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Rev. 2

1213056

# FLUOR

## Memorandum

To: S. J. Trent A0-21 Date: M8141-SLF-06-254  
September 12, 2006

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

cc: w/Attachments  
T. F. Dale S3-30 J. E. Trechter S3-30  
H. K. Meznarich S3-30 D. D. Wright S3-30  
P. D. Mix S3-30 File/LB

Subject: REVISED FINAL RESULTS FOR 216-Z-9 TRENCH SLANT CHARACTERIZATION  
BOREHOLE – SOIL SAMPLES – SAMPLE DELIVERY GROUP WSCF20060389 – SAF  
NUMBER F06-005

Reference: (1) Memo, SL Fitzgerald to SJ Trent, same subject (M8141-SLF-06-131), dated June 1, 2006  
(2) Memo, SL Fitzgerald to SJ Trent, same subject (M8141-SLF-06-129), dated May 31, 2006  
(3) Groundwater Protection Program-Letter of Instruction, FH-EIS-2003-MEM-001,  
October 31, 2002  
(4) HNF-SD-CD-QAPP-017, Rev. 7, Waste Sampling & Characterization Facility Quality  
Assurance Plan

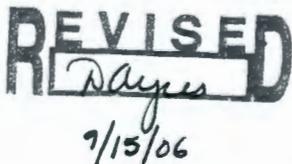
Attached for your review and information are copies of a revised narrative (Attachment 1) and analytical report (Attachment 2). Please replace Attachments 1 and 2 from Reference 1 in their entirety.

Sorry for the inconvenience and, if you have any questions, don't hesitate to call on Pauline Mix, telephone 372-1488, for assistance.

SLF/grf

Attachments 2

Chains of Custody  
added as pages  
44A, 44B and 44C.  
D Hayes  
9/15/06



M8141-SLF-06-254

ATTACHMENT 1

**NARRATIVE**

Consisting of 5 pages  
Including cover page

**REVISED**  
*Dayes*  
9/15/06

<b>Sample Delivery Group</b>	<b>WSCF20060389, Rev. 2</b>
<b>Sample Matrix</b>	<b>Soil</b>
<b>Sample Visual</b>	<b>N/A</b>
<b>SAF Number</b>	<b>F06-005</b>
<b>Data Deliverable</b>	<b>Summary Report</b>

**Introduction**

Two (2) 216-Z-9 Trench Slant Characterization Borehole (C3427, I22), soil samples (B1HK57 and B1HK62) were received at the WSCF Laboratory on April 27, 2006. The samples were analyzed for the analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Groundwater Remediation Program – Letter of Instruction*, referenced in the cover letter.

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

It should be noted that the attached chain of custody was stamped “iced”, initialed and dated by the WSCF Laboratory Sample Custodian during sample receiving, indicating the presence of ice in the sample container.

**Analytical Methodology for Requested Analyses**

Refer to *WSCF Method References Report*, pages 37 through 38, for a complete listing of approved analytical methods.

**Inorganic Comments**

**Ammonia** - The hold time for this analysis was met. A Blank, Duplicate, Laboratory Control Sample, Matrix Spike and Matrix Spike Duplicate were analyzed with each delivery group per GRP Letter of Instruction. See page 12 for QC details. Analytical Note:

- Duplicate, Matrix Spike and Matrix Spike Duplicate QC samples were analyzed on sample# B1HY24 (SDG# 20060384, SAF# F06-018).

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 13 through 14 for QC details. Analytical Notes:

- Preparation Date: 10-may-2006.

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D Hayes  
9/15/06

- Duplicate, Matrix Spike and Matrix Spike Duplicate QC samples were analyzed on sample# B1HY24 (SDG# 20060384, SAF# F06-018) for fluoride, nitrogen in nitrate, phosphate and sulfate. Offered below is the QC data for chloride.

Sample (B1HY24) Result	2.8294 ppm
Duplicate (B1HY24) Result	2.8261 ppm
Relative Percent Difference (RPD)	.117%

Matrix Spike	99.50%
Matrix Spike Duplicate	92.96%
Spike (RPD)	6.79%

All chloride QC results are within established laboratory control limits.

- Sample results that were less than the lowest calibration standard but greater than the detection limit were B flagged.
- Phosphate – Matrix Spike and Matrix Spike Duplicate recoveries were less than established laboratory limits. Low recoveries were due to probable matrix interference.

All other QC controls are within the established laboratory limits.

**Anions (Nitrate-N, Sample B1HK57 and B1HK62)** – The hold time requirement for this analysis was met. A Blank, Duplicate, Laboratory Control Sample, Matrix Spike and Matrix Spike Duplicate were analyzed with this delivery group. See page 14 for QC details. Analytical Notes:

- Preparation Date: 17-may-2006. Note: Reanalysis was required on samples B1HK57 and B1HK62 because the Nitrate-N results exceeded the calibration range on the first analysis. Samples were diluted, reanalyzed and D flagged.
- Duplicate, Matrix Spike and Matrix Spike Duplicate QC samples were analyzed on sample# B1HK77 (SDG# 20060478, SAF# F06-005).

All other QC controls are within the established limits.

**ICP-AES 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 GRP Letter of Instruction. See pages 15 through 19 for QC details. Analytical Notes:

- Preparation Date: 09-may-2006.
- Manganese – Matrix Spike and Matrix Spike Duplicate recoveries were less than established laboratory limits. Sample results (B1HK57 and B1HK62) were E flagged.

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 9/15/06

- Sodium – Matrix Spike and Matrix Spike Duplicate recoveries exceeded established laboratory limits. Sample result (B1HK62) was E flagged.
- Aluminum, Calcium, Iron, Magnesium, and Phosphorus – insufficient spike concentrations. Sample concentration was greater than four times the spike concentration.
- Bismuth, Copper, Potassium, Manganese, Phosphorus and Vanadium – Analytes detected in the associated preparation Blank sample were evaluated and there was no significant affect on sample results except for Phosphorus. Phosphorus sample results were C flagged.

All other 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 page 20 for QC details. Analytical Notes:

- Preparation Date: 17-may-2006.
- Matrix Spike and Matrix Spike Duplicate QC samples were analyzed on sample# B1HY24 (SDG# 20060384, SAF# F06-018).
- Mercury – Analyte detected in the associated preparation Blank sample was evaluated and sample results were C flagged.

All other QC controls are within the established limits.

**Percent Solids** – analyzed for organic moisture correction.

### Organic Comments

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

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

- Preparation Date: 01-may-2006.
- Matrix Spike and Matrix Spike Duplicate QC samples were analyzed on sample# B1HY24 (SDG# 20060384, SAF# F06-018).

All QC controls are within the established limits.

**REVISED**  
*R. Hayes*

**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:

9/15/06

- Preparation Date: 01-may-2006.
- Matrix Spike and Matrix Spike Duplicate QC samples were analyzed on sample# B1HY24 (SDG# 20060384, SAF# F06-018).
- 1,4-Dichlorobenzene – Matrix Spike and Matrix Spike Duplicate sample recoveries slightly exceeded established laboratory limits.
- 4-Chloro-3-methylphenol – Matrix Spike Duplicate and Laboratory Control Sample recoveries slightly exceeded established laboratory limits.
- 2-Chlorophenol – Laboratory Control Sample recovery slightly exceeded established laboratory limits.
- 2-Fluorophenyl (B1HK62) – Surrogate sample recovery slightly exceeded established laboratory limits.
- 2-Fluorobiphenyl – Laboratory Control Sample recovery slightly exceeded established laboratory limits.
- Phenol – Laboratory Control Sample recovery slightly exceeded established laboratory limits.

All other QC controls are within the established limits.

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

  
Pauline D. Mix  
WSCF Client Services

Abbreviations

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

**REVISED**  
*D. Hayes*  
9/15/06

M8141-SLF-06-254

ATTACHMENT 2

**ANALYTICAL RESULTS**

Consisting of 35 pages  
Including cover page

**REVISED**  
*D. Jones*  
9/15/06

**WSCF  
ANALYTICAL RESULTS REPORT**

for

**Groundwater Remediation Program**

**Richland, WA 99354**

**Attention: Steve Trent**

Analytical:

*S. Fitzgerald*

Client Services:

*P.D. Mix 9/13/2006*

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

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Contract#: FH-EIS-2003-MEM-001  
Report#: WSCF20060389  
Report Date: 13-sep-2006  
Report WGPP/ver. 1.3.1  
Groundwater Remediation Program

**REVISED**  
*D. Dwyer*  
9/15/06

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F06-005: F06-005

**Group #:** WSCF20060389

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze	Sample	Receive
<b>Inorganic</b>													
W060000954	B1HK57	TRENT	NH4-N	Nitrogen in ammonium	SOIL	LA-503-401	14.2	mg/kg	49.00	0.20	05/09/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	TS	Total solids	SOIL	LA-519-412	83.4	%	1.00	0.0	05/08/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	16984-48-8	Fluoride	SOIL	LA-533-410	35.3	mg/kg	50.00	2.0	05/11/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	16887-00-6	Chloride	SOIL	LA-533-410	5.69	mg/kg	50.00	1.7	05/11/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	NO2-N	Nitrogen in Nitrite	SOIL	LA-533-410	U < 0.490	mg/kg	50.00	0.49	05/11/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	NO3-N	Nitrogen in Nitrate	SOIL	LA-533-410	D 187	mg/kg	1.97e+002	3.5	05/17/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	PO4-P	Phosphate (P) by IC	SOIL	LA-533-410	U < 3.90	mg/kg	50.00	3.9	05/11/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	14808-79-8	Sulfate	SOIL	LA-533-410	B 10.6	mg/kg	50.00	6.5	05/11/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	7429-90-5	Aluminum	SOIL	LA-505-411	1.26e+04	mg/kg	9.87e+003	2.7e+02	05/10/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	7439-89-6	Iron	SOIL	LA-505-411	2.08e+04	mg/kg	9.87e+003	2.1e+02	05/10/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	7439-95-4	Magnesium	SOIL	LA-505-411	7.14e+03	mg/kg	98.74	1.9	05/10/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	7439-96-5	Manganese	SOIL	LA-505-411	E 508	mg/kg	9.87e+003	9.9	05/10/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	7440-02-0	Nickel	SOIL	LA-505-411	15.7	mg/kg	98.74	0.099	05/10/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	7440-09-7	Potassium	SOIL	LA-505-411	1.99e+03	mg/kg	98.74	11	05/10/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	7440-22-4	Silver	SOIL	LA-505-411	U < 0.197	mg/kg	98.74	0.20	05/10/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	7440-23-5	Sodium	SOIL	LA-505-411	U < 1.95e+03	mg/kg	9.87e+003	2.0e+03	05/10/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	7440-36-0	Antimony	SOIL	LA-505-411	U < 2.47	mg/kg	98.74	2.5	05/10/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	7440-39-3	Barium	SOIL	LA-505-411	66.1	mg/kg	98.74	0.099	05/10/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	7440-43-9	Cadmium	SOIL	LA-505-411	118	mg/kg	98.74	0.099	05/10/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	7440-47-3	Chromium	SOIL	LA-505-411	14.8	mg/kg	98.74	0.30	05/10/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	7440-48-4	Cobalt	SOIL	LA-505-411	9.29	mg/kg	98.74	0.099	05/10/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	7440-50-8	Copper	SOIL	LA-505-411	19.9	mg/kg	98.74	0.30	05/10/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	7440-62-2	Vanadium	SOIL	LA-505-411	32.7	mg/kg	98.74	0.30	05/10/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	7440-66-6	Zinc	SOIL	LA-505-411	83.7	mg/kg	98.74	0.30	05/10/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	7440-70-2	Calcium	SOIL	LA-505-411	1.32e+04	mg/kg	9.87e+003	1.6e+02	05/10/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	7439-92-1	Lead	SOIL	LA-505-411	17.0	mg/kg	98.74	2.1	05/10/06	04/18/06	04/27/06

**MDL = Minimum Detection Limit**  
**RQ = Result Qualifier**

B - The analyte < the RDL but > = the IDL/MDL (inorganic)  
D - Analyte was identified at a secondary dilution factor  
U - Analyzed for but not detected above limiting criteria.

C - The Analyte was found in the Associated Blank.  
E - Analyte is an estimate, has potentially larger errors

**DF = Dilution Factor**

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

Report WGPP/ver. 1.3.1

Groundwater Remediation Program

**REVISED**  
*D. Reyes*  
9/15/06

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F06-005: F06-005

**Group #:** WSCF20060389

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze	Sample	Receive
W060000954	B1HK57	TRENT	7439-93-2	Lithium	SOIL	LA-505-411	16.1	mg/kg	98.74	0.099	05/10/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	7440-24-6	Strontium	SOIL	LA-505-411	30.0	mg/kg	98.74	0.099	05/10/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	7440-38-2	Arsenic	SOIL	LA-505-411	3.00	mg/kg	98.74	2.2	05/10/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	7440-41-7	Beryllium	SOIL	LA-505-411	0.523	mg/kg	98.74	0.099	05/10/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	7440-69-9	Bismuth	SOIL	LA-505-411	U < 2.17	mg/kg	98.74	2.2	05/10/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	7723-14-0	Phosphorus	SOIL	LA-505-411	C 927	mg/kg	9.87e+003	4.7e+02	05/10/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	7782-49-2	Selenium	SOIL	LA-505-411	U < 1.78	mg/kg	98.74	1.8	05/10/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	7439-97-6	Mercury	SOIL	LA-505-412	C 0.0776	mg/kg	1.11	0.0444	05/18/06	04/18/06	04/27/06
W060000955	B1HK62	TRENT	NH4-N	Nitrogen in ammonium	SOIL	LA-503-401	2.88	mg/kg	50.00	0.20	05/09/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	TS	Total solids	SOIL	LA-519-412	79.6	%	1.00	0.0	05/08/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	16984-48-8	Fluoride	SOIL	LA-533-410	U < 2.00	mg/kg	50.00	2.0	05/11/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	16887-00-6	Chloride	SOIL	LA-533-410	8.26	mg/kg	50.00	1.7	05/11/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	NO2-N	Nitrogen in Nitrite	SOIL	LA-533-410	U < 0.490	mg/kg	50.00	0.49	05/11/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	NO3-N	Nitrogen in Nitrate	SOIL	LA-533-410	D 157	mg/kg	1.99e+002	3.6	05/17/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	PO4-P	Phosphate (P) by IC	SOIL	LA-533-410	U < 3.90	mg/kg	50.00	3.9	05/11/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	14808-79-8	Sulfate	SOIL	LA-533-410	B 11.4	mg/kg	50.00	6.5	05/11/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	7429-90-5	Aluminum	SOIL	LA-505-411	7.15e+03	mg/kg	93.41	2.5	05/10/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	7439-89-6	Iron	SOIL	LA-505-411	1.56e+04	mg/kg	9.34e+003	2.0e+02	05/10/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	7439-95-4	Magnesium	SOIL	LA-505-411	5.67e+03	mg/kg	93.41	1.8	05/10/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	7439-96-5	Manganese	SOIL	LA-505-411	E 304	mg/kg	93.41	0.093	05/10/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	7440-02-0	Nickel	SOIL	LA-505-411	13.2	mg/kg	93.41	0.093	05/10/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	7440-09-7	Potassium	SOIL	LA-505-411	1.27e+03	mg/kg	93.41	11	05/10/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	7440-22-4	Silver	SOIL	LA-505-411	0.565	mg/kg	93.41	0.19	05/10/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	7440-23-5	Sodium	SOIL	LA-505-411	E 270	mg/kg	93.41	18	05/10/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	7440-36-0	Antimony	SOIL	LA-505-411	U < 2.34	mg/kg	93.41	2.3	05/10/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	7440-39-3	Barium	SOIL	LA-505-411	51.9	mg/kg	93.41	0.093	05/10/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	7440-43-9	Cadmium	SOIL	LA-505-411	0.465	mg/kg	93.41	0.093	05/10/06	04/24/06	04/27/06

**MDL = Minimum Detection Limit**

**RQ = Result Qualifier**

**DF = Dilution Factor**

B - The analyte < the RDL but > = the IDL/MDL (inorganic)

D - Analyte was identified at a secondary dilution factor

U - Analyzed for but not detected above limiting criteria.

C - The Analyte was found in the Associated Blank.

E - Analyte is an estimate, has potentially larger errors

\* - Indicates results that have NOT been validated;

+ - Indicates more than six qualifier symbols

Report WGPP/ver. 1.3.1

Groundwater Remediation Program

REVISED

D. Reyes

9/15/06

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F06-005: F06-005

**Group #:** WSCF20060389

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF		Result	Unit	DF	MDL	Analyze Sample Receive		
					Method	RQ							
W060000955	B1HK62	TRENT	7440-47-3	Chromium	SOIL	LA-505-411	15.2	mg/kg	93.41	0.28	05/10/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	7440-48-4	Cobalt	SOIL	LA-505-411	6.27	mg/kg	93.41	0.093	05/10/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	7440-50-8	Copper	SOIL	LA-505-411	12.9	mg/kg	93.41	0.28	05/10/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	7440-62-2	Vanadium	SOIL	LA-505-411	22.2	mg/kg	93.41	0.28	05/10/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	7440-66-6	Zinc	SOIL	LA-505-411	58.0	mg/kg	93.41	0.28	05/10/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	7440-70-2	Calcium	SOIL	LA-505-411	1.52e+04	mg/kg	9.34e+003	1.5e+02	05/10/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	7439-92-1	Lead	SOIL	LA-505-411	6.47	mg/kg	93.41	2.0	05/10/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	7439-93-2	Lithium	SOIL	LA-505-411	12.0	mg/kg	93.41	0.093	05/10/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	7440-24-6	Strontium	SOIL	LA-505-411	37.9	mg/kg	93.41	0.093	05/10/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	7440-38-2	Arsenic	SOIL	LA-505-411 U	< 2.05	mg/kg	93.41	2.1	05/10/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	7440-41-7	Beryllium	SOIL	LA-505-411	0.226	mg/kg	93.41	0.093	05/10/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	7440-69-9	Bismuth	SOIL	LA-505-411 U	< 2.05	mg/kg	93.41	2.1	05/10/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	7723-14-0	Phosphorus	SOIL	LA-505-411 C	1.22e+03	mg/kg	9.34e+003	4.5e+02	05/10/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	7782-49-2	Selenium	SOIL	LA-505-411 U	< 1.68	mg/kg	93.41	1.7	05/10/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	7439-97-6	Mercury	SOIL	LA-505-412 C	0.0466	mg/kg	1.06	0.0426	05/18/06	04/24/06	04/27/06

**MDL=Minimum Detection Limit**  
**RQ=Result Qualifier**

B - The analyte < the RDL but > = the IDL/MDL (inorganic)  
D - Analyte was identified at a secondary dilution factor  
U - Analyzed for but not detected above limiting criteria.

C - The Analyte was found in the Associated Blank.  
E - Analyte is an estimate, has potentially larger errors

**DF=Dilution Factor**

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

Report WGPP/ver. 1.3.1

Groundwater Remediation Program

**REVISED**  
*D. Hayes*  
9/15/06

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20060389  
 Matrix: SOLID  
 Test: Ammonia (N) by IC

SAF Number: F06-005  
 Sample Date: 04/27/06  
 Receive Date: 04/27/06

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
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Lab ID: W060000944  
 BATCH QC ASSOCIATED WITH SAMPLE

DUP	Ammonia (N) by IC	7664-41-7	4.35e-01	7.309	RPD	05/09/06	0.000	20.000	
MS	Ammonia (N) by IC	7664-41-7	3.83e-01	92.961	% Recov	05/09/06	75.000	125.000	
MSD	Ammonia (N) by IC	7664-41-7	4.21e-01	102.184	% Recov	05/09/06	75.000	125.000	

BATCH QC

BLANK	Ammonia (N) by IC	7664-41-7	<4.00e-3	n/a	mg/L	05/09/06	0.000	30.000	U
BLANK	Ammonia (N) by IC	7664-41-7	<4.00e-3	n/a	mg/L	05/09/06	0.000	30.000	U
LCS	Ammonia (N) by IC	7664-41-7	8.29e+01	101.098	% Recov	05/09/06	80.000	120.000	

**REVISED**  
*D. Dyer*  
 9/15/06

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20060389  
 Matrix: SOLID  
 Test: Anions by Ion Chromatography

SAF Number: F06-005  
 Sample Date: 04/27/06  
 Receive Date: 04/27/06

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
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Lab ID: W060000944  
**BATCH QC ASSOCIATED WITH SAMPLE**

DUP	Fluoride	16984-48-8	< 1.96	n/a	RPD	05/11/06	0.000	20.000	U
DUP	Nitrogen in Nitrite	NO2-N	< 0.4802	n/a	RPD	05/11/06	0.000	20.000	U
DUP	Phosphate (P) by IC	PO4-P	< 3.822	n/a	RPD	05/11/06	0.000	20.000	U
DUP	Sulfate	14808-79-8	141.8777	5.671	RPD	05/11/06	0.000	20.000	
MS	Fluoride	16984-48-8	0.446154	89.231	% Recov	05/11/06	75.000	125.000	
MS	Nitrogen in Nitrite	NO2-N	0.493054	99.007	% Recov	05/11/06	75.000	125.000	
MS	Phosphate (P) by IC	PO4-P	0.579808	60.271	% Recov	05/11/06	75.000	125.000	
MS	Sulfate	14808-79-8	2.211158	110.558	% Recov	05/11/06	75.000	125.000	
MSD	Fluoride	16984-48-8	0.425422	85.084	% Recov	05/11/06	75.000	125.000	
MSD	Nitrogen in Nitrite	NO2-N	0.458768	92.122	% Recov	05/11/06	75.000	125.000	
MSD	Phosphate (P) by IC	PO4-P	0.602292	62.608	% Recov	05/11/06	75.000	125.000	
MSD	Sulfate	14808-79-8	2.039992	102.000	% Recov	05/11/06	75.000	125.000	

**BATCH QC**

BLANK	Chloride	16887-00-6	< 3.4e-2	n/a	mg/L	05/11/06	0.000	300.000	U
BLANK	Chloride	16887-00-6	< 3.4e-2	n/a	mg/L	05/11/06	0.000	300.000	U
BLANK	Fluoride	16984-48-8	< 4e-2	n/a	mg/L	05/11/06	0.000	300.000	U
BLANK	Fluoride	16984-48-8	< 4e-2	n/a	mg/L	05/11/06	0.000	300.000	U
BLANK	Nitrogen in Nitrite	NO2-N	< 9.8e-3	n/a	mg/L	05/11/06	0.000	300.000	U
BLANK	Nitrogen in Nitrite	NO2-N	< 9.8e-3	n/a	mg/L	05/11/06	0.000	300.000	U
BLANK	Phosphate (P) by IC	PO4-P	< 7.8e-2	n/a	mg/L	05/11/06	0.000	300.000	U
BLANK	Phosphate (P) by IC	PO4-P	< 7.8e-2	n/a	mg/L	05/11/06	0.000	300.000	U
BLANK	Sulfate	14808-79-8	< 0.13	n/a	mg/L	05/11/06	0.000	300.000	U
BLANK	Sulfate	14808-79-8	< 0.13	n/a	mg/L	05/11/06	0.000	300.000	U
LCS	Chloride	16887-00-6	190.443	97.165	% Recov	05/11/06	80.000	120.000	
LCS	Fluoride	16984-48-8	90.3993	90.399	% Recov	05/11/06	80.000	120.000	

REVISED

Allyes

9/15/06

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20060389  
 Matrix: SOLID  
 Test: Anions by Ion Chromatography

SAF Number: F06-005  
 Sample Date:  
 Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
LCS	Nitrogen in Nitrite	NO2-N	96.3727	96.760	% Recov	05/11/06	80.000	120.000	
LCS	Phosphate (P) by IC	PO4-P	177.3606	92.135	% Recov	05/11/06	80.000	120.000	
LCS	Sulfate	14808-79-8	360.6744	90.169	% Recov	05/11/06	80.000	120.000	

Lab ID: W060001184  
 BATCH QC ASSOCIATED WITH SAMPLE

DUP	Nitrogen in Nitrate	NO3-N	16.0031	15.058	RPD	05/17/06	0.000	20.000	
MS	Nitrogen in Nitrate	NO3-N	0.490207	111.411	% Recov	05/17/06	75.000	125.000	
MSD	Nitrogen in Nitrate	NO3-N	0.47546	108.059	% Recov	05/17/06	75.000	125.000	

### BATCH QC

BLANK	Nitrogen in Nitrate	NO3-N	<1.8e-2	n/a	mg/L	05/17/06	0.000	300.000	U
BLANK	Nitrogen in Nitrate	NO3-N	<1.8e-2	n/a	mg/L	05/17/06	0.000	300.000	U
LCS	Nitrogen in Nitrate	NO3-N	82.8575	94.263	% Recov	05/17/06	80.000	120.000	

**REVISED**  
*Revised*  
 9/15/06

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20060389  
 Matrix: SOLID  
 Test: ICP Metals Analysis, Grd H20 P

SAF Number: F06-005  
 Sample Date: 04/18/06  
 Receive Date: 04/27/06

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
Lab ID: W060000954									
BATCH QC ASSOCIATED WITH SAMPLE									
MS	Silver	7440-22-4	178	89.899	% Recov	05/10/06	75.000	125.000	
MS	Aluminum	7429-90-5	NA	n/a	% Recov	05/10/06	75.000	125.000	
MS	Arsenic	7440-38-2	201	101.515	% Recov	05/10/06	75.000	125.000	
MS	Barium	7440-39-3	100.9	101.919	% Recov	05/10/06	75.000	125.000	
MS	Beryllium	7440-41-7	93.877	94.825	% Recov	05/10/06	75.000	125.000	
MS	Bismuth	7440-69-9	154	77.778	% Recov	05/10/06	75.000	125.000	
MS	Calcium	7440-70-2	NA	n/a	% Recov	05/10/06	75.000	125.000	
MS	Cadmium	7440-43-9	190	95.960	% Recov	05/10/06	75.000	125.000	
MS	Cobalt	7440-48-4	186.71	94.298	% Recov	05/10/06	75.000	125.000	
MS	Chromium	7440-47-3	184.2	93.030	% Recov	05/10/06	75.000	125.000	
MS	Copper	7440-50-8	184.1	92.980	% Recov	05/10/06	75.000	125.000	
MS	Iron	7439-89-6	NA	n/a	% Recov	05/10/06	75.000	125.000	
MS	Potassium	7440-09-7	2128	107.475	% Recov	05/10/06	75.000	125.000	
MS	Lithium	7439-93-2	93.9	94.848	% Recov	05/10/06	70.000	130.000	
MS	Magnesium	7439-95-4	NA	n/a	% Recov	05/10/06	75.000	125.000	
MS	Manganese	7439-96-5	148	74.747	% Recov	05/10/06	75.000	125.000	•
MS	Sodium	7440-23-5	596	301.010	% Recov	05/10/06	75.000	125.000	•
MS	Nickel	7440-02-0	180.3	91.061	% Recov	05/10/06	75.000	125.000	
MS	Phosphorus	7723-14-0	NA	n/a	% Recov	05/10/06	70.000	130.000	
MS	Lead	7439-92-1	193	97.475	% Recov	05/10/06	75.000	125.000	
MS	Antimony	7440-36-0	176	88.889	% Recov	05/10/06	75.000	125.000	
MS	Selenium	7782-49-2	197	99.495	% Recov	05/10/06	75.000	125.000	
MS	Strontium	7440-24-6	98	98.990	% Recov	05/10/06	70.000	130.000	
MS	Vanadium	7440-62-2	187.3	94.596	% Recov	05/10/06	75.000	125.000	
MS	Zinc	7440-66-6	178.3	90.051	% Recov	05/10/06	75.000	125.000	
MSD	Silver	7440-22-4	187	92.118	% Recov	05/10/06	75.000	125.000	

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REVISED

*R. Reyes*  
 9/13/06

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20060389  
 Matrix: SOLID  
 Test: ICP Metals Analysis, Grd H20 P

SAF Number: F06-005  
 Sample Date: 04/18/06  
 Receive Date: 04/27/06

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
MSD	Aluminum	7429-90-5	NA	n/a	% Recov	05/10/06	75.000	125.000	
MSD	Arsenic	7440-38-2	200	98.522	% Recov	05/10/06	75.000	125.000	
MSD	Barium	7440-39-3	99.9	97.941	% Recov	05/10/06	75.000	125.000	
MSD	Beryllium	7440-41-7	96.477	94.585	% Recov	05/10/06	75.000	125.000	
MSD	Bismuth	7440-69-9	161	79.310	% Recov	05/10/06	75.000	125.000	
MSD	Calcium	7440-70-2	NA	n/a	% Recov	05/10/06	75.000	125.000	
MSD	Cadmium	7440-43-9	192	94.581	% Recov	05/10/06	75.000	125.000	
MSD	Cobalt	7440-48-4	191.71	94.438	% Recov	05/10/06	75.000	125.000	
MSD	Chromium	7440-47-3	187.2	92.217	% Recov	05/10/06	75.000	125.000	
MSD	Copper	7440-50-8	189.1	93.153	% Recov	05/10/06	75.000	125.000	
MSD	Iron	7439-89-6	NA	n/a	% Recov	05/10/06	75.000	125.000	
MSD	Potassium	7440-09-7	2050	100.985	% Recov	05/10/06	75.000	125.000	
MSD	Lithium	7439-93-2	95.9	94.020	% Recov	05/10/06	75.000	125.000	
MSD	Magnesium	7439-95-4	NA	n/a	% Recov	05/10/06	75.000	125.000	
MSD	Manganese	7439-96-5	118	58.128	% Recov	05/10/06	75.000	125.000	
MSD	Sodium	7440-23-5	598	294.581	% Recov	05/10/06	75.000	125.000	
MSD	Nickel	7440-02-0	186.3	91.773	% Recov	05/10/06	75.000	125.000	
MSD	Phosphorus	7723-14-0	NA	n/a	% Recov	05/10/06	75.000	125.000	
MSD	Lead	7439-92-1	199	98.030	% Recov	05/10/06	75.000	125.000	
MSD	Antimony	7440-36-0	186	91.626	% Recov	05/10/06	75.000	125.000	
MSD	Selenium	7782-49-2	203	100.000	% Recov	05/10/06	75.000	125.000	
MSD	Strontium	7440-24-6	100	98.039	% Recov	05/10/06	75.000	125.000	
MSD	Vanadium	7440-62-2	192.3	94.729	% Recov	05/10/06	75.000	125.000	
MSD	Zinc	7440-66-6	180.3	88.818	% Recov	05/10/06	75.000	125.000	
SPK-RPD	Silver	7440-22-4	92.118	2.438	RPD	05/10/06	0.000	20.000	
SPK-RPD	Aluminum	7429-90-5		n/a	RPD	05/10/06	0.000	20.000	
SPK-RPD	Arsenic	7440-38-2	98.522	2.992	RPD	05/10/06	0.000	20.000	
SPK-RPD	Barium	7440-39-3	97.941	3.981	RPD	05/10/06	0.000	20.000	
SPK-RPD	Beryllium	7440-41-7	94.585	0.253	RPD	05/10/06	0.000	20.000	
SPK-RPD	Bismuth	7440-69-9	79.310	1.950	RPD	05/10/06	0.000	20.000	

**REVISED**  
*Revised*  
 9/15/06

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20060389  
 Matrix: SOLID  
 Test: ICP Metals Analysis, Grd H20 P

SAF Number: F06-005  
 Sample Date: 04/18/06  
 Receive Date: 04/27/06

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
SPK-RPD	Calcium	7440-70-2		n/a	RPD	05/10/06	0.000	20.000	
SPK-RPD	Cadmium	7440-43-9	94.581	1.447	RPD	05/10/06	0.000	20.000	
SPK-RPD	Cobalt	7440-48-4	94.438	0.148	RPD	05/10/06	0.000	20.000	
SPK-RPD	Chromium	7440-47-3	92.217	0.878	RPD	05/10/06	0.000	20.000	
SPK-RPD	Copper	7440-50-8	93.153	0.186	RPD	05/10/06	0.000	20.000	
SPK-RPD	Iron	7439-89-6		n/a	RPD	05/10/06	0.000	20.000	
SPK-RPD	Potassium	7440-09-7	100.985	6.227	RPD	05/10/06	0.000	20.000	
SPK-RPD	Lithium	7439-93-2	94.020	0.877	RPD	05/10/06	0.000	20.000	
SPK-RPD	Magnesium	7439-95-4		n/a	RPD	05/10/06	0.000	20.000	
SPK-RPD	Manganese	7439-96-5	58.128	25.014	RPD	05/10/06	0.000	20.000	
SPK-RPD	Sodium	7440-23-5	294.581	2.159	RPD	05/10/06	0.000	20.000	
SPK-RPD	Nickel	7440-02-0	91.773	0.779	RPD	05/10/06	0.000	20.000	
SPK-RPD	Phosphorus	7723-14-0		n/a	RPD	05/10/06	0.000	20.000	
SPK-RPD	Lead	7439-92-1	98.030	0.568	RPD	05/10/06	0.000	20.000	
SPK-RPD	Antimony	7440-36-0	91.626	3.032	RPD	05/10/06	0.000	20.000	
SPK-RPD	Selenium	7782-49-2	100.000	0.506	RPD	05/10/06	0.000	20.000	
SPK-RPD	Strontium	7440-24-6	98.039	0.965	RPD	05/10/06	0.000	20.000	
SPK-RPD	Vanadium	7440-62-2	94.729	0.140	RPD	05/10/06	0.000	20.000	
SPK-RPD	Zinc	7440-66-6	88.818	1.379	RPD	05/10/06	0.000	20.000	

## BATCH QC

BLANK	Silver	7440-22-4	< 2e-3	n/a	ug/mL	05/10/06			U
BLANK	Aluminum	7429-90-5	< 2.7e-2	n/a	ug/mL	05/10/06			U
BLANK	Arsenic	7440-38-2	< 2.2e-2	n/a	ug/mL	05/10/06			U
BLANK	Barium	7440-39-3	< 1e-3	n/a	ug/mL	05/10/06			U
BLANK	Beryllium	7440-41-7	< 1e-3	n/a	ug/mL	05/10/06			U
BLANK	Bismuth	7440-69-9	2.3e-2	0.023	ug/mL	05/10/06			
BLANK	Calcium	7440-70-2	< 1.6e-2	n/a	ug/mL	05/10/06			U
BLANK	Cadmium	7440-43-9	< 1e-3	n/a	ug/mL	05/10/06			U
BLANK	Cobalt	7440-48-4	< 1e-3	n/a	ug/mL	05/10/06			U

**REVISED**  
*Reyes*  
 9/15/06

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20060389  
 Matrix: SOLID  
 Test: ICP Metals Analysis, Grd H2O P

SAF Number: F06-005  
 Sample Date:  
 Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
BLANK	Chromium	7440-47-3	<3e-3	n/a	ug/mL	05/10/06			U
BLANK	Copper	7440-50-8	6e-3	0.006	ug/mL	05/10/06			
BLANK	Iron	7439-89-6	<2.1e-2	n/a	ug/mL	05/10/06			U
BLANK	Potassium	7440-09-7	0.124	0.124	ug/mL	05/10/06			
BLANK	Lithium	7439-93-2	<1e-3	n/a	ug/mL	05/10/06			U
BLANK	Magnesium	7439-95-4	<1.9e-2	n/a	ug/mL	05/10/06			U
BLANK	Manganese	7439-96-5	1e-3	0.001	ug/mL	05/10/06			
BLANK	Sodium	7440-23-5	<0.198	n/a	ug/mL	05/10/06			U
BLANK	Nickel	7440-02-0	<1e-3	n/a	ug/mL	05/10/06			U
BLANK	Phosphorus	7723-14-0	4.9e-2	0.049	ug/mL	05/10/06			
BLANK	Lead	7439-92-1	<2.1e-2	n/a	ug/mL	05/10/06			U
BLANK	Antimony	7440-36-0	<2.5e-2	n/a	ug/mL	05/10/06			U
BLANK	Selenium	7782-49-2	<1.8e-2	n/a	ug/mL	05/10/06			U
BLANK	Strontium	7440-24-6	<1e-3	n/a	ug/mL	05/10/06			U
BLANK	Vanadium	7440-62-2	3e-3	0.003	ug/mL	05/10/06			
BLANK	Zinc	7440-66-6	<3e-3	n/a	ug/mL	05/10/06			U
LCS	Silver	7440-22-4	147	113.077	% Recov	05/10/06	45.000	155.000	
LCS	Aluminum	7429-90-5	7345	116.218	% Recov	05/10/06	44.000	157.000	
LCS	Arsenic	7440-38-2	174	108.075	% Recov	05/10/06	79.000	121.000	
LCS	Barium	7440-39-3	266	105.556	% Recov	05/10/06	80.000	120.000	
LCS	Beryllium	7440-41-7	102	108.051	% Recov	05/10/06	81.000	119.000	
LCS	Bismuth	7440-69-9	184	91.089	% Recov	05/10/06	80.000	120.000	
LCS	Calcium	7440-70-2	3779	113.825	% Recov	05/10/06	76.000	124.000	
LCS	Cadmium	7440-43-9	142	110.938	% Recov	05/10/06	80.000	120.000	
LCS	Cobalt	7440-48-4	37.3	105.966	% Recov	05/10/06	85.000	115.000	
LCS	Chromium	7440-47-3	74.8	107.626	% Recov	05/10/08	77.000	122.000	
LCS	Copper	7440-50-8	157	106.081	% Recov	05/10/06	80.000	120.000	
LCS	Iron	7439-89-6	16420	146.607	% Recov	05/10/06	47.000	152.000	
LCS	Potassium	7440-09-7	2020	105.208	% Recov	05/10/06	64.000	136.000	
LCS	Lithium	7439-93-2	7.03	117.953	% Recov	05/10/06	80.000	120.000	

REVISED

Rhyes

9/15/06

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20060389  
 Matrix: SOLID  
 Test: ICP Metals Analysis, Grd H2O P

SAF Number: F06-005  
 Sample Date:  
 Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
LCS	Magnesium	7439-95-4	2294	112.451	% Recov	05/10/06	71.000	129.000	
LCS	Manganese	7439-96-5	444	108.824	% Recov	05/10/06	76.000	124.000	
LCS	Sodium	7440-23-5	456	102.472	% Recov	05/10/06	51.000	149.000	
LCS	Nickel	7440-02-0	156	106.122	% Recov	05/10/06	74.000	121.000	
LCS	Phosphorus	7723-14-0	482	109.050	% Recov	05/10/06	78.000	123.000	
LCS	Lead	7439-92-1	162	114.085	% Recov	05/10/06	77.000	123.000	
LCS	Antimony	7440-36-0	140	229.885	% Recov	05/10/06	53.000	205.000	•
LCS	Selenium	7782-49-2	68.8	107.165	% Recov	05/10/06	74.000	126.000	
LCS	Strontium	7440-24-6	89.1	106.071	% Recov	05/10/06	74.000	126.000	
LCS	Vanadium	7440-62-2	114	117.163	% Recov	05/10/06	70.000	129.000	
LCS	Zinc	7440-66-6	208	126.061	% Recov	05/10/06	77.000	123.000	•

**REVISED**  
*Meyers*  
 9/15/06

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20060389  
 Matrix: SOLID  
 Test: ICP-2008 MS All possible metal

SAF Number: F06-005  
 Sample Date: 04/27/06  
 Receive Date: 04/27/06

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
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Lab ID: W060000944  
 BATCH QC ASSOCIATED WITH SAMPLE

MS	Mercury	7439-97-6	2.51311	125.656	% Recov	05/18/06	70.000	130.000	
MSD	Mercury	7439-97-6	2.45911	122.956	% Recov	05/18/06	70.000	130.000	
SPK-RPD	Mercury	7439-97-6	122.956	2.172	RPD	05/18/06	0.000	20.000	

BATCH QC

BLANK	Mercury	7439-97-6	8.458e-2	0.085	ug/L	05/18/06			
LCS	Mercury	7439-97-6	19.75	116.864	% Recov	05/18/06	71.000	132.000	

**REVISED**  
*Reyes*  
 9/15/06

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F06-005: F06-005

**Group #:** WSCF20060389

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze	Sample	Receive
<b>Organic</b>													
W060000954	B1HK57	TRENT	12674-11-2	Aroclor-1016	SOIL	LA-523-427	U	< 12.0	ug/kg	1.00	12	05/04/06	04/18/06 04/27/06
W060000954	B1HK57	TRENT	11104-28-2	Aroclor-1221	SOIL	LA-523-427	U	< 23.0	ug/kg	1.00	23	05/04/06	04/18/06 04/27/06
W060000954	B1HK57	TRENT	11141-16-5	Aroclor-1232	SOIL	LA-523-427	U	< 12.0	ug/kg	1.00	12	05/04/06	04/18/06 04/27/06
W060000954	B1HK57	TRENT	53469-21-9	Aroclor-1242	SOIL	LA-523-427	U	< 12.0	ug/kg	1.00	12	05/04/06	04/18/06 04/27/06
W060000954	B1HK57	TRENT	12672-29-6	Aroclor-1248	SOIL	LA-523-427	U	< 12.0	ug/kg	1.00	12	05/04/06	04/18/06 04/27/06
W060000954	B1HK57	TRENT	11097-69-1	Aroclor-1254	SOIL	LA-523-427	U	< 12.0	ug/kg	1.00	12	05/04/06	04/18/06 04/27/06
W060000954	B1HK57	TRENT	11096-82-5	Aroclor-1260	SOIL	LA-523-427	U	< 12.0	ug/kg	1.00	12	05/04/06	04/18/06 04/27/06
W060000954	B1HK57	TRENT	37324-23-5	Aroclor-1262	SOIL	LA-523-427	U	< 12.0	ug/kg	1.00	12	05/04/06	04/18/06 04/27/06
W060000954	B1HK57	TRENT	11100-14-4	Aroclor-1268	SOIL	LA-523-427	U	< 12.0	ug/kg	1.00	12	05/04/06	04/18/06 04/27/06
W060000954	B1HK57	TRENT	100-02-7	4-Nitrophenol	SOIL	LA-523-456	U	< 310	ug/kg	1.00	3.1e+02	05/04/06	04/18/06 04/27/06
W060000954	B1HK57	TRENT	106-46-7	1,4-Dichlorobenzene	SOIL	LA-523-456	U	< 480	ug/kg	1.00	4.8e+02	05/04/06	04/18/06 04/27/06
W060000954	B1HK57	TRENT	108-95-2	Phenol	SOIL	LA-523-456	U	< 250	ug/kg	1.00	2.5e+02	05/04/06	04/18/06 04/27/06
W060000954	B1HK57	TRENT	120-82-1	1,2,4-Trichlorobenzene	SOIL	LA-523-456	U	< 320	ug/kg	1.00	3.2e+02	05/04/06	04/18/06 04/27/06
W060000954	B1HK57	TRENT	121-14-2	2,4-Dinitrotoluene	SOIL	LA-523-456	U	< 190	ug/kg	1.00	1.9e+02	05/04/06	04/18/06 04/27/06
W060000954	B1HK57	TRENT	129-00-0	Pyrene	SOIL	LA-523-456	U	< 1.30e+03	ug/kg	1.00	1.3e+03	05/04/06	04/18/06 04/27/06
W060000954	B1HK57	TRENT	59-50-7	4-Chloro-3-methylphenol	SOIL	LA-523-456	U	< 170	ug/kg	1.00	1.7e+02	05/04/06	04/18/06 04/27/06
W060000954	B1HK57	TRENT	621-64-7	N-Nitrosodi-n-dipropylamine	SOIL	LA-523-456	U	< 270	ug/kg	1.00	2.7e+02	05/04/06	04/18/06 04/27/06
W060000954	B1HK57	TRENT	83-32-9	Acenaphthene	SOIL	LA-523-456	U	< 250	ug/kg	1.00	2.5e+02	05/04/06	04/18/06 04/27/06
W060000954	B1HK57	TRENT	87-86-5	Pentachlorophenol	SOIL	LA-523-456	U	< 260	ug/kg	1.00	2.6e+02	05/04/06	04/18/06 04/27/06
W060000954	B1HK57	TRENT	95-57-8	2-Chlorophenol	SOIL	LA-523-456	U	< 270	ug/kg	1.00	2.7e+02	05/04/06	04/18/06 04/27/06
W060000954	B1HK57	TRENT	100-01-6	4-Nitroaniline	SOIL	LA-523-456	U	< 310	ug/kg	1.00	3.1e+02	05/04/06	04/18/06 04/27/06
W060000954	B1HK57	TRENT	101-55-3	4-Bromophenylphenyl ether	SOIL	LA-523-456	U	< 180	ug/kg	1.00	1.8e+02	05/04/06	04/18/06 04/27/06
W060000954	B1HK57	TRENT	105-67-9	2,4-Dimethylphenol	SOIL	LA-523-456	U	< 320	ug/kg	1.00	3.2e+02	05/04/06	04/18/06 04/27/06
W060000954	B1HK57	TRENT	106-47-8	4-Chloroaniline	SOIL	LA-523-456	U	< 540	ug/kg	1.00	5.4e+02	05/04/06	04/18/06 04/27/06
W060000954	B1HK57	TRENT	108-60-1	Bis(2-chloro-1-methylethyl)eth	SOIL	LA-523-456	U	< 320	ug/kg	1.00	3.2e+02	05/04/06	04/18/06 04/27/06
W060000954	B1HK57	TRENT	111-44-4	Bis(2-chloroethyl) ether	SOIL	LA-523-456	U	< 360	ug/kg	1.00	3.6e+02	05/04/06	04/18/06 04/27/06

**MDL = Minimum Detection Limit**

**RQ = Result Qualifier**

**DF = Dilution Factor**

B - The analyte < the RDL but > = the IDL/MDL (inorganic)

D - Analyte was identified at a secondary dilution factor

U - Analyzed for but not detected above limiting criteria.

C - The Analyte was found in the Associated Blank.

E - Analyte is an estimate, has potentially larger errors

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

Report WGPP/ver. 1.3.1

Groundwater Remediation Program

**REVISED**  
*Allyes*  
9/15/06

# WSCF ANALYTICAL RESULTS REPORT

Attention: Steve Trent  
Project: F06-005: F06-005

Group #: WSCF20060389

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF			Result	Unit	DF	MDL	Analyze Sample Receive		
					Method	RQ								
W060000954	B1HK57	TRENT	111-91-1	Bis(2-Chloroethoxy)methane	SOIL	LA-523-456	U	< 220	ug/kg	1.00	2.2e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	117-81-7	Bis(2-ethylhexyl) phthalate	SOIL	LA-523-456	U	< 180	ug/kg	1.00	1.8e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	117-84-0	Di-n-octylphthalate	SOIL	LA-523-456	U	< 300	ug/kg	1.00	3.0e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	118-74-1	Hexachlorobenzene	SOIL	LA-523-456	U	< 250	ug/kg	1.00	2.5e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	120-12-7	Anthracene	SOIL	LA-523-456	U	< 270	ug/kg	1.00	2.7e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	120-83-2	2,4-Dichlorophenol	SOIL	LA-523-456	U	< 160	ug/kg	1.00	1.6e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	131-11-3	Dimethyl phthalate	SOIL	LA-523-456	U	< 230	ug/kg	1.00	2.3e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	132-64-9	Dibenzofuran	SOIL	LA-523-456	U	< 220	ug/kg	1.00	2.2e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	191-24-2	Benzo(ghi)perylene	SOIL	LA-523-456	U	< 270	ug/kg	1.00	2.7e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	193-39-5	Indeno(1,2,3-cd)pyrene	SOIL	LA-523-456	U	< 290	ug/kg	1.00	2.9e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	205-99-2	Benzo(b)fluoranthene	SOIL	LA-523-456	U	< 270	ug/kg	1.00	2.7e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	206-44-0	Fluoranthene	SOIL	LA-523-456	U	< 290	ug/kg	1.00	2.9e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	207-08-9	Benzo(k)fluoranthene	SOIL	LA-523-456	U	< 190	ug/kg	1.00	1.9e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	208-96-8	Acenaphthylene	SOIL	LA-523-456	U	< 260	ug/kg	1.00	2.6e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	218-01-9	Chrysene	SOIL	LA-523-456	U	< 250	ug/kg	1.00	2.5e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	50-32-8	Benzo(a)pyrene	SOIL	LA-523-456	U	< 220	ug/kg	1.00	2.2e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	51-28-5	2,4-Dinitrophenol	SOIL	LA-523-456	U	< 630	ug/kg	1.00	6.3e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	53-70-3	Dibenz[a,h]anthracene	SOIL	LA-523-456	U	< 330	ug/kg	1.00	3.3e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	534-52-1	4,6-Dinitro-2-methylphenol	SOIL	LA-523-456	U	< 450	ug/kg	1.00	4.5e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	541-73-1	1,3-Dichlorobenzene	SOIL	LA-523-456	U	< 570	ug/kg	1.00	5.7e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	56-55-3	Benzo(a)anthracene	SOIL	LA-523-456	U	< 230	ug/kg	1.00	2.3e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	606-20-2	2,6-Dinitrotoluene	SOIL	LA-523-456	U	< 250	ug/kg	1.00	2.5e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	7005-72-3	4-Chlorophenylphenyl ether	SOIL	LA-523-456	U	< 180	ug/kg	1.00	1.8e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	77-47-4	Hexachlorocyclopentadiene	SOIL	LA-523-456	U	< 580	ug/kg	1.00	5.8e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	78-59-1	Isophorone	SOIL	LA-523-456	U	< 300	ug/kg	1.00	3.0e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	84-66-2	Diethylphthalate	SOIL	LA-523-456		600	ug/kg	1.00	4.7e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	84-74-2	Di-n-butylphthalate	SOIL	LA-523-456		1.30e+03	ug/kg	1.00	5.8e+02	05/04/06	04/18/06	04/27/06

**MDL = Minimum Detection Limit**  
**RQ = Result Qualifier**

B - The analyte < the RDL but > = the IDL/MDL (inorganic)  
D - Analyte was identified at a secondary dilution factor  
U - Analyzed for but not detected above limiting criteria.

C - The Analyte was found in the Associated Blank.  
E - Analyte is an estimate, has potentially larger errors

**DF = Dilution Factor**

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

Report WGPP/ver. 1.3.1

Groundwater Remediation Program

**REVISED**  
*Deves*  
9/15/06

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F06-005: F06-005

**Group #:** WSCF20060389

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF			Result	Unit	DF	MDL	Analyze Sample Receive		
					Method	RQ								
W060000954	B1HK57	TRENT	85-01-8	Phenanthrene	SOIL	LA-523-456	U	< 250	ug/kg	1.00	2.5e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	85-68-7	Butylbenzylphthalate	SOIL	LA-523-456	U	< 150	ug/kg	1.00	1.5e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	86-30-6	N-Nitrosodiphenylamine	SOIL	LA-523-456	U	< 260	ug/kg	1.00	2.6e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	86-73-7	Fluorene	SOIL	LA-523-456	U	< 240	ug/kg	1.00	2.4e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	86-74-8	Carbazole	SOIL	LA-523-456	U	< 280	ug/kg	1.00	2.8e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	87-68-3	Hexachlorobutadiene	SOIL	LA-523-456	U	< 300	ug/kg	1.00	3.0e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	88-74-4	2-Nitroaniline	SOIL	LA-523-456	U	< 180	ug/kg	1.00	1.8e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	88-75-5	2-Nitrophenol	SOIL	LA-523-456	U	< 320	ug/kg	1.00	3.2e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	91-20-3	Naphthalene	SOIL	LA-523-456	U	< 290	ug/kg	1.00	2.9e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	91-57-6	2-Methylnaphthalene	SOIL	LA-523-456	U	< 270	ug/kg	1.00	2.7e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	91-58-7	2-Chloronaphthalene	SOIL	LA-523-456	U	< 230	ug/kg	1.00	2.3e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	91-94-1	3,3'-Dichlorobenzidine	SOIL	LA-523-456	U	< 120	ug/kg	1.00	1.2e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	95-48-7	2-Methylphenol (cresol, o-)	SOIL	LA-523-456	U	< 290	ug/kg	1.00	2.9e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	95-50-1	1,2-Dichlorobenzene	SOIL	LA-523-456	U	< 450	ug/kg	1.00	4.5e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	95-95-4	2,4,5-Trichlorophenol	SOIL	LA-523-456	U	< 160	ug/kg	1.00	1.6e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	98-95-3	Nitrobenzene	SOIL	LA-523-456	U	< 300	ug/kg	1.00	3.0e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	99-09-2	3-Nitroaniline	SOIL	LA-523-456	U	< 210	ug/kg	1.00	2.1e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	65794-96-9	3 & 4 Methylphenol Total	SOIL	LA-523-456	U	< 380	ug/kg	1.00	3.8e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	67-72-1	Hexachloroethane	SOIL	LA-523-456	U	< 430	ug/kg	1.00	4.3e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	88-06-2	2,4,6-Trichlorophenol	SOIL	LA-523-456	U	< 150	ug/kg	1.00	1.5e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	126-73-8	Tributyl phosphate	SOIL	LA-523-456	U	< 98.0	ug/kg	1.00	98	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	108-94-1	Cyclohexanone	SOIL	LA-523-456	U	< 140	ug/kg	1.00	1.4e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	95-63-6	1,2,4-Trimethylbenzene	SOIL	LA-523-456	U	< 120	ug/kg	1.00	1.2e+02	05/04/06	04/18/06	04/27/06
W060000954	B1HK57	TRENT	78-46-6	Dibutyl butylphosphonate	SOIL	LA-523-456	U	< 3.0e+02	ug/kg	1.00	3.0e+02	05/04/06	04/18/06	04/27/06
W060000955	B1HK62	TRENT	12674-11-2	Aroclor-1016	SOIL	LA-523-427	U	< 12.0	ug/kg	1.00	12	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	11104-28-2	Aroclor-1221	SOIL	LA-523-427	U	< 25.0	ug/kg	1.00	25	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	11141-16-5	Aroclor-1232	SOIL	LA-523-427	U	< 12.0	ug/kg	1.00	12	05/04/06	04/24/06	04/27/06

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**DF=Dilution Factor**

B - The analyte < the RDL but >= the IDL/MDL (inorganic)

D - Analyte was identified at a secondary dilution factor

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C - The Analyte was found in the Associated Blank.

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\* - Indicates results that have NOT been validated;

+ - Indicates more than six qualifier symbols

Report WGPP/ver. 1.3.1

Groundwater Remediation Program

**REVISED**  
*Daves*

9/15/06

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F06-005: F06-005

**Group #:** WSCF20060389

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF			Result	Unit	DF	MDL	Analyze Sample Receive		
					Method	RQ								
W060000955	B1HK62	TRENT	53469-21-9	Aroclor-1242	SOIL	LA-523-427	U	< 12.0	ug/kg	1.00	12	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	12672-29-6	Aroclor-1248	SOIL	LA-523-427	U	< 12.0	ug/kg	1.00	12	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	11097-89-1	Aroclor-1254	SOIL	LA-523-427	U	< 12.0	ug/kg	1.00	12	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	11096-82-5	Aroclor-1260	SOIL	LA-523-427	U	< 12.0	ug/kg	1.00	12	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	37324-23-5	Aroclor-1262	SOIL	LA-523-427	U	< 12.0	ug/kg	1.00	12	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	11100-14-4	Aroclor-1268	SOIL	LA-523-427	U	< 12.0	ug/kg	1.00	12	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	100-02-7	4-Nitrophenol	SOIL	LA-523-456	U	< 320	ug/kg	1.00	3.2e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	106-46-7	1,4-Dichlorobenzene	SOIL	LA-523-456	U	< 500	ug/kg	1.00	5.0e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	108-95-2	Phenol	SOIL	LA-523-456	U	< 260	ug/kg	1.00	2.6e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	120-82-1	1,2,4-Trichlorobenzene	SOIL	LA-523-456	U	< 340	ug/kg	1.00	3.4e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	121-14-2	2,4-Dinitrotoluene	SOIL	LA-523-456	U	< 200	ug/kg	1.00	2.0e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	129-00-0	Pyrene	SOIL	LA-523-456	U	< 1.40e+03	ug/kg	1.00	1.4e+03	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	59-50-7	4-Chloro-3-methylphenol	SOIL	LA-523-456	U	< 180	ug/kg	1.00	1.8e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	621-64-7	N-Nitrosodi-n-dipropylamine	SOIL	LA-523-456	U	< 280	ug/kg	1.00	2.8e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	83-32-9	Acenaphthene	SOIL	LA-523-456	U	< 260	ug/kg	1.00	2.6e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	87-86-5	Pentachlorophenol	SOIL	LA-523-456	U	< 270	ug/kg	1.00	2.7e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	95-57-8	2-Chlorophenol	SOIL	LA-523-456	U	< 290	ug/kg	1.00	2.9e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	100-01-6	4-Nitroaniline	SOIL	LA-523-456	U	< 330	ug/kg	1.00	3.3e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	101-55-3	4-Bromophenyphenyl ether	SOIL	LA-523-456	U	< 190	ug/kg	1.00	1.9e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	105-67-9	2,4-Dimethylphenol	SOIL	LA-523-456	U	< 340	ug/kg	1.00	3.4e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	106-47-8	4-Chloroaniline	SOIL	LA-523-456	U	< 560	ug/kg	1.00	5.6e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	108-60-1	Bis(2-chloro-1-methylethyl)eth	SOIL	LA-523-456	U	< 330	ug/kg	1.00	3.3e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	111-44-4	Bis(2-chloroethyl) ether	SOIL	LA-523-456	U	< 380	ug/kg	1.00	3.8e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	111-91-1	Bis(2-Chloroethoxy)methane	SOIL	LA-523-456	U	< 230	ug/kg	1.00	2.3e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	117-81-7	Bis(2-ethylhexyl) phthalate	SOIL	LA-523-456	U	< 190	ug/kg	1.00	1.9e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	117-84-0	Di-n-octylphthalate	SOIL	LA-523-456	U	< 310	ug/kg	1.00	3.1e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	118-74-1	Hexachlorobenzene	SOIL	LA-523-456	U	< 260	ug/kg	1.00	2.6e+02	05/04/06	04/24/06	04/27/06

**MDL=Minimum Detection Limit**  
**RQ=Result Qualifier**

B - The analyte < the RDL but > = the IDL/MDL (inorganic)  
D - Analyte was identified at a secondary dilution factor  
U - Analyzed for but not detected above limiting criteria.

C - The Analyte was found in the Associated Blank.  
E - Analyte is an estimate, has potentially larger errors

**DF=Dilution Factor**

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

Report WGPP/ver. 1.3.1

Groundwater Remediation Program

**REVISED**  
*D. Jones*  
9/15/06

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F06-005: F06-005

**Group #:** WSCF20060389

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF			Result	Unit	DF	MDL	Analyze Sample Receive			
					Method	RQ									
W060000955	B1HK62	TRENT	120-12-7	Anthracene	SOIL	LA-523-456	U	<	290	ug/kg	1.00	2.9e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	120-83-2	2,4-Dichlorophenol	SOIL	LA-523-456	U	<	170	ug/kg	1.00	1.7e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	131-11-3	Dimethyl phthalate	SOIL	LA-523-456	U	<	240	ug/kg	1.00	2.4e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	132-64-9	Dibenzofuran	SOIL	LA-523-456	U	<	230	ug/kg	1.00	2.3e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	191-24-2	Benzo(ghi)perylene	SOIL	LA-523-456	U	<	290	ug/kg	1.00	2.9e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	193-39-5	Indeno(1,2,3-cd)pyrene	SOIL	LA-523-456	U	<	310	ug/kg	1.00	3.1e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	205-99-2	Benzo(b)fluoranthene	SOIL	LA-523-456	U	<	280	ug/kg	1.00	2.8e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	206-44-0	Fluoranthene	SOIL	LA-523-456	U	<	300	ug/kg	1.00	3.0e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	207-08-9	Benzo(k)fluoranthene	SOIL	LA-523-456	U	<	200	ug/kg	1.00	2.0e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	208-96-8	Acenaphthylene	SOIL	LA-523-456	U	<	280	ug/kg	1.00	2.8e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	218-01-9	Chrysene	SOIL	LA-523-456	U	<	270	ug/kg	1.00	2.7e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	50-32-8	Benzo(a)pyrene	SOIL	LA-523-456	U	<	230	ug/kg	1.00	2.3e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	51-28-5	2,4-Dinitrophenol	SOIL	LA-523-456	U	<	660	ug/kg	1.00	6.6e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	53-70-3	Dibenz[a,h]anthracene	SOIL	LA-523-456	U	<	350	ug/kg	1.00	3.5e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	534-52-1	4,6-Dinitro-2-methylphenol	SOIL	LA-523-456	U	<	480	ug/kg	1.00	4.8e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	541-73-1	1,3-Dichlorobenzene	SOIL	LA-523-456	U	<	600	ug/kg	1.00	6.0e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	56-55-3	Benzo(a)anthracene	SOIL	LA-523-456	U	<	240	ug/kg	1.00	2.4e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	606-20-2	2,6-Dinitrotoluene	SOIL	LA-523-456	U	<	260	ug/kg	1.00	2.6e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	7005-72-3	4-Chlorophenylphenyl ether	SOIL	LA-523-456	U	<	190	ug/kg	1.00	1.9e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	77-47-4	Hexachlorocyclopentadiene	SOIL	LA-523-456	U	<	610	ug/kg	1.00	6.1e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	78-59-1	Isophorone	SOIL	LA-523-456	U	<	310	ug/kg	1.00	3.1e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	84-66-2	Diethylphthalate	SOIL	LA-523-456			710	ug/kg	1.00	5.0e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	84-74-2	Di-n-butylphthalate	SOIL	LA-523-456			800	ug/kg	1.00	6.1e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	85-01-8	Phenanthrene	SOIL	LA-523-456	U	<	270	ug/kg	1.00	2.7e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	85-68-7	Butylbenzylphthalate	SOIL	LA-523-456	U	<	160	ug/kg	1.00	1.6e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	86-30-6	N-Nitrosodiphenylamine	SOIL	LA-523-456	U	<	270	ug/kg	1.00	2.7e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	86-73-7	Fluorene	SOIL	LA-523-456	U	<	260	ug/kg	1.00	2.6e+02	05/04/06	04/24/06	04/27/06

**MDL=Minimum Detection Limit**

**RQ=Result Qualifier**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated;

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B - The analyte < the RDL but >= the IDL/MDL (inorganic)

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Report WGPP/ver. 1.3.1

Groundwater Remediation Program

**REVISED**  
*R. Hayes*

9/15/06

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F06-005: F06-005

**Group #:** WSCF20060389

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF		Result	Unit	DF	MDL	Analyze Sample Receive			
					Method	RQ								
W060000955	B1HK62	TRENT	86-74-8	Carbazole	SOIL	LA-523-456	U	< 290	ug/kg	1.00	2.9e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	87-68-3	Hexachlorobutadiene	SOIL	LA-523-456	U	< 310	ug/kg	1.00	3.1e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	88-74-4	2-Nitroaniline	SOIL	LA-523-456	U	< 190	ug/kg	1.00	1.9e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	88-75-5	2-Nitrophenol	SOIL	LA-523-456	U	< 340	ug/kg	1.00	3.4e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	91-20-3	Naphthalene	SOIL	LA-523-456	U	< 310	ug/kg	1.00	3.1e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	91-57-6	2-Methylnaphthalene	SOIL	LA-523-456	U	< 280	ug/kg	1.00	2.8e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	91-58-7	2-Chloronaphthalene	SOIL	LA-523-456	U	< 250	ug/kg	1.00	2.5e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	91-94-1	3,3'-Dichlorobenzidine	SOIL	LA-523-456	U	< 130	ug/kg	1.00	1.3e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	95-48-7	2-Methylphenol (cresol, o-)	SOIL	LA-523-456	U	< 310	ug/kg	1.00	3.1e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	95-50-1	1,2-Dichlorobenzene	SOIL	LA-523-456	U	< 470	ug/kg	1.00	4.7e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	95-95-4	2,4,5-Trichlorophenol	SOIL	LA-523-456	U	< 170	ug/kg	1.00	1.7e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	98-95-3	Nitrobenzene	SOIL	LA-523-456	U	< 310	ug/kg	1.00	3.1e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	99-09-2	3-Nitroaniline	SOIL	LA-523-456	U	< 220	ug/kg	1.00	2.2e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	65794-96-9	3 & 4 Methylphenol Total	SOIL	LA-523-456	U	< 390	ug/kg	1.00	3.9e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	67-72-1	Hexachloroethane	SOIL	LA-523-456	U	< 450	ug/kg	1.00	4.5e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	88-06-2	2,4,6-Trichlorophenol	SOIL	LA-523-456	U	< 160	ug/kg	1.00	1.6e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	126-73-8	Tributyl phosphate	SOIL	LA-523-456	U	< 100	ug/kg	1.00	1.0e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	108-94-1	Cyclohexanone	SOIL	LA-523-456	U	< 140	ug/kg	1.00	1.4e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	95-63-6	1,2,4-Trimethylbenzene	SOIL	LA-523-456	U	< 130	ug/kg	1.00	1.3e+02	05/04/06	04/24/06	04/27/06
W060000955	B1HK62	TRENT	78-46-6	Dibutyl butylphosphonate	SOIL	LA-523-456	U	< 3.1e+02	ug/kg	1.00	3.1e+02	05/04/06	04/24/06	04/27/06

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Report WGPP/ver. 1.3.1  
Groundwater Remediation Program

**REVISED**  
*Revised*

9/15/06

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20060389  
 Matrix: SOLID  
 Test: PCBs complete list

SAF Number: F06-005  
 Sample Date: 04/27/06  
 Receive Date: 04/27/06

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
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**Lab ID: W060000944**  
**BATCH QC ASSOCIATED WITH SAMPLE**

MS	Aroclor-1254	11097-69-1	200.36	97.300	% Recov	05/04/06	75.000	125.000	
MS	Decachlorobiphenyl	2051-24-3	228.14	111.000	% Recov	05/04/06	50.000	150.000	
MS	Tetrachloro-m-xylene	877-09-8	244.00	118.000	% Recov	05/04/06	50.000	150.000	
MSD	Aroclor-1254	11097-69-1	177.06	86.400	% Recov	05/04/06	75.000	125.000	
MSD	Decachlorobiphenyl	2051-24-3	221.72	108.000	% Recov	05/04/06	50.000	150.000	
MSD	Tetrachloro-m-xylene	877-09-8	233.07	114.000	% Recov	05/04/06	50.000	150.000	
SPK-RPD	Aroclor-1254	11097-69-1	86.400	11.867	RPD	05/04/06	0.000	25.000	
SPK-RPD	Decachlorobiphenyl	2051-24-3	108.000	2.740	RPD	05/04/06	0.000	20.000	
SPK-RPD	Tetrachloro-m-xylene	877-09-8	114.000	3.448	RPD	05/04/06	0.000	20.000	

**Lab ID: W060000954**  
**BATCH QC ASSOCIATED WITH SAMPLE**

SURR	Decachlorobiphenyl	2051-24-3	230.34	98.600	% Recov	05/04/06	50.000	150.000	
SURR	Tetrachloro-m-xylene	877-09-8	238.45	102.000	% Recov	05/04/06	50.000	150.000	

**Lab ID: W060000955**  
**BATCH QC ASSOCIATED WITH SAMPLE**

SURR	Decachlorobiphenyl	2051-24-3	256.48	103.000	% Recov	05/04/06	50.000	150.000	
SURR	Tetrachloro-m-xylene	877-09-8	262.67	106.000	% Recov	05/04/06	50.000	150.000	

**BATCH QC**

BLANK	Aroclor-1016	12674-11-2	< 10	n/a	UGKG	05/04/06			U
BLANK	Aroclor-1221	11104-28-2	< 20	n/a	ug/Kg	05/04/06			U
BLANK	Aroclor-1232	11141-16-5	< 10	n/a	ug/Kg	05/04/06			U
BLANK	Aroclor-1242	53469-21-9	< 10	n/a	ug/Kg	05/04/06			U
BLANK	Aroclor-1248	12672-29-6	< 10	n/a	ug/Kg	05/04/06			U

REVISED

Dalyes

9/15/06

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20060389  
 Matrix: SOLID  
 Test: PCBs complete list

SAF Number: F06-005  
 Sample Date:  
 Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
BLANK	Aroclor-1254	11097-69-1	< 10	n/a	ug/Kg	05/04/06			U
BLANK	Aroclor-1260	11096-82-5	< 10	n/a	ug/Kg	05/04/06			U
BLANK	Aroclor-1262	37324-23-5	< 10	n/a	ug/Kg	05/04/06			U
BLANK	Aroclor-1268	11100-14-4	< 10	n/a	ug/Kg	05/04/06			U
BLANK	Decachlorobiphenyl	2051-24-3	155.80	77.900	% Recov	05/04/06	50.000	150.000	
BLANK	Tetrachloro-m-xylene	877-09-8	157.35	78.700	% Recov	05/04/06	50.000	150.000	
LCS	Aroclor-1254	11097-69-1	198.72	99.400	% Recov	05/04/06	70.000	130.000	
LCS	Decachlorobiphenyl	2051-24-3	190.36	95.200	% Recov	05/04/06	50.000	150.000	
LCS	Tetrachloro-m-xylene	877-09-8	189.86	94.900	% Recov	05/04/06	50.000	150.000	

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*Allyes*  
 9/15/06

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20060389  
 Matrix: SOLID  
 Test: SW-846 8270C Semi-Vols

SAF Number: F06-005  
 Sample Date: 04/27/06  
 Receive Date: 04/27/06

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
Lab ID: W060000944									
BATCH QC ASSOCIATED WITH SAMPLE									
MS	1,2,4-Trichlorobenzene	120-82-1	2119.4	102.000	% Recov	05/04/06	46.000	107.000	
MS	1,4-Dichlorobenzene	106-46-7	2106.4	102.000	% Recov	05/04/06	30.000	96.000	
MS	2,4-Dinitrotoluene	121-14-2	1953.4	94.500	% Recov	05/04/06	59.000	106.000	
MS	2-Fluorophenol	367-12-4	2073.6	100.000	% Recov	05/04/06	42.000	105.000	
MS	Acenaphthene	83-32-9	2133.3	103.000	% Recov	05/04/06	61.000	116.000	
MS	4-Chloro-3-methylphenol	59-50-7	3139.2	101.000	% Recov	05/04/06	61.000	106.000	
MS	2-Chlorophenol	95-57-8	3146.5	101.000	% Recov	05/04/06	66.000	106.000	
MS	N-Nitrosodi-n-dipropylamine	621-64-7	2153.2	104.000	% Recov	05/04/06	71.000	114.000	
MS	2-Fluorobiphenyl	321-60-8	2130.5	103.000	% Recov	05/04/06	56.000	122.000	
MS	Phenol	108-95-2	3127.8	101.000	% Recov	05/04/06	42.000	111.000	
MS	Nitrobenzene-d5	4165-60-0	2083.3	101.000	% Recov	05/04/06	64.000	111.000	
MS	4-Nitrophenol	100-02-7	3163.9	102.000	% Recov	05/04/06	32.000	118.000	
MS	Pentachlorophenol	87-86-5	2867.9	92.500	% Recov	05/04/06	62.000	114.000	
MS	Phenol-d5	4165-62-2	2146.4	104.000	% Recov	05/04/06	54.000	120.000	
MS	Pyrene	129-00-0	2273.6	110.000	% Recov	05/04/06	66.000	118.000	
MS	2,4,6-Tribromophenol	118-79-6	2250.3	109.000	% Recov	05/04/06	24.000	122.000	
MS	Terphenyl-d14 (7Cl)	98904-43-9	2240.7	108.000	% Recov	05/04/06	35.000	150.000	
MSD	1,2,4-Trichlorobenzene	120-82-1	2216.3	107.000	% Recov	05/04/06	46.000	107.000	
MSD	1,4-Dichlorobenzene	106-46-7	2214.3	107.000	% Recov	05/04/06	30.000	96.000	
MSD	2,4-Dinitrotoluene	121-14-2	2066.6	99.700	% Recov	05/04/06	59.000	106.000	
MSD	2-Fluorophenol	367-12-4	2040.8	98.500	% Recov	05/04/06	42.000	105.000	
MSD	Acenaphthene	83-32-9	2243.4	108.000	% Recov	05/04/06	61.000	116.000	
MSD	4-Chloro-3-methylphenol	59-50-7	3420.7	110.000	% Recov	05/04/06	61.000	106.000	
MSD	2-Chlorophenol	95-57-8	3310.1	106.000	% Recov	05/04/06	66.000	106.000	
MSD	N-Nitrosodi-n-dipropylamine	621-64-7	2281.4	110.000	% Recov	05/04/06	71.000	114.000	
MSD	2-Fluorobiphenyl	321-60-8	2169.1	105.000	% Recov	05/04/06	56.000	122.000	

**REVISED**  
*Dlynes*  
 9/15/06

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20060389  
 Matrix: SOLID  
 Test: SW-846 8270C Semi-Vols

SAF Number: F06-005  
 Sample Date: 04/27/06  
 Receive Date: 04/27/06

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
MSD	Phenol	108-95-2	3285.9	106.000	% Recov	05/04/06	42.000	111.000	
MSD	Nitrobenzene-d5	4165-60-0	2053.2	99.100	% Recov	05/04/06	64.000	111.000	
MSD	4-Nitrophenol	100-02-7	3204.4	103.000	% Recov	05/04/06	32.000	118.000	
MSD	Pentachlorophenol	87-86-5	2735.1	88.000	% Recov	05/04/06	62.000	114.000	
MSD	Phenol-d5	4165-62-2	2177.5	105.000	% Recov	05/04/06	54.000	120.000	
MSD	Pyrene	129-00-0	2435.6	118.000	% Recov	05/04/06	66.000	118.000	
MSD	2,4,6-Tribromophenol	118-79-6	2291.7	111.000	% Recov	05/04/06	24.000	122.000	
MSD	Terphenyl-d14 (7Cl)	98904-43-9	2435.2	117.000	% Recov	05/04/06	35.000	150.000	
SPK-RPD	1,2,4-Trichlorobenzene	120-82-1	107.000	4.785	RPD	05/04/06	0.000	20.000	
SPK-RPD	1,4-Dichlorobenzene	106-46-7	107.000	4.785	RPD	05/04/06	0.000	20.000	
SPK-RPD	2,4-Dinitrotoluene	121-14-2	99.700	5.355	RPD	05/04/06	0.000	20.000	
SPK-RPD	2-Fluorophenol	367-12-4	98.500	1.511	RPD	05/04/06	0.000	20.000	
SPK-RPD	Acenaphthene	83-32-9	108.000	4.739	RPD	05/04/06	0.000	20.000	
SPK-RPD	4-Chloro-3-methylphenol	59-50-7	110.000	8.531	RPD	05/04/06	0.000	20.000	
SPK-RPD	2-Chlorophenol	95-57-8	106.000	4.831	RPD	05/04/06	0.000	20.000	
SPK-RPD	N-Nitrosodi-n-dipropylamine	621-64-7	110.000	5.607	RPD	05/04/06	0.000	20.000	
SPK-RPD	2-Fluorobiphenyl	321-60-8	105.000	1.923	RPD	05/04/06	0.000	20.000	
SPK-RPD	Phenol	108-95-2	106.000	4.831	RPD	05/04/06	0.000	20.000	
SPK-RPD	Nitrobenzene-d5	4165-60-0	99.100	1.899	RPD	05/04/06	0.000	20.000	
SPK-RPD	4-Nitrophenol	100-02-7	103.000	0.976	RPD	05/04/06	0.000	20.000	
SPK-RPD	Pentachlorophenol	87-86-5	88.000	4.986	RPD	05/04/06	0.000	20.000	
SPK-RPD	Phenol-d5	4165-62-2	105.000	0.957	RPD	05/04/06	0.000	20.000	
SPK-RPD	Pyrene	129-00-0	118.000	7.018	RPD	05/04/06	0.000	20.000	
SPK-RPD	2,4,6-Tribromophenol	118-79-6	111.000	1.818	RPD	05/04/06	0.000	20.000	
SPK-RPD	Terphenyl-d14 (7Cl)	98904-43-9	117.000	8.000	RPD	05/04/06	0.000	20.000	

Lab ID: W060000954  
 BATCH QC ASSOCIATED WITH SAMPLE

SURR	2-Fluorophenol	367-12-4	1345.3	88.000	% Recov	05/04/06	42.000	105.000	
SURR	2-Fluorobiphenyl	321-60-8	1184.8	77.500	% Recov	05/04/06	56.000	122.000	

**REVISED**  
*D. Hayes*  
 9/15/06

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20060389  
 Matrix: SOLID  
 Test: SW-846 8270C Semi-Vols

SAF Number: F06-005  
 Sample Date: 04/18/06  
 Receive Date: 04/27/06

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
SURR	Nitrobenzene-d5	4165-60-0	1414.2	92.500	% Recov	05/04/06	64.000	111.000	
SURR	Phenol-d5	4165-62-2	1359.4	88.900	% Recov	05/04/06	54.000	120.000	
SURR	2,4,6-Tribromophenol	118-79-6	1304.8	85.300	% Recov	05/04/06	24.000	122.000	
SURR	Terphenyl-d14 (7Cl)	98904-43-9	1503.4	98.300	% Recov	05/04/06	35.000	150.000	

Lab ID: W060000955  
**BATCH QC ASSOCIATED WITH SAMPLE**

SURR	2-Fluorophenol	367-12-4	1688.5	106.000	% Recov	05/04/06	42.000	105.000	*
SURR	2-Fluorobiphenyl	321-60-8	1285.9	80.400	% Recov	05/04/06	56.000	122.000	
SURR	Nitrobenzene-d5	4165-60-0	1745.4	109.000	% Recov	05/04/06	64.000	111.000	
SURR	Phenol-d5	4165-62-2	1726.4	108.000	% Recov	05/04/06	54.000	120.000	
SURR	2,4,6-Tribromophenol	118-79-6	1317.3	82.300	% Recov	05/04/06	24.000	122.000	
SURR	Terphenyl-d14 (7Cl)	98904-43-9	1719.7	107.000	% Recov	05/04/06	35.000	150.000	

**BATCH QC**

BLANK	1,2-Dichlorobenzene	95-50-1	< 380	n/a	ug/Kg	05/04/06			U
BLANK	1,2,4-Trimethylbenzene	95-63-6	< 100	n/a	ug/Kg	05/04/06			U
BLANK	1,2,4-Trichlorobenzene	120-82-1	< 270	n/a	ug/Kg	05/04/06			U
BLANK	1,3-Dichlorobenzene	541-73-1	< 480	n/a	ug/Kg	05/04/06			U
BLANK	1,4-Dichlorobenzene	106-46-7	< 400	n/a	ug/Kg	05/04/06			U
BLANK	2,4-Dichlorophenol	120-83-2	< 130	n/a	ug/Kg	05/04/06			U
BLANK	2,4-Dinitrotoluene	121-14-2	< 160	n/a	ug/Kg	05/04/06			U
BLANK	2,4,5-Trichlorophenol	95-95-4	< 140	n/a	ug/Kg	05/04/06			U
BLANK	2,4,6-Trichlorophenol	88-06-2	< 130	n/a	ug/Kg	05/04/06			U
BLANK	2,4-Dimethylphenol	105-67-9	< 270	n/a	ug/Kg	05/04/06			U
BLANK	2,6-Dinitrotoluene	606-20-2	< 210	n/a	ug/Kg	05/04/06			U
BLANK	2-Chloronaphthalene	91-58-7	< 200	n/a	ug/Kg	05/04/06			U
BLANK	2-Fluorophenol	367-12-4	2094.8	105.000	% Recov	05/04/06	42.000	105.000	
BLANK	2-Methylnaphthalene	91-57-6	< 220	n/a	ug/Kg	05/04/06			U
BLANK	2-Methylphenol (cresol, o-)	95-48-7	< 240	n/a	ug/Kg	05/04/06			U

**REVISED**  
*Reyes*  
 9/15/06

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20060389  
 Matrix: SOLID  
 Test: SW-846 8270C Semi-Vols

SAF Number: F06-005  
 Sample Date:  
 Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
BLANK	2-Nitroaniline	88-74-4	< 150	n/a	ug/Kg	05/04/06			U
BLANK	2-Nitrophenol	88-75-5	< 270	n/a	ug/Kg	05/04/06			U
BLANK	3 & 4 Methylphenol Total	65794-96-9	< 310	n/a	ug/Kg	05/04/06			U
BLANK	3-Nitroaniline	99-09-2	< 170	n/a	ug/Kg	05/04/06			U
BLANK	4,6-Dinitro-2-methylphenol	534-52-1	< 380	n/a	ug/Kg	05/04/06			U
BLANK	4-Bromophenylphenyl ether	101-55-3	< 150	n/a	ug/Kg	05/04/06			U
BLANK	4-Chlorophenylphenyl ether	7005-72-3	< 150	n/a	ug/Kg	05/04/06			U
BLANK	Acenaphthene	83-32-9	< 210	n/a	ug/Kg	05/04/06			U
BLANK	Acenaphthylene	208-96-8	< 220	n/a	ug/Kg	05/04/06			U
BLANK	Anthracene	120-12-7	< 230	n/a	ug/Kg	05/04/06			U
BLANK	Bis(2-chloroethyl) ether	111-44-4	< 300	n/a	ug/Kg	05/04/06			U
BLANK	Benzo(a)anthracene	56-55-3	< 190	n/a	ug/Kg	05/04/06			U
BLANK	Benzo(b)fluoranthene	205-99-2	< 220	n/a	ug/Kg	05/04/06			U
BLANK	Benzo(ghi)perylene	191-24-2	< 230	n/a	ug/Kg	05/04/06			U
BLANK	Benzo(a)pyrene	50-32-8	< 180	n/a	ug/Kg	05/04/06			U
BLANK	Bis(2-Chloroethoxy)methane	111-91-1	< 180	n/a	ug/Kg	05/04/06			U
BLANK	Bis(2-ethylhexyl) phthalate	117-81-7	< 150	n/a	ug/Kg	05/04/06			U
BLANK	Bis(2-chloro-1-methylethyl)eth	108-60-1	< 260	n/a	ug/Kg	05/04/06			U
BLANK	Benzo(k)fluoranthene	207-08-9	< 160	n/a	ug/Kg	05/04/06			U
BLANK	Butylbenzylphthalate	85-68-7	< 130	n/a	ug/Kg	05/04/06			U
BLANK	Carbazole	86-74-8	< 230	n/a	ug/Kg	05/04/06			U
BLANK	4-Chloroaniline	106-47-8	< 450	n/a	ug/Kg	05/04/06			U
BLANK	4-Chloro-3-methylphenol	59-50-7	< 140	n/a	ug/Kg	05/04/06			U
BLANK	2-Chlorophenol	95-57-8	< 230	n/a	ug/Kg	05/04/06			U
BLANK	Chrysene	218-01-9	< 210	n/a	ug/Kg	05/04/06			U
BLANK	Cyclohexanone	108-94-1	< 110	n/a	ug/Kg	05/04/06			U
BLANK	3,3'-Dichlorobenzidine	91-94-1	< 100	n/a	ug/Kg	05/04/06			U
BLANK	Dibenz[a,h]anthracene	53-70-3	< 280	n/a	ug/Kg	05/04/06			U
BLANK	Dibutyl butylphosphonate	78-46-6	< 250	n/a	ug/kg	05/04/06			U
BLANK	Dibenzofuran	132-64-9	< 180	n/a	ug/Kg	05/04/06			U

**REVISED**  
*Revised*  
 9/15/06

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20060389  
 Matrix: SOLID  
 Test: SW-846 8270C Semi-Vols

SAF Number: F06-005  
 Sample Date:  
 Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
BLANK	Di-n-butylphthalate	84-74-2	< 480	n/a	ug/Kg	05/04/06			U
BLANK	Diethylphthalate	84-66-2	< 400	n/a	ug/Kg	05/04/06			U
BLANK	Dimethyl phthalate	131-11-3	< 190	n/a	ug/Kg	05/04/06			U
BLANK	2,4-Dinitrophenol	51-28-5	< 530	n/a	ug/Kg	05/04/06			U
BLANK	Di-n-octylphthalate	117-84-0	< 250	n/a	ug/Kg	05/04/06			U
BLANK	N-Nitrosodi-n-dipropylamine	621-64-7	< 220	n/a	ug/Kg	05/04/06			U
BLANK	2-Fluorobiphenyl	321-60-8	2079.1	104.000	% Recov	05/04/06	56.000	122.000	
BLANK	Fluorene	86-73-7	< 200	n/a	ug/Kg	05/04/06			U
BLANK	Fluoranthene	206-44-0	< 240	n/a	ug/Kg	05/04/06			U
BLANK	Hexachlorobenzene	118-74-1	< 210	n/a	ug/Kg	05/04/06			U
BLANK	Hexachlorobutadiene	87-68-3	< 250	n/a	ug/Kg	05/04/06			U
BLANK	Hexachlorocyclopentadiene	77-47-4	< 490	n/a	ug/Kg	05/04/06			U
BLANK	Hexachloroethane	67-72-1	< 360	n/a	ug/Kg	05/04/06			U
BLANK	Indeno(1,2,3-cd)pyrene	193-39-5	< 250	n/a	ug/Kg	05/04/06			U
BLANK	Isophorone	78-59-1	< 250	n/a	ug/Kg	05/04/06			U
BLANK	Phenol	108-95-2	< 210	n/a	ug/Kg	05/04/06			U
BLANK	Naphthalene	91-20-3	< 250	n/a	ug/Kg	05/04/06			U
BLANK	Nitrobenzene-d5	4165-60-0	2146.6	107.000	% Recov	05/04/06	64.000	111.000	
BLANK	Nitrobenzene	98-95-3	< 250	n/a	ug/Kg	05/04/06			U
BLANK	4-Nitrophenol	100-02-7	< 260	n/a	ug/Kg	05/04/06			U
BLANK	4-Nitroaniline	100-01-6	< 260	n/a	ug/Kg	05/04/06			U
BLANK	N-Nitrosodiphenylamine	86-30-6	< 220	n/a	ug/Kg	05/04/06			U
BLANK	Pentachlorophenol	87-86-5	< 220	n/a	ug/Kg	05/04/06			U
BLANK	Phenanthrene	85-01-8	< 210	n/a	ug/Kg	05/04/06			U
BLANK	Phenol-d5	4165-62-2	2181.6	109.000	% Recov	05/04/06	54.000	120.000	
BLANK	Pyrene	129-00-0	< 1100	n/a	ug/Kg	05/04/06			U
BLANK	Tributyl phosphate	126-73-8	< 82	n/a	ug/Kg	05/04/06			U
BLANK	2,4,6-Tribromophenol	118-79-6	1794.0	89.700	% Recov	05/04/06	24.000	122.000	
BLANK	Terphenyl-d14 (7Cl)	98904-43-9	2163.1	108.000	% Recov	05/04/06	35.000	150.000	
LCS	1,2,4-Trichlorobenzene	120-82-1	2145.5	107.000	% Recov	05/04/06	46.000	107.000	

**REVISED**  
*R. Reyes*  
 9/15/06

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20060389  
 Matrix: SOLID  
 Test: SW-846 8270C Semi-Vols

SAF Number: F06-005  
 Sample Date:  
 Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
LCS	1,4-Dichlorobenzene	106-46-7	2142.1	107.000	% Recov	05/04/06	42.000	111.000	
LCS	2,4-Dinitrotoluene	121-14-2	1998.6	99.900	% Recov	05/04/06	59.000	106.000	
LCS	2-Fluorophenol	367-12-4	2142.9	107.000	% Recov	05/04/06	50.000	110.000	
LCS	Acenaphthene	83-32-9	2226.7	111.000	% Recov	05/04/06	61.000	116.000	
LCS	4-Chloro-3-methylphenol	59-50-7	3237.0	108.000	% Recov	05/04/06	61.000	106.000	*
LCS	2-Chlorophenol	95-57-8	3228.1	108.000	% Recov	05/04/06	66.000	106.000	*
LCS	N-Nitrosodi-n-dipropylamine	621-64-7	2145.4	107.000	% Recov	05/04/06	71.000	114.000	
LCS	2-Fluorobiphenyl	321-60-8	2193.8	110.000	% Recov	05/04/06	58.000	109.000	*
LCS	Phenol	108-95-2	3231.1	108.000	% Recov	05/04/06	67.000	105.000	*
LCS	Nitrobenzene-d5	4165-60-0	2179.1	109.000	% Recov	05/04/06	60.000	118.000	
LCS	4-Nitrophenol	100-02-7	3005.8	100.000	% Recov	05/04/06	32.000	118.000	
LCS	Pentachlorophenol	87-86-5	2808.9	93.600	% Recov	05/04/06	62.000	114.000	
LCS	Phenol-d5	4165-62-2	2179.0	109.000	% Recov	05/04/06	59.000	116.000	
LCS	Pyrene	129-00-0	2247.4	112.000	% Recov	05/04/06	66.000	118.000	
LCS	2,4,6-Tribromophenol	118-79-6	2063.8	103.000	% Recov	05/04/06	60.000	120.000	
LCS	Terphenyl-d14 (7Cl)	98904-43-9	2314.6	116.000	% Recov	05/04/06	60.000	120.000	

**REVISED**  
*Reyes*  
 9/15/06

# WSCF ANALYTICAL COMMENT REPORT

Attention: Steve Trent  
Project Number F06-005

Group #: WSCF20060389

Sample #	Client ID	Lab Area	Test	Comment
		VALGROUP		<p>IC Anions: - Phosphate matrix spikes bias low, possible matrix interference due to chloride. Sample level &lt; MDL</p> <p>ORGANICS: Sample concentrations are corrected for moisture and reported as dry weight basis. gar</p> <p>SVOC: One surrogate and several matrix spike compound recoveries slightly exceeded upper control limits. Process improvements have increased spike recoveries. The statistical QC limits will increase when sufficient data points are in the LIMS to allow updating the QC database. cgc</p> <p>ICP-AES: High preparation blank results for phosphorus, bismuth, vanadium, copper, manganese, and potassium; "C" flags if applicable, High antimony and zinc LCS recoveries; no flags issued because other QC is acceptable. High sodium and low manganese spike recoveries; "E" flag if applicable. Aluminum, iron, magnesium, calcium, and phosphorus sample results beyond effective spike range (spike results marked "NA").</p> <p>ICP-MS: Mercury prep blank above the MDL and more than 10%</p>

Lab Areas: VALGROUP - Group Validation  
LOGSAMP - Login for Sample

VALTEST - Test Validation  
LOGTEST - Login for Tests

TESTDATA - Test Data Entry

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wgppc/1 Report#: WSCF20060389

Report Date: 13-sep-2006

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**REVISED**  
*D. Hayes*  
9/15/06

# WSCF ANALYTICAL COMMENT REPORT

Attention: Steve Trent  
Project Number F06-005

Group #: WSCF20060389

Sample #	Client ID	Lab Area	Test	Comment
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of the sample results. C-flag  
IC Anions: Samples re-extracted for reanalysis of Nitrate-N  
which was over calibration range on first analysis

Lab Areas: VALGROUP - Group Validation  
LOGSAMP - Login for Sample

VALTEST - Test Validation  
LOGTEST - Login for Tests

TESTDATA - Test Data Entry

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wgppc/1 Report#: WSCF20060389

Report Date: 13-sep-2006

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**REVISED**  
*Revised*  
9/15/06

**WSCF**  
**TENTATIVELY IDENTIFIED PEAK REPORT**

**Attention:**  
**Project Number** :

**Group #:** 20060389

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Sample #	Client ID	Test Name	Peak Name	CAS#	RT	RQ	Result	Units
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RQ=Result Qualifier

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WGPPE v 1.1 Report#: 20060389

Report Date: 13-sep-2006

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**REVISED**  
*D. Hayes*  
9/15/06

# 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.

<b>LA-503-401</b>	<b>LA-503-401: ANALYSIS OF CATIONS BY ION CHROMATOGRAPHY</b> EPA-600/4-86-024 300.7 HEIS 300.7_IC	Dissolved Sodium, Ammonium, Potassium, and Calcium in Wet Deposition by Chemical Determination of Ammonium by Ion Chromatography
<b>LA-505-411</b>	<b>LA-505-411: ELEMENTAL ANALYSIS BY INDUCTIVELY COUPLED PLASMA ATOMIC EMISSION SPE</b> EPA SW-846 6010B HEIS 6010_METALS_ICP	INDUCTIVELY COUPLED PLASMA-ATOMIC EMISSION SPECTROMETRY Inductively Coupled Plasma-Atomic Emission Spectrometry
<b>LA-505-412</b>	<b>LA-505-412: DETERMINATION OF TRACE ELEMENTS IN WATERS AND WASTES BY INDUCTIVELY</b> EPA-600/R-94-111 200.8 HEIS 200.8_METALS_ICPMS	DETERMINATION OF TRACE ELEMENTS IN WATERS AND WASTES BY INDUCTIVELY COUPLED PLASMA Inductively Coupled Plasma - Mass Spectrometry
<b>LA-519-412</b>	<b>LA-519-412: TOTAL RESIDUE/% SOLIDS DRIED AT 103 - 105 C</b> EPA-600/4-79-020 160.3 HEIS 160.1_TDS Standard Methods 2540B	RESIDUE, TOTAL Residue, Filterable Total Solids Dried at 103-105 C
<b>LA-523-427</b>	<b>LA-523-427: POLYCHLORINATED BIPHENYLS (PCBs) BY GAS CHROMATOGRAPHY</b> EPA SW-846 3510C EPA SW-846 3545 EPA SW-846 3665A EPA SW-846 8000B EPA SW-846 8082A HEIS 8082_PCB_GC	SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION PRESSURIZED FLUID EXTRACTION (PFE) SULFURIC ACID/PERMANGANATE CLEANUP DETERMINATIVE CHROMATOGRAPHIC SEPARATIONS POLYCHLORINATED BIPHENYLS (PCBs) BY GAS CHROMATOGRAPHY Polychlorinated Biphenyls (PCBs) by Gas Chromatography

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](http://ap006\aspdocs\WSCF\Sample Mgmt\ProcedureMethodCrossReference.pdf). This document includes on-line links to full-text versions of the procedures and methods, where available.

Report Date: 13-sep-2006

Report#: WSCF20060389

Report WGPPM/O

**REVISED**  
*Wheeler*  
9/15/06

# 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.

<b>LA-523-456</b>	<b>LA-523-456: SEMIVOLATILE SAMPLE ANALYSIS BY SW-846, METHOD 8270C</b>
<b>EPA SW-846 8000B</b>	<b>DETERMINATIVE CHROMATOGRAPHIC SEPARATIONS</b>
<b>EPA SW-846 8270C</b>	<b>SEMIVOLATILE ORGANIC COMPOUNDS BY GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)</b>
<b>HEIS 8270_SVOA_GCMS</b>	<b>Semivolatile Organic Compounds By Gas Chromatography/Mass Spectrometry (GC/MS)</b>
<b>LA-533-410</b>	<b>LA-533-410: ANION ANALYSIS BY ION CHROMATOGRAPHY</b>
<b>EPA-600/R-94-111 300.0</b>	<b>DETERMINATION OF INORGANIC ANIONS BY ION CHROMATOGRAPHY</b>
<b>HEIS 300.0_ANIONS_IC</b>	<b>Determination of Inorganic Anions by Ion Chromatography</b>

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.

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**REVISED**  
*Revised*  
9/15/06

## W13q Worklist/Batch/QC Report for Group# WSCF20060389

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
				SAMPLE	W060000954	Percent Solids
				SAMPLE	W060000955	Percent Solids
			32800	BLANK		PCBs complete list
			32800	LCS		PCBs complete list
			32800	MS	W060000944	PCBs complete list
			32800	MSD	W060000944	PCBs complete list
			32800	SPK-RPD	W060000944	PCBs complete list
			32800	SAMPLE	W060000954	PCBs complete list
			32800	SURR	W060000954	PCBs complete list
			32800	SAMPLE	W060000955	PCBs complete list
			32800	SURR	W060000955	PCBs complete list
			32804	BLANK		SW-846 8270C Semi-Vols
			32804	LCS		SW-846 8270C Semi-Vols
			32804	MS	W060000944	SW-846 8270C Semi-Vols
			32804	MSD	W060000944	SW-846 8270C Semi-Vols
			32804	SPK-RPD	W060000944	SW-846 8270C Semi-Vols
			32804	SAMPLE	W060000954	SW-846 8270C Semi-Vols
			32804	SURR	W060000954	SW-846 8270C Semi-Vols
			32804	SAMPLE	W060000955	SW-846 8270C Semi-Vols
			32804	SURR	W060000955	SW-846 8270C Semi-Vols
28592	1	28963	32815	BLANK		ICP Metals Analysis, Grd H20 P
28592	2	28963	32815	LCS		ICP Metals Analysis, Grd H20 P
28592	5	28963	32815	MS	W060000954	ICP Metals Analysis, Grd H20 P
28592	6	28963	32815	MSD	W060000954	ICP Metals Analysis, Grd H20 P
28592	4	28963	32815	SAMPLE	W060000954	ICP Metals Analysis, Grd H20 P
28592	6	28963	32815	SPK-RPD	W060000954	ICP Metals Analysis, Grd H20 P
28592	7	28963	32815	SAMPLE	W060000955	ICP Metals Analysis, Grd H20 P
28613	2	28984	32824	BLANK		Ammonia (N) by IC
28613	10	28984	32824	BLANK		Ammonia (N) by IC
28613	3	28984	32824	LCS		Ammonia (N) by IC
28613	5	28984	32824	DUP	W060000944	Ammonia (N) by IC
28613	6	28984	32824	MS	W060000944	Ammonia (N) by IC
28613	7	28984	32824	MSD	W060000944	Ammonia (N) by IC
28613	8	28984	32824	SAMPLE	W060000954	Ammonia (N) by IC
28613	9	28984	32824	SAMPLE	W060000955	Ammonia (N) by IC
28674	1	29045	32885	BLANK		ICP-2008 MS All possible metal
28674	2	29045	32885	LCS		ICP-2008 MS All possible metal
28674	4	29045	32885	MS	W060000944	ICP-2008 MS All possible metal
28674	5	29045	32885	MSD	W060000944	ICP-2008 MS All possible metal
28674	5	29045	32885	SPK-RPD	W060000944	ICP-2008 MS All possible metal
28674	6	29045	32885	SAMPLE	W060000954	ICP-2008 MS All possible metal
28674	7	29045	32885	SAMPLE	W060000955	ICP-2008 MS All possible metal
29570	2	29935	33860	BLANK		Anions by Ion Chromatography
29570	10	29935	33860	BLANK		Anions by Ion Chromatography
29570	3	29935	33860	LCS		Anions by Ion Chromatography
29570	5	29935	33860	DUP	W060000944	Anions by Ion Chromatography
29570	6	29935	33860	MS	W060000944	Anions by Ion Chromatography
29570	7	29935	33860	MSD	W060000944	Anions by Ion Chromatography

REVISED  
*Revised*  
 9/15/06

29570	8	29935	33860	SAMPLE	W060000954	Anions by Ion Chromatography
29570	9	29935	33860	SAMPLE	W060000955	Anions by Ion Chromatography
29584	2	29949	33864	BLANK		Anions by Ion Chromatography
29584	12	29949	33864	BLANK		Anions by Ion Chromatography
29584	3	29949	33864	LCS		Anions by Ion Chromatography
29570	8	29949	33864	SAMPLE	W060000954	Anions by Ion Chromatography
29570	9	29949	33864	SAMPLE	W060000955	Anions by Ion Chromatography
29584	5	29949	33864	DUP	W060001184	Anions by Ion Chromatography
29584	6	29949	33864	MS	W060001184	Anions by Ion Chromatography
29584	7	29949	33864	MSD	W060001184	Anions by Ion Chromatography

**REVISED**  
*R. Lopez*  
 9/15/06

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

*5/29/06*

ACKNOWLEDGMENT OF SAMPLES RECEIVED

*File KB*

Groundwater Remediation Program

Richland, WA 99354  
Attn: Steve Trent

Customer Code: GPP  
PO#: 121618/ES10  
Group#: 20060389  
Project#: F06-005  
Proj Mgr: Steve Trent A0-21  
Phone: 373-5869

The following samples were received from you on 04/27/06. 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
W060000954	B1HK57	TRENT @2008 NH4-IC	Solid, or handle as if solid @GPP6010 @IC-30 PERSOLID	04/18/06
W060000955	B1HK62	TRENT @2008 NH4-IC	Solid, or handle as if solid @GPP6010 @IC-30 PERSOLID	04/24/06

Test Acronym Description

Test Acronym	Description
@2008	ICP-2008 MS All possible metal
@GPP6010	ICP Metals Analysis, Grd H2O P
@IC-30	Anions by Ion Chromatography
@PCBGPP	PCBs complete list
@SVOCGPP	SW-846 8270C Semi-Vols
NH4-IC	Ammonia (N) by IC
PERSOLID	Percent Solids

**REVISED**  
*D. Jones*  
9/15/06

<b>COLLECTOR</b> Mokler/Pope/Pfister	<b>COMPANY CONTACT</b> TRENT, SJ	<b>TELEPHONE NO.</b> 373-5869	<b>PROJECT COORDINATOR</b> TRENT, SJ	<b>PRICE CODE</b> 8N	<b>DATA TURNAROUND</b> 45 Days / 45 Days
<b>SAMPLING LOCATION</b> C3427, Slant, I-22	<b>PROJECT DESIGNATION</b> 216-Z-9 Trench Slant Characterization Borehole - Soil		<b>SAF NO.</b> F06-005	<b>AIR QUALITY</b> <input type="checkbox"/>	
<b>ICE CHEST NO.</b>	<b>FIELD LOGBOOK NO.</b> HNF-N-360-1	<b>COA</b> 121618E510	<b>METHOD OF SHIPMENT</b> GOVERNMENT VEHICLE		
<b>SHIPPED TO</b> Waste Sampling & Characterization	<b>OFFSITE PROPERTY NO.</b>		<b>BILL OF LADING/AIR BILL NO.</b>		

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS	PRESERVATION	Cool 4C	Cool 4C	Cool 4C	Cool 4C
A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	ITEM #1 - 241g ITEM #2 - 245g ITEM #3 - 248g PCB'S - 238g					
		<b>TYPE OF CONTAINER</b>	aG	aG	G/P	G
		<b>NO. OF CONTAINER(S)</b>	1	1	1	1
		<b>VOLUME</b>	120mL	120mL	120mL	120mL
	<b>SPECIAL HANDLING AND/OR STORAGE</b>	<b>SAMPLE ANALYSIS</b>	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	PCBs - 8082;	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

2060389

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME				
B1HK57	SOIL	4-18-06	1025	X	X	X	X
W060000954							

CHAIN OF POSSESSION	SIGN/ PRINT NAMES
RELINQUISHED BY/REMOVED FROM J. Sporel J. Sporel	RECEIVED BY/STORED IN SITE RMA
DATE/TIME 4-18-06 1130	DATE/TIME 4-18-06 1130
RELINQUISHED BY/REMOVED FROM 2-9 Site Air	RECEIVED BY/STORED IN J.S. Pope
DATE/TIME 4-27-06 1300	DATE/TIME 4-27-06 1300
RELINQUISHED BY/REMOVED FROM J.S. Pope	RECEIVED BY/STORED IN TA ROZIER
DATE/TIME 4-27-06 1240	DATE/TIME 4-27-06 1240
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN
DATE/TIME	DATE/TIME
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN
DATE/TIME	DATE/TIME
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN
DATE/TIME	DATE/TIME

**SPECIAL INSTRUCTIONS**

(1) Semi-VOA - 8270B (TCL); Semi-VOA - 8270B (Add-On) {1,2,4-Trimethylbenzene, Cyclohexanone, Dibutyl Butylphosphonate, Tributyl phosphate}

(2) ICP Metals - 6010B (TAL); ICP Metals - 6010B (Add-On) {Arsenic, Beryllium, Bismuth, Lead, Lithium, Phosphorus, Selenium, Strontium} ICP/MS - 200.8 (Hg);

(3) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Phosphorous in phosphate, Sulfate} Cations (IC) - 300.7 {Nitrogen in ammonium}

ICED  
Initial Date  
4-27-06

**REVISED**  
D. Hayes

<b>LABORATORY SECTION</b>	<b>RECEIVED BY</b>	<b>TITLE</b> 9/15/06	<b>DATE/TIME</b>
<b>FINAL SAMPLE DISPOSITION</b>	<b>DISPOSAL METHOD</b>	<b>DISPOSED BY</b>	<b>DATE/TIME</b>

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Fluor Hanford Inc. 5/29		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F06-005-069	PAGE 1 OF 1
COLLECTOR Mokler/Pope/Pfister	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ		PRICE CODE 8N	DATA TURNAROUND 45 Days / 45 Days
SAMPLING LOCATION C3427, Slant, I-23	PROJECT DESIGNATION 216-Z-9 Trench Slant Characterization Borehole - Soil		SAF NO. F06-005	AIR QUALITY		
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-360-1	COA 121618E510	METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO Waste Sampling & Characterization	OFFSITE PROPERTY NO.	BILL OF LADING/AIR BILL NO.				

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS	PRESERVATION	Cool 4C	Cool 4C	Cool 4C	Cool 4C
			TYPE OF CONTAINER	aG	aG	G/P
A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other			1	1	1	1
			120mL	120mL	120mL	120mL
		SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	PCBs - 0082;	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	ICED	Initial	Date
B1HK62	SOIL	4/24/06	0945	ICED	Initial	Date
20060385						
2006000955						

CHAIN OF POSSESSION	SIGN/ PRINT NAMES	SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM J. S. Pope / 4/27/06 1200	RECEIVED BY/STORED IN SITE REP 4/29/06 1040	(1)Semi-VOA - 8270B (TCL); Semi-VOA - 8270B (Add-On) {1,2,4-Trimethylbenzene, Cyclohexanone, Dibutyl Butylphosphonate, Tributyl phosphate} (2)ICP Metals - 6010B (TAL); ICP Metals - 6010B (Add-On) {Arsenic, Beryllium, Bismuth, Lead, Lithium, Phosphorus, Selenium, Strontium} ICP/MS - 200.8 (Hg); (3)IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Phosphorous in phosphate, Sulfate} Cations (IC) - 300.7 {Nitrogen in ammonium}
RELINQUISHED BY/REMOVED FROM J. S. Pope / 4/27/06 1340	RECEIVED BY/STORED IN [Signature] 4/27/06 1340	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	

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

**REVISED**  
 [Signature]  
 9/15/06