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Memorandum

M4W41-SLF-08-974

To: H. Hampt E6-35 Date: September 9, 2008

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

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

Subject: FINAL RESULTS FOR SAMPLE DELIVERY GROUP WSCF20081329 – SAF NUMBER F08-051

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 information for sample delivery group WSCF20081329:

- Cover Sheet (Attachment 1)
- Narrative (Attachment 2)
- Issue Resolution Form (Attachment 3)
- Analytical Results (Attachment 4)
- Sample Receipt Information (Attachment 5)

SLF/grf

Attachments 5

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ATTACHMENT 1

COVER SHEET

**Consisting of 2 pages
Including cover page**

WSCF SAF NUMBER CROSS REFERENCE

Group#: WSCF20081329
Data Deliverable Date: 15-aug-2008
Data Deliverable: Cover Sheet

SAF#	Sample ID	WSCF#	Matrix
F08-051	B1TTV2	W08GR02043	WATER
	B1TTV3	W08GR02042	WATER

M4W41-SLF-08-974

ATTACHMENT 2

NARRATIVE

Consisting of 5 pages
Including cover page

Introduction

Two (2) S&GRP samples were received at the WSCF Laboratory on July 2, 2008. These 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 copy of an Issue Resolution Form documenting four analytes requiring ICP metals analysis were inadvertently missed during login, subsequently the results are not included with this report. These four analytes, Lithium, Phosphorous, Silicon, and Strontium are in process and will be reported under this SDG when the analysis is complete. A copy of Issue Resolution Form #08-099, documenting a sample bottle delivery mix-up between nitrate/nitrite sample bottles and cyanide bottles. These two IRFs are included as Attachment 3. A Data Summary Report (Attachment 4) 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 5. 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 19 through 21, for a complete listing of approved analytical methods.

Inorganic Comments

Anions – The hold time requirement for this analysis was met. A Duplicate, Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per GRP Letter of Instruction. See pages 26 through 28 for QC details. Analytical Result(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on samples B1VW86 (SDG# 20081317, SAF# F0-027) and B1VWD3 (SDG# 20081332, SAF# F0-027).

All QC controls are within the established limits.

Cyanide – The hold time requirement (14 days) for this analysis was not met (refer to the IRF in attachment 3). A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per GRP Letter of Instruction. See page 29 for QC details. Analytical Results(s):

- The spike recovery in the MSD was below the laboratory requirement thus resulting in the RPD value to not be met. The sample concentration was greater than four times the

spike concentration; therefore, the spike result is not valid. The sample result was X flagged.

All other QC controls are within the established limits.

Hexavalent Chromium – The hold time requirement (24 hours) for this analysis was met. A Duplicate, Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per the GRP Letter of Instruction. See page 30 for QC details. Analytical Result(s):

The spike recovery in the MS/MSD was below the laboratory requirement. The sample result was N flagged.

All other QC controls are within the established limits.

ICP-AES Metals – The hold time requirement for this analysis was met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per the GRP Letter of Instruction. See pages 31 through 32 for QC details. Analytical Note(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1W1X6 (SDG# 20081673, SAF# F08-039).
- Batch QC (B1W1X6) – Calcium and Sodium sample results exceeded the spiking levels by a factor of four. Spike recoveries are not valid. Check standard was analyzed to ensure Sodium, Magnesium, and Calcium linearity because sample results were greater than the calibration standard.
- Batch QC (B1W1X6) – The spike recovery was low for Barium in the MS/MSD, therefore, applicable date were N flagged.

All other QC controls are within the established limits.

ICP-MS Metals – The hold time requirement for some of the analytes in this SDG were not met (refer to the IRF in attachment 3). A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per the GRP Letter of Instruction. See pages 33 through 35 for QC details. Analytical Results(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1V577 (SDG# 20081261, SAF# F08-103).

All QC controls are within the established limits.

Organic Comments

Semi-VOA – The hold time requirement for this analysis was met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per the GPP Letter of Instruction. See pages 48 through 53 for QC details.

All QC controls are within the established limits.

VOA – The hold time requirement for this analysis was met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample, were analyzed with this delivery group per the GRP Letter of Instruction. See pages 54 through 57 for QC details. Analytical Result(s):

Tritium by LSC: Matrix Spike and Duplicate was analyzed on sample# B1V574, (SDG#20081327, SAF# F08-103)

All QC controls are within the established limits.

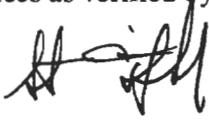
Rad Chem Comments – There are no hold times associated with WSCF's radiochemical methods. A Duplicate, Matrix Spike (*Matrix Spikes apply only to Neptunium, Technetium & Tritium and Matrix Spike Duplicate applies to Neptunium*), Blank and Laboratory Control Sample were analyzed with this delivery group. See pages 64 through 71 for QC details. Analytical Note(s):

Rad Chem analyses requested to be performed on this sample included: Americium by AEA, Gamma Energy Analysis, Neptunium by AEA, Plutonium Isotopics by AEA, Sr-89/90, Tc-99 by ICP-MS, Tc-99 by LSC, and Uranium Isotopics by AEA. TC-99 by LSC: Matrix Spike and Duplicate was analyzed on sample# B1TT54, (SDG#20081085, SAF# F08-076).

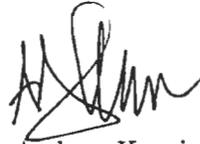
- TC-99 by LSC: Matrix Spike failed due to a high sample concentration. Matrix Spike evaluation criteria does not apply to samples with high concentration.
- Neptunium by AEA: Matrix Spike and Duplicate was analyzed on sample# B1TTV4, (SDG#20081493, SAF# F08-051).
- Neptunium by AEA: The LCS was less than the laboratory requirement. Since all of the other QC controls met the laboratory requirements, the data was accepted.
- Uranium Isotopic by AEA: Matrix Spike and Duplicate was analyzed on sample# B1V577, (SDG#20081833, SAF# F08-103).
- Plutonium Isotopic by AEA: Matrix Spike and Duplicate was analyzed on sample# B1V577, (SDG#20081833, SAF# F08-103).
- Americium by AEA: Matrix Spike and Duplicate was analyzed on sample# B1V577, (SDG#20081833, SAF# F08-103).

Except as noted, all 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-08-974

ATTACHMENT 3

ISSUE RESOLUTION FORM

Consisting of 3 pages
Including cover page

ISSUE RESOLUTION FORM

PNNL TRACKING NUMBER: 08-XXX

DRAFT

Date : 9-09-2008 SAF No. F08-051

SDG: WSCF20081329 LOGIN No.: TEST: Metals (@GPP6010)

Sample No.(s) B1TTV2 and B1TTV3

W08GR02043, and W08GR02042

Submitted By: WW Baird Submitted To: H Hampt

Phone No. 373-7189 Phone No. 376-4319

Fax No. 372-0456 Fax No

ISSUE

PROPOSED RESOLUTION

Four Add-On analytes (Lithium, Phosphorous, Silicon, and Strontium) for ICP metals analysis were not included to be tested for during initial login. missed for the S&GRP samples identified above.

Log-in the four analytes for the ICP metals analysis and when the test is complete, accept analytical results (accept as-is) and document missed holding time in the case narrative.

This samples were collected in the field and submitted to the WSCF Laboratory on July 2, 2008 for analysis.

Sample analysis was delayed beyond the 28 hold time authorization for the Silicon and Strontium.

GRP COMMENTS

Signature and Date

ISSUE RESOLUTION FORM

PNNL TRACKING NUMBER: 08-099, Rev. 1

Date : **8/20/08** SAF No. **F08-051**

SDG: **WSCF20081329** LOGIN No.: TEST: Log In of All Tests

Sample No.(s) **B1TTV3 (W08GR02042) and B1TTV2 (W08GR02043)**

Submitted By: John Trechter Submitted To: H Hampt

Phone No. 373-7046 Phone No. 376-4319

Fax No. 372-0456 Fax No

<u>ISSUE</u>	<u>PROPOSED RESOLUTION</u>
<p>Samples were collected and delivered to the WSCF Laboratory on July 2, 2008. Water samples B1TTV3 and B1TTV2 were sent to the lab requesting nitrite/nitrate analysis on two of the bottles; however this test was not listed on the chain of custody. In addition there were no bottles delivered to WSCF for cyanide analysis, which was listed on the chain of custody. Mistakenly it was assumed the bottles marked nitrate/nitrite were to be analyzed for cyanide, which was discovered to be incorrect after the samples were prepared for cyanide analysis. When contacted regarding incorrect preservation of samples for cyanide analysis, the client indicated that those bottles were to be sent off site to Lionville Laboratory for nitrate/nitrite analysis. The laboratory failed to inform the client of the issues in a timely manner in order for them to correct the problem.</p>	<p>In the future, WSCF will more diligently inspect bottles and requested analyses with respect to the accompanying chain of custody.</p>

GRP COMMENTS

Accept proposed resolution.

Heidi Hampt 8/20/08

Signature and Date

M4W41-SLF-08-974

ATTACHMENT 4

ANALYTICAL RESULTS

Consisting of 61 pages
Including cover page

**WSCF
ANALYTICAL RESULTS REPORT**

for

Groundwater Remediation Program

Richland, WA 99354

Attention: Steve Trent

Analytical:

S. Fitzgerald 9/9/08

Client Services:

A. Koprwa 9/9/08

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#: WSCF20081329
Report Date: 8-sep-2008
Report WGPP/ver. 5.2
Groundwater Remediation Program

Page 1

Department: Organic

W13q Worklist/Batch/QC Report for Group# WSCF20081329

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
			41842	BLANK		SW-846 8270C Semi-Vols
			41842	LCS		SW-846 8270C Semi-Vols
			41842	SAMPLE	W08GR02042	SW-846 8270C Semi-Vols
			41842	SURR	W08GR02042	SW-846 8270C Semi-Vols
			41842	MS	W08GR02043	SW-846 8270C Semi-Vols
			41842	MSD	W08GR02043	SW-846 8270C Semi-Vols
			41842	SAMPLE	W08GR02043	SW-846 8270C Semi-Vols
			41842	SPK-RPD	W08GR02043	SW-846 8270C Semi-Vols
			41842	SURR	W08GR02043	SW-846 8270C Semi-Vols
			42339	BLANK		VOA Ground Water Protection
			42339	LCS		VOA Ground Water Protection
			42339	MS	W08GR02041	VOA Ground Water Protection
			42339	MSD	W08GR02041	VOA Ground Water Protection
			42339	SPK-RPD	W08GR02041	VOA Ground Water Protection
			42339	SAMPLE	W08GR02042	VOA Ground Water Protection
			42339	SURR	W08GR02042	VOA Ground Water Protection
			42339	SAMPLE	W08GR02043	VOA Ground Water Protection
			42339	SURR	W08GR02043	VOA Ground Water Protection

Department: Radiochemistry

W13q Worklist/Batch/QC Report for Group# WSCF20081329

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
37025	1	37449	41800	BLANK		TC99 by Liquid Scin.
37025	4	37449	41800	LCS		TC99 by Liquid Scin.
37025	3	37449	41800	DUP	W08GR01411	TC99 by Liquid Scin.
37025	2	37449	41800	MS	W08GR01411	TC99 by Liquid Scin.
37025	10	37449	41800	SAMPLE	W08GR02042	TC99 by Liquid Scin.
37025	11	37449	41800	SAMPLE	W08GR02043	TC99 by Liquid Scin.
37087	1	37496	41868	BLANK		TC99 by ICP-200.8 MS
37087	2	37496	41868	LCS		TC99 by ICP-200.8 MS
37087	5	37496	41868	SAMPLE	W08GR02042	TC99 by ICP-200.8 MS
37087	6	37496	41868	SAMPLE	W08GR02043	TC99 by ICP-200.8 MS
36973	1	37396	42016	BLANK		Gamma Energy Analysis-grd H2O
36973	2	37396	42016	LCS		Gamma Energy Analysis-grd H2O
36973	3	37396	42016	DUP	W08GR02042	Gamma Energy Analysis-grd H2O
36973	4	37396	42016	SAMPLE	W08GR02042	Gamma Energy Analysis-grd H2O
36973	5	37396	42016	SAMPLE	W08GR02043	Gamma Energy Analysis-grd H2O
37403	1	37829	42209	BLANK		Uranium Isotopics by AEA
37403	2	37829	42209	LCS		Uranium Isotopics by AEA
37403	3	37829	42209	DUP	W08GR01833	Uranium Isotopics by AEA
37403	8	37829	42209	SAMPLE	W08GR02042	Uranium Isotopics by AEA
37403	9	37829	42209	SURR	W08GR02042	Uranium Isotopics by AEA
37403	10	37829	42209	SAMPLE	W08GR02043	Uranium Isotopics by AEA
37403	11	37829	42209	SURR	W08GR02043	Uranium Isotopics by AEA
37404	1	37832	42216	BLANK		Plutonium Isotopics by AEA
37404	2	37832	42216	LCS		Plutonium Isotopics by AEA
37404	3	37832	42216	DUP	W08GR01833	Plutonium Isotopics by AEA
37404	8	37832	42216	SAMPLE	W08GR02042	Plutonium Isotopics by AEA
37404	9	37832	42216	SURR	W08GR02042	Plutonium Isotopics by AEA
37404	10	37832	42216	SAMPLE	W08GR02043	Plutonium Isotopics by AEA
37404	11	37832	42216	SURR	W08GR02043	Plutonium Isotopics by AEA
37405	1	37837	42217	BLANK		Americium by AEA
37405	2	37837	42217	LCS		Americium by AEA
37405	3	37837	42217	DUP	W08GR01833	Americium by AEA
37405	8	37837	42217	SAMPLE	W08GR02042	Americium by AEA
37405	9	37837	42217	SURR	W08GR02042	Americium by AEA
37405	10	37837	42217	SAMPLE	W08GR02043	Americium by AEA
37405	11	37837	42217	SURR	W08GR02043	Americium by AEA
37470	1	37904	42320	BLANK		Neptunium by AEA
37470	2	37904	42320	LCS		Neptunium by AEA
37470	3	37904	42320	DUP	W08GR02042	Neptunium by AEA
37470	5	37904	42320	MS	W08GR02042	Neptunium by AEA
37470	6	37904	42320	MSD	W08GR02042	Neptunium by AEA
37470	4	37904	42320	SAMPLE	W08GR02042	Neptunium by AEA
37470	6	37904	42320	SPK-RPD	W08GR02042	Neptunium by AEA
37470	8	37904	42320	MS	W08GR02043	Neptunium by AEA
37470	7	37904	42320	SAMPLE	W08GR02043	Neptunium by AEA
37470	12	37904	42320	MS	W08GR02687	Neptunium by AEA

37470	10	37904	42320	MS	W08GR02802	Neptunium by AEA
37077	1	37504	42511	BLANK		Strontium 89/90
37077	2	37504	42511	LCS		Strontium 89/90
37077	6	37504	42511	SAMPLE	W08GR02042	Strontium 89/90
37077	7	37504	42511	SURR	W08GR02042	Strontium 89/90
37077	3	37504	42511	DUP	W08GR02043	Strontium 89/90
37077	4	37504	42511	SAMPLE	W08GR02043	Strontium 89/90
37077	5	37504	42511	SURR	W08GR02043	Strontium 89/90

Department: Inorganic

W13q Worklist/Batch/QC Report for Group# WSCF20081329

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
36970	2	37394	41737	BLANK		Hexavalent chromium
36970	9	37394	41737	BLANK		Hexavalent chromium
36970	3	37394	41737	LCS		Hexavalent chromium
36970	5	37394	41737	DUP	W08GR02042	Hexavalent chromium
36970	6	37394	41737	MS	W08GR02042	Hexavalent chromium
36970	7	37394	41737	MSD	W08GR02042	Hexavalent chromium
36970	4	37394	41737	SAMPLE	W08GR02042	Hexavalent chromium
36970	7	37394	41737	SPK-RPD	W08GR02042	Hexavalent chromium
36970	8	37394	41737	SAMPLE	W08GR02043	Hexavalent chromium
36984	2	37403	41769	BLANK		Anions by Ion Chromatography
36984	13	37403	41769	BLANK		Anions by Ion Chromatography
36984	25	37403	41769	BLANK		Anions by Ion Chromatography
36984	3	37403	41769	LCS		Anions by Ion Chromatography
36984	14	37403	41769	LCS		Anions by Ion Chromatography
36984	5	37403	41769	DUP	W08GR02036	Anions by Ion Chromatography
36984	6	37403	41769	MS	W08GR02036	Anions by Ion Chromatography
36984	7	37403	41769	MSD	W08GR02036	Anions by Ion Chromatography
36984	7	37403	41769	SPK-RPD	W08GR02036	Anions by Ion Chromatography
36984	19	37403	41769	SAMPLE	W08GR02042	Anions by Ion Chromatography
36984	21	37403	41769	SAMPLE	W08GR02043	Anions by Ion Chromatography
36984	16	37403	41769	DUP	W08GR02070	Anions by Ion Chromatography
36984	17	37403	41769	MS	W08GR02070	Anions by Ion Chromatography
36984	18	37403	41769	MSD	W08GR02070	Anions by Ion Chromatography
36984	18	37403	41769	SPK-RPD	W08GR02070	Anions by Ion Chromatography
37144	1	37571	41904	BLANK		ICP-200.8 MS All possible meta
37144	2	37571	41904	LCS		ICP-200.8 MS All possible meta
37144	16	37571	41904	MS	W08D000029	ICP-200.8 MS All possible meta
37144	17	37571	41904	MSD	W08D000029	ICP-200.8 MS All possible meta
37144	17	37571	41904	SPK-RPD	W08D000029	ICP-200.8 MS All possible meta
37144	4	37571	41904	MS	W08GR01833	ICP-200.8 MS All possible meta
37144	5	37571	41904	MSD	W08GR01833	ICP-200.8 MS All possible meta
37144	5	37571	41904	SPK-RPD	W08GR01833	ICP-200.8 MS All possible meta
37144	8	37571	41904	SAMPLE	W08GR02042	ICP-200.8 MS All possible meta
37144	9	37571	41904	SAMPLE	W08GR02043	ICP-200.8 MS All possible meta
37153	1	37578	41980	BLANK		Cyanide by Midi/Spectrophotom
37153	2	37578	41980	LCS		Cyanide by Midi/Spectrophotom
37153	4	37578	41980	MS	W08GR02042	Cyanide by Midi/Spectrophotom
37153	5	37578	41980	MSD	W08GR02042	Cyanide by Midi/Spectrophotom
37153	3	37578	41980	SAMPLE	W08GR02042	Cyanide by Midi/Spectrophotom
37153	5	37578	41980	SPK-RPD	W08GR02042	Cyanide by Midi/Spectrophotom
37153	6	37578	41980	SAMPLE	W08GR02043	Cyanide by Midi/Spectrophotom
37778	1	38205	42675	BLANK		ICP Metals Analysis, Grd H20 P
37778	2	38205	42675	LCS		ICP Metals Analysis, Grd H20 P
37778	8	38205	42675	SAMPLE	W08GR02042	ICP Metals Analysis, Grd H20 P
37778	9	38205	42675	SAMPLE	W08GR02043	ICP Metals Analysis, Grd H20 P
37778	4	38205	42675	MS	W08GR03259	ICP Metals Analysis, Grd H20 P
37778	5	38205	42675	MSD	W08GR03259	ICP Metals Analysis, Grd H20 P
37778	5	38205	42675	SPK-RPD	W08GR03259	ICP Metals Analysis, Grd H20 P

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WSCF

METHOD REFERENCES REPORT

Department: Inorganic

The results provided in this report were generated using the following WSCF Laboratory procedures. For your convenience, this table provides a listing of the regulatory or industry methods that are referenced by each of these WSCF procedures. Please note that the most recent version of the regulatory or industry method is listed here even though the WSCF procedure may reference an older version of the method. Also, a reference to a regulatory or industry method here does not necessarily indicate a verbatim implementation of that method.

LA-265-403	LA-265-403: Hexavalent Chromium analysis by Spectrophotometer EPA SW-846 7196A HEXAVALENT CHROMIUM HEIS 7196_CR6 Hexavalent Chromium
LA-505-411	LA-505-411: ELEMENTAL ANALYSIS BY INDUCTIVELY COUPLED PLASMA ATOMIC EMISSION SPE HEIS 6010_METALS_ICP Inductively Coupled Plasma-Atomic Emmission Spectrometry
LA-505-412	LA-505-412: DETERMINATION OF TRACE ELEMENTS IN WATERS AND WASTES BY INDUCTIVELY EPA-600/R-94-111 200.8 DETERMINATION OF TRACE ELEMENTS IN WATERS AND WASTES BY INDUCTIVELY COUPLED PLAS HEIS 200.8_METALS_ICPMS Inductively Coupled Plasma - Mass Spectrometry HEIS RADISOTOPES_ICPMS Radioisotopes by ICP/MS
LA-533-410	LA-533-410: ANION ANALYSIS BY ION CHROMATOGRAPHY EPA-600/R-94-111 300.0 DETERMINATION OF INORGANIC ANIONS BY ION CHROMATOGRAPHY HEIS 300.0_ANIONS_IC Determination of Inorganic Anions by Ion Chromatography
LA-695-402	LA-695-402: DETERMINATION OF CYANIDE BY MIDIDISTILLATION AND SPECTROPHOTOMETRIC EPA-600/4-79-020 335.2 Cyanide, Total HEIS 335.2_CYANIDE Cyanide, Total

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: 8-sep-2008
Report#: WSCF20081329
Report WGPPM/5.2

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WSCF

METHOD REFERENCES REPORT

Department: Organic

The results provided in this report were generated using the following WSCF Laboratory procedures. For your convenience, this table provides a listing of the regulatory or industry methods that are referenced by each of these WSCF procedures. Please note that the most recent version of the regulatory or industry method is listed here even though the WSCF procedure may reference an older version of the method. Also, a reference to a regulatory or industry method here does not necessarily indicate a verbatim implementation of that method.

LA-523-455	LA-523-455: VOLATILE SAMPLE ANALYSIS BY SW-846
EPA SW-846 8000B	DETERMINATIVE CHROMATOGRAPHIC SEPARATIONS
EPA SW-846 8260B	VOLATILE ORGANIC COMPOUNDS BY GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)
HEIS 8260_VOA_GCMS	Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)
LA-523-456	LA-523-456: SEMIVOLATILE SAMPLE ANALYSIS BY SW-846, METHOD 8270C
EPA SW-846 8000B	DETERMINATIVE CHROMATOGRAPHIC SEPARATIONS
EPA SW-846 8270C	SEMIVOLATILE ORGANIC COMPOUNDS BY GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)
HEIS 8270_SVOA_GCMS	Semivolatile Organic Compounds By Gas Chromatography/Mass Spectrometry (GC/MS)

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

Report Date: 8-sep-2008

Report#: WSCF20081329

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METHOD REFERENCES REPORT

Department: Radiochemistry

The results provided in this report were generated using the following WSCF Laboratory procedures. For your convenience, this table provides a listing of the regulatory or industry methods that are referenced by each of these WSCF procedures. Please note that the most recent version of the regulatory or industry method is listed here even though the WSCF procedure may reference an older version of the method. Also, a reference to a regulatory or industry method here does not necessarily indicate a verbatim implementation of that method.

LA-508-415	LA-508-415: OPERATION OF THE PROTEAN 2-INCH ALPHA/BETA COUNTING SYSTEM FOR GROSS
HEIS ALPHA_GPC	GROSS ALPHA GPC
HEIS BETA_GPC	GROSS BETA GPC
HEIS SRTOT_SEP_PRECIP_GPC	Strontium 89/90
LA-508-421	LA-508-421: OPERATION OF THE TRI-CARB MODEL 2500TR LIQUID SCINTILLATION ANALYZER
HEIS ALPHA_LSC	A/B Liquid Scintillation
HEIS BETA_LSC	A/B Liquid Scintillation
HEIS TC99_3MDSK_LSC	TC99 by Liquid Scintillation
HEIS TRITIUM_EIE_LSC	Tritium Liquid Scintillation
LA-508-471	LA-508-471: ALPHA ENERGY ANALYZER DATA ACQUISITION AND SYSTEM CHECKOUT USING ALP
HEIS PUIISO_IE_PRECIP_AEA	Plutonium by Alpha Energy Analysis
HEIS RAISO_AEA	Radium-226
LA-508-481	LA-508-481: GAMMA ENERGY ANALYSIS USING PROCOUNT SOFTWARE
HEIS GAMMA_GS	Gamma Emission Spectrometry

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: 8-sep-2008
Report#: WSCF20081329
Report WGPPM/5.2

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WSCF

ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-051
Sample # W08GR02042
Client ID: BITTV3

TRENT
WSCF

Matrix: WATER

Group #: WSCF20081329
Department: Inorganic
Sampled: 07/02/08
Received: 07/02/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Anions by Ion Chromatography											
Fluoride	16984-48-8	LA-533-410	BD	0.173	mg/L			5.00	0.10		07/03/08
Chloride	16887-00-6	LA-533-410	D	34.3	mg/L			5.00	0.55		07/03/08
Nitrogen in Nitrite	NO2-N	LA-533-410	D	1.02	mg/L			5.00	0.050		07/03/08
Nitrogen in Nitrate	NO3-N	LA-533-410	D	157	mg/L			51.00	1.8		07/03/08
Phosphate (P) by IC	PO4-P	LA-533-410	DU	< 0.160	mg/L			5.00	0.16		07/03/08
Sulfate	14808-79-8	LA-533-410	D	205	mg/L			51.00	3.9		07/03/08
Cyanide											
Cyanide	57-12-5	LA-695-402	DX	860	ug/L			5.00	20		07/18/08
Hexavalent Chromium											
Hexavalent Chromium	18540-29-9	LA-265-403	NU	< 2.00e-03	mg/L			1.00	2.0e-03		07/02/08
											08/25/08
ICP Metals Analysis, Grd H2O P Prep											
ICP Metals Analysis, Grd H2O P											
Aluminum	7429-90-5	LA-505-411		149	ug/L			1.00	52		08/31/08
Iron	7439-89-6	LA-505-411		362	ug/L			1.00	25		08/31/08
Magnesium	7439-95-4	LA-505-411		3.70e+04	ug/L			1.00	50		08/31/08
Manganese	7439-96-5	LA-505-411		117	ug/L			1.00	4.0		08/31/08
Potassium	7440-09-7	LA-505-411		1.45e+04	ug/L			1.00	1.7e+02		08/31/08
Sodium	7440-23-5	LA-505-411		1.37e+05	ug/L			1.00	51		08/31/08
Barium	7440-39-3	LA-505-411	N	68.0	ug/L			1.00	4.0		08/31/08
Calcium	7440-70-2	LA-505-411		1.48e+05	ug/L			1.00	73		08/31/08
											07/17/08
ICP-200.8 MS All possible meta Prep											
ICP-200.8 MS All possible meta											
Antimony	7440-36-0	LA-505-412		0.340	ug/L			1.00	0.300		07/18/08
Cadmium	7440-43-9	LA-505-412	U	< 0.100	ug/L			1.00	0.100		07/18/08

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)

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

U - Analyzed for but not detected above limiting criteria.

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

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

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

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

* - Indicates results that have NOT been validated;

+ - Indicates more than six qualifier symbols

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Report WGPP/ver. 5.2

Groundwater Remediation Program

WSCF ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-051
Sample # W08GR02042
Client ID: BITTV3

TRENT
 WSCF

Matrix: WATER

Group #: WSCF20081329
Department: Inorganic
Sampled: 07/02/08
Received: 07/02/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Chromium	7440-47-3	LA-505-412		2.30	ug/L			1.00	0.500		07/18/08
Mercury	7439-97-6	LA-505-412		0.130	ug/L			1.00	0.0500		07/18/08
Uranium	7440-61-1	LA-505-412		5.71	ug/L			1.00	0.0500		07/18/08
Arsenic	7440-38-2	LA-505-412		2.22	ug/L			1.00	0.400		07/18/08
Thallium	7440-28-0	LA-505-412	U	< 0.100	ug/L			1.00	0.100		07/18/08

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)
 N - Spike sample recovery is outside control limits.(inorg)
 U - Analyzed for but not detected above limiting criteria.
 X - Other flags/notes described in the comments/narrative(inorg)

D - Analyte was identified at a secondary dilution factor(inorg)
 U - Analyzed for but not detected above limiting criteria(inorg)
 U - Analyzed for but not detected above limiting criteria.(org)

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

WSCF ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-051
Sample # W08GR02043
Client ID: B1TTV2

**TRENT
WSCF**

Matrix: WATER

Group #: WSCF20081329
Department: Inorganic
Sampled: 07/02/08
Received: 07/02/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Anions by Ion Chromatography											
Fluoride	16984-48-8	LA-533-410	BD	0.268	mg/L			5.00	0.10		07/03/08
Chloride	16887-00-6	LA-533-410	D	34.3	mg/L			5.00	0.55		07/03/08
Nitrogen in Nitrite	NO2-N	LA-533-410	D	1.16	mg/L			5.00	0.050		07/03/08
Nitrogen in Nitrate	NO3-N	LA-533-410	D	160	mg/L			51.00	1.8		07/03/08
Phosphate (P) by IC	PO4-P	LA-533-410	DU	< 0.160	mg/L			5.00	0.16		07/03/08
Sulfate	14808-79-8	LA-533-410	D	208	mg/L			51.00	3.9		07/03/08
Cyanide											
Cyanide	57-12-5	LA-695-402	DX	825	ug/L			5.00	20		07/18/08
Hexavalent Chromium											
Hexavalent Chromium	18540-29-9	LA-265-403	N	6.70e-03	mg/L			1.00	2.0e-03		07/02/08
											08/25/08
ICP Metals Analysis, Grd H2O P Prep											
ICP Metals Analysis, Grd H2O P											
Aluminum	7429-90-5	LA-505-411		188	ug/L			1.00	52		08/31/08
Iron	7439-89-6	LA-505-411		429	ug/L			1.00	25		08/31/08
Magnesium	7439-95-4	LA-505-411		3.85e+04	ug/L			1.00	50		08/31/08
Manganese	7439-96-5	LA-505-411		138	ug/L			1.00	4.0		08/31/08
Potassium	7440-09-7	LA-505-411		1.50e+04	ug/L			1.00	1.7e+02		08/31/08
Sodium	7440-23-5	LA-505-411		1.45e+05	ug/L			1.00	51		08/31/08
Barium	7440-39-3	LA-505-411	N	71.4	ug/L			1.00	4.0		08/31/08
Calcium	7440-70-2	LA-505-411		1.46e+05	ug/L			1.00	73		08/31/08
											07/17/08
ICP-200.8 MS All possible meta Prep											
ICP-200.8 MS All possible meta											
Antimony	7440-36-0	LA-505-412	U	< 0.300	ug/L			1.00	0.300		07/18/08
Cadmium	7440-43-9	LA-505-412	U	< 0.100	ug/L			1.00	0.100		07/18/08

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)

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

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Report WGPP/ver. 5.2

Groundwater Remediation Program

WSCF ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-051
Sample # W08GR02043
Client ID: B1TTV2

TRENT
 WSCF

Matrix: WATER

Group #: WSCF20081329
Department: Inorganic
Sampled: 07/02/08
Received: 07/02/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Chromium	7440-47-3	LA-505-412		1.75	ug/L			1.00	0.500		07/18/08
Mercury	7439-97-6	LA-505-412		0.110	ug/L			1.00	0.0500		07/18/08
Uranium	7440-61-1	LA-505-412		5.66	ug/L			1.00	0.0500		07/18/08
Arsenic	7440-38-2	LA-505-412		1.86	ug/L			1.00	0.400		07/18/08
Thallium	7440-28-0	LA-505-412	U	< 0.100	ug/L			1.00	0.100		07/18/08

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)
 N - Spike sample recovery is outside control limits.(inorg)
 U - Analyzed for but not detected above limiting criteria.
 X - Other flags/notes described in the comments/narrative(inorg)

D - Analyte was identified at a secondary dilution factor(inorg)
 U - Analyzed for but not detected above limiting criteria(inorg)
 U - Analyzed for but not detected above limiting criteria.(org)

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

Report WGPP/ver. 5.2
 Groundwater Remediation Program

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081329
 Matrix: WATER
 Test: Anions by Ion Chromatography

Sample Date: 07/01/08
 Receive Date: 07/01/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR02036											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Chloride	16887-00-6	11.379		RPD			1.198	20.000		07/03/08
DUP	Fluoride	16984-48-8	<0.21		RPD			n/a	20.000	U	07/03/08
DUP	Nitrogen in Nitrite	NO2-N	<9.9e-2		RPD			n/a	20.000	U	07/03/08
DUP	Nitrogen in Nitrate	NO3-N	<0.36		RPD			n/a	20.000	U	07/03/08
DUP	Phosphate (P) by IC	PO4-P	27.4982		RPD			1.010	20.000		07/03/08
DUP	Sulfate	14808-79-8	11.0691		RPD			2.069	20.000		07/03/08
MS	Chloride	16887-00-6	0.91931	92.393	% Recov	80.000	120.000				07/03/08
MS	Fluoride	16984-48-8	0.50926	103.298	% Recov	80.000	120.000				07/03/08
MS	Nitrogen in Nitrite	NO2-N	0.46452	94.415	% Recov	80.000	120.000				07/03/08
MS	Nitrogen in Nitrate	NO3-N	0.43212	96.888	% Recov	80.000	120.000				07/03/08
MS	Phosphate (P) by IC	PO4-P	0.92167	96.308	% Recov	80.000	120.000				07/03/08
MS	Sulfate	14808-79-8	1.80741	92.215	% Recov	80.000	120.000				07/03/08
MSD	Chloride	16887-00-6	0.92296	92.760	% Recov	80.000	120.000				07/03/08
MSD	Fluoride	16984-48-8	0.51752	104.974	% Recov	80.000	120.000				07/03/08
MSD	Nitrogen in Nitrite	NO2-N	0.46873	95.270	% Recov	80.000	120.000				07/03/08
MSD	Nitrogen in Nitrate	NO3-N	0.43003	96.419	% Recov	80.000	120.000				07/03/08
MSD	Phosphate (P) by IC	PO4-P	0.9385	98.067	% Recov	80.000	120.000				07/03/08
MSD	Sulfate	14808-79-8	1.83556	93.651	% Recov	80.000	120.000				07/03/08
SPK-RPD	Chloride	16887-00-6	92.760		RPD			0.396	20.000		07/03/08
SPK-RPD	Fluoride	16984-48-8	104.974		RPD			1.609	20.000		07/03/08
SPK-RPD	Nitrogen in Nitrite	NO2-N	95.270		RPD			0.901	20.000		07/03/08
SPK-RPD	Nitrogen in Nitrate	NO3-N	96.419		RPD			0.485	20.000		07/03/08
SPK-RPD	Phosphate (P) by IC	PO4-P	98.067		RPD			1.810	20.000		07/03/08
SPK-RPD	Sulfate	14808-79-8	93.651		RPD			1.545	20.000		07/03/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081329
 Matrix: WATER
 Test: Anions by Ion Chromatography

Sample Date: 07/02/08
 Receive Date: 07/02/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR02070											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Chloride	16887-00-6	<1.1		RPD			n/a	20.000	U	07/03/08
DUP	Fluoride	16984-48-8	<0.21		RPD			n/a	20.000	U	07/03/08
DUP	Nitrogen in Nitrite	NO2-N	<9.9e-2		RPD			n/a	20.000	U	07/03/08
DUP	Nitrogen in Nitrate	NO3-N	<0.36		RPD			n/a	20.000	U	07/03/08
DUP	Phosphate (P) by IC	PO4-P	<0.32		RPD			n/a	20.000	U	07/03/08
DUP	Sulfate	14808-79-8	6.0903		RPD			3.459	20.000		07/03/08
MS	Chloride	16887-00-6	0.99373	99.872	% Recov	80.000	120.000				07/03/08
MS	Fluoride	16984-48-8	0.43011	87.243	% Recov	80.000	120.000				07/03/08
MS	Nitrogen in Nitrite	NO2-N	0.45758	93.004	% Recov	80.000	120.000				07/03/08
MS	Nitrogen in Nitrate	NO3-N	0.44292	99.309	% Recov	80.000	120.000				07/03/08
MS	Phosphate (P) by IC	PO4-P	0.91454	95.563	% Recov	80.000	120.000				07/03/08
MS	Sulfate	14808-79-8	1.78168	90.902	% Recov	80.000	120.000				07/03/08
MSD	Chloride	16887-00-6	1.00364	100.868	% Recov	80.000	120.000				07/03/08
MSD	Fluoride	16984-48-8	0.43048	87.318	% Recov	80.000	120.000				07/03/08
MSD	Nitrogen in Nitrite	NO2-N	0.46532	94.577	% Recov	80.000	120.000				07/03/08
MSD	Nitrogen in Nitrate	NO3-N	0.45007	100.913	% Recov	80.000	120.000				07/03/08
MSD	Phosphate (P) by IC	PO4-P	0.9195	96.082	% Recov	80.000	120.000				07/03/08
MSD	Sulfate	14808-79-8	1.79475	91.569	% Recov	80.000	120.000				07/03/08
SPK-RPD	Chloride	16887-00-6	100.868		RPD			0.992	20.000		07/03/08
SPK-RPD	Fluoride	16984-48-8	87.318		RPD			0.086	20.000		07/03/08
SPK-RPD	Nitrogen in Nitrite	NO2-N	94.577		RPD			1.677	20.000		07/03/08
SPK-RPD	Nitrogen in Nitrate	NO3-N	100.913		RPD			1.602	20.000		07/03/08
SPK-RPD	Phosphate (P) by IC	PO4-P	96.082		RPD			0.542	20.000		07/03/08
SPK-RPD	Sulfate	14808-79-8	91.569		RPD			0.731	20.000		07/03/08
BATCH QC											
BLANK	Chloride	16887-00-6	<0.11	n/a	mg/L	0.000	0.030			U	07/03/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Inorganic**

SDG Number: WSCF20081329
 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	Chloride	16887-00-6	<0.11	n/a	mg/L	0.000	0.030			U	07/03/08
BLANK	Chloride	16887-00-6	<0.11	n/a	mg/L	0.000	0.030			U	07/03/08
BLANK	Fluoride	16984-48-8	<2.1e-2	n/a	mg/L	0.000	0.030			U	07/03/08
BLANK	Fluoride	16984-48-8	<2.1e-2	n/a	mg/L	0.000	0.030			U	07/03/08
BLANK	Fluoride	16984-48-8	<2.1e-2	n/a	mg/L	0.000	0.030			U	07/03/08
BLANK	Nitrogen in Nitrite	NO2-N	<9.9e-3	n/a	mg/L	0.000	0.020			U	07/03/08
BLANK	Nitrogen in Nitrite	NO2-N	<9.9e-3	n/a	mg/L	0.000	0.020			U	07/03/08
BLANK	Nitrogen in Nitrite	NO2-N	<9.9e-3	n/a	mg/L	0.000	0.020			U	07/03/08
BLANK	Nitrogen in Nitrate	NO3-N	<3.6e-2	n/a	mg/L	0.000	0.040			U	07/03/08
BLANK	Nitrogen in Nitrate	NO3-N	<3.6e-2	n/a	mg/L	0.000	0.040			U	07/03/08
BLANK	Nitrogen in Nitrate	NO3-N	<3.6e-2	n/a	mg/L	0.000	0.040			U	07/03/08
BLANK	Phosphate (P) by IC	PO4-P	<3.2e-2	n/a	mg/L	0.000	0.200			U	07/03/08
BLANK	Phosphate (P) by IC	PO4-P	<3.2e-2	n/a	mg/L	0.000	0.200			U	07/03/08
BLANK	Phosphate (P) by IC	PO4-P	<3.2e-2	n/a	mg/L	0.000	0.200			U	07/03/08
BLANK	Sulfate	14808-79-8	<7.7e-2	n/a	mg/L	0.000	0.200			U	07/03/08
BLANK	Sulfate	14808-79-8	<7.7e-2	n/a	mg/L	0.000	0.200			U	07/03/08
BLANK	Sulfate	14808-79-8	<7.7e-2	n/a	mg/L	0.000	0.200			U	07/03/08
LCS	Chloride	16887-00-6	191.6001	95.323	% Recov	80.000	120.000				07/03/08
LCS	Chloride	16887-00-6	194.7435	96.887	% Recov	80.000	120.000				07/03/08
LCS	Fluoride	16984-48-8	101.5595	101.967	% Recov	80.000	120.000				07/03/08
LCS	Fluoride	16984-48-8	104.6103	105.030	% Recov	80.000	120.000				07/03/08
LCS	Nitrogen in Nitrite	NO2-N	95.8061	96.384	% Recov	80.000	120.000				07/03/08
LCS	Nitrogen in Nitrite	NO2-N	99.2777	99.877	% Recov	80.000	120.000				07/03/08
LCS	Nitrogen in Nitrate	NO3-N	100.452	111.489	% Recov	80.000	120.000				07/03/08
LCS	Nitrogen in Nitrate	NO3-N	91.9648	102.070	% Recov	80.000	120.000				07/03/08
LCS	Phosphate (P) by IC	PO4-P	189.1732	97.814	% Recov	80.000	120.000				07/03/08
LCS	Phosphate (P) by IC	PO4-P	194.5616	100.601	% Recov	80.000	120.000				07/03/08
LCS	Sulfate	14808-79-8	364.7718	92.114	% Recov	80.000	120.000				07/03/08
LCS	Sulfate	14808-79-8	379.1202	95.737	% Recov	80.000	120.000				07/03/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081329
 Matrix: WATER
 Test: Cyanide by Midi/Spectrophotom

Sample Date: 07/02/08
 Receive Date: 07/02/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR02042											
BATCH QC ASSOCIATED WITH SAMPLE											
MS	Cyanide by Midi/Spectrophotom	57-12-5	34.9	87.250	% Recov	75.000	125.000				07/18/08
MSD	Cyanide by Midi/Spectrophotom	57-12-5	5.9	14.750	% Recov	75.000	125.000				07/18/08
SPK-RPD	Cyanide by Midi/Spectrophotom	57-12-5	14.750		RPD			142.157	20.000		07/18/08
BATCH QC											
BLANK	Cyanide by Midi/Spectrophotom	57-12-5	< 4	n/a	ug/L	-4.000	4.000			U	07/18/08
LCS	Cyanide by Midi/Spectrophotom	57-12-5	52.1	104.200	% Recov	85.000	115.000				07/18/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081329
 Matrix: WATER
 Test: Hexavalent chromium

Sample Date: 07/02/08
 Receive Date: 07/02/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR02042											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Hexavalent chromium	18540-29-9	<0.002		RPD			n/a	15.000	U	07/02/08
MS	Hexavalent chromium	18540-29-9	0.0274	51.119	% Recov	85.000	115.000				07/02/08
MSD	Hexavalent chromium	18540-29-9	0.0261	48.694	% Recov	85.000	115.000				07/02/08
SPK-RPD	Hexavalent chromium	18540-29-9	48.694		RPD			4.859	20.000		07/02/08
BATCH QC											
BLANK	Hexavalent chromium	18540-29-9	<0.002	n/a	mg/L	0.000	2.000			U	07/02/08
BLANK	Hexavalent chromium	18540-29-9	<0.002	n/a	mg/L	0.000	2.000			U	07/02/08
LCS	Hexavalent chromium	18540-29-9	0.0519	102.976	% Recov	80.000	120.000				07/02/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081329
 Matrix: WATER
 Test: ICP Metals Analysis, Grd H2O P

Sample Date: 08/07/08
 Receive Date: 08/07/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR03259											
BATCH QC ASSOCIATED WITH SAMPLE											
MS	Aluminum	7429-90-5	1043.5	104.350	% Recov	75.000	125.000				08/31/08
MS	Barium	7440-39-3	360.6	72.120	% Recov	75.000	125.000			*	08/31/08
MS	Calcium	7440-70-2	1192	119.200	% Recov	75.000	125.000				08/31/08
MS	Iron	7439-89-6	978.6	97.880	% Recov	75.000	125.000				08/31/08
MS	Potassium	7440-09-7	8656	86.580	% Recov	75.000	125.000				08/31/08
MS	Magnesium	7439-95-4	872	87.200	% Recov	75.000	125.000				08/31/08
MS	Manganese	7439-96-5	1021	102.100	% Recov	75.000	125.000				08/31/08
MS	Sodium	7440-23-5	-8364000	-836400.000	% Recov	75.000	125.000			*	08/31/08
MSD	Aluminum	7429-90-5	1010.5	101.050	% Recov	75.000	125.000				08/31/08
MSD	Barium	7440-39-3	349.7	69.940	% Recov	75.000	125.000			*	08/31/08
MSD	Calcium	7440-70-2	923	92.300	% Recov	75.000	125.000				08/31/08
MSD	Iron	7439-89-6	977.8	97.780	% Recov	75.000	125.000				08/31/08
MSD	Potassium	7440-09-7	9408	94.080	% Recov	75.000	125.000				08/31/08
MSD	Magnesium	7439-95-4	1014	101.400	% Recov	75.000	125.000				08/31/08
MSD	Manganese	7439-96-5	1032	103.200	% Recov	75.000	125.000				08/31/08
MSD	Sodium	7440-23-5	-8364000	-836400.000	% Recov	75.000	125.000			*	08/31/08
SPK-RPD	Aluminum	7429-90-5	101.050		RPD			3.213	20.000		08/31/08
SPK-RPD	Barium	7440-39-3	69.940		RPD			3.069	20.000		08/31/08
SPK-RPD	Calcium	7440-70-2	92.300		RPD			25.437	20.000	*	08/31/08
SPK-RPD	Iron	7439-89-6	97.780		RPD			0.102	20.000		08/31/08
SPK-RPD	Potassium	7440-09-7	94.080		RPD			8.305	20.000		08/31/08
SPK-RPD	Magnesium	7439-95-4	101.400		RPD			15.058	20.000		08/31/08
SPK-RPD	Manganese	7439-96-5	103.200		RPD			1.072	20.000		08/31/08
SPK-RPD	Sodium	7440-23-5	-836400.000		RPD			-0.000	20.000		08/31/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Inorganic**

SDG Number: WSCF20081329
 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
BATCH QC											
BLANK	Aluminum	7429-90-5	<52	n/a	ug/L					U	08/31/08
BLANK	Barium	7440-39-3	<4	n/a	ug/L					U	08/31/08
BLANK	Calcium	7440-70-2	<73	n/a	ug/L					U	08/31/08
BLANK	Iron	7439-89-6	<25	n/a	ug/L					U	08/31/08
BLANK	Potassium	7440-09-7	<170	n/a	ug/L					U	08/31/08
BLANK	Magnesium	7439-95-4	<50	n/a	ug/L					U	08/31/08
BLANK	Manganese	7439-96-5	<4	n/a	ug/L					U	08/31/08
BLANK	Sodium	7440-23-5	<51	n/a	ug/L					U	08/31/08
LCS	Aluminum	7429-90-5	991.5	99.150	% Recov	80.000	120.000				08/31/08
LCS	Barium	7440-39-3	491.7	98.340	% Recov	80.000	120.000				08/31/08
LCS	Calcium	7440-70-2	1065	106.500	% Recov	80.000	120.000				08/31/08
LCS	Iron	7439-89-6	1043	104.300	% Recov	80.000	120.000				08/31/08
LCS	Potassium	7440-09-7	10490	104.900	% Recov	80.000	120.000				08/31/08
LCS	Magnesium	7439-95-4	987.7	98.770	% Recov	80.000	120.000				08/31/08
LCS	Manganese	7439-96-5	1027	102.700	% Recov	80.000	120.000				08/31/08
LCS	Sodium	7440-23-5	1025	102.500	% Recov	80.000	120.000				08/31/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Inorganic**

SDG Number: WSCF20081329
 Matrix: WATER
 Test: ICP-200.8 MS All possible meta

Sample Date: 07/15/08
 Receive Date: 07/15/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08D000029											
BATCH QC ASSOCIATED WITH SAMPLE											
MS	Arsenic	7440-38-2	34.32	85.800	% Recov	70.000	130.000				07/18/08
MS	Cadmium	7440-43-9	37.08	92.700	% Recov	70.000	130.000				07/18/08
MS	Chromium	7440-47-3	35.04	87.600	% Recov	70.000	130.000				07/18/08
MS	Mercury	7439-97-8	2.33	116.500	% Recov	70.000	130.000				07/18/08
MS	Antimony	7440-36-0	39.14	97.850	% Recov	70.000	130.000				07/18/08
MS	Thallium	7440-28-0	40.4	101.000	% Recov	70.000	130.000				07/18/08
MS	Uranium	7440-61-1	44.27	110.675	% Recov	70.000	130.000				07/18/08
MSD	Arsenic	7440-38-2	35.91	89.775	% Recov	70.000	130.000				07/18/08
MSD	Cadmium	7440-43-9	37.39	93.475	% Recov	70.000	130.000				07/18/08
MSD	Chromium	7440-47-3	36.88	92.200	% Recov	70.000	130.000				07/18/08
MSD	Mercury	7439-97-8	2.4	120.000	% Recov	70.000	130.000				07/18/08
MSD	Antimony	7440-36-0	39.53	98.825	% Recov	70.000	130.000				07/18/08
MSD	Thallium	7440-28-0	41.02	102.550	% Recov	70.000	130.000				07/18/08
MSD	Uranium	7440-61-1	44.75	111.875	% Recov	70.000	130.000				07/18/08
SPK-RPD	Arsenic	7440-38-2	89.775		RPD			4.528	20.000		07/18/08
SPK-RPD	Cadmium	7440-43-9	93.475		RPD			0.833	20.000		07/18/08
SPK-RPD	Chromium	7440-47-3	92.200		RPD			5.117	20.000		07/18/08
SPK-RPD	Mercury	7439-97-8	120.000		RPD			2.960	20.000		07/18/08
SPK-RPD	Antimony	7440-36-0	98.825		RPD			0.991	20.000		07/18/08
SPK-RPD	Thallium	7440-28-0	102.550		RPD			1.523	20.000		07/18/08
SPK-RPD	Uranium	7440-61-1	111.875		RPD			1.078	20.000		07/18/08
Lab ID: W08GR01833											
BATCH QC ASSOCIATED WITH SAMPLE											
MS	Arsenic	7440-38-2	36	90.000	% Recov	70.000	130.000				07/18/08
MS	Cadmium	7440-43-9	37.21	93.025	% Recov	70.000	130.000				07/18/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081329
 Matrix: WATER
 Test: ICP-200.8 MS All possible meta

Sample Date: 06/24/08
 Receive Date: 06/24/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
MS	Chromium	7440-47-3	37.52	93.800	% Recov	70.000	130.000				07/18/08
MS	Mercury	7439-97-6	2.22	111.000	% Recov	70.000	130.000				07/18/08
MS	Antimony	7440-36-0	38.61	96.525	% Recov	70.000	130.000				07/18/08
MS	Thallium	7440-28-0	39.35	98.375	% Recov	70.000	130.000				07/18/08
MS	Uranium	7440-61-1	40.08	100.200	% Recov	70.000	130.000				07/18/08
MSD	Arsenic	7440-38-2	36.3	90.750	% Recov	70.000	130.000				07/18/08
MSD	Cadmium	7440-43-9	37.27	93.175	% Recov	70.000	130.000				07/18/08
MSD	Chromium	7440-47-3	38.82	97.050	% Recov	70.000	130.000				07/18/08
MSD	Mercury	7439-97-6	2.32	116.000	% Recov	70.000	130.000				07/18/08
MSD	Antimony	7440-36-0	38.47	96.175	% Recov	70.000	130.000				07/18/08
MSD	Thallium	7440-28-0	40.11	100.275	% Recov	70.000	130.000				07/18/08
MSD	Uranium	7440-61-1	40.55	101.375	% Recov	70.000	130.000				07/18/08
SPK-RPD	Arsenic	7440-38-2	90.750		RPD			0.830	20.000		07/18/08
SPK-RPD	Cadmium	7440-43-9	93.175		RPD			0.161	20.000		07/18/08
SPK-RPD	Chromium	7440-47-3	97.050		RPD			3.406	20.000		07/18/08
SPK-RPD	Mercury	7439-97-6	116.000		RPD			4.405	20.000		07/18/08
SPK-RPD	Antimony	7440-36-0	96.175		RPD			0.363	20.000		07/18/08
SPK-RPD	Thallium	7440-28-0	100.275		RPD			1.913	20.000		07/18/08
SPK-RPD	Uranium	7440-61-1	101.375		RPD			1.166	20.000		07/18/08
BATCH QC											
BLANK	Arsenic	7440-38-2	<0.4	n/a	ug/L					U	07/18/08
BLANK	Cadmium	7440-43-9	<0.1	n/a	ug/L					U	07/18/08
BLANK	Chromium	7440-47-3	<0.5	n/a	ug/L					U	07/18/08
BLANK	Mercury	7439-97-6	<5e-2	n/a	ug/L					U	07/18/08
BLANK	Antimony	7440-36-0	<0.3	n/a	ug/L					U	07/18/08
BLANK	Thallium	7440-28-0	<0.1	n/a	ug/L					U	07/18/08
BLANK	Uranium	7440-61-1	<5e-2	n/a	ug/L					U	07/18/08
LCS	Arsenic	7440-38-2	36.97	92.425	% Recov	85.000	115.000				07/18/08
LCS	Cadmium	7440-43-9	37.69	94.225	% Recov	85.000	115.000				07/18/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Inorganic**

SDG Number: WSCF20081329
 Matrix: WATER
 Test: ICP-200.8 MS All possible meta

Sample Date:
 Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
LCS	Chromium	7440-47-3	38.42	96.050	% Recov	85.000	115.000				07/18/08
LCS	Mercury	7439-97-6	2.27	113.500	% Recov	85.000	115.000				07/18/08
LCS	Antimony	7440-36-0	38.62	96.550	% Recov	85.000	115.000				07/18/08
LCS	Thallium	7440-28-0	39.58	98.950	% Recov	85.000	115.000				07/18/08
LCS	Uranium	7440-61-1	39.94	99.850	% Recov	85.000	115.000				07/18/08

WSCF ANALYTICAL COMMENT REPORT

Attention: Steve Trent
Project Number F08-051

Group #: WSCF20081329
Department: Inorganic

Sample #	Client ID	Lab Area	Test	Comment
		VALGROUP		<p>Cr + 6 MS & MSD recoveries below limits. Sample GR02042 is most likely reducing. -jpw</p> <p>Tc99 spike failure due to high sample concentration. Imh Spike criterion does not apply. Imh</p> <p>Np237 LCS recovery is slightly out of range. Since all the other QC checks came out fine, this batch has been approved. Imh</p> <p>ICP-AES: No zirconium present in the LCS and spike standards. Sodium and calcium sample results exceed spiking level by a factor of 4 so spike recoveries are not valid. Check and high standards used to ensure sodium, magnesium, and calcium linearity because sample results are greater than the calibration standard. Low barium spike recoveries; "N" flag.</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 RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-051
Sample # W08GR02042
Client ID: B1TTV3

TRENT
WSCF

Matrix: WATER

Group #: WSCF20081329
Department: Organic
Sampled: 07/02/08
Received: 07/02/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
SW-846 8270C Semi-Vols Prep											
SW-846 8270C Semi-Vols											
4-Nitrophenol	100-02-7	LA-523-456	U	< 0.990	ug/L			1.00	0.99		07/14/08
1,4-Dichlorobenzene	106-46-7	LA-523-456	U	< 1.40	ug/L			1.00	1.4		07/14/08
Phenol	108-95-2	LA-523-456	U	< 0.500	ug/L			1.00	0.50		07/14/08
1,2,4-Trichlorobenzene	120-82-1	LA-523-456	U	< 2.20	ug/L			1.00	2.2		07/14/08
2,4-Dinitrotoluene	121-14-2	LA-523-456	U	< 0.500	ug/L			1.00	0.50		07/14/08
Pyrene	129-00-0	LA-523-456	U	< 0.500	ug/L			1.00	0.50		07/14/08
4-Chloro-3-methylphenol	59-50-7	LA-523-456	U	< 0.500	ug/L			1.00	0.50		07/14/08
N-Nitrosodi-n-dipropylamine	621-64-7	LA-523-456	U	< 0.590	ug/L			1.00	0.59		07/14/08
Acenaphthene	83-32-9	LA-523-456	U	< 2.60	ug/L			1.00	2.6		07/14/08
Pentachlorophenol	87-86-5	LA-523-456	U	< 1.50	ug/L			1.00	1.5		07/14/08
2-Chlorophenol	95-57-8	LA-523-456	U	< 0.500	ug/L			1.00	0.50		07/14/08
4-Nitroaniline	100-01-6	LA-523-456	U	< 0.990	ug/L			1.00	0.99		07/14/08
4-Bromophenylphenyl ether	101-55-3	LA-523-456	U	< 0.990	ug/L			1.00	0.99		07/14/08
2,4-Dimethylphenol	105-67-9	LA-523-456	U	< 0.940	ug/L			1.00	0.94		07/14/08
4-Chloroaniline	106-47-8	LA-523-456	U	< 0.500	ug/L			1.00	0.50		07/14/08
Bis(2-chloro-1-methylethyl)eth	108-60-1	LA-523-456	U	< 0.990	ug/L			1.00	0.99		07/14/08
Bis(2-chloroethyl) ether	111-44-4	LA-523-456	U	< 0.890	ug/L			1.00	0.89		07/14/08
Bis(2-Chloroethoxy)methane	111-91-1	LA-523-456	U	< 0.500	ug/L			1.00	0.50		07/14/08
Bis(2-ethylhexyl) phthalate	117-81-7	LA-523-456	U	< 0.790	ug/L			1.00	0.79		07/14/08
Di-n-octylphthalate	117-84-0	LA-523-456	U	< 0.500	ug/L			1.00	0.50		07/14/08
Hexachlorobenzene	118-74-1	LA-523-456	U	< 0.500	ug/L			1.00	0.50		07/14/08
Anthracene	120-12-7	LA-523-456	U	< 0.500	ug/L			1.00	0.50		07/14/08
2,4-Dichlorophenol	120-83-2	LA-523-456	U	< 0.500	ug/L			1.00	0.50		07/14/08

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)

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

U - Analyzed for but not detected above limiting criteria.

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

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

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

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

* - 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: F08-051
Sample #: W08GR02042
Client ID: B1TTV3

TRENT
WSCF

Matrix: WATER

Group #: WSCF20081329
Department: Organic
Sampled: 07/02/08
Received: 07/02/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Dimethyl phthalate	131-11-3	LA-523-456	U	< 0.500	ug/L			1.00	0.50		07/14/08
Dibenzofuran	132-64-9	LA-523-456	U	< 2.20	ug/L			1.00	2.2		07/14/08
Benzo(ghi)perylene	191-24-2	LA-523-456	U	< 0.500	ug/L			1.00	0.50		07/14/08
Indeno(1,2,3-cd)pyrene	193-39-5	LA-523-456	U	< 0.500	ug/L			1.00	0.50		07/14/08
Benzo(b)fluoranthene	205-99-2	LA-523-456	U	< 0.500	ug/L			1.00	0.50		07/14/08
Fluoranthene	206-44-0	LA-523-456	U	< 0.500	ug/L			1.00	0.50		07/14/08
Benzo(k)fluoranthene	207-08-9	LA-523-456	U	< 0.500	ug/L			1.00	0.50		07/14/08
Acenaphthylene	208-96-8	LA-523-456	U	< 2.30	ug/L			1.00	2.3		07/14/08
Chrysene	218-01-9	LA-523-456	U	< 0.500	ug/L			1.00	0.50		07/14/08
Benzo(a)pyrene	50-32-8	LA-523-456	U	< 0.500	ug/L			1.00	0.50		07/14/08
2,4-Dinitrophenol	51-28-5	LA-523-456	U	< 2.00	ug/L			1.00	2.0		07/14/08
Dibenz[a,h]anthracene	53-70-3	LA-523-456	U	< 0.500	ug/L			1.00	0.50		07/14/08
4,6-Dinitro-2-methylphenol	534-52-1	LA-523-456	U	< 0.990	ug/L			1.00	0.99		07/14/08
1,3-Dichlorobenzene	541-73-1	LA-523-456	U	< 1.30	ug/L			1.00	1.3		07/14/08
Benzo(a)anthracene	56-55-3	LA-523-456	U	< 0.500	ug/L			1.00	0.50		07/14/08
2,6-Dinitrotoluene	606-20-2	LA-523-456	U	< 0.500	ug/L			1.00	0.50		07/14/08
4-Chlorophenyphenyl ether	7005-72-3	LA-523-456	U	< 1.70	ug/L			1.00	1.7		07/14/08
Hexachlorocyclopentadiene	77-47-4	LA-523-456	U	< 5.00	ug/L			1.00	5.0		07/14/08
Isophorone	78-59-1	LA-523-456	U	< 0.500	ug/L			1.00	0.50		07/14/08
Diethylphthalate	84-66-2	LA-523-456	U	< 1.90	ug/L			1.00	1.9		07/14/08
Di-n-butylphthalate	84-74-2	LA-523-456	U	< 2.30	ug/L			1.00	2.3		07/14/08
Phenanthrene	85-01-8	LA-523-456	U	< 0.540	ug/L			1.00	0.54		07/14/08
Butylbenzylphthalate	85-68-7	LA-523-456	U	< 0.590	ug/L			1.00	0.59		07/14/08
N-Nitrosodiphenylamine	86-30-6	LA-523-456	U	< 0.500	ug/L			1.00	0.50		07/14/08
Fluorene	86-73-7	LA-523-456	U	< 1.40	ug/L			1.00	1.4		07/14/08

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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of 78 Groundwater Remediation Program

WSCF

ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-051
Sample #: W08GR02042
Client ID: B1TTV3

TRENT
WSCF

Matrix: WATER

Group #: WSCF20081329
Department: Organic
Sampled: 07/02/08
Received: 07/02/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Carbazole	86-74-8	LA-523-456	U	< 0.500	ug/L			1.00	0.50		07/14/08
Hexachlorobutadiene	87-68-3	LA-523-456	U	< 2.00	ug/L			1.00	2.0		07/14/08
2-Nitroaniline	88-74-4	LA-523-456	U	< 0.500	ug/L			1.00	0.50		07/14/08
2-Nitrophenol	88-75-5	LA-523-456	U	< 0.500	ug/L			1.00	0.50		07/14/08
Naphthalene	91-20-3	LA-523-456	U	< 2.10	ug/L			1.00	2.1		07/14/08
2-Methylnaphthalene	91-57-6	LA-523-456	U	< 3.00	ug/L			1.00	3.0		07/14/08
2-Chloronaphthalene	91-58-7	LA-523-456	U	< 3.50	ug/L			1.00	3.5		07/14/08
3,3'-Dichlorobenzidine	91-94-1	LA-523-456	U	< 0.790	ug/L			1.00	0.79		07/14/08
2-Methylphenol (cresol, o-)	95-48-7	LA-523-456	U	< 0.500	ug/L			1.00	0.50		07/14/08
1,2-Dichlorobenzene	95-50-1	LA-523-456	U	< 1.50	ug/L			1.00	1.5		07/14/08
2,4,5-Trichlorophenol	95-95-4	LA-523-456	U	< 0.640	ug/L			1.00	0.64		07/14/08
Nitrobenzene	98-95-3	LA-523-456	U	< 0.590	ug/L			1.00	0.59		07/14/08
3-Nitroaniline	99-09-2	LA-523-456	U	< 0.590	ug/L			1.00	0.59		07/14/08
3 & 4 Methylphenol Total	65794-96-9	LA-523-456	U	< 0.500	ug/L			1.00	0.50		07/14/08
Hexachloroethane	67-72-1	LA-523-456	U	< 1.40	ug/L			1.00	1.4		07/14/08
2,4,6-Trichlorophenol	88-06-2	LA-523-456	U	< 0.500	ug/L			1.00	0.50		07/14/08
VOA Ground Water Protection											
1,1-Dichloroethene	75-35-4	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Trichloroethene	79-01-6	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Benzene	71-43-2	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Toluene	108-88-3	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Chlorobenzene	108-90-7	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
1,1-Dichloroethane	75-34-3	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Ethylbenzene	100-41-4	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Styrene	100-42-5	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08

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Report WGPP/ver. 5.2

Groundwater Remediation Program

WSCF

ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-051
Sample # W08GR02042
Client ID: B1TTV3

TRENT
WSCF

Matrix: WATER

Group #: WSCF20081329
Department: Organic
Sampled: 07/02/08
Received: 07/02/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
cis-1,3-Dichloropropene	10061-01-5	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
trans-1,3-Dichloropropene	10061-02-8	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
1,2-Dichloroethane	107-06-2	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
4-Methyl-2-Pentanone	108-10-1	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Dibromochloromethane	124-48-1	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Tetrachloroethene	127-18-4	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Xylenes (total)	1330-20-7	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
1,2-Dichloroethene(Total)	540-59-0	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Carbon tetrachloride	56-23-5	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
2-Hexanone	591-78-6	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Acetone	67-64-1	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Chloroform	67-66-3	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
1,1,1-Trichloroethane	71-55-8	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Bromomethane	74-83-9	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
1,1,2,2-Tetrachloroethane	79-34-5	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Chloromethane	74-87-3	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Chloroethane	75-00-3	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Vinyl chloride	75-01-4	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Methylenechloride	75-09-2	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Carbon disulfide	75-15-0	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Bromoform	75-25-2	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Bromodichloromethane	75-27-4	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
1,2-Dichloropropane	78-87-5	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
2-Butanone	78-93-3	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
1,1,2-Trichloroethane	79-00-5	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08

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RQ=Result Qualifier

TP Err=Total Propagated Error

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Report WGPP/ver. 5.2

Groundwater Remediation Program

WSCF

ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-051
Sample # W08GR02042
Client ID: B1TTV3

TRENT
 WSCF

Matrix: WATER

Group #: WSCF20081329
Department: Organic
Sampled: 07/02/08
Received: 07/02/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
1-Butanol	71-36-3	LA-523-455	U	< 100	ug/L			1.00	1.0e+02		07/10/08
Trichloromonofluoromethane	75-69-4	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
trans-1,2-Dichloroethylene	156-60-5	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
cis-1,2-Dichloroethylene	156-59-2	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08

MDL=Minimum Detection Limit
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Report WGPP/ver. 5.2
 Groundwater Remediation Program

WSCF ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-051
Sample # W08GR02043
Client ID: B1TTV2

TRENT
WSCF

Matrix: WATER

Group #: WSCF20081329
Department: Organic
Sampled: 07/02/08
Received: 07/02/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
SW-846 8270C Semi-Vols Prep											
SW-846 8270C Semi-Vols											
4-Nitrophenol	100-02-7	LA-523-456	U	< 1.10	ug/L			1.00	1.1		07/14/08
1,4-Dichlorobenzene	106-46-7	LA-523-456	U	< 1.50	ug/L			1.00	1.5		07/14/08
Phenol	108-95-2	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/14/08
1,2,4-Trichlorobenzene	120-82-1	LA-523-456	U	< 2.30	ug/L			1.00	2.3		07/14/08
2,4-Dinitrotoluene	121-14-2	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/14/08
Pyrene	129-00-0	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/14/08
4-Chloro-3-methylphenol	59-50-7	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/14/08
N-Nitrosodi-n-dipropylamine	621-64-7	LA-523-456	U	< 0.630	ug/L			1.00	0.63		07/14/08
Acenaphthene	83-32-9	LA-523-456	U	< 2.70	ug/L			1.00	2.7		07/14/08
Pentachlorophenol	87-86-5	LA-523-456	U	< 1.60	ug/L			1.00	1.6		07/14/08
2-Chlorophenol	95-57-8	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/14/08
4-Nitroaniline	100-01-6	LA-523-456	U	< 1.10	ug/L			1.00	1.1		07/14/08
4-Bromophenylphenyl ether	101-55-3	LA-523-456	U	< 1.10	ug/L			1.00	1.1		07/14/08
2,4-Dimethylphenol	105-67-9	LA-523-456	U	< 1.00	ug/L			1.00	1.0		07/14/08
4-Chloroaniline	106-47-8	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/14/08
Bis(2-chloro-1-methylethyl)eth	108-60-1	LA-523-456	U	< 1.10	ug/L			1.00	1.1		07/14/08
Bis(2-chloroethyl) ether	111-44-4	LA-523-456	U	< 0.950	ug/L			1.00	0.95		07/14/08
Bis(2-Chloroethoxy)methane	111-91-1	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/14/08
Bis(2-ethylhexyl) phthalate	117-81-7	LA-523-456	U	< 0.840	ug/L			1.00	0.84		07/14/08
Di-n-octylphthalate	117-84-0	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/14/08
Hexachlorobenzene	118-74-1	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/14/08
Anthracene	120-12-7	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/14/08
2,4-Dichlorophenol	120-83-2	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/14/08

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 Report WGPP/ver. 5.2
 Groundwater Remediation Program

WSCF

ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-051
Sample # W08GR02043
Client ID: BITTV2

Group #: WSCF20081329
Department: Organic
Sampled: 07/02/08
Received: 07/02/08

TRENT
WSCF

Matrix: WATER

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Dimethyl phthalate	131-11-3	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/14/08
Dibenzofuran	132-64-9	LA-523-456	U	< 2.30	ug/L			1.00	2.3		07/14/08
Benzo(ghi)perylene	191-24-2	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/14/08
Indeno(1,2,3-cd)pyrene	193-39-5	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/14/08
Benzo(b)fluoranthene	205-99-2	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/14/08
Fluoranthene	206-44-0	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/14/08
Benzo(k)fluoranthene	207-08-9	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/14/08
Acenaphthylene	208-96-8	LA-523-456	U	< 2.40	ug/L			1.00	2.4		07/14/08
Chrysene	218-01-9	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/14/08
Benzo(a)pyrene	50-32-8	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/14/08
2,4-Dinitrophenol	51-28-5	LA-523-456	U	< 2.10	ug/L			1.00	2.1		07/14/08
Dibenz[a,h]anthracene	53-70-3	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/14/08
4,6-Dinitro-2-methylphenol	534-52-1	LA-523-456	U	< 1.10	ug/L			1.00	1.1		07/14/08
1,3-Dichlorobenzene	541-73-1	LA-523-456	U	< 1.40	ug/L			1.00	1.4		07/14/08
Benzo(a)anthracene	56-55-3	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/14/08
2,6-Dinitrotoluene	606-20-2	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/14/08
4-Chlorophenylphenyl ether	7005-72-3	LA-523-456	U	< 1.80	ug/L			1.00	1.8		07/14/08
Hexachlorocyclopentadiene	77-47-4	LA-523-456	U	< 5.30	ug/L			1.00	5.3		07/14/08
Isophorone	78-59-1	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/14/08
Diethylphthalate	84-66-2	LA-523-456	U	< 2.00	ug/L			1.00	2.0		07/14/08
Di-n-butylphthalate	84-74-2	LA-523-456	U	< 2.40	ug/L			1.00	2.4		07/14/08
Phenanthrene	85-01-8	LA-523-456	U	< 0.580	ug/L			1.00	0.58		07/14/08
Butylbenzylphthalate	85-68-7	LA-523-456	U	< 0.630	ug/L			1.00	0.63		07/14/08
N-Nitrosodiphenylamine	86-30-6	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/14/08
Fluorene	86-73-7	LA-523-456	U	< 1.50	ug/L			1.00	1.5		07/14/08

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Report WGPP/ver. 5.2

Groundwater Remediation Program

WSCF

ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-051
Sample # W08GR02043
Client ID: B1TTV2

TRENT
WSCF

Matrix: WATER

Group #: WSCF20081329
Department: Organic
Sampled: 07/02/08
Received: 07/02/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Carbazole	86-74-8	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/14/08
Hexachlorobutadiene	87-88-3	LA-523-456	U	< 2.10	ug/L			1.00	2.1		07/14/08
2-Nitroaniline	88-74-4	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/14/08
2-Nitrophenol	88-75-5	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/14/08
Naphthalene	91-20-3	LA-523-456	U	< 2.20	ug/L			1.00	2.2		07/14/08
2-Methylnaphthalene	91-57-6	LA-523-456	U	< 3.20	ug/L			1.00	3.2		07/14/08
2-Chloronaphthalene	91-58-7	LA-523-456	U	< 3.70	ug/L			1.00	3.7		07/14/08
3,3'-Dichlorobenzidine	91-94-1	LA-523-456	U	< 0.840	ug/L			1.00	0.84		07/14/08
2-Methylphenol (cresol, o-)	95-48-7	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/14/08
1,2-Dichlorobenzene	95-50-1	LA-523-456	U	< 1.60	ug/L			1.00	1.6		07/14/08
2,4,5-Trichlorophenol	95-95-4	LA-523-456	U	< 0.680	ug/L			1.00	0.68		07/14/08
Nitrobenzene	98-95-3	LA-523-456	U	< 0.630	ug/L			1.00	0.63		07/14/08
3-Nitroaniline	99-09-2	LA-523-456	U	< 0.630	ug/L			1.00	0.63		07/14/08
3 & 4 Methylphenol Total	65794-98-9	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/14/08
Hexachloroethane	87-72-1	LA-523-456	U	< 1.50	ug/L			1.00	1.5		07/14/08
2,4,6-Trichlorophenol	88-06-2	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/14/08
VOA Ground Water Protection											
1,1-Dichloroethene	75-35-4	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Trichloroethene	79-01-6	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Benzene	71-43-2	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Toluene	108-88-3	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Chlorobenzene	108-90-7	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
1,1-Dichloroethane	75-34-3	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Ethylbenzene	100-41-4	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Styrene	100-42-5	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08

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)

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

U - Analyzed for but not detected above limiting criteria.

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

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

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

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

* - 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: F08-051
Sample #: W08GR02043
Client ID: B1TTV2

TRENT
WSCF

Matrix: WATER

Group #: WSCF20081329
Department: Organic
Sampled: 07/02/08
Received: 07/02/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
cis-1,3-Dichloropropene	10061-01-5	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
trans-1,3-Dichloropropene	10061-02-6	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
1,2-Dichloroethane	107-06-2	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
4-Methyl-2-Pentanone	108-10-1	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Dibromochloromethane	124-48-1	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Tetrachloroethene	127-18-4	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Xylenes (total)	1330-20-7	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
1,2-Dichloroethene(Total)	540-59-0	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Carbon tetrachloride	56-23-5	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
2-Hexanone	591-78-6	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Acetone	67-64-1	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Chloroform	67-66-3	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
1,1,1-Trichloroethane	71-55-6	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Bromomethane	74-83-9	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
1,1,2,2-Tetrachloroethane	79-34-5	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Chloromethane	74-87-3	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Chloroethane	75-00-3	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Vinyl chloride	75-01-4	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Methylenechloride	75-09-2	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Carbon disulfide	75-15-0	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Bromoform	75-25-2	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
Bromodichloromethane	75-27-4	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
1,2-Dichloropropane	78-87-5	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
2-Butanone	78-93-3	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
1,1,2-Trichloroethane	79-00-5	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08

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)
 N - Spike sample recovery is outside control limits.(inorg)
 U - Analyzed for but not detected above limiting criteria.
 X - Other flags/notes described in the comments/narrative(inorg)

D - Analyte was identified at a secondary dilution factor(inorg)
 U - Analyzed for but not detected above limiting criteria(inorg)
 U - Analyzed for but not detected above limiting criteria.(org)

* - 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: F08-051
Sample # W08GR02043
Client ID: B1TTV2

TRENT
 WSCF

Matrix: WATER

Group #: WSCF20081329
Department: Organic
Sampled: 07/02/08
Received: 07/02/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
1-Butanol	71-36-3	LA-523-455	U	< 100	ug/L			1.00	1.0e+02		07/10/08
Trichloromonofluoromethane	75-69-4	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
trans-1,2-Dichloroethylene	156-60-5	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08
cis-1,2-Dichloroethylene	156-59-2	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/10/08

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)

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

U - Analyzed for but not detected above limiting criteria.

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

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

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

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

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

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Report WGPP/ver. 5.2

Groundwater Remediation Program

WSCF

TENTATIVELY IDENTIFIED PEAK REPORT

Attention: Steve Trent
Project Number: F08-051 :F08-051

Group #: WSCF20081329
Department: Organic

Sample #	Client ID	Test Name	Peak Name	CAS#	RT	RQ	Result	Units
W08GR02042	B1TTV3	TRENT	SW-846 8270C Semi-Vols	SMP 11.578 Tributyl Phosphate	126-73-8		5.6	ug/L
W08GR02043	B1TTV2	TRENT	SW-846 8270C Semi-Vols	SMP 11.583 Tributyl Phosphate	126-73-8		8.2	ug/L
W08GR02043	B1TTV2	TRENT	SW-846 8270C Semi-Vols	SMP 4.652 3-Methyl-3-chloro-1-bu	2190-48-9		6.8	ug/L
W08GR02043	B1TTV2	TRENT	SW-846 8270C Semi-Vols	SMP 5.651 Unknown Alcohol	Unknown		13	ug/L
W08GR02043	B1TTV2	TRENT	SW-846 8270C Semi-Vols	SMP 7.051 2-Pyrrolidinone, 1-met	872-50-4		9.8	ug/L

RQ=Result Qualifier J - Analyte < lowest calibration but > = MDL.(org)

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Groundwater Remediation Program

WGPE v 5.2 Report#: WSCF20081329 Report Date: 8-sep-2008

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WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Organic**

SDG Number: WSCF20081329
 Matrix: WATER
 Test: SW-846 8270C Semi-Vols

Sample Date: 07/02/08
 Receive Date: 07/02/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR02042											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	2-Fluorophenol(Surr)	367-12-4	13.524	68.300	% Recov	50.000	110.000				07/14/08
SURR	2-Fluorobiphenyl(Surr)	321-60-8	17.264	87.200	% Recov	58.000	109.000				07/14/08
SURR	Nitrobenzene-d5(Surr)	4165-60-0	17.145	86.600	% Recov	60.000	118.000				07/14/08
SURR	Phenol-d5(Surr)	4165-62-2	15.370	77.600	% Recov	59.000	116.000				07/14/08
SURR	2,4,6-Tribromophenol(Surr)	118-79-6	15.243	77.000	% Recov	60.000	120.000				07/14/08
SURR	Terphenyl-d14(Surr)	98904-43-9	22.860	115.000	% Recov	60.000	120.000				07/14/08
Lab ID: W08GR02043											
BATCH QC ASSOCIATED WITH SAMPLE											
MS	1,2,4-Trichlorobenzene	120-82-1	19.102	96.500	% Recov	50.000	120.000				07/14/08
MS	1,4-Dichlorobenzene	106-46-7	18.092	91.400	% Recov	41.000	113.000				07/14/08
MS	2,4-Dinitrotoluene	121-14-2	17.602	88.900	% Recov	65.000	109.000				07/14/08
MS	2-Fluorophenol(Surr)	367-12-4	14.514	73.300	% Recov	50.000	110.000				07/14/08
MS	Acenaphthene	83-32-9	18.837	95.100	% Recov	62.000	112.000				07/14/08
MS	4-Chloro-3-methylphenol	59-50-7	27.803	93.600	% Recov	59.000	115.000				07/14/08
MS	2-Chlorophenol	95-57-8	26.167	88.100	% Recov	69.000	111.000				07/14/08
MS	N-Nitrosodi-n-dipropylamine	621-64-7	17.566	88.700	% Recov	69.000	115.000				07/14/08
MS	2-Fluorobiphenyl(Surr)	321-60-8	19.803	100.000	% Recov	58.000	109.000				07/14/08
MS	Phenol	108-95-2	23.185	78.100	% Recov	59.000	115.000				07/14/08
MS	Nitrobenzene-d5(Surr)	4165-60-0	19.885	100.000	% Recov	60.000	118.000				07/14/08
MS	4-Nitrophenol	100-02-7	28.609	96.300	% Recov	32.000	130.000				07/14/08
MS	Pentachlorophenol	87-86-5	25.658	86.400	% Recov	51.000	121.000				07/14/08
MS	Phenol-d5(Surr)	4165-62-2	18.661	94.200	% Recov	59.000	116.000				07/14/08
MS	Pyrene	129-00-0	20.957	106.000	% Recov	58.000	116.000				07/14/08
MS	2,4,6-Tribromophenol(Surr)	118-79-6	18.593	93.900	% Recov	60.000	120.000				07/14/08
MS	Terphenyl-d14(Surr)	98904-43-9	23.168	117.000	% Recov	60.000	120.000				07/14/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Organic**

SDG Number: WSCF20081329
 Matrix: WATER
 Test: SW-846 8270C Semi-Vols

Sample Date: 07/02/08
 Receive Date: 07/02/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
MSD	1,2,4-Trichlorobenzene	120-82-1	19.401	92.200	% Recov	50.000	120.000				07/14/08
MSD	1,4-Dichlorobenzene	106-46-7	18.462	87.700	% Recov	41.000	113.000				07/14/08
MSD	2,4-Dinitrotoluene	121-14-2	17.772	84.400	% Recov	65.000	109.000				07/14/08
MSD	2-Fluorophenol(Surr)	367-12-4	16.098	76.500	% Recov	50.000	110.000				07/14/08
MSD	Acenaphthene	83-32-9	19.177	91.100	% Recov	62.000	112.000				07/14/08
MSD	4-Chloro-3-methylphenol	59-50-7	27.363	86.600	% Recov	59.000	115.000				07/14/08
MSD	2-Chlorophenol	95-57-8	26.916	85.200	% Recov	69.000	111.000				07/14/08
MSD	N-Nitrosodi-n-dipropylamine	621-64-7	17.774	84.400	% Recov	69.000	115.000				07/14/08
MSD	2-Fluorobiphenyl(Surr)	321-60-8	20.423	97.000	% Recov	58.000	109.000				07/14/08
MSD	Phenol	108-95-2	23.892	75.700	% Recov	59.000	115.000				07/14/08
MSD	Nitrobenzene-d5(Surr)	4165-60-0	20.824	98.900	% Recov	60.000	118.000				07/14/08
MSD	4-Nitrophenol	100-02-7	28.016	88.700	% Recov	32.000	130.000				07/14/08
MSD	Pentachlorophenol	87-86-5	26.380	83.500	% Recov	51.000	121.000				07/14/08
MSD	Phenol-d5(Surr)	4165-62-2	19.095	90.700	% Recov	59.000	116.000				07/14/08
MSD	Pyrene	129-00-0	21.726	103.000	% Recov	58.000	116.000				07/14/08
MSD	2,4,6-Tribromophenol(Surr)	118-79-6	20.796	98.800	% Recov	60.000	120.000				07/14/08
MSD	Terphenyl-d14(Surr)	98904-43-9	24.209	115.000	% Recov	60.000	120.000				07/14/08
SPK-RPD	1,2,4-Trichlorobenzene	120-82-1	92.200		RPD			4.557	25.000		07/14/08
SPK-RPD	1,4-Dichlorobenzene	106-46-7	87.700		RPD			4.132	25.000		07/14/08
SPK-RPD	2,4-Dinitrotoluene	121-14-2	84.400		RPD			5.193	25.000		07/14/08
SPK-RPD	2-Fluorophenol(Surr)	367-12-4	76.500		RPD			4.272	25.000		07/14/08
SPK-RPD	Acenaphthene	83-32-9	91.100		RPD			4.296	25.000		07/14/08
SPK-RPD	4-Chloro-3-methylphenol	59-50-7	86.600		RPD			7.769	25.000		07/14/08
SPK-RPD	2-Chlorophenol	95-57-8	85.200		RPD			3.347	25.000		07/14/08
SPK-RPD	N-Nitrosodi-n-dipropylamine	621-64-7	84.400		RPD			4.968	25.000		07/14/08
SPK-RPD	2-Fluorobiphenyl(Surr)	321-60-8	97.000		RPD			3.046	25.000		07/14/08
SPK-RPD	Phenol	108-95-2	75.700		RPD			3.121	16.000		07/14/08
SPK-RPD	Nitrobenzene-d5(Surr)	4165-60-0	98.900		RPD			1.106	25.000		07/14/08
SPK-RPD	4-Nitrophenol	100-02-7	88.700		RPD			8.216	25.000		07/14/08
SPK-RPD	Pentachlorophenol	87-86-5	83.500		RPD			3.414	25.000		07/14/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Organic**

SDG Number: WSCF20081329
 Matrix: WATER
 Test: SW-846 8270C Semi-Vols

Sample Date: 07/02/08
 Receive Date: 07/02/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
SPK-RPD	Phenol-d5(Surr)	4165-62-2	90.700		RPD			3.786	25.000		07/14/08
SPK-RPD	Pyrene	129-00-0	103.000		RPD			2.871	25.000		07/14/08
SPK-RPD	2,4,6-Tribromophenol(Surr)	118-79-8	98.800		RPD			5.086	25.000		07/14/08
SPK-RPD	Terphenyl-d14(Surr)	98904-43-9	115.000		RPD			1.724	25.000		07/14/08
SURR	2-Fluorophenol(Surr)	367-12-4	18.877	80.200	% Recov	50.000	110.000				07/14/08
SURR	2-Fluorobiphenyl(Surr)	321-60-8	21.168	101.000	% Recov	58.000	109.000				07/14/08
SURR	Nitrobenzene-d5(Surr)	4165-80-0	21.738	103.000	% Recov	60.000	118.000				07/14/08
SURR	Phenol-d5(Surr)	4185-82-2	19.077	90.600	% Recov	59.000	118.000				07/14/08
SURR	2,4,6-Tribromophenol(Surr)	118-79-8	18.110	86.000	% Recov	60.000	120.000				07/14/08
SURR	Terphenyl-d14(Surr)	98904-43-9	21.124	100.000	% Recov	60.000	120.000				07/14/08

BATCH QC

BLANK	1,2-Dichlorobenzene	95-50-1	< 1.5	n/a	ug/L					U	07/14/08
BLANK	1,2,4-Trichlorobenzene	120-82-1	< 2.2	n/a	ug/L					U	07/14/08
BLANK	1,3-Dichlorobenzene	541-73-1	< 1.3	n/a	ug/L					U	07/14/08
BLANK	1,4-Dichlorobenzene	106-46-7	< 1.4	n/a	ug/L					U	07/14/08
BLANK	2,4-Dichlorophenol	120-83-2	< 0.50	n/a	ug/L					U	07/14/08
BLANK	2,4-Dinitrotoluene	121-14-2	< 0.50	n/a	ug/L					U	07/14/08
BLANK	2,4,5-Trichlorophenol	95-95-4	< 0.85	n/a	ug/L					U	07/14/08
BLANK	2,4,6-Trichlorophenol	88-06-2	< 0.50	n/a	ug/L					U	07/14/08
BLANK	2,4-Dimethylphenol	105-87-9	< 0.95	n/a	ug/L					U	07/14/08
BLANK	2,6-Dinitrotoluene	806-20-2	< 0.50	n/a	ug/L					U	07/14/08
BLANK	2-Chloronaphthalene	91-58-7	< 3.5	n/a	ug/L					U	07/14/08
BLANK	2-Fluorophenol(Surr)	367-12-4	18.322	91.600	% Recov	50.000	110.000				07/14/08
BLANK	2-Methylnaphthalene	91-57-8	< 3.0	n/a	ug/L					U	07/14/08
BLANK	2-Methylphenol (cresol, o-)	95-48-7	< 0.50	n/a	ug/L					U	07/14/08
BLANK	2-Nitroaniline	88-74-4	< 0.50	n/a	ug/L					U	07/14/08
BLANK	2-Nitrophenol	88-75-5	< 0.50	n/a	ug/L					U	07/14/08
BLANK	3 & 4 Methylphenol Total	85794-96-9	< 0.50	n/a	ug/L	0.000	5.000			U	07/14/08
BLANK	3-Nitroaniline	99-09-2	< 0.60	n/a	ug/L					U	07/14/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Organic**

SDG Number: WSCF20081329
 Matrix: WATER
 Test: SW-846 8270C Semi-Vols

Sample Date:
 Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
BLANK	4,6-Dinitro-2-methylphenol	534-52-1	< 1.0	n/a	ug/L					U	07/14/08
BLANK	4-Bromophenylphenyl ether	101-55-3	< 1.0	n/a	ug/L					U	07/14/08
BLANK	4-Chlorophenylphenyl ether	7005-72-3	< 1.7	n/a	ug/L					U	07/14/08
BLANK	Acenaphthene	83-32-9	< 2.6	n/a	ug/L					U	07/14/08
BLANK	Acenaphthylene	208-96-8	< 2.3	n/a	ug/L					U	07/14/08
BLANK	Anthracene	120-12-7	< 0.50	n/a	ug/L					U	07/14/08
BLANK	Bis(2-chloroethyl) ether	111-44-4	< 0.90	n/a	ug/L					U	07/14/08
BLANK	Benzo(a)anthracene	56-55-3	< 0.50	n/a	ug/L					U	07/14/08
BLANK	Benzo(b)fluoranthene	205-99-2	< 0.50	n/a	ug/L					U	07/14/08
BLANK	Benzo(ghi)perylene	191-24-2	< 0.50	n/a	ug/L					U	07/14/08
BLANK	Benzo(a)pyrene	50-32-8	< 0.50	n/a	ug/L					U	07/14/08
BLANK	Bis(2-Chloroethoxy)methane	111-91-1	< 0.50	n/a	ug/L					U	07/14/08
BLANK	Bis(2-ethylhexyl) phthalate	117-81-7	< 0.80	n/a	ug/L					U	07/14/08
BLANK	Bis(2-chloro-1-methylethyl)eth	108-60-1	< 1.0	n/a	ug/L	0.000	10.000			U	07/14/08
BLANK	Benzo(k)fluoranthene	207-08-9	< 0.50	n/a	ug/L					U	07/14/08
BLANK	Butylbenzylphthalate	85-68-7	< 0.60	n/a	ug/L					U	07/14/08
BLANK	Carbazole	86-74-8	< 0.50	n/a	ug/L					U	07/14/08
BLANK	4-Chloroaniline	106-47-8	< 0.50	n/a	ug/L					U	07/14/08
BLANK	4-Chloro-3-methylphenol	59-50-7	< 0.50	n/a	ug/L					U	07/14/08
BLANK	2-Chlorophenol	95-57-8	< 0.50	n/a	ug/L					U	07/14/08
BLANK	Chrysene	218-01-9	< 0.50	n/a	ug/L					U	07/14/08
BLANK	3,3'-Dichlorobenzidine	91-94-1	< 0.80	n/a	ug/L					U	07/14/08
BLANK	Dibenz[a,h]anthracene	53-70-3	< 0.50	n/a	ug/L					U	07/14/08
BLANK	Dibenzofuran	132-64-9	< 2.2	n/a	ug/L					U	07/14/08
BLANK	Di-n-butylphthalate	84-74-2	< 2.3	n/a	ug/L					U	07/14/08
BLANK	Diethylphthalate	84-66-2	< 1.9	n/a	ug/L					U	07/14/08
BLANK	Dimethyl phthalate	131-11-3	< 0.50	n/a	ug/L					U	07/14/08
BLANK	2,4-Dinitrophenol	51-28-5	< 2.0	n/a	ug/L					U	07/14/08
BLANK	Di-n-octylphthalate	117-84-0	< 0.50	n/a	ug/L					U	07/14/08
BLANK	N-Nitrosodi-n-dipropylamine	621-64-7	< 0.80	n/a	ug/L					U	07/14/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Organic**

SDG Number: WSCF20081329
 Matrix: WATER
 Test: SW-846 8270C Semi-Vols

Sample Date:
 Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
BLANK	2-Fluorobiphenyl(Surr)	321-60-8	20.462	102.000	% Recov	58.000	109.000				07/14/08
BLANK	Fluorene	86-73-7	< 1.4	n/a	ug/L					U	07/14/08
BLANK	Fluoranthene	206-44-0	< 0.50	n/a	ug/L					U	07/14/08
BLANK	Hexachlorobenzene	118-74-1	< 0.50	n/a	ug/L					U	07/14/08
BLANK	Hexachlorobutadiene	87-68-3	< 2.0	n/a	ug/L					U	07/14/08
BLANK	Hexachlorocyclopentadiene	77-47-4	< 5.0	n/a	ug/L					U	07/14/08
BLANK	Hexachloroethane	67-72-1	< 1.4	n/a	ug/L					U	07/14/08
BLANK	Indeno(1,2,3-cd)pyrene	193-39-5	< 0.50	n/a	ug/L					U	07/14/08
BLANK	Isophorone	78-59-1	< 0.50	n/a	ug/L					U	07/14/08
BLANK	Phenol	108-95-2	< 0.50	n/a	ug/L					U	07/14/08
BLANK	Naphthalene	91-20-3	< 2.1	n/a	ug/L					U	07/14/08
BLANK	Nitrobenzene-d5(Surr)	4165-60-0	21.446	107.000	% Recov	60.000	118.000				07/14/08
BLANK	Nitrobenzene	98-95-3	< 0.60	n/a	ug/L					U	07/14/08
BLANK	4-Nitrophenol	100-02-7	< 1.0	n/a	ug/L					U	07/14/08
BLANK	4-Nitroaniline	100-01-6	< 1.0	n/a	ug/L					U	07/14/08
BLANK	N-Nitrosodiphenylamine	86-30-6	< 0.50	n/a	ug/L					U	07/14/08
BLANK	Pentachlorophenol	87-86-5	< 1.5	n/a	ug/L					U	07/14/08
BLANK	Phenanthrene	85-01-8	< 0.55	n/a	ug/L					U	07/14/08
BLANK	Phenol-d5(Surr)	4165-62-2	19.965	99.800	% Recov	59.000	116.000				07/14/08
BLANK	Pyrene	129-00-0	< 0.50	n/a	ug/L					U	07/14/08
BLANK	2,4,6-Tribromophenol(Surr)	118-79-6	18.304	91.500	% Recov	60.000	120.000				07/14/08
BLANK	Terphenyl-d14(Surr)	98904-43-9	22.976	115.000	% Recov	60.000	120.000				07/14/08
LCS	1,2,4-Trichlorobenzene	120-82-1	20.175	101.000	% Recov	46.000	107.000				07/14/08
LCS	1,4-Dichlorobenzene	106-46-7	19.850	99.200	% Recov	42.000	111.000				07/14/08
LCS	2,4-Dinitrotoluene	121-14-2	18.222	91.100	% Recov	59.000	106.000				07/14/08
LCS	2-Fluorophenol(Surr)	367-12-4	17.580	87.900	% Recov	50.000	110.000				07/14/08
LCS	Acenaphthene	83-32-9	19.408	97.000	% Recov	61.000	116.000				07/14/08
LCS	4-Chloro-3-methylphenol	59-50-7	28.654	95.500	% Recov	61.000	106.000				07/14/08
LCS	2-Chlorophenol	95-57-8	29.896	99.700	% Recov	66.000	106.000				07/14/08
LCS	N-Nitrosodi-n-dipropylamine	621-64-7	20.230	101.000	% Recov	71.000	114.000				07/14/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Organic**

SDG Number: WSCF20081329
 Matrix: WATER
 Test: SW-846 8270C Semi-Vols

Sample Date:
 Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
LCS	2-Fluorobiphenyl(Surr)	321-60-8	19.447	97.200	% Recov	58.000	109.000				07/14/08
LCS	Phenol	108-95-2	26.664	88.900	% Recov	67.000	105.000				07/14/08
LCS	Nitrobenzene-d5(Surr)	4165-60-0	19.975	99.900	% Recov	60.000	118.000				07/14/08
LCS	4-Nitrophenol	100-02-7	28.254	94.200	% Recov	32.000	118.000				07/14/08
LCS	Pentachlorophenol	87-86-5	29.009	96.700	% Recov	62.000	114.000				07/14/08
LCS	Phenol-d5(Surr)	4165-62-2	19.627	98.100	% Recov	59.000	118.000				07/14/08
LCS	Pyrene	129-00-0	20.637	103.000	% Recov	66.000	118.000				07/14/08
LCS	2,4,6-Tribromophenol(Surr)	118-79-6	19.024	95.100	% Recov	60.000	120.000				07/14/08
LCS	Terphenyl-d14(Surr)	98904-43-9	22.842	114.000	% Recov	60.000	120.000				07/14/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Organic**

SDG Number: WSCF20081329
 Matrix: WATER
 Test: VOA Ground Water Protection

Sample Date: 06/30/08
 Receive Date: 07/02/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR02041											
BATCH QC ASSOCIATED WITH SAMPLE											
MS	1,1-Dichloroethene	75-35-4	24.960	99.800	% Recov	63.000	117.000				07/10/08
MS	Benzene	71-43-2	23.590	94.400	% Recov	75.000	129.000				07/10/08
MS	4-Bromofluorobenzene(Surr)	460-00-4	49.190	98.400	% Recov	75.000	125.000				07/10/08
MS	Chlorobenzene	108-90-7	25.430	102.000	% Recov	79.000	119.000				07/10/08
MS	1,2-Dichloroethane-d4(Surr)	17060-07-0	55.210	110.000	% Recov	75.000	125.000				07/10/08
MS	Toluene-d8(Surr)	2037-26-5	49.230	98.500	% Recov	75.000	125.000				07/10/08
MS	Toluene	108-88-3	25.010	100.000	% Recov	76.000	120.000				07/10/08
MS	Trichloroethene	79-01-6	21.020	84.100	% Recov	73.000	123.000				07/10/08
MSD	1,1-Dichloroethene	75-35-4	23.640	94.600	% Recov	63.000	117.000				07/10/08
MSD	Benzene	71-43-2	25.130	101.000	% Recov	75.000	129.000				07/10/08
MSD	4-Bromofluorobenzene(Surr)	460-00-4	49.280	98.600	% Recov	75.000	125.000				07/10/08
MSD	Chlorobenzene	108-90-7	26.620	106.000	% Recov	79.000	119.000				07/10/08
MSD	1,2-Dichloroethane-d4(Surr)	17060-07-0	56.160	112.000	% Recov	75.000	125.000				07/10/08
MSD	Toluene-d8(Surr)	2037-26-5	48.790	97.600	% Recov	75.000	125.000				07/10/08
MSD	Toluene	108-88-3	26.400	106.000	% Recov	76.000	120.000				07/10/08
MSD	Trichloroethene	79-01-6	22.420	89.700	% Recov	73.000	123.000				07/10/08
SPK-RPD	1,1-Dichloroethene	75-35-4	94.600		RPD			5.350	20.000		07/10/08
SPK-RPD	Benzene	71-43-2	101.000		RPD			6.755	20.000		07/10/08
SPK-RPD	4-Bromofluorobenzene(Surr)	460-00-4	98.600		RPD			0.203	20.000		07/10/08
SPK-RPD	Chlorobenzene	108-90-7	106.000		RPD			3.848	20.000		07/10/08
SPK-RPD	1,2-Dichloroethane-d4(Surr)	17060-07-0	112.000		RPD			1.802	20.000		07/10/08
SPK-RPD	Toluene-d8(Surr)	2037-26-5	97.600		RPD			0.918	20.000		07/10/08
SPK-RPD	Toluene	108-88-3	106.000		RPD			5.825	20.000		07/10/08
SPK-RPD	Trichloroethene	79-01-6	89.700		RPD			6.444	20.000		07/10/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Organic**

SDG Number: WSCF20081329
 Matrix: WATER
 Test: VOA Ground Water Protection

Sample Date: 07/02/08
 Receive Date: 07/02/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR02042											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	4-Bromofluorobenzene(Surr)	460-00-4	49.580	99.200	% Recov	75.000	125.000				07/10/08
SURR	1,2-Dichloroethane-d4(Surr)	17060-07-0	53.770	108.000	% Recov	75.000	125.000				07/10/08
SURR	Toluene-d8(Surr)	2037-26-5	49.330	98.700	% Recov	75.000	125.000				07/10/08
Lab ID: W08GR02043											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	4-Bromofluorobenzene(Surr)	460-00-4	49.420	98.800	% Recov	75.000	125.000				07/10/08
SURR	1,2-Dichloroethane-d4(Surr)	17060-07-0	54.010	108.000	% Recov	75.000	125.000				07/10/08
SURR	Toluene-d8(Surr)	2037-26-5	49.590	99.200	% Recov	75.000	125.000				07/10/08
BATCH QC											
BLANK	1,1-Dichloroethane	75-34-3	< 1.0	n/a	ug/L					U	07/10/08
BLANK	1,1,1-Trichloroethane	71-55-6	< 1.0	n/a	ug/L					U	07/10/08
BLANK	1,1,2-Trichloroethane	79-00-5	< 1.0	n/a	ug/L					U	07/10/08
BLANK	1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	n/a	ug/L	0.000	5.000			U	07/10/08
BLANK	1,1-Dichloroethene	75-35-4	< 1.0	n/a	ug/L					U	07/10/08
BLANK	1,2-Dichloroethane	107-06-2	< 1.0	n/a	ug/L					U	07/10/08
BLANK	1,2-Dichloroethene(Total)	540-59-0	< 1.0	n/a	ug/L					U	07/10/08
BLANK	1-Butanol	71-36-3	< 100	n/a	ug/L					U	07/10/08
BLANK	2-Hexanone	591-78-6	< 1.0	n/a	ug/L					U	07/10/08
BLANK	4-Methyl-2-Pentanone	108-10-1	< 1.0	n/a	ug/L					U	07/10/08
BLANK	Acetone	67-64-1	< 1.0	n/a	ug/L					U	07/10/08
BLANK	Bromodichloromethane	75-27-4	< 1.0	n/a	ug/L					U	07/10/08
BLANK	Benzene	71-43-2	< 1.0	n/a	ug/L					U	07/10/08
BLANK	4-Bromofluorobenzene(Surr)	460-00-4	50.340	101.000	% Recov	75.000	125.000				07/10/08
BLANK	Bromoform	75-25-2	< 1.0	n/a	ug/L					U	07/10/08
BLANK	Carbon disulfide	75-15-0	< 1.0	n/a	ug/L					U	07/10/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Organic**

SDG Number: WSCF20081329
 Matrix: WATER
 Test: VOA Ground Water Protection

Sample Date:
 Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
BLANK	Carbon tetrachloride	56-23-5	< 1.0	n/a	ug/L					U	07/10/08
BLANK	Dibromochloromethane	124-48-1	< 1.0	n/a	ug/L					U	07/10/08
BLANK	Chloroform	67-68-3	< 1.0	n/a	ug/L					U	07/10/08
BLANK	Chlorobenzene	108-90-7	< 1.0	n/a	ug/L					U	07/10/08
BLANK	cis-1,2-Dichloroethylene	156-59-2	< 1.0	n/a	ug/L					U	07/10/08
BLANK	cis-1,3-Dichloropropene	10061-01-5	< 1.0	n/a	ug/L					U	07/10/08
BLANK	Chloroethane	75-00-3	< 1.0	n/a	ug/L					U	07/10/08
BLANK	1,2-Dichloroethane-d4(Surr)	17060-07-0	54.850	110.000	% Recov	75.000	125.000				07/10/08
BLANK	trans-1,2-Dichloroethylene	156-60-5	< 1.0	n/a	ug/L					U	07/10/08
BLANK	1,2-Dichloropropane	78-87-5	< 1.0	n/a	ug/L					U	07/10/08
BLANK	Ethylbenzene	100-41-4	< 1.0	n/a	ug/L					U	07/10/08
BLANK	Bromomethane	74-83-9	< 1.0	n/a	ug/L					U	07/10/08
BLANK	Chloromethane	74-87-3	< 1.0	n/a	ug/L					U	07/10/08
BLANK	2-Butanone	78-93-3	< 1.0	n/a	ug/L					U	07/10/08
BLANK	Methylenechloride	75-09-2	< 1.0	n/a	ug/L					U	07/10/08
BLANK	Tetrachloroethene	127-18-4	< 1.0	n/a	ug/L					U	07/10/08
BLANK	Styrene	100-42-5	< 1.0	n/a	ug/L					U	07/10/08
BLANK	Xylenes (total)	1330-20-7	< 1.0	n/a	ug/L	0.000	5.000			U	07/10/08
BLANK	Toluene-d8(Surr)	2037-26-5	48.440	96.900	% Recov	75.000	125.000				07/10/08
BLANK	Toluene	108-88-3	< 1.0	n/a	ug/L					U	07/10/08
BLANK	trans-1,3-Dichloropropene	10061-02-6	< 1.0	n/a	ug/L					U	07/10/08
BLANK	Trichloromonofluoromethane	75-69-4	< 1.0	n/a	ug/L	0.000	5.000			U	07/10/08
BLANK	Trichloroethene	79-01-6	< 1.0	n/a	ug/L					U	07/10/08
BLANK	Vinyl chloride	75-01-4	< 1.0	n/a	ug/L					U	07/10/08
LCS	1,1-Dichloroethene	75-35-4	24.410	97.600	% Recov	75.000	125.000				07/10/08
LCS	Benzene	71-43-2	24.660	98.600	% Recov	75.000	125.000				07/10/08
LCS	4-Bromofluorobenzene(Surr)	460-00-4	49.760	99.500	% Recov	75.000	125.000				07/10/08
LCS	Chlorobenzene	108-90-7	25.930	104.000	% Recov	75.000	125.000				07/10/08
LCS	1,2-Dichloroethane-d4(Surr)	17060-07-0	52.710	105.000	% Recov	75.000	125.000				07/10/08
LCS	Toluene-d8(Surr)	2037-26-5	48.680	97.400	% Recov	75.000	125.000				07/10/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20081329
Matrix: WATER
Test: VOA Ground Water Protection

Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
LCS	Toluene	108-88-3	25.740	103.000	% Recov	75.000	125.000				07/10/08
LCS	Trichloroethene	79-01-6	21.580	86.300	% Recov	75.000	125.000				07/10/08

WSCF ANALYTICAL COMMENT REPORT

Attention: Steve Trent
Project Number F08-051

Group #: WSCF20081329
Department: Organic

Sample #	Client ID	Lab Area	Test	Comment
		VALGROUP		<p>Cr + 6 MS & MSD recoveries below limits. Sample GR02042 is most likely reducing. -jpw</p> <p>Tc99 spike failure due to high sample concentration. Imh Spike criterion does not apply. Imh</p> <p>Np237 LCS recovery is slightly out of range. Since all the other QC checks came out fine, this batch has been approved. Imh</p> <p>ICP-AES: No zirconium present in the LCS and spike standards. Sodium and calcium sample results exceed spiking level by a factor of 4 so spike recoveries are not valid. Check and high standards used to ensure sodium, magnesium, and calcium linearity because sample results are greater than the calibration standard. Low barium spike recoveries; "N" flag.</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 RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-051
Sample # W08GR02042
Client ID: B1TTV3

TRENT
WSCF

Matrix: WATER

Group #: WSCF20081329
Department: Radiochemistry
Sampled: 07/02/08
Received: 07/02/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Americium by AEA											
Americium-241	14596-10-2	LA-508-471	B	0.200	pCi/L	+ -0.0760	pCi/L	1.00	0.054		08/04/08
Am-243 tracer by AEA	AM243	LA-508-471		10.0	pCi/L			1.00	0.030		08/04/08
Gamma Energy Analysis-grd H2O											
Cobalt-60	10198-40-0	LA-508-481		40.5	pCi/L	+ -7.38	pCi/L	1.00	8.5		07/08/08
Cesium-137	10045-97-3	LA-508-481	U	-3.42	pCi/L	+ -4.83	pCi/L	1.00	7.8		07/08/08
Neptunium by AEA											
Neptunium-237	13994-20-2	LA-508-471	U	0.0860	pCi/L	+ -0.172	pCi/L	1.00	0.32		08/11/08
Plutonium Isotopics by AEA											
Plutonium-238	13981-16-3	LA-508-471	U	0.0500	pCi/L	+ -0.0710	pCi/L	1.00	0.12		08/04/08
Pu-239/240 by AEA	PU-239/240	LA-508-471	U	9.00e-03	pCi/L	+ -0.0256	pCi/L	1.00	0.049		08/04/08
Pu-242 tracer by AEA	PU242	LA-508-471		16.0	pCi/L			1.00	0.059		08/04/08
Strontium 89/90											
Strontium-89/90	SR-RAD	LA-508-415	U	-0.690	pCi/L	+ -2.02	pCi/L	1.00	0.90		07/15/08
Sr-85 Tracer by Beta Counting	SR85	LA-508-415		94.9	Percent			1.00	0.0		07/15/08
TC99 by ICP-200.8 MS Prep											
TC99 by ICP-200.8 MS											
Technetium by ICP-MS	14133-76-7	LA-505-412		0.810	ug/L			1.00	1.0e-03		07/14/08
TC99 by Liquid Scin.											
Tc-99 by Liquid Scin.	14133-76-7	LA-508-421		1.70e+04	pCi/L	+ -3.40e+03	pCi/L	1.00	6.0		07/09/08
Uranium Isotopics by AEA											
Uranium-233/234	U-233/234	LA-508-471		2.10	pCi/L	+ -0.567	pCi/L	1.00	0.039		08/04/08
Uranium-235	15117-96-1	LA-508-471		0.200	pCi/L	+ -0.0800	pCi/L	1.00	0.013		08/04/08
Uranium-238	U-238	LA-508-471		1.70	pCi/L	+ -0.476	pCi/L	1.00	0.031		08/04/08
U-232 tracer by AEA	U232	LA-508-471		10.0	pCi/L			1.00	0.064		08/04/08

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)

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

U - Analyzed for but not detected above limiting criteria.

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

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

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

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

* - 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: F08-051
Sample # W08GR02042
Client ID: B1TTV3

TRENT
 WSCF

Matrix: WATER

Group #: WSCF20081329
Department: Radiochemistry
Sampled: 07/02/08
Received: 07/02/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
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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)
 N - Spike sample recovery is outside control limits.(inorg)
 U - Analyzed for but not detected above limiting criteria.
 X - Other flags/notes described in the comments/narrative(inorg)

D - Analyte was identified at a secondary dilution factor(inorg)
 U - Analyzed for but not detected above limiting criteria(inorg)
 U - Analyzed for but not detected above limiting criteria.(org)

* - 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: F08-051
Sample # W08GR02043
Client ID: BITTV2

TRENT
WSCF

Matrix: WATER

Group #: WSCF20081329
Department: Radiochemistry
Sampled: 07/02/08
Received: 07/02/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Americium by AEA											
Americium-241	14596-10-2	LA-508-471	B	0.190	pCi/L	+ -0.0684	pCi/L	1.00	0.029		08/04/08
Am-243 tracer by AEA	AM243	LA-508-471		10.0	pCi/L			1.00	0.011		08/04/08
Gamma Energy Analysis-grd H2O											
Cobalt-60	10198-40-0	LA-508-481		45.1	pCi/L	+ -8.45	pCi/L	1.00	6.9		07/14/08
Cesium-137	10045-97-3	LA-508-481	U	-2.20	pCi/L	+ -4.52	pCi/L	1.00	7.7		07/14/08
Neptunium by AEA											
Neptunium-237	13994-20-2	LA-508-471	U	0.0360	pCi/L	+ -0.0720	pCi/L	1.00	0.097		08/11/08
Plutonium Isotopics by AEA											
Plutonium-238	13981-16-3	LA-508-471	U	0.0810	pCi/L	+ -0.0729	pCi/L	1.00	0.11		08/04/08
Pu-239/240 by AEA	PU-239/240	LA-508-471	U	0.0300	pCi/L	+ -0.0267	pCi/L	1.00	0.031		08/04/08
Pu-242 tracer by AEA	PU242	LA-508-471		16.0	pCi/L			1.00	0.039		08/04/08
Strontium 89/90											
Strontium-89/90	SR-RAD	LA-508-415	U	-0.650	pCi/L	+ -2.04	pCi/L	1.00	0.86		07/15/08
Sr-85 Tracer by Beta Counting	SR85	LA-508-415		99.7	Percent			1.00	0.0		07/15/08
TC99 by ICP-200.8 MS Prep											
TC99 by ICP-200.8 MS											
Technetium by ICP-MS	14133-76-7	LA-505-412		0.800	ug/L			1.00	1.0e-03		07/14/08
TC99 by Liquid Scin.											
Tc-99 by Liquid Scin.	14133-76-7	LA-508-421		1.70e+04	pCi/L	+ -3.40e+03	pCi/L	1.00	6.0		07/09/08
Uranium Isotopics by AEA											
Uranium-233/234	U-233/234	LA-508-471		1.90	pCi/L	+ -0.532	pCi/L	1.00	0.033		08/04/08
Uranium-235	15117-96-1	LA-508-471		0.170	pCi/L	+ -0.0731	pCi/L	1.00	0.013		08/04/08
Uranium-238	U-238	LA-508-471		1.60	pCi/L	+ -0.448	pCi/L	1.00	0.012		08/04/08
U-232 tracer by AEA	U232	LA-508-471		10.0	pCi/L			1.00	0.054		08/04/08

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)

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

U - Analyzed for but not detected above limiting criteria.

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

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

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

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

* - 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: F08-051
Sample # W08GR02043
Client ID: B1TTV2

TRENT
 WSCF

Matrix: WATER

Group #: WSCF20081329
Department: Radiochemistry
Sampled: 07/02/08
Received: 07/02/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
----------------	-------	--------	----	--------	------	--------	------	----	-----	-----	---------------

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)
 N - Spike sample recovery is outside control limits.(inorg)
 U - Analyzed for but not detected above limiting criteria.
 X - Other flags/notes described in the comments/narrative(inorg)

D - Analyte was identified at a secondary dilution factor(inorg)
 U - Analyzed for but not detected above limiting criteria(inorg)
 U - Analyzed for but not detected above limiting criteria.(org)

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

Report WGPP/ver. 5.2
Groundwater Remediation Program

WSCF

TENTATIVELY IDENTIFIED PEAK REPORT

Attention: Steve Trent
Project Number: F08-051 :F08-051

Group #: WSCF20081329
Department: Radiochemistry

Sample #	Client ID	Test Name	Peak Name	CAS#	RT	RQ	Result	Units
W08GR02042	B1TTV3	TRENT	Gamma Energy Analysis-grd H2O	BI-214			1.2e+02	pCi/L
W08GR02042	B1TTV3	TRENT	Gamma Energy Analysis-grd H2O	BI-214 Count Error			33	%
W08GR02042	B1TTV3	TRENT	Gamma Energy Analysis-grd H2O	RA-226			65	pCi/L
W08GR02042	B1TTV3	TRENT	Gamma Energy Analysis-grd H2O	RA-226 Count Error			34	%
W08GR02043	B1TTV2	TRENT	Gamma Energy Analysis-grd H2O	BI-214			92	pCi/L
W08GR02043	B1TTV2	TRENT	Gamma Energy Analysis-grd H2O	BI-214 Count Error			43	%
W08GR02043	B1TTV2	TRENT	Gamma Energy Analysis-grd H2O	PB-214			73	pCi/L
W08GR02043	B1TTV2	TRENT	Gamma Energy Analysis-grd H2O	PB-214 Count Error			30	%
W08GR02043	B1TTV2	TRENT	Gamma Energy Analysis-grd H2O	RA-226			84	pCi/L
W08GR02043	B1TTV2	TRENT	Gamma Energy Analysis-grd H2O	RA-226 Count Error			29	%

RQ=Result Qualifier J - Analyte < lowest calibration but > = MDL.(org)

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WGPFPE v 5.2 Report #: WSCF20081329 Report Date: 8-sep-2008

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20081329
 Matrix: WATER
 Test: Americium by AEA

Sample Date: 06/24/08
 Receive Date: 06/24/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR01833											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Americium-241	14596-10-2	U0.1		RPD			n/a	20.000		08/06/08
DUP	Am-243 tracer by AEA	AM243	10.01	77.750	% Recov	30.000	105.000				08/06/08
Lab ID: W08GR02042											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	Am-243 tracer by AEA	AM243	10.01	82.340	% Recov	30.000	105.000				08/04/08
Lab ID: W08GR02043											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	Am-243 tracer by AEA	AM243	10.01	91.180	% Recov	30.000	105.000				08/04/08
BATCH QC											
BLANK	Americium-241	14596-10-2	0.22	0.220	pCi/L	-10.000	1000.000				08/04/08
BLANK	Am-243 tracer by AEA	AM243	10.01	83.990	% Recov	30.000	105.000				08/04/08
LCS	Americium-241	14596-10-2	11.79	99.494	% Recov	80.000	120.000				08/04/08
LCS	Am-243 tracer by AEA	AM243	11.11	86.850	% Recov	30.000	105.000				08/04/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20081329
 Matrix: WATER
 Test: Gamma Energy Analysis-grd H2O

Sample Date: 07/02/08
 Receive Date: 07/02/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR02042											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Cobalt-60	10198-40-0	43.22		RPD			6.449	20.000		07/08/08
DUP	Cesium-137	10045-97-3	U1.031		RPD			n/a	20.000		07/08/08
BATCH QC											
BLANK	Cobalt-60	10198-40-0	U2.898	n/a	pCi/L	-10.000	1000.000				07/08/08
BLANK	Cesium-137	10045-97-3	U-1.108	n/a	pCi/L	-10.000	1000.000				07/08/08
LCS	Cobalt-60	10198-40-0	9881	99.408	% Recov	80.000	120.000				07/14/08
LCS	Cesium-137	10045-97-3	6375	105.546	% Recov	80.000	120.000				07/14/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20081329
 Matrix: WATER
 Test: Neptunium by AEA

Sample Date: 07/02/08
 Receive Date: 07/02/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR02042											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Neptunium-237	13994-20-2	0.35		RPD			n/a	20.000		08/11/08
MS	Neptunium-237	13994-20-2	96.4	96.400	% Recov	75.000	125.000				08/11/08
MSD	Neptunium-237	13994-20-2	97	97.000	% Recov	75.000	125.000				08/11/08
SPK-RPD	Neptunium-237	13994-20-2	97.000		% RPD			0.620	20.000		08/11/08
Lab ID: W08GR02043											
BATCH QC ASSOCIATED WITH SAMPLE											
MS	Neptunium-237	13994-20-2	92.6	92.600	% Recov	75.000	125.000				08/11/08
Lab ID: W08GR02687											
BATCH QC ASSOCIATED WITH SAMPLE											
MS	Neptunium-237	13994-20-2	86	86.000	% Recov	75.000	125.000				08/11/08
Lab ID: W08GR02802											
BATCH QC ASSOCIATED WITH SAMPLE											
MS	Neptunium-237	13994-20-2	75.3	75.300	% Recov	75.000	125.000				08/11/08
BATCH QC											
BLANK	Neptunium-237	13994-20-2	U0.17	n/a	pCi/L	-10.000	1000.000				08/11/08
LCS	Neptunium-237	13994-20-2	9.6	75.324	% Recov	80.000	120.000				08/11/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20081329
 Matrix: WATER
 Test: Plutonium Isotopics by AEA

Sample Date: 06/24/08
 Receive Date: 06/24/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR01833											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Plutonium-238	13981-16-3	U3.2e-2		RPD			n/a	20.000		08/06/08
DUP	Pu-239/240 by AEA	PU-239/240	U3.2e-2		RPD			n/a	20.000		08/06/08
DUP	Pu-242 tracer by AEA	PU242	15.59	95.300	% Recov	30.000	105.000				08/06/08
Lab ID: W08GR02042											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	Pu-242 tracer by AEA	PU242	15.59	96.960	% Recov	30.000	105.000				08/04/08
Lab ID: W08GR02043											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	Pu-242 tracer by AEA	PU242	15.59	97.930	% Recov	30.000	105.000				08/04/08
BATCH QC											
BLANK	Plutonium-238	13981-16-3	U-5e-3	n/a	pCi/L	-10.000	1000.000				08/04/08
BLANK	Pu-239/240 by AEA	PU-239/240	U3e-2	n/a	pCi/L	-10.000	1000.000				08/04/08
BLANK	Pu-242 tracer by AEA	PU242	15.59	77.760	% Recov	30.000	105.000				08/04/08
LCS	Pu-239/240 by AEA	PU-239/240	11.5	89.529	% Recov	80.000	120.000				08/04/08
LCS	Pu-242 tracer by AEA	PU242	17.3	80.290	% Recov	30.000	105.000				08/04/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20081329
 Matrix: WATER
 Test: Strontium 89/90

Sample Date: 07/02/08
 Receive Date: 07/02/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR02042											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	Sr-85 Tracer by Beta Counting	SR85	94.9	94.900	% Recov	30.000	105.000				07/15/08
Lab ID: W08GR02043											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Sr-85 Tracer by Beta Counting	SR85	102.2	102.200	% Recov	30.000	105.000				07/15/08
DUP	Strontium-89/90	SR-RAD	U-1.9		RPD			n/a	20.000		07/15/08
SURR	Sr-85 Tracer by Beta Counting	SR85	99.7	99.700	% Recov	30.000	105.000				07/15/08
BATCH QC											
BLANK	Sr-85 Tracer by Beta Counting	SR85	97	97.000	% Recov	30.000	105.000				07/15/08
BLANK	Strontium-89/90	10098-97-2	U-3.2	n/a	pCi/L	-10.000	100.000				07/15/08
LCS	Sr-85 Tracer by Beta Counting	SR85	92.5	92.500	% Recov	30.000	105.000				07/15/08
LCS	Strontium-89/90	10098-97-2	145	104.444	% Recov	80.000	120.000				07/15/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20081329
 Matrix: WATER
 Test: TC99 by ICP-200.8 MS

Sample Date:
 Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
BATCH QC											
BLANK	Technetium by ICP-MS	14133-76-7	<1e-3	n/a	ug/L					U	07/14/08
LCS	Technetium by ICP-MS	14133-76-7	.137	95.804	% Recov	49.000	125.000				07/14/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20081329
 Matrix: WATER
 Test: TC99 by Liquid Scin.

Sample Date: 05/28/08
 Receive Date: 05/28/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR01411											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Tc-99 by Liquid Scin.	14133-76-7	2.6E+04		RPD			12.245	20.000		07/09/08
MS	Tc-99 by Liquid Scin.	14133-76-7	293.3	38.990	% Recov	75.000	125.000				07/09/08
BATCH QC											
BLANK	Tc-99 by Liquid Scin.	14133-76-7	U-1.8	n/a	pCi/L	-10.000	10.000				07/09/08
LCS	Tc-99 by Liquid Scin.	14133-76-7	198	105.263	% Recov	80.000	120.000				07/09/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20081329
 Matrix: WATER
 Test: Uranium Isotopics by AEA

Sample Date: 06/24/08
 Receive Date: 06/24/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR01833											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	U-232 tracer by AEA	U232	10.23	95.710	% Recov	30.000	105.000				08/04/08
DUP	Uranium-233/234	U-233/234	U3.9e-2		RPD			n/a	20.000		08/04/08
DUP	Uranium-235	15117-96-1	2.4e-2		RPD			n/a	20.000		08/04/08
DUP	Uranium-238	U-238	2.2e-2		RPD			19.672	20.000		08/04/08
Lab ID: W08GR02042											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	U-232 tracer by AEA	U232	10.23	99.790	% Recov	30.000	105.000				08/04/08
Lab ID: W08GR02043											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	U-232 tracer by AEA	U232	10.23	98.800	% Recov	30.000	105.000				08/04/08
BATCH QC											
BLANK	U-232 tracer by AEA	U232	10.23	89.780	% Recov	30.000	105.000				08/04/08
BLANK	Uranium-233/234	13966-29-5	7.2e-2	0.072	pCi/L	-10.000	1000.000				08/04/08
BLANK	Uranium-235	15117-96-1	4.4e-2	0.044	pCi/L	-10.000	1000.000				08/04/08
BLANK	Uranium-238	24678-82-8	2.7e-2	0.027	pCi/L	-10.000	1000.000				08/04/08
LCS	U-232 tracer by AEA	U232	11.36	94.570	% Recov	30.000	105.000				08/04/08
LCS	Uranium-233/234	13966-29-5	n/a	n/a	% Recov	75.000	125.000				08/04/08
LCS	Uranium-238	24678-82-8	19.04	100.448	% Recov	80.000	120.000				08/04/08

WSCF ANALYTICAL COMMENT REPORT

Attention: Steve Trent
Project Number F08-051

Group #: WSCF20081329
Department: Radiochemistry

Sample #	Client ID	Lab Area	Test	Comment
		VALGROUP		<p>Cr + 6 MS & MSD recoveries below limits. Sample GR02042 is most likely reducing. -jpw</p> <p>Tc99 spike failure due to high sample concentration. Imh Spike criterion does not apply. Imh</p> <p>Np237 LCS recovery is slightly out of range. Since all the other QC checks came out fine, this batch has been approved. Imh</p> <p>ICP-AES: No zirconium present in the LCS and spike standards.</p> <p>Sodium and calcium sample results exceed spiking level by a factor of 4 so spike recoveries are not valid.</p> <p>Check and high standards used to ensure sodium, magnesium, and calcium linearity because sample results are greater than the calibration standard.</p> <p>Low barium spike recoveries; "N" flag.</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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M4W41-SLF-08-974

ATTACHMENT 5

SAMPLE RECEIPT INFORMATION

Consisting of 6 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
08/15/08
H

ACKNOWLEDGMENT OF SAMPLES RECEIVED

Groundwater Remediation Program

Richland, WA 99354
Attn: Steve Trent

Customer Code: GPP
PO#: 123516/ES10
Group#: 20081329
Project#: F08-051
Proj Mgr: Steve Trent E6-35
Phone: 373-5869

The following samples were received from you on 07/02/08. 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
W08GR02042	B1TTV3	TRENT @2008 @GEA-GPP @TC99-MS	Water @AEA-30 @AEA-31 @GPP6010 @IC-30 @VOA-GPP CN-02	07/02/08 @AEA-32 @AEA-33 @SR89_90 @SVOCGPP @TC99 CR+6
W08GR02043	B1TTV2	TRENT @2008 @GEA-GPP @TC99-MS	Water @AEA-30 @AEA-31 @GPP6010 @IC-30 @VOA-GPP CN-02	07/02/08 @AEA-32 @AEA-33 @SR89_90 @SVOCGPP @TC99 CR+6

Test Acronym Description

Test Acronym	Description
@2008	ICP-200.8 MS All possible meta
@AEA-30	Plutonium Isotopics by AEA
@AEA-31	Americium by AEA
@AEA-32	Uranium Isotopics by AEA
@AEA-33	Neptunium by AEA
@GEA-GPP	Gamma Energy Analysis-grd H2O
@GPP6010	ICP Metals Analysis, Grd H2O P
@IC-30	Anions by Ion Chromatography
@SR89_90	Strontium 89/90
@SVOCGPP	SW-846 8270C Semi-Vols
@TC99-30	TC99 by Liquid Scin.
@TC99-MS	TC99 by ICP-200.8 MS
@VOA-GPP	VOA Ground Water Protection
CN-02	Cyanide by Midi/Spectrophotom
CR+6	Hexavalent chromium

COLLECTOR NCO SAMPLER <i>Kulhan</i>	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 7N	DATA TURNAROUND 45 Days / 45 Days
SAMPLING LOCATION C5853, I-022-D	PROJECT DESIGNATION 200-BP-5 OU Characterization for 299-E33-340 - Groundwater		SAF NO. F08-051	AIR QUALITY <input type="checkbox"/>	
ICE CHEST NO.	FIELD LOGBOOK NO. <i>HNF-N-498-1</i>	ACTUAL SAMPLE DEPTH <i>33'</i>	COA 123516ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	

SHIPPED TO Waste Sampling & Characterization <i>20081329</i>	OFFSITE PROPERTY NO. N/A	BILL OF LADING/AIR BILL NO. N/A
--	------------------------------------	---

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)	PRESERVATION	HNO3 to pH <2 (ULTREx)	HCl or H2SO4 to pH <2/Cool-4C	Cool-4C	HNO3 to pH <2	Cool-4C	NaOH to pH >= 12/Cool-4C	Cool-4C	HNO3 to pH <2	HNO3 to pH <2	HCl to pH <2	
			TYPE OF CONTAINER	NO. OF CONTAINER(S)	VOLUME	SAMPLE ANALYSIS	Tc-99 by ICPMS (Technetium-99)	SEE ITEM (1) IN SPECIAL INSTRUCTIONS <i>VOA</i>	Semi-VOA - 82708 (TCL);	SEE ITEM (2) IN SPECIAL INSTRUCTIONS <i>20081329</i>	Chromium Hex - 7196;	Cyanide (Total) - 335.2;	SEE ITEM (3) IN SPECIAL INSTRUCTIONS <i>10</i>
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			Nalgene	aGs*	aG	G/P	aG	G/P	P	Square Bottle - Poly	G/P	G/P	
			1	3	4	1	1	1	1	1	1	2	
			500mL	40mL	1000mL	500mL	500mL	250mL	500mL	500mL	1000mL	1000mL	
	SPECIAL HANDLING AND/OR STORAGE Radioactive Tie To: B1TV39												

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	HNO3 to pH <2 (ULTREx)	HCl or H2SO4 to pH <2/Cool-4C	Cool-4C	HNO3 to pH <2	Cool-4C	NaOH to pH >= 12/Cool-4C	Cool-4C	HNO3 to pH <2	HNO3 to pH <2	HCl to pH <2
B1TV3 <i>W08602042</i>	WATER	<i>7-2-08</i>	<i>0943</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. ** Analytical batch QC must be run on a sample associated with this SAF. (1)VOA - 8260B (TCL); VOA - 8260B (Add-On) {1-Butanol, Trichloromonofluoromethane, cis-1,2-Dichloroethylene, trans-1,2-Dichloroethylene} (2)ICP/MS - 200.8 (TAL) {Antimony, Cadmium, Chromium} ICP/MS - 200.8 (Add-on) {Arsenic, Thallium, Uranium} ICP Metals - 6010B (TAL) {Aluminum, Barium, Calcium, Iron, Magnesium, Manganese, Potassium, Sodium} ICP Metals - 6010B (Add-On) {Lithium, Phosphorus, Silicon, Strontium} 200.8_HG - ICPMS; (3)IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Phosphorus in phosphate, Sulfate}	
<i>C. Fulton/Christina</i>	<i>7-2-08 1035</i>	<i>TA #1121111</i>	<i>7-2-08 1035</i>		
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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LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

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COLLECTOR NCO SAMPLER Fulton	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 7N	DATA TURNAROUND 45 Days / 45 Days
SAMPLING LOCATION C5853, I-022-D	PROJECT DESIGNATION 200-BP-5 OU Characterization for 299-E33-340 - Groundwater		SAF NO. F08-051	AIR QUALITY <input type="checkbox"/>	
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-489-1	ACTUAL SAMPLE DEPTH 331'	COA 123516ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO Waste Sampling & Characterization	OFFSITE PROPERTY NO. N/A	BILL OF LADING/AIR BILL NO. N/A			

MATRIX* 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	POSSIBLE SAMPLE HAZARDS/ REMARKS Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)	PRESERVATION	HNO3 to pH <2	HNO3 to pH <2	HNO3 to pH <2	HNO3 to pH <2					
		TYPE OF CONTAINER	P	G/P	G/P	G/P					
		NO. OF CONTAINER(S)	1	1	1	1					
		VOLUME	1000mL	1000mL	1000mL	1000mL					
		SPECIAL HANDLING AND/OR STORAGE Radioactive Tie To: B1TVJ9	SAMPLE ANALYSIS	Isotopic Plutonium;	Isotopic Uranium;	Neptunium-237;	Americium-241;				

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	HNO3 to pH <2							
B1TTV3	WATER	7-2-08	0543	/	/	/	/				
				/	/	/	/				

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM C Fulton / [Signature]	DATE/TIME 7-2-08 1735	RECEIVED BY/STORED IN TA PRAZIER [Signature]	DATE/TIME 7-2-08 1035	** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	** Analytical batch QC must be run on a sample associated with this SAF.	
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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LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

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Fluor Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST								F08-051-004		PAGE 1 OF 2		
COLLECTOR NCO SAMPLER Fulton		COMPANY CONTACT TRENT, SJ		TELEPHONE NO. 373-5869		PROJECT COORDINATOR WIDRIG, DL		PRICE CODE 7N		DATA TURNAROUND 45 Days / 45 Days				
SAMPLING LOCATION C5853, I-022		PROJECT DESIGNATION 200-BP-5 OU Characterization for 299-E33-340 - Groundwater				SAF NO. F08-051		AIR QUALITY <input type="checkbox"/>						
ICE CHEST NO.		FIELD LOGBOOK NO. HNF-N-499-1		ACTUAL SAMPLE DEPTH 331'		COA 123516E510		METHOD OF SHIPMENT GOVERNMENT VEHICLE						
SHIPPED TO Waste Sampling & Characterization		OFFSITE PROPERTY NO. N/A				BILL OF LADING/AIR BILL NO. N/A								
MATRIX* 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	POSSIBLE SAMPLE HAZARDS/ REMARKS Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		PRESERVATION		HNO3 to pH <2 (ULTREX)	HCl or H2SO4 to pH <2/Cool-4C	Cool-4C	HNO3 to pH <2	Cool-4C	NaOH to pH >= 12/Cool-4C	Cool-4C	HNO3 to pH <2	HNO3 to pH <2	HCl to pH <2
			TYPE OF CONTAINER		Nalgene	aGs*	aG	G/P	aG	G/P	P	Square Bottle - Poly	G/P	G/P
			NO. OF CONTAINER(S)		1	3	4	1	1	1	1	1	1	2
			VOLUME		500mL	40mL	1000mL	500mL	500mL	250mL	500mL	500mL	1000mL	1000mL
	SPECIAL HANDLING AND/OR STORAGE Radioactive Tie To: B1TVJ9		SAMPLE ANALYSIS		Tc-99 by ICMS (Technetium-99)	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Semi-VOA - 8270B (TCL);	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	Cyanide (Total) - 335.2;	SEE ITEM (3) IN SPECIAL INSTRUCTIONS	Gamma Spectroscopy (Cesium-137, Cobalt-60)	Strontium-89,90 - Total Sr;	Technetium-99;
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME											
B1TTV2	2043 WATER	7-2-08	0843	-	✓	✓	-	-	-	-	-	-	-	✓
				0299038	803901	029541	029796	029746	031390	029796	N/A	029511	029541	
CHAIN OF POSSESSION				SIGN/ PRINT NAMES				SPECIAL INSTRUCTIONS						
RELINQUISHED BY/REMOVED FROM		DATE/TIME		RECEIVED BY/STORED IN		DATE/TIME		** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. ** Analytical batch QC must be run on a sample associated with this SAF. (1)VOA - 8260B (TCL); VOA - 8260B (Add-On) {1-Butanol, Trichloromonofluoromethane, cis-1,2-Dichloroethylene, trans-1,2-Dichloroethylene} (2)ICP/MS - 200.8 (TAL) {Antimony, Cadmium, Chromium} ICP/MS - 200.8 (Add-on) {Arsenic, Thallium, Uranium} ICP Metals - 6010B (TAL) {Aluminum, Barium, Calcium, Iron, Magnesium, Manganese, Potassium, Sodium} ICP Metals - 6010B (Add-On) {Lithium, Phosphorus, Silicon, Strontium} 200.8_HG - ICPMS; (3)IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Phosphorus in phosphate, Sulfate}						
C Fulton		7-2-08 1:30		TARAZIA		7-2-08 1:30								
RELINQUISHED BY/REMOVED FROM		DATE/TIME		RECEIVED BY/STORED IN		DATE/TIME								
RELINQUISHED BY/REMOVED FROM		DATE/TIME		RECEIVED BY/STORED IN		DATE/TIME								
RELINQUISHED BY/REMOVED FROM		DATE/TIME		RECEIVED BY/STORED IN		DATE/TIME								
RELINQUISHED BY/REMOVED FROM		DATE/TIME		RECEIVED BY/STORED IN		DATE/TIME								
RELINQUISHED BY/REMOVED FROM		DATE/TIME		RECEIVED BY/STORED IN		DATE/TIME		<div style="text-align: center; font-size: 2em; font-weight: bold;">CED</div>						
LABORATORY SECTION		RECEIVED BY		TITLE		DATE/TIME								
FINAL SAMPLE DISPOSITION		DISPOSAL METHOD		DISPOSED BY		DATE/TIME								

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COLLECTOR NCO SAMPLER <i>Fulton</i>	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 7N	DATA TURNAROUND 45 Days / 45 Days
SAMPLING LOCATION C5853, I-022	PROJECT DESIGNATION 200-BP-5 OU Characterization for 299-E33-340 - Groundwater		SAF NO. F08-051	AIR QUALITY <input type="checkbox"/>	
ICE CHEST NO.	FIELD LOGBOOK NO. <i>HNF-N-499-1</i>	ACTUAL SAMPLE DEPTH <i>331'</i>	COA 123516ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO Waste Sampling & Characterization		OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A	

MATRIX* 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	POSSIBLE SAMPLE HAZARDS/ REMARKS Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)	PRESERVATION	HNO3 to pH <2	HNO3 to pH <2	HNO3 to pH <2	HNO3 to pH <2							
		TYPE OF CONTAINER	P	G/P	G/P	G/P							
		NO. OF CONTAINER(S)	1	1	1	1							
		VOLUME	1000mL	1000mL	1000mL	1000mL							
		SAMPLE ANALYSIS	Isotopic Plutonium;	Isotopic Uranium;	Neptunium-237;	Americium-241;							
SPECIAL HANDLING AND/OR STORAGE Radioactive Tie To: B1TVJ9													

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	HNO3 to pH <2								
B1TTV2	WATER	7-2-08	0843	✓	✓	✓	✓					
				✓	✓	✓	✓					
				028642	028642	028642	028642					

CHAIN OF POSSESSION	SIGN/ PRINT NAMES
RELINQUISHED BY/REMOVED FROM <i>Fulton</i>	RECEIVED BY/STORED IN <i>TA RAZIN</i>
DATE/TIME 7-2-08 1030	DATE/TIME 7-2-08 1032
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN
DATE/TIME	DATE/TIME
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN
DATE/TIME	DATE/TIME
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN
DATE/TIME	DATE/TIME
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN
DATE/TIME	DATE/TIME

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** Analytical batch QC must be run on a sample associated with this SAF.

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

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