Fluor Hanford, Inc.
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Richland, Washington 99352

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FLUOR

Memorandum

T4180-03-SLF-010

To: S. J. Trent

Date: June 13, 2003

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

Telephone: 373-7495

cc:

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

Subject: FINAL RESULTS FOR 200-PW-2/200-PW-4 OU- BOREHOLE SOIL SAMPLING-SAMPLE DELIVERY GROUP WSCF20030642, 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 (WSCF20030642), the analytical results (Attachment 2) and the sample receipt information (Attachment 3).

slf/ddw

Attachments 3

RECEIVED
AUG 11 2003
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T4180-03-SLF-010

ATTACHMENT 1

NARRATIVE

Consisting of 2 pages
Cover page not included

Sample Delivery Group	**WSCF20030642**
Sample Matrix	**Soil**
Sample Visual	**Brown**
SAF Number	**F03-006**
Data Deliverable	**Summary Report**

Introduction

One (1) soil sample (B16WB2) from the GPP was received at the WSCF Laboratory on May 6, 2003. The samples were 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 and additional guidance provided by the customer (see page 3-3).

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

- 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 procedure.
- IC Anions and Ammonium by EPA SW-846 Method 300.0 and 300.7. Analytical work was performed with no deviations to the approved procedure 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 procedure.
- All RadChem analyses (AEA's, GEA) were run by internal WDOE accredited WSCF procedures. Analytical work was performed with no deviations to the approved procedures.

Comments

ICP-AES and ICP-MS 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) 2-11, 2-12, 2-13, 2-14 and 2-15 for QC 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) 2-21 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 and 2-20 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-010

ATTACHMENT 2

ANALYTICAL RESULTS

Consisting of 21 pages
Cover page not included

WSCF
ANALYTICAL RESULTS REPORT

for

Ground Water Protection Program

Richland, WA 99352

Attention: Steve Trent

Analytical: _____

Client Services: _____

Contract#: F03-006
Report#: WSCF20030642
Report Date: 13-jun-2003
Report W004/ver. 5.1
Ground Water Protection Program

WSCF
ANALYTICAL RESULTS REPORT

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

Group #: WSCF20030642

Sample #	Client ID		CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze	Sample	Receive
W030000370	B16WB2	GPP	7664-41-7	Ammonia (N) by IC	SOLID	LA-503-401	U	< 0.200	ug/g	50.00	0.20	06/03/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	PH	pH Soil and Waste Measurement	SOLID	LA-212-411		9.18	pH		0.010	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	14596-10-2	Am-241 by AEA	SOLID	LA-508-471	U	0.0170	pCi/g		0.041	06/03/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	E,T,C	Am-241 by AEA Total Cntg Error	SOLID	LA-508-471		150	%		0.0	06/03/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	24959-67-9	Bromide (Br) by IC	SOLID	LA-533-410	U	< 2.25	ug/g	50.00	2.2	06/04/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	16887-00-6	Chloride (Cl) by IC	SOLID	LA-533-410		9.07	ug/g	50.00	0.70	06/04/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	16984-48-8	Fluoride (F) by IC	SOLID	LA-533-410	U	< 0.350	ug/g	50.00	0.35	06/04/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	NO3-N	Nitrate (N) by IC	SOLID	LA-533-410		1.91	ug/g	50.00	0.25	06/04/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	NO2-N	Nitrite (N) by IC	SOLID	LA-533-410	U	< 0.450	ug/g	50.00	0.45	06/04/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	14265-44-2	Phosphate (P) by IC	SOLID	LA-533-410	U	< 0.650	ug/g	50.00	0.65	06/04/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	14808-79-8	Sulfate (SO4) by IC	SOLID	LA-533-410		8.16	ug/g	50.00	1.2	06/04/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	E,T,C	Ac-228 Rel.% Count Error (GEA)	SOLID	LA-508-462		15.8	%		0.0	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	14331-83-0	Ac-228 by GEA	SOLID	LA-508-462		0.456	pCi/g		0.024	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	E,T,C	Am-241 Rel.% Count Error (GEA)	SOLID	LA-508-462		140	%		0.0	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	14596-10-2	Am-241 by GEA	SOLID	LA-508-462	U	0.0322	pCi/g		0.065	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	E,T,C	Bi-212 Rel.% Count Error (GEA)	SOLID	LA-508-462		25.9	%		0.0	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	14913-49-6	Bi-212 by GEA	SOLID	LA-508-462		0.293	pCi/g		0.056	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	E,T,C	Bi-214 Rel.% Count Error (GEA)	SOLID	LA-508-462		14.0	%		0.0	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	14733-03-0	Bi-214 by GEA	SOLID	LA-508-462		0.358	pCi/g		0.014	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	E,T,C	Ce-144 Rel.% Count Error (GEA)	SOLID	LA-508-462		189	%		0.0	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	14762-78-8	Ce-144 by GEA	SOLID	LA-508-462	U	0.0242	pCi/g		0.069	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	E,T,C	Co-60 Rel.% Count Error (GEA)	SOLID	LA-508-462		179	%		0.0	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	10198-40-0	Co-60 by GEA	SOLID	LA-508-462	U	-2.39e-03	pCi/g		7.3e-03	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	E,T,C	Cs-134 Rel.% Count Error (GEA)	SOLID	LA-508-462		31.4	%		0.0	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	13967-70-9	Cs-134 by GEA	SOLID	LA-508-462	U	0.0200	pCi/g		0.010	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	E,T,C	Cs-137 Rel.% Count Error (GEA)	SOLID	LA-508-462		90.3	%		0.0	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	10045-97-3	Cs-137 by GEA	SOLID	LA-508-462	U	5.28e-03	pCi/g		8.4e-03	05/22/03	05/06/03	05/06/03

MDL = Minimum Detection Limit E - Analyte is an estimate, has potentially larger errors 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: F03-006: 200-PW-2/PW-4

Group #: WSCF20030642

Sample #	Client ID		CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze	Sample	Receive
W030000370	B16WB2	GPP	E,T,C	Eu-152 Rel.% Count Error (GEA)	SOLID	LA-508-462		122	%		0.0	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	14683-23-9	Eu-152 by GEA	SOLID	LA-508-462	U	-0.0130	pCi/g		0.023	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	E,T,C	Eu-154 Rel.% Count Error (GEA)	SOLID	LA-508-462		228	%		0.0	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	15585-10-1	Eu-154 by GEA	SOLID	LA-508-462	U	-6.17e-03	pCi/g		0.024	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	E,T,C	Eu-155 Rel.% Count Error (GEA)	SOLID	LA-508-462		1.00e+03	%		0.0	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	14391-16-3	Eu-155 by GEA	SOLID	LA-508-462	U	-2.12e-03	pCi/g		0.037	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	E,T,C	Nb-94 Rel.% Count Error (GEA)	SOLID	LA-508-462		121	%		0.0	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	14681-63-1	Nb-94 by GEA	SOLID	LA-508-462	U	3.42e-03	pCi/g		7.2e-03	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	E,T,C	Pb-212 Rel.% Count Error (GEA)	SOLID	LA-508-462		12.6	%		0.0	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	15092-94-1	Pb-212 by GEA	SOLID	LA-508-462		0.447	pCi/g		0.016	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	E,T,C	Pb-214 Rel.% Count Error (GEA)	SOLID	LA-508-462		14.9	%		0.0	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	15067-28-4	Pb-214 by GEA	SOLID	LA-508-462		0.384	pCi/g		0.017	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	E,T,C	Ra-226 Rel.% Count Error (GEA)	SOLID	LA-508-462		14.0	%		0.0	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	13982-63-3	Ra-226 by GEA	SOLID	LA-508-462		0.358	pCi/g		0.014	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	E,T,C	Ra-228 Rel.% Count Error (GEA)	SOLID	LA-508-462		15.8	%		0.0	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	15262-20-1	Ra-228 by GEA	SOLID	LA-508-462		0.456	pCi/g		0.024	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	E,T,C	Ru-103 Rel.% Count Error (GEA)	SOLID	LA-508-462		210	%		0.0	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	13968-53-1	Ru-103 by GEA	SOLID	LA-508-462	U	-2.04e-03	pCi/g		7.3e-03	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	E,T,C	Ru-106 Rel.% Count Error (GEA)	SOLID	LA-508-462		714	%		0.0	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	13967-48-1	Ru-106 by GEA	SOLID	LA-508-462	U	-5.44e-03	pCi/g		0.066	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	E,T,C	Sb-125 Rel.% Count Error (GEA)	SOLID	LA-508-462		531	%		0.0	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	14234-35-6	Sb-125 by GEA	SOLID	LA-508-462	U	-2.44e-03	pCi/g		0.021	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	E,T,C	Sn-113 Rel.% Count Error (GEA)	SOLID	LA-508-462		119	%		0.0	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	13966-06-8	Sn-113 by GEA	SOLID	LA-508-462	U	-5.27e-03	pCi/g		0.010	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	E,T,C	Sn-126 Rel.% Count Error (GEA)	SOLID	LA-508-462		20.2	%		0.0	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	15832-50-5	Sn-126 by GEA	SOLID	LA-508-462	U	0.115	pCi/g		0.032	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	E,T,C	Th-234 Rel.% Count Error (GEA)	SOLID	LA-508-462		74.5	%		0.0	05/22/03	05/06/03	05/06/03

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* - 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 #: WSCF20030642

Sample #	Client ID		CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze	Sample	Receive
W030000370	B16WB2	GPP	15065-10-8	Th-234 by GEA	SOLID	LA-508-462	U	0.447	pCi/g		0.54	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	E,T,C	Tl-208 Rel.% Count Error (GEA)	SOLID	LA-508-462		14.5	%		0.0	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	14913-50-9	Tl-208 by GEA	SOLID	LA-508-462		0.135	pCi/g		7.6e-03	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	E,T,C	U-235 Rel.% Count Error (GEA)	SOLID	LA-508-462		84.1	%		0.0	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	15117-96-1	U-235 by GEA	SOLID	LA-508-462	U	0.0608	pCi/g		0.067	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	E,T,C	Zn-65 Rel.% Count Error (GEA)	SOLID	LA-508-462		1.00e+03	%		0.0	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	13982-39-3	Zn-65 by GEA	SOLID	LA-508-462	U	-1.17e-03	pCi/g		0.017	05/22/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	7440-69-9	Bismuth by ICP	SOLID	LA-505-411	U	< 0.100	ug/g	1.00	0.10	06/03/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	7440-50-8	Boron by ICP	SOLID	LA-505-411	U	< 0.1020	ug/g	1.00	0.1020	06/03/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	7429-90-5	Aluminum by ICP-MS	SOLID	LA-505-412	E	7.37e+03	ug/g	4.87	54	05/20/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	7440-36-0	Antimony by ICP-MS	SOLID	LA-505-412	U	< 2.44	ug/g	4.87	2.4	05/20/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	7440-38-2	Arsenic by ICP-MS	SOLID	LA-505-412	U	< 1.46	ug/g	4.87	1.5	05/20/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	7440-39-3	Barium by ICP-MS	SOLID	LA-505-412		62.7	ug/g	4.87	0.97	05/20/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	7440-41-7	Beryllium by ICP-MS	SOLID	LA-505-412	U	< 1.46	ug/g	4.87	1.5	05/20/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	7440-43-9	Cadmium by ICP-MS	SOLID	LA-505-412	U	< 0.487	ug/g	4.87	0.49	05/20/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	7440-47-3	Chromium by ICP-MS	SOLID	LA-505-412		13.5	ug/g	4.87	1.5	05/20/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	7440-48-4	Cobalt by ICP-MS	SOLID	LA-505-412		7.88	ug/g	4.87	0.97	05/20/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	7440-50-8	Copper by ICP-MS	SOLID	LA-505-412		13.9	ug/g	4.87	2.4	05/20/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	7439-92-1	Lead by ICP-MS	SOLID	LA-505-412	U	< 5.84	ug/g	4.87	5.8	05/20/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	7439-96-5	Manganese by ICP-MS	SOLID	LA-505-412		287	ug/g	4.87	1.5	05/20/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	7439-97-6	Mercury by ICP-MS	SOLID	LA-505-412	U	< 0.487	ug/g	4.87	0.49	05/20/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	7439-98-7	Molybdenum by ICP-MS	SOLID	LA-505-412		1.95	ug/g	4.87	1.5	05/20/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	7440-02-0	Nickel by ICP-MS	SOLID	LA-505-412		15.1	ug/g	4.87	2.4	05/20/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	7782-49-2	Selenium by ICP-MS	SOLID	LA-505-412	U	< 1.46	ug/g	4.87	1.5	05/20/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	7440-22-4	Silver by ICP-MS	SOLID	LA-505-412		2.53	ug/g	4.87	0.97	05/20/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	7440-28-0	Thallium by ICP-MS	SOLID	LA-505-412		1.52	ug/g	4.87	0.49	05/20/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	7440-29-1	Thorium by ICP-MS	SOLID	LA-505-412		3.20	ug/g	4.87	0.97	05/20/03	05/06/03	05/06/03

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

Report W004/ver. 5.1
Ground Water Protection Program

WSCF
ANALYTICAL RESULTS REPORT

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

Group #: WSCF20030642

Sample #	Client ID		CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze	Sample	Receive
W030000370	B16WB2	GPP	7440-61-1	Uranium by ICP-MS	SOLID	LA-505-412		0.524	ug/g	4.87	0.49	05/20/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	7440-62-2	Vanadium by ICP-MS	SOLID	LA-505-412		60.0	ug/g	4.87	2.0	05/20/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	7440-66-6	Zinc by ICP-MS	SOLID	LA-505-412		42.9	ug/g	4.87	20	05/20/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	13981-16-3	Pu-238 by AEA	SOLID	LA-508-471	U	-0.0120	pCi/g		0.047	06/03/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	E,T,C	Pu-238 by AEA Total Cntg Error	SOLID	LA-508-471		200	%		0.0	06/03/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	E,T,C	Pu-239/240 AEA Total Cntg Err	SOLID	LA-508-471		250	%		0.0	06/03/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	PU-239/240	Pu-239/240 by AEA	SOLID	LA-508-471	U	3.40e-03	pCi/g		0.016	06/03/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	13966-29-5	U-234 by AEA	SOLID	LA-508-471		0.110	pCi/g		0.013	06/03/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	E,T,C	U-234 by AEA Total Cntg Error	SOLID	LA-508-471		32.0	%		0.0	06/03/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	15117-96-1	U-235 by AEA	SOLID	LA-508-471		0.0280	pCi/g		5.1e-03	06/03/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	E,T,C	U-235 by AEA Total Cntg Error	SOLID	LA-508-471		55.0	%		0.0	06/03/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	24678-82-8	U-238 by AEA	SOLID	LA-508-471		0.110	pCi/g		4.7e-03	06/03/03	05/06/03	05/06/03
W030000370	B16WB2	GPP	E,T,C	U-238 by AEA Total Cntg Error	SOLID	LA-508-471		31.0	%		0.10	06/03/03	05/06/03	05/06/03

MDL=Minimum Detection Limit E - Analyte is an estimate, has potentially larger errors 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 COMMENT REPORT

2-6

Attention: Steve Trent
Project Number F03-006

Group #: WSCF20030642

Sample #	Client ID	Lab Area	Test	Comment
		VALGROUP		ICP-MS: Estimated aluminum result due to it being out of linear range. High LCS results for aluminum, nickel, zinc, silver, and antimony but no flags issued because results are within manufacturers performance acceptance limits. ICP-AES: Bismuth recovery in LCS was 123% no Qualifiers asigned as all results were non detect. IC: Chloride and nitrate duplicates and chloride matrix spike were not within acceptable limits; however, the probable cause is the sample heterogeneity (soil) -wwb

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

2 - 7

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

Group #: WSCF20030642

Sample #	Client ID		Test Name	Peak Name	CAS#	RT	RQ	Result	Units
W030000370	B16WB2	GPP	Gamma Energy Analysis-grd H2O	K-40 Count Error				11.458	%
W030000370	B16WB2	GPP	Gamma Energy Analysis-grd H2O	K-40				12.5	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-533-410	LA-533-410: ANION ANALYSIS BY ION CHROMATOGRAPHY	
	EPA-600/R-94-111 300	DETERMINATION OF INORGANIC ANIONS BY ION CHROMATOGRAPHY

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 13-jun-2003 13:05:49

W13q Worklist/Batch/QC Report for Group# WSCF20030642

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
				SAMPLE	W030000370	pH Soil and Waste Measurement
19474	1	19864	22580	SAMPLE	W030000370	Gamma Energy Analysis-grd H2O
19513	1	19901	22620	BLANK		ICP-2008 MS All possible metal
19513	2	19901	22620	BLANK		ICP-2008 MS All possible metal
19513	4	19901	22620	LCS		ICP-2008 MS All possible metal
19513	5	19901	22620	LCS		ICP-2008 MS All possible metal
19513	6	19901	22620	MS	W030000352	ICP-2008 MS All possible metal
19513	7	19901	22620	MSD	W030000352	ICP-2008 MS All possible metal
19513	8	19901	22620	MS	W030000370	ICP-2008 MS All possible metal
19513	9	19901	22620	MSD	W030000370	ICP-2008 MS All possible metal
19513	10	19901	22620	SAMPLE	W030000370	ICP-2008 MS All possible metal
19524	1	19912	22633	BLANK		ICP Metals Analysis, Grd H20 P
19524	2	19912	22633	LCS		ICP Metals Analysis, Grd H20 P
19524	4	19912	22633	MS	W030000352	ICP Metals Analysis, Grd H20 P
19524	5	19912	22633	MSD	W030000352	ICP Metals Analysis, Grd H20 P
19524	7	19912	22633	MS	W030000370	ICP Metals Analysis, Grd H20 P
19524	8	19912	22633	MSD	W030000370	ICP Metals Analysis, Grd H20 P
19524	6	19912	22633	SAMPLE	W030000370	ICP Metals Analysis, Grd H20 P
19524	0	19912	22633	SPK-RPD	W030000370	ICP Metals Analysis, Grd H20 P
19547	2	19935	22649	BLANK		Anions by Ion Chromatography
19547	12	19935	22649	BLANK		Anions by Ion Chromatography
19547	3	19935	22649	LCS		Anions by Ion Chromatography
19547	5	19935	22649	DUP	W030000352	Anions by Ion Chromatography
19547	6	19935	22649	MS	W030000352	Anions by Ion Chromatography
19547	7	19935	22649	MSD	W030000352	Anions by Ion Chromatography
19547	9	19935	22649	DUP	W030000370	Anions by Ion Chromatography
19547	10	19935	22649	MS	W030000370	Anions by Ion Chromatography
19547	11	19935	22649	MSD	W030000370	Anions by Ion Chromatography
19547	8	19935	22649	SAMPLE	W030000370	Anions by Ion Chromatography
19521	1	19907	22650	BLANK		Uranium Isotopics by AEA
19521	2	19907	22650	LCS		Uranium Isotopics by AEA
19521	3	19907	22650	DUP	W030000370	Uranium Isotopics by AEA
19521	4	19907	22650	SAMPLE	W030000370	Uranium Isotopics by AEA
19522	1	19906	22651	BLANK		Americium by AEA
19522	2	19906	22651	LCS		Americium by AEA
19522	3	19906	22651	DUP	W030000370	Americium by AEA
19522	4	19906	22651	SAMPLE	W030000370	Americium by AEA
19523	1	19905	22652	BLANK		Plutonium Isotopics by AEA
19523	2	19905	22652	LCS		Plutonium Isotopics by AEA
19523	3	19905	22652	DUP	W030000370	Plutonium Isotopics by AEA
19523	4	19905	22652	SAMPLE	W030000370	Plutonium Isotopics by AEA
19549	3	19937	22659	BLNK-PREP		Ammonia (N) by IC
19549	12	19937	22659	BLNK-PREP		Ammonia (N) by IC
19549	1	19937	22659	LCS		Ammonia (N) by IC
19549	5	19937	22659	DUP	W030000352	Ammonia (N) by IC
19549	6	19937	22659	MS	W030000352	Ammonia (N) by IC

19549	7	19937	22659	MSD	W030000352	Ammonia (N) by IC
19549	9	19937	22659	DUP	W030000370	Ammonia (N) by IC
19549	10	19937	22659	MS	W030000370	Ammonia (N) by IC
19549	11	19937	22659	MSD	W030000370	Ammonia (N) by IC
19549	8	19937	22659	SAMPLE	W030000370	Ammonia (N) by IC

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030642
Matrix: SOLID
Test: ICP-2008 MS All possible metal

SAF Number: F03-006
Sample Date: 05/05/03
Receive Date: 05/05/03

Lab ID: W030000352
BATCH QC ASSOCIATED WITH SAMPLE

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
MS	Silver by ICP-MS	7440-22-4	97.462	% Recov	05/20/03	70.000	130.000
MS	Aluminum by ICP-MS	7429-90-5	n/a	% Recov	05/20/03	70.000	130.000
MS	Arsenic by ICP-MS	7440-38-2	101.015	% Recov	05/20/03	70.000	130.000
MS	Barium by ICP-MS	7440-39-3	102.030	% Recov	05/20/03	70.000	130.000
MS	Beryllium by ICP-MS	7440-41-7	100.508	% Recov	05/20/03	70.000	130.000
MS	Cadmium by ICP-MS	7440-43-9	98.985	% Recov	05/20/03	70.000	130.000
MS	Cobalt by ICP-MS	7440-48-4	102.538	% Recov	05/20/03	70.000	130.000
MS	Chromium by ICP-MS	7440-47-3	102.030	% Recov	05/20/03	70.000	130.000
MS	Copper by ICP-MS	7440-50-8	103.553	% Recov	05/20/03	70.000	130.000
MS	Mercury by ICP-MS	7439-97-6	105.477	% Recov	05/20/03	70.000	130.000
MS	Manganese by ICP-MS	7439-96-5	95.431	% Recov	05/20/03	70.000	130.000
MS	Molybdenum by ICP-MS	7439-98-7	95.431	% Recov	05/20/03	70.000	130.000
MS	Nickel by ICP-MS	7440-02-0	103.553	% Recov	05/20/03	70.000	130.000
MS	Lead by ICP-MS	7439-92-1	103.553	% Recov	05/20/03	70.000	130.000
MS	Antimony by ICP-MS	7440-36-0	92.893	% Recov	05/20/03	70.000	130.000
MS	Selenium by ICP-MS	7782-49-2	98.985	% Recov	05/20/03	70.000	130.000
MS	Thorium by ICP-MS	7440-29-1	105.076	% Recov	05/20/03	70.000	130.000
MS	Thallium by ICP-MS	7440-28-0	97.462	% Recov	05/20/03	70.000	130.000
MS	Uranium by ICP-MS	7440-61-1	100.000	% Recov	05/20/03	70.000	130.000
MS	Vanadium by ICP-MS	7440-62-2	100.508	% Recov	05/20/03	70.000	130.000
MS	Zinc by ICP-MS	7440-66-6	105.076	% Recov	05/20/03	70.000	130.000
MSD	Silver by ICP-MS	7440-22-4	94.211	% Recov	05/20/03	70.000	130.000
MSD	Aluminum by ICP-MS	7429-90-5	n/a	% Recov	05/20/03	70.000	130.000
MSD	Arsenic by ICP-MS	7440-38-2	96.842	% Recov	05/20/03	70.000	130.000
MSD	Barium by ICP-MS	7440-39-3	98.947	% Recov	05/20/03	70.000	130.000
MSD	Beryllium by ICP-MS	7440-41-7	95.789	% Recov	05/20/03	70.000	130.000
MSD	Cadmium by ICP-MS	7440-43-9	94.737	% Recov	05/20/03	70.000	130.000
MSD	Cobalt by ICP-MS	7440-48-4	101.053	% Recov	05/20/03	70.000	130.000
MSD	Chromium by ICP-MS	7440-47-3	98.947	% Recov	05/20/03	70.000	130.000
MSD	Copper by ICP-MS	7440-50-8	103.158	% Recov	05/20/03	70.000	130.000
MSD	Mercury by ICP-MS	7439-97-6	102.947	% Recov	05/20/03	70.000	130.000
MSD	Manganese by ICP-MS	7439-96-5	102.105	% Recov	05/20/03	70.000	130.000
MSD	Molybdenum by ICP-MS	7439-98-7	92.632	% Recov	05/20/03	70.000	130.000
MSD	Nickel by ICP-MS	7440-02-0	101.053	% Recov	05/20/03	70.000	130.000
MSD	Lead by ICP-MS	7439-92-1	99.474	% Recov	05/20/03	70.000	130.000
MSD	Antimony by ICP-MS	7440-36-0	85.789	% Recov	05/20/03	70.000	130.000
MSD	Selenium by ICP-MS	7782-49-2	95.263	% Recov	05/20/03	70.000	130.000
MSD	Thorium by ICP-MS	7440-29-1	100.526	% Recov	05/20/03	70.000	130.000
MSD	Thallium by ICP-MS	7440-28-0	94.211	% Recov	05/20/03	70.000	130.000
MSD	Uranium by ICP-MS	7440-61-1	95.263	% Recov	05/20/03	70.000	130.000
MSD	Vanadium by ICP-MS	7440-62-2	96.316	% Recov	05/20/03	70.000	130.000
MSD	Zinc by ICP-MS	7440-66-6	102.632	% Recov	05/20/03	70.000	130.000

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030642
Matrix: SOLID
Test: ICP-2008 MS All possible metal

SAF Number: F03-006
Sample Date: 05/05/03
Receive Date: 05/05/03

Lab ID: W030000370
BATCH QC ASSOCIATED WITH SAMPLE

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
MS	Silver by ICP-MS	7440-22-4	92.347	% Recov	05/20/03	70.000	130.000
MS	Aluminum by ICP-MS	7429-90-5	n/a	% Recov	05/20/03	70.000	130.000
MS	Arsenic by ICP-MS	7440-38-2	97.959	% Recov	05/20/03	70.000	130.000
MS	Barium by ICP-MS	7440-39-3	108.673	% Recov	05/20/03	70.000	130.000
MS	Beryllium by ICP-MS	7440-41-7	98.980	% Recov	05/20/03	70.000	130.000
MS	Cadmium by ICP-MS	7440-43-9	100.510	% Recov	05/20/03	70.000	130.000
MS	Cobalt by ICP-MS	7440-48-4	105.102	% Recov	05/20/03	70.000	130.000
MS	Chromium by ICP-MS	7440-47-3	103.061	% Recov	05/20/03	70.000	130.000
MS	Copper by ICP-MS	7440-50-8	105.612	% Recov	05/20/03	70.000	130.000
MS	Mercury by ICP-MS	7439-97-6	107.943	% Recov	05/20/03	70.000	130.000
MS	Manganese by ICP-MS	7439-96-5	95.408	% Recov	05/20/03	70.000	130.000
MS	Molybdenum by ICP-MS	7439-98-7	93.878	% Recov	05/20/03	70.000	130.000
MS	Nickel by ICP-MS	7440-02-0	105.612	% Recov	05/20/03	70.000	130.000
MS	Lead by ICP-MS	7439-92-1	103.061	% Recov	05/20/03	70.000	130.000
MS	Antimony by ICP-MS	7440-36-0	93.367	% Recov	05/20/03	70.000	130.000
MS	Selenium by ICP-MS	7782-49-2	96.939	% Recov	05/20/03	70.000	130.000
MS	Thorium by ICP-MS	7440-29-1	105.102	% Recov	05/20/03	70.000	130.000
MS	Thallium by ICP-MS	7440-28-0	96.939	% Recov	05/20/03	70.000	130.000
MS	Uranium by ICP-MS	7440-61-1	100.000	% Recov	05/20/03	70.000	130.000
MS	Vanadium by ICP-MS	7440-62-2	99.490	% Recov	05/20/03	70.000	130.000
MS	Zinc by ICP-MS	7440-66-6	103.571	% Recov	05/20/03	70.000	130.000
MSD	Silver by ICP-MS	7440-22-4	94.819	% Recov	05/20/03	70.000	130.000
MSD	Aluminum by ICP-MS	7429-90-5	n/a	% Recov	05/20/03	70.000	130.000
MSD	Arsenic by ICP-MS	7440-38-2	99.482	% Recov	05/20/03	70.000	130.000
MSD	Barium by ICP-MS	7440-39-3	97.409	% Recov	05/20/03	70.000	130.000
MSD	Beryllium by ICP-MS	7440-41-7	101.554	% Recov	05/20/03	70.000	130.000
MSD	Cadmium by ICP-MS	7440-43-9	96.891	% Recov	05/20/03	70.000	130.000
MSD	Cobalt by ICP-MS	7440-48-4	101.554	% Recov	05/20/03	70.000	130.000
MSD	Chromium by ICP-MS	7440-47-3	100.518	% Recov	05/20/03	70.000	130.000
MSD	Copper by ICP-MS	7440-50-8	105.699	% Recov	05/20/03	70.000	130.000
MSD	Mercury by ICP-MS	7439-97-6	107.884	% Recov	05/20/03	70.000	130.000
MSD	Manganese by ICP-MS	7439-96-5	96.373	% Recov	05/20/03	70.000	130.000
MSD	Molybdenum by ICP-MS	7439-98-7	94.301	% Recov	05/20/03	70.000	130.000
MSD	Nickel by ICP-MS	7440-02-0	102.073	% Recov	05/20/03	70.000	130.000
MSD	Lead by ICP-MS	7439-92-1	101.554	% Recov	05/20/03	70.000	130.000
MSD	Antimony by ICP-MS	7440-36-0	99.482	% Recov	05/20/03	70.000	130.000
MSD	Selenium by ICP-MS	7782-49-2	96.891	% Recov	05/20/03	70.000	130.000
MSD	Thorium by ICP-MS	7440-29-1	103.109	% Recov	05/20/03	70.000	130.000
MSD	Thallium by ICP-MS	7440-28-0	95.337	% Recov	05/20/03	70.000	130.000
MSD	Uranium by ICP-MS	7440-61-1	96.891	% Recov	05/20/03	70.000	130.000
MSD	Vanadium by ICP-MS	7440-62-2	93.782	% Recov	05/20/03	70.000	130.000
MSD	Zinc by ICP-MS	7440-66-6	102.591	% Recov	05/20/03	70.000	130.000

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030642
Matrix: SOLID
Test: ICP-2008 MS All possible metal

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

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit	
BATCH QC								
BLANK	Silver by ICP-MS	7440-22-4	<0.200	ug/L	05/20/03	-0.440	0.440	
BLANK	Silver by ICP-MS	7440-22-4	<0.200	ug/L	05/20/03	-0.440	0.440	
BLANK	Aluminum by ICP-MS	7429-90-5	<11.0	ug/L	05/20/03	-24.200	24.200	
BLANK	Aluminum by ICP-MS	7429-90-5	<11.0	ug/L	05/20/03	-24.200	24.200	
BLANK	Arsenic by ICP-MS	7440-38-2	<0.300	ug/L	05/20/03	-0.660	0.660	
BLANK	Arsenic by ICP-MS	7440-38-2	<0.300	ug/L	05/20/03	-0.660	0.660	
BLANK	Barium by ICP-MS	7440-39-3	<0.200	ug/L	05/20/03	-0.440	0.440	
BLANK	Barium by ICP-MS	7440-39-3	<0.200	ug/L	05/20/03	-0.440	0.440	
BLANK	Beryllium by ICP-MS	7440-41-7	<0.300	ug/L	05/20/03	-0.660	0.660	
BLANK	Beryllium by ICP-MS	7440-41-7	<0.300	ug/L	05/20/03	-0.660	0.660	
BLANK	Cadmium by ICP-MS	7440-43-9	<0.100	ug/L	05/20/03	-0.220	0.220	
BLANK	Cadmium by ICP-MS	7440-43-9	<0.100	ug/L	05/20/03	-0.220	0.220	
BLANK	Cobalt by ICP-MS	7440-48-4	<0.200	ug/L	05/20/03	-0.440	0.440	
BLANK	Cobalt by ICP-MS	7440-48-4	<0.200	ug/L	05/20/03	-0.440	0.440	
BLANK	Chromium by ICP-MS	7440-47-3	<0.300	ug/L	05/20/03	-0.660	0.660	
BLANK	Chromium by ICP-MS	7440-47-3	<0.300	ug/L	05/20/03	-0.660	0.660	
BLANK	Copper by ICP-MS	7440-50-8	<0.500	ug/L	05/20/03	-1.100	1.100	
BLANK	Copper by ICP-MS	7440-50-8	<0.500	ug/L	05/20/03	-1.100	1.100	
BLANK	Mercury by ICP-MS	7439-97-6	<0.100	ug/L	05/20/03	-0.220	0.220	
BLANK	Mercury by ICP-MS	7439-97-6	<0.100	ug/L	05/20/03	-0.220	0.220	
BLANK	Manganese by ICP-MS	7439-96-5	<0.300	ug/L	05/20/03	-0.660	0.660	
BLANK	Manganese by ICP-MS	7439-96-5	<0.300	ug/L	05/20/03	-0.660	0.660	
BLANK	Molybdenum by ICP-MS	7439-98-7	<0.300	ug/L	05/20/03	-0.660	0.660	
BLANK	Molybdenum by ICP-MS	7439-98-7	<0.300	ug/L	05/20/03	-0.660	0.660	
BLANK	Nickel by ICP-MS	7440-02-0	<0.500	ug/L	05/20/03	-1.100	1.100	
BLANK	Nickel by ICP-MS	7440-02-0	<0.500	ug/L	05/20/03	-1.100	1.100	
BLANK	Lead by ICP-MS	7439-92-1	<1.20	ug/L	05/20/03	-2.640	2.640	
BLANK	Lead by ICP-MS	7439-92-1	<1.20	ug/L	05/20/03	-2.640	2.640	
BLANK	Antimony by ICP-MS	7440-36-0	<0.500	ug/L	05/20/03	-1.100	1.100	
BLANK	Antimony by ICP-MS	7440-36-0	<0.500	ug/L	05/20/03	-1.100	1.100	
BLANK	Selenium by ICP-MS	7782-49-2	<0.300	ug/L	05/20/03	-0.660	0.660	
BLANK	Selenium by ICP-MS	7782-49-2	<0.300	ug/L	05/20/03	-0.660	0.660	
BLANK	Thorium by ICP-MS	7440-29-1	<0.200	ug/L	05/20/03	-0.440	0.440	
BLANK	Thorium by ICP-MS	7440-29-1	<0.200	ug/L	05/20/03	-0.440	0.440	
BLANK	Thallium by ICP-MS	7440-28-0	<0.100	ug/L	05/20/03	-0.220	0.220	
BLANK	Thallium by ICP-MS	7440-28-0	<0.100	ug/L	05/20/03	-0.220	0.220	
BLANK	Uranium by ICP-MS	7440-61-1	<0.100	ug/L	05/20/03	-0.220	0.220	
BLANK	Uranium by ICP-MS	7440-61-1	<0.100	ug/L	05/20/03	-0.220	0.220	
BLANK	Vanadium by ICP-MS	7440-62-2	<0.400	ug/L	05/20/03	-0.880	0.880	
BLANK	Vanadium by ICP-MS	7440-62-2	<0.400	ug/L	05/20/03	-0.880	0.880	
BLANK	Zinc by ICP-MS	7440-66-6	<4.00	ug/L	05/20/03	-8.800	8.800	
BLANK	Zinc by ICP-MS	7440-66-6	<4.00	ug/L	05/20/03	-8.800	8.800	
LCS	Silver by ICP-MS	7440-22-4	149.580	% Recov	05/20/03	85.000	115.000	*
LCS	Silver by ICP-MS	7440-22-4	150.420	% Recov	05/20/03	85.000	115.000	*
LCS	Aluminum by ICP-MS	7429-90-5	130.496	% Recov	05/20/03	85.000	115.000	*

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030642
Matrix: SOLID
Test: ICP-2008 MS All possible metal

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

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit	
LCS	Aluminum by ICP-MS	7429-90-5	133.475	% Recov	05/20/03	85.000	115.000	*
LCS	Arsenic by ICP-MS	7440-38-2	111.795	% Recov	05/20/03	85.000	115.000	
LCS	Arsenic by ICP-MS	7440-38-2	115.897	% Recov	05/20/03	85.000	115.000	*
LCS	Barium by ICP-MS	7440-39-3	108.673	% Recov	05/20/03	85.000	115.000	
LCS	Barium by ICP-MS	7440-39-3	110.459	% Recov	05/20/03	85.000	115.000	
LCS	Beryllium by ICP-MS	7440-41-7	106.242	% Recov	05/20/03	85.000	115.000	
LCS	Beryllium by ICP-MS	7440-41-7	112.085	% Recov	05/20/03	85.000	115.000	
LCS	Cadmium by ICP-MS	7440-43-9	106.851	% Recov	05/20/03	85.000	115.000	
LCS	Cadmium by ICP-MS	7440-43-9	110.204	% Recov	05/20/03	85.000	115.000	
LCS	Cobalt by ICP-MS	7440-48-4	104.393	% Recov	05/20/03	85.000	115.000	
LCS	Cobalt by ICP-MS	7440-48-4	108.555	% Recov	05/20/03	85.000	115.000	
LCS	Chromium by ICP-MS	7440-47-3	108.671	% Recov	05/20/03	85.000	115.000	
LCS	Chromium by ICP-MS	7440-47-3	113.064	% Recov	05/20/03	85.000	115.000	
LCS	Copper by ICP-MS	7440-50-8	113.386	% Recov	05/20/03	85.000	115.000	
LCS	Copper by ICP-MS	7440-50-8	117.323	% Recov	05/20/03	85.000	115.000	*
LCS	Mercury by ICP-MS	7439-97-6	106.270	% Recov	05/20/03	85.000	115.000	
LCS	Mercury by ICP-MS	7439-97-6	105.845	% Recov	05/20/03	85.000	115.000	
LCS	Manganese by ICP-MS	7439-96-5	110.968	% Recov	05/20/03	85.000	115.000	
LCS	Manganese by ICP-MS	7439-96-5	114.839	% Recov	05/20/03	85.000	115.000	
LCS	Molybdenum by ICP-MS	7439-98-7	107.030	% Recov	05/20/03	85.000	115.000	
LCS	Molybdenum by ICP-MS	7439-98-7	109.576	% Recov	05/20/03	85.000	115.000	
LCS	Nickel by ICP-MS	7440-02-0	122.010	% Recov	05/20/03	85.000	115.000	*
LCS	Nickel by ICP-MS	7440-02-0	120.813	% Recov	05/20/03	85.000	115.000	*
LCS	Lead by ICP-MS	7439-92-1	112.169	% Recov	05/20/03	85.000	115.000	
LCS	Lead by ICP-MS	7439-92-1	114.286	% Recov	05/20/03	85.000	115.000	
LCS	Antimony by ICP-MS	7440-36-0	129.710	% Recov	05/20/03	85.000	115.000	*
LCS	Antimony by ICP-MS	7440-36-0	136.232	% Recov	05/20/03	85.000	115.000	*
LCS	Selenium by ICP-MS	7782-49-2	114.912	% Recov	05/20/03	85.000	115.000	
LCS	Selenium by ICP-MS	7782-49-2	115.789	% Recov	05/20/03	85.000	115.000	*
LCS	Thorium by ICP-MS	7440-29-1	102.062	% Recov	05/20/03	85.000	115.000	
LCS	Thorium by ICP-MS	7440-29-1	102.577	% Recov	05/20/03	85.000	115.000	
LCS	Thallium by ICP-MS	7440-28-0	115.462	% Recov	05/20/03	85.000	115.000	*
LCS	Thallium by ICP-MS	7440-28-0	112.450	% Recov	05/20/03	85.000	115.000	
LCS	Uranium by ICP-MS	7440-61-1	98.454	% Recov	05/20/03	85.000	115.000	
LCS	Uranium by ICP-MS	7440-61-1	100.515	% Recov	05/20/03	85.000	115.000	
LCS	Vanadium by ICP-MS	7440-62-2	114.024	% Recov	05/20/03	85.000	115.000	
LCS	Vanadium by ICP-MS	7440-62-2	118.293	% Recov	05/20/03	85.000	115.000	*
LCS	Zinc by ICP-MS	7440-66-6	119.245	% Recov	05/20/03	85.000	115.000	*
LCS	Zinc by ICP-MS	7440-66-6	123.019	% Recov	05/20/03	85.000	115.000	*

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030642
Matrix: SOLID
Test: ICP Metals Analysis, Grd H20 P

SAF Number: F03-006
Sample Date: 05/05/03
Receive Date: 05/05/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
Lab ID: W030000352							
BATCH QC ASSOCIATED WITH SAMPLE							
MS	Boron by ICP	7440-50-8	105.920	% Recov	06/03/03	75.000	125.000
MS	Bismuth by ICP	7440-69-9	99.300	% Recov	06/03/03	75.000	125.000
MSD	Boron by ICP	7440-50-8	106.520	% Recov	06/03/03	75.000	125.000
MSD	Bismuth by ICP	7440-69-9	100.180	% Recov	06/03/03	75.000	125.000
Lab ID: W030000370							
BATCH QC ASSOCIATED WITH SAMPLE							
MS	Boron by ICP	7440-50-8	106.520	% Recov	06/03/03	75.000	125.000
MS	Bismuth by ICP	7440-69-9	100.060	% Recov	06/03/03	75.000	125.000
MSD	Boron by ICP	7440-50-8	107.920	% Recov	06/03/03	75.000	125.000
MSD	Bismuth by ICP	7440-69-9	102.980	% Recov	06/03/03	75.000	125.000
SPK-RPD	Boron by ICP	7440-50-8	1.306	RPD	06/03/03	0.000	20.000
SPK-RPD	Bismuth by ICP	7440-69-9	2.857	RPD	06/03/03	0.000	20.000
BATCH QC							
BLANK	Boron by ICP	7440-50-8	<0.102	ug/L	06/03/03	-10.000	10.000
BLANK	Bismuth by ICP	7440-69-9	<0.1	ug/L	06/03/03	-1.000	0.088
LCS	Boron by ICP	7440-50-8	114.466	% Recov	06/03/03	80.000	120.000
LCS	Bismuth by ICP	7440-69-9	123.620	% Recov	06/03/03	80.000	120.000 *

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030642
Matrix: SOLID
Test: Anions by Ion Chromatography

SAF Number: F03-006
Sample Date: 05/05/03
Receive Date: 05/05/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit	
Lab ID: W030000352								
BATCH QC ASSOCIATED WITH SAMPLE								
DUP	Bromide (Br) by IC	24959-67-9	n/a	RPD	06/04/03	0.000	20.000	
DUP	Chloride (Cl) by IC	16887-00-6	26.887	RPD	06/04/03	0.000	20.000	*
DUP	Fluoride (F) by IC	16984-48-8	n/a	RPD	06/04/03	0.000	20.000	
DUP	Nitrite (N) by IC	NO2-N	n/a	RPD	06/04/03	0.000	20.000	
DUP	Nitrate (N) by IC	NO3-N	14.984	RPD	06/04/03	0.000	20.000	
DUP	Phosphate (P) by IC	14265-44-2	n/a	RPD	06/04/03	0.000	20.000	
DUP	Sulfate (SO4) by IC	14808-79-8	10.544	RPD	06/04/03	0.000	20.000	
MS	Bromide (Br) by IC	24959-67-9	96.985	% Recov	06/04/03	75.000	125.000	
MS	Chloride (Cl) by IC	16887-00-6	98.788	% Recov	06/04/03	75.000	125.000	
MS	Fluoride (F) by IC	16984-48-8	112.065	% Recov	06/04/03	75.000	125.000	
MS	Nitrite (N) by IC	NO2-N	100.992	% Recov	06/04/03	75.000	125.000	
MS	Nitrate (N) by IC	NO3-N	97.982	% Recov	06/04/03	75.000	125.000	
MS	Phosphate (P) by IC	14265-44-2	92.284	% Recov	06/04/03	75.000	125.000	
MS	Sulfate (SO4) by IC	14808-79-8	101.015	% Recov	06/04/03	75.000	125.000	
MSD	Bromide (Br) by IC	24959-67-9	86.935	% Recov	06/04/03	75.000	125.000	
MSD	Chloride (Cl) by IC	16887-00-6	87.576	% Recov	06/04/03	75.000	125.000	
MSD	Fluoride (F) by IC	16984-48-8	100.204	% Recov	06/04/03	75.000	125.000	
MSD	Nitrite (N) by IC	NO2-N	91.667	% Recov	06/04/03	75.000	125.000	
MSD	Nitrate (N) by IC	NO3-N	86.547	% Recov	06/04/03	75.000	125.000	
MSD	Phosphate (P) by IC	14265-44-2	82.795	% Recov	06/04/03	75.000	125.000	
MSD	Sulfate (SO4) by IC	14808-79-8	88.832	% Recov	06/04/03	75.000	125.000	
Lab ID: W030000370								
BATCH QC ASSOCIATED WITH SAMPLE								
DUP	Bromide (Br) by IC	24959-67-9	n/a	RPD	06/04/03	0.000	20.000	
DUP	Chloride (Cl) by IC	16887-00-6	133.763	RPD	06/04/03	0.000	20.000	*
DUP	Fluoride (F) by IC	16984-48-8	n/a	RPD	06/04/03	0.000	20.000	
DUP	Nitrite (N) by IC	NO2-N	n/a	RPD	06/04/03	0.000	20.000	
DUP	Nitrate (N) by IC	NO3-N	21.449	RPD	06/04/03	0.000	20.000	*
DUP	Phosphate (P) by IC	14265-44-2	n/a	RPD	06/04/03	0.000	20.000	
DUP	Sulfate (SO4) by IC	14808-79-8	18.328	RPD	06/04/03	0.000	20.000	
MS	Bromide (Br) by IC	24959-67-9	80.402	% Recov	06/04/03	75.000	125.000	
MS	Chloride (Cl) by IC	16887-00-6	66.061	% Recov	06/04/03	75.000	125.000	*
MS	Fluoride (F) by IC	16984-48-8	91.820	% Recov	06/04/03	75.000	125.000	
MS	Nitrite (N) by IC	NO2-N	84.127	% Recov	06/04/03	75.000	125.000	
MS	Nitrate (N) by IC	NO3-N	78.700	% Recov	06/04/03	75.000	125.000	
MS	Phosphate (P) by IC	14265-44-2	76.538	% Recov	06/04/03	75.000	125.000	
MS	Sulfate (SO4) by IC	14808-79-8	80.711	% Recov	06/04/03	75.000	125.000	
MSD	Bromide (Br) by IC	24959-67-9	96.482	% Recov	06/04/03	75.000	125.000	
MSD	Chloride (Cl) by IC	16887-00-6	81.919	% Recov	06/04/03	75.000	125.000	
MSD	Fluoride (F) by IC	16984-48-8	108.384	% Recov	06/04/03	75.000	125.000	
MSD	Nitrite (N) by IC	NO2-N	100.198	% Recov	06/04/03	75.000	125.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030642
Matrix: SOLID
Test: Anions by Ion Chromatography

SAF Number: F03-006
Sample Date: 05/06/03
Receive Date: 05/06/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
MSD	Nitrate (N) by IC	NO3-N	95.291	% Recov	06/04/03	75.000	125.000
MSD	Phosphate (P) by IC	14265-44-2	90.928	% Recov	06/04/03	75.000	125.000
MSD	Sulfate (SO4) by IC	14808-79-8	96.954	% Recov	06/04/03	75.000	125.000

BATCH QC

BLANK	Bromide (Br) by IC	24959-67-9	<4.50e-2	mg/L	06/04/03	0.000	300.000
BLANK	Bromide (Br) by IC	24959-67-9	<4.50e-2	mg/L	06/04/03	0.000	300.000
BLANK	Chloride (Cl) by IC	16887-00-6	<1.40e-2	mg/L	06/04/03	0.000	300.000
BLANK	Chloride (Cl) by IC	16887-00-6	<1.40e-2	mg/L	06/04/03	0.000	300.000
BLANK	Fluoride (F) by IC	16984-48-8	<7.00e-3	mg/L	06/04/03	0.000	300.000
BLANK	Fluoride (F) by IC	16984-48-8	<7.00e-3	mg/L	06/04/03	0.000	300.000
BLANK	Nitrite (N) by IC	NO2-N	<9.00e-3	mg/L	06/04/03	0.000	300.000
BLANK	Nitrite (N) by IC	NO2-N	<9.00e-3	mg/L	06/04/03	0.000	300.000
BLANK	Nitrate (N) by IC	NO3-N	<5.00e-3	mg/L	06/04/03	0.000	300.000
BLANK	Nitrate (N) by IC	NO3-N	<5.00e-3	mg/L	06/04/03	0.000	300.000
BLANK	Phosphate (P) by IC	14265-44-2	<1.30e-2	mg/L	06/04/03	0.000	300.000
BLANK	Phosphate (P) by IC	14265-44-2	<1.30e-2	mg/L	06/04/03	0.000	300.000
BLANK	Sulfate (SO4) by IC	14808-79-8	<2.40e-2	mg/L	06/04/03	0.000	300.000
BLANK	Sulfate (SO4) by IC	14808-79-8	<2.40e-2	mg/L	06/04/03	0.000	300.000
LCS	Bromide (Br) by IC	24959-67-9	99.252	% Recov	06/04/03	80.000	120.000
LCS	Chloride (Cl) by IC	16887-00-6	100.000	% Recov	06/04/03	80.000	120.000
LCS	Fluoride (F) by IC	16984-48-8	108.409	% Recov	06/04/03	80.000	120.000
LCS	Nitrite (N) by IC	NO2-N	102.941	% Recov	06/04/03	80.000	120.000
LCS	Nitrate (N) by IC	NO3-N	98.113	% Recov	06/04/03	80.000	120.000
LCS	Phosphate (P) by IC	14265-44-2	97.523	% Recov	06/04/03	80.000	120.000
LCS	Sulfate (SO4) by IC	14808-79-8	99.499	% Recov	06/04/03	80.000	120.000

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030642
Matrix: SOLID
Test: Uranium Isotopics by AEA

SAF Number: F03-006
Sample Date: 05/06/03
Receive Date: 05/06/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
Lab ID: W030000370							
BATCH QC ASSOCIATED WITH SAMPLE							
DUP	U-238 by AEA	24678-82-8	16.667	RPD	06/03/03	0.000	20.000
BATCH QC							
BLANK	U-238 by AEA	24678-82-8	1.2e-02	PCG	06/03/03	0.000	1000.000
LCS	U-238 by AEA	24678-82-8	107.000	% Recov	06/03/03	75.000	125.000

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030642
Matrix: SOLID
Test: Americium by AEA

SAF Number: F03-006
Sample Date: 05/06/03
Receive Date: 05/06/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
Lab ID: W030000370							
BATCH QC ASSOCIATED WITH SAMPLE							
DUP	Am-241 by AEA	14596-10-2	6.061	RPD	06/03/03	0.000	20.000
BATCH QC							
BLANK	Am-241 by AEA	14596-10-2	2.8e-02	PCG	06/03/03	0.000	1000.000
LCS	Am-241 by AEA	14596-10-2	94.000	% Recov	06/03/03	75.000	125.000

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030642
Matrix: SOLID
Test: Plutonium Isotopics by AEA

SAF Number: F03-006
Sample Date: 05/06/03
Receive Date: 05/06/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit	
Lab ID: W030000370								
BATCH QC ASSOCIATED WITH SAMPLE								
DUP	Pu-239/240 by AEA	PU-239/240	199.980	RPD	06/03/03	0.000	20.000	*
BATCH QC								
BLANK	Pu-239/240 by AEA	PU-239/240	3.5e-03	PCG	06/03/03	0.000	1000.000	
LCS	Pu-239/240 by AEA	PU-239/240	94.000	% Recov	06/03/03	75.000	125.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030642
Matrix: SOLID
Test: Ammonia (N) by IC

SAF Number: F03-006
Sample Date: 05/05/03
Receive Date: 05/05/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
Lab ID: W030000352							
BATCH QC ASSOCIATED WITH SAMPLE							
DUP	Ammonia (N) by IC	7664-41-7	n/a	RPD	06/03/03	0.000	20.000
MS	Ammonia (N) by IC	7664-41-7	99.394	% Recov	06/03/03	75.000	125.000
MSD	Ammonia (N) by IC	7664-41-7	96.970	% Recov	06/03/03	75.000	125.000
Lab ID: W030000370							
BATCH QC ASSOCIATED WITH SAMPLE							
DUP	Ammonia (N) by IC	7664-41-7	n/a	RPD	06/03/03	0.000	20.000
MS	Ammonia (N) by IC	7664-41-7	94.545	% Recov	06/03/03	75.000	125.000
MSD	Ammonia (N) by IC	7664-41-7	95.758	% Recov	06/03/03	75.000	125.000
BATCH QC							
BLNK-PREP	Ammonia (N) by IC	7664-41-7	<4.00e-3	Ratio	06/04/03		
BLNK-PREP	Ammonia (N) by IC	7664-41-7	<4.00e-3	Ratio	06/03/03		
LCS	Ammonia (N) by IC	7664-41-7	104.101	% Recov	06/03/03	80.000	120.000

T4180-03-SLF-010

ATTACHMENT 3

SAMPLE RECEIPT INFORMATION

Consisting of 3 pages
Cover page not included

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

File
VB
Revised
5/21/03

ACKNOWLEDGMENT OF SAMPLES RECEIVED

Ground Water Protection Program

Richland, WA 99352
Attn: Steve Trent

Customer Code: GPP
PO#: 117504/ES10
Group#: 20030642
Project#: F03-006
Proj Mgr: STEVE TRENT A0-21
Phone: 373-5869

The following samples were received from you on 05/06/03. 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
W030000370	B16WB2	GPP @2008 @AEA-30 @AEA-31 @AEA-32 @GEA-GPP @IC-30 @ICP-GPP NH4-IC PH-30	Solid, or handle as if solid	05/06/03

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
@IC-30	Anions by Ion Chromatography
@ICP-GPP	ICP Metals Analysis, Grd H20 P
NH4-IC	Ammonia (N) by IC
PH-30	pH Soil and Waste Measurement

COPY

MAP

3-1

4/4

FH-Central Plateau Project	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F03-006-85	Page 1 of 1

Collector Johansen/Pope/Pfister	Company Contact LC Hulstrom	Telephone No. 373-3928	Project Coordinator TRENT, SJ
Project Designation 200-PW-2/200-PW-4 OU - Borehole Soil Sampling	Sampling Location 216-A-37 (C4106); (197.5-200')		SAF No. F03-006
Ice Chest No. ERC-02-107	Field Logbook No. HNF-N-3361	COA 117504ES10	Method of Shipment Government Vehicle
Shipped To Waste Sampling & Characterization	Offsite Property No. N/A		Bill of Lading/Air Bill No. N/A

Price Code 8N

Air Quality ☐

Data Turnaround 30 Days

POSSIBLE SAMPLE HAZARDS/REMARKS

Special Handling and/or Storage

20030642

Preservation	Cool 4C	Cool 4C	Cool 4C	Cool 4C							
Type of Container	Gs*	aG	Gs*	P							
No. of Container(s)	3	1	3	1							
Volume	40mL	250mL	40mL	500mL							
SAMPLE ANALYSIS	See item (1) in Special Instructions.	See item (2) in Special Instructions.	See item (3) in Special Instructions.	See item (4) in Special Instructions.							

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Sample No.	Matrix *	Sample Date	Sample Time										
B16WB2	SOIL	5/6/03	0945	X	X	X	X						
W03000370													

CHAIN OF POSSESSION		Sign/Print Names	
Relinquished By/Removed From S-SAPE/Sgt	Date/Time 5/6/03 1047	Received By/Stored In [illegible]	Date/Time 5/6/03 1047
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time

SPECIAL INSTRUCTIONS

** The laboratory is to report both kerosene and diesel range compounds from WTPH-D analysis.

(1) VOA - 8260A (TCL); VOA - 8260A (Add-On) {2-Pentanone, Benzyl alcohol, n-Butylbenzene}
(2) 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
(3) Alcohols, Glycols, & Ketones - 8015 {1-Butanol, Diethyl ether, Ethylene glycol, Methanol}
(4) 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, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, 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

3-2

-----Original Message-----
From: Trent, Stephen J
Sent: Wednesday, May 14, 2003 8:45 AM
To: Trechter, John E Jr.
Cc: Dale, Troy F; Caprio, Christina M; Fitzgerald, Scot L; Swanson, L Craig; Connell, Carl W; Hulstrom, Larry C; Ford, Bruce H; Bradfield, Thomas A (Tom); Thomas, Greg S
Subject: Game Plan for Organics, CN and smear sample
Importance: High

John,

Here's my game plan for the at-risk organics and CN associated with SAF F03-006 and F03-007 (200-PW-2/4 characterization) -

I spoke with Lionville Labs yesterday and they feel that they have retained enough sample material to complete all the organics and CN analyses on samples collected from the same sample intervals as those submitted to WSCF; recall that Lionville was sent material from each sample interval to complete certain analyses that are not available at WSCF. Lionville started these samples this morning and hopes to have them analysed today. As a result, please cancel the 8015, 8260, 8270, PCB, WTPH-D/G, and CN on sample delivery groups 20030588, 20030598, 20030613, 20030630, and 20030642. In addition, please cancel the 8260 analysis on sample delivery group 20030612 as this was a trip blank for VOA soil sample submitted to WSCF.

With respect to the quick-turn smear sample, please cancel all the remaining isotopic analyses. The GEA gave enough information from Am-241 result to help GPP radcon get their RWP in place for the next 200-PW-2 borehole.

If DOE/FH do not secure the mixed waste exemption for laboratory waste by COB today, then we will need to start moving the remaining sample material out of the lab to the commercial providers tomorrow morning. I'll get you a list of what we want to remove later today.

Steve Trent
Sample Management Project Coordinator
Fluor Hanford - Central Plateau Project
Ph: (509) 373-5869
EFax: (866) 252-5816
Site Pager: 85-7344

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