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Post Office Box 1000
Richland, Washington 99352

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FLUOR

Memorandum

T4180-03-SLF-041

To:	S. J. Trent	Date:	October 1, 2003
From:	S. L. Fitzgerald, Manager WSCF Analytical Services	Telephone:	373-7495

	W/Attachments		W/O Attachments	
cc:	T. F. Dale	S3-28	D. Hart	S3-30
	S. L. Fitzgerald	S3-30	L. C. Swanson	E6-35
	H. K. Meznarich	S3-30	File/LB	
	J. E. Trechter	S3-30		
	M. Neely	S3-30		

Subject: FINAL RESULTS FOR 200-PW-2/200-PW-4 OU- BOREHOLE SOIL SAMPLING-SAMPLE DELIVERY GROUP WSCF20031165 SAF NUMBER F03-006

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

(2) HNF-SD-CD-QAPP-017, Rev. 5, Waste Sampling and Characterization Facility Quality Assurance Plan

This letter contains a narrative (Attachment 1) for the sample delivery group (WSCF20031165), the analytical results (Attachment 2) and the sample receipt information (Attachment 3).

slf/ddw

Attachments 3

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T4180-03-SLF-041

ATTACHMENT 1

NARRATIVE

Consisting of 3 pages
Cover page not included

Sample Delivery Group	**WSCF20031165**
Sample Matrix	**Soil**
Sample Visual	**Brown**
SAF Number	**F03-006**
Data Deliverable	**Summary Report**

Introduction

One (1) soil sample (B173V8) from the GPP was received at the WSCF Laboratory on August 26, 2003. The sample was analyzed for those analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Groundwater Protection 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 Request for Sample Analysis forms are included as Attachment 3.

Analytical Methodology for Requested Analyses

- PCB's by EPA SW-846 Method 8082. Analytical work was performed with no deviations to the approved method.
- ICP-MS Metals by EPA Method 200.8 and ICP-AES Metals by EPA SW-846 Method 6010A. Analytical work was performed with no deviations to the approved method.
- Semi-VOA's by EPA SW-846 Method 8270B. Analytical work was performed with no deviations to the approved method.
- Alcohols and Glycols by EPA SW-846 Method 8015. Analytical work was performed with no deviations to the approved method.
- WTPH-D by WDOE Method NWTPH-Dx. Analytical work was performed with no deviations to the approved method.
- WTPH-G by WDOE Method NWTPH-Gx. Analytical work was performed with no deviations to the approved method.
- IC Anions and Ammonium by EPA SW-846 Method 300.0 and 300.7. Analytical work was performed with no deviations to the approved method for Ammonium, but a deviation was required for the Anions (see comments below).

- The pH by EPA Method 150.1. Analytical work was performed with no deviations to the approved method.

- Percent Solids by EPA Method 160.3. Analytical work was performed with no deviations to the approved method.

- Cyanide by EPA SW-846 Method 9010. Analytical work was performed with no deviations to the approved method.

- All RadChem analyses (AEA's, GEA) were run by internal WDOE accredited WSCF procedures. Analytical work was performed with no deviations to the approved method.

Comments

PCB's – The hold time(s) for this analysis was met. A Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See page(s) 2-26 and 2-27 for QC details.

ICP-MS and ICP-AES Metals – The hold time(s) for this analysis was met. A Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See page(s) 2-29, 2-30, 2-31, 2-32, and 2-40 for QC details. The QC associated with the ICP-AES (page 2-40) is a different format because multiple sample delivery groups were ran for the requested elements. WSCF sample number W030000727 is GPP sample B173V8 for this group.

Semi-VOA's – The hold time(s) for this analysis was met. A Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See page(s) 2-20, 2-21, 2-22, 2-23, 2-24 and 2-25 for QC details. Compounds listed on the tentatively identified peak report with an "N" qualifier have been identified with the program used to interpret the raw data.

Alcohols and Glycols – The hold time(s) for this analysis was met. A Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See page(s) 2-36 and 2-37 for QC details.

WTPH-D – The hold time(s) for this analysis was met. A Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See page(s) 2-28 for details.

WTPH-G – The hold time(s) for this analysis was met. A Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See page(s) 2-35 for details.

IC Anions – The client requested hold time(s) for this analysis was not met. The client was notified and requested WSCF to continue with this analysis. A Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See page(s) 2-16 and 2-17 for QC details.

NH4 – The hold time(s) for this analysis was met. A Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See page(s) 2-33 for QC details.

Percent Solids – PCB's, Semi-VOA's, Alcohols and Glycols, WTPH-G and WTPH-D analytical results were corrected for percent solids. All other analytical results were reported for the sample as received.

CN – The hold time(s) for this analysis was met. A Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See page(s) 2-15 for QC details.

RadChem – There are no hold times associated with these WDOE accredited methods. Except for GEA, a Laboratory Control Sample and Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See page(s) 2-18, 2-19, 2-34, 2-38 and 2-39 for QC details.

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.

Troy Dale
WSCF Production Control

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

T4180-03-SLF-041

ATTACHMENT 2

ANALYTICAL RESULTS

Consisting of 40 pages
Cover page not included

WSCF
ANALYTICAL RESULTS REPORT

for

Ground Water Protection Program

Richland, WA 99352

Attention: Steve Trent

Analytical: _____

Client Services: John Zrechter

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#: F03-006
Report#: WSCF20031165
Report Date: 30-sep-2003
Report WGPP/ver. 1
Ground Water Protection Program

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
Project: F03-006: 200-PW-2/PW-4

Group #: WSCF20031165

Sample #	Client ID		CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze	Sample	Receive
W030000727	B173V8	TRENT	57-12-5	Cyanide	SOIL	LA-695-402	U	< 0.200	mg/kg	1.00	0.20	09/09/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	NH4-N	Nitrogen in ammonium	SOIL	LA-503-401	B	< 0.200	mg/kg	50.00	0.20	09/20/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	TS	Total solids	SOIL	LA-519-412		87.6	%	1.00	0.0	09/18/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	PH	pH Measurement	SOIL	LA-212-411		8.26	pH	1.00	0.010	09/23/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	60-29-7	Diethyl ether	SOIL	Organics	U	< 5.00e+03	ug/kg	1.00	5.0e+03	09/03/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	67-56-1	Methanol	SOIL	Organics	U	< 1.00e+03	ug/kg	1.00	1.0e+03	09/03/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	107-21-1	Ethylene glycol	SOIL	Organics	U	< 5.00e+03	ug/kg	1.00	5.0e+03	09/03/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	14596-10-2	Americium-241	SOIL	LA-508-471		0.0450	pCi/g	1.00	0.041	09/05/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	E,T,C	Am-241 by AEA Total Cntg Error	SOIL	LA-508-471		+- 0.0297	pCi/g	1.00	0.0	09/05/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	16984-48-8	Fluoride	SOIL	LA-533-410	B	0.908	mg/kg	50.00	0.35	09/08/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	16887-00-6	Chloride	SOIL	LA-533-410	B	4.59	mg/kg	50.00	0.70	09/08/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	NO2-N	Nitrogen in Nitrite	SOIL	LA-533-410	U	< 0.450	mg/kg	50.00	0.45	09/08/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	NO3-N	Nitrogen in Nitrate	SOIL	LA-533-410	E	48.2	mg/kg	50.00	0.25	09/08/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	14265-44-2	Phosphate	SOIL	LA-533-410	U	< 0.650	mg/kg	50.00	0.65	09/08/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	14808-79-8	Sulfate	SOIL	LA-533-410		44.6	mg/kg	50.00	1.2	09/08/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	10198-40-0	Cobalt-60	SOIL	LA-508-462		0.0345	pCi/g	1.00	0.017	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	E,T,C	Co-60 Rel. Count Error (GEA)	SOIL	LA-508-462		+- 0.0204	pCi/g	1.00	0.0	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	14234-35-6	Antimony-125	SOIL	LA-508-462	U	2.59e-03	pCi/g	1.00	0.050	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	E,T,C	Sb-125 Rel. Count Error (GEA)	SOIL	LA-508-462		+- 0.0259	pCi/g	1.00	0.0	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	13967-70-9	Cesium-134	SOIL	LA-508-462	U	0.0406	pCi/g	1.00	0.023	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	E,T,C	Cs-134 Rel. Count Error (GEA)	SOIL	LA-508-462		+- 0.0194	pCi/g	1.00	0.0	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	10045-97-3	Cesium-137	SOIL	LA-508-462	U	-7.69e-04	pCi/g	1.00	0.019	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	E,T,C	Cs-137 Rel. Count Error (GEA)	SOIL	LA-508-462		+- 7.69e-03	pCi/g	1.00	0.0	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	14683-23-9	Europium-152	SOIL	LA-508-462	U	-0.0511	pCi/g	1.00	0.055	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	E,T,C	Eu-152 Rel. Count Error (GEA)	SOIL	LA-508-462		+- 0.0669	pCi/g	1.00	0.0	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	15585-10-1	Europium-154	SOIL	LA-508-462	U	-0.0189	pCi/g	1.00	0.054	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	E,T,C	Eu-154 Rel. Count Error (GEA)	SOIL	LA-508-462		+- 0.0325	pCi/g	1.00	0.0	09/25/03	08/26/03	08/26/03

MDL=Minimum Detection Limit
RQ=Result Qualifier

B - The analyte < the RDL but > = the IDL/MDL (inorganic)
J - Estimated Value
E - Analyte is an estimate, has potentially larger errors
U - Analyzed for but not detected above limiting criteria.

DF=Dilution Factor

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

Report WGPP/ver. 1
Ground Water Protection Program

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
Project: F03-006: 200-PW-2/PW-4

Group #: WSCF20031165

Sample #	Client ID		CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze	Sample	Receive
W030000727	B173V8	TRENT	14391-16-3	Europium-155	SOIL	LA-508-462	U	0.0179	pCi/g	1.00	0.094	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	E,T,C	Eu-155 Rel. Count Error (GEA)	SOIL	LA-508-462		+- 0.0560	pCi/g	1.00	0.0	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	15832-50-5	Tin-126	SOIL	LA-508-462	U	0.240	pCi/g	1.00	0.37	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	E,T,C	Sn-126 Rel. Count Error (GEA)	SOIL	LA-508-462		+- 0.0756	pCi/g	1.00	0.0	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	15262-20-1	Radium-228	SOIL	LA-508-462		0.983	pCi/g	1.00	0.057	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	E,T,C	Ra-228 Rel. Count Error (GEA)	SOIL	LA-508-462		+- 0.175	pCi/g	1.00	0.0	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	13982-63-3	Radium-226	SOIL	LA-508-462		0.808	pCi/g	1.00	0.034	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	E,T,C	Ra-226 Rel. Count Error (GEA)	SOIL	LA-508-462		+- 0.137	pCi/g	1.00	0.0	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	13982-39-3	Zinc-65	SOIL	LA-508-462	U	0.0168	pCi/g	1.00	0.041	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	E,T,C	Zn-65 Rel. Count Error (GEA)	SOIL	LA-508-462		+- 0.0277	pCi/g	1.00	0.0	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	14681-63-1	Niobium-94	SOIL	LA-508-462	U	5.43e-03	pCi/g	1.00	0.017	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	E,T,C	Nb-94 Rel. Count Error (GEA)	SOIL	LA-508-462		+- 9.88e-03	pCi/g	1.00	0.0	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	13968-53-1	Ruthenium-103	SOIL	LA-508-462	U	2.35e-03	pCi/g	1.00	0.017	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	E,T,C	Ru-103 Rel. Count Error (GEA)	SOIL	LA-508-462		+- 0.0102	pCi/g	1.00	0.0	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	13967-48-1	Ruthenium-106	SOIL	LA-508-462	U	-0.0352	pCi/g	1.00	0.15	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	E,T,C	Ru-106 Rel. Count Error (GEA)	SOIL	LA-508-462		+- 0.0905	pCi/g	1.00	0.0	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	13966-06-8	Tin-113	SOIL	LA-508-462	U	-2.88e-03	pCi/g	1.00	0.024	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	E,T,C	Sn-113 Rel. Count Error (GEA)	SOIL	LA-508-462		+- 0.0143	pCi/g	1.00	0.0	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	14762-78-8	Cerium-144	SOIL	LA-508-462	U	0.0311	pCi/g	1.00	0.17	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	E,T,C	Ce-144 Rel. Count Error (GEA)	SOIL	LA-508-462		+- 0.116	pCi/g	1.00	0.0	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	14913-50-9	Thallium-208	SOIL	LA-508-462		0.304	pCi/g	1.00	0.018	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	E,T,C	Tl-208 Rel. Count Error (GEA)	SOIL	LA-508-462		+- 0.0535	pCi/g	1.00	0.0	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	14913-49-6	Bismuth-212	SOIL	LA-508-462		0.562	pCi/g	1.00	0.13	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	E,T,C	Bi-212 Rel. Count Error (GEA)	SOIL	LA-508-462		+- 0.170	pCi/g	1.00	0.0	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	15092-94-1	Lead-212	SOIL	LA-508-462		1.06	pCi/g	1.00	0.038	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	E,T,C	Pb-212 Rel. Count Error (GEA)	SOIL	LA-508-462		+- 0.145	pCi/g	1.00	0.0	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	14733-03-0	Bismuth-214	SOIL	LA-508-462		0.808	pCi/g	1.00	0.034	09/25/03	08/26/03	08/26/03

MDL=Minimum Detection Limit
RQ=Result Qualifier

B - The analyte < the RDL but > = the IDL/MDL (inorganic)
J - Estimated Value
E - Analyte is an estimate, has potentially larger errors
U - Analyzed for but not detected above limiting criteria.

DF=Dilution Factor

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
Project: F03-006: 200-PW-2/PW-4

Group #: WSCF20031165

Sample #	Client ID		CAS #	Test Performed	Matrix	WSCF Method	RQ		Result	Unit	DF	MDL	Analyze	Sample	Receive
W030000727	B173V8	TRENT	E,T,C	Bi-214 Rel. Count Error (GEA)	SOIL	LA-508-462		+-	0.137	pCi/g	1.00	0.0	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	15067-28-4	Lead-214	SOIL	LA-508-462			0.826	pCi/g	1.00	0.039	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	E,T,C	Pb-214 Rel. Count Error (GEA)	SOIL	LA-508-462		+-	0.121	pCi/g	1.00	0.0	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	14331-83-0	Actinium-228	SOIL	LA-508-462			0.983	pCi/g	1.00	0.057	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	E,T,C	Ac-228 Rel. Count Error (GEA)	SOIL	LA-508-462		+-	0.175	pCi/g	1.00	0.0	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	15065-10-8	Thorium-234	SOIL	LA-508-462			1.58	pCi/g	1.00	1.5	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	E,T,C	Th-234 Rel. Count Error (GEA)	SOIL	LA-508-462		+-	0.495	pCi/g	1.00	0.0	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	15117-96-1	Uranium-235	SOIL	LA-508-462	U		0.111	pCi/g	1.00	0.17	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	E,T,C	U-235 Rel. Count Error (GEA)	SOIL	LA-508-462		+-	0.0363	pCi/g	1.00	0.0	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	14596-10-2	Americium-241	SOIL	LA-508-462	U		-0.0791	pCi/g	1.00	0.19	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	E,T,C	Am-241 Rel Count Error (GEA)	SOIL	LA-508-462		+-	0.112	pCi/g	1.00	0.0	09/25/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	7440-69-9	Bismuth	SOIL	LA-505-411	U	<	4.97	mg/kg	49.71	5.0	09/23/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	7440-42-8	Boron	SOIL	LA-505-411	U	<	5.07	mg/kg	49.71	5.1	09/23/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	7440-36-0	Antimony	SOIL	LA-505-412	EU	<	4.94	mg/kg	9.88	4.9	09/15/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	7440-38-2	Arsenic	SOIL	LA-505-412			6.12	mg/kg	9.88	3.0	09/15/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	7440-39-3	Barium	SOIL	LA-505-412			89.8	mg/kg	9.88	2.0	09/15/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	7440-41-7	Beryllium	SOIL	LA-505-412	U	<	2.96	mg/kg	9.88	3.0	09/15/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	7440-47-3	Chromium	SOIL	LA-505-412			23.0	mg/kg	9.88	3.0	09/15/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	7440-50-8	Copper	SOIL	LA-505-412			18.6	mg/kg	9.88	4.9	09/15/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	7439-92-1	Lead	SOIL	LA-505-412	U	<	11.9	mg/kg	9.88	12	09/15/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	7440-02-0	Nickel	SOIL	LA-505-412			18.6	mg/kg	9.88	4.9	09/15/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	7440-22-4	Silver	SOIL	LA-505-412			2.59	mg/kg	9.88	2.0	09/15/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	7440-61-1	Uranium	SOIL	LA-505-412	U	<	0.988	mg/kg	9.88	0.99	09/15/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	7439-97-6	Mercury	SOIL	LA-505-412	U	<	0.988	mg/kg	9.88	0.99	09/15/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	TPHGASOLINE	Total Pet. Hydrocarbons Gas	SOIL	NWTPH	U	<	250	ug/kg	1.00	2.5e+02	09/03/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	12674-11-2	Aroclor-1016	SOIL	LA-523-427	U	<	51.0	ug/kg	1.00	51	09/09/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	11104-28-2	Aroclor-1221	SOIL	LA-523-427	U	<	100	ug/kg	1.00	1.0e+02	09/09/03	08/26/03	08/26/03

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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
Project: F03-006: 200-PW-2/PW-4

Group #: WSCF20031165

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze	Sample	Receive
W030000727	B173V8 TRENT	11141-16-5	Aroclor-1232	SOIL	LA-523-427	U	< 51.0	ug/kg	1.00	51	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	53469-21-9	Aroclor-1242	SOIL	LA-523-427	U	< 51.0	ug/kg	1.00	51	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	12672-29-6	Aroclor-1248	SOIL	LA-523-427	U	< 51.0	ug/kg	1.00	51	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	11097-69-1	Aroclor-1254	SOIL	LA-523-427	U	< 51.0	ug/kg	1.00	51	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	11096-82-5	Aroclor-1260	SOIL	LA-523-427	U	< 51.0	ug/kg	1.00	51	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	37324-23-5	Aroclor-1262	SOIL	LA-523-427	U	< 51.0	ug/kg	1.00	51	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	11100-14-4	Aroclor-1268	SOIL	LA-523-427	U	< 51.0	ug/kg	1.00	51	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	13981-16-3	Plutonium-238	SOIL	LA-508-471	U	1.90e-03	pCi/g	1.00	0.056	09/08/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	E,T,C	Pu-238 by AEA Total Cntg Error	SOIL	LA-508-471		+- 1.90e-03	pCi/g	1.00	0.0	09/08/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	PU-239/240	Pu-239/240 by AEA	SOIL	LA-508-471	U	3.90e-03	pCi/g	1.00	0.014	09/08/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	E,T,C	Pu-239/240 AEA Total Cntg Err	SOIL	LA-508-471		+- 7.80e-03	pCi/g	1.00	0.0	09/08/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	100-02-7	4-Nitrophenol	SOIL	LA-523-456	U	< 730	ug/kg	1.00	7.3e+02	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	106-46-7	1,4-Dichlorobenzene	SOIL	LA-523-456	U	< 360	ug/kg	1.00	3.6e+02	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	108-95-2	Phenol	SOIL	LA-523-456	U	< 110	ug/kg	1.00	1.1e+02	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	120-82-1	1,2,4-Trichlorobenzene	SOIL	LA-523-456	U	< 330	ug/kg	1.00	3.3e+02	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	121-14-2	2,4-Dinitrotoluene	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	129-00-0	Pyrene	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	59-50-7	4-Chloro-3-methylphenol	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	621-64-7	N-Nitrosodi-n-dipropylamine	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	83-32-9	Acenaphthene	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	87-86-5	Pentachlorophenol	SOIL	LA-523-456	U	< 340	ug/kg	1.00	3.4e+02	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	95-57-8	2-Chlorophenol	SOIL	LA-523-456	U	< 170	ug/kg	1.00	1.7e+02	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	100-01-6	4-Nitroaniline	SOIL	LA-523-456	U	< 280	ug/kg	1.00	2.8e+02	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	101-55-3	4-Bromophenylphenyl ether	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	105-67-9	2,4-Dimethylphenol	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	106-47-8	4-Chloroaniline	SOIL	LA-523-456	U	< 110	ug/kg	1.00	1.1e+02	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	108-60-1	Bis(2-chloro-1-methylethyl)eth	SOIL	LA-523-456	U	< 290	ug/kg	1.00	2.9e+02	09/09/03	08/26/03	08/26/03

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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
Project: F03-006: 200-PW-2/PW-4

Group #: WSCF20031165

Sample #	Client ID		CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze	Sample	Receive
W030000727	B173V8	TRENT	111-44-4	Bis(2-chloroethyl) ether	SOIL	LA-523-456	U	< 280	ug/kg	1.00	2.8e+02	09/09/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	111-91-1	Bis(2-Chloroethoxy)methane	SOIL	LA-523-456	U	< 130	ug/kg	1.00	1.3e+02	09/09/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	117-81-7	Bis(2-ethylhexyl) phthalate	SOIL	LA-523-456	U	< 630	ug/kg	1.00	6.3e+02	09/09/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	117-84-0	Di-n-octylphthalate	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	118-74-1	Hexachlorobenzene	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	120-12-7	Anthracene	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	120-83-2	2,4-Dichlorophenol	SOIL	LA-523-456	U	< 91.0	ug/kg	1.00	91	09/09/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	131-11-3	Dimethyl phthalate	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	132-64-9	Dibenzofuran	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	191-24-2	Benzo(ghi)perylene	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	193-39-5	Indeno(1,2,3-cd)pyrene	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	205-99-2	Benzo(b)fluoranthene	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	206-44-0	Fluoranthene	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	207-08-9	Benzo(k)fluoranthene	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	208-96-8	Acenaphthylene	SOIL	LA-523-456	U	< 91.0	ug/kg	1.00	91	09/09/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	218-01-9	Chrysene	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	50-32-8	Benzo(a)pyrene	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	51-28-5	2,4-Dinitrophenol	SOIL	LA-523-456	U	< 760	ug/kg	1.00	7.6e+02	09/09/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	53-70-3	Dibenz[a,h]anthracene	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	534-52-1	4,6-Dinitro-2-methylphenol	SOIL	LA-523-456	U	< 760	ug/kg	1.00	7.6e+02	09/09/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	541-73-1	1,3-Dichlorobenzene	SOIL	LA-523-456	U	< 360	ug/kg	1.00	3.6e+02	09/09/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	56-55-3	Benzo(a)anthracene	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	606-20-2	2,6-Dinitrotoluene	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	7005-72-3	4-Chlorophenylphenyl ether	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	77-47-4	Hexachlorocyclopentadiene	SOIL	LA-523-456	U	< 360	ug/kg	1.00	3.6e+02	09/09/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	78-59-1	Isophorone	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	84-66-2	Diethylphthalate	SOIL	LA-523-456	J	290	ug/kg	1.00	2.1e+02	09/09/03	08/26/03	08/26/03

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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
Project: F03-006: 200-PW-2/PW-4

Group #: WSCF20031165

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze	Sample	Receive
W030000727	B173V8 TRENT	84-74-2	Di-n-butylphthalate	SOIL	LA-523-456	U	< 98.0	ug/kg	1.00	98	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	85-01-8	Phenanthrene	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	85-68-7	Butylbenzylphthalate	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	86-30-6	N-Nitrosodiphenylamine	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	86-73-7	Fluorene	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	86-74-8	Carbazole	SOIL	LA-523-456	U	< 91.0	ug/kg	1.00	91	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	87-68-3	Hexachlorobutadiene	SOIL	LA-523-456	U	< 420	ug/kg	1.00	4.2e+02	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	88-74-4	2-Nitroaniline	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	88-75-5	2-Nitrophenol	SOIL	LA-523-456	U	< 200	ug/kg	1.00	2.0e+02	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	91-20-3	Naphthalene	SOIL	LA-523-456	U	< 320	ug/kg	1.00	3.2e+02	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	91-57-6	2-Methylnaphthalene	SOIL	LA-523-456	U	< 200	ug/kg	1.00	2.0e+02	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	91-58-7	2-Chloronaphthalene	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	91-94-1	3,3'-Dichlorobenzidine	SOIL	LA-523-456	U	< 91.0	ug/kg	1.00	91	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	95-48-7	2-Methylphenol (cresol, o-)	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	95-50-1	1,2-Dichlorobenzene	SOIL	LA-523-456	U	< 410	ug/kg	1.00	4.1e+02	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	95-95-4	2,4,5-Trichlorophenol	SOIL	LA-523-456	U	< 83.0	ug/kg	1.00	83	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	98-95-3	Nitrobenzene	SOIL	LA-523-456	U	< 290	ug/kg	1.00	2.9e+02	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	99-09-2	3-Nitroaniline	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	65794-96-9	3 & 4 Methylphenol Total	SOIL	LA-523-456	U	< 130	ug/kg	1.00	1.3e+02	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	67-72-1	Hexachloroethane	SOIL	LA-523-456	U	< 530	ug/kg	1.00	5.3e+02	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	88-06-2	2,4,6-Trichlorophenol	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	111-76-2	2-Butoxyethanol	SOIL	LA-523-456	U	< 110	ug/kg	1.00	1.1e+02	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	126-73-8	Tributyl phosphate	SOIL	LA-523-456	U	< 76.0	ug/kg	1.00	76	09/09/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	U-233/234	Uranium-233/234	SOIL	LA-508-471		0.210	pCi/g	1.00	0.013	09/05/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	E,T,C	U-233/234 AEA Total Cntg Error	SOIL	LA-508-471		+- 0.0672	pCi/g	1.00	0.0	09/05/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	15117-96-1	Uranium-235	SOIL	LA-508-471	U	0.0120	pCi/g	1.00	0.014	09/05/03	08/26/03	08/26/03
W030000727	B173V8 TRENT	E,T,C	U-235 by AEA Total Cntg Error	SOIL	LA-508-471		+- 0.0118	pCi/g	1.00	0.0	09/05/03	08/26/03	08/26/03

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WSCF
ANALYTICAL RESULTS REPORT

2-8

Attention: Steve Trent
Project: F03-006: 200-PW-2/PW-4

Group #: WSCF20031165

Sample #	Client ID		CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze	Sample	Receive
W030000727	B173V8	TRENT	U-238	Uranium-238	SOIL	LA-508-471		0.210	pCi/g	1.00	4.8e-03	09/05/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	E,T,C	U-238 by AEA Total Cntg Error	SOIL	LA-508-471		+- 0.0651	pCi/g	1.00	0.10	09/05/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	TPHDIESEL	Total Pet. Hydrocarbons Diesel	SOIL	NWTPH	U	< 5.10e+03	ug/kg	1.00	5.1e+03	09/08/03	08/26/03	08/26/03
W030000727	B173V8	TRENT	TPHKEROSENE	Kerosene	SOIL	NWTPH	U	< 5.10e+03	ug/kg	1.00	5.1e+03	09/08/03	08/26/03	08/26/03

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WSCF
ANALYTICAL COMMENT REPORT

2-9

Attention: Steve Trent
Project Number F03-006

Group #: WSCF20031165

Sample #	Client ID	Lab Area	Test	Comment
		VALGROUP		IC: Fluoride and Chloride detected at a concentration less than the lowest value on the calibration curve. Chloride resut is less than 10X the EQL; therefore RPD limits do not apply. jmv
				Nitrate estimated value due to failed MSD on 3 attempts; other QC acceptable. wwb
				TPHD: The diesel recovery of 74% is slightly below the lower control limit of 75%. All results are moisture corrected and reported on a dry weight basis. cgc
				ICP-MS: High silver LCS recovery but no flag issued because the result was within manufacturers specifications. Estimated antimony result due to low CCV recovery.
				SVOA: Samples are moisture corrected and reported on a dry weight basis. The extracts had to be dried twice in order to remove all the water. For target compounds which are below the lowest calibration standard but above the detection limit a J-flag is added. den
				PCB: spk-rpd high for one surrogate at 21%. gar
				NH4-IC detected at a concentration less than that of the lowest value on the calibration curve.jmv
				RPD not applicable to GEA/Am-241 due to low count rate.

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

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WSCF
TENTATIVELY IDENTIFIED PEAK REPORT

2 - 10

Attention: Steve Trent
Project Number F03-006 :200-PW-2/PW-4

Group #: WSCF20031165

Sample #	Client ID		Test Name	Peak Name	CAS#	RT	RQ	Result	Units
W030000727	B173V8	TRENT	Gamma Energy Analysis-grd H2O	K-40 Count Error				14	%
W030000727	B173V8	TRENT	Gamma Energy Analysis-grd H2O	K-40				21	pCi/g

RQ=Result Qualifier

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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-508-462	Gamma Energy Analysis -- the Genie System -- WSCF	
	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-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
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)

Note: A complete list of WSCF analytical procedures and referenced regulatory or industry methods is available online at http://apweb02/asponlinedocs/wscf/sample%20mgmt/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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	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-523-456	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	DETERMINATION OF INORGANIC ANIONS BY ION CHROMATOGRAPHY
LA-695-402	LA-695-402: DETERMINATION OF CYANIDE BY MIDIDISTILLATION AND SPECTROPHOTOMETRIC	
	EPA-600/4-79-020 335.2	Cyanide, Total
NWTPH	NWTPH-Diesel and/or Gasoline	
	WDOE NWTPH-Dx/Gx	Total Petroleum Hydrocarbons - Diesel/Gasoline
Organics	Organics - Alcohols, Glycols	
	EPA SW-846 8015B	Nonhalogenated Organics Using GC/FID

Note: A complete list of WSCF analytical procedures and referenced regulatory or industry methods is available online at http://apweb02/asponlinedocs/wscf/sample%20mgmt/ProcedureMethodCrossReference.pdf. This document includes on-line links to full-text versions of the procedures and methods, where available.

w13qlog v1 30-sep-2003 14:10:10

W13q Worklist/Batch/QC Report for Group# WSCF20031165

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
				SAMPLE	W030000727	Percent Solids
				SAMPLE	W030000727	pH Soil and Waste Measurement
			23480	BLANK		Cyanide by Midi/Spectrophotom
			23480	BLNK-PREP		Cyanide by Midi/Spectrophotom
			23480	DUP		Cyanide by Midi/Spectrophotom
			23480	LCS		Cyanide by Midi/Spectrophotom
			23480	LCS-2		Cyanide by Midi/Spectrophotom
			23480	MS	W030000705	Cyanide by Midi/Spectrophotom
			23480	MSD	W030000705	Cyanide by Midi/Spectrophotom
			23480	SPK-RPD	W030000705	Cyanide by Midi/Spectrophotom
			23480	SAMPLE	W030000727	Cyanide by Midi/Spectrophotom
20294	2	20674	23481	BLANK		Anions by Ion Chromatography
20294	8	20674	23481	BLANK		Anions by Ion Chromatography
20294	3	20674	23481	LCS		Anions by Ion Chromatography
20294	5	20674	23481	DUP	W030000727	Anions by Ion Chromatography
20294	6	20674	23481	MS	W030000727	Anions by Ion Chromatography
20294	7	20674	23481	MSD	W030000727	Anions by Ion Chromatography
20294	4	20674	23481	SAMPLE	W030000727	Anions by Ion Chromatography
20267	1	20648	23497	BLANK		Americium by AEA
20267	2	20648	23497	LCS		Americium by AEA
20267	3	20648	23497	DUP	W030000727	Americium by AEA
20267	4	20648	23497	SAMPLE	W030000727	Americium by AEA
20268	1	20647	23498	BLANK		Plutonium Isotopics by AEA
20268	2	20647	23498	LCS		Plutonium Isotopics by AEA
20268	3	20647	23498	DUP	W030000727	Plutonium Isotopics by AEA
20268	4	20647	23498	SAMPLE	W030000727	Plutonium Isotopics by AEA
			23527	BLANK		SW-846 8270B Semi-Vols
			23527	LCS		SW-846 8270B Semi-Vols
			23527	SAMPLE	W030000727	SW-846 8270B Semi-Vols
			23527	SURR	W030000727	SW-846 8270B Semi-Vols
			23527	MS	W030000789	SW-846 8270B Semi-Vols
			23527	MSD	W030000789	SW-846 8270B Semi-Vols
			23527	SPK-RPD	W030000789	SW-846 8270B Semi-Vols
			23529	BLANK		PCBs complete list
			23529	LCS		PCBs complete list
			23529	SAMPLE	W030000727	PCBs complete list
			23529	SURR	W030000727	PCBs complete list
			23529	MS	W030000789	PCBs complete list
			23529	MSD	W030000789	PCBs complete list
			23529	SPK-RPD	W030000789	PCBs complete list
			23536	BLANK		WTPH-D TPH Diesel Range (Wa)
			23536	LCS		WTPH-D TPH Diesel Range (Wa)
			23536	SAMPLE	W030000727	WTPH-D TPH Diesel Range (Wa)
			23536	SURR	W030000727	WTPH-D TPH Diesel Range (Wa)
			23536	MS	W030000789	WTPH-D TPH Diesel Range (Wa)
			23536	MSD	W030000789	WTPH-D TPH Diesel Range (Wa)
			23536	SPK-RPD	W030000789	WTPH-D TPH Diesel Range (Wa)

20349	1	20730	23538	BLANK		ICP-2008 MS All possible metal
20349	2	20730	23538	LCS		ICP-2008 MS All possible metal
20349	4	20730	23538	MS	W030000715	ICP-2008 MS All possible metal
20349	5	20730	23538	MSD	W030000715	ICP-2008 MS All possible metal
20349	12	20730	23538	MS	W030000723	ICP-2008 MS All possible metal
20349	13	20730	23538	MSD	W030000723	ICP-2008 MS All possible metal
20349	15	20730	23538	MS	W030000727	ICP-2008 MS All possible metal
20349	16	20730	23538	MSD	W030000727	ICP-2008 MS All possible metal
20349	14	20730	23538	SAMPLE	W030000727	ICP-2008 MS All possible metal
20422	3	20804	23625	BLNK-PREP		Ammonia (N) by IC
20422	8	20804	23625	BLNK-PREP		Ammonia (N) by IC
20422	1	20804	23625	LCS		Ammonia (N) by IC
20422	5	20804	23625	DUP	W030000727	Ammonia (N) by IC
20422	6	20804	23625	MS	W030000727	Ammonia (N) by IC
20422	7	20804	23625	MSD	W030000727	Ammonia (N) by IC
20422	4	20804	23625	SAMPLE	W030000727	Ammonia (N) by IC
20266	1	20649	23634	BLANK		Uranium Isotopics by AEA
20266	2	20649	23634	LCS		Uranium Isotopics by AEA
20266	3	20649	23634	DUP	W030000727	Uranium Isotopics by AEA
20266	4	20649	23634	SAMPLE	W030000727	Uranium Isotopics by AEA
20433	1	20816	23644	BLANK		NWTPH-GX TPH Gasoline Range
20433	2	20816	23644	LCS		NWTPH-GX TPH Gasoline Range
20433	4	20816	23644	MS	W030000727	NWTPH-GX TPH Gasoline Range
20433	5	20816	23644	MSD	W030000727	NWTPH-GX TPH Gasoline Range
20433	3	20816	23644	SAMPLE	W030000727	NWTPH-GX TPH Gasoline Range
20433	5	20816	23644	SPK-RPD	W030000727	NWTPH-GX TPH Gasoline Range
20435	1	20818	23651	BLANK		Alcohols, Glycols - 8015
20435	2	20818	23651	LCS		Alcohols, Glycols - 8015
20435	4	20818	23651	DUP	W030000727	Alcohols, Glycols - 8015
20435	5	20818	23651	MS	W030000727	Alcohols, Glycols - 8015
20435	6	20818	23651	MSD	W030000727	Alcohols, Glycols - 8015
20435	3	20818	23651	SAMPLE	W030000727	Alcohols, Glycols - 8015
20435	6	20818	23651	SPK-RPD	W030000727	Alcohols, Glycols - 8015
20431	8	20814	23653	SAMPLE	W030000727	ICP Metals Analysis, Grd H20 P
20170	2	20552	23741	BLANK		Gamma Energy Analysis-grd H2O
20170	1	20552	23741	LCS		Gamma Energy Analysis-grd H2O
20170	3	20552	23741	DUP	W030000727	Gamma Energy Analysis-grd H2O
20170	4	20552	23741	SAMPLE	W030000727	Gamma Energy Analysis-grd H2O

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20031165
Matrix: SOLID
Test: Cyanide by Midi/Spectrophotom

SAF Number: F03-006
Sample Date: 08/13/03
Receive Date:08/13/03

Lab ID: W030000705

BATCH QC ASSOCIATED WITH SAMPLE

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
MS	Cyanide by Midi/Spectrophotom	57-12-5	96.5	96.500	% Recov	09/09/03	75.000	125.000	
MSD	Cyanide by Midi/Spectrophotom	57-12-5	95.5	95.500	% Recov	09/09/03	75.000	125.000	
SPK-RPD	Cyanide by Midi/Spectrophotom	57-12-5	95.500	1.042	RPD	09/09/03	0.000	20.000	

BATCH QC

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
BLANK	Cyanide by Midi/Spectrophotom	57-12-5	2.7	2.700	ug/L	09/09/03	-4.000	4.000	
BLNK-PREP	Cyanide by Midi/Spectrophotom	57-12-5	2.7	2.700	ug/L	09/09/03	-4.000	4.000	
DUP	Cyanide by Midi/Spectrophotom	57-12-5	n/a	n/a	RPD	09/09/03	0.000	20.000	
LCS	Cyanide by Midi/Spectrophotom	57-12-5	105.0	105.000	% Recov	09/09/03	85.000	115.000	
LCS-2	Cyanide by Midi/Spectrophotom	57-12-5	n/a	n/a	% Recov	09/09/03	85.000	115.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20031165
Matrix: SOLID
Test: Anions by Ion Chromatography

SAF Number: F03-006
Sample Date: 08/26/03
Receive Date:08/26/03

Lab ID: W030000727

BATCH QC ASSOCIATED WITH SAMPLE

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit		RQ
DUP	Chloride	16887-00-6	3.55e+00	25.553	RPD	09/08/03	0.000	20.000	*	
DUP	Fluoride	16984-48-8	8.92e-01	1.778	RPD	09/08/03	0.000	20.000		
DUP	Nitrogen in Nitrite	NO2-N	<4.50e-1	n/a	RPD	09/08/03	0.000	20.000		U
DUP	Nitrogen in Nitrate	NO3-N	4.90e+01	1.646	RPD	09/08/03	0.000	20.000		
DUP	Phosphate	14265-44-2	<6.50e-1	n/a	RPD	09/08/03	0.000	20.000		U
DUP	Sulfate	14808-79-8	4.57e+01	2.436	RPD	09/08/03	0.000	20.000		
MS	Chloride	16887-00-6	9.20e-01	92.929	% Recov	09/08/03	75.000	125.000		
MS	Fluoride	16984-48-8	5.01e-01	102.454	% Recov	09/08/03	75.000	125.000		
MS	Nitrogen in Nitrite	NO2-N	4.63e-01	91.865	% Recov	09/08/03	75.000	125.000		
MS	Nitrogen in Nitrate	NO3-N	4.80e-01	107.623	% Recov	09/08/03	75.000	125.000		
MS	Phosphate	14265-44-2	7.86e-01	81.960	% Recov	09/08/03	75.000	125.000		
MS	Sulfate	14808-79-8	2.29e+00	116.244	% Recov	09/08/03	75.000	125.000		
MSD	Chloride	16887-00-6	9.84e-01	99.394	% Recov	09/08/03	75.000	125.000		
MSD	Fluoride	16984-48-8	5.51e-01	112.679	% Recov	09/08/03	75.000	125.000		
MSD	Nitrogen in Nitrite	NO2-N	4.99e-01	99.008	% Recov	09/08/03	75.000	125.000		
MSD	Nitrogen in Nitrate	NO3-N	6.88e-01	154.260	% Recov	09/08/03	75.000	125.000	*	
MSD	Phosphate	14265-44-2	8.82e-01	91.971	% Recov	09/08/03	75.000	125.000		
MSD	Sulfate	14808-79-8	2.23e+00	113.198	% Recov	09/08/03	75.000	125.000		

BATCH QC

BLANK	Chloride	16887-00-6	<1.40e-2	n/a	mg/L	09/08/03	0.000	300.000		U
BLANK	Chloride	16887-00-6	<1.40e-2	n/a	mg/L	09/08/03	0.000	300.000		U
BLANK	Fluoride	16984-48-8	<7.00e-3	n/a	mg/L	09/08/03	0.000	300.000		U
BLANK	Fluoride	16984-48-8	<7.00e-3	n/a	mg/L	09/08/03	0.000	300.000		U
BLANK	Nitrogen in Nitrite	NO2-N	<9.00e-3	n/a	mg/L	09/08/03	0.000	300.000		U
BLANK	Nitrogen in Nitrite	NO2-N	<9.00e-3	n/a	mg/L	09/08/03	0.000	300.000		U

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20031165
Matrix: SOLID
Test: Anions by Ion Chromatography

SAF Number: F03-006
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	<5.00e-3	n/a	mg/L	09/08/03	0.000	300.000	U
BLANK	Nitrogen in Nitrate	NO3-N	<5.00e-3	n/a	mg/L	09/08/03	0.000	300.000	U
BLANK	Phosphate	14265-44-2	<1.30e-2	n/a	mg/L	09/08/03	0.000	300.000	U
BLANK	Phosphate	14265-44-2	<1.30e-2	n/a	mg/L	09/08/03	0.000	300.000	U
BLANK	Sulfate	14808-79-8	<2.40e-2	n/a	mg/L	09/08/03	0.000	300.000	U
BLANK	Sulfate	14808-79-8	<2.40e-2	n/a	mg/L	09/08/03	0.000	300.000	U
LCS	Chloride	16887-00-6	2.00e+02	100.000	% Recov	09/08/03	80.000	120.000	
LCS	Fluoride	16984-48-8	1.07e+02	108.409	% Recov	09/08/03	80.000	120.000	
LCS	Nitrogen in Nitrite	NO2-N	9.75e+01	97.500	% Recov	09/08/03	80.000	120.000	
LCS	Nitrogen in Nitrate	NO3-N	9.56e+01	106.104	% Recov	09/08/03	80.000	120.000	
LCS	Phosphate	14265-44-2	1.95e+02	100.619	% Recov	09/08/03	80.000	120.000	
LCS	Sulfate	14808-79-8	4.02e+02	100.752	% Recov	09/08/03	80.000	120.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20031165
Matrix: SOLID
Test: Americium by AEA

SAF Number: F03-006
Sample Date: 08/26/03
Receive Date:08/26/03

Lab ID: W030000727

BATCH QC ASSOCIATED WITH SAMPLE

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
DUP	Americium-241	14596-10-2	3.6e-02	22.222	RPD	09/05/03	0.000	20.000	*

BATCH QC

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
BLANK	Americium-241	14596-10-2	1.7e-02	0.017	PCG	09/05/03	0.000	1000.000	
LCS	Americium-241	14596-10-2	12.36	93.992	% Recov	09/05/03	75.000	125.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20031165
Matrix: SOLID
Test: Plutonium Isotopics by AEA

SAF Number: F03-006
Sample Date: 08/26/03
Receive Date:08/26/03

Lab ID: W030000727

BATCH QC ASSOCIATED WITH SAMPLE

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
DUP	Pu-239/240 by AEA	PU-239/240	3.8e-03	2.597	RPD	09/08/03	0.000	20.000	

BATCH QC

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
BLANK	Pu-239/240 by AEA	PU-239/240	-4.0e-03	-0.004	PCG	09/08/03	0.000	1000.000	*
LCS	Pu-239/240 by AEA	PU-239/240	12.32	100.163	% Recov	09/08/03	75.000	125.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20031165
Matrix: SOLID
Test: SW-846 8270B Semi-Vols

SAF Number: F03-006
Sample Date: 08/26/03
Receive Date:08/26/03

Lab ID: W030000727
BATCH QC ASSOCIATED WITH SAMPLE

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
SURR	2-Fluorophenol	367-12-4	2776.0	83.900	%Recove	09/09/03	42.000	105.000	
SURR	2-Fluorobiphenyl	321-60-8	3193.6	96.500	%Recove	09/09/03	56.000	122.000	
SURR	Nitrobenzene-d5	4165-60-0	2814.3	85.000	%Recove	09/09/03	64.000	111.000	
SURR	Phenol-d5	4165-62-2	2662.5	80.400	%Recove	09/09/03	54.000	120.000	
SURR	2,4,6-Tribromophenol	118-79-6	2454.2	74.200	%Recove	09/09/03	24.000	122.000	
SURR	Terphenyl-d14 (7Cl)	98904-43-9	3001.2	90.700	%Recove	09/09/03	35.000	150.000	

Lab ID: W030000789
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	3002.4	90.500	% Recov	09/09/03	46.000	107.000	
MS	1,4-Dichlorobenzene	106-46-7	2979.5	89.800	% Recov	09/09/03	30.000	96.000	
MS	2,4-Dinitrotoluene	121-14-2	2812.3	84.700	% Recov	09/09/03	59.000	106.000	
MS	2-Fluorophenol	367-12-4	2844.1	85.700	%Recove	09/09/03	42.000	105.000	
MS	Acenaphthene	83-32-9	3306.9	99.700	% Recov	09/09/03	61.000	116.000	
MS	4-Chloro-3-methylphenol	59-50-7	4775.0	95.900	% Recov	09/09/03	61.000	106.000	
MS	2-Chlorophenol	95-57-8	4420.8	88.800	% Recov	09/09/03	66.000	106.000	
MS	N-Nitrosodi-n-dipropylamine	621-64-7	3300.9	99.500	% Recov	09/09/03	71.000	114.000	
MS	2-Fluorobiphenyl	321-60-8	3476.4	105.000	%Recove	09/09/03	56.000	122.000	
MS	Phenol	108-95-2	4674.7	93.900	% Recov	09/09/03	42.000	111.000	
MS	Nitrobenzene-d5	4165-60-0	2893.5	87.200	%Recove	09/09/03	64.000	111.000	
MS	4-Nitrophenol	100-02-7	4390.9	88.200	% Recov	09/09/03	32.000	118.000	
MS	Pentachlorophenol	87-86-5	4150.7	83.400	% Recov	09/09/03	62.000	114.000	
MS	Phenol-d5	4165-62-2	2861.4	86.200	%Recove	09/09/03	54.000	120.000	
MS	Pyrene	129-00-0	3153.3	95.000	% Recov	09/09/03	66.000	118.000	
MS	2,4,6-Tribromophenol	118-79-6	3076.8	92.700	%Recove	09/09/03	24.000	122.000	
MS	Terphenyl-d14 (7Cl)	98904-43-9	3169.2	95.500	%Recove	09/09/03	35.000	150.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20031165
Matrix: SOLID
Test: SW-846 8270B Semi-Vols

SAF Number: F03-006
Sample Date: 09/03/03
Receive Date:09/03/03

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
MSD	1,2,4-Trichlorobenzene	120-82-1	3104.0	93.600	% Recov	09/09/03	46.000	107.000	
MSD	1,4-Dichlorobenzene	106-46-7	3089.7	93.200	% Recov	09/09/03	30.000	96.000	
MSD	2,4-Dinitrotoluene	121-14-2	2753.6	83.100	% Recov	09/09/03	59.000	106.000	
MSD	2-Fluorophenol	367-12-4	2809.2	84.700	%Recove	09/09/03	42.000	105.000	
MSD	Acenaphthene	83-32-9	3077.4	92.800	% Recov	09/09/03	61.000	116.000	
MSD	4-Chloro-3-methylphenol	59-50-7	4834.8	97.200	% Recov	09/09/03	61.000	106.000	
MSD	2-Chlorophenol	95-57-8	4371.6	87.900	% Recov	09/09/03	66.000	106.000	
MSD	N-Nitrosodi-n-dipropylamine	621-64-7	3207.7	96.800	% Recov	09/09/03	71.000	114.000	
MSD	2-Fluorobiphenyl	321-60-8	3181.4	96.000	%Recove	09/09/03	56.000	122.000	
MSD	Phenol	108-95-2	4518.8	90.900	% Recov	09/09/03	42.000	111.000	
MSD	Nitrobenzene-d5	4165-60-0	2883.9	87.000	%Recove	09/09/03	64.000	111.000	
MSD	4-Nitrophenol	100-02-7	3890.8	78.200	% Recov	09/09/03	32.000	118.000	
MSD	Pentachlorophenol	87-86-5	4146.5	83.400	% Recov	09/09/03	62.000	114.000	
MSD	Phenol-d5	4165-62-2	2825.0	85.200	%Recove	09/09/03	54.000	120.000	
MSD	Pyrene	129-00-0	3106.2	93.700	% Recov	09/09/03	66.000	118.000	
MSD	2,4,6-Tribromophenol	118-79-6	2891.3	87.200	%Recove	09/09/03	24.000	122.000	
MSD	Terphenyl-d14 (7Cl)	98904-43-9	3107.4	93.700	%Recove	09/09/03	35.000	150.000	
SPK-RPD	1,2,4-Trichlorobenzene	120-82-1	93.600	3.368	RPD	09/09/03	0.000	20.000	
SPK-RPD	1,4-Dichlorobenzene	106-46-7	93.200	3.716	RPD	09/09/03	0.000	20.000	
SPK-RPD	2,4-Dinitrotoluene	121-14-2	83.100	1.907	RPD	09/09/03	0.000	20.000	
SPK-RPD	2-Fluorophenol	367-12-4	84.700	1.174	%Recove	09/09/03	0.000	20.000	
SPK-RPD	Acenaphthene	83-32-9	92.800	7.169	RPD	09/09/03	0.000	20.000	
SPK-RPD	4-Chloro-3-methylphenol	59-50-7	97.200	1.346	RPD	09/09/03	0.000	20.000	
SPK-RPD	2-Chlorophenol	95-57-8	87.900	1.019	RPD	09/09/03	0.000	20.000	
SPK-RPD	N-Nitrosodi-n-dipropylamine	621-64-7	96.800	2.751	RPD	09/09/03	0.000	20.000	
SPK-RPD	2-Fluorobiphenyl	321-60-8	96.000	8.955	%Recove	09/09/03	0.000	20.000	
SPK-RPD	Phenol	108-95-2	90.900	3.247	RPD	09/09/03	0.000	20.000	
SPK-RPD	Nitrobenzene-d5	4165-60-0	87.000	0.230	%Recove	09/09/03	0.000	20.000	
SPK-RPD	4-Nitrophenol	100-02-7	78.200	12.019	RPD	09/09/03	0.000	20.000	
SPK-RPD	Pentachlorophenol	87-86-5	83.400	0.000	RPD	09/09/03	0.000	20.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20031165
Matrix: SOLID
Test: SW-846 8270B Semi-Vols

SAF Number: F03-006
Sample Date: 09/03/03
Receive Date:09/03/03

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
SPK-RPD	Phenol-d5	4165-62-2	85.200	1.187	%Recove	09/09/03	0.000	20.000	
SPK-RPD	Pyrene	129-00-0	93.700	1.378	RPD	09/09/03	0.000	20.000	
SPK-RPD	2,4,6-Tribromophenol	118-79-6	87.200	6.115	%Recove	09/09/03	0.000	20.000	
SPK-RPD	Terphenyl-d14 (7Cl)	98904-43-9	93.700	1.903	%Recove	09/09/03	0.000	20.000	

BATCH QC

BLANK	1,2-Dichlorobenzene	95-50-1	< 360	n/a	ug/Kg	09/09/03			U
BLANK	1,2,4-Trichlorobenzene	120-82-1	< 290	n/a	ug/Kg	09/09/03			U
BLANK	1,3-Dichlorobenzene	541-73-1	< 320	n/a	ug/Kg	09/09/03			U
BLANK	1,4-Dichlorobenzene	106-46-7	< 310	n/a	ug/Kg	09/09/03			U
BLANK	2,4-Dichlorophenol	120-83-2	< 80	n/a	ug/Kg	09/09/03			U
BLANK	2,4-Dinitrotoluene	121-14-2	< 67	n/a	ug/Kg	09/09/03			U
BLANK	2,4,5-Trichlorophenol	95-95-4	< 73	n/a	ug/Kg	09/09/03			U
BLANK	2,4,6-Trichlorophenol	88-06-2	< 67	n/a	ug/Kg	09/09/03			U
BLANK	2,4-Dimethylphenol	105-67-9	< 67	n/a	ug/Kg	09/09/03			U
BLANK	2,6-Dinitrotoluene	606-20-2	< 67	n/a	ug/Kg	09/09/03			U
BLANK	2-Butoxyethanol	111-76-2	< 100	n/a	ug/Kg	09/09/03			U
BLANK	2-Chloronaphthalene	91-58-7	< 67	n/a	ug/Kg	09/09/03			U
BLANK	2-Fluorophenol	367-12-4	2697.9	80.900	%Recove	09/09/03	42.000	105.000	
BLANK	2-Methylnaphthalene	91-57-6	< 180	n/a	ug/Kg	09/09/03			U
BLANK	2-Methylphenol (cresol, o-)	95-48-7	< 67	n/a	ug/Kg	09/09/03			U
BLANK	2-Nitroaniline	88-74-4	< 67	n/a	ug/Kg	09/09/03			U
BLANK	2-Nitrophenol	88-75-5	< 170	n/a	ug/Kg	09/09/03			U
BLANK	3 & 4 Methylphenol Total	65794-96-9	< 110	n/a	ug/Kg	09/09/03	0.000	300.000	U
BLANK	3-Nitroaniline	99-09-2	< 67	n/a	ug/Kg	09/09/03			U
BLANK	4,6-Dinitro-2-methylphenol	534-52-1	< 670	n/a	ug/Kg	09/09/03			U
BLANK	4-Bromophenylphenyl ether	101-55-3	< 67	n/a	ug/Kg	09/09/03			U
BLANK	4-Chlorophenylphenyl ether	7005-72-3	< 67	n/a	ug/Kg	09/09/03			U
BLANK	Acenaphthene	83-32-9	< 67	n/a	ug/Kg	09/09/03			U
BLANK	Acenaphthylene	208-96-8	< 80	n/a	ug/Kg	09/09/03			U

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20031165
Matrix: SOLID
Test: SW-846 8270B Semi-Vols

SAF Number: F03-006
Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
BLANK	Anthracene	120-12-7	< 67	n/a	ug/Kg	09/09/03			U
BLANK	Bis(2-chloroethyl) ether	111-44-4	< 250	n/a	ug/Kg	09/09/03			U
BLANK	Benzo(a)anthracene	56-55-3	< 67	n/a	ug/Kg	09/09/03			U
BLANK	Benzo(b)fluoranthene	205-99-2	< 67	n/a	ug/Kg	09/09/03			U
BLANK	Benzo(ghi)perylene	191-24-2	< 67	n/a	ug/Kg	09/09/03			U
BLANK	Benzo(a)pyrene	50-32-8	< 67	n/a	ug/Kg	09/09/03			U
BLANK	Bis(2-Chloroethoxy)methane	111-91-1	< 110	n/a	ug/Kg	09/09/03			U
BLANK	Bis(2-ethylhexyl) phthalate	117-81-7	< 560	n/a	ug/Kg	09/09/03			U
BLANK	Bis(2-chloro-1-methylethyl)eth	108-60-1	< 250	n/a	ug/Kg	09/09/03	0.000	10.000	U
BLANK	Benzo(k)fluoranthene	207-08-9	< 67	n/a	ug/Kg	09/09/03			U
BLANK	Butylbenzylphthalate	85-68-7	< 67	n/a	ug/Kg	09/09/03			U
BLANK	Carbazole	86-74-8	< 80	n/a	ug/Kg	09/09/03			U
BLANK	4-Chloroaniline	106-47-8	< 93	n/a	ug/Kg	09/09/03			U
BLANK	4-Chloro-3-methylphenol	59-50-7	< 67	n/a	ug/Kg	09/09/03			U
BLANK	2-Chlorophenol	95-57-8	< 150	n/a	ug/Kg	09/09/03			U
BLANK	Chrysene	218-01-9	< 67	n/a	ug/Kg	09/09/03			U
BLANK	3,3'-Dichlorobenzidine	91-94-1	< 80	n/a	ug/Kg	09/09/03			U
BLANK	Dibenz[a,h]anthracene	53-70-3	< 67	n/a	ug/Kg	09/09/03			U
BLANK	Dibenzofuran	132-64-9	< 67	n/a	ug/Kg	09/09/03			U
BLANK	Di-n-butylphthalate	84-74-2	< 87	n/a	ug/Kg	09/09/03			U
BLANK	Diethylphthalate	84-66-2	< 190	n/a	ug/Kg	09/09/03			U
BLANK	Dimethyl phthalate	131-11-3	< 67	n/a	ug/Kg	09/09/03			U
BLANK	2,4-Dinitrophenol	51-28-5	< 670	n/a	ug/Kg	09/09/03			U
BLANK	Di-n-octylphthalate	117-84-0	< 67	n/a	ug/Kg	09/09/03			U
BLANK	N-Nitrosodi-n-dipropylamine	621-64-7	< 67	n/a	ug/Kg	09/09/03			U
BLANK	2-Fluorobiphenyl	321-60-8	2999.7	90.000	%Recove	09/09/03	56.000	122.000	
BLANK	Fluorene	86-73-7	< 67	n/a	ug/Kg	09/09/03			U
BLANK	Fluoranthene	206-44-0	< 67	n/a	ug/Kg	09/09/03			U
BLANK	Hexachlorobenzene	118-74-1	< 67	n/a	ug/Kg	09/09/03			U
BLANK	Hexachlorobutadiene	87-68-3	< 370	n/a	ug/Kg	09/09/03			U

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20031165
Matrix: SOLID
Test: SW-846 8270B Semi-Vols

SAF Number: F03-006
Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
BLANK	Hexachlorocyclopentadiene	77-47-4	< 310	n/a	ug/Kg	09/09/03			U
BLANK	Hexachloroethane	67-72-1	< 470	n/a	ug/Kg	09/09/03			U
BLANK	Indeno(1,2,3-cd)pyrene	193-39-5	< 67	n/a	ug/Kg	09/09/03			U
BLANK	Isophorone	78-59-1	< 67	n/a	ug/Kg	09/09/03			U
BLANK	Phenol	108-95-2	< 100	n/a	ug/Kg	09/09/03			U
BLANK	Naphthalene	91-20-3	< 290	n/a	ug/Kg	09/09/03			U
BLANK	Nitrobenzene-d5	4165-60-0	2663.3	79.900	%Recove	09/09/03	64.000	111.000	
BLANK	Nitrobenzene	98-95-3	< 260	n/a	ug/Kg	09/09/03			U
BLANK	4-Nitrophenol	100-02-7	< 650	n/a	ug/Kg	09/09/03			U
BLANK	4-Nitroaniline	100-01-6	< 250	n/a	ug/Kg	09/09/03			U
BLANK	N-Nitrosodiphenylamine	86-30-6	< 67	n/a	ug/Kg	09/09/03			U
BLANK	Pentachlorophenol	87-86-5	< 300	n/a	ug/Kg	09/09/03			U
BLANK	Phenanthrene	85-01-8	< 67	n/a	ug/Kg	09/09/03			U
BLANK	Phenol-d5	4165-62-2	2686.4	80.600	%Recove	09/09/03	54.000	120.000	
BLANK	Pyrene	129-00-0	< 67	n/a	ug/Kg	09/09/03			U
BLANK	Tributyl phosphate	126-73-8	< 67	n/a	ug/Kg	09/09/03			U
BLANK	2,4,6-Tribromophenol	118-79-6	2469.0	74.100	%Recove	09/09/03	24.000	122.000	
BLANK	Terphenyl-d14 (7Cl)	98904-43-9	3019.8	90.600	%Recove	09/09/03	35.000	150.000	
LCS	1,2,4-Trichlorobenzene	120-82-1	2966.0	89.000	% Recov	09/09/03	46.000	107.000	
LCS	1,4-Dichlorobenzene	106-46-7	2778.8	83.400	% Recov	09/09/03	42.000	111.000	
LCS	2,4-Dinitrotoluene	121-14-2	2733.8	82.000	% Recov	09/09/03	59.000	106.000	
LCS	2-Fluorophenol	367-12-4	2515.7	75.500	% Recov	09/09/03	50.000	110.000	
LCS	Acenaphthene	83-32-9	2935.0	88.100	% Recov	09/09/03	61.000	116.000	
LCS	4-Chloro-3-methylphenol	59-50-7	4519.3	90.400	% Recov	09/09/03	61.000	106.000	
LCS	2-Chlorophenol	95-57-8	4374.7	87.500	% Recov	09/09/03	66.000	106.000	
LCS	N-Nitrosodi-n-dipropylamine	621-64-7	3206.0	96.200	% Recov	09/09/03	71.000	114.000	
LCS	2-Fluorobiphenyl	321-60-8	3190.6	95.700	% Recov	09/09/03	58.000	109.000	
LCS	Phenol	108-95-2	4603.8	92.100	% Recov	09/09/03	67.000	105.000	
LCS	Nitrobenzene-d5	4165-60-0	2658.1	79.700	% Recov	09/09/03	60.000	118.000	
LCS	4-Nitrophenol	100-02-7	4391.6	87.800	% Recov	09/09/03	32.000	118.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20031165
Matrix: SOLID
Test: SW-846 8270B Semi-Vols

SAF Number: F03-006
Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
LCS	Pentachlorophenol	87-86-5	3927.9	78.600	% Recov	09/09/03	62.000	114.000	
LCS	Phenol-d5	4165-62-2	2632.0	79.000	% Recov	09/09/03	59.000	116.000	
LCS	Pyrene	129-00-0	3138.2	94.100	% Recov	09/09/03	66.000	118.000	
LCS	2,4,6-Tribromophenol	118-79-6	2660.3	79.800	% Recov	09/09/03	60.000	120.000	
LCS	Terphenyl-d14 (7Cl)	98904-43-9	3073.0	92.200	% Recov	09/09/03	60.000	120.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20031165
Matrix: SOLID
Test: PCBs complete list

SAF Number: F03-006
Sample Date: 08/26/03
Receive Date:08/26/03

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
Lab ID: W030000727									
BATCH QC ASSOCIATED WITH SAMPLE									
SURR	Decachlorobiphenyl	2051-24-3	823.92	81.300	% Recov	09/09/03	50.000	150.000	
SURR	Tetrachloro-m-xylene	877-09-8	835.07	82.400	% Recov	09/09/03	50.000	150.000	
Lab ID: W030000789									
BATCH QC ASSOCIATED WITH SAMPLE									
MS	Aroclor-1260	11096-82-5	784.60	76.000	% Recov	09/10/03	75.000	125.000	
MS	Decachlorobiphenyl	2051-24-3	771.45	74.700	% Recov	09/10/03	50.000	150.000	
MS	Tetrachloro-m-xylene	877-09-8	774.06	74.900	% Recov	09/10/03	50.000	150.000	
MSD	Aroclor-1260	11096-82-5	769.68	76.100	% Recov	09/10/03	75.000	125.000	
MSD	Decachlorobiphenyl	2051-24-3	929.32	91.900	% Recov	09/10/03	50.000	150.000	
MSD	Tetrachloro-m-xylene	877-09-8	805.17	79.600	% Recov	09/10/03	50.000	150.000	
SPK-RPD	Aroclor-1260	11096-82-5	76.100	0.131	RPD	09/09/03	0.000	25.000	
SPK-RPD	Decachlorobiphenyl	2051-24-3	91.900	20.648	RPD	09/09/03	0.000	20.000	*
SPK-RPD	Tetrachloro-m-xylene	877-09-8	79.600	6.084	RPD	09/09/03	0.000	20.000	
BATCH QC									
BLANK	Aroclor-1016	12674-11-2	< 50	n/a	ug/Kg	09/09/03			U
BLANK	Aroclor-1221	11104-28-2	< 100	n/a	ug/Kg	09/09/03			U
BLANK	Aroclor-1232	11141-16-5	< 50	n/a	ug/Kg	09/09/03			U
BLANK	Aroclor-1242	53469-21-9	< 50	n/a	ug/Kg	09/09/03			U
BLANK	Aroclor-1248	12672-29-6	< 50	n/a	ug/Kg	09/09/03			U
BLANK	Aroclor-1254	11097-69-1	< 50	n/a	ug/Kg	09/09/03			U
BLANK	Aroclor-1260	11096-82-5	< 50	n/a	ug/Kg	09/09/03			U
BLANK	Aroclor-1262	37324-23-5	< 50	n/a	ug/Kg	09/09/03			U
BLANK	Aroclor-1268	11100-14-4	< 50	n/a	ug/Kg	09/09/03			U
BLANK	Decachlorobiphenyl	2051-24-3	857.03	85.700	% Recov	09/09/03	50.000	150.000	

WSCF ANALYTICAL LABORATORY QC REPORT

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SDG Number: WSCF20031165
Matrix: SOLID
Test: PCBs complete list

SAF Number: F03-006
Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
BLANK	Tetrachloro-m-xylene	877-09-8	902.28	90.200	% Recov	09/09/03	50.000	150.000	
LCS	Aroclor-1260	11096-82-5	948.86	94.900	% Recov	09/09/03	70.000	130.000	
LCS	Decachlorobiphenyl	2051-24-3	764.80	76.500	% Recov	09/09/03	50.000	150.000	
LCS	Tetrachloro-m-xylene	877-09-8	809.23	80.900	% Recov	09/09/03	50.000	150.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20031165
Matrix: SOLID
Test: WTPH-D TPH Diesel Range (Wa)

SAF Number: F03-006
Sample Date: 08/26/03
Receive Date:08/26/03

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
Lab ID: W030000727									
BATCH QC ASSOCIATED WITH SAMPLE									
SURR	ortho-Terphenyl Surr	84-15-1	24917	83.000	% Recov	09/08/03	70.000	130.000	
Lab ID: W030000789									
BATCH QC ASSOCIATED WITH SAMPLE									
MS	ortho-Terphenyl Surr	84-15-1	24295	98.000	% Recov	09/09/03	70.000	130.000	
MS	Total Pet. Hydrocarbons Diesel	TPHDIESEL	91228	73.600	% Recov	09/09/03	75.000	125.000	*
MSD	ortho-Terphenyl Surr	84-15-1	20720	83.500	% Recov	09/09/03	70.000	130.000	
MSD	Total Pet. Hydrocarbons Diesel	TPHDIESEL	97917	78.900	% Recov	09/09/03	75.000	125.000	
SPK-RPD	ortho-Terphenyl Surr	84-15-1	83.500	15.978	RPD	09/08/03	0.000	20.000	
SPK-RPD	Total Pet. Hydrocarbons Diesel	TPHDIESEL	78.900	6.951	RPD	09/08/03	0.000	20.000	
BATCH QC									
BLANK	Kerosene	TPHKEROSENE	< 3800	n/a	ug/Kg	09/08/03	0.000	100.000	U
BLANK	ortho-Terphenyl Surr	84-15-1	24630	98.500	ug/Kg	09/08/03	70.000	130.000	
BLANK	Total Pet. Hydrocarbons Diesel	TPHDIESEL	< 3800	n/a	ug/Kg	09/08/03	0.000	300.000	U
LCS	Kerosene	TPHKEROSENE	100640	80.500	%Recove	09/08/03	70.000	130.000	
LCS	ortho-Terphenyl Surr	84-15-1	24278	97.100	% Recov	09/08/03	70.000	130.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20031165
Matrix: SOLID
Test: ICP-2008 MS All possible metal

SAF Number: F03-006
Sample Date: 08/14/03
Receive Date:08/14/03

Lab ID: W030000715
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	377.8	93.608	% Recov	09/15/03	70.000	130.000	
MS	Arsenic	7440-38-2	381.6	94.549	% Recov	09/15/03	70.000	130.000	
MS	Barium	7440-39-3	353.9	87.686	% Recov	09/15/03	70.000	130.000	
MS	Beryllium	7440-41-7	347.8	86.174	% Recov	09/15/03	70.000	130.000	
MS	Chromium	7440-47-3	360.5	89.321	% Recov	09/15/03	70.000	130.000	
MS	Copper	7440-50-8	356.5	88.330	% Recov	09/15/03	70.000	130.000	
MS	Mercury	7439-97-6	23.5	116.337	% Recov	09/15/03	70.000	130.000	
MS	Nickel	7440-02-0	352.8	87.413	% Recov	09/15/03	70.000	130.000	
MS	Lead	7439-92-1	359	88.949	% Recov	09/15/03	70.000	130.000	
MS	Antimony	7440-36-0	396.1	98.142	% Recov	09/15/03	70.000	130.000	
MS	Uranium	7440-61-1	365.3	90.510	% Recov	09/15/03	70.000	130.000	
MSD	Silver	7440-22-4	372.2	92.220	% Recov	09/15/03	70.000	130.000	
MSD	Arsenic	7440-38-2	361	89.445	% Recov	09/15/03	70.000	130.000	
MSD	Barium	7440-39-3	340.7	84.415	% Recov	09/15/03	70.000	130.000	
MSD	Beryllium	7440-41-7	334	82.755	% Recov	09/15/03	70.000	130.000	
MSD	Chromium	7440-47-3	350.8	86.918	% Recov	09/15/03	70.000	130.000	
MSD	Copper	7440-50-8	352.3	87.289	% Recov	09/15/03	70.000	130.000	
MSD	Mercury	7439-97-6	23.03	114.010	% Recov	09/15/03	70.000	130.000	
MSD	Nickel	7440-02-0	341.5	84.613	% Recov	09/15/03	70.000	130.000	
MSD	Lead	7439-92-1	348.3	86.298	% Recov	09/15/03	70.000	130.000	
MSD	Antimony	7440-36-0	381.4	94.500	% Recov	09/15/03	70.000	130.000	
MSD	Uranium	7440-61-1	354.5	87.834	% Recov	09/15/03	70.000	130.000	

Lab ID: W030000723
BATCH QC ASSOCIATED WITH SAMPLE

MS	Silver	7440-22-4	368.4	92.843	% Recov	09/15/03	70.000	130.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20031165
Matrix: SOLID
Test: ICP-2008 MS All possible metal

SAF Number: F03-006
Sample Date: 08/22/03
Receive Date:08/25/03

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
MS	Arsenic	7440-38-2	365.756	92.176	% Recov	09/15/03	70.000	130.000	
MS	Barium	7440-39-3	357.11	89.997	% Recov	09/15/03	70.000	130.000	
MS	Beryllium	7440-41-7	352.3	88.785	% Recov	09/15/03	70.000	130.000	
MS	Chromium	7440-47-3	342.81	86.394	% Recov	09/15/03	70.000	130.000	
MS	Copper	7440-50-8	336.62	84.834	% Recov	09/15/03	70.000	130.000	
MS	Mercury	7439-97-6	22.33	112.778	% Recov	09/15/03	70.000	130.000	
MS	Nickel	7440-02-0	330.67	83.334	% Recov	09/15/03	70.000	130.000	
MS	Lead	7439-92-1	357.9	90.197	% Recov	09/15/03	70.000	130.000	
MS	Antimony	7440-36-0	363.8	91.683	% Recov	09/15/03	70.000	130.000	
MS	Uranium	7440-61-1	360.3	90.801	% Recov	09/15/03	70.000	130.000	
MSD	Silver	7440-22-4	384.8	96.976	% Recov	09/15/03	70.000	130.000	
MSD	Arsenic	7440-38-2	378.756	95.453	% Recov	09/15/03	70.000	130.000	
MSD	Barium	7440-39-3	366.31	92.316	% Recov	09/15/03	70.000	130.000	
MSD	Beryllium	7440-41-7	355.3	89.541	% Recov	09/15/03	70.000	130.000	
MSD	Chromium	7440-47-3	353.81	89.115	% Recov	09/15/03	70.000	130.000	
MSD	Copper	7440-50-8	347.42	87.555	% Recov	09/15/03	70.000	130.000	
MSD	Mercury	7439-97-6	23.02	116.283	% Recov	09/15/03	70.000	130.000	
MSD	Nickel	7440-02-0	341.57	86.081	% Recov	09/15/03	70.000	130.000	
MSD	Lead	7439-92-1	369.5	93.120	% Recov	09/15/03	70.000	130.000	
MSD	Antimony	7440-36-0	374.8	94.456	% Recov	09/15/03	70.000	130.000	
MSD	Uranium	7440-61-1	370.1	93.271	% Recov	09/15/03	70.000	130.000	

Lab ID: W030000727
BATCH QC ASSOCIATED WITH SAMPLE

MS	Silver	7440-22-4	364.006	91.093	% Recov	09/15/03	70.000	130.000	
MS	Arsenic	7440-38-2	369.881	92.563	% Recov	09/15/03	70.000	130.000	
MS	Barium	7440-39-3	341.31	85.413	% Recov	09/15/03	70.000	130.000	
MS	Beryllium	7440-41-7	353.9	88.564	% Recov	09/15/03	70.000	130.000	
MS	Chromium	7440-47-3	348.28	87.157	% Recov	09/15/03	70.000	130.000	
MS	Copper	7440-50-8	343	85.836	% Recov	09/15/03	70.000	130.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20031165
Matrix: SOLID
Test: ICP-2008 MS All possible metal

SAF Number: F03-006
Sample Date: 08/26/03
Receive Date:08/26/03

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
MS	Mercury	7439-97-6	22.41	112.050	% Recov	09/15/03	70.000	130.000	
MS	Nickel	7440-02-0	339.03	84.842	% Recov	09/15/03	70.000	130.000	
MS	Lead	7439-92-1	360.6	90.240	% Recov	09/15/03	70.000	130.000	
MS	Antimony	7440-36-0	359.8	90.040	% Recov	09/15/03	70.000	130.000	
MS	Uranium	7440-61-1	362.3	90.686	% Recov	09/15/03	70.000	130.000	
MSD	Silver	7440-22-4	389.506	97.474	% Recov	09/15/03	70.000	130.000	
MSD	Arsenic	7440-38-2	386.981	96.842	% Recov	09/15/03	70.000	130.000	
MSD	Barium	7440-39-3	355.41	88.941	% Recov	09/15/03	70.000	130.000	
MSD	Beryllium	7440-41-7	362.9	90.816	% Recov	09/15/03	70.000	130.000	
MSD	Chromium	7440-47-3	361.28	90.410	% Recov	09/15/03	70.000	130.000	
MSD	Copper	7440-50-8	361.1	90.365	% Recov	09/15/03	70.000	130.000	
MSD	Mercury	7439-97-6	23.63	118.150	% Recov	09/15/03	70.000	130.000	
MSD	Nickel	7440-02-0	347.13	86.869	% Recov	09/15/03	70.000	130.000	
MSD	Lead	7439-92-1	373.5	93.468	% Recov	09/15/03	70.000	130.000	
MSD	Antimony	7440-36-0	376.9	94.319	% Recov	09/15/03	70.000	130.000	
MSD	Uranium	7440-61-1	376.6	94.244	% Recov	09/15/03	70.000	130.000	

BATCH QC

BLANK	Silver	7440-22-4	<0.2	n/a	ug/L	09/15/03	-0.440	0.440	U
BLANK	Arsenic	7440-38-2	<0.3	n/a	ug/L	09/15/03	-0.660	0.660	U
BLANK	Barium	7440-39-3	<0.2	n/a	ug/L	09/15/03	-0.440	0.440	U
BLANK	Beryllium	7440-41-7	<0.3	n/a	ug/L	09/15/03	-0.660	0.660	U
BLANK	Chromium	7440-47-3	<0.3	n/a	ug/L	09/15/03	-0.660	0.660	U
BLANK	Copper	7440-50-8	<0.5	n/a	ug/L	09/15/03	-1.100	1.100	U
BLANK	Mercury	7439-97-6	<0.1	n/a	ug/L	09/15/03	-0.220	0.220	U
BLANK	Nickel	7440-02-0	<0.5	n/a	ug/L	09/15/03	-1.100	1.100	U
BLANK	Lead	7439-92-1	<1.2	n/a	ug/L	09/15/03	-2.640	2.640	U
BLANK	Antimony	7440-36-0	<0.5	n/a	ug/L	09/15/03	-1.100	1.100	U
BLANK	Uranium	7440-61-1	<0.1	n/a	ug/L	09/15/03	-0.220	0.220	U
LCS	Silver	7440-22-4	168.7	141.765	% Recov	09/15/03	85.000	115.000	*

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20031165
Matrix: SOLID
Test: ICP-2008 MS All possible metal

SAF Number: F03-006
Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
LCS	Arsenic	7440-38-2	198	101.538	% Recov	09/15/03	85.000	115.000	
LCS	Barium	7440-39-3	381.8	97.398	% Recov	09/15/03	85.000	115.000	
LCS	Beryllium	7440-41-7	73.36	97.424	% Recov	09/15/03	85.000	115.000	
LCS	Chromium	7440-47-3	80.8	93.410	% Recov	09/15/03	85.000	115.000	
LCS	Copper	7440-50-8	122	96.063	% Recov	09/15/03	85.000	115.000	
LCS	Mercury	7439-97-6	9.933	105.558	% Recov	09/15/03	85.000	115.000	
LCS	Nickel	7440-02-0	84.5	101.077	% Recov	09/15/03	85.000	115.000	
LCS	Lead	7439-92-1	93.19	98.614	% Recov	09/15/03	85.000	115.000	
LCS	Antimony	7440-36-0	124.8	90.435	% Recov	09/15/03	85.000	115.000	
LCS	Uranium	7440-61-1	371.9	95.851	% Recov	09/15/03	85.000	115.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20031165
Matrix: SOLID
Test: Ammonia (N) by IC

SAF Number: F03-006
Sample Date: 08/26/03
Receive Date:08/26/03

Lab ID: W030000727

BATCH QC ASSOCIATED WITH SAMPLE

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
DUP	Ammonia (N) by IC	7664-41-7	<2.00e-1	n/a	RPD	09/20/03	0.000	20.000	U
MS	Ammonia (N) by IC	7664-41-7	1.70e-01	103.030	% Recov	09/20/03	75.000	125.000	
MSD	Ammonia (N) by IC	7664-41-7	1.73e-01	104.848	% Recov	09/20/03	75.000	125.000	

BATCH QC

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
BLNK-PREP	Ammonia (N) by IC	7664-41-7	<4.00e-3	n/a	Ratio	09/20/03			U
BLNK-PREP	Ammonia (N) by IC	7664-41-7	<4.00e-3	n/a	Ratio	09/20/03			U
LCS	Ammonia (N) by IC	7664-41-7	7.59e+01	91.556	% Recov	09/20/03	80.000	120.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20031165
Matrix: SOLID
Test: Uranium Isotopics by AEA

SAF Number: F03-006
Sample Date: 08/26/03
Receive Date:08/26/03

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
Lab ID: W030000727									
BATCH QC ASSOCIATED WITH SAMPLE									
DUP	Uranium-238	U-238	2.5e-01	17.391	RPD	09/05/03	0.000	20.000	
BATCH QC									
BLANK	Uranium-238	24678-82-8	1.1e-02	0.011	PCG	09/05/03	0.000	1000.000	
LCS	Uranium-238	24678-82-8	3.9e+01	102.875	% Recov	09/05/03	75.000	125.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20031165
Matrix: SOLID
Test: NWTPH-GX TPH Gasoline Range

SAF Number: F03-006
Sample Date: 08/26/03
Receive Date:08/26/03

Lab ID: W030000727

BATCH QC ASSOCIATED WITH SAMPLE

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
MS	Total Pet. Hydrocarbons Gas	TPHGASOLINE	3400	98.551	% Recov	09/03/03	50.000	150.000	
MSD	Total Pet. Hydrocarbons Gas	TPHGASOLINE	3200	92.754	% Recov	09/03/03	50.000	150.000	
SPK-RPD	Total Pet. Hydrocarbons Gas	TPHGASOLINE	92.754	6.060	RPD	09/03/03	0.000	20.000	

BATCH QC

BLANK	Total Pet. Hydrocarbons Gas	TPHGASOLINE	<250	n/a	mg/L	09/03/03	0.000	300.000	U
LCS	Total Pet. Hydrocarbons Gas	TPHGASOLINE	3800	110.145	% Recov	09/03/03	85.000	115.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20031165
Matrix: SOLID
Test: Alcohols, Glycols - 8015

SAF Number: F03-006
Sample Date: 08/26/03
Receive Date:08/26/03

Lab ID: W030000727

BATCH QC ASSOCIATED WITH SAMPLE

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
DUP	2-Bromoethanol	540-51-2	NA	n/a	rpd	09/03/03	0.000	25.000	
DUP	Diethyl ether	60-29-7	NA	n/a	RPD	09/03/03	0.000	25.000	
DUP	Ethylene glycol	107-21-1	NA	n/a	RPD	09/03/03	0.000	25.000	
DUP	Methanol	67-56-1	NA	n/a	RPD	09/03/03	0.000	25.000	
MS	2-Bromoethanol	540-51-2	7500	75.000	%Recove	09/03/03	70.000	125.000	
MS	Diethyl ether	60-29-7	9200	92.000	%Recove	09/03/03	75.000	125.000	
MS	Ethylene glycol	107-21-1	8500	85.000	%Recove	09/03/03	75.000	125.000	
MS	Methanol	67-56-1	10000	100.000	%Recove	09/03/03	75.000	125.000	
MSD	2-Bromoethanol	540-51-2	7700	77.000	%Recove	09/03/03	70.000	125.000	
MSD	Diethyl ether	60-29-7	10000	100.000	%Recove	09/03/03	75.000	125.000	
MSD	Ethylene glycol	107-21-1	7600	76.000	%Recove	09/03/03	75.000	125.000	
MSD	Methanol	67-56-1	10000	100.000	%Recove	09/03/03	75.000	125.000	
SPK-RPD	2-Bromoethanol	540-51-2	77.000	2.632	RPD	09/03/03	0.000	20.000	
SPK-RPD	Diethyl ether	60-29-7	100.000	8.333	RPD	09/03/03	0.000	20.000	
SPK-RPD	Ethylene glycol	107-21-1	76.000	11.180	RPD	09/03/03	0.000	20.000	
SPK-RPD	Methanol	67-56-1	100.000	0.000	RPD	09/03/03	0.000	20.000	

BATCH QC

BLANK	2-Bromoethanol	540-51-2	8200	0.820	ug/Kg	09/03/03	0.000	10.000	
BLANK	Diethyl ether	60-29-7	<5000	n/a	ug/Kg	09/03/03	0.000	10.000	U
BLANK	Ethylene glycol	107-21-1	<5000	n/a	ug/Kg	09/03/03	0.000	5.000	U
BLANK	Methanol	67-56-1	<1000	n/a	ug/Kg	09/03/03	0.000	10.000	U
LCS	2-Bromoethanol	540-51-2	7200	72.000	%Recove	09/03/03	70.000	130.000	
LCS	Diethyl ether	60-29-7	9300	93.000	%Recove	09/03/03	70.000	130.000	
LCS	Ethylene glycol	107-21-1	12000	120.000	%Recove	09/03/03	70.000	130.000	
LCS	Methanol	67-56-1	11000	110.000	%Recove	09/03/03	70.000	130.000	

WSCF ANALYTICAL LABORATORY QC REPORT

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SDG Number: WSCF20031165
Matrix: SOLID
Test: Alcohols, Glycols - 8015

SAF Number: F03-006
Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ

WSCF ANALYTICAL LABORATORY QC REPORT

2 - 38

SDG Number: WSCF20031165
Matrix: SOLID
Test: Gamma Energy Analysis-grd H2O

SAF Number: F03-006
Sample Date: 08/26/03
Receive Date:08/26/03

Lab ID: W030000727
BATCH QC ASSOCIATED WITH SAMPLE

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
DUP	Actinium-228	14331-83-0	9.55e-01	2.890	RPD	09/29/03	0.000	20.000	
DUP	Americium-241	14596-10-2	U-2.77e-1	n/a	RPD	09/29/03	0.000	20.000	
DUP	Bismuth-212	14913-49-6	7.52e-01	28.919	RPD	09/29/03	0.000	20.000	*
DUP	Bismuth-214	14733-03-0	7.17e-01	11.934	RPD	09/29/03	0.000	20.000	
DUP	Cerium-144	14762-78-8	U-1.07e-1	n/a	RPD	09/29/03	0.000	20.000	
DUP	Cobalt-60	10198-40-0	5.77e-02	50.325	RPD	09/29/03	0.000	20.000	*
DUP	Cesium-134	13967-70-9	U5.72e-02	n/a	RPD	09/29/03	0.000	20.000	
DUP	Cesium-137	10045-97-3	U-1.04e-2	n/a	RPD	09/29/03	0.000	20.000	
DUP	Europium-152	14683-23-9	U-1.87e-3	n/a	RPD	09/29/03	0.000	20.000	
DUP	Europium-154	15585-10-1	U-2.17e-2	n/a	RPD	09/29/03	0.000	20.000	
DUP	Europium-155	14391-16-3	U-1.00e-4	n/a	RPD	09/29/03	0.000	20.000	
DUP	Niobium-94	14681-63-1	U1.00e-02	n/a	RPD	09/29/03	0.000	20.000	
DUP	Lead-212	15092-94-1	1.03e+00	2.871	RPD	09/29/03	0.000	20.000	
DUP	Lead-214	15067-28-4	8.17e-01	1.096	RPD	09/29/03	0.000	20.000	
DUP	Radium-226	13982-63-3	7.17e-01	11.934	RPD	09/29/03	0.000	20.000	
DUP	Radium-228	15262-20-1	9.55e-01	2.890	RPD	09/29/03	0.000	20.000	
DUP	Ruthenium-103	13968-53-1	U1.50e-03	n/a	RPD	09/29/03	0.000	20.000	
DUP	Ruthenium-106	13967-48-1	U5.34e-02	n/a	RPD	09/29/03	0.000	20.000	
DUP	Antimony-125	14234-35-6	U2.18e-02	n/a	RPD	09/29/03	0.000	20.000	
DUP	Tin-113	13966-06-8	U-2.16e-3	n/a	RPD	09/29/03	0.000	20.000	
DUP	Tin-126	15832-50-5	U2.52e-01	n/a	RPD	09/29/03	0.000	20.000	
DUP	Thorium-234	15065-10-8	U1.49e+00	n/a	RPD	09/29/03	0.000	20.000	
DUP	Thallium-208	14913-50-9	3.20e-01	5.128	RPD	09/29/03	0.000	20.000	
DUP	Uranium-235	15117-96-1	U1.31e-01	n/a	RPD	09/29/03	0.000	20.000	
DUP	Zinc-65	13982-39-3	U1.54e-02	n/a	RPD	09/29/03	0.000	20.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20031165
Matrix: SOLID
Test: Gamma Energy Analysis-grd H2O

SAF Number: F03-006
Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
BATCH QC									
BLANK	Actinium-228	14331-83-0	5.75e-02	0.058	pCi/g	09/25/03	-10000.000	1000.000	
BLANK	Americium-241	14596-10-2	U-3.63e-2	n/a	pCi/g	09/25/03	-10000.000	1000.000	
BLANK	Bismuth-212	14913-49-6	U2.70e-02	n/a	pCi/g	09/25/03	-10000.000	1000.000	
BLANK	Bismuth-214	14733-03-0	5.92e-02	0.059	pCi/g	09/25/03	-10000.000	1000.000	
BLANK	Cerium-144	14762-78-8	U1.48e-02	n/a	pCi/g	09/25/03	-10000.000	1000.000	
BLANK	Cobalt-60	10198-40-0	U-1.04e-3	n/a	pCi/g	09/25/03	-10000.000	1000.000	
BLANK	Cesium-134	13967-70-9	U5.68e-03	n/a	pCi/g	09/25/03	-10000.000	1000.000	
BLANK	Cesium-137	10045-97-3	U1.50e-03	n/a	pCi/g	09/25/03	-10000.000	1000.000	
BLANK	Europium-152	14683-23-9	U-1.62e-3	n/a	pCi/g	09/25/03	-10000.000	1000.000	
BLANK	Europium-154	15585-10-1	U-3.26e-3	n/a	pCi/g	09/25/03	-10000.000	1000.000	
BLANK	Europium-155	14391-16-3	U1.15e-03	n/a	pCi/g	09/25/03	-10000.000	1000.000	
BLANK	Niobium-94	14681-63-1	U7.82e-05	n/a	pCi/g	09/25/03	-10000.000	1000.000	
BLANK	Lead-212	15092-94-1	5.24e-02	0.052	pCi/g	09/25/03	-10000.000	1000.000	
BLANK	Lead-214	15067-28-4	7.28e-02	0.073	pCi/g	09/25/03	-10000.000	1000.000	
BLANK	Radium-226	13982-63-3	5.92e-02	0.059	pCi/g	09/25/03	-10000.000	1000.000	
BLANK	Radium-228	15262-20-1	5.75e-02	0.058	pCi/g	09/25/03	-10000.000	1000.000	
BLANK	Ruthenium-103	13968-53-1	U1.08e-04	n/a	pCi/g	09/25/03	-10000.000	1000.000	
BLANK	Ruthenium-106	13967-48-1	U-2.69e-2	n/a	pCi/g	09/25/03	-10000.000	1000.000	
BLANK	Antimony-125	14234-35-6	U9.90e-03	n/a	pCi/g	09/25/03	-10000.000	1000.000	
BLANK	Tin-113	13966-06-8	U2.53e-03	n/a	pCi/g	09/25/03	-10000.000	1000.000	
BLANK	Tin-126	15832-50-5	U-1.93e-3	n/a	pCi/g	09/25/03	-10000.000	1000.000	
BLANK	Thorium-234	15065-10-8	U7.47e-04	n/a	pCi/g	09/25/03	-10000.000	1000.000	
BLANK	Thallium-208	14913-50-9	1.19e-02	0.012	pCi/g	09/25/03	-10000.000	1000.000	
BLANK	Uranium-235	15117-96-1	U1.47e-02	n/a	pCi/g	09/25/03	-10000.000	1000.000	
BLANK	Zinc-65	13982-39-3	U-6.25e-3	n/a	pCi/g	09/25/03	-10000.000	1000.000	
LCS	Americium-241	14596-10-2	3.95e+03	100.765	% Recov	09/30/03	80.000	120.000	
LCS	Cobalt-60	10198-40-0	4.18e+03	99.761	% Recov	09/30/03	80.000	120.000	
LCS	Cesium-137	10045-97-3	3.71e+03	103.631	% Recov	09/30/03	80.000	120.000	

LABCORE Completed Worklist Report for Worklist# 20431

Analyst: skb **Instrument:** ICP405 **Book#** _____

Method: _____ Rev/Mod _____

Worklist Comment:

Seq	Type	Sample#	R	A	Test	Matrix	Actual		Found	DL or Yield	Unit
1	BLANK		0		@ICP-GPP BI-32	SOLID	1.00		<0.1		ug/L
1	BLANK		0		@ICP-GPP B-32	SOLID	1.00		<0.102		ug/L
2	LCS		0		@ICP-GPP BI-32	SOLID	494		283	57.287	% Recovery
2	LCS		0		@ICP-GPP B-32	SOLID	64.1		57.7	90.016	% Recovery
3	SAMPLE	W030000817	0	M	@GPP6010 B-32	SOLID	N/A	<	5.07	5.070	ug/g
3	SAMPLE	W030000817	0	M	@GPP6010 BI-32	SOLID	N/A	<	4.97	4.970	ug/g
4	SAMPLE	W030000818	0	M	@GPP6010 B-32	SOLID	N/A	<	5.08	5.080	ug/g
4	SAMPLE	W030000818	0	M	@GPP6010 BI-32	SOLID	N/A	<	4.98	4.980	ug/g
5	SAMPLE	W030000819	0	M	@GPP6010 B-32	SOLID	N/A	<	5.1	5.100	ug/g
5	SAMPLE	W030000819	0	M	@GPP6010 BI-32	SOLID	N/A	<	5.0	5.000	ug/g
6	MS	W030000819	0	M	@GPP6010 B-32	SOLID	249		264	106.024	% Recovery
6	MS	W030000819	0	M	@GPP6010 BI-32	SOLID	249		240	96.386	% Recovery
7	MSD	W030000819	0	M	@GPP6010 B-32	SOLID	247		266	107.692	% Recovery
7	MSD	W030000819	0	M	@GPP6010 BI-32	SOLID	247		244	98.785	% Recovery
8	SAMPLE	W030000727	0	M	@ICP-GPP BI-32	SOLID	N/A	<	4.97	4.970	ug/g
8	SAMPLE	W030000727	0	M	@ICP-GPP B-32	SOLID	N/A	<	5.07	5.070	ug/g
9	SAMPLE	W030000775	0	M	@ICP-GPP BI-32	SOLID	N/A	<	4.96	4.960	ug/g
9	SAMPLE	W030000775	0	M	@ICP-GPP B-32	SOLID	N/A	<	5.06	5.060	ug/g
10	SAMPLE	W030000799	0	M	@ICP-GPP BI-32	SOLID	N/A	<	4.95	4.950	ug/g
10	SAMPLE	W030000799	0	M	@ICP-GPP B-32	SOLID	N/A	<	5.05	5.050	ug/g
11	SAMPLE	W030000800	0	M	@ICP-GPP BI-32	SOLID	N/A	<	4.98	4.980	ug/g
11	SAMPLE	W030000800	0	M	@ICP-GPP B-32	SOLID	N/A	<	5.08	5.080	ug/g
12	SAMPLE	W030000789	0	M	@ICP-GPP BI-32	SOLID	N/A	<	4.99	4.990	ug/g
12	SAMPLE	W030000789	0	M	@ICP-GPP B-32	SOLID	N/A	<	5.09	5.090	ug/g
13	SAMPLE	W030000790	0	M	@ICP-GPP BI-32	SOLID	N/A	<	4.94	4.940	ug/g
13	SAMPLE	W030000790	0	M	@ICP-GPP B-32	SOLID	N/A	<	5.04	5.040	ug/g
14	SAMPLE	W030000791	0	M	@ICP-GPP BI-32	SOLID	N/A	<	4.96	4.960	ug/g
14	SAMPLE	W030000791	0	M	@ICP-GPP B-32	SOLID	N/A	<	5.06	5.060	ug/g
15	SAMPLE	W030000792	0	M	@ICP-GPP BI-32	SOLID	N/A	<	4.98	4.980	ug/g
15	SAMPLE	W030000792	0	M	@ICP-GPP B-32	SOLID	N/A	<	5.08	5.080	ug/g
16	SAMPLE	W030000793	0	M	@ICP-GPP BI-32	SOLID	N/A	<	4.98	4.980	ug/g
16	SAMPLE	W030000793	0	M	@ICP-GPP B-32	SOLID	N/A	<	5.08	5.080	ug/g
17	SAMPLE	W030000794	0	M	@ICP-GPP BI-32	SOLID	N/A	<	4.92	4.920	ug/g
17	SAMPLE	W030000794	0	M	@ICP-GPP B-32	SOLID	N/A	<	5.02	5.020	ug/g
18	SAMPLE	W030000795	0	M	@ICP-GPP BI-32	SOLID	N/A	<	4.95	4.950	ug/g
18	SAMPLE	W030000795	0	M	@ICP-GPP B-32	SOLID	N/A	<	5.05	5.050	ug/g
19	SAMPLE	W030000796	0	M	@ICP-GPP BI-32	SOLID	N/A	<	4.92	4.920	ug/g
19	SAMPLE	W030000796	0	M	@ICP-GPP B-32	SOLID	N/A	<	5.01	5.010	ug/g
	SPK-RPD	W030000819	0	M	@GPP6010 B-32	SOLID	106.024		107.692	1.561	RPD
	SPK-RPD	W030000819	0	M	@GPP6010 BI-32	SOLID	96.386		98.785	2.458	RPD

Units shown for QC (BLK/BKG) may not reflect the actual units.

T4180-03-SLF-041

ATTACHMENT 3

SAMPLE RECEIPT INFORMATION

Consisting of 2 pages
Cover page not included

9/24

FH-Central Plateau Project	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F03-006-198	Page 1 of 1

Collector Pope/Pfister/Hughes/Johansen	Company Contact LC Hulstrom	Telephone No. 373-3928	Project Coordinator TRENT, SJ	Price Code 8N Data Turnaround 45 Days
Project Designation 200-PW-2/200-PW-4 OU - Borehole Soil Sampling	Sampling Location 216-A-36B ~~(C3248)~~ - 292-294.5' (C4160)		SAF No. F03-006	Air Quality ☐
Ice Chest No.	Field Logbook No. HNF-N-3361	COA 117504ES10	Method of Shipment Federal Express	
Shipped To Waste Sampling & Characterization	Offsite Property No.		Bill of Lading/Air Bill No.	

POSSIBLE SAMPLE HAZARDS/REMARKS

Special Handling and/or Storage

20031165

Preservation	Cool 4C	Cool 4C	Cool 4C								
Type of Container	aG	Gs*	~~aG~~ P								
No. of Container(s)	1	2	1								
Volume	40mL	40mL	~~425mL~~ 500 mL								
SAMPLE ANALYSIS	See item (1) in Special Instructions.	See item (2) in Special Instructions.	See item (3) in Special Instructions.								
Sample No. / Matrix * / Sample Date / Sample Time											
B173V8 / SOIL / 8/26/03 / 1230	X	X	X								
W030000727											

CHAIN OF POSSESSION		Sign/Print Names	
Relinquished By/Removed From JSPOPE	Date/Time 8/26/03 1300	Received By/Stored In	Date/Time 8/26/03 1300
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

Report kerosene and diesel range compounds from WTPH-D analysis. FH acknowledges that holding times (less than 14 days) may not be met by the lab due to the radl characteristics.

(1) Semi-VOA - 8270A (TCL); Semi-VOA – 8270A (Add-On) {2-Butoxyethanol, Tributyl phosphate}; TPH-Diesel Range - WTPH-D; TPH-Gasoline Range - WTPH-G; PCBs - 8082
(2) Alcohols, Glycols, & Ketones - 8015 {Diethyl ether, Ethylene glycol, Methanol}
(3) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Antimony-125, Cesium-134, Radium-226, Radium-228, Tin-126}; Isotopic Plutonium; Americium-241; Isotopic Uranium; Trace Elements ICP/MS - 200.8 (Complete) {Antimony, Arsenic, Barium, Beryllium, Chromium, Copper, Lead, Mercury, Nickel, Silver, Uranium}; ICP Metals - 6010A (Add-on) {Bismuth, Boron}; IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Phosphate, Sulfate}; Cyanide (Total) - 335.2; Cations (IC) - 300.7 {Nitrogen in ammonium}; pH (Soil) - 9045

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

LABORATORY SECTION	Received By	Title	Date/Time
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

(03/01/2002)

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

9/24/03

ACKNOWLEDGMENT OF SAMPLES RECEIVED

File 108

Ground Water Protection Program

Richland, WA 99352
Attn: Steve Trent

Customer Code: GPP
PO#: 117504/ES20
Group#: 20031165
Project#: F03-006
Proj Mgr: STEVE TRENT A0-21
Phone: 373-5869

The following samples were received from you on 08/26/03. 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
W030000727	B173V8	TRENT	Solid, or handle as if solid	08/26/03
		@2008 @8015GPP @AEA-30 @AEA-31 @AEA-32		
		@GEA-GPP @IC-30 @ICP-GPP @PCBGPP @SVOCGPP @TPHD		
		@TPHG-WA CN-02 NH4-IC PERSOLID PH-30		

Test Acronym Description

Test Acronym	Description
@2008	ICP-2008 MS All possible metal
@8015GPP	Alcohols, Glycols - 8015
@AEA-30	Plutonium Isotopics by AEA
@AEA-31	Americium by AEA
@AEA-32	Uranium Isotopics by AEA
@GEA-GPP	Gamma Energy Analysis-grd H2O
@IC-30	Anions by Ion Chromatography
@ICP-GPP	ICP Metals Analysis, Grd H20 P
@PCBGPP	PCBs complete list
@SVOCGPP	SW-846 8270B Semi-Vols
@TPHD-WA	WTPH-D TPH Diesel Range (Wa)
@TPHG-WA	NWTPH-GX TPH Gasoline Range
CN-02	Cyanide by Midi/Spectrophotom
NH4-IC	Ammonia (N) by IC
PERSOLID	Percent Solids
PH-30	pH Soil and Waste Measurement

MAN