RECEIVED JULY 29, 2008

0080054

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FLUOR

Memorandum

M4W41-SLF-08-751

To: H. Hampt E6-35 Date: July 28, 2008

From: S. L. Fitzgerald, Manager
WSCF Analytical Lab

cc: w/Attachments

T. F. Dale	S3-30	J. E. Trechter	S3-30
A. J. Kopriva	S3-30	S. J. Trent	E6-35
H. K. Meznarich	S3-30	File/LB	
P. D. Mix	S3-30		

Subject: FINAL RESULTS FOR SAMPLE DELIVERY GROUP WSCF20081294 – SAF NUMBER F06-027

Reference:
(1) Groundwater Protection Program-Letter of Instruction, FH-EIS-2003-MEM-001, October 31, 2002

(2) HNF-SD-CD-QAPP-017, Rev. 9, Waste Sampling & Characterization Facility Quality Assurance Plan

This letter contains the following attachments for sample delivery group WSCF20081294:

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

SLF/grf

Attachments 4

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M4W41-SLF-08-751

ATTACHMENT 1

COVER SHEET

Consisting of 2 pages
Including cover page

WSCF SAF NUMBER CROSS REFERENCE

Group#: WSCF20081294
Data Deliverable Date: 15-jul-2008
Data Deliverable: Cover Sheet

SAF#	Sample ID	WSCF#	Matrix
F06-027	B1VVT7	W08GR01869	WATER
	B1VVT8	W08GR01870	WATER
	B1VVT9	W08GR01871	WATER
	B1VVV0	W08GR01872	WATER
	B1VVV1	W08GR01873	WATER
	B1VVV2	W08GR01874	WATER
	B1VVV3	W08GR01875	WATER
	B1VVV4	W08GR01876	WATER
	B1VVV5	W08GR01877	WATER
	B1VVV6	W08GR01878	WATER
	B1VVV7	W08GR01879	WATER
	B1VVV8	W08GR01880	WATER

M4W41-SLF-08-751

ATTACHMENT 2

NARRATIVE

Consisting of 4 pages
Including cover page

Introduction

Twelve (12) S&GRP samples were received at the WSCF Laboratory on June 27, 2008. The samples were analyzed for the analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Groundwater Remediation Program – Letter of Instruction*, referenced in the cover letter.

The narrative (Attachment 2) will address sample characteristics, analyses requested and general information in performance of the analytical methods. A Data Summary Report (Attachment 3) includes analytical results, a comment report detailing method abnormalities, tentatively identified peaks if applicable, method references, and Laboratory QC information as applicable. Copies of the chain of custody and sample receipt documentation are included as Attachment 4.

It should be noted that the attached chain of custody was stamped "ICED" by the WSCF Laboratory Sample Custodian during sample receiving, indicating the presence of ice in the sample container.

Analytical Methodology for Requested Analyses

Refer to *WSCF Method References Report,* pages 13 through 14, for a complete listing of approved analytical methods.

Inorganic Comments

Anions – The regulatory hold time requirement WAS met. Duplicate, Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with each batch in this delivery group per GRP Letter of Instruction. See pages 39 through 45 for QC details.
Analytical Note(s):

- Duplicates, Matrix Spikes and Matrix Spike Duplicates were analyzed on samples B1VVT7, B1VVV0, B1VVV7, and B1VVV8 of this SDG.
- Sample results were D flagged if dilution(s) were required.
- Sample results that were less than the reportable limit, however greater than the method detection limit were B flagged.
- Batch QC (B1VVV7) – Unknown peak interference was observed in sample B1VVV6 affecting the sulfate result. The sulfate result for this sample was "E" flagged.

All other QC controls are within the established limits.

ICP-AES Metals – The hold time requirement for this analysis was met. A Matrix Spike, Matrix Spike Duplicate, Blank, and Laboratory Control Sample were analyzed with each batch in this delivery group per the GRP Letter of Instruction. See pages 46 through 53 for details. Analytical Note(s):

- Duplicates, Matrix Spikes and Matrix Spike Duplicates were analyzed on samples B1VVT0 (SDG# 20081218, SAF# F06-027), and B1VVV2 of this SDG.
- Sample results were D flagged if dilution(s) were required.

- <u>Batch QC - B1VVT0</u>
  - Calcium and Sodium sample results exceeded the spiking levels by a factor of four in the MS/MSD. Spike recoveries are not valid. Check standard was analyzed to ensure sodium linearity because sample results were greater than the calibration standard.
  - Magnesium – Matrix Spike Duplicate recovery was below established laboratory limits. Affected sample results were N flagged.

- <u>Batch QC - B1VVV2</u>
  - Sodium sample results exceeded the spiking levels by a factor of four in the MS/MSD. Spike recoveries are not valid. Check standard was analyzed to ensure sodium and calcium linearity because sample results were greater than the calibration standard.
  - Calcium – Matrix Spike recovery exceeded established laboratory limits. Affected sample results were N flagged.
  - Silver – Preparation Blank result exceeded established laboratory limits. Affected sample results were C flagged

All other QC controls are within the established limits.

Rad Chem – There are no hold times associated with WSCF's radiochemical methods. Duplicate, Blank, and Laboratory Control Sample were analyzed with this delivery group. See page 68 for QC details. Analytical Note(s):

- Duplicates, Matrix Spikes and Matrix Spike Duplicates were analyzed on samples B1VVW2 (SDG# 20081295, SAF# F06-027), and B1VVT7 of this SDG.
- Gross Beta (B1VVW2) – Duplicate Relative Percent Difference (RPD) slightly exceeded established laboratory limits. No flags issued.

All other QC controls are within the established limits.

I certify that this data package is in compliance with the LOI, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Analytical Manager and Client Services as verified by the following signatures.

Scot L. Fitzgerald
WSCF Analytical Laboratory Manager

Andrew Kopriva
WSCF Client Services

M4W41-SLF-08-751

ATTACHMENT 3

ANALYTICAL RESULTS

Consisting of 63 pages
Including cover page

WSCF
ANALYTICAL RESULTS REPORT

for

Groundwater Remediation Program

Richland, WA 99354

Attention: Steve Trent

Analytical: S. Fitzgerald 7/28/08

Client Services: A. Kopriva 7/28/08

All results are reported on an "as received" basis unless otherwise noted in the comment section.

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Contract#: FH-EIS-2003-MEM-001
Report#: WSCF20081294
Report Date: 28-jul-2008
Report WGPP/ver. 5.2
Groundwater Remediation Program

w13qlog v4.2 28-jul-2008 11:52:34

Department: Inorganic

W13q Worklist/Batch/QC Report for Group# WSCF20081294

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
36875	2	37295	41639	BLANK		Anions by Ion Chromatography
36875	16	37295	41639	BLANK		Anions by Ion Chromatography
36875	3	37295	41639	LCS		Anions by Ion Chromatography
36875	4	37295	41639	SAMPLE	W08GR01870	Anions by Ion Chromatography
36875	6	37295	41639	DUP	W08GR01872	Anions by Ion Chromatography
36875	7	37295	41639	MS	W08GR01872	Anions by Ion Chromatography
36875	8	37295	41639	MSD	W08GR01872	Anions by Ion Chromatography
36875	5	37295	41639	SAMPLE	W08GR01872	Anions by Ion Chromatography
36875	8	37295	41639	SPK-RPD	W08GR01872	Anions by Ion Chromatography
36875	9	37295	41639	SAMPLE	W08GR01873	Anions by Ion Chromatography
36875	10	37295	41639	SAMPLE	W08GR01874	Anions by Ion Chromatography
36881	2	37300	41643	BLANK		Anions by Ion Chromatography
36881	9	37300	41643	BLANK		Anions by Ion Chromatography
36881	3	37300	41643	LCS		Anions by Ion Chromatography
36881	5	37300	41643	DUP	W08GR01880	Anions by Ion Chromatography
36881	6	37300	41643	MS	W08GR01880	Anions by Ion Chromatography
36881	7	37300	41643	MSD	W08GR01880	Anions by Ion Chromatography
36881	4	37300	41643	SAMPLE	W08GR01880	Anions by Ion Chromatography
36881	7	37300	41643	SPK-RPD	W08GR01880	Anions by Ion Chromatography
36882	2	37299	41645	BLANK		Anions by Ion Chromatography
36882	13	37299	41645	BLANK		Anions by Ion Chromatography
36882	3	37299	41645	LCS		Anions by Ion Chromatography
36882	12	37299	41645	SAMPLE	W08GR01878	Anions by Ion Chromatography
36882	5	37299	41645	DUP	W08GR01879	Anions by Ion Chromatography
36882	6	37299	41645	MS	W08GR01879	Anions by Ion Chromatography
36882	7	37299	41645	MSD	W08GR01879	Anions by Ion Chromatography
36882	4	37299	41645	SAMPLE	W08GR01879	Anions by Ion Chromatography
36882	7	37299	41645	SPK-RPD	W08GR01879	Anions by Ion Chromatography
36879	2	37297	41651	BLANK		Anions by Ion Chromatography
36879	15	37297	41651	BLANK		Anions by Ion Chromatography
36879	3	37297	41651	LCS		Anions by Ion Chromatography
36879	5	37297	41651	DUP	W08GR01869	Anions by Ion Chromatography
36879	6	37297	41651	MS	W08GR01869	Anions by Ion Chromatography
36879	7	37297	41651	MSD	W08GR01869	Anions by Ion Chromatography
36879	4	37297	41651	SAMPLE	W08GR01869	Anions by Ion Chromatography
36879	7	37297	41651	SPK-RPD	W08GR01869	Anions by Ion Chromatography
36879	8	37297	41651	SAMPLE	W08GR01871	Anions by Ion Chromatography
36879	9	37297	41651	SAMPLE	W08GR01875	Anions by Ion Chromatography
36879	10	37297	41651	SAMPLE	W08GR01876	Anions by Ion Chromatography
36879	11	37297	41651	SAMPLE	W08GR01877	Anions by Ion Chromatography
37209	1	37637	42003	BLANK		ICP Metals Analysis, Grd H20 P
37209	2	37637	42003	LCS		ICP Metals Analysis, Grd H20 P
37209	4	37637	42003	MS	W08GR01829	ICP Metals Analysis, Grd H20 P
37209	5	37637	42003	MSD	W08GR01829	ICP Metals Analysis, Grd H20 P
37209	5	37637	42003	SPK-RPD	W08GR01829	ICP Metals Analysis, Grd H20 P
37209	20	37637	42003	SAMPLE	W08GR01869	ICP Metals Analysis, Grd H20 P
37209	21	37637	42003	SAMPLE	W08GR01870	ICP Metals Analysis, Grd H20 P
37209	22	37637	42003	SAMPLE	W08GR01871	ICP Metals Analysis, Grd H20 P

37209	23	37637	42003	SAMPLE	W08GR01872	ICP Metals Analysis, Grd H20 P
37209	24	37637	42003	SAMPLE	W08GR01873	ICP Metals Analysis, Grd H20 P
37211	1	37638	42005	BLANK		ICP Metals Analysis, Grd H20 P
37211	2	37638	42005	LCS		ICP Metals Analysis, Grd H20 P
37211	4	37638	42005	MS	W08GR01874	ICP Metals Analysis, Grd H20 P
37211	5	37638	42005	MSD	W08GR01874	ICP Metals Analysis, Grd H20 P
37211	3	37638	42005	SAMPLE	W08GR01874	ICP Metals Analysis, Grd H20 P
37211	5	37638	42005	SPK-RPD	W08GR01874	ICP Metals Analysis, Grd H20 P
37211	6	37638	42005	SAMPLE	W08GR01875	ICP Metals Analysis, Grd H20 P
37211	7	37638	42005	SAMPLE	W08GR01876	ICP Metals Analysis, Grd H20 P
37211	8	37638	42005	SAMPLE	W08GR01877	ICP Metals Analysis, Grd H20 P
37211	9	37638	42005	SAMPLE	W08GR01878	ICP Metals Analysis, Grd H20 P
37211	10	37638	42005	SAMPLE	W08GR01879	ICP Metals Analysis, Grd H20 P
37211	11	37638	42005	SAMPLE	W08GR01880	ICP Metals Analysis, Grd H20 P

w13qlog v4.2 28-jul-2008 11:52:34

Department: Radiochemistry

W13q Worklist/Batch/QC Report for Group# WSCF20081294

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
36949	1	37372	41757	BLANK		Gross Alpha/Gross Beta (AB32)
36949	2	37372	41757	LCS		Gross Alpha/Gross Beta (AB32)
36949	3	37372	41757	DUP	W08GR01869	Gross Alpha/Gross Beta (AB32)
36949	4	37372	41757	SAMPLE	W08GR01869	Gross Alpha/Gross Beta (AB32)
36949	5	37372	41757	SAMPLE	W08GR01870	Gross Alpha/Gross Beta (AB32)
36949	6	37372	41757	SAMPLE	W08GR01871	Gross Alpha/Gross Beta (AB32)
36949	7	37372	41757	SAMPLE	W08GR01872	Gross Alpha/Gross Beta (AB32)
36949	8	37372	41757	SAMPLE	W08GR01873	Gross Alpha/Gross Beta (AB32)
36949	9	37372	41757	SAMPLE	W08GR01874	Gross Alpha/Gross Beta (AB32)
36949	10	37372	41757	SAMPLE	W08GR01875	Gross Alpha/Gross Beta (AB32)
36949	11	37372	41757	SAMPLE	W08GR01878	Gross Alpha/Gross Beta (AB32)
36949	12	37372	41757	SAMPLE	W08GR01879	Gross Alpha/Gross Beta (AB32)
36949	13	37372	41757	SAMPLE	W08GR01880	Gross Alpha/Gross Beta (AB32)
37030	1	37455	41808	BLANK		Gross Alpha/Gross Beta (AB32)
37030	2	37455	41808	LCS		Gross Alpha/Gross Beta (AB32)
37030	16	37455	41808	SAMPLE	W08GR01876	Gross Alpha/Gross Beta (AB32)
37030	17	37455	41808	SAMPLE	W08GR01877	Gross Alpha/Gross Beta (AB32)
37030	3	37455	41808	DUP	W08GR01887	Gross Alpha/Gross Beta (AB32)

WSCF
METHOD REFERENCES REPORT

Department: Inorganic

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 or industry 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 the 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	LA-505-411: ELEMENTAL ANALYSIS BY INDUCTIVELY COUPLED PLASMA ATOMIC EMISSION SPE	
	HEIS 6010_METALS_ICP	Inductively Coupled Plasma-Atomic Emmision Spectrometry
LA-533-410	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 referenced regulatory or industry methods is available online at http://www2.rl.gov/phmc/as-dol.

METHOD REFERENCES REPORT

Department: Radiochemistry

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 or industry 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 the WSCF procedure may reference an older version of the method. Also, a reference to a regulatory or industry method here does not necessarily indicate a verbatim implementation of that method.

LA-508-415 LA-508-415: OPERATION OF THE PROTEAN 2-INCH ALPHA/BETA COUNTING SYSTEM FOR GROSS

HEIS	**ALPHA_GPC**	GROSS ALPHA GPC
HEIS	**BETA_GPC**	GROSS BETA GPC
HEIS	**SRTOT_SEP_PRECIP_GPC**	Strontium 89/90

Note: A complete list of WSCF analytical procedures and referenced regulatory or industry methods is available online at http://www2.rl.gov/phmc/as-dol.

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01869
Client ID: B1VVT7 TRENT WSCF

Matrix: WATER

Group #: WSCF20081294
Department: Inorganic
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Anions by Ion Chromatography											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/27/08
Chloride	16887-00-6	LA-533-410	DU	< 1.10	mg/L			10.00	1.1		06/27/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/27/08
Nitrogen in Nitrate	NO3-N	LA-533-410	BD	0.470	mg/L			10.00	0.36		06/27/08
Phosphate (P) by IC	PO4-P	LA-533-410	D	4.21	mg/L			10.00	0.32		06/27/08
Sulfate	14808-79-8	LA-533-410	BD	6.01	mg/L			10.00	0.77		06/27/08
ICP Metals Analysis, Grd H20 P Prep											**07/22/08**
ICP Metals Analysis, Grd H20 P											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e+02		07/23/08
Iron	7439-89-6	LA-505-411	DU	< 125	ug/L			5.00	1.2e+02		07/23/08
Magnesium	7439-95-4	LA-505-411	DN	3.06e+03	ug/L			5.00	2.5e+02		07/23/08
Manganese	7439-96-5	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Potassium	7440-09-7	LA-505-411	D	1.20e+03	ug/L			5.00	8.5e+02		07/23/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/23/08
Sodium	7440-23-5	LA-505-411	D	1.48e+04	ug/L			5.00	2.6e+02		07/23/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e+02		07/23/08
Barium	7440-39-3	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/23/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/23/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/23/08
Zinc	7440-66-6	LA-505-411	DU	< 45.0	ug/L			5.00	45		07/23/08

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
DF = Dilution Factor

B - The analyte < the RDL but > = the IDL/MDL (inorg)
D - Analyte was identified at a secondary dilution factor(inorg)
N - Spike sample recovery is outside control limits.(inorg)
U - Analyzed for but not detected above limiting criteria.

D - Analyte was identified at a secondary dilution factor
E - Analyte is an estimate, has potentially larger errors(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
X - Other flags/notes described in the comments/narrative(inorg)

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01869
Client ID: B1VVT7 TRENT WSCF

Matrix: WATER

Group #: WSCF20081294
Department: Inorganic
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	D	1.74e+04	ug/L			5.00	3.6e+02		07/23/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e+02		07/23/08
Molybdenum	7439-98-7	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/23/08
Strontium	7440-24-6	LA-505-411	D	110	ug/L			5.00	20		07/23/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e+02		07/23/08

MDL=Minimum Detection Limit
RQ=Result Qualifier
TP Err=Total Propagated Error
DF=Dilution Factor

B - The analyte < the RDL but > = the IDL/MDL (inorg)
D - Analyte was identified at a secondary dilution factor(inorg)
N - Spike sample recovery is outside control limits.(inorg)
U - Analyzed for but not detected above limiting criteria.

D - Analyte was identified at a secondary dilution factor
E - Analyte is an estimate, has potentially larger errors(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
X - Other flags/notes described in the comments/narrative(inorg)

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01870
Client ID: B1VVT8 TRENT WSCF

Matrix: WATER

Group #: WSCF20081294
Department: Inorganic
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Anions by Ion Chromatography											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/27/08
Chloride	16887-00-6	LA-533-410	D	122	mg/L			10.00	1.1		06/27/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/27/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.360	mg/L			10.00	0.36		06/27/08
Phosphate (P) by IC	PO4-P	LA-533-410	D	346	mg/L			51.00	1.6		06/27/08
Sulfate	14808-79-8	LA-533-410	DU	< 0.770	mg/L			10.00	0.77		06/27/08
ICP Metals Analysis, Grd H20 P Prep											**07/22/08**
ICP Metals Analysis, Grd H20 P											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e+02		07/23/08
Iron	7439-89-6	LA-505-411	D	1.17e+03	ug/L			5.00	1.2e+02		07/23/08
Magnesium	7439-95-4	LA-505-411	DN	2.58e+03	ug/L			5.00	2.5e+02		07/23/08
Manganese	7439-96-5	LA-505-411	D	415	ug/L			5.00	20		07/23/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Potassium	7440-09-7	LA-505-411	D	5.08e+03	ug/L			5.00	8.5e+02		07/23/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/23/08
Sodium	7440-23-5	LA-505-411	D	9.33e+05	ug/L			5.00	2.6e+02		07/23/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e+02		07/23/08
Barium	7440-39-3	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/23/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/23/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/23/08
Zinc	7440-66-6	LA-505-411	DU	< 45.0	ug/L			5.00	45		07/23/08

MDL=Minimum Detection Limit
RQ=Result Qualifier
TP Err=Total Propagated Error
DF=Dilution Factor

B - The analyte < the RDL but > = the IDL/MDL (inorg)
D - Analyte was identified at a secondary dilution factor(inorg)
N - Spike sample recovery is outside control limits.(inorg)
U - Analyzed for but not detected above limiting criteria.

D - Analyte was identified at a secondary dilution factor
E - Analyte is an estimate, has potentially larger errors(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
X - Other flags/notes described in the comments/narrative(inorg)

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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01870
Client ID: B1VVT8 TRENT WSCF

Matrix: WATER

Group #: WSCF20081294
Department: Inorganic
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	D	1.28e+04	ug/L			5.00	3.6e+02		07/23/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e+02		07/23/08
Molybdenum	7439-98-7	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/23/08
Strontium	7440-24-6	LA-505-411	D	181	ug/L			5.00	20		07/23/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e+02		07/23/08

MDL=Minimum Detection Limit
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X - Other flags/notes described in the comments/narrative(inorg)

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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01871
Client ID: B1VVT9 TRENT WSCF

Matrix: WATER

Group #: WSCF20081294
Department: Inorganic
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Anions by Ion Chromatography											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/27/08
Chloride	16887-00-6	LA-533-410	D	7.35	mg/L			10.00	1.1		06/27/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/27/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.360	mg/L			10.00	0.36		06/27/08
Phosphate (P) by IC	PO4-P	LA-533-410	D	110	mg/L			10.00	0.32		06/27/08
Sulfate	14808-79-8	LA-533-410	BD	6.79	mg/L			10.00	0.77		06/27/08
ICP Metals Analysis, Grd H20 P Prep											**07/22/08**
ICP Metals Analysis, Grd H20 P											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e+02		07/23/08
Iron	7439-89-6	LA-505-411	D	509	ug/L			5.00	1.2e+02		07/23/08
Magnesium	7439-95-4	LA-505-411	DN	1.08e+03	ug/L			5.00	2.5e+02		07/23/08
Manganese	7439-96-5	LA-505-411	D	341	ug/L			5.00	20		07/23/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Potassium	7440-09-7	LA-505-411	D	1.75e+03	ug/L			5.00	8.5e+02		07/23/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/23/08
Sodium	7440-23-5	LA-505-411	D	2.22e+05	ug/L			5.00	2.6e+02		07/23/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e+02		07/23/08
Barium	7440-39-3	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/23/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/23/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/23/08
Zinc	7440-66-6	LA-505-411	DU	< 45.0	ug/L			5.00	45		07/23/08

MDL=Minimum Detection Limit
RQ=Result Qualifier
TP Err=Total Propagated Error
DF=Dilution Factor

B - The analyte < the RDL but > = the IDL/MDL (inorg)
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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01871
Client ID: B1VVT9 TRENT WSCF

Matrix: WATER

Group #: WSCF20081294
Department: Inorganic
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	D	6.13e+03	ug/L			5.00	3.6e+02		07/23/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e+02		07/23/08
Molybdenum	7439-98-7	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/23/08
Strontium	7440-24-6	LA-505-411	D	63.6	ug/L			5.00	20		07/23/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e+02		07/23/08

MDL=Minimum Detection Limit
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TP Err=Total Propagated Error
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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01872
Client ID: B1VVV0 TRENT WSCF
Matrix: WATER

Group #: WSCF20081294
Department: Inorganic
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Anions by Ion Chromatography											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/27/08
Chloride	16887-00-6	LA-533-410	D	6.16	mg/L			10.00	1.1		06/27/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/27/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.360	mg/L			10.00	0.36		06/27/08
Phosphate (P) by IC	PO4-P	LA-533-410	BD	2.70	mg/L			10.00	0.32		06/27/08
Sulfate	14808-79-8	LA-533-410	BD	8.31	mg/L			10.00	0.77		06/27/08
ICP Metals Analysis, Grd H20 P Prep											**07/22/08**
ICP Metals Analysis, Grd H20 P											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e+02		07/23/08
Iron	7439-89-6	LA-505-411	DU	< 125	ug/L			5.00	1.2e+02		07/23/08
Magnesium	7439-95-4	LA-505-411	DN	2.43e+03	ug/L			5.00	2.5e+02		07/23/08
Manganese	7439-96-5	LA-505-411	D	79.0	ug/L			5.00	20		07/23/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Potassium	7440-09-7	LA-505-411	D	1.62e+03	ug/L			5.00	8.5e+02		07/23/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/23/08
Sodium	7440-23-5	LA-505-411	D	3.81e+04	ug/L			5.00	2.6e+02		07/23/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e+02		07/23/08
Barium	7440-39-3	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/23/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/23/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/23/08
Zinc	7440-66-6	LA-505-411	DU	< 45.0	ug/L			5.00	45		07/23/08

MDL=Minimum Detection Limit
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X - Other flags/notes described in the comments/narrative(inorg)

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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01872
Client ID: B1VVV0 TRENT WSCF
Matrix: WATER

Group #: WSCF20081294
Department: Inorganic
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	D	1.41e+04	ug/L			5.00	3.6e+02		07/23/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e+02		07/23/08
Molybdenum	7439-98-7	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/23/08
Strontium	7440-24-6	LA-505-411	D	54.7	ug/L			5.00	20		07/23/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e+02		07/23/08

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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01873
Client ID: B1VVV1 TRENT WSCF

Matrix: WATER

Group #: WSCF20081294
Department: Inorganic
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Anions by Ion Chromatography											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/27/08
Chloride	16887-00-6	LA-533-410	BD	2.72	mg/L			10.00	1.1		06/27/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/27/08
Nitrogen in Nitrate	NO3-N	LA-533-410	BD	0.612	mg/L			10.00	0.36		06/27/08
Phosphate (P) by IC	PO4-P	LA-533-410	D	17.8	mg/L			10.00	0.32		06/27/08
Sulfate	14808-79-8	LA-533-410	BD	6.63	mg/L			10.00	0.77		06/27/08
ICP Metals Analysis, Grd H20 P Prep											**07/22/08**
ICP Metals Analysis, Grd H20 P											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e+02		07/23/08
Iron	7439-89-6	LA-505-411	DU	< 125	ug/L			5.00	1.2e+02		07/23/08
Magnesium	7439-95-4	LA-505-411	DN	2.51e+03	ug/L			5.00	2.5e+02		07/23/08
Manganese	7439-96-5	LA-505-411	D	32.0	ug/L			5.00	20		07/23/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Potassium	7440-09-7	LA-505-411	D	1.48e+03	ug/L			5.00	8.5e+02		07/23/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/23/08
Sodium	7440-23-5	LA-505-411	D	5.18e+04	ug/L			5.00	2.6e+02		07/23/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e+02		07/23/08
Barium	7440-39-3	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/23/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/23/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/23/08
Zinc	7440-66-6	LA-505-411	DU	< 45.0	ug/L			5.00	45		07/23/08

MDL = Minimum Detection Limit
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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01873
Client ID: B1VVV1 TRENT WSCF

Matrix: WATER

Group #: WSCF20081294
Department: Inorganic
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	D	1.41e+04	ug/L			5.00	3.6e+02		07/23/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e+02		07/23/08
Molybdenum	7439-98-7	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/23/08
Strontium	7440-24-6	LA-505-411	D	68.5	ug/L			5.00	20		07/23/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e+02		07/23/08

MDL=Minimum Detection Limit
RQ=Result Qualifier
TP Err=Total Propagated Error
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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01874
Client ID: B1VVV2 TRENT WSCF

Matrix: WATER

Group #: WSCF20081294
Department: Inorganic
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Anions by Ion Chromatography											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/27/08
Chloride	16887-00-6	LA-533-410	D	32.4	mg/L			10.00	1.1		06/27/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/27/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.360	mg/L			10.00	0.36		06/27/08
Phosphate (P) by IC	PO4-P	LA-533-410	D	62.7	mg/L			10.00	0.32		06/27/08
Sulfate	14808-79-8	LA-533-410	BD	1.91	mg/L			10.00	0.77		06/27/08
ICP Metals Analysis, Grd H20 P Prep											**07/22/08**
ICP Metals Analysis, Grd H20 P											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e+02		07/23/08
Iron	7439-89-6	LA-505-411	D	762	ug/L			5.00	1.2e+02		07/23/08
Magnesium	7439-95-4	LA-505-411	D	4.28e+03	ug/L			5.00	2.5e+02		07/23/08
Manganese	7439-96-5	LA-505-411	D	511	ug/L			5.00	20		07/23/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Potassium	7440-09-7	LA-505-411	D	2.62e+03	ug/L			5.00	8.5e+02		07/23/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/23/08
Sodium	7440-23-5	LA-505-411	D	1.81e+05	ug/L			5.00	2.6e+02		07/23/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e+02		07/23/08
Barium	7440-39-3	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/23/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/23/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/23/08
Zinc	7440-66-6	LA-505-411	DU	< 45.0	ug/L			5.00	45		07/23/08

MDL=Minimum Detection Limit
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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01874
Client ID: B1VVV2 TRENT WSCF

Matrix: WATER

Group #: WSCF20081294
Department: Inorganic
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	DN	1.76e+04	ug/L			5.00	3.6e+02		07/23/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e+02		07/23/08
Molybdenum	7439-98-7	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/23/08
Strontium	7440-24-6	LA-505-411	D	74.5	ug/L			5.00	20		07/23/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e+02		07/23/08

MDL=Minimum Detection Limit
RQ=Result Qualifier
TP Err=Total Propagated Error
DF=Dilution Factor

B - The analyte < the RDL but >= the IDL/MDL (inorg)
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N - Spike sample recovery is outside control limits.(inorg)
U - Analyzed for but not detected above limiting criteria.

D - Analyte was identified at a secondary dilution factor
E - Analyte is an estimate, has potentially larger errors(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
X - Other flags/notes described in the comments/narrative(inorg)

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01875
Client ID: B1VVV3 TRENT WSCF

Matrix: WATER

Group #: WSCF20081294
Department: Inorganic
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Anions by Ion Chromatography											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/27/08
Chloride	16887-00-6	LA-533-410	D	30.3	mg/L			10.00	1.1		06/27/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/27/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.360	mg/L			10.00	0.36		06/27/08
Phosphate (P) by IC	PO4-P	LA-533-410	D	57.0	mg/L			10.00	0.32		06/27/08
Sulfate	14808-79-8	LA-533-410	BD	2.43	mg/L			10.00	0.77		06/27/08
ICP Metals Analysis, Grd H20 P Prep											**07/22/08**
ICP Metals Analysis, Grd H20 P											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e+02		07/23/08
Iron	7439-89-6	LA-505-411	D	859	ug/L			5.00	1.2e+02		07/23/08
Magnesium	7439-95-4	LA-505-411	D	4.78e+03	ug/L			5.00	2.5e+02		07/23/08
Manganese	7439-96-5	LA-505-411	D	572	ug/L			5.00	20		07/23/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Potassium	7440-09-7	LA-505-411	D	2.78e+03	ug/L			5.00	8.5e+02		07/23/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/23/08
Sodium	7440-23-5	LA-505-411	D	2.03e+05	ug/L			5.00	2.6e+02		07/23/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e+02		07/23/08
Barium	7440-39-3	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/23/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/23/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/23/08
Zinc	7440-66-6	LA-505-411	DU	< 45.0	ug/L			5.00	45		07/23/08

MDL=Minimum Detection Limit
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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01875
Client ID: B1VVV3 TRENT WSCF

Matrix: WATER

Group #: WSCF20081294
Department: Inorganic
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	DN	1.93e+04	ug/L			5.00	3.6e+02		07/23/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e+02		07/23/08
Molybdenum	7439-98-7	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/23/08
Strontium	7440-24-6	LA-505-411	D	82.2	ug/L			5.00	20		07/23/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e+02		07/23/08

MDL=Minimum Detection Limit
RQ=Result Qualifier
TP Err=Total Propagated Error
DF=Dilution Factor

B - The analyte < the RDL but > = the IDL/MDL (inorg)
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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01876
Client ID: B1VVV4 TRENT WSCF

Matrix: WATER

Group #: WSCF20081294
Department: Inorganic
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Anions by Ion Chromatography											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/27/08
Chloride	16887-00-6	LA-533-410	D	154	mg/L			10.00	1.1		06/27/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/27/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.360	mg/L			10.00	0.36		06/27/08
Phosphate (P) by IC	PO4-P	LA-533-410	D	50.1	mg/L			10.00	0.32		06/27/08
Sulfate	14808-79-8	LA-533-410	DU	< 0.770	mg/L			10.00	0.77		06/27/08
ICP Metals Analysis, Grd H20 P Prep											**07/22/08**
ICP Metals Analysis, Grd H20 P											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e+02		07/23/08
Iron	7439-89-6	LA-505-411	D	5.27e+03	ug/L			5.00	1.2e+02		07/23/08
Magnesium	7439-95-4	LA-505-411	D	3.70e+04	ug/L			5.00	2.5e+02		07/23/08
Manganese	7439-96-5	LA-505-411	D	5.50e+03	ug/L			5.00	20		07/23/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Potassium	7440-09-7	LA-505-411	D	6.17e+03	ug/L			5.00	8.5e+02		07/23/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/23/08
Sodium	7440-23-5	LA-505-411	D	4.15e+05	ug/L			5.00	2.6e+02		07/23/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e+02		07/23/08
Barium	7440-39-3	LA-505-411	D	76.0	ug/L			5.00	20		07/23/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/23/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/23/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/23/08
Zinc	7440-66-6	LA-505-411	DU	< 45.0	ug/L			5.00	45		07/23/08

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
DF = Dilution Factor

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X - Other flags/notes described in the comments/narrative(inorg)

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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01876
Client ID: B1VVV4 TRENT WSCF
Matrix: WATER

Group #: WSCF20081294
Department: Inorganic
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	DN	1.78e+05	ug/L			5.00	3.6e+02		07/23/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e+02		07/23/08
Molybdenum	7439-98-7	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/23/08
Strontium	7440-24-6	LA-505-411	D	607	ug/L			5.00	20		07/23/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e+02		07/23/08

MDL=Minimum Detection Limit
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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01877
Client ID: B1VVV5 TRENT WSCF

Matrix: WATER

Group #: WSCF20081294
Department: Inorganic
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Anions by Ion Chromatography											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/27/08
Chloride	16887-00-6	LA-533-410	D	130	mg/L			10.00	1.1		06/27/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/27/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.360	mg/L			10.00	0.36		06/27/08
Phosphate (P) by IC	PO4-P	LA-533-410	D	284	mg/L			51.00	1.6		06/27/08
Sulfate	14808-79-8	LA-533-410	BD	1.35	mg/L			10.00	0.77		06/27/08
ICP Metals Analysis, Grd H20 P Prep											**07/22/08**
ICP Metals Analysis, Grd H20 P											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e+02		07/23/08
Iron	7439-89-6	LA-505-411	D	314	ug/L			5.00	1.2e+02		07/23/08
Magnesium	7439-95-4	LA-505-411	D	8.76e+03	ug/L			5.00	2.5e+02		07/23/08
Manganese	7439-96-5	LA-505-411	D	1.30e+03	ug/L			5.00	20		07/23/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Potassium	7440-09-7	LA-505-411	D	5.05e+03	ug/L			5.00	8.5e+02		07/23/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/23/08
Sodium	7440-23-5	LA-505-411	D	8.84e+05	ug/L			5.00	2.6e+02		07/23/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e+02		07/23/08
Barium	7440-39-3	LA-505-411	D	25.0	ug/L			5.00	20		07/23/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/23/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/23/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/23/08
Zinc	7440-66-6	LA-505-411	DU	< 45.0	ug/L			5.00	45		07/23/08

MDL=Minimum Detection Limit
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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01877
Client ID: B1VVV5 TRENT WSCF

Matrix: WATER

Group #: WSCF20081294
Department: Inorganic
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	DN	2.41e+04	ug/L			5.00	3.6e+02		07/23/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e+02		07/23/08
Molybdenum	7439-98-7	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/23/08
Strontium	7440-24-6	LA-505-411	D	134	ug/L			5.00	20		07/23/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e+02		07/23/08

MDL=Minimum Detection Limit
RQ=Result Qualifier
TP Err=Total Propagated Error
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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01878
Client ID: B1VVV6 TRENT WSCF

Matrix: WATER

Group #: WSCF20081294
Department: Inorganic
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Anions by Ion Chromatography											
Fluoride	16984-48-8	LA-533-410	BD	0.398	mg/L			10.00	0.21		06/28/08
Chloride	16887-00-6	LA-533-410	D	19.9	mg/L			10.00	1.1		06/28/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/28/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.360	mg/L			10.00	0.36		06/28/08
Phosphate (P) by IC	PO4-P	LA-533-410	D	72.4	mg/L			10.00	0.32		06/28/08
Sulfate	14808-79-8	LA-533-410	DEX	18.7	mg/L			10.00	0.77		06/28/08
ICP Metals Analysis, Grd H20 P Prep											**07/22/08**
ICP Metals Analysis, Grd H20 P											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e+02		07/23/08
Iron	7439-89-6	LA-505-411	D	730	ug/L			5.00	1.2e+02		07/23/08
Magnesium	7439-95-4	LA-505-411	D	4.41e+03	ug/L			5.00	2.5e+02		07/23/08
Manganese	7439-96-5	LA-505-411	D	615	ug/L			5.00	20		07/23/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Potassium	7440-09-7	LA-505-411	D	2.67e+03	ug/L			5.00	8.5e+02		07/23/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/23/08
Sodium	7440-23-5	LA-505-411	D	2.34e+05	ug/L			5.00	2.6e+02		07/23/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e+02		07/23/08
Barium	7440-39-3	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/23/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/23/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/23/08
Zinc	7440-66-6	LA-505-411	DU	< 45.0	ug/L			5.00	45		07/23/08

MDL=Minimum Detection Limit
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DF=Dilution Factor

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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01878
Client ID: B1VVV6 TRENT WSCF
Matrix: WATER

Group #: WSCF20081294
Department: Inorganic
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	DN	1.64e+04	ug/L			5.00	3.6e+02		07/23/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e+02		07/23/08
Molybdenum	7439-98-7	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/23/08
Strontium	7440-24-6	LA-505-411	D	57.5	ug/L			5.00	20		07/23/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e+02		07/23/08

MDL=Minimum Detection Limit
RQ=Result Qualifier
TP Err=Total Propagated Error
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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01879
Client ID: B1VVV7 TRENT WSCF
Matrix: WATER

Group #: WSCF20081294
Department: Inorganic
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Anions by Ion Chromatography											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/27/08
Chloride	16887-00-6	LA-533-410	BD	1.85	mg/L			10.00	1.1		06/27/08
Nitrogen in Nitrite	NO2-N	LA-533-410	BD	0.272	mg/L			10.00	0.099		06/27/08
Nitrogen in Nitrate	NO3-N	LA-533-410	BD	0.703	mg/L			10.00	0.36		06/27/08
Phosphate (P) by IC	PO4-P	LA-533-410	D	35.1	mg/L			10.00	0.32		06/27/08
Sulfate	14808-79-8	LA-533-410	BD	7.03	mg/L			10.00	0.77		06/27/08
ICP Metals Analysis, Grd H20 P Prep											**07/22/08**
ICP Metals Analysis, Grd H20 P											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e+02		07/23/08
Iron	7439-89-6	LA-505-411	DU	< 125	ug/L			5.00	1.2e+02		07/23/08
Magnesium	7439-95-4	LA-505-411	D	541	ug/L			5.00	2.5e+02		07/23/08
Manganese	7439-96-5	LA-505-411	D	72.0	ug/L			5.00	20		07/23/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Potassium	7440-09-7	LA-505-411	D	1.01e+03	ug/L			5.00	8.5e+02		07/23/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/23/08
Sodium	7440-23-5	LA-505-411	D	8.22e+04	ug/L			5.00	2.6e+02		07/23/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e+02		07/23/08
Barium	7440-39-3	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/23/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/23/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/23/08
Zinc	7440-66-6	LA-505-411	DU	< 45.0	ug/L			5.00	45		07/23/08

MDL=Minimum Detection Limit
RQ=Result Qualifier
TP Err=Total Propagated Error
DF=Dilution Factor

B - The analyte < the RDL but >= the IDL/MDL (inorg)
D - Analyte was identified at a secondary dilution factor(inorg)
N - Spike sample recovery is outside control limits.(inorg)
U - Analyzed for but not detected above limiting criteria.

D - Analyte was identified at a secondary dilution factor
E - Analyte is an estimate, has potentially larger errors(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
X - Other flags/notes described in the comments/narrative(inorg)

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01879
Client ID: B1VVV7 TRENT WSCF

Matrix: WATER

Group #: WSCF20081294
Department: Inorganic
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	DN	2.82e+03	ug/L			5.00	3.6e+02		07/23/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e+02		07/23/08
Molybdenum	7439-98-7	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/23/08
Strontium	7440-24-6	LA-505-411	D	22.7	ug/L			5.00	20		07/23/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e+02		07/23/08

MDL=Minimum Detection Limit
RQ=Result Qualifier
TP Err=Total Propagated Error
DF=Dilution Factor

B - The analyte < the RDL but >= the IDL/MDL (inorg)
D - Analyte was identified at a secondary dilution factor(inorg)
N - Spike sample recovery is outside control limits.(inorg)
U - Analyzed for but not detected above limiting criteria.

D - Analyte was identified at a secondary dilution factor
E - Analyte is an estimate, has potentially larger errors(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
X - Other flags/notes described in the comments/narrative(inorg)

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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01880
Client ID: B1VVV8 TRENT WSCF

Matrix: WATER

Group #: WSCF20081294
Department: Inorganic
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Anions by Ion Chromatography											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/28/08
Chloride	16887-00-6	LA-533-410	DU	< 1.10	mg/L			10.00	1.1		06/28/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/28/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.360	mg/L			10.00	0.36		06/28/08
Phosphate (P) by IC	PO4-P	LA-533-410	DU	< 0.320	mg/L			10.00	0.32		06/28/08
Sulfate	14808-79-8	LA-533-410	BD	5.71	mg/L			10.00	0.77		06/28/08
ICP Metals Analysis, Grd H20 P Prep											**07/22/08**
ICP Metals Analysis, Grd H20 P											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e+02		07/23/08
Iron	7439-89-6	LA-505-411	DU	< 125	ug/L			5.00	1.2e+02		07/23/08
Magnesium	7439-95-4	LA-505-411	D	5.30e+03	ug/L			5.00	2.5e+02		07/23/08
Manganese	7439-96-5	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Potassium	7440-09-7	LA-505-411	D	1.29e+03	ug/L			5.00	8.5e+02		07/23/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/23/08
Sodium	7440-23-5	LA-505-411	D	5.33e+03	ug/L			5.00	2.6e+02		07/23/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e+02		07/23/08
Barium	7440-39-3	LA-505-411	D	24.0	ug/L			5.00	20		07/23/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/23/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/23/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/23/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/23/08
Zinc	7440-66-6	LA-505-411	DU	< 45.0	ug/L			5.00	45		07/23/08

MDL=Minimum Detection Limit
RQ=Result Qualifier
TP Err=Total Propagated Error
DF=Dilution Factor

B - The analyte < the RDL but >= the IDL/MDL (inorg)
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X - Other flags/notes described in the comments/narrative(inorg)

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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01880
Client ID: B1VVV8 TRENT WSCF

Matrix: WATER

Group #: WSCF20081294
Department: Inorganic
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	DN	2.99e+04	ug/L			5.00	3.6e+02		07/23/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e+02		07/23/08
Molybdenum	7439-98-7	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/23/08
Strontium	7440-24-6	LA-505-411	D	112	ug/L			5.00	20		07/23/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e+02		07/23/08

MDL=Minimum Detection Limit
RQ=Result Qualifier
TP Err=Total Propagated Error
DF=Dilution Factor

B - The analyte < the RDL but > = the IDL/MDL (inorg)
D - Analyte was identified at a secondary dilution factor(inorg)
N - Spike sample recovery is outside control limits.(inorg)
U - Analyzed for but not detected above limiting criteria.

D - Analyte was identified at a secondary dilution factor
E - Analyte is an estimate, has potentially larger errors(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
X - Other flags/notes described in the comments/narrative(inorg)

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081294
Matrix: WATER
Test: Anions by Ion Chromatography

Sample Date: 06/27/08
Receive Date:06/27/08

Lab ID: W08GR01872
BATCH QC ASSOCIATED WITH SAMPLE

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
DUP	Chloride	16887-00-6	6.1848		RPD			0.429	20.000		06/27/08
DUP	Fluoride	16984-48-8	<0.21		RPD			n/a	20.000	U	06/27/08
DUP	Nitrogen in Nitrite	NO2-N	<9.9e-2		RPD			n/a	20.000	U	06/27/08
DUP	Nitrogen in Nitrate	NO3-N	<0.36		RPD			n/a	20.000	U	06/27/08
DUP	Phosphate (P) by IC	PO4-P	2.6633		RPD			1.528	20.000		06/27/08
DUP	Sulfate	14808-79-8	8.2741		RPD			0.376	20.000		06/27/08
MS	Chloride	16887-00-6	1.03721	104.242	% Recov	80.000	120.000				06/27/08
MS	Fluoride	16984-48-8	0.46937	95.207	% Recov	80.000	120.000				06/27/08
MS	Nitrogen in Nitrite	NO2-N	0.46545	94.604	% Recov	80.000	120.000				06/27/08
MS	Nitrogen in Nitrate	NO3-N	0.44654	100.121	% Recov	80.000	120.000				06/27/08
MS	Phosphate (P) by IC	PO4-P	0.9492	99.185	% Recov	80.000	120.000				06/27/08
MS	Sulfate	14808-79-8	1.84147	93.953	% Recov	80.000	120.000				06/27/08
MSD	Chloride	16887-00-6	0.94034	94.507	% Recov	80.000	120.000				06/27/08
MSD	Fluoride	16984-48-8	0.46925	95.183	% Recov	80.000	120.000				06/27/08
MSD	Nitrogen in Nitrite	NO2-N	0.46629	94.774	% Recov	80.000	120.000				06/27/08
MSD	Nitrogen in Nitrate	NO3-N	0.45013	100.926	% Recov	80.000	120.000				06/27/08
MSD	Phosphate (P) by IC	PO4-P	0.96374	100.704	% Recov	80.000	120.000				06/27/08
MSD	Sulfate	14808-79-8	1.86102	94.950	% Recov	80.000	120.000				06/27/08
SPK-RPD	Chloride	16887-00-6	94.507		RPD			9.796	20.000		06/27/08
SPK-RPD	Fluoride	16984-48-8	95.183		RPD			0.025	20.000		06/27/08
SPK-RPD	Nitrogen in Nitrite	NO2-N	94.774		RPD			0.180	20.000		06/27/08
SPK-RPD	Nitrogen in Nitrate	NO3-N	100.926		RPD			0.801	20.000		06/27/08
SPK-RPD	Phosphate (P) by IC	PO4-P	100.704		RPD			1.520	20.000		06/27/08
SPK-RPD	Sulfate	14808-79-8	94.950		RPD			1.056	20.000		06/27/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081294
Matrix: WATER
Test: Anions by Ion Chromatography

Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
BATCH QC											
BLANK	Chloride	16887-00-6	<0.11	n/a	mg/L	0.000	0.030			U	06/27/08
BLANK	Chloride	16887-00-6	<0.11	n/a	mg/L	0.000	0.030			U	06/27/08
BLANK	Fluoride	16984-48-8	<2.1e-2	n/a	mg/L	0.000	0.030			U	06/27/08
BLANK	Fluoride	16984-48-8	<2.1e-2	n/a	mg/L	0.000	0.030			U	06/27/08
BLANK	Nitrogen in Nitrite	NO2-N	<9.9e-3	n/a	mg/L	0.000	0.020			U	06/27/08
BLANK	Nitrogen in Nitrite	NO2-N	<9.9e-3	n/a	mg/L	0.000	0.020			U	06/27/08
BLANK	Nitrogen in Nitrate	NO3-N	<3.6e-2	n/a	mg/L	0.000	0.040			U	06/27/08
BLANK	Nitrogen in Nitrate	NO3-N	<3.6e-2	n/a	mg/L	0.000	0.040			U	06/27/08
BLANK	Phosphate (P) by IC	PO4-P	<3.2e-2	n/a	mg/L	0.000	0.200			U	06/27/08
BLANK	Phosphate (P) by IC	PO4-P	<3.2e-2	n/a	mg/L	0.000	0.200			U	06/27/08
BLANK	Sulfate	14808-79-8	<7.7e-2	n/a	mg/L	0.000	0.200			U	06/27/08
BLANK	Sulfate	14808-79-8	<7.7e-2	n/a	mg/L	0.000	0.200			U	06/27/08
LCS	Chloride	16887-00-6	199.4776	99.243	% Recov	80.000	120.000				06/27/08
LCS	Fluoride	16984-48-8	107.1769	107.607	% Recov	80.000	120.000				06/27/08
LCS	Nitrogen in Nitrite	NO2-N	101.6093	102.223	% Recov	80.000	120.000				06/27/08
LCS	Nitrogen in Nitrate	NO3-N	93.1897	103.429	% Recov	80.000	120.000				06/27/08
LCS	Phosphate (P) by IC	PO4-P	198.3305	102.549	% Recov	80.000	120.000				06/27/08
LCS	Sulfate	14808-79-8	387.1042	97.754	% Recov	80.000	120.000				06/27/08
Lab ID: W08GR01880											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Chloride	16887-00-6	<1.1		RPD			n/a	20.000	U	06/28/08
DUP	Fluoride	16984-48-8	<0.21		RPD			n/a	20.000	U	06/28/08
DUP	Nitrogen in Nitrite	NO2-N	<9.9e-2		RPD			n/a	20.000	U	06/28/08
DUP	Nitrogen in Nitrate	NO3-N	<0.36		RPD			n/a	20.000	U	06/28/08
DUP	Phosphate (P) by IC	PO4-P	<0.32		RPD			n/a	20.000	U	06/28/08
DUP	Sulfate	14808-79-8	5.5078		RPD			3.561	20.000		06/28/08
MS	Chloride	16887-00-6	1.0648	107.015	% Recov	80.000	120.000				06/28/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Inorganic**

SDG Number: WSCF20081294
Matrix: WATER
Test: Anions by Ion Chromatography

Sample Date: 06/27/08
Receive Date:06/27/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
MS	Fluoride	16984-48-8	0.4048	82.110	% Recov	80.000	120.000				06/28/08
MS	Nitrogen in Nitrite	NO2-N	0.47932	97.423	% Recov	80.000	120.000				06/28/08
MS	Nitrogen in Nitrate	NO3-N	0.4373	98.049	% Recov	80.000	120.000				06/28/08
MS	Phosphate (P) by IC	PO4-P	0.94208	98.441	% Recov	80.000	120.000				06/28/08
MS	Sulfate	14808-79-8	1.95338	99.662	% Recov	80.000	120.000				06/28/08
MSD	Chloride	16887-00-6	1.06524	107.059	% Recov	80.000	120.000				06/28/08
MSD	Fluoride	16984-48-8	0.42061	85.316	% Recov	80.000	120.000				06/28/08
MSD	Nitrogen in Nitrite	NO2-N	0.47488	96.520	% Recov	80.000	120.000				06/28/08
MSD	Nitrogen in Nitrate	NO3-N	0.44301	99.330	% Recov	80.000	120.000				06/28/08
MSD	Phosphate (P) by IC	PO4-P	0.95384	99.670	% Recov	80.000	120.000				06/28/08
MSD	Sulfate	14808-79-8	1.9233	98.128	% Recov	80.000	120.000				06/28/08
SPK-RPD	Chloride	16887-00-6	107.059		RPD			0.041	20.000		06/28/08
SPK-RPD	Fluoride	16984-48-8	85.316		RPD			3.830	20.000		06/28/08
SPK-RPD	Nitrogen in Nitrite	NO2-N	96.520		RPD			0.931	20.000		06/28/08
SPK-RPD	Nitrogen in Nitrate	NO3-N	99.330		RPD			1.298	20.000		06/28/08
SPK-RPD	Phosphate (P) by IC	PO4-P	99.670		RPD			1.241	20.000		06/28/08
SPK-RPD	Sulfate	14808-79-8	98.128		RPD			1.551	20.000		06/28/08

BATCH QC

BLANK	Chloride	16887-00-6	<0.11	n/a	mg/L	0.000	0.030			U	06/28/08
BLANK	Chloride	16887-00-6	<0.11	n/a	mg/L	0.000	0.030			U	06/28/08
BLANK	Fluoride	16984-48-8	<2.1e-2	n/a	mg/L	0.000	0.030			U	06/28/08
BLANK	Fluoride	16984-48-B	<2.1e-2	n/a	mg/L	0.000	0.030			U	06/28/08
BLANK	Nitrogen in Nitrite	NO2-N	<9.9e-3	n/a	mg/L	0.000	0.020			U	06/28/08
BLANK	Nitrogen in Nitrite	NO2-N	<9.9e-3	n/a	mg/L	0.000	0.020			U	06/28/08
BLANK	Nitrogen in Nitrate	NO3-N	<3.6e-2	n/a	mg/L	0.000	0.040			U	06/28/08
BLANK	Nitrogen in Nitrate	NO3-N	<3.6e-2	n/a	mg/L	0.000	0.040			U	06/28/08
BLANK	Phosphate (P) by IC	PO4-P	<3.2e-2	n/a	mg/L	0.000	0.200			U	06/28/08
BLANK	Phosphate (P) by IC	PO4-P	<3.2e-2	n/a	mg/L	0.000	0.200			U	06/28/08
BLANK	Sulfate	14808-79-8	<7.7e-2	n/a	mg/L	0.000	0.200			U	06/28/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081294
Matrix: WATER
Test: Anions by Ion Chromatography

Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
BLANK	Sulfate	14808-79-8	<7.7e-2	n/a	mg/L	0.000	0.200			U	06/28/08
LCS	Chloride	16887-00-6	200.5248	99.764	% Recov	80.000	120.000				06/28/08
LCS	Fluoride	16984-48-8	101.7168	102.125	% Recov	80.000	120.000				06/28/08
LCS	Nitrogen in Nitrite	NO2-N	99.4673	100.068	% Recov	80.000	120.000				06/28/08
LCS	Nitrogen in Nitrate	NO3-N	93.0197	103.241	% Recov	80.000	120.000				06/28/08
LCS	Phosphate (P) by IC	PO4-P	212.2555	109.749	% Recov	80.000	120.000				06/28/08
LCS	Sulfate	14808-79-8	399.7981	100.959	% Recov	80.000	120.000				06/28/08

Lab ID: W08GR01879
BATCH QC ASSOCIATED WITH SAMPLE

DUP	Chloride	16887-00-6	1.7541		RPD			5.424	20.000		06/27/08
DUP	Fluoride	16984-48-8	<0.21		RPD			n/a	20.000	U	06/27/08
DUP	Nitrogen in Nitrite	NO2-N	0.2764		RPD			1.789	20.000		06/27/08
DUP	Nitrogen in Nitrate	NO3-N	0.6794		RPD			3.471	20.000		06/27/08
DUP	Phosphate (P) by IC	PO4-P	35.1558		RPD			0.097	20.000		06/27/08
DUP	Sulfate	14808-79-8	7.0346		RPD			0.100	20.000		06/27/08
MS	Chloride	16887-00-6	0.96198	96.681	% Recov	80.000	120.000				06/28/08
MS	Fluoride	16984-48-8	0.42318	85.838	% Recov	80.000	120.000				06/28/08
MS	Nitrogen in Nitrite	NO2-N	0.48254	98.077	% Recov	80.000	120.000				06/28/08
MS	Nitrogen in Nitrate	NO3-N	0.45922	102.964	% Recov	80.000	120.000				06/28/08
MS	Phosphate (P) by IC	PO4-P	0.97502	101.883	% Recov	80.000	120.000				06/28/08
MS	Sulfate	14808-79-8	1.95893	99.945	% Recov	80.000	120.000				06/28/08
MSD	Chloride	16887-00-6	0.95394	95.873	% Recov	80.000	120.000				06/28/08
MSD	Fluoride	16984-48-8	0.4405	89.351	% Recov	80.000	120.000				06/28/08
MSD	Nitrogen in Nitrite	NO2-N	0.48296	98.163	% Recov	80.000	120.000				06/28/08
MSD	Nitrogen in Nitrate	NO3-N	0.44533	99.850	% Recov	80.000	120.000				06/28/08
MSD	Phosphate (P) by IC	PO4-P	1.01197	105.744	% Recov	80.000	120.000				06/28/08
MSD	Sulfate	14808-79-8	1.95783	99.889	% Recov	80.000	120.000				06/28/08
SPK-RPD	Chloride	16887-00-6	95.873		RPD			0.839	20.000		06/28/08
SPK-RPD	Fluoride	16984-48-8	89.351		RPD			4.011	20.000		06/28/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Inorganic**

SDG Number: WSCF20081294
Matrix: WATER
Test: Anions by Ion Chromatography

Sample Date: 06/27/08
Receive Date:06/27/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
SPK-RPD	Nitrogen in Nitrite	NO2-N	98.163		RPD			0.088	20.000		06/28/08
SPK-RPD	Nitrogen in Nitrate	NO3-N	99.850		RPD			3.071	20.000		06/28/08
SPK-RPD	Phosphate (P) by IC	PO4-P	105.744		RPD			3.719	20.000		06/28/08
SPK-RPD	Sulfate	14808-79-8	99.889		RPD			0.056	20.000		06/28/08

BATCH QC

BLANK	Chloride	16887-00-6	<0.11	n/a	mg/L	0.000	0.030			U	06/28/08
BLANK	Chloride	16887-00-6	<0.11	n/a	mg/L	0.000	0.030			U	06/27/08
BLANK	Fluoride	16984-48-8	<2.1e-2	n/a	mg/L	0.000	0.030			U	06/28/08
BLANK	Fluoride	16984-48-8	<2.1e-2	n/a	mg/L	0.000	0.030			U	06/27/08
BLANK	Nitrogen in Nitrite	NO2-N	<9.9e-3	n/a	mg/L	0.000	0.020			U	06/27/08
BLANK	Nitrogen in Nitrite	NO2-N	<9.9e-3	n/a	mg/L	0.000	0.020			U	06/28/08
BLANK	Nitrogen in Nitrate	NO3-N	<3.6e-2	n/a	mg/L	0.000	0.040			U	06/28/08
BLANK	Nitrogen in Nitrate	NO3-N	<3.6e-2	n/a	mg/L	0.000	0.040			U	06/27/08
BLANK	Phosphate (P) by IC	PO4-P	<3.2e-2	n/a	mg/L	0.000	0.200			U	06/27/08
BLANK	Phosphate (P) by IC	PO4-P	<3.2e-2	n/a	mg/L	0.000	0.200			U	06/28/08
BLANK	Sulfate	14808-79-8	<7.7e-2	n/a	mg/L	0.000	0.200			U	06/27/08
BLANK	Sulfate	14808-79-8	<7.7e-2	n/a	mg/L	0.000	0.200			U	06/28/08
LCS	Chloride	16887-00-6	200.9096	99.955	% Recov	80.000	120.000				06/27/08
LCS	Fluoride	16984-48-8	103.9496	104.367	% Recov	80.000	120.000				06/27/08
LCS	Nitrogen in Nitrite	NO2-N	100.6734	101.281	% Recov	80.000	120.000				06/27/08
LCS	Nitrogen in Nitrate	NO3-N	93.2014	103.442	% Recov	80.000	120.000				06/27/08
LCS	Phosphate (P) by IC	PO4-P	208.7289	107.926	% Recov	80.000	120.000				06/27/08
LCS	Sulfate	14808-79-8	399.8028	100.960	% Recov	80.000	120.000				06/27/08

Lab ID: W08GR01869

BATCH QC ASSOCIATED WITH SAMPLE

DUP	Chloride	16887-00-6	<1.1		RPD			n/a	20.000	U	06/27/08
DUP	Fluoride	16984-48-8	<0.21		RPD			n/a	20.000	U	06/27/08
DUP	Nitrogen in Nitrite	NO2-N	<9.9e-2		RPD			n/a	20.000	U	06/27/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Inorganic**

SDG Number: WSCF20081294
Matrix: WATER
Test: Anions by Ion Chromatography

Sample Date: 06/27/08
Receive Date:06/27/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
DUP	Nitrogen in Nitrate	NO3-N	0.4165		RPD			12.134	20.000		06/27/08
DUP	Phosphate (P) by IC	PO4-P	4.3859		RPD			4.083	20.000		06/27/08
DUP	Sulfate	14808-79-8	6.1063		RPD			1.668	20.000		06/27/08
MS	Chloride	16887-00-6	0.99961	100.463	% Recov	80.000	120.000				06/27/08
MS	Fluoride	16984-48-8	0.44599	90.465	% Recov	80.000	120.000				06/27/08
MS	Nitrogen in Nitrite	NO2-N	0.46509	94.530	% Recov	80.000	120.000				06/27/08
MS	Nitrogen in Nitrate	NO3-N	0.42772	95.901	% Recov	80.000	120.000				06/27/08
MS	Phosphate (P) by IC	PO4-P	0.95569	99.863	% Recov	80.000	120.000				06/27/08
MS	Sulfate	14808-79-8	1.82557	93.141	% Recov	80.000	120.000				06/27/08
MSD	Chloride	16887-00-6	0.9817	98.663	% Recov	80.000	120.000				06/27/08
MSD	Fluoride	16984-48-8	0.44047	89.345	% Recov	80.000	120.000				06/27/08
MSD	Nitrogen in Nitrite	NO2-N	0.45372	92.220	% Recov	80.000	120.000				06/27/08
MSD	Nitrogen in Nitrate	NO3-N	0.42735	95.818	% Recov	80.000	120.000				06/27/08
MSD	Phosphate (P) by IC	PO4-P	0.95645	99.943	% Recov	80.000	120.000				06/27/08
MSD	Sulfate	14808-79-8	1.81649	92.678	% Recov	80.000	120.000				06/27/08
SPK-RPD	Chloride	16887-00-6	98.663		RPD			1.808	20.000		06/27/08
SPK-RPD	Fluoride	16984-48-8	89.345		RPD			1.246	20.000		06/27/08
SPK-RPD	Nitrogen in Nitrite	NO2-N	92.220		RPD			2.474	20.000		06/27/08
SPK-RPD	Nitrogen in Nitrate	NO3-N	95.818		RPD			0.087	20.000		06/27/08
SPK-RPD	Phosphate (P) by IC	PO4-P	99.943		RPD			0.080	20.000		06/27/08
SPK-RPD	Sulfate	14808-79-8	92.678		RPD			0.498	20.000		06/27/08

BATCH QC

BLANK	Chloride	16887-00-6	<0.11	n/a	mg/L	0.000	0.030			U	06/27/08
BLANK	Chloride	16887-00-6	<0.11	n/a	mg/L	0.000	0.030			U	06/27/08
BLANK	Fluoride	16984-48-8	<2.1e-2	n/a	mg/L	0.000	0.030			U	06/27/08
BLANK	Fluoride	16984-48-8	<2.1e-2	n/a	mg/L	0.000	0.030			U	06/27/08
BLANK	Nitrogen in Nitrite	NO2-N	<9.9e-3	n/a	mg/L	0.000	0.020			U	06/27/08
BLANK	Nitrogen in Nitrite	NO2-N	<9.9e-3	n/a	mg/L	0.000	0.020			U	06/27/08
BLANK	Nitrogen in Nitrate	NO3-N	<3.6e-2	n/a	mg/L	0.000	0.040			U	06/27/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Inorganic**

SDG Number: WSCF20081294
Matrix: WATER
Test: Anions by Ion Chromatography

Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
BLANK	Nitrogen in Nitrate	NO3-N	<3.6e-2	n/a	mg/L	0.000	0.040			U	06/27/08
BLANK	Phosphate (P) by IC	PO4-P	<3.2e-2	n/a	mg/L	0.000	0.200			U	06/27/08
BLANK	Phosphate (P) by IC	PO4-P	<3.2e-2	n/a	mg/L	0.000	0.200			U	06/27/08
BLANK	Sulfate	14808-79-8	<7.7e-2	n/a	mg/L	0.000	0.200			U	06/27/08
BLANK	Sulfate	14808-79-8	<7.7e-2	n/a	mg/L	0.000	0.200			U	06/27/08
LCS	Chloride	16887-00-6	195.7881	97.407	% Recov	80.000	120.000				06/27/08
LCS	Fluoride	16984-48-8	104.9766	105.398	% Recov	80.000	120.000				06/27/08
LCS	Nitrogen in Nitrite	NO2-N	99.7157	100.318	% Recov	80.000	120.000				06/27/08
LCS	Nitrogen in Nitrate	NO3-N	92.2193	102.352	% Recov	80.000	120.000				06/27/08
LCS	Phosphate (P) by IC	PO4-P	192.4265	99.497	% Recov	80.000	120.000				06/27/08
LCS	Sulfate	14808-79-8	381.8994	96.439	% Recov	80.000	120.000				06/27/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081294
Matrix: WATER
Test: ICP Metals Analysis, Grd H20 P

Sample Date: 06/18/08
Receive Date:06/18/08

Lab ID: W08GR01829
BATCH QC ASSOCIATED WITH SAMPLE

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
MS	Silver	7440-22-4	4900	98.000	% Recov	75.000	125.000				07/23/08
MS	Aluminum	7429-90-5	4798	95.960	% Recov	75.000	125.000				07/23/08
MS	Arsenic	7440-38-2	4960	99.200	% Recov	75.000	125.000				07/23/08
MS	Barium	7440-39-3	2410	96.400	% Recov	75.000	125.000				07/23/08
MS	Calcium	7440-70-2	11420	228.400	% Recov	75.000	125.000			*	07/23/08
MS	Cadmium	7440-43-9	5003	100.060	% Recov	75.000	125.000				07/23/08
MS	Cobalt	7440-48-4	5143	102.860	% Recov	75.000	125.000				07/23/08
MS	Chromium	7440-47-3	4987	99.740	% Recov	75.000	125.000				07/23/08
MS	Copper	7440-50-8	4920	98.400	% Recov	75.000	125.000				07/23/08
MS	Iron	7439-89-6	4944.1	98.882	% Recov	75.000	125.000				07/23/08
MS	Potassium	7440-09-7	50276	100.552	% Recov	75.000	125.000				07/23/08
MS	Magnesium	7439-95-4	5410	108.200	% Recov	75.000	125.000				07/23/08
MS	Manganese	7439-96-5	5171	103.420	% Recov	75.000	125.000				07/23/08
MS	Molybdenum	7439-98-7	5088	101.760	% Recov	70.000	130.000				07/23/08
MS	Sodium	7440-23-5	4260	85.200	% Recov	75.000	125.000				07/23/08
MS	Nickel	7440-02-0	5061	101.220	% Recov	75.000	125.000				07/23/08
MS	Lead	7439-92-1	5240	104.800	% Recov	75.000	125.000				07/23/08
MS	Antimony	7440-36-0	4944	98.880	% Recov	75.000	125.000				07/23/08
MS	Strontium	7440-24-6	2541.7	101.668	% Recov	75.000	125.000				07/23/08
MS	Vanadium	7440-62-2	4950	99.000	% Recov	75.000	125.000				07/23/08
MS	Zinc	7440-66-6	4992	99.840	% Recov	75.000	125.000				07/23/08
MSD	Silver	7440-22-4	4880	97.600	% Recov	75.000	125.000				07/23/08
MSD	Aluminum	7429-90-5	4842	96.840	% Recov	75.000	125.000				07/23/08
MSD	Arsenic	7440-38-2	5190	103.800	% Recov	75.000	125.000				07/23/08
MSD	Barium	7440-39-3	2400	96.000	% Recov	75.000	125.000				07/23/08
MSD	Calcium	7440-70-2	660	13.200	% Recov	75.000	125.000			*	07/23/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081294
Matrix: WATER
Test: ICP Metals Analysis, Grd H20 P

Sample Date: 06/18/08
Receive Date:06/18/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
MSD	Cadmium	7440-43-9	4964	99.280	% Recov	75.000	125.000				07/23/08
MSD	Cobalt	7440-48-4	5054	101.080	% Recov	75.000	125.000				07/23/08
MSD	Chromium	7440-47-3	4900	98.000	% Recov	75.000	125.000				07/23/08
MSD	Copper	7440-50-8	4980	99.600	% Recov	75.000	125.000				07/23/08
MSD	Iron	7439-89-6	4847.1	96.942	% Recov	75.000	125.000				07/23/08
MSD	Potassium	7440-09-7	51036	102.072	% Recov	75.000	125.000				07/23/08
MSD	Magnesium	7439-95-4	3420	68.400	% Recov	75.000	125.000			*	07/23/08
MSD	Manganese	7439-96-5	5031	100.620	% Recov	75.000	125.000				07/23/08
MSD	Molybdenum	7439-98-7	5053	101.060	% Recov	75.000	125.000				07/23/08
MSD	Sodium	7440-23-5	-1800	-36.000	% Recov	75.000	125.000			*	07/23/08
MSD	Nickel	7440-02-0	5013	100.260	% Recov	75.000	125.000				07/23/08
MSD	Lead	7439-92-1	5260	105.200	% Recov	75.000	125.000				07/23/08
MSD	Antimony	7440-36-0	4955	99.100	% Recov	75.000	125.000				07/23/08
MSD	Strontium	7440-24-6	2484.7	99.388	% Recov	75.000	125.000				07/23/08
MSD	Vanadium	7440-62-2	4920	98.400	% Recov	75.000	125.000				07/23/08
MSD	Zinc	7440-66-6	5132	102.640	% Recov	75.000	125.000				07/23/08
SPK-RPD	Silver	7440-22-4	97.600		RPD			0.409	20.000		07/23/08
SPK-RPD	Aluminum	7429-90-5	96.840		RPD			0.913	20.000		07/23/08
SPK-RPD	Arsenic	7440-38-2	103.800		RPD			4.532	20.000		07/23/08
SPK-RPD	Barium	7440-39-3	96.000		RPD			0.416	20.000		07/23/08
SPK-RPD	Calcium	7440-70-2	13.200		RPD			178.146	20.000 *		07/23/08
SPK-RPD	Cadmium	7440-43-9	99.280		RPD			0.783	20.000		07/23/08
SPK-RPD	Cobalt	7440-48-4	101.080		RPD			1.746	20.000		07/23/08
SPK-RPD	Chromium	7440-47-3	98.000		RPD			1.760	20.000		07/23/08
SPK-RPD	Copper	7440-50-8	99.600		RPD			1.212	20.000		07/23/08
SPK-RPD	Iron	7439-89-6	96.942		RPD			1.981	20.000		07/23/08
SPK-RPD	Potassium	7440-09-7	102.072		RPD			1.500	20.000		07/23/08
SPK-RPD	Magnesium	7439-95-4	68.400		RPD			45.074	20.000 *		07/23/08
SPK-RPD	Manganese	7439-96-5	100.620		RPD			2.745	20.000		07/23/08
SPK-RPD	Molybdenum	7439-98-7	101.060		RPD			0.690	20.000		07/23/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081294
Matrix: WATER
Test: ICP Metals Analysis, Grd H20 P

Sample Date: 06/18/08
Receive Date:06/18/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
SPK-RPD	Sodium	7440-23-5	-36.000		RPD			492.683	20.000 *		07/23/08
SPK-RPD	Nickel	7440-02-0	100.260		RPD			0.953	20.000		07/23/08
SPK-RPD	Lead	7439-92-1	105.200		RPD			0.381	20.000		07/23/08
SPK-RPD	Antimony	7440-36-0	99.100		RPD			0.222	20.000		07/23/08
SPK-RPD	Strontium	7440-24-6	99.388		RPD			2.268	20.000		07/23/08
SPK-RPD	Vanadium	7440-62-2	98.400		RPD			0.608	20.000		07/23/08
SPK-RPD	Zinc	7440-66-6	102.640		RPD			2.766	20.000		07/23/08

BATCH QC

BLANK	Silver	7440-22-4	<5	n/a	ug/L					U	07/23/08
BLANK	Aluminum	7429-90-5	<52	n/a	ug/L					U	07/23/08
BLANK	Arsenic	7440-38-2	<78	n/a	ug/L					U	07/23/08
BLANK	Barium	7440-39-3	<4	n/a	ug/L					U	07/23/08
BLANK	Calcium	7440-70-2	<73	n/a	ug/L					U	07/23/08
BLANK	Cadmium	7440-43-9	<4	n/a	ug/L					U	07/23/08
BLANK	Cobalt	7440-48-4	<4	n/a	ug/L					U	07/23/08
BLANK	Chromium	7440-47-3	<13	n/a	ug/L					U	07/23/08
BLANK	Copper	7440-50-8	<6	n/a	ug/L					U	07/23/08
BLANK	Iron	7439-89-6	<25	n/a	ug/L					U	07/23/08
BLANK	Potassium	7440-09-7	<170	n/a	ug/L					U	07/23/08
BLANK	Magnesium	7439-95-4	<50	n/a	ug/L					U	07/23/08
BLANK	Manganese	7439-96-5	<4	n/a	ug/L					U	07/23/08
BLANK	Molybdenum	7439-98-7	<5	n/a	ug/L					U	07/23/08
BLANK	Sodium	7440-23-5	<51	n/a	ug/L					U	07/23/08
BLANK	Nickel	7440-02-0	<4	n/a	ug/L					U	07/23/08
BLANK	Lead	7439-92-1	<45	n/a	ug/L					U	07/23/08
BLANK	Antimony	7440-36-0	<56	n/a	ug/L					U	07/23/08
BLANK	Strontium	7440-24-6	<4	n/a	ug/L					U	07/23/08
BLANK	Vanadium	7440-62-2	<12	n/a	ug/L					U	07/23/08
BLANK	Zinc	7440-66-6	<9	n/a	ug/L					U	07/23/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081294
Matrix: WATER
Test: ICP Metals Analysis, Grd H20 P

Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
LCS	Silver	7440-22-4	964	96.400	% Recov	80.000	120.000				07/23/08
LCS	Aluminum	7429-90-5	960.1	96.010	% Recov	80.000	120.000				07/23/08
LCS	Arsenic	7440-38-2	974	97.400	% Recov	80.000	120.000				07/23/08
LCS	Barium	7440-39-3	467	93.400	% Recov	80.000	120.000				07/23/08
LCS	Calcium	7440-70-2	1025	102.500	% Recov	80.000	120.000				07/23/08
LCS	Cadmium	7440-43-9	982.9	98.290	% Recov	80.000	120.000				07/23/08
LCS	Cobalt	7440-48-4	995.2	99.520	% Recov	80.000	120.000				07/23/08
LCS	Chromium	7440-47-3	969	96.900	% Recov	80.000	120.000				07/23/08
LCS	Copper	7440-50-8	992	99.200	% Recov	80.000	120.000				07/23/08
LCS	Iron	7439-89-6	976.1	97.610	% Recov	80.000	120.000				07/23/08
LCS	Potassium	7440-09-7	10030	100.300	% Recov	80.000	120.000				07/23/08
LCS	Magnesium	7439-95-4	966.6	96.660	% Recov	80.000	120.000				07/23/08
LCS	Manganese	7439-96-5	991	99.100	% Recov	80.000	120.000				07/23/08
LCS	Molybdenum	7439-98-7	992.6	99.260	% Recov	80.000	120.000				07/23/08
LCS	Sodium	7440-23-5	1009	100.900	% Recov	80.000	120.000				07/23/08
LCS	Nickel	7440-02-0	991	99.100	% Recov	80.000	120.000				07/23/08
LCS	Lead	7439-92-1	1020	102.000	% Recov	80.000	120.000				07/23/08
LCS	Antimony	7440-36-0	985.2	98.520	% Recov	80.000	120.000				07/23/08
LCS	Strontium	7440-24-6	488.8	97.760	% Recov	80.000	120.000				07/23/08
LCS	Vanadium	7440-62-2	969	96.900	% Recov	80.000	120.000				07/23/08
LCS	Zinc	7440-66-6	981.7	98.170	% Recov	80.000	120.000				07/23/08

Lab ID: W08GR01874
BATCH QC ASSOCIATED WITH SAMPLE

MS	Silver	7440-22-4	4920	98.400	% Recov	75.000	125.000				07/23/08
MS	Aluminum	7429-90-5	5004	100.080	% Recov	75.000	125.000				07/23/08
MS	Arsenic	7440-38-2	5090	101.800	% Recov	75.000	125.000				07/23/08
MS	Barium	7440-39-3	2460	98.400	% Recov	75.000	125.000				07/23/08
MS	Calcium	7440-70-2	6360	127.200	% Recov	75.000	125.000				07/23/08
MS	Cadmium	7440-43-9	5061	101.220	% Recov	75.000	125.000				07/23/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Inorganic**

SDG Number: WSCF20081294
Matrix: WATER
Test: ICP Metals Analysis, Grd H20 P

Sample Date: 06/27/08
Receive Date:06/27/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
MS	Cobalt	7440-48-4	5066	101.320	% Recov	75.000	125.000				07/23/08
MS	Chromium	7440-47-3	4973	99.460	% Recov	75.000	125.000				07/23/08
MS	Copper	7440-50-8	5060	101.200	% Recov	75.000	125.000				07/23/08
MS	Iron	7439-89-6	5069.7	101.394	% Recov	75.000	125.000				07/23/08
MS	Potassium	7440-09-7	52435	104.870	% Recov	75.000	125.000				07/23/08
MS	Magnesium	7439-95-4	5268	105.360	% Recov	75.000	125.000				07/23/08
MS	Manganese	7439-96-5	5099	101.980	% Recov	75.000	125.000				07/23/08
MS	Molybdenum	7439-98-7	4922	98.440	% Recov	70.000	130.000				07/23/08
MS	Sodium	7440-23-5	12600	252.000	% Recov	75.000	125.000			*	07/23/08
MS	Nickel	7440-02-0	5024	100.480	% Recov	75.000	125.000				07/23/08
MS	Lead	7439-92-1	5340	106.800	% Recov	75.000	125.000				07/23/08
MS	Antimony	7440-36-0	4968	99.360	% Recov	75.000	125.000				07/23/08
MS	Strontium	7440-24-6	2555.5	102.220	% Recov	75.000	125.000				07/23/08
MS	Vanadium	7440-62-2	4940	98.800	% Recov	75.000	125.000				07/23/08
MS	Zinc	7440-66-6	5003	100.060	% Recov	75.000	125.000				07/23/08
MSD	Silver	7440-22-4	4820	96.400	% Recov	75.000	125.000				07/23/08
MSD	Aluminum	7429-90-5	4917	98.340	% Recov	75.000	125.000				07/23/08
MSD	Arsenic	7440-38-2	5140	102.800	% Recov	75.000	125.000				07/23/08
MSD	Barium	7440-39-3	2390	95.600	% Recov	75.000	125.000				07/23/08
MSD	Calcium	7440-70-2	6000	120.000	% Recov	75.000	125.000				07/23/08
MSD	Cadmium	7440-43-9	4974	99.480	% Recov	75.000	125.000				07/23/08
MSD	Cobalt	7440-48-4	4931	98.620	% Recov	75.000	125.000				07/23/08
MSD	Chromium	7440-47-3	4809	96.180	% Recov	75.000	125.000				07/23/08
MSD	Copper	7440-50-8	4950	99.000	% Recov	75.000	125.000				07/23/08
MSD	Iron	7439-89-6	4906.7	98.134	% Recov	75.000	125.000				07/23/08
MSD	Potassium	7440-09-7	51385	102.770	% Recov	75.000	125.000				07/23/08
MSD	Magnesium	7439-95-4	5087	101.740	% Recov	75.000	125.000				07/23/08
MSD	Manganese	7439-96-5	4949	98.980	% Recov	75.000	125.000				07/23/08
MSD	Molybdenum	7439-98-7	4904	98.080	% Recov	75.000	125.000				07/23/08
MSD	Sodium	7440-23-5	9000	180.000	% Recov	75.000	125.000			*	07/23/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081294
Matrix: WATER
Test: ICP Metals Analysis, Grd H20 P

Sample Date: 06/27/08
Receive Date:06/27/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
MSD	Nickel	7440-02-0	4947	98.940	% Recov	75.000	125.000				07/23/08
MSD	Lead	7439-92-1	5170	103.400	% Recov	75.000	125.000				07/23/08
MSD	Antimony	7440-36-0	4981	99.620	% Recov	75.000	125.000				07/23/08
MSD	Strontium	7440-24-6	2490.5	99.620	% Recov	75.000	125.000				07/23/08
MSD	Vanadium	7440-62-2	4860	97.200	% Recov	75.000	125.000				07/23/08
MSD	Zinc	7440-66-6	4906	98.120	% Recov	75.000	125.000				07/23/08
SPK-RPD	Silver	7440-22-4	96.400		RPD			2.053	20.000		07/23/08
SPK-RPD	Aluminum	7429-90-5	98.340		RPD			1.754	20.000		07/23/08
SPK-RPD	Arsenic	7440-38-2	102.800		RPD			0.978	20.000		07/23/08
SPK-RPD	Barium	7440-39-3	95.600		RPD			2.887	20.000		07/23/08
SPK-RPD	Calcium	7440-70-2	120.000		RPD			5.825	20.000		07/23/08
SPK-RPD	Cadmium	7440-43-9	99.480		RPD			1.734	20.000		07/23/08
SPK-RPD	Cobalt	7440-48-4	98.620		RPD			2.701	20.000		07/23/08
SPK-RPD	Chromium	7440-47-3	96.180		RPD			3.353	20.000		07/23/08
SPK-RPD	Copper	7440-50-8	99.000		RPD			2.198	20.000		07/23/08
SPK-RPD	Iron	7439-89-6	98.134		RPD			3.268	20.000		07/23/08
SPK-RPD	Potassium	7440-09-7	102.770		RPD			2.023	20.000		07/23/08
SPK-RPD	Magnesium	7439-95-4	101.740		RPD			3.496	20.000		07/23/08
SPK-RPD	Manganese	7439-96-5	98.980		RPD			2.986	20.000		07/23/08
SPK-RPD	Molybdenum	7439-98-7	98.080		RPD			0.366	20.000		07/23/08
SPK-RPD	Sodium	7440-23-5	180.000		RPD			33.333	20.000 *		07/23/08
SPK-RPD	Nickel	7440-02-0	98.940		RPD			1.544	20.000		07/23/08
SPK-RPD	Lead	7439-92-1	103.400		RPD			3.235	20.000		07/23/08
SPK-RPD	Antimony	7440-36-0	99.620		RPD			0.261	20.000		07/23/08
SPK-RPD	Strontium	7440-24-6	99.620		RPD			2.576	20.000		07/23/08
SPK-RPD	Vanadium	7440-62-2	97.200		RPD			1.633	20.000		07/23/08
SPK-RPD	Zinc	7440-66-6	98.120		RPD			1.958	20.000		07/23/08

BATCH QC

BLANK	Silver	7440-22-4	7	7.000	ug/L						07/23/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081294
Matrix: WATER
Test: ICP Metals Analysis, Grd H20 P

Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
BLANK	Aluminum	7429-90-5	<52	n/a	ug/L					U	07/23/08
BLANK	Arsenic	7440-38-2	<78	n/a	ug/L					U	07/23/08
BLANK	Barium	7440-39-3	<4	n/a	ug/L					U	07/23/08
BLANK	Calcium	7440-70-2	<73	n/a	ug/L					U	07/23/08
BLANK	Cadmium	7440-43-9	<4	n/a	ug/L					U	07/23/08
BLANK	Cobalt	7440-48-4	<4	n/a	ug/L					U	07/23/08
BLANK	Chromium	7440-47-3	<13	n/a	ug/L					U	07/23/08
BLANK	Copper	7440-50-8	<6	n/a	ug/L					U	07/23/08
BLANK	Iron	7439-89-6	<25	n/a	ug/L					U	07/23/08
BLANK	Potassium	7440-09-7	<170	n/a	ug/L					U	07/23/08
BLANK	Magnesium	7439-95-4	<50	n/a	ug/L					U	07/23/08
BLANK	Manganese	7439-96-5	<4	n/a	ug/L					U	07/23/08
BLANK	Molybdenum	7439-98-7	<5	n/a	ug/L					U	07/23/08
BLANK	Sodium	7440-23-5	<51	n/a	ug/L					U	07/23/08
BLANK	Nickel	7440-02-0	<4	n/a	ug/L					U	07/23/08
BLANK	Lead	7439-92-1	<45	n/a	ug/L					U	07/23/08
BLANK	Antimony	7440-36-0	<56	n/a	ug/L					U	07/23/08
BLANK	Strontium	7440-24-6	<4	n/a	ug/L					U	07/23/08
BLANK	Vanadium	7440-62-2	<12	n/a	ug/L					U	07/23/08
BLANK	Zinc	7440-66-6	<9	n/a	ug/L					U	07/23/08
LCS	Silver	7440-22-4	971	97.100	% Recov	80.000	120.000				07/23/08
LCS	Aluminum	7429-90-5	974.8	97.480	% Recov	80.000	120.000				07/23/08
LCS	Arsenic	7440-38-2	1000	100.000	% Recov	80.000	120.000				07/23/08
LCS	Barium	7440-39-3	473	94.600	% Recov	80.000	120.000				07/23/08
LCS	Calcium	7440-70-2	1039	103.900	% Recov	80.000	120.000				07/23/08
LCS	Cadmium	7440-43-9	994.1	99.410	% Recov	80.000	120.000				07/23/08
LCS	Cobalt	7440-48-4	1002	100.200	% Recov	80.000	120.000				07/23/08
LCS	Chromium	7440-47-3	971.4	97.140	% Recov	80.000	120.000				07/23/08
LCS	Copper	7440-50-8	994	99.400	% Recov	80.000	120.000				07/23/08
LCS	Iron	7439-89-6	985.3	98.530	% Recov	80.000	120.000				07/23/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081294
Matrix: WATER
Test: ICP Metals Analysis, Grd H20 P

Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
LCS	Potassium	7440-09-7	9912	99.120	% Recov	80.000	120.000				07/23/08
LCS	Magnesium	7439-95-4	953.6	95.360	% Recov	80.000	120.000				07/23/08
LCS	Manganese	7439-96-5	986	98.600	% Recov	80.000	120.000				07/23/08
LCS	Molybdenum	7439-98-7	986.5	98.650	% Recov	80.000	120.000				07/23/08
LCS	Sodium	7440-23-5	990.1	99.010	% Recov	80.000	120.000				07/23/08
LCS	Nickel	7440-02-0	995.2	99.520	% Recov	80.000	120.000				07/23/08
LCS	Lead	7439-92-1	1060	106.000	% Recov	80.000	120.000				07/23/08
LCS	Antimony	7440-36-0	1019	101.900	% Recov	80.000	120.000				07/23/08
LCS	Strontium	7440-24-6	493.5	98.700	% Recov	80.000	120.000				07/23/08
LCS	Vanadium	7440-62-2	969	96.900	% Recov	80.000	120.000				07/23/08
LCS	Zinc	7440-66-6	981.3	98.130	% Recov	80.000	120.000				07/23/08

WSCF
ANALYTICAL COMMENT REPORT

Attention: Steve Trent
Project Number F06-027

Group #: WSCF20081294
Department: Inorganic

Sample #	Client ID	Lab Area	Test	Comment
		VALGROUP		IC Anion - Sample W08GR01878: Unknown peak interfering with sulfate result. DTS W08GR01876-1877/Gross beta dup is flagged for poor RPD. Since all the other QC checks came out fine, this batch has been approved. lmh ICP-AES: [Samples W08GR1869-1873] No zirconium present in the LCS standard. Sodium and calcium sample results exceed spiking level by a factor of 4 so spike recoveries are not valid. Check and high standards are used to ensure sodium linearity because sample results are greater than the calibration standard. Low magnesium MSD recovery; "N" flag. ICP-AES: [Samples W08GR1874-1880] High silver preparation blank result; "C" flag if applicable. No zirconium present in the LCS standard. Sodium sample result exceeds spiking level by a factor of 4 so spike recoveries are not valid. Check and high standards are used to ensure sodium and calcium linearity because sample results are greater than

Lab Areas: VALGROUP - Group Validation
LOGSAMP - Login for Sample
VALTEST - Test Validation
LOGTEST - Login for Tests
TESTDATA - Test Data Entry

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WSCF
ANALYTICAL COMMENT REPORT

Attention: Steve Trent
Project Number F06-027

Group #: WSCF20081294
Department: Inorganic

Sample #	Client ID	Lab Area	Test	Comment
				the calibration standard.
				High calcium MS recovery; "N" flag.

Lab Areas: VALGROUP - Group Validation
LOGSAMP - Login for Sample
VALTEST - Test Validation
LOGTEST - Login for Tests
TESTDATA - Test Data Entry

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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01869
Client ID: B1VVT7 TRENT WSCF
Matrix: WATER

Group #: WSCF20081294
Department: Radiochemistry
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Gross Alpha/Gross Beta (AB32)											
Gross alpha	12587-46-1	LA-508-415	U	2.00	pCi/L	+-2.40	pCi/L	1.00	3.9		07/03/08
Gross beta	12587-47-2	LA-508-415		260	pCi/L	+-28.6	pCi/L	1.00	5.8		07/03/08

MDL=Minimum Detection Limit
RQ=Result Qualifier
TP Err=Total Propagated Error
DF=Dilution Factor

B - The analyte < the RDL but >= the IDL/MDL (inorg)
D - Analyte was identified at a secondary dilution factor(inorg)
N - Spike sample recovery is outside control limits.(inorg)
U - Analyzed for but not detected above limiting criteria.

D - Analyte was identified at a secondary dilution factor
E - Analyte is an estimate, has potentially larger errors(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
X - Other flags/notes described in the comments/narrative(inorg)

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01870
Client ID: B1VVT8 TRENT WSCF

Matrix: WATER

Group #: WSCF20081294
Department: Radiochemistry
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Gross Alpha/Gross Beta (AB32)											
Gross alpha	12587-46-1	LA-508-415	U	-9.90	pCi/L	+-9.90	pCi/L	1.00	19		07/03/08
Gross beta	12587-47-2	LA-508-415		260	pCi/L	+-36.4	pCi/L	1.00	22		07/03/08

MDL=Minimum Detection Limit
RQ=Result Qualifier
TP Err=Total Propagated Error
DF=Dilution Factor

B - The analyte < the RDL but >= the IDL/MDL (inorg)
D - Analyte was identified at a secondary dilution factor(inorg)
N - Spike sample recovery is outside control limits.(inorg)
U - Analyzed for but not detected above limiting criteria.

D - Analyte was identified at a secondary dilution factor
E - Analyte is an estimate, has potentially larger errors(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
X - Other flags/notes described in the comments/narrative(inorg)

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01871
Client ID: B1VVT9 TRENT WSCF
Matrix: WATER

Group #: WSCF20081294
Department: Radiochemistry
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Gross Alpha/Gross Beta (AB32)											
Gross alpha	12587-46-1	LA-508-415	U	-0.270	pCi/L	+-2.70	pCi/L	1.00	6.0		07/03/08
Gross beta	12587-47-2	LA-508-415		250	pCi/L	+-27.5	pCi/L	1.00	7.2		07/03/08

MDL=Minimum Detection Limit
RQ=Result Qualifier
TP Err=Total Propagated Error
DF=Dilution Factor

B - The analyte < the RDL but >= the IDL/MDL (inorg)
D - Analyte was identified at a secondary dilution factor(inorg)
N - Spike sample recovery is outside control limits.(inorg)
U - Analyzed for but not detected above limiting criteria.

D - Analyte was identified at a secondary dilution factor
E - Analyte is an estimate, has potentially larger errors(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
X - Other flags/notes described in the comments/narrative(inorg)

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01872
Client ID: B1VVV0 TRENT WSCF
Matrix: WATER

Group #: WSCF20081294
Department: Radiochemistry
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Gross Alpha/Gross Beta (AB32)											
Gross alpha	12587-46-1	LA-508-415	U	-0.550	pCi/L	+-1.98	pCi/L	1.00	4.0		07/03/08
Gross beta	12587-47-2	LA-508-415		620	pCi/L	+-62.0	pCi/L	1.00	5.9		07/03/08

MDL=Minimum Detection Limit
RQ=Result Qualifier
TP Err=Total Propagated Error
DF=Dilution Factor

B - The analyte < the RDL but > = the IDL/MDL (inorg)
D - Analyte was identified at a secondary dilution factor(inorg)
N - Spike sample recovery is outside control limits.(inorg)
U - Analyzed for but not detected above limiting criteria.

D - Analyte was identified at a secondary dilution factor
E - Analyte is an estimate, has potentially larger errors(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
X - Other flags/notes described in the comments/narrative(inorg)

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01873
Client ID: B1VVV1 TRENT WSCF
Matrix: WATER

Group #: WSCF20081294
Department: Radiochemistry
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Gross Alpha/Gross Beta (AB32)											
Gross alpha	12587-46-1	LA-508-415	U	-0.760	pCi/L	+-2.01	pCi/L	1.00	4.1		07/03/08
Gross beta	12587-47-2	LA-508-415		420	pCi/L	+-42.0	pCi/L	1.00	5.9		07/03/08

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
DF = Dilution Factor

B - The analyte < the RDL but >= the IDL/MDL (inorg)
D - Analyte was identified at a secondary dilution factor(inorg)
N - Spike sample recovery is outside control limits.(inorg)
U - Analyzed for but not detected above limiting criteria.

D - Analyte was identified at a secondary dilution factor
E - Analyte is an estimate, has potentially larger errors(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
X - Other flags/notes described in the comments/narrative(inorg)

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01874
Client ID: B1VVV2 TRENT WSCF
Matrix: WATER

Group #: WSCF20081294
Department: Radiochemistry
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Gross Alpha/Gross Beta (AB32)											
Gross alpha	12587-46-1	LA-508-415	U	0.0180	pCi/L	+-1.98e-03	pCi/L	1.00	7.6		07/03/08
Gross beta	12587-47-2	LA-508-415		980	pCi/L	+-98.0	pCi/L	1.00	9.2		07/03/08

MDL=Minimum Detection Limit
RQ=Result Qualifier
TP Err=Total Propagated Error
DF=Dilution Factor

B - The analyte < the RDL but >= the IDL/MDL (inorg)
D - Analyte was identified at a secondary dilution factor(inorg)
N - Spike sample recovery is outside control limits.(inorg)
U - Analyzed for but not detected above limiting criteria.

D - Analyte was identified at a secondary dilution factor
E - Analyte is an estimate, has potentially larger errors(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
X - Other flags/notes described in the comments/narrative(inorg)

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01875
Client ID: B1VVV3 TRENT WSCF
Matrix: WATER

Group #: WSCF20081294
Department: Radiochemistry
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Gross Alpha/Gross Beta (AB32)											
Gross alpha	12587-46-1	LA-508-415	U	-0.660	pCi/L	+-3.62	pCi/L	1.00	7.1		07/03/08
Gross beta	12587-47-2	LA-508-415		880	pCi/L	+-88.0	pCi/L	1.00	9.0		07/03/08

MDL=Minimum Detection Limit
RQ=Result Qualifier
TP Err=Total Propagated Error
DF=Dilution Factor

B - The analyte < the RDL but > = the IDL/MDL (inorg)
D - Analyte was identified at a secondary dilution factor(inorg)
N - Spike sample recovery is outside control limits.(inorg)
U - Analyzed for but not detected above limiting criteria.

D - Analyte was identified at a secondary dilution factor
E - Analyte is an estimate, has potentially larger errors(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
X - Other flags/notes described in the comments/narrative(inorg)

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01876
Client ID: B1VVV4 TRENT WSCF

Matrix: WATER

Group #: WSCF20081294
Department: Radiochemistry
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Gross Alpha/Gross Beta (AB32)											
Gross alpha	12587-46-1	LA-508-415		17.0	pCi/L	+-11.4	pCi/L	1.00	16		07/07/08
Gross beta	12587-47-2	LA-508-415		7.90e+03	pCi/L	+-790	pCi/L	1.00	20		07/07/08

MDL=Minimum Detection Limit
RQ=Result Qualifier
TP Err=Total Propagated Error
DF=Dilution Factor

B - The analyte < the RDL but >= the IDL/MDL (inorg)
D - Analyte was identified at a secondary dilution factor(inorg)
N - Spike sample recovery is outside control limits.(inorg)
U - Analyzed for but not detected above limiting criteria.

D - Analyte was identified at a secondary dilution factor
E - Analyte is an estimate, has potentially larger errors(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
X - Other flags/notes described in the comments/narrative(inorg)

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01877
Client ID: B1VVV5 TRENT WSCF
Matrix: WATER

Group #: WSCF20081294
Department: Radiochemistry
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Gross Alpha/Gross Beta (AB32)											
Gross alpha	12587-46-1	LA-508-415	U	2.40	pCi/L	+-13.2	pCi/L	1.00	24		07/07/08
Gross beta	12587-47-2	LA-508-415		1.80e+03	pCi/L	+-198	pCi/L	1.00	30		07/07/08

MDL=Minimum Detection Limit
RQ=Result Qualifier
TP Err=Total Propagated Error
DF=Dilution Factor

B - The analyte < the RDL but >= the IDL/MDL (inorg)
D - Analyte was identified at a secondary dilution factor(inorg)
N - Spike sample recovery is outside control limits.(inorg)
U - Analyzed for but not detected above limiting criteria.

D - Analyte was identified at a secondary dilution factor
E - Analyte is an estimate, has potentially larger errors(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
X - Other flags/notes described in the comments/narrative(inorg)

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01878
Client ID: B1VVV6 TRENT WSCF

Matrix: WATER

Group #: WSCF20081294
Department: Radiochemistry
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Gross Alpha/Gross Beta (AB32)											
Gross alpha	12587-46-1	LA-508-415	U	2.40	pCi/L	+-4.30	pCi/L	1.00	7.4		07/03/08
Gross beta	12587-47-2	LA-508-415		730	pCi/L	+-73.0	pCi/L	1.00	9.1		07/03/08

MDL=Minimum Detection Limit
RQ=Result Qualifier
TP Err=Total Propagated Error
DF=Dilution Factor

B - The analyte < the RDL but > = the IDL/MDL (inorg)
D - Analyte was identified at a secondary dilution factor(inorg)
N - Spike sample recovery is outside control limits.(inorg)
U - Analyzed for but not detected above limiting criteria.

D - Analyte was identified at a secondary dilution factor
E - Analyte is an estimate, has potentially larger errors(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
X - Other flags/notes described in the comments/narrative(inorg)

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01879
Client ID: B1VVV7 TRENT WSCF
Matrix: WATER

Group #: WSCF20081294
Department: Radiochemistry
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Gross Alpha/Gross Beta (AB32)											
Gross alpha	12587-46-1	LA-508-415	U	0.0100	pCi/L	+-1.00e-03	pCi/L	1.00	4.2		07/03/08
Gross beta	12587-47-2	LA-508-415		94.0	pCi/L	+-12.2	pCi/L	1.00	6.0		07/03/08

MDL=Minimum Detection Limit
RQ=Result Qualifier
TP Err=Total Propagated Error
DF=Dilution Factor

B - The analyte < the RDL but >= the IDL/MDL (inorg)
D - Analyte was identified at a secondary dilution factor(inorg)
N - Spike sample recovery is outside control limits.(inorg)
U - Analyzed for but not detected above limiting criteria.

D - Analyte was identified at a secondary dilution factor
E - Analyte is an estimate, has potentially larger errors(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
X - Other flags/notes described in the comments/narrative(inorg)

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F06-027
Sample # W08GR01880
Client ID: B1VVV8 TRENT WSCF

Matrix: WATER

Group #: WSCF20081294
Department: Radiochemistry
Sampled: 06/27/08
Received: 06/27/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Gross Alpha/Gross Beta (AB32)											
Gross alpha	12587-46-1	LA-508-415	U	0.760	pCi/L	+-2.28	pCi/L	1.00	4.1		07/03/08
Gross beta	12587-47-2	LA-508-415		710	pCi/L	+-71.0	pCi/L	1.00	5.9		07/03/08

MDL=Minimum Detection Limit
RQ=Result Qualifier
TP Err=Total Propagated Error
DF=Dilution Factor

B - The analyte < the RDL but > = the IDL/MDL (inorg)
D - Analyte was identified at a secondary dilution factor(inorg)
N - Spike sample recovery is outside control limits.(inorg)
U - Analyzed for but not detected above limiting criteria.

D - Analyte was identified at a secondary dilution factor
E - Analyte is an estimate, has potentially larger errors(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
X - Other flags/notes described in the comments/narrative(inorg)

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20081294
Matrix: WATER
Test: Gross Alpha/Gross Beta (AB32)

Sample Date: 06/27/08
Receive Date:06/27/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR01869											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Gross alpha	12587-46-1	U1.1		RPD			n/a	20.000		07/03/08
DUP	Gross beta	12587-47-2	2.4E+02		RPD			8.000	20.000		07/03/08
BATCH QC											
BLANK	Gross alpha	12587-46-1	U-4.7E-01	n/a	pCi/L	-10.000	10.000				07/03/08
BLANK	Gross beta	12587-47-2	8.1	8.100	pCi/L	-10.000	10.000				07/03/08
LCS	Gross alpha	12587-46-1	159	103.247	% Recov	80.000	120.000				07/03/08
LCS	Gross beta	12587-47-2	499	111.235	% Recov	80.000	120.000				07/03/08
Lab ID: W08GR01887											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Gross alpha	12587-46-1	U-1.1E+01		RPD			n/a	20.000		07/07/08
DUP	Gross beta	12587-47-2	3.2E+02		RPD			27.027	20.000 *		07/07/08
BATCH QC											
BLANK	Gross alpha	12587-46-1	U-3.5E-01	n/a	pCi/L	-10.000	10.000				07/07/08
BLANK	Gross beta	12587-47-2	U4.2E-01	n/a	pCi/L	-10.000	10.000				07/07/08
LCS	Gross alpha	12587-46-1	152.0	98.096	% Recov	80.000	120.000				07/07/08
LCS	Gross beta	12587-47-2	482.0	107.433	% Recov	80.000	120.000				07/07/08

WSCF
ANALYTICAL COMMENT REPORT

Attention: Steve Trent
Project Number F06-027

Group #: WSCF20081294
Department: Radiochemistry

Sample #	Client ID	Lab Area	Test	Comment
		VALGROUP		IC Anion - Sample W08GR01878: Unknown peak interfering with sulfate result. DTS W08GR01876-1877/Gross beta dup is flagged for poor RPD. Since all the other QC checks came out fine, this batch has been approved. lmh ICP-AES: [Samples W08GR1869-1873] No zirconium present in the LCS standard. Sodium and calcium sample results exceed spiking level by a factor of 4 so spike recoveries are not valid. Check and high standards are used to ensure sodium linearity because sample results are greater than the calibration standard. Low magnesium MSD recovery; "N" flag. ICP-AES: [Samples W08GR1874-1880] High silver preparation blank result; "C" flag if applicable. No zirconium present in the LCS standard. Sodium sample result exceeds spiking level by a factor of 4 so spike recoveries are not valid. Check and high standards are used to ensure sodium and calcium linearity because sample results are greater than

Lab Areas: VALGROUP - Group Validation; LOGSAMP - Login for Sample; VALTEST - Test Validation; LOGTEST - Login for Tests; TESTDATA - Test Data Entry

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WSCF
ANALYTICAL COMMENT REPORT

Attention: Steve Trent
Project Number F06-027

Group #: WSCF20081294
Department: Radiochemistry

Sample #	Client ID	Lab Area	Test	Comment
				the calibration standard.
				High calcium MS recovery; "N" flag.

Lab Areas: VALGROUP - Group Validation
LOGSAMP - Login for Sample
VALTEST - Test Validation
LOGTEST - Login for Tests
TESTDATA - Test Data Entry

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M4W41-SLF-08-751

ATTACHMENT 4

SAMPLE RECEIPT INFORMATION

Consisting of 5 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

7/15/08
File 1CB

ACKNOWLEDGMENT OF SAMPLES RECEIVED

Groundwater Remediation Program

Richland, WA 99354
Attn: Steve Trent

Customer Code: GPP
PO#: 122561/ES20
Group#: 20081294
Project#: F06-027
Proj Mgr: Steve Trent G6-35
Phone: 373-5869

The following samples were received from you on 06/27/08. 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	Tests Scheduled	Matrix	Sample Date
W08GR01869	B1VVT7	TRENT @AB-32 @GPP6010 @IC-30	Water	06/27/08
W08GR01870	B1VVT8	TRENT @AB-32 @GPP6010 @IC-30	Water	06/27/08
W08GR01871	B1VVT9	TRENT @AB-32 @GPP6010 @IC-30	Water	06/27/08
W08GR01872	B1VVV0	TRENT @AB-32 @GPP6010 @IC-30	Water	06/27/08
W08GR01873	B1VVV1	TRENT @AB-32 @GPP6010 @IC-30	Water	06/27/08
W08GR01874	B1VVV2	TRENT @AB-32 @GPP6010 @IC-30	Water	06/27/08
W08GR01875	B1VVV3	TRENT @AB-32 @GPP6010 @IC-30	Water	06/27/08
W08GR01876	B1VVV4	TRENT @AB-32 @GPP6010 @IC-30	Water	06/27/08
W08GR01877	B1VVV5	TRENT @AB-32 @GPP6010 @IC-30	Water	06/27/08
W08GR01878	B1VVV6	TRENT @AB-32 @GPP6010 @IC-30	Water	06/27/08
W08GR01879	B1VVV7	TRENT @AB-32 @GPP6010 @IC-30	Water	06/27/08
W08GR01880	B1VVV8	TRENT @AB-32 @GPP6010 @IC-30	Water	06/27/08

Test Acronym Description

Test Acronym	Description
@AB-32	Gross Alpha/Gross Beta (AB32)
@GPP6010	ICP Metals Analysis, Grd H20 P
@IC-30	Anions by Ion Chromatography

Fluor Hanford Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F06-027-137

COLLECTOR: KJ. Young 1/15	COMPANY CONTACT: FABRE, RJ	TELEPHONE NO.: 373-2774	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 7G	DATA TURNAROUND: 15 Days / 30 Days
SAMPLING LOCATION: 100-NR-2 Pilot Test #1 Site	PROJECT DESIGNATION: 100-N Apatite Barrier Performance Monitoring		SAF NO.: F06-027	AIR QUALITY: ☐	
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-585-11	ACTUAL SAMPLE DEPTH	COA: 122561ES20	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.		BILL OF LADING/AIR BILL NO.		

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegitation, W=Water, WI=Wipe, X=Other

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

SPECIAL HANDLING AND/OR STORAGE: 20081294

ICED

PRESERVATION	HNO3 to pH <2	HNO3 to pH <2	Cool~4C
TYPE OF CONTAINER	P	P	P
NO. OF CONTAINER(S)	1	1	1
VOLUME	1000mL	250mL	120mL
SAMPLE ANALYSIS	Gross Alpha; Gross Beta;	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS
	028608	027722	031390

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B1VVT7 W08620186	WATER	6/27/08	0744	✓	✓	✓
B1VVT8 70	WATER		0750	✓	✓	✓
B1VVT9 71	WATER		0803	✓	✓	✓
B1VVV0 72	WATER		0810	✓	✓	✓
B1VVV1 73	WATER		0813	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
KJ. Young	6/27/08 18:25	[illegible]	6/25/08 / 0:25
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

(1)ICP Metals - 6010B (TAL); ICP Metals - 6010B (Add-On) {Arsenic, Lead, Molybdenum, Strontium}
(2)IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Phosphorus in phosphate, Sulfate}

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

A-6003-618(01/06)

Fluor Hanford Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F06-027-137

COLLECTOR: KJ. Young	COMPANY CONTACT: FABRE, RJ	TELEPHONE NO.: 373-2774	PROJECT COORDINATOR: TRENT, SJ
PRICE CODE: 7G	DATA TURNAROUND: 15 Days / 30 Days		
SAMPLING LOCATION: 100-NR-2 Pilot Test #1 Site	PROJECT DESIGNATION: 100-N Apatite Barrier Performance Monitoring	SAF NO.: F06-027	AIR QUALITY: ☐
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-585-11	ACTUAL SAMPLE DEPTH	COA: 122561ES20
METHOD OF SHIPMENT: GOVERNMENT VEHICLE			
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.	BILL OF LADING/AIR BILL NO.	

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegitation, W=Water, WI=Wipe, X=Other

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

SPECIAL HANDLING AND/OR STORAGE

ICED

PRESERVATION					HNO3 to pH <2	HNO3 to pH <2	Cool~4C							
TYPE OF CONTAINER					P	P	P							
NO. OF CONTAINER(S)					1	1	1							
VOLUME					1000mL	250mL	120mL							
SAMPLE ANALYSIS					Gross Alpha; Gross Beta;	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS							
					028688	027722	031390							
SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME										
B1VVV2	74	WATER	6/27/08	0827	✓	✓	✓							
B1VVV3	75	WATER		0835	✓	✓	✓							
B1VVV4	76	WATER		0840	✓	✓	✓							
B1VVV5	77	WATER		0845	✓	✓	✓							
B1VVV6	78	WATER		0852	✓	✓	✓							

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
KJ. Young Ken Young	6/27/08 10:25	Victor Brown	6/27/08 10:25

SPECIAL INSTRUCTIONS

(1)ICP Metals - 6010B (TAL); ICP Metals - 6010B (Add-On) {Arsenic, Lead, Molybdenum, Strontium}
(2)IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Phosphorus in phosphate, Sulfate}

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

A-6003-618(01/06)

Fluor Hanford Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F06-027-137

COLLECTOR KJ. Young	**COMPANY CONTACT** FABRE, RJ	**TELEPHONE NO.** 373-2774	**PROJECT COORDINATOR** TRENT, SJ
PRICE CODE 7G	**DATA TURNAROUND** 15 Days / 30 Days		
SAMPLING LOCATION 100-NR-2 Pilot Test #1 Site	**PROJECT DESIGNATION** 100-N Apatite Barrier Performance Monitoring		**SAF NO.** F06-027
AIR QUALITY ☐			
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-585-11	**ACTUAL SAMPLE DEPTH**	**COA** 122561ES20
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Waste Sampling & Characterization	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

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

SPECIAL HANDLING AND/OR STORAGE

ICED

PRESERVATION	HNO3 to pH <2	HNO3 to pH <2	Cool~4C
TYPE OF CONTAINER	P	P	P
NO. OF CONTAINER(S)	1	1	1
VOLUME	1000mL	250mL	120mL
SAMPLE ANALYSIS	Gross Alpha; Gross Beta;	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS

SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME			
B1VW7	79	WATER	6/27/08	0852	✓	✓	✓
B1VW8	80	WATER	↓	0857	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
KJ. Young	6/27/08 1125	[illegible]	6/27/08 1125
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
(1)ICP Metals - 6010B (TAL); ICP Metals - 6010B (Add-On) {Arsenic, Lead, Molybdenum, Strontium}
(2)IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Phosphorus in phosphate, Sulfate}

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

A-6003-618(01/06)