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Fluor Hanford
WSCF Analytical Lab
P.O. Box 1000
Richland, WA 99352
Telephone 373-7495
Telefax 372-0456

FLUOR

Memorandum

M4W41-SLF-08-702

To: H. Hampt E6-35 Date: July 16, 2008

From: S. L. Fitzgerald, Manager *Handwritten: Member Handler for SLF*
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 WSCF20081090 – SAF NUMBER F08-130

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 WSCF20081090:

- 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

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M4W41-SLF-08-702

ATTACHMENT 1

COVER SHEET

Consisting of 2 pages
Including cover page

WSCF SAF NUMBER CROSS REFERENCE

Group#: WSCF20081090
Data Deliverable Date: 10-jul-2008
Data Deliverable: Cover Sheet

SAF#	Sample ID	WSCF#	Matrix
F08-130	B1W0K7	W08GR01421	SOIL
	B1W0K9	W08GR01420	SOIL

M4W41-SLF-08-702

ATTACHMENT 2

NARRATIVE

**Consisting of 3 pages
Including cover page**

Introduction

Three S&GRP samples were received at the WSCF Laboratory on May 29, 2008. Two of the three samples were analyzed at the WSCF Laboratory. Summary of sample disposition is offered below:

- Samples B1W0K7 and B1W0K9 were successfully analyzed at the WSCF Laboratory 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;
- B1W0K8 – Analyses of the Methanol Blank sample and associated high concentration VOA sample 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 the 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.

ICP-MS 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 16 through 17 for QC details. Analytical Note(s):

- Matrix Spike, Matrix Spike Duplicate and Sample Duplicate analyzed on sample B1V265 (SDG 20081005, SAF F08-046).

All QC controls are within the established limits.

Organic Comments

VOA – The holding 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 19 through 20 for QC details.

All QC controls are within the established limits.

Radiochemistry Comments

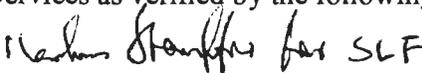
There are no holding times associated with WSCF's radiochemical methods.

A Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group. See pages 23 through 26 for QC details.

- U-234 and U-238 Duplicate RPD is above the acceptance limit, but since the sample activity is low, the RPD limits do not apply.

All other QC controls are within the established limits.

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


Scot L. Fitzgerald
WSCF Analytical Laboratory Manager


Andrew Kopriva
WSCF Client Services

M4W41-SLF-08-702

ATTACHMENT 3

ANALYTICAL RESULTS

Consisting of 21 pages
Including cover page

WSCF
ANALYTICAL RESULTS REPORT

for

Groundwater Remediation Program

Richland, WA 99354

Attention: Steve Trent

Analytical: Markus Stauffer Markus Stauffer 7/17/08

Client Services: A. Kopriva A. Kopriva 7/17/08

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#: WSCF20081090

Report Date: 16-jul-2008

Report WGPP/ver. 5.2

Groundwater Remediation Program

Department: Inorganic

W13q Worklist/Batch/QC Report for Group# WSCF20081090

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
				SAMPLE	W08GR01420	Percent Solids
36579	1	36999	41339	BLANK		ICP-200.8 MS All possible meta
36579	2	36999	41339	LCS		ICP-200.8 MS All possible meta
36579	4	36999	41339	MS	W08GR01308	ICP-200.8 MS All possible meta
36579	5	36999	41339	MSD	W08GR01308	ICP-200.8 MS All possible meta
36579	5	36999	41339	SPK-RPD	W08GR01308	ICP-200.8 MS All possible meta
36579	11	36999	41339	SAMPLE	W08GR01420	ICP-200.8 MS All possible meta

Department: Organic

W13q Worklist/Batch/QC Report for Group# WSCF20081090

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
			41685	BLANK		VOA Ground Water Protection
			41685	LCS		VOA Ground Water Protection
			41685	MS	W08GR01336	VOA Ground Water Protection
			41685	MSD	W08GR01336	VOA Ground Water Protection
			41685	SPK-RPD	W08GR01336	VOA Ground Water Protection
			41685	SAMPLE	W08GR01421	VOA Ground Water Protection
			41685	SURR	W08GR01421	VOA Ground Water Protection

W13q Worklist/Batch/QC Report for Group# WSCF20081090

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
36725	1	37142	41578	BLANK		Strontium 89/90
36725	2	37142	41578	LCS		Strontium 89/90
36725	3	37142	41578	DUP	W08GR01420	Strontium 89/90
36725	4	37142	41578	SAMPLE	W08GR01420	Strontium 89/90
36725	5	37142	41578	SURR	W08GR01420	Strontium 89/90
36546	1	36962	41623	BLANK		Gamma Energy Analysis-grd H2O
36546	2	36962	41623	LCS		Gamma Energy Analysis-grd H2O
36546	3	36962	41623	DUP	W08GR01420	Gamma Energy Analysis-grd H2O
36546	4	36962	41623	SAMPLE	W08GR01420	Gamma Energy Analysis-grd H2O
37071	1	37497	41870	BLANK		Uranium Isotopics by AEA
37071	2	37497	41870	LCS		Uranium Isotopics by AEA
37071	3	37497	41870	DUP	W08GR01420	Uranium Isotopics by AEA
37071	4	37497	41870	SAMPLE	W08GR01420	Uranium Isotopics by AEA
37071	5	37497	41870	SURR	W08GR01420	Uranium Isotopics by AEA
37072	1	37498	41871	BLANK		Plutonium Isotopics by AEA
37072	2	37498	41871	LCS		Plutonium Isotopics by AEA
37072	3	37498	41871	DUP	W08GR01420	Plutonium Isotopics by AEA
37072	4	37498	41871	SAMPLE	W08GR01420	Plutonium Isotopics by AEA
37072	5	37498	41871	SURR	W08GR01420	Plutonium Isotopics by AEA

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)

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: 16-jul-2008
Report#: WSCF20081090
Report WGPPM/5.2

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WSCF

METHOD REFERENCES REPORT

Department: Radiochemistry

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

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 Rontium 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 Emmission 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: 16-jul-2008
Report#: WSCF20081090
Report WGPPM/5.2

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WSCF

METHOD REFERENCES REPORT

Department: Inorganic

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

LA-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-519-412	LA-519-412: TOTAL RESIDUE/% SOLIDS DRIED AT 103 - 105 C
EPA-600/4-79-020 160.1	Residual, 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: 16-jul-2008
Report#: WSCF20081090
Report WGPPM/5.2

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WSCF

ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-130
Sample # W08GR01420
Client ID: BIW0K9

TRENT
WSCF

Matrix: SOIL

Group #: WSCF20081090
Department: Inorganic
Sampled: 05/29/08
Received: 05/29/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
ICP-200.8 MS All possible meta Prep											
ICP-200.8 MS All possible meta											
Silver	7440-22-4	LA-505-412		0.140	mg/kg			1.00	0.0998		06/04/08
Cadmium	7440-43-9	LA-505-412		0.140	mg/kg			1.00	0.0998		06/04/08
Chromium	7440-47-3	LA-505-412		13.7	mg/kg			1.00	0.499		06/04/08
Zinc	7440-66-6	LA-505-412		91.3	mg/kg			1.00	0.799		06/04/08
Lead	7439-92-1	LA-505-412		4.72	mg/kg			1.00	0.0998		06/04/08
Arsenic	7440-38-2	LA-505-412		2.97	mg/kg			1.00	0.399		06/04/08
Total solids											
Total solids	TS	LA-519-412		93.6	Percent			1.00	0.0		07/09/08

MDL = Minimum Detection Limit

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

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

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

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WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081090
 Matrix: SOLID
 Test: ICP-200.8 MS All possible meta

Sample Date: 05/16/08
 Receive Date: 05/16/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR01308											
BATCH QC ASSOCIATED WITH SAMPLE											
MS	Silver	7440-22-4	176.6	88.300	% Recov	70.000	130.000				06/04/08
MS	Arsenic	7440-38-2	181.6	90.800	% Recov	70.000	130.000				06/04/08
MS	Cadmium	7440-43-9	183.7	91.850	% Recov	70.000	130.000				06/04/08
MS	Chromium	7440-47-3	170.86	85.430	% Recov	70.000	130.000				06/04/08
MS	Lead	7439-92-1	187	93.500	% Recov	70.000	130.000				06/04/08
MS	Zinc	7440-66-6	168.2	84.100	% Recov	70.000	130.000				06/04/08
MSD	Silver	7440-22-4	177.2	88.600	% Recov	70.000	130.000				06/04/08
MSD	Arsenic	7440-38-2	181.2	90.600	% Recov	70.000	130.000				06/04/08
MSD	Cadmium	7440-43-9	183.8	91.900	% Recov	70.000	130.000				06/04/08
MSD	Chromium	7440-47-3	174.46	87.230	% Recov	70.000	130.000				06/04/08
MSD	Lead	7439-92-1	184.8	92.400	% Recov	70.000	130.000				06/04/08
MSD	Zinc	7440-66-6	171.5	85.750	% Recov	70.000	130.000				06/04/08
SPK-RPD	Silver	7440-22-4	88.600		RPD			0.339	20.000		06/04/08
SPK-RPD	Arsenic	7440-38-2	90.600		RPD			0.221	20.000		06/04/08
SPK-RPD	Cadmium	7440-43-9	91.900		RPD			0.054	20.000		06/04/08
SPK-RPD	Chromium	7440-47-3	87.230		RPD			2.085	20.000		06/04/08
SPK-RPD	Lead	7439-92-1	92.400		RPD			1.183	20.000		06/04/08
SPK-RPD	Zinc	7440-66-6	85.750		RPD			1.943	20.000		06/04/08
BATCH QC											
BLANK	Silver	7440-22-4	<0.1	n/a	ug/L					U	06/04/08
BLANK	Arsenic	7440-38-2	<0.4	n/a	ug/L					U	06/04/08
BLANK	Cadmium	7440-43-9	<0.1	n/a	ug/L					U	06/04/08
BLANK	Chromium	7440-47-3	<0.5	n/a	ug/L					U	06/04/08
BLANK	Lead	7439-92-1	<0.1	n/a	ug/L					U	06/04/08
BLANK	Zinc	7440-66-6	<0.8	n/a	ug/L					U	06/04/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081090
 Matrix: SOLID
 Test: ICP-200.8 MS All possible meta

Sample Date:
 Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
LCS	Silver	7440-22-4	102.5	101.485	% Recov	98.000	134.000				06/04/08
LCS	Arsenic	7440-38-2	128.5	97.348	% Recov	75.000	134.000				06/04/08
LCS	Cadmium	7440-43-9	63.24	95.098	% Recov	95.000	124.000				06/04/08
LCS	Chromium	7440-47-3	62.61	85.885	% Recov	77.000	125.000				06/04/08
LCS	Lead	7439-92-1	127	97.692	% Recov	92.000	123.000				06/04/08
LCS	Zinc	7440-66-6	169.4	95.706	% Recov	85.000	130.000				06/04/08

WSCF

ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-130
Sample # W08GR01421
Client ID: B1W0K7

TRENT
 WSCF

Matrix: SOIL

Group #: WSCF20081090
Department: Organic
Sampled: 05/29/08
Received: 05/29/08

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		06/03/08
Trichloroethene	79-01-6	LA-523-455	U	< 1.00	ug/kg			1.00	1.0		06/03/08
Benzene	71-43-2	LA-523-455	U	< 1.00	ug/kg			1.00	1.0		06/03/08
Toluene	108-88-3	LA-523-455	U	< 1.00	ug/kg			1.00	1.0		06/03/08
Chlorobenzene	108-90-7	LA-523-455	U	< 1.00	ug/kg			1.00	1.0		06/03/08
Chloroform	67-66-3	LA-523-455	U	< 1.00	ug/kg			1.00	1.0		06/03/08

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)

Report WGPP/ver. 5.2

Groundwater Remediation Program

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Organic**

SDG Number: WSCF20081090
 Matrix: SOLID
 Test: VOA Ground Water Protection

Sample Date: 05/22/08
 Receive Date: 05/22/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR01336											
BATCH QC ASSOCIATED WITH SAMPLE											
MS	1,1-Dichloroethene	75-35-4	21.680	97.900	% Recov	63.000	117.000				06/03/08
MS	Benzene	71-43-2	21.920	99.100	% Recov	75.000	129.000				06/03/08
MS	4-Bromofluorobenzene(Surr)	460-00-4	48.370	109.000	% Recov	75.000	125.000				06/03/08
MS	Chlorobenzene	108-90-7	23.080	104.000	% Recov	79.000	119.000				06/03/08
MS	1,2-Dichloroethane-d4(Surr)	17060-07-0	50.870	115.000	% Recov	75.000	125.000				06/03/08
MS	Toluene-d8(Surr)	2037-26-5	45.270	102.000	% Recov	75.000	125.000				06/03/08
MS	Toluene	108-88-3	22.280	101.000	% Recov	76.000	120.000				06/03/08
MS	Trichloroethene	79-01-6	19.090	86.300	% Recov	73.000	123.000				06/03/08
MSD	1,1-Dichloroethene	75-35-4	32.140	96.900	% Recov	63.000	117.000				06/03/08
MSD	Benzene	71-43-2	33.430	101.000	% Recov	75.000	129.000				06/03/08
MSD	4-Bromofluorobenzene(Surr)	460-00-4	72.710	110.000	% Recov	75.000	125.000				06/03/08
MSD	Chlorobenzene	108-90-7	35.070	106.000	% Recov	79.000	119.000				06/03/08
MSD	1,2-Dichloroethane-d4(Surr)	17060-07-0	76.340	115.000	% Recov	75.000	125.000				06/03/08
MSD	Toluene-d8(Surr)	2037-26-5	68.030	103.000	% Recov	75.000	125.000				06/03/08
MSD	Toluene	108-88-3	33.870	102.000	% Recov	76.000	120.000				06/03/08
MSD	Trichloroethene	79-01-6	29.390	88.600	% Recov	73.000	123.000				06/03/08
SPK-RPD	1,1-Dichloroethene	75-35-4	96.900		RPD			1.027	20.000		06/03/08
SPK-RPD	Benzene	71-43-2	101.000		RPD			1.899	20.000		06/03/08
SPK-RPD	4-Bromofluorobenzene(Surr)	460-00-4	110.000		RPD			0.913	20.000		06/03/08
SPK-RPD	Chlorobenzene	108-90-7	106.000		RPD			1.905	20.000		06/03/08
SPK-RPD	1,2-Dichloroethane-d4(Surr)	17060-07-0	115.000		RPD			0.000	20.000		06/03/08
SPK-RPD	Toluene-d8(Surr)	2037-26-5	103.000		RPD			0.976	20.000		06/03/08
SPK-RPD	Toluene	108-88-3	102.000		RPD			0.985	20.000		06/03/08
SPK-RPD	Trichloroethene	79-01-6	88.600		RPD			2.630	20.000		06/03/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20081090
 Matrix: SOLID
 Test: VOA Ground Water Protection

Sample Date: 05/29/08
 Receive Date: 05/29/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR01421											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	4-Bromofluorobenzene(Surr)	460-00-4	57.160	111.000	% Recov	75.000	125.000				06/03/08
SURR	1,2-Dichloroethane-d4(Surr)	17060-07-0	59.250	116.000	% Recov	75.000	125.000				06/03/08
SURR	Toluene-d8(Surr)	2037-26-5	53.450	104.000	% Recov	80.000	126.000				06/03/08
BATCH QC											
BLANK	1,1-Dichloroethene	75-35-4	< 1.0	n/a	ug/Kg					U	06/03/08
BLANK	Benzene	71-43-2	< 1.0	n/a	ug/Kg					U	06/03/08
BLANK	4-Bromofluorobenzene(Surr)	460-00-4	54.240	108.000	% Recov	75.000	125.000				06/03/08
BLANK	Chloroform	67-66-3	< 1.0	n/a	ug/Kg					U	06/03/08
BLANK	Chlorobenzene	108-90-7	< 1.0	n/a	ug/Kg					U	06/03/08
BLANK	1,2-Dichloroethane-d4(Surr)	17060-07-0	58.040	116.000	% Recov	75.000	125.000				06/03/08
BLANK	Toluene-d8(Surr)	2037-26-5	50.910	102.000	% Recov	80.000	126.000				06/03/08
BLANK	Toluene	108-88-3	< 1.0	n/a	ug/Kg					U	06/03/08
BLANK	Trichloroethene	79-01-6	< 1.0	n/a	ug/Kg					U	06/03/08
LCS	1,1-Dichloroethene	75-35-4	25.790	103.000	% Recov	75.000	125.000				06/03/08
LCS	Benzene	71-43-2	24.950	99.800	% Recov	75.000	125.000				06/03/08
LCS	4-Bromofluorobenzene(Surr)	460-00-4	53.810	108.000	% Recov	75.000	125.000				06/03/08
LCS	Chlorobenzene	108-90-7	25.880	104.000	% Recov	75.000	125.000				06/03/08
LCS	1,2-Dichloroethane-d4(Surr)	17060-07-0	58.550	117.000	% Recov	75.000	125.000				06/03/08
LCS	Toluene-d8(Surr)	2037-26-5	51.410	103.000	% Recov	80.000	126.000				06/03/08
LCS	Toluene	108-88-3	25.590	102.000	% Recov	75.000	125.000				06/03/08
LCS	Trichloroethene	79-01-6	21.930	87.700	% Recov	75.000	125.000				06/03/08

WSCF

ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-130
Sample # W08GR01420
Client ID: B1W0K9

TRENT
WSCF

Matrix: SOIL

Group #: WSCF20081090
Department: Radiochemistry
Sampled: 05/29/08
Received: 05/29/08

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	-4.65e-03	pCi/g	+ -6.62e-03	pCi/g	1.00	0.011		06/19/08
Europium-152	14683-23-9	LA-508-481	U	-2.04e-03	pCi/g	+ -0.0204	pCi/g	1.00	0.031		06/19/08
Europium-154	15585-10-1	LA-508-481	U	0.0169	pCi/g	+ -0.0238	pCi/g	1.00	0.036		06/19/08
Europium-155	14391-16-3	LA-508-481	U	0.0167	pCi/g	+ -0.0278	pCi/g	1.00	0.046		06/19/08
Plutonium Isotopics by AEA											
Plutonium-238	13981-16-3	LA-508-471	U	0.0210	pCi/g	+ -0.0361	pCi/g	1.00	0.059		07/15/08
Pu-239/240 by AEA	PU-239/240	LA-508-471	U	2.10e-03	pCi/g	+ -7.29e-03	pCi/g	1.00	0.015		07/15/08
Pu-242 tracer by AEA	PU242	LA-508-471		6.10	pCi/g			1.00	0.022		07/15/08
Strontium 89/90											
Strontium-89/90	SR-RAD	LA-508-415	U	-0.370	pCi/g	+ -0.670	pCi/g	1.00	0.34		06/17/08
Sr-85 Tracer by Beta Counting	SR85	LA-508-415		98.6	Percent			1.00	0.0		06/17/08
Uranium Isotopics by AEA											
Uranium-233/234	U-233/234	LA-508-471		0.170	pCi/g	+ -0.0561	pCi/g	1.00	4.8e-03		07/15/08
Uranium-235	15117-96-1	LA-508-471		0.0250	pCi/g	+ -0.0152	pCi/g	1.00	5.2e-03		07/15/08
Uranium-238	U-238	LA-508-471		0.210	pCi/g	+ -0.0672	pCi/g	1.00	4.8e-03		07/15/08
U-232 tracer by AEA	U232	LA-508-471		4.10	pCi/g			1.00	0.023		07/15/08

MDL=Minimum Detection Limit

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

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

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

WSCF

TENTATIVELY IDENTIFIED PEAK REPORT

Attention: Steve Trent
Project Number: F08-130 :F08-130

Group #: WSCF20081090
Department: Radiochemistry

Sample #	Client ID	Test Name	Peak Name	CAS#	RT	RQ	Result	Units
W08GR01420	B1WOK9	TRENT	Gamma Energy Analysis-grd H2O	AC-228			0.46	pCi/g
W08GR01420	B1WOK9	TRENT	Gamma Energy Analysis-grd H2O	AC-228 Count Error			22	%
W08GR01420	B1WOK9	TRENT	Gamma Energy Analysis-grd H2O	BI-212			0.40	pCi/g
W08GR01420	B1WOK9	TRENT	Gamma Energy Analysis-grd H2O	BI-212 Count Error			28	%
W08GR01420	B1WOK9	TRENT	Gamma Energy Analysis-grd H2O	BI-214			0.54	pCi/g
W08GR01420	B1WOK9	TRENT	Gamma Energy Analysis-grd H2O	BI-214 Count Error			14	%
W08GR01420	B1WOK9	TRENT	Gamma Energy Analysis-grd H2O	CS-134			0.033	pCi/g
W08GR01420	B1WOK9	TRENT	Gamma Energy Analysis-grd H2O	CS-134 Count Error			37	%
W08GR01420	B1WOK9	TRENT	Gamma Energy Analysis-grd H2O	K-40			11	pCi/g
W08GR01420	B1WOK9	TRENT	Gamma Energy Analysis-grd H2O	K-40 Count Error			13	%
W08GR01420	B1WOK9	TRENT	Gamma Energy Analysis-grd H2O	PB-212			0.59	pCi/g
W08GR01420	B1WOK9	TRENT	Gamma Energy Analysis-grd H2O	PB-212 Count Error			9.9	%
W08GR01420	B1WOK9	TRENT	Gamma Energy Analysis-grd H2O	PB-214			0.69	pCi/g
W08GR01420	B1WOK9	TRENT	Gamma Energy Analysis-grd H2O	PB-214 Count Error			23	%
W08GR01420	B1WOK9	TRENT	Gamma Energy Analysis-grd H2O	RA-226			0.45	pCi/g
W08GR01420	B1WOK9	TRENT	Gamma Energy Analysis-grd H2O	RA-226 Count Error			17	%
W08GR01420	B1WOK9	TRENT	Gamma Energy Analysis-grd H2O	RA-228			0.50	pCi/g
W08GR01420	B1WOK9	TRENT	Gamma Energy Analysis-grd H2O	RA-228 Count Error			17	%
W08GR01420	B1WOK9	TRENT	Gamma Energy Analysis-grd H2O	SN-126			0.11	pCi/g
W08GR01420	B1WOK9	TRENT	Gamma Energy Analysis-grd H2O	SN-126 Count Error			30	%
W08GR01420	B1WOK9	TRENT	Gamma Energy Analysis-grd H2O	TH-234			0.63	pCi/g
W08GR01420	B1WOK9	TRENT	Gamma Energy Analysis-grd H2O	TH-234 Count Error			36	%
W08GR01420	B1WOK9	TRENT	Gamma Energy Analysis-grd H2O	TL-208			0.17	pCi/g
W08GR01420	B1WOK9	TRENT	Gamma Energy Analysis-grd H2O	TL-208 Count Error			16	%

RQ=Result Qualifier

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Groundwater Remediation Program

WGPE v 5.2 Report#: WSCF20081090

Report Date: 16-jul-2008

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WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20081090
 Matrix: SOLID
 Test: Gamma Energy Analysis-grd H2O

Sample Date: 05/29/08
 Receive Date: 05/29/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR01420											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Cobalt-60	10198-40-0	U3.987e-3		RPD			n/a	20.000		06/20/08
DUP	Europium-152	14683-23-9	U-9.518e-3		RPD			n/a	20.000		06/20/08
DUP	Europium-154	15585-10-1	U-3.563e-2		RPD			n/a	20.000		06/20/08
DUP	Europium-155	14391-16-3	U6.787e-2		RPD			n/a	20.000		06/20/08
BATCH QC											
BLANK	Cobalt-60	10198-40-0	U-1.579e-3	n/a	pCi/g	-10.000	1000.000				06/17/08
BLANK	Europium-152	14683-23-9	U5.218e-3	n/a	pCi/g	-10.000	1000.000				06/17/08
BLANK	Europium-154	15585-10-1	U-4.218e-3	n/a	pCi/g	-10.000	1000.000				06/17/08
BLANK	Europium-155	14391-16-3	U5.251e-3	n/a	pCi/g	-10.000	1000.000				06/17/08
LCS	Cobalt-60	10198-40-0	10490	105.533	% Recov	80.000	120.000				06/13/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20081090
 Matrix: SOLID
 Test: Plutonium Isotopics by AEA

Sample Date: 05/29/08
 Receive Date: 05/29/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR01420											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Plutonium-238	13981-16-3	U-8.6e-3		RPD			n/a	20.000		07/15/08
DUP	Pu-239/240 by AEA	PU-239/240	U1.7e-3		RPD			n/a	20.000		07/15/08
DUP	Pu-242 tracer by AEA	PU242	6.123	90.140	% Recov	30.000	105.000				07/15/08
SURR	Pu-242 tracer by AEA	PU242	6.111	78.670	% Recov	30.000	105.000				07/15/08
BATCH QC											
BLANK	Plutonium-238	13981-16-3	U2.9e-2	n/a	pCi/g	-10.000	1000.000				07/15/08
BLANK	Pu-239/240 by AEA	PU-239/240	U2.1e-03	n/a	pCi/g	-10.000	1000.000				07/15/08
BLANK	Pu-242 tracer by AEA	PU242	6.196	80.340	% Recov	30.000	105.000				07/15/08
LCS	Pu-239/240 by AEA	PU-239/240	11.78	91.709	% Recov	80.000	120.000				07/15/08
LCS	Pu-242 tracer by AEA	PU242	17.19	81.850	% Recov	30.000	105.000				07/15/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20081090
 Matrix: SOLID
 Test: Strontium 89/90

Sample Date: 05/29/08
 Receive Date: 05/29/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR01420											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Sr-85 Tracer by Beta Counting	SR85	100.9	100.900	% Recov	30.000	105.000				06/17/08
DUP	Strontium-89/90	SR-RAD	U-4.4E-02		RPD			n/a	20.000		06/17/08
SURR	Sr-85 Tracer by Beta Counting	SR85	98.6	98.600	% Recov	30.000	105.000				06/17/08
BATCH QC											
BLANK	Sr-85 Tracer by Beta Counting	SR85	96.7	96.700	% Recov	30.000	105.000				06/17/08
BLANK	Strontium-89/90	10098-97-2	U-1.5E-01	n/a	pCi/g	-10.000	300.000				06/17/08
LCS	Sr-85 Tracer by Beta Counting	SR85	91.5	91.500	% Recov	30.000	105.000				06/17/08
LCS	Strontium-89/90	10098-97-2	68.4	98.531	% Recov	80.000	120.000				06/17/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20081090
 Matrix: SOLID
 Test: Uranium Isotopics by AEA

Sample Date: 05/29/08
 Receive Date: 05/29/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR01420											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	U-232 tracer by AEA	U232	4.059	87.430	% Recov	30.000	105.000				07/15/08
DUP	Uranium-233/234	U-233/234	0.18		RPD			5.714	20.000		07/15/08
DUP	Uranium-235	15117-96-1	1.6e-2		RPD			43.902	20.000		07/15/08
DUP	Uranium-238	U-238	0.17		RPD			21.053	20.000		07/15/08
SURR	U-232 tracer by AEA	U232	4.051	91.880	% Recov	30.000	105.000				07/15/08
BATCH QC											
BLANK	U-232 tracer by AEA	U232	4.107	104.990	% Recov	30.000	105.000				07/15/08
BLANK	Uranium-233/234	13966-29-5	1.4e-2	0.014	pCi/g	-10.000	1000.000				07/15/08
BLANK	Uranium-235	15117-96-1	5.1e-3	0.005	pCi/g	-10.000	1000.000				07/15/08
BLANK	Uranium-238	24678-82-8	6.2e-3	0.006	pCi/g	-10.000	1000.000				07/15/08
LCS	U-232 tracer by AEA	U232	11.4	89.570	% Recov	30.000	105.000				07/15/08
LCS	Uranium-233/234	13966-29-5	n/a	n/a	% Recov	75.000	125.000				07/15/08
LCS	Uranium-235	15117-96-1	n/a	n/a	% Recov	75.000	125.000				07/15/08
LCS	Uranium-238	24678-82-8	19.99	105.460	% Recov	80.000	120.000				07/15/08

WSCF ANALYTICAL COMMENT REPORT

Attention: Steve Trent
Project Number F08-130

Group #: WSCF20081090
Department: Radiochemistry

Sample #	Client ID	Lab Area	Test	Comment
		VALGROUP		U-235 and U238/Duplicate is flagged but the sample activity is low level. RPD does not apply. Imh

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-08-702

ATTACHMENT 4

SAMPLE RECEIPT INFORMATION

Consisting of 5 pages
Including cover page

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

File

ACKNOWLEDGMENT OF SAMPLES RECEIVED

07/10/08

td

Groundwater Remediation Program

Richland, WA 99354
Attn: Steve Trent

Customer Code: GPP
PO#: 123077/ES10
Group#: 20081090
Project#: F08-130
Proj Mgr: Steve Trent E6-35
Phone: 373-5869

The following samples were received from you on 05/29/08. 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
W08GR01420	B1W0K9	TRENT @2008 PERSOLID	Solid, or handle as if solid @AEA-30 @AEA-32 @GEA-GPP @SR89_90	05/29/08
W08GR01421	B1W0K7	TRENT @VOA-GPP	Solid, or handle as if solid	05/29/08
W08GR01422	B1W0K8	TRENT @VOA-GPP	Solid, or handle as if solid	05/29/08

Test Acronym Description

Test Acronym	Description
@2008	ICP-200.8 MS All possible meta
@AEA-30	Plutonium Isotopics by AEA
@AEA-32	Uranium Isotopics by AEA
@GEA-GPP	Gamma Energy Analysis-grd H2O
@SR89_90	Strontium 89/90
@VOA-GPP	VOA Ground Water Protection
PERSOLID	Percent Solids

COLLECTOR
NCO Sampler - *Mowbray*

COMPANY CONTACT
TRENT, SJ

TELEPHONE NO.
373-5869

PROJECT COORDINATOR
WIDRIG, DL

PRICE CODE
8N

DATA
TURNAROUND
45 Days / 45
Days

SAMPLING LOCATION
CS939

PROJECT DESIGNATION
100-KR-4 Expansion Wells (Vadose Zone) - Waste Characterization

SAF NO.
F08-130

AIR QUALITY

ICE CHEST NO.

FIELD LOGBOOK NO.
HW-1-585 J

ACTUAL SAMPLE DEPTH
COA
123077ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
Waste Sampling & Characterization *20081090*

OFFSITE PROPERTY NO.

BILL OF LADING/AIR BILL NO.

MATRIX*
A=Air
DL=Drum
Liquids
DS=Drum
Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=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
None
None
TYPE OF CONTAINER
G/P
Square
Bottle - Poly
NO. OF CONTAINER(S)
1
1
VOLUME
60ml
500ml

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						
B1WOK9 <i>W-086201420</i>	SOIL	<i>5/29/8</i>	<i>1050</i>						

CHAIN OF POSSESSION

RELINQUISHED BY / REMOVED FROM	DATE/TIME	RECEIVED BY / STORED IN	DATE/TIME
<i>J. Mowbray</i>	<i>5/29/8 1250</i>	<i>T. Ramirez</i>	<i>5/25/8 1250</i>

SIGN/ PRINT NAMES
02CG09 637588

SPECIAL INSTRUCTIONS
Sample @ 25 Feet. Drum number KR4-08-233 / 0050725. Radioactive tie to B1WOK6.
(1) ICP/MS - 200.8 (TAL) {Cadmium, Chromium, Silver, Zinc} ICP/MS - 200.8 (Add-on) {Arsenic, Lead}
(2) Gamma Spectroscopy {Cobalt-60, Europium-152, Europium-154, Europium-155} Isotopic Plutonium {Plutonium-238, Plutonium-239/240} Isotopic Uranium {Uranium-233/234} Strontium-89,90 -- Total Sr {Total beta radiostrontium}

ICED

30 of 34
LABORATORY SECTION
FINAL SAMPLE DISPOSITION

RECEIVED BY
DISPOSAL METHOD

TITLE
DATE/TIME
DISPOSED BY
DATE/TIME

COLLECTOR NCO Sampler - <i>Mueller</i>	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8N	DATA TURNAROUND 45 Days / 45 Days
SAMPLING LOCATION C5939	PROJECT DESIGNATION 100-KR-4 Expansion Wells (Vadose Zone) - Waste Characterization		SAF NO. F08-130	AIR QUALITY <input type="checkbox"/>	
ICE CHEST NO.	FIELD LOGBOOK NO. <i>HNF-N-5855</i>	ACTUAL SAMPLE DEPTH	COA 123077ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO Waste Sampling & Characterization	OFFSITE PROPERTY NO.		BILL OF LADING/AIR BILL NO.		

MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=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 >-20C	MEOH/Cool-4 C
		TYPE OF CONTAINER	gGs*	gGs*
		NO. OF CONTAINER(S)	5	3
		VOLUME	40mL	40mL
		SPECIAL HANDLING AND/OR STORAGE	SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME						
B1WOK7	1421 SOIL	5/29/2008	1050						

CHAIN OF POSSESSION	SIGN/ PRINT NAMES
RELINQUISHED BY/REMOVED FROM <i>J. Mueller</i>	RECEIVED BY/STORED IN <i>JA ANAZIRI</i>
DATE/TIME <i>5/29/08 1250</i>	DATE/TIME <i>5/29/08 1250</i>
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN
DATE/TIME	DATE/TIME
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN
DATE/TIME	DATE/TIME
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN
DATE/TIME	DATE/TIME
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN
DATE/TIME	DATE/TIME

SPECIAL INSTRUCTIONS
 Sample @ 25 Feet. Drum number KR4-08-233 / 0050725. Radioactive tie to B1WOK6.
 (1)VOA - 5035/8260 (LOW LEVEL) {Chloroform, Trichloroethene}
 (2)VOA - 5035/8260 (HIGH LEVEL) {Chloroform, Trichloroethene}

ICED

31 of 34	LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
	FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

COLLECTOR NCO Sampler - <i>Moulton</i>	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8N	DATA TURNAROUND 45 Days / 45 Days
SAMPLING LOCATION CS939	PROJECT DESIGNATION 100-KR-4 Expansion Wells (Vadose Zone) - Waste Characterization		SAF NO. F08-130	AIR QUALITY <input type="checkbox"/>	
ICE CHEST NO.	FIELD LOGBOOK NO. <i>UWF-NL585J</i>	ACTUAL SAMPLE DEPTH	COA 123077ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO Waste Sampling & Characterization	OFFSITE PROPERTY NO.		BILL OF LADING/AIR BILL NO.		

MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=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	gGs*							
		NO. OF CONTAINER(S)	1							
		VOLUME	40mL							
SPECIAL HANDLING AND/OR STORAGE	SAMPLE ANALYSIS	VOA - 82608 (TCL) (Chloroform, Trichloroethene)								

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME						
B1WOK8	1422 SOIL	5/29/2008	1050						

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM <i>J. Moulton</i>	DATE/TIME 5/29/08 1250	RECEIVED BY/STORED IN <i>T. F. Nazarian</i>	DATE/TIME 05/29/08 1250	Sample @ 25 Feet. Drum number KR4-08-233 / 0050725. Radioactive tie to B1WOK6.	
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		

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

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ATTACHMENT 5

SAMPLE RECEIPT INFORMATION

Consisting of 2 pages
Including cover page

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
	K	31.1	35.8	4.7	---	---	---
	L	30.5	34.7	4.2	---	---	---
	M	31.0	34.2	2.9	---	---	---
	N	31.6	36.6	5.0	---	---	---
	P	30.5	34.5	4.0	---	---	---
		29.6	29.6	0		5	33.2
	W	30.3	33.4	3.1		3	33.5
	X	30.2	34.9	4.7		5	38.2
	Y	29.5	33.3	3.8		4	36.1

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