

#### Weston Solutions, Inc.

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November 3, 2008

Mr. Scott Miller U.S. EPA Region 4 61 Forsyth Street, SW Atlanta, Georgia 30303

Work Order No. 05791.008.001.0001

Re: Submittal of Third Quarter 2008 Groundwater Sampling Results

Former Cabot Carbon Site, Gainesville, Florida

Dear Mr. Miller:

Enclosed is the above referenced report for your files. As instructed, this report is being submitted electronically in Adobe® Portable Document Format (PDF). If you have any questions, please call me at (770) 325-7938.

The fourth quarter 2008 sampling event will occur in December 2008.

Sincerely,

WESTON SOLUTIONS, INC.

Ralph P. McKeen, P.E.

Project Manager

WRM/smo

cc: W. Reiber (Cabot)

K. Helton (FDEP)

J. Mousa (Alachua County)

# RESULTS OF QUARTERLY GROUNDWATER SAMPLING CONDUCTED SEPTEMBER 23-26, 2008, FOR THIRD QUARTER, 2008

# EASTERN PORTION OF THE CABOT CARBON/KOPPERS SUPERFUND SITE GAINESVILLE, FLORIDA

# Prepared for:

Cabot Corporation Two Seaport Lane, Suite 1300 Boston, Massachusetts 02210

Prepared by:

Weston Solutions, Inc. Suite 100 5430 Metric Place Norcross, Georgia 30092 (770) 325-7900

November 2008

WESTON WORK ORDER NO. 05791.008.001.0001

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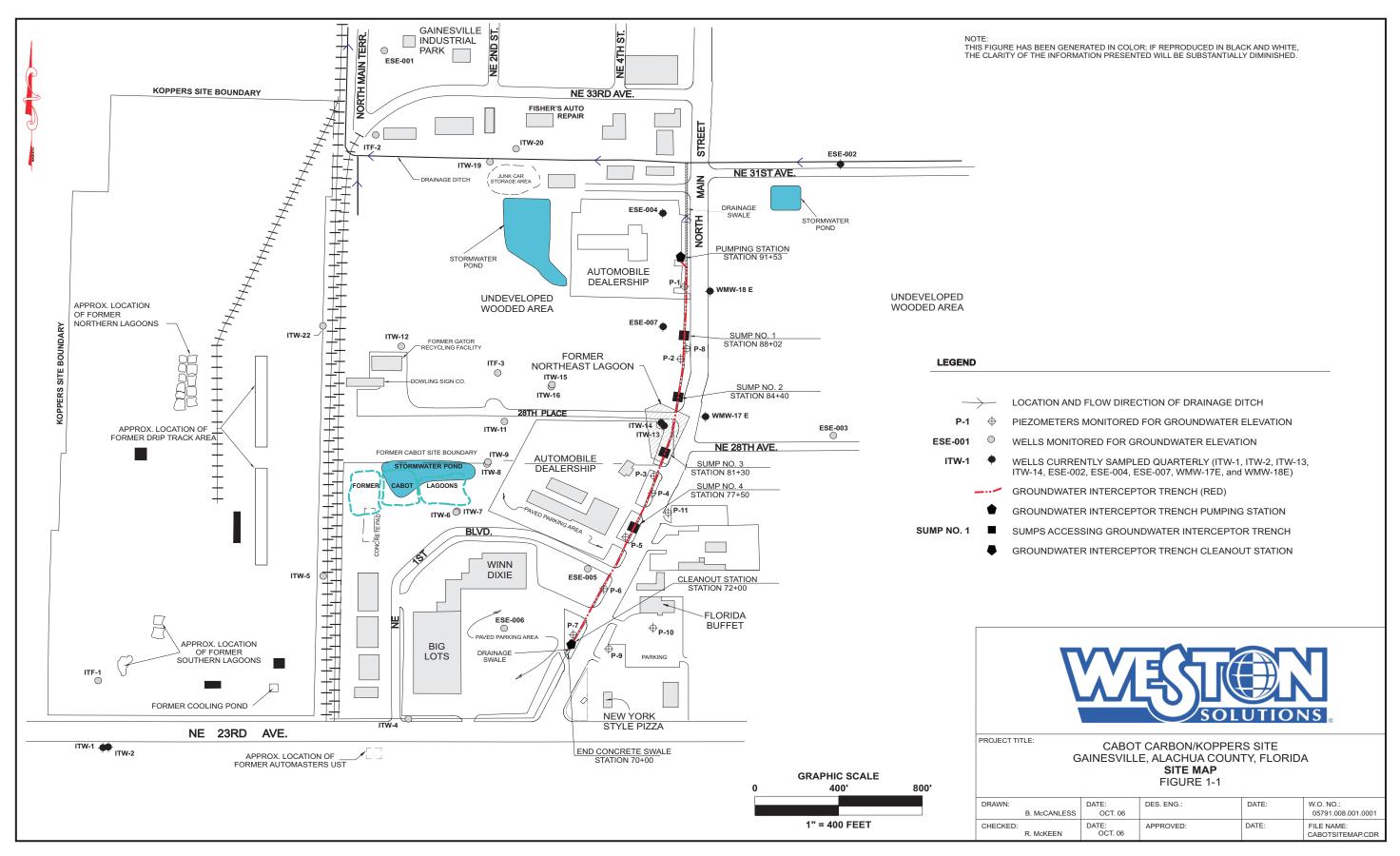
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### **BACKGROUND**

The purpose of the third quarter 2008 sampling conducted by Weston Solutions, Inc., (WESTON®) is to evaluate the effectiveness of the groundwater collection system that has been installed along the border of the eastern portion of the Cabot Carbon/Koppers Superfund Site (Eastern Site) (Figure 1-1). The current post-remedial groundwater monitoring program for the Eastern Site includes sampling the following wells on a quarterly basis: ITW-13, ITW-14, WMW-17E, WMW-18E, ESE-002, ESE-004, ESE-007, and up-gradient monitoring wells ITW-1 and ITW-2. This report summarizes the results of the third quarter 2008 groundwater sampling event.



#### **METHODOLOGY**

Groundwater samples were collected from the Eastern Site monitoring wells by Brant McCanless, P.G. of Weston Solutions, Inc. with project management by Ralph McKeen, P.E. of Weston Solutions, Inc. The subject samples were analyzed for the parameters listed in Table 2-1. Physical parameter readings (e.g., specific conductance and temperature) measured during well sampling is provided in Appendix A of this report.

Chromium concentrations that have been periodically detected in samples from a few of the surficial aquifer monitoring wells are likely attributable to sediment in the samples, rather than actual chromium dissolved in the groundwater. For this reason, following the well purge and collection of samples for benzene, ethyl benzene, toluene and xylene (BETX), phenol, pentachlorophenol (PCP), and polynuclear aromatic hydrocarbons (PAHs) analyses, the sediment in the well was allowed time to settle prior to collection of the samples for metals analyses. This settling period did not exceed 24 hours for any well sampled.

Table 2-1

Monitoring Wells Sampled and Corresponding Analytical Parameters,
Third Quarter 2008

	Groundwate	r	
Aquifer	Wells Sampled	Parameters	Analytical Method
Surficial	ITW-1, ITW-2, ESE-002, ESE-004, ESE-007,	Anthracene	8310
	ITW-13, ITW-14, WMW-17E, and WMW-18E	Phenanthrene	
		Acenaphthylene	
		Acenaphthene	
		Fluorene	
		Pyrene	
		Naphthalene	
		Fluoranthene	
		Benzo(a)pyrene	
		Benzo(a)anthracene	
		Benzo(b)fluoranthene	
		Benzo(k)fluoranthene	
		Dibenzo(a,h)anthracene	
		Indeno(1,2,3-c,d)pyrene	
		Chrysene	
		SVOCs (Phenol)	8270C
		Pentachlorophenol (PCP)	
		Arsenic	6010
		Chromium	
		Benzene	SW 846
			8260B
		Ethyl benzene	
		Toluene, & Xylene (BETX)	

#### WATER LEVEL MEASUREMENTS

To assist in evaluating the interceptor trench's effectiveness, water level measurements were collected on September 23, 2008, from 24 Eastern Site monitoring wells, 10 piezometers, and 4 sumps along the interceptor trench. Monitor wells/piezometer ITW-3, ITW-10, ITW-21, and P-1 were abandoned historically. Car dealership construction activities around surficial aquifer monitor wells ITW-15, ITW-16, and piezometer P8 have been completed and the wells/piezometer have been reconstructed with flushmounts/minor stickup surface completions. The wells/piezometer will be resurveyed to obtain corrected well casing elevations for precise water level elevation data. All other wells installed at the site are in good condition and, with the exception of abandoned monitor wells ITW-3, ITW-10, ITW-12, ITW-21, and piezometer P-1 are included in the water level measurements normally taken at the site. These wells are not included in the determination of the potentiometric surface.

Historically, wells ITW-17 and ITW-18 were replaced by WMW-17E and WMW-18E. A new car dealership (Gatorland Toyota) was developed in 2007 east of North Main Street in the vicinity of monitor wells WMW-17E and WMW-18E. The site development activities included raising this once low area to match the roadway elevations of North Main Street. Consequently, WMW-17E and WMW-18E were extended and a new concrete pad, bollards, and protective casing installed in February 2007. The top of casing elevations used for this sampling event were measured from the site development surveyed existing grade elevations. These wells are planned to be re-surveyed at the same time as reconstructed wells/piezometer ITW-15, ITW-16, and P-8.

The surveyed elevation and water level data for each well were utilized to calculate the groundwater elevation at each location. The elevation of each well was established by registered Florida land surveyors. Groundwater elevations collected from the Eastern Site are summarized in Table 3-1. Figure 3-1 shows the water level elevations and groundwater flow directions in the upper surficial aquifer measured on September 23, 2008.

### 3.1 SURFICIAL AQUIFER

Based on the groundwater elevations measured in the surficial aquifer, the groundwater flow direction beneath the southern part of the Cabot Carbon/Koppers site is to the northeast toward the groundwater interceptor trench (see Figure 3-1). Based on the September 2008 groundwater elevation data, the average hydraulic gradient in the southern portion of the Eastern Site is calculated to be approximately 4.98 x 10<sup>-3</sup> ft/ft. Beneath the northern part of the Eastern Site, the groundwater flow direction is to the north-northeast and the average hydraulic gradient in this area is approximately 9.46 x 10<sup>-3</sup> ft/ft. Groundwater elevations indicate that the interceptor trench maintains effective control of the groundwater in the upper surficial aquifer. For example, groundwater in the area of well WMW-18E continues to flow west towards the interceptor trench (see Figure 3-1).

Additionally, the groundwater flow directions shown by the overall potentiometric surface indicate that the groundwater flow direction in the surficial aquifer is generally toward the interceptor trench. These data further substantiate that the Eastern Site interceptor trench is collecting groundwater from the eastern and western sides of the trench.

### 3.2 INTERMEDIATE AQUIFER

Based on groundwater elevations from the three intermediate aquifer wells, the groundwater flow direction in this aquifer continues to be generally toward the northeast. A downward hydraulic gradient continues to be present between the surficial and intermediate aquifers. On September 23, 2008, a head difference of approximately 34.24 feet was measured between surficial aquifer well ITW-11 and intermediate aquifer well ITF-3 (see Table 3-1).

#### **Table 3-1**

#### **Groundwater Depths and Elevations**

#### September 2008 Sampling Event<sup>1</sup>

# Eastern Portion of Cabot Carbon/Koppers Superfund Site Gainesville, Alachua County, Florida

		June 17, 2008		
36	Top of Casing/Sump	Field Measured Water Depth		Depth of Screened
Monitoring			Ground water Elevation reet	· .
Well ID	Elevation Feet (MSL) <sup>3</sup>	Below Top of Casing (Feet) <sup>2</sup>	(MSL)	Interval <sup>4</sup>
ITW-1	188.47	9.43	179.04	15.50 - 25.50
ITW-2	187.48	8.41	179.07	5.50 - 15.50
ITW-3	Does not currently exist.	Does not currently exist.	Does not currently exist.	Does not currently exist.
ITW-4	187.82	11.48	176.34	5.00 - 15.00
ITW-5	185.34	9.00	176.34	19.00 - 24.00
ITW-6	183.10	10.10	173.00	18.50 - 28.50
ITW-7 <sup>5</sup>	182.97	9.99	172.98	8.50 - 18.50
ITW-8	180.81	8.06	172.75	18.50 - 28.50
ITW-9	180.30	8.14	172.16	8.00 - 18.00
ITW-10	Does not currently exist.	Does not currently exist.	Does not currently exist.	Does not currently exist.
ITW-11	180.91	8.44	172.47	6.00 - 16.00
ITW-12	Does not currently exist.	Does not currently exist.	Does not currently exist.	Does not currently exist.
ITW-13	174.14	7.90	166.24	23.00 - 33.00
ITW-14 <sup>6</sup>	174.80	Approx. 0.2 foot product	Not Measured	5.00 - 15.00
ITW-15 <sup>7</sup>	179.30	6.52	Top of Casing Elev. Changed	20.00 - 30.00
ITW-16 <sup>7</sup>	178.86	5.81	Top of Casing Elev. Changed	12.50 - 22.50
ITW-19	169.74	9.38	160.36	11.00 - 31.00
ITW-20	169.77	10.24	159.53	11.00 - 31.00
ITW-21 <sup>5</sup>	Does not currently exist.	Does not currently exist.	Does not currently exist.	Does not currently exist.
ITW-22 <sup>5</sup>	178.61	8.65	169.96	3.00 - 13.00
ESE-001	162.05	8.64	153.41	6.50 - 21.20
ESE-002	169.08	6.77	162.31	8.00 - 23.00
ESE-003	171.86	5.57	166.29	9.00 - 29.00
ESE-004 <sup>5</sup>	166.69	8.47	158.22	6.50 - 21.50
ESE-005	178.23	9.77	168.46	9.50 - 29.50
ESE-006	180.39	7.85	172.54	7.50 - 27.50
ESE-007	168.42	2.11	166.31	7.50 - 22.50
WMW-17E <sup>5</sup>	175.50	9.02	166.48	9.00 - 29.00
WMW-18E	172.69	6.55	166.14	9.00 - 29.00
ITF-1	186.63	21.32	165.31	69.00 - 79.00
ITF-2	168.95	36.88	132.07	71.00 - 81.00
ITF-3	176.89	38.66	138.23	69.50 - 79.50
P-1	Does not currently exist.	Does not currently exist.	Does not currently exist.	Does not currently exist.
P-2	169.77	5.53	164.24	5.18 - 10.18
P-3	171.05	5.67	165.38	5.00 - 10.00
P-4	172.26	6.43	165.83	5.00 - 10.00
P-5	173.20	5.70	167.50	6.65 - 11.65
P-6	177.07	9.85	167.22	7.50 - 12.50
P-7	179.24	10.23	169.01	7.50 - 12.50
P-8 <sup>7</sup>	168.44	7.85	Top of Casing Elev. Changed	5.00 - 10.00
P-9	181.35	10.45	170.90	10.00 - 15.00
P-10	180.23	10.56	169.67	10.00 - 15.00
P-11 Sump No. 1	173.35 168.95	6.78 6.80	166.57 162.15	10.00 - 15.00 Sump
Sump No. 1 Sump No. 2	168.95	6.33	162.15	Sump
Sump No. 2 Sump No. 3	170.94	6.75	163.47	Sump
Sump No. 4	170.94	7.55	165.72	Sump
5ump 140. 4	1/3.4/	1.33	103.72	Sump

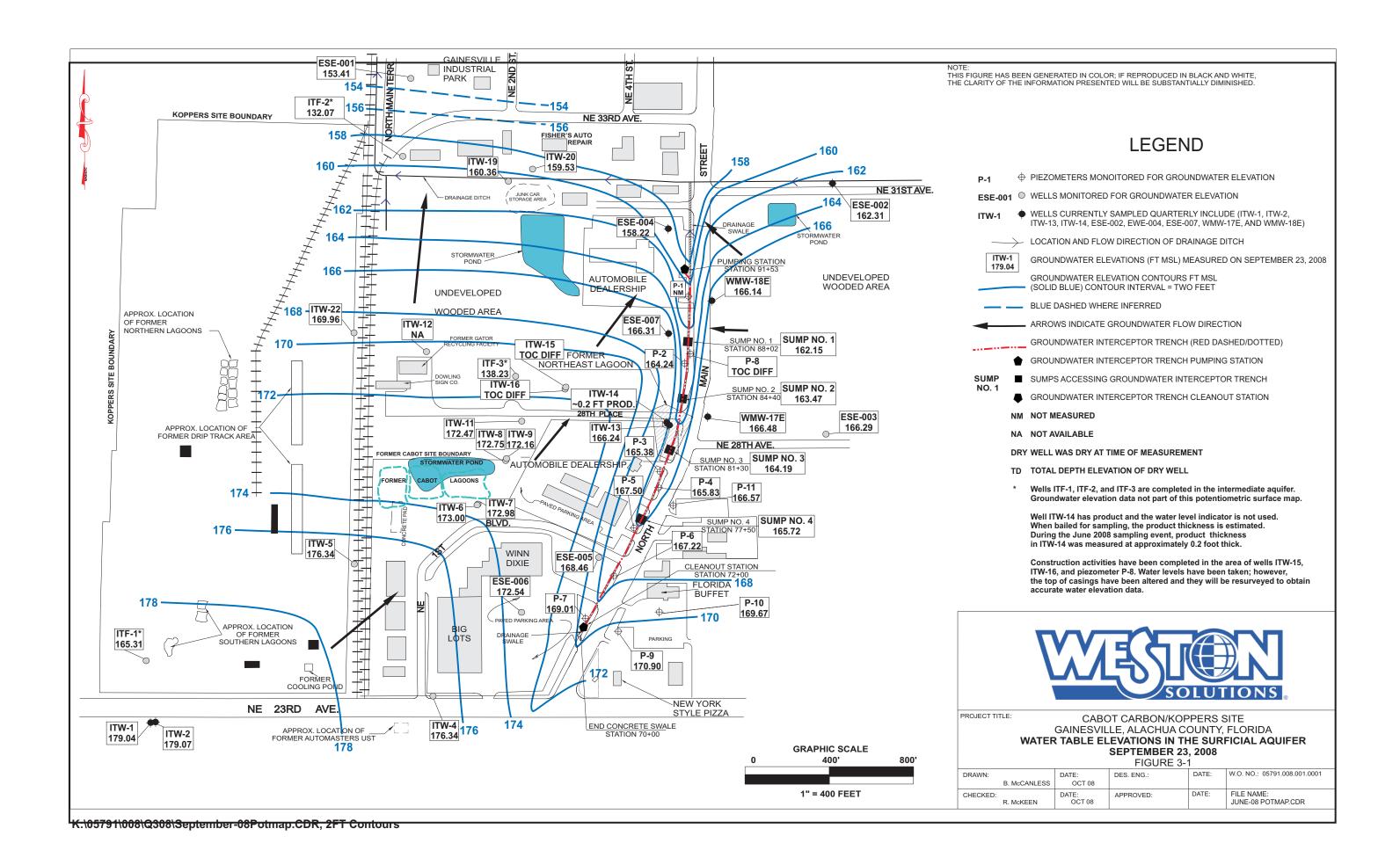
Notes: 1. Depths to water measured on September 23, 2008.

- 2. All depths measured in feet below top of casing. Elevations are in feet above mean sea level (MSL).
- 3. Top of casing elevations measured by registered Florida Land Surveyors.
- 4. Screened intervals measured from ground surface.
- $5.\ Wells\ ITW-7,\ ITW-21,\ ITW-22,\ ESE-004,\ and\ WMW-17E\ were\ repaired\ and\ resurveyed\ in\ July\ 2000.$
- 6. Depth to water in ITW-14 was not measured due to tar in the well. Estimated thickness of product determined by placing bailer at bottom of well and then measuring thickness of product.
- 7. Wells ITW-15, ITW-16, and piezometer P-8 were cut off to grade in September 2007 and covered for protection during construction activities. When construction activities are complete, these wells will be reconstructed as flush mount wells and resurveyed.

Land around wells WMW-17E and WMW-18E was raised in late 2006. Wells were raised approximately 3 feet.

 $All\ elevations\ associated\ with\ WMW-17E\ and\ WMW-18E\ are\ approximate\ until\ wells\ are\ resurveyed\ in\ late\ 2007$ 

Wells sampled in September 2008 for the normal quarterly sampling event are bolded



#### ANALYTICAL RESULTS

The laboratory analytical data package for the monitor well samples collected at the Eastern Site on September 25, 2008 is provided in Appendix B, and a summary of these data exceeding Record of Decision (ROD) cleanup goals is contained in Table 4-1. A historical summary of the monitor well data collected prior to the installation of the remedial system is provided in Appendix C. A summary of the recent post-remedial construction monitor well data is provided in Appendix D. Discussion of the third quarter 2008 sampling results is provided below.

Neither arsenic nor chromium was detected in any well during the September 2008 sampling event. Historically, highly variable concentrations of arsenic and chromium have been reported for various wells for preceding quarters. These concentrations can ostensibly be attributed to turbidity in the wells.

Benzene concentrations exceeded the ROD cleanup goals of 1 ug/L in groundwater samples collected from ITW-13 (86  $\mu$ g/L), ITW-14 (32  $\mu$ g/L), and ESE-007 (6.8  $\mu$ g/L). Naphthalene in ITW-13 (50  $\mu$ g/L) and ITW-14 (250  $\mu$ g/L) exceeded the ROD cleanup goal of 18  $\mu$ g/L. Acenaphthylene concentrations exceeded the ROD cleanup goal of 130  $\mu$ g/L in ITW-14 (560  $\mu$ g/L). Phenol concentrations exceeded the ROD cleanup goal of 2,630  $\mu$ g/L in ITW-13 (8,100  $\mu$ g/L). Historically, phenol has consistently been detected in ESE-007 (2nd quarter 2008 at 2,700  $\mu$ g/L); however, phenol was not detected in ESE-007 above the 19  $\mu$ g/L reporting limit during the 3rd quarter 2008 sampling event.

Potentially carcinogenic PAH's were below the laboratory reporting limit of 1.9 ug/L in all wells this quarter except ITW-14. The ROD cleanup goal is 0.003 µg/L for the combination of all potentially carcinogenic PAH's. Well ITW-14 had combined PAHs of 122 µg/L. Approximately 0.2 foot of free product was observed in monitoring well ITW-14 during the September 2008 sampling event. Wells ITW-13 and ITW-14 are located within the former Northeast Lagoon. Groundwater in the area of these wells migrates toward the interceptor trench.

Table 4-1
Summary of Surficial Aquifer Groundwater Analytical Data Exceeding ROD Cleanup Goals
Eastern Portion of Cabot Carbon/Koppers Superfund Site
September 25, 2008

Well Designation/ Screened Interval (feet)	Parameter	Results (µg/L)	RL (µg/L)	ROD Cleanup Goal (µg/L)
ITW-13 / 23-33	Benzene	86	5	1
	Naphthalene	50	9.4	18
	Phenol	8,100	470	2,630
ITW-14 / 5-15	Benzene	32	5	1
	Acenaphthylene	560	46	130
	Naphthalene	250	46	18
	*Total Potentially Carcinogenic PAHs	122	9.3	0.003
ESE-007 / 7.5-22.5	Benzene	6.8	1	1

 $(\mu g/L) = micrograms per liter$ 

RL = Report Limit

ROD = Record of Decision

<sup>\*</sup> Total Potentially Carcinogenic PAHs include: Benzo (a) anthracene, Benzo (a) pyrene, Benzo (b) flouranthene, Benzo (k) flouranthene, Chrysene, Dibenzo (a,h) anthracene, & Indeno (1,2,3-cd)pyrene.

#### **FINDINGS**

Based on the groundwater analytical data collected at the Eastern Site during the third quarter 2008 sampling event, WESTON offers the following findings:

- The groundwater interceptor trench continues to maintain effective hydraulic control of the upper surficial aquifer.
- The groundwater interceptor trench continues to effectively capture constituents from the Northeast Lagoon area in the surficial aquifer.
- The overall distribution of constituents appears to be similar to that reported from previous quarterly sampling events for the majority of the site, with the exceptions noted previously in Section 4.

The next quarterly groundwater-sampling event for the Eastern Site will occur about the third week of December 2008. The wells to be sampled in the fourth quarter 2008 are ITW-1, ITW-2, ITW-13, ITW-14, WMW-17E, WMW-18E, ESE-002, ESE-004, and ESE-007.

# APPENDIX A WELL PURGE DATA

#### Appendix A

# Well Purge Data Eastern Portion of Cabot Carbon/Koppers Superfund Site Purge - September 24, 2008

Sample - September 25, 2008

WELL ID	Purge/Sample Dates	Time	VOLUME (GAL)	TEMPERATUR E (°C)	рН	SPECIFIC CONDUCTANCE (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTU)	ODOR YES/NO	PURGE DRY YES/NO
ITW-1	Purge; 9/24/08	0957	2	23.26	5.39	227	3.54	0.18		
ITW-1	Purge; 9/24/08	1002	4	23.40	5.16	196	2.09	0.42		
ITW-1	Purge; 9/24/08	1007	6	23.35	5.18	197	2.61	0.31		
ITW-1	Purge; 9/24/08	1012	8	23.71	5.21	198	2.45	0.25	NO	NO
ITW-1	Sample; 9/25/08	0930	NA	20.90	5.12	223	2.21	0.18	Duplicate collecte	ed here.
ITW-2	Purge; 9/24/08	1020	1	23.75	5.16	248	2.87	73.9		
ITW-2	Purge; 9/24/08	1023	2	24.20	5.21	252	2.93	58.1		
ITW-2	Purge; 9/24/08	1026	3	24.28	5.24	255	2.91	44.9		
ITW-2	Sample; 9/25/08		NA	20.99	4.92	246	NA	0.09		
ESE-002	Purge; 9/24/08	1043	2	26.83	5.51	174	2.17	33.8		
ESE-002	Purge; 9/24/08	1048	4	26.73	5.36	183	1.37	29.8		
ESE-002	Purge; 9/24/08	1053	6	26.69	5.26	182	1.34	37.8		
ESE-002	Purge; 9/24/08	1057	8	26.66	5.15	182	0.82	33.3		
ESE-002	Purge; 9/24/08	1102	10	26.59	5.12	182	1.28	38	NO	NO
	Sample; 9/25/08		NA	22.90	5.39	185	NA	0.11		
ESE-002	Purge; 9/24/08	1115	2	27.62	5.55	393	0.85	7.06		
ESE-004	Purge; 9/24/08	1120	4	27.14	5.53	452	0.81	3.11		
ESE-004	Purge; 9/24/08	1124	6	26.87	5.49	456	0.76	1.63		
ESE-004	Purge; 9/24/08	1128	8	26.64	5.51	453	0.89	2.84		
ESE-004	Purge; 9/24/08	1133	10	26.46	5.50	452	0.65	1.07	NO	NO
	Sample; 9/25/08	1045	NA	26.19	5.39	350	NA	0.46	140	110
ESE-007	Purge; 9/24/08	1157	2	24.05						
ESE-007	Purge, 9/24/08 Purge, 9/24/08	1202	4	23.36	5.51	553 591	0.61 0.14	20.5 85.4		
ESE-007	Purge; 9/24/08	1202	6	23.26	5.51	596	0.14	142		
ESE-007	Purge; 9/24/08	1210	8	23.09	5.51	589	0.15	866		
ESE-007	Purge; 9/24/08	1215	10	23.21	5.54	583	0.15	1129	Yes/Sulfur	
ESE-007	Purge; 9/24/08	1219	12	23.11	5.52	581	0.23	43.74	Water is foamy	NO
	Sample; 9/25/08		NA	22.20	5.67	587	0.22	29.8	Water is rearry	110
ITW-13	Purge; 9/24/08		2							
ITW-13	Purge; 9/24/08 Purge; 9/24/08	1340 1347	4	26.05 25.09	5.06 4.86	257 244	0.05 0.06	42.1 9.48		
ITW-13	Purge, 9/24/08 Purge, 9/24/08	1352	6	25.09	4.71	252	0.05	6.7		
ITW-13	Purge; 9/24/08	1356	8	24.29	4.66	253	0.03	7.25		
ITW-13	Purge; 9/24/08	1401	10	24.33	4.62	251	0.04	8.36	Yes/Sulfur &	
ITW-13	Purge; 9/24/08	1406	12	24.35	4.68	249	0.03	11.3	possible slight tar	NO
	Sample; 9/25/08		NA	26.22	4.51	287	0.04	0.21	possible slight tal	140
ITW-13	Purge; 9/24/08	1215	3	-		ollected due to histo			YES/Tar	YES
			NA NA	<u> </u>					TES/Tai	TLO
	Sample; 9/25/08					oproximately 0.2 foo				
	Purge; 9/24/08	1432	2	25.93	5.29	272	0.31	1.03		
	Purge; 9/24/08	1437	4	25.66	5.23	353	0.29	4.66		
	Purge; 9/24/08	1441 1445	6 8	25.35	5.11	364 364	0.05	5.38		
	Purge; 9/24/08 Purge; 9/24/08	1445	10	25.28 25.08	5.09 5.11	364 357	0.03 0.04	5.64 8.63		
	Purge; 9/24/08	1454	12	25.06	5.08	355	0.04	1.43	No Odor/Foamv	NO
			NA			322		2.42	140 Odol/I bailly	140
	Sample; 9/25/08			26.10	4.80		0.04		Crooniah aalaa ta	water
	Purge; 9/24/08 Purge; 9/24/08		2	26.41 25.66	4.45	282	0.07	9.66	Greenish color to	water.
	<u> </u>	1512	4 6	25.66	4.71	360 376	0.04	10.41 26.7		
	Purge; 9/24/08 Purge; 9/24/08	1516 1521	8	25.45 25.54	4.80	380	0.05 0.03	32.2		
	Purge, 9/24/08 Purge, 9/24/08	1521	10	25.25	4.85	379	0.03	103.8		
	Purge; 9/24/08		12	25.11	4.03	385	0.03	234	NO	NO
									INO	140
Notes	Sample; 9/25/08		NA	26.22	4.79	331 er centimeter: ma/L = L	NA	7.64		

Notes:

NTU = Nephlometric Turbidity Units

Several dissolved oxygen data may be suspect due to possible instrument malfunction.

These indicated by NA and data very close to 0 like 0.05, etc. Future sampling efforts will obtain more precise/correct dissolved oxygen data.

 $<sup>^{\</sup>circ}C$  = degrees Celsius;  $\mu$ S/cm = microSeimens per centimeter; mg/L = milligrams per liter, parts per million;

# APPENDIX B LABORATORY ANALYTICAL DATA PACKAGE



# **ANALYTICAL REPORT**

Job Number: 680-40780-1 Job Description: Cabot

For:
Weston Solutions, Inc.
5430 Metric Place
Suite 100
Norcross, GA 30092

Attention: Mr. Ralph McKeen

Approved for release Abbie Page Project Manager I 10/16/2008 6:10 PM

Abbie Page Project Manager I abbie.page@testamericainc.com 10/16/2008

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project Manager who signed this test report.

# Job Narrative 680-J40780-1

#### Comments

No additional comments.

#### Receipt

Method(s) 8260B: The following sample(s) submitted for volatiles analysis was received with insufficient preservation (pH >2): ESE-007 (680-40780-7), WMW-18E (680-40780-9).

All other samples were received in good condition within temperature requirements.

#### GC/MS VOA

No analytical or quality issues were noted.

#### GC/MS Semi VOA

Method(s) 8270C: The following sample(s) was diluted due to the abundance of target analytes: ITW-13 (680-40780-3), ITW14 (680-40780-4). Elevated reporting limits (RLs) are provided.

Method(s) 8270C: Due to the level of dilution required for the following sample(s), surrogate recoveries are not reported: ITW-13 (680-40780-3), ITW14 (680-40780-4).

Method(s) 8270C: The following sample(s) contained one acid and/or one base surrogate outside acceptance limits: ESE-002 (680-40780-5). The laboratory's SOP allows one acid surrogate and/or one base surrogate to be outside acceptance limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

No other analytical or quality issues were noted.

#### **HPLC**

No analytical or quality issues were noted.

#### Metals

No analytical or quality issues were noted.

#### Organic Prep

No analytical or quality issues were noted.

#### **VOA Prep**

No analytical or quality issues were noted.

### **METHOD SUMMARY**

Client: Weston Solutions, Inc.

Job Number: 680-40780-1

Description	Lab Location	Method	Preparation Method
Matrix Water			
Volatile Organic Compounds (GC/MS)	TAL SAV	SW846 8260B	
Purge and Trap	TAL SAV		SW846 5030B
Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	TAL SAV	SW846 8270C	
Liquid-Liquid Extraction (Continuous)	TAL SAV		SW846 3520C
PAHs (HPLC)	TAL PEN	SW846 8310	
Liquid-Liquid Extraction (Separatory Funnel)	TAL PEN		SW846 3510C
Metals (ICP)	TAL SAV	SW846 6010B	
Preparation, Total Recoverable or Dissolved Metals	TAL SAV		SW846 3005A

#### Lab References:

TAL PEN = TestAmerica Pensacola

TAL SAV = TestAmerica Savannah

#### Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

## **SAMPLE SUMMARY**

Client: Weston Solutions, Inc. Job Number: 680-40780-1

			Date/Time	Date/Time
Lab Sample ID	Client Sample ID	Client Matrix	Sampled	Received
680-40780-1	ITW-1	Water	09/25/2008 0930	09/26/2008 1105
680-40780-2	ITW-2	Water	09/25/2008 1000	09/26/2008 1105
680-40780-3	ITW-13	Water	09/25/2008 1140	09/26/2008 1105
680-40780-4	ITW14	Water	09/25/2008 1215	09/26/2008 1105
680-40780-5	ESE-002	Water	09/25/2008 1020	09/26/2008 1105
680-40780-6	ESE-004	Water	09/25/2008 1045	09/26/2008 1105
680-40780-7	ESE-007	Water	09/25/2008 1100	09/26/2008 1105
680-40780-8	WMW-17E	Water	09/25/2008 1245	09/26/2008 1105
680-40780-9	WMW-18E	Water	09/25/2008 1300	09/26/2008 1105
680-40780-10FD	Duplicate	Water	09/25/2008 0000	09/26/2008 1105
680-40780-11EB	Equipment Blank	Water	09/25/2008 1200	09/26/2008 1105
680-40780-12TB	TB-01	Water	09/25/2008 0000	09/26/2008 1105

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Client Sample ID: ITW-1

 Lab Sample ID:
 680-40780-1
 Date Sampled:
 09/25/2008 0930

 Client Matrix:
 Water
 Date Received:
 09/26/2008 1105

#### 8260B Volatile Organic Compounds (GC/MS)

Method: 8260B Analysis Batch: 680-119073 Instrument ID: GC/MS Volatiles - A

Preparation: 5030B Lab File ID: a015.d

Dilution: 1.0 Initial Weight/Volume: 5 mL

Date Analyzed: 10/03/2008 1442 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Benzene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Methyl tert-butyl ether	<10		10
Toluene	<1.0		1.0
Xylenes, Total	<2.0		2.0
Surrogate	%Rec		Acceptance Limits
4-Bromofluorobenzene	91		75 - 120
Dibromofluoromethane	105		75 - 121
Toluene-d8 (Surr)	103		75 - 120

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Client Sample ID: ITW-2

 Lab Sample ID:
 680-40780-2
 Date Sampled:
 09/25/2008 1000

 Client Matrix:
 Water
 Date Received:
 09/26/2008 1105

#### 8260B Volatile Organic Compounds (GC/MS)

Method: 8260B Analysis Batch: 680-119073 Instrument ID: GC/MS Volatiles - A

Preparation: 5030B Lab File ID: a017.d

Dilution: 1.0 Initial Weight/Volume: 5 mL

Date Analyzed: 10/03/2008 1511 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Benzene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Methyl tert-butyl ether	<10		10
Toluene	<1.0		1.0
Xylenes, Total	<2.0		2.0
Surrogate	%Rec		Acceptance Limits
4-Bromofluorobenzene	90		75 - 120
Dibromofluoromethane	106		75 - 121
Toluene-d8 (Surr)	101		75 - 120

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Client Sample ID: ITW-13

 Lab Sample ID:
 680-40780-3
 Date Sampled:
 09/25/2008 1140

 Client Matrix:
 Water
 Date Received:
 09/26/2008 1105

#### 8260B Volatile Organic Compounds (GC/MS)

Method: 8260B Analysis Batch: 680-119073 Instrument ID: GC/MS Volatiles - A

Preparation: 5030B Lab File ID: a027.d

Dilution: 5.0 Initial Weight/Volume: 5 mL

Date Analyzed: 10/03/2008 1738 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Benzene	86		5.0
Ethylbenzene	290		5.0
Methyl tert-butyl ether	<50		50
Toluene	330		5.0
Xylenes, Total	180		10
Surrogate	%Rec		Acceptance Limits
4-Bromofluorobenzene	91		75 - 120
Dibromofluoromethane	104		75 - 121
Toluene-d8 (Surr)	105		75 - 120

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Client Sample ID: ITW14

 Lab Sample ID:
 680-40780-4
 Date Sampled:
 09/25/2008 1215

 Client Matrix:
 Water
 Date Received:
 09/26/2008 1105

#### 8260B Volatile Organic Compounds (GC/MS)

Method: 8260B Analysis Batch: 680-119073 Instrument ID: GC/MS Volatiles - A

Preparation: 5030B Lab File ID: a029.d

Dilution: 5.0 Initial Weight/Volume: 5 mL

Date Analyzed: 10/03/2008 1807 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Benzene	32		5.0
Ethylbenzene	110		5.0
Methyl tert-butyl ether	<50		50
Toluene	380		5.0
Xylenes, Total	320		10
Surrogate	%Rec		Acceptance Limits
4-Bromofluorobenzene	95		75 - 120
Dibromofluoromethane	107		75 - 121
Toluene-d8 (Surr)	103		75 - 120

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Client Sample ID: ESE-002

 Lab Sample ID:
 680-40780-5
 Date Sampled:
 09/25/2008 1020

 Client Matrix:
 Water
 Date Received:
 09/26/2008 1105

#### 8260B Volatile Organic Compounds (GC/MS)

Method: 8260B Analysis Batch: 680-119073 Instrument ID: GC/MS Volatiles - A

Preparation: 5030B Lab File ID: a019.d

Dilution: 1.0 Initial Weight/Volume: 5 mL

Date Analyzed: 10/03/2008 1541 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Benzene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Methyl tert-butyl ether	<10		10
Toluene	<1.0		1.0
Xylenes, Total	<2.0		2.0
Surrogate	%Rec		Acceptance Limits
4-Bromofluorobenzene	92		75 - 120
Dibromofluoromethane	107		75 - 121
Toluene-d8 (Surr)	102		75 - 120

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Client Sample ID: ESE-004

 Lab Sample ID:
 680-40780-6
 Date Sampled:
 09/25/2008
 1045

 Client Matrix:
 Water
 Date Received:
 09/26/2008
 1105

#### 8260B Volatile Organic Compounds (GC/MS)

Method: 8260B Analysis Batch: 680-119073 Instrument ID: GC/MS Volatiles - A

Preparation: 5030B Lab File ID: a021.d

Dilution: 1.0 Initial Weight/Volume: 5 mL

Date Analyzed: 10/03/2008 1610 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Benzene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Methyl tert-butyl ether	<10		10
Toluene	<1.0		1.0
Xylenes, Total	<2.0		2.0
Surrogate	%Rec		Acceptance Limits
4-Bromofluorobenzene	91		75 - 120
Dibromofluoromethane	105		75 - 121
Toluene-d8 (Surr)	102		75 - 120

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Client Sample ID: ESE-007

 Lab Sample ID:
 680-40780-7
 Date Sampled:
 09/25/2008 1100

 Client Matrix:
 Water
 Date Received:
 09/26/2008 1105

#### 8260B Volatile Organic Compounds (GC/MS)

Method: 8260B Analysis Batch: 680-119201 Instrument ID: GC/MS Volatiles - A

Preparation: 5030B Lab File ID: a037.d

Dilution: 1.0 Initial Weight/Volume: 5 mL

Date Analyzed: 10/06/2008 1506 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Benzene	6.8		1.0
Ethylbenzene	14		1.0
Methyl tert-butyl ether	<10		10
Toluene	7.1		1.0
Xylenes, Total	17		2.0
Surrogate	%Rec		Acceptance Limits
4-Bromofluorobenzene	93		75 - 120
Dibromofluoromethane	101		75 - 121
Toluene-d8 (Surr)	105		75 - 120

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Client Sample ID: WMW-17E

 Lab Sample ID:
 680-40780-8
 Date Sampled:
 09/25/2008
 1245

 Client Matrix:
 Water
 Date Received:
 09/26/2008
 1105

#### 8260B Volatile Organic Compounds (GC/MS)

Method: 8260B Analysis Batch: 680-119073 Instrument ID: GC/MS Volatiles - A

Preparation: 5030B Lab File ID: a023.d

Dilution: 1.0 Initial Weight/Volume: 5 mL

Date Analyzed: 10/03/2008 1639 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Benzene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Methyl tert-butyl ether	<10		10
Toluene	<1.0		1.0
Xylenes, Total	<2.0		2.0
Surrogate	%Rec		Acceptance Limits
4-Bromofluorobenzene	92		75 - 120
Dibromofluoromethane	105		75 - 121
Toluene-d8 (Surr)	103		75 - 120

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Client Sample ID: WMW-18E

 Lab Sample ID:
 680-40780-9
 Date Sampled:
 09/25/2008 1300

 Client Matrix:
 Water
 Date Received:
 09/26/2008 1105

#### 8260B Volatile Organic Compounds (GC/MS)

Method: 8260B Analysis Batch: 680-119073 Instrument ID: GC/MS Volatiles - A

Preparation: 5030B Lab File ID: a025.d

Dilution: 1.0 Initial Weight/Volume: 5 mL

Date Analyzed: 10/03/2008 1709 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Benzene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Methyl tert-butyl ether	<10		10
Toluene	<1.0		1.0
Xylenes, Total	<2.0		2.0
Surrogate	%Rec		Acceptance Limits
4-Bromofluorobenzene	91		75 - 120
Dibromofluoromethane	101		75 - 121
Toluene-d8 (Surr)	105		75 - 120

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Client Sample ID: Duplicate

 Lab Sample ID:
 680-40780-10FD
 Date Sampled:
 09/25/2008 0000

 Client Matrix:
 Water
 Date Received:
 09/26/2008 1105

#### 8260B Volatile Organic Compounds (GC/MS)

Method: 8260B Analysis Batch: 680-119201 Instrument ID: GC/MS Volatiles - A

Preparation: 5030B Lab File ID: a039.d

Dilution: 1.0 Initial Weight/Volume: 5 mL

Date Analyzed: 10/06/2008 1535 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Benzene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Methyl tert-butyl ether	<10		10
Toluene	<1.0		1.0
Xylenes, Total	<2.0		2.0
Surrogate	%Rec		Acceptance Limits
4-Bromofluorobenzene	90		75 - 120
Dibromofluoromethane	104		75 - 121
Toluene-d8 (Surr)	103		75 - 120

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Client Sample ID: Equipment Blank

 Lab Sample ID:
 680-40780-11EB
 Date Sampled:
 09/25/2008
 1200

 Client Matrix:
 Water
 Date Received:
 09/26/2008
 1105

#### 8260B Volatile Organic Compounds (GC/MS)

Method: 8260B Analysis Batch: 680-119201 Instrument ID: GC/MS Volatiles - A

Preparation: 5030B Lab File ID: a033.d

Dilution: 1.0 Initial Weight/Volume: 5 mL

Date Analyzed: 10/06/2008 1407 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Benzene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Methyl tert-butyl ether	<10		10
Toluene	<1.0		1.0
Xylenes, Total	<2.0		2.0
Surrogate	%Rec		Acceptance Limits
4-Bromofluorobenzene	91		75 - 120
Dibromofluoromethane	103		75 - 121
Toluene-d8 (Surr)	101		75 - 120

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Client Sample ID: TB-01

 Lab Sample ID:
 680-40780-12TB
 Date Sampled:
 09/25/2008 0000

 Client Matrix:
 Water
 Date Received:
 09/26/2008 1105

#### 8260B Volatile Organic Compounds (GC/MS)

Method: 8260B Analysis Batch: 680-119201 Instrument ID: GC/MS Volatiles - A

Preparation: 5030B Lab File ID: a035.d

Dilution: 1.0 Initial Weight/Volume: 5 mL

Date Analyzed: 10/06/2008 1436 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Benzene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Methyl tert-butyl ether	<10		10
Toluene	<1.0		1.0
Xylenes, Total	<2.0		2.0
Surrogate	%Rec		Acceptance Limits
4-Bromofluorobenzene	92		75 - 120
Dibromofluoromethane	103		75 - 121
Toluene-d8 (Surr)	103		75 - 120

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Client Sample ID: ITW-1

 Lab Sample ID:
 680-40780-1
 Date Sampled:
 09/25/2008 0930

 Client Matrix:
 Water
 Date Received:
 09/26/2008 1105

#### 8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method: 8270C Analysis Batch: 680-119270 Instrument ID: GC/MS SemiVolatiles - F

Preparation: 3520C Prep Batch: 680-118800 Lab File ID: f2350.d

 Dilution:
 1.0
 Initial Weight/Volume:
 1030 mL

 Date Analyzed:
 10/03/2008 1729
 Final Weight/Volume:
 1 mL

Date Analyzed: 10/03/2008 17/29 Final Weight/Volume: 1 mL

Date Prepared: 10/02/2008 1346 Injection Volume: 1.0 uL

Analyte	Result (ug/L)	Qualifier	RL	
Phenol	<9.7		9.7	
2,4-Dimethylphenol	<9.7		9.7	
Pentachlorophenol	<49		49	
Surrogate	%Rec		Acceptance Limits	
Phenol-d5	74		38 - 116	
2-Fluorophenol	74		36 - 110	
2,4,6-Tribromophenol	81		40 - 139	

Job Number: 680-40780-1 Client: Weston Solutions, Inc.

Client Sample ID: ITW-2

Lab Sample ID: Date Sampled: 09/25/2008 1000 680-40780-2 09/26/2008 1105 Client Matrix: Water Date Received:

#### 8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method: 8270C Analysis Batch: 680-119270 Instrument ID: GC/MS SemiVolatiles - F

Preparation: 3520C Prep Batch: 680-118800 f2351.d Lab File ID:

Dilution: Initial Weight/Volume: 1030 mL 1.0 10/03/2008 1752 Date Analyzed: Final Weight/Volume: 1 mL

Date Prepared: 10/02/2008 1346 Injection Volume: 1.0 uL

Analyte	Result (ug/L)	Qualifier	RL
Phenol	<9.7		9.7
2,4-Dimethylphenol	<9.7		9.7
Pentachlorophenol	<49		49
Surrogate	%Rec		Acceptance Limits
Phenol-d5	79		38 - 116
2-Fluorophenol	77		36 - 110
2,4,6-Tribromophenol	86		40 - 139

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Client Sample ID: ITW-13

 Lab Sample ID:
 680-40780-3
 Date Sampled:
 09/25/2008 1140

 Client Matrix:
 Water
 Date Received:
 09/26/2008 1105

#### 8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method: 8270C Analysis Batch: 680-119229 Instrument ID: GC/MS SemiVolatiles - F

Preparation: 3520C Prep Batch: 680-118800 Lab File ID: f2367.d

 Dilution:
 50
 Initial Weight/Volume:
 1060 mL

 Date Analyzed:
 10/06/2008 1409
 Final Weight/Volume:
 1 mL

 Date Prepared:
 10/02/2008 1346
 Injection Volume:
 1.0 uL

 Analyte
 Result (ug/L)
 Qualifier
 RL

 Phenol
 8100
 470

 2,4-Dimethylphenol
 3300
 470

 Pentachlorophenol
 <2400</td>
 2400

Surrogate	%Rec		Acceptance Limits
Phenol-d5	0	D	38 - 116
2-Fluorophenol	0	D	36 - 110
2,4,6-Tribromophenol	0	D	40 - 139

Job Number: 680-40780-1 Client: Weston Solutions, Inc.

Client Sample ID: ITW14

Lab Sample ID: Date Sampled: 09/25/2008 1215 680-40780-4 09/26/2008 1105 Client Matrix: Water Date Received:

#### 8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method: 8270C Analysis Batch: 680-119278 Instrument ID: GC/MS SemiVolatiles - F

Preparation: 3520C Prep Batch: 680-118800 f2392.d Lab File ID:

Dilution: Initial Weight/Volume: 1060 mL 40 Date Analyzed: 10/07/2008 1348 Final Weight/Volume: 1 mL

Analyte	Result (ug/L)	Qualifier	RL
Phenol	<380		380
2,4-Dimethylphenol	4000		380
Pentachlorophenol	<1900		1900
Surrogate	%Rec		Acceptance Limits
Phenol-d5	0	D	38 - 116
2-Fluorophenol	0	D	36 - 110
2,4,6-Tribromophenol	0	D	40 - 139

Job Number: 680-40780-1 Client: Weston Solutions, Inc.

Client Sample ID: ESE-002

Lab Sample ID: Date Sampled: 09/25/2008 1020 680-40780-5 09/26/2008 1105 Client Matrix: Water Date Received:

#### 8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method: 8270C Analysis Batch: 680-119270 Instrument ID: GC/MS SemiVolatiles - F

Preparation: 3520C Prep Batch: 680-118800 f2354.d Lab File ID:

Dilution: Initial Weight/Volume: 1060 mL 1.0 10/03/2008 1902 Date Analyzed: Final Weight/Volume: 1 mL

Analyte	Result (ug/L)	Qualifier	RL
Phenol	<9.4		9.4
2,4-Dimethylphenol	<9.4		9.4
Pentachlorophenol	<47		47
Surrogate	%Rec		Acceptance Limits
Phenol-d5	70		38 - 116
2-Fluorophenol	35	Χ	36 - 110
2,4,6-Tribromophenol	87		40 - 139

Job Number: 680-40780-1 Client: Weston Solutions, Inc.

Client Sample ID: ESE-004

Lab Sample ID: Date Sampled: 09/25/2008 1045 680-40780-6 09/26/2008 1105 Client Matrix: Water Date Received:

#### 8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method: 8270C Analysis Batch: 680-119270 Instrument ID: GC/MS SemiVolatiles - F

Preparation: 3520C Prep Batch: 680-118800 f2355.d Lab File ID:

Dilution: Initial Weight/Volume: 1060 mL 1.0 10/03/2008 1925 Date Analyzed: Final Weight/Volume: 1 mL

Analyte	Result (ug/L)	Qualifier	RL
Phenol	<9.4		9.4
2,4-Dimethylphenol	<9.4		9.4
Pentachlorophenol	<47		47
Surrogate	%Rec		Acceptance Limits
Phenol-d5	70		38 - 116
2-Fluorophenol	70		36 - 110
2,4,6-Tribromophenol	90		40 - 139

40 - 139

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Client Sample ID: ESE-007

2,4,6-Tribromophenol

 Lab Sample ID:
 680-40780-7
 Date Sampled:
 09/25/2008 1100

 Client Matrix:
 Water
 Date Received:
 09/26/2008 1105

#### 8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method: 8270C Analysis Batch: 680-119229 Instrument ID: GC/MS SemiVolatiles - F

Preparation: 3520C Prep Batch: 680-118800 Lab File ID: f2370.d

 Dilution:
 2.0
 Initial Weight/Volume:
 1060 mL

 Date Analyzed:
 10/06/2008 1518
 Final Weight/Volume:
 1 mL

 Date Proposed:
 10/02/2008 1346
 Initial Weight/Volume:
 1 mL

Date Prepared: 10/02/2008 1346 Injection Volume: 1.0 uL

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Analyte	Result (ug/L)	Qualifier	RL	
Phenol	<19		19	
2,4-Dimethylphenol	220		19	
Pentachlorophenol	<94		94	
Surrogate	%Rec		Acceptance Limits	
Phenol-d5	74		38 - 116	
2-Fluorophenol	68		36 - 110	

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Client Sample ID: WMW-17E

 Lab Sample ID:
 680-40780-8
 Date Sampled:
 09/25/2008 1245

 Client Matrix:
 Water
 Date Received:
 09/26/2008 1105

#### 8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method: 8270C Analysis Batch: 680-119270 Instrument ID: GC/MS SemiVolatiles - F

Preparation: 3520C Prep Batch: 680-118800 Lab File ID: f2357.d

 Dilution:
 1.0
 Initial Weight/Volume:
 1060 mL

 Date Analyzed:
 10/03/2008 2012
 Final Weight/Volume:
 1 mL

 Date Prepared:
 10/02/2008 1346
 Injection Volume:
 1.0 uL

Analyte Result (ug/L) Qualifier RL

Phenol <9.4
2,4-Dimethylphenol <9.4
Pentachlorophenol <47

Result (ug/L) Qualifier RL
9.4
47

 Surrogate
 %Rec
 Acceptance Limits

 Phenol-d5
 75
 38 - 116

 2-Fluorophenol
 77
 36 - 110

 2,4,6-Tribromophenol
 94
 40 - 139

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Client Sample ID: WMW-18E

 Lab Sample ID:
 680-40780-9
 Date Sampled:
 09/25/2008 1300

 Client Matrix:
 Water
 Date Received:
 09/26/2008 1105

#### 8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method: 8270C Analysis Batch: 680-119270 Instrument ID: GC/MS SemiVolatiles - F

Preparation: 3520C Prep Batch: 680-118800 Lab File ID: f2358.d

Dilution: 1.0 Initial Weight/Volume: 500 mL Date Analyzed: 10/03/2008 2035 Final Weight/Volume: 0.5 mL

 Date Analyzed:
 10/03/2008 2035
 Final Weight/Volume:
 0.5 mL

 Date Prepared:
 10/02/2008 1346
 Injection Volume:
 1.0 uL

Analyte	Result (ug/L)	Qualifier	RL
Phenol	<10		10
2,4-Dimethylphenol	<10		10
Pentachlorophenol	<50		50
Surrogate	%Rec		Acceptance Limits
Phenol-d5	69		38 - 116
2-Fluorophenol	75		36 - 110
2,4,6-Tribromophenol	84		40 - 139

Job Number: 680-40780-1 Client: Weston Solutions, Inc.

Client Sample ID: **Duplicate** 

Lab Sample ID: 680-40780-10FD Date Sampled: 09/25/2008 0000 09/26/2008 1105 Client Matrix: Water Date Received:

#### 8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method: 8270C Analysis Batch: 680-119270 Instrument ID: GC/MS SemiVolatiles - F

Preparation: 3520C Prep Batch: 680-118800 f2359.d Lab File ID:

Dilution: Initial Weight/Volume: 1030 mL 1.0 10/03/2008 2058 Date Analyzed: Final Weight/Volume: 1 mL

Analyte	Result (ug/L)	Qualifier	RL
Phenol	<9.7		9.7
2,4-Dimethylphenol	<9.7		9.7
Pentachlorophenol	<49		49
Surrogate	%Rec		Acceptance Limits
Phenol-d5	71		38 - 116
2-Fluorophenol	74		36 - 110
2,4,6-Tribromophenol	89		40 - 139

Job Number: 680-40780-1 Client: Weston Solutions, Inc.

Client Sample ID: **Equipment Blank** 

Lab Sample ID: 680-40780-11EB Date Sampled: 09/25/2008 1200 09/26/2008 1105 Client Matrix: Water Date Received:

#### 8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method: 8270C Analysis Batch: 680-119270 Instrument ID: GC/MS SemiVolatiles - F

Preparation: 3520C Prep Batch: 680-118800 f2360.d Lab File ID:

Dilution: Initial Weight/Volume: 1030 mL 1.0 10/03/2008 2121 Date Analyzed: Final Weight/Volume: 1 mL

Analyte	Result (ug/L)	Qualifier	RL	
Phenol	<9.7		9.7	
2,4-Dimethylphenol	<9.7		9.7	
Pentachlorophenol	<49		49	
Surrogate	%Rec		Acceptance Limits	
Phenol-d5	69		38 - 116	
2-Fluorophenol	76		36 - 110	
2,4,6-Tribromophenol	89		40 - 139	

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Client Sample ID: ITW-1

 Lab Sample ID:
 680-40780-1
 Date Sampled:
 09/25/2008
 0930

 Client Matrix:
 Water
 Date Received:
 09/26/2008
 1105

8310 PAHs (HPLC)

Method: 8310 Analysis Batch: 400-77283 Instrument ID: HPLC/UV/FLUOR

Preparation: 3510C Prep Batch: 400-76958 Lab File ID: 014-1501.D

 Dilution:
 1.0
 Initial Weight/Volume:
 1070 mL

 Date Analyzed:
 10/02/2008 0151
 Final Weight/Volume:
 1.0 mL

Analyte	Result (ug/L)	Qualifier	RL
Acenaphthene	<0.93		0.93
Acenaphthylene	<0.93		0.93
Anthracene	<0.93		0.93
Benzo[a]anthracene	<0.19		0.19
Benzo[a]pyrene	<0.19		0.19
Benzo[b]fluoranthene	<0.19		0.19
Benzo[g,h,i]perylene	<0.93		0.93
Benzo[k]fluoranthene	<0.47		0.47
Chrysene	<0.93		0.93
Dibenz(a,h)anthracene	<0.19		0.19
Fluoranthene	<0.93		0.93
Fluorene	<0.93		0.93
Indeno[1,2,3-cd]pyrene	<0.19		0.19
1-Methylnaphthalene	<0.93		0.93
2-Methylnaphthalene	<0.93		0.93
Naphthalene	<0.93		0.93
Phenanthrene	<0.93		0.93
Pyrene	<0.93		0.93
Surrogate	%Rec		Acceptance Limits
2-Chloroanthracene	87		41 - 177

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Client Sample ID: ITW-2

 Lab Sample ID:
 680-40780-2
 Date Sampled:
 09/25/2008
 1000

 Client Matrix:
 Water
 Date Received:
 09/26/2008
 1105

8310 PAHs (HPLC)

Method: 8310 Analysis Batch: 400-77283 Instrument ID: HPLC/UV/FLUOR

Preparation: 3510C Prep Batch: 400-76958 Lab File ID: 015-1601.D

 Dilution:
 1.0
 Initial Weight/Volume:
 1070 mL

 Date Analyzed:
 10/02/2008 0224
 Final Weight/Volume:
 1.0 mL

Analyte	Result (ug/L)	Qualifier	RL
Acenaphthene	<0.93		0.93
Acenaphthylene	<0.93		0.93
Anthracene	<0.93		0.93
Benzo[a]anthracene	<0.19		0.19
Benzo[a]pyrene	<0.19		0.19
Benzo[b]fluoranthene	<0.19		0.19
Benzo[g,h,i]perylene	<0.93		0.93
Benzo[k]fluoranthene	<0.47		0.47
Chrysene	<0.93		0.93
Dibenz(a,h)anthracene	<0.19		0.19
Fluoranthene	<0.93		0.93
Fluorene	<0.93		0.93
Indeno[1,2,3-cd]pyrene	<0.19		0.19
1-Methylnaphthalene	<0.93		0.93
2-Methylnaphthalene	<0.93		0.93
Naphthalene	<0.93		0.93
Phenanthrene	<0.93		0.93
Pyrene	<0.93		0.93
Surrogate	%Rec		Acceptance Limits
2-Chloroanthracene	80		41 - 177

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Client Sample ID: ITW-13

 Lab Sample ID:
 680-40780-3
 Date Sampled:
 09/25/2008 1140

 Client Matrix:
 Water
 Date Received:
 09/26/2008 1105

8310 PAHs (HPLC)

Method: 8310 Analysis Batch: 400-77283 Instrument ID: HPLC/UV/FLUOR

 Preparation:
 3510C
 Prep Batch: 400-76958
 Lab File ID:
 016-1701.D

 Dilution:
 10
 Initial Weight/Volume:
 1060 mL

 Date Analyzed:
 10/02/2008 0258
 Final Weight/Volume:
 1.0 mL

Analyte	Result (ug/L)	Qualifier	RL
Acenaphthene	<9.4		9.4
Acenaphthylene	<9.4		9.4
Anthracene	<9.4		9.4
Benzo[a]anthracene	<1.9		1.9
Benzo[a]pyrene	<1.9		1.9
Benzo[b]fluoranthene	<1.9		1.9
Benzo[g,h,i]perylene	<9.4		9.4
Benzo[k]fluoranthene	<4.7		4.7
Chrysene	<9.4		9.4
Dibenz(a,h)anthracene	<1.9		1.9
Fluoranthene	<9.4		9.4
Fluorene	<9.4		9.4
Indeno[1,2,3-cd]pyrene	<1.9		1.9
1-Methylnaphthalene	<9.4		9.4
2-Methylnaphthalene	<9.4		9.4
Naphthalene	50		9.4
Phenanthrene	<9.4		9.4
Pyrene	<9.4		9.4
Surrogate	%Rec		Acceptance Limits
2-Chloroanthracene	75		41 - 177

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Client Sample ID: ITW14

 Lab Sample ID:
 680-40780-4
 Date Sampled:
 09/25/2008 1215

 Client Matrix:
 Water
 Date Received:
 09/26/2008 1105

8310 PAHs (HPLC)

Method: 8310 Analysis Batch: 400-77283 Instrument ID: HPLC/UV/FLUOR

 Preparation:
 3510C
 Prep Batch: 400-76958
 Lab File ID:
 017-1801.D

 Dilution:
 50
 Initial Weight/Volume:
 1080 mL

 Date Analyzed:
 10/02/2008 0332
 Final Weight/Volume:
 1.0 mL

Analyte	Result (ug/L)	Qualifier	RL
Acenaphthene	<46		46
Acenaphthylene	560		46
Anthracene	<46		46
Benzo[a]anthracene	<9.3		9.3
Benzo[a]pyrene	12		9.3
Benzo[b]fluoranthene	31	Р	9.3
Benzo[g,h,i]perylene	<46		46
Benzo[k]fluoranthene	<23		23
Chrysene	79	Р	46
Dibenz(a,h)anthracene	<9.3		9.3
Fluoranthene	300	Р	46
Fluorene	79	Р	46
Indeno[1,2,3-cd]pyrene	<9.3		9.3
1-Methylnaphthalene	180		46
2-Methylnaphthalene	190		46
Naphthalene	250		46
Phenanthrene	<46		46
Pyrene	<46		46
Surrogate	%Rec		Acceptance Limits
2-Chloroanthracene	438	Х	41 - 177

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Client Sample ID: ESE-002

 Lab Sample ID:
 680-40780-5
 Date Sampled:
 09/25/2008 1020

 Client Matrix:
 Water
 Date Received:
 09/26/2008 1105

8310 PAHs (HPLC)

Method: 8310 Analysis Batch: 400-77283 Instrument ID: HPLC/UV/FLUOR

Preparation: 3510C Prep Batch: 400-76958 Lab File ID: 018-1901.D

 Dilution:
 1.0
 Initial Weight/Volume:
 1040 mL

 Date Analyzed:
 10/02/2008 0405
 Final Weight/Volume:
 1.0 mL

Analyte	Result (ug/L)	Qualifier	RL
Acenaphthene	9.6		0.96
Acenaphthylene	<0.96		0.96
Anthracene	<0.96		0.96
Benzo[a]anthracene	<0.19		0.19
Benzo[a]pyrene	<0.19		0.19
Benzo[b]fluoranthene	<0.19		0.19
Benzo[g,h,i]perylene	<0.96		0.96
Benzo[k]fluoranthene	<0.48		0.48
Chrysene	<0.96		0.96
Dibenz(a,h)anthracene	<0.19		0.19
Fluoranthene	6.1		0.96
Fluorene	<0.96		0.96
Indeno[1,2,3-cd]pyrene	<0.19		0.19
1-Methylnaphthalene	<0.96		0.96
2-Methylnaphthalene	3.1	Р	0.96
Naphthalene	<0.96		0.96
Phenanthrene	<0.96		0.96
Pyrene	4.1		0.96
Surrogate	%Rec		Acceptance Limits
2-Chloroanthracene	81		41 - 177

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Client Sample ID: ESE-004

 Lab Sample ID:
 680-40780-6
 Date Sampled:
 09/25/2008 1045

 Client Matrix:
 Water
 Date Received:
 09/26/2008 1105

8310 PAHs (HPLC)

Method: 8310 Analysis Batch: 400-77283 Instrument ID: HPLC/UV/FLUOR

Preparation: 3510C Prep Batch: 400-76958 Lab File ID: 019-2001.D

 Dilution:
 1.0
 Initial Weight/Volume:
 1080 mL

 Date Analyzed:
 10/02/2008 0439
 Final Weight/Volume:
 1.0 mL

Analyte	Result (ug/L)	Qualifier	RL
Acenaphthene	<0.93		0.93
Acenaphthylene	<0.93		0.93
Anthracene	<0.93		0.93
Benzo[a]anthracene	<0.19		0.19
Benzo[a]pyrene	<0.19		0.19
Benzo[b]fluoranthene	<0.19		0.19
Benzo[g,h,i]perylene	<0.93		0.93
Benzo[k]fluoranthene	<0.46		0.46
Chrysene	<0.93		0.93
Dibenz(a,h)anthracene	<0.19		0.19
Fluoranthene	<0.93		0.93
Fluorene	<0.93		0.93
Indeno[1,2,3-cd]pyrene	<0.19		0.19
1-Methylnaphthalene	<0.93		0.93
2-Methylnaphthalene	<0.93		0.93
Naphthalene	<0.93		0.93
Phenanthrene	<0.93		0.93
Pyrene	<0.93		0.93
Surrogate	%Rec		Acceptance Limits
2-Chloroanthracene	63		41 - 177

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Client Sample ID: ESE-007

 Lab Sample ID:
 680-40780-7
 Date Sampled:
 09/25/2008 1100

 Client Matrix:
 Water
 Date Received:
 09/26/2008 1105

8310 PAHs (HPLC)

Method: 8310 Analysis Batch: 400-77283 Instrument ID: HPLC/UV/FLUOR

 Preparation:
 3510C
 Prep Batch: 400-76958
 Lab File ID:
 020-2101.D

 Dilution:
 1.0
 Initial Weight/Volume:
 1080 mL

 Date Analyzed:
 10/02/2008 0513
 Final Weight/Volume:
 1.0 mL

Analyte	Result (ug/L)	Qualifier	RL
Acenaphthene	<0.93		0.93
Acenaphthylene	<0.93		0.93
Anthracene	<0.93		0.93
Benzo[a]anthracene	<0.19		0.19
Benzo[a]pyrene	<0.19		0.19
Benzo[b]fluoranthene	<0.19		0.19
Benzo[g,h,i]perylene	<0.93		0.93
Benzo[k]fluoranthene	<0.46		0.46
Chrysene	<0.93		0.93
Dibenz(a,h)anthracene	<0.19		0.19
Fluoranthene	<0.93		0.93
Fluorene	<0.93		0.93
Indeno[1,2,3-cd]pyrene	<0.19		0.19
1-Methylnaphthalene	<0.93		0.93
2-Methylnaphthalene	<0.93		0.93
Naphthalene	2.1		0.93
Phenanthrene	<0.93		0.93
Pyrene	<0.93		0.93
Surrogate	%Rec		Acceptance Limits
2-Chloroanthracene	78		41 - 177

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Client Sample ID: WMW-17E

 Lab Sample ID:
 680-40780-8
 Date Sampled:
 09/25/2008 1245

 Client Matrix:
 Water
 Date Received:
 09/26/2008 1105

8310 PAHs (HPLC)

Method: 8310 Analysis Batch: 400-77283 Instrument ID: HPLC/UV/FLUOR

Preparation: 3510C Prep Batch: 400-76958 Lab File ID: 021-2201.D

 Dilution:
 1.0
 Initial Weight/Volume:
 1080 mL

 Date Analyzed:
 10/02/2008 0546
 Final Weight/Volume:
 1.0 mL

Analyte	Result (ug/L)	Qualifier	RL
Acenaphthene	<0.93		0.93
Acenaphthylene	<0.93		0.93
Anthracene	<0.93		0.93
Benzo[a]anthracene	<0.19		0.19
Benzo[a]pyrene	<0.19		0.19
Benzo[b]fluoranthene	<0.19		0.19
Benzo[g,h,i]perylene	<0.93		0.93
Benzo[k]fluoranthene	<0.46		0.46
Chrysene	<0.93		0.93
Dibenz(a,h)anthracene	<0.19		0.19
Fluoranthene	<0.93		0.93
Fluorene	<0.93		0.93
Indeno[1,2,3-cd]pyrene	<0.19		0.19
1-Methylnaphthalene	<0.93		0.93
2-Methylnaphthalene	<0.93		0.93
Naphthalene	1.6		0.93
Phenanthrene	<0.93		0.93
Pyrene	<0.93		0.93
Surrogate	%Rec		Acceptance Limits
2-Chloroanthracene	79		41 - 177

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Client Sample ID: WMW-18E

 Lab Sample ID:
 680-40780-9
 Date Sampled:
 09/25/2008 1300

 Client Matrix:
 Water
 Date Received:
 09/26/2008 1105

8310 PAHs (HPLC)

Method: 8310 Analysis Batch: 400-77283 Instrument ID: HPLC/UV/FLUOR

Preparation: 3510C Prep Batch: 400-76958 Lab File ID: 022-2301.D

 Dilution:
 1.0
 Initial Weight/Volume:
 1080 mL

 Date Analyzed:
 10/02/2008 0620
 Final Weight/Volume:
 1.0 mL

Analyte	Result (ug/L)	Qualifier	RL
Acenaphthene	<0.93		0.93
Acenaphthylene	<0.93		0.93
Anthracene	<0.93		0.93
Benzo[a]anthracene	<0.19		0.19
Benzo[a]pyrene	<0.19		0.19
Benzo[b]fluoranthene	<0.19		0.19
Benzo[g,h,i]perylene	<0.93		0.93
Benzo[k]fluoranthene	<0.46		0.46
Chrysene	<0.93		0.93
Dibenz(a,h)anthracene	<0.19		0.19
Fluoranthene	<0.93		0.93
Fluorene	<0.93		0.93
Indeno[1,2,3-cd]pyrene	<0.19		0.19
1-Methylnaphthalene	<0.93		0.93
2-Methylnaphthalene	<0.93		0.93
Naphthalene	<0.93		0.93
Phenanthrene	<0.93		0.93
Pyrene	<0.93		0.93
Surrogate	%Rec		Acceptance Limits
2-Chloroanthracene	55		41 - 177

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Client Sample ID: Duplicate

 Lab Sample ID:
 680-40780-10FD
 Date Sampled:
 09/25/2008 0000

 Client Matrix:
 Water
 Date Received:
 09/26/2008 1105

8310 PAHs (HPLC)

Method: 8310 Analysis Batch: 400-77283 Instrument ID: HPLC/UV/FLUOR

 Preparation:
 3510C
 Prep Batch: 400-76958
 Lab File ID:
 023-2501.D

 Dilution:
 1.0
 Initial Weight/Volume:
 1080 mL

 Date Analyzed:
 10/02/2008 0727
 Final Weight/Volume:
 1.0 mL

Analyte	Result (ug/L)	Qualifier	RL
Acenaphthene	<0.93		0.93
Acenaphthylene	<0.93		0.93
Anthracene	<0.93		0.93
Benzo[a]anthracene	<0.19		0.19
Benzo[a]pyrene	<0.19		0.19
Benzo[b]fluoranthene	<0.19		0.19
Benzo[g,h,i]perylene	<0.93		0.93
Benzo[k]fluoranthene	<0.46		0.46
Chrysene	<0.93		0.93
Dibenz(a,h)anthracene	<0.19		0.19
Fluoranthene	<0.93		0.93
Fluorene	<0.93		0.93
Indeno[1,2,3-cd]pyrene	<0.19		0.19
1-Methylnaphthalene	<0.93		0.93
2-Methylnaphthalene	<0.93		0.93
Naphthalene	<0.93		0.93
Phenanthrene	<0.93		0.93
Pyrene	<0.93		0.93
Surrogate	%Rec		Acceptance Limits
2-Chloroanthracene	79		41 - 177

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Client Sample ID: Equipment Blank

 Lab Sample ID:
 680-40780-11EB
 Date Sampled:
 09/25/2008
 1200

 Client Matrix:
 Water
 Date Received:
 09/26/2008
 1105

8310 PAHs (HPLC)

Method: 8310 Analysis Batch: 400-77283 Instrument ID: HPLC/UV/FLUOR

Preparation: 3510C Prep Batch: 400-76958 Lab File ID: 024-2601.D

 Dilution:
 1.0
 Initial Weight/Volume:
 1080 mL

 Date Analyzed:
 10/02/2008 0801
 Final Weight/Volume:
 1.0 mL

Analyte	Result (ug/L)	Qualifier	RL
Acenaphthene	<0.93		0.93
Acenaphthylene	<0.93		0.93
Anthracene	<0.93		0.93
Benzo[a]anthracene	<0.19		0.19
Benzo[a]pyrene	<0.19		0.19
Benzo[b]fluoranthene	<0.19		0.19
Benzo[g,h,i]perylene	<0.93		0.93
Benzo[k]fluoranthene	<0.46		0.46
Chrysene	<0.93		0.93
Dibenz(a,h)anthracene	<0.19		0.19
Fluoranthene	<0.93		0.93
Fluorene	<0.93		0.93
Indeno[1,2,3-cd]pyrene	<0.19		0.19
1-Methylnaphthalene	<0.93		0.93
2-Methylnaphthalene	<0.93		0.93
Naphthalene	<0.93		0.93
Phenanthrene	<0.93		0.93
Pyrene	<0.93		0.93
Surrogate	%Rec		Acceptance Limits
2-Chloroanthracene	66		41 - 177

10

Job Number: 680-40780-1 Client: Weston Solutions, Inc.

Client Sample ID: ITW-1

Chromium

Lab Sample ID: 680-40780-1 Date Sampled: 09/25/2008 0930 Client Matrix: Water Date Received: 09/26/2008 1105

6010B Metals (ICP)-Total Recoverable

Method: 6010B Instrument ID: Analysis Batch: 680-118805 ICP/AES - D Lab File ID: N/A

Preparation: 3005A Prep Batch: 680-118578

Dilution: 1.0 Initial Weight/Volume: 50 mL 10/01/2008 2009 Date Analyzed: Final Weight/Volume: 50 mL Date Prepared: 09/30/2008 1023

Analyte Result (ug/L) Qualifier RL <10 10 Arsenic

<10

ICP/AES - D

Job Number: 680-40780-1 Client: Weston Solutions, Inc.

Client Sample ID: ITW-2

09/25/2008 1000 Lab Sample ID: 680-40780-2 Date Sampled: 09/26/2008 1105 Client Matrix: Water Date Received:

6010B Metals (ICP)-Total Recoverable

Method: 6010B Preparation: 3005A Dilution:

1.0

10/01/2008 2124 Date Analyzed: 09/30/2008 1023 Date Prepared:

Analysis Batch: 680-118805 Instrument ID: Prep Batch: 680-118578 Lab File ID:

N/A Initial Weight/Volume: 50 mL Final Weight/Volume: 50 mL

Job Number: 680-40780-1 Client: Weston Solutions, Inc.

Client Sample ID: ITW-13

09/25/2008 1140 Lab Sample ID: 680-40780-3 Date Sampled: 09/26/2008 1105 Client Matrix: Water Date Received:

6010B Metals (ICP)-Total Recoverable

Method: 6010B Preparation: 3005A Dilution: 1.0

Date Analyzed:

10/01/2008 2130 09/30/2008 1023 Date Prepared:

Analysis Batch: 680-118805

Prep Batch: 680-118578

Instrument ID: Lab File ID:

ICP/AES - D N/A

Initial Weight/Volume: 50 mL Final Weight/Volume: 50 mL

Job Number: 680-40780-1 Client: Weston Solutions, Inc.

Client Sample ID: ITW14

09/25/2008 1215 Lab Sample ID: 680-40780-4 Date Sampled: 09/26/2008 1105 Client Matrix: Water Date Received:

6010B Metals (ICP)-Total Recoverable

Method: 6010B Preparation: 3005A Dilution: 1.0

10/01/2008 2135 Date Analyzed: 09/30/2008 1023 Date Prepared:

Analysis Batch: 680-118805

Prep Batch: 680-118578

Instrument ID: Lab File ID:

ICP/AES - D N/A

Initial Weight/Volume: 50 mL

Final Weight/Volume: 50 mL

Job Number: 680-40780-1 Client: Weston Solutions, Inc.

Client Sample ID: ESE-002

09/25/2008 1020 Lab Sample ID: 680-40780-5 Date Sampled: 09/26/2008 1105 Client Matrix: Water Date Received:

6010B Metals (ICP)-Total Recoverable

Method: 6010B Preparation: 3005A Dilution: 1.0

10/01/2008 2140 Date Analyzed:

09/30/2008 1023 Date Prepared:

Analysis Batch: 680-118805 Instrument ID: ICP/AES - D Prep Batch: 680-118578 Lab File ID:

N/A Initial Weight/Volume: 50 mL Final Weight/Volume: 50 mL

ICP/AES - D

Job Number: 680-40780-1 Client: Weston Solutions, Inc.

Client Sample ID: ESE-004

09/25/2008 1045 Lab Sample ID: 680-40780-6 Date Sampled: 09/26/2008 1105 Client Matrix: Water Date Received:

6010B Metals (ICP)-Total Recoverable

Method: 6010B Preparation: 3005A Dilution: 1.0

10/01/2008 2146 Date Analyzed:

09/30/2008 1023 Date Prepared:

Analysis Batch: 680-118805 Instrument ID:

Prep Batch: 680-118578 Lab File ID: N/A Initial Weight/Volume: 50 mL Final Weight/Volume: 50 mL

ICP/AES - D

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Client Sample ID: ESE-007

 Lab Sample ID:
 680-40780-7
 Date Sampled:
 09/25/2008 1100

 Client Matrix:
 Water
 Date Received:
 09/26/2008 1105

6010B Metals (ICP)-Total Recoverable

Method: 6010B
Preparation: 3005A
Dilution: 1.0

Date Analyzed: 10/01/2008 2151

Date Prepared: 09/30/2008 1023

Analysis Batch: 680-118805 Instrument ID:
Prep Batch: 680-118578 Lab File ID:

Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

 Analyte
 Result (ug/L)
 Qualifier
 RL

 Arsenic
 <10</td>
 10

 Chromium
 <10</td>
 10

Job Number: 680-40780-1 Client: Weston Solutions, Inc.

Client Sample ID: WMW-17E

09/25/2008 1245 Lab Sample ID: 680-40780-8 Date Sampled: Client Matrix: 09/26/2008 1105 Water Date Received:

6010B Metals (ICP)-Total Recoverable

Method: 6010B Preparation: 3005A

Dilution: 1.0

10/01/2008 2157 Date Analyzed: 09/30/2008 1023 Date Prepared:

Analysis Batch: 680-118805

Prep Batch: 680-118578

Instrument ID: Lab File ID: Initial Weight/Volume: ICP/AES - D N/A

50 mL Final Weight/Volume: 50 mL

Analyte	Result (ug/L)	Qualifier	RL
Arsenic	<10		10
Chromium	<10		10

Job Number: 680-40780-1 Client: Weston Solutions, Inc.

Client Sample ID: WMW-18E

09/25/2008 1300 Lab Sample ID: 680-40780-9 Date Sampled: Client Matrix: 09/26/2008 1105 Water Date Received:

6010B Metals (ICP)-Total Recoverable

Method: 6010B Preparation: 3005A

Dilution: 1.0

10/01/2008 2202 Date Analyzed: 09/30/2008 1023 Date Prepared:

Analysis Batch: 680-118805

Prep Batch: 680-118578

Instrument ID: Lab File ID:

ICP/AES - D N/A

Initial Weight/Volume: 50 mL

Final Weight/Volume: 50 mL

Analyte	Result (ug/L)	Qualifier	RL
Arsenic	<10		10
Chromium	<10		10

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Client Sample ID: Duplicate

 Lab Sample ID:
 680-40780-10FD
 Date Sampled:
 09/25/2008 0000

 Client Matrix:
 Water
 Date Received:
 09/26/2008 1105

6010B Metals (ICP)-Total Recoverable

Method: 6010B
Preparation: 3005A
Dilution: 1.0

Date Analyzed: 10/01/2008 2207 Date Prepared: 09/30/2008 1023 Analysis Batch: 680-118805 Prep Batch: 680-118578 Instrument ID: ICP/AES - D
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

 Analyte
 Result (ug/L)
 Qualifier
 RL

 Arsenic
 <10</td>
 10

 Chromium
 <10</td>
 10

Job Number: 680-40780-1 Client: Weston Solutions, Inc.

Client Sample ID: **Equipment Blank** 

09/25/2008 1200 Lab Sample ID: 680-40780-11EB Date Sampled: 09/26/2008 1105 Client Matrix: Water Date Received:

6010B Metals (ICP)-Total Recoverable

Method: 6010B Preparation: 3005A Dilution: 1.0

10/01/2008 2213 Date Analyzed:

09/30/2008 1023 Date Prepared:

Analysis Batch: 680-118805

Prep Batch: 680-118578

Instrument ID: Lab File ID:

ICP/AES - D N/A

Initial Weight/Volume: 50 mL Final Weight/Volume: 50 mL

# **DATA REPORTING QUALIFIERS**

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Lab Section	Qualifier	Description
GC/MS Semi VOA		
	Х	Surrogate exceeds the control limits
	D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
HPLC		
	X	Surrogate exceeds the control limits
	Р	The lower of the two values is reported when the % difference between the results of two GC columns is greater than 40%

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Method Blank - Batch: 680-119073

Method: 8260B Preparation: 5030B

Lab Sample ID: MB 680-119073/22

Client Matrix: Water Dilution: 1.0

Date Analyzed: 10/03/2008 1026 Date Prepared: 10/03/2008 1026 Analysis Batch: 680-119073

Prep Batch: N/A Units: ug/L Instrument ID: GC/MS Volatiles - A

Lab File ID: aq011.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	RL
Benzene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Methyl tert-butyl ether	<10		10
Toluene	<1.0		1.0
Xylenes, Total	<2.0		2.0
Surrogate	% Rec	Acceptance Limits	
4-Bromofluorobenzene	90	75 - 120	
Dibromofluoromethane	106	75 - 121	
Toluene-d8 (Surr)	103	75 - 120	

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Lab Control Spike/ Method: 8260B
Lab Control Spike Duplicate Recovery Report - Batch: 680-119073 Preparation: 5030B

LCS Lab Sample ID: LCS 680-119073/19 Analysis Batch: 680-119073 Instrument ID: GC/MS Volatiles - A

Client Matrix: Water Prep Batch: N/A Lab File ID: aq005.d

Dilution: 1.0 Units: ug/L Initial Weight/Volume: 5 mL

 Date Analyzed:
 10/03/2008 0858
 Final Weight/Volume:
 5 mL

 Date Prepared:
 10/03/2008 0858

LCSD Lab Sample ID: LCSD 680-119073/20 Analysis Batch: 680-119073 Instrument ID: GC/MS Volatiles - A

Client Matrix: Water Prep Batch: N/A Lab File ID: aq007.d

Dilution: 1.0 Units: ug/L Initial Weight/Volume: 5 mL

 Date Analyzed:
 10/03/2008 0927
 Final Weight/Volume:
 5 mL

 Date Prepared:
 10/03/2008 0927

	(	<u>% Rec.</u>					
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	107	108	77 - 119	1	30		
Ethylbenzene	102	102	86 - 116	1	30		
Methyl tert-butyl ether	102	105	77 - 121	3	30		
Toluene	108	109	81 - 117	2	30		
Xylenes, Total	102	102	84 - 118	0	30		
Surrogate	L	.CS % Rec	LCSD %	Rec	Accep	tance Limits	
4-Bromofluorobenzene	1	01	99		7	'5 - 120	
Dibromofluoromethane	1	06	103		7	<b>'</b> 5 - 121	
Toluene-d8 (Surr)	1	08	106		7	<b>'</b> 5 - 120	

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Method Blank - Batch: 680-119201 Method: 8260B

Preparation: 5030B

Lab Sample ID: MB 680-119201/22 Analysis Batch: 680-119201 Instrument ID: GC/MS Volatiles - A

Client Matrix: Water Prep Batch: N/A Lab File ID: aq023.d

Dilution: 1.0 Units: ug/L Initial Weight/Volume: 5 mL

Date Analyzed: 10/06/2008 1305

Final Weight/Volume: 5 mL

Date Analyzed: 10/06/2008 1305

Date Prepared: 10/06/2008 1305

Analyte	Result	Qual	RL
Benzene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Methyl tert-butyl ether	<10		10
Toluene	<1.0		1.0
Xylenes, Total	<2.0		2.0
Surrogate	% Rec	Acceptance Limits	
4-Bromofluorobenzene	92	75 - 120	
Dibromofluoromethane	104	75 - 121	
Toluene-d8 (Surr)	103	75 - 120	

Lab Control Spike - Batch: 680-119201 Method: 8260B Preparation: 5030B

Lab Sample ID: LCS 680-119201/20 Analysis Batch: 680-119201 Instrument ID: GC/MS Volatiles - A

Client Matrix: Water Prep Batch: N/A Lab File ID: aq019.d

Dilution: 1.0 Units: ug/L Initial Weight/Volume: 5 mL

Date Analyzed: 10/06/2008 1206 Final Weight/Volume: 5 mL

Date Prepared: 10/06/2008 1206

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Benzene	50.0	52.0	104	77 - 119	
Ethylbenzene	50.0	50.0	100	86 - 116	
Methyl tert-butyl ether	100	98.1	98	77 - 121	
Toluene	50.0	53.2	106	81 - 117	
Xylenes, Total	150	150	100	84 - 118	
Surrogate	% R	% Rec		Acceptance Limits	
4-Bromofluorobenzene	99	ı		75 - 120	
Dibromofluoromethane	99		75 - 121		
Toluene-d8 (Surr)	10	7		75 - 120	

1000 mL

1000 mL

40 - 139

40 - 139

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Method Blank - Batch: 680-118800 Method: 8270C Preparation: 3520C

Lab Sample ID: MB 680-118800/18-A Analysis Batch: 680-119270 Instrument ID: GC/MS SemiVolatiles - F

Client Matrix: Water Prep Batch: 680-118800 Lab File ID: f2347.d

Dilution: 1.0 Units: ug/L Initial Weight/Volume:

 Date Analyzed:
 10/03/2008 1620
 Final Weight/Volume:
 1 mL

 Date Prepared:
 10/02/2008 1346
 Injection Volume:
 1.0 uL

Analyte	Result	Qual	RL
Phenol	<10		10
2,4-Dimethylphenol	<10		10
Pentachlorophenol	<50		50
Surrogate	% Rec	Acceptance Limits	
Phenol-d5	77	38 - 116	
2-Fluorophenol	78	36 - 110	

Lab Control Spike/ Method: 8270C
Lab Control Spike Duplicate Recovery Report - Batch: 680-118800 Preparation: 3520C

2,4,6-Tribromophenol

2,4,6-Tribromophenol

LCS Lab Sample ID: LCS 680-118800/19-A Analysis Batch: 680-119270 Instrument ID: GC/MS SemiVolatiles - F

79

Client Matrix: Water Prep Batch: 680-118800 Lab File ID: f2348.d

Dilution: 1.0 Units: ug/L Initial Weight/Volume:

 Date Analyzed:
 10/03/2008 1643
 Final Weight/Volume:
 1 mL

 Date Prepared:
 10/02/2008 1346
 Injection Volume:
 1.0 uL

LCSD Lab Sample ID: LCSD 680-118800/20-A Analysis Batch: 680-119270 Instrument ID: GC/MS SemiVolatiles - F

Client Matrix: Water Prep Batch: 680-118800 Lab File ID: f2349.d

88

Dilution: 1.0 Units: ug/L Initial Weight/Volume: 1000 mL

Date Analyzed: 10/03/2008 1706 Final Weight/Volume: 1 mL

Date Prepared: 10/02/2008 1346 Injection Volume: 1.0 uL

% Rec. LCS RPD Analyte LCSD Limit RPD Limit LCS Qual LCSD Qual 73 39 - 110 Phenol 81 11 40 2,4-Dimethylphenol 79 36 - 110 12 40 70 Pentachlorophenol 94 89 37 - 132 5 40 LCS % Rec LCSD % Rec Surrogate Acceptance Limits Phenol-d5 76 66 38 - 116 76 36 - 110 2-Fluorophenol 79

Calculations are performed before rounding to avoid round-off errors in calculated results.

82

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Method Blank - Batch: 400-76958

Method: 8310 Preparation: 3510C

Lab Sample ID: MB 400-76958/19-A Client Matrix: Water

Water 1.0

Date Analyzed: 10/01/2008 2048

Date Prepared: 09/30/2008 0735

Dilution:

Analysis Batch: 400-77283 Prep Batch: 400-76958

Units: ug/L

Instrument ID: HPLC/UV/FLUOR
Lab File ID: 006-0601.D
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 1.0 mL

Injection Volume:

Column ID: PRIMARY

Analyte	Result	Qual	RL
Acenaphthene	<1.0		1.0
Acenaphthylene	<1.0		1.0
Anthracene	<1.0		1.0
Benzo[a]anthracene	<0.20		0.20
Benzo[a]pyrene	<0.20		0.20
Benzo[b]fluoranthene	<0.20		0.20
Benzo[g,h,i]perylene	<1.0		1.0
Benzo[k]fluoranthene	<0.50		0.50
Chrysene	<1.0		1.0
Dibenz(a,h)anthracene	<0.20		0.20
Fluoranthene	<1.0		1.0
Fluorene	<1.0		1.0
Indeno[1,2,3-cd]pyrene	<0.20		0.20
1-Methylnaphthalene	<1.0		1.0
2-Methylnaphthalene	<1.0		1.0
Naphthalene	<1.0		1.0
Phenanthrene	<1.0		1.0
Pyrene	<1.0		1.0
Surrogate	% Rec	Acceptance Limits	
2-Chloroanthracene	88	41 - 177	

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Lab Control Spike - Batch: 400-76958

Method: 8310 Preparation: 3510C

Lab Sample ID: LCS 400-76958/18-A

Client Matrix: Water Dilution: 1.0

Date Analyzed: 10/01/2008 2121

Date Prepared: 09/30/2008 0735

Analysis Batch: 400-77283 Prep Batch: 400-76958

Units: ug/L

Instrument ID: HPLC/UV/FLUOR
Lab File ID: 007-0701.D
Initial Weight/Volume: 1000 mL

Final Weight/Volume: 1.0 mL

Injection Volume:

Column ID: PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	10.0	7.34	73	36 - 102	
Acenaphthylene	10.0	6.61	66	40 - 88	
Anthracene	10.0	8.17	82	43 - 103	
Benzo[a]anthracene	10.0	9.11	91	54 - 104	
Benzo[a]pyrene	10.0	9.83	98	47 - 111	
Benzo[b]fluoranthene	10.0	8.91	89	46 - 102	
Benzo[g,h,i]perylene	10.0	8.79	88	37 - 110	
Benzo[k]fluoranthene	10.0	8.95	90	46 - 105	
Chrysene	10.0	9.77	98	62 - 114	
Dibenz(a,h)anthracene	10.0	8.73	87	41 - 116	
Fluoranthene	10.0	8.75	88	45 - 129	
Fluorene	10.0	7.35	73	39 - 97	
Indeno[1,2,3-cd]pyrene	10.0	9.02	90	53 - 106	
1-Methylnaphthalene	10.0	6.82	68	27 - 97	
2-Methylnaphthalene	10.0	6.97	70	23 - 96	
Naphthalene	10.0	7.03	70	28 - 99	
Phenanthrene	10.0	8.27	83	51 - 103	
Pyrene	10.0	9.60	96	53 - 112	
Surrogate	% R	lec	Acc	ceptance Limits	
2-Chloroanthracene	11	3		41 - 177	

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Method Blank - Batch: 680-118578

Method: 6010B Preparation: 3005A Total Recoverable

Lab Sample ID: MB 680-118578/14-A

Client Matrix: Water Dilution: 1.0

Date Analyzed: 10/01/2008 1958 Date Prepared: 09/30/2008 1023 Analysis Batch: 680-118805 Prep Batch: 680-118578

Units: ug/L

Instrument ID: ICP/AES - D

Lab File ID: N/A

Initial Weight/Volume: 50 mL Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Arsenic	<10		10
Chromium	<10		10

Lab Control Spike - Batch: 680-118578

Method: 6010B Preparation: 3005A Total Recoverable

Lab Sample ID: LCS 680-118578/15-A

Client Matrix: Water
Dilution: 1.0

Date Analyzed: 10/01/2008 2003 Date Prepared: 09/30/2008 1023 Analysis Batch: 680-118805 Prep Batch: 680-118578

Units: ug/L

Instrument ID: ICP/AES - D

Lab File ID: N/A

Initial Weight/Volume: 50 mL

Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Arsenic	2000	1950	98	75 - 125	
Chromium	200	197	98	75 - 125	

Client: Weston Solutions, Inc. Job Number: 680-40780-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 680-118578

Method: 6010B Preparation: 3005A Total Recoverable

MS Lab Sample ID: Client Matrix:

680-40780-1 Water Analysis Batch: 680-118805 Prep Batch: 680-118578 Instrument ID: ICP/AES - D Lab File ID: N/A

Dilution:

on: 1.0

Date Analyzed: 10/01/2008 2014 Date Prepared: 09/30/2008 1023 Initial Weight/Volume: 50 mL Final Weight/Volume: 50 mL

MSD Lab Sample ID: Client Matrix:

680-40780-1 Water

1 Analysis Batch: 680-118805 Prep Batch: 680-118578 Instrument ID: ICP/AES - D
Lab File ID: N/A

Dilution: 1.0

Date Analyzed: 10/01/2008 2020 Date Prepared: 09/30/2008 1023 Initial Weight/Volume: 50 mL Final Weight/Volume: 50 mL

% Rec.

Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual MSD Qual
Arsenic	102	98	75 - 125	4	20	
Chromium	103	99	75 - 125	4	20	

TestAmerica Savannah 5102 LaRoche Avenue Savannah, GA 31404

# **Chain of Custody Record**

	*	Coolen Temperature(s) °C and Other Remarks:	CooleNTempe				Custody Seals Intact: Custody Seal No.:
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_ Z ,		3E	es or			Project #: 68000815	Cabot Quarterly Sampling
H - Ascorbic Acid						WO#: 5.79101E+13	ralph.mckeen@westonsolutions.com
F - MeOH R - Na2S2SO3 G - Amchior S - H2SO4						PO# 32730	388-482-2414(Tel) 770.325.7938
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Page 1 of 2		cainc.com	E-Mail: abbie.page@testamericainc.com	E-Mail: abbie	5,7938	770.32S	Mr. Ralph McKeen
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THE REASE IN TRANSCOMENTAL TESTAND OF THE PROPERTY OF THE PROP		/ Record	Chain of Custody Record	Chain c			5102 LaRoche Avenue Savannah, GA 31404 Phone (912) 354-7858 Fax (912) 352-0165

TestAmerica Savannah 5102 LaRoche Avenue Savannah, GA 31404 Phone (912) 354-7858 Fax (912) 352-0165

# **Chain of Custody Record**

0.00	Received by Cooler Temperature(s) °C and Other Remarks:	Recayed by Cooler Temperate	Company	C	lime:	Date/Time	Custody Seals intact Custody Seal No.:  A Yes A No
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Other:	& MTE	г			V#:	ssow#:	CA BOT / KOPPERS
K-EDTA L-EDA	3E				Project #: 68000815	Projec 6800	Cabot Quarterly Sampling
1 - Iso Dougcarlydrate 1 - Iso Undecarlydrate U - ACAA 9 J - Di Water V - MCAA		NO)			WO#. 5.79101E+13	WO# 5.79	ralph.mckeen@westonsolutions.com
<u>{</u>			o)		30	PO#: 32730	386.462.2414(Fel) 770, 3257 7938
D - Nitric Adid P - Na204S E - NaHS04 Q - Na2S03	10/-			NORMAL			SA:e, Jp: GA, 30092
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Preservation Codes:				MORMAL		Due I	5430 Metric Place Suite 100
	Analysis Requested						Weston Solutions, Inc.
Page:	nc.com	E-Mall: abble.page@testamericaln	E-Mail: abbie, pag	.7938	770,325.	Phone:	Mr. Ralph McKeen
Carrier Tracking No(s): COC No:	Carrier Tr	bie	Lab PM: Page, Abbie	Sampler BRANT MCCANLES	となるが	Samp	Client Information
THE LEADER IN ENVIRONMENTS, TESTING	Record	Sustody I	Chain of Custody Record	ဂ			Savannah, GA 31404 Phone (912) 354-7858 Fax (912) 352-0165
ς				ì			5102 LaRoche Avenue

# SUMMARY OF PRE-REMEDIAL ACTION GROUNDWATER DATA EASTERN SITE GAINESVILLE, FLORIDA

#### Summary of Pre-Remedial Action Groundwater Data Eastern Site, Gainesville, Florida

Well Designation	Parameters	IT Corp	Hunter/ ESE 1989	WESTON June 1992	WESTON October	WESTON	WESTON April 1993	WESTON July 1993	WESTON October	WESTON January	WESTON April 1994	WESTON July 1994	WESTON October	WESTON	WESTON April 1995	ROD Cleanup
Designation		Results	Results	Results	1992	January 1993	Results	Results	1993	1994	Results	Results	1994	January 1995	Results	Goal
			(μg/L) (2)		Results	Results	(μg/L) (3)	(μg/L) (3)	Results	Results	(μg/L) (3)	(μg/L) (3)	Results	Results	(µg/L) (3)	(μg/L)
		(µg/12) (1)	(µg/2) (2)	( <b>µg</b> / <b>L</b> ) (0)	(μg/L) (3)	(μg/L) (3)	( <b>µg</b> / <b>L</b> ) ( <b>c</b> )	( <b>µg</b> / <b>L</b> ) ( <b>b</b> )	(μg/L) (3)	(μg/L) (3)	( <b>µg</b> / <b>L</b> ) ( <b>c</b> )	( <b>µg</b> / <b>L</b> ) ( <b>c</b> )	(μg/L) (3)	(μg/L) (3)	( <b>µg</b> / <b>L</b> ) (0)	(µg/L)
																į
ITW-1	Chromium	110	60.4	ND	NS	ND	NS	ND	NS	ND	NS	ND	NS	ND	NS	*100
ITW-2	Chromium	100	124	39	NS	ND	NS	ND	NS	8	NS	ND	NS	ND	NS	*100
ITW-3	Chromium	40	NS	11	10	24	NS	NS	NS	NS	NS	NS	NS	NS	NS	*100
ITW-4	Chromium	110	45.1	10	9	27	ND	ND	NS	7	ND	ND	ND	23	ND	*100
	Naphthalene	40	35	30	27	17	27	31	NS	5.8	25	58	81	46	25	18
	Acenaphthylene	ND	<1.0	11	13	ND	ND	17	NS	ND	16	7.7	13	8	5.7	130
	Acenaphthene	ND	ND	ND	ND	ND	ND	ND	NS	ND	ND	2	3.5	ND	ND	260
	Benzene	140	ND	20	52	20	24	11	NS	21	20	26	25	9.2	8	1
ITW-5	Chromium	<140	47.1	42	NS	26	8	14	26	5	ND	ND	6	6	5	*100
	Arsenic	73	NS	56	NS	65	43	45	48	45	38	34	50	43	46	50
	PCP	30	120	300	NS	980	690	1,500	890	730	1,100	580	550	440	ND	0.1
	Phenol	ND	65	30	NS	750	990	2,600	2,000	1,850	2,600	1,200	900	700	1,200	2,630
	Naphthalene	1,600	1,000	500	NS	860	2,700	1,300	1,200	900	1,500	1,600	1,600	1,500	670	18
	Acenaphthylene	18	12	44	NS	ND	48	ND	34	69	59	73	74	100	20	130
	Acenaphthene	370	540	ND	NS	190	ND	440	ND	ND	220	460	530	610	320	260
	Fluorene	340	210	180	NS	ND	ND	ND	330	300	320	380	470	450	240	323
	Phenanthrene	290	280	160	NS	ND	130	ND	ND	210	280	300	380	320	200	130
	Anthracene	25	17	12	NS	ND	ND	ND	ND	ND	29	22	31	20	15	1,310
	Benzene	<10	ND	4.8	NS	4.3	4.4	4.7	5	0.8	4.1	4.6	ND	5.7	4.6	1

The data presented in this table represents only those compounds that have been detected above detection limit in groundwater samples from the indicated wells.

- (1) Please see Table 6 of Remedial Investigation Report, Cabot Carbon/Koppers Site Vol. 1 (IT Corp., 1987) for analytical detection limits of individual compounds.
- (2) Please see Appendix B of Remedial Investigation/Risk Assessment at the Cabot Carbon/Koppers Site, Gainesville, Florida Vol. 3 (Hunter/ESE, 1989).
- (3) Please see individual groundwater report for analytical detection limits of compounds for different sampling events.

All results are in µg/L.

 $\mu$ g/L = micrograms per liter.

MDL = laboratory method detection limit.

ND = not detected above the MDL.

NS = not sampled for indicated compound.

<sup>\*</sup> The new EPA MCL for chromium is 100 μg/L. As per the ROD, this new MCL replaces the previous cleanup goals of 50 μg/L.

<sup>\*\*</sup> Cleanup goal for indicated compound has not been established.

<sup>+</sup> Analytical results from January 1994 are suspect. Past groundwater data review indicates sample bottles may have been mislabeled.

<sup>++</sup> Sampled only for BTEX constituents.

Well	Parameters	IT Corp	Hunter/	WESTON	WESTON	WESTON	WESTON	ROD								
Designation		1987	ESE 1989	June 1992	October	January	April 1993	July 1993	October	January	April 1994	July 1994	October	January	April 1995	Cleanup
		Results	Results	Results	1992	1993	Results	Results	1993	1994	Results	Results	1994	1995	Results	Goal
		(µg/L) (1)	(µg/L) (2)	$(\mu g/L) (3)$	Results	Results	$(\mu g/L)$ (3)	$(\mu g/L)$ (3)	Results	Results	$(\mu g/L)$ (3)	$(\mu g/L)$ (3)	Results	Results	$(\mu g/L) (3)$	(µg/L)
					$(\mu g/L)$ (3)	$(\mu g/L)$ (3)			$(\mu g/L)$ (3)	$(\mu g/L)$ (3)			(µg/L) (3)	$(\mu g/L)$ (3)		
TOTAL C	CI :	170	NG	170	110	NG	NG	NG	NG	NG	NG	7	NG	NG	NG	*100
ITW-6	Chromium	170	NS	170	110	NS	NS	NS	NS	NS	NS	7	NS	NS	NS	*100
	Naphthalene	1,700	NS	1,100	580	NS	NS	NS	NS	NS	NS	450	NS	NS	NS	18
	Acenaphthylene	ND	ND	ND	ND	NS	NS	NS	NS	NS	NS	11	NS	NS	NS	130
	Acenaphthene	ND	ND	ND	ND	NS	NS	NS	NS	NS	NS	90	NS	NS	NS	260
	Fluorene	200	NS	73	ND	NS	NS	NS	NS	NS	NS	83	NS	NS	NS	323
	Phenanthrene	32	NS	19	ND	NS	NS	NS	NS	NS	NS	28	NS	NS	NS	130
	Anthracene	<10	NS	2	ND	NS	NS	NS	NS	NS	NS	2	NS	NS	NS	1,310
	Benzene	<10	NS	1.2	1.5	NS	NS	NS	NS	NS	NS	1	NS	NS	NS	1
ITW-7	Chromium	280	NS	110	82	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	*100
	Arsenic	23	NS	57	ND	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	50
	Acenaphthylene	10	NS	ND	11	NS	NS	NS	NS	NS	NS	7.4	NS	NS	NS	130
	Acenaphthene	ND	ND	ND	ND	NS	NS	NS	NS	NS	NS	2.7	NS	NS	NS	260
	Fluorene	ND	ND	ND	ND	NS	NS	NS	NS	NS	NS	3.3	NS	NS	NS	323
	Phenanthrene	ND	ND	ND	ND	NS	NS	NS	NS	NS	NS	0.4	NS	NS	NS	130
	Anthracene	ND	ND	ND	ND	NS	NS	NS	NS	NS	NS	0.4	NS	NS	NS	1,310
	Total Potentially	ND	NS	0.8	ND	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	0.003
	Carcinogenic PAHs															,
	Benzene	25	NS	14	12	NS	NS	NS	NS	NS	NS	16	NS	NS	NS	1
ITW-8	Chromium	80	NS	7	NS	ND	NS	NS	NS	*100						
	Arsenic	1	NS	ND	NS	ND	NS	NS	NS	50						
	Phenol	890	NS	720	NS	350	NS	NS	NS	2,630						
	Naphthalene	48	NS	15	NS	8.2	NS	NS	NS	18						
	Acenaphthylene	ND	NS	73	NS	100	NS	NS	NS	130						
	Acenaphthene	ND	ND	ND	NS	22	NS	NS	NS	260						
	Fluorene	ND	ND	ND	NS	1.2	NS	NS	NS	323						
	Benzene	40	NS	ND	NS	NS	NS	NS	47	NS	NS	31	NS	NS	NS	1
ITW-9	Chromium	170	NS	14	NS	ND	NS	NS	NS	*100						
	Arsenic	4	NS	ND	NS	ND	NS	NS	NS	50						
	Naphthalene	ND	ND	ND	NS	30	NS	NS	NS	18						
	Acenaphthylene	ND	ND	ND	NS	120	NS	NS	NS	130						
	Acenaphthene	ND	ND	ND	NS	54	NS	NS	NS	260						
	Fluorene	ND	ND	ND	NS	3.6	NS	NS	NS	323						
	Phenanthrene	ND	ND	ND	NS	0.5	NS	NS	NS	130						
	Phenol	76	NS	180	NS	190	NS	NS	NS	2,630						
	Benzene	<10	NS	31	NS	NS	NS	NS	22	NS	NS	ND	NS	NS	NS	1

Well Designation	Parameters	IT Corp 1987 Results (µg/L) (1)		WESTON June 1992 Results (µg/L) (3)	WESTON October 1992 Results (µg/L) (3)	WESTON January 1993 Results (µg/L) (3)	WESTON April 1993 Results (µg/L) (3)	WESTON July 1993 Results (µg/L) (3)	WESTON October 1993 Results (µg/L) (3)	WESTON January 1994 Results (µg/L) (3)	WESTON April 1994 Results (µg/L) (3)	WESTON July 1994 Results (µg/L) (3)	WESTON October 1994 Results (µg/L) (3)	WESTON January 1995 Results (µg/L) (3)	WESTON April 1995 Results (µg/L) (3)	ROD Cleanup Goal (µg/L)
ITW-10 +	Chromium	100	NS	77	53	71	19	12	30	9	ND	ND	8	5	5	*100
	Phenol	ND	NS	5,400	3,060	7,900	13,000	13,000	8,300	ND	1,800	1,200	500	284	310	2,630
	Naphthalene	ND	NS	ND	ND	14	35	84	ND	ND	ND	ND	ND	ND	ND	18
	Acenaphthylene	ND	NS	ND	ND	640	41	470	25	8.5	ND	ND	310	ND	ND	130
	Fluorene	ND	NS	ND	ND	2.6	ND	ND	1.1	ND	ND	0.7	ND	ND	ND	323
	Benzene	150	NS	320	200	250	130	120	120	61	59	65	12	64	60	1
ITW-11 +	Chromium	240	NS	130	12	23	ND	ND	ND	ND	ND	ND	ND	ND	ND	*100
	Arsenic	9	NS	21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
	Acenaphthylene	ND	NS	ND	15	ND	7.8	59	61	400	ND	ND	ND	ND	ND	130
	Fluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8	ND	ND	ND	323
	Phenanthrene	ND	NS	ND	0.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4	130
l l	Pyrene	ND	NS	ND	0.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	130
	Total Potentially	ND	NS	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003
	Carcinogenic PAHs															
	Benzene	<10	NS	3.3	2.7	2.5	1.6	2.7	3.7	2.8	2.5	1.1	0.6	3.7	4.1	1
	Phenol	ND	NS	ND	ND	ND	ND	ND	ND	8,500	ND	ND	ND	ND	ND	2,630
ITW-12	Chromium	0.06	NS	NS	NS	NS	NS	12	ND	ND	NS	NS	NS	NS	NS	*100
ITW-13	Chromium	80	34.4	10	13	10	ND	ND	ND	ND	ND	ND	6	ND	ND	*100
	Phenol	ND	6,500	2,700	2,500	4,000	11,000	7,000	9,300	8,900	6,200	7,500	4,820	5,720	7,100	2,630
	Naphthalene	ND	59	38	6.1	32	84	71	83	51	35	63	40	47	34	18
	Acenaphthylene	ND	<20	35	46	210	240	12	ND	300	ND	ND	370	ND	ND	130
	Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	33	ND	260
	Fluorene	ND	<20	0.3	0.7	0.8	1.2	1.1	1.6	1.8	ND	2.8	3.7	2.1	1.7	323
	Phenanthrene	ND	<20	0.3	ND	0.3	ND	0.4	0.4	0.2	0.26	0.5	0.5	0.6	0.43	130
	Anthracene	ND	?	ND	ND	ND	ND	ND	ND	ND	ND	0.2	ND	0.18	0.16	1,310
	Total Potentially	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.47	ND	ND	0.003
	Carcinogenic PAHs															
	Benzene	100	ND	130	140	130	82	49	65	55	75	64	59	62	66	1

Well Designation	Parameters	IT Corp 1987 Results	Hunter/ ESE 1989 Results	WESTON June 1992 Results	WESTON October 1992	WESTON January 1993	WESTON April 1993 Results	WESTON July 1993 Results	WESTON October 1993	WESTON January 1994	WESTON April 1994 Results	WESTON July 1994 Results	WESTON October 1994	WESTON January 1995	WESTON April 1995 Results	ROD Cleanup Goal
		(µg/L) (1)	(μg/L) (2)	(μg/L) (3)	Results (µg/L) (3)	Results (µg/L) (3)	(μg/L) (3)	(μg/L) (3)	Results (µg/L) (3)	Results (µg/L) (3)	(μg/L) (3)	(μg/L) (3)	Results (µg/L) (3)	Results (µg/L) (3)	(µg/L) (3)	(μg/L)
ITW-14	Chromium	140	NS	ND	7	10	ND	5	ND	6	ND	ND	ND	ND	5	*100
	Phenol	4,100	NS	2,700	2,300	1,600	14,000	9,900	12,000	8,600	5,000	6,700	910	4,460	1,700	2,630
	Naphthalene	18	NS	170	ND	ND	1,100	390	ND	1,100	480	5,400	700	350	240	18
	Acenaphthylene	<10	NS	190	1,600	360	1,200	1,800	9,900	2,700	1,200	13,000	2,000	890	650	130
	Acenaphthene	<10	NS	ND	ND	83	ND	ND	ND	ND	3,100	48,000	3,300	1,400	720	260
	Fluorene	ND	NS	72	80	51	31	50	1,100	370	700	3,500	330	71	59	323
	Phenanthrene	<10	NS	40	12	ND	37	36	ND	230	190	2,000	180	25	23	130
	Anthracene	ND	NS	ND	ND	ND	ND	ND	ND	ND	53	270	16	3.1	3.8	1,310
	Total Potentially Carcinogenic PAHs	ND	NS	49	1,000	19.6	ND	ND	6,040	1,590	ND	ND	410	32	71	0.003
	Benzene	130	NS	45	180	170	68	150	180	120	130	140	160	160	120	1
	Pyrene	ND	NS	ND	ND	ND	ND	ND	5,000	ND	ND	ND	69	ND	6.4	130
ITW-15	Chromium	70	NS	6	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	*100
	Arsenic	9	NS	ND	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	50
	Phenol	2,200	NS	260	NS	NS	NS	NS	NS	NS	NS	140	NS	NS	NS	2,630
	Naphthalene	ND	NS	ND	NS	NS	NS	NS	NS	NS	NS	4.2	NS	NS	NS	18
ITW-16	Acenaphthylene	ND	NS	120	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	130
	Fluorene	ND	NS	0.6	NS	NS	NS	NS	NS	NS	NS	1.4	NS	NS	NS	323
	Benzene	19	NS	7	NS	NS	NS	NS	NS	NS	NS	3	NS	NS	NS	1
	Chromium	200	NS	61	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	*100
	Arsenic	10	NS	ND	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	50
	Naphthalene	16	NS	3.5	NS	NS	NS	NS	NS	NS	NS	7.9	NS	NS	NS	18
	Acenaphthylene	ND	NS	130	NS	NS	NS	NS	NS	NS	NS	140	NS	NS	NS	130
	Acenaphthene	ND	ND	ND	NS	NS	NS	NS	NS	NS	NS	3.6	NS	NS	NS	260
	Fluorene	ND	ND	ND	NS	NS	NS	NS	NS	NS	NS	0.5	NS	NS	NS	323
	Benzene	<10	NS	ND	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	1
ITW-17	Chromium	190	14.3	29	34	12	5	5	NS	NS	NS	NS	NS	NS	NS	*100
	Phenol	<10	6,200	660	1,080	1,400	ND	3,800	NS	NS	NS	NS	NS	NS	NS	2,630
	Naphthalene	ND	140	21	9.4	23	21	170	NS	NS	NS	NS	NS	NS	NS	18
	Acenaphthylene	ND	<20	ND	140	ND	25	310	NS	NS	NS	NS	NS	NS	NS	130
	Acenaphthene	ND	<20	ND	ND	3.7	ND	ND	NS	NS	NS	NS	NS	NS	NS	260
	Fluorene	ND	<20	ND	0.5	0.9	ND	7.3	NS	NS	NS	NS	NS	NS	NS	323
	Phenanthrene	<10	<20	1.3	ND	0.8	0.2	0.9	NS	NS	NS	NS	NS	NS	NS	130
	Benzene	12	ND	26	17	36	10	39	NS	NS	NS	NS	NS	NS	NS	1

Well Designation	Parameters	IT Corp 1987 Results (µg/L) (1)	Hunter/ ESE 1989 Results (µg/L) (2)	WESTON June 1992 Results (µg/L) (3)	WESTON October 1992 Results (µg/L) (3)	WESTON January 1993 Results (µg/L) (3)	WESTON April 1993 Results (µg/L) (3)	WESTON July 1993 Results (µg/L) (3)	WESTON October 1993 Results (µg/L) (3)	WESTON January 1994 Results (µg/L) (3)	WESTON April 1994 Results (µg/L) (3)	WESTON July 1994 Results (µg/L) (3)	WESTON October 1994 Results (µg/L) (3)	WESTON January 1995 Results (µg/L) (3)	WESTON April 1995 Results (µg/L) (3)	ROD Cleanup Goal (µg/L)
WMW-17E	Chromium	NS	NS	NS	NS	NS	NS	25	5	ND	ND	ND	ND	6	10	*100
	Benzene	NS	NS	NS	NS	NS	NS	2.5	20	3.3	1.4	2.5	2.3	49	14	1
	Naphthalene	NS	NS	NS	NS	NS	NS	4.5	15	3.5	ND	2.1	ND	20	6	18
	Acenaphthylene	NS	NS	NS	NS	NS	NS	10	ND	7.1	ND	4.2	ND	ND	ND	130
	Acenaphthene	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	13	6.2	ND	260
	Anthracene	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	0.9	0.39	0.2	ND	1,310
	Pyrene	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	2.4	ND	ND	ND	130
	Fluorene	NS	NS	NS	NS	NS	NS	0.7	ND	ND	ND	0.3	1.2	1.3	ND	323
	PCP	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	94	ND	ND	0.1
	Phenol	NS	NS	NS	NS	NS	NS	ND	3,000	ND	ND	ND	ND	340	ND	2,630
	Phenanthrene	NS	NS	NS	NS	NS	NS	ND	0.5	ND	ND	ND	1.3	0.32	ND	130
	Total Potentially	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	2	ND	ND	0.003
	Carcinogenic PAHs															
ITW-18	Chromium	110	126	44	47	33	14	16	NS	NS	NS	NS	NS	NS	NS	*100
WMW-18E	Chromium	NS	NS	NS	NS	NS	NS	130	10	8	29	17	230	140	50	*100
	Arsenic	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	19	ND	ND	50
	PCP	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	34	ND	ND	0.1
	Acenaphthylene	NS	NS	NS	NS	NS	NS	5.6	6.8	ND	3.2	7.6	10	ND	ND	130
	Pyrene	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	ND	0.21	ND	130
	Fluorene	NS	NS	NS	NS	NS	NS	ND	ND	ND	0.5	ND	ND	ND	ND	323
	Total Potentially Carcinogenic PAHs	NS	NS	NS	NS	NS	NS	0.4	ND	ND	ND	0.5	0.88	ND	ND	0.003
ITW-19	Chromium	420	NS	47	10	7.4	7	9	ND	9	ND	ND	ND	ND	ND	*100
	Naphthalene	150	NS	96	89	62	88	110	59	68	79	180	170	180	130	18
	Acenaphthylene	ND	NS	ND	ND	ND	9.7	8.5	ND	ND	ND	13	7.2	8.4	ND	130
	Acenaphthene	ND	NS	ND	ND	7.5	ND	ND	ND	7.4	7.7	28	21	28	17	260
	Fluorene	<10	NS	ND	6.2	6	9.2	ND	ND	7.9	7.3	17	14	15	10	323
	Phenanthrene	ND	NS	ND	0.6	0.2	0.6	0.7	0.2	0.3	0.3	0.8	0.54	0.68	0.66	130
	Anthracene	ND	NS	ND	ND	ND	ND	ND	ND	ND	0.2	0.4	0.26	0.25	0.26	1,310
	Benzene	<10	NS	0.9	1.1	1	0.6	0.8	1.2	0.9	1	ND	0.9	0.9	0.9	1
ITW-20	Chromium	470	148	25	13	6.5	ND	ND	ND	8	21	ND	ND	ND	ND	*100
	Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	1

Well Designation	Parameters	IT Corp 1987 Results (µg/L) (1)	Hunter/ ESE 1989 Results (µg/L) (2)	WESTON June 1992 Results (µg/L) (3)	WESTON October 1992 Results (µg/L) (3)	WESTON January 1993 Results (µg/L) (3)	WESTON April 1993 Results (µg/L) (3)	WESTON July 1993 Results (µg/L) (3)	WESTON October 1993 Results (µg/L) (3)	WESTON January 1994 Results (µg/L) (3)	WESTON April 1994 Results (µg/L) (3)	WESTON July 1994 Results (µg/L) (3)	WESTON October 1994 Results (µg/L) (3)	WESTON January 1995 Results (µg/L) (3)	WESTON April 1995 Results (µg/L) (3)	ROD Cleanup Goal (µg/L)
ITW-21	Chromium	60	29.9	8	NS	6.2	ND	ND	NS	ND	ND	ND	ND	ND	ND	*100
	Arsenic	2	NS	42	NS	46	18	20	NS	22	13	15	12	14	10	50
	PCP	ND	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	124	ND	ND	0.1
	Naphthalene	3,400	2,700	4,600	NS	4,300	70	3,100	NS	6,000	3,000	6,600	7,200	6,200	4,500	18
	Acenaphthylene	11	<4.0	260	NS	ND	12	ND	NS	230	94	180	290	220	150	130
	Acenaphthene	210	380	ND	NS	200	ND	ND	NS	ND	100	460	430	380	300	260
	Fluorene	130	160	5.6	NS	120	ND	15	NS	180	100	210	270	220	180	323
	Phenanthrene	ND	69	82	NS	45	ND	5	NS	63	47	79	87	68	55	130
	Anthracene	ND	ND	ND	NS	ND	ND	ND	NS	ND	1.6	2	1.1	1.3	1.2	1,310
	Benzene	ND	ND	8.2	NS	6	5.4	28	NS	3.1	4	3.7	3.5	3.7	2.9	1
ITW-22	Chromium	100	NS	11	NS	11	ND	ND	NS	ND	ND	ND	ND	ND	ND	*100
	Arsenic	8	NS	13	NS	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	50
	PCP	ND	ND	ND	NS	ND	ND	ND	NS	ND	ND	ND	52	ND	ND	0.1
	Naphthalene	<10	NS	ND	NS	1.5	ND	ND	NS	ND	ND	11	ND	3.1	ND	18
-	Acenaphthene	ND	ND	ND	NS	ND	ND	ND	NS	ND	ND	3.9	ND	ND	ND	260
	Phenanthrene	ND	ND	ND	NS	ND	ND	ND	NS	ND	ND	0.2	ND	ND	ND	130
	Total Potentially Carcinogenic PAHs	<10	NS	0.2	NS	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	0.003
ESE-001	Chromium	NS	62.4	51	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	*100
	Acenaphthene	NS	1.3	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	260
	Naphthalene	NS	5.2	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	18
ESE-002	Chromium	NS	55.6	170	120	39	ND	ND	ND	28	5	ND	19	ND	7	*100
	Naphthalene	NS	27	ND	ND	2	59	7.3	4.8	42	110	12	ND	9.5	6.7	18
	Acenaphthylene	NS	<1.0	ND	ND	ND	5.5	ND	ND	ND	2.9	4	11	ND	10	130
	Acenaphthene	NS	9.3	ND	ND	ND	ND	ND	ND	8.8	4.6	ND	ND	ND	ND	260
	Fluorene	NS	4.4	ND	ND	1	ND	ND	ND	13	9.4	5.1	1.2	2.5	ND	323
	Phenanthrene	NS	<1.0	18	0.4	1.5	3.7	1.2	1.4	12	9.4	9.4	1.2	1.1	0.55	130
	Anthracene	NS	<1.0	1.2	ND	ND	ND	ND	ND	0.8	0.5	0.9	0.29	0.28	0.16	1,310
	Benzene	NS	ND	13	5.2	7.7	4.3	9.2	11	4.2	2.5	2.5	0.8	5	5.1	1
	Pyrene	NS	<1.0	ND	ND	ND	ND	ND	ND	0.6	1.1	2.4	1.8	1.7	1.1	130
	Total Potentially Carcinogenic PAHs	NS	ND	ND	ND	ND	ND	ND	ND	ND	0.3	ND	0.33	ND	ND	0.003
ESE-003	Chromium	NS	31.3	100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	*100
	Benzene	NS	NS	0.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1

Well	Parameters	IT Corp	Hunter/	WESTON	WESTON	WESTON	WESTON	WESTON	WESTON	WESTON	WESTON	WESTON	WESTON	WESTON	WESTON	ROD
Designation	Tarameters	1987	ESE 1989	June 1992	October	January	April 1993	July 1993	October	January	April 1994	July 1994	October	January	April 1995	Cleanup
		Results	Results	Results	1992	1993	Results	Results	1993	1994	Results	Results	1994	1995	Results	Goal
		(µg/L) (1)	(µg/L) (2)	$(\mu g/L) (3)$	Results	Results	(µg/L) (3)	(µg/L) (3)	Results	Results	(µg/L) (3)	(µg/L) (3)	Results	Results	(µg/L) (3)	(µg/L)
					$(\mu g/L)$ (3)	$(\mu g/L)$ (3)			$(\mu g/L)$ (3)	$(\mu g/L)$ (3)			$(\mu g/L)$ (3)	$(\mu g/L)\ (3)$		1
ESE-004	Chromium	NS	70.2	120	29	29	ND	9	8	7	6	ND	8	5	13	*100
	Phenol	NS	260	ND	23	ND	50	40	ND	ND	315	ND	16	ND	610	2,630
	Naphthalene	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.5	18
	Acenaphthylene	NS	ND	ND	ND	ND	ND	5	ND	ND	ND	ND	ND	ND	ND	130
	Phenanthrene	NS	ND	ND	ND	ND	ND	ND	0.5	ND	ND	0.2	ND	ND	ND	130
	Anthracene	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.21	ND	ND	1,310
	Benzene	NS	ND	ND	ND	ND	ND	ND	3.2	ND	1.8	ND	ND	ND	3.6	1
	Fluorene	NS	<1.0	ND	ND	ND	ND	ND	ND	0.3	ND	0.7	ND	ND	ND	323
ESE-005	Chromium	NS	59.2	110	53	20	11	ND	ND	ND	ND	ND	ND	ND	ND	*100
	PCP	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	90	ND	ND	0.1
	Phenol	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	90	ND	ND	56	2,630
	Naphthalene	NS	1,300	660	97	730	170	400	1,000	1,100	420	610	1,100	1,200	3,600	18
	Acenaphthylene	NS	< 5.0	81	89	ND	ND	ND	320	ND	49	35	270	84	300	130
	Acenaphthene	NS	68	17	ND	ND	ND	360	ND	ND	ND	44	49	120	190	260
	Fluorene	NS	30	21	4.7	22	10	ND	3.9	45	13	16	42	41	61	323
	Phenanthrene	NS	4.3	4.1	1.1	3.7	1.8	3.4	2.5	8.9	3.5	2.9	5	8.1	20	130
	Anthracene	NS	ND	ND	ND	ND	ND	ND	ND	ND	0.3	0.3	0.62	0.53	0.96	1,310
	Pyrene	NS	ND	ND	ND	ND	ND	ND	ND	ND	0.7	ND	ND	ND	4.2	130
	Total Potentially	NS	<61	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003
	Carcinogenic PAHs	NG	100	50	40	50	4.5	7.5	120	F.C.	40	0.6	0.5	00	150	1
EGE 004	Benzene	NS NS	<100 230	50 64	49 NS	59 NS	45 NS	75 NS	130 NS	56 NS	48 NS	86	85 NS	90 NS	150 NS	*100
ESE-006	Chromium Phenol	NS NS	81	ND	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	2,630
	Naphthalene	NS NS	340	560	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	18
	Acenaphthylene	NS	<20	880	NS NS	NS	NS	NS NS	NS NS	NS NS	NS	NS	NS NS	NS NS	NS NS	130
	Fluorene	NS	ND	24	NS NS	NS NS	NS NS	NS NS	NS	NS NS	NS NS	NS NS	NS NS	NS	NS NS	323
	Phenanthrene	NS NS	ND ND	7.9	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	130
	Benzene	NS NS	320	65	NS NS	NS NS	60	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	130
ESE-007	Chromium	NS	45.7	96	47	26	11	9	24	22	5	ND	15	9	10	*100
ESE 007	Phenol	NS	11,000	240	490	1,550	890	5,000	4,300	6,400	2,100	4,000	3,200	830	540	2,630
	Naphthalene	NS	<40	2.4	12	21	14	25	13	14	15	19	17	35	21	18
	Acenaphthylene	NS	<40	130	210	320	110	ND	9.1	450	ND	ND	440	ND	ND	130
	Acenaphthene	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	ND	260
	Phenanthrene	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.69	ND	0.31	130
	Anthracene	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25	ND	0.22	1,310
	Fluorene	NS	<40	ND	ND	0.8	ND	ND	1	1.6	ND	2.1	ND	2.8	ND	323
	Total Potentially	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.29	ND	ND	0.003
	Carcinogenic PAHs															<u> </u>
	Benzene	NS	ND	74	30	48	9.8	37	25	33	30	38	35	34	10	1

#### Summary of Pre-Remedial Action Groundwater Data Eastern Site, Gainesville, Florida

Well	Parameters	IT Corp	Hunter/	WESTON		WESTON	WESTON	WESTON	WESTON	ROD						
Designation		1987	ESE 1989	June 1992	October	January	April 1993	July 1993	October	January	April 1994	July 1994	October	January	April 1995	Cleanup
		Results	Results	Results	1992	1993	Results	Results	1993	1994	Results	Results	1994	1995	Results	Goal
		$(\mu g/L)$ (1)	$(\mu g/L)$ (2)	$(\mu g/L)$ (3)	Results	Results	$(\mu g/L)$ (3)	$(\mu g/L)$ (3)	Results	Results	$(\mu g/L)$ (3)	$(\mu g/L)$ (3)	Results	Results	$(\mu g/L)$ (3)	(μg/L)
					$(\mu g/L)$ (3)	$(\mu g/L)$ (3)			$(\mu g/L)$ (3)	$(\mu g/L)$ (3)			$(\mu g/L)$ (3)	$(\mu g/L)$ (3)		1
YEST 4		NID	NID	MD	MD	NG	NG	NG	NG	NG	NG	MG	NG	NG	NG	
ITF-1 ++	Benzene	ND	ND	ND	ND	NS	1									
	Toluene	ND	ND	1.6	1.6	NS	**									
	Ethylbenzene	ND	ND	1.4	ND	NS	**									
	Xylenes	NS	NS	3.1	4.3	NS	**									
ITF-2 ++	Benzene	ND	ND	ND	NS	1										
	Toluene	ND	ND	ND	NS	**										
	Ethylbenzene	ND	ND	ND	NS	**										
	Xylenes	NS	NS	ND	NS	**										
ITF-3 ++	Benzene	ND	ND	2.8	3.5	3.6	2.4	2.6	3.5	2.7	NS	NS	NS	NS	NS	1
	Toluene	ND	ND	1	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	NS	**
	Ethylbenzene	ND	NS	NS	NS	NS	NS	**								
	Xylenes	NS	NS	1.1	1.6	1.4	1.3	3	2	2.1	NS	NS	NS	NS	NS	**

The data presented in this table represents only those compounds that have been detected above detection limit in groundwater samples from the indicated wells.

- (1) Please see Table 6 of Remedial Investigation Report, Cabot Carbon/Koppers Site Vol. 1 (IT Corp., 1987) for analytical detection limits of individual compounds.
- (2) Please see Appendix B of Remedial Investigation/Risk Assessment at the Cabot Carbon/Koppers Site, Gainesville, Florida Vol. 3 (Hunter/ESE, 1989).
- (3) Please see individual groundwater report for analytical detection limits of compounds for different sampling events.

All results are in µg/L.

 $\mu$ g/L = micrograms per liter.

MDL = laboratory method detection limit.

ND = not detected above the MDL.

NS = not sampled for indicated compound.

- \* The new EPA MCL for chromium is 100 μg/L. As per the ROD, this new MCL replaces the previous cleanup goals of 50 μg/L.
- \*\* Cleanup goal for indicated compound has not been established.
- + Analytical results from January 1994 are suspect. Past groundwater data review indicates sample bottles may have been mislabeled.
- ++ Sampled only for BTEX constituents.

## APPENDIX D

# SUMMARY OF POST-REMEDIAL ACTION GROUNDWATER DATA EASTERN SITE GAINESVILLE, FLORIDA

# Appendix D

				1						1							1	1							ROD
WELL																									cleanup
DESIGNATION	PARAMETERS	Mar-03	Jun-03	Sep-03	Dec-03	Mar-04	Jun-04	Sep-04	Dec-04	Mar-05	Jun-05	Sep-05	Dec-05	Mar-06	Jun-06	Sep-06	Dec-06	Mar-07	Jun-07	Sep-07	Dec-07	Mar-08	Jun-08	Sep-08	goal
				•				•				•				•									
ITW-1	Chromium	ND 0.67	ND	ND 0.70	ND 0.6	ND 0.10	ND 0.50	ND 0.47	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND 1	ND	ND	ND	*100
ITW-1	Acenaphthene Anthracene	0.67	ND ND	0.72 ND	0.6 ND	0.19	0.50 0.079	0.47	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND	ND ND	ND ND	ND ND	260
ITW-1 ITW-1		ND 0.0	0.54		0.49	ND 0.32	0.079	0.044 0.37	ND ND	ND ND	ND ND	ND	ND ND		ND ND	ND ND	ND ND	ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	1,310 323
ITW-1	Fluorene Naphthalene	0.9 ND	ND	0.81 ND	ND	ND	ND	1.60	ND ND	ND	ND	ND	ND	ND ND	ND	ND	ND	ND	ND	ND	ND ND	ND	ND	ND	18
ITW-1	Phenanthrene	ND	ND	ND	ND	ND	0.045	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND ND	ND	ND	ND	130
ITW-1	1- Methylnaphthalene	ND	ND	ND	ND	ND	0.52	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ITW-1	2- Methylnaphthalene	ND	ND	ND	ND	ND	0.66	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ITW-2	Benzene	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
ITW-2	Total Xylenes	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ITW-2	Acenaphthene	ND	0.66	1.3	0.8	0.12	67	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	260
ITW-2	Anthracene	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,310
ITW-2	Fluoranthene	ND	ND	ND	ND	ND	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ITW-2	Fluorene	0.98	1	1.6	1.3	0.61	52	0.19	ND	0.56	ND	0.52	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	323
ITW-2	Naphthalene	ND	ND	ND	ND	ND	28	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18
ITW-2	Phenanthrene	ND	ND	ND	ND	ND	42	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	130
ITW-2	Pyrene	ND	ND	ND	ND	ND	4.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	130
ITW-2	2- Methylnaphthalene	ND	ND	ND	ND	ND	58	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ITW-2	Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND	ND	ND	ND	ND	*100
ITW-13	Benzene	82	85	55	120	61	72	ND	63	ND	ND	ND	58	64	88	81	87	81	88	81	74	100	73	86	1
ITW-13	Toluene	460	430	250	350	250	300	350	230	190	170	170	270	280	280	310	290	310	440	390	280	420	320	330	*
ITW-13	Ethylbenzene	320	300	220	370	240	240	260	250	190	230	240	260	260	280	280	300	270	270	260	270	350	320	290	*
ITW-13	Total Xylenes	208 ND	174	116	255 ND	154	135 ND	144	150	120	150	140	160	160	190	190	190	180	180	170	160	210 ND	200 ND	180	260
ITW-13 ITW-13	Acenaphthene Acenaphthylene	ND 56	0.52 24	ND ND	ND ND	0.17 13	ND 1.2	ND 12	ND ND	ND ND	ND ND	ND 9.8	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	260 130
ITW-13	Anthracene	ND	ND	ND	ND	0.0084	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,310
ITW-13	Benzo (a) anthracene	ND	ND	ND	ND	0.012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	PAH
ITW-13	Benzo (b) fluoranthene	ND	ND	ND	ND	0.031	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	PAH
ITW-13	Fluorene	0.56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	323
ITW-13	Naphthalene	84	55	80	35	28	36	34	ND	24	23	21	31	54	48	45	26	ND	45	71	41	53	38	50	18
ITW-13	Phenanthrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	130
	Total Potentially																								
ITW-13	Carcinogenic PAHs	ND	ND	ND	ND	0.043	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003
ITW-13	1- Methylnaphthalene	2.5	4.3	ND	3	1.2	ND	ND	ND	ND	ND	ND	ND	2.7	4.6	3.3	ND	ND	5.8	ND	2.3	3.3	ND	ND	*
ITW-13	2- Methylnaphthalene	5.8	5.5	ND	3.4	2.4	1.5	0.99	ND	ND	ND	1.6	ND	4.1	3.9	3.7	ND	ND	3.4	ND	2.4	3.9	ND	ND	*
ITW-13	Phenol	9000	4100	2000	5800	7700	4200	10000	5300	2400	ND	940	5200	6200	13000	8800	4600	1500	3100	6100	6300	5900	8300	8100	2630
ITW-13	2,4- Dimethylphenol	3000	3300	2600 NO	2000	2800	2200	2700	2900	1800	990	2600	2200	1800	3100	2600	1900	830 NO	1800	2200	2000	2300	2400	3300	*
ITW-13 ITW-13	2- Methylphenol	NS NS	NS NS	NS NS	NS NS	NS	NS NS	NS NS	NS NS	1800 6000	440 950	1700	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS	NS NS	NS NS	NS NS	NS NS	*
ITW-13	3&4- Methylphenol Arsenic	ND	ND	ND	ND	NS ND	11	ND	ND	ND	ND	2700 ND	ND	10	ND	ND	ND	ND	ND	NS ND	ND	12	10	ND	50
ITW-13	Chromium	22	ND	ND ND	ND	12	ND	ND ND	ND	14	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	ND ND	ND	ND	ND	*100
ITW-14	Benzene	ND	ND	30	45	31	43	ND	33	26	ND	ND	ND	25	31	57	47	26	ND	ND	39	46	28	32	1
ITW-14	Toluene	490	360	590	880	540	730	300	630	440	470	380	350	440	420	790	650	230	670	500	580	700	430	380	*
ITW-14	Ethylbenzene	130	120	120	210	140	140	ND	150	110	130	110	94	120	120	210	150	97	200	120	160	160	120	110	*
ITW-14	Total Xylenes	468	345	395	624	389	444	ND	470	320	440	330	270	320	350	620	470	280	640	380	470	480	380	320	*
ITW-14	Acenaphthene	170	66	34	36	240	77	4.8	60	ND	ND	ND	ND	ND	ND	23	250	ND	ND	ND	ND	17	ND	ND	260
ITW-14	Acenaphthylene	1000	440	ND	76	1000	370	83	ND	ND	ND	420	ND	ND	ND	480	610	320	240	**4900	ND	380	260	560	130
ITW-14	Anthracene	44	12	ND	9.1	76	0.30	2.7	ND	ND	ND	26.0	3.2	3.0	3.0	5.1	ND	ND	ND	ND	ND	ND	ND	ND	1310
ITW-14	Benzo (a) anthracene	180	51	ND	3.8	ND	ND	ND	ND	ND	ND	ND	2.8	3.4	1.0	2.2	ND	ND	3.4	**100	0.2	ND	ND	ND	PAH
ITW-14	Benzo (a) pyrene	7.3	1.1	ND	ND	17	ND	ND	ND	ND	ND	ND	4.6	5.7	1.8	3.7	ND	ND	0.57	**45	ND	5	ND	12	PAH
ITW-14	Benzo (b) fluoranthene	60	4.8	ND	ND	120	75	ND	ND	ND	ND	ND	ND	ND	1.3	23	120	ND	27	**1300	1.2	15	13	31	PAH
ITW-14	Benzo (g,h,i) perylene	ND	ND	ND	ND	8.1	3.8	ND	ND	ND	ND	ND	11.0	10.0	2.3	12.0	ND	ND	3.6	**300	ND	ND	ND	ND	*
ITW-14	Benzo (k) flouranthene	ND	ND	ND	ND 4	24 ND	16	ND	ND	ND	ND	ND	9.5	11 ND	2.6	9.5	ND	ND	8.4	**320	ND 4	ND	ND 46	ND	PAH
ITW-14	Chrysene	260	56	ND	4	ND	28	ND	ND	900	ND	170	5.7	ND	4.7	14.0	ND	ND	41	**1500	4	ND	16	79	PAH
ITW-14	Dibenzo (a,h)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	3.8	3.6	6.2	ND	ND	ND	**120	ND	ND	ND	ND	PAH
ITW-14 ITW-14	anthracene Indeno(1,2,3-cd)pyrene	ND ND	ND ND	ND ND	ND ND	34	24	ND ND	ND ND	ND ND	ND ND	ND	0.7	0.73	ND	3	ND ND	ND ND	4	**250	ND ND	ND ND	ND ND	ND ND	PAH
ITW-14 ITW-14	Fluoranthene	120	52	ND	17	ND	260	ND ND	ND	ND	ND	ND	140	180	60	ND	500	ND	190	**10000	19	150	79	300	*
ITW-14	Fluorene	230	99	ND ND	20	350	260	20	ND	ND	ND	ND	ND	ND	52.0	67.0	140	ND	61	**2400	ND	71	36	79	323
11 77-14	i iuolelle	230	99	טאו	20	550	200	۷2	שואו	טויו	טויו	טויו	טאו	טאו	JZ.U	07.0	140	טאו	υı	2400	טאו	7 1	JU	13	JZJ

# Appendix D

			ı													1	1								ROD
WELL																									cleanup
DESIGNATION	PARAMETERS	Mar-03	Jun-03	Sep-03	Dec-03	Mar-04	Jun-04	Sep-04	Dec-04	Mar-05	Jun-05	Sep-05	Dec-05	Mar-06	Jun-06	Sep-06	Dec-06	Mar-07	Jun-07	Sep-07	Dec-07	Mar-08	Jun-08	Sep-08	goal
				•				•				•				•				•				•	
ITW-14	Naphthalene	520	310	460	200	930	1000	170	530	ND	ND	400	ND	ND	210	230	250	260	250	**3000	120	200	260	250	18
ITW-14	Phenanthrene	190	43	42 ND	69	480	240	20 ND	120	210	ND	140	ND	ND	11	20	ND	ND	30	**1400	ND	29	15	ND	130
ITW-14	Pyrene	7.3	11	ND	13	ND	24	ND	ND	ND	ND	ND 470	23	23	8.8	12	260	ND	ND	ND	ND	22	ND 450	ND	130
ITW-14	1- Methylnaphthalene	300	130	300	140	410	230	41	350	ND	ND ND(1)	170	ND	ND	110	150	310	83	160	**4300	36	170	150	180	*
ITW-14	2- Methylnaphthalene	180	150	220	200	1200	690	60	470	ND	ND(J)	250	ND	ND	91	100	200	97	120	**4200	60	80	130	190	
ITW-14	Total Potentially Carcinogenic PAHs	507.3	112.9	ND	7.8	195	143	0	0	900	0	170	26.6	24.6	15	61.3	120	0	84.07	0	5.1	20	29	122	0.003
ITW-14	Phenol	ND	140	ND ND	280	ND	1100	ND	750	ND	290	ND	ND	ND	<b>15</b> 220	640	520	ND	ND	ND	ND	ND	ND	ND	2,630
ITW-14	2,4- Dimethylphenol	1800	1900	4700	2000	8400	ND	2600	4600	1800	4400	1900	2700	3000	4300	4800	4900	11000	3900	1700	2600	3900	6100	4000	*
ITW-14	2- Methylphenol	NS	NS	NS NS	NS	NS	NS	NS NS	NS	1800	2200	640	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	*
ITW-14	3&4- Methylphenol	NS	3500	2700	1000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	*							
ITW-14	Arsenic	21	16	14	15	12	ND	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
ITW-14	Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*100								
WMW-17E	Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1								
WMW-17E	Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	*								
WMW-17E	Total Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	ND	ND	*								
WMW-17E	Acenaphthene	ND	ND	0.37	0.26	ND	0.30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	260
WMW-17E	Acenaphthylene	ND	ND	ND	ND	0.14	0.48	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	2.5	ND	ND	5.7	ND	ND	130
WMW-17E	Anthracene	ND	ND	ND	ND	ND	0.010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,310
WMW-17E	Fluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	323								
WMW-17E	Naphthalene	ND	ND	ND	ND	ND	0.40	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	2.5	1.6	18
WMW-17E	Phenanthrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	130								
WMW-17E	Pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	130								
	Total Potentially																								
WMW-17E	Carcinogenic PAHs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003								
WMW-17E	1- Methylnaphthalene	ND	ND	ND	ND	ND	0.089	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	2	ND	*
WMW-17E	2- Methylnaphthalene	ND	ND	ND	ND	ND	0.32	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
WMW-17E	2,4- Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND									
WMW-17E WMW-17E	PCP Phenol	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	0.1 2,630								
WMW-17E	Chromium	ND	ND	ND ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	11	55	ND	ND	ND	ND	ND	ND	ND	*100
WMW-18E	Benzene	ND	ND	ND	ND	ND	ND	ND ND	ND	ND	ND	ND	ND	ND ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
WMW-18E	Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*								
WMW-18E	Total Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*								
WMW-18E	Acenaphthene	ND	ND	ND	ND	ND	0.056	0.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	260
WMW-18E	Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	130								
WMW-18E	Benzo(b)flouranthene	ND	ND	ND	ND	ND	0.0047	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	PAH
WMW-18E	Fluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	323								
WMW-18E	Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18								
WMW-18E	Phenanthrene	ND	ND	ND	ND	ND	0.029	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	130
WMW-18E	Pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	130								
	Total Potentially																								
WMW-18E	Carcinogenic PAHs	ND	ND	ND	ND	ND	0.0047	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003
WMW-18E	1- Methylnaphthalene	ND	ND	ND	ND	ND	0.14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
WMW-18E	2- Methylnaphthalene	ND	ND	ND	ND	ND	0.28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
WMW-18E	PCP	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1								
WMW-18E	2,4- Dimethylphenol	ND 66	ND	14	ND 12	ND 12	ND 24	ND	ND 10	ND 47	ND 12	ND 10	ND	ND	ND 70	ND 470	ND 220	ND	ND	ND	ND	ND	ND	ND	*400
WMW-18E WMW-18E	Chromium Arsenic	66 ND	ND ND	12 ND	12 ND	12 ND	21 ND	ND ND	10 ND	17 ND	13 ND	10 ND	17 ND	73 ND	70 ND	170 14	220 20	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	*100
																ND									50
ESE-002 ESE-002	Benzene Ethylbenzene	ND ND	ND ND	ND ND	2 ND	ND ND	ND ND	ND ND	ND ND	2.3 ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	! *
ESE-002	Total Xylenes	2	1	ND	3.3	2	ND ND	ND ND	3.1	5.2	ND	ND ND	6.8	ND ND	ND	ND ND	ND	ND	ND	ND	ND	ND ND	ND	ND ND	*
ESE-002	Acenaphthene	4.8	18	10	16	64	0.50	35	18	41	ND	24	5	2.7	ND	3	16	ND	2	28	ND	ND	20	9.6	260
ESE-002	Acenaphthylene	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	130
ESE-002	Anthracene	0.55	1.8	0.91	1.0	1.3	0.015	1.1	2.0	ND	ND	ND	0.7	ND	ND	ND	ND	ND	ND	5.7	2.8	ND	2.3	ND	1,310
ESE-002	Benzo(a)anthracene	ND	ND	ND	ND	0.034	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23	0.19	ND	ND	ND	PAH
ESE-002	Chrysene	ND	ND	ND	ND	0.057	ND	0.021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	PAH
ESE-002	Fluoranthene	3.8	9.4	6.2	5.7	9.8	ND	7.3	8.2	ND	ND	8.5	5.6	4.7	5.3	6.6	ND	4.7	2.6	ND	18	9	9.1	6.1	*
ESE-002	Fluorene	4.9	12.0	8.4	14	54	1.1	30.0	12.0	35.0	ND	22	4.5	3.6	7.8	2.1	3.8	2.3	1.5	34	ND	ND	11	ND	323
		-							-				-		-		-	-	-						

# Appendix D

# Summary of Recent Post-Remedial Action Groundwater Data Eastern Site, Gainesville, Florida

																									ROD
WELL																									cleanup
DESIGNATION	PARAMETERS	Mar-03	Jun-03	Sep-03	Dec-03	Mar-04	Jun-04	Sep-04	Dec-04	Mar-05	Jun-05	Sep-05	Dec-05	Mar-06	Jun-06	Sep-06	Dec-06	Mar-07	Jun-07	Sep-07	Dec-07	Mar-08	Jun-08	Sep-08	goal
ESE-002	Naphthalene	1.8	5.6	3	10	65	ND	ND	6.2	ND	ND	ND	3	ND	ND	ND	ND	ND	0.93	ND	ND	ND	2.6	ND	18
ESE-002	Phenanthrene	4.7	34.0	7.5	18.0	38.0	0.035	37	24	36	11	15	4	3.5	4.8	ND	ND	ND	ND	10	ND	ND	21	ND	130
ESE-002	Pyrene	1.8	3.3	4.1	3.1	3.1	ND	ND	4.4	ND	ND	ND	3.6	2.5	2.5	2.7	2.6	1.6	1.5	4.8	11	3.9	4.2	4.1	130
ESE-002	1- Methylnaphthalene	1.1	3.4	2.3	3.9	30	0.22	ND	4.1	ND	ND	ND	1.6	ND	3.4	ND	7.5	ND	ND	ND	ND	ND	2.4	ND	*
ESE-002	2-Methylnaphthalene	5.1	14.0	3.7	8.2	110.0	1.3	6.0	4.0	ND	ND	48	15	ND	14	4.7	14	ND	ND	ND	ND	ND	11	3.1	*
	Total Potentially																								
ESE-002	Carcinogenic PAHs	ND	ND	ND	ND	0.091	ND	0.021	ND	ND	ND	ND	0.23	0.19	0	ND	ND	0.003							
ESE-002	Phenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,630
ESE-002	2,4- Dimethylphenol	12	ND	ND	12	ND	ND	ND	ND	13	ND	ND	22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ESE-002	Chromium	ND	ND	ND	ND	ND	ND	ND	12	ND	ND	ND	ND	ND	10	ND	21	ND	*100						
ESE-004	Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
ESE-004	Ethylbenzene	ND	2.2	1.3	2.2	1.7	1.6	ND	2.0	1.3	1.8	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ESE-004	Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	130
ESE-004	Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,310
ESE-004	Fluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	323
ESE-004	Naphthalene	ND	ND	ND	0.38	ND	0.48	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18
ESE-004	Phenanthrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	130
ESE-004	2,4- Dimethylphenol	ND	ND	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ESE-004	Phenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,630
ESE-004	Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	10	ND	*100						
ESE-007	Benzene	2.7	2.6	1.8	1.8	1.2	8	ND	ND	2.3	3.1	1.8	ND	1.1	4.7	3	11	9.5	20	14	12	9.3	11	6.8	1
ESE-007	Toluene	9.5	26	6.8	3.8	3.3	78	62	25	22	33	7.8	43	11	26	2.2	190	210	290	190	160	120	170	7.1	*
ESE-007	Ethylbenzene	42	8.2	6.3	4.9	4	24	ND	10	7.7	11	6	11	3.9	13	1.5	29	31	56	37	34	31	40	14	*
ESE-007	Total Xylenes	10.4	9.4	5.3	4.9	4	20.7	ND	ND	7.6	10	5.6	10	3.9	14	4.5	31	30	61	44	39	34	44	17	*
ESE-007	Acenaphthene	ND	ND	ND	ND	ND	ND	0.14	ND	ND	ND(J)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	260
ESE-007	Acenaphthylene	ND	1.5	ND	ND	ND	1.2	1.8	ND	ND	1.3(J)	ND	ND	ND	ND	1.5	ND	130							
ESE-007	Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,310
ESE-007	Fluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	323
ESE-007	Naphthalene	2.6	2.2	3.8	2.3	1.5	4.2	3.5	5.2	1.9	2.3	2.3	ND	ND	1.6	1.6	ND	4.5	10	12	6.6	3.7	7.5	2.1	18
ESE-007	Phenanthrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	130
ESE-007	1-Methylnaphthalene	ND	ND	ND	0.58	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.93	2.5	ND	ND	ND	1.9	ND	*
ESE-007	2-Methylnaphthalene	ND	ND	ND	0.54	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	1.4	ND	*
	Total Potentially			<u> </u>												l				l					
ESE-007	Carcinogenic PAHs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003
ESE-007	Phenol	680	390	52	28	33	650	1000	290	40	330	130	490	230	270	58	1400	3400	1500	2000	1400	390	2700	ND	2,630
ESE-007	2,4- Dimethylphenol	ND	80	62	40	41	280	210	ND	35	99	64	95	56	140	36	330	600	520	680	410	230	500	220	*
ESE-007	2- Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	15	61	36	67	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	*
ESE-007	3&4- Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	79	320	170	360	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	*
ESE-007	Arsenic	ND	ND 100	ND 1000	ND 1000	ND	ND 400	ND 510	ND	ND	ND	ND	ND	ND	14	ND 150	20	11	ND	ND	ND	ND	ND	ND	50
ESE-007	Chromium	22	190	1900	1900	87	490	510	240	63	37	24	11	11	110	150	230	ND	*100						

All results are in ug/l (micrograms per liter).

ND = Not detected above the MDL.

PAH = Included as Total Potentially Carcinogenic PAHs.

Bolded values meet or exceed indicated ROD cleanup goals.

NS = Not sampled for indicated compound.

<sup>\* =</sup> No ROD Cleanup Goal for compound. Tested as part of complete scan for tests 8021, 8270 or 8310.

Y = Target compounds were quantified from a secondary dilution due to analyte abundance in the sample.

P = Identification of target analytes using LC methodology is based on retention time. Discretion should be employed during data review and interpretation of results for this target compound.

<sup>\*\* =</sup> Free-phase product was observed in the groundwater sample collected at ITW-14 during the September 2007 sampling event.