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RECEIVED SEPTEMBER 8, 2008

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Memorandum

M4W41-SLF-08-957

To: H. Hampt E6-35 Date: September 8, 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 WSCF20081371 – SAF NUMBER F08-134

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 WSCF20081371:

- 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#: WSCF20081371
Data Deliverable Date: 21-aug-2008
Data Deliverable: Cover Sheet

SAF#	Sample ID	WSCF#	Matrix
F08-134	B1W1B5	W08GR02298	WATER

M4W41-SLF-08-957

ATTACHMENT 2

NARRATIVE

Consisting of 5 pages
Including cover page

Introduction

One (1) S&GRP sample was received at the WSCF Laboratory on July 8, 2008. This sample was 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 Draft Issue Resolution Form documenting missed hold time for Silicon and Phosphorous is 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.

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Analytical Methodology for Requested Analyses

Refer to *WSCF Method References Report,* pages 17 through 19, 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 22 through 23 for QC details. Analytical Result(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1W786 (SDG# 20081359, SAF# F08-027).

All QC controls are within the established limits.

Cyanide – The hold time requirement (14 days) for this analysis was met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per GRP Letter of Instruction. See page 24 for QC details. Analytical Note(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1V569 (SDG# 20081468, SAF# F08-100).

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 25 for QC details.

All 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 26 through 28 for QC details. Analytical Note(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1W1B5 (SDG# 20081371, SAF# F08-134).
- Batch QC (B1W1B5) – Calcium, Sodium, Silicon, and Phosphorous sample results exceeded the spiking levels by a factor of four. Spike recoveries are not valid. Check standard was analyzed to ensure Sodium and Phosphorous linearity because sample results were greater than the calibration standard.
- Batch QC (B1W1B5) - We observed low Lithium recovery in the spike. The Lithium analyte was N fagged in the sample.

All other QC controls are within the established limits.

ICP-MS 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 29 through 33 for QC details. Analytical Note(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

Alcohol/Glycols - The hold time requirement for this analysis was met. A Duplicate, Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per GRP Letter of Instruction. See page 40 for QC details.

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 41 through 46 for QC details. Analytical Result(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1VKY6 (SDG# 20081406).

All QC controls are within the established limits.

TPHD-WA – 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. See page 47 for QC details. Analytical Note(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1V9X7 (SDG# 20081363).

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 48 through 50 for QC details.

All QC controls are within the established limits.

Rad Chem – 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 55 through 63 for QC details. Analytical Note(s):

- Rad Chem analyses requested to be performed on this sample included: Americium by AEA, Gamma Energy Analysis, Gross Alpha/Beta, Uranium by AEA, Plutonium Isotopics by AEA, Sr-89/90, Tc-99 by ICP-MS, Tc-99 by LSC, and Tritium by LSC.

- TC-99 by LSC: Matrix Spike and Duplicate was analyzed on sample# B1TT54, (SDG#20081085, SAF# F07-076).

- The spike recovery in the MS failed due to the excessive Tc-99 concentration in the sample. The spike evaluation criteria does not apply.

- Gross Alpha/Beta: Duplicate was analyzed on sample# B1W840, (SDG#20081388, SAF# F06-027).

- Uranium by AEA: Duplicate was analyzed on sample# B1V577, (SDG#20081261, SAF# F08-133).

- Plutonium by AEA: Duplicate was analyzed on sample# B1V577, (SDG#20081261, SAF# F08-133).

- Americium-241 by AEA: Duplicate was analyzed on sample# B1V577, (SDG#20081261, SAF# F08-133).

- Tritium by Liquid Scintillation: Duplicate was analyzed on sample# B1TVK5, (SDG#20081270, SAF# F08-052).

- SR 89/90: Duplicate was analyzed on sample# B1TTV2, (SDG#20081329, SAF# F08-051).

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-08-957

ATTACHMENT 3

ISSUE RESOLUTION FORM

Consisting of 3 pages
Including cover page

ISSUE RESOLUTION FORM

FH TRACKING NUMBER: 08-XXX

DRAFT

Date : **9-4-2008** SAF No. **F08-103, F08-052, F08-051, F08-134**

SDG: **WSCF20081261, -1270, -1283, -1371** LOGIN No.: TEST: @GPP6010

Sample No.(s) **B1V577, B1TVK5, B1TTV1, B1W1B5**

W08GR01833, W08GR01840, W08GR01854, W08GR02298

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
The 28-day regulatory hold time for Silicon and Phosphorus was missed on S&GRP samples identified above. Samples were collected in the field and submitted to the WSCF Laboratory for analysis in the late June and early July timeframe. However, due to large sample backlog, samples were not prepped for analysis until August 25, 2008, after the regulatory hold time had been exceeded. Samples were analyzed on August 31, 2008. QC control information is as follows for **Samples #B1V577 (F08-103), B1TVK5 (F08-052) and B1W1B5 (F08-134)** – Batch QC was performed on sample B1W1X6 (F08-039). Silicon – All QC controls were within established limits. Phosphorus – Sample concentration exceeded spiking levels by a factor of 4. All other QC controls were within established limits. **Sample # B1TTV1 (F08-051)** – Batch QC was performed on same sample (B1TTV1). Silicon – Sample concentration exceeded spiking levels by a factor of 4. All other QC controls were within established limits. Phosphorus – All QC controls were within established limits.	Document missed holding time in the case narrative.

GRP COMMENTS

Signature and Date

M4W41-SLF-08-957

ATTACHMENT 4

ANALYTICAL RESULTS

Consisting of 53 pages
Including cover page

WSCF
ANALYTICAL RESULTS REPORT

for

Groundwater Remediation Program

Richland, WA 99354

Attention: Steve Trent

Analytical: S. Fitzgerald 9/8/08

Client Services: A. Kopriva 9/7/08

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

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

Contract#: FH-EIS-2003-MEM-001
Report#: WSCF20081371
Report Date: 4-sep-2008
Report WGPP/ver. 5.2
Groundwater Remediation Program

w13qlog v4.2 04-sep-2008 07:20:55

Department: Inorganic

W13q Worklist/Batch/QC Report for Group# WSCF20081371

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
36999	2	37421	41767	BLANK		Hexavalent chromium
36999	8	37421	41767	BLANK		Hexavalent chromium
36999	3	37421	41767	LCS		Hexavalent chromium
36999	5	37421	41767	DUP	W08GR02298	Hexavalent chromium
36999	6	37421	41767	MS	W08GR02298	Hexavalent chromium
36999	7	37421	41767	MSD	W08GR02298	Hexavalent chromium
36999	4	37421	41767	SAMPLE	W08GR02298	Hexavalent chromium
36999	7	37421	41767	SPK-RPD	W08GR02298	Hexavalent chromium
37014	2	37435	41794	BLANK		Anions by Ion Chromatography
37014	12	37435	41794	BLANK		Anions by Ion Chromatography
37014	3	37435	41794	LCS		Anions by Ion Chromatography
37014	5	37435	41794	DUP	W08GR02291	Anions by Ion Chromatography
37014	6	37435	41794	MS	W08GR02291	Anions by Ion Chromatography
37014	7	37435	41794	MSD	W08GR02291	Anions by Ion Chromatography
37014	7	37435	41794	SPK-RPD	W08GR02291	Anions by Ion Chromatography
37014	11	37435	41794	SAMPLE	W08GR02298	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	10	37571	41904	SAMPLE	W08GR02298	ICP-200.8 MS All possible meta
37119	1	37544	41982	BLANK		Cyanide by Midi/Spectrophotom
37119	2	37544	41982	LCS		Cyanide by Midi/Spectrophotom
37119	3	37544	41982	SAMPLE	W08GR02298	Cyanide by Midi/Spectrophotom
37119	5	37544	41982	MS	W08GR02619	Cyanide by Midi/Spectrophotom
37119	6	37544	41982	MSD	W08GR02619	Cyanide by Midi/Spectrophotom
37119	6	37544	41982	SPK-RPD	W08GR02619	Cyanide by Midi/Spectrophotom
37119	12	37544	41982	MS	W08P003362	Cyanide by Midi/Spectrophotom
37119	13	37544	41982	MSD	W08P003362	Cyanide by Midi/Spectrophotom
37119	13	37544	41982	SPK-RPD	W08P003362	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	10	38205	42675	SAMPLE	W08GR02298	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

w13qlog v4.2 04-sep-2008 07:20:55

Department: Organic

W13q Worklist/Batch/QC Report for Group# WSCF20081371

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
			41940	BLANK		NWTPH-D TPH Diesel Range (Wa)
			41940	LCS		NWTPH-D TPH Diesel Range (Wa)
			41940	MS	W08GR02298	NWTPH-D TPH Diesel Range (Wa)
			41940	MSD	W08GR02298	NWTPH-D TPH Diesel Range (Wa)
			41940	SAMPLE	W08GR02298	NWTPH-D TPH Diesel Range (Wa)
			41940	SURR	W08GR02298	NWTPH-D TPH Diesel Range (Wa)
			41940	MS	W08P003344	NWTPH-D TPH Diesel Range (Wa)
			41940	MSD	W08P003344	NWTPH-D TPH Diesel Range (Wa)
			41940	SPK-RPD	W08P003344	NWTPH-D TPH Diesel Range (Wa)
			41983	BLANK		SW-846 8270C Semi-Vols
			41983	LCS		SW-846 8270C Semi-Vols
			41983	SAMPLE	W08GR02298	SW-846 8270C Semi-Vols
			41983	SURR	W08GR02298	SW-846 8270C Semi-Vols
			41983	MS	W08P003413	SW-846 8270C Semi-Vols
			41983	MSD	W08P003413	SW-846 8270C Semi-Vols
			41983	SPK-RPD	W08P003413	SW-846 8270C Semi-Vols
37686	1	38121	42480	BLANK		Alcohols, Glycols - 8015
37686	2	38121	42480	LCS		Alcohols, Glycols - 8015
37686	4	38121	42480	DUP	W08GR02298	Alcohols, Glycols - 8015
37686	5	38121	42480	MS	W08GR02298	Alcohols, Glycols - 8015
37686	6	38121	42480	MSD	W08GR02298	Alcohols, Glycols - 8015
37686	3	38121	42480	SAMPLE	W08GR02298	Alcohols, Glycols - 8015
37686	6	38121	42480	SPK-RPD	W08GR02298	Alcohols, Glycols - 8015
			42492	BLANK		VOA Ground Water Protection
			42492	LCS		VOA Ground Water Protection
			42492	MS	W08GR02298	VOA Ground Water Protection
			42492	MSD	W08GR02298	VOA Ground Water Protection
			42492	SAMPLE	W08GR02298	VOA Ground Water Protection
			42492	SPK-RPD	W08GR02298	VOA Ground Water Protection
			42492	SURR	W08GR02298	VOA Ground Water Protection

w13qlog v4.2 04-sep-2008 07:20:55

Department: Radiochemistry

W13q Worklist/Batch/QC Report for Group# WSCF20081371

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	13	37449	41800	SAMPLE	W08GR02298	TC99 by Liquid Scin.
37028	1	37453	41828	BLANK		Gamma Energy Analysis-grd H2O
37028	2	37453	41828	LCS		Gamma Energy Analysis-grd H2O
37028	3	37453	41828	DUP	W08GR02298	Gamma Energy Analysis-grd H2O
37028	4	37453	41828	SAMPLE	W08GR02298	Gamma Energy Analysis-grd H2O
37087	1	37496	41868	BLANK		TC99 by ICP-200.8 MS
37087	2	37496	41868	LCS		TC99 by ICP-200.8 MS
37087	8	37496	41868	SAMPLE	W08GR02298	TC99 by ICP-200.8 MS
37074	1	37501	41890	BLANK		Gross Alpha/Gross Beta (AB32)
37074	2	37501	41890	LCS		Gross Alpha/Gross Beta (AB32)
37074	9	37501	41890	SAMPLE	W08GR02298	Gross Alpha/Gross Beta (AB32)
37074	3	37501	41890	DUP	W08GR02356	Gross Alpha/Gross Beta (AB32)
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	14	37829	42209	SAMPLE	W08GR02298	Uranium Isotopics by AEA
37403	15	37829	42209	SURR	W08GR02298	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	14	37832	42216	SAMPLE	W08GR02298	Plutonium Isotopics by AEA
37404	15	37832	42216	SURR	W08GR02298	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	14	37837	42217	SAMPLE	W08GR02298	Americium by AEA
37405	15	37837	42217	SURR	W08GR02298	Americium by AEA
37458	1	37891	42286	BLANK		Tritium by Liq Sct column prep
37458	4	37891	42286	LCS		Tritium by Liq Sct column prep
37458	3	37891	42286	DUP	W08GR01840	Tritium by Liq Sct column prep
37458	2	37891	42286	MS	W08GR01840	Tritium by Liq Sct column prep
37458	6	37891	42286	SAMPLE	W08GR02298	Tritium by Liq Sct column prep
37077	1	37504	42511	BLANK		Strontium 89/90
37077	2	37504	42511	LCS		Strontium 89/90
37077	3	37504	42511	DUP	W08GR02043	Strontium 89/90
37077	8	37504	42511	SAMPLE	W08GR02298	Strontium 89/90
37077	9	37504	42511	SURR	W08GR02298	Strontium 89/90

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 Emmision 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.

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 Orgamoc Compounds By Gas Chromatography/Mass Spectrometry (GC/MS)
LA-523-493	NWTPH-Diesel and/or Gasoline	
	HEIS WTPH_DIESEL (HEIS)	Total Petroleum Hydrocarbons in Diesel
	WDOE TPHD	Total Petroleum Hydrocarbons in Diesel
Organics	Organics - Alcohols, Glycols	
	EPA SW-846 8015B	Nonhalogenated Organics Using GC/FID

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

WSCF
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_GE**	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 Scintilillation
HEIS	**BETA_LSC**	A/B Liquid Scintilallation
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	**PUISO_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 Emmision 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.

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-134
Sample # W08GR02298
Client ID: B1W1B5 TRENT WSCF
Matrix: WATER

Group #: WSCF20081371
Department: Inorganic
Sampled: 07/08/08
Received: 07/08/08

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	U	< 0.0210	mg/L			1.00	0.021		07/08/08
Chloride	16887-00-6	LA-533-410	U	< 0.110	mg/L			1.00	0.11		07/08/08
Nitrogen in Nitrite	NO2-N	LA-533-410	U	< 9.90e-03	mg/L			1.00	9.9e-03		07/08/08
Nitrogen in Nitrate	NO3-N	LA-533-410	U	< 0.0360	mg/L			1.00	0.036		07/08/08
Phosphate (P) by IC	PO4-P	LA-533-410	U	< 0.0320	mg/L			1.00	0.032		07/08/08
Sulfate	14808-79-8	LA-533-410	U	< 0.0770	mg/L			1.00	0.077		07/08/08
Cyanide											
Cyanide	57-12-5	LA-695-402	U	< 4.00	ug/L			1.00	4.0		07/17/08
Hexavalent Chromium											
Hexavalent Chromium	18540-29-9	LA-265-403	U	< 2.00e-03	mg/L			1.00	2.0e-03		07/08/08
ICP Metals Analysis, Grd H20 P Prep											**08/25/08**
ICP Metals Analysis, Grd H20 P											
Aluminum	7429-90-5	LA-505-411	U	< 52.0	ug/L			1.00	52		08/31/08
Iron	7439-89-6	LA-505-411	U	< 25.0	ug/L			1.00	25		08/31/08
Magnesium	7439-95-4	LA-505-411		188	ug/L			1.00	50		08/31/08
Potassium	7440-09-7	LA-505-411	U	< 170	ug/L			1.00	1.7e+02		08/31/08
Sodium	7440-23-5	LA-505-411		902	ug/L			1.00	51		08/31/08
Calcium	7440-70-2	LA-505-411		902	ug/L			1.00	73		08/31/08
Lithium	7439-93-2	LA-505-411	NU	< 4.00	ug/L			1.00	4.0		08/31/08
Beryllium	7440-41-7	LA-505-411	U	< 4.00	ug/L			1.00	4.0		08/31/08
Boron	7440-42-8	LA-505-411	U	< 20.0	ug/L			1.00	20		08/31/08
Silicon	7440-21-3	LA-505-411		96.2	ug/L			1.00	26		08/31/08
Phosphorus	7723-14-0	LA-505-411	U	< 44.0	ug/L			1.00	44		08/31/08
ICP-200.8 MS All possible meta Prep											**07/17/08**

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

N - Spike sample recovery is outside control limits.(inorg)
U - Analyzed for but not detected above limiting criteria.
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: F08-134
Sample # W08GR02298
Client ID: B1W1B5 TRENT WSCF
Matrix: WATER

Group #: WSCF20081371
Department: Inorganic
Sampled: 07/08/08
Received: 07/08/08

ICP-200.8 MS All possible meta

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Manganese	7439-96-5	LA-505-412		0.430	ug/L			1.00	0.100		07/18/08
Nickel	7440-02-0	LA-505-412	U	< 0.200	ug/L			1.00	0.200		07/18/08
Silver	7440-22-4	LA-505-412	U	< 0.100	ug/L			1.00	0.100		07/18/08
Antimony	7440-36-0	LA-505-412	U	< 0.300	ug/L			1.00	0.300		07/18/08
Barium	7440-39-3	LA-505-412	U	< 0.200	ug/L			1.00	0.200		07/18/08
Cadmium	7440-43-9	LA-505-412	U	< 0.100	ug/L			1.00	0.100		07/18/08
Chromium	7440-47-3	LA-505-412	U	< 0.500	ug/L			1.00	0.500		07/18/08
Cobalt	7440-48-4	LA-505-412	U	< 0.0500	ug/L			1.00	0.0500		07/18/08
Copper	7440-50-8	LA-505-412	U	< 0.100	ug/L			1.00	0.100		07/18/08
Vanadium	7440-62-2	LA-505-412	U	< 0.200	ug/L			1.00	0.200		07/18/08
Zinc	7440-66-6	LA-505-412		1.43	ug/L			1.00	0.800		07/18/08
Lead	7439-92-1	LA-505-412	U	< 0.100	ug/L			1.00	0.100		07/18/08
Mercury	7439-97-6	LA-505-412	U	< 0.0500	ug/L			1.00	0.0500		07/18/08
Uranium	7440-61-1	LA-505-412	U	< 0.0500	ug/L			1.00	0.0500		07/18/08
Arsenic	7440-38-2	LA-505-412	U	< 0.400	ug/L			1.00	0.400		07/18/08
Selenium	7782-49-2	LA-505-412	U	< 0.300	ug/L			1.00	0.300		07/18/08
Thallium	7440-28-0	LA-505-412	U	< 0.100	ug/L			1.00	0.100		07/18/08
Strontium	7440-24-6	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

N - Spike sample recovery is outside control limits.(inorg)
U - Analyzed for but not detected above limiting criteria.
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 LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081371
Matrix: WATER
Test: Anions by Ion Chromatography

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

Lab ID: W08GR02291
BATCH QC ASSOCIATED WITH SAMPLE

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
DUP	Chloride	16887-00-6	1.3542		RPD			n/a	20.000		07/08/08
DUP	Fluoride	16984-48-8	<0.21		RPD			n/a	20.000	U	07/08/08
DUP	Nitrogen in Nitrite	NO2-N	<9.9e-2		RPD			n/a	20.000	U	07/08/08
DUP	Nitrogen in Nitrate	NO3-N	<0.36		RPD			n/a	20.000	U	07/08/08
DUP	Phosphate (P) by IC	PO4-P	<0.32		RPD			n/a	20.000	U	07/08/08
DUP	Sulfate	14808-79-8	7.2133		RPD			3.685	20.000		07/08/08
MS	Chloride	16887-00-6	1.02193	102.707	% Recov	80.000	120.000				07/08/08
MS	Fluoride	16984-48-8	0.45881	93.065	% Recov	80.000	120.000				07/08/08
MS	Nitrogen in Nitrite	NO2-N	0.46498	94.508	% Recov	80.000	120.000				07/08/08
MS	Nitrogen in Nitrate	NO3-N	0.45413	101.823	% Recov	80.000	120.000				07/08/08
MS	Phosphate (P) by IC	PO4-P	0.90471	94.536	% Recov	80.000	120.000				07/08/08
MS	Sulfate	14808-79-8	1.83606	93.677	% Recov	80.000	120.000				07/08/08
MSD	Chloride	16887-00-6	1.04807	105.334	% Recov	80.000	120.000				07/08/08
MSD	Fluoride	16984-48-8	0.46248	93.809	% Recov	80.000	120.000				07/08/08
MSD	Nitrogen in Nitrite	NO2-N	0.48228	98.024	% Recov	80.000	120.000				07/08/08
MSD	Nitrogen in Nitrate	NO3-N	0.46143	103.460	% Recov	80.000	120.000				07/08/08
MSD	Phosphate (P) by IC	PO4-P	0.90293	94.350	% Recov	80.000	120.000				07/08/08
MSD	Sulfate	14808-79-8	1.83416	93.580	% Recov	80.000	120.000				07/08/08
SPK-RPD	Chloride	16887-00-6	105.334		RPD			2.525	20.000		07/08/08
SPK-RPD	Fluoride	16984-48-8	93.809		RPD			0.796	20.000		07/08/08
SPK-RPD	Nitrogen in Nitrite	NO2-N	98.024		RPD			3.652	20.000		07/08/08
SPK-RPD	Nitrogen in Nitrate	NO3-N	103.460		RPD			1.595	20.000		07/08/08
SPK-RPD	Phosphate (P) by IC	PO4-P	94.350		RPD			0.197	20.000		07/08/08
SPK-RPD	Sulfate	14808-79-8	93.580		RPD			0.104	20.000		07/08/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081371
Matrix: WATER
Test: Anions by Ion Chromatography

Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
BATCH QC											
BLANK	Chloride	16887-00-6	<0.11	n/a	mg/L	0.000	0.030			U	07/08/08
BLANK	Chloride	16887-00-6	<0.11	n/a	mg/L	0.000	0.030			U	07/08/08
BLANK	Fluoride	16984-48-8	<2.1e-2	n/a	mg/L	0.000	0.030			U	07/08/08
BLANK	Fluoride	16984-48-8	<2.1e-2	n/a	mg/L	0.000	0.030			U	07/08/08
BLANK	Nitrogen in Nitrite	NO2-N	<9.9e-3	n/a	mg/L	0.000	0.020			U	07/08/08
BLANK	Nitrogen in Nitrite	NO2-N	<9.9e-3	n/a	mg/L	0.000	0.020			U	07/08/08
BLANK	Nitrogen in Nitrate	NO3-N	<3.6e-2	n/a	mg/L	0.000	0.040			U	07/08/08
BLANK	Nitrogen in Nitrate	NO3-N	<3.6e-2	n/a	mg/L	0.000	0.040			U	07/08/08
BLANK	Phosphate (P) by IC	PO4-P	<3.2e-2	n/a	mg/L	0.000	0.200			U	07/08/08
BLANK	Phosphate (P) by IC	PO4-P	<3.2e-2	n/a	mg/L	0.000	0.200			U	07/08/08
BLANK	Sulfate	14808-79-8	<7.7e-2	n/a	mg/L	0.000	0.200			U	07/08/08
BLANK	Sulfate	14808-79-8	<7.7e-2	n/a	mg/L	0.000	0.200			U	07/08/08
LCS	Chloride	16887-00-6	197.2851	98.152	% Recov	80.000	120.000				07/08/08
LCS	Fluoride	16984-48-8	105.492	105.916	% Recov	80.000	120.000				07/08/08
LCS	Nitrogen in Nitrite	NO2-N	100.2667	100.872	% Recov	80.000	120.000				07/08/08
LCS	Nitrogen in Nitrate	NO3-N	92.0676	102.184	% Recov	80.000	120.000				07/08/08
LCS	Phosphate (P) by IC	PO4-P	199.6954	103.255	% Recov	80.000	120.000				07/08/08
LCS	Sulfate	14808-79-8	383.9685	96.962	% Recov	80.000	120.000				07/08/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081371
Matrix: WATER
Test: Cyanide by Midi/Spectrophotom

Sample Date: 07/16/08
Receive Date:07/16/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR02619											
BATCH QC ASSOCIATED WITH SAMPLE											
MS	Cyanide by Midi/Spectrophotom	57-12-5	38.8	97.000	% Recov	75.000	125.000				07/17/08
MSD	Cyanide by Midi/Spectrophotom	57-12-5	39.8	99.500	% Recov	75.000	125.000				07/17/08
SPK-RPD	Cyanide by Midi/Spectrophotom	57-12-5	99.500		RPD			2.545	20.000		07/17/08
Lab ID: W08P003362											
BATCH QC ASSOCIATED WITH SAMPLE											
MS	Cyanide by Midi/Spectrophotom	57-12-5	41.7	104.250	% Recov	75.000	125.000				07/17/08
MSD	Cyanide by Midi/Spectrophotom	57-12-5	42.8	107.000	% Recov	75.000	125.000				07/17/08
SPK-RPD	Cyanide by Midi/Spectrophotom	57-12-5	107.000		RPD			2.604	20.000		07/17/08
BATCH QC											
BLANK	Cyanide by Midi/Spectrophotom	57-12-5	< 4	n/a	ug/L	-4.000	4.000			U	07/17/08
LCS	Cyanide by Midi/Spectrophotom	57-12-5	50.3	100.600	% Recov	85.000	115.000				07/17/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081371
Matrix: WATER
Test: Hexavalent chromium

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

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR02298											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Hexavalent chromium	18540-29-9	<0.002		RPD			n/a	15.000	U	07/08/08
MS	Hexavalent chromium	18540-29-9	0.0559	104.291	% Recov	85.000	115.000				07/08/08
MSD	Hexavalent chromium	18540-29-9	0.0559	104.291	% Recov	85.000	115.000				07/08/08
SPK-RPD	Hexavalent chromium	18540-29-9	104.291		RPD			0.000	20.000		07/08/08
BATCH QC											
BLANK	Hexavalent chromium	18540-29-9	<0.002	n/a	mg/L	0.000	2.000			U	07/08/08
BLANK	Hexavalent chromium	18540-29-9	<0.002	n/a	mg/L	0.000	2.000			U	07/08/08
LCS	Hexavalent chromium	18540-29-9	0.0518	102.778	% Recov	80.000	120.000				07/08/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081371
Matrix: WATER
Test: ICP Metals Analysis, Grd H20 P

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

Lab ID: W08GR03259
BATCH QC ASSOCIATED WITH SAMPLE

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
MS	Aluminum	7429-90-5	1043.5	104.350	% Recov	75.000	125.000				08/31/08
MS	Boron	7440-42-8	937.2	93.720	% Recov	70.000	130.000				08/31/08
MS	Beryllium	7440-41-7	468.1	93.620	% 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	97.860	% Recov	75.000	125.000				08/31/08
MS	Potassium	7440-09-7	8656	86.560	% Recov	75.000	125.000				08/31/08
MS	Lithium	7439-93-2	318.6	63.720	% Recov	70.000	130.000			*	08/31/08
MS	Magnesium	7439-95-4	872	87.200	% Recov	75.000	125.000				08/31/08
MS	Sodium	7440-23-5	-8364000	-836400.000	% Recov	75.000	125.000			*	08/31/08
MS	Phosphorus	7723-14-0	860	86.000	% Recov	70.000	130.000				08/31/08
MS	Silicon	7440-21-3	819	81.900	% Recov	70.000	130.000				08/31/08
MSD	Aluminum	7429-90-5	1010.5	101.050	% Recov	75.000	125.000				08/31/08
MSD	Boron	7440-42-8	912.2	91.220	% Recov	75.000	125.000				08/31/08
MSD	Beryllium	7440-41-7	472.6	94.520	% 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	977.6	97.760	% Recov	75.000	125.000				08/31/08
MSD	Potassium	7440-09-7	9406	94.060	% Recov	75.000	125.000				08/31/08
MSD	Lithium	7439-93-2	338.9	67.780	% 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	Sodium	7440-23-5	-8364000	-836400.000	% Recov	75.000	125.000			*	08/31/08
MSD	Phosphorus	7723-14-0	5390	539.000	% Recov	75.000	125.000			*	08/31/08
MSD	Silicon	7440-21-3	1175	117.500	% 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	Boron	7440-42-8	91.220		RPD			2.704	20.000		08/31/08
SPK-RPD	Beryllium	7440-41-7	94.520		RPD			0.957	20.000		08/31/08
SPK-RPD	Calcium	7440-70-2	92.300		RPD			25.437	20.000	*	08/31/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081371
Matrix: WATER
Test: ICP Metals Analysis, Grd H20 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
SPK-RPD	Iron	7439-89-6	97.760		RPD			0.102	20.000		08/31/08
SPK-RPD	Potassium	7440-09-7	94.060		RPD			8.305	20.000		08/31/08
SPK-RPD	Lithium	7439-93-2	67.780		RPD			6.175	20.000		08/31/08
SPK-RPD	Magnesium	7439-95-4	101.400		RPD			15.058	20.000		08/31/08
SPK-RPD	Sodium	7440-23-5	-836400.000		RPD			-0.000	20.000		08/31/08
SPK-RPD	Phosphorus	7723-14-0	539.000		RPD			144.960	20.000 •		08/31/08
SPK-RPD	Silicon	7440-21-3	117.500		RPD			35.707	20.000 •		08/31/08
BATCH QC											
BLANK	Aluminum	7429-90-5	<52	n/a	ug/L					U	08/31/08
BLANK	Boron	7440-42-8	<20	n/a	ug/L					U	08/31/08
BLANK	Beryllium	7440-41-7	<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	Lithium	7439-93-2	<4	n/a	ug/L					U	08/31/08
BLANK	Magnesium	7439-95-4	<50	n/a	ug/L					U	08/31/08
BLANK	Sodium	7440-23-5	<51	n/a	ug/L					U	08/31/08
BLANK	Phosphorus	7723-14-0	<44	n/a	ug/L					U	08/31/08
BLANK	Silicon	7440-21-3	<26	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	Boron	7440-42-8	1002	100.200	% Recov	80.000	120.000				08/31/08
LCS	Beryllium	7440-41-7	542	108.400	% 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	Lithium	7439-93-2	511.6	102.320	% 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	Sodium	7440-23-5	1025	102.500	% Recov	80.000	120.000				08/31/08
LCS	Phosphorus	7723-14-0	1044	104.400	% Recov	80.000	120.000				08/31/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Inorganic**

SDG Number: WSCF20081371
Matrix: WATER
Test: ICP Metals Analysis, Grd H20 P

Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
LCS	Silicon	7440-21-3	1026	102.600	% Recov	80.000	120.000				08/31/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081371
Matrix: WATER
Test: ICP-200.8 MS All possible meta

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

Lab ID: W08D000029
BATCH QC ASSOCIATED WITH SAMPLE

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
MS	Silver	7440-22-4	38.26	95.650	% Recov	70.000	130.000				07/18/08
MS	Arsenic	7440-38-2	34.32	85.800	% Recov	70.000	130.000				07/18/08
MS	Barium	7440-39-3	39.5	98.750	% 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	Cobalt	7440-48-4	34.76	86.900	% 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	Copper	7440-50-8	33.59	83.975	% Recov	70.000	130.000				07/18/08
MS	Mercury	7439-97-6	2.33	116.500	% Recov	70.000	130.000				07/18/08
MS	Manganese	7439-96-5	35.42	88.550	% Recov	70.000	130.000				07/18/08
MS	Nickel	7440-02-0	34.46	86.150	% Recov	70.000	130.000				07/18/08
MS	Lead	7439-92-1	41.22	103.050	% 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	Selenium	7782-49-2	33.86	84.650	% 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
MS	Vanadium	7440-62-2	36.04	90.100	% Recov	70.000	130.000				07/18/08
MS	Zinc	7440-66-6	33.08	82.700	% Recov	70.000	130.000				07/18/08
MSD	Silver	7440-22-4	38.24	95.600	% 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	Barium	7440-39-3	39.81	99.525	% 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	Cobalt	7440-48-4	36.32	90.800	% 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	Copper	7440-50-8	35.52	88.800	% Recov	70.000	130.000				07/18/08
MSD	Mercury	7439-97-6	2.4	120.000	% Recov	70.000	130.000				07/18/08
MSD	Manganese	7439-96-5	37.39	93.475	% Recov	70.000	130.000				07/18/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081371
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
MSD	Nickel	7440-02-0	36.16	90.400	% Recov	70.000	130.000				07/18/08
MSD	Lead	7439-92-1	41.52	103.800	% 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	Selenium	7782-49-2	33.53	83.825	% 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
MSD	Vanadium	7440-62-2	37.7	94.250	% Recov	70.000	130.000				07/18/08
MSD	Zinc	7440-66-6	35.35	88.375	% Recov	70.000	130.000				07/18/08
SPK-RPD	Silver	7440-22-4	95.600		RPD			0.052	20.000		07/18/08
SPK-RPD	Arsenic	7440-38-2	89.775		RPD			4.528	20.000		07/18/08
SPK-RPD	Barium	7440-39-3	99.525		RPD			0.782	20.000		07/18/08
SPK-RPD	Cadmium	7440-43-9	93.475		RPD			0.833	20.000		07/18/08
SPK-RPD	Cobalt	7440-48-4	90.800		RPD			4.389	20.000		07/18/08
SPK-RPD	Chromium	7440-47-3	92.200		RPD			5.117	20.000		07/18/08
SPK-RPD	Copper	7440-50-8	88.800		RPD			5.585	20.000		07/18/08
SPK-RPD	Mercury	7439-97-6	120.000		RPD			2.960	20.000		07/18/08
SPK-RPD	Manganese	7439-96-5	93.475		RPD			5.411	20.000		07/18/08
SPK-RPD	Nickel	7440-02-0	90.400		RPD			4.815	20.000		07/18/08
SPK-RPD	Lead	7439-92-1	103.800		RPD			0.725	20.000		07/18/08
SPK-RPD	Antimony	7440-36-0	98.825		RPD			0.991	20.000		07/18/08
SPK-RPD	Selenium	7782-49-2	83.825		RPD			0.979	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
SPK-RPD	Vanadium	7440-62-2	94.250		RPD			4.502	20.000		07/18/08
SPK-RPD	Zinc	7440-66-6	88.375		RPD			6.635	20.000		07/18/08

Lab ID: W08GR01833
BATCH QC ASSOCIATED WITH SAMPLE

MS	Silver	7440-22-4	40.51	101.275	% Recov	70.000	130.000				07/18/08
MS	Arsenic	7440-38-2	36	90.000	% Recov	70.000	130.000				07/18/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081371
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	Barium	7440-39-3	38.87	97.175	% 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
MS	Cobalt	7440-48-4	37	92.500	% Recov	70.000	130.000				07/18/08
MS	Chromium	7440-47-3	37.52	93.800	% Recov	70.000	130.000				07/18/08
MS	Copper	7440-50-8	37.66	94.150	% 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	Manganese	7439-96-5	37.57	93.925	% Recov	70.000	130.000				07/18/08
MS	Nickel	7440-02-0	37.41	93.525	% Recov	70.000	130.000				07/18/08
MS	Lead	7439-92-1	39.52	98.800	% 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	Selenium	7782-49-2	33.91	84.775	% Recov	70.000	130.000				07/18/08
MS	Strontium	7440-24-6	38.92	97.300	% 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
MS	Vanadium	7440-62-2	37.4	93.500	% Recov	70.000	130.000				07/18/08
MS	Zinc	7440-66-6	34.99	87.475	% Recov	70.000	130.000				07/18/08
MSD	Silver	7440-22-4	40.35	100.875	% 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	Barium	7440-39-3	38.96	97.400	% 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	Cobalt	7440-48-4	38.26	95.650	% 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	Copper	7440-50-8	38.56	96.400	% 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	Manganese	7439-96-5	39.01	97.525	% Recov	70.000	130.000				07/18/08
MSD	Nickel	7440-02-0	38.7	96.750	% Recov	70.000	130.000				07/18/08
MSD	Lead	7439-92-1	39.94	99.850	% 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	Selenium	7782-49-2	34.25	85.625	% Recov	70.000	130.000				07/18/08
MSD	Strontium	7440-24-6	38.68	96.700	% Recov	70.000	130.000				07/18/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081371
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
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
MSD	Vanadium	7440-62-2	38.61	96.525	% Recov	70.000	130.000				07/18/08
MSD	Zinc	7440-66-6	36.36	90.900	% Recov	70.000	130.000				07/18/08
SPK-RPD	Silver	7440-22-4	100.875		RPD			0.396	20.000		07/18/08
SPK-RPD	Arsenic	7440-38-2	90.750		RPD			0.830	20.000		07/18/08
SPK-RPD	Barium	7440-39-3	97.400		RPD			0.231	20.000		07/18/08
SPK-RPD	Cadmium	7440-43-9	93.175		RPD			0.161	20.000		07/18/08
SPK-RPD	Cobalt	7440-48-4	95.650		RPD			3.348	20.000		07/18/08
SPK-RPD	Chromium	7440-47-3	97.050		RPD			3.406	20.000		07/18/08
SPK-RPD	Copper	7440-50-8	96.400		RPD			2.362	20.000		07/18/08
SPK-RPD	Mercury	7439-97-6	116.000		RPD			4.405	20.000		07/18/08
SPK-RPD	Manganese	7439-96-5	97.525		RPD			3.761	20.000		07/18/08
SPK-RPD	Nickel	7440-02-0	96.750		RPD			3.390	20.000		07/18/08
SPK-RPD	Lead	7439-92-1	99.850		RPD			1.057	20.000		07/18/08
SPK-RPD	Antimony	7440-36-0	96.175		RPD			0.363	20.000		07/18/08
SPK-RPD	Selenium	7782-49-2	85.625		RPD			0.998	20.000		07/18/08
SPK-RPD	Strontium	7440-24-6	96.700		RPD			0.619	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
SPK-RPD	Vanadium	7440-62-2	96.525		RPD			3.184	20.000		07/18/08
SPK-RPD	Zinc	7440-66-6	90.900		RPD			3.840	20.000		07/18/08

BATCH QC

BLANK	Silver	7440-22-4	<0.1	n/a	ug/L					U	07/18/08
BLANK	Arsenic	7440-38-2	<0.4	n/a	ug/L					U	07/18/08
BLANK	Barium	7440-39-3	<0.2	n/a	ug/L					U	07/18/08
BLANK	Cadmium	7440-43-9	<0.1	n/a	ug/L					U	07/18/08
BLANK	Cobalt	7440-48-4	<5e-2	n/a	ug/L					U	07/18/08
BLANK	Chromium	7440-47-3	<0.5	n/a	ug/L					U	07/18/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081371
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
BLANK	Copper	7440-50-8	<0.1	n/a	ug/L					U	07/18/08
BLANK	Mercury	7439-97-6	<5e-2	n/a	ug/L					U	07/18/08
BLANK	Manganese	7439-96-5	<0.1	n/a	ug/L					U	07/18/08
BLANK	Nickel	7440-02-0	<0.2	n/a	ug/L					U	07/18/08
BLANK	Lead	7439-92-1	<0.1	n/a	ug/L					U	07/18/08
BLANK	Antimony	7440-36-0	<0.3	n/a	ug/L					U	07/18/08
BLANK	Selenium	7782-49-2	0.3	0.300	ug/L						07/18/08
BLANK	Strontium	7440-24-6	<0.1	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
BLANK	Vanadium	7440-62-2	<0.2	n/a	ug/L					U	07/18/08
BLANK	Zinc	7440-66-6	1.14	1.140	ug/L						07/18/08
LCS	Silver	7440-22-4	40.45	101.125	% Recov	85.000	115.000				07/18/08
LCS	Arsenic	7440-38-2	36.97	92.425	% Recov	85.000	115.000				07/18/08
LCS	Barium	7440-39-3	38.89	97.225	% 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
LCS	Cobalt	7440-48-4	38.09	95.225	% Recov	85.000	115.000				07/18/08
LCS	Chromium	7440-47-3	38.42	96.050	% Recov	85.000	115.000				07/18/08
LCS	Copper	7440-50-8	38.23	95.575	% 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	Manganese	7439-96-5	38.57	96.425	% Recov	85.000	115.000				07/18/08
LCS	Nickel	7440-02-0	38.33	95.825	% Recov	85.000	115.000				07/18/08
LCS	Lead	7439-92-1	39.45	98.625	% 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	Selenium	7782-49-2	35.65	89.125	% Recov	85.000	115.000				07/18/08
LCS	Strontium	7440-24-6	39.22	98.050	% Recov	80.000	120.000				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
LCS	Vanadium	7440-62-2	38.36	95.900	% Recov	85.000	115.000				07/18/08
LCS	Zinc	7440-66-6	37.99	94.975	% Recov	85.000	115.000				07/18/08

WSCF
ANALYTICAL COMMENT REPORT

Attention: Steve Trent
Project Number F08-134

Group #: WSCF20081371
Department: Inorganic

Sample #	Client ID	Lab Area	Test	Comment
		VALGROUP		Tc99 spike failure is due to high sample concentration. Spike criterion does not apply. lmh SVOA: Low phenolic surrogate recoveries are matrix effects for a sample unrelated to these samples. All surrogate recoveries for these samples meet QC control limits. cgc ICP-AES: No zirconium present in the LCS and spike standards. Sodium, calcium, silicon, and phosphorus sample results exceed spiking level by a factor of 4 so spike recoveries are not valid. High standard used to ensure sodium and phosphorus linearity because sample results are greater than the calibration standard. Low lithium spike recoveries; "N" flag.

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

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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-134
Sample # W08GR02298
Client ID: B1W1B5 TRENT WSCF
Matrix: WATER

Group #: WSCF20081371
Department: Organic
Sampled: 07/08/08
Received: 07/08/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Alcohols, Glycols - 8015 Prep											**07/21/08**
Alcohols, Glycols - 8015											
Diethyl ether	60-29-7	Organics	U	< 5.00e+03	ug/L			1.00	5.0e+03		07/21/08
Ethylene glycol	107-21-1	Organics	U	< 5.00e+03	ug/L			1.00	5.0e+03		07/21/08
NWTPH-D TPH Diesel Range (Wa) Prep											**07/10/08**
NWTPH-D TPH Diesel Range (Wa)											
Total Pet. Hydrocarbons Diesel	TPHDIESEL	LA-523-493	U	< 71.0	ug/L			1.00	71		07/21/08
Kerosene	TPHKEROSENE	LA-523-493	U	< 71.0	ug/L			1.00	71		07/21/08
SW-846 8270C Semi-Vols Prep											**07/14/08**
SW-846 8270C Semi-Vols											
4-Nitrophenol	100-02-7	LA-523-456	U	< 0.950	ug/L			1.00	0.95		07/21/08
1,4-Dichlorobenzene	106-46-7	LA-523-456	U	< 1.30	ug/L			1.00	1.3		07/21/08
Phenol	108-95-2	LA-523-456	U	< 0.480	ug/L			1.00	0.48		07/21/08
1,2,4-Trichlorobenzene	120-82-1	LA-523-456	U	< 2.10	ug/L			1.00	2.1		07/21/08
2,4-Dinitrotoluene	121-14-2	LA-523-456	U	< 0.480	ug/L			1.00	0.48		07/21/08
Pyrene	129-00-0	LA-523-456	U	< 0.480	ug/L			1.00	0.48		07/21/08
4-Chloro-3-methylphenol	59-50-7	LA-523-456	U	< 0.480	ug/L			1.00	0.48		07/21/08
N-Nitrosodi-n-dipropylamine	621-64-7	LA-523-456	U	< 0.570	ug/L			1.00	0.57		07/21/08
Acenaphthene	83-32-9	LA-523-456	U	< 2.50	ug/L			1.00	2.5		07/21/08
Pentachlorophenol	87-86-5	LA-523-456	U	< 1.40	ug/L			1.00	1.4		07/21/08
2-Chlorophenol	95-57-8	LA-523-456	U	< 0.480	ug/L			1.00	0.48		07/21/08
4-Nitroaniline	100-01-6	LA-523-456	U	< 0.950	ug/L			1.00	0.95		07/21/08
4-Bromophenylphenyl ether	101-55-3	LA-523-456	U	< 0.950	ug/L			1.00	0.95		07/21/08
2,4-Dimethylphenol	105-67-9	LA-523-456	U	< 0.900	ug/L			1.00	0.90		07/21/08
4-Chloroaniline	106-47-8	LA-523-456	U	< 0.480	ug/L			1.00	0.48		07/21/08

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

N - Spike sample recovery is outside control limits.(inorg)
U - Analyzed for but not detected above limiting criteria.
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: F08-134
Sample # W08GR02298
Client ID: B1W1B5 TRENT **Matrix:** WATER

Group #: WSCF20081371
Department: Organic
Sampled: 07/08/08
Received: 07/08/08

Test Performed	CAS #	WSCF Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Bis(2-chloro-1-methylethyl)eth	108-60-1	LA-523-456	U	< 0.950	ug/L			1.00	0.95		07/21/08
Bis(2-chloroethyl) ether	111-44-4	LA-523-456	U	< 0.860	ug/L			1.00	0.86		07/21/08
Bis(2-Chloroethoxy)methane	111-91-1	LA-523-456	U	< 0.480	ug/L			1.00	0.48		07/21/08
Bis(2-ethylhexyl) phthalate	117-81-7	LA-523-456	U	< 0.760	ug/L			1.00	0.76		07/21/08
Di-n-octylphthalate	117-84-0	LA-523-456	U	< 0.480	ug/L			1.00	0.48		07/21/08
Hexachlorobenzene	118-74-1	LA-523-456	U	< 0.480	ug/L			1.00	0.48		07/21/08
Anthracene	120-12-7	LA-523-456	U	< 0.480	ug/L			1.00	0.48		07/21/08
2,4-Dichlorophenol	120-83-2	LA-523-456	U	< 0.480	ug/L			1.00	0.48		07/21/08
Dimethyl phthalate	131-11-3	LA-523-456	U	< 0.480	ug/L			1.00	0.48		07/21/08
Dibenzofuran	132-64-9	LA-523-456	U	< 2.10	ug/L			1.00	2.1		07/21/08
Benzo(ghi)perylene	191-24-2	LA-523-456	U	< 0.480	ug/L			1.00	0.48		07/21/08
Indeno(1,2,3-cd)pyrene	193-39-5	LA-523-456	U	< 0.480	ug/L			1.00	0.48		07/21/08
Benzo(b)fluoranthene	205-99-2	LA-523-456	U	< 0.480	ug/L			1.00	0.48		07/21/08
Fluoranthene	206-44-0	LA-523-456	U	< 0.480	ug/L			1.00	0.48		07/21/08
Benzo(k)fluoranthene	207-08-9	LA-523-456	U	< 0.480	ug/L			1.00	0.48		07/21/08
Acenaphthylene	208-96-8	LA-523-456	U	< 2.20	ug/L			1.00	2.2		07/21/08
Chrysene	218-01-9	LA-523-456	U	< 0.480	ug/L			1.00	0.48		07/21/08
Benzo(a)pyrene	50-32-8	LA-523-456	U	< 0.480	ug/L			1.00	0.48		07/21/08
2,4-Dinitrophenol	51-28-5	LA-523-456	U	< 1.90	ug/L			1.00	1.9		07/21/08
Dibenz[a,h]anthracene	53-70-3	LA-523-456	U	< 0.480	ug/L			1.00	0.48		07/21/08
4,6-Dinitro-2-methylphenol	534-52-1	LA-523-456	U	< 0.950	ug/L			1.00	0.95		07/21/08
1,3-Dichlorobenzene	541-73-1	LA-523-456	U	< 1.30	ug/L			1.00	1.3		07/21/08
Benzo(a)anthracene	56-55-3	LA-523-456	U	< 0.480	ug/L			1.00	0.48		07/21/08
2,6-Dinitrotoluene	606-20-2	LA-523-456	U	< 0.480	ug/L			1.00	0.48		07/21/08
4-Chlorophenylphenyl ether	7005-72-3	LA-523-456	U	< 1.60	ug/L			1.00	1.6		07/21/08

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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-134
Sample # W08GR02298
Client ID: B1W1B5 TRENT **Matrix:** WATER

Group #: WSCF20081371
Department: Organic
Sampled: 07/08/08
Received: 07/08/08

Test Performed	CAS #	WSCF Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Hexachlorocyclopentadiene	77-47-4	LA-523-456	U	< 4.80	ug/L			1.00	4.8		07/21/08
Isophorone	78-59-1	LA-523-456	U	< 0.480	ug/L			1.00	0.48		07/21/08
Diethylphthalate	84-66-2	LA-523-456	U	< 1.80	ug/L			1.00	1.8		07/21/08
Di-n-butylphthalate	84-74-2	LA-523-456	U	< 2.20	ug/L			1.00	2.2		07/21/08
Phenanthrene	85-01-8	LA-523-456	U	< 0.520	ug/L			1.00	0.52		07/21/08
Butylbenzylphthalate	85-68-7	LA-523-456	U	< 0.570	ug/L			1.00	0.57		07/21/08
N-Nitrosodiphenylamine	86-30-6	LA-523-456	U	< 0.480	ug/L			1.00	0.48		07/21/08
Fluorene	86-73-7	LA-523-456	U	< 1.30	ug/L			1.00	1.3		07/21/08
Carbazole	86-74-8	LA-523-456	U	< 0.480	ug/L			1.00	0.48		07/21/08
Hexachlorobutadiene	87-68-3	LA-523-456	U	< 1.90	ug/L			1.00	1.9		07/21/08
2-Nitroaniline	88-74-4	LA-523-456	U	< 0.480	ug/L			1.00	0.48		07/21/08
2-Nitrophenol	88-75-5	LA-523-456	U	< 0.480	ug/L			1.00	0.48		07/21/08
Naphthalene	91-20-3	LA-523-456	U	< 2.00	ug/L			1.00	2.0		07/21/08
2-Methylnaphthalene	91-57-6	LA-523-456	U	< 2.90	ug/L			1.00	2.9		07/21/08
2-Chloronaphthalene	91-58-7	LA-523-456	U	< 3.30	ug/L			1.00	3.3		07/21/08
3,3'-Dichlorobenzidine	91-94-1	LA-523-456	U	< 0.760	ug/L			1.00	0.76		07/21/08
2-Methylphenol (cresol, o-)	95-48-7	LA-523-456	U	< 0.480	ug/L			1.00	0.48		07/21/08
1,2-Dichlorobenzene	95-50-1	LA-523-456	U	< 1.40	ug/L			1.00	1.4		07/21/08
2,4,5-Trichlorophenol	95-95-4	LA-523-456	U	< 0.620	ug/L			1.00	0.62		07/21/08
Nitrobenzene	98-95-3	LA-523-456	U	< 0.570	ug/L			1.00	0.57		07/21/08
3-Nitroaniline	99-09-2	LA-523-456	U	< 0.570	ug/L			1.00	0.57		07/21/08
3 & 4 Methylphenol Total	65794-96-9	LA-523-456	U	< 0.480	ug/L			1.00	0.48		07/21/08
Hexachloroethane	67-72-1	LA-523-456	U	< 1.30	ug/L			1.00	1.3		07/21/08
2,4,6-Trichlorophenol	88-06-2	LA-523-456	U	< 0.480	ug/L			1.00	0.48		07/21/08
Tributyl phosphate	126-73-8	LA-523-456	U	< 0.480	ug/L			1.00	0.48		07/21/08

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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-134
Sample # W08GR02298
Client ID: B1W1B5 TRENT **Matrix:** WATER

Group #: WSCF20081371
Department: Organic
Sampled: 07/08/08
Received: 07/08/08

Test Performed	CAS #	WSCF Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
VOA Ground Water Protection											
1,1-Dichloroethene	75-35-4	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
Trichloroethene	79-01-6	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
Benzene	71-43-2	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
Toluene	108-88-3	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
Chlorobenzene	108-90-7	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
1,1-Dichloroethane	75-34-3	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
Ethylbenzene	100-41-4	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
Styrene	100-42-5	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
cis-1,3-Dichloropropene	10061-01-5	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
trans-1,3-Dichloropropene	10061-02-6	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
1,2-Dichloroethane	107-06-2	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
4-Methyl-2-Pentanone	108-10-1	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
Dibromochloromethane	124-48-1	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
Tetrachloroethene	127-18-4	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
Xylenes (total)	1330-20-7	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
1,2-Dichloroethene(Total)	540-59-0	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
Carbon tetrachloride	56-23-5	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
2-Hexanone	591-78-6	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
Acetone	67-64-1	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
Chloroform	67-66-3	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
1,1,1-Trichloroethane	71-55-6	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
Bromomethane	74-83-9	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
1,1,2,2-Tetrachloroethane	79-34-5	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
Chloromethane	74-87-3	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08

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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-134
Sample # W08GR02298
Client ID: B1W1B5 TRENT **Matrix:** WATER

Group #: WSCF20081371
Department: Organic
Sampled: 07/08/08
Received: 07/08/08

Test Performed	CAS #	WSCF Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Chloroethane	75-00-3	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
Vinyl chloride	75-01-4	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
Methylenechloride	75-09-2	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
Carbon disulfide	75-15-0	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
Bromoform	75-25-2	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
Bromodichloromethane	75-27-4	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
1,2-Dichloropropane	78-87-5	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
2-Butanone	78-93-3	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
1,1,2-Trichloroethane	79-00-5	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
1-Butanol	71-36-3	LA-523-455	U	< 100	ug/L			1.00	1.0e+02		07/18/08
Trichloromonofluoromethane	75-69-4	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
n-Butylbenzene	104-51-8	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
trans-1,2-Dichloroethylene	156-60-5	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08
cis-1,2-Dichloroethylene	156-59-2	LA-523-455	U	< 1.00	ug/L			1.00	1.0		07/18/08

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WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20081371
Matrix: WATER
Test: Alcohols, Glycols - 8015

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

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR02298											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	2-Bromoethanol	540-51-2	17600		RPD			0.000	25.000		07/21/08
DUP	Diethyl ether	60-29-7	<5000		RPD			n/a	25.000	U	07/21/08
DUP	Ethylene glycol	107-21-1	<5000		RPD			n/a	25.000	U	07/21/08
MS	2-Bromoethanol	540-51-2	17500	99.432	% Recov	70.000	125.000				07/21/08
MS	Diethyl ether	60-29-7	6100	85.915	% Recov	75.000	125.000				07/21/08
MS	Ethylene glycol	107-21-1	10600	96.364	% Recov	75.000	125.000				07/21/08
MSD	2-Bromoethanol	540-51-2	16700	94.886	% Recov	70.000	125.000				07/21/08
MSD	Diethyl ether	60-29-7	6900	97.183	% Recov	75.000	125.000				07/21/08
MSD	Ethylene glycol	107-21-1	10500	95.455	% Recov	75.000	125.000				07/21/08
SPK-RPD	2-Bromoethanol	540-51-2	94.886		RPD			4.679	20.000		07/21/08
SPK-RPD	Diethyl ether	60-29-7	97.183		RPD			12.308	20.000		07/21/08
SPK-RPD	Ethylene glycol	107-21-1	95.455		RPD			0.948	20.000		07/21/08
BATCH QC											
BLANK	2-Bromoethanol	540-51-2	18100	102.841	% Recov	75.000	125.000				07/21/08
BLANK	Diethyl ether	60-29-7	<5000	n/a	ug/L	0.000	10.000			U	07/21/08
BLANK	Ethylene glycol	107-21-1	<5000	n/a	ug/L	0.000	5.000			U	07/21/08
LCS	2-Bromoethanol	540-51-2	16900	96.023	% Recov	70.000	130.000				07/21/08
LCS	Diethyl ether	60-29-7	7500	105.634	% Recov	70.000	130.000				07/21/08
LCS	Ethylene glycol	107-21-1	8900	80.909	% Recov	70.000	130.000				07/21/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20081371
Matrix: WATER
Test: SW-846 8270C Semi-Vols

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

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR02298											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	2-Fluorophenol(Surr)	367-12-4	15.169	79.600	% Recov	50.000	110.000				07/21/08
SURR	2-Fluorobiphenyl(Surr)	321-60-8	17.368	91.200	% Recov	58.000	109.000				07/21/08
SURR	Nitrobenzene-d5(Surr)	4165-60-0	17.088	89.700	% Recov	60.000	118.000				07/21/08
SURR	Phenol-d5(Surr)	4165-62-2	16.446	86.300	% Recov	59.000	116.000				07/21/08
SURR	2,4,6-Tribromophenol(Surr)	118-79-6	16.604	87.200	% Recov	60.000	120.000				07/21/08
SURR	Terphenyl-d14(Surr)	98904-43-9	20.011	105.000	% Recov	60.000	120.000				07/21/08
Lab ID: W08P003413											
BATCH QC ASSOCIATED WITH SAMPLE											
MS	1,2,4-Trichlorobenzene	120-82-1	22.039	99.200	% Recov	50.000	120.000				07/21/08
MS	1,4-Dichlorobenzene	106-46-7	21.802	98.100	% Recov	41.000	113.000				07/21/08
MS	2,4-Dinitrotoluene	121-14-2	20.514	92.300	% Recov	65.000	109.000				07/21/08
MS	2-Fluorophenol(Surr)	367-12-4	17.246	77.600	% Recov	50.000	110.000				07/21/08
MS	Acenaphthene	83-32-9	22.010	99.000	% Recov	62.000	112.000				07/21/08
MS	4-Chloro-3-methylphenol	59-50-7	33.101	99.300	% Recov	59.000	115.000				07/21/08
MS	2-Chlorophenol	95-57-8	30.374	91.100	% Recov	69.000	111.000				07/21/08
MS	N-Nitrosodi-n-dipropylamine	621-64-7	21.537	96.900	% Recov	69.000	115.000				07/21/08
MS	2-Fluorobiphenyl(Surr)	321-60-8	21.861	98.400	% Recov	58.000	109.000				07/21/08
MS	Phenol	108-95-2	27.406	82.200	% Recov	59.000	115.000				07/21/08
MS	Nitrobenzene-d5(Surr)	4165-60-0	22.329	100.000	% Recov	60.000	118.000				07/21/08
MS	4-Nitrophenol	100-02-7	28.955	86.900	% Recov	32.000	130.000				07/21/08
MS	Pentachlorophenol	87-86-5	30.250	90.800	% Recov	51.000	121.000				07/21/08
MS	Phenol-d5(Surr)	4165-62-2	20.957	94.300	% Recov	59.000	116.000				07/21/08
MS	Pyrene	129-00-0	24.024	108.000	% Recov	58.000	116.000				07/21/08
MS	2,4,6-Tribromophenol(Surr)	118-79-6	21.059	94.800	% Recov	60.000	120.000				07/21/08
MS	Terphenyl-d14(Surr)	98904-43-9	24.189	109.000	% Recov	60.000	120.000				07/21/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20081371
Matrix: WATER
Test: SW-846 8270C Semi-Vols

Sample Date: 07/10/08
Receive Date:07/10/08

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	21.050	94.700	% Recov	50.000	120.000				07/21/08
MSD	1,4-Dichlorobenzene	106-46-7	21.032	94.600	% Recov	41.000	113.000				07/21/08
MSD	2,4-Dinitrotoluene	121-14-2	19.612	88.300	% Recov	65.000	109.000				07/21/08
MSD	2-Fluorophenol(Surr)	367-12-4	14.876	66.900	% Recov	50.000	110.000				07/21/08
MSD	Acenaphthene	83-32-9	21.752	97.90Q	% Recov	62.000	112.000				07/21/08
MSD	4-Chloro-3-methylphenol	59-50-7	31.078	93.200	% Recov	59.000	115.000				07/21/08
MSD	2-Chlorophenol	95-57-8	29.390	88.200	% Recov	69.000	111.000				07/21/08
MSD	N-Nitrosodi-n-dipropylamine	621-64-7	21.233	95.500	% Recov	69.000	115.000				07/21/08
MSD	2-Fluorobiphenyl(Surr)	321-60-8	21.823	98.200	% Recov	58.000	109.000				07/21/08
MSD	Phenol	108-95-2	26.436	79.300	% Recov	59.000	115.000				07/21/08
MSD	Nitrobenzene-d5(Surr)	4165-60-0	21.574	97.100	% Recov	60.000	118.000				07/21/08
MSD	4-Nitrophenol	100-02-7	28.723	86.200	% Recov	32.000	130.000				07/21/08
MSD	Pentachlorophenol	87-86-5	29.578	88.700	% Recov	51.000	121.000				07/21/08
MSD	Phenol-d5(Surr)	4165-62-2	19.798	89.100	% Recov	59.000	116.000				07/21/08
MSD	Pyrene	129-00-0	24.057	108.000	% Recov	58.000	116.000				07/21/08
MSD	2,4,6-Tribromophenol(Surr)	118-79-6	20.372	91.700	% Recov	60.000	120.000				07/21/08
MSD	Terphenyl-d14(Surr)	98904-43-9	24.067	108.000	% Recov	60.000	120.000				07/21/08
SPK-RPD	1,2,4-Trichlorobenzene	120-82-1	94.700		RPD			4.642	25.000		07/21/08
SPK-RPD	1,4-Dichlorobenzene	106-46-7	94.600		RPD			3.633	25.000		07/21/08
SPK-RPD	2,4-Dinitrotoluene	121-14-2	88.300		RPD			4.430	25.000		07/21/08
SPK-RPD	2-Fluorophenol(Surr)	367-12-4	66.900		RPD			14.810	25.000		07/21/08
SPK-RPD	Acenaphthene	83-32-9	97.900		RPD			1.117	25.000		07/21/08
SPK-RPD	4-Chloro-3-methylphenol	59-50-7	93.200		RPD			6.338	25.000		07/21/08
SPK-RPD	2-Chlorophenol	95-57-8	88.200		RPD			3.235	25.000		07/21/08
SPK-RPD	N-Nitrosodi-n-dipropylamine	621-64-7	95.500		RPD			1.455	25.000		07/21/08
SPK-RPD	2-Fluorobiphenyl(Surr)	321-60-8	98.200		RPD			0.203	25.000		07/21/08
SPK-RPD	Phenol	108-95-2	79.300		RPD			3.591	16.000		07/21/08
SPK-RPD	Nitrobenzene-d5(Surr)	4165-60-0	97.100		RPD			2.943	25.000		07/21/08
SPK-RPD	4-Nitrophenol	100-02-7	86.200		RPD			0.809	25.000		07/21/08
SPK-RPD	Pentachlorophenol	87-86-5	88.700		RPD			2.340	25.000		07/21/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20081371
Matrix: WATER
Test: SW-846 8270C Semi-Vols

Sample Date: 07/10/08
Receive Date:07/10/08

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	89.100		RPD			5.671	25.000		07/21/08
SPK-RPD	Pyrene	129-00-0	108.000		RPD			0.000	25.000		07/21/08
SPK-RPD	2,4,6-Tribromophenol(Surr)	118-79-6	91.700		RPD			3.324	25.000		07/21/08
SPK-RPD	Terphenyl-d14(Surr)	98904-43-9	108.000		RPD			0.922	25.000		07/21/08

BATCH QC

BLANK	1,2-Dichlorobenzene	95-50-1	< 1.5	n/a	ug/L					U	07/21/08
BLANK	1,2,4-Trichlorobenzene	120-82-1	< 2.2	n/a	ug/L					U	07/21/08
BLANK	1,3-Dichlorobenzene	541-73-1	< 1.3	n/a	ug/L					U	07/21/08
BLANK	1,4-Dichlorobenzene	106-46-7	< 1.4	n/a	ug/L					U	07/21/08
BLANK	2,4-Dichlorophenol	120-83-2	< 0.50	n/a	ug/L					U	07/21/08
BLANK	2,4-Dinitrotoluene	121-14-2	< 0.50	n/a	ug/L					U	07/21/08
BLANK	2,4,5-Trichlorophenol	95-95-4	< 0.65	n/a	ug/L					U	07/21/08
BLANK	2,4,6-Trichlorophenol	88-06-2	< 0.50	n/a	ug/L					U	07/21/08
BLANK	2,4-Dimethylphenol	105-67-9	< 0.95	n/a	ug/L					U	07/21/08
BLANK	2,6-Dinitrotoluene	606-20-2	< 0.50	n/a	ug/L					U	07/21/08
BLANK	2-Chloronaphthalene	91-58-7	< 3.5	n/a	ug/L					U	07/21/08
BLANK	2-Fluorophenol(Surr)	367-12-4	17.902	89.500	% Recov	50.000	110.000				07/21/08
BLANK	2-Methylnaphthalene	91-57-6	< 3.0	n/a	ug/L					U	07/21/08
BLANK	2-Methylphenol (cresol, o-)	95-48-7	< 0.50	n/a	ug/L					U	07/21/08
BLANK	2-Nitroaniline	88-74-4	< 0.50	n/a	ug/L					U	07/21/08
BLANK	2-Nitrophenol	88-75-5	< 0.50	n/a	ug/L					U	07/21/08
BLANK	3 & 4 Methylphenol Total	65794-96-9	< 0.50	n/a	ug/L	0.000	5.000			U	07/21/08
BLANK	3-Nitroaniline	99-09-2	< 0.60	n/a	ug/L					U	07/21/08
BLANK	4,6-Dinitro-2-methylphenol	534-52-1	< 1.0	n/a	ug/L					U	07/21/08
BLANK	4-Bromophenylphenyl ether	101-55-3	< 1.0	n/a	ug/L					U	07/21/08
BLANK	4-Chlorophenylphenyl ether	7005-72-3	< 1.7	n/a	ug/L					U	07/21/08
BLANK	Acenaphthene	83-32-9	< 2.6	n/a	ug/L					U	07/21/08
BLANK	Acenaphthylene	208-96-8	< 2.3	n/a	ug/L					U	07/21/08
BLANK	Anthracene	120-12-7	< 0.50	n/a	ug/L					U	07/21/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20081371
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	Bis(2-chloroethyl) ether	111-44-4	< 0.90	n/a	ug/L					U	07/21/08
BLANK	Benzo(a)anthracene	56-55-3	< 0.50	n/a	ug/L					U	07/21/08
BLANK	Benzo(b)fluoranthene	205-99-2	< 0.50	n/a	ug/L					U	07/21/08
BLANK	Benzo(ghi)perylene	191-24-2	< 0.50	n/a	ug/L					U	07/21/08
BLANK	Benzo(a)pyrene	50-32-8	< 0.50	n/a	ug/L					U	07/21/08
BLANK	Bis(2-Chloroethoxy)methane	111-91-1	< 0.50	n/a	ug/L					U	07/21/08
BLANK	Bis(2-ethylhexyl) phthalate	117-81-7	< 0.80	n/a	ug/L					U	07/21/08
BLANK	Bis(2-chloro-1-methylethyl)eth	108-60-1	< 1.0	n/a	ug/L	0.000	10.000			U	07/21/08
BLANK	Benzo(k)fluoranthene	207-08-9	< 0.50	n/a	ug/L					U	07/21/08
BLANK	Butylbenzylphthalate	85-68-7	< 0.60	n/a	ug/L					U	07/21/08
BLANK	Carbazole	86-74-8	< 0.50	n/a	ug/L					U	07/21/08
BLANK	4-Chloroaniline	106-47-8	< 0.50	n/a	ug/L					U	07/21/08
BLANK	4-Chloro-3-methylphenol	59-50-7	< 0.50	n/a	ug/L					U	07/21/08
BLANK	2-Chlorophenol	95-57-8	< 0.50	n/a	ug/L					U	07/21/08
BLANK	Chrysene	218-01-9	< 0.50	n/a	ug/L					U	07/21/08
BLANK	3,3'-Dichlorobenzidine	91-94-1	< 0.80	n/a	ug/L					U	07/21/08
BLANK	Dibenz[a,h]anthracene	53-70-3	< 0.50	n/a	ug/L					U	07/21/08
BLANK	Dibenzofuran	132-64-9	< 2.2	n/a	ug/L					U	07/21/08
BLANK	Di-n-butylphthalate	84-74-2	< 2.3	n/a	ug/L					U	07/21/08
BLANK	Diethylphthalate	84-66-2	< 1.9	n/a	ug/L					U	07/21/08
BLANK	Dimethyl phthalate	131-11-3	< 0.50	n/a	ug/L					U	07/21/08
BLANK	2,4-Dinitrophenol	51-28-5	< 2.0	n/a	ug/L					U	07/21/08
BLANK	Di-n-octylphthalate	117-84-0	< 0.50	n/a	ug/L					U	07/21/08
BLANK	N-Nitrosodi-n-dipropylamine	621-64-7	< 0.60	n/a	ug/L					U	07/21/08
BLANK	2-Fluorobiphenyl(Surr)	321-60-8	19.725	98.600	% Recov	58.000	109.000				07/21/08
BLANK	Fluorene	86-73-7	< 1.4	n/a	ug/L					U	07/21/08
BLANK	Fluoranthene	206-44-0	< 0.50	n/a	ug/L					U	07/21/08
BLANK	Hexachlorobenzene	118-74-1	< 0.50	n/a	ug/L					U	07/21/08
BLANK	Hexachlorobutadiene	87-68-3	< 2.0	n/a	ug/L					U	07/21/08
BLANK	Hexachlorocyclopentadiene	77-47-4	< 5.0	n/a	ug/L					U	07/21/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20081371
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	Hexachloroethane	67-72-1	< 1.4	n/a	ug/L					U	07/21/08
BLANK	Indeno(1,2,3-cd)pyrene	193-39-5	< 0.50	n/a	ug/L					U	07/21/08
BLANK	Isophorone	78-59-1	< 0.50	n/a	ug/L					U	07/21/08
BLANK	Phenol	108-95-2	< 0.50	n/a	ug/L					U	07/21/08
BLANK	Naphthalene	91-20-3	< 2.1	n/a	ug/L					U	07/21/08
BLANK	Nitrobenzene-d5(Surr)	4165-60-0	19.651	98.300	% Recov	60.000	118.000				07/21/08
BLANK	Nitrobenzene	98-95-3	< 0.60	n/a	ug/L					U	07/21/08
BLANK	4-Nitrophenol	100-02-7	< 1.0	n/a	ug/L					U	07/21/08
BLANK	4-Nitroaniline	100-01-6	< 1.0	n/a	ug/L					U	07/21/08
BLANK	N-Nitrosodiphenylamine	86-30-6	< 0.50	n/a	ug/L					U	07/21/08
BLANK	Pentachlorophenol	87-86-5	< 1.5	n/a	ug/L					U	07/21/08
BLANK	Phenanthrene	85-01-8	< 0.55	n/a	ug/L					U	07/21/08
BLANK	Phenol-d5(Surr)	4165-62-2	18.838	94.200	% Recov	59.000	116.000				07/21/08
BLANK	Pyrene	129-00-0	< 0.50	n/a	ug/L					U	07/21/08
BLANK	Tributyl phosphate	126-73-8	< 0.50	n/a	ug/L					U	07/21/08
BLANK	2,4,6-Tribromophenol(Surr)	118-79-6	17.552	87.800	% Recov	60.000	120.000				07/21/08
BLANK	Terphenyl-d14(Surr)	98904-43-9	22.237	111.000	% Recov	60.000	120.000				07/21/08
LCS	1,2,4-Trichlorobenzene	120-82-1	19.154	95.800	% Recov	46.000	107.000				07/21/08
LCS	1,4-Dichlorobenzene	106-46-7	18.815	94.100	% Recov	42.000	111.000				07/21/08
LCS	2,4-Dinitrotoluene	121-14-2	18.183	90.900	% Recov	59.000	106.000				07/21/08
LCS	2-Fluorophenol(Surr)	367-12-4	15.580	77.900	% Recov	50.000	110.000				07/21/08
LCS	Acenaphthene	83-32-9	19.490	97.400	% Recov	61.000	116.000				07/21/08
LCS	4-Chloro-3-methylphenol	59-50-7	28.483	94.900	% Recov	61.000	106.000				07/21/08
LCS	2-Chlorophenol	95-57-8	27.294	91.000	% Recov	66.000	106.000				07/21/08
LCS	N-Nitrosodi-n-dipropylamine	621-64-7	18.842	94.200	% Recov	71.000	114.000				07/21/08
LCS	2-Fluorobiphenyl(Surr)	321-60-8	19.913	99.600	% Recov	58.000	109.000				07/21/08
LCS	Phenol	108-95-2	24.129	80.400	% Recov	67.000	105.000				07/21/08
LCS	Nitrobenzene-d5(Surr)	4165-60-0	19.612	98.100	% Recov	60.000	118.000				07/21/08
LCS	4-Nitrophenol	100-02-7	26.913	89.700	% Recov	32.000	118.000				07/21/08
LCS	Pentachlorophenol	87-86-5	26.463	88.200	% Recov	62.000	114.000				07/21/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Organic**

SDG Number: WSCF20081371
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	Phenol-d5(Surr)	4165-62-2	18.431	92.200	% Recov	59.000	116.000				07/21/08
LCS	Pyrene	129-00-0	21.176	106.000	% Recov	66.000	118.000				07/21/08
LCS	2,4,6-Tribromophenol(Surr)	118-79-6	19.486	97.400	% Recov	60.000	120.000				07/21/08
LCS	Terphenyl-d14(Surr)	98904-43-9	21.782	109.000	% Recov	60.000	120.000				07/21/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20081371
Matrix: WATER
Test: NWTPH-D TPH Diesel Range (Wa)

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

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR02298											
BATCH QC ASSOCIATED WITH SAMPLE											
MS	ortho-Terphenyl Surr	84-15-1	457.71	96.100	% Recov	70.000	130.000				07/21/08
MS	Total Pet. Hydrocarbons Diesel	TPHDIESEL	2508.1	105.000	% Recov	75.000	125.000				07/21/08
MSD	ortho-Terphenyl Surr	84-15-1	502.96	101.000	% Recov	70.000	130.000				07/21/08
MSD	Total Pet. Hydrocarbons Diesel	TPHDIESEL	2831.8	113.000	% Recov	75.000	125.000				07/21/08
SURR	ortho-Terphenyl Surr	84-15-1	446.65	93.800	% Recov	70.000	130.000				07/21/08
Lab ID: W08P003344											
BATCH QC ASSOCIATED WITH SAMPLE											
MS	ortho-Terphenyl Surr	84-15-1	487.53	102.000	% Recov	70.000	130.000				07/21/08
MS	Total Pet. Hydrocarbons Diesel	TPHDIESEL	2566.0	108.000	% Recov	75.000	125.000				07/21/08
MSD	ortho-Terphenyl Surr	84-15-1	518.25	109.000	% Recov	70.000	130.000				07/21/08
MSD	Total Pet. Hydrocarbons Diesel	TPHDIESEL	2722.7	114.000	% Recov	75.000	125.000				07/21/08
SPK-RPD	ortho-Terphenyl Surr	84-15-1	109.000		RPD			6.635	20.000		07/21/08
SPK-RPD	Total Pet. Hydrocarbons Diesel	TPHDIESEL	114.000		RPD			5.405	20.000		07/21/08
BATCH QC											
BLANK	Kerosene	TPHKEROSENE	< 75	n/a	ug/L					U	07/21/08
BLANK	ortho-Terphenyl Surr	84-15-1	448.16	89.600	% Recov	70.000	130.000				07/21/08
BLANK	Total Pet. Hydrocarbons Diesel	TPHDIESEL	< 75	n/a	ug/L					U	07/21/08
LCS	ortho-Terphenyl Surr	84-15-1	513.78	103.000	% Recov	70.000	130.000				07/21/08
LCS	Total Pet. Hydrocarbons Diesel	TPHDIESEL	2644.9	106.000	% Recov	80.000	120.000				07/21/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20081371
Matrix: WATER
Test: VOA Ground Water Protection

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

Lab ID: W08GR02298
BATCH QC ASSOCIATED WITH SAMPLE

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
MS	1,1-Dichloroethene	75-35-4	26.350	105.000	% Recov	63.000	117.000				07/18/08
MS	Benzene	71-43-2	26.090	104.000	% Recov	75.000	129.000				07/18/08
MS	4-Bromofluorobenzene(Surr)	460-00-4	51.770	104.000	% Recov	75.000	125.000				07/18/08
MS	Chlorobenzene	108-90-7	25.190	101.000	% Recov	79.000	119.000				07/18/08
MS	1,2-Dichloroethane-d4(Surr)	17060-07-0	57.410	115.000	% Recov	75.000	125.000				07/18/08
MS	Toluene-d8(Surr)	2037-26-5	49.960	99.900	% Recov	75.000	125.000				07/18/08
MS	Toluene	108-88-3	26.730	107.000	% Recov	76.000	120.000				07/18/08
MS	Trichloroethene	79-01-6	22.940	91.800	% Recov	73.000	123.000				07/18/08
MSD	1,1-Dichloroethene	75-35-4	26.000	104.000	% Recov	63.000	117.000				07/22/08
MSD	Benzene	71-43-2	24.940	99.800	% Recov	75.000	129.000				07/22/08
MSD	4-Bromofluorobenzene(Surr)	460-00-4	50.720	101.000	% Recov	75.000	125.000				07/22/08
MSD	Chlorobenzene	108-90-7	25.610	102.000	% Recov	79.000	119.000				07/22/08
MSD	1,2-Dichloroethane-d4(Surr)	17060-07-0	56.200	112.000	% Recov	75.000	125.000				07/22/08
MSD	Toluene-d8(Surr)	2037-26-5	49.630	99.300	% Recov	75.000	125.000				07/22/08
MSD	Toluene	108-88-3	25.510	102.000	% Recov	76.000	120.000				07/22/08
MSD	Trichloroethene	79-01-6	22.450	89.800	% Recov	73.000	123.000				07/22/08
SPK-RPD	1,1-Dichloroethene	75-35-4	104.000		RPD			0.957	20.000		07/22/08
SPK-RPD	Benzene	71-43-2	99.800		RPD			4.122	20.000		07/22/08
SPK-RPD	4-Bromofluorobenzene(Surr)	460-00-4	101.000		RPD			2.927	20.000		07/22/08
SPK-RPD	Chlorobenzene	108-90-7	102.000		RPD			0.985	20.000		07/22/08
SPK-RPD	1,2-Dichloroethane-d4(Surr)	17060-07-0	112.000		RPD			2.643	20.000		07/22/08
SPK-RPD	Toluene-d8(Surr)	2037-26-5	99.300		RPD			0.602	20.000		07/22/08
SPK-RPD	Toluene	108-88-3	102.000		RPD			4.785	20.000		07/22/08
SPK-RPD	Trichloroethene	79-01-6	89.800		RPD			2.203	20.000		07/22/08
SURR	4-Bromofluorobenzene(Surr)	460-00-4	51.380	103.000	% Recov	75.000	125.000				07/18/08
SURR	1,2-Dichloroethane-d4(Surr)	17060-07-0	56.850	114.000	% Recov	75.000	125.000				07/18/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20081371
Matrix: WATER
Test: VOA Ground Water Protection

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

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
SURR	Toluene-d8(Surr)	2037-26-5	50.790	102.000	% Recov	75.000	125.000				07/18/08
BATCH QC											
BLANK	1,1-Dichloroethane	75-34-3	< 1.0	n/a	ug/L					U	07/18/08
BLANK	1,1,1-Trichloroethane	71-55-6	< 1.0	n/a	ug/L					U	07/18/08
BLANK	1,1,2-Trichloroethane	79-00-5	< 1.0	n/a	ug/L					U	07/18/08
BLANK	1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	n/a	ug/L	0.000	5.000			U	07/18/08
BLANK	1,1-Dichloroethene	75-35-4	< 1.0	n/a	ug/L					U	07/18/08
BLANK	1,2-Dichloroethane	107-06-2	< 1.0	n/a	ug/L					U	07/18/08
BLANK	1,2-Dichloroethene(Total)	540-59-0	< 1.0	n/a	ug/L					U	07/18/08
BLANK	1-Butanol	71-36-3	< 100	n/a	ug/L					U	07/18/08
BLANK	2-Hexanone	591-78-6	< 1.0	n/a	ug/L					U	07/18/08
BLANK	4-Methyl-2-Pentanone	108-10-1	< 1.0	n/a	ug/L					U	07/18/08
BLANK	Acetone	67-64-1	< 1.0	n/a	ug/L					U	07/18/08
BLANK	Bromodichloromethane	75-27-4	< 1.0	n/a	ug/L					U	07/18/08
BLANK	Benzene	71-43-2	< 1.0	n/a	ug/L					U	07/18/08
BLANK	4-Bromofluorobenzene(Surr)	460-00-4	51.790	104.000	% Recov	75.000	125.000				07/18/08
BLANK	Bromoform	75-25-2	< 1.0	n/a	ug/L					U	07/18/08
BLANK	n-Butylbenzene	104-51-8	< 1.0	n/a	ug/L					U	07/18/08
BLANK	Carbon disulfide	75-15-0	< 1.0	n/a	ug/L					U	07/18/08
BLANK	Carbon tetrachloride	56-23-5	< 1.0	n/a	ug/L					U	07/18/08
BLANK	Dibromochloromethane	124-48-1	< 1.0	n/a	ug/L					U	07/18/08
BLANK	Chloroform	67-66-3	< 1.0	n/a	ug/L					U	07/18/08
BLANK	Chlorobenzene	108-90-7	< 1.0	n/a	ug/L					U	07/18/08
BLANK	cis-1,2-Dichloroethylene	156-59-2	< 1.0	n/a	ug/L					U	07/18/08
BLANK	cis-1,3-Dichloropropene	10061-01-5	< 1.0	n/a	ug/L					U	07/18/08
BLANK	Chloroethane	75-00-3	< 1.0	n/a	ug/L					U	07/18/08
BLANK	1,2-Dichloroethane-d4(Surr)	17060-07-0	56.440	113.000	% Recov	75.000	125.000				07/18/08
BLANK	trans-1,2-Dichloroethylene	156-60-5	< 1.0	n/a	ug/L					U	07/18/08
BLANK	1,2-Dichloropropane	78-87-5	< 1.0	n/a	ug/L					U	07/18/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20081371
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	Ethylbenzene	100-41-4	< 1.0	n/a	ug/L					U	07/18/08
BLANK	Bromomethane	74-83-9	< 1.0	n/a	ug/L					U	07/18/08
BLANK	Chloromethane	74-87-3	< 1.0	n/a	ug/L					U	07/18/08
BLANK	2-Butanone	78-93-3	< 1.0	n/a	ug/L					U	07/18/08
BLANK	Methylenechloride	75-09-2	< 1.0	n/a	ug/L					U	07/18/08
BLANK	Tetrachloroethene	127-18-4	< 1.0	n/a	ug/L					U	07/18/08
BLANK	Styrene	100-42-5	< 1.0	n/a	ug/L					U	07/18/08
BLANK	Xylenes (total)	1330-20-7	< 1.0	n/a	ug/L	0.000	5.000			U	07/18/08
BLANK	Toluene-d8(Surr)	2037-26-5	49.770	99.500	% Recov	75.000	125.000				07/18/08
BLANK	Toluene	108-88-3	< 1.0	n/a	ug/L					U	07/18/08
BLANK	trans-1,3-Dichloropropene	10061-02-6	< 1.0	n/a	ug/L					U	07/18/08
BLANK	Trichloromonofluoromethane	75-69-4	< 1.0	n/a	ug/L	0.000	5.000			U	07/18/08
BLANK	Trichloroethene	79-01-6	< 1.0	n/a	ug/L					U	07/18/08
BLANK	Vinyl chloride	75-01-4	< 1.0	n/a	ug/L					U	07/18/08
LCS	1,1-Dichloroethene	75-35-4	27.500	110.000	% Recov	75.000	125.000				07/18/08
LCS	Benzene	71-43-2	25.700	103.000	% Recov	75.000	125.000				07/18/08
LCS	4-Bromofluorobenzene(Surr)	460-00-4	51.720	103.000	% Recov	75.000	125.000				07/18/08
LCS	Chlorobenzene	108-90-7	26.130	105.000	% Recov	75.000	125.000				07/18/08
LCS	1,2-Dichloroethane-d4(Surr)	17060-07-0	54.460	109.000	% Recov	75.000	125.000				07/18/08
LCS	Toluene-d8(Surr)	2037-26-5	50.430	101.000	% Recov	75.000	125.000				07/18/08
LCS	Toluene	108-88-3	25.890	104.000	% Recov	75.000	125.000				07/18/08
LCS	Trichloroethene	79-01-6	21.850	87.400	% Recov	75.000	125.000				07/18/08

WSCF
ANALYTICAL COMMENT REPORT

Attention: Steve Trent
Project Number F08-134

Group #: WSCF20081371
Department: Organic

Sample #	Client ID	Lab Area	Test	Comment
		VALGROUP		Tc99 spike failure is due to high sample concentration. Spike criterion does not apply. lmh SVOA: Low phenolic surrogate recoveries are matrix effects for a sample unrelated to these samples. All surrogate recoveries for these samples meet QC control limits. cgc ICP-AES: No zirconium present in the LCS and spike standards. Sodium, calcium, silicon, and phosphorus sample results exceed spiking level by a factor of 4 so spike recoveries are not valid. High standard used to ensure sodium and phosphorus linearity because sample results are greater than the calibration standard. Low lithium spike recoveries; "N" flag.

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

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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-134
Sample # W08GR02298
Client ID: B1W1B5 TRENT **Matrix:** WATER

Group #: WSCF20081371
Department: Radiochemistry
Sampled: 07/08/08
Received: 07/08/08

Test Performed	CAS #	WSCF Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Americium by AEA											
Americium-241	14596-10-2	LA-508-471	U	0.120	pCi/L	+-0.0912	pCi/L	1.00	0.13		08/05/08
Am-243 tracer by AEA	AM243	LA-508-471		10.0	pCi/L			1.00	0.058		08/05/08
Gamma Energy Analysis-grd H2O											
Antimony-125	14234-35-6	LA-508-481	U	2.91	pCi/L	+-12.4	pCi/L	1.00	21		07/10/08
Cobalt-60	10198-40-0	LA-508-481	U	-0.354	pCi/L	+-3.54	pCi/L	1.00	6.6		07/10/08
Cesium-137	10045-97-3	LA-508-481	U	5.00	pCi/L	+-6.02	pCi/L	1.00	7.7		07/10/08
Europium-152	14683-23-9	LA-508-481	U	-5.80	pCi/L	+-13.1	pCi/L	1.00	22		07/10/08
Europium-154	15585-10-1	LA-508-481	U	-1.18	pCi/L	+-11.2	pCi/L	1.00	20		07/10/08
Europium-155	14391-16-3	LA-508-481	U	1.36	pCi/L	+-13.6	pCi/L	1.00	24		07/10/08
Gross Alpha/Gross Beta (AB32)											
Gross alpha	12587-46-1	LA-508-415	U	0.200	pCi/L	+-1.55	pCi/L	1.00	3.0		07/14/08
Gross beta	12587-47-2	LA-508-415	U	5.80	pCi/L	+-4.12	pCi/L	1.00	6.5		07/14/08
Plutonium Isotopics by AEA											
Plutonium-238	13981-16-3	LA-508-471	U	0.0130	pCi/L	+-0.0569	pCi/L	1.00	0.10		08/04/08
Pu-239/240 by AEA	PU-239/240	LA-508-471		0.0310	pCi/L	+-0.0248	pCi/L	1.00	0.012		08/04/08
Pu-242 tracer by AEA	PU242	LA-508-471		16.0	pCi/L			1.00	0.041		08/04/08
Strontium 89/90											
Strontium-89/90	SR-RAD	LA-508-415	U	-0.870	pCi/L	+-2.12	pCi/L	1.00	0.99		07/15/08
Sr-85 Tracer by Beta Counting	SR85	LA-508-415		85.6	Percent			1.00	0.0		07/15/08
TC99 by ICP-200.8 MS Prep											**07/10/08**
TC99 by ICP-200.8 MS											
Technetium by ICP-MS	14133-76-7	LA-505-412	U	< 1.00e-03	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	U	-1.10	pCi/L	+-3.62	pCi/L	1.00	6.0		07/09/08

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

N - Spike sample recovery is outside control limits.(inorg)
U - Analyzed for but not detected above limiting criteria.
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: F08-134
Sample # W08GR02298
Client ID: B1W1B5 TRENT WSCF
Matrix: WATER

Group #: WSCF20081371
Department: Radiochemistry
Sampled: 07/08/08
Received: 07/08/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Tritium by Liq Sct column prep											
Tritium	10028-17-8	LA-508-421	U	-55.0	pCi/L	+-55.0	pCi/L	1.00	2.7e+02		08/07/08
Uranium Isotopics by AEA											
Uranium-233/234	U-233/234	LA-508-471		0.0690	pCi/L	+-0.0435	pCi/L	1.00	0.036		08/04/08
Uranium-235	15117-96-1	LA-508-471		0.0270	pCi/L	+-0.0251	pCi/L	1.00	0.015		08/04/08
Uranium-238	U-238	LA-508-471		0.0150	pCi/L	+-0.0177	pCi/L	1.00	0.013		08/04/08
U-232 tracer by AEA	U232	LA-508-471		10.0	pCi/L			1.00	0.065		08/04/08

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

N - Spike sample recovery is outside control limits.(inorg)
U - Analyzed for but not detected above limiting criteria.
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
TENTATIVELY IDENTIFIED PEAK REPORT

Attention: Steve Trent
Project Number F08-134 :F08-134

Group #: WSCF20081371
Department: Radiochemistry

Sample #	Client ID		Test Name	Peak Name	CAS#	RT	RQ	Result	Units
W08GR02298	B1W1B5	TRENT	Gamma Energy Analysis-grd H2O	BI-214				1.6e+02	pCi/L
W08GR02298	B1W1B5	TRENT	Gamma Energy Analysis-grd H2O	BI-214 Count Error				26	%
W08GR02298	B1W1B5	TRENT	Gamma Energy Analysis-grd H2O	PB-212				19	pCi/L
W08GR02298	B1W1B5	TRENT	Gamma Energy Analysis-grd H2O	PB-212 Count Error				47	%
W08GR02298	B1W1B5	TRENT	Gamma Energy Analysis-grd H2O	RA-226				78	pCi/L
W08GR02298	B1W1B5	TRENT	Gamma Energy Analysis-grd H2O	RA-226 Count Error				31	%

RQ=Result Qualifier

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WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20081371
Matrix: WATER
Test: Gamma Energy Analysis-grd H2O

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

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR02298											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Cobalt-60	10198-40-0	U1.431		RPD			n/a	20.000		07/10/08
DUP	Cesium-137	10045-97-3	U-0.167		RPD			n/a	20.000		07/10/08
DUP	Europium-152	14683-23-9	U4.061		RPD			n/a	20.000		07/10/08
DUP	Europium-154	15585-10-1	U7.211		RPD			n/a	20.000		07/10/08
DUP	Europium-155	14391-16-3	U-12.07		RPD			n/a	20.000		07/10/08
DUP	Antimony-125	14234-35-6	U4.285		RPD			n/a	20.000		07/10/08
BATCH QC											
BLANK	Cobalt-60	10198-40-0	U-1.803	n/a	pCi/L	-10.000	1000.000				07/10/08
BLANK	Cesium-137	10045-97-3	U-1.089	n/a	pCi/L	-10.000	1000.000				07/10/08
BLANK	Europium-152	14683-23-9	U6.509	n/a	pCi/L	-10.000	1000.000				07/10/08
BLANK	Europium-154	15585-10-1	U-2.894	n/a	pCi/L	-10.000	1000.000				07/10/08
BLANK	Europium-155	14391-16-3	U-4.544	n/a	pCi/L	-10.000	1000.000				07/10/08
BLANK	Antimony-125	14234-35-6	U-2.455	n/a	pCi/L	-10.000	1000.000				07/10/08
LCS	Cobalt-60	10198-40-0	10360	104.646	% Recov	80.000	120.000				07/10/08
LCS	Cesium-137	10045-97-3	6329	104.785	% Recov	80.000	120.000				07/10/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20081371
Matrix: WATER
Test: Gross Alpha/Gross Beta (AB32)

Sample Date: 07/09/08
Receive Date:07/09/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR02356											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Gross alpha	12587-46-1	1.4E+01		RPD			0.000	20.000		07/14/08
DUP	Gross beta	12587-47-2	2.0E+03		RPD			4.878	20.000		07/14/08
BATCH QC											
BLANK	Gross alpha	12587-46-1	U8.9E-01	n/a	pCi/L	-10.000	10.000				07/14/08
BLANK	Gross beta	12587-47-2	U-2.0	n/a	pCi/L	-10.000	10.000				07/14/08
LCS	Gross alpha	12587-46-1	154.0	99.387	% Recov	80.000	120.000				07/14/08
LCS	Gross beta	12587-47-2	473.0	105.427	% Recov	80.000	120.000				07/14/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Radiochemistry**

SDG Number: WSCF20081371
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: W08GR02298											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	Am-243 tracer by AEA	AM243	10.01	87.560	% Recov	30.000	105.000				08/05/08
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: WSCF20081371
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: W08GR02298											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	Pu-242 tracer by AEA	PU242	15.59	97.720	% 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: WSCF20081371
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: 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
Lab ID: W08GR02298											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	Sr-85 Tracer by Beta Counting	SR85	85.6	85.600	% 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: WSCF20081371
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: WSCF20081371
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: WSCF20081371
Matrix: WATER
Test: Tritium by Liq Sct column prep

Sample Date: 06/25/08
Receive Date:06/25/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR01840											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Tritium	10028-17-8	U-5.0E+01		RPD			n/a	20.000		08/07/08
MS	Tritium	10028-17-8	23850.5	92.866	% Recov	75.000	125.000				08/07/08
BATCH QC											
BLANK	Tritium	10028-17-8	U-9.7E+01	n/a	pCi/L	-10.000	1000.000				08/07/08
LCS	Tritium	10028-17-8	2760.0	81.074	% Recov	80.000	120.000				08/07/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20081371
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: W08GR02298											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	U-232 tracer by AEA	U232	10.23	88.640	% 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 F08-134

Group #: WSCF20081371
Department: Radiochemistry

Sample #	Client ID	Lab Area	Test	Comment
		VALGROUP		Tc99 spike failure is due to high sample concentration. Spike criterion does not apply. lmh SVOA: Low phenolic surrogate recoveries are matrix effects for a sample unrelated to these samples. All surrogate recoveries for these samples meet QC control limits. cgc ICP-AES: No zirconium present in the LCS and spike standards. Sodium, calcium, silicon, and phosphorus sample results exceed spiking level by a factor of 4 so spike recoveries are not valid. High standard used to ensure sodium and phosphorus linearity because sample results are greater than the calibration standard. Low lithium spike recoveries; "N" flag.

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

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M4W41-SLF-08-957

ATTACHMENT 5

SAMPLE RECEIPT INFORMATION

Consisting of 5 pages
Including cover page

Mod 0
7/9/08
VB

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

See E-Mail

ACKNOWLEDGMENT OF SAMPLES RECEIVED

Groundwater Remediation Program
Richland, WA 99354
Attn: Steve Trent

Customer Code: GPP
PO#: 123517/ES10
Group#: 20081371
Project#: F08-134
Proj Mgr: Steve Trent E6-35
Phone: 373-5869

The following samples were received from you on 07/08/08. 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	Matrix	Tests Scheduled					Sample Date
W08GR02298	B1W1B5	TRENT Water						07/08/08
			@2008	@8015GPP	@AB-32	@AEA-30	@AEA-31	
			@AEA-32	@GEA-GPP	@GPP6010	@H3-33	@IC-30	@SR89
			@SVOCGPP	@TC99-30	@TC99-MS	@TPHD-WA	@VOA-GPP	CN-02
			CR+6					

Test Acronym Description

Test Acronym	Description
@2008	ICP-200.8 MS All possible meta
@8015GPP	Alcohols, Glycols - 8015
@AB-32	Gross Alpha/Gross Beta (AB32)
@AEA-30	Plutonium Isotopics by AEA
@AEA-31	Americium by AEA
@AEA-32	Uranium Isotopics by AEA
@GEA-GPP	Gamma Energy Analysis-grd H2O
@GPP6010	ICP Metals Analysis, Grd H20 P
@H3-33	Tritium by Liq Sct column prep
@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
@TPHD-WA	NWTPH-D TPH Diesel Range (Wa)
@VOA-GPP	VOA Ground Water Protection
CN-02	Cyanide by Midi/Spectrophotom
CR+6	Hexavalent chromium

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 7N	DATA TURNAROUND
Fulton	TRENT, SJ	373-5869	WIDRIG, DL	AIR QUALITY ☐	45 Days / 45 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C5862, EB-I-002	200-BP-5 OU Charactertzation of Well 699-52-55B ("H") - QC Sampling		F08-134		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-499-1	N/A	123517ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Waste Sampling & Characterization	N/A		N/A		

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

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

SPECIAL HANDLING AND/OR STORAGE: 20081371

PRESERVATION	HCl or H2SO4 to pH <2/Cool~4C	Cool~4C	Cool~4C	HCl to pH <2/Cool~4C	HNO3 to pH <2	Cool~4C	NaOH to pH >= 12/Cool~4C	Cool~4C	HNO3 to pH <2(ULTREX)	HNO3 to pH <2
TYPE OF CONTAINER	aGs*	aGs*	aG	aG	P	aG	G/P	P	Nalgene	P
NO. OF CONTAINER(S)	4	3	4	4	1	1	1	1	1	1
VOLUME	40mL	40mL	1000mL	1000mL	500mL	500mL	250mL	~~125mL~~ 125mL	500mL	500mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS	SEE ITEM (4) IN SPECIAL INSTRUCTIONS	SEE ITEM (5) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196;	Cyanide (Total) - 335.2;	SEE ITEM (6) IN SPECIAL INSTRUCTIONS	Tc-99 by ICPMS (Technetium-99)	SEE ITEM (7) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
B1W1B5 W0898012288	WATER	7-8-08	0947	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
				803901	7129080	029911	029911	029796	028946	~~027006~~ 031390	027006	029038	029038

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
CFulton	7-8-08 1245	CA Hudson	7/8/08 1245
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ICED

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

A-6003-618(01/06)

Fluor Hanford Inc.	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F08-134-001	PAGE 2 OF 3
COLLECTOR	**COMPANY CONTACT** TRENT, SJ	**TELEPHONE NO.** 373-5869	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 7N **AIR QUALITY** ☐	**DATA TURNAROUND** **45 Days / 45 Days**
SAMPLING LOCATION C5862, EB-I-002	**PROJECT DESIGNATION** 200-BP-5 OU Characterization of Well 699-52-55B ("H") - QC Sampling		**SAF NO.** F08-134		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA** 123517ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Waste Sampling & Characterization	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)VOA - 8260B (TCL); VOA - 8260B (Add-On) {1-Butanol, Trichloromonofluoromethane, cis-1,2-Dichloroethylene, n-Butylbenzene, trans-1,2-Dichloroethylene}
(2)Alcohols, Glycols, & Ketones - 8015 {Diethyl ether, Ethylene glycol}
(3)Semi-VOA - 8270B (TCL); Semi-VOA - 8270B (Add-On) {3+4 Methylphenol (cresol, m+p), Tributyl phosphate}
(4)TPH-DieselKerosene Range - WTPH-D {Total petroleum hydrocarbons - diesel range, Total petroleum hydrocarbons - kerosene range}
(5)ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc} ICP/MS - 200.8 (Add-on) {Arsenic, Lead, Selenium, Strontium, Thallium, Uranium} ICP Metals - 6010B (TAL) {Aluminum, Calcium, Iron, Magnesium, Potassium, Sodium} ICP Metals - 6010B (Add-On) {Beryllium, Boron, Lithium, Phosphorus, Silicon} 200.8_HG - ICPMS;
(6)IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Phosphate, Sulfate}
(7)Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Gamma Spec - Add-on {Antimony-125}

A-6003-618(01/06)

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 7N	DATA TURNAROUND
Fulton	TRENT, SJ	373-5869	WIDRIG, DL	AIR QUALITY ☐	45 Days / 45 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C5862, EB-I-002	200-BP-5 OU Characterization of Well 699-S2-S5B ("H") - QC Sampling		F08-134		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-498-1	N/A	123517ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Waste Sampling & Characterization	N/A		N/A		

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	HNO3 to pH <2	HNO3 to pH <2	HNO3 to pH<2	HNO3 to pH <2	HCl to pH <2	HNO3 to pH <2	None			
TYPE OF CONTAINER	P	P	G/P	G/P	G/P	G/P	G			
NO. OF CONTAINER(S)	1	1	1	1	2	1	1			
VOLUME	1000mL	1000mL	1000mL	1L	1L	1000mL	250mL			
SAMPLE ANALYSIS	Gross Alpha; Gross Beta;	~~Isotopic Plutonium;~~	~~Isotopic Uranium;~~	Strontium-89/90 -- Total Sr;	~~Technetium-99;~~	~~Americium-241;~~	~~Tritium - H3;~~			

ICED

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
B1W1B5	WATER	7-8-08	0947	✓	✓	✓	✓	✓	✓	✓			
							031394	031394					
				031394	031394	031394	~~031394~~	~~031394~~	031394	024075			

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
C Fulton	7-8-08 1245	C Fulton	7-8-08 1245
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

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

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

A-6003-61B(01/06)