

RECEIVED AUGUST 20, 2008

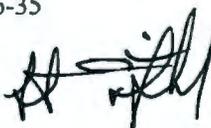
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FLUOR

Memorandum

To: H. Hampt E6-35 Date: M4W41-SLF-08-862
August 20, 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 WSCF20081183 – SAF NUMBER F08-045

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

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

This letter contains the following attachments for sample delivery group WSCF20081183:

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

SLF/grf

Attachments 5

RECEIVED
AUG 22 2008
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M4W41-SLF-08-862

ATTACHMENT 1

COVER SHEET

Consisting of 2 pages
Including cover page

WSCF SAF NUMBER CROSS REFERENCE

Group#: WSCF20081183
Data Deliverable Date: 23-jul-2008
Data Deliverable: Cover Sheet

SAF#	Sample ID	WSCF#	Matrix
F08-045	B1V9K7	W08GR01667	SOIL
	B1V9K9	W08GR01663	SOIL
	B1V9L1	W08GR01664	SOIL
	B1V9L3	W08GR01666	SOIL
	B1V9L9	W08GR01661	SOIL
	B1V9M1	W08GR01660	SOIL

M4W41-SLF-08-862

ATTACHMENT 2

NARRATIVE

Consisting of 3 pages
Including cover page

Introduction

Nine S&GRP samples were received at the WSCF Laboratory on June 11, 2008. Six of the samples were analyzed for the analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Groundwater Remediation Program – Letter of Instruction*, referenced in the cover letter. Analysis of the high concentration VOA sample and the associated Methanol Blanks (B1V9M0, B1V9L2, and B1V9K8) was not required.

The narrative (Attachment 2) will address sample characteristics, analyses requested and general information in performance of the analytical methods. A Data Summary Report (Attachment 3) includes analytical results, a comment report detailing method abnormalities, tentatively identified peaks if applicable, method references, and Laboratory QC information as applicable. Copies of the chain of custody and sample receipt documentation are included as Attachment 4. Additionally, a copy of a sample record sheet is included as Attachment 5.

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

Analytical Methodology for Requested Analyses

Refer to *WSCF Method References Report*, pages 12 through 14, for a complete listing of approved analytical methods.

Inorganic Comments

ICP-AES Metals – The hold time requirements for this analysis were met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per the GRP Letter of Instruction. See pages 18 through 19 for QC details. Analytical Note(s):

- Matrix Spikes and Matrix Spike Duplicates were analyzed on sample B1V9M1 of this SDG and B1VHL8 (SDG# 20081141, SAF# F08-093) from another SDG.
- There was a high Lithium concentration observed in the LCS. Sample results were X flagged for Lithium. Lithium has no certified value. It's value was taken from multiple analyses.

All QC controls are within the established limits.

Percent Solids – analyzed for organic moisture correction.

Organic Comments

Note: Sample concentrations are corrected for moisture and reported as dry weight basis

Semi-VOA – The hold time requirements for this analysis were met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per the GPP Letter of Instruction. See pages 28 through 31 for QC details.

All QC controls are within the established limits.

VOA – The hold time requirement for this analysis was met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample, were analyzed with this delivery group per the GRP Letter of Instruction. See pages 32 through 34 for QC details. Analytical Note(s):

All QC controls are within the established limits.

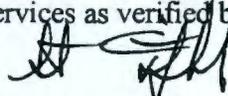
Radiochemistry Comments

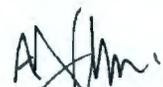
Rad Chem – There are no hold times associated with WSCF's radiochemical methods. A Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group. See pages 42 through 44 for QC details. Analytical Note(s):

- GEA – Duplicate was analyzed on sample# B1VHL7 (SDG# 20081166, SAF# F08-093).
- Strontium 89/90 and 85 (tracer) – Duplicate was analyzed on sample# B1VHL7 (SDG# 20081166, SAF# F08-093).
- Uranium-233/234, 235, 238 and 232 (tracer) – Duplicate was analyzed on sample# B1V9M1. Uranium-235 Duplicate Relative Percent Difference (RPD) exceeded established laboratory limits. RPD does not apply to low level samples. No flags issued.

All other QC controls are within the established limits.

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


Scot L. Fitzgerald
WSCF Analytical Laboratory Manager


Andrew J. Kopriva
WSCF Client Services

M4W41-SLF-08-862

ATTACHMENT 3

ANALYTICAL RESULTS

Consisting of 39 pages
Including cover page

**WSCF
ANALYTICAL RESULTS REPORT**

for

Groundwater Remediation Program

Richland, WA 99354

Attention: Steve Trent

Analytical:

~~W. J. Fitzgerald~~ S. Fitzgerald 8/24/08

Client Services:

~~A. Kopriva~~ A. Kopriva 8/19/08

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

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Contract#: FH-EIS-2003-MEM-001
Report#: WSCF20081183
Report Date: 19-aug-2008
Report WGPP/ver. 5.2
Groundwater Remediation Program

Department: Inorganic

W13q Worklist/Batch/QC Report for Group# WSCF20081183

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
				SAMPLE	W08GR01660	Percent Solids
				SAMPLE	W08GR01663	Percent Solids
				SAMPLE	W08GR01666	Percent Solids
37254	1	37682	42420	BLANK		ICP Metals Analysis, Grd H20 P
37254	2	37682	42420	LCS		ICP Metals Analysis, Grd H20 P
37254	4	37682	42420	MS	W08GR01494	ICP Metals Analysis, Grd H20 P
37254	5	37682	42420	MSD	W08GR01494	ICP Metals Analysis, Grd H20 P
37254	5	37682	42420	SPK-RPD	W08GR01494	ICP Metals Analysis, Grd H20 P
37254	20	37682	42420	MS	W08GR01660	ICP Metals Analysis, Grd H20 P
37254	21	37682	42420	MSD	W08GR01660	ICP Metals Analysis, Grd H20 P
37254	19	37682	42420	SAMPLE	W08GR01660	ICP Metals Analysis, Grd H20 P
37254	21	37682	42420	SPK-RPD	W08GR01660	ICP Metals Analysis, Grd H20 P
37254	22	37682	42420	SAMPLE	W08GR01663	ICP Metals Analysis, Grd H20 P
37254	23	37682	42420	SAMPLE	W08GR01666	ICP Metals Analysis, Grd H20 P

Department: Organic

W13q Worklist/Batch/QC Report for Group# WSCF20081183

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
			41503	BLANK		SW-846 8270C Semi-Vols
			41503	LCS		SW-846 8270C Semi-Vols
			41503	SAMPLE	W08GR01660	SW-846 8270C Semi-Vols
			41503	SURR	W08GR01660	SW-846 8270C Semi-Vols
			41503	SAMPLE	W08GR01663	SW-846 8270C Semi-Vols
			41503	SURR	W08GR01663	SW-846 8270C Semi-Vols
			41503	MS	W08GR01666	SW-846 8270C Semi-Vols
			41503	MSD	W08GR01666	SW-846 8270C Semi-Vols
			41503	SAMPLE	W08GR01666	SW-846 8270C Semi-Vols
			41503	SPK-RPD	W08GR01666	SW-846 8270C Semi-Vols
			41503	SURR	W08GR01666	SW-846 8270C Semi-Vols
			41918	BLANK		VOA Ground Water Protection
			41918	LCS		VOA Ground Water Protection
			41918	MS	W08GR01661	VOA Ground Water Protection
			41918	MSD	W08GR01661	VOA Ground Water Protection
			41918	SAMPLE	W08GR01661	VOA Ground Water Protection
			41918	SPK-RPD	W08GR01661	VOA Ground Water Protection
			41918	SURR	W08GR01661	VOA Ground Water Protection
			41918	SAMPLE	W08GR01664	VOA Ground Water Protection
			41918	SURR	W08GR01664	VOA Ground Water Protection
			41918	SAMPLE	W08GR01667	VOA Ground Water Protection
			41918	SURR	W08GR01667	VOA Ground Water Protection

Department: Radiochemistry

W13q Worklist/Batch/QC Report for Group# WSCF20081183

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
36749	1	37166	41551	BLANK		Strontium 89/90
36749	2	37166	41551	LCS		Strontium 89/90
36749	3	37166	41551	DUP	W08GR01628	Strontium 89/90
36749	6	37166	41551	SAMPLE	W08GR01660	Strontium 89/90
36749	7	37166	41551	SURR	W08GR01660	Strontium 89/90
36749	8	37166	41551	SAMPLE	W08GR01663	Strontium 89/90
36749	9	37166	41551	SURR	W08GR01663	Strontium 89/90
36749	10	37166	41551	SAMPLE	W08GR01666	Strontium 89/90
36749	11	37166	41551	SURR	W08GR01666	Strontium 89/90
36688	1	37105	41630	BLANK		Gamma Energy Analysis-grd H2O
36688	2	37105	41630	LCS		Gamma Energy Analysis-grd H2O
36688	3	37105	41630	DUP	W08GR01628	Gamma Energy Analysis-grd H2O
36688	5	37105	41630	SAMPLE	W08GR01660	Gamma Energy Analysis-grd H2O
36688	6	37105	41630	SAMPLE	W08GR01663	Gamma Energy Analysis-grd H2O
36688	7	37105	41630	SAMPLE	W08GR01666	Gamma Energy Analysis-grd H2O
37230	1	37662	41988	BLANK		Uranium Isotopics by AEA
37230	2	37662	41988	LCS		Uranium Isotopics by AEA
37230	3	37662	41988	DUP	W08GR01660	Uranium Isotopics by AEA
37230	4	37662	41988	SAMPLE	W08GR01660	Uranium Isotopics by AEA
37230	5	37662	41988	SURR	W08GR01660	Uranium Isotopics by AEA
37230	6	37662	41988	SAMPLE	W08GR01663	Uranium Isotopics by AEA
37230	7	37662	41988	SURR	W08GR01663	Uranium Isotopics by AEA
37230	8	37662	41988	SAMPLE	W08GR01666	Uranium Isotopics by AEA
37230	9	37662	41988	SURR	W08GR01666	Uranium Isotopics by AEA

WSCF

METHOD REFERENCES REPORT

Department: Inorganic

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

LA-505-411	LA-505-411: ELEMENTAL ANALYSIS BY INDUCTIVELY COUPLED PLASMA ATOMIC EMISSION SPE
	HEIS 6010_METALS_ICP Inductively Coupled Plasma-Atomic Emmision Spectrometry
LA-519-412	LA-519-412: TOTAL RESIDUE/% SOLIDS DRIED AT 103 - 105 C
	EPA-600/4-79-020 160.1 Resisual, Filterable
	EPA-600/4-79-020 160.3 RESIDUE, TOTAL
	HEIS 160.1_TDS Residual, Filterable
	Standard Methods 2540B Total Solids Dried at 103-105 C

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

Report Date: 19-aug-2008

Report#: WSCF20081183

Report WGPPM/5.2

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WSCF

METHOD REFERENCES REPORT

Department: Organic

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

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

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

Report Date: 19-aug-2008
Report#: WSCF20081183
Report WGPPM/5.2

Page 1

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_GPC Protium 89/90
LA-508-471	LA-508-471: ALPHA ENERGY ANALYZER DATA ACQUISITION AND SYSTEM CHECKOUT USING ALP HEIS PUIISO_IE_PRECIP_AEA Plutonium by Alpha Energy Analysis HEIS RAISO_AEA Radium-226
LA-508-481	LA-508-481: GAMMA ENERGY ANALYSIS USING PROCOUNT SOFTWARE HEIS GAMMA_GS Gamma 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>.

Report Date: 19-aug-2008
Report#: WSCF20081183
Report WGPPM/5.2

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WSCF ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-045
Sample # W08GR01660
Client ID: B1V9M1

TRENT
WSCF

Matrix: SOIL

Group #: WSCF20081183
Department: Inorganic
Sampled: 06/11/08
Received: 06/11/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
ICP Metals Analysis, Grd H20 P Prep											
ICP Metals Analysis, Grd H20 P											
Antimony	7440-36-0	LA-505-411	U	< 5.16	mg/kg			92.10	5.2		08/15/08
Cadmium	7440-43-9	LA-505-411	U	< 0.368	mg/kg			92.10	0.37		08/15/08
Chromium	7440-47-3	LA-505-411		47.4	mg/kg			92.10	1.2		08/15/08
Vanadium	7440-62-2	LA-505-411		57.1	mg/kg			92.10	1.1		08/15/08
Lithium	7439-93-2	LA-505-411	X	7.67	mg/kg			92.10	0.37		08/15/08
Total solids											
Total solids	TS	LA-519-412		89.9	Percent			1.00	0.0		06/16/08

MDL=Minimum Detection Limit

RQ=Result Qualifier

TP Err=Total Propagated Error

DF=Dilution Factor

* - Indicates results that have NOT been validated;

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

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

U - Analyzed for but not detected above limiting criteria.

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

+ - Indicates more than six qualifier symbols

Report WGPP/ver. 5.2

Groundwater Remediation Program

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WSCF

ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-045
Sample # W08GR01663
Client ID: B1V9K9

TRENT
 WSCF

Matrix: SOIL

Group #: WSCF20081183
Department: Inorganic
Sampled: 06/11/08
Received: 06/11/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
ICP Metals Analysis, Grd H20 P Prep											
ICP Metals Analysis, Grd H20 P											
Antimony	7440-36-0	LA-505-411	U	< 5.05	mg/kg			90.22	5.1		08/16/08
Cadmium	7440-43-9	LA-505-411	U	< 0.361	mg/kg			90.22	0.36		08/16/08
Chromium	7440-47-3	LA-505-411		14.8	mg/kg			90.22	1.2		08/16/08
Vanadium	7440-82-2	LA-505-411		12.7	mg/kg			90.22	1.1		08/16/08
Lithium	7439-93-2	LA-505-411	X	4.38	mg/kg			90.22	0.36		08/16/08
Total solids											
Total solids	TS	LA-519-412		76.7	Percent			1.00	0.0		06/16/08

MDL=Minimum Detection Limit

RQ=Result Qualifier

TP Err=Total Propagated Error

DF=Dilution Factor

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

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

U - Analyzed for but not detected above limiting criteria.

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

+ - Indicates more than six qualifier symbols

Report WGPP/ver. 5.2

Groundwater Remediation Program

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WSCF

ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-045
Sample # W08GR01666
Client ID: B1V9L3

TRENT
WSCF

Matrix: SOIL

Group #: WSCF20081183
Department: Inorganic
Sampled: 06/11/08
Received: 06/11/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
ICP Metals Analysis, Grd H2O P Prep											
ICP Metals Analysis, Grd H2O P											
Antimony	7440-36-0	LA-505-411	U	< 5.15	mg/kg			91.89	5.1		08/16/08
Cadmium	7440-43-9	LA-505-411	U	< 0.368	mg/kg			91.89	0.37		08/16/08
Chromium	7440-47-3	LA-505-411		41.7	mg/kg			91.89	1.2		08/16/08
Vanadium	7440-62-2	LA-505-411		50.4	mg/kg			91.89	1.1		08/16/08
Lithium	7439-93-2	LA-505-411	X	7.23	mg/kg			91.89	0.37		08/16/08
Total solids											
Total solids	TS	LA-519-412		93.8	Percent			1.00	0.0		08/16/08

MDL=Minimum Detection Limit

RQ=Result Qualifier

TP Err=Total Propagated Error

DF=Dilution Factor

* - Indicates results that have NOT been validated;

+ - Indicates more than six qualifier symbols

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

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

U - Analyzed for but not detected above limiting criteria.

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

Report WGPP/ver. 5.2

Groundwater Remediation Program

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081183
 Matrix: SOLID
 Test: ICP Metals Analysis, Grd H2O P

Sample Date: 06/04/08
 Receive Date: 06/05/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR01494											
BATCH QC ASSOCIATED WITH SAMPLE											
MS	Lithium	7439-93-2	83.032	94.355	% Recov	70.000	130.000				08/15/08
MSD	Lithium	7439-93-2	82.742	91.936	% Recov	75.000	125.000				08/15/08
SPK-RPD	Lithium	7439-93-2	91.936		RPD			2.597	20.000		08/16/08
Lab ID: W08GR01660											
BATCH QC ASSOCIATED WITH SAMPLE											
MS	Cadmium	7440-43-9	169.8	94.860	% Recov	75.000	125.000				08/15/08
MS	Chromium	7440-47-3	181.52	101.408	% Recov	75.000	125.000				08/15/08
MS	Lithium	7439-93-2	82.148	91.276	% Recov	70.000	130.000				08/15/08
MS	Antimony	7440-36-0	139.2	77.765	% Recov	75.000	125.000				08/15/08
MS	Vanadium	7440-62-2	169.9	94.916	% Recov	75.000	125.000				08/15/08
MSD	Cadmium	7440-43-9	179.7	95.079	% Recov	75.000	125.000				08/16/08
MSD	Chromium	7440-47-3	196.42	103.926	% Recov	75.000	125.000				08/16/08
MSD	Lithium	7439-93-2	85.648	91.115	% Recov	75.000	125.000				08/16/08
MSD	Antimony	7440-36-0	149.7	79.206	% Recov	75.000	125.000				08/16/08
MSD	Vanadium	7440-62-2	184.9	97.831	% Recov	75.000	125.000				08/16/08
SPK-RPD	Cadmium	7440-43-9	95.079		RPD			0.231	20.000		08/16/08
SPK-RPD	Chromium	7440-47-3	103.926		RPD			2.453	20.000		08/16/08
SPK-RPD	Lithium	7439-93-2	91.115		RPD			0.177	20.000		08/16/08
SPK-RPD	Antimony	7440-36-0	79.206		RPD			1.836	20.000		08/16/08
SPK-RPD	Vanadium	7440-62-2	97.831		RPD			3.025	20.000		08/16/08
BATCH QC											
BLANK	Cadmium	7440-43-9	< 4e-3	n/a	ug/mL					U	08/15/08
BLANK	Chromium	7440-47-3	< 1.3e-2	n/a	ug/mL					U	08/15/08
BLANK	Lithium	7439-93-2	< 4e-3	n/a	ug/mL					U	08/15/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Inorganic**

SDG Number: WSCF20081183
 Matrix: SOLID
 Test: ICP Metals Analysis, Grd H2O P

Sample Date:
 Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
BLANK	Antimony	7440-36-0	< 5.6e-2	n/a	ug/mL					U	08/15/08
BLANK	Vanadium	7440-62-2	< 1.2e-2	n/a	ug/mL					U	08/15/08
LCS	Cadmium	7440-43-9	66.96	100.692	% Recov	80.000	120.000				08/15/08
LCS	Chromium	7440-47-3	90.64	124.335	% Recov	77.000	122.000				08/15/08
LCS	Lithium	7439-93-2	7.588	127.315	% Recov	80.000	120.000				08/15/08
LCS	Antimony	7440-36-0	146.5	162.417	% Recov	53.000	205.000				08/15/08
LCS	Vanadium	7440-62-2	93.4	112.530	% Recov	70.000	129.000				08/15/08

WSCF ANALYTICAL COMMENT REPORT

Attention: Steve Trent
Project Number F08-045

Group #: WSCF20081183
Department: Inorganic

Sample #	Client ID	Lab Area	Test	Comment
		VALGROUP		<p>Organics: All results are moisture corrected and reported on a dry weight basis. cgc</p> <p>U-235/Batch dup is flagged for poor RPD but the sample activity is low level. RPD does not apply to low level samples. Imh</p> <p>ICP-AES: High lithium LCS recovery; "X" flag. Lithium has no certified value. It's value was taken from multiple analyses.</p>

Lab Areas: VALGROUP - Group Validation
LOGSAMP - Login for Sample

VALTEST - Test Validation
LOGTEST - Login for Tests

TESTDATA - Test Data Entry

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wgppc/5.2 Report#: WSCF20081183

Report Date: 19-aug-2008

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WSCF

ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-045
Sample # W08GR01660
Client ID: B1V9M1

TRENT
WSCF

Matrix: SOIL

Group #: WSCF20081183
Department: Organic
Sampled: 06/11/08
Received: 06/11/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
SW-846 8270C Semi-Vols Prep											
SW-846 8270C Semi-Vols											
4-Nitrophenol	100-02-7	LA-523-456	U	< 220	ug/kg			1.00	2.2e +02		06/17/08
1,4-Dichlorobenzene	106-46-7	LA-523-456	U	< 270	ug/kg			1.00	2.7e +02		06/17/08
Phenol	108-95-2	LA-523-456	U	< 160	ug/kg			1.00	1.6e +02		06/17/08
1,2,4-Trichlorobenzene	120-82-1	LA-523-456	U	< 160	ug/kg			1.00	1.6e +02		06/17/08
2,4-Dinitrotoluene	121-14-2	LA-523-456	U	< 160	ug/kg			1.00	1.6e +02		06/17/08
Pyrene	129-00-0	LA-523-456	U	< 160	ug/kg			1.00	1.6e +02		06/17/08
4-Chloro-3-methylphenol	59-50-7	LA-523-456	U	< 160	ug/kg			1.00	1.6e +02		06/17/08
N-Nitrosodi-n-dipropylamine	621-64-7	LA-523-456	U	< 160	ug/kg			1.00	1.6e +02		06/17/08
Acenaphthene	83-32-9	LA-523-456	U	< 160	ug/kg			1.00	1.6e +02		06/17/08
Pentachlorophenol	87-86-5	LA-523-456	U	< 220	ug/kg			1.00	2.2e +02		06/17/08
2-Chlorophenol	95-57-8	LA-523-456	U	< 160	ug/kg			1.00	1.6e +02		06/17/08
2-Methylphenol (cresol, o-)	95-48-7	LA-523-456	U	< 160	ug/kg			1.00	1.6e +02		06/17/08
3 & 4 Methylphenol Total	65794-96-9	LA-523-456	U	< 160	ug/kg			1.00	1.6e +02		06/17/08

MDL=Minimum Detection Limit

RQ=Result Qualifier

TP Err=Total Propagated Error

DF=Dilution Factor

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Report WGPP/ver. 5.2

Groundwater Remediation Program

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WSCF

ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-045
Sample #: W08GR01661
Client ID: B1V9L9

TRENT
WSCF

Matrix: SOIL

Group #: WSCF20081183
Department: Organic
Sampled: 06/11/08
Received: 06/11/08

Test Performed	CAS #	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	< 1.30	ug/kg			1.00	1.3		06/25/08
Trichloroethene	79-01-8	LA-523-455	U	< 1.30	ug/kg			1.00	1.3		06/25/08
Benzene	71-43-2	LA-523-455	U	< 1.30	ug/kg			1.00	1.3		06/25/08
Toluene	108-88-3	LA-523-455	U	< 1.30	ug/kg			1.00	1.3		06/25/08
Chlorobenzene	108-90-7	LA-523-455	U	< 1.30	ug/kg			1.00	1.3		06/25/08
4-Methyl-2-Pentanone	108-10-1	LA-523-455	U	< 1.30	ug/kg			1.00	1.3		06/25/08
Carbon tetrachloride	56-23-5	LA-523-455	U	< 1.30	ug/kg			1.00	1.3		06/25/08
Acetone	67-64-1	LA-523-455	U	< 1.30	ug/kg			1.00	1.3		06/25/08
1,1,1-Trichloroethane	71-55-6	LA-523-455	U	< 1.30	ug/kg			1.00	1.3		06/25/08
Methylenechloride	75-09-2	LA-523-455	U	< 1.30	ug/kg			1.00	1.3		06/25/08
2-Butanone	78-93-3	LA-523-455	U	< 1.30	ug/kg			1.00	1.3		06/25/08

MDL=Minimum Detection Limit

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Report WGPP/ver. 5.2

Groundwater Remediation Program

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WSCF

ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-045
Sample # W08GR01663
Client ID: B1V9K9

TRENT
WSCF

Matrix: SOIL

Group #: WSCF20081183
Department: Organic
Sampled: 06/11/08
Received: 06/11/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
SW-846 8270C Semi-Vols Prep											
SW-846 8270C Semi-Vols											
4-Nitrophenol	100-02-7	LA-523-456	U	< 260	ug/kg			1.00	2.6e+02		06/18/08
1,4-Dichlorobenzene	106-46-7	LA-523-456	U	< 310	ug/kg			1.00	3.1e+02		06/18/08
Phenol	108-95-2	LA-523-456	U	< 180	ug/kg			1.00	1.8e+02		06/18/08
1,2,4-Trichlorobenzene	120-82-1	LA-523-456	U	< 180	ug/kg			1.00	1.8e+02		06/18/08
2,4-Dinitrotoluene	121-14-2	LA-523-456	U	< 180	ug/kg			1.00	1.8e+02		06/18/08
Pyrene	129-00-0	LA-523-456	U	< 180	ug/kg			1.00	1.8e+02		06/18/08
4-Chloro-3-methylphenol	59-50-7	LA-523-456	U	< 180	ug/kg			1.00	1.8e+02		06/18/08
N-Nitrosodi-n-dipropylamine	621-64-7	LA-523-456	U	< 180	ug/kg			1.00	1.8e+02		06/18/08
Acanaphthene	83-32-9	LA-523-456	U	< 180	ug/kg			1.00	1.8e+02		06/18/08
Pentachlorophenol	87-86-5	LA-523-456	U	< 260	ug/kg			1.00	2.6e+02		06/18/08
2-Chlorophenol	95-57-8	LA-523-456	U	< 180	ug/kg			1.00	1.8e+02		06/18/08
2-Methylphenol (cresol, o-)	95-48-7	LA-523-456	U	< 180	ug/kg			1.00	1.8e+02		06/18/08
3 & 4 Methylphenol Total	65794-96-9	LA-523-456	U	< 180	ug/kg			1.00	1.8e+02		06/18/08

MDL = Minimum Detection Limit

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DF = Dilution Factor

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Report WGPP/ver. 5.2

Groundwater Remediation Program

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WSCF

ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-045
Sample # W08GR01664
Client ID: B1V9L1

TRENT
WSCF

Matrix: SOIL

Group #: WSCF20081183
Department: Organic
Sampled: 06/11/08
Received: 06/11/08

Test Performed	CAS #	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	< 0.860	ug/kg			1.00	0.86		06/25/08
Trichloroethene	79-01-6	LA-523-455	U	< 0.860	ug/kg			1.00	0.86		06/25/08
Benzene	71-43-2	LA-523-455	U	< 0.860	ug/kg			1.00	0.86		06/25/08
Toluene	108-88-3	LA-523-455	U	< 0.860	ug/kg			1.00	0.86		06/25/08
Chlorobenzene	108-90-7	LA-523-455	U	< 0.860	ug/kg			1.00	0.86		06/25/08
4-Methyl-2-Pentanone	108-10-1	LA-523-455	U	< 0.860	ug/kg			1.00	0.86		06/25/08
Carbon tetrachloride	56-23-5	LA-523-455	U	< 0.860	ug/kg			1.00	0.86		06/25/08
Acetone	67-64-1	LA-523-455	U	< 0.860	ug/kg			1.00	0.86		06/25/08
1,1,1-Trichloroethane	71-55-6	LA-523-455	U	< 0.860	ug/kg			1.00	0.86		06/25/08
Methylenechloride	75-09-2	LA-523-455	U	< 0.860	ug/kg			1.00	0.86		06/25/08
2-Butanone	78-93-3	LA-523-455	U	< 0.860	ug/kg			1.00	0.86		06/25/08

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Report WGPP/ver. 5.2

Groundwater Remediation Program

WSCF

ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-045
Sample # W08GR01666
Client ID: B1V9L3

TRENT
WSCF

Matrix: SOIL

Group #: WSCF20081183
Department: Organic
Sampled: 06/11/08
Received: 06/11/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
SW-846 8270C Semi-Vols Prep											
SW-846 8270C Semi-Vols											
4-Nitrophenol	100-02-7	LA-523-456	U	< 210	ug/kg			1.00	2.1e+02		06/18/08
1,4-Dichlorobenzene	106-46-7	LA-523-456	U	< 250	ug/kg			1.00	2.5e+02		06/18/08
Phenol	108-95-2	LA-523-456	U	< 150	ug/kg			1.00	1.5e+02		06/18/08
1,2,4-Trichlorobenzene	120-82-1	LA-523-456	U	< 150	ug/kg			1.00	1.5e+02		06/18/08
2,4-Dinitrotoluene	121-14-2	LA-523-456	U	< 150	ug/kg			1.00	1.5e+02		06/18/08
Pyrene	129-00-0	LA-523-456	U	< 150	ug/kg			1.00	1.5e+02		06/18/08
4-Chloro-3-methylphenol	59-50-7	LA-523-456	U	< 150	ug/kg			1.00	1.5e+02		06/18/08
N-Nitrosodi-n-dipropylamine	621-64-7	LA-523-456	U	< 150	ug/kg			1.00	1.5e+02		06/18/08
Acenaphthene	83-32-9	LA-523-456	U	< 150	ug/kg			1.00	1.5e+02		06/18/08
Pentachlorophenol	87-86-5	LA-523-456	U	< 210	ug/kg			1.00	2.1e+02		06/18/08
2-Chlorophenol	95-57-8	LA-523-456	U	< 150	ug/kg			1.00	1.5e+02		06/18/08
2-Methylphenol (cresol, o-)	95-48-7	LA-523-456	U	< 150	ug/kg			1.00	1.5e+02		06/18/08
3 & 4 Methylphenol Total	65794-96-9	LA-523-456	U	< 150	ug/kg			1.00	1.5e+02		06/18/08

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Report WGPP/ver. 5.2

Groundwater Remediation Program

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WSCF

ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-045
Sample # W08GR01667
Client ID: B1V9K7

TRENT
 WSCF

Matrix: SOIL

Group #: WSCF20081183
Department: Organic
Sampled: 06/11/08
Received: 06/11/08

Test Performed	CAS #	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/kg			1.00	1.0		06/25/08
Trichloroethene	79-01-6	LA-523-455	U	< 1.00	ug/kg			1.00	1.0		06/25/08
Benzene	71-43-2	LA-523-455	U	< 1.00	ug/kg			1.00	1.0		06/25/08
Toluene	108-88-3	LA-523-455	U	< 1.00	ug/kg			1.00	1.0		06/25/08
Chlorobenzene	108-90-7	LA-523-455	U	< 1.00	ug/kg			1.00	1.0		06/25/08
4-Methyl-2-Pentanone	108-10-1	LA-523-455	U	< 1.00	ug/kg			1.00	1.0		06/25/08
Carbon tetrachloride	56-23-5	LA-523-455	U	< 1.00	ug/kg			1.00	1.0		06/25/08
Acetone	67-64-1	LA-523-455	U	< 1.00	ug/kg			1.00	1.0		06/25/08
1,1,1-Trichloroethane	71-55-6	LA-523-455	U	< 1.00	ug/kg			1.00	1.0		06/25/08
Methylenechloride	75-09-2	LA-523-455	U	< 1.00	ug/kg			1.00	1.0		06/25/08
2-Butanone	78-93-3	LA-523-455	U	< 1.00	ug/kg			1.00	1.0		06/25/08

MDL=Minimum Detection Limit

RQ=Result Qualifier

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DF=Dilution Factor

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Report WGPP/ver. 5.2

Groundwater Remediation Program

WSCF

TENTATIVELY IDENTIFIED PEAK REPORT

Attention: Steve Trent
Project Number: F08-045 :F08-045

Group #: WSCF20081183
Department: Organic

Sample #	Client ID	Test Name	Peak Name	CAS#	RT	RQ	Result	Units
W08GRO1660	B1V9M1	TRENT	SW-846 8270C Semi-Vols	SMP 16.398 bis(2-Ethylhexyl)phtha	117-81-7		16.39808	3.9e+02 ug/kg
W08GRO1660	B1V9M1	TRENT	SW-846 8270C Semi-Vols	SMP 16.975 Unknown Hydrocarbon	Unknown	J	16.97526	9.3e+02 ug/kg
W08GRO1660	B1V9M1	TRENT	SW-846 8270C Semi-Vols	SMP 17.146 Unknown	Unknown	J	17.1463	1.4e+03 ug/kg
W08GRO1660	B1V9M1	TRENT	SW-846 8270C Semi-Vols	SMP 17.531 Unknown Alkane	Unknown	J	17.53108	1.6e+03 ug/kg
W08GRO1660	B1V9M1	TRENT	SW-846 8270C Semi-Vols	SMP 17.915 Unknown Alkane	Unknown	J	17.91588	1.4e+03 ug/kg
W08GRO1660	B1V9M1	TRENT	SW-846 8270C Semi-Vols	SMP 19.412 Unknown	Unknown	J	19.4123	2.2e+03 ug/kg

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

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Groundwater Remediation Program

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Report Date: 19-aug-2008

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WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Organic**

SDG Number: WSCF20081183
 Matrix: SOLID
 Test: SW-846 8270C Semi-Vols

Sample Date: 06/11/08
 Receive Date: 06/11/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR01660											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	2-Fluorophenol(Surr)	367-12-4	3689.1	83.100	% Recov	72.000	120.000				06/17/08
SURR	2-Fluorobiphenyl(Surr)	321-60-8	3727.7	83.900	% Recov	66.000	122.000				06/17/08
SURR	Nitrobenzene-d5(Surr)	4165-60-0	3604.5	81.200	% Recov	63.000	125.000				06/17/08
SURR	Phenol-d5(Surr)	4165-62-2	3734.5	84.100	% Recov	66.000	124.000				06/17/08
SURR	2,4,6-Tribromophenol(Surr)	118-79-6	3737.4	84.200	% Recov	49.000	120.000				06/17/08
SURR	Terphenyl-d14(Surr)	98904-43-9	3537.0	79.600	% Recov	58.000	128.000				06/17/08
Lab ID: W08GR01663											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	2-Fluorophenol(Surr)	367-12-4	4529.5	87.200	% Recov	72.000	120.000				06/18/08
SURR	2-Fluorobiphenyl(Surr)	321-60-8	4238.6	81.600	% Recov	66.000	122.000				06/18/08
SURR	Nitrobenzene-d5(Surr)	4165-60-0	4507.9	86.800	% Recov	63.000	125.000				06/18/08
SURR	Phenol-d5(Surr)	4165-62-2	4701.8	90.500	% Recov	66.000	124.000				06/18/08
SURR	2,4,6-Tribromophenol(Surr)	118-79-6	4474.6	86.200	% Recov	49.000	120.000				06/18/08
SURR	Terphenyl-d14(Surr)	98904-43-9	4362.4	84.000	% Recov	58.000	128.000				06/18/08
Lab ID: W08GR01666											
BATCH QC ASSOCIATED WITH SAMPLE											
MS	1,2,4-Trichlorobenzene	120-82-1	3430.6	80.700	% Recov	75.000	121.000				06/18/08
MS	1,4-Dichlorobenzene	106-46-7	3248.0	76.400	% Recov	68.000	121.000				06/18/08
MS	2,4-Dinitrotoluene	121-14-2	3217.2	75.600	% Recov	66.000	113.000				06/18/08
MS	2-Fluorophenol(Surr)	367-12-4	3289.9	77.400	% Recov	72.000	120.000				06/18/08
MS	Acenaphthene	83-32-9	3508.8	82.500	% Recov	69.000	125.000				06/18/08
MS	4-Chloro-3-methylphenol	59-50-7	5131.0	80.400	% Recov	68.000	116.000				06/18/08
MS	2-Chlorophenol	95-57-8	5089.3	79.800	% Recov	65.000	124.000				06/18/08
MS	N-Nitrosodi-n-dipropylamine	621-64-7	3338.1	78.500	% Recov	69.000	127.000				06/18/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Organic**

SDG Number: WSCF20081183
 Matrix: SOLID
 Test: SW-846 8270C Semi-Vols

Sample Date: 06/11/08
 Receive Date: 06/11/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
MS	2-Fluorobiphenyl(Surr)	321-60-8	3301.6	77.600	% Recov	66.000	122.000				06/18/08
MS	Phenol	108-95-2	5170.6	81.000	% Recov	71.000	122.000				06/18/08
MS	Nitrobenzene-d5(Surr)	4165-60-0	3126.1	73.500	% Recov	63.000	125.000				06/18/08
MS	4-Nitrophenol	100-02-7	4944.6	77.500	% Recov	55.000	113.000				06/18/08
MS	Pentachlorophenol	87-86-5	4930.5	77.300	% Recov	50.000	113.000				06/18/08
MS	Phenol-d5(Surr)	4165-62-2	3219.5	75.700	% Recov	66.000	124.000				06/18/08
MS	Pyrene	129-00-0	2881.4	67.700	% Recov	67.000	125.000				06/18/08
MS	2,4,6-Tribromophenol(Surr)	118-79-6	3328.3	78.300	% Recov	49.000	120.000				06/18/08
MS	Terphenyl-d14(Surr)	98904-43-9	3008.4	70.700	% Recov	58.000	128.000				06/18/08
MSD	1,2,4-Trichlorobenzene	120-82-1	3452.8	81.400	% Recov	75.000	121.000				06/18/08
MSD	1,4-Dichlorobenzene	106-46-7	3404.7	80.300	% Recov	68.000	121.000				06/18/08
MSD	2,4-Dinitrotoluene	121-14-2	3594.1	84.800	% Recov	66.000	113.000				06/18/08
MSD	2-Fluorophenol(Surr)	367-12-4	3338.2	78.700	% Recov	72.000	120.000				06/18/08
MSD	Acenaphthene	83-32-9	3730.9	88.000	% Recov	69.000	125.000				06/18/08
MSD	4-Chloro-3-methylphenol	59-50-7	5637.1	88.600	% Recov	68.000	116.000				06/18/08
MSD	2-Chlorophenol	95-57-8	5461.7	85.900	% Recov	65.000	124.000				06/18/08
MSD	N-Nitrosodi-n-dipropylamine	621-64-7	3524.4	83.100	% Recov	69.000	127.000				06/18/08
MSD	2-Fluorobiphenyl(Surr)	321-60-8	3529.6	83.300	% Recov	66.000	122.000				06/18/08
MSD	Phenol	108-95-2	5679.8	89.300	% Recov	71.000	122.000				06/18/08
MSD	Nitrobenzene-d5(Surr)	4165-60-0	3327.0	78.500	% Recov	63.000	125.000				06/18/08
MSD	4-Nitrophenol	100-02-7	5803.2	91.300	% Recov	55.000	113.000				06/18/08
MSD	Pentachlorophenol	87-86-5	5541.0	87.100	% Recov	50.000	113.000				06/18/08
MSD	Phenol-d5(Surr)	4165-62-2	3666.9	86.500	% Recov	66.000	124.000				06/18/08
MSD	Pyrene	129-00-0	3035.2	71.600	% Recov	67.000	125.000				06/18/08
MSD	2,4,6-Tribromophenol(Surr)	118-79-6	3783.0	89.200	% Recov	49.000	120.000				06/18/08
MSD	Terphenyl-d14(Surr)	98904-43-9	3271.4	77.200	% Recov	58.000	128.000				06/18/08
SPK-RPD	1,2,4-Trichlorobenzene	120-82-1	81.400		RPD			0.864	20.000		06/17/08
SPK-RPD	1,4-Dichlorobenzene	106-46-7	80.300		RPD			4.978	20.000		06/17/08
SPK-RPD	2,4-Dinitrotoluene	121-14-2	84.800		RPD			11.471	20.000		06/17/08
SPK-RPD	2-Fluorophenol(Surr)	367-12-4	78.700		RPD			1.666	20.000		06/17/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Organic**

SDG Number: WSCF20081183
 Matrix: SOLID
 Test: SW-846 8270C Semi-Vols

Sample Date: 06/11/08
 Receive Date: 06/11/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
SPK-RPD	Acenaphthene	83-32-9	88.000		RPD			6.452	20.000		06/17/08
SPK-RPD	4-Chloro-3-methylphenol	59-50-7	88.600		RPD			9.704	20.000		06/17/08
SPK-RPD	2-Chlorophenol	95-57-8	85.900		RPD			7.363	20.000		06/17/08
SPK-RPD	N-Nitrosodi-n-dipropylamine	621-64-7	83.100		RPD			5.693	20.000		06/17/08
SPK-RPD	2-Fluorobiphenyl(Surr)	321-60-8	83.300		RPD			7.085	20.000		06/17/08
SPK-RPD	Phenol	108-95-2	89.300		RPD			9.748	20.000		06/17/08
SPK-RPD	Nitrobenzene-d5(Surr)	4165-60-0	78.500		RPD			6.579	20.000		06/17/08
SPK-RPD	4-Nitrophenol	100-02-7	91.300		RPD			16.351	20.000		06/17/08
SPK-RPD	Pentachlorophenol	87-86-5	87.100		RPD			11.922	20.000		06/17/08
SPK-RPD	Phenol-d5(Surr)	4165-62-2	86.500		RPD			13.317	20.000		06/17/08
SPK-RPD	Pyrene	129-00-0	71.600		RPD			5.599	20.000		06/17/08
SPK-RPD	2,4,6-Tribromophenol(Surr)	118-79-6	89.200		RPD			13.015	20.000		06/17/08
SPK-RPD	Terphenyl-d14(Surr)	98904-43-9	77.200		RPD			8.790	20.000		06/17/08
SURR	2-Fluorophenol(Surr)	367-12-4	4003.6	94.700	% Recov	72.000	120.000				06/18/08
SURR	2-Fluorobiphenyl(Surr)	321-60-8	4065.5	96.100	% Recov	66.000	122.000				06/18/08
SURR	Nitrobenzene-d5(Surr)	4165-60-0	3933.9	93.000	% Recov	63.000	125.000				06/18/08
SURR	Phenol-d5(Surr)	4165-62-2	4171.3	98.600	% Recov	66.000	124.000				06/18/08
SURR	2,4,6-Tribromophenol(Surr)	118-79-6	3643.8	86.200	% Recov	49.000	120.000				06/18/08
SURR	Terphenyl-d14(Surr)	98904-43-9	3569.7	84.400	% Recov	58.000	128.000				06/18/08
BATCH QC											
BLANK	1,2,4-Trichlorobenzene	120-82-1	< 140	n/a	ug/Kg					U	06/17/08
BLANK	1,4-Dichlorobenzene	106-46-7	< 240	n/a	ug/Kg					U	06/17/08
BLANK	2,4-Dinitrotoluene	121-14-2	< 140	n/a	ug/Kg					U	06/17/08
BLANK	2-Fluorophenol(Surr)	367-12-4	3527.0	88.200	% Recov	72.000	120.000				06/17/08
BLANK	2-Methylphenol (cresol, o-)	95-48-7	< 140	n/a	ug/Kg					U	06/17/08
BLANK	3 & 4 Methylphenol Total	65794-96-9	< 140	n/a	ug/Kg					U	06/17/08
BLANK	Acenaphthene	83-32-9	< 140	n/a	ug/Kg					U	06/17/08
BLANK	4-Chloro-3-methylphenol	59-50-7	< 140	n/a	ug/Kg					U	06/17/08
BLANK	2-Chlorophenol	95-57-8	< 140	n/a	ug/Kg					U	06/17/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Organic**

SDG Number: WSCF20081183
 Matrix: SOLID
 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	N-Nitrosodi-n-dipropylamine	621-64-7	< 140	n/a	ug/Kg					U	06/17/08
BLANK	2-Fluorobiphenyl(Surr)	321-60-8	3653.2	91.300	% Recov	66.000	122.000				06/17/08
BLANK	Phenol	108-95-2	< 140	n/a	ug/Kg					U	06/17/08
BLANK	Nitrobenzene-d5(Surr)	4165-60-0	3687.6	92.200	% Recov	63.000	125.000				06/17/08
BLANK	4-Nitrophenol	100-02-7	< 200	n/a	ug/Kg					U	06/17/08
BLANK	Pentachlorophenol	87-86-5	< 200	n/a	ug/Kg					U	06/17/08
BLANK	Phenol-d5(Surr)	4165-62-2	3711.2	92.800	% Recov	66.000	124.000				06/17/08
BLANK	Pyrene	129-00-0	< 140	n/a	ug/Kg					U	06/17/08
BLANK	2,4,6-Tribromophenol(Surr)	118-79-6	3388.5	84.700	% Recov	49.000	120.000				06/17/08
BLANK	Terphenyl-d14(Surr)	98904-43-9	3339.5	83.500	% Recov	58.000	128.000				06/17/08
LCS	1,2,4-Trichlorobenzene	120-82-1	3411	85.275	% Recov	76.000	118.000				06/17/08
LCS	1,4-Dichlorobenzene	106-46-7	3008.5	75.200	% Recov	68.000	121.000				06/17/08
LCS	2,4-Dinitrotoluene	121-14-2	2915.8	72.900	% Recov	68.000	112.000				06/17/08
LCS	2-Fluorophenol(Surr)	367-12-4	3011.5	75.300	% Recov	50.000	110.000				06/17/08
LCS	Acenaphthene	83-32-9	3050.8	76.300	% Recov	75.000	121.000				06/17/08
LCS	4-Chloro-3-methylphenol	59-50-7	4429.0	73.800	% Recov	68.000	117.000				06/17/08
LCS	2-Chlorophenol	95-57-8	5243	87.383	% Recov	84.000	114.000				06/17/08
LCS	N-Nitrosodi-n-dipropylamine	621-64-7	3218	80.450	% Recov	76.000	119.000				06/17/08
LCS	2-Fluorobiphenyl(Surr)	321-60-8	3170.2	79.300	% Recov	58.000	109.000				06/17/08
LCS	Phenol	108-95-2	5468	91.133	% Recov	80.000	113.000				06/17/08
LCS	Nitrobenzene-d5(Surr)	4165-60-0	2959.4	74.000	% Recov	60.000	118.000				06/17/08
LCS	4-Nitrophenol	100-02-7	4396.0	73.300	% Recov	42.000	123.000				06/17/08
LCS	Pentachlorophenol	87-86-5	4328.1	72.100	% Recov	55.000	120.000				06/17/08
LCS	Phenol-d5(Surr)	4165-62-2	3167.8	79.200	% Recov	59.000	116.000				06/17/08
LCS	Pyrene	129-00-0	2740.3	68.500	% Recov	67.000	122.000				06/17/08
LCS	2,4,6-Tribromophenol(Surr)	118-79-6	2947.6	73.700	% Recov	60.000	120.000				06/17/08
LCS	Terphenyl-d14(Surr)	98904-43-9	2895.8	72.400	% Recov	60.000	120.000				06/17/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Organic**

SDG Number: WSCF20081183
 Matrix: SOLID
 Test: VOA Ground Water Protection

Sample Date: 06/11/08
 Receive Date: 06/11/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR01661											
BATCH QC ASSOCIATED WITH SAMPLE											
MS	1,1-Dichloroethene	75-35-4	34.010	112.000	% Recov	63.000	117.000				06/25/08
MS	Benzene	71-43-2	32.950	108.000	% Recov	75.000	129.000				06/25/08
MS	4-Bromofluorobenzene(Surr)	460-00-4	56.700	93.000	% Recov	75.000	125.000				06/25/08
MS	Chlorobenzene	108-90-7	32.700	107.000	% Recov	79.000	119.000				06/25/08
MS	1,2-Dichloroethane-d4(Surr)	17060-07-0	62.180	102.000	% Recov	75.000	125.000				06/25/08
MS	Toluene-d8(Surr)	2037-26-5	59.450	97.500	% Recov	75.000	125.000				06/25/08
MS	Toluene	108-88-3	33.660	110.000	% Recov	76.000	120.000				06/25/08
MS	Trichloroethene	79-01-6	26.300	88.200	% Recov	73.000	123.000				06/25/08
MSD	1,1-Dichloroethene	75-35-4	35.070	107.000	% Recov	63.000	117.000				06/25/08
MSD	Benzene	71-43-2	36.270	111.000	% Recov	75.000	129.000				06/25/08
MSD	4-Bromofluorobenzene(Surr)	460-00-4	61.090	93.600	% Recov	75.000	125.000				06/25/08
MSD	Chlorobenzene	108-90-7	36.190	111.000	% Recov	79.000	119.000				06/25/08
MSD	1,2-Dichloroethane-d4(Surr)	17060-07-0	64.660	99.100	% Recov	75.000	125.000				06/25/08
MSD	Toluene-d8(Surr)	2037-26-5	63.520	97.300	% Recov	75.000	125.000				06/25/08
MSD	Toluene	108-88-3	36.320	111.000	% Recov	76.000	120.000				06/25/08
MSD	Trichloroethene	79-01-6	28.790	88.200	% Recov	73.000	123.000				06/25/08
SPK-RPD	1,1-Dichloroethene	75-35-4	107.000		RPD			4.566	20.000		06/25/08
SPK-RPD	Benzene	71-43-2	111.000		RPD			2.740	20.000		06/25/08
SPK-RPD	4-Bromofluorobenzene(Surr)	460-00-4	93.600		RPD			0.643	20.000		06/25/08
SPK-RPD	Chlorobenzene	108-90-7	111.000		RPD			3.670	20.000		06/25/08
SPK-RPD	1,2-Dichloroethane-d4(Surr)	17060-07-0	99.100		RPD			2.884	20.000		06/25/08
SPK-RPD	Toluene-d8(Surr)	2037-26-5	97.300		RPD			0.205	20.000		06/25/08
SPK-RPD	Toluene	108-88-3	111.000		RPD			0.905	20.000		06/25/08
SPK-RPD	Trichloroethene	79-01-6	88.200		RPD			2.294	20.000		06/25/08
SURR	4-Bromofluorobenzene(Surr)	460-00-4	61.230	93.800	% Recov	75.000	125.000				06/25/08
SURR	1,2-Dichloroethane-d4(Surr)	17060-07-0	65.380	100.000	% Recov	75.000	125.000				06/25/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20081183
 Matrix: SOLID
 Test: VOA Ground Water Protection

Sample Date: 06/11/08
 Receive Date: 06/11/08

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	65.350	100.000	% Recov	80.000	126.000				06/25/08
Lab ID: W08GR01664											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	4-Bromofluorobenzene(Surr)	460-00-4	41.300	96.100	% Recov	75.000	125.000				06/25/08
SURR	1,2-Dichloroethane-d4(Surr)	17060-07-0	43.570	101.000	% Recov	75.000	125.000				06/25/08
SURR	Toluene-d8(Surr)	2037-26-5	42.950	99.900	% Recov	80.000	126.000				06/25/08
Lab ID: W08GR01667											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	4-Bromofluorobenzene(Surr)	460-00-4	49.830	95.000	% Recov	75.000	125.000				06/25/08
SURR	1,2-Dichloroethane-d4(Surr)	17060-07-0	53.910	103.000	% Recov	75.000	125.000				06/25/08
SURR	Toluene-d8(Surr)	2037-26-5	53.030	101.000	% Recov	80.000	126.000				06/25/08
BATCH QC											
BLANK	1,1,1-Trichloroethane	71-55-6	< 1.0	n/a	ug/Kg					U	06/25/08
BLANK	1,1-Dichloroethane	75-35-4	< 1.0	n/a	ug/Kg					U	06/25/08
BLANK	4-Methyl-2-Pentanone	108-10-1	< 1.0	n/a	ug/Kg					U	06/25/08
BLANK	Acetone	67-64-1	< 1.0	n/a	ug/Kg					U	06/25/08
BLANK	Benzene	71-43-2	< 1.0	n/a	ug/Kg					U	06/25/08
BLANK	4-Bromofluorobenzene(Surr)	460-00-4	49.400	98.800	% Recov	75.000	125.000				06/25/08
BLANK	Carbon tetrachloride	56-23-5	< 1.0	n/a	ug/Kg					U	06/25/08
BLANK	Chlorobenzene	108-90-7	< 1.0	n/a	ug/Kg					U	06/25/08
BLANK	1,2-Dichloroethane-d4(Surr)	17060-07-0	50.080	100.000	% Recov	75.000	125.000				06/25/08
BLANK	2-Butanone	78-93-3	< 1.0	n/a	ug/Kg					U	06/25/08
BLANK	Methylenechloride	75-09-2	< 1.0	n/a	ug/Kg					U	06/25/08
BLANK	Toluene-d8(Surr)	2037-26-5	49.390	98.800	% Recov	80.000	126.000				06/25/08
BLANK	Toluene	108-88-3	< 1.0	n/a	ug/Kg					U	06/25/08
BLANK	Trichloroethane	79-01-6	< 1.0	n/a	ug/Kg					U	06/25/08
LCS	1,1-Dichloroethane	75-35-4	28.720	115.000	% Recov	75.000	125.000				06/25/08

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WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20081183
Matrix: SOLID
Test: VOA Ground Water Protection

Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
LCS	Benzene	71-43-2	27.390	110.000	% Recov	75.000	125.000				06/25/08
LCS	4-Bromofluorobenzene(Surr)	460-00-4	48.390	96.800	% Recov	75.000	125.000				06/25/08
LCS	Chlorobenzene	108-90-7	28.030	112.000	% Recov	75.000	125.000				06/25/08
LCS	1,2-Dichloroethane-d4(Surr)	17060-07-0	47.020	94.000	% Recov	75.000	125.000				06/25/08
LCS	Toluene-d8(Surr)	2037-26-5	50.290	101.000	% Recov	80.000	126.000				06/25/08
LCS	Toluene	108-88-3	28.530	114.000	% Recov	75.000	125.000				06/25/08
LCS	Trichloroethene	79-01-6	22.980	91.900	% Recov	75.000	125.000				06/25/08

WSCF ANALYTICAL COMMENT REPORT

Attention: Steve Trent
Project Number F08-045

Group #: WSCF20081183
Department: Organic

Sample #	Client ID	Lab Area	Test	Comment
		VALGROUP		<p>Organics: All results are moisture corrected and reported on a dry weight basis. cgc</p> <p>U-235/Batch dup is flagged for poor RPD but the sample activity is low level. RPD does not apply to low level samples. lmh</p> <p>ICP-AES: High lithium LCS recovery; "X" flag. Lithium has no certified value. It's value was taken from multiple analyses.</p>

Lab Areas: VALGROUP - Group Validation
LOGSAMP - Login for Sample

VALTEST - Test Validation
LOGTEST - Login for Tests

TESTDATA - Test Data Entry

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wgppc/5.2 Report#: WSCF20081183 Report Date: 19-aug-2008

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WSCF

ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-045
Sample # W08GR01660
Client ID: B1V9M1

TRENT
 WSCF

Matrix: SOIL

Group #: WSCF20081183
Department: Radiochemistry
Sampled: 06/11/08
Received: 06/11/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Gamma Energy Analysis-grd H2O											
Cobalt-60	10198-40-0	LA-508-481	U	-3.63e-03	pCi/g	+ -6.01e-03	pCi/g	1.00	0.010		06/16/08
Cesium-137	10045-97-3	LA-508-481	U	-3.82e-03	pCi/g	+ -6.53e-03	pCi/g	1.00	0.011		06/16/08
Europium-154	15585-10-1	LA-508-481	U	-0.0158	pCi/g	+ -0.0188	pCi/g	1.00	0.031		06/16/08
Strontium 89/90											
Strontium-89/90	SR-RAD	LA-508-415	U	0.170	pCi/g	+ -0.794	pCi/g	1.00	0.48		06/18/08
Sr-85 Tracer by Beta Counting	SR85	LA-508-415		90.8	Percent			1.00	0.0		06/18/08
Uranium Isotopics by AEA											
Uranium-233/234	U-233/234	LA-508-471		0.160	pCi/g	+ -0.0544	pCi/g	1.00	5.0e-03		07/23/08
Uranium-235	15117-96-1	LA-508-471		0.0120	pCi/g	+ -0.0103	pCi/g	1.00	5.5e-03		07/23/08
Uranium-238	U-238	LA-508-471		0.160	pCi/g	+ -0.0544	pCi/g	1.00	5.0e-03		07/23/08
U-232 tracer by AEA	U232	LA-508-471		4.00	pCi/g			1.00	0.024		07/23/08

MDL=Minimum Detection Limit

RQ=Result Qualifier

TP Err=Total Propagated Error

DF=Dilution Factor

* - Indicates results that have NOT been validated;

+ - Indicates more than six qualifier symbols

Report WGPP/ver. 5.2

Groundwater Remediation Program

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

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

U - Analyzed for but not detected above limiting criteria.

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

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WSCF

ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-045
Sample # W08GR01663
Client ID: B1V9K9

TRENT
 WSCF

Matrix: SOIL

Group #: WSCF20081183
Department: Radiochemistry
Sampled: 06/11/08
Received: 06/11/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Gamma Energy Analysis-grd H2O											
Cobalt-60	10198-40-0	LA-508-481	U	3.31e-03	pCi/g	+ -6.58e-03	pCi/g	1.00	0.011		06/16/08
Cesium-137	10045-97-3	LA-508-481	U	-5.31e-03	pCi/g	+ -7.22e-03	pCi/g	1.00	0.012		06/16/08
Europium-154	15585-10-1	LA-508-481	U	-0.0148	pCi/g	+ -0.0256	pCi/g	1.00	0.036		06/16/08
Strontium 89/90											
Strontium-89/90	SR-RAD	LA-508-415	U	-0.840	pCi/g	+ -0.840	pCi/g	1.00	0.40		06/18/08
Sr-85 Tracer by Beta Counting	SR85	LA-508-415		99.6	Percent			1.00	0.0		06/18/08
Uranium Isotopics by AEA											
Uranium-233/234	U-233/234	LA-508-471		0.0560	pCi/g	+ -0.0235	pCi/g	1.00	4.2e-03		07/23/08
Uranium-235	15117-96-1	LA-508-471		0.0140	pCi/g	+ -0.0116	pCi/g	1.00	0.013		07/23/08
Uranium-238	U-238	LA-508-471		0.0850	pCi/g	+ -0.0314	pCi/g	1.00	4.2e-03		07/23/08
U-232 tracer by AEA	U232	LA-508-471		3.80	pCi/g			1.00	0.017		07/23/08

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

* - Indicates results that have NOT been validated;

+ - Indicates more than six qualifier symbols

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

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

U - Analyzed for but not detected above limiting criteria.

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

Report WGPP/ver. 5.2

Groundwater Remediation Program

WSCF ANALYTICAL RESULTS REPORT

Attention: Steve Trent
 SAF Number: F08-045
 Sample # W08GR01666
 Client ID: B1V9L3

TRENT
 WSCF

Matrix: SOIL

Group #: WSCF20081183
 Department: Radiochemistry
 Sampled: 06/11/08
 Received: 06/11/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Gamma Energy Analysis-grd H2O											
Cobalt-60	10198-40-0	LA-508-481	U	-7.33e-03	pCi/g	+ -7.44e-03	pCi/g	1.00	0.012		06/16/08
Cesium-137	10045-97-3	LA-508-481	U	-3.10e-03	pCi/g	+ -8.90e-03	pCi/g	1.00	0.013		06/16/08
Europium-154	15585-10-1	LA-508-481	U	-0.0132	pCi/g	+ -0.0283	pCi/g	1.00	0.042		06/16/08
Strontium 89/90											
Strontium-89/90	SR-RAD	LA-508-415	U	-0.720	pCi/g	+ -0.749	pCi/g	1.00	0.45		06/18/08
Sr-85 Tracer by Beta Counting	SR85	LA-508-415		93.1	Percent			1.00	0.0		06/18/08
Uranium Isotopics by AEA											
Uranium-233/234	U-233/234	LA-508-471		0.180	pCi/g	+ -0.0544	pCi/g	1.00	5.5e-03		07/23/08
Uranium-235	15117-96-1	LA-508-471	U	8.90e-03	pCi/g	+ -0.0111	pCi/g	1.00	0.018		07/23/08
Uranium-238	U-238	LA-508-471		0.150	pCi/g	+ -0.0525	pCi/g	1.00	5.5e-03		07/23/08
U-232 tracer by AEA	U232	LA-508-471		4.00	pCi/g			1.00	0.031		07/23/08

MDL = Minimum Detection Limit

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

U - Analyzed for but not detected above limiting criteria.

RQ = Result Qualifier

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

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

TP Err = Total Propagated Error

DF = Dilution Factor

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

Report WGPP/ver. 5.2

Groundwater Remediation Program

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WSCF

TENTATIVELY IDENTIFIED PEAK REPORT

Attention: Steve Trent
Project Number: F08-045 :F08-045

Group #: WSCF20081183
Department: Radiochemistry

Sample #	Client ID	Test Name	Peak Name	CAS#	RT	RQ	Result	Units
W08GR01660	B1V9M1	TRENT	Gamma Energy Analysis-grd H2O	AC-228			0.57	pCi/g
W08GR01660	B1V9M1	TRENT	Gamma Energy Analysis-grd H2O	AC-228 Count Error			20	%
W08GR01660	B1V9M1	TRENT	Gamma Energy Analysis-grd H2O	BI-212			0.41	pCi/g
W08GR01660	B1V9M1	TRENT	Gamma Energy Analysis-grd H2O	BI-212 Count Error			26	%
W08GR01660	B1V9M1	TRENT	Gamma Energy Analysis-grd H2O	BI-214			0.45	pCi/g
W08GR01660	B1V9M1	TRENT	Gamma Energy Analysis-grd H2O	BI-214 Count Error			15	%
W08GR01660	B1V9M1	TRENT	Gamma Energy Analysis-grd H2O	CS-134			0.028	pCi/g
W08GR01660	B1V9M1	TRENT	Gamma Energy Analysis-grd H2O	CS-134 Count Error			36	%
W08GR01660	B1V9M1	TRENT	Gamma Energy Analysis-grd H2O	EU-155			0.084	pCi/g
W08GR01660	B1V9M1	TRENT	Gamma Energy Analysis-grd H2O	EU-155 Count Error			50	%
W08GR01660	B1V9M1	TRENT	Gamma Energy Analysis-grd H2O	K-40			13	pCi/g
W08GR01660	B1V9M1	TRENT	Gamma Energy Analysis-grd H2O	K-40 Count Error			14	%
W08GR01660	B1V9M1	TRENT	Gamma Energy Analysis-grd H2O	PB-212			0.72	pCi/g
W08GR01660	B1V9M1	TRENT	Gamma Energy Analysis-grd H2O	PB-212 Count Error			10	%
W08GR01660	B1V9M1	TRENT	Gamma Energy Analysis-grd H2O	PB-214			0.82	pCi/g
W08GR01660	B1V9M1	TRENT	Gamma Energy Analysis-grd H2O	PB-214 Count Error			25	%
W08GR01660	B1V9M1	TRENT	Gamma Energy Analysis-grd H2O	RA-226			0.40	pCi/g
W08GR01660	B1V9M1	TRENT	Gamma Energy Analysis-grd H2O	RA-226 Count Error			17	%
W08GR01660	B1V9M1	TRENT	Gamma Energy Analysis-grd H2O	RA-228			0.60	pCi/g
W08GR01660	B1V9M1	TRENT	Gamma Energy Analysis-grd H2O	RA-228 Count Error			17	%
W08GR01660	B1V9M1	TRENT	Gamma Energy Analysis-grd H2O	SN-126			0.14	pCi/g
W08GR01660	B1V9M1	TRENT	Gamma Energy Analysis-grd H2O	SN-126 Count Error			25	%
W08GR01660	B1V9M1	TRENT	Gamma Energy Analysis-grd H2O	TL-208			0.22	pCi/g
W08GR01660	B1V9M1	TRENT	Gamma Energy Analysis-grd H2O	TL-208 Count Error			14	%
W08GR01663	B1V9K9	TRENT	Gamma Energy Analysis-grd H2O	AC-228			0.42	pCi/g

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

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Groundwater Remediation Program

WGPPE v 5.2 Report#: WSCF20081183

Report Date: 19-aug-2008

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WSCF

TENTATIVELY IDENTIFIED PEAK REPORT

Attention: Steve Trent
Project Number: F08-045 :F08-045

Group #: WSCF20081183
Department: Radiochemistry

Sample #	Client ID	Test Name	Peak Name	CAS#	RT	RQ	Result	Units
W08GRO1663	B1V9K9	TRENT	Gamma Energy Analysis-grd H2O	AC-228	Count Error		27	%
W08GRO1663	B1V9K9	TRENT	Gamma Energy Analysis-grd H2O	BI-212			0.30	pCi/g
W08GRO1663	B1V9K9	TRENT	Gamma Energy Analysis-grd H2O	BI-212	Count Error		37	%
W08GRO1663	B1V9K9	TRENT	Gamma Energy Analysis-grd H2O	BI-214			0.35	pCi/g
W08GRO1663	B1V9K9	TRENT	Gamma Energy Analysis-grd H2O	BI-214	Count Error		17	%
W08GRO1663	B1V9K9	TRENT	Gamma Energy Analysis-grd H2O	CS-134			0.019	pCi/g
W08GRO1663	B1V9K9	TRENT	Gamma Energy Analysis-grd H2O	CS-134	Count Error		45	%
W08GRO1663	B1V9K9	TRENT	Gamma Energy Analysis-grd H2O	K-40			9.4	pCi/g
W08GRO1663	B1V9K9	TRENT	Gamma Energy Analysis-grd H2O	K-40	Count Error		13	%
W08GRO1663	B1V9K9	TRENT	Gamma Energy Analysis-grd H2O	PB-212			0.50	pCi/g
W08GRO1663	B1V9K9	TRENT	Gamma Energy Analysis-grd H2O	PB-212	Count Error		11	%
W08GRO1663	B1V9K9	TRENT	Gamma Energy Analysis-grd H2O	PB-214			0.44	pCi/g
W08GRO1663	B1V9K9	TRENT	Gamma Energy Analysis-grd H2O	PB-214	Count Error		37	%
W08GRO1663	B1V9K9	TRENT	Gamma Energy Analysis-grd H2O	RA-226			0.27	pCi/g
W08GRO1663	B1V9K9	TRENT	Gamma Energy Analysis-grd H2O	RA-226	Count Error		18	%
W08GRO1663	B1V9K9	TRENT	Gamma Energy Analysis-grd H2O	RA-228			0.44	pCi/g
W08GRO1663	B1V9K9	TRENT	Gamma Energy Analysis-grd H2O	RA-228	Count Error		19	%
W08GRO1663	B1V9K9	TRENT	Gamma Energy Analysis-grd H2O	SN-126			0.085	pCi/g
W08GRO1663	B1V9K9	TRENT	Gamma Energy Analysis-grd H2O	SN-126	Count Error		32	%
W08GRO1663	B1V9K9	TRENT	Gamma Energy Analysis-grd H2O	TH-234			0.54	pCi/g
W08GRO1663	B1V9K9	TRENT	Gamma Energy Analysis-grd H2O	TH-234	Count Error		30	%
W08GRO1663	B1V9K9	TRENT	Gamma Energy Analysis-grd H2O	TL-208			0.13	pCi/g
W08GRO1663	B1V9K9	TRENT	Gamma Energy Analysis-grd H2O	TL-208	Count Error		17	%
W08GRO1666	B1V9L3	TRENT	Gamma Energy Analysis-grd H2O	AC-228			0.56	pCi/g
W08GRO1666	B1V9L3	TRENT	Gamma Energy Analysis-grd H2O	AC-228	Count Error		21	%

RQ=Result Qualifier

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

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Groundwater Remediation Program

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Report Date: 19-aug-2008

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WSCF

TENTATIVELY IDENTIFIED PEAK REPORT

Attention: Steve Trent
Project Number: F08-045 :F08-045

Group #: WSCF20081183
Department: Radiochemistry

Sample #	Client ID	Test Name	Peak Name	CAS#	RT	RQ	Result	Units
W08GRO1666	B1V9L3	TRENT	Gamma Energy Analysis-grd H2O	BI-212			0.48	pCi/g
W08GRO1666	B1V9L3	TRENT	Gamma Energy Analysis-grd H2O	BI-212 Count Error			25	%
W08GRO1666	B1V9L3	TRENT	Gamma Energy Analysis-grd H2O	BI-214			0.53	pCi/g
W08GRO1666	B1V9L3	TRENT	Gamma Energy Analysis-grd H2O	BI-214 Count Error			15	%
W08GRO1666	B1V9L3	TRENT	Gamma Energy Analysis-grd H2O	CS-134			0.023	pCi/g
W08GRO1666	B1V9L3	TRENT	Gamma Energy Analysis-grd H2O	CS-134 Count Error			49	%
W08GRO1666	B1V9L3	TRENT	Gamma Energy Analysis-grd H2O	K-40			16	pCi/g
W08GRO1666	B1V9L3	TRENT	Gamma Energy Analysis-grd H2O	K-40 Count Error			13	%
W08GRO1666	B1V9L3	TRENT	Gamma Energy Analysis-grd H2O	PB-212			0.80	pCi/g
W08GRO1666	B1V9L3	TRENT	Gamma Energy Analysis-grd H2O	PB-212 Count Error			9.4	%
W08GRO1666	B1V9L3	TRENT	Gamma Energy Analysis-grd H2O	PB-214			0.96	pCi/g
W08GRO1666	B1V9L3	TRENT	Gamma Energy Analysis-grd H2O	PB-214 Count Error			18	%
W08GRO1666	B1V9L3	TRENT	Gamma Energy Analysis-grd H2O	RA-226			0.41	pCi/g
W08GRO1666	B1V9L3	TRENT	Gamma Energy Analysis-grd H2O	RA-226 Count Error			19	%
W08GRO1666	B1V9L3	TRENT	Gamma Energy Analysis-grd H2O	RA-228			0.63	pCi/g
W08GRO1666	B1V9L3	TRENT	Gamma Energy Analysis-grd H2O	RA-228 Count Error			18	%
W08GRO1666	B1V9L3	TRENT	Gamma Energy Analysis-grd H2O	SN-126			0.14	pCi/g
W08GRO1666	B1V9L3	TRENT	Gamma Energy Analysis-grd H2O	SN-126 Count Error			29	%
W08GRO1666	B1V9L3	TRENT	Gamma Energy Analysis-grd H2O	TH-234			0.81	pCi/g
W08GRO1666	B1V9L3	TRENT	Gamma Energy Analysis-grd H2O	TH-234 Count Error			33	%
W08GRO1666	B1V9L3	TRENT	Gamma Energy Analysis-grd H2O	TL-208			0.21	pCi/g
W08GRO1666	B1V9L3	TRENT	Gamma Energy Analysis-grd H2O	TL-208 Count Error			16	%

RQ=Result Qualifier

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

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Groundwater Remediation Program

WGPPE v 5.2 Report#: WSCF20081183

Report Date: 19-aug-2008

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WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20081183
 Matrix: SOLID
 Test: Gamma Energy Analysis-grd H2O

Sample Date: 06/03/08
 Receive Date: 06/10/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR01628											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Cesium-137	10045-97-3	1074		RPD			0.280	20.000		06/13/08
DUP	Europium-154	15585-10-1	U0.504		RPD			n/a	20.000		06/13/08
BATCH QC											
BLANK	Cobalt-60	10198-40-0	U-3.899e-4	n/a	pCi/g	-10.000	1000.000				06/17/08
BLANK	Cesium-137	10045-97-3	U-8.389e-4	n/a	pCi/g	-10.000	1000.000				06/17/08
BLANK	Europium-154	15585-10-1	U1.258e-3	n/a	pCi/g	-10.000	1000.000				06/17/08
LCS	Cobalt-60	10198-40-0	10170	102.314	% Recov	80.000	120.000				06/18/08
LCS	Cesium-137	10045-97-3	8313	104.520	% Recov	80.000	120.000				06/18/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20081183
 Matrix: SOLID
 Test: Strontium 89/90

Sample Date: 06/03/08
 Receive Date: 06/10/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR01628											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Sr-85 Tracer by Beta Counting	SR85	88.9	88.900	% Recov	30.000	105.000				06/18/08
DUP	Strontium-89/90	SR-RAD	1.2		RPD			8.696	20.000		06/18/08
Lab ID: W08GR01660											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	Sr-85 Tracer by Beta Counting	SR85	90.8	90.800	% Recov	30.000	105.000				06/18/08
Lab ID: W08GR01663											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	Sr-85 Tracer by Beta Counting	SR85	99.6	99.600	% Recov	30.000	105.000				06/18/08
Lab ID: W08GR01666											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	Sr-85 Tracer by Beta Counting	SR85	93.1	93.100	% Recov	30.000	105.000				06/18/08
BATCH QC											
BLANK	Sr-85 Tracer by Beta Counting	SR85	81.2	81.200	% Recov	30.000	105.000				06/18/08
BLANK	Strontium-89/90	10098-97-2	6.1E-01	0.610	pCi/g	-10.000	300.000				06/18/08
LCS	Sr-85 Tracer by Beta Counting	SR85	85.4	85.400	% Recov	30.000	105.000				06/18/08
LCS	Strontium-89/90	10098-97-2	67.6	96.399	% Recov	80.000	120.000				06/18/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20081183
 Matrix: SOLID
 Test: Uranium Isotopics by AEA

Sample Date: 06/11/08
 Receive Date: 06/11/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR01660											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	U-232 tracer by AEA	U232	3.987	94.850	% Recov	30.000	105.000				07/23/08
DUP	Uranium-233/234	U-233/234	0.16		RPD			0.000	20.000		07/23/08
DUP	Uranium-235	15117-96-1	2.6e-2		RPD			73.684	20.000		07/23/08
DUP	Uranium-238	U-238	0.15		RPD			6.452	20.000		07/23/08
SURR	U-232 tracer by AEA	U232	3.979	85.170	% Recov	30.000	105.000				07/23/08
Lab ID: W08GR01663											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	U-232 tracer by AEA	U232	3.781	103.330	% Recov	30.000	105.000				07/23/08
Lab ID: W08GR01666											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	U-232 tracer by AEA	U232	4.018	80.130	% Recov	30.000	105.000				07/23/08
BATCH QC											
BLANK	U-232 tracer by AEA	U232	4.106	89.130	% Recov	30.000	105.000				07/23/08
BLANK	Uranium-233/234	13966-29-5	2.4e-2	0.024	pCi/g	-10.000	1000.000				07/23/08
BLANK	Uranium-235	15117-96-1	1e-2	0.010	pCi/g	-10.000	1000.000				07/23/08
BLANK	Uranium-238	24678-82-8	1.1e-2	0.011	pCi/g	-10.000	1000.000				07/23/08
LCS	U-232 tracer by AEA	U232	11.4	89.680	% Recov	30.000	105.000				07/23/08
LCS	Uranium-233/234	13966-29-5	N/A	n/a	% Recov	75.000	125.000				07/23/08
LCS	Uranium-235	15117-96-1	N/A	n/a	% Recov	75.000	125.000				07/23/08
LCS	Uranium-238	24678-82-8	19.99	105.460	% Recov	80.000	120.000				07/23/08

WSCF ANALYTICAL COMMENT REPORT

Attention: Steve Trent
Project Number F08-045

Group #: WSCF20081183
Department: Radiochemistry

Sample #	Client ID	Lab Area	Test	Comment
		VALGROUP		<p>Organics: All results are moisture corrected and reported on a dry weight basis. cgc</p> <p>U-235/Batch dup is flagged for poor RPD but the sample activity is low level. RPD does not apply to low level samples. lmh</p> <p>ICP-AES: High lithium LCS recovery; "X" flag. Lithium has no certified value. It's value was taken from multiple analyses.</p>

Lab Areas: VALGROUP - Group Validation
LOGSAMP - Login for Sample

VALTEST - Test Validation
LOGTEST - Login for Tests

TESTDATA - Test Data Entry

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M4W41-SLF-08-862

ATTACHMENT 4

SAMPLE RECEIPT INFORMATION

Consisting of 11 pages
Including cover page

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

File

ACKNOWLEDGMENT OF SAMPLES RECEIVED

07/23/08
[Signature]

Groundwater Remediation Program

Richland, WA 99354
Attn: Steve Trent

Customer Code: GPP
PO#: 123074ES10
Group#: 20081183
Project#: F08-045
Proj Mgr: Steve Trent E6-35
Phone: 373-5869

The following samples were received from you on 06/11/08. They have been scheduled for the tests listed beside each sample. If this information is incorrect, please contact your service representative. Thank you for using Waste Sampling and Characterization Facility.

Sample#	Sample Id	Tests Scheduled	Matrix	Sample Date
W08GR01660 ①	B1V9M1	TRENT @AEA-32 PERSOLID	Solid, or handle as if solid @GEA-GPP @GPP6010 @SR89_90 @SVOCGPP	06/11/08
W08GR01661 ①	B1V9L9	TRENT @VOA-GPP	Solid, or handle as if solid	06/11/08
W08GR01662 ①	B1V9M0 <i>MeOH</i>	TRENT @VOA-GPP	Solid, or handle as if solid	06/11/08
W08GR01663 ③	B1V9K9	TRENT @AEA-32 PERSOLID	Solid, or handle as if solid @GEA-GPP @GPP6010 @SR89_90 @SVOCGPP	06/11/08
W08GR01664 ②	B1V9L1	TRENT @VOA-GPP	Solid, or handle as if solid	06/11/08
W08GR01665 ②	B1V9L2 <i>MeOH</i>	TRENT @VOA-GPP	Solid, or handle as if solid	06/11/08
W08GR01666 ②	B1V9L3	TRENT @AEA-32 PERSOLID	Solid, or handle as if solid @GEA-GPP @GPP6010 @SR89_90 @SVOCGPP	06/11/08
W08GR01667 ③	B1V9K7	TRENT @VOA-GPP	Solid, or handle as if solid	06/11/08
W08GR01668 ③	B1V9K8 <i>MeOH</i>	TRENT @VOA-GPP	Solid, or handle as if solid	06/11/08

Test Acronym Description

Test Acronym	Description
@AEA-32	Uranium Isotopics by AEA
@GEA-GPP	Gamma Energy Analysis-grd H2O
@GPP6010	ICP Metals Analysis, Grd H2O P
@SR89_90	Strontium 89/90
@SVOCGPP	SW-846 8270C Semi-Vols
@VOA-GPP	VOA Ground Water Protection
PERSOLID	Percent Solids

Fluor Hanford Inc. 07/23/08

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F08-045-019

PAGE 1 OF 1

COLLECTOR
NCO Sampler *D. WEBB, J. HANS*
SAMPLING LOCATION
C4975
ICE CHEST NO.

COMPANY CONTACT
TRENT, SJ
TELEPHONE NO.
373-5869
PROJECT DESIGNATION
200-UP-1 OU Monitoring Wells - Waste Designation
FIELD LOGBOOK NO.
HNF-N-488-1
ACTUAL SAMPLE DEPTH
OFFSITE PROPERTY NO.

PROJECT COORDINATOR
WIDRIG, DL
PRICE CODE 8N
SAF NO.
F08-045
AIR QUALITY
COA
123074ES10
METHOD OF SHIPMENT
GOVERNMENT VEHICLE
BILL OF LADING/AIR BILL NO.

DATA
TURNAROUND
45 Days / 45
Days

SHIPPED TO
Waste Sampling & Characterization *20081183*

MATRIX*
A=Air
DL=Drum
Liquids
DS=Drum
Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other
POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)
SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool-4C	None	None
TYPE OF CONTAINER	aG	G/P	Square Bottle - Poly
NO. OF CONTAINER(S)	1	1	1
VOLUME	250mL	120mL	500mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO. B1V9M1
MATRIX* SOIL
W086101660

SAMPLE DATE	SAMPLE TIME			
6-11-08	1140	X	X	X

ICED

3207062 029561

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM *D. Webb / J. Hans* DATE/TIME *6-11-08 / 1200*

RELINQUISHED BY/REMOVED FROM *Christy Han / [Signature]* DATE/TIME *6-11-08 / 1345*

RELINQUISHED BY/REMOVED FROM

RELINQUISHED BY/REMOVED FROM

RELINQUISHED BY/REMOVED FROM

RELINQUISHED BY/REMOVED FROM

RECEIVED BY/STORED IN *Christy Han / [Signature]* DATE/TIME *6-11-08 / 1200*

RECEIVED BY/STORED IN *CA Hyder / [Signature]* DATE/TIME *6/11/08 1345*

RECEIVED BY/STORED IN

RECEIVED BY/STORED IN

RECEIVED BY/STORED IN

RECEIVED BY/STORED IN

Sample at 232 feet. Drum number UP1-07-008 / 0045284. Radioactive tie to B1V9L8.

(1)Semi-VOA - 8270B (TCL) {2-Methylphenol (cresol, o-), Phenol} Semi-VOA - 8270B (Add-On) {3+4 Methylphenol (cresol, m+p)}

(2)ICP/MS - 200.8 (TAL) {Antimony, Cadmium, Chromium, Vanadium} ICP Metals - 6010B (Add-On) {Lithium}

(3)Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-154} Isotopic Uranium; Strontium-89,90 -- Total Sr;

48 OF 60

LABORATORY SECTION RECEIVED BY
FINAL SAMPLE DISPOSITION DISPOSAL METHOD

TITLE DATE/TIME
DISPOSED BY DATE/TIME

COLLECTOR
NCO Sampler *D. WEBB, J. HELMS*

SAMPLING LOCATION
C4975

ICE CHEST NO.

SHIPPED TO
Waste Sampling & Characterization

COMPANY CONTACT
TRENT, SJ

TELEPHONE NO.
373-5869

PROJECT DESIGNATION
200-UP-1 OU Monitoring Wells - Waste Designation

FIELD LOGBOOK NO.
HNF-N-488-1

ACTUAL SAMPLE DEPTH

OFFSITE PROPERTY NO.

PROJECT COORDINATOR
WIDRIG, DL

PRICE CODE 8N

SAF NO.
F08-045

AIR QUALITY

COA
123074E510

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

BILL OF LADING/AIR BILL NO.

DATA TURNAROUND
45 Days / 45 Days

MATRIX*
A=Air
DL=Drum
L=Liquid
DS=Drum
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION Cool <-7C and Cool~4C >-20C

TYPE OF CONTAINER G G

NO. OF CONTAINER(S) 5 3

VOLUME 40mL 40mL

SAMPLE ANALYSIS SEE ITEM (1) IN SPECIAL INSTRUCTIONS SEE ITEM (2) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME						
B1V9L9	SOIL	6-11-08	1140	X	X				

ICED

7312110 7312110

CHAIN OF POSSESSION	RELINQUISHED BY/REMOVED FROM	DATE/TIME	SIGN/ PRINT NAMES	RECEIVED BY/STORED IN	DATE/TIME
	<i>Quinn</i>	<i>6-11-08/1230</i>	<i>Chris Fulton</i>	<i>Chris Fulton</i>	<i>6-11-08/1315</i>
	<i>Chris Fulton</i>	<i>6-11-08</i>	<i>Chris Fulton</i>	<i>Chris Fulton</i>	<i>6-11-08</i>

SPECIAL INSTRUCTIONS
Sample at 232 feet. Drum number UP1-07-008 / 0045284. Radioactive tie to B1V9L8.
(1)VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethene, 2-Butanone, 2-Pentanone, 4-Methyl, Acetone, Carbon tetrachloride, Methylene chloride}
(2)VOA - 5035/8260 (HIGH LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethene, 2-Butanone, 2-Pentanone, 4-Methyl, Acetone, Carbon tetrachloride, Methylene chloride}

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

49 of 60

COLLECTOR
NCO Sampler *D. WEBB, J. HELMS*

SAMPLING LOCATION
C4975

ICE CHEST NO.

SHIPPED TO

Waste Sampling & Characterization

MATRIX*

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

POSSIBLE SAMPLE HAZARDS/ REMARKS

Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

COMPANY CONTACT

TRENT, SJ

TELEPHONE NO.

373-5869

PROJECT COORDINATOR

WIDRIG, DL

PROJECT DESIGNATION

200-UP-1 OU Monitoring Wells - Waste Designation

SAF NO.

F08-045

FIELD LOGBOOK NO.

HNF-N-488-1

ACTUAL SAMPLE DEPTH

COA

123074ES10

OFFSITE PROPERTY NO.

BILL OF LADING/AIR BILL NO.

PRICE CODE

8N

AIR QUALITY

DATA TURNAROUND

45 Days / 45 Days

PRESERVATION

Cool~4C

TYPE OF CONTAINER

G

NO. OF CONTAINER(S)

1

VOLUME

40mL

SAMPLE ANALYSIS

VOA - 5035/8260 (TCL);

SAMPLE NO.

MATRIX*

SAMPLE DATE

SAMPLE TIME

B1V9M0

1662

SOIL

6-11-08

1140

X

ICED

7312110

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

DL Webb / J. Helms *6-11-08* *1250*

6-11-08 *1250*

Chris Fulton / [Signature] *6-11-08* *1250*

6-11-08 *1250*

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

Chris Fulton / [Signature] *6-11-08* *1315*

6-11-08 *1315*

CA Hudson / [Signature] *6/14/08* *1315*

6/14/08 *1315*

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

LABORATORY SECTION

RECEIVED BY

TITLE

DATE/TIME

FINAL SAMPLE DISPOSITION

DISPOSAL METHOD

DISPOSED BY

DATE/TIME

50 of 60

COLLECTOR
NCO Sampler *D. Webb, J. Helms*

COMPANY CONTACT
TRENT, SJ

TELEPHONE NO.
373-5869

PROJECT COORDINATOR
WIDRIG, DL

PRICE CODE 8N

DATA
TURNAROUND

SAMPLING LOCATION
C4972

PROJECT DESIGNATION
200-UP-1 OU Monitoring Wells - Waste Designation

SAF NO.
F08-045

AIR QUALITY

45 Days / 45
Days

ICE CHEST NO.

FIELD LOGBOOK NO. *HNF-N-488-1*
ACTUAL SAMPLE DEPTH

COA
123074ES10

METHOD OF SHIPMENT

GOVERNMENT VEHICLE

SHIPPED TO

Waste Sampling & Characterization

BILL OF LADING/AIR BILL NO.

MATRIX*

POSSIBLE SAMPLE HAZARDS/ REMARKS

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

Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

PRESERVATION

Cool~4C None None

TYPE OF CONTAINER

aG G/P Square Bottle - Poly

NO. OF CONTAINER(S)

1 1 1

VOLUME

250mL 120mL 500mL

SAMPLE ANALYSIS

SEE ITEM (1) IN SPECIAL INSTRUCTIONS SEE ITEM (2) IN SPECIAL INSTRUCTIONS SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SPECIAL HANDLING AND/OR STORAGE

SAMPLE NO.

MATRIX*

SAMPLE DATE SAMPLE TIME

B1V9K9 1663 SOIL

6-11-08 1000 X X X

ICED

3207062 027006

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

Sample at 241 feet. Drum number UP1-08-133 / 0050323. Radioactive tie to B1V9K6 (1)Semi-VOA - 8270B (TCL) {2-Methylphenol (cresol, o-), Phenol} Semi-VOA - 8270B (Add-On) {3+4 Methylphenol (cresol, m+p)} (2)ICP/MS - 200.8 (TAL) {Antimony, Cadmium, Chromium, Vanadium} ICP Metals - 6010B (Add-On) {Lithium} (3)Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-154} Isotopic Uranium; Strontium-89,90 -- Total Sr;

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

LABORATORY SECTION

RECEIVED BY

TITLE

DATE/TIME

FINAL SAMPLE DISPOSITION

DISPOSAL METHOD

DISPOSED BY

DATE/TIME

51 of 60

COLLECTOR
NCO Sampler *D. W. CRAB, J. HELMS*
SAMPLING LOCATION
C4973
ICE CHEST NO.

COMPANY CONTACT
TRENT, SJ
TELEPHONE NO.
373-5869
PROJECT DESIGNATION
200-UP-1 OU Monitoring Wells - Waste Designation
FIELD LOGBOOK NO.
HNF-N-488-1
ACTUAL SAMPLE DEPTH
OFFSITE PROPERTY NO.

PROJECT COORDINATOR
WIDRIG, DL
SAF NO.
F08-045
COA
123074E510
BILL OF LADING/AIR BILL NO.

PRICE CODE 8N
AIR QUALITY
METHOD OF SHIPMENT
GOVERNMENT VEHICLE

DATA
TURNAROUND
45 Days / 45
Days

SHIPPED TO
Waste Sampling & Characterization

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION Cool <-7C and Cool~4C >-20C
TYPE OF CONTAINER G G
NO. OF CONTAINER(S) 5 3
VOLUME 40mL 40mL
SAMPLE ANALYSIS SEE ITEM (1) IN SPECIAL INSTRUCTIONS SEE ITEM (2) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME																	
B1V9L1	1664 SOIL	6-11-08	1040	X	X															

ICED

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
<i>See WEBB/DeWalt</i>	6-11-08/1250	<i>Christy Hutton</i>	6-11-08/1250
<i>Chris Fulmer</i>	6-11-08/1315	<i>CA Hudson</i>	6-11-08/1315
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

Sample at 239 feet. Drum number UP1-08-192 / 0050530. Radioactive tie to B1V9L0. *178*

(1)VOA - 5035/8260 (LOW LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethene, 2-Butanone, 2-Pentanone, 4-Methyl, Acetone, Carbon tetrachloride, Methylene chloride}

(2)VOA - 5035/8260 (HIGH LEVEL) {1,1,1-Trichloroethane, 1,1-Dichloroethene, 2-Butanone, 2-Pentanone, 4-Methyl, Acetone, Carbon tetrachloride, Methylene chloride}

7312110 7312110

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

COLLECTOR
NCO Sampler *D. WELLS, J. HEMS*
SAMPLING LOCATION
C4973
ICE CHEST NO.

COMPANY CONTACT
TRENT, SJ
TELEPHONE NO.
373-5869
PROJECT COORDINATOR
WIDRIG, DL
PROJECT DESIGNATION
200-UP-1 OU Monitoring Wells - Waste Designation
SAF NO.
F08-045
FIELD LOGBOOK NO.
HNF-N-488-1
ACTUAL SAMPLE DEPTH
COA
123074E510
OFFSITE PROPERTY NO.
BILL OF LADING/AIR BILL NO.

PRICE CODE 8N
AIR QUALITY

DATA
TURNAROUND
45 Days / 45
Days

SHIPPED TO
Waste Sampling & Characterization

MATRIX*
A=Air
DL=Drum
Liquids
DS=Drum
Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other
POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations
that are not regulated for transportation per 49
CFR but are not releasable per DOE Order
5400.5 (1990/1993)

PRESERVATION Cool--4C
TYPE OF CONTAINER G
NO. OF CONTAINER(S) 1
VOLUME 40mL
SAMPLE ANALYSIS VOA - 5035/8260 (TCL);

SPECIAL HANDLING AND/OR STORAGE

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME																	
B1V9L2	SOIL	6-11-08	1040	X																

ICED

731240

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM <i>D. Wells / J. Hems</i>	DATE/TIME 6-11-08/1250	RECEIVED BY/STORED IN <i>Chris Fulton</i>	DATE/TIME 6-11-08/1250
RELINQUISHED BY/REMOVED FROM <i>Chris Fulton</i>	DATE/TIME 6-11-08/1315	RECEIVED BY/STORED IN <i>Offsite</i>	DATE/TIME 6/11/08/1315
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

Sample at ~~230~~ feet. Drum number UP1-08-192 / 0050530. Radioactive tie to B1V9L0. 193

53 of 60

LABORATORY SECTION

RECEIVED BY

TITLE

DATE/TIME

FINAL SAMPLE DISPOSITION

DISPOSAL METHOD

DISPOSED BY

DATE/TIME

COLLECTOR
NCO Sampler *D. Webb, J. Helms*

SAMPLING LOCATION
C4973

ICE CHEST NO.

COMPANY CONTACT
TRENT, SJ

TELEPHONE NO.
373-5869

PROJECT COORDINATOR
WIDRIG, DL

PRICE CODE BN

DATA TURNAROUND
45 Days / 45 Days

PROJECT DESIGNATION
200-UP-1 OU Monitoring Wells - Waste Designation

SAF NO.
F08-045

AIR QUALITY

FIELD LOGBOOK NO.
HNF-N-488-1

OFFSITE PROPERTY NO.

ACTUAL SAMPLE DEPTH

COA
123074E510

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Waste Sampling & Characterization

BILL OF LADING/AIR BILL NO.

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	None	None
TYPE OF CONTAINER	aG	G/P	Square Bottle - Poly
NO. OF CONTAINER(S)	1	1	1
VOLUME	250ml	120ml	500ml
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.
B1V9L3 *1666* SOIL

MATRIX*

SAMPLE DATE *6-11-08* **SAMPLE TIME** *1040*

ICED

3207062
029561 029561

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME
<i>D. Webb / J. Helms</i>	<i>6-11-08/1250</i>
<i>Chris Fulton / J. Helms</i>	<i>6-11-08 1315</i>
RELINQUISHED BY/REMOVED FROM	DATE/TIME

SIGN/ PRINT NAMES

RECEIVED BY/STORED IN	DATE/TIME
<i>Chris Fulton / J. Helms</i>	<i>6-11-08/1250</i>
<i>Chris Fulton / J. Helms</i>	<i>6/11/08 1315</i>
RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

Sample at ~~239~~ feet. Drum number UP1-08-192 / 0050530. Radioactive tie to B1V9L0. *K13*

(1) Semi-VOA - 8270B (TCL) (2-Methylphenol (cresol, o-), Phenol) Semi-VOA - 8270B (Add-On) {3+4 Methylphenol (cresol, m+p)}

(2) ICP/MS - 200.8 (TAL) (Antimony, Cadmium, Chromium, Vanadium) ICP Metals - 6010B (Add-On) {Lithium}

(3) Gamma Spectroscopy (Cesium-137, Cobalt-60, Europium-154) Isotopic Uranium; Strontium-89,90 -- Total Sr;

54 of 60

LABORATORY SECTION RECEIVED BY

FINAL SAMPLE DISPOSITION DISPOSAL METHOD

TITLE DATE/TIME

DISPOSED BY DATE/TIME

COLLECTOR
NCO Sampler *D. Webb, T. Helms*

COMPANY CONTACT
TRENT, SJ

TELEPHONE NO.
373-5869

PROJECT COORDINATOR
WIDRIG, DL

PRICE CODE 8N

DATA
TURNAROUND
45 Days / 45
Days

SAMPLING LOCATION
C4972

PROJECT DESIGNATION
200-UP-1 OU Monitoring Wells - Waste Designation

SAF NO.
F08-045

AIR QUALITY

ICE CHEST NO.

FIELD LOGBOOK NO. *HNF N-488-1*
ACTUAL SAMPLE DEPTH

COA
123074E510

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Waste Sampling & Characterization

BILL OF LADING/AIR BILL NO.

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

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

PRESERVATION
Cool <-7C and Cool~4C
>-20C

TYPE OF CONTAINER
G G

NO. OF CONTAINER(S)
5 3

VOLUME
40mL 40mL

SPECIAL HANDLING AND/OR STORAGE

SAMPLE ANALYSIS
SEE ITEM (1) IN SPECIAL INSTRUCTIONS
SEE ITEM (2) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B1V9K7 1667	SOIL	6-11-08	1000	X	X

ICED

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	SIGN/ PRINT NAMES	RECEIVED BY/STORED IN	DATE/TIME
<i>Archie Webb / Dec Webb</i>	6-11-08 / 1250	<i>Chris F. Helms</i>	<i>Chris F. Helms</i>	6-11-08 / 1250
<i>Chris F. Helms</i>	6-11-08	<i>1315 CA Helms</i>	<i>1315 CA Helms</i>	6/11/08 1315
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	DATE/TIME

SPECIAL INSTRUCTIONS

Sample at 241 feet. Drum number UP1-08-133 / 0050323. Radioactive tie to B1V9K6 (1)VOA - 5035/8260 (LOW LEVEL) (1,1,1-Trichloroethane, 1,1-Dichloroethene, 2-Butanone, 2-Pentanone, 4-Methyl, Acetone, Carbon tetrachloride, Methylene chloride)
(2)VOA - 5035/8260 (HIGH LEVEL) (1,1,1-Trichloroethane, 1,1-Dichloroethene, 2-Butanone, 2-Pentanone, 4-Methyl, Acetone, Carbon tetrachloride, Methylene chloride)

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LABORATORY SECTION RECEIVED BY

FINAL SAMPLE DISPOSITION DISPOSAL METHOD

TITLE DATE/TIME

DISPOSED BY DATE/TIME

COLLECTOR
NCO Sampler *D. WEBB, J. HAMS*
SAMPLING LOCATION
C4972
ICE CHEST NO.

COMPANY CONTACT
TRENT, SJ
TELEPHONE NO.
373-5869
PROJECT COORDINATOR
WIDRIG, DL
PROJECT DESIGNATION
200-UP-1 OU Monitoring Wells - Waste Designation
SAF NO.
F08-045
FIELD LOGBOOK NO.
HNF N-488-1
ACTUAL SAMPLE DEPTH
COA
123074ES10
OFFSITE PROPERTY NO.
BILL OF LADING/AIR BILL NO.

PRICE CODE 8N
AIR QUALITY
METHOD OF SHIPMENT
GOVERNMENT VEHICLE

DATA
TURNAROUND
45 Days / 45
Days

SHIPPED TO
Waste Sampling & Characterization

MATRIX*
A=Air
DL=Drum
L=Liquid
DS=Drum
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

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

PRESERVATION *Cool to 4C*
TYPE OF CONTAINER *G*
NO. OF CONTAINER(S) *1*
VOLUME *40ml*
SPECIAL HANDLING AND/OR STORAGE
SAMPLE ANALYSIS *VOA - 5035/8260 (TCL);*

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B1V9K8 <i>1668</i>	SOIL	<i>6-11-08</i>	<i>1000 X</i>

ICED

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
<i>D. Webb / J. Hams</i>	<i>6-11-08 1250</i>	<i>Christy / Hams</i>	<i>6-11-08 1250</i>
<i>Christy / Hams</i>	<i>6-11-08 1315</i>	<i>IA Hudson / Hams</i>	<i>6-11-08 1315</i>
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

Sample at 241 feet. Drum number UP1-08-133 / 0050323. Radioactive tie to B1V9K6

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

M4W41-SLF-08-862

ATTACHMENT 5

SAMPLE RECORD SHEET

Consisting of 4 pages
Including cover page

C 4975

6-11-08

1140 HRS

SAMPLE RECORD SHEET

Sample Number	Sample Suffix	Empty Weight ² (g)	Weight with Sample ³ (g)	Weight of Sample ⁴ (g)	Methanol Added (g)	Methanol Added (mL)	Weight of Methanol and Sample
BIV9L9	K	31.0	35.3	4.3	---	---	---
	L	31.6	36.2	4.6	---	---	---
	M	31.8	36.1	4.3	---	---	---
	N	31.8	36.5	4.7	---	---	---
↓	P	32.4	36.9	4.5	---	---	---
BIV9MO		30.2	30.2	0	3.8	5.0	34.0
BIV9L9	W	30.4	35.4	5.0	3.9	5.0	39.3
	X	31.2	36.3	5.1	3.9	5.1	40.2
↓	Y	30.4	35.0	4.6	3.5	4.6	38.5

¹ Sample suffix of L, K, M, N and P relate to low-level concentration samples and will not have any preservation beyond freezing between -7C and -20C.
 Sample suffix of W, X, and Y relate to methanol preservation for high-level samples.

² Empty weight is to include all labels, stickers, bags, and anything else that will be associated with the bottle when it is weighed with the sample.

³ Ensure that everything weighed for the empty bottle and no additional items (besides the sample) is weighed.

⁴ Sample weight is the vial with sample minus the vial empty

C 4973

6-11-08

1040 HRS

SAMPLE RECORD SHEET

Sample Number	Sample Suffix ¹	Empty Weight ² (g)	Weight with Sample ³ (g)	Weight of Sample ⁴ (g)	Methanol Added (g)	Methanol Added (mL)	Weight of Methanol and Sample
BIV9L1	K	31.2	37.0	4.8	---	---	---
	L	32.0	37.5	5.5	---	---	---
	M	31.3	36.5	5.2	---	---	---
	N	31.8	37.0	5.2	---	---	---
✓	P	31.3	37.5	6.2	---	---	---

BIV9L2		30.9	30.3	0	4.7	5.0	35.0
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BIV9L1	W	30.2	35.5	5.3	4.4	5.3	35.0
	X	30.6	35.6	5.0	4.0	5.0	39.6
✓	Y	30.3	34.7	4.4	4.7	4.4	39.4

D
6-11-08

39.6
39.4

¹Sample suffix of L, K, M, N and P relate to low-level concentration samples and will not have any preservation beyond freezing between -7C and -20C.

Sample suffix of W, X, and Y relate to methanol preservation for high-level samples.

²Empty weight is to include all labels, stickers, bags, and anything else that will be associated with the bottle when it is weighed with the sample.

³Ensure that everything weighed for the empty bottle and no additional items (besides the sample) is weighed.

⁴Sample weight is the vial with sample minus the vial empty

C 4972

6-11-08

1000 HRS

SAMPLE RECORD SHEET

Sample Number	Sample Suffix ¹	Empty Weight ² (g)	Weight with Sample ³ (g)	Weight of Sample ⁴ (g)	Methanol Added (g)	Methanol Added (mL)	Weight of Methanol and Sample
BIV9K7	K	32.3	38.0	6.7 5.7	---	---	---
	L	34.27	38.0	6.3	---	---	---
	M	31.2	36.5	5.3	---	---	---
	N	32.5	38.0	5.5	---	---	---
	P	32.5	38.0	5.5	---	---	---
BIV9K8		31.4	31.4	0	3.6	5	35.0
BIV9K7	W	31.4	38.0	6.6	5.2	7	43.2
	X	30.6	36.4	5.8	4.6	6	41.0
	Y	30.7	36.5	5.8	4.5	6	41.0

¹Sample suffix of L, K, M, N and P relate to low-level concentration samples and will not have any preservation beyond freezing between -7C and -20C.

Sample suffix of W, X, and Y relate to methanol preservation for high-level samples.

²Empty weight is to include all labels, stickers, bags, and anything else that will be associated with the bottle when it is weighed with the sample.

³Ensure that everything weighed for the empty bottle and no additional items (besides the sample) is weighed.

⁴Sample weight is the vial with sample minus the vial empty