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Memorandum

M8141-SLF-05-328

To: S. J. Trent A0-21 Date: July 27, 2005

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

cc:	w/Attachments		w/o Attachments	
	T. F. Dale	S3-30	D. J. Hart	S3-30
	H. K. Meznarich	S3-30	M. A. Neely	S3-30
	P. D. Mix	S3-30	H. S. Rich	S3-28
	J. E. Trechter	S3-30	L. C. Swanson	E6-35
			File/LB	

Subject: FINAL RESULTS FOR 216-A-8 CRIB CHARACTERIZATION BOREHOLE SAMPLE – SAMPLE DELIVERY GROUP WSCF20051337 – SAF NUMBER F05-023

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

(2) HNF-SD-CD-QAPP-017, Rev. 7, Waste Sampling & Characterization Facility Quality Assurance Plan

This letter contains a narrative (Attachment 1) for sample delivery group WSCF20051337, the analytical results (Attachment 2), and the sample receipt information (Attachment 3).

SLF/grf

Attachments 3

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M8141-SLF-05-328

ATTACHMENT 1

NARRATIVE

Consisting of 6 pages
Including cover page

Sample Delivery Group	**WSCF20051337**
Sample Matrix	**Soil**
Sample Visual	**N/A**
SAF Number	**F05-023**
Data Deliverable	**Summary Report**

Introduction

One (1) 216-A-8 Crib Characterization Borehole sample/I-7 (B1D994) was received at the WSCF Laboratory on June 29, 2005. The sample was analyzed for the analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Groundwater Remediation Program – Letter of Instruction*, referenced in the cover letter.

The narrative (Attachment 1) will address sample characteristics, analyses requested and general information in performance of the analytical methods. A Data Summary Report (Attachment 2) includes analytical results, a comment report detailing method abnormalities, tentatively identified peaks if applicable, method references, and Laboratory QC information. Copies of the chain of custody and sample receipt are included as Attachment 3.

Analytical Methodology for Requested Analyses

Refer to *WSCF Method References Report,* pages 45 through 46, for a complete listing of approved analytical methods.

Inorganic Comments

Ammonia - The hold time for this analysis was met. A Blank, Duplicate, Laboratory Control Sample, Matrix Spike and Matrix Spike Duplicate were analyzed with each delivery group per GRP Letter of Instruction. See page 11 for QC details. Analytical Notes:

- Sample B1D994 result was B-flagged; the analyte was less than the reportable detection limit, but greater than or equal to the method detection limit.
- Duplicate Relative Percent Difference (RPD) exceeded established laboratory limits. RPD criterion not applicable to low level sample.

All other QC controls are within the established limits.

Anions - The hold times for this analysis were met. A Blank, Duplicate, Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per GRP Letter of Instruction. See pages 12 through 13 for QC details. Analytical Note:

- Preparation Date: 07-jul-2005.

All QC controls are within the established limits.

ICP-AES Metals (Bismuth and Phosphorus) – The hold time for this analysis was met. A Blank, Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per GRP Letter of Instruction. See page 14 for QC details. Analytical Notes:

- Preparation Date: 18-jul-2005.
- Matrix Spike and Matrix Spike Duplicate QC samples were analyzed on sample# B1D7D0 (SDG# 20051234, F05-023).
- Phosphorus: insufficient spike concentration. Sample concentration was greater than four times the spike concentration.
- Bismuth: The analyte detected in the associated preparation Blank sample was evaluated and there was no significant effect on the sample result.

All other QC controls are within the established limits.

ICP-MS Metals – The hold time for this analysis was met. A Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GRP Letter of Instruction. See pages 15 through 17 for QC details. Analytical Notes:

- Preparation Date: 06-jul-2005.
- Matrix Spike and Matrix Spike Duplicate QC samples were analyzed on sample# B1D993 (SDG# 20051319, SAF# F05-023).

All QC controls are within the established limits.

Percent Solids – analyzed for organic moisture correction.

pH - See page 18 for QC details.

Organic Comments

- Sample results are moisture corrected and reported on dry weight basis.

PCBs – The hold time for this analysis was met. A Blank, Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GRP Letter of Instruction. See pages 24 through 25 for QC details. Analytical Note:

- Preparation Date: 08-jul-2005.

All QC controls are within the established limits.

Semi-VOA – The hold time for this analysis was met. A Blank, Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GRP Letter of Instruction. See pages 26 through 31 for QC details. Analytical Note:

- Preparation Date: 08-jul-2005.

TPHD-WA - The hold time for this analysis was met. A Blank, Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per GRP Letter of Instruction. See page 32 for QC details. Analytical Note:

- Preparation Date: 08-jul-2005.

All QC controls are within the established limits.

VOA – The hold time for this analysis was met. A Blank, Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GRP Letter of Instruction. See pages 33 through 36 for QC details. Analytical Note:

- Matrix Spike and Matrix Spike Duplicate QC samples were analyzed on sample# B1D992 (SDG# 20051295, SAF# F05-023).

All QC controls are within the established limits.

Radiochemistry Comments

RadChem – There are no hold times associated with WSCF's radiochemical methods. A Blank, Laboratory Control Sample and Duplicate were analyzed with each delivery group per the GRP Letter of Instruction. See pages 38 through 42 for QC details. Analytical Notes:

- GEA – Duplicate QC sample was analyzed on sample# B1DCK1 (SDG# 20051304, F05-026).
- Americium-241, Plutonium-238, Plutonium-239/240, Uranium-233/234, Uranium-235 and Uranium-238 – Duplicate QC samples were analyzed on sample# B1D992 (SDG# 20051295, SAF# F05-023).
- Uranium-235 and Uranium-238– Duplicate Relative Percent Difference (RPD) was above established limits due to batch sample and duplicate were not homogeneous.

All other QC controls are within the established limits.

Plutonium-242, Americium-243 and Uranium-232 – Radiochemical Tracer Recovery Data are summarized below:

Radiochemical Tracer Percent Recovery			
Sample Number	**Lab Sample ID**	**Isotope**	**Tracer Recovery (Percent)**
Americium-243			
BLANK		Am-243	90.1%

Radiochemical Tracer Percent Recovery			
Sample Number	**Lab Sample ID**	**Isotope**	**Tracer Recovery (Percent)**
LCS		Am-243	99.6%
B1D992	W050001997	Am-243	90.7%
DUPLICATE	W050001997	Am-243	88.3%
B1D994	W050002028	Am-243	91.7%
Plutonium-242			
BLANK		Pu-242	81.9%
LCS		Pu-242	89.4%
B1D992	W050001997	Pu-242	78.6%
DUPLICATE	W050001997	Pu-242	83.9%
B1D994	W050002028	Pu-242	89.5%
Strontium-85			
BLANK		Sr-85	89.6%
LCS		Sr-85	94.1%
B1D994	W050002028	Sr-85	87.0%
DUPLICATE	W050002028	Sr-85	95.7%
Uranium-232			
BLANK		U-232	64.1%
LCS		U-232	71.3%
B1D992	W050001997	U-232	92.1%
DUPLICATE	W050001997	U-232	75.6%
B1D994	W050002028	U-232	82.0%

This Summary Report is in compliance with the SOW, both technically and for completeness. Release of the data contained in this hard copy report has been authorized by the WSCF Laboratory Analytical Manager and Client Services, as verified by the following signature.

Pauline D. Mix
WSCF Client Services

Abbreviations

Hg – mercury
IC – ion chromatography
ICP – inductively coupled plasma
ICP/AES – ICP/atomic emission spectroscopy
ICP/MS – ICP/mass spectrometry
Total U – total uranium
AT/TB – total alpha/total beta
AEA – Alpha Energy Analysis
WTPH-G – Total Hydrocarbons-Gasoline
Am – americium
Cm - curium
Pu – plutonium
Np – neptunium
GEA – gamma energy analysis
H3 – Tritium
Sr – Strontium 89, 90
WTPH-D – Total Hydrocarbons-Diesel
TSS – Total Suspended Solids

M8141-SLF-05-328

ATTACHMENT 2

ANALYTICAL RESULTS

Consisting of 41 pages
Including cover page

WSCF
ANALYTICAL RESULTS REPORT

for

Groundwater Remediation Program

Richland, WA 99354

Attention: Steve Trent

Analytical: S. Fitzgerald

Client Services: P.O. Mix 7/27/2005

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

Confidentiality Notice: The information contained in this report is privileged and confidential information intended only for the use of the addressee. If the reader of this report is not the intended recipient, or the employee or agent responsible to deliver it to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by telephone at (509) 373-7020.

Contract#: FH-EIS-2003-MEM-001
Report#: WSCF20051337
Report Date: 26-jul-2005
Report WGPP/ver. 1.1
Groundwater Remediation Program

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
Project: F05-023: F05-023

Group #: WSCF20051337

Sample #	Client ID		CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze	Sample	Receive
Inorganic														
W050002028	B1D994	TRENT	NH4-N	Nitrogen in ammonium	SOIL	LA-503-401	B	0.245	mg/kg	50.00	0.20	07/07/05	06/28/05	06/29/05
W050002028	B1D994	TRENT	TS	Total solids	SOIL	LA-519-412		97.4	%	1.00	0.0	07/07/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	PH	pH Measurement	SOIL	LA-212-411		9.16	pH	1.00	0.010	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	16984-48-8	Fluoride	SOIL	LA-533-410	U	< 1.15	mg/kg	50.00	1.2	07/07/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	16887-00-6	Chloride	SOIL	LA-533-410	U	< 2.60	mg/kg	50.00	2.6	07/07/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	NO2-N	Nitrogen in Nitrite	SOIL	LA-533-410	U	< 0.950	mg/kg	50.00	0.95	07/07/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	NO3-N	Nitrogen in Nitrate	SOIL	LA-533-410	U	< 0.650	mg/kg	50.00	0.65	07/07/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	PO4-P	Phosphate (P) by IC	SOIL	LA-533-410	U	< 2.70	mg/kg	50.00	2.7	07/07/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	14808-79-8	Sulfate	SOIL	LA-533-410	U	< 5.00	mg/kg	50.00	5.0	07/07/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	7440-69-9	Bismuth	SOIL	LA-505-411	U	< 1.08	mg/kg	49.30	1.1	07/18/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	7723-14-0	Phosphorus	SOIL	LA-505-411		451	mg/kg	49.30	2.4	07/18/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	7440-02-0	Nickel	SOIL	LA-505-412		12.7	mg/kg	1.04	0.10	07/07/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	7440-22-4	Silver	SOIL	LA-505-412	U	< 0.104	mg/kg	1.04	0.10	07/07/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	7440-39-3	Barium	SOIL	LA-505-412		48.9	mg/kg	1.04	4.2	07/07/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	7440-43-9	Cadmium	SOIL	LA-505-412	U	< 0.104	mg/kg	1.04	0.10	07/07/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	7440-47-3	Chromium	SOIL	LA-505-412		10.2	mg/kg	1.04	4.2	07/07/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	7440-50-8	Copper	SOIL	LA-505-412		9.07	mg/kg	1.04	2.1	07/07/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	7439-92-1	Lead	SOIL	LA-505-412		3.01	mg/kg	1.04	0.21	07/07/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	7439-97-6	Mercury	SOIL	LA-505-412	U	< 0.104	mg/kg	1.04	0.10	07/07/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	7440-61-1	Uranium	SOIL	LA-505-412		0.300	mg/kg	1.04	0.10	07/07/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	7440-38-2	Arsenic	SOIL	LA-505-412		2.45	mg/kg	1.04	0.42	07/07/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	7782-49-2	Selenium	SOIL	LA-505-412	U	< 0.416	mg/kg	1.04	0.42	07/07/05	06/29/05	06/29/05

MDL=Minimum Detection Limit B - The analyte < the RDL but > = the IDL/MDL (inorganic) U - Analyzed for but not detected above limiting criteria.
RQ=Result Qualifier

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

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051337
Matrix: SOLID
Test: Ammonia (N) by IC

SAF Number: F05-023
Sample Date: 06/29/05
Receive Date:06/29/05

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
Lab ID: W050002028									
BATCH QC ASSOCIATED WITH SAMPLE									
DUP	Ammonia (N) by IC	7664-41-7	3.67e-01	37.209	RPD	07/07/05	0.000	20.000	*
MS	Ammonia (N) by IC	7664-41-7	3.92e-01	95.146	% Recov	07/07/05	75.000	125.000	
MSD	Ammonia (N) by IC	7664-41-7	3.89e-01	94.417	% Recov	07/07/05	75.000	125.000	
BATCH QC									
BLANK	Ammonia (N) by IC	7664-41-7	<4.00e-3	n/a	mg/L	07/07/05	0.000	30.000	U
BLANK	Ammonia (N) by IC	7664-41-7	<4.00e-3	n/a	mg/L	07/07/05	0.000	30.000	U
LCS	Ammonia (N) by IC	7664-41-7	7.77e+01	94.756	% Recov	07/07/05	80.000	120.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051337
Matrix: SOLID
Test: Anions by Ion Chromatography

SAF Number: F05-023
Sample Date: 06/29/05
Receive Date:06/29/05

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
Lab ID: W050002028									
BATCH QC ASSOCIATED WITH SAMPLE									
DUP	Chloride	16887-00-6	<2.55e0	n/a	RPD	07/07/05	0.000	20.000	U
DUP	Fluoride	16984-48-8	<1.13e0	n/a	RPD	07/07/05	0.000	20.000	U
DUP	Nitrogen in Nitrite	NO2-N	<9.31e-1	n/a	RPD	07/07/05	0.000	20.000	U
DUP	Nitrogen in Nitrate	NO3-N	<6.37e-1	n/a	RPD	07/07/05	0.000	20.000	U
DUP	Phosphate (P) by IC	PO4-P	<2.65e0	n/a	RPD	07/07/05	0.000	20.000	U
DUP	Sulfate	14808-79-8	<4.90e0	n/a	RPD	07/07/05	0.000	20.000	U
MS	Chloride	16887-00-6	9.98e-01	99.800	% Recov	07/07/05	75.000	125.000	
MS	Fluoride	16984-48-8	4.61e-01	93.320	% Recov	07/07/05	75.000	125.000	
MS	Nitrogen in Nitrite	NO2-N	4.95e-01	99.000	% Recov	07/07/05	75.000	125.000	
MS	Nitrogen in Nitrate	NO3-N	4.51e-01	100.000	% Recov	07/07/05	75.000	125.000	
MS	Phosphate (P) by IC	PO4-P	7.94e-01	81.940	% Recov	07/07/05	75.000	125.000	
MS	Sulfate	14808-79-8	1.92e+00	96.000	% Recov	07/07/05	75.000	125.000	
MSD	Chloride	16887-00-6	9.32e-01	93.200	% Recov	07/07/05	75.000	125.000	
MSD	Fluoride	16984-48-8	4.48e-01	90.688	% Recov	07/07/05	75.000	125.000	
MSD	Nitrogen in Nitrite	NO2-N	4.53e-01	90.600	% Recov	07/07/05	75.000	125.000	
MSD	Nitrogen in Nitrate	NO3-N	4.31e-01	95.565	% Recov	07/07/05	75.000	125.000	
MSD	Phosphate (P) by IC	PO4-P	8.07e-01	83.282	% Recov	07/07/05	75.000	125.000	
MSD	Sulfate	14808-79-8	1.91e+00	95.500	% Recov	07/07/05	75.000	125.000	
BATCH QC									
BLANK	Chloride	16887-00-6	<5.20e-2	n/a	mg/L	07/07/05	0.000	300.000	U
BLANK	Chloride	16887-00-6	<5.20e-2	n/a	mg/L	07/07/05	0.000	300.000	U
BLANK	Fluoride	16984-48-8	<2.30e-2	n/a	mg/L	07/07/05	0.000	300.000	U
BLANK	Fluoride	16984-48-8	<2.30e-2	n/a	mg/L	07/07/05	0.000	300.000	U
BLANK	Nitrogen in Nitrite	NO2-N	<1.90e-2	n/a	mg/L	07/07/05	0.000	300.000	U
BLANK	Nitrogen in Nitrite	NO2-N	<1.90e-2	n/a	mg/L	07/07/05	0.000	300.000	U

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051337
Matrix: SOLID
Test: Anions by Ion Chromatography

SAF Number: F05-023
Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
BLANK	Nitrogen in Nitrate	NO3-N	<1.30e-2	n/a	mg/L	07/07/05	0.000	300.000	U
BLANK	Nitrogen in Nitrate	NO3-N	<1.30e-2	n/a	mg/L	07/07/05	0.000	300.000	U
BLANK	Phosphate (P) by IC	PO4-P	<5.40e-2	n/a	mg/L	07/07/05	0.000	300.000	U
BLANK	Phosphate (P) by IC	PO4-P	<5.40e-2	n/a	mg/L	07/07/05	0.000	300.000	U
BLANK	Sulfate	14808-79-8	<1.00e-1	n/a	mg/L	07/07/05	0.000	300.000	U
BLANK	Sulfate	14808-79-8	<1.00e-1	n/e	mg/L	07/07/05	0.000	300.000	U
LCS	Chloride	16887-00-6	1.83e+02	91.500	% Recov	07/07/05	80.000	120.000	
LCS	Fluoride	16984-48-8	9.09e+01	90.900	% Recov	07/07/05	80.000	120.000	
LCS	Nitrogen in Nitrite	NO2-N	9.05e+01	90.500	% Recov	07/07/05	80.000	120.000	
LCS	Nitrogen in Nitrate	NO3-N	8.66e+01	95.374	% Recov	07/07/05	80.000	120.000	
LCS	Phosphate (P) by IC	PO4-P	1.76e+02	90.815	% Recov	07/07/05	80.000	120.000	
LCS	Sulfate	14808-79-8	3.77e+02	94.486	% Recov	07/07/05	80.000	120.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051337
Matrix: SOLID
Test: ICP Metals Analysis, Grd H20 P

SAF Number: F05-023
Sample Date: 06/14/05
Receive Date:06/15/05

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
Lab ID: W050001783									
BATCH QC ASSOCIATED WITH SAMPLE									
MS	Bismuth	7440-69-9	83.1	83.939	% Recov	07/18/05	75.000	125.000	
MS	Phosphorus	7723-14-0	145	n/a	% Recov	07/18/05	70.000	130.000	
MSD	Bismuth	7440-69-9	83.5	84.343	% Recov	07/18/05	75.000	125.000	
MSD	Phosphorus	7723-14-0	147	n/a	% Recov	07/18/05	75.000	125.000	
SPK-RPD	Bismuth	7440-69-9	84.343	0.480	RPD	07/18/05	0.000	20.000	
SPK-RPD	Phosphorus	7723-14-0		n/a	RPD	07/18/05	0.000	20.000	
BATCH QC									
BLANK	Bismuth	7440-69-9	2.2	2.200	ug/L	07/18/05			
BLANK	Phosphorus	7723-14-0	<4.8e-2	n/a	ug/L	07/18/05			U
LCS	Bismuth	7440-69-9	181	91.414	% Recov	07/18/05	80.000	120.000	
LCS	Phosphorus	7723-14-0	709	110.781	% Recov	07/18/05	78.000	123.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051337
Matrix: SOLID
Test: ICP-2008 MS All possible metal

SAF Number: F05-023
Sample Date: 06/27/05
Receive Date:06/27/05

Lab ID: W050002015
BATCH QC ASSOCIATED WITH SAMPLE

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
MS	Silver	7440-22-4	206.6	103.300	% Recov	07/07/05	70.000	130.000	
MS	Arsenic	7440-38-2	189.857	94.928	% Recov	07/07/05	70.000	130.000	
MS	Barium	7440-39-3	215.47	107.735	% Recov	07/07/05	70.000	130.000	
MS	Cadmium	7440-43-9	207.4785	103.739	% Recov	07/07/05	70.000	130.000	
MS	Chromium	7440-47-3	170.91	85.455	% Recov	07/07/05	70.000	130.000	
MS	Copper	7440-50-8	190.554	95.277	% Recov	07/07/05	70.000	130.000	
MS	Mercury	7439-97-6	1.9776	98.880	% Recov	07/07/05	70.000	130.000	
MS	Nickel	7440-02-0	186.46	93.230	% Recov	07/07/05	70.000	130.000	
MS	Lead	7439-92-1	209.693	104.846	% Recov	07/07/05	70.000	130.000	
MS	Selenium	7782-49-2	190.4	95.200	% Recov	07/07/05	70.000	130.000	
MS	Uranium	7440-61-1	204.8397	102.420	% Recov	07/07/05	70.000	130.000	
MSD	Silver	7440-22-4	199.4	99.700	% Recov	07/07/05	70.000	130.000	
MSD	Arsenic	7440-38-2	189.157	94.579	% Recov	07/07/05	70.000	130.000	
MSD	Barium	7440-39-3	212.47	106.235	% Recov	07/07/05	70.000	130.000	
MSD	Cadmium	7440-43-9	203.5785	101.789	% Recov	07/07/05	70.000	130.000	
MSD	Chromium	7440-47-3	170.61	85.305	% Recov	07/07/05	70.000	130.000	
MSD	Copper	7440-50-8	190.054	95.027	% Recov	07/07/05	70.000	130.000	
MSD	Mercury	7439-97-6	1.9576	97.880	% Recov	07/07/05	70.000	130.000	
MSD	Nickel	7440-02-0	185.36	92.680	% Recov	07/07/05	70.000	130.000	
MSD	Lead	7439-92-1	207.093	103.546	% Recov	07/07/05	70.000	130.000	
MSD	Selenium	7782-49-2	191.2	95.600	% Recov	07/07/05	70.000	130.000	
MSD	Uranium	7440-61-1	200.9397	100.470	% Recov	07/07/05	70.000	130.000	
SPK-RPD	Silver	7440-22-4	99.700	3.547	RPD	07/07/05	0.000	20.000	
SPK-RPD	Arsenic	7440-38-2	94.579	0.368	RPD	07/07/05	0.000	20.000	
SPK-RPD	Barium	7440-39-3	106.235	1.402	RPD	07/07/05	0.000	20.000	
SPK-RPD	Cadmium	7440-43-9	101.789	1.898	RPD	07/07/05	0.000	20.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051337
Matrix: SOLID
Test: ICP-2008 MS All possible metal

SAF Number: F05-023
Sample Date: 06/27/05
Receive Date:06/27/05

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
SPK-RPD	Chromium	7440-47-3	85.305	0.176	RPD	07/07/05	0.000	20.000	
SPK-RPD	Copper	7440-50-8	95.027	0.263	RPD	07/07/05	0.000	20.000	
SPK-RPD	Mercury	7439-97-6	97.880	1.016	RPD	07/07/05	0.000	20.000	
SPK-RPD	Nickel	7440-02-0	92.680	0.592	RPD	07/07/05	0.000	20.000	
SPK-RPD	Lead	7439-92-1	103.546	1.248	RPD	07/07/05	0.000	20.000	
SPK-RPD	Selenium	7782-49-2	95.600	0.419	RPD	07/07/05	0.000	20.000	
SPK-RPD	Uranium	7440-61-1	100.470	1.922	RPD	07/07/05	0.000	20.000	
BATCH QC									
BLANK	Silver	7440-22-4	<0.1	n/a	ug/L	07/07/05			U
BLANK	Arsenic	7440-38-2	<0.4	n/a	ug/L	07/07/05			U
BLANK	Barium	7440-39-3	<4	n/a	ug/L	07/07/05			U
BLANK	Cadmium	7440-43-9	<0.1	n/a	ug/L	07/07/05			U
BLANK	Chromium	7440-47-3	<4	n/a	ug/L	07/07/05			U
BLANK	Copper	7440-50-8	<2	n/a	ug/L	07/07/05			U
BLANK	Mercury	7439-97-6	<0.1	n/a	ug/L	07/07/05			U
BLANK	Nickel	7440-02-0	<0.1	n/a	ug/L	07/07/05			U
BLANK	Lead	7439-92-1	<0.2	n/a	ug/L	07/07/05			U
BLANK	Selenium	7782-49-2	<0.4	n/a	ug/L	07/07/05			U
BLANK	Uranium	7440-61-1	<0.1	n/a	ug/L	07/07/05			U
LCS	Silver	7440-22-4	148.4	114.154	% Recov	07/07/05	110.000	170.000	
LCS	Arsenic	7440-38-2	161	100.000	% Recov	07/07/05	82.000	142.000	
LCS	Barium	7440-39-3	252.5	100.198	% Recov	07/07/05	79.000	123.000	
LCS	Cadmium	7440-43-9	133.9	104.609	% Recov	07/07/05	88.000	127.000	
LCS	Chromium	7440-47-3	67.75	97.482	% Recov	07/07/05	50.000	126.000	
LCS	Copper	7440-50-8	144.1	97.365	% Recov	07/07/05	61.000	134.000	
LCS	Mercury	7439-97-6	16.33	96.627	% Recov	07/07/05	75.000	114.000	
LCS	Nickel	7440-02-0	153.7	104.558	% Recov	07/07/05	84.000	125.000	
LCS	Lead	7439-92-1	147.9	104.155	% Recov	07/07/05	87.000	120.000	
LCS	Selenium	7782-49-2	64.13	99.891	% Recov	07/07/05	83.000	145.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051337
Matrix: SOLID
Test: ICP-2008 MS All possible metal

SAF Number: F05-023
Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
LCS	Uranium	7440-61-1	414	103.500	% Recov	07/07/05	89.000	107.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051337
Matrix: SOLID
Test: pH Soil and Waste Measurement

SAF Number: F05-023
Sample Date: 06/29/05
Receive Date:06/29/05

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
Lab ID: W050002028									
BATCH QC ASSOCIATED WITH SAMPLE									
DUP	pH Soil and Waste Measurement	PH	9.176	0.207	RPD	07/06/05	0.000	3.000	

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
Project: F05-023: F05-023

Group #: WSCF20051337

Sample #	Client ID		CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze	Sample	Receive
Organic														
W050002028	B1D994	TRENT	12674-11-2	Aroclor-1016	SOIL	LA-523-427	U	< 10.0	ug/kg	1.00	10	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	11104-28-2	Aroclor-1221	SOIL	LA-523-427	U	< 20.0	ug/kg	1.00	20	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	11141-16-5	Aroclor-1232	SOIL	LA-523-427	U	< 10.0	ug/kg	1.00	10	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	53469-21-9	Aroclor-1242	SOIL	LA-523-427	U	< 10.0	ug/kg	1.00	10	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	12672-29-6	Aroclor-1248	SOIL	LA-523-427	U	< 10.0	ug/kg	1.00	10	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	11097-69-1	Aroclor-1254	SOIL	LA-523-427		39.0	ug/kg	1.00	10	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	11096-82-5	Aroclor-1260	SOIL	LA-523-427	U	< 10.0	ug/kg	1.00	10	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	37324-23-5	Aroclor-1262	SOIL	LA-523-427	U	< 10.0	ug/kg	1.00	10	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	11100-14-4	Aroclor-1268	SOIL	LA-523-427	U	< 10.0	ug/kg	1.00	10	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	100-02-7	4-Nitrophenol	SOIL	LA-523-456	U	< 88.0	ug/kg	1.00	88	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	106-46-7	1,4-Dichlorobenzene	SOIL	LA-523-456	U	< 140	ug/kg	1.00	1.4e+02	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	108-95-2	Phenol	SOIL	LA-523-456	U	< 70.0	ug/kg	1.00	70	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	120-82-1	1,2,4-Trichlorobenzene	SOIL	LA-523-456	U	< 94.0	ug/kg	1.00	94	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	121-14-2	2,4-Dinitrotoluene	SOIL	LA-523-456	U	< 55.0	ug/kg	1.00	55	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	129-00-0	Pyrene	SOIL	LA-523-456	U	< 80.0	ug/kg	1.00	80	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	59-50-7	4-Chloro-3-methylphenol	SOIL	LA-523-456	U	< 48.0	ug/kg	1.00	48	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	621-64-7	N-Nitrosodi-n-dipropylamine	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	83-32-9	Acenaphthene	SOIL	LA-523-456	U	< 70.0	ug/kg	1.00	70	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	87-86-5	Pentachlorophenol	SOIL	LA-523-456	U	< 74.0	ug/kg	1.00	74	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	95-57-8	2-Chlorophenol	SOIL	LA-523-456	U	< 78.0	ug/kg	1.00	78	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	100-01-6	4-Nitroaniline	SOIL	LA-523-456	U	< 89.0	ug/kg	1.00	89	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	101-55-3	4-Bromophenylphenyl ether	SOIL	LA-523-456	U	< 53.0	ug/kg	1.00	53	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	105-67-9	2,4-Dimethylphenol	SOIL	LA-523-456	U	< 91.0	ug/kg	1.00	91	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	106-47-8	4-Chloroaniline	SOIL	LA-523-456	U	< 150	ug/kg	1.00	1.5e+02	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	108-60-1	Bis(2-chloro-1-methylethyl)eth	SOIL	LA-523-456	U	< 90.0	ug/kg	1.00	90	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	111-44-4	Bis(2-chloroethyl) ether	SOIL	LA-523-456	U	< 100	ug/kg	1.00	1.0e+02	07/20/05	06/29/05	06/29/05

MDL = Minimum Detection Limit B - The analyte < the RDL but > = the IDL/MDL (Inorganic) U - Analyzed for but not detected above limiting criteria.
RQ = Result Qualifier

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
Project: F05-023: F05-023

Group #: WSCF20051337

Sample #	Client ID		CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze	Sample	Receive
W05000202B	B1D994	TRENT	111-91-1	Bis(2-Chloroethoxy)methane	SOIL	LA-523-456	U	< 63.0	ug/kg	1.00	63	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	117-81-7	Bis(2-ethylhexyl) phthalate	SOIL	LA-523-456	U	< 73.0	ug/kg	1.00	73	07/20/05	06/29/05	06/29/05
W05000202B	B1D994	TRENT	117-84-0	Di-n-octylphthalate	SOIL	LA-523-456	U	< 87.0	ug/kg	1.00	87	07/20/05	06/29/05	06/29/05
W05000202B	B1D994	TRENT	118-74-1	Hexachlorobenzene	SOIL	LA-523-456	U	< 70.0	ug/kg	1.00	70	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	120-12-7	Anthracene	SOIL	LA-523-456	U	< 79.0	ug/kg	1.00	79	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	120-83-2	2,4-Dichlorophenol	SOIL	LA-523-456	U	< 46.0	ug/kg	1.00	46	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	131-11-3	Dimethyl phthalate	SOIL	LA-523-456	U	< 66.0	ug/kg	1.00	66	07/20/05	06/29/05	06/29/05
W05000202B	B1D994	TRENT	132-64-9	Dibenzofuran	SOIL	LA-523-456	U	< 63.0	ug/kg	1.00	63	07/20/05	06/29/05	06/29/05
W05000202B	B1D994	TRENT	191-24-2	Benzo(ghi)perylene	SOIL	LA-523-456	U	< 79.0	ug/kg	1.00	79	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	193-39-5	Indeno(1,2,3-cd)pyrene	SOIL	LA-523-456	U	< 84.0	ug/kg	1.00	84	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	205-99-2	Benzo(b)fluoranthene	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	07/20/05	06/29/05	06/29/05
W05000202B	B1D994	TRENT	206-44-0	Fluoranthene	SOIL	LA-523-456	U	< 82.0	ug/kg	1.00	82	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	207-08-9	Benzo(k)fluoranthene	SOIL	LA-523-456	U	< 55.0	ug/kg	1.00	55	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	208-96-8	Acenaphthylene	SOIL	LA-523-456	U	< 75.0	ug/kg	1.00	75	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	218-01-9	Chrysene	SOIL	LA-523-456	U	< 72.0	ug/kg	1.00	72	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	50-32-8	Benzo(a)pyrene	SOIL	LA-523-456	U	< 62.0	ug/kg	1.00	62	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	51-28-5	2,4-Dinitrophenol	SOIL	LA-523-456	U	< 180	ug/kg	1.00	1.8e+02	07/20/05	06/29/05	06/29/05
W05000202B	B1D994	TRENT	53-70-3	Dibenz(a,h)anthracene	SOIL	LA-523-456	U	< 96.0	ug/kg	1.00	96	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	534-52-1	4,6-Dinitro-2-methylphenol	SOIL	LA-523-456	U	< 130	ug/kg	1.00	1.3e+02	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	541-73-1	1,3-Dichlorobenzene	SOIL	LA-523-456	U	< 160	ug/kg	1.00	1.6e+02	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	56-55-3	Benzo(a)anthracene	SOIL	LA-523-456	U	< 65.0	ug/kg	1.00	65	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	606-20-2	2,6-Dinitrotoluene	SOIL	LA-523-456	U	< 70.0	ug/kg	1.00	70	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	7005-72-3	4-Chlorophenylphenyl ether	SOIL	LA-523-456	U	< 53.0	ug/kg	1.00	53	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	77-47-4	Hexachlorocyclopentadiene	SOIL	LA-523-456	U	< 170	ug/kg	1.00	1.7e+02	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	78-59-1	Isophorone	SOIL	LA-523-456	U	< 85.0	ug/kg	1.00	85	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	84-66-2	Diethylphthalate	SOIL	LA-523-456	U	< 140	ug/kg	1.00	1.4e+02	07/20/05	06/29/05	06/29/05
W05000202B	B1D994	TRENT	84-74-2	Di-n-butylphthalate	SOIL	LA-523-456		340	ug/kg	1.00	1.7e+02	07/20/05	06/29/05	06/29/05

MDL = Minimum Detection Limit B - The analyte < the RDL but > = the IDL/MDL (inorganic) U - Analyzed for but not detected above limiting criteria.
RQ = Result Qualifier

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
Project: F05-023: F05-023

Group #: WSCF20051337

Sample #	Client ID		CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze	Sample	Receive
W050002028	B1D994	TRENT	85-01-8	Phenanthrene	SOIL	LA-523-456	U	< 72.0	ug/kg	1.00	72	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	85-68-7	Butylbenzylphthalate	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	86-30-6	N-Nitrosodiphenylamine	SOIL	LA-523-456	U	< 74.0	ug/kg	1.00	74	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	86-73-7	Fluorene	SOIL	LA-523-456	U	< 70.0	ug/kg	1.00	70	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	86-74-8	Carbazole	SOIL	LA-523-456	U	< 80.0	ug/kg	1.00	80	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	87-68-3	Hexachlorobutadiene	SOIL	LA-523-456	U	< 85.0	ug/kg	1.00	85	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	88-74-4	2-Nitroaniline	SOIL	LA-523-456	U	< 53.0	ug/kg	1.00	53	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	88-75-5	2-Nitrophenol	SOIL	LA-523-456	U	< 93.0	ug/kg	1.00	93	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	91-20-3	Naphthalene	SOIL	LA-523-456	U	< 84.0	ug/kg	1.00	84	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	91-57-6	2-Methylnaphthalene	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	91-58-7	2-Chloronaphthalene	SOIL	LA-523-456	U	< 67.0	ug/kg	1.00	67	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	91-94-1	3,3'-Dichlorobenzidine	SOIL	LA-523-456	U	< 200	ug/kg	1.00	2.0e+02	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	95-48-7	2-Methylphenol (cresol, o-)	SOIL	LA-523-456	U	< 83.0	ug/kg	1.00	83	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	95-50-1	1,2-Dichlorobenzene	SOIL	LA-523-456	U	< 130	ug/kg	1.00	1.3e+02	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	95-95-4	2,4,5-Trichlorophenol	SOIL	LA-523-456	U	< 46.0	ug/kg	1.00	46	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	98-95-3	Nitrobenzene	SOIL	LA-523-456	U	< 85.0	ug/kg	1.00	85	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	99-09-2	3-Nitroaniline	SOIL	LA-523-456	U	< 59.0	ug/kg	1.00	59	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	65794-96-9	3 & 4 Methylphenol Total	SOIL	LA-523-456	U	< 110	ug/kg	1.00	1.1e+02	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	67-72-1	Hexachloroethane	SOIL	LA-523-456	U	< 120	ug/kg	1.00	1.2e+02	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	88-06-2	2,4,6-Trichlorophenol	SOIL	LA-523-456	U	< 43.0	ug/kg	1.00	43	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	124-18-5	Decane	SOIL	LA-523-456	U	< 180	ug/kg	1.00	1.8e+02	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	100-51-6	Benzyl alcohol	SOIL	LA-523-456	U	< 58.0	ug/kg	1.00	58	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	111-76-2	2-Butoxyethanol	SOIL	LA-523-456	U	< 85.0	ug/kg	1.00	85	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	126-73-8	Tributyl phosphate	SOIL	LA-523-456	U	< 72.0	ug/kg	1.00	72	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	91-59-8	2-Naphthylamine	SOIL	LA-523-456	U	< 170	ug/kg	1.00	1.7e+02	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	108-94-1	Cyclohexanone	SOIL	LA-523-456	U	< 89.0	ug/kg	1.00	89	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	110-86-1	Pyridine	SOIL	LA-523-456	U	< 97.0	ug/kg	1.00	97	07/20/05	06/29/05	06/29/05

MDL=Minimum Detection Limit B - The analyte < the RDL but >= the IDL/MDL (inorganic) U - Analyzed for but not detected above limiting criteria.
RQ=Result Qualifier

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
Project: F05-023: F05-023

Group #: WSCF20051337

Sample #	Client ID		CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze	Sample	Receive
W050002028	B1D994	TRENT	95-63-6	1,2,4-Trimethylbenzene	SOIL	LA-523-456	U	< 150	ug/kg	1.00	1.5e+02	07/20/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	75-35-4	1,1-Dichloroethene	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	79-01-6	Trichloroethene	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	71-43-2	Benzene	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	108-88-3	Toluene	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	108-90-7	Chlorobenzene	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	75-34-3	1,1-Dichloroethane	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	100-41-4	Ethylbenzene	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	100-42-5	Styrene	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	10061-01-5	cis-1,3-Dichloropropene	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	10061-02-6	trans-1,3-Dichloropropene	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	107-06-2	1,2-Dichloroethane	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	108-10-1	4-Methyl-2-Pentanone	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	124-48-1	Dibromochloromethane	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	127-18-4	Tetrachloroethene	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	1330-20-7	Xylenes (total)	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	540-59-0	1,2-Dichloroethene(Total)	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	56-23-5	Carbon tetrachloride	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	591-78-6	2-Hexanone	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	67-64-1	Acetone	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	67-66-3	Chloroform	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	71-55-6	1,1,1-Trichloroethane	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	74-83-9	Bromomethane	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	74-87-3	Chloromethane	SOIL	LA 523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	75-00-3	Chloroethane	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	75-01-4	Vinyl chloride	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	75-09-2	Methylenechloride	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05

MDL = Minimum Detection Limit B - The analyte < the RDL but > = the IDL/MDL (inorganic) U - Analyzed for but not detected above limiting criteria.
RQ = Result Qualifier

DF = Dilution Factor
* - Indicates results that have NOT been validated; + - indicates more than six qualifier symbols

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
Project: F05-023: F05-023

Group #: WSCF20051337

Sample #	Client ID		CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze	Sample	Receive
W050002028	B1D994	TRENT	75-15-0	Carbon disulfide	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	75-25-2	Bromoform	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	75-27-4	Bromodichloromethane	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	78-87-5	1,2-Dichloropropane	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	78-93-3	2-Butanone	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	79-00-5	1,1,2-Trichloroethane	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	79-34-5	1,1,2,2-Tetrachloroethane	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	71-36-3	1-Butanol	SOIL	LA-523-455	U	< 41.0	ug/kg	1.00	41	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	107-87-9	2-Pentanone	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	110-82-7	Cyclohexane	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	110-54-3	Hexane	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	109-99-9	Tetrahydrofuran	SOIL	LA-523-455	U	< 4.10	ug/kg	1.00	4.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	75-69-4	Trichloromonofluoromethane	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	104-51-8	n-Butylbenzene	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	156-60-5	trans-1,2-Dichloroethylene	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	75-05-8	Acetonitrile	SOIL	LA-523-455	U	< 4.10	ug/kg	1.00	4.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	156-59-2	cis-1,2-Dichloroethylene	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	07/06/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	TPHDIESEL	Total Pet. Hydrocarbons Diesel	SOIL	NWTPH	U	< 3.80e+03	ug/kg	1.00	3.8e+03	07/21/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	TPHKEROSENE	Kerosene	SOIL	NWTPH	U	< 3.80e+03	ug/kg	1.00	3.8e+03	07/21/05	06/29/05	06/29/05

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WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051337
Matrix: SOLID
Test: PCBs complete list

SAF Number: F05-023
Sample Date: 06/29/05
Receive Date:06/29/05

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
Lab ID: W050002028									
BATCH QC ASSOCIATED WITH SAMPLE									
MS	Aroclor-1260	11096-82-5	246.77	121.000	% Recov	07/20/05	75.000	125.000	
MS	Decachlorobiphenyl	2051-24-3	214.98	105.000	% Recov	07/20/05	50.000	150.000	
MS	Tetrachloro-m-xylene	877-09-8	207.80	101.000	% Recov	07/20/05	50.000	150.000	
MSD	Aroclor-1260	11096-82-5	221.69	109.000	% Recov	07/20/05	75.000	125.000	
MSD	Decachlorobiphenyl	2051-24-3	181.45	89.100	% Recov	07/20/05	50.000	150.000	
MSD	Tetrachloro-m-xylene	877-09-8	190.29	93.400	% Recov	07/20/05	50.000	150.000	
SPK-RPD	Aroclor-1260	11096-82-5	109.000	10.435	RPD	07/20/05	0.000	25.000	
SPK-RPD	Dacachlorobiphenyl	2051-24-3	89.100	16.383	RPD	07/20/05	0.000	20.000	
SPK-RPD	Tetrachloro-m-xylene	877-09-8	93.400	7.819	RPD	07/20/05	0.000	20.000	
SURR	Decachlorobiphenyl	2051-24-3	196.59	96.200	% Recov	07/20/05	50.000	150.000	
SURR	Tetrachloro-m-xylene	877-09-8	190.83	93.400	% Recov	07/20/05	50.000	150.000	
BATCH QC									
BLANK	Aroclor-1016	12674-11-2	< 10	n/a	UGKG	07/20/05			U
BLANK	Aroclor-1221	11104-28-2	< 20	n/a	ug/Kg	07/20/05			U
BLANK	Aroclor-1232	11141-16-5	< 10	n/a	ug/Kg	07/20/05			U
BLANK	Aroclor-1242	53469-21-9	< 10	n/a	ug/Kg	07/20/05			U
BLANK	Aroclor-1248	12672-29-6	< 10	n/a	ug/Kg	07/20/05			U
BLANK	Aroclor-1254	11097-69-1	< 10	n/a	ug/Kg	07/20/05			U
BLANK	Aroclor-1260	11096-82-5	< 10	n/a	ug/Kg	07/20/05			U
BLANK	Aroclor-1262	37324-23-5	< 10	n/a	ug/Kg	07/20/05			U
BLANK	Aroclor-1268	11100-14-4	< 10	n/a	ug/Kg	07/20/05			U
BLANK	Decachlorobiphenyl	2051-24-3	185.88	92.900	% Recov	07/20/05	50.000	150.000	
BLANK	Tetrachloro-m-xylene	877-09-8	184.40	92.200	% Recov	07/20/05	50.000	150.000	
LCS	Aroclor-1260	11096-82-5	221.90	111.000	% Recov	07/20/05	70.000	130.000	
LCS	Decachlorobiphenyl	2051-24-3	189.02	94.500	% Recov	07/20/05	50.000	150.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051337
Matrix: SOLID
Test: PCBs complete list

SAF Number: F05-023
Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
LCS	Tetrachloro-m-xylene	877-09-8	189.92	95.000	% Recov	07/20/05	50.000	150.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051337
Matrix: SOLID
Test: SW-846 8270C Semi-Vols

SAF Number: F05-023
Sample Date: 06/29/05
Receive Date:06/29/05

Lab ID: W050002028
BATCH QC ASSOCIATED WITH SAMPLE

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
MS	1,2,4-Trichlorobenzene	120-82-1	1126.1	82.800	% Recov	07/20/05	46.000	107.000	
MS	1,4-Dichlorobenzene	106-46-7	982.79	72.200	% Recov	07/20/05	30.000	96.000	
MS	2,4-Dinitrotoluene	121-14-2	1124.5	82.600	% Recov	07/20/05	59.000	106.000	
MS	2-Fluorophenol	367-12-4	1283.8	94.400	% Recov	07/20/05	42.000	105.000	
MS	Acenaphthene	83-32-9	1130.8	83.100	% Recov	07/20/05	61.000	116.000	
MS	4-Chloro-3-methylphenol	59-50-7	1760.9	86.300	% Recov	07/20/05	61.000	106.000	
MS	2-Chlorophenol	95-57-8	1728.2	84.700	% Recov	07/20/05	66.000	106.000	
MS	N-Nitrosodi-n-dipropylamine	621-64-7	1179.4	86.700	% Recov	07/20/05	71.000	114.000	
MS	2-Fluorobiphenyl	321-60-8	1175.7	86.400	% Recov	07/20/05	56.000	122.000	
MS	Phenol	108-95-2	1785.1	87.500	% Recov	07/20/05	42.000	111.000	
MS	Nitrobenzene-d5	4165-60-0	1164.8	85.600	% Recov	07/20/05	64.000	111.000	
MS	4-Nitrophenol	100-02-7	1658.4	81.300	% Recov	07/20/05	32.000	118.000	
MS	Pentachlorophenol	87-86-5	1399.6	68.600	% Recov	07/20/05	62.000	114.000	
MS	Phenol-d5	4165-62-2	1195.9	87.900	% Recov	07/20/05	54.000	120.000	
MS	Pyrene	129-00-0	1150.9	84.600	% Recov	07/20/05	66.000	118.000	
MS	2,4,6-Tribromophenol	118-79-6	1202.2	88.400	% Recov	07/20/05	24.000	122.000	
MS	Terphenyl-d14 (7Cl)	98904-43-9	1210.6	89.000	% Recov	07/20/05	35.000	150.000	
MSD	1,2,4-Trichlorobenzene	120-82-1	1150.4	84.500	% Recov	07/20/05	46.000	107.000	
MSD	1,4-Dichlorobenzene	106-46-7	1024.8	75.300	% Recov	07/20/05	30.000	96.000	
MSD	2,4-Dinitrotoluene	121-14-2	1145.0	84.100	% Recov	07/20/05	59.000	106.000	
MSD	2-Fluorophenol	367-12-4	1349.5	99.100	% Recov	07/20/05	42.000	105.000	
MSD	Acenaphthene	83-32-9	1151.5	84.600	% Recov	07/20/05	61.000	116.000	
MSD	4-Chloro-3-methylphenol	59-50-7	1775.5	86.900	% Recov	07/20/05	61.000	106.000	
MSD	2-Chlorophenol	95-57-8	1769.2	86.600	% Recov	07/20/05	66.000	106.000	
MSD	N-Nitrosodi-n-diprepylamine	621-64-7	1201.4	88.200	% Recov	07/20/05	71.000	114.000	
MSD	2-Fluorobiphenyl	321-60-8	1182.3	86.800	% Recov	07/20/05	56.000	122.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051337
Matrix: SOLID
Test: SW-846 8270C Semi-Vols

SAF Number: F05-023
Sample Date: 06/29/05
Receive Date:06/29/05

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
MSD	Phenol	108-95-2	1817.9	89.000	% Recov	07/20/05	42.000	111.000	
MSD	Nitrobenzene-d5	4165-60-0	1192.2	87.500	% Recov	07/20/05	64.000	111.000	
MSD	4-Nitrophenol	100-02-7	1675.7	82.000	% Recov	07/20/05	32.000	118.000	
MSD	Pentachlorophenol	87-86-5	1535.4	75.200	% Recov	07/20/05	62.000	114.000	
MSD	Phenol-d5	4165-62-2	1228.0	90.200	% Recov	07/20/05	54.000	120.000	
MSD	Pyrene	129-00-0	1189.1	87.300	% Recov	07/20/05	66.000	118.000	
MSD	2,4,6-Tribromophenol	118-79-6	1220.9	89.700	% Recov	07/20/05	24.000	122.000	
MSD	Terphenyl-d14 (7Cl)	98904-43-9	1230.4	90.400	% Recov	07/20/05	35.000	150.000	
SPK-RPD	1,2,4-Trichlorobenzene	120-82-1	84.500	2.032	RPD	07/20/05	0.000	20.000	
SPK-RPD	1,4-Dichlorobenzene	106-46-7	75.300	4.203	RPD	07/20/05	0.000	20.000	
SPK-RPD	2,4-Dinitrotoluene	121-14-2	84.100	1.800	RPD	07/20/05	0.000	20.000	
SPK-RPD	2-Fluorophenol	367-12-4	99.100	4.858	RPD	07/20/05	0.000	20.000	
SPK-RPD	Acenaphthene	83-32-9	84.600	1.789	RPD	07/20/05	0.000	20.000	
SPK-RPD	4-Chloro-3-methylphenol	59-50-7	86.900	0.693	RPD	07/20/05	0.000	20.000	
SPK-RPD	2-Chlorophenol	95-57-8	86.600	2.218	RPD	07/20/05	0.000	20.000	
SPK-RPD	N-Nitrosodi-n-dipropylamine	621-64-7	88.200	1.715	RPD	07/20/05	0.000	20.000	
SPK-RPD	2-Fluorobiphenyl	321-60-8	86.800	0.462	RPD	07/20/05	0.000	20.000	
SPK-RPD	Phenol	108-95-2	89.000	1.700	RPD	07/20/05	0.000	20.000	
SPK-RPD	Nitrobenzene-d5	4165-60-0	87.500	2.195	RPD	07/20/05	0.000	20.000	
SPK-RPD	4-Nitrophenol	100-02-7	82.000	0.857	RPD	07/20/05	0.000	20.000	
SPK-RPD	Pentachlorophenol	87-86-5	75.200	9.179	RPD	07/20/05	0.000	20.000	
SPK-RPD	Phenol-d5	4165-62-2	90.200	2.583	RPD	07/20/05	0.000	20.000	
SPK-RPD	Pyrene	129-00-0	87.300	3.141	RPD	07/20/05	0.000	20.000	
SPK-RPD	2,4,6-Tribromophenol	118-79-6	89.700	1.460	RPD	07/20/05	0.000	20.000	
SPK-RPD	Terphenyl-d14 (7Cl)	98904-43-9	90.400	1.561	RPD	07/20/05	0.000	20.000	
SURR	2-Fluorophenol	367-12-4	1207.7	88.400	% Recov	07/20/05	42.000	105.000	
SURR	2-Fluorobiphenyl	321-60-8	1105.4	80.900	% Recov	07/20/05	56.000	122.000	
SURR	Nitrobenzene-d5	4165-60-0	1100.6	80.600	% Recov	07/20/05	64.000	111.000	
SURR	Phenol-d5	4165-62-2	1137.1	83.300	% Recov	07/20/05	54.000	120.000	
SURR	2,4,6-Tribromophenol	118-79-6	1033.8	75.700	% Recov	07/20/05	24.000	122.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051337
Matrix: SOLID
Test: SW-846 8270C Semi-Vols

SAF Number: F05-023
Sample Date: 06/29/05
Receive Date:06/29/05

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
SURR	Terphenyl-d14 (7Cl)	98904-43-9	1150.0	84.200	% Recov	07/20/05	35.000	150.000	
BATCH QC									
BLANK	1,2-Dichlorobenzene	95-50-1	< 130	n/a	ug/Kg	07/20/05			U
BLANK	1,2,4-Trimethylbenzene	95-63-6	< 150	n/a	ug/Kg	07/20/05			U
BLANK	1,2,4-Trichlorobenzene	120-82-1	< 91	n/a	ug/Kg	07/20/05			U
BLANK	1,3-Dichlorobenzene	541-73-1	< 160	n/a	ug/Kg	07/20/05			U
BLANK	1,4-Dichlorobenzene	106-46-7	< 130	n/a	ug/Kg	07/20/05			U
BLANK	2-Naphthylamine	91-59-8	< 170	n/a	ug/Kg	07/20/05			U
BLANK	2,4-Dichlorophenol	120-83-2	< 45	n/a	ug/Kg	07/20/05			U
BLANK	2,4-Dinitrotoluene	121-14-2	< 54	n/a	ug/Kg	07/20/05			U
BLANK	2,4,5-Trichlorophenol	95-95-4	< 45	n/a	ug/Kg	07/20/05			U
BLANK	2,4,6-Trichlorophenol	88-06-2	< 42	n/a	ug/Kg	07/20/05			U
BLANK	2,4-Dimethylphenol	105-67-9	< 89	n/a	ug/Kg	07/20/05			U
BLANK	2,6-Dinitrotoluene	606-20-2	< 69	n/a	ug/Kg	07/20/05			U
BLANK	2-Butoxyethanol	111-76-2	< 83	n/a	ug/Kg	07/20/05			U
BLANK	2-Chloronaphthalene	91-58-7	< 65	n/a	ug/Kg	07/20/05			U
BLANK	2-Fluorophenol	367-12-4	1076.2	80.700	% Recov	07/20/05	42.000	105.000	
BLANK	2-Methylnaphthalene	91-57-6	< 75	n/a	ug/Kg	07/20/05			U
BLANK	2-Methylphenol (cresol, o-)	95-48-7	< 81	n/a	ug/Kg	07/20/05			U
BLANK	2-Nitroaniline	88-74-4	< 51	n/a	ug/Kg	07/20/05			U
BLANK	2-Nitrophenol	88-75-5	< 91	n/a	ug/Kg	07/20/05			U
BLANK	3 & 4 Methylphenol Total	65794-96-9	< 100	n/a	ug/Kg	07/20/05			U
BLANK	3-Nitroaniline	99-09-2	< 58	n/a	ug/Kg	07/20/05			U
BLANK	4,6-Dinitro-2-methylphenol	534-52-1	< 130	n/a	ug/Kg	07/20/05			U
BLANK	4-Bromophenylphenyl ether	101-55-3	< 51	n/a	ug/Kg	07/20/05			U
BLANK	4-Chlorophenylphenyl ether	7005-72-3	< 51	n/a	ug/Kg	07/20/06			U
BLANK	Acenaphthene	83-32-9	< 69	n/a	ug/Kg	07/20/05			U
BLANK	Acenaphthylene	208-96-8	< 73	n/a	ug/Kg	07/20/05			U
BLANK	Anthracene	120-12-7	< 77	n/a	ug/Kg	07/20/05			U

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051337
Matrix: SOLID
Test: SW-846 8270C Semi-Vols

SAF Number: F05-023
Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
BLANK	Bis(2-chloroethyl) ether	111-44-4	< 100	n/a	ug/Kg	07/20/05			U
BLANK	Benzo(a)anthracene	56-55-3	< 63	n/a	ug/Kg	07/20/05			U
BLANK	Benzo(b)fluoranthene	205-99-2	< 74	n/a	ug/Kg	07/20/05			U
BLANK	Benzo(ghi)perylene	191-24-2	< 77	n/a	ug/Kg	07/20/05			U
BLANK	Benzo(a)pyrene	50-32-8	< 61	n/a	ug/Kg	07/20/05			U
BLANK	Bis(2-Chloroethoxy)methane	111-91-1	< 61	n/a	ug/Kg	07/20/05			U
BLANK	Bis(2-ethylhexyl) phthalate	117-81-7	< 71	n/a	ug/Kg	07/20/05			U
BLANK	Bis(2-chloro-1-methylethyl)eth	108-60-1	< 88	n/a	ug/Kg	07/20/05			U
BLANK	Benzyl alcohol	100-51-6	< 57	n/a	ug/Kg	07/20/05			U
BLANK	Benzo(k)fluoranthene	207-08-9	< 54	n/a	ug/Kg	07/20/05			U
BLANK	Butylbenzylphthalate	85-68-7	< 74	n/a	ug/Kg	07/20/05			U
BLANK	Carbazole	86-74-8	< 78	n/a	ug/Kg	07/20/05			U
BLANK	4-Chloroaniline	106-47-8	< 150	n/a	ug/Kg	07/20/05			U
BLANK	4-Chloro-3-methylphenol	59-50-7	< 47	n/a	ug/Kg	07/20/05			U
BLANK	2-Chlorophenol	95-57-8	< 76	n/a	ug/Kg	07/20/05			U
BLANK	Chrysene	218-01-9	< 71	n/a	ug/Kg	07/20/05			U
BLANK	Cyclohexanone	108-94-1	< 87	n/a	ug/Kg	07/20/05			U
BLANK	3,3'-Dichlorobenzidine	91-94-1	< 200	n/a	ug/Kg	07/20/05			U
BLANK	Decane	124-18-5	< 170	n/a	ug/Kg	07/20/05			U
BLANK	Dibenz[a,h]anthracene	53-70-3	< 93	n/a	ug/Kg	07/20/05			U
BLANK	Dibenzofuran	132-64-9	< 61	n/a	ug/Kg	07/20/05			U
BLANK	Di-n-butylphthalate	84-74-2	< 160	n/a	ug/Kg	07/20/05			U
BLANK	Diethylphthalate	84-66-2	< 130	n/a	ug/Kg	07/20/05			U
BLANK	Dimethyl phthalate	131-11-3	< 64	n/a	ug/Kg	07/20/05			U
BLANK	2,4-Dinitrophenol	51-28-5	< 180	n/a	ug/Kg	07/20/05			U
BLANK	Di-n-octylphthalate	117-84-0	< 85	n/a	ug/Kg	07/20/05			U
BLANK	N-Nitrosodi-n-dipropylamine	621-64-7	< 75	n/a	ug/Kg	07/20/05			U
BLANK	2-Fluorobiphenyl	321-60-8	968.47	72.600	% Recov	07/20/05	56.000	122.000	
BLANK	Fluorene	86-73-7	< 68	n/a	ug/Kg	07/20/05			U
BLANK	Fluoranthene	206-44-0	< 80	n/a	ug/Kg	07/20/05			U

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051337
Matrix: SOLID
Test: SW-846 8270C Semi-Vols

SAF Number: F05-023
Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
BLANK	Hexachlorobenzene	118-74-1	< 69	n/a	ug/Kg	07/20/05			U
BLANK	Hexachlorobutadiene	87-68-3	< 83	n/a	ug/Kg	07/20/05			U
BLANK	Hexachlorocyclopentadiene	77-47-4	< 160	n/a	ug/Kg	07/20/05			U
BLANK	Hexachloroethane	67-72-1	< 120	n/a	ug/Kg	07/20/05			U
BLANK	Indeno(1,2,3-cd)pyrene	193-39-5	< 82	n/a	ug/Kg	07/20/05			U
BLANK	Isophorone	78-59-1	< 83	n/a	ug/Kg	07/20/05			U
BLANK	Phenol	108-95-2	< 69	n/a	ug/Kg	07/20/05			U
BLANK	Naphthalene	91-20-3	< 82	n/a	ug/Kg	07/20/05			U
BLANK	Nitrobenzene-d5	4165-60-0	963.11	72.200	% Recov	07/20/05	64.000	111.000	
BLANK	Nitrobenzene	98-95-3	< 83	n/a	ug/Kg	07/20/05			U
BLANK	4-Nitrophenol	100-02-7	< 86	n/a	ug/Kg	07/20/05			U
BLANK	4-Nitroaniline	100-01-6	< 87	n/a	ug/Kg	07/20/05			U
BLANK	N-Nitrosodiphenylamine	86-30-6	< 72	n/a	ug/Kg	07/20/05			U
BLANK	Pentachlorophenol	87-86-5	< 73	n/a	ug/Kg	07/20/05			U
BLANK	Phenanthrene	85-01-8	< 71	n/a	ug/Kg	07/20/05			U
BLANK	Phenol-d5	4165-62-2	1001.9	75.100	% Recov	07/20/05	54.000	120.000	
BLANK	Pyrene	129-00-0	< 78	n/a	ug/Kg	07/20/05			U
BLANK	Pyridine	110-86-1	< 95	n/a	ug/Kg	07/20/05			U
BLANK	Tributyl phosphate	126-73-8	< 71	n/a	ug/Kg	07/20/05			U
BLANK	2,4,6-Tribromophenol	118-79-6	933.97	70.000	% Recov	07/20/05	24.000	122.000	
BLANK	Terphenyl-d14 (7Cl)	98904-43-9	1000.7	75.100	% Recov	07/20/05	35.000	150.000	
LCS	1,2,4-Trichlorobenzene	120-82-1	1137.5	85.300	% Recov	07/20/05	46.000	107.000	
LCS	1,4-Dichlorobenzene	106-46-7	1024.2	76.800	% Recov	07/20/05	42.000	111.000	
LCS	2,4-Dinitrotoluene	121-14-2	1172.7	88.000	% Recov	07/20/05	59.000	106.000	
LCS	2-Fluorophenol	367-12-4	1294.0	97.100	% Recov	07/20/05	50.000	110.000	
LCS	Acenaphthene	83-32-9	1134.9	85.100	% Recov	07/20/05	61.000	116.000	
LCS	4-Chloro-3-methylphenol	59-50-7	1687.1	84.400	% Recov	07/20/05	61.000	106.000	
LCS	2-Chlorophenol	95-57-8	1735.3	86.800	% Recov	07/20/05	66.000	106.000	
LCS	N-Nitrosodi-n-dipropylamine	621-64-7	1171.4	87.900	% Recov	07/20/05	71.000	114.000	
LCS	2-Fluorobiphenyl	321-60-8	1170.9	87.800	% Recov	07/20/05	58.000	109.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051337
Matrix: SOLID
Test: SW-846 8270C Semi-Vols

SAF Number: F05-023
Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
LCS	Phenol	108-95-2	1755.5	87.800	% Recov	07/20/05	67.000	105.000	
LCS	Nitrobenzene-d5	4165-60-0	1151.9	86.400	% Recov	07/20/05	60.000	118.000	
LCS	4-Nitrophenol	100-02-7	1516.4	75.800	% Recov	07/20/05	32.000	118.000	
LCS	Pentachlorophenol	87-86-5	1514.5	75.700	% Recov	07/20/05	62.000	114.000	
LCS	Phenol-d5	4165-62-2	1197.8	89.800	% Recov	07/20/05	59.000	116.000	
LCS	Pyrene	129-00-0	1158.7	86.900	% Recov	07/20/05	66.000	118.000	
LCS	2,4,6-Tribromophenol	118-79-6	1165.7	87.400	% Recov	07/20/05	60.000	120.000	
LCS	Terphenyl-d14 (7Cl)	98904-43-9	1224.4	91.800	% Recov	07/20/05	60.000	120.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051337
Matrix: SOLID
Test: WTPH-D TPH Diesel Range (Wa)

SAF Number: F05-023
Sample Date: 06/29/05
Receive Date:06/29/05

QC Type	Analyte		CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
Lab ID: W050002028										
BATCH QC ASSOCIATED WITH SAMPLE										
MS	Kerosene		TPHKEROSENE	138550	108.000	% Recov	07/21/05	70.000	130.000	
MS	ortho-Terphenyl	Surr	84-15-1	25310	99.100	% Recov	07/21/05	70.000	130.000	
MSD	Kerosene		TPHKEROSENE	115740	90.300	% Recov	07/21/05	70.000	130.000	
MSD	ortho-Terphenyl	Surr	84-15-1	22994	89.700	% Recov	07/21/05	70.000	130.000	
SPK-RPD	ortho-Terphenyl	Surr	84-15-1	89.700	9.968	RPD	07/21/05	0.000	20.000	
SURR	ortho-Terphenyl	Surr	84-15-1	28370	111.000	% Recov	07/21/05	70.000	130.000	
BATCH QC										
BLANK	Kerosene		TPHKEROSENE	< 3800	n/a	ug/Kg	07/21/05			U
BLANK	ortho-Terphenyl	Surr	84-15-1	25846	103.000	% Recov	07/21/05	70.000	130.000	
BLANK	Total Pet. Hydrocarbons Diesel		TPHDIESEL	< 3800	n/a	ug/Kg	07/21/05			U
LCS	ortho-Terphenyl	Surr	84-15-1	26822	107.000	% Recov	07/21/05	70.000	130.000	
LCS	Total Pet. Hydrocarbons Diesel		TPHDIESEL	136180	108.000	% Recov	07/21/05	80.000	120.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051337
Matrix: SOLID
Test: VOA Ground Water Protection

SAF Number: F05-023
Sample Date: 06/23/05
Receive Date:06/23/05

Lab ID: W050001997
BATCH QC ASSOCIATED WITH SAMPLE

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
MS	1,1-Dichloroethene	75-35-4	23.090	92.400	% Recov	07/06/05	63.000	117.000	
MS	Benzene	71-43-2	22.310	89.200	% Recov	07/06/05	75.000	129.000	
MS	4-Bromofluorobenzene	460-00-4	52.070	104.000	% Recov	07/06/05	84.000	116.000	
MS	Chlorobenzene	108-90-7	24.190	96.800	% Recov	07/06/05	79.000	119.000	
MS	1,2-Dichloroethane-d4	17060-07-0	48.900	97.800	% Recov	07/06/05	82.000	136.000	
MS	Toluene-d8	2037-26-5	53.520	107.000	% Recov	07/06/05	89.000	119.000	
MS	Toluene	108-88-3	24.630	98.500	% Recov	07/06/05	76.000	120.000	
MS	Trichloroethene	79-01-6	24.260	97.000	% Recov	07/06/05	73.000	123.000	
MSD	1,1-Dichloroethene	75-35-4	36.950	87.100	% Recov	07/06/05	63.000	117.000	
MSD	Benzene	71-43-2	40.740	96.000	% Recov	07/06/05	75.000	129.000	
MSD	4-Bromofluorobenzene	460-00-4	86.860	102.000	% Recov	07/06/05	84.000	116.000	
MSD	Chlorobenzene	108-90-7	41.540	97.900	% Recov	07/06/05	79.000	119.000	
MSD	1,2-Dichloroethane-d4	17060-07-0	83.950	98.900	% Recov	07/06/05	82.000	136.000	
MSD	Toluene-d8	2037-26-5	92.820	109.000	% Recov	07/06/05	89.000	119.000	
MSD	Toluene	108-88-3	44.180	104.000	% Recov	07/06/05	76.000	120.000	
MSD	Trichloroethene	79-01-6	40.440	95.300	% Recov	07/06/05	73.000	123.000	
SPK-RPD	1,1-Dichloroethene	75-35-4	87.100	5.905	RPD	07/06/05	0.000	20.000	
SPK-RPD	Benzene	71-43-2	96.000	7.343	RPD	07/06/05	0.000	20.000	
SPK-RPD	4-Bromofluorobenzene	460-00-4	102.000	1.942	RPD	07/06/05	0.000	20.000	
SPK-RPD	Chlorobenzene	108-90-7	97.900	1.130	RPD	07/06/05	0.000	20.000	
SPK-RPD	1,2-Dichloroethane-d4	17060-07-0	98.900	1.118	RPD	07/06/05	0.000	20.000	
SPK-RPD	Toluene-d8	2037-26-5	109.000	1.852	RPD	07/06/05	0.000	20.000	
SPK-RPD	Toluene	108-88-3	104.000	5.432	RPD	07/06/05	0.000	20.000	
SPK-RPD	Trichloroethene	79-01-6	95.300	1.768	RPD	07/06/05	0.000	20.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051337
Matrix: SOLID
Test: VOA Ground Water Protection

SAF Number: F05-023
Sample Date: 06/29/05
Receive Date:06/29/05

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
Lab ID: W050002028									
BATCH QC ASSOCIATED WITH SAMPLE									
SURR	4-Bromofluorobenzene	460-00-4	50.060	100.000	% Recov	07/06/05	71.000	125.000	
SURR	1,2-Dichloroethane-d4	17060-07-0	51.180	102.000	% Recov	07/06/05	80.000	134.000	
SURR	Toluene-d8	2037-26-5	51.860	104.000	% Recov	07/06/05	80.000	126.000	
BATCH QC									
BLANK	1,1-Dichloroethane	75-34-3	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	1,1,1-Trichloroethane	71-55-6	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	1,1,2-Trichloroethane	79-00-5	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	1,1,2,2-Tetrachloroethane	79-34-5	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	1,1-Dichloroethene	75-35-4	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	1,2-Dichloroethane	107-06-2	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	1,2-Dichloroethene(Total)	540-59-0	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	1-Butanol	71-36-3	< 40	n/a	ug/Kg	07/06/05			U
BLANK	2-Hexanone	591-78-6	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	2-Pentanone	107-87-9	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	4-Methyl-2-Pentanone	108-10-1	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	Acetone	67-64-1	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	Bromodichloromethane	75-27-4	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	Benzene	71-43-2	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	4-Bromofluorobenzene	460-00-4	52.910	106.000	% Recov	07/06/05	71.000	125.000	
BLANK	Bromoform	75-25-2	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	n-Butylbenzene	104-51-8	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	Carbon disulfide	75-15-0	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	Carbon tetrachloride	56-23-5	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	Dibromochloromethane	124-48-1	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	Cyclohexane	110-82-7	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	Chloroform	67-66-3	< 2.0	n/a	ug/Kg	07/06/05			U

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051337
Matrix: SOLID
Test: VOA Ground Water Protection

SAF Number: F05-023
Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
BLANK	Chlorobenzene	108-90-7	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	cis-1,2-Dichloroethylene	156-59-2	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	cis-1,3-Dichloropropene	10061-01-5	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	Chloroethane	75-00-3	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	1,2-Dichloroethane-d4	17060-07-0	49.420	98.800	% Recov	07/06/05	80.000	134.000	
BLANK	trans-1,2-Dichloroethylene	156-60-5	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	1,2-Dichloropropane	78-87-5	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	Ethylbenzene	100-41-4	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	Hexane	110-54-3	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	Bromomethane	74-83-9	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	Chloromethane	74-87-3	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	2-Butanone	78-93-3	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	Methylenechloride	75-09-2	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	Tetrachloroethene	127-18-4	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	Styrene	100-42-5	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	Xylenes (total)	1330-20-7	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	Tetrahydrofuran	109-99-9	< 4.0	n/a	ug/Kg	07/06/05			U
BLANK	Toluene-d8	2037-26-5	52.360	105.000	% Recov	07/06/05	80.000	126.000	
BLANK	Toluene	108-88-3	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	trans-1,3-Dichloropropene	10061-02-6	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	Trichloromonofluoromethane	75-69-4	< 2.0	n/a	ug/Kg	07/06/05	0.000	5.000	U
BLANK	Trichloroethene	79-01-6	< 2.0	n/a	ug/Kg	07/06/05			U
BLANK	Vinyl chloride	75-01-4	< 2.0	n/a	ug/Kg	07/06/05			U
LCS	1,1-Dichloroethene	75-35-4	23.510	94.000	% Recov	07/06/05	70.000	130.000	
LCS	Benzene	71-43-2	24.730	98.900	% Recov	07/06/05	70.000	130.000	
LCS	4-Bromofluorobenzene	460-00-4	51.220	102.000	% Recov	07/06/05	71.000	125.000	
LCS	Chlorobenzene	108-90-7	25.360	101.000	% Recov	07/06/05	70.000	130.000	
LCS	1,2-Dichloroethane-d4	17060-07-0	53.280	107.000	% Recov	07/06/05	80.000	134.000	
LCS	Toluene-d8	2037-26-5	53.280	107.000	% Recov	07/06/05	80.000	126.000	
LCS	Toluene	108-88-3	27.010	108.000	% Recov	07/06/05	70.000	130.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051337
Matrix: SOLID
Test: VOA Ground Water Protection

SAF Number: F05-023
Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
LCS	Trichloroethene	79-01-6	25.570	102.000	% Recov	07/06/05	70.000	130.000	

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
Project: F05-023: F05-023

Group #: WSCF20051337

Sample #	Client ID		CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze	Sample	Receive
Radiochemistry														
W050002028	B1D994	TRENT	14596-10-2	Americium-241	SOIL	LA-508-471	U	8.40e-03	pCi/g	1.00	0.047	07/18/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	E,T,C	Am-241 by AEA Total Cntg Error	SOIL	LA-508-471		+- 0.027	pCi/g	1.00	0.0	07/18/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	10198-40-0	Cobalt-60	SOIL	LA-508-481	U	1.19e-03	pCi/g	1.00	0.013	07/07/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	E,T,C	Co-60 Rel. Count Error (GEA)	SOIL	LA-508-481		+- 7.6e-03	pCi/g	1.00	0.0	07/07/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	10045-97-3	Cesium-137	SOIL	LA-508-481	U	2.77e-03	pCi/g	1.00	0.013	07/07/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	E,T,C	Cs-137 Rel. Count Error (GEA)	SOIL	LA-508-481		+- 8.4e-03	pCi/g	1.00	0.0	07/07/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	14683-23-9	Europium-152	SOIL	LA-508-481	U	-5.40e-03	pCi/g	1.00	0.038	07/07/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	E,T,C	Eu-152 Rel. Count Error (GEA)	SOIL	LA-508-481		+- 0.024	pCi/g	1.00	0.0	07/07/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	15585-10-1	Europium-154	SOIL	LA-508-481	U	0.0116	pCi/g	1.00	0.042	07/07/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	E,T,C	Eu-154 Rel. Count Error (GEA)	SOIL	LA-508-481		+- 0.027	pCi/g	1.00	0.0	07/07/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	14391-16-3	Europium-155	SOIL	LA-508-481	U	0.0392	pCi/g	1.00	0.053	07/07/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	E,T,C	Eu-155 Rel. Count Error (GEA)	SOIL	LA-508-481		+- 0.036	pCi/g	1.00	0.0	07/07/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	13981-16-3	Plutonium-238	SOIL	LA-508-471	U	-1.80e-03	pCi/g	1.00	0.051	07/18/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	E,T,C	Pu-238 by AEA Total Cntg Error	SOIL	LA-508-471		+- 0.018	pCi/g	1.00	0.0	07/18/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	PU-239/240	Pu-239/240 by AEA	SOIL	LA-508-471	U	7.00e-03	pCi/g	1.00	0.016	07/18/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	E,T,C	Pu-239/240 AEA Total Cntg Err	SOIL	LA-508-471		+- 9.8e-03	pCi/g	1.00	0.0	07/18/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	SR-RAD	Strontium-89/90	SOIL	LA-508-415	U	-0.390	pCi/g	1.00	0.25	07/14/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	E,T,C	Sr-89/90 Rel. Count Error	SOIL	LA-508-415		+- 0.39	pCi/g	1.00	0.0	07/14/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	U-233/234	Uranium-233/234	SOIL	LA-508-471		0.140	pCi/g	1.00	4.9e-03	07/18/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	E,T,C	U-233/234 AEA Total Cntg Error	SOIL	LA-508-471		+- 0.048	pCi/g	1.00	0.0	07/18/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	15117-96-1	Uranium-235	SOIL	LA-508-471		0.0200	pCi/g	1.00	0.015	07/18/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	E,T,C	U-235 by AEA Total Cntg Error	SOIL	LA-508-471		+- 0.015	pCi/g	1.00	0.0	07/18/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	U-238	Uranium-238	SOIL	LA-508-471		0.140	pCi/g	1.00	0.020	07/18/05	06/29/05	06/29/05
W050002028	B1D994	TRENT	E,T,C	U-238 by AEA Total Cntg Error	SOIL	LA-508-471		+- 0.049	pCi/g	1.00	0.10	07/18/05	06/29/05	06/29/05

MDL=Minimum Detection Limit B - The analyte < the RDL but >= the IDL/MDL (inorganic) U - Analyzed for but not detected above limiting criteria.
RQ=Result Qualifier

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

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051337
Matrix: SOLID
Test: Gamma Energy Analysis-grd H2O

SAF Number: F05-023
Sample Date: 06/24/05
Receive Date:06/24/05

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
Lab ID: W050002009									
BATCH QC ASSOCIATED WITH SAMPLE									
DUP	Cesium-137	10045-97-3	U2.13e-04	n/a	RPD	07/06/05	0.000	20.000	
BATCH QC									
BLANK	Cobalt-60	10198-40-0	U-1.3e-3	n/a	pCi/g	07/06/05	-10.000	1000.000	
BLANK	Cesium-137	10045-97-3	U-1.4e-3	n/a	pCi/g	07/06/05	-10.000	1000.000	
BLANK	Europium-152	14683-23-9	U8.85e-4	n/a	pCi/g	07/06/05	-10.000	1000.000	
BLANK	Europium-154	15585-10-1	U-4.0e-3	n/a	pCi/g	07/06/05	-10.000	1000.000	
BLANK	Europium-155	14391-16-3	U-1.4e-2	n/a	pCi/g	07/06/05	-10.000	1000.000	
LCS	Cobalt-60	10198-40-0	4.44e+03	105.967	% Recov	07/05/05	80.000	120.000	
LCS	Cesium-137	10045-97-3	3.91e+03	109.218	% Recov	07/05/05	80.000	120.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051337
Matrix: SOLID
Test: Americium by AEA

SAF Number: F05-023
Sample Date: 06/23/05
Receive Date:06/23/05

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
Lab ID: W050001997									
BATCH QC ASSOCIATED WITH SAMPLE									
DUP	Americium-241	14596-10-2	U-6.9e-03	n/a	RPD	07/18/05	0.000	20.000	
BATCH QC									
BLANK	Americium-241	14596-10-2	U1.4e-02	n/a	pCi/g	07/18/05	-10.000	1000.000	
LCS	Americium-241	14596-10-2	4.7e+01	105.665	% Recov	07/18/05	75.000	125.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051337
Matrix: SOLID
Test: Plutonium Isotopics by AEA

SAF Number: F05-023
Sample Date: 06/23/05
Receive Date:06/23/05

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
Lab ID: W050001997									
BATCH QC ASSOCIATED WITH SAMPLE									
DUP	Plutonium-238	13981-16-3	U-2.3e-02	n/a	RPD	07/18/05	0.000	20.000	
DUP	Pu-239/240 by AEA	PU-239/240	U1.9E-03	n/a	RPD	07/18/05	0.000	20.000	
BATCH QC									
BLANK	Plutonium-238	13981-16-3	U-1.3e-02	n/a	PCT	07/18/05	0.000	1000.000	
BLANK	Pu-239/240 by AEA	PU-239/240	U5.5e-03	n/a	pCi/g	07/18/05	-10.000	1000.000	
LCS	Pu-239/240 by AEA	PU-239/240	4.8e+01	93.422	% Recov	07/18/05	75.000	125.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051337
Matrix: SOLID
Test: Strontium 89/90

SAF Number: F05-023
Sample Date: 06/29/05
Receive Date:06/29/05

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
Lab ID: W050002028									
BATCH QC ASSOCIATED WITH SAMPLE									
DUP	Strontium-89/90	SR-RAD	U-7.3E-02	n/a	RPD	07/14/05	0.000	20.000	
BATCH QC									
BLANK	Strontium-89/90	10098-97-2	5.6e-01	0.560	pCi/g	07/14/05	-10.000	300.000	
LCS	Strontium-89/90	10098-97-2	70.7	99.577	% Recov	07/14/05	80.000	120.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051337
Matrix: SOLID
Test: Uranium Isotopics by AEA

SAF Number: F05-023
Sample Date: 06/23/05
Receive Date:06/23/05

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
Lab ID: W050001997									
BATCH QC ASSOCIATED WITH SAMPLE									
DUP	Uranium-233/234	U-233/234	1.2e-01	28.571	RPD	07/18/05	0.000	20.000	*
DUP	Uranium-235	15117-96-1	1.1e-02	n/a	RPD	07/18/05	0.000	20.000	
DUP	Uranium-238	U-238	1.2e-01	22.222	RPD	07/18/05	0.000	20.000	*
BATCH QC									
BLANK	Uranium-233/234	13966-29-5	U1.2e-02	n/a	pCi/g	07/18/05	-10.000	1000.000	
BLANK	Uranium-235	15117-96-1	U7.8e-03	n/a	pCi/g	07/18/05	-10.000	1000.000	
BLANK	Uranium-238	24678-82-8	7.1e-03	0.007	pCi/g	07/18/05	-10.000	1000.000	
LCS	Uranium-238	24678-82-8	3.3e+01	97.059	% Recov	07/18/05	75.000	125.000	

WSCF
ANALYTICAL COMMENT REPORT

Attention: Steve Trent
Project Number F05-023

Group #: WSCF20051337

Sample #	Client ID	Lab Area	Test	Comment
		VALGROUP		IC Ammonia: DUP RPD criterion not applicable to low level (8 flagged) samples ORGANICS: Sample concentrations are corrected for moisture and reported as dry weight basis. gar ICP-AES: Insufficient spike Phosphorus MS/MSD, results NA. U234& U238 batch sample and dup are not homogeneous. lmh

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

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WSCF
TENTATIVELY IDENTIFIED PEAK REPORT

Attention: Steve Trent
Project Number F05-023 :F05-023

Group #: WSCF20051337

Sample #	Client ID		Test Name	Peak Name	CAS#	RT	RQ	Result	Units
W050002028	B1D994	TRENT	Gamma Energy Analysis-grd H2O	K-40 Count Error				13	%
W050002028	B1D994	TRENT	Gamma Energy Analysis-grd H2O	PB-212 Count Error				14	%
W050002028	B1D994	TRENT	Gamma Energy Analysis-grd H2O	PB-214 Count Error				15	%
W050002028	B1D994	TRENT	Gamma Energy Analysis-grd H2O	TL-208 Count Error				17	%
W050002028	B1D994	TRENT	Gamma Energy Analysis-grd H2O	BI-214 Count Error				17	%
W050002028	B1D994	TRENT	Gamma Energy Analysis-grd H2O	RA-226 Count Error				17	%
W050002028	B1D994	TRENT	Gamma Energy Analysis-grd H2O	AC-228 Count Error				18	%
W050002028	B1D994	TRENT	Gamma Energy Analysis-grd H2O	RA-228 Count Error				18	%
W050002028	B1D994	TRENT	Gamma Energy Analysis-grd H2O	SN-126 Count Error				24	%
W050002028	B1D994	TRENT	Gamma Energy Analysis-grd H2O	BI-212 Count Error				30	%
W050002028	B1D994	TRENT	Gamma Energy Analysis-grd H2O	CS-134 Count Error				44	%
W050002028	B1D994	TRENT	Gamma Energy Analysis-grd H2O	CS-134				0.030	pCi/g
W050002028	B1D994	TRENT	Gamma Energy Analysis-grd H2O	SN-126				0.18	pCi/g
W050002028	B1D994	TRENT	Gamma Energy Analysis-grd H2O	BI-214				0.52	pCi/g
W050002028	B1D994	TRENT	Gamma Energy Analysis-grd H2O	RA-226				0.52	pCi/g
W050002028	B1D994	TRENT	Gamma Energy Analysis-grd H2O	PB-214				0.61	pCi/g
W050002028	B1D994	TRENT	Gamma Energy Analysis-grd H2O	AC-228				0.74	pCi/g
W050002028	B1D994	TRENT	Gamma Energy Analysis-grd H2O	RA-228				0.74	pCi/g

RQ=Result Qualifier J - Analyte is an estimate, has potentially larger errors

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WSCF
METHOD REFERENCES REPORT

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-212-411	Determination of Soil pH Measurement	
	EPA SW-846 9045C	SOIL AND WASTE pH
LA-503-401	LA-503-401: ANALYSIS OF CATIONS BY ION CHROMATOGRAPHY	
	EPA-600/4-86-024 300.7	Dissolved Sodium, Ammonium, Potassium, and Calcium in Wet Deposition by Chemical
LA-505-411	LA-505-411: ELEMENTAL ANALYSIS BY INDUCTIVELY COUPLED PLASMA ATOMIC EMISSION SPE	
	EPA SW-846 6010B	INDUCTIVELY COUPLED PLASMA-ATOMIC EMISSION SPECTROMETRY
LA-505-412	LA-505-412: DETERMINATION OF TRACE ELEMENTS IN WATERS AND WASTES BY INDUCTIVELY	
	EPA-600/R-94-111 200.8	DETERMINATION OF TRACE ELEMENTS IN WATERS AND WASTES BY INDUCTIVELY COUPLED PLAS
LA-508-415	LA-508-415: OPERATION OF THE PROTEAN 2-INCH ALPHA/BETA COUNTING SYSTEM FOR GROSS	
	None	No reference to any industry method.
LA-508-471	LA-508-471: ALPHA ENERGY ANALYZER DATA ACQUISITION AND SYSTEM CHECKOUT USING ALP	
	None	No reference to any industry method.
LA-508-481	LA-508-481: GAMMA ENERGY ANALYSIS USING PROCOUNT SOFTWARE	
	None	No reference to any industry method.
LA-519-412	LA-519-412: TOTAL RESIDUE/% SOLIDS DRIED AT 103 - 105 C	
	EPA-600/4-79-020 160.3	RESIDUE, TOTAL
	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 \\ap006\aspdocs\WSCF\Sample Mgmt\ProcedureMethodCrossReference.pdf. This document includes on-line links to full-text versions of the procedures and methods, where available.

WSCF
METHOD REFERENCES REPORT

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LA-523-427	LA-523-427: POLYCHLORINATED BIPHENYLS (PCBs) BY GAS CHROMATOGRAPHY	
	EPA SW-846 3510C	SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION
	EPA SW-846 3545	PRESSURIZED FLUID EXTRACTION (PFE)
	EPA SW-846 3665A	SULFURIC ACID/PERMANGANATE CLEANUP
	EPA SW-846 8000B	DETERMINATIVE CHROMATOGRAPHIC SEPARATIONS
	EPA SW-846 8082	POLYCHLORINATED BIPHENYLS (PCBs) BY GAS CHROMATOGRAPHY
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)
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)
LA-533-410	LA-533-410: ANION ANALYSIS BY ION CHROMATOGRAPHY	
	EPA-600/R-94-111 300.0	DETERMINATION OF INORGANIC ANIONS BY ION CHROMATOGRAPHY
NWTPH	NWTPH-Diesel and/or Gasoline	
	WDOE NWTPH-Dx/Gx	Total Petroleum Hydrocarbons - Diesel/Gasoline

Note: A complete list of WSCF analytical procedures and referenced regulatory or industry methods is available online at \\ap006\aspdocs\WSCF\Sample Mgmt\ProcedureMethodCrossReference.pdf. This document includes on-line links to full-text versions of the procedures and methods, where available.

w13qlog v1 26-jul-2005 11:08:00

W13q Worklist/Batch/QC Report for Group# WSCF20051337

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
				SAMPLE	W050002028	Percent Solids
			30362	DUP	W050002028	pH Soil and Waste Measurement
			30362	SAMPLE	W050002028	pH Soil and Waste Measurement
26486	1	26859	30411	BLANK		ICP-2008 MS All possible metal
26486	2	26859	30411	LCS		ICP-2008 MS All possible metal
26486	4	26859	30411	MS	W050002015	ICP-2008 MS All possible metal
26486	5	26859	30411	MSD	W050002015	ICP-2008 MS All possible metal
26486	5	26859	30411	SPK-RPD	W050002015	ICP-2008 MS All possible metal
26486	6	26859	30411	SAMPLE	W050002028	ICP-2008 MS All possible metal
26509	2	26882	30436	BLANK		Anions by Ion Chromatography
26509	10	26882	30436	BLANK		Anions by Ion Chromatography
26509	3	26882	30436	LCS		Anions by Ion Chromatography
26509	5	26882	30436	DUP	W050002028	Anions by Ion Chromatography
26509	6	26882	30436	MS	W050002028	Anions by Ion Chromatography
26509	7	26882	30436	MSD	W050002028	Anions by Ion Chromatography
26509	4	26882	30436	SAMPLE	W050002028	Anions by Ion Chromatography
26413	1	26785	30442	BLANK		Gamma Energy Analysis-grd H2O
26413	2	26785	30442	LCS		Gamma Energy Analysis-grd H2O
26413	3	26785	30442	DUP	W050002009	Gamma Energy Analysis-grd H2O
26413	5	26785	30442	SAMPLE	W050002028	Gamma Energy Analysis-grd H2O
26512	2	26885	30452	BLANK		Ammonia (N) by IC
26512	10	26885	30452	BLANK		Ammonia (N) by IC
26512	3	26885	30452	LCS		Ammonia (N) by IC
26512	5	26885	30452	DUP	W050002028	Ammonia (N) by IC
26512	6	26885	30452	MS	W050002028	Ammonia (N) by IC
26512	7	26885	30452	MSD	W050002028	Ammonia (N) by IC
26512	4	26885	30452	SAMPLE	W050002028	Ammonia (N) by IC
			30488	BLANK		VOA Ground Water Protection
			30488	LCS		VOA Ground Water Protection
			30488	MS	W050001997	VOA Ground Water Protection
			30488	MSD	W050001997	VOA Ground Water Protection
			30488	SPK-RPD	W050001997	VOA Ground Water Protection
			30488	SAMPLE	W050002028	VOA Ground Water Protection
			30488	SURR	W050002028	VOA Ground Water Protection
26497	1	26870	30497	BLANK		Strontium 89/90
26497	2	26870	30497	LCS		Strontium 89/90
26497	3	26870	30497	DUP	W050002028	Strontium 89/90
26497	4	26870	30497	SAMPLE	W050002028	Strontium 89/90
26516	1	26889	30515	BLANK		ICP Metals Analysis, Grd H20 P
26516	2	26889	30515	LCS		ICP Metals Analysis, Grd H20 P
26516	4	26889	30515	MS	W050001783	ICP Metals Analysis, Grd H20 P
26516	5	26889	30515	MSD	W050001783	ICP Metals Analysis, Grd H20 P
26516	5	26889	30515	SPK-RPD	W050001783	ICP Metals Analysis, Grd H20 P
26516	10	26889	30515	SAMPLE	W050002028	ICP Metals Analysis, Grd H20 P
26557	1	26930	30526	BLANK		Uranium Isotopics by AEA

26557	2	26930	30526	LCS		Uranium Isotopics by AEA
26557	3	26930	30526	DUP	W050001997	Uranium Isotopics by AEA
26557	6	26930	30526	SAMPLE	W050002028	Uranium Isotopics by AEA
26559	1	26932	30546	BLANK		Plutonium Isotopics by AEA
26559	2	26932	30546	LCS		Plutonium Isotopics by AEA
26559	3	26932	30546	DUP	W050001997	Plutonium Isotopics by AEA
26559	6	26932	30546	SAMPLE	W050002028	Plutonium Isotopics by AEA
26561	1	26934	30547	BLANK		Americium by AEA
26561	2	26934	30547	LCS		Americium by AEA
26561	3	26934	30547	DUP	W050001997	Americium by AEA
26561	6	26934	30547	SAMPLE	W050002028	Americium by AEA
			30561	BLANK		SW-846 8270C Semi-Vols
			30561	LCS		SW-846 8270C Semi-Vols
			30561	MS	W050002028	SW-846 8270C Semi-Vols
			30561	MSD	W050002028	SW-846 8270C Semi-Vols
			30561	SAMPLE	W050002028	SW-846 8270C Semi-Vols
			30561	SPK-RPD	W050002028	SW-846 8270C Semi-Vols
			30561	SURR	W050002028	SW-846 8270C Semi-Vols
			30602	BLANK		PCBs complete list
			30602	LCS		PCBs complete list
			30602	MS	W050002028	PCBs complete list
			30602	MSD	W050002028	PCBs complete list
			30602	SAMPLE	W050002028	PCBs complete list
			30602	SPK-RPD	W050002028	PCBs complete list
			30602	SURR	W050002028	PCBs complete list
			30604	BLANK		WTPH-D TPH Diesel Range (Wa)
			30604	LCS		WTPH-D TPH Diesel Range (Wa)
			30604	MS	W050002028	WTPH-D TPH Diesel Range (Wa)
			30604	MSD	W050002028	WTPH-D TPH Diesel Range (Wa)
			30604	SAMPLE	W050002028	WTPH-D TPH Diesel Range (Wa)
			30604	SPK-RPD	W050002028	WTPH-D TPH Diesel Range (Wa)
			30604	SURR	W050002028	WTPH-D TPH Diesel Range (Wa)

M8141-SLF-05-328

ATTACHMENT 3

SAMPLE RECEIPT INFORMATION

Consisting of 4 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

7/28/05

ACKNOWLEDGMENT OF SAMPLES RECEIVED

File KB

Groundwater Remediation Program

Richland, WA 99354
Attn: Steve Trent

Customer Code: GPP
PO#: 119152/ES20
Group#: 20051337
Project#: F05-023
Proj Mgr: Steve Trent A0-21
Phone: 373-5869

The following samples were received from you on 06/29/05. 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
W050002028	B1D994	TRENT @2008 @AEA-30 @AEA-31 @AEA-32 @GEA-GPP @GPP6010 @IC-30 @PCBGPP @SR89_90 @SVOCGPP @TPHD @VOA-GPP NH4-IC PERSOLID PH-30	Solid, or handle as if solid	06/29/05

Test Acronym Description

Test Acronym	Description
@2008	ICP-2008 MS All possible metal
@AEA-30	Plutonium Isotopics by AEA
@AEA-31	Americium by AEA
@AEA-32	Uranium Isotopics by AEA
@GEA-GPP	Gamma Energy Analysis-grd H2O
@GPP6010	ICP Metals Analysis, Grd H2O P
@IC-30	Anions by Ion Chromatography
@PCBGPP	PCBs complete list
@SR89_90	Strontium 89/90
@SVOCGPP	SW-846 8270C Semi-Vols
@TPHD-WA	WTPH-D TPH Diesel Range (Wa)
@VOA-GPP	VOA Ground Water Protection
NH4-IC	Ammonia (N) by IC
PERSOLID	Percent Solids
PH-30	pH Soil and Waste Measurement

PDM

Fluor Hanford Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F05-023-027

COLLECTOR: Pope/Pfister/Mokler/Weis/Tyra 7/25	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ
PRICE CODE: 8N	DATA TURNAROUND: 45 Days / ~~45 Days~~ 4/29/5		
SAMPLING LOCATION: 216-A-8, I-7	PROJECT DESIGNATION: 216-A-8 Crib Characterization Borehole	SAF NO.: F05-023	AIR QUALITY: ☐
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-336-1	COA: 119152ES10	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=Vegitation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS

SPECIAL HANDLING AND/OR STORAGE

20051357

PRESERVATION	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	None
TYPE OF CONTAINER	aGs*	aG	G/P	aG	G/P	Square Bottle - Poly
NO. OF CONTAINER(S)	3	1	1	1	1	1
VOLUME	40mL	120mL	120mL	120mL	120mL	500mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS	PCBs - 8082;	SEE ITEM (4) IN SPECIAL INSTRUCTIONS	SEE ITEM (5) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME						
B1D994	SOIL	6/29/5	0905	X	X	X	X	X	X
W05100020 28									

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
[illegible]	6/29/05 1000	TA FRAZIER [illegible]	6/29/05 1000
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

B1D989 IS TIED TO THIS CHAIN

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

A-6003-618(03/03)

Fluor Hanford Inc.	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F05-023-027	PAGE 2 OF 2
COLLECTOR Pope/Pfister/Mokler/Weis/Tyra	**COMPANY CONTACT** TRENT, SJ	**TELEPHONE NO.** 373-5869	**PROJECT COORDINATOR** TRENT, SJ	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION 216-A-8, I-7	**PROJECT DESIGNATION** 216-A-8 Crib Characterization Borehole		**SAF NO.** F05-023	**AIR QUALITY** ☐	**45 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-336-1	**COA** 119152ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE		
SHIPPED TO Waste Sampling & Characterization	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		

SPECIAL INSTRUCTIONS

P.D.Mi P.D. Mix 7/5/2005 P.D.Mi P.D. Mix 7/5/2005

(1)VOA - 8260B (TCL); VOA - 8260B (Add-On) {1-Butanol, 1-Propanol, 2-Pentanone, Acetonitrile, Cyclohexane, Ethanol, Hexane, Tetrahydrofuran, Trichloromonofluoromethane, cis-1,2-Dichloroethylene, n-Butylbenzene, trans-1,2-Dichloroethylene}
(2)Semi-VOA - 8270A (TCL); Semi-VOA - 8270B (Add-On) {1,2,4-Trimethylbenzene, 2-Butoxyethanol, 2-Naphthylamine, 3+4 Methylphenol (cresol, m+p), Benzyl alcohol, Cyclohexanone, Decane, Pyridine, Tributyl phosphate} TPH-Diesel Range - WTPH-D {Total petroleum hydrocarbons - diesel range, Total petroleum hydrocarbons - kerosene range}
(3)ICP/MS - 200.8 (TAL) {Barium, Cadmium, Chromium, Copper, Nickel, Silver} ICP/MS - 200.8 (Add-on) {Arsenic, Lead, Selenium, Uranium} 200.8_HG - ICPMS; ICP Metals - 6010B (Add-On) {Bismuth, Phosphorus}
(4)IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Phosphorous in phosphate, Sulfate} Cations (IC) - 300.7 {Nitrogen in ammonium} pH - 150.1;
(5)Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} ~~Gamma Spec - Add-on {Antimony-125, Cesium-134} Gross Alpha; Gross Beta~~; Isotopic Plutonium; Isotopic Uranium; Americium-241; Strontium-89,90 -- Total Sr;

MAB 6/6/05

A-6003-618(03/03)