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# FLUOR

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## Memorandum

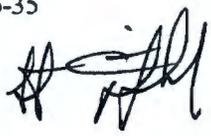
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M4W41-SLF-08-749

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  
A. J. Kopriva S3-30  
H. K. Meznarich S3-30  
P. D. Mix S3-30

J. E. Trechter S3-30  
S. J. Trent E6-35  
File/LB

Subject: FINAL RESULTS FOR SAMPLE DELIVERY GROUP WSCF20081218 – 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 WSCF20081218:

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

SLF/grf

Attachments 4

**RECEIVED**  
JAN 29 2009  
**EDMC**

M4W41-SLF-08-749

ATTACHMENT 1

**COVER SHEET**

Consisting of 2 pages  
Including cover page

## WSCF SAF NUMBER CROSS REFERENCE

Group#: WSCF20081218  
Data Deliverable Date: 03-jul-2008  
Data Deliverable: Cover Sheet

SAF#	Sample ID	WSCF#	Matrix
F06-027	B1VVN5	W08GR01804	WATER
	B1VVN6	W08GR01805	WATER
	B1VVN7	W08GR01806	WATER
	B1VVN8	W08GR01807	WATER
	B1VVN9	W08GR01808	WATER
	B1VVP0	W08GR01809	WATER
	B1VVP1	W08GR01810	WATER
	B1VVP2	W08GR01811	WATER
	B1VVP3	W08GR01812	WATER
	B1VVP4	W08GR01813	WATER
	B1VVP5	W08GR01814	WATER
	B1VVP6	W08GR01815	WATER
	B1VVP7	W08GR01816	WATER
	B1VVP8	W08GR01817	WATER
	B1VVP9	W08GR01818	WATER
	B1VVR0	W08GR01819	WATER
	B1VVR1	W08GR01820	WATER
	B1VVR2	W08GR01821	WATER
	B1VVR3	W08GR01822	WATER
	B1VVR4	W08GR01823	WATER
	B1VVR5	W08GR01824	WATER
	B1VVR6	W08GR01825	WATER
	B1VVR7	W08GR01826	WATER
	B1VVR8	W08GR01827	WATER
	B1VVR9	W08GR01828	WATER
	B1VVT0	W08GR01829	WATER
	B1VVT6	W08GR01830	WATER

M4W41-SLF-08-749

ATTACHMENT 2

**NARRATIVE**

Consisting of 4 pages  
Including cover page

### Introduction

Twenty-seven (27) S&GRP samples were received at the WSCF Laboratory on June 18, 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 14 through 15, 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 70 through 77 for QC details.  
Analytical Note(s):

- Duplicates, Matrix Spikes and Matrix Spike Duplicates were analyzed on samples B1VVN7, B1VVN8, B1VVN5, of this SDG; and samples B1VV L2 (SDG# 20081209, F06-027), B1V TY0 (SDG# 20081152, F06-027), and B1VV11 (SDG# 20081152, F06-027)
- 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 (B1VVN7) – Matrix Spike recovery (phosphate) was less than established limits. Affected sample results were N flagged.
- The sample duplicate RPD did not meet the established laboratory requirement for chloride in sample B1VVN5. The analyte concentration was below the calibration range; therefore, the result was accepted.

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 78 through 89 for details. Analytical Note(s):

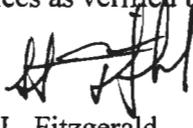
- Duplicates, Matrix Spikes and Matrix Spike Duplicates were analyzed on samples B1VVP3 and B1VY0, of this SDG; and sample B1VVM9 (SDG# 20081210, F06-027).
- Sample results were D flagged if dilution(s) were required.
- Batch QC - B1VVM9
  - Sodium sample results exceeded the spiking levels by a factor of four in the MS/MSD. Spike recoveries are not valid. Check standard was analyzed to ensure sodium, calcium, and magnesium linearity because sample results were greater than the calibration standard. Low calcium and magnesium MS/MSD recoveries were observed; therefore, affected samples were “N” flagged.
- Batch QC - B1VVP3
  - 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 some of the sample results were greater than the calibration standard. High calcium and magnesium spike recoveries were observed; therefore, affected samples were “N” flagged. Low molybdenum spike recovery was observed; therefore, affected samples were “N” flagged.
- Batch QC - B1VVT0
  - Sodium and calcium 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. Low magnesium MSD recovery was observed; therefore, affected samples were “N” flagged.

All other QC controls are within the established limits.

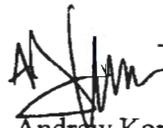
**Rad Chem** – There are no hold times associated with WSCF’s radiochemical methods. Duplicate, Blank, and Laboratory Control Sample were analyzed with this delivery group. See pages 119 through 120 for QC details. Analytical Note(s):

- Duplicates were analyzed on samples B1VVN5, B1VVP8 and B1VVR5, of this SDG.
- Some of the Gross Alpha & Beta MDL results did not meet the laboratory requirement on account of high dissolved solid in the sample.
- 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-08-749

ATTACHMENT 3

**ANALYTICAL RESULTS**

Consisting of 113 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#: WSCF20081218

Report Date: 25-jul-2008

Report WGPP/ver. 5.2

Groundwater Remediation Program

Department: Inorganic

## W13q Worklist/Batch/QC Report for Group# WSCF20081218

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
36761	2	37178	41522	BLANK		Anions by Ion Chromatography
36761	17	37178	41522	BLANK		Anions by Ion Chromatography
36761	3	37178	41522	LCS		Anions by Ion Chromatography
36761	4	37178	41522	SAMPLE	W08GR01805	Anions by Ion Chromatography
36761	12	37178	41522	DUP	W08GR01806	Anions by Ion Chromatography
36761	13	37178	41522	MS	W08GR01806	Anions by Ion Chromatography
36761	14	37178	41522	MSD	W08GR01806	Anions by Ion Chromatography
36761	11	37178	41522	SAMPLE	W08GR01806	Anions by Ion Chromatography
36761	14	37178	41522	SPK-RPD	W08GR01806	Anions by Ion Chromatography
36761	5	37178	41522	SAMPLE	W08GR01808	Anions by Ion Chromatography
36761	6	37178	41522	SAMPLE	W08GR01809	Anions by Ion Chromatography
36761	7	37178	41522	SAMPLE	W08GR01810	Anions by Ion Chromatography
36761	8	37178	41522	SAMPLE	W08GR01813	Anions by Ion Chromatography
36761	9	37178	41522	SAMPLE	W08GR01814	Anions by Ion Chromatography
36761	10	37178	41522	SAMPLE	W08GR01815	Anions by Ion Chromatography
36761	15	37178	41522	SAMPLE	W08GR01816	Anions by Ion Chromatography
36761	16	37178	41522	SAMPLE	W08GR01817	Anions by Ion Chromatography
36760	2	37179	41525	BLANK		Anions by Ion Chromatography
36760	14	37179	41525	BLANK		Anions by Ion Chromatography
36760	30	37179	41525	BLANK		Anions by Ion Chromatography
36760	3	37179	41525	LCS		Anions by Ion Chromatography
36760	15	37179	41525	LCS		Anions by Ion Chromatography
36760	5	37179	41525	DUP	W08GR01778	Anions by Ion Chromatography
36760	6	37179	41525	MS	W08GR01778	Anions by Ion Chromatography
36760	7	37179	41525	MSD	W08GR01778	Anions by Ion Chromatography
36760	7	37179	41525	SPK-RPD	W08GR01778	Anions by Ion Chromatography
36760	17	37179	41525	DUP	W08GR01807	Anions by Ion Chromatography
36760	18	37179	41525	MS	W08GR01807	Anions by Ion Chromatography
36760	19	37179	41525	MSD	W08GR01807	Anions by Ion Chromatography
36760	16	37179	41525	SAMPLE	W08GR01807	Anions by Ion Chromatography
36760	19	37179	41525	SPK-RPD	W08GR01807	Anions by Ion Chromatography
36760	21	37179	41525	SAMPLE	W08GR01819	Anions by Ion Chromatography
36760	22	37179	41525	SAMPLE	W08GR01820	Anions by Ion Chromatography
36760	23	37179	41525	SAMPLE	W08GR01821	Anions by Ion Chromatography
36760	24	37179	41525	SAMPLE	W08GR01825	Anions by Ion Chromatography
36760	27	37179	41525	SAMPLE	W08GR01826	Anions by Ion Chromatography
36760	26	37179	41525	SAMPLE	W08GR01827	Anions by Ion Chromatography
36760	28	37179	41525	SAMPLE	W08GR01828	Anions by Ion Chromatography
36760	25	37179	41525	SAMPLE	W08GR01829	Anions by Ion Chromatography
36760	29	37179	41525	SAMPLE	W08GR01830	Anions by Ion Chromatography
36762	2	37180	41526	BLANK		Anions by Ion Chromatography
36762	14	37180	41526	BLANK		Anions by Ion Chromatography
36762	3	37180	41526	LCS		Anions by Ion Chromatography
36762	8	37180	41526	DUP	W08GR01804	Anions by Ion Chromatography
36762	9	37180	41526	MS	W08GR01804	Anions by Ion Chromatography
36762	10	37180	41526	MSD	W08GR01804	Anions by Ion Chromatography
36762	7	37180	41526	SAMPLE	W08GR01804	Anions by Ion Chromatography
36762	10	37180	41526	SPK-RPD	W08GR01804	Anions by Ion Chromatography
36762	4	37180	41526	SAMPLE	W08GR01811	Anions by Ion Chromatography
36762	5	37180	41526	SAMPLE	W08GR01812	Anions by Ion Chromatography

36762	6	37180	41526	SAMPLE	W08GR01818	Anions by Ion Chromatography
36762	11	37180	41526	SAMPLE	W08GR01822	Anions by Ion Chromatography
36762	12	37180	41526	SAMPLE	W08GR01823	Anions by Ion Chromatography
36762	13	37180	41526	SAMPLE	W08GR01824	Anions by Ion Chromatography
36789	2	37206	41545	BLANK		Anions by Ion Chromatography
36789	13	37206	41545	BLANK		Anions by Ion Chromatography
36789	3	37206	41545	LCS		Anions by Ion Chromatography
36789	5	37206	41545	DUP	W08GR01535	Anions by Ion Chromatography
36789	6	37206	41545	MS	W08GR01535	Anions by Ion Chromatography
36789	7	37206	41545	MSD	W08GR01535	Anions by Ion Chromatography
36789	7	37206	41545	SPK-RPD	W08GR01535	Anions by Ion Chromatography
36761	4	37206	41545	SAMPLE	W08GR01805	Anions by Ion Chromatography
36788	2	37207	41548	BLANK		Anions by Ion Chromatography
36788	13	37207	41548	BLANK		Anions by Ion Chromatography
36788	3	37207	41548	LCS		Anions by Ion Chromatography
36788	5	37207	41548	DUP	W08GR01556	Anions by Ion Chromatography
36788	6	37207	41548	MS	W08GR01556	Anions by Ion Chromatography
36788	7	37207	41548	MSD	W08GR01556	Anions by Ion Chromatography
36788	7	37207	41548	SPK-RPD	W08GR01556	Anions by Ion Chromatography
36761	16	37207	41548	SAMPLE	W08GR01817	Anions by Ion Chromatography
37190	1	37614	41961	BLANK		ICP Metals Analysis, Grd H20 P
37190	2	37614	41961	LCS		ICP Metals Analysis, Grd H20 P
37190	4	37614	41961	MS	W08GR01795	ICP Metals Analysis, Grd H20 P
37190	5	37614	41961	MSD	W08GR01795	ICP Metals Analysis, Grd H20 P
37190	5	37614	41961	SPK-RPD	W08GR01795	ICP Metals Analysis, Grd H20 P
37190	12	37614	41961	SAMPLE	W08GR01804	ICP Metals Analysis, Grd H20 P
37190	13	37614	41961	SAMPLE	W08GR01805	ICP Metals Analysis, Grd H20 P
37190	14	37614	41961	SAMPLE	W08GR01806	ICP Metals Analysis, Grd H20 P
37190	15	37614	41961	SAMPLE	W08GR01807	ICP Metals Analysis, Grd H20 P
37190	16	37614	41961	SAMPLE	W08GR01808	ICP Metals Analysis, Grd H20 P
37190	17	37614	41961	SAMPLE	W08GR01809	ICP Metals Analysis, Grd H20 P
37190	18	37614	41961	SAMPLE	W08GR01810	ICP Metals Analysis, Grd H20 P
37190	19	37614	41961	SAMPLE	W08GR01811	ICP Metals Analysis, Grd H20 P
37190	20	37614	41961	SAMPLE	W08GR01812	ICP Metals Analysis, Grd H20 P
37190	21	37614	41961	SAMPLE	W08GR01813	ICP Metals Analysis, Grd H20 P
37190	22	37614	41961	SAMPLE	W08GR01814	ICP Metals Analysis, Grd H20 P
37190	23	37614	41961	SAMPLE	W08GR01815	ICP Metals Analysis, Grd H20 P
37190	24	37614	41961	SAMPLE	W08GR01816	ICP Metals Analysis, Grd H20 P
37221	1	37650	41978	BLANK		ICP Metals Analysis, Grd H20 P
37221	2	37650	41978	LCS		ICP Metals Analysis, Grd H20 P
37221	4	37650	41978	MS	W08GR01817	ICP Metals Analysis, Grd H20 P
37221	5	37650	41978	MSD	W08GR01817	ICP Metals Analysis, Grd H20 P
37221	3	37650	41978	SAMPLE	W08GR01817	ICP Metals Analysis, Grd H20 P
37221	5	37650	41978	SPK-RPD	W08GR01817	ICP Metals Analysis, Grd H20 P
37221	6	37650	41978	SAMPLE	W08GR01818	ICP Metals Analysis, Grd H20 P
37221	7	37650	41978	SAMPLE	W08GR01819	ICP Metals Analysis, Grd H20 P
37221	8	37650	41978	SAMPLE	W08GR01820	ICP Metals Analysis, Grd H20 P
37221	9	37650	41978	SAMPLE	W08GR01821	ICP Metals Analysis, Grd H20 P
37221	10	37650	41978	SAMPLE	W08GR01822	ICP Metals Analysis, Grd H20 P
37221	11	37650	41978	SAMPLE	W08GR01823	ICP Metals Analysis, Grd H20 P
37221	12	37650	41978	SAMPLE	W08GR01824	ICP Metals Analysis, Grd H20 P
37221	13	37650	41978	SAMPLE	W08GR01825	ICP Metals Analysis, Grd H20 P
37221	14	37650	41978	SAMPLE	W08GR01826	ICP Metals Analysis, Grd H20 P
37221	15	37650	41978	SAMPLE	W08GR01827	ICP Metals Analysis, Grd H20 P
37221	16	37650	41978	SAMPLE	W08GR01828	ICP Metals Analysis, Grd H20 P

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	3	37637	42003	SAMPLE	W08GR01829	ICP Metals Analysis, Grd H20 P
37209	5	37637	42003	SPK-RPD	W08GR01829	ICP Metals Analysis, Grd H20 P
37209	6	37637	42003	SAMPLE	W08GR01830	ICP Metals Analysis, Grd H20 P

Department: Radiochemistry

## W13q Worklist/Batch/QC Report for Group# WSCF20081218

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
36863	1	37283	41656	BLANK		Gross Alpha/Gross Beta (AB32)
36863	2	37283	41656	LCS		Gross Alpha/Gross Beta (AB32)
36863	3	37283	41656	DUP	W08GR01804	Gross Alpha/Gross Beta (AB32)
36863	4	37283	41656	SAMPLE	W08GR01804	Gross Alpha/Gross Beta (AB32)
36863	5	37283	41656	SAMPLE	W08GR01805	Gross Alpha/Gross Beta (AB32)
36863	6	37283	41656	SAMPLE	W08GR01806	Gross Alpha/Gross Beta (AB32)
36863	7	37283	41656	SAMPLE	W08GR01807	Gross Alpha/Gross Beta (AB32)
36863	8	37283	41656	SAMPLE	W08GR01808	Gross Alpha/Gross Beta (AB32)
36863	9	37283	41656	SAMPLE	W08GR01809	Gross Alpha/Gross Beta (AB32)
36863	10	37283	41656	SAMPLE	W08GR01810	Gross Alpha/Gross Beta (AB32)
36863	11	37283	41656	SAMPLE	W08GR01811	Gross Alpha/Gross Beta (AB32)
36863	12	37283	41656	SAMPLE	W08GR01812	Gross Alpha/Gross Beta (AB32)
36863	13	37283	41656	SAMPLE	W08GR01813	Gross Alpha/Gross Beta (AB32)
36863	14	37283	41656	SAMPLE	W08GR01814	Gross Alpha/Gross Beta (AB32)
36863	15	37283	41656	SAMPLE	W08GR01815	Gross Alpha/Gross Beta (AB32)
36863	16	37283	41656	SAMPLE	W08GR01816	Gross Alpha/Gross Beta (AB32)
36871	1	37291	41660	BLANK		Gross Alpha/Gross Beta (AB32)
36871	2	37291	41660	LCS		Gross Alpha/Gross Beta (AB32)
36871	3	37291	41660	DUP	W08GR01817	Gross Alpha/Gross Beta (AB32)
36871	4	37291	41660	SAMPLE	W08GR01817	Gross Alpha/Gross Beta (AB32)
36871	5	37291	41660	SAMPLE	W08GR01818	Gross Alpha/Gross Beta (AB32)
36871	6	37291	41660	SAMPLE	W08GR01819	Gross Alpha/Gross Beta (AB32)
36871	7	37291	41660	SAMPLE	W08GR01820	Gross Alpha/Gross Beta (AB32)
36871	8	37291	41660	SAMPLE	W08GR01821	Gross Alpha/Gross Beta (AB32)
36871	9	37291	41660	SAMPLE	W08GR01822	Gross Alpha/Gross Beta (AB32)
36871	10	37291	41660	SAMPLE	W08GR01823	Gross Alpha/Gross Beta (AB32)
36871	12	37291	41660	SAMPLE	W08GR01825	Gross Alpha/Gross Beta (AB32)
36871	13	37291	41660	SAMPLE	W08GR01826	Gross Alpha/Gross Beta (AB32)
36871	14	37291	41660	SAMPLE	W08GR01827	Gross Alpha/Gross Beta (AB32)
36871	15	37291	41660	SAMPLE	W08GR01828	Gross Alpha/Gross Beta (AB32)
36871	16	37291	41660	SAMPLE	W08GR01829	Gross Alpha/Gross Beta (AB32)
36871	17	37291	41660	SAMPLE	W08GR01830	Gross Alpha/Gross Beta (AB32)
36932	1	37354	41731	BLANK		Gross Alpha/Gross Beta (AB32)
36932	2	37354	41731	LCS		Gross Alpha/Gross Beta (AB32)
36932	3	37354	41731	DUP	W08GR01824	Gross Alpha/Gross Beta (AB32)
36932	4	37354	41731	SAMPLE	W08GR01824	Gross Alpha/Gross Beta (AB32)

# WSCF

## METHOD REFERENCES REPORT

Department: Inorganic

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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.

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<b>LA-505-411</b>	<b>LA-505-411: ELEMENTAL ANALYSIS BY INDUCTIVELY COUPLED PLASMA ATOMIC EMISSION SPE</b> <b>HEIS 6010_METALS_ICP</b> Inductively Coupled Plasma-Atomic Emmision Spectrometry
<b>LA-533-410</b>	<b>LA-533-410: ANION ANALYSIS BY ION CHROMATOGRAPHY</b> <b>EPA-600/R-94-111 300.0</b> DETERMINATION OF INORGANIC ANIONS BY ION CHROMATOGRAPHY <b>HEIS 300.0_ANIONS_IC</b> Determination of Inorganic Anions by Ion Chromatography

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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>.

Report Date: 25-jul-2008  
Report#: WSCF20081218  
Report WGPPM/5.2

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# WSCF

## 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.

<b>LA-508-415</b>	<b>LA-508-415: OPERATION OF THE PROTEAN 2-INCH ALPHA/BETA COUNTING SYSTEM FOR GROSS</b>
<b>HEIS ALPHA_GPC</b>	<b>GROSS ALPHA GPC</b>
<b>HEIS BETA_GPC</b>	<b>GROSS BETA GPC</b>
<b>HEIS SRTOT_SEP_PRECIP_GPC</b>	<b>Protium 89/90</b>

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>.

Report Date: 25-jul-2008  
Report#: WSCF20081218  
Report WGPPM/5.2

Page 1

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01804  
**Client ID:** B1VVN5

**TRENT**  
**WSCF**

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Anions by Ion Chromatography</b>											
Fluoride	16984-48-8	LA-533-410	DU	< 0.105	mg/L			5.00	0.10		06/18/08
Chloride	16887-00-6	LA-533-410	BD	1.25	mg/L			5.00	0.55		06/18/08
Nitrogen in Nitrite	NO2-N	LA-533-410	BD	0.234	mg/L			5.00	0.050		06/18/08
Nitrogen in Nitrate	NO3-N	LA-533-410	BD	0.351	mg/L			5.00	0.18		06/18/08
Phosphate (P) by IC	PO4-P	LA-533-410	D	10.2	mg/L			5.00	0.16		06/18/08
Sulfate	14808-79-8	LA-533-410	D	6.35	mg/L			5.00	0.38		06/18/08
<b>ICP Metals Analysis, Grd H2O P Prep</b>											<b>07/20/08</b>
<b>ICP Metals Analysis, Grd H2O P</b>											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e+02		07/21/08
Iron	7439-89-6	LA-505-411	DU	< 125	ug/L			5.00	1.2e+02		07/21/08
Magnesium	7439-95-4	LA-505-411	DN	2.02e+03	ug/L			5.00	2.5e+02		07/21/08
Manganese	7439-96-5	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Potassium	7440-09-7	LA-505-411	D	1.56e+03	ug/L			5.00	8.5e+02		07/21/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/21/08
Sodium	7440-23-5	LA-505-411	D	4.02e+04	ug/L			5.00	2.6e+02		07/21/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e+02		07/21/08
Barium	7440-39-3	LA-505-411	D	21.0	ug/L			5.00	20		07/21/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/21/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/21/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/21/08
Zinc	7440-66-6	LA-505-411	D	165	ug/L			5.00	45		07/21/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

+ - Indicates more than six qualifier symbols

Report WGPP/ver. 5.2

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# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01804  
**Client ID:** BIVVN5

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	DN	1.24e+04	ug/L			5.00	3.6e+02		07/21/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e+02		07/21/08
Molybdenum	7439-98-7	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/21/08
Strontium	7440-24-6	LA-505-411	D	86.7	ug/L			5.00	20		07/21/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e+02		07/21/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

+ - Indicates more than six qualifier symbols

Report WGPP/ver. 5.2

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# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01805  
**Client ID:** B1VVN6

**TRENT**  
**WSCF**

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Anions by Ion Chromatography</b>											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/18/08
Chloride	16887-00-6	LA-533-410	D	145	mg/L			10.00	1.1		06/18/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/18/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.360	mg/L			10.00	0.36		06/18/08
Phosphate (P) by IC	PO4-P	LA-533-410	D	439	mg/L			51.00	1.6		06/19/08
Sulfate	14808-79-8	LA-533-410	DU	< 0.770	mg/L			10.00	0.77		06/18/08
<b>ICP Metals Analysis, Grd H2O P Prep</b>											<b>07/20/08</b>
<b>ICP Metals Analysis, Grd H2O P</b>											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e + 02		07/21/08
Iron	7439-89-6	LA-505-411	D	1.60e + 03	ug/L			5.00	1.2e + 02		07/21/08
Magnesium	7439-95-4	LA-505-411	DN	3.12e + 03	ug/L			5.00	2.5e + 02		07/21/08
Manganese	7439-96-5	LA-505-411	D	661	ug/L			5.00	20		07/21/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Potassium	7440-09-7	LA-505-411	D	5.70e + 03	ug/L			5.00	8.5e + 02		07/21/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/21/08
Sodium	7440-23-5	LA-505-411	D	1.04e + 06	ug/L			5.00	2.6e + 02		07/21/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e + 02		07/21/08
Barium	7440-39-3	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/21/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/21/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/21/08
Zinc	7440-66-6	LA-505-411	DU	< 45.0	ug/L			5.00	45		07/21/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

+ - Indicates more than six qualifier symbols

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

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Groundwater Remediation Program

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01805  
**Client ID:** B1VVN6

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	DN	1.56e + 04	ug/L			5.00	3.6e + 02		07/21/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e + 02		07/21/08
Molybdenum	7439-98-7	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/21/08
Strontium	7440-24-8	LA-505-411	D	217	ug/L			5.00	20		07/21/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e + 02		07/21/08

**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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U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

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# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01806  
**Client ID:** B1VVN7

**TRENT**  
**WSCF**

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Anions by Ion Chromatography</b>											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/18/08
Chloride	16887-00-6	LA-533-410	D	26.1	mg/L			10.00	1.1		06/18/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/18/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.360	mg/L			10.00	0.36		06/18/08
Phosphate (P) by IC	PO4-P	LA-533-410	DN	172	mg/L			10.00	0.32		06/18/08
Sulfate	14808-79-8	LA-533-410	BD	5.70	mg/L			10.00	0.77		06/18/08
<b>ICP Metals Analysis, Grd H2O P Prep</b>											<b>07/20/08</b>
<b>ICP Metals Analysis, Grd H2O P</b>											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e + 02		07/21/08
Iron	7439-89-6	LA-505-411	D	152	ug/L			5.00	1.2e + 02		07/21/08
Magnesium	7439-95-4	LA-505-411	DN	1.44e + 03	ug/L			5.00	2.5e + 02		07/21/08
Manganese	7439-96-5	LA-505-411	D	512	ug/L			5.00	20		07/21/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Potassium	7440-09-7	LA-505-411	D	2.35e + 03	ug/L			5.00	8.5e + 02		07/21/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/21/08
Sodium	7440-23-5	LA-505-411	D	3.55e + 05	ug/L			5.00	2.6e + 02		07/21/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e + 02		07/21/08
Barium	7440-39-3	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/21/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/21/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/21/08
Zinc	7440-66-6	LA-505-411	DU	< 45.0	ug/L			5.00	45		07/21/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

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Groundwater Remediation Program

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01806  
**Client ID:** B1VVN7

**TRENT**  
**WSCF**

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	DN	7.92e+03	ug/L			5.00	3.6e+02		07/21/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e+02		07/21/08
Molybdenum	7439-98-7	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/21/08
Strontium	7440-24-6	LA-505-411	D	86.4	ug/L			5.00	20		07/21/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e+02		07/21/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

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U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

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+ - Indicates more than six qualifier symbols

Report WGPP/ver. 5.2

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# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01807  
**Client ID:** B1VVN8

**TRENT**  
**WSCF**

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Anions by Ion Chromatography</b>											
Fluoride	16984-48-8	LA-533-410	DU	< 0.105	mg/L			5.00	0.10		06/18/08
Chloride	18887-00-6	LA-533-410	BD	1.42	mg/L			5.00	0.55		06/18/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0495	mg/L			5.00	0.050		06/18/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.180	mg/L			5.00	0.18		06/18/08
Phosphate (P) by IC	PO4-P	LA-533-410	D	3.56	mg/L			5.00	0.16		06/18/08
Sulfate	14808-79-8	LA-533-410	D	8.82	mg/L			5.00	0.38		06/18/08
<b>ICP Metals Analysis, Grd H2O P Prep</b>											<b>07/20/08</b>
<b>ICP Metals Analysis, Grd H2O P</b>											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e+02		07/21/08
Iron	7439-89-8	LA-505-411	DU	< 125	ug/L			5.00	1.2e+02		07/21/08
Magnesium	7439-95-4	LA-505-411	DN	1.77e+03	ug/L			5.00	2.5e+02		07/21/08
Manganese	7439-96-5	LA-505-411	D	57.0	ug/L			5.00	20		07/21/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Potassium	7440-09-7	LA-505-411	D	1.24e+03	ug/L			5.00	8.5e+02		07/21/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/21/08
Sodium	7440-23-5	LA-505-411	D	3.07e+04	ug/L			5.00	2.6e+02		07/21/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e+02		07/21/08
Barium	7440-39-3	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Chromium	7440-47-3	LA-505-411	DU	< 85.0	ug/L			5.00	85		07/21/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/21/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/21/08
Zinc	7440-66-6	LA-505-411	DU	< 45.0	ug/L			5.00	45		07/21/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

+ - Indicates more than six qualifier symbols

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

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Groundwater Remediation Program

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01807  
**Client ID:** B1VVN8

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	DN	1.08e+04	ug/L			5.00	3.6e+02		07/21/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e+02		07/21/08
Molybdenum	7439-98-7	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/21/08
Strontium	7440-24-6	LA-505-411	D	41.9	ug/L			5.00	20		07/21/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e+02		07/21/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

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U - Analyzed for but not detected above limiting criteria.

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Groundwater Remediation Program

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01808  
**Client ID:** B1VVN9

**TRENT**  
**WSCF**

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Anions by Ion Chromatography</b>											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/18/08
Chloride	16887-00-6	LA-533-410	BD	2.97	mg/L			10.00	1.1		06/18/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/18/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.360	mg/L			10.00	0.36		06/18/08
Phosphate (P) by IC	PO4-P	LA-533-410	DN	29.8	mg/L			10.00	0.32		06/18/08
Sulfate	14808-79-8	LA-533-410	BD	7.04	mg/L			10.00	0.77		06/18/08
<b>ICP Metals Analysis, Grd H2O P Prep</b>											<b>07/20/08</b>
<b>ICP Metals Analysis, Grd H2O P</b>											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e+02		07/21/08
Iron	7439-89-6	LA-505-411	DU	< 125	ug/L			5.00	1.2e+02		07/21/08
Magnesium	7439-95-4	LA-505-411	DN	1.74e+03	ug/L			5.00	2.5e+02		07/21/08
Manganese	7439-96-5	LA-505-411	D	111	ug/L			5.00	20		07/21/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Potassium	7440-09-7	LA-505-411	D	1.24e+03	ug/L			5.00	8.5e+02		07/21/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/21/08
Sodium	7440-23-5	LA-505-411	D	7.36e+04	ug/L			5.00	2.6e+02		07/21/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e+02		07/21/08
Barium	7440-39-3	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/21/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/21/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/21/08
Zinc	7440-66-6	LA-505-411	D	55.7	ug/L			5.00	45		07/21/08

**MDL = Minimum Detection Limit**

**RQ = Result Qualifier**

**TP Err = Total Propagated Error**

**DF = Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor (inorg)

U - Analyzed for but not detected above limiting criteria (inorg)

+ - Indicates more than six qualifier symbols

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits. (inorg)

U - Analyzed for but not detected above limiting criteria.

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Report WGPP/ver. 5.2

Groundwater Remediation Program

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01808  
**Client ID:** B1VVN9

**TRENT**  
**WSCF**

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	DN	9.44e+03	ug/L			5.00	3.6e+02		07/21/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e+02		07/21/08
Molybdenum	7439-98-7	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/21/08
Strontium	7440-24-6	LA-505-411	D	47.2	ug/L			5.00	20		07/21/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e+02		07/21/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

+ - Indicates more than six qualifier symbols

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

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Report WGPP/ver. 5.2

Groundwater Remediation Program

# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01809  
**Client ID:** B1VVP0

**TRENT  
WSCF**

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Anions by Ion Chromatography</b>											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/18/08
Chloride	16887-00-6	LA-533-410	D	28.6	mg/L			10.00	1.1		06/18/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/18/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.360	mg/L			10.00	0.36		06/18/08
Phosphate (P) by IC	PO4-P	LA-533-410	DN	83.3	mg/L			10.00	0.32		06/18/08
Sulfate	14808-79-8	LA-533-410	BD	3.31	mg/L			10.00	0.77		06/18/08
<b>ICP Metals Analysis, Grd H20 P Prep</b>											<b>07/20/08</b>
<b>ICP Metals Analysis, Grd H20 P</b>											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e +02		07/21/08
Iron	7439-89-6	LA-505-411	D	581	ug/L			5.00	1.2e +02		07/21/08
Magnesium	7439-95-4	LA-505-411	DN	4.37e +03	ug/L			5.00	2.5e +02		07/21/08
Manganese	7439-96-5	LA-505-411	D	508	ug/L			5.00	20		07/21/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Potassium	7440-09-7	LA-505-411	D	2.47e +03	ug/L			5.00	8.5e +02		07/21/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/21/08
Sodium	7440-23-5	LA-505-411	D	2.07e +05	ug/L			5.00	2.6e +02		07/21/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e +02		07/21/08
Berium	7440-39-3	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Chromium	7440-47-3	LA-505-411	DU	< 85.0	ug/L			5.00	65		07/21/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/21/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/21/08
Zinc	7440-66-6	LA-505-411	DU	< 45.0	ug/L			5.00	45		07/21/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

+ - Indicates more than six qualifier symbols

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

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Report WGPP/ver. 5.2

Groundwater Remediation Program

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01809  
**Client ID:** B1VVPO

TRENT  
WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	DN	1.63e+04	ug/L			5.00	3.6e+02		07/21/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e+02		07/21/08
Molybdenum	7439-98-7	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/21/08
Strontium	7440-24-6	LA-505-411	D	62.7	ug/L			5.00	20		07/21/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e+02		07/21/08

**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)

U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

\* - Indicates results that have NOT been validated;

+ - Indicates more than six qualifier symbols

Report WGPP/ver. 5.2

Groundwater Remediation Program

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01810  
**Client ID:** B1VVP1

TRENT  
WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Anions by Ion Chromatography</b>											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/18/08
Chloride	16887-00-6	LA-533-410	BD	3.52	mg/L			10.00	1.1		06/18/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/18/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.360	mg/L			10.00	0.36		06/18/08
Phosphate (P) by IC	PO4-P	LA-533-410	DN	88.1	mg/L			10.00	0.32		06/18/08
Sulfate	14808-79-8	LA-533-410	BD	7.14	mg/L			10.00	0.77		06/18/08
<b>ICP Metals Analysis, Grd H20 P Prep</b>											<b>07/20/08</b>
<b>ICP Metals Analysis, Grd H20 P</b>											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e + 02		07/21/08
Iron	7439-89-6	LA-505-411	DU	< 125	ug/L			5.00	1.2e + 02		07/21/08
Magnesium	7439-95-4	LA-505-411	DN	1.24e + 03	ug/L			5.00	2.5e + 02		07/21/08
Manganese	7439-96-5	LA-505-411	D	228	ug/L			5.00	20		07/21/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Potassium	7440-09-7	LA-505-411	D	1.53e + 03	ug/L			5.00	8.5e + 02		07/21/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/21/08
Sodium	7440-23-5	LA-505-411	D	1.62e + 05	ug/L			5.00	2.6e + 02		07/21/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e + 02		07/21/08
Barium	7440-39-3	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/21/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/21/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/21/08
Zinc	7440-66-6	LA-505-411	DU	< 45.0	ug/L			5.00	45		07/21/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

+ - Indicates more than six qualifier symbols

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

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Groundwater Remediation Program

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01810  
**Client ID:** B1VVP1

**TRENT**  
**WSCF**

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	DN	6.80e+03	ug/L			5.00	3.6e+02		07/21/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e+02		07/21/08
Molybdenum	7439-98-7	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/21/08
Strontium	7440-24-6	LA-505-411	D	37.0	ug/L			5.00	20		07/21/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e+02		07/21/08

**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)

U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

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+ - Indicates more than six qualifier symbols

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# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01811  
**Client ID:** B1VVP2

TRENT  
WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Anions by Ion Chromatography</b>											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/18/08
Chloride	16887-00-6	LA-533-410	D	182	mg/L			10.00	1.1		06/18/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/18/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.360	mg/L			10.00	0.36		06/18/08
Phosphate (P) by IC	PO4-P	LA-533-410	D	41.1	mg/L			10.00	0.32		06/18/08
Sulfate	14808-79-8	LA-533-410	BD	5.18	mg/L			10.00	0.77		06/18/08
<b>ICP Metals Analysis, Grd H2O P Prep</b>											07/20/08
<b>ICP Metals Analysis, Grd H2O P</b>											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e+02		07/21/08
Iron	7439-89-6	LA-505-411	D	6.72e+03	ug/L			5.00	1.2e+02		07/21/08
Magnesium	7439-95-4	LA-505-411	DN	5.23e+04	ug/L			5.00	2.5e+02		07/21/08
Manganese	7439-96-5	LA-505-411	D	7.67e+03	ug/L			5.00	20		07/21/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Potassium	7440-09-7	LA-505-411	D	6.93e+03	ug/L			5.00	8.5e+02		07/21/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/21/08
Sodium	7440-23-5	LA-505-411	D	3.95e+05	ug/L			5.00	2.6e+02		07/21/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e+02		07/21/08
Barium	7440-39-3	LA-505-411	D	97.0	ug/L			5.00	20		07/21/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/21/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/21/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/21/08
Zinc	7440-66-6	LA-505-411	DU	< 45.0	ug/L			5.00	45		07/21/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

+ - Indicates more than six qualifier symbols

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

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Groundwater Remediation Program

# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01811  
**Client ID:** B1VVP2

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	DN	2.70e+05	ug/L			5.00	3.6e+02		07/21/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e+02		07/21/08
Molybdenum	7439-98-7	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/21/08
Strontium	7440-24-6	LA-505-411	D	880	ug/L			5.00	20		07/21/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e+02		07/21/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**SDF=Dilution Factor**

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

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+ - Indicates more than six qualifier symbols

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# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01812  
**Client ID:** B1VVP3

TRENT  
WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Anions by Ion Chromatography</b>											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/18/08
Chloride	16887-00-6	LA-533-410	D	185	mg/L			10.00	1.1		06/18/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/18/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.360	mg/L			10.00	0.36		06/18/08
Phosphate (P) by IC	PO4-P	LA-533-410	D	418	mg/L			51.00	1.6		06/18/08
Sulfate	14808-79-8	LA-533-410	BD	7.06	mg/L			10.00	0.77		06/18/08
<b>ICP Metals Analysis, Grd H2O P Prep</b>											07/20/08
<b>ICP Metals Analysis, Grd H2O P</b>											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e+02		07/21/08
Iron	7439-89-6	LA-505-411	DU	< 125	ug/L			5.00	1.2e+02		07/21/08
Magnesium	7439-95-4	LA-505-411	DN	1.10e+04	ug/L			5.00	2.5e+02		07/21/08
Manganese	7439-96-5	LA-505-411	D	1.55e+03	ug/L			5.00	20		07/21/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Potassium	7440-09-7	LA-505-411	D	6.18e+03	ug/L			5.00	8.5e+02		07/21/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/21/08
Sodium	7440-23-5	LA-505-411	D	1.13e+06	ug/L			5.00	2.6e+02		07/21/08
Antimony	7440-38-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e+02		07/21/08
Barium	7440-39-3	LA-505-411	D	36.0	ug/L			5.00	20		07/21/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/21/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/21/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/21/08
Zinc	7440-66-6	LA-505-411	D	83.2	ug/L			5.00	45		07/21/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

+ - Indicates more than six qualifier symbols

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

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# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01812  
**Client ID:** B1VVP3

**TRENT  
WSCF**

**Matrix: WATER**

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	DN	2.57e+04	ug/L			5.00	3.6e+02		07/21/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e+02		07/21/08
Molybdenum	7439-98-7	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/21/08
Strontium	7440-24-6	LA-505-411	D	173	ug/L			5.00	20		07/21/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e+02		07/21/08

**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)

U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

\* - Indicates results that have NOT been validated;

+ - Indicates more than six qualifier symbols

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# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01813  
**Client ID:** B1VVP4

**TRENT  
WSCF**

**Matrix: WATER**

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Anions by Ion Chromatography</b>											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/18/08
Chloride	16887-00 6	LA-533-410	D	20.7	mg/L			10.00	1.1		06/18/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/18/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.360	mg/L			10.00	0.36		06/18/08
Phosphate (P) by IC	PO4-P	LA-533-410	DN	71.9	mg/L			10.00	0.32		06/18/08
Sulfate	14808-79-8	LA-533-410	BD	9.83	mg/L			10.00	0.77		06/18/08
<b>ICP Metals Analysis, Grd H20 P Prep</b>											<b>07/20/08</b>
<b>ICP Metals Analysis, Grd H20 P</b>											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e +02		07/21/08
Iron	7439-89-6	LA-505-411	D	297	ug/L			5.00	1.2e +02		07/21/08
Magnesium	7439-95-4	LA-505-411	DN	4.47e +03	ug/L			5.00	2.5e +02		07/21/08
Manganese	7439-96-5	LA-505-411	D	563	ug/L			5.00	20		07/21/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Potassium	7440-09-7	LA-505-411	D	2.67e +03	ug/L			5.00	8.5e +02		07/21/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/21/08
Sodium	7440-23-5	LA-505-411	D	2.35e +05	ug/L			5.00	2.6e +02		07/21/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e +02		07/21/08
Barium	7440-39-3	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/21/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/21/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/21/08
Zinc	7440-66-6	LA-505-411	DU	< 45.0	ug/L			5.00	45		07/21/08

**MDL = Minimum Detection Limit**

**RQ = Result Qualifier**

**TP Err = Total Propagated Error**

**SDF = Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

+ - Indicates more than six qualifier symbols

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

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# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01813  
**Client ID:** B1VVP4

**TRENT  
WSCF**

**Matrix: WATER**

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	DN	1.65e+04	ug/L			5.00	3.6e+02		07/21/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e+02		07/21/08
Molybdenum	7439-98-7	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/21/08
Strontium	7440-24-6	LA-505-411	D	54.8	ug/L			5.00	20		07/21/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e+02		07/21/08

**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)

U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

\* - Indicates results that have NOT been validated;

+ - Indicates more than six qualifier symbols

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# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #:** W08GR01814  
**Client ID:** B1VVP5

**TRENT**  
**WSCF**

**Matrix: WATER**

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Anions by Ion Chromatography</b>											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/18/08
Chloride	16887-00-6	LA-533-410	D	4.85	mg/L			10.00	1.1		06/18/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/18/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.360	mg/L			10.00	0.36		06/18/08
Phosphate (P) by IC	PO4-P	LA-533-410	DN	61.4	mg/L			10.00	0.32		06/18/08
Sulfate	14808-79-8	LA-533-410	BD	7.11	mg/L			10.00	0.77		06/18/08
<b>ICP Metals Analysis, Grd H2O P Prep</b>											<b>07/20/08</b>
<b>ICP Metals Analysis, Grd H2O P</b>											
Aluminum	7429-90-5	LA-505-411	D	286	ug/L			5.00	2.6e +02		07/21/08
Iron	7439-89-6	LA-505-411	D	176	ug/L			5.00	1.2e +02		07/21/08
Magnesium	7439-95-4	LA-505-411	DN	1.02e +03	ug/L			5.00	2.5e +02		07/21/08
Manganese	7439-96-5	LA-505-411	D	167	ug/L			5.00	20		07/21/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Potassium	7440-09-7	LA-505-411	D	1.30e +03	ug/L			5.00	8.5e +02		07/21/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/21/08
Sodium	7440-23-5	LA-505-411	D	1.37e +05	ug/L			5.00	2.6e +02		07/21/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e +02		07/21/08
Barium	7440-39-3	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/21/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/21/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/21/08
Zinc	7440-66-6	LA-505-411	DU	< 45.0	ug/L			5.00	45		07/21/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

+ - Indicates more than six qualifier symbols

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

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# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01814  
**Client ID:** B1VVP5

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	DN	4.90e+03	ug/L			5.00	3.6e+02		07/21/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e+02		07/21/08
Molybdenum	7439-98-7	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/21/08
Strontium	7440-24-6	LA-505-411	D	38.1	ug/L			5.00	20		07/21/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e+02		07/21/08

**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)

U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

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

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# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01815  
**Client ID:** B1VVP6

**TRENT  
WSCF**

**Matrix: WATER**

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Anions by Ion Chromatography</b>											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/18/08
Chloride	16887-00-6	LA-533-410	DU	< 1.10	mg/L			10.00	1.1		06/18/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/18/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.360	mg/L			10.00	0.36		06/18/08
Phosphate (P) by IC	PO4-P	LA-533-410	DNU	< 0.320	mg/L			10.00	0.32		06/18/08
Sulfate	14808-79-8	LA-533-410	BD	6.34	mg/L			10.00	0.77		06/18/08
<b>ICP Metals Analysis, Grd H20 P Prep</b>											<b>07/20/08</b>
<b>ICP Metals Analysis, Grd H20 P</b>											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e+02		07/21/08
Iron	7439-89-6	LA-505-411	DU	< 125	ug/L			5.00	1.2e+02		07/21/08
Magnesium	7439-95-4	LA-505-411	DN	5.36e+03	ug/L			5.00	2.5e+02		07/21/08
Manganese	7439-96-5	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Potassium	7440-09-7	LA-505-411	D	1.18e+03	ug/L			5.00	8.5e+02		07/21/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/21/08
Sodium	7440-23-5	LA-505-411	D	5.68e+03	ug/L			5.00	2.6e+02		07/21/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e+02		07/21/08
Barium	7440-39-3	LA-505-411	D	24.0	ug/L			5.00	20		07/21/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/21/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/21/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/21/08
Zinc	7440-66-6	LA-505-411	DU	< 45.0	ug/L			5.00	45		07/21/08

**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)

U - Analyzed for but not detected above limiting criteria (inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits. (inorg)

U - Analyzed for but not detected above limiting criteria.

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

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# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01815  
**Client ID:** B1VVP6

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	DN	2.88e+04	ug/L			5.00	3.6e+02		07/21/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e+02		07/21/08
Molybdenum	7439-98-7	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/21/08
Strontium	7440-24-6	LA-505-411	D	111	ug/L			5.00	20		07/21/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e+02		07/21/08

**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)

U - Analyzed for but not detected above limiting criteria (inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits. (inorg)

U - Analyzed for but not detected above limiting criteria.

\* - Indicates results that have NOT been validated;

+ - Indicates more than six qualifier symbols

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# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01816  
**Client ID:** B1VVP7

**TRENT  
WSCF**

**Matrix: WATER**

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Anions by Ion Chromatography</b>											
Fluoride	18984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/18/08
Chloride	16887-00-6	LA-533-410	D	8.15	mg/L			10.00	1.1		06/18/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/18/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.360	mg/L			10.00	0.36		06/18/08
Phosphate (P) by IC	PO4-P	LA-533-410	DN	98.2	mg/L			10.00	0.32		06/18/08
Sulfate	14808-79-8	LA-533-410	BD	6.02	mg/L			10.00	0.77		06/18/08
<b>ICP Metals Analysis, Grd H20 P Prep</b>											<b>07/20/08</b>
<b>ICP Metals Analysis, Grd H20 P</b>											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e+02		07/21/08
Iron	7439-89-6	LA-505-411	DU	< 125	ug/L			5.00	1.2e+02		07/21/08
Magnesium	7439-95-4	LA-505-411	DN	1.51e+03	ug/L			5.00	2.5e+02		07/21/08
Manganese	7439-96-5	LA-505-411	D	504	ug/L			5.00	20		07/21/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Potassium	7440-09-7	LA-505-411	D	1.60e+03	ug/L			5.00	8.5e+02		07/21/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/21/08
Sodium	7440-23-5	LA-505-411	D	1.88e+05	ug/L			5.00	2.6e+02		07/21/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e+02		07/21/08
Barium	7440-39-3	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/21/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/21/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/21/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/21/08
Zinc	7440-66-6	LA-505-411	DU	< 45.0	ug/L			5.00	45		07/21/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

+ - Indicates more than six qualifier symbols

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# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01816  
**Client ID:** B1VVP7

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	DN	6.93e +03	ug/L			5.00	3.6e +02		07/21/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e +02		07/21/08
Molybdenum	7439-98-7	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/21/08
Strontium	7440-24-6	LA-505-411	D	53.5	ug/L			5.00	20		07/21/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e +02		07/21/08

**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)

U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

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

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# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01817  
**Client ID:** B1VVP8

**TRENT  
WSCF**

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Anions by Ion Chromatography</b>											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/18/08
Chloride	16887-00-6	LA-533-410	D	176	mg/L			20.00	2.2		06/19/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/18/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.360	mg/L			10.00	0.36		06/18/08
Phosphate (P) by IC	PO4-P	LA-533-410	D	865	mg/L			1.01e+002	3.2		06/19/08
Sulfate	14808-79-8	LA-533-410	BD	4.53	mg/L			10.00	0.77		06/18/08
<b>ICP Metals Analysis, Grd H2O P Prep</b>											<b>07/16/08</b>
<b>ICP Metals Analysis, Grd H2O P</b>											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e+02		07/22/08
Iron	7439-89-6	LA-505-411	D	416	ug/L			5.00	1.2e+02		07/22/08
Magnesium	7439-95-4	LA-505-411	DN	4.17e+03	ug/L			5.00	2.5e+02		07/22/08
Manganese	7439-96-5	LA-505-411	D	712	ug/L			5.00	20		07/22/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Potassium	7440-09-7	LA-505-411	D	7.07e+03	ug/L			5.00	8.5e+02		07/22/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/22/08
Sodium	7440-23-5	LA-505-411	D	1.57e+06	ug/L			10.00	5.1e+02		07/22/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e+02		07/22/08
Barium	7440-39-3	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/22/08
Cobalt	7440-48-4	LA-505-411	D	22.7	ug/L			5.00	20		07/22/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/22/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/22/08
Zinc	7440-66-6	LA-505-411	DU	< 45.0	ug/L			5.00	45		07/22/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

+ - Indicates more than six qualifier symbols

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

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# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01817  
**Client ID:** B1VVP8

**TRENT  
WSCF**

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	DN	1.28e+04	ug/L			5.00	3.6e+02		07/22/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e+02		07/22/08
Molybdenum	7439-98-7	LA-505-411	DNU	< 25.0	ug/L			5.00	25		07/22/08
Strontium	7440-24-8	LA-505-411	D	289	ug/L			5.00	20		07/22/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e+02		07/22/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

+ - Indicates more than six qualifier symbols

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

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# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01818  
**Client ID:** B1VVP9

**TRENT  
WSCF**

**Matrix: WATER**

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Anions by Ion Chromatography</b>											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		08/18/08
Chloride	16887-00-6	LA-533-410	D	139	mg/L			10.00	1.1		08/18/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/18/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.360	mg/L			10.00	0.36		06/18/08
Phosphate (P) by IC	PO4-P	LA-533-410	D	464	mg/L			51.00	1.6		08/18/08
Sulfate	14808-79-8	LA-533-410	BD	4.08	mg/L			10.00	0.77		08/18/08
<b>ICP Metals Analysis, Grd H20 P Prep</b>											<b>07/16/08</b>
<b>ICP Metals Analysis, Grd H20 P</b>											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e+02		07/22/08
Iron	7439-89-6	LA-505-411	D	1.53e+03	ug/L			5.00	1.2e+02		07/22/08
Magnesium	7439-95-4	LA-505-411	DN	4.68e+03	ug/L			5.00	2.5e+02		07/22/08
Manganese	7439-96-5	LA-505-411	D	947	ug/L			5.00	20		07/22/08
Nickel	7440-02-0	LA-505-411	D	24.5	ug/L			5.00	20		07/22/08
Potassium	7440-09-7	LA-505-411	D	5.85e+03	ug/L			5.00	8.5e+02		07/22/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/22/08
Sodium	7440-23-5	LA-505-411	D	1.02e+06	ug/L			5.00	2.6e+02		07/22/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e+02		07/22/08
Barium	7440-39-3	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/22/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/22/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/22/08
Zinc	7440-66-6	LA-505-411	D	50.7	ug/L			5.00	45		07/22/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

+ - Indicates more than six qualifier symbols

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# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01818  
**Client ID:** B1VVP9

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	DN	1.58e+04	ug/L			5.00	3.6e+02		07/22/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e+02		07/22/08
Molybdenum	7439-98-7	LA-505-411	DNU	< 25.0	ug/L			5.00	25		07/22/08
Strontium	7440-24-8	LA-505-411	D	161	ug/L			5.00	20		07/22/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e+02		07/22/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

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U - Analyzed for but not detected above limiting criteria(inorg)

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U - Analyzed for but not detected above limiting criteria.

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# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #:** W08GR01819  
**Client ID:** B1VVRO

**TRENT**  
**WSCF**

**Matrix: WATER**

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Anions by Ion Chromatography</b>											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/18/08
Chloride	16887-00-6	LA-533-410	D	13.1	mg/L			10.00	1.1		06/18/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/18/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.360	mg/L			10.00	0.36		06/18/08
Phosphate (P) by IC	PO4-P	LA-533-410	D	76.7	mg/L			10.00	0.32		06/18/08
Sulfate	14808-79-8	LA-533-410	BD	5.81	mg/L			10.00	0.77		06/18/08
<b>ICP Metals Analysis, Grd H2O P Prep</b>											<b>07/16/08</b>
<b>ICP Metals Analysis, Grd H2O P</b>											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e+02		07/22/08
Iron	7439-89-6	LA-505-411	DU	< 125	ug/L			5.00	1.2e+02		07/22/08
Magnesium	7439-95-4	LA-505-411	DN	4.42e+03	ug/L			5.00	2.5e+02		07/22/08
Manganese	7439-96-5	LA-505-411	D	616	ug/L			5.00	20		07/22/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Potassium	7440-09-7	LA-505-411	D	2.65e+03	ug/L			5.00	8.5e+02		07/22/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/22/08
Sodium	7440-23-5	LA-505-411	D	1.71e+05	ug/L			5.00	2.6e+02		07/22/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e+02		07/22/08
Barium	7440-39-3	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/22/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/22/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/22/08
Zinc	7440-66-6	LA-505-411	DU	< 45.0	ug/L			5.00	45		07/22/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

+ - Indicates more than six qualifier symbols

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

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# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01819  
**Client ID:** B1VVRO

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	DN	2.06e +04	ug/L			5.00	3.6e +02		07/22/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e +02		07/22/08
Molybdenum	7439-98-7	LA-505-411	DNU	< 25.0	ug/L			5.00	25		07/22/08
Strontium	7440-24-6	LA-505-411	D	109	ug/L			5.00	20		07/22/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e +02		07/22/08

**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)

U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

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# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01820  
**Client ID:** B1VVR1

**TRENT**  
**WSCF**

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Anions by Ion Chromatography</b>											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/18/08
Chloride	16887-00-6	LA-533-410	D	13.5	mg/L			10.00	1.1		06/18/08
Nitrogen in Nitrite	NO2-N	LA-533-410	BD	0.0998	mg/L			10.00	0.099		06/18/08
Nitrogen in Nitrate	NO3-N	LA-533-410	BD	0.396	mg/L			10.00	0.36		06/18/08
Phosphate (P) by IC	PO4-P	LA-533-410	D	3.92	mg/L			10.00	0.32		06/18/08
Sulfate	14808-79-8	LA-533-410	BD	6.97	mg/L			10.00	0.77		06/18/08
<b>ICP Metals Analysis, Grd H20 P Prep</b>											<b>07/16/08</b>
<b>ICP Metals Analysis, Grd H20 P</b>											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e +02		07/22/08
Iron	7439-89-6	LA-505-411	D	162	ug/L			5.00	1.2e +02		07/22/08
Magnesium	7439-95-4	LA-505-411	DN	5.85e +03	ug/L			5.00	2.5e +02		07/22/08
Manganese	7439-96-5	LA-505-411	D	1.45e +03	ug/L			5.00	20		07/22/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Potassium	7440-09-7	LA-505-411	D	1.93e +03	ug/L			5.00	8.5e +02		07/22/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/22/08
Sodium	7440-23-5	LA-505-411	D	3.06e +04	ug/L			5.00	2.6e +02		07/22/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e +02		07/22/08
Barium	7440-39-3	LA-505-411	D	35.0	ug/L			5.00	20		07/22/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/22/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/22/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/22/08
Zinc	7440-66-6	LA-505-411	DU	< 45.0	ug/L			5.00	45		07/22/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

+ - Indicates more than six qualifier symbols

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

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Report WGPP/ver. 5.2

Groundwater Remediation Program

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01820  
**Client ID:** B1VVR1

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	DN	2.96e +04	ug/L			5.00	3.6e +02		07/22/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e +02		07/22/08
Molybdenum	7439-98-7	LA-505-411	DNU	< 25.0	ug/L			5.00	25		07/22/08
Strontium	7440-24-6	LA-505-411	D	121	ug/L			5.00	20		07/22/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e +02		07/22/08

**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)

U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

\* - Indicates results that have NOT been validated;

+ - Indicates more than six qualifier symbols

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# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01821  
**Client ID:** B1VVR2

**TRENT  
WSCF**

**Matrix: WATER**

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Anions by Ion Chromatography</b>											
Fluoride	18984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/18/08
Chloride	18887-00-6	LA-533-410	BD	2.73	mg/L			10.00	1.1		06/18/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/18/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.360	mg/L			10.00	0.36		06/18/08
Phosphate (P) by IC	PO4-P	LA-533-410	D	53.4	mg/L			10.00	0.32		06/18/08
Sulfate	14808-79-8	LA-533-410	BD	6.15	mg/L			10.00	0.77		06/18/08
<b>ICP Metals Analysis, Grd H20 P Prep</b>											<b>07/16/08</b>
<b>ICP Metals Analysis, Grd H20 P</b>											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e +02		07/22/08
Iron	7439-89-6	LA-505-411	DU	< 125	ug/L			5.00	1.2e +02		07/22/08
Magnesium	7439-95-4	LA-505-411	DN	1.37e +03	ug/L			5.00	2.5e +02		07/22/08
Manganese	7439-96-5	LA-505-411	D	186	ug/L			5.00	20		07/22/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Potassium	7440-09-7	LA-505-411	D	1.18e +03	ug/L			5.00	8.5e +02		07/22/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/22/08
Sodium	7440-23-5	LA-505-411	D	9.88e +04	ug/L			5.00	2.6e +02		07/22/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e +02		07/22/08
Barium	7440-39-3	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/22/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/22/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/22/08
Zinc	7440-66-6	LA-505-411	DU	< 45.0	ug/L			5.00	45		07/22/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

+ - Indicates more than six qualifier symbols

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

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Groundwater Remediation Program

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01821  
**Client ID:** B1VVR2

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	DN	8.05e+03	ug/L			5.00	3.6e+02		07/22/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e+02		07/22/08
Molybdenum	7439-98-7	LA-505-411	DNU	< 25.0	ug/L			5.00	25		07/22/08
Strontium	7440-24-6	LA-505-411	D	43.4	ug/L			5.00	20		07/22/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e+02		07/22/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

+ - Indicates more than six qualifier symbols

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

Report WGPP/ver. 5.2

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# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #:** W08GR01822  
**Client ID:** B1VVR3

TRENT  
WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Anions by Ion Chromatography</b>											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/18/08
Chloride	16887-00-8	LA-533-410	D	5.57	mg/L			10.00	1.1		06/18/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/18/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.360	mg/L			10.00	0.36		06/18/08
Phosphate (P) by IC	PO4-P	LA-533-410	D	28.3	mg/L			10.00	0.32		06/18/08
Sulfate	14808-79-8	LA-533-410	BD	5.87	mg/L			10.00	0.77		06/18/08
<b>ICP Metals Analysis, Grd H20 P Prep</b>											<b>07/16/08</b>
<b>ICP Metals Analysis, Grd H20 P</b>											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e+02		07/22/08
Iron	7439-89-6	LA-505-411	D	298	ug/L			5.00	1.2e+02		07/22/08
Magnesium	7439-95-4	LA-505-411	DN	2.47e+03	ug/L			5.00	2.5e+02		07/22/08
Manganese	7439-96-5	LA-505-411	D	635	ug/L			5.00	20		07/22/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Potassium	7440-09-7	LA-505-411	D	2.04e+03	ug/L			5.00	8.5e+02		07/22/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/22/08
Sodium	7440-23-5	LA-505-411	D	6.49e+04	ug/L			5.00	2.6e+02		07/22/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e+02		07/22/08
Barium	7440-39-3	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/22/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/22/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/22/08
Zinc	7440-66-6	LA-505-411	DU	< 45.0	ug/L			5.00	45		07/22/08

**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)

U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

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

Report WGPP/ver. 5.2

Groundwater Remediation Program

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# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01822  
**Client ID:** B1VVR3

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	DN	1.30e + 04	ug/L			5.00	3.6e + 02		07/22/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e + 02		07/22/08
Molybdenum	7439-98-7	LA-505-411	DNU	< 25.0	ug/L			5.00	25		07/22/08
Strontium	7440-24-6	LA-505-411	D	42.1	ug/L			5.00	20		07/22/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e + 02		07/22/08

**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)

U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

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Report WGPP/ver. 5.2

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# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01823  
**Client ID:** B1VVR4

**TRENT  
WSCF**

**Matrix: WATER**

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Anions by Ion Chromatography</b>											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/18/08
Chloride	16887-00-6	LA-533-410	D	3.77	mg/L			10.00	1.1		06/18/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/18/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.380	mg/L			10.00	0.36		06/18/08
Phosphate (P) by IC	PO4-P	LA-533-410	D	55.1	mg/L			10.00	0.32		06/18/08
Sulfate	14808-79-8	LA-533-410	BD	6.39	mg/L			10.00	0.77		06/18/08
<b>ICP Metals Analysis, Grd H2O P Prep</b>											<b>07/16/08</b>
<b>ICP Metals Analysis, Grd H2O P</b>											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e+02		07/22/08
Iron	7439-89-6	LA-505-411	DU	< 125	ug/L			5.00	1.2e+02		07/22/08
Magnesium	7439-95-4	LA-505-411	DN	1.01e+03	ug/L			5.00	2.5e+02		07/22/08
Manganese	7439-96-5	LA-505-411	D	264	ug/L			5.00	20		07/22/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Potassium	7440-09-7	LA-505-411	D	1.10e+03	ug/L			5.00	8.5e+02		07/22/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/22/08
Sodium	7440-23-5	LA-505-411	D	1.15e+05	ug/L			5.00	2.6e+02		07/22/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e+02		07/22/08
Barium	7440-39-3	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/22/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/22/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/22/08
Zinc	7440-66-6	LA-505-411	DU	< 45.0	ug/L			5.00	45		07/22/08

**MDL = Minimum Detection Limit**

**RQ = Result Qualifier**

**TP Err = Total Propagated Error**

**DF = Dilution Factor**

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D - Analyte was identified at a secondary dilution factor (inorg)

U - Analyzed for but not detected above limiting criteria (inorg)

+ - Indicates more than six qualifier symbols

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits. (inorg)

U - Analyzed for but not detected above limiting criteria.

Report WGPP/ver. 5.2

Groundwater Remediation Program

# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01823  
**Client ID:** B1VVR4

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	DN	5.14e+03	ug/L			5.00	3.6e+02		07/22/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e+02		07/22/08
Molybdenum	7439-98-7	LA-505-411	DNU	< 25.0	ug/L			5.00	25		07/22/08
Strontium	7440-24-6	LA-505-411	D	38.3	ug/L			5.00	20		07/22/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e+02		07/22/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

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D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

Report WGPP/ver. 5.2

Groundwater Remediation Program

# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #:** W08GR01824  
**Client ID:** B1VVR5

**TRENT  
WSCF**

**Matrix: WATER**

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Anions by Ion Chromatography</b>											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/18/08
Chloride	16887-00-6	LA-533-410	D	32.9	mg/L			10.00	1.1		06/18/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/18/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.360	mg/L			10.00	0.36		06/18/08
Phosphate (P) by IC	PO4-P	LA-533-410	D	136	mg/L			10.00	0.32		06/18/08
Sulfate	14808-79-8	LA-533-410	BD	1.13	mg/L			10.00	0.77		06/18/08
<b>ICP Metals Analysis, Grd H2O P Prep</b>											<b>07/16/08</b>
<b>ICP Metals Analysis, Grd H2O P</b>											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e+02		07/22/08
Iron	7439-89-6	LA-505-411	DU	< 125	ug/L			5.00	1.2e+02		07/22/08
Magnesium	7439-95-4	LA-505-411	DN	5.52e+03	ug/L			5.00	2.5e+02		07/22/08
Manganese	7439-96-5	LA-505-411	D	454	ug/L			5.00	20		07/22/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Potassium	7440-09-7	LA-505-411	D	3.04e+03	ug/L			5.00	8.5e+02		07/22/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/22/08
Sodium	7440-23-5	LA-505-411	D	3.02e+05	ug/L			5.00	2.6e+02		07/22/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e+02		07/22/08
Barium	7440-39-3	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/22/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/22/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/22/08
Zinc	7440-66-6	LA-505-411	DU	< 45.0	ug/L			5.00	45		07/22/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

+ - Indicates more than six qualifier symbols

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

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Report WGPP/ver. 5.2

Groundwater Remediation Program

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01824  
**Client ID:** B1VVR5

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	DN	1.65e+04	ug/L			5.00	3.6e+02		07/22/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e+02		07/22/08
Molybdenum	7439-98-7	LA-505-411	DNU	< 25.0	ug/L			5.00	25		07/22/08
Strontium	7440-24-6	LA-505-411	D	75.5	ug/L			5.00	20		07/22/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e+02		07/22/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

+ - Indicates more than six qualifier symbols

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

Report WGPP/ver. 5.2

Groundwater Remediation Program

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# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01825  
**Client ID:** B1VVR6

**TRENT  
WSCF**

**Matrix: WATER**

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Anions by Ion Chromatography</b>											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/18/08
Chloride	16887-00-6	LA-533-410	D	12.1	mg/L			10.00	1.1		06/18/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/18/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.360	mg/L			10.00	0.36		06/18/08
Phosphate (P) by IC	PO4-P	LA-533-410	D	128	mg/L			10.00	0.32		06/18/08
Sulfate	14808-79-8	LA-533-410	BD	5.55	mg/L			10.00	0.77		06/18/08
<b>ICP Metals Analysis, Grd H20 P Prep</b>											<b>07/16/08</b>
<b>ICP Metals Analysis, Grd H20 P</b>											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e+02		07/22/08
Iron	7439-89-6	LA-505-411	DU	< 125	ug/L			5.00	1.2e+02		07/22/08
Magnesium	7439-95-4	LA-505-411	DN	1.00e+03	ug/L			5.00	2.5e+02		07/22/08
Manganese	7439-96-5	LA-505-411	D	507	ug/L			5.00	20		07/22/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Potassium	7440-09-7	LA-505-411	D	1.98e+03	ug/L			5.00	8.5e+02		07/22/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/22/08
Sodium	7440-23-5	LA-505-411	D	2.84e+05	ug/L			5.00	2.6e+02		07/22/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e+02		07/22/08
Barium	7440-39-3	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/22/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/22/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/22/08
Zinc	7440-66-8	LA-505-411	DU	< 45.0	ug/L			5.00	45		07/22/08

**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)

U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

\* - Indicates results that have NOT been validated;

+ - Indicates more than six qualifier symbols

Report WGPP/ver. 5.2

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# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01825  
**Client ID:** B1VVR6

TRENT  
WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	DN	5.11e+03	ug/L			5.00	3.6e+02		07/22/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e+02		07/22/08
Molybdenum	7439-98-7	LA-505-411	DNU	< 25.0	ug/L			5.00	25		07/22/08
Strontium	7440-24-8	LA-505-411	D	46.2	ug/L			5.00	20		07/22/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e+02		07/22/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

+ - Indicates more than six qualifier symbols

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

Report WGPP/ver. 5.2

Groundwater Remediation Program

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #:** W08GR01826  
**Client ID:** B1VVR7

**TRENT**  
**WSCF**

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Anions by Ion Chromatography</b>											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		08/18/08
Chloride	16887-00-6	LA-533-410	D	10.6	mg/L			10.00	1.1		08/18/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/18/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.360	mg/L			10.00	0.36		06/18/08
Phosphate (P) by IC	PO4-P	LA-533-410	D	53.0	mg/L			10.00	0.32		06/18/08
Sulfate	14808-79-8	LA-533-410	BD	5.39	mg/L			10.00	0.77		06/18/08
<b>ICP Metals Analysis, Grd H2O P Prep</b>											<b>07/16/08</b>
<b>ICP Metals Analysis, Grd H2O P</b>											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e+02		07/22/08
Iron	7439-89-6	LA-505-411	D	162	ug/L			5.00	1.2e+02		07/22/08
Magnesium	7439-95-4	LA-505-411	DN	4.30e+03	ug/L			5.00	2.5e+02		07/22/08
Manganese	7439-96-5	LA-505-411	D	1.35e+03	ug/L			5.00	20		07/22/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Potassium	7440-09-7	LA-505-411	D	1.56e+03	ug/L			5.00	8.5e+02		07/22/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/22/08
Sodium	7440-23-5	LA-505-411	D	1.25e+05	ug/L			5.00	2.6e+02		07/22/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e+02		07/22/08
Barium	7440-39-3	LA-505-411	D	43.0	ug/L			5.00	20		07/22/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/22/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/22/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/22/08
Zinc	7440-66-6	LA-505-411	DU	< 45.0	ug/L			5.00	45		07/22/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor (inorg)

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+ - Indicates more than six qualifier symbols

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits. (inorg)

U - Analyzed for but not detected above limiting criteria.

Report WGPP/ver. 5.2

Groundwater Remediation Program

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01826  
**Client ID:** B1VVR7

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	DN	1.50e+04	ug/L			5.00	3.6e+02		07/22/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e+02		07/22/08
Molybdenum	7439-98-7	LA-505-411	DNU	< 25.0	ug/L			5.00	25		07/22/08
Strontium	7440-24-6	LA-505-411	D	53.9	ug/L			5.00	20		07/22/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e+02		07/22/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

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D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

Report WGPP/ver. 5.2

Groundwater Remediation Program

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01827  
**Client ID:** B1VVR8

**TRENT**  
**WSCF**

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Anions by Ion Chromatography</b>											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/18/08
Chloride	16887-00-6	LA-533-410	D	20.8	mg/L			10.00	1.1		06/18/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/18/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.360	mg/L			10.00	0.36		06/18/08
Phosphate (P) by IC	PO4-P	LA-533-410	D	92.4	mg/L			10.00	0.32		06/18/08
Sulfate	14808-79-8	LA-533-410	BD	5.67	mg/L			10.00	0.77		06/18/08
<b>ICP Metals Analysis, Grd H2O P Prep</b>											<b>07/16/08</b>
<b>ICP Metals Analysis, Grd H2O P</b>											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e + 02		07/22/08
Iron	7439-89-6	LA-505-411	DU	< 125	ug/L			5.00	1.2e + 02		07/22/08
Magnesium	7439-95-4	LA-505-411	DN	2.37e + 03	ug/L			5.00	2.5e + 02		07/22/08
Manganese	7439-96-5	LA-505-411	D	660	ug/L			5.00	20		07/22/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Potassium	7440-09-7	LA-505-411	D	2.03e + 03	ug/L			5.00	8.5e + 02		07/22/08
Silver	7440-22-4	LA-505-411	D	25.0	ug/L			5.00	25		07/22/08
Sodium	7440-23-5	LA-505-411	D	2.41e + 05	ug/L			5.00	2.6e + 02		07/22/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e + 02		07/22/08
Barium	7440-39-3	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/22/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/22/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/22/08
Zinc	7440-66-6	LA-505-411	DU	< 45.0	ug/L			5.00	45		07/22/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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D - Analyte was identified at a secondary dilution factor (inorg)

U - Analyzed for but not detected above limiting criteria (inorg)

+ - Indicates more than six qualifier symbols

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits. (inorg)

U - Analyzed for but not detected above limiting criteria.

Report WGPP/ver. 5.2

Groundwater Remediation Program

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01827  
**Client ID:** B1VVR8

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	DN	1.08e+04	ug/L			5.00	3.6e+02		07/22/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e+02		07/22/08
Molybdenum	7439-98-7	LA-505-411	DNU	< 25.0	ug/L			5.00	25		07/22/08
Strontium	7440-24-8	LA-505-411	D	71.2	ug/L			5.00	20		07/22/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e+02		07/22/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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U - Analyzed for but not detected above limiting criteria(inorg)

+ - Indicates more than six qualifier symbols

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

Report WGPP/ver. 5.2

Groundwater Remediation Program

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# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01828  
**Client ID:** B1VVR9

**TRENT**  
**WSCF**

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Anions by Ion Chromatography</b>											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/18/08
Chloride	16887-00-6	LA-533-410	BD	2.96	mg/L			10.00	1.1		06/18/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/18/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.380	mg/L			10.00	0.38		06/18/08
Phosphate (P) by IC	PO4-P	LA-533-410	D	20.5	mg/L			10.00	0.32		06/18/08
Sulfate	14808-79-8	LA-533-410	D	11.3	mg/L			10.00	0.77		06/18/08
<b>ICP Metals Analysis, Grd H2O P Prep</b>											<b>07/16/08</b>
<b>ICP Metals Analysis, Grd H2O P</b>											
Aluminum	7429-90-5	LA-505-411	DU	< 260	ug/L			5.00	2.6e +02		07/22/08
Iron	7439-89-6	LA-505-411	D	246	ug/L			5.00	1.2e +02		07/22/08
Magnesium	7439-95-4	LA-505-411	DN	1.70e +03	ug/L			5.00	2.5e +02		07/22/08
Manganese	7439-96-5	LA-505-411	D	284	ug/L			5.00	20		07/22/08
Nickel	7440-02-0	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Potassium	7440-09-7	LA-505-411	D	1.35e +03	ug/L			5.00	8.5e +02		07/22/08
Silver	7440-22-4	LA-505-411	DU	< 25.0	ug/L			5.00	25		07/22/08
Sodium	7440-23-5	LA-505-411	D	6.78e +04	ug/L			5.00	2.6e +02		07/22/08
Antimony	7440-36-0	LA-505-411	DU	< 280	ug/L			5.00	2.8e +02		07/22/08
Barium	7440-39-3	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Cadmium	7440-43-9	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Chromium	7440-47-3	LA-505-411	DU	< 65.0	ug/L			5.00	65		07/22/08
Cobalt	7440-48-4	LA-505-411	DU	< 20.0	ug/L			5.00	20		07/22/08
Copper	7440-50-8	LA-505-411	DU	< 30.0	ug/L			5.00	30		07/22/08
Vanadium	7440-62-2	LA-505-411	DU	< 60.0	ug/L			5.00	60		07/22/08
Zinc	7440-66-8	LA-505-411	DU	< 45.0	ug/L			5.00	45		07/22/08

**MDL = Minimum Detection Limit**

**RQ = Result Qualifier**

**TP Err = Total Propagated Error**

**DF = Dilution Factor**

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D - Analyte was identified at a secondary dilution factor (inorg)

U - Analyzed for but not detected above limiting criteria (inorg)

+ - Indicates more than six qualifier symbols

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits. (inorg)

U - Analyzed for but not detected above limiting criteria.

Report WGPP/ver. 5.2

Groundwater Remediation Program

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# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01828  
**Client ID:** B1VVR9

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	DN	1.01e+04	ug/L			5.00	3.6e+02		07/22/08
Lead	7439-92-1	LA-505-411	DU	< 225	ug/L			5.00	2.2e+02		07/22/08
Molybdenum	7439-98-7	LA-505-411	DNU	< 25.0	ug/L			5.00	25		07/22/08
Strontium	7440-24-8	LA-505-411	D	50.8	ug/L			5.00	20		07/22/08
Arsenic	7440-38-2	LA-505-411	DU	< 390	ug/L			5.00	3.9e+02		07/22/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

+ - Indicates more than six qualifier symbols

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(Inorg)

U - Analyzed for but not detected above limiting criteria.

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Report WGPP/ver. 5.2

Groundwater Remediation Program

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01829  
**Client ID:** BIVVTO

**TRENT**  
**WSCF**

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Anions by Ion Chromatography</b>											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/18/08
Chloride	16887-00-6	LA-533-410	D	28.6	mg/L			10.00	1.1		06/18/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/18/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.360	mg/L			10.00	0.36		06/18/08
Phosphate (P) by IC	PO4-P	LA-533-410	D	11.9	mg/L			10.00	0.32		06/18/08
Sulfate	14808-79-8	LA-533-410	BD	7.53	mg/L			10.00	0.77		06/18/08
<b>ICP Metals Analysis, Grd H20 P Prep</b>											<b>07/22/08</b>
<b>ICP Metals Analysis, Grd H20 P</b>											
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	137	ug/L			5.00	1.2e+02		07/23/08
Magnesium	7439-95-4	LA-505-411	DN	1.76e+04	ug/L			5.00	2.5e+02		07/23/08
Manganese	7439-96-5	LA-505-411	D	519	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	2.24e+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	7.00e+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	D	80.0	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**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

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D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

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Report WGPP/ver. 5.2

Groundwater Remediation Program

# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01829  
**Client ID:** B1VVT0

TRENT  
WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	D	7.80e+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	363	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**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

+ - Indicates more than six qualifier symbols

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

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Report WGPP/ver. 5.2

Groundwater Remediation Program

# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01830  
**Client ID:** B1VVT6

**TRENT  
WSCF**

**Matrix: WATER**

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Anions by Ion Chromatography</b>											
Fluoride	16984-48-8	LA-533-410	DU	< 0.210	mg/L			10.00	0.21		06/18/08
Chloride	16887-00-6	LA-533-410	BD	2.58	mg/L			10.00	1.1		06/18/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0990	mg/L			10.00	0.099		06/18/08
Nitrogen in Nitrate	NO3-N	LA-533-410	DU	< 0.360	mg/L			10.00	0.36		06/18/08
Phosphate (P) by IC	PO4-P	LA-533-410	D	22.0	mg/L			10.00	0.32		06/18/08
Sulfate	14808-79-8	LA-533-410	D	28.6	mg/L			10.00	0.77		06/18/08
<b>ICP Metals Analysis, Grd H20 P Prep</b>											<b>07/22/08</b>
<b>ICP Metals Analysis, Grd H20 P</b>											
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	735	ug/L			5.00	2.5e+02		07/23/08
Manganese	7439-96-5	LA-505-411	D	108	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	1.05e+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	7.62e+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	7440-66-8	LA-505-411	D	58.6	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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Report WGPP/ver. 5.2

Groundwater Remediation Program

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01830  
**Client ID:** BIVVT6

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Inorganic  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Calcium	7440-70-2	LA-505-411	D	4.72e+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	7440-24-8	LA-505-411	D	22.1	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**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

+ - Indicates more than six qualifier symbols

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

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Report WGPP/ver. 5.2

Groundwater Remediation Program

# WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081218  
 Matrix: WATER  
 Test: Anions by Ion Chromatography

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
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Lab ID: W08GR01806  
 BATCH QC ASSOCIATED WITH SAMPLE

DUP	Chloride	16887-00-6	25.7787		RPD			1.142	20.000		06/18/08
DUP	Fluoride	16984-48-8	0.3374		RPD			n/a	20.000		06/18/08
DUP	Nitrogen in Nitrite	NO2-N	<9.9e-2		RPD			n/a	20.000	U	06/18/08
DUP	Nitrogen in Nitrate	NO3-N	<0.36		RPD			n/a	20.000	U	06/18/08
DUP	Phosphate (P) by IC	PO4-P	172.0117		RPD			0.155	20.000		06/18/08
DUP	Sulfate	14808-79-8	5.6919		RPD			0.218	20.000		06/18/08
MS	Chloride	16887-00-6	0.92342	92.806	% Recov	80.000	120.000				06/18/08
MS	Fluoride	16984-48-8	0.4362	88.479	% Recov	80.000	120.000				06/18/08
MS	Nitrogen in Nitrite	NO2-N	0.44548	90.545	% Recov	80.000	120.000				06/18/08
MS	Nitrogen in Nitrate	NO3-N	0.39427	88.401	% Recov	80.000	120.000				06/18/08
MS	Phosphate (P) by IC	PO4-P	0.72773	76.043	% Recov	80.000	120.000				06/18/08
MS	Sulfate	14808-79-8	1.91503	97.706	% Recov	80.000	120.000				06/18/08
MSD	Chloride	16887-00-6	0.92151	92.614	% Recov	80.000	120.000				06/18/08
MSD	Fluoride	16984-48-8	0.45379	92.047	% Recov	80.000	120.000				06/18/08
MSD	Nitrogen in Nitrite	NO2-N	0.44675	90.803	% Recov	80.000	120.000				06/18/08
MSD	Nitrogen in Nitrate	NO3-N	0.38112	85.453	% Recov	80.000	120.000				06/18/08
MSD	Phosphate (P) by IC	PO4-P	0.83302	87.045	% Recov	80.000	120.000				06/18/08
MSD	Sulfate	14808-79-8	1.89975	96.926	% Recov	80.000	120.000				06/18/08
SPK-RPD	Chloride	16887-00-6	92.614		RPD			0.207	20.000		06/18/08
SPK-RPD	Fluoride	16984-48-8	92.047		RPD			3.953	20.000		06/18/08
SPK-RPD	Nitrogen in Nitrite	NO2-N	90.803		RPD			0.285	20.000		06/18/08
SPK-RPD	Nitrogen in Nitrate	NO3-N	85.453		RPD			3.391	20.000		06/18/08
SPK-RPD	Phosphate (P) by IC	PO4-P	87.045		RPD			13.492	20.000		06/18/08
SPK-RPD	Sulfate	14808-79-8	96.926		RPD			0.802	20.000		06/18/08

# WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081218  
 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
<b>BATCH QC</b>											
BLANK	Chloride	16887-00-6	<0.11	n/a	mg/L	0.000	0.030			U	06/18/08
BLANK	Chloride	16887-00-6	<0.11	n/a	mg/L	0.000	0.030			U	06/18/08
BLANK	Fluoride	16984-48-8	<2.1e-2	n/a	mg/L	0.000	0.030			U	06/18/08
BLANK	Fluoride	16984-48-8	<2.1e-2	n/a	mg/L	0.000	0.030			U	06/18/08
BLANK	Nitrogen in Nitrite	NO2-N	<9.9e-3	n/a	mg/L	0.000	0.020			U	06/18/08
BLANK	Nitrogen in Nitrite	NO2-N	<9.9e-3	n/a	mg/L	0.000	0.020			U	06/18/08
BLANK	Nitrogen in Nitrate	NO3-N	<3.8e-2	n/a	mg/L	0.000	0.040			U	06/18/08
BLANK	Nitrogen in Nitrate	NO3-N	<3.8e-2	n/a	mg/L	0.000	0.040			U	06/18/08
BLANK	Phosphate (P) by IC	PO4-P	<3.2e-2	n/a	mg/L	0.000	0.200			U	06/18/08
BLANK	Phosphate (P) by IC	PO4-P	<3.2e-2	n/a	mg/L	0.000	0.200			U	06/18/08
BLANK	Sulfate	14808-79-8	<7.7e-2	n/a	mg/L	0.000	0.200			U	06/18/08
BLANK	Sulfate	14808-79-8	<7.7e-2	n/a	mg/L	0.000	0.200			U	06/18/08
LCS	Chloride	16887-00-6	200.5538	99.778	% Recov	80.000	120.000				06/18/08
LCS	Fluoride	16984-48-8	109.2081	109.647	% Recov	80.000	120.000				06/18/08
LCS	Nitrogen in Nitrite	NO2-N	101.3272	101.939	% Recov	80.000	120.000				06/18/08
LCS	Nitrogen in Nitrate	NO3-N	93.3102	103.563	% Recov	80.000	120.000				06/18/08
LCS	Phosphate (P) by IC	PO4-P	189.0777	97.765	% Recov	80.000	120.000				06/18/08
LCS	Sulfate	14808-79-8	392.9702	99.235	% Recov	80.000	120.000				06/18/08
<b>Lab ID: W08GR01778</b>											
<b>BATCH QC ASSOCIATED WITH SAMPLE</b>											
DUP	Chloride	16887-00-6	2.3096		RPD			0.913	20.000		06/18/08
DUP	Fluoride	16984-48-8	<0.21		RPD			n/a	20.000	U	06/18/08
DUP	Nitrogen in Nitrite	NO2-N	<9.9e-2		RPD			n/a	20.000	U	06/18/08
DUP	Nitrogen in Nitrate	NO3-N	<0.36		RPD			n/a	20.000	U	06/18/08
DUP	Phosphate (P) by IC	PO4-P	3.941		RPD			4.368	20.000		06/18/08
DUP	Sulfate	14808-79-8	8.5842		RPD			0.136	20.000		06/18/08
MS	Chloride	16887-00-6	0.90707	91.163	% Recov	80.000	120.000				06/18/08

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# WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081218  
 Matrix: WATER  
 Test: Anions by Ion Chromatography

Sample Date: 06/16/08  
 Receive Date: 06/16/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
MS	Fluoride	16984-48-8	0.44742	90.755	% Recov	80.000	120.000				06/18/08
MS	Nitrogen in Nitrite	NO2-N	0.4656	94.634	% Recov	80.000	120.000				06/18/08
MS	Nitrogen in Nitrate	NO3-N	0.42765	95.886	% Recov	80.000	120.000				06/18/08
MS	Phosphate (P) by IC	PO4-P	0.92167	96.308	% Recov	80.000	120.000				06/18/08
MS	Sulfate	14808-79-8	1.82126	92.921	% Recov	80.000	120.000				06/18/08
MSD	Chloride	16887-00-6	0.90692	91.148	% Recov	80.000	120.000				06/18/08
MSD	Fluoride	16984-48-8	0.44695	90.659	% Recov	80.000	120.000				06/18/08
MSD	Nitrogen in Nitrite	NO2-N	0.4666	94.837	% Recov	80.000	120.000				06/18/08
MSD	Nitrogen in Nitrate	NO3-N	0.42725	95.796	% Recov	80.000	120.000				06/18/08
MSD	Phosphate (P) by IC	PO4-P	0.95261	99.541	% Recov	80.000	120.000				06/18/08
MSD	Sulfate	14808-79-8	1.84763	94.267	% Recov	80.000	120.000				06/18/08
SPK-RPD	Chloride	16887-00-6	91.148		RPD			0.016	20.000		06/18/08
SPK-RPD	Fluoride	16984-48-8	90.659		RPD			0.106	20.000		06/18/08
SPK-RPD	Nitrogen in Nitrite	NO2-N	94.837		RPD			0.214	20.000		06/18/08
SPK-RPD	Nitrogen in Nitrate	NO3-N	95.796		RPD			0.094	20.000		06/18/08
SPK-RPD	Phosphate (P) by IC	PO4-P	99.541		RPD			3.302	20.000		06/18/08
SPK-RPD	Sulfate	14808-79-8	94.267		RPD			1.438	20.000		06/18/08
<b>Lab ID: W08GR01807</b>											
<b>BATCH QC ASSOCIATED WITH SAMPLE</b>											
DUP	Chloride	16887-00-6	1.5343		RPD			7.780	20.000		06/18/08
DUP	Fluoride	16984-48-8	<0.105		RPD			n/a	20.000	U	06/18/08
DUP	Nitrogen in Nitrite	NO2-N	<4.95e-2		RPD			n/a	20.000	U	06/18/08
DUP	Nitrogen in Nitrate	NO3-N	<0.18		RPD			n/a	20.000	U	06/18/08
DUP	Phosphate (P) by IC	PO4-P	3.4831		RPD			2.290	20.000		06/18/08
DUP	Sulfate	14808-79-8	8.6971		RPD			1.384	20.000		06/18/08
MS	Chloride	16887-00-6	0.9217	92.633	% Recov	80.000	120.000				06/18/08
MS	Fluoride	16984-48-8	0.44986	91.249	% Recov	80.000	120.000				06/18/08
MS	Nitrogen in Nitrite	NO2-N	0.46292	94.089	% Recov	80.000	120.000				06/18/08
MS	Nitrogen in Nitrate	NO3-N	0.45438	101.879	% Recov	80.000	120.000				06/18/08

# WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081218  
 Matrix: WATER  
 Test: Anions by Ion Chromatography

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
MS	Phosphate (P) by IC	PO4-P	0.91504	95.615	% Recov	80.000	120.000				06/18/08
MS	Sulfate	14808-79-8	1.86228	95.014	% Recov	80.000	120.000				06/18/08
MSD	Chloride	16887-00-6	0.9154	92.000	% Recov	80.000	120.000				06/18/08
MSD	Fluoride	16984-48-8	0.4467	90.609	% Recov	80.000	120.000				06/18/08
MSD	Nitrogen in Nitrite	NO2-N	0.4628	94.065	% Recov	80.000	120.000				06/18/08
MSD	Nitrogen in Nitrate	NO3-N	0.44904	100.682	% Recov	80.000	120.000				06/18/08
MSD	Phosphate (P) by IC	PO4-P	0.90826	94.907	% Recov	80.000	120.000				06/18/08
MSD	Sulfate	14808-79-8	1.83786	93.768	% Recov	80.000	120.000				06/18/08
SPK-RPD	Chloride	16887-00-6	92.000		RPD			0.686	20.000		06/18/08
SPK-RPD	Fluoride	16984-48-8	90.609		RPD			0.704	20.000		06/18/08
SPK-RPD	Nitrogen in Nitrite	NO2-N	94.065		RPD			0.026	20.000		06/18/08
SPK-RPD	Nitrogen in Nitrate	NO3-N	100.682		RPD			1.182	20.000		06/18/08
SPK-RPD	Phosphate (P) by IC	PO4-P	94.907		RPD			0.743	20.000		06/18/08
SPK-RPD	Sulfate	14808-79-8	93.768		RPD			1.320	20.000		06/18/08
<b>BATCH QC</b>											
BLANK	Chloride	16887-00-6	<0.11	n/a	mg/L	0.000	0.030			U	06/18/08
BLANK	Chloride	16887-00-6	<0.11	n/a	mg/L	0.000	0.030			U	06/18/08
BLANK	Chloride	16887-00-6	<0.11	n/a	mg/L	0.000	0.030			U	06/18/08
BLANK	Fluoride	16984-48-8	<2.1e-2	n/a	mg/L	0.000	0.030			U	06/18/08
BLANK	Fluoride	16984-48-8	<2.1e-2	n/a	mg/L	0.000	0.030			U	06/18/08
BLANK	Fluoride	16984-48-8	<2.1e-2	n/a	mg/L	0.000	0.030			U	06/18/08
BLANK	Nitrogen in Nitrite	NO2-N	<9.9e-3	n/a	mg/L	0.000	0.020			U	06/18/08
BLANK	Nitrogen in Nitrite	NO2-N	<9.9e-3	n/a	mg/L	0.000	0.020			U	06/18/08
BLANK	Nitrogen in Nitrite	NO2-N	<9.9e-3	n/a	mg/L	0.000	0.020			U	06/18/08
BLANK	Nitrogen in Nitrate	NO3-N	<3.6e-2	n/a	mg/L	0.000	0.040			U	06/18/08
BLANK	Nitrogen in Nitrate	NO3-N	<3.6e-2	n/a	mg/L	0.000	0.040			U	06/18/08
BLANK	Nitrogen in Nitrate	NO3-N	<3.6e-2	n/a	mg/L	0.000	0.040			U	06/18/08
BLANK	Phosphate (P) by IC	PO4-P	<3.2e-2	n/a	mg/L	0.000	0.200			U	06/18/08
BLANK	Phosphate (P) by IC	PO4-P	<3.2e-2	n/a	mg/L	0.000	0.200			U	06/18/08

# WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Inorganic**

SDG Number: WSCF20081218  
 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	Phosphate (P) by IC	PO4-P	<3.2e-2	n/a	mg/L	0.000	0.200			U	06/18/08
BLANK	Sulfate	14808-79-8	<7.7e-2	n/a	mg/L	0.000	0.200			U	06/18/08
BLANK	Sulfate	14808-79-8	<7.7e-2	n/a	mg/L	0.000	0.200			U	06/18/08
BLANK	Sulfate	14808-79-8	<7.7e-2	n/a	mg/L	0.000	0.200			U	06/18/08
LCS	Chloride	16887-00-6	193.6015	96.319	% Recov	80.000	120.000				06/18/08
LCS	Chloride	16887-00-6	186.4372	92.755	% Recov	80.000	120.000				06/18/08
LCS	Fluoride	16984-48-8	102.9116	103.325	% Recov	80.000	120.000				06/18/08
LCS	Fluoride	16984-48-8	96.0498	96.436	% Recov	80.000	120.000				06/18/08
LCS	Nitrogen in Nitrite	NO2-N	96.3025	96.884	% Recov	80.000	120.000				06/18/08
LCS	Nitrogen in Nitrite	NO2-N	98.2422	98.835	% Recov	80.000	120.000				06/18/08
LCS	Nitrogen in Nitrate	NO3-N	89.0401	98.824	% Recov	80.000	120.000				06/18/08
LCS	Nitrogen in Nitrate	NO3-N	89.8845	99.761	% Recov	80.000	120.000				06/18/08
LCS	Phosphate (P) by IC	PO4-P	188.5984	97.517	% Recov	80.000	120.000				06/18/08
LCS	Phosphate (P) by IC	PO4-P	190.206	98.349	% Recov	80.000	120.000				06/18/08
LCS	Sulfate	14808-79-8	372.0262	93.946	% Recov	80.000	120.000				06/18/08
LCS	Sulfate	14808-79-8	378.6347	95.615	% Recov	80.000	120.000				06/18/08

**Lab ID: W08GR01804**  
**BATCH QC ASSOCIATED WITH SAMPLE**

DUP	Chloride	16887-00-6	0.8996		RPD			32.703	20.000 *		06/18/08
DUP	Fluoride	16984-48-8	<0.105		RPD			n/a	20.000	U	06/18/08
DUP	Nitrogen in Nitrite	NO2-N	0.2128		RPD			9.276	20.000		06/18/08
DUP	Nitrogen in Nitrate	NO3-N	0.3438		RPD			2.158	20.000		06/18/08
DUP	Phosphate (P) by IC	PO4-P	10.2362		RPD			0.089	20.000		06/18/08
DUP	Sulfate	14808-79-8	6.2226		RPD			1.956	20.000		06/18/08
MS	Chloride	16887-00-6	0.91818	92.279	% Recov	80.000	120.000				06/18/08
MS	Fluoride	16984-48-8	0.47604	96.560	% Recov	80.000	120.000				06/18/08
MS	Nitrogen in Nitrite	NO2-N	0.47368	96.276	% Recov	80.000	120.000				06/18/08
MS	Nitrogen in Nitrate	NO3-N	0.43618	97.798	% Recov	80.000	120.000				06/18/08
MS	Phosphate (P) by IC	PO4-P	0.9969	104.169	% Recov	80.000	120.000				06/18/08

# WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081218  
 Matrix: WATER  
 Test: Anions by Ion Chromatography

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
MS	Sulfate	14808-79-8	1.79806	91.636	% Recov	80.000	120.000				06/18/08
MSD	Chloride	16887-00-6	0.90976	91.433	% Recov	80.000	120.000				06/18/08
MSD	Fluoride	16984-48-8	0.48218	97.805	% Recov	80.000	120.000				06/18/08
MSD	Nitrogen in Nitrite	NO2-N	0.47564	96.675	% Recov	80.000	120.000				06/18/08
MSD	Nitrogen in Nitrate	NO3-N	0.43924	98.484	% Recov	80.000	120.000				06/18/08
MSD	Phosphate (P) by IC	PO4-P	1.02022	106.606	% Recov	80.000	120.000				06/18/08
MSD	Sulfate	14808-79-8	1.8199	92.852	% Recov	80.000	120.000				06/18/08
SPK-RPD	Chloride	16887-00-6	91.433		RPD			0.921	20.000		06/18/08
SPK-RPD	Fluoride	16984-48-8	97.805		RPD			1.281	20.000		06/18/08
SPK-RPD	Nitrogen in Nitrite	NO2-N	96.875		RPD			0.414	20.000		06/18/08
SPK-RPD	Nitrogen in Nitrate	NO3-N	98.484		RPD			0.699	20.000		06/18/08
SPK-RPD	Phosphate (P) by IC	PO4-P	106.606		RPD			2.312	20.000		06/18/08
SPK-RPD	Sulfate	14808-79-8	92.852		RPD			1.318	20.000		06/18/08

## BATCH QC

BLANK	Chloride	16887-00-6	<0.11	n/a	mg/L	0.000	0.030			U	06/18/08
BLANK	Chloride	16887-00-6	<0.11	n/a	mg/L	0.000	0.030			U	06/18/08
BLANK	Fluoride	16984-48-8	<2.1e-2	n/a	mg/L	0.000	0.030			U	06/18/08
BLANK	Fluoride	16984-48-8	<2.1e-2	n/a	mg/L	0.000	0.030			U	06/18/08
BLANK	Nitrogen in Nitrite	NO2-N	<9.9e-3	n/a	mg/L	0.000	0.020			U	06/18/08
BLANK	Nitrogen in Nitrite	NO2-N	<9.9e-3	n/a	mg/L	0.000	0.020			U	06/18/08
BLANK	Nitrogen in Nitrate	NO3-N	<3.6e-2	n/a	mg/L	0.000	0.040			U	06/18/08
BLANK	Nitrogen in Nitrate	NO3-N	<3.6e-2	n/a	mg/L	0.000	0.040			U	06/18/08
BLANK	Phosphate (P) by IC	PO4-P	<3.2e-2	n/a	mg/L	0.000	0.200			U	06/18/08
BLANK	Phosphate (P) by IC	PO4-P	<3.2e-2	n/a	mg/L	0.000	0.200			U	06/18/08
BLANK	Sulfate	14808-79-8	<7.7e-2	n/a	mg/L	0.000	0.200			U	06/18/08
BLANK	Sulfate	14808-79-8	<7.7e-2	n/a	mg/L	0.000	0.200			U	06/18/08
LCS	Chloride	16887-00-6	187.2706	93.169	% Recov	80.000	120.000				06/18/08
LCS	Fluoride	16984-48-8	101.4705	101.878	% Recov	80.000	120.000				06/18/08
LCS	Nitrogen in Nitrite	NO2-N	97.3253	97.913	% Recov	80.000	120.000				06/18/08

# WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081218  
 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
LCS	Nitrogen in Nitrate	NO3-N	89.9662	99.851	% Recov	80.000	120.000				06/18/08
LCS	Phosphate (P) by IC	PO4-P	186.2612	96.309	% Recov	80.000	120.000				06/18/08
LCS	Sulfate	14808-79-8	366.6217	92.581	% Recov	80.000	120.000				06/18/08

**Lab ID: W08GR01535**  
**BATCH QC ASSOCIATED WITH SAMPLE**

DUP	Phosphate (P) by IC	PO4-P	20.8833		RPD			2.152	20.000		06/19/08
MS	Phosphate (P) by IC	PO4-P	0.84531	88.329	% Recov	80.000	120.000				06/19/08
MSD	Phosphate (P) by IC	PO4-P	0.83011	86.741	% Recov	80.000	120.000				06/19/08
SPK-RPD	Phosphate (P) by IC	PO4-P	86.741		RPD			1.814	20.000		06/19/08

**BATCH QC**

BLANK	Phosphate (P) by IC	PO4-P	<3.2e-2	n/a	mg/L	0.000	0.200			U	06/19/08
BLANK	Phosphate (P) by IC	PO4-P	<3.2e-2	n/a	mg/L	0.000	0.200			U	06/19/08
LCS	Phosphate (P) by IC	PO4-P	192.5852	99.579	% Recov	80.000	120.000				06/19/08

**Lab ID: W08GR01556**  
**BATCH QC ASSOCIATED WITH SAMPLE**

DUP	Chloride	16887-00-6	6.8661		RPD			0.682	20.000		06/19/08
DUP	Phosphate (P) by IC	PO4-P	64.2784		RPD			0.344	20.000		06/19/08
MS	Chloride	16887-00-6	0.95539	96.019	% Recov	80.000	120.000				06/19/08
MS	Phosphate (P) by IC	PO4-P	0.90378	94.439	% Recov	80.000	120.000				06/19/08
MSD	Chloride	16887-00-6	0.95917	96.399	% Recov	80.000	120.000				06/19/08
MSD	Phosphate (P) by IC	PO4-P	0.90744	94.821	% Recov	80.000	120.000				06/19/08
SPK-RPD	Chloride	16887-00-6	96.399		RPD			0.395	20.000		06/19/08
SPK-RPD	Phosphate (P) by IC	PO4-P	94.821		RPD			0.404	20.000		06/19/08

**BATCH QC**

BLANK	Chloride	16887-00-6	<0.11	n/a	mg/L	0.000	0.030			U	06/19/08
BLANK	Chloride	16887-00-6	<0.11	n/a	mg/L	0.000	0.030			U	06/19/08

# WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081218  
 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	Phosphate (P) by IC	PO4-P	< 3.2e-2	n/a	mg/L	0.000	0.200			U	06/19/08
BLANK	Phosphate (P) by IC	PO4-P	< 3.2e-2	n/a	mg/L	0.000	0.200			U	06/19/08
LCS	Chloride	18887-00-8	196.8204	97.921	% Recov	80.000	120.000				06/19/08
LCS	Phosphate (P) by IC	PO4-P	189.45	97.958	% Recov	80.000	120.000				06/19/08

# WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081218  
 Matrix: WATER  
 Test: ICP Metals Analysis, Grd H2O P

Sample Date: 06/16/08  
 Receive Date: 06/16/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR01795											
BATCH QC ASSOCIATED WITH SAMPLE											
MS	Silver	7440-22-4	918	91.800	% Recov	75.000	125.000				07/21/08
MS	Aluminum	7429-90-5	889.2	88.920	% Recov	75.000	125.000				07/21/08
MS	Arsenic	7440-38-2	820	82.000	% Recov	75.000	125.000				07/21/08
MS	Barium	7440-39-3	453	90.600	% Recov	75.000	125.000				07/21/08
MS	Calcium	7440-70-2	130	13.000	% Recov	75.000	125.000				07/21/08
MS	Cadmium	7440-43-9	914.2	91.420	% Recov	75.000	125.000				07/21/08
MS	Cobalt	7440-48-4	923.2	92.320	% Recov	75.000	125.000				07/21/08
MS	Chromium	7440-47-3	906.3	90.630	% Recov	75.000	125.000				07/21/08
MS	Copper	7440-50-8	905	90.500	% Recov	75.000	125.000				07/21/08
MS	Iron	7439-89-6	883.3	88.330	% Recov	75.000	125.000				07/21/08
MS	Potassium	7440-09-7	10127	101.270	% Recov	75.000	125.000				07/21/08
MS	Magnesium	7439-95-4	632	63.200	% Recov	75.000	125.000				07/21/08
MS	Manganese	7439-96-5	915	91.500	% Recov	75.000	125.000				07/21/08
MS	Molybdenum	7439-98-7	896.4	89.640	% Recov	70.000	130.000				07/21/08
MS	Sodium	7440-23-5	-9600	-960.000	% Recov	75.000	125.000				07/21/08
MS	Nickel	7440-02-0	923.1	92.310	% Recov	75.000	125.000				07/21/08
MS	Lead	7439-92-1	911	91.100	% Recov	75.000	125.000				07/21/08
MS	Antimony	7440-36-0	949.4	94.940	% Recov	75.000	125.000				07/21/08
MS	Strontium	7440-24-6	467	93.400	% Recov	75.000	125.000				07/21/08
MS	Vanadium	7440-62-2	917	91.700	% Recov	75.000	125.000				07/21/08
MS	Zinc	7440-66-6	911.4	91.140	% Recov	75.000	125.000				07/21/08
MSD	Silver	7440-22-4	907	90.700	% Recov	75.000	125.000				07/21/08
MSD	Aluminum	7429-90-5	882.1	88.210	% Recov	75.000	125.000				07/21/08
MSD	Arsenic	7440-38-2	862	86.200	% Recov	75.000	125.000				07/21/08
MSD	Barium	7440-39-3	453	90.600	% Recov	75.000	125.000				07/21/08
MSD	Calcium	7440-70-2	320	32.000	% Recov	75.000	125.000				07/21/08

# WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081218  
 Matrix: WATER  
 Test: ICP Metals Analysis, Grd H2O P

Sample Date: 06/16/08  
 Receive Date: 06/16/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
MSD	Cadmium	7440-43-9	913.1	91.310	% Recov	75.000	125.000				07/21/08
MSD	Cobalt	7440-48-4	917.8	91.780	% Recov	75.000	125.000				07/21/08
MSD	Chromium	7440-47-3	917	91.700	% Recov	75.000	125.000				07/21/08
MSD	Copper	7440-50-8	913	91.300	% Recov	75.000	125.000				07/21/08
MSD	Iron	7439-89-6	896.2	89.620	% Recov	75.000	125.000				07/21/08
MSD	Potassium	7440-09-7	10007	100.070	% Recov	75.000	125.000				07/21/08
MSD	Magnesium	7439-95-4	638	63.800	% Recov	75.000	125.000			*	07/21/08
MSD	Manganese	7439-96-5	905	90.500	% Recov	75.000	125.000				07/21/08
MSD	Molybdenum	7439-98-7	895.4	89.540	% Recov	75.000	125.000				07/21/08
MSD	Sodium	7440-23-5	-7900	-790.000	% Recov	75.000	125.000			*	07/21/08
MSD	Nickel	7440-02-0	910.6	91.060	% Recov	75.000	125.000				07/21/08
MSD	Lead	7439-92-1	1030	103.000	% Recov	75.000	125.000				07/21/08
MSD	Antimony	7440-36-0	936.6	93.660	% Recov	75.000	125.000				07/21/08
MSD	Strontium	7440-24-6	464.8	46.480	% Recov	75.000	125.000				07/21/08
MSD	Vanadium	7440-62-2	905	90.500	% Recov	75.000	125.000				07/21/08
MSD	Zinc	7440-66-6	912.4	91.240	% Recov	75.000	125.000				07/21/08
SPK-RPD	Silver	7440-22-4	90.700		RPD			1.205	20.000		07/21/08
SPK-RPD	Aluminum	7429-90-5	88.210		RPD			0.802	20.000		07/21/08
SPK-RPD	Arsenic	7440-38-2	86.200		RPD			4.994	20.000		07/21/08
SPK-RPD	Barium	7440-39-3	90.600		RPD			0.000	20.000		07/21/08
SPK-RPD	Calcium	7440-70-2	32.000		RPD			84.444	20.000	*	07/21/08
SPK-RPD	Cadmium	7440-43-9	91.310		RPD			0.120	20.000		07/21/08
SPK-RPD	Cobalt	7440-48-4	91.780		RPD			0.587	20.000		07/21/08
SPK-RPD	Chromium	7440-47-3	91.700		RPD			1.174	20.000		07/21/08
SPK-RPD	Copper	7440-50-8	91.300		RPD			0.880	20.000		07/21/08
SPK-RPD	Iron	7439-89-6	89.620		RPD			1.450	20.000		07/21/08
SPK-RPD	Potassium	7440-09-7	100.070		RPD			1.192	20.000		07/21/08
SPK-RPD	Magnesium	7439-95-4	63.800		RPD			0.945	20.000		07/21/08
SPK-RPD	Manganese	7439-96-5	90.500		RPD			1.099	20.000		07/21/08
SPK-RPD	Molybdenum	7439-98-7	89.540		RPD			0.112	20.000		07/21/08

# WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081218  
 Matrix: WATER  
 Test: ICP Metals Analysis, Grd H2O P

Sample Date: 06/16/08  
 Receive Date: 06/16/08

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	-790.000		RPD			-19.429	20.000 *		07/21/08
SPK-RPD	Nickel	7440-02-0	91.060		RPD			1.363	20.000		07/21/08
SPK-RPD	Lead	7439-92-1	103.000		RPD			12.262	20.000		07/21/08
SPK-RPD	Antimony	7440-36-0	93.660		RPD			1.357	20.000		07/21/08
SPK-RPD	Strontium	7440-24-6	92.960		RPD			0.472	20.000		07/21/08
SPK-RPD	Vanadium	7440-62-2	90.500		RPD			1.317	20.000		07/21/08
SPK-RPD	Zinc	7440-66-6	91.240		RPD			0.110	20.000		07/21/08

## BATCH QC

BLANK	Silver	7440-22-4	<5	n/a	ug/L					U	07/21/08
BLANK	Aluminum	7429-90-5	<52	n/a	ug/L					U	07/21/08
BLANK	Arsenic	7440-38-2	<78	n/a	ug/L					U	07/21/08
BLANK	Barium	7440-39-3	<4	n/a	ug/L					U	07/21/08
BLANK	Calcium	7440-70-2	<73	n/a	ug/L					U	07/21/08
BLANK	Cadmium	7440-43-9	<4	n/a	ug/L					U	07/21/08
BLANK	Cobalt	7440-48-4	<4	n/a	ug/L					U	07/21/08
BLANK	Chromium	7440-47-3	<13	n/a	ug/L					U	07/21/08
BLANK	Copper	7440-50-8	<6	n/a	ug/L					U	07/21/08
BLANK	Iron	7439-89-8	<25	n/a	ug/L					U	07/21/08
BLANK	Potassium	7440-09-7	<170	n/a	ug/L					U	07/21/08
BLANK	Magnesium	7439-95-4	<50	n/a	ug/L					U	07/21/08
BLANK	Manganese	7439-96-5	<4	n/a	ug/L					U	07/21/08
BLANK	Molybdenum	7439-98-7	<5	n/a	ug/L					U	07/21/08
BLANK	Sodium	7440-23-5	<51	n/a	ug/L					U	07/21/08
BLANK	Nickel	7440-02-0	<4	n/a	ug/L					U	07/21/08
BLANK	Lead	7439-92-1	<45	n/a	ug/L					U	07/21/08
BLANK	Antimony	7440-36-0	<56	n/a	ug/L					U	07/21/08
BLANK	Strontium	7440-24-6	<4	n/a	ug/L					U	07/21/08
BLANK	Vanadium	7440-62-2	<12	n/a	ug/L					U	07/21/08
BLANK	Zinc	7440-66-6	<9	n/a	ug/L					U	07/21/08

# WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081218  
 Matrix: WATER  
 Test: ICP Metals Analysis, Grd H2O 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	969	96.900	% Recov	80.000	120.000				07/21/08
LCS	Aluminum	7429-90-5	961.2	96.120	% Recov	80.000	120.000				07/21/08
LCS	Arsenic	7440-38-2	1000	100.000	% Recov	80.000	120.000				07/21/08
LCS	Barium	7440-39-3	472	94.400	% Recov	80.000	120.000				07/21/08
LCS	Calcium	7440-70-2	1088	108.800	% Recov	80.000	120.000				07/21/08
LCS	Cadmium	7440-43-9	1019	101.900	% Recov	80.000	120.000				07/21/08
LCS	Cobalt	7440-48-4	1032	103.200	% Recov	80.000	120.000				07/21/08
LCS	Chromium	7440-47-3	996.2	99.620	% Recov	80.000	120.000				07/21/08
LCS	Copper	7440-50-8	986	98.600	% Recov	80.000	120.000				07/21/08
LCS	Iron	7439-89-6	988.5	98.850	% Recov	80.000	120.000				07/21/08
LCS	Potassium	7440-09-7	10110	101.100	% Recov	80.000	120.000				07/21/08
LCS	Magnesium	7439-95-4	945.6	94.560	% Recov	80.000	120.000				07/21/08
LCS	Manganese	7439-96-5	1010	101.000	% Recov	80.000	120.000				07/21/08
LCS	Molybdenum	7439-98-7	1007	100.700	% Recov	80.000	120.000				07/21/08
LCS	Sodium	7440-23-5	1000	100.000	% Recov	80.000	120.000				07/21/08
LCS	Nickel	7440-02-0	1018	101.800	% Recov	80.000	120.000				07/21/08
LCS	Lead	7439-92-1	1090	109.000	% Recov	80.000	120.000				07/21/08
LCS	Antimony	7440-36-0	1026	102.600	% Recov	80.000	120.000				07/21/08
LCS	Strontium	7440-24-6	493.3	98.660	% Recov	80.000	120.000				07/21/08
LCS	Vanadium	7440-62-2	980	98.000	% Recov	80.000	120.000				07/21/08
LCS	Zinc	7440-68-6	991.8	99.180	% Recov	80.000	120.000				07/21/08

**Lab ID: W08GR01817**  
**BATCH QC ASSOCIATED WITH SAMPLE**

MS	Silver	7440-22-4	935	93.500	% Recov	75.000	125.000				07/22/08
MS	Aluminum	7429-90-5	1085	108.500	% Recov	75.000	125.000				07/22/08
MS	Arsenic	7440-38-2	1020	102.000	% Recov	75.000	125.000				07/22/08
MS	Barium	7440-39-3	515	103.000	% Recov	75.000	125.000				07/22/08
MS	Calcium	7440-70-2	3060	306.000	% Recov	75.000	125.000				07/22/08
MS	Cadmium	7440-43-9	1047	104.700	% Recov	75.000	125.000				07/22/08

# WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081218  
 Matrix: WATER  
 Test: ICP Metals Analysis, Grd H2O 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
MS	Cobalt	7440-48-4	1053.3	105.330	% Recov	75.000	125.000				07/22/08
MS	Chromium	7440-47-3	1059	105.900	% Recov	75.000	125.000				07/22/08
MS	Copper	7440-50-8	997	99.700	% Recov	75.000	125.000				07/22/08
MS	Iron	7439-89-6	1057.7	105.770	% Recov	75.000	125.000				07/22/08
MS	Potassium	7440-09-7	10466	104.660	% Recov	75.000	125.000				07/22/08
MS	Magnesium	7439-95-4	1520	152.000	% Recov	75.000	125.000		•		07/22/08
MS	Manganese	7439-96-5	1158	115.800	% Recov	75.000	125.000				07/22/08
MS	Molybdenum	7439-98-7	612.6	61.260	% Recov	70.000	130.000		•		07/22/08
MS	Sodium	7440-23-5	-7000	-700.000	% Recov	75.000	125.000		•		07/22/08
MS	Nickel	7440-02-0	1062	106.200	% Recov	75.000	125.000				07/22/08
MS	Lead	7439-92-1	1230	123.000	% Recov	75.000	125.000				07/22/08
MS	Antimony	7440-36-0	1145	114.500	% Recov	75.000	125.000				07/22/08
MS	Strontium	7440-24-6	569.7	113.940	% Recov	75.000	125.000				07/22/08
MS	Vanadium	7440-62-2	1040	104.000	% Recov	75.000	125.000				07/22/08
MS	Zinc	7440-66-6	1082	108.200	% Recov	75.000	125.000				07/22/08
MSD	Silver	7440-22-4	905	90.500	% Recov	75.000	125.000				07/22/08
MSD	Aluminum	7429-90-5	966.1	96.610	% Recov	75.000	125.000				07/22/08
MSD	Arsenic	7440-38-2	812	81.200	% Recov	75.000	125.000				07/22/08
MSD	Barium	7440-39-3	454	90.800	% Recov	75.000	125.000				07/22/08
MSD	Calcium	7440-70-2	780	78.000	% Recov	75.000	125.000				07/22/08
MSD	Cadmium	7440-43-9	895.5	89.550	% Recov	75.000	125.000				07/22/08
MSD	Cobalt	7440-48-4	891.9	89.190	% Recov	75.000	125.000				07/22/08
MSD	Chromium	7440-47-3	871.8	87.180	% Recov	75.000	125.000				07/22/08
MSD	Copper	7440-50-8	883	88.300	% Recov	75.000	125.000				07/22/08
MSD	Iron	7439-89-6	1114.7	111.470	% Recov	75.000	125.000				07/22/08
MSD	Potassium	7440-09-7	9966	99.660	% Recov	75.000	125.000				07/22/08
MSD	Magnesium	7439-95-4	782	78.200	% Recov	75.000	125.000				07/22/08
MSD	Manganese	7439-96-5	918	91.800	% Recov	75.000	125.000				07/22/08
MSD	Molybdenum	7439-98-7	527.1	52.710	% Recov	75.000	125.000		•		07/22/08
MSD	Sodium	7440-23-5	-198000	-19800.000	% Recov	75.000	125.000		•		07/22/08

# WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081218  
 Matrix: WATER  
 Test: ICP Metals Analysis, Grd H2O 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	Nickel	7440-02-0	902.8	90.280	% Recov	75.000	125.000				07/22/08
MSD	Lead	7439-92-1	1030	103.000	% Recov	75.000	125.000				07/22/08
MSD	Antimony	7440-36-0	929.8	92.980	% Recov	75.000	125.000				07/22/08
MSD	Strontium	7440-24-6	464.8	92.960	% Recov	75.000	125.000				07/22/08
MSD	Vanadium	7440-62-2	898	89.800	% Recov	75.000	125.000				07/22/08
MSD	Zinc	7440-66-6	915.3	91.530	% Recov	75.000	125.000				07/22/08
SPK-RPD	Silver	7440-22-4	90.500		RPD			3.261	20.000		07/22/08
SPK-RPD	Aluminium	7429-90-5	96.610		RPD			11.594	20.000		07/22/08
SPK-RPD	Arsenic	7440-38-2	81.200		RPD			22.707	20.000	*	07/22/08
SPK-RPD	Barium	7440-39-3	90.800		RPD			12.590	20.000		07/22/08
SPK-RPD	Calcium	7440-70-2	78.000		RPD			118.750	20.000	*	07/22/08
SPK-RPD	Cadmium	7440-43-9	89.550		RPD			15.598	20.000		07/22/08
SPK-RPD	Cobalt	7440-48-4	89.190		RPD			16.595	20.000		07/22/08
SPK-RPD	Chromium	7440-47-3	87.180		RPD			19.391	20.000		07/22/08
SPK-RPD	Copper	7440-50-8	88.300		RPD			12.128	20.000		07/22/08
SPK-RPD	Iron	7439-89-6	111.470		RPD			5.248	20.000		07/22/08
SPK-RPD	Potassium	7440-09-7	99.660		RPD			4.894	20.000		07/22/08
SPK-RPD	Magnesium	7439-95-4	78.200		RPD			64.118	20.000	*	07/22/08
SPK-RPD	Manganese	7439-96-5	91.800		RPD			23.121	20.000	*	07/22/08
SPK-RPD	Molybdenum	7439-98-7	52.710		RPD			15.004	20.000		07/22/08
SPK-RPD	Sodium	7440-23-5	-19800.000		RPD			-186.341	20.000	*	07/22/08
SPK-RPD	Nickel	7440-02-0	90.280		RPD			16.205	20.000		07/22/08
SPK-RPD	Lead	7439-92-1	103.000		RPD			17.699	20.000		07/22/08
SPK-RPD	Antimony	7440-36-0	92.980		RPD			20.744	20.000	*	07/22/08
SPK-RPD	Strontium	7440-24-6	92.960		RPD			20.280	20.000	*	07/22/08
SPK-RPD	Vanadium	7440-62-2	89.800		RPD			14.654	20.000		07/22/08
SPK-RPD	Zinc	7440-66-6	91.530		RPD			16.693	20.000		07/22/08
<b>BATCH QC</b>											
BLANK	Silver	7440-22-4	<5	n/a	ug/L					U	07/22/08

# WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081218  
 Matrix: WATER  
 Test: ICP Metals Analysis, Grd H2O 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	07/22/08
BLANK	Arsenic	7440-38-2	<78	n/a	ug/L					U	07/22/08
BLANK	Barium	7440-39-3	<4	n/a	ug/L					U	07/22/08
BLANK	Calcium	7440-70-2	<73	n/a	ug/L					U	07/22/08
BLANK	Cadmium	7440-43-9	<4	n/a	ug/L					U	07/22/08
BLANK	Cobalt	7440-48-4	<4	n/a	ug/L					U	07/22/08
BLANK	Chromium	7440-47-3	<13	n/a	ug/L					U	07/22/08
BLANK	Copper	7440-50-8	<6	n/a	ug/L					U	07/22/08
BLANK	Iron	7439-89-6	<25	n/a	ug/L					U	07/22/08
BLANK	Potassium	7440-09-7	<170	n/a	ug/L					U	07/22/08
BLANK	Magnesium	7439-95-4	<50	n/a	ug/L					U	07/22/08
BLANK	Manganese	7439-96-5	<4	n/a	ug/L					U	07/22/08
BLANK	Molybdenum	7439-98-7	<5	n/a	ug/L					U	07/22/08
BLANK	Sodium	7440-23-5	<51	n/a	ug/L					U	07/22/08
BLANK	Nickel	7440-02-0	<4	n/a	ug/L					U	07/22/08
BLANK	Lead	7439-92-1	<45	n/a	ug/L					U	07/22/08
BLANK	Antimony	7440-36-0	<56	n/a	ug/L					U	07/22/08
BLANK	Strontium	7440-24-6	<4	n/a	ug/L					U	07/22/08
BLANK	Vanadium	7440-62-2	<12	n/a	ug/L					U	07/22/08
BLANK	Zinc	7440-66-6	<9	n/a	ug/L					U	07/22/08
LCS	Silver	7440-22-4	959	95.900	% Recov	80.000	120.000				07/22/08
LCS	Aluminum	7429-90-5	962.8	96.280	% Recov	80.000	120.000				07/22/08
LCS	Arsenic	7440-38-2	1000	100.000	% Recov	80.000	120.000				07/22/08
LCS	Barium	7440-39-3	463	92.600	% Recov	80.000	120.000				07/22/08
LCS	Calcium	7440-70-2	1108	110.800	% Recov	80.000	120.000				07/22/08
LCS	Cadmium	7440-43-9	1001	100.100	% Recov	80.000	120.000				07/22/08
LCS	Cobalt	7440-48-4	1015	101.500	% Recov	80.000	120.000				07/22/08
LCS	Chromium	7440-47-3	978.6	97.860	% Recov	80.000	120.000				07/22/08
LCS	Copper	7440-50-8	974	97.400	% Recov	80.000	120.000				07/22/08
LCS	Iron	7439-89-6	980.4	98.040	% Recov	80.000	120.000				07/22/08

# WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081218  
 Matrix: WATER  
 Test: ICP Metals Analysis, Grd H2O 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	9857	98.570	% Recov	80.000	120.000				07/22/08
LCS	Magnesium	7439-95-4	940.5	94.050	% Recov	80.000	120.000				07/22/08
LCS	Manganese	7439-96-5	993	99.300	% Recov	80.000	120.000				07/22/08
LCS	Molybdenum	7439-98-7	1002	100.200	% Recov	80.000	120.000				07/22/08
LCS	Sodium	7440-23-5	1031	103.100	% Recov	80.000	120.000				07/22/08
LCS	Nickel	7440-02-0	1004	100.400	% Recov	80.000	120.000				07/22/08
LCS	Lead	7439-92-1	1070	107.000	% Recov	80.000	120.000				07/22/08
LCS	Antimony	7440-36-0	992.8	99.280	% Recov	80.000	120.000				07/22/08
LCS	Strontium	7440-24-6	485.3	97.080	% Recov	80.000	120.000				07/22/08
LCS	Vanadium	7440-62-2	965	96.500	% Recov	80.000	120.000				07/22/08
LCS	Zinc	7440-66-6	977.5	97.750	% Recov	80.000	120.000				07/22/08

Lab ID: W08GR01829  
 BATCH QC ASSOCIATED WITH SAMPLE

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	100.080	% 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

# WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081218  
 Matrix: WATER  
 Test: ICP Metals Analysis, Grd H2O 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
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
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

# WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081218  
 Matrix: WATER  
 Test: ICP Metals Analysis, Grd H2O 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	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
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	7440-66-8	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

# WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081218  
 Matrix: WATER  
 Test: ICP Metals Analysis, Grd H2O 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	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	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

# WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081218  
Matrix: WATER  
Test: ICP Metals Analysis, Grd H2O 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	Zinc	7440-68-6	981.7	98.170	% Recov	80.000	120.000				07/23/08

# WSCF ANALYTICAL COMMENT REPORT

**Attention:** Steve Trent  
**Project Number** F06-027

**Group #:** WSCF20081218  
**Department:** Inorganic

Sample #	Client ID	Lab Area	Test	Comment
		VALGROUP		<p>IC Anion - MS recovery low for phosphate in sample W08GR01806. Data N-flagged. DTS</p> <p>IC Anion - Sample dup RPD out of limits for chloride in sample W08GR01804; Analyte concentration below calibration range. DTS</p> <p>ICP-AES: [Samples W08GR1807-1816] 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, calcium, and magnesium linearity because sample results are greater than the calibration standard. Low calcium and magnesium spike recoveries; "N" flag.</p> <p>ICP-AES: [Samples W08GR1817-1828] 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 the calibration standard. High calcium and magnesium MS and low molybdenum spike</p>

**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 #: WSCF20081218  
Department: Inorganic

Sample #	Client ID	Lab Area	Test	Comment
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recoveries; "N" flag.

ICP-AES: [Samples W08GR1829-1830]

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 standard is used to ensure sodium and calcium linearity because sample results are greater than the the calibration standard.

Low magnesium MSD 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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Report Date: 25-jul-2008

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# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01804  
**Client ID:** B1VVN5

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Radiochemistry  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-46-1	LA-508-415	U	0.920	pCi/L	+ -1.66	pCi/L	1.00	2.8		06/27/08
Gross beta	12587-47-2	LA-508-415		140	pCi/L	+ -15.4	pCi/L	1.00	4.8		06/27/08

**MDL = Minimum Detection Limit**

**RQ = Result Qualifier**

**TP Err = Total Propagated Error**

**DF = Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor (inorg)

U - Analyzed for but not detected above limiting criteria (inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits (inorg)

U - Analyzed for but not detected above limiting criteria.

+ - Indicates more than six qualifier symbols

Report WGPP/ver. 5.2

Groundwater Remediation Program

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# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01805  
**Client ID:** B1VVN6

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Radiochemistry  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-46-1	LA-508-415	U	-4.10	pCi/L	+ -18.4	pCi/L	1.00	37		06/27/08
Gross beta	12587-47-2	LA-508-415		220	pCi/L	+ -50.6	pCi/L	1.00	60		06/27/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

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

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

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Groundwater Remediation Program

# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01806  
**Client ID:** B1VVN7

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Radiochemistry  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-46-1	LA-508-415	U	7.90	pCi/L	+ -11.1	pCi/L	1.00	18		06/27/08
Gross beta	12587-47-2	LA-508-415		420	pCi/L	+ -54.6	pCi/L	1.00	30		06/27/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

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

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

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Groundwater Remediation Program

# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01807  
**Client ID:** B1VVN8

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Radiochemistry  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-48-1	LA-508-415	U	1.10	pCi/L	+ -1.98	pCi/L	1.00	3.4		06/27/08
Gross beta	12587-47-2	LA-508-415		430	pCi/L	+ -43.0	pCi/L	1.00	5.8		06/27/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

+ - Indicates more than six qualifier symbols

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Groundwater Remediation Program

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# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01808  
**Client ID:** B1VVN9

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Radiochemistry  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-46-1	LA-508-415	U	0.300	pCi/L	+ -2.88	pCi/L	1.00	5.7		06/27/08
Gross beta	12587-47-2	LA-508-415		280	pCi/L	+ -30.8	pCi/L	1.00	9.7		06/27/08

**MDL = Minimum Detection Limit**

**RQ = Result Qualifier**

**TP Err = Total Propagated Error**

**DF = Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor (inorg)

U - Analyzed for but not detected above limiting criteria (inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits (inorg)

U - Analyzed for but not detected above limiting criteria.

+ - Indicates more than six qualifier symbols

Report WGPP/ver. 5.2

Groundwater Remediation Program

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# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01809  
**Client ID:** B1VVPO

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Radiochemistry  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-46-1	LA-508-415	U	0.910	pCi/L	+ -8.74	pCi/L	1.00	17		06/27/08
Gross beta	12587-47-2	LA-508-415		700	pCi/L	+ -84.0	pCi/L	1.00	29		06/27/08

**MDL = Minimum Detection Limit**

**RQ = Result Qualifier**

**TP Err = Total Propagated Error**

**DF = Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor (inorg)

U - Analyzed for but not detected above limiting criteria (inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits. (inorg)

U - Analyzed for but not detected above limiting criteria.

+ - Indicates more than six qualifier symbols

Report WGPP/ver. 5.2

Groundwater Remediation Program

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01810  
**Client ID:** B1VVP1 TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Radiochemistry  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-46-1	LA-508-415	U	-5.50	pCi/L	+5.50	pCi/L	1.00	11		06/27/08
Gross beta	12587-47-2	LA-508-415		280	pCi/L	+36.4	pCi/L	1.00	19		06/27/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

+ - Indicates more than six qualifier symbols

Report WGPP/ver. 5.2

Groundwater Remediation Program

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #:** W08GR01811  
**Client ID:** B1VVP2

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Radiochemistry  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-46-1	LA-508-415	U	23.0	pCi/L	+ -22.5	pCi/L	1.00	35		06/27/08
Gross beta	12587-47-2	LA-508-415		1.40e+04	pCi/L	+ -1.40e+03	pCi/L	1.00	59		06/27/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

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

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

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Groundwater Remediation Program

# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01812  
**Client ID:** B1VVP3

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Radiochemistry  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-46-1	LA-508-415	U	6.40	pCi/L	+ -21.3	pCi/L	1.00	39		06/27/08
Gross beta	12587-47-2	LA-508-415		2.00e +03	pCi/L	+ -220	pCi/L	1.00	61		06/27/08

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

8 - The analyte < the RDL but > = the IDL/MDL (inorg)  
 D - Analyte was identified at a secondary dilution factor(inorg)  
 U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor  
 N - Spike sample recovery is outside control limits.(inorg)  
 U - Analyzed for but not detected above limiting criteria.

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

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# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01813  
**Client ID:** B1VVP4

TRENT  
WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Radiochemistry  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-46-1	LA-508-415	U	2.80	pCi/L	+ -9.32	pCi/L	1.00	17		06/27/08
Gross beta	12587-47-2	LA-508-415		730	pCi/L	+ -87.6	pCi/L	1.00	29		06/27/08

**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)

U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

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

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# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01814  
**Client ID:** B1VVP5

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Radiochemistry  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-46-1	LA-508-415	U	0.460	pCi/L	+ -4.42	pCi/L	1.00	8.5		06/27/08
Gross beta	12587-47-2	LA-508-415		170	pCi/L	+ -23.8	pCi/L	1.00	15		06/27/08

**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)  
 U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor  
 N - Spike sample recovery is outside control limits.(inorg)  
 U - Analyzed for but not detected above limiting criteria.

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

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# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01815  
**Client ID:** B1VVP6

TRENT  
WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Radiochemistry  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-46-1	LA-508-415		5.70	pCi/L	+ -3.25	pCi/L	1.00	4.3		06/27/08
Gross beta	12587-47-2	LA-508-415		1.90e +03	pCi/L	+ -190	pCi/L	1.00	7.3		06/27/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

+ - Indicates more than six qualifier symbols

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

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# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01816  
**Client ID:** B1VVP7

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Radiochemistry  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-46-1	LA-508-415	U	-0.220	pCi/L	+ -2.02	pCi/L	1.00	4.0		06/27/08
Gross beta	12587-47-2	LA-508-415		380	pCi/L	+ -41.8	pCi/L	1.00	6.2		06/27/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

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

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

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# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01817  
**Client ID:** B1VVP8

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Radiochemistry  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-46-1	LA-508-415	U	-3.50	pCi/L	+ -13.4	pCi/L	1.00	26		06/27/08
Gross beta	12587-47-2	LA-508-415		190	pCi/L	+ -34.2	pCi/L	1.00	33		06/27/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

+ - Indicates more than six qualifier symbols

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# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01818  
**Client ID:** B1VVP9

TRENT  
WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Radiochemistry  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-46-1	LA-508-415	U	-1.10	pCi/L	+ -2.45	pCi/L	1.00	4.8		06/27/08
Gross beta	12587-47-2	LA-508-415		47.0	pCi/L	+ -7.52	pCi/L	1.00	6.4		06/27/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

+ - Indicates more than six qualifier symbols

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# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01819  
**Client ID:** B1VVRO

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Radiochemistry  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-46-1	LA-508-415	U	1.50	pCi/L	+ -3.30	pCi/L	1.00	5.6		06/27/08
Gross beta	12587-47-2	LA-508-415		440	pCi/L	+ -44.0	pCi/L	1.00	6.7		06/27/08

**MDL = Minimum Detection Limit**

**RQ = Result Qualifier**

**TP Err = Total Propagated Error**

**DF = Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor (inorg)

U - Analyzed for but not detected above limiting criteria (inorg)

+ - Indicates more than six qualifier symbols

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits. (inorg)

U - Analyzed for but not detected above limiting criteria.

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# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01820  
**Client ID:** B1VVR1

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Radiochemistry  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-46-1	LA-508-415	U	1.70	pCi/L	+3.23	pCi/L	1.00	5.4		06/27/08
Gross beta	12587-47-2	LA-508-415		6.40e+03	pCi/L	+640	pCi/L	1.00	6.7		06/27/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

+ - Indicates more than six qualifier symbols

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

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# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01821  
**Client ID:** B1VVR2

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Radiochemistry  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-46-1	LA-508-415	U	0.0130	pCi/L	+ -0.0130	pCi/L	1.00	5.6		06/27/08
Gross beta	12587-47-2	LA-508-415		740	pCi/L	+ -74.0	pCi/L	1.00	6.8		06/27/08

**MDL = Minimum Detection Limit**

**RQ = Result Qualifier**

**TP Err = Total Propagated Error**

**DF = Dilution Factor**

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

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

D - Analyte was identified at a secondary dilution factor (inorg)

U - Analyzed for but not detected above limiting criteria (inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits. (inorg)

U - Analyzed for but not detected above limiting criteria.

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Groundwater Remediation Program

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #:** W08GR01822  
**Client ID:** B1VVR3

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Radiochemistry  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-46-1	LA-508-415	U	-0.330	pCi/L	+ -3.30	pCi/L	1.00	7.4		06/27/08
Gross beta	12587-47-2	LA-508-415		3.70e+03	pCi/L	+ -370	pCi/L	1.00	8.6		06/27/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(Inorg)

+ - Indicates more than six qualifier symbols

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

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# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01823  
**Client ID:** B1VVR4

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Radiochemistry  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-46-1	LA-508-415	U	-2.90	pCi/L	+ -5.31	pCi/L	1.00	11		06/27/08
Gross beta	12587-47-2	LA-508-415		720	pCi/L	+ -79.2	pCi/L	1.00	13		06/27/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

+ - Indicates more than six qualifier symbols

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# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01824  
**Client ID:** B1VVR5

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Radiochemistry  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-46-1	LA-508-415	U	5.00	pCi/L	+ -4.85	pCi/L	1.00	7.3		07/02/08
Gross beta	12587-47-2	LA-508-415		780	pCi/L	+ -85.8	pCi/L	1.00	14		07/02/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

+ - Indicates more than six qualifier symbols

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# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01825  
**Client ID:** B1VVR6

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Radiochemistry  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-46-1	LA-508-415	U	0.970	pCi/L	+ -3.10	pCi/L	1.00	5.5		06/27/08
Gross beta	12587-47-2	LA-508-415		300	pCi/L	+ -33.0	pCi/L	1.00	6.7		06/27/08

**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)  
 U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor  
 N - Spike sample recovery is outside control limits.(inorg)  
 U - Analyzed for but not detected above limiting criteria.

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

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# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01826  
**Client ID:** B1VVR7

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Radiochemistry  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-48-1	LA-508-415	U	-1.90	pCi/L	+ -5.38	pCi/L	1.00	11		06/27/08
Gross beta	12587-47-2	LA-508-415		2.00e + 03	pCi/L	+ -200	pCi/L	1.00	13		06/27/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

+ - Indicates more than six qualifier symbols

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# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01827  
**Client ID:** B1VVR8

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Radiochemistry  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-46-1	LA-508-415	U	0.710	pCi/L	+ -2.98	pCi/L	1.00	5.3		06/27/08
Gross beta	12587-47-2	LA-508-415		470	pCi/L	+ -47.0	pCi/L	1.00	6.6		06/27/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

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

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

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# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01828  
**Client ID:** B1VVR9

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Radiochemistry  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-46-1	LA-508-415	U	-1.60	pCi/L	+ -3.57	pCi/L	1.00	7.0		06/27/08
Gross beta	12587-47-2	LA-508-415		910	pCi/L	+ -91.0	pCi/L	1.00	8.5		06/27/08

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits.(inorg)

U - Analyzed for but not detected above limiting criteria.

+ - Indicates more than six qualifier symbols

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# WSCF ANALYTICAL RESULTS REPORT

Attention: Steve Trent  
 SAF Number: F06-027  
 Sample # W08GR01829  
 Client ID: B1VVT0

TRENT  
 WSCF

Matrix: WATER

Group #: WSCF20081218  
 Department: Radiochemistry  
 Sampled: 06/18/08  
 Received: 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-46-1	LA-508-415	U	-0.220	pCi/L	+ -2.20	pCi/L	1.00	5.0		06/27/08
Gross beta	12587-47-2	LA-508-415		2.10e+03	pCi/L	+ -210	pCi/L	1.00	6.5		06/27/08

**MDL = Minimum Detection Limit**

**RQ = Result Qualifier**

**TP Err = Total Propagated Error**

**DF = Dilution Factor**

\* - Indicates results that have NOT been validated;

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

D - Analyte was identified at a secondary dilution factor (inorg)

U - Analyzed for but not detected above limiting criteria (inorg)

D - Analyte was identified at a secondary dilution factor

N - Spike sample recovery is outside control limits (inorg)

U - Analyzed for but not detected above limiting criteria.

+ - Indicates more than six qualifier symbols

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# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F06-027  
**Sample #** W08GR01830  
**Client ID:** B1VVT6

TRENT  
 WSCF

**Matrix:** WATER

**Group #:** WSCF20081218  
**Department:** Radiochemistry  
**Sampled:** 06/18/08  
**Received:** 06/18/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-46-1	LA-508-415	U	-1.70	pCi/L	+ -2.04	pCi/L	1.00	4.3		06/27/08
Gross beta	12587-47-2	LA-508-415		310	pCi/L	+ -34.1	pCi/L	1.00	6.2		06/27/08

**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)  
 U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor  
 N - Spike sample recovery is outside control limits.(inorg)  
 U - Analyzed for but not detected above limiting criteria.

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

Report WGPP/ver. 5.2  
 Groundwater Remediation Program

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# WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20081218  
 Matrix: WATER  
 Test: Gross Alpha/Gross Beta (AB32)

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
<b>Lab ID: W08GR01804</b>											
<b>BATCH QC ASSOCIATED WITH SAMPLE</b>											
DUP	Gross alpha	12587-46-1	U4.6E-01		RPD			n/a	20.000		06/27/08
DUP	Gross beta	12587-47-2	1.4E+02		RPD			0.000	20.000		06/27/08
<b>BATCH QC</b>											
BLANK	Gross alpha	12587-46-1	U8.0E-03	n/a	pCi/L	-10.000	10.000				06/27/08
BLANK	Gross beta	12587-47-2	U3.5E-01	n/a	pCi/L	-10.000	10.000				06/27/08
LCS	Gross alpha	12587-46-1	143.0	92.288	% Recov	80.000	120.000				06/27/08
LCS	Gross beta	12587-47-2	468.0	104.313	% Recov	80.000	120.000				06/27/08
<b>Lab ID: W08GR01817</b>											
<b>BATCH QC ASSOCIATED WITH SAMPLE</b>											
DUP	Gross alpha	12587-46-1	U5.9E-02		RPD			n/a	20.000		06/27/08
DUP	Gross beta	12587-47-2	1.7E+02		RPD			11.111	20.000		06/27/08
<b>BATCH QC</b>											
BLANK	Gross alpha	12587-46-1	U7.1E-01	n/a	pCi/L	-10.000	10.000				06/27/08
BLANK	Gross beta	12587-47-2	U-4.6	n/a	pCi/L	-10.000	10.000				06/27/08
LCS	Gross alpha	12587-46-1	149	96.129	% Recov	80.000	120.000				06/27/08
LCS	Gross beta	12587-47-2	472.0	105.205	% Recov	80.000	120.000				06/27/08
<b>Lab ID: W08GR01824</b>											
<b>BATCH QC ASSOCIATED WITH SAMPLE</b>											
DUP	Gross alpha	12587-46-1	9.2		RPD			n/a	20.000		07/02/08
DUP	Gross beta	12587-47-2	7.5E+02		RPD			3.922	20.000		07/02/08

# WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20081218  
 Matrix: WATER  
 Test: Gross Alpha/Gross Beta (AB32)

Sample Date:  
 Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
<b>BATCH QC</b>											
BLANK	Gross alpha	12587-46-1	U3.6E-01	n/a	pCi/L	-10.000	10.000				07/02/08
BLANK	Gross beta	12587-47-2	U5.3	n/a	pCi/L	-10.000	10.000				07/02/08
LCS	Gross alpha	12587-46-1	374.0	96.541	% Recov	80.000	120.000				07/02/08
LCS	Gross beta	12587-47-2	1200	106.952	% Recov	80.000	120.000				07/02/08

M4W41-SLF-08-749

ATTACHMENT 4

**SAMPLE RECEIPT INFORMATION**

Consisting of 9 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

*File*  
07/03/08  
*tdj*

ACKNOWLEDGMENT OF SAMPLES RECEIVED

Groundwater Remediation Program

Richland, WA 99354  
Attn: Steve Trent

Customer Code: GPP  
PO#: 122561/ES20  
Group#: 20081218  
Project#: F06-027  
Proj Mgr: Steve Trent G6-35  
Phone: 373-5869

The following samples were received from you on 06/18/08. 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
W08GR01804	B1VVN5	TRENT @AB-32	Water @GPP6010 @IC-30	06/18/08
W08GR01805	B1VVN6	TRENT @AB-32	Water @GPP6010 @IC-30	06/18/08
W08GR01806	B1VVN7	TRENT @AB-32	Water @GPP6010 @IC-30	06/18/08
W08GR01807	B1VVN8	TRENT @AB-32	Water @GPP6010 @IC-30	06/18/08
W08GR01808	B1VVN9	TRENT @AB-32	Water @GPP6010 @IC-30	06/18/08
W08GR01809	B1VVP0	TRENT @AB-32	Water @GPP6010 @IC-30	06/18/08
W08GR01810	B1VVP1	TRENT @AB-32	Water @GPP6010 @IC-30	06/18/08
W08GR01811	B1VVP2	TRENT @AB-32	Water @GPP6010 @IC-30	06/18/08
W08GR01812	B1VVP3	TRENT @AB-32	Water @GPP6010 @IC-30	06/18/08
W08GR01813	B1VVP4	TRENT @AB-32	Water @GPP6010 @IC-30	06/18/08
W08GR01814	B1VVP5	TRENT @AB-32	Water @GPP6010 @IC-30	06/18/08
W08GR01815	B1VVP6	TRENT @AB-32	Water @GPP6010 @IC-30	06/18/08
W08GR01816	B1VVP7	TRENT @AB-32	Water @GPP6010 @IC-30	06/18/08
W08GR01817	B1VVP8	TRENT @AB-32	Water @GPP6010 @IC-30	06/18/08
W08GR01818	B1VVP9	TRENT @AB-32	Water @GPP6010 @IC-30	06/18/08

Groundwater Remediation Program

Richland, WA 99354  
 Attn: Steve Trent

Customer Code: GPP  
 PO#: 122561/ES20  
 Group#: 20081218  
 Project#: F06-027  
 Proj Mgr: Steve Trent G6-35  
 Phone: 373-5869

Sample#	Sample Id	Tests Scheduled	Matrix	Sample Date
W08GR01819	B1VVR0	TRENT @AB-32	Water @GPP6010 @IC-30	06/18/08
W08GR01820	B1VVR1	TRENT @AB-32	Water @GPP6010 @IC-30	06/18/08
W08GR01821	B1VVR2	TRENT @AB-32	Water @GPP6010 @IC-30	06/18/08
W08GR01822	B1VVR3	TRENT @AB-32	Water @GPP6010 @IC-30	06/18/08
W08GR01823	B1VVR4	TRENT @AB-32	Water @GPP6010 @IC-30	06/18/08
W08GR01824	B1VVR5	TRENT @AB-32	Water @GPP6010 @IC-30	06/18/08
W08GR01825	B1VVR6	TRENT @AB-32	Water @GPP6010 @IC-30	06/18/08
W08GR01826	B1VVR7	TRENT @AB-32	Water @GPP6010 @IC-30	06/18/08
W08GR01827	B1VVR8	TRENT @AB-32	Water @GPP6010 @IC-30	06/18/08
W08GR01828	B1VVR9	TRENT @AB-32	Water @GPP6010 @IC-30	06/18/08
W08GR01829	B1VVT0	TRENT @AB-32	Water @GPP6010 @IC-30	06/18/08
W08GR01830	B1VVT6	TRENT @AB-32	Water @GPP6010 @IC-30	06/18/08

Test Acronym Description

Test Acronym	Description
@AB-32	Gross Alpha/Gross Beta (AB32)
@GPP6010	ICP Metals Analysis, Grd H2O P
@IC-30	Anions by Ion Chromatography

06/30/08  
07/15/08  
07/03/08

<b>COLLECTOR</b> MORLEY	<b>COMPANY CONTACT</b> FABRE, RJ	<b>TELEPHONE NO.</b> 373-2774	<b>PROJECT COORDINATOR</b> TRENT, SJ	<b>PRICE CODE</b> 7G	<b>DATA TURNAROUND</b> 15 Days / 30 Days
<b>SAMPLING LOCATION</b> 100-NR-2 Pilot Test #1 Site	<b>PROJECT DESIGNATION</b> 100-N Apatite Barrier Performance Monitoring		<b>SAF NO.</b> F06-027	<b>AIR QUALITY</b> <input type="checkbox"/>	
<b>ICE CHEST NO.</b>	<b>FIELD LOGBOOK NO.</b> HNF-N-585-11	<b>ACTUAL SAMPLE DEPTH</b>	<b>COA</b> 122561E520	<b>METHOD OF SHIPMENT</b> GOVERNMENT VEHICLE	
<b>SHIPPED TO</b> Waste Sampling & Characterization 2008/2/18		<b>OFFSITE PROPERTY NO.</b>	<b>BILL OF LADING/AIR BILL NO.</b>		

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS	PRESERVATION	HNO3 to pH <2	HNO3 to pH <2	Cool-4C
A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	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)	<b>TYPE OF CONTAINER</b>	P	P	P
		<b>NO. OF CONTAINER(S)</b>	1	1	1
		<b>VOLUME</b>	1000ml	250ml	120ml
	<b>SPECIAL HANDLING AND/OR STORAGE</b>	<b>SAMPLE ANALYSIS</b>	Gross Alpha; Gross Beta;	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	HNO3 to pH <2	HNO3 to pH <2	Cool-4C
B1VVN5 W086201804	WATER	6/18/08	0705	-	-	-
B1VVN6 1805	WATER	6/18/08	0632	-	-	-
B1VVN7 1806	WATER	6/18/08	0554	-	-	-
B1VVN8 1807	WATER	6/18/08	0658	-	-	-
B1VVN9 1808	WATER	6/18/08	0652	-	-	-

ICED

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	SPECIAL INSTRUCTIONS
J. New... RELINQUISHED BY/REMOVED FROM	6/18/08 0815	CH Hudson RECEIVED BY/STORED IN	6/18/08 0835	(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}
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	

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

<b>COLLECTOR</b> Luskien	<b>COMPANY CONTACT</b> FABRE, RJ	<b>TELEPHONE NO.</b> 373-2774	<b>PROJECT COORDINATOR</b> TRENT, SJ	<b>PRICE CODE</b> 7G	<b>DATA TURNAROUND</b> 15 Days / 30 Days
<b>SAMPLING LOCATION</b> 100-NR-2 Pilot Test #1 Site	<b>PROJECT DESIGNATION</b> 100-N Apatite Barrier Performance Monitoring		<b>SAF NO.</b> F06-027	<b>AIR QUALITY</b> <input type="checkbox"/>	
<b>ICE CHEST NO.</b>	<b>FIELD LOGBOOK NO.</b> HNF-N-585-11	<b>ACTUAL SAMPLE DEPTH</b>	<b>COA</b> 122561E520	<b>METHOD OF SHIPMENT</b> GOVERNMENT VEHICLE	
<b>SHIPPED TO</b> Waste Sampling & Characterization	<b>OFFSITE PROPERTY NO.</b>		<b>BILL OF LADING/AIR BILL NO.</b>		

<b>MATRIX*</b> A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	<b>POSSIBLE SAMPLE HAZARDS/ REMARKS</b> 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)	<b>PRESERVATION</b>	HNO3 to pH <2	HNO3 to pH <2	Cool-4C
		<b>TYPE OF CONTAINER</b>	P	P	P
		<b>NO. OF CONTAINER(S)</b>	1	1	1
		<b>VOLUME</b>	1000mL	250mL	120mL
		<b>SPECIAL HANDLING AND/OR STORAGE</b>	<b>SAMPLE ANALYSIS</b>	Gross Alpha; Gross Beta;	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B1VVP0	1809 WATER	6/18/8	0645	-	-	-
B1VVP1	1810 WATER	6/18/8	0638	-	-	-
B1VVP2	1811 WATER	6/18/8	0618	-	-	-
B1VVP3	1812 WATER	6/18/8	0625	-	-	-
B1VVP4	1813 WATER	6/18/8	0605	-	-	-

**ICED**

<b>CHAIN OF POSSESSION</b>		<b>SIGN/ PRINT NAMES</b>		<b>SPECIAL INSTRUCTIONS</b> (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)
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
<i>Shanta Subila</i>	6/18/8 0815	<i>CA Hanford</i>	6/18/8 0815	
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	

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

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<b>COLLECTOR</b> MOLIPR	<b>COMPANY CONTACT</b> FABRE, RJ	<b>TELEPHONE NO.</b> 373-2774	<b>PROJECT COORDINATOR</b> TRENT, SJ	<b>PRICE CODE</b> 7G	<b>DATA TURNAROUND</b> 15 Days / 30 Days
<b>SAMPLING LOCATION</b> 100-NR-2 Pilot Test #1 Site	<b>PROJECT DESIGNATION</b> 100-N Apatite Barrier Performance Monitoring		<b>SAF NO.</b> F06-027	<b>AIR QUALITY</b> <input type="checkbox"/>	
<b>ICE CHEST NO.</b>	<b>FIELD LOGBOOK NO.</b> HNF-N-585-11	<b>ACTUAL SAMPLE DEPTH</b>	<b>COA</b> 122561E520	<b>METHOD OF SHIPMENT</b> GOVERNMENT VEHICLE	
<b>SHIPPED TO</b> Waste Sampling & Characterization	<b>OFFSITE PROPERTY NO.</b>		<b>BILL OF LADING/AIR BILL NO.</b>		

<b>MATRIX*</b> A=Air DL=Drum L=Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	<b>POSSIBLE SAMPLE HAZARDS/ REMARKS</b> 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)	<b>PRESERVATION</b>	HNO3 to pH <2	HNO3 to pH <2	Cool ~4C
		<b>TYPE OF CONTAINER</b>	P	P	P
		<b>NO. OF CONTAINER(S)</b>	1	1	1
		<b>VOLUME</b>	1000mL	250mL	120mL
		<b>SPECIAL HANDLING AND/OR STORAGE</b>	<b>SAMPLE ANALYSIS</b>	Gross Alpha; Gross Beta;	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B1VVP5	1814 WATER	6/18/08	0611			
B1VVP6	1815 WATER	6/18/08	0712			

**ICED**

CHAIN OF POSSESSION	SIGN/ PRINT NAMES	SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM <i>[Signature]</i>	DATE/TIME 6/18/08 0915	RECEIVED BY/STORED IN <i>[Signature]</i>
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN

(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}

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

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

<b>MATRIX*</b> A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	<b>POSSIBLE SAMPLE HAZARDS/ REMARKS</b> 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)	<b>PRESERVATION</b>	HNO3 to pH <2	HNO3 to pH <2	Cool-4C
		<b>TYPE OF CONTAINER</b>	P	P	P
		<b>NO. OF CONTAINER(S)</b>	1	1	1
		<b>VOLUME</b>	1000mL	250mL	120mL
<b>SPECIAL HANDLING AND/OR STORAGE</b>	<b>SAMPLE ANALYSIS</b>	Gross Alpha; Gross Beta;	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B1VVP7	1816 WATER	6-18-08	0630	X	X	X
B1VVP8	1817 WATER	6-18-08	0600	X	X	X
B1VVP9	1818 WATER	6-18-08	0610	X	X	X
B1VVR0	1819 WATER	6-18-08	0615	X	X	X
B1VVR1	1820 WATER	6-18-08	0650	X	X	X

<b>CHAIN OF POSSESSION</b>	<b>SPECIAL INSTRUCTIONS</b>
RELINQUISHED BY/REMOVED FROM <i>Ed Kauer / [Signature]</i>	(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}
DATE/TIME 6-18-08 0825	
RECEIVED BY/STORED IN <i>JA NAZIM [Signature]</i>	
DATE/TIME 6-18-08 0825	
RELINQUISHED BY/REMOVED FROM	
DATE/TIME	
RELINQUISHED BY/REMOVED FROM	
DATE/TIME	
RELINQUISHED BY/REMOVED FROM	
DATE/TIME	
RELINQUISHED BY/REMOVED FROM	
DATE/TIME	
RELINQUISHED BY/REMOVED FROM	
DATE/TIME	

**ICED**

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

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

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS	PRESERVATION	HNO3 to pH	HNO3 to pH	Cool-4C
			<2	<2	
A=Air DL=Drum L=Liquid DS=Drum S=Solid L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	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)	<b>TYPE OF CONTAINER</b>	P	P	P
		<b>NO. OF CONTAINER(S)</b>	1	1	1
		<b>VOLUME</b>	1000mL	250mL	120mL
<b>SPECIAL HANDLING AND/OR STORAGE</b>	<b>SAMPLE ANALYSIS</b>	Gross Alpha; Gross Beta;	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME							
B1VVR2	1821 WATER	6-18-08	0700	✓	✓	✓				
B1VVR3	1822 WATER	6-18-08	0705	✓	✓	✓				
B1VVR4	1823 WATER	6-18-08	0710	✓	✓	✓				
B1VVR5	1824 WATER	6-18-08	0745	✓	✓	✓				
B1VVR6	1825 WATER	6-18-08	0715	✓	✓	✓				

CHAIN OF POSSESSION	SIGN/ PRINT NAMES	SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM <i>Ed Kause / Ed Kause</i>	RECEIVED BY/STORED IN <i>TA PRAZIER, James</i>	(1)ICP Metals - 6010B (TAL); ICP Metals - 6010B (Add-On) {Arsenic, Lead, Molybdenum, Strontium}
DATE/TIME 6-18-08 0825	DATE/TIME 6-18-08 0825	(2)IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Phosphorus in phosphate, Sulfate}
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	

**ICED**

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

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

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS	PRESERVATION	HNO3 to pH <2	HNO3 to pH <2	Cool-4C
A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WT=Wipe X=Other	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)	TYPE OF CONTAINER	p	p	p
		NO. OF CONTAINER(S)	1	1	1
		VOLUME	1000mL	250mL	120mL
<b>SPECIAL HANDLING AND/OR STORAGE</b>	<b>SAMPLE ANALYSIS</b>	Gross Alpha; Gross Beta;	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B1VVR7	1826 WATER	6-18-08	0720	✓	✓	✓
B1VVR8	1827 WATER	6-18-08	0725	✓	✓	✓
B1VVR9	1828 WATER	6-18-08	0735	✓	✓	✓
B1VVT0	1829 WATER	6-18-08	0640	✓	✓	✓
B1VVT6	1830 WATER	6-18-08	0620	✓	✓	✓

CHAIN OF POSSESSION	SIGN/ PRINT NAMES	SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM <i>Ed Kauer / Edna Blank</i>	DATE/TIME 6-18-08 0825	RECEIVED BY/STORED IN <i>TA MAZIER</i>
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN

(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}

**ICED**

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