G/P	Strontium-89,90 – Total Sr	6 Months	HNO3 to pH <2
B29H82	N	W			1x1-L G/P	TC99_3MDSK_LSC: Tc-99 (1)	6 Months	HCl to pH <2
B29H82	N	W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	6 Months	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
SE Hamaker, CHPRC		Brett Hamaker	JAN 09 2011 1350	Victor Bing			JAN 09 2011 1350

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		

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

A-6004-842 (REV 2)

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C.# X11-016-66
		Page 2 of 2

SAF No.	Contact/Requestor	Telephone No.	MSIN	FAX
X11-016	Karen Waters-Husted	376-4650		

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative	
B29H82	N	W	01/07/11	0854	1x1-L G/P	UISO_IE_PRECIP_AEA: List-1 (3)	6 Months	HNO3 to pH <2
B29H82	N	W			3x1-L aG	TPH-Diesel Range - WTPH-D	14/40 Days	HCl to pH <2 Cool~4C
B29H82	N	W			4x40-mL aGs*	TPH-Gasoline Range - WTPH-G	14 Days	HCl to pH <2 Cool~4C
B29H82	N	W	↓	↓	4x1-L aG	PCBs - 8082	1 yr/1 yr	Cool~4C

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
SE Hamaker CHPRC			1350 JAN 09 2011	Victor			1350 JAN 09 2011
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 *

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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		

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

A-6004-842 (REV 2)