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FLUOR

Memorandum

M8141-SLF-05-292

To: S. J. Trent A0-21 Date: July 11, 2005

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

cc:

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

Subject: UPDATED FINAL RESULTS FOR 216-A-8 CRIB CHARACTERIZATION BOREHOLE – SAMPLE DELIVERY GROUP WSCF20051184 – SAF NUMBER F05-024

Reference:
(1) Memo, SL Fitzgerald to SJ Trent, same subject (M8141-SLF-05-286) dated July 7, 2005
(2) Groundwater Protection Program-Letter of Instruction, FH-EIS-2003-MEM-001, October 31, 2002
(3) HNF-SD-CD-QAPP-017, Rev. 7, Waste Sampling & Characterization Facility Quality Assurance Plan

This letter contains a revised narrative (Attachment 1) for sample delivery group WSCF20051184 correcting a few minor errors noted in the text's side bars. Please replace the original narrative (Reference 1) with the updated attachment.

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Attachment 1

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M8141-SLF-05-292

ATTACHMENT 1

REVISED NARRATIVE

Consisting of 6 pages
Including cover page

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Sample Delivery Group	**WSCF20051184, Rev. 1**
Sample Matrix	**WATER**
Sample Visual	**N/A**
SAF Number	**F05-024**
Data Deliverable	**Summary Report**

Introduction

Two (2) 216-A-8 Crib Characterization Borehole (QC) samples (B1D7F1 and B1D7D3) were received at the WSCF Laboratory on June 7, 2005. The samples were analyzed for the analytes indicated on the attached copy of the chain of custodies (COC) form in accordance with the *Groundwater Remediation Program – Letter of Instruction*, referenced in the cover letter.

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

Analytical Methodology for Requested Analyses

Refer to *WSCF Method References Report,* pages 49 through 50, for a complete listing of approved analytical methods.

Inorganic Comments

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

- Sample B1D7F1 result was B-flagged; the analyte was less than the reportable detection limit, but greater than or equal to the method detection limit.

All QC controls are within the established limits.

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

All QC controls are within the established limits.

Chromium, Hexavalent – The hold time for this analysis was met. A Blank, Duplicate, Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GRP Letter of Instruction. See page 14 for QC details. All QC controls are within the established limits.

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ICP-AES Metals (Bismuth and Phosphorus only) – The hold time for this analysis was met. A Blank, Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per GRP Letter of Instruction. See page 15 for QC details. Analytical Note:

- Preparation Date: 14-jun-2005.

All QC controls are within the established limits.

ICP-MS Metals – The hold time for this analysis was met. A Blank, Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GRP Letter of Instruction. See pages 16 through 18 for QC details. Analytical Notes:

- Preparation Date: 13-jun-2005.
- Matrix Spike and Matrix Spike Duplicate QC samples were analyzed on sample# B1D7K0 (SDG# 20051190, SAF# F04-032).

All QC controls are within the established limits.

pH - The hold time for this analysis was met. A Laboratory Control Sample and Duplicate were analyzed with each delivery group per the GRP Letter of Instruction. See page 19 for QC details. Analytical Note:

- Duplicate QC sample was analyzed on a non GRP sample# PFP-05-243-45 (SDG# 20051180).

All QC controls are within the established limits.

Organic Comments

PCBs – The hold time for this analysis was met. A Blank, Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GRP Letter of Instruction. See pages 27 through 28 for QC details. Analytical Note:

- Preparation Date: 13-jun-2005.

All QC controls are within the established limits.

Semi-VOA – The hold time for this analysis was met. A Blank, Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GRP Letter of Instruction. See pages 29 through 34 for QC details. Analytical Notes:

- Preparation Date: 14-jun-2005.
- Diethylphthalate – Sample B1D7F1 result was less than the reportable detection limit, but greater than or equal to the method detection limit. Sample B1D7F1 result was J flagged.

All QC controls are within the established limits.

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TPHD-WA - The hold time for this analysis was met. A Blank, Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per GRP Letter of Instruction. See page 35 for QC details. Analytical Note:

- Preparation Date: 08-jun-2005.

All QC controls are within the established limits.

VOA – The hold time for this analysis was met. A Blank, Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GRP Letter of Instruction. See pages 36 through 39 for QC details. Analytical Note:

- Matrix Spike and Matrix Spike Duplicate QC samples were analyzed on sample# B1D7K5 (SDG# 20051157, SAF# F04-032).

All QC controls are within the established limits.

Radiochemistry Comments

RadChem – There are no hold times associated with WSCF radiochemical methods. A Laboratory Control Sample and Duplicate QC samples were analyzed with each delivery group per the GRP Letter of Instruction. See pages 42 through 46 for QC details. Analytical Notes:

- Uranium234 - Duplicate Relative Percent Difference QC sample exceeded established laboratory standards. All other QC controls are within the established limits.

- Technetium-99 – Because the sample was preserved in acid, the WSCF laboratory was unable to analyze for Tc-99. Per direction from client, the sample was returned to GRP for shipment to an offsite laboratory.

Americium-243, Plutonium-242, Strontium-85 and Uranium-232 – Radiochemical Tracer Recovery Data are summarized below:

Radiochemical Tracer Percent Recovery			
[illegible]	[illegible]	[illegible]	[illegible]
Americium-243			
BLANK		Am-243	78.6%
LCS		Am-243	73.4%
B1D7F1	W050001685	Am-243	74.5%
DUPLICATE	W050001685	Am-243	79.0%

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Radiochemical Tracer Percent Recovery			
Sample	Lab Sample	Isotope	Recovery
Plutonium-242			
BLANK		Pu-242	84.3%
LCS		Pu-242	82.5%
B1D7F1	W050001685	Pu-242	67.8%
DUPLICATE	W050001685	Pu-242	68.0%
Strontium-85			
BLANK		Sr-85	94.5%
LCS		Sr-85	104.7%
B1D7F1	W050001685	Sr-85	106.6%
DUPLICATE	W050001685	Sr-85	92.4%
Uranium-232			
BLANK		U-232	92.2%
LCS		U-232	65.7%
B1D7F1	W050001685	U-232	90.4%
DUPLICATE	W050001685	U-232	90.8%

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

Pauline D. Mix
WSCF Client Services

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7/21/05

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

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M8141-SLF-05-286

ATTACHMENT 2

ANALYTICAL RESULTS

Consisting of 45 pages
Including cover page

WSCF
ANALYTICAL RESULTS REPORT

for

Groundwater Remediation Program

Richland, WA 99354

Attention: Steve Trent

Analytical: WWBaird 7/7/05

Client Services: P.D. Mix 7/6/2005

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

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

Contract#: FH-EIS-2003-MEM-001
Report#: WSCF20051184
Report Date: 30-jun-2005
Report WGPP/ver. 1.1

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
Project: F05-024: F05-024

Group #: WSCF20051184

Sample #	Client ID		CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze	Sample	Receive
Inorganic														
W050001685	B1D7F1	TRENT	18540-29-9	Hexavalent Chromium	WATER	LA-265-403	U	< 3.00e-03	mg/L	1.00	3.0e-03	06/08/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	NH4-N	Nitrogen In ammonium	WATER	LA-503-401	B	4.00e-03	mg/L	1.00	2.0e-03	06/10/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	PH	pH Measurement	WATER	LA-212-402		7.44	pH	1.00	0.010	06/07/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	16984-48-8	Fluoride	WATER	LA-533-410	U	< 0.0180	mg/L	1.00	0.018	06/07/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	16887-00-6	Chloride	WATER	LA-533-410	U	< 0.0340	mg/L	1.00	0.034	06/07/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	NO2-N	Nitrogen in Nitrite	WATER	LA-533-410	U	< 6.00e-03	mg/L	1.00	6.0e-03	06/07/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	NO3-N	Nitrogen In Nitrate	WATER	LA-533-410		0.208	mg/L	1.00	0.022	06/07/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	PO4-P	Phosphate (P) by IC	WATER	LA-533-410	U	< 0.0780	mg/L	1.00	0.078	06/07/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	14808-79-8	Sulfate	WATER	LA-533-410	U	< 0.150	mg/L	1.00	0.15	06/07/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	7440-69-9	Bismuth	WATER	LA-505-411	U	< 22.0	ug/L	1.00	22	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	7723-14-0	Phosphorus	WATER	LA-505-411		59.2	ug/L	1.00	48	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	7440-02-0	Nickel	WATER	LA-505-412		0.128	ug/L	1.00	0.10	06/14/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	7440-22-4	Silver	WATER	LA-505-412	U	< 0.100	ug/L	1.00	0.10	06/14/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	7440-39-3	Barium	WATER	LA-505-412	U	< 4.00	ug/L	1.00	4.0	06/14/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	7440-43-9	Cadmium	WATER	LA-505-412	U	< 0.100	ug/L	1.00	0.10	06/14/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	7440-47-3	Chromium	WATER	LA-505-412	U	< 4.00	ug/L	1.00	4.0	06/14/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	7440-50-8	Copper	WATER	LA-505-412	U	< 2.00	ug/L	1.00	2.0	06/14/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	7439-92-1	Lead	WATER	LA-505-412	U	< 0.200	ug/L	1.00	0.20	06/14/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	7439-97-6	Mercury	WATER	LA-505-412	U	< 0.100	ug/L	1.00	0.10	06/14/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	7440-61-1	Uranium	WATER	LA-505-412	U	< 0.100	ug/L	1.00	0.10	06/14/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	7440-38-2	Arsenic	WATER	LA-505-412	U	< 0.400	ug/L	1.00	0.40	06/14/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	7782-49-2	Selenium	WATER	LA-505-412	U	< 0.400	ug/L	1.00	0.40	06/14/05	06/07/05	06/07/05

MDL=Minimum Detection Limit
RQ=Result Qualifier

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

DF=Dilution Factor

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

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051184
Matrix: WATER
Test: Ammonia (N) by IC

SAF Number: F05-024
Sample Date: 06/07/05
Receive Date:06/07/05

Lab ID: W050001685

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	4.20e-03	4.878	RPD	06/10/05	0.000	20.000	
MS	Ammonia (N) by IC	7664-41-7	1.62e-01	98.780	% Recov	06/10/05	75.000	125.000	
MSD	Ammonia (N) by IC	7664-41-7	1.60e-01	97.561	% Recov	06/10/05	75.000	125.000	

BATCH QC

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
BLANK	Ammonia (N) by IC	7664-41-7	<2.00e-3	n/a	mg/L	06/10/05	0.000	30.000	U
BLANK	Ammonia (N) by IC	7664-41-7	<2.00e-3	n/a	mg/L	06/10/05	0.000	30.000	U
LCS	Ammonia (N) by IC	7664-41-7	8.39e+01	101.820	% Recov	06/10/05	80.000	120.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051184
Matrix: WATER
Test: Anions by Ion Chromatography

SAF Number: F05-024
Sample Date: 06/07/05
Receive Date:06/07/05

Lab ID: W050001685

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	<3.40e-2	n/a	RPD	06/07/05	0.000	20.000	U
DUP	Fluoride	16984-48-8	<1.80e-2	n/a	RPD	06/07/05	0.000	20.000	U
DUP	Nitrogen in Nitrite	NO2-N	<6.00e-3	n/a	RPD	06/07/05	0.000	20.000	U
DUP	Nitrogen in Nitrate	NO3-N	2.26e-01	8.295	RPD	06/07/05	0.000	20.000	
DUP	Phosphate (P) by IC	PO4-P	<7.80e-2	n/a	RPD	06/07/05	0.000	20.000	U
DUP	Sulfate	14808-79-8	<1.50e-1	n/a	RPD	06/07/05	0.000	20.000	U
MS	Chloride	16887-00-6	9.89e-01	99.899	% Recov	06/07/05	75.000	125.000	
MS	Fluoride	16984-48-8	4.22e-01	86.299	% Recov	06/07/05	75.000	125.000	
MS	Nitrogen in Nitrite	NO2-N	4.91e-01	97.421	% Recov	06/07/05	75.000	125.000	
MS	Nitrogen in Nitrate	NO3-N	4.36e-01	97.758	% Recov	06/07/05	75.000	125.000	
MS	Phosphate (P) by IC	PO4-P	9.61e-01	100.209	% Recov	06/07/05	75.000	125.000	
MS	Sulfate	14808-79-8	1.85e+00	93.909	% Recov	06/07/05	75.000	125.000	
MSD	Chloride	16887-00-6	1.00e+00	101.010	% Recov	06/07/05	75.000	125.000	
MSD	Fluoride	16984-48-8	4.27e-01	87.321	% Recov	06/07/05	75.000	125.000	
MSD	Nitrogen in Nitrite	NO2-N	4.73e-01	93.849	% Recov	06/07/05	75.000	125.000	
MSD	Nitrogen in Nitrate	NO3-N	4.31e-01	96.637	% Recov	06/07/05	75.000	125.000	
MSD	Phosphate (P) by IC	PO4-P	9.41e-01	98.123	% Recov	06/07/05	75.000	125.000	
MSD	Sulfate	14808-79-8	1.95e+00	98.985	% Recov	06/07/05	75.000	125.000	

BATCH QC

BLANK	Chloride	16887-00-6	<5.83e0	n/a	mg/L	06/07/05	0.000	300.000	U
BLANK	Chloride	16887-00-6	<3.40e-2	n/a	mg/L	06/07/05	0.000	300.000	U
BLANK	Fluoride	16984-48-8	<1.80e-2	n/a	mg/L	06/07/05	0.000	300.000	U
BLANK	Fluoride	16984-48-8	<3.62e0	n/a	mg/L	06/07/05	0.000	300.000	U
BLANK	Nitrogen in Nitrite	NO2-N	<1.21e0	n/a	mg/L	06/07/05	0.000	300.000	U
BLANK	Nitrogen in Nitrite	NO2-N	<6.00e-3	n/a	mg/L	06/07/05	0.000	300.000	U

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051184
Matrix: WATER
Test: Anions by Ion Chromatography

SAF Number: F05-024
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	<2.20e-2	n/a	mg/L	06/07/05	0.000	300.000	U
BLANK	Nitrogen in Nitrate	NO3-N	<4.42e0	n/a	mg/L	06/07/05	0.000	300.000	U
BLANK	Phosphate (P) by IC	PO4-P	<7.80e-2	n/a	mg/L	06/07/05	0.000	300.000	U
BLANK	Phosphate (P) by IC	PO4-P	<1.57e1	n/a	mg/L	06/07/05	0.000	300.000	U
BLANK	Sulfate	14808-79-8	<3.02e1	n/a	mg/L	06/07/05	0.000	300.000	U
BLANK	Sulfate	14808-79-8	<1.50e-1	n/a	mg/L	06/07/05	0.000	300.000	U
LCS	Chloride	16887-00-6	1.97e+02	98.500	% Recov	06/07/05	80.000	120.000	
LCS	Fluoride	16984-48-8	9.49e+01	94.900	% Recov	06/07/05	80.000	120.000	
LCS	Nitrogen in Nitrite	NO2-N	9.43e+01	94.300	% Recov	06/07/05	80.000	120.000	
LCS	Nitrogen in Nitrate	NO3-N	9.40e+01	92.511	% Recov	06/07/05	80.000	120.000	
LCS	Phosphate (P) by IC	PO4-P	1.83e+02	94.427	% Recov	06/07/05	80.000	120.000	
LCS	Sulfate	14808-79-8	3.71e+02	92.982	% Recov	06/07/05	80.000	120.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051184
Matrix: WATER
Test: Hexavalent chromium

SAF Number: F05-024
Sample Date: 06/07/05
Receive Date:06/07/05

Lab ID: W050001685

BATCH QC ASSOCIATED WITH SAMPLE

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
DUP	Hexavalent chromium	18540-29-9	<0.003	n/a	RPD	06/08/05	0.000	15.000	U
MS	Hexavalent chromium	18540-29-9	0.0430	87.045	% Recov	06/08/05	85.000	115.000	
MSD	Hexavalent chromium	18540-29-9	0.0440	89.069	% Recov	06/08/05	85.000	115.000	
SPK-RPD	Hexavalent chromium	18540-29-9	89.069	2.299	RPD	06/08/05	0.000	20.000	

BATCH QC

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
BLANK	Hexavalent chromium	18540-29-9	<0.003	n/a	mg/L	06/08/05	0.000	2.000	U
BLANK	Hexavalent chromium	18540-29-9	<0.003	n/a	mg/L	06/08/05	0.000	2.000	U
LCS	Hexavalent chromium	18540-29-9	0.0400	86.207	% Recov	06/08/05	80.000	120.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051184
Matrix: WATER
Test: ICP Metals Analysis, Grd H20 P

SAF Number: F05-024
Sample Date: 06/07/05
Receive Date:06/07/05

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
Lab ID: W050001685									
BATCH QC ASSOCIATED WITH SAMPLE									
MS	Bismuth	7440-69-9	1054	105.400	% Recov	06/15/05	75.000	125.000	
MS	Phosphorus	7723-14-0	996.8	99.680	% Recov	06/15/05	70.000	130.000	
MSD	Bismuth	7440-69-9	1066	106.600	% Recov	06/15/05	75.000	125.000	
MSD	Phosphorus	7723-14-0	964.8	96.480	% Recov	06/15/05	75.000	125.000	
SPK-RPD	Bismuth	7440-69-9	106.600	1.132	RPD	06/15/05	0.000	20.000	
SPK-RPD	Phosphorus	7723-14-0	96.480	3.263	RPD	06/15/05	0.000	20.000	
BATCH QC									
BLANK	Bismuth	7440-69-9	<22	n/a	ug/L	06/15/05			U
BLANK	Phosphorus	7723-14-0	<48	n/a	ug/L	06/15/05			U
LCS	Bismuth	7440-69-9	1062	106.200	% Recov	06/15/05	80.000	120.000	
LCS	Phosphorus	7723-14-0	1078	107.800	% Recov	06/15/05	80.000	120.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051184
Matrix: WATER
Test: ICP-2008 MS All possible metal

SAF Number: F05-024
Sample Date: 06/07/05
Receive Date:06/07/05

Lab ID: W050001692
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	35.83	89.575	% Recov	06/14/05	70.000	130.000	
MS	Arsenic	7440-38-2	36.15	90.375	% Recov	06/14/05	70.000	130.000	
MS	Barium	7440-39-3	36.98	92.450	% Recov	06/14/05	70.000	130.000	
MS	Cadmium	7440-43-9	34.84	87.100	% Recov	06/14/05	70.000	130.000	
MS	Chromium	7440-47-3	38.22	95.550	% Recov	06/14/05	70.000	130.000	
MS	Copper	7440-50-8	34.02	85.050	% Recov	06/14/05	70.000	130.000	
MS	Mercury	7439-97-6	2.018	100.900	% Recov	06/14/05	70.000	130.000	
MS	Nickel	7440-02-0	35.024	87.560	% Recov	06/14/05	70.000	130.000	
MS	Lead	7439-92-1	41.03	102.575	% Recov	06/14/05	70.000	130.000	
MS	Selenium	7782-49-2	31.316	78.290	% Recov	06/14/05	70.000	130.000	
MS	Uranium	7440-61-1	42.917	107.293	% Recov	06/14/05	70.000	130.000	
MSD	Silver	7440-22-4	36.89	92.225	% Recov	06/14/05	70.000	130.000	
MSD	Arsenic	7440-38-2	36.32	90.800	% Recov	06/14/05	70.000	130.000	
MSD	Barium	7440-39-3	39.58	98.950	% Recov	06/14/05	70.000	130.000	
MSD	Cadmium	7440-43-9	35.55	88.875	% Recov	06/14/05	70.000	130.000	
MSD	Chromium	7440-47-3	37.47	93.675	% Recov	06/14/05	70.000	130.000	
MSD	Copper	7440-50-8	33.85	84.625	% Recov	06/14/05	70.000	130.000	
MSD	Mercury	7439-97-6	2.027	101.350	% Recov	06/14/05	70.000	130.000	
MSD	Nickel	7440-02-0	35.264	88.160	% Recov	06/14/05	70.000	130.000	
MSD	Lead	7439-92-1	41.19	102.975	% Recov	06/14/05	70.000	130.000	
MSD	Selenium	7782-49-2	31.746	79.365	% Recov	06/14/05	70.000	130.000	
MSD	Uranium	7440-61-1	42.887	107.218	% Recov	06/14/05	70.000	130.000	
SPK-RPD	Silver	7440-22-4	92.225	2.915	RPD	06/14/05	0.000	20.000	
SPK-RPD	Arsenic	7440-38-2	90.800	0.469	RPD	06/14/05	0.000	20.000	
SPK-RPD	Barium	7440-39-3	98.950	6.792	RPD	06/14/05	0.000	20.000	
SPK-RPD	Cadmium	7440-43-9	88.875	2.017	RPD	06/14/05	0.000	20.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051184
Matrix: WATER
Test: ICP-2008 MS All possible metal

SAF Number: F05-024
Sample Date: 06/07/05
Receive Date:06/07/05

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
SPK-RPD	Chromium	7440-47-3	93.675	1.982	RPD	06/14/05	0.000	20.000	
SPK-RPD	Copper	7440-50-8	84.625	0.501	RPD	06/14/05	0.000	20.000	
SPK-RPD	Mercury	7439-97-6	101.350	0.445	RPD	06/14/05	0.000	20.000	
SPK-RPD	Nickel	7440-02-0	88.160	0.683	RPD	06/14/05	0.000	20.000	
SPK-RPD	Lead	7439-92-1	102.975	0.389	RPD	06/14/05	0.000	20.000	
SPK-RPD	Selenium	7782-49-2	79.365	1.364	RPD	06/14/05	0.000	20.000	
SPK-RPD	Uranium	7440-61-1	107.218	0.070	RPD	06/14/05	0.000	20.000	
BATCH QC									
BLANK	Silver	7440-22-4	<0.1	n/a	ug/L	06/14/05			U
BLANK	Arsenic	7440-38-2	<0.4	n/a	ug/L	06/14/05			U
BLANK	Barium	7440-39-3	<4	n/a	ug/L	06/14/05			U
BLANK	Cadmium	7440-43-9	<0.1	n/a	ug/L	06/14/05			U
BLANK	Chromium	7440-47-3	<4	n/a	ug/L	06/14/05			U
BLANK	Copper	7440-50-8	< 2	n/a	ug/L	06/14/05			U
BLANK	Mercury	7439-97-6	<0.1	n/a	ug/L	06/14/05			U
BLANK	Nickel	7440-02-0	<0.1	n/a	ug/L	06/14/05			U
BLANK	Lead	7439-92-1	<0.2	n/a	ug/L	06/14/05			U
BLANK	Selenium	7782-49-2	<0.4	n/a	ug/L	06/14/05			U
BLANK	Uranium	7440-61-1	<0.1	n/a	ug/L	06/14/05			U
LCS	Silver	7440-22-4	38.99	97.475	% Recov	06/14/05	85.000	115.000	
LCS	Arsenic	7440-38-2	36.52	91.300	% Recov	06/14/05	85.000	115.000	
LCS	Barium	7440-39-3	40.02	100.050	% Recov	06/14/05	85.000	115.000	
LCS	Cadmium	7440-43-9	37.87	94.675	% Recov	06/14/05	85.000	115.000	
LCS	Chromium	7440-47-3	40.97	102.425	% Recov	06/14/05	85.000	115.000	
LCS	Copper	7440-50-8	39.83	99.575	% Recov	06/14/05	85.000	115.000	
LCS	Mercury	7439-97-6	1.903	95.150	% Recov	06/14/05	85.000	115.000	
LCS	Nickel	7440-02-0	39.38	98.450	% Recov	06/14/05	85.000	115.000	
LCS	Lead	7439-92-1	39.67	99.175	% Recov	06/14/05	85.000	115.000	
LCS	Selenium	7782-49-2	34.76	86.900	% Recov	06/14/05	85.000	115.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051184
Matrix: WATER
Test: ICP-2008 MS All possible metal

SAF Number: F05-024
Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
LCS	Uranium	7440-61-1	38.61	96.525	% Recov	06/14/05	85.000	115.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051184
Matrix: WATER
Test: pH Direct Measurement

SAF Number: F05-024
Sample Date: 06/07/05
Receive Date:06/07/05

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
Lab ID: W050001677									
BATCH QC ASSOCIATED WITH SAMPLE									
DUP	pH Direct Measurement	PH	7.515	0.372	RPD	06/07/05	0.000	20.000	
BATCH QC									
LCS	pH Direct Measurement	PH	8.082	1.010	Ratio	06/07/05	0.900	1.100	

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
Project: F05-024: F05-024

Group #: WSCF20051184

Sample #	Client ID		CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze	Sample	Receive
Organic														
W050001685	B1D7F1	TRENT	12674-11-2	Aroclor-1016	WATER	LA-523-427	U	< 0.0940	ug/L	1.00	0.094	06/29/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	11104-28-2	Aroclor-1221	WATER	LA-523-427	U	< 0.190	ug/L	1.00	0.19	06/29/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	11141-16-5	Aroclor-1232	WATER	LA-523-427	U	< 0.0940	ug/L	1.00	0.094	06/29/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	53469-21-9	Aroclor-1242	WATER	LA-523-427	U	< 0.0940	ug/L	1.00	0.094	06/29/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	12672-29-6	Aroclor-1248	WATER	LA-523-427	U	< 0.0940	ug/L	1.00	0.094	06/29/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	11097-69-1	Aroclor-1254	WATER	LA-523-427	U	< 0.0940	ug/L	1.00	0.094	06/29/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	11096-82-5	Aroclor-1260	WATER	LA-523-427	U	< 0.0940	ug/L	1.00	0.094	06/29/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	37324-23-5	Aroclor-1262	WATER	LA-523-427	U	< 0.0940	ug/L	1.00	0.094	06/29/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	11100-14-4	Aroclor-1268	WATER	LA-523-427	U	< 0.0940	ug/L	1.00	0.094	06/29/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	100-02-7	4-Nitrophenol	WATER	LA-523-456	U	< 1.10	ug/L	1.00	1.1	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	106-46-7	1,4-Dichlorobenzene	WATER	LA-523-456	U	< 1.30	ug/L	1.00	1.3	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	108-95-2	Phenol	WATER	LA-523-456	U	< 0.560	ug/L	1.00	0.56	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	120-82-1	1,2,4-Trichlorobenzene	WATER	LA-523-456	U	< 1.70	ug/L	1.00	1.7	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	121-14-2	2,4-Dinitrotoluene	WATER	LA-523-456	U	< 0.370	ug/L	1.00	0.37	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	129-00-0	Pyrene	WATER	LA-523-456	U	< 0.320	ug/L	1.00	0.32	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	59-50-7	4-Chloro-3-methylphenol	WATER	LA-523-456	U	< 0.450	ug/L	1.00	0.45	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	621-64-7	N-Nitrosodi-n-dipropylamine	WATER	LA-523-456	U	< 0.440	ug/L	1.00	0.44	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	83-32-9	Acenaphthene	WATER	LA-523-456	U	< 2.70	ug/L	1.00	2.7	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	87-86-5	Pentachlorophenol	WATER	LA-523-456	U	< 0.630	ug/L	1.00	0.63	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	95-57-8	2-Chlorophenol	WATER	LA-523-456	U	< 2.10	ug/L	1.00	2.1	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	100-01-6	4-Nitroaniline	WATER	LA-523-456	U	< 0.380	ug/L	1.00	0.38	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	101-55-3	4-Bromophenylphenyl ether	WATER	LA-523-456	U	< 1.80	ug/L	1.00	1.8	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	105-67-9	2,4-Dimethylphenol	WATER	LA-523-456	U	< 1.60	ug/L	1.00	1.6	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	106-47-8	4-Chloroaniline	WATER	LA-523-456	U	< 0.550	ug/L	1.00	0.55	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	108-60-1	Bis(2-chloro-1-methylethyl)eth	WATER	LA-523-456	U	< 1.40	ug/L	1.00	1.4	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	111-44-4	Bis(2-chloroethyl) ether	WATER	LA-523-456	U	< 0.230	ug/L	1.00	0.23	06/15/05	06/07/05	06/07/05

MDL=Minimum Detection Limit
RQ=Result Qualifier

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

DF=Dilution Factor

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
Project: F05-024: F05-024

Group #: WSCF20051184

Sample #	Client ID		CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze	Sample	Receive
W050001685	B1D7F1	TRENT	111-91-1	Bis(2-Chloroethoxy)methane	WATER	LA-523-456	U	< 0.300	ug/L	1.00	0.30	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	117-81-7	Bis(2-ethylhexyl) phthalate	WATER	LA-523-456	U	< 0.770	ug/L	1.00	0.77	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	117-84-0	Di-n-octylphthalate	WATER	LA-523-456	U	< 1.40	ug/L	1.00	1.4	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	118-74-1	Hexachlorobenzene	WATER	LA-523-456	U	< 1.10	ug/L	1.00	1.1	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	120-12-7	Anthracene	WATER	LA-523-456	U	< 0.800	ug/L	1.00	0.80	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	120-83-2	2,4-Dichlorophenol	WATER	LA-523-456	U	< 0.510	ug/L	1.00	0.51	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	131-11-3	Dimethyl phthalate	WATER	LA-523-456	U	< 0.330	ug/L	1.00	0.33	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	132-64-9	Dibenzofuran	WATER	LA-523-456	U	< 2.50	ug/L	1.00	2.5	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	191-24-2	Benzo(ghi)perylene	WATER	LA-523-456	U	< 0.870	ug/L	1.00	0.87	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	193-39-5	Indeno(1,2,3-cd)pyrene	WATER	LA-523-456	U	< 0.820	ug/L	1.00	0.82	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	205-99-2	Benzo(b)fluoranthene	WATER	LA-523-456	U	< 0.360	ug/L	1.00	0.36	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	206-44-0	Fluoranthene	WATER	LA-523-456	U	< 0.510	ug/L	1.00	0.51	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	207-08-9	Benzo(k)fluoranthene	WATER	LA-523-456	U	< 0.370	ug/L	1.00	0.37	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	208-96-8	Acenaphthylene	WATER	LA-523-456	U	< 2.40	ug/L	1.00	2.4	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	218-01-9	Chrysene	WATER	LA-523-456	U	< 0.300	ug/L	1.00	0.30	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	50-32-8	Benzo(a)pyrene	WATER	LA-523-456	U	< 0.520	ug/L	1.00	0.52	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	51-28-5	2,4-Dinitrophenol	WATER	LA-523-456	U	< 0.490	ug/L	1.00	0.49	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	53-70-3	Dibenz(a,h)anthracene	WATER	LA-523-456	U	< 0.940	ug/L	1.00	0.94	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	534-52-1	4,6-Dinitro-2-methylphenol	WATER	LA-523-456	U	< 0.520	ug/L	1.00	0.52	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	541-73-1	1,3-Dichlorobenzene	WATER	LA-523-456	U	< 1.20	ug/L	1.00	1.2	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	56-55-3	Benzo(a)anthracene	WATER	LA-523-456	U	< 0.400	ug/L	1.00	0.40	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	606-20-2	2,6-Dinitrotoluene	WATER	LA-523-456	U	< 0.330	ug/L	1.00	0.33	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	7005-72-3	4-Chlorophenylphenyl ether	WATER	LA-523-456	U	< 2.10	ug/L	1.00	2.1	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	77-47-4	Hexachlorocyclopentadiene	WATER	LA-523-456	U	< 0.600	ug/L	1.00	0.60	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	78-59-1	Isophorone	WATER	LA-523-456	U	< 0.420	ug/L	1.00	0.42	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	84-66-2	Diethylphthalate	WATER	LA-523-456	J	1.10	ug/L	1.00	0.53	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	84-74-2	Di-n-butylphthalate	WATER	LA-523-456	U	< 0.430	ug/L	1.00	0.43	06/15/05	06/07/05	06/07/05

MDL=Minimum Detection Limit
RQ=Result Qualifier

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

DF=Dilution Factor

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
Project: F05-024: F05-024

Group #: WSCF20051184

Sample #	Client ID		CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze	Sample	Receive
W050001685	B1D7F1	TRENT	85-01-8	Phenanthrene	WATER	LA-523-456	U	< 1.20	ug/L	1.00	1.2	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	85-68-7	Butylbenzylphthalate	WATER	LA-523-456	U	< 1.40	ug/L	1.00	1.4	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	86-30-6	N-Nitrosodiphenylamine	WATER	LA-523-456	U	< 0.520	ug/L	1.00	0.52	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	86-73-7	Fluorene	WATER	LA-523-456	U	< 2.20	ug/L	1.00	2.2	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	86-74-8	Carbazole	WATER	LA-523-456	U	< 0.390	ug/L	1.00	0.39	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	87-68-3	Hexachlorobutadiene	WATER	LA-523-456	U	< 1.20	ug/L	1.00	1.2	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	88-74-4	2-Nitroaniline	WATER	LA-523-456	U	< 0.400	ug/L	1.00	0.40	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	88-75-5	2-Nitrophenol	WATER	LA-523-456	U	< 0.550	ug/L	1.00	0.55	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	91-20-3	Naphthalene	WATER	LA-523-456	U	< 1.40	ug/L	1.00	1.4	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	91-57-6	2-Methylnaphthalene	WATER	LA-523-456	U	< 3.30	ug/L	1.00	3.3	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	91-58-7	2-Chloronaphthalene	WATER	LA-523-456	U	< 3.80	ug/L	1.00	3.8	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	91-94-1	3,3'-Dichlorobenzidine	WATER	LA-523-456	U	< 0.980	ug/L	1.00	0.98	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	95-48-7	2-Methylphenol (cresol, o-)	WATER	LA-523-456	U	< 0.240	ug/L	1.00	0.24	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	95-50-1	1,2-Dichlorobenzene	WATER	LA-523-456	U	< 1.40	ug/L	1.00	1.4	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	95-95-4	2,4,5-Trichlorophenol	WATER	LA-523-456	U	< 0.770	ug/L	1.00	0.77	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	98-95-3	Nitrobenzene	WATER	LA-523-456	U	< 0.920	ug/L	1.00	0.92	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	99-09-2	3-Nitroaniline	WATER	LA-523-456	U	< 0.430	ug/L	1.00	0.43	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	65794-96-9	3 & 4 Methylphenol Total	WATER	LA-523-456	U	< 0.620	ug/L	1.00	0.62	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	67-72-1	Hexachloroethane	WATER	LA-523-456	U	< 1.00	ug/L	1.00	1.0	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	88-06-2	2,4,6-Trichlorophenol	WATER	LA-523-456	U	< 0.480	ug/L	1.00	0.48	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	124-18-5	Decane	WATER	LA-523-456	U	< 2.10	ug/L	1.00	2.1	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	100-51-6	Benzyl alcohol	WATER	LA-523-456	U	< 0.290	ug/L	1.00	0.29	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	111-76-2	2-Butoxyethanol	WATER	LA-523-456	U	< 0.640	ug/L	1.00	0.64	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	126-73-8	Tributyl phosphate	WATER	LA-523-456	U	< 0.130	ug/L	1.00	0.13	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	91-59-8	2-Naphthylamine	WATER	LA-523-456	U	< 0.620	ug/L	1.00	0.62	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	108-94-1	Cyclohexanone	WATER	LA-523-456	U	< 0.340	ug/L	1.00	0.34	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	110-86-1	Pyridine	WATER	LA-523-456	U	< 0.410	ug/L	1.00	0.41	06/15/05	06/07/05	06/07/05

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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
Project: F05-024: F05-024

Group #: WSCF20051184

Sample #	Client ID		CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze	Sample	Receive
W050001685	B1D7F1	TRENT	95-63-6	1,2,4-Trimethylbenzene	WATER	LA-523-456	U	< 2.10	ug/L	1.00	2.1	06/15/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	75-35-4	1,1-Dichloroethene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	79-01-6	Trichloroethene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	71-43-2	Benzene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	108-88-3	Toluene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	108-90-7	Chlorobenzene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	75-34-3	1,1-Dichloroethane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	100-41-4	Ethylbenzene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	100-42-5	Styrene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	10061-01-5	cis-1,3-Dichloropropene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	10061-02-6	trans-1,3-Dichloropropene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	107-06-2	1,2-Dichloroethane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	108-10-1	4-Methyl-2-Pentanone	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	124-48-1	Dibromochloromethane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	127-18-4	Tetrachloroethene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	1330-20-7	Xylenes (total)	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	540-59-0	1,2-Dichloroethane(Total)	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	56-23-5	Carbon tetrachloride	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	591-78-6	2-Hexanone	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	67-64-1	Acetone	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	67-66-3	Chloroform	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	71-55-6	1,1,1-Trichloroethane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	74-83-9	Bromomethane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	79-34-5	1,1,2,2-Tetrachloroethane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	74-87-3	Chloromethane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	75-00-3	Chloroethane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	75-01-4	Vinyl chloride	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05

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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
Project: F05-024: F05-024

Group #: WSCF20051184

Sample #	Client ID		CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze	Sample	Receive
W050001685	B1D7F1	TRENT	75-09-2	Methylenechloride	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	75-15-0	Carbon disulfide	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	75-25-2	Bromoform	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	75-27-4	Bromodichloromethane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	78-87-5	1,2-Dichloropropane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	78-93-3	2-Butanone	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	79-00-5	1,1,2-Trichloroethane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	71-36-3	1-Butanol	WATER	LA-523-455	U	< 20.0	ug/L	1.00	20	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	107-87-9	2-Pentanone	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	110-82-7	Cyclohexane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	110-54-3	Hexane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	109-99-9	Tetrahydrofuran	WATER	LA-523-455	U	< 2.00	ug/L	1.00	2.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	75-69-4	Trichloromonofluoromethane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	104-51-8	n-Butylbenzene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	156-60-5	trans-1,2-Dichloroethylene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	75-05-8	Acetonitrile	WATER	LA-523-455	U	< 2.00	ug/L	1.00	2.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	156-59-2	cis-1,2-Dichloroethylene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	TPHDIESEL	Total Pet. Hydrocarbons Diesel	WATER	NWTPH	U	< 71.0	ug/L	1.00	71	06/09/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	TPHKEROSENE	Kerosene	WATER	NWTPH	U	< 71.0	ug/L	1.00	71	06/09/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	75-35-4	1,1-Dichloroethene	WATER	LA-523 455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	79-01-6	Trichloroethene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	71-43-2	Benzene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	108-88-3	Toluene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	108-90-7	Chlorobenzene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	75-34-3	1,1-Dichloroethane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	100-41-4	Ethylbenzene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	100-42-5	Styrene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05

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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
Project: F05-024: F05-024

Group #: WSCF20051184

Sample #	Client ID		CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze	Sample	Receive
W050001690	B1D7D3	TRENT	10061-01-5	cis-1,3-Dichloropropene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	10061-02-6	trans-1,3-Dichloropropene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	107-06-2	1,2-Dichloroethane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/06
W050001690	B1D7D3	TRENT	108-10-1	4-Methyl-2-Pentanone	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	124-48-1	Dibromochloromethane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	127-18-4	Tetraehloroethene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	1330-20-7	Xylenes (total)	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	540-59-0	1,2-Dichloroethene(Total)	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	56-23-5	Carbon tetrachloride	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	591-78-6	2-Hexanone	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	67-64-1	Acetone	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	67-66-3	Chloroform	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	71-55-6	1,1,1-Trichloroethane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	74-83-9	Bromomethane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	79-34-5	1,1,2,2-Tetrachloroethane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	74-87-3	Chloromethane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	75-00-3	Chloroethane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	75-01-4	Vinyl chloride	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	75-09-2	Methylenechloride	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	75-15-0	Carbon disulfide	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	75-25-2	Bromoform	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	75-27-4	Bromodichloromethane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	78-87-5	1,2-Dichloropropane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	78-93-3	2-Butanone	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	79-00-5	1,1,2-Trichloroethane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	71-36-3	1-Butanol	WATER	LA-523-455	U	< 20.0	ug/L	1.00	20	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	107-87-9	2-Pentanone	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05

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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
Project: F05-024: F05-024

Group #: WSCF20051184

Sample #	Client ID		CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze	Sample	Receive
W050001690	B1D7D3	TRENT	110-82-7	Cyclohexane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	110-54-3	Hexane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	109-99-9	Tetrahydrofuran	WATER	LA-523-455	U	< 2.00	ug/L	1.00	2.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	75-69-4	Trichloromonofluoromethane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	104-51-8	n-Butylbenzene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	156-60-5	trans-1,2-Dichloroethylene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	75-05-8	Acetonitrile	WATER	LA-523-455	U	< 2.00	ug/L	1.00	2.0	06/13/05	06/07/05	06/07/05
W050001690	B1D7D3	TRENT	156-59-2	cis-1,2-Dichloroethylene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/13/05	06/07/05	06/07/05

MDL=Minimum Detection Limit
RQ=Result Qualifier

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

DF=Dilution Factor

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

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051184
Matrix: WATER
Test: PCBs complete list

SAF Number: F05-024
Sample Date: 06/07/05
Receive Date:06/07/05

Lab ID: W050001685

BATCH QC ASSOCIATED WITH SAMPLE

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
MS	Aroclor-1260	11096-82-5	1.5044	79.700	% Recov	06/29/05	75.000	125.000	
MS	Decachlorobiphenyl	2051-24-3	1.4911	79.000	% Recov	06/29/05	50.000	150.000	
MS	Tetrachloro-m-xylene	877-09-8	1.7404	92.200	% Recov	06/29/05	50.000	150.000	
MSD	Aroclor-1260	11096-82-5	1.4940	79.200	% Recov	06/29/05	75.000	125.000	
MSD	Decachlorobiphenyl	2051-24-3	1.3435	71.200	% Recov	06/29/05	50.000	150.000	
MSD	Tetrachloro-m-xylene	877-09-8	1.7278	91.600	% Recov	06/29/05	50.000	150.000	
SPK-RPD	Aroclor-1260	11096-82-5	79.200	0.629	RPD	06/29/05	0.000	25.000	
SPK-RPD	Decachlorobiphenyl	2051-24-3	71.200	10.386	RPD	06/29/05	0.000	20.000	
SPK-RPD	Tetrachloro-m-xylene	877-09-8	91.600	0.653	RPD	06/29/05	0.000	20.000	
SURR	Decachlorobiphenyl	2051-24-3	1.3715	72.700	% Recov	06/29/05	50.000	150.000	
SURR	Tetrachloro-m-xylene	877-09-8	1.6267	86.200	% Recov	06/29/05	50.000	150.000	

BATCH QC

BLANK	Aroclor-1016	12674-11-2	< 0.10	n/a	ug/L	06/29/05			U
BLANK	Aroclor-1221	11104-28-2	< 0.20	n/a	ug/L	06/29/05			U
BLANK	Aroclor-1232	11141-16-5	< 0.10	n/a	ug/L	06/29/05			U
BLANK	Aroclor-1242	53469-21-9	< 0.10	n/a	ug/L	06/29/05			U
BLANK	Aroclor-1248	12672-29-6	< 0.10	n/a	ug/L	06/29/05			U
BLANK	Aroclor-1254	11097-69-1	< 0.10	n/a	ug/L	06/29/05			U
BLANK	Aroclor-1260	11096-82-5	< 0.10	n/a	ug/L	06/29/05			U
BLANK	Aroclor-1262	37324-23-5	< 0.10	n/a	ug/L	06/29/05			U
BLANK	Aroclor-1268	11100-14-4	< 0.10	n/a	ug/L	06/29/05			U
BLANK	Decachlorobiphenyl	2051-24-3	1.4418	72.100	% Recov	06/29/05	50.000	150.000	
BLANK	Tetrachloro-m-xylene	877-09-8	1.7252	86.300	% Recov	06/29/05	50.000	150.000	
LCS	Aroclor-1260	11096-82-5	1.7680	88.400	% Recov	06/29/05	70.000	130.000	
LCS	Decachlorobiphenyl	2051-24-3	1.7174	85.900	% Recov	06/29/05	50.000	150.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051184
Matrix: WATER
Test: PCBs complete list

SAF Number: F05-024
Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
LCS	Tetrachloro-m-xylene	877-09-8	1.8011	90.100	% Recov	06/29/05	50.000	150.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051184
Matrix: WATER
Test: SW-846 8270C Semi-Vols

SAF Number: F05-024
Sample Date: 06/07/05
Receive Date:06/07/05

Lab ID: W050001685
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	17.844	92.800	% Recov	06/15/05	50.000	120.000	
MS	1,4-Dichlorobenzene	106-46-7	16.400	85.300	% Recov	06/15/05	41.000	113.000	
MS	2,4-Dinitrotoluene	121-14-2	19.624	102.000	% Recov	06/15/05	65.000	109.000	
MS	2-Fluorophenol	367-12-4	16.640	86.500	% Recov	06/15/05	50.000	110.000	
MS	Acenaphthene	83-32-9	17.551	91.300	% Recov	06/15/05	62.000	112.000	
MS	4-Chloro-3-methylphenol	59-50-7	23.521	81.500	% Recov	06/15/05	59.000	115.000	
MS	2-Chlorophenol	95-57-8	24.258	84.100	% Recov	06/15/05	69.000	111.000	
MS	N-Nitrosodi-n-dipropylamine	621-64-7	17.444	90.700	% Recov	06/15/05	69.000	115.000	
MS	2-Fluorobiphenyl	321-60-8	14.271	74.200	% Recov	06/15/05	58.000	109.000	
MS	Phenol	108-95-2	26.242	91.000	% Recov	06/15/05	59.000	115.000	
MS	Nitrobenzene-d5	4165-60-0	17.184	89.400	% Recov	06/15/05	60.000	118.000	
MS	4-Nitrophenol	100-02-7	20.895	72.400	% Recov	06/15/05	32.000	130.000	
MS	Pentachlorophenol	87-86-5	15.882	55.100	% Recov	06/15/05	51.000	121.000	
MS	Phenol-d5	4165-62-2	16.432	85.400	% Recov	06/15/05	59.000	116.000	
MS	Pyrene	129-00-0	18.958	98.600	% Recov	06/15/05	58.000	116.000	
MS	2,4,6-Tribromophenol	118-79-6	16.733	87.000	% Recov	06/15/05	60.000	120.000	
MS	Terphenyl-d14 (7Cl)	98904-43-9	18.864	98.100	% Recov	06/15/05	60.000	120.000	
MSD	1,2,4-Trichlorobenzene	120-82-1	15.889	82.600	% Recov	06/15/05	50.000	120.000	
MSD	1,4-Dichlorobenzene	106-46-7	15.391	80.000	% Recov	06/15/05	41.000	113.000	
MSD	2,4-Dinitrotoluene	121-14-2	18.539	96.400	% Recov	06/15/05	65.000	109.000	
MSD	2-Fluorophenol	367-12-4	18.642	96.900	% Recov	06/15/05	50.000	110.000	
MSD	Acenaphthene	83-32-9	18.302	95.200	% Recov	06/15/05	62.000	112.000	
MSD	4-Chloro-3-methylphenol	59-50-7	24.374	84.500	% Recov	06/15/05	59.000	115.000	
MSD	2-Chlorophenol	95-57-8	26.518	91.900	% Recov	06/15/05	69.000	111.000	
MSD	N-Nitrosodi-n-dipropylamine	621-64-7	18.880	98.200	% Recov	06/15/05	69.000	115.000	
MSD	2-Fluorobiphenyl	321-60-8	16.251	84.500	% Recov	06/15/05	58.000	109.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051184
Matrix: WATER
Test: SW-846 8270C Semi-Vols

SAF Number: F05-024
Sample Date: 06/07/05
Receive Date:06/07/05

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
MSD	Phenol	108-95-2	28.428	98.600	% Recov	06/15/05	59.000	115.000	
MSD	Nitrobenzene-d5	4165-60-0	18.418	95.800	% Recov	06/15/05	60.000	118.000	
MSD	4-Nitrophenol	100-02-7	19.388	67.200	% Recov	06/15/05	32.000	130.000	
MSD	Pentachlorophenol	87-86-5	16.091	55.800	% Recov	06/15/05	51.000	121.000	
MSD	Phenol-d5	4165-62-2	18.400	95.700	% Recov	06/15/05	59.000	116.000	
MSD	Pyrene	129-00-0	19.459	101.000	% Recov	06/15/05	58.000	116.000	
MSD	2,4,6-Tribromophenol	118-79-6	15.153	78.800	% Recov	06/15/05	60.000	120.000	
MSD	Terphenyl-d14 (7Cl)	98904-43-9	19.790	103.000	% Recov	06/15/05	60.000	120.000	
SPK-RPD	1,2,4-Trichlorobenzene	120-82-1	82.600	11.631	RPD	06/15/05	0.000	25.000	
SPK-RPD	1,4-Dichlorobenzene	106-46-7	80.000	6.413	RPD	06/15/05	0.000	25.000	
SPK-RPD	2,4-Dinitrotoluene	121-14-2	96.400	5.645	RPD	06/15/05	0.000	25.000	
SPK-RPD	2-Fluorophenol	367-12-4	96.900	11.341	RPD	06/15/05	0.000	25.000	
SPK-RPD	Acenaphthene	83-32-9	95.200	4.182	RPD	06/15/05	0.000	25.000	
SPK-RPD	4-Chloro-3-methylphenol	59-50-7	84.500	3.614	RPD	06/15/05	0.000	25.000	
SPK-RPD	2-Chlorophenol	95-57-8	91.900	8.864	RPD	06/15/05	0.000	25.000	
SPK-RPD	N-Nitrosodi-n-dipropylamine	621-64-7	98.200	7.941	RPD	06/15/05	0.000	25.000	
SPK-RPD	2-Fluorobiphenyl	321-60-8	84.500	12.980	RPD	06/15/05	0.000	25.000	
SPK-RPD	Phenol	108-95-2	98.600	8.017	RPD	06/15/05	0.000	16.000	
SPK-RPD	Nitrobenzene-d5	4165-60-0	95.800	6.911	RPD	06/15/05	0.000	25.000	
SPK-RPD	4-Nitrophenol	100-02-7	67.200	7.450	RPD	06/15/05	0.000	25.000	
SPK-RPD	Pentachlorophenol	87-86-5	55.800	1.262	RPD	06/15/05	0.000	25.000	
SPK-RPD	Phenol-d5	4165-62-2	95.700	11.375	RPD	06/15/05	0.000	25.000	
SPK-RPD	Pyrene	129-00-0	101.000	2.405	RPD	06/15/05	0.000	25.000	
SPK-RPD	2,4,6-Tribromophenol	118-79-6	78.800	9.891	RPD	06/15/05	0.000	25.000	
SPK-RPD	Terphenyl-d14 (7Cl)	98904-43-9	103.000	4.873	RPD	06/15/05	0.000	25.000	
SURR	2-Fluorophenol	367-12-4	33.010	85.800	% Recov	06/15/05	50.000	110.000	
SURR	2-Fluorobiphenyl	321-60-8	27.305	71.000	% Recov	06/15/05	58.000	109.000	
SURR	Nitrobenzene-d5	4165-60-0	33.499	87.100	% Recov	06/15/05	60.000	118.000	
SURR	Phenol-d5	4165-62-2	33.581	87.300	% Recov	06/15/05	59.000	116.000	
SURR	2,4,6-Tribromophenol	118-79-6	32.002	83.200	% Recov	06/15/05	60.000	120.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051184
Matrix: WATER
Test: SW-846 8270C Semi-Vols

SAF Number: F05-024
Sample Date: 06/07/05
Receive Date:06/07/05

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
SURR	Terphenyl-d14 (7Cl)	98904-43-9	38.529	100.000	% Recov	06/15/05	60.000	120.000	
BATCH QC									
BLANK	1,2-Dichlorobenzene	95-50-1	< 1.5	n/a	ug/L	06/15/05			U
BLANK	1,2,4-Trimethylbenzene	95-63-6	< 2.2	n/a	ug/L	06/15/05			U
BLANK	1,2,4-Trichlorobenzene	120-82-1	< 1.8	n/a	ug/L	06/15/05			U
BLANK	1,3-Dichlorobenzene	541-73-1	< 1.2	n/a	ug/L	06/15/05			U
BLANK	1,4-Dichlorobenzene	106-46-7	< 1.4	n/a	ug/L	06/15/05			U
BLANK	2-Naphthylamine	91-59-8	< 0.65	n/a	ug/L	06/15/05			U
BLANK	2,4-Dichlorophenol	120-83-2	< 0.63	n/a	ug/L	06/15/05			U
BLANK	2,4-Dinitrotoluene	121-14-2	< 0.38	n/a	ug/L	06/15/05			U
BLANK	2,4,5-Trichlorophenol	95-95-4	< 0.80	n/a	ug/L	06/15/05			U
BLANK	2,4,6-Trichlorophenol	88-06-2	< 0.50	n/a	ug/L	06/15/05			U
BLANK	2,4-Dimethylphenol	105-67-9	< 1.7	n/a	ug/L	06/15/05			U
BLANK	2,6-Dinitrotoluene	606-20-2	< 0.34	n/a	ug/L	06/15/05			U
BLANK	2-Butoxyethanol	111-76-2	< 0.67	n/a	ug/L	06/15/05			U
BLANK	2-Chloronaphthalene	91-58-7	< 4.0	n/a	ug/L	06/15/05			U
BLANK	2-Fluorophenol	367-12-4	17.144	85.700	% Recov	06/15/05	50.000	110.000	
BLANK	2 Methylnaphthalene	91-57-6	< 3.4	n/a	ug/L	06/15/05			U
BLANK	2-Methylphenol (cresol, o-)	95-48-7	< 0.25	n/a	ug/L	06/15/05			U
BLANK	2-Nitroaniline	88-74-4	< 0.42	n/a	ug/L	06/15/05			U
BLANK	2-Nitrophenol	88-75-5	< 0.57	n/a	ug/L	06/15/05			U
BLANK	3 & 4 Methylphenol Total	65794-96-9	< 0.64	n/a	ug/L	06/15/05	0.000	5.000	U
BLANK	3-Nitroaniline	99-09-2	< 0.45	n/a	ug/L	06/15/05			U
BLANK	4,6-Dinitro-2-methylphenol	534-52-1	< 0.54	n/a	ug/L	06/15/05			U
BLANK	4-Bromophenylphenyl ether	101-55-3	< 1.8	n/a	ug/L	06/15/05			U
BLANK	4-Chlorophenylphenyl ether	7005-72-3	< 2.2	n/a	ug/L	06/15/05			U
BLANK	Acenaphthene	83-32-9	< 2.8	n/a	ug/L	06/15/05			U
BLANK	Acenaphthylene	208-96-8	< 2.4	n/a	ug/L	06/15/05			U
BLANK	Anthracene	120-12-7	< 0.83	n/a	ug/L	06/15/05			U

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051184
Matrix: WATER
Test: SW-846 8270C Semi-Vols

SAF Number: F05-024
Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
BLANK	Bis(2-chloroethyl) ether	111-44-4	< 0.24	n/a	ug/L	06/15/05			U
BLANK	Benzo(a)anthracene	56-55-3	< 0.42	n/a	ug/L	06/15/05			U
BLANK	Benzo(b)fluoranthene	205-99-2	< 0.37	n/a	ug/L	06/15/05			U
BLANK	Benzo(ghi)perylene	191-24-2	< 0.90	n/a	ug/L	06/15/05			U
BLANK	Benzo(a)pyrene	50-32-8	< 0.54	n/a	ug/L	06/15/05			U
BLANK	Bis(2-Chloroethoxy)methane	111-91-1	< 0.31	n/a	ug/L	06/15/05			U
BLANK	Bis(2-ethylhexyl) phthalate	117-81-7	< 0.80	n/a	ug/L	06/15/05			U
BLANK	Bis(2-chloro-1-methylethyl)eth	108-60-1	< 1.5	n/a	ug/L	06/15/05	0.000	10.000	U
BLANK	Benzyl alcohol	100-51-6	< 0.30	n/a	ug/L	06/15/05			U
BLANK	Benzo(k)fluoranthene	207-08-9	< 0.39	n/a	ug/L	06/15/05			U
BLANK	Butylbenzylphthalate	85-68-7	< 1.5	n/a	ug/L	06/15/05			U
BLANK	Carbazole	86-74-8	< 0.41	n/a	ug/L	06/15/05			U
BLANK	4-Chloroaniline	106-47-8	< 0.57	n/a	ug/L	06/15/05			U
BLANK	4-Chloro-3-methylphenol	59-50-7	< 0.47	n/a	ug/L	06/15/05			U
BLANK	2-Chlorophenol	95-57-8	< 2.2	n/a	ug/L	06/15/05			U
BLANK	Chrysene	218-01-9	< 0.31	n/a	ug/L	06/15/05			U
BLANK	Cyclohexanone	108-94-1	< 0.35	n/a	ug/L	06/15/05	0.000	10.000	U
BLANK	3,3'-Dichlorobenzidine	91-94-1	< 1.0	n/a	ug/L	06/15/05			U
BLANK	Decane	124-18-5	< 2.2	n/a	ug/L	06/15/05	0.000	300.000	U
BLANK	Dibenz[a,h]anthracene	53-70-3	< 0.98	n/a	ug/L	06/15/05			U
BLANK	Dibenzofuran	132-64-9	< 2.6	n/a	ug/L	06/15/05			U
BLANK	Di-n-butylphthalate	84-74-2	< 0.45	n/a	ug/L	06/15/05			U
BLANK	Diethylphthalate	84-66-2	< 0.55	n/a	ug/L	06/15/05			U
BLANK	Dimethyl phthalate	131-11-3	< 0.34	n/a	ug/L	06/15/05			U
BLANK	2,4-Dinitrophenol	51-28-5	< 0.51	n/a	ug/L	06/15/05			U
BLANK	Di-n-octylphthalate	117-84-0	< 1.4	n/a	ug/L	06/15/05			U
BLANK	N-Nitrosodi-n-dipropylamine	621-64-7	< 0.46	n/a	ug/L	06/15/05			U
BLANK	2-Fluorobiphenyl	321-60-8	16.026	80.100	% Recov	06/15/05	58.000	109.000	
BLANK	Fluorene	86-73-7	< 2.3	n/a	ug/L	06/15/05			U
BLANK	Fluoranthene	206-44-0	< 0.53	n/a	ug/L	06/15/05			U

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051184
Matrix: WATER
Test: SW-846 8270C Semi-Vols

SAF Number: F05-024
Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
BLANK	Hexachlorobenzene	118-74-1	< 1.2	n/a	ug/L	06/15/05			U
BLANK	Hexachlorobutadiene	87-68-3	< 1.3	n/a	ug/L	06/15/05			U
BLANK	Hexachlorocyclopentadiene	77-47-4	< 0.62	n/a	ug/L	06/15/05			U
BLANK	Hexachloroethane	67-72-1	< 1.0	n/a	ug/L	06/15/05			U
BLANK	Indeno(1,2,3-cd)pyrene	193-39-5	< 0.85	n/a	ug/L	06/15/05			U
BLANK	Isophorone	78-59-1	< 0.44	n/a	ug/L	06/15/05			U
BLANK	Phenol	108-95-2	< 0.58	n/a	ug/L	06/15/05			U
BLANK	Naphthalene	91-20-3	< 1.5	n/a	ug/L	06/15/05			U
BLANK	Nitrobenzene-d5	4165-60-0	17.867	89.300	% Recov	06/15/05	60.000	118.000	
BLANK	Nitrobenzene	98-95-3	< 0.96	n/a	ug/L	06/15/05			U
BLANK	4-Nitrophenol	100-02-7	< 1.1	n/a	ug/L	06/15/05			U
BLANK	4-Nitroaniline	100-01-6	< 0.40	n/a	ug/L	06/15/05			U
BLANK	N-Nitrosodiphenylamine	86-30-6	< 0.54	n/a	ug/L	06/15/05			U
BLANK	Pentachlorophenol	87-86-5	< 0.66	n/a	ug/L	06/15/05			U
BLANK	Phenanthrene	85-01-8	< 1.2	n/a	ug/L	06/15/05			U
BLANK	Phenol-d5	4165-62-2	17.650	88.200	% Recov	06/15/05	59.000	116.000	
BLANK	Pyrene	129-00-0	< 0.33	n/a	ug/L	06/15/05			U
BLANK	Pyridine	110-86-1	< 0.43	n/a	ug/L	06/15/05			U
BLANK	Tributyl phosphate	126-73-8	< 0.14	n/a	ug/L	06/15/05			U
BLANK	2,4,6-Tribromophenol	118-79-6	12.398	62.000	% Recov	06/15/05	60.000	120.000	
BLANK	Terphenyl-d14 (7Cl)	98904-43-9	19.985	99.900	% Recov	06/15/05	60.000	120.000	
LCS	1,2,4-Trichlorobenzene	120-82-1	12.958	64.800	% Recov	06/15/05	46.000	107.000	
LCS	1,4-Dichlorobenzene	106-46-7	9.8583	49.300	% Recov	06/15/05	42.000	111.000	
LCS	2,4-Dinitrotoluene	121-14-2	17.482	87.400	% Recov	06/15/05	59.000	106.000	
LCS	2-Fluorophenol	367-12-4	17.932	89.700	% Recov	06/15/05	50.000	110.000	
LCS	Acenaphthene	83-32-9	16.560	82.800	% Recov	06/15/05	61.000	116.000	
LCS	4-Chloro-3-methylphenol	59-50-7	24.385	81.300	% Recov	06/15/05	61.000	106.000	
LCS	2-Chlorophenol	95-57-8	26.103	87.000	% Recov	06/15/05	66.000	106.000	
LCS	N-Nitrosodi-n-dipropylamine	621-64-7	19.790	99.000	% Recov	06/15/05	71.000	114.000	
LCS	2-Fluorobiphenyl	321-60-8	17.347	86.700	% Recov	06/15/05	58.000	109.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051184
Matrix: WATER
Test: SW-846 8270C Semi-Vols

SAF Number: F05-024
Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
LCS	Phenol	108-95-2	28.592	95.300	% Recov	06/15/05	67.000	105.000	
LCS	Nitrobenzene-d5	4165-60-0	17.715	88.600	% Recov	06/15/05	60.000	118.000	
LCS	4-Nitrophenol	100-02-7	20.045	66.800	% Recov	06/15/05	32.000	118.000	
LCS	Pentachlorophenol	87-86-5	22.063	73.500	% Recov	06/15/05	62.000	114.000	
LCS	Phenol-d5	4165-62-2	17.726	88.600	% Recov	06/15/05	59.000	116.000	
LCS	Pyrene	129-00-0	20.233	101.000	% Recov	06/15/05	66.000	118.000	
LCS	2,4,6-Tribromophenol	118-79-6	17.993	90.000	% Recov	06/15/05	60.000	120.000	
LCS	Terphenyl-d14 (7Cl)	98904-43-9	21.553	108.000	% Recov	06/15/05	60.000	120.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051184
Matrix: WATER
Test: WTPH-D TPH Diesel Range (Wa)

SAF Number: F05-024
Sample Date: 06/07/05
Receive Date:06/07/05

QC Type	Analyte		CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
Lab ID: W050001685										
BATCH QC ASSOCIATED WITH SAMPLE										
MS	Kerosene		TPHKEROSENE	1760.0	75.000	% Recov	06/09/05	70.000	130.000	
MS	ortho-Terphenyl	Surr	84-15-1	402.00	85.600	% Recov	06/09/05	70.000	130.000	
MSD	Kerosene		TPHKEROSENE	1765.5	75.200	% Recov	06/09/05	70.000	130.000	
MSD	ortho-Terphenyl	Surr	84-15-1	402.32	85.700	% Recov	06/09/05	70.000	130.000	
SPK-RPD	Kerosene		TPHKEROSENE	75.200	0.266	RPD	06/09/05	0.000	20.000	
SPK-RPD	ortho-Terphenyl	Surr	84-15-1	85.700	0.117	RPD	06/09/05	0.000	20.000	
SURR	ortho-Terphenyl	Surr	84-15-1	429.37	90.600	% Recov	06/09/05	70.000	130.000	
BATCH QC										
BLANK	Kerosene		TPHKEROSENE	< 75	n/a	ug/L	06/09/05			U
BLANK	ortho-Terphenyl	Surr	84-15-1	410.58	82.100	% Recov	06/09/05	70.000	130.000	
BLANK	Total Pet. Hydrocarbons Diesel		TPHDIESEL	< 75	n/a	ug/L	06/09/05			U
LCS	Kerosene		TPHKEROSENE	1756.4	70.300	% Recov	06/09/05	70.000	130.000	
LCS	ortho-Terphenyl	Surr	84-15-1	445.47	89.100	% Recov	06/09/05	70.000	130.000	
LCS-DUP	Kerosene		TPHKEROSENE	1824.4	73.000	% Recov	06/09/05	70.000	130.000	
LCS-DUP	ortho-Terphenyl	Surr	84-15-1	421.56	84.300	% Recov	06/09/05	70.000	130.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051184
Matrix: WATER
Test: VOA Ground Water Protection

SAF Number: F05-024
Sample Date: 06/01/05
Receive Date:06/01/05

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
Lab ID: W050001669									
BATCH QC ASSOCIATED WITH SAMPLE									
MS	1,1-Dichloroethene	75-35-4	22.690	90.800	% Recov	06/13/05	63.000	117.000	
MS	Benzene	71-43-2	23.590	94.400	% Recov	06/13/05	75.000	129.000	
MS	4-Bromofluorobenzene	460-00-4	51.370	103.000	% Recov	06/13/05	84.000	116.000	
MS	Chlorobenzene	108-90-7	25.500	102.000	% Recov	06/13/05	79.000	119.000	
MS	1,2-Dichloroethane-d4	17060-07-0	49.110	98.200	% Recov	06/13/05	82.000	136.000	
MS	Toluene-d8	2037-26-5	52.560	105.000	% Recov	06/13/05	89.000	119.000	
MS	Toluene	108-88-3	25.840	103.000	% Recov	06/13/05	76.000	120.000	
MS	Trichloroethene	79-01-6	24.300	97.200	% Recov	06/13/05	73.000	123.000	
MSD	1,1-Dichloroethene	75-35-4	22.680	90.700	% Recov	06/13/05	63.000	117.000	
MSD	Benzene	71-43-2	23.340	93.400	% Recov	06/13/05	75.000	129.000	
MSD	4-Bromofluorobenzene	460-00-4	51.080	102.000	% Recov	06/13/05	84.000	116.000	
MSD	Chlorobenzene	108-90-7	24.560	98.200	% Recov	06/13/05	79.000	119.000	
MSD	1,2-Dichloroethane-d4	17060-07-0	47.840	95.700	% Recov	06/13/05	82.000	136.000	
MSD	Toluene-d8	2037-26-5	52.730	105.000	% Recov	06/13/05	89.000	119.000	
MSD	Toluene	108-88-3	25.420	102.000	% Recov	06/13/05	76.000	120.000	
MSD	Trichloroethene	79-01-6	23.220	92.900	% Recov	06/13/05	73.000	123.000	
SPK-RPD	1,1-Dichloroethene	75-35-4	90.700	0.110	RPD	06/13/05	0.000	20.000	
SPK-RPD	Benzene	71-43-2	93.400	1.065	RPD	06/13/05	0.000	20.000	
SPK-RPD	Chlorobenzene	108-90-7	98.200	3.796	RPD	06/13/05	0.000	20.000	
SPK-RPD	1,2-Dichloroethane-d4	17060-07-0	95.700	2.579	RPD	06/13/05	0.000	20.000	
SPK-RPD	Toluene-d8	2037-26-5	105.000	0.000	RPD	06/13/05	0.000	20.000	
SPK-RPD	Toluene	108-88-3	102.000	0.976	RPD	06/13/05	0.000	20.000	
SPK-RPD	Trichloroethene	79-01-6	92.900	4.524	RPD	06/13/05	0.000	20.000	

Lab ID: W050001685
BATCH QC ASSOCIATED WITH SAMPLE

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051184
Matrix: WATER
Test: VOA Ground Water Protection

SAF Number: F05-024
Sample Date: 06/07/05
Receive Date:06/07/05

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
SURR	4-Bromofluorobenzene	460-00-4	50.440	101.000	% Recov	06/13/05	84.000	116.000	
SURR	1,2-Dichloroethane-d4	17060-07-0	49.850	99.700	% Recov	06/13/05	82.000	136.000	
SURR	Toluene-d8	2037-26-5	52.720	105.000	% Recov	06/13/05	89.000	119.000	

Lab ID: W050001690
BATCH QC ASSOCIATED WITH SAMPLE

SURR	4-Bromofluorobenzene	460-00-4	50.650	101.000	% Recov	06/13/05	84.000	116.000	
SURR	1,2-Dichloroethane-d4	17060-07-0	48.630	97.300	% Recov	06/13/05	82.000	136.000	
SURR	Toluene-d8	2037-26-5	52.540	105.000	% Recov	06/13/05	89.000	119.000	

BATCH QC

BLANK	1,1-Dichloroethane	75-34-3	< 1.0	n/a	ug/L	06/13/05			U
BLANK	1,1,1-Trichloroethane	71-55-6	< 1.0	n/a	ug/L	06/13/05			U
BLANK	1,1,2-Trichloroethane	79-00-5	< 1.0	n/a	ug/L	06/13/05			U
BLANK	1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	n/a	ug/L	06/13/05	0.000	5.000	U
BLANK	1,1-Dichloroethene	75-35-4	< 1.0	n/a	ug/L	06/13/05			U
BLANK	1,2-Dichloroethane	107-06-2	< 1.0	n/a	ug/L	06/13/05			U
BLANK	1,2-Dichloroethene(Total)	540-59-0	< 1.0	n/a	ug/L	06/13/05			U
BLANK	1-Butanol	71-36-3	< 20	n/a	ug/L	06/13/05			U
BLANK	2-Hexanone	591-78-6	< 1.0	n/a	ug/L	06/13/05			U
BLANK	2-Pentanone	107-87-9	< 1.0	n/a	ug/L	06/13/05			U
BLANK	4-Methyl-2-Pentanone	108-10-1	< 1.0	n/a	ug/L	06/13/05			U
BLANK	Acetone	67-64-1	< 1.0	n/a	ug/L	06/13/05			U
BLANK	Bromodichloromethane	75-27-4	< 1.0	n/a	ug/L	06/13/05			U
BLANK	Benzene	71-43-2	< 1.0	n/a	ug/L	06/13/05			U
BLANK	4-Bromofluorobenzene	460-00-4	50.920	102.000	% Recov	06/13/05	84.000	116.000	
BLANK	Bromoform	75-25-2	< 1.0	n/a	ug/L	06/13/05			U
BLANK	n-Butylbenzene	104-51-8	< 1.0	n/a	ug/L	06/13/05			U
BLANK	Carbon disulfide	75-15-0	< 1.0	n/a	ug/L	06/13/05			U
BLANK	Carbon tetrachloride	56-23-5	< 1.0	n/a	ug/L	06/13/05			U

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051184
Matrix: WATER
Test: VOA Ground Water Protection

SAF Number: F05-024
Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
BLANK	Dibromochloromethane	124-48-1	< 1.0	n/a	ug/L	06/13/05			U
BLANK	Cyclohexane	110-82-7	< 1.0	n/a	ug/L	06/13/05			U
BLANK	Chloroform	67-66-3	< 1.0	n/a	ug/L	06/13/05			U
BLANK	Chlorobenzene	108-90-7	< 1.0	n/a	ug/L	06/13/05			U
BLANK	cis-1,2-Dichloroethylene	156-59-2	< 1.0	n/a	ug/L	06/13/05			U
BLANK	cis-1,3-Dichloropropene	10061-01-5	< 1.0	n/a	ug/L	06/13/05			U
BLANK	Chloroethane	75-00-3	< 1.0	n/a	ug/L	06/13/05			U
BLANK	1,2-Dichloroethane-d4	17060-07-0	48.680	97.400	% Recov	06/13/05	82.000	136.000	
BLANK	trans-1,2-Dichloroethylene	156-60-5	< 1.0	n/a	ug/L	06/13/05			U
BLANK	1,2-Dichloropropane	78-87-5	< 1.0	n/a	ug/L	06/13/05			U
BLANK	Ethylbenzene	100-41-4	< 1.0	n/a	ug/L	06/13/05			U
BLANK	Hexane	110-54-3	< 1.0	n/a	ug/L	06/13/05			U
BLANK	Bromomethane	74-83-9	< 1.0	n/a	ug/L	06/13/05			U
BLANK	Chloromethane	74-87-3	< 1.0	n/a	ug/L	06/13/05			U
BLANK	2-Butanone	78-93-3	< 1.0	n/a	ug/L	06/13/05			U
BLANK	Methylenechloride	75-09-2	< 1.0	n/a	ug/L	06/13/05			U
BLANK	Tetrachloroethene	127-18-4	< 1.0	n/a	ug/L	06/13/05			U
BLANK	Styrene	100-42-5	< 1.0	n/a	ug/L	06/13/05			U
BLANK	Xylenes (total)	1330-20-7	< 1.0	n/a	ug/L	06/13/05	0.000	5.000	U
BLANK	Tetrahydrofuran	109-99-9	< 2.0	n/a	ug/L	06/13/05			U
BLANK	Toluene-d8	2037-26-5	52.370	105.000	% Recov	06/13/05	89.000	119.000	
BLANK	Toluene	108-88-3	< 1.0	n/a	ug/L	06/13/05			U
BLANK	trans-1,3-Dichloropropene	10061-02-6	< 1.0	n/a	ug/L	06/13/05			U
BLANK	Trichloromonofluoromethane	75-69-4	< 1.0	n/a	ug/L	06/13/05	0.000	5.000	U
BLANK	Trichloroethene	79-01-6	< 1.0	n/a	ug/L	06/13/05			U
BLANK	Vinyl chloride	75-01-4	< 1.0	n/a	ug/L	06/13/05			U
LCS	1,1-Dichloroethene	75-35-4	22.850	91.400	% Recov	06/13/05	70.000	130.000	
LCS	Benzene	71-43-2	25.060	100.000	% Recov	06/13/05	70.000	130.000	
LCS	4-Bromofluorobenzene	460-00-4	51.250	102.000	% Recov	06/13/05	84.000	116.000	
LCS	Chlorobenzene	108-90-7	25.460	102.000	% Recov	06/13/05	70.000	130.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051184
Matrix: WATER
Test: VOA Ground Water Protection

SAF Number: F05-024
Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
LCS	1,2-Dichloroethane-d4	17060-07-0	49.730	99.500	% Recov	06/13/05	82.000	136.000	
LCS	Toluene-d8	2037-26-5	53.290	107.000	% Recov	06/13/05	89.000	119.000	
LCS	Toluene	108-88-3	26.680	107.000	% Recov	06/13/05	70.000	130.000	
LCS	Trichloroethene	79-01-6	24.670	98.700	% Recov	06/13/05	70.000	130.000	

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
Project: F05-024: F05-024

Group #: WSCF20051184

Sample #	Client ID		CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze	Sample	Receive
Radiochemistry														
W050001685	B1D7F1	TRENT	14596-10-2	Americium-241	WATER	LA-508-471	U	0.0390	pCi/L	1.00	0.15	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	E,T,C	Am-241 by AEA Total Cntg Error	WATER	LA-508-471		+- 0.086	pCi/L	1.00	0.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	14234-35-6	Antimony-125	WATER	LA-508-481	U	9.06	pCi/L	1.00	21	06/08/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	E,T,C	Sb-125 Rel. Count Error (GEA)	WATER	LA-508-481		+- 12	pCi/L	1.00	0.0	06/08/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	10198-40-0	Cobalt-60	WATER	LA-508-481	U	-1.25	pCi/L	1.00	6.5	06/08/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	E,T,C	Co-60 Rel. Count Error (GEA)	WATER	LA-508-481		+- 3.7	pCi/L	1.00	0.0	06/08/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	13967-70-9	Cesium-134	WATER	LA-508-481	U	-3.74	pCi/L	1.00	6.8	06/08/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	E,T,C	Cs-134 Rel. Count Error (GEA)	WATER	LA-508-481		+- 4.6	pCi/L	1.00	0.0	06/08/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	10045-97-3	Cesium-137	WATER	LA-508-481	U	-0.667	pCi/L	1.00	7.7	06/08/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	E,T,C	Cs-137 Rel. Count Error (GEA)	WATER	LA-508-481		+- 4.4	pCi/L	1.00	0.0	06/08/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	14683-23-9	Europium-152	WATER	LA-508-481	U	-3.92	pCi/L	1.00	22	06/08/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	E,T,C	Eu-152 Rel. Count Error (GEA)	WATER	LA-508-481		+- 13	pCi/L	1.00	0.0	06/08/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	15585-10-1	Europium-154	WATER	LA-508-481	U	-9.17	pCi/L	1.00	19	06/08/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	E,T,C	Eu-154 Rel. Count Error (GEA)	WATER	LA-508-481		+- 11	pCi/L	1.00	0.0	06/08/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	14391-16-3	Europium-155	WATER	LA-508-481	U	-6.23	pCi/L	1.00	22	06/08/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	E,T,C	Eu-155 Rel. Count Error (GEA)	WATER	LA-508-481		+- 13	pCi/L	1.00	0.0	06/08/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	13981-16-3	Plutonium-238	WATER	LA-508-471	U	0.0670	pCi/L	1.00	0.18	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	E,T,C	Pu-238 by AEA Total Cntg Error	WATER	LA-508-471		+- 0.11	pCi/L	1.00	0.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	PU-239/240	Pu-239/240 by AEA	WATER	LA-508-471	U	0.0220	pCi/L	1.00	0.041	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	E,T,C	Pu-239/240 AEA Total Cntg Err	WATER	LA-508-471		+- 0.026	pCi/L	1.00	0.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	SR-RAD	Strontium-89/90	WATER	LA-508-415	U	-0.840	pCi/L	1.00	0.74	06/14/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	E,T,C	Sr-89/90 Rel. Count Error	WATER	LA-508-415		+- 1.0	pCi/L	1.00	0.0	06/14/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	U-233/234	Uranium-233/234	WATER	LA-508-471		0.100	pCi/L	1.00	0.034	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	E,T,C	U-233/234 AEA Total Cntg Error	WATER	LA-508-471		+- 0.052	pCi/L	1.00	0.0	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	15117-96-1	Uranium-235	WATER	LA-508-471	U	0.0200	pCi/L	1.00	0.037	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	E,T,C	U-235 by AEA Total Cntg Error	WATER	LA-508-471		+- 0.024	pCi/L	1.00	0.0	06/13/05	06/07/05	06/07/05

MDL=Minimum Detection Limit
RQ=Result Qualifier

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

DF=Dilution Factor

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
Project: F05-024: F05-024

Group #: WSCF20051184

Sample #	Client ID		CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze	Sample	Receive
W050001685	B1D7F1	TRENT	U-238	Uranium-238	WATER	LA-508-471	U	0.0280	pCi/L	1.00	0.034	06/13/05	06/07/05	06/07/05
W050001685	B1D7F1	TRENT	E,T,C	U-238 by AEA Total Cntg Error	WATER	LA-508-471		+- 0.027	pCi/L	1.00	0.0	06/13/05	06/07/05	06/07/05

MDL=Minimum Detection Limit
RQ=Result Qualifier

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

DF=Dilution Factor

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

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051184
Matrix: WATER
Test: Gamma Energy Analysis-grd H2O

SAF Number: F05-024
Sample Date: 06/07/05
Receive Date:06/07/05

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
Lab ID: W050001685									
BATCH QC ASSOCIATED WITH SAMPLE									
DUP	Cobalt-60	10198-40-0	U-2.89e0	n/a	RPD	06/08/05	0.000	20.000	
DUP	Cesium-134	13967-70-9	U7.88e-02	n/a	RPD	06/08/05	0.000	20.000	
DUP	Cesium-137	10045-97-3	U-1.11e0	n/a	RPD	06/08/05	0.000	20.000	
DUP	Europium-152	14683-23-9	U-2.78e-1	n/a	RPD	06/08/05	0.000	20.000	
DUP	Europium-154	15585-10-1	U2.34e+00	n/a	RPD	06/08/05	0.000	20.000	
DUP	Europium-155	14391-16-3	U-4.58e0	n/a	RPD	06/08/05	0.000	20.000	
DUP	Antimony-125	14234-35-6	U1.34e+00	n/a	RPD	06/08/05	0.000	20.000	
BATCH QC									
BLANK	Cobalt-60	10198-40-0	U2.88e0	n/a	pCi/L	06/08/05	-10.000	1000.000	
BLANK	Cesium-134	13967-70-9	U-5.79e0	n/a	pCi/L	06/08/05	-10.000	1000.000	
BLANK	Cesium-137	10045-97-3	U-1.46e0	n/a	pCi/L	06/08/05	-10.000	1000.000	
BLANK	Europium-152	14683-23-9	U-4.42e0	n/a	pCi/L	06/08/05	-10.000	1000.000	
BLANK	Europium-154	15585-10-1	U3.35e-1	n/a	pCi/L	06/08/05	-10.000	1000.000	
BLANK	Europium-155	14391-16-3	U-1.20e1	n/a	pCi/L	06/08/05	-10.000	1000.000	
BLANK	Antimony-125	14234-35-6	U1.58e0	n/a	pCi/L	06/08/05	-10.000	1000.000	
LCS	Cobalt-60	10198-40-0	4.46e+03	106.444	% Recov	06/08/05	80.000	120.000	
LCS	Cesium-137	10045-97-3	3.92e+03	109.497	% Recov	06/08/05	80.000	120.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051184
Matrix: WATER
Test: Americium by AEA

SAF Number: F05-024
Sample Date: 06/07/05
Receive Date:06/07/05

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
Lab ID: W050001685									
BATCH QC ASSOCIATED WITH SAMPLE									
DUP	Americium-241	14596-10-2	U6.4e-02	n/a	RPD	06/13/05	0.000	20.000	
BATCH QC									
BLANK	Americium-241	14596-10-2	U3.3e-02	n/a	pCi/L	06/13/05	-10.000	1000.000	
LCS	Americium-241	14596-10-2	1.2e+01	99.792	% Recov	06/13/05	75.000	125.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051184
Matrix: WATER
Test: Plutonium Isotopics by AEA

SAF Number: F05-024
Sample Date: 06/07/05
Receive Date:06/07/05

Lab ID: W050001685

BATCH QC ASSOCIATED WITH SAMPLE

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
DUP	Plutonium-238	13981-16-3	U1.2e-02	n/a	RPD	06/13/05	0.000	20.000	
DUP	Pu-239/240 by AEA	PU-239/240	U1.2e-02	n/a	RPD	06/13/05	0.000	20.000	

BATCH QC

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
BLANK	Plutonium-238	13981-16-3	U5.3e-02	n/a	pCi/L	06/13/05	-10.000	1000.000	
BLANK	Pu-239/240 by AEA	PU-239/240	U-9.7e-03	n/a	pCi/L	06/13/05	-10.000	1000.000	
LCS	Pu-239/240 by AEA	PU-239/240	1.2e+01	99.792	% Recov	06/13/05	75.000	125.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051184
Matrix: WATER
Test: Strontium 89/90

SAF Number: F05-024
Sample Date: 06/07/05
Receive Date:06/07/05

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
Lab ID: W050001685									
BATCH QC ASSOCIATED WITH SAMPLE									
DUP	Strontium-89/90	SR-RAD	U-8.8E-01	n/a	RPD	06/14/05	0.000	20.000	
BATCH QC									
BLANK	Strontium-89/90	10098-97-2	1.5	1.500	pCi/L	06/14/05	-10.000	100.000	
LCS	Strontium-89/90	10098-97-2	140	98.522	% Recov	06/14/05	80.000	120.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20051184
Matrix: WATER
Test: Uranium Isotopics by AEA

SAF Number: F05-024
Sample Date: 06/07/05
Receive Date:06/07/05

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
Lab ID: W050001685									
BATCH QC ASSOCIATED WITH SAMPLE									
DUP	Uranium-233/234	U-233/234	4.3e-02	79.720	RPD	06/13/05	0.000	20.000	*
DUP	Uranium-235	15117-96-1	U3.6e-02	n/a	RPD	06/13/05	0.000	20.000	
DUP	Uranium-238	U-238	1.4e-02	n/a	RPD	06/13/05	0.000	20.000	
BATCH QC									
BLANK	Uranium-233/234	13966-29-5	6.9e-02	0.069	pCi/L	06/13/05	-10.000	1000.000	
BLANK	Uranium-235	15117-96-1	6.0e-02	0.060	pCi/L	06/13/05	-10.000	1000.000	
BLANK	Uranium-238	24678-82-8	2.3e-02	0.023	pCi/L	06/13/05	-10.000	1000.000	
LCS	Uranium-238	24678-82-8	2.3e+01	121.340	% Recov	06/13/05	75.000	125.000	

WSCF
ANALYTICAL COMMENT REPORT

Attention: Steve Trent
Project Number F05-024

Group #: WSCF20051184

Sample #	Client ID	Lab Area	Test	Comment
		VALGROUP		W050001685/U234 dup is flagged but the sample activity is low level so the RPD criterion does not apply. lmh SVOA: A J-flag of a target compound indicates that it was found at a concentration less than the lowest calibration standard but greater than the detection limit. gar

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

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WSCF
TENTATIVELY IDENTIFIED PEAK REPORT

Attention: Steve Trent
Project Number F05-024 :F05-024

Group #: WSCF20051184

Sample #	Client ID		Test Name	Peak Name	CAS#	RT	RQ	Result	Units
W050001685	B1D7F1	TRENT	Gamma Energy Analysis-grd H2O	PB-212 Count Error				44	%
W050001685	B1D7F1	TRENT	Gamma Energy Analysis-grd H2O	ZN-65 Count Error				45	%

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-212-402	Determination of pH Direct Measurement	
	EPA SW-846 9040B	pH ELECTROMETRIC MEASUREMENT
	EPA-600/4-79-020 150.1	pH
LA-265-403	LA-265-403: Hexavalent Chromium analysis by Spectrophotometer	
	EPA SW-846 7196A	HEXAVALENT CHROMIUM
LA-503-401	LA-503-401: ANALYSIS OF CATIONS BY ION CHROMATOGRAPHY	
	EPA-600/4-86-024 300.7	Dissolved Sodium, Ammonium, Potassium, and Calcium in Wet Deposition by Chemical
LA-505-411	LA-505-411: ELEMENTAL ANALYSIS BY INDUCTIVELY COUPLED PLASMA ATOMIC EMISSION SPE	
	EPA SW-846 6010B	INDUCTIVELY COUPLED PLASMA-ATOMIC EMISSION SPECTROMETRY
LA-505-412	LA-505-412: DETERMINATION OF TRACE ELEMENTS IN WATERS AND WASTES BY INDUCTIVELY	
	EPA-600/R-94-111 200.8	DETERMINATION OF TRACE ELEMENTS IN WATERS AND WASTES BY INDUCTIVELY COUPLED PLAS
LA-508-415	LA-508-415: OPERATION OF THE PROTEAN 2-INCH ALPHA/BETA COUNTING SYSTEM FOR GROSS	
	None	No reference to any industry method.
LA-508-471	LA-508-471: ALPHA ENERGY ANALYZER DATA ACQUISITION AND SYSTEM CHECKOUT USING ALP	
	None	No reference to any industry method.
LA-508-481	LA-508-481: GAMMA ENERGY ANALYSIS USING PROCOUNT SOFTWARE	
	None	No reference to any industry method.

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

WSCF
METHOD REFERENCES REPORT

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LA-523-427	LA-523-427: POLYCHLORINATED BIPHENYLS (PCBs) BY GAS CHROMATOGRAPHY	
	EPA SW-846 3510C	SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION
	EPA SW-846 3545	PRESSURIZED FLUID EXTRACTION (PFE)
	EPA SW-846 3665A	SULFURIC ACID/PERMANGANATE CLEANUP
	EPA SW-846 8000B	DETERMINATIVE CHROMATOGRAPHIC SEPARATIONS
	EPA SW-846 8082	POLYCHLORINATED BIPHENYLS (PCBs) BY GAS CHROMATOGRAPHY
LA-523-455	LA-523-455: VOLATILE SAMPLE ANALYSIS BY SW-846	
	EPA SW-846 8000B	DETERMINATIVE CHROMATOGRAPHIC SEPARATIONS
	EPA SW-846 8260B	VOLATILE ORGANIC COMPOUNDS BY GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)
LA-523-456	LA-523-456: SEMIVOLATILE SAMPLE ANALYSIS BY SW-846, METHOD 8270C	
	EPA SW-846 8000B	DETERMINATIVE CHROMATOGRAPHIC SEPARATIONS
	EPA SW-846 8270C	SEMIVOLATILE ORGANIC COMPOUNDS BY GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)
LA-533-410	LA-533-410: ANION ANALYSIS BY ION CHROMATOGRAPHY	
	EPA-600/R-94-111 300.0	DETERMINATION OF INORGANIC ANIONS BY ION CHROMATOGRAPHY
NWTPH	NWTPH-Diesel and/or Gasoline	
	WDOE NWTPH-Dx/Gx	Total Petroleum Hydrocarbons - Diesel/Gasoline

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

wl3qlog v1 30-jun-2005 13:59:23

Wl3q Worklist/Batch/QC Report for Group# WSCF20051184

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
26161	4	26535	30058	LCS		pH Direct Measurement
26161	6	26535	30058	DUP	W050001677	pH Direct Measurement
26161	8	26535	30058	SAMPLE	W050001685	pH Direct Measurement
26187	2	26561	30073	BLANK		Anions by Ion Chromatography
26187	10	26561	30073	BLANK		Anions by Ion Chromatography
26187	3	26561	30073	LCS		Anions by Ion Chromatography
26187	5	26561	30073	DUP	W050001685	Anions by Ion Chromatography
26187	6	26561	30073	MS	W050001685	Anions by Ion Chromatography
26187	7	26561	30073	MSD	W050001685	Anions by Ion Chromatography
26187	4	26561	30073	SAMPLE	W050001685	Anions by Ion Chromatography
			30096	BLANK		WTPH-D TPH Diesel Range (Wa)
			30096	LCS		WTPH-D TPH Diesel Range (Wa)
			30096	LCS-DUP		WTPH-D TPH Diesel Range (Wa)
			30096	MS	W050001685	WTPH-D TPH Diesel Range (Wa)
			30096	MSD	W050001685	WTPH-D TPH Diesel Range (Wa)
			30096	SAMPLE	W050001685	WTPH-D TPH Diesel Range (Wa)
			30096	SPK-RPD	W050001685	WTPH-D TPH Diesel Range (Wa)
			30096	SURR	W050001685	WTPH-D TPH Diesel Range (Wa)
26165	1	26539	30102	BLANK		Gamma Energy Analysis-grd H2O
26165	2	26539	30102	LCS		Gamma Energy Analysis-grd H2O
26165	3	26539	30102	DUP	W050001685	Gamma Energy Analysis-grd H2O
26165	4	26539	30102	SAMPLE	W050001685	Gamma Energy Analysis-grd H2O
26180	2	26554	30125	BLANK		Hexavalent chromium
26180	10	26554	30125	BLANK		Hexavalent chromium
26180	3	26554	30125	LCS		Hexavalent chromium
26180	5	26554	30125	DUP	W050001685	Hexavalent chromium
26180	6	26554	30125	MS	W050001685	Hexavalent chromium
26180	7	26554	30125	MSD	W050001685	Hexavalent chromium
26180	4	26554	30125	SAMPLE	W050001685	Hexavalent chromium
26180	7	26554	30125	SPK-RPD	W050001685	Hexavalent chromium
26226	2	26600	30129	BLANK		Ammonia (N) by IC
26226	12	26600	30129	BLANK		Ammonia (N) by IC
26226	3	26600	30129	LCS		Ammonia (N) by IC
26226	5	26600	30129	DUP	W050001685	Ammonia (N) by IC
26226	6	26600	30129	MS	W050001685	Ammonia (N) by IC
26226	7	26600	30129	MSD	W050001685	Ammonia (N) by IC
26226	4	26600	30129	SAMPLE	W050001685	Ammonia (N) by IC
26203	1	26578	30131	BLANK		Strontium 89/90
26203	2	26578	30131	LCS		Strontium 89/90
26203	3	26578	30131	DUP	W050001685	Strontium 89/90
26203	4	26578	30131	SAMPLE	W050001685	Strontium 89/90
26236	1	26610	30133	BLANK		ICP-2008 MS All possible metal
26236	2	26610	30133	LCS		ICP-2008 MS All possible metal
26236	9	26610	30133	SAMPLE	W050001685	ICP-2008 MS All possible metal
26236	4	26610	30133	MS	W050001692	ICP-2008 MS All possible metal
26236	5	26610	30133	MSD	W050001692	ICP-2008 MS All possible metal
26236	5	26610	30133	SPK-RPD	W050001692	ICP-2008 MS All possible metal

26229	1	26604	30144	BLANK		ICP Metals Analysis, Grd H20 P
26229	2	26604	30144	LCS		ICP Metals Analysis, Grd H20 P
26229	4	26604	30144	MS	W050001685	ICP Metals Analysis, Grd H20 P
26229	5	26604	30144	MSD	W050001685	ICP Metals Analysis, Grd H20 P
26229	3	26604	30144	SAMPLE	W050001685	ICP Metals Analysis, Grd H20 P
26229	5	26604	30144	SPK-RPD	W050001685	ICP Metals Analysis, Grd H20 P
26223	1	26597	30154	BLANK		Plutonium Isotopics by AEA
26223	2	26597	30154	LCS		Plutonium Isotopics by AEA
26223	3	26597	30154	DUP	W050001685	Plutonium Isotopics by AEA
26223	4	26597	30154	SAMPLE	W050001685	Plutonium Isotopics by AEA
26224	1	26598	30155	BLANK		Americium by AEA
26224	2	26598	30155	LCS		Americium by AEA
26224	3	26598	30155	DUP	W050001685	Americium by AEA
26224	4	26598	30155	SAMPLE	W050001685	Americium by AEA
26225	1	26599	30157	BLANK		Uranium Isotopics by AEA
26225	2	26599	30157	LCS		Uranium Isotopics by AEA
26225	3	26599	30157	DUP	W050001685	Uranium Isotopics by AEA
26225	4	26599	30157	SAMPLE	W050001685	Uranium Isotopics by AEA
			30198	BLANK		SW-846 8270C Semi-Vols
			30198	LCS		SW-846 8270C Semi-Vols
			30198	MS	W050001685	SW-846 8270C Semi-Vols
			30198	MSD	W050001685	SW-846 8270C Semi-Vols
			30198	SAMPLE	W050001685	SW-846 8270C Semi-Vols
			30198	SPK-RPD	W050001685	SW-846 8270C Semi-Vols
			30198	SURR	W050001685	SW-846 8270C Semi-Vols
			30231	BLANK		VOA Ground Water Protection
			30231	LCS		VOA Ground Water Protection
			30231	MS	W050001669	VOA Ground Water Protection
			30231	MSD	W050001669	VOA Ground Water Protection
			30231	SPK-RPD	W050001669	VOA Ground Water Protection
			30231	SAMPLE	W050001685	VOA Ground Water Protection
			30231	SURR	W050001685	VOA Ground Water Protection
			30231	SAMPLE	W050001690	VOA Ground Water Protection
			30231	SURR	W050001690	VOA Ground Water Protection
			30329	BLANK		PCBs complete list
			30329	LCS		PCBs complete list
			30329	MS	W050001685	PCBs complete list
			30329	MSD	W050001685	PCBs complete list
			30329	SAMPLE	W050001685	PCBs complete list
			30329	SPK-RPD	W050001685	PCBs complete list
			30329	SURR	W050001685	PCBs complete list

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

ACKNOWLEDGMENT OF SAMPLES RECEIVED

Deleted @TC99-30. KB 6/20/05

Groundwater Remediation Program

Richland, WA 99354
Attn: Steve Trent

Customer Code: GPP
PO#: 119152/ES10
Group#: 20051184
Project#: F05-024
Proj Mgr: Steve Trent A0-21
Phone: 373-5869

The following samples were received from you on 06/07/05. They have been scheduled for the tests listed beside each sample. If this information is incorrect, please contact your service representative. Thank you for using Waste Sampling and Characterization Facility.

Sample#	Sample Id	Tests Scheduled	Matrix	Sample Date
W050001685	B1D7F1	TRENT	Water	06/07/05
		@2008, @AEA-30, @AEA-31, @AEA-32, @GEA-GPP, @GPP6010, @IC-30, @PCBGPP, @SR89_90, @SVOCGPP, @TPHD, @VOA-GPP, CR+6, NH4-IC, PH-30		
W050001690	B1D7D3	TRENT	Water	06/07/05
		@VOA-GPP		

Test Acronym Description

Test Acronym	Description
@2008	ICP-2008 MS All possible metal
@AEA-30	Plutonium Isotopics by AEA
@AEA-31	Americium by AEA
@AEA-32	Uranium Isotopics by AEA
@GEA-GPP	Gamma Energy Analysis-grd H2O
@GPP6010	ICP Metals Analysis, Grd H20 P
@IC-30	Anions by Ion Chromatography
@PCBGPP	PCBs complete list
@SR89_90	Strontium 89/90
@SVOCGPP	SW-846 8270E Semi-Vols
@TPHD-WA	WTPH-D TPH Diesel Range (Wa)
@VOA-GPP	VOA Ground Water Protection
CR+6	Hexavalent chromium
NH4-IC	Ammonia (N) by IC
PH-30	pH Direct Measurement

Fluor Hanford Inc.	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F05-024-009	PAGE 1 OF 3
COLLECTOR: Pope/Pfister/Weis/Tyra/Mokler	COMPANY CONTACT: TRENT, SJ — TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ	PRICE CODE: 7N — DATA TURNAROUND: 45 Days / ~~45 Days~~ TPL 6-7-05
SAMPLING LOCATION: 216-A-8	PROJECT DESIGNATION: 216-A-8 Crib Characterization Borehole - QC Samples	SAF NO.: F05-024	AIR QUALITY: ☐
ICE CHEST NO.	FIELD LOGBOOK NO. — COA: 119152ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: Waste Sampling & Characterization	OFFSITE PROPERTY NO.	BILL OF LADING/AIR BILL NO.	

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

POSSIBLE SAMPLE HAZARDS/ REMARKS

SPECIAL HANDLING AND/OR STORAGE: 20051184

PRESERVATION	HCl or H2SO4 to pH <2/Cool 4C	Cool 4C	HCl to pH <2/Cool 4C	HNO3 to pH <2/Cool 4C	Cool 4C	Cool 4C	Cool 4C	H2SO4 to pH <2	None	HNO3 to pH <2
TYPE OF CONTAINER	aGs*	aG	aG	G/P	P	aG	~~aG~~ TPL 6-7-05	G/P	G/P	G/P
NO. OF CONTAINER(S)	3	4	2	1	1	4	1	1	1	1
VOLUME	40mL	1000mL	1000mL	500mL	500mL	1000mL	60mL	500 mL ~~250mL~~ TPL 6-7-05	125 mL ~~120mL~~ ~~125mL~~ TPL 6-7-05	1000mL
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	Chromium Hex - 7196;	PCBs - 8082;	SEE ITEM (5) IN SPECIAL INSTRUCTIONS	Cations (IC) - 300.7 (Nitrogen in ammonium)	pH - 150.1;	SEE ITEM (6) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
B1D7F1	WATER	6-7-05	0810	X	X	X	X	X	X	X	X	X	X
W050001685													

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: JSPope/ TPL 6-7-05	DATE/TIME: 1035	RECEIVED BY/STORED IN: KBaber	DATE/TIME: 6/7/05 1035
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

A-6003-618(03/03)

Fluor Hanford Inc.	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F05-024-009	PAGE 3 OF 3
COLLECTOR Pope/Pfister/Weis/Tyra/Mokler	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 7N DATA TURNAROUND
SAMPLING LOCATION 216-A-8	PROJECT DESIGNATION 216-A-8 Crib Characterization Borehole - QC Samples		SAF NO. F05-024	AIR QUALITY ☐ 45 Days / ~~45 Days~~ 6-7-05
ICE CHEST NO.	FIELD LOGBOOK NO.	COA 119152ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO Waste Sampling & Characterization	OFFSITE PROPERTY NO.		BILL OF LADING/AIR BILL NO.	

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

POSSIBLE SAMPLE HAZARDS/ REMARKS

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION		HNO3 to pH <2	HNO3 to pH <2	HCl to pH <2	HCl to pH <2	HNO3 to pH <2					
TYPE OF CONTAINER		G/P	G/P	G/P	G/P	G/P					
NO. OF CONTAINER(S)		1	1	2	2	1					
VOLUME		1000mL	1000mL	1L	1L	1000mL					
SAMPLE ANALYSIS		Isotopic Plutonium;	Isotopic Uranium;	Strontium-89,90 -- Total Sr;	Technetium-99; DELETED PJN 6/29/2005	Americium-241;					
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME								
B1D7F1	WATER	6-7-05	0745	X	X	X	X	X			

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM JS Pfister/ASfer	DATE/TIME 6-7-05 1035	RECEIVED BY/STORED IN TC Bobbs KB	DATE/TIME 6/7/05 1635	
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	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

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

A-6003-618(03/03)

Fluor Hanford Inc.	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F05-024-001	PAGE 1 OF 1

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 7N	DATA TURNAROUND
Pope/Pfister/Wels/Tyra/Mokler	TRENT, SJ	373-5869	TRENT, SJ		
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**	**AIR QUALITY** ☐	45 Days / ~~45 Days~~
216-A-8	216-A-8 Crib Characterization Borehole - QC Samples		F05-024		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**COA**	**METHOD OF SHIPMENT**		
		119152ES10	GOVERNMENT VEHICLE		
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Waste Sampling & Characterization					

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

POSSIBLE SAMPLE HAZARDS/ REMARKS

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	HCl or H2SO4 to pH <2/Cool 4C										
TYPE OF CONTAINER	aGs*										
NO. OF CONTAINER(S)	3										
VOLUME	40mL										
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS										

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B1D7D3	WATER	6-7-05	0750	X
BX5001690				

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
JSPOPE/	6-7-05 1035	[signature]	6/7/05 1035

SPECIAL INSTRUCTIONS

(1)VOA - 8260B (TCL); VOA - 8260B (Add-On) {1-Butanol, 1-Propanol, 2-Pentanone, Acetonitrile, Cyclohexane, Ethanol, Hexane, Tetrahydrofuran, Trichloromonofluoromethane, cis-1,2-Dichloroethylene, n-Butylbenzene, trans-1,2-Dichloroethylene}

RDM P.D. Mey 6/29/2005

RDM P.D. Mey 6/29/2005

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

A-6003-618(03/03)