

Historical Soil Data

Sample Location ID Date of Sampling Samplers Data Source Sampling Interval (ft bgs) Units		FR-SB74 1996 ERM Upchurch '96 3-4	UST-SB89A 1996 ERM Upchurch '96 4-6	RET-SB92 1996 ERM Upchurch '96 6-6.5	RV-SB94B 1996 ERM Upchurch '96 4-6	SEA-SB97A 1996 ERM Upchurch '96 4	HOLE 1C 1982 Univ. FI Zoltek '82									0-5	5-8	10-14	14-15	15-19	19-20	25-35	30-34	30-35
Parameter	Units																							
Pine Tar Indicators	ppm																							
a-Pinene	ppm	-	-	-	-	-	66.24	285.5	224.4	26.48	73.51	45.7	8.56	5.8	ND									
Camphene	ppm	-	-	-	-	-	85.5	274	173.6	33.8	69.69	40.1	9.1	5.9	ND									
p-Cymene	ppm	-	-	-	-	-	116.4	207	186.2	30.02	71.16	39.46	11.3	9.52	0.2									
Limonene	ppm	-	-	-	-	-	454.7	919.5	807.3	116.9	332.6	187.5	34.04	29.24	0.8									
gamma terpinene	ppm	-	-	-	-	-	9.1	37.3	ND	8.3	8.3	5.2	1.9	ND	ND									
fenchone	ppm	-	-	-	-	-	65	90.6	60.9	0.4	28.6	15.3	ND	6	0.7									
d-camphor	ppm	-	-	-	-	-	51.3	78.5	61.7	2.8	27.2	15	ND	4.8	ND									
2,4-Dimethylphenol	ppm	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	-									
2,5&3,4 dimethyl phenol	ppm	-	-	-	-	-	124.1	179.6	124.7	4.9	81.1	47.1	3.6	17.9	0.3									
2 ally phenol	ppm	-	-	-	-	-	*	9.5	*	ND	3.6	4.3	0.4	0.6	ND									
2-methylphenol	ppm	ND	ND	ND	ND	ND	44.5	54.1	27.6	2.6	21.9	11.3	3.6	6.4	1.1									
4-methylphenol	ppm	ND	ND	ND	13	ND	-	-	-	-	-	-	-	-	-									
3,4-methylphenol	ppm	-	-	-	-	-	97.3	101.3	52.1	ND	46	23.1	7.1	13.5	2.9									
1-methylnaphthalene	ppm	-	-	-	-	-	14.2	18	12.9	4.5	5.3	3	1.1	0.8	ND									
2-methylnaphthalene	ppm	-	-	-	-	-	10.6	14.4	10	3.3	4.2	2.4	ND	0.9	ND									
4,6-Dinitro-o-cresol	ppm	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	-									
2,4-Dinitrophenol	ppm	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	-									
Pentachlorophenol	ppm	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	-									
Phenol (acid extractable)	ppm	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	-									

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Sample Location ID Date of Sampling Samplers Data Source Sampling Interval (ft bgs) Units	HOLE 2 1982 Univ. FI Zoltek '82						HOLE 3 1982 Univ. FI Zoltek '82	HOLE 4A 1982 Univ. FI Zoltek '82			HOLE 5A 1982 Univ. FI Zoltek '82							HOLE 6 1982 Univ. FI Zoltek '82									HOLE 7 1982 Univ. FI Zoltek '82				
	0-5	5-10	10-15	15-20	20-25	25-30	20-25	5-7	8-10	20-21.5	0-5	5-10	10-15	15-20	20-25	25-30	30	0-5	5-10	10-15	15-20	19-20	20-25	24	25-30	29.5-30	0.5-2.5	10-12.5	37.5-40		
Parameter																															
Total Metals	ppm																														
Arsenic	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Chromium	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Copper	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Volatile Organic Compounds (VOCs)	ppm																														
Benzene	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Toluene	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Ethyl Benzene	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Total Xylenes	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Styrene	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Chloroform	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Methylene Chloride	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Tetrachloroethylene	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
trans-1,2-Dichloroethylene	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1,1,1-Trichloroethane	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Trichloroethylene	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Vinyl Chloride	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Total Volatile Organics	ppm																														
Semi-Volatile Organic Compounds (SVOCs)	ppm																														
Acenaphthene	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Acenaphthylene	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Anthracene	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Benzidine	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Benzo(a)Anthracene	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Benzo(a)pyrene	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Benzo(k)flouranthene	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Benzo(ghi)perylene	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Bis(2-ethylhexyl)phthalate	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Butyl benzyphthalate	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Chrysene	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Diethylphthalate	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Di-n-butylphthalate	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Fluoranthene	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Fluorene	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Indeno(1,2,3-cd)pyrene	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Isophorone	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1-methylnaphthalene	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2-methylnaphthalene	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Naphthalene	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
N-nitrosodiphenylamine	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Phenanthrene	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Pyrene	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1,2,4-Trichlorobenzene	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Benzo(b)flouranthene	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Dibenzo(a,h)anthracene	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2-chloronaphthalene	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Di-n-octyphthalate	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Total Semivolatile Organic	ppm																														

Historical Soil Data

Sample Location ID Date of Sampling Samplers Data Source Sampling Interval (ft bgs)		HOLE 2 1982 Univ. FI Zoltek '82						HOLE 3 1982 Univ. FI Zoltek '82	HOLE 4A 1982 Univ. FI Zoltek '82			HOLE 5A 1982 Univ. FI Zoltek '82							HOLE 6 1982 Univ. FI Zoltek '82									HOLE 7 1982 Univ. FI Zoltek '82		
Units		0-5	5-10	10-15	15-20	20-25	25-30	20-25	5-7	8-10	20-21.5	0-5	5-10	10-15	15-20	20-25	25-30	30	0-5	5-10	10-15	15-20	19-20	20-25	24	25-30	29.5-30	0.5-2.5	10-12.5	37.5-40
Parameter																														
Pine Tar Indicators	ppm																													
a-Pinene	ppm	5.1	15.5	0.42	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13.55	22.6	6.2	1.1	2.89	8.83	3.31	1.29	0.1	ND	ND	ND
Camphene	ppm	4.45	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	88.5	117.3	37.25	6.17	3.5	7.9	5.62	1.3	0.14	ND	ND	ND
p-Cymene	ppm	28.84	15.7	0.391	ND	0.3	ND	ND	ND	0.4	ND	ND	ND	ND	7.6	ND	0.4	ND	270	301.2	150.8	29	9.3	25.2	10.05	5.72	0.2	0.3	ND	0.6
Limonene	ppm	18.82	10.5	0.24	ND	1	0.4	*	0.1	4.8	ND	0.6	ND	ND	1.7	ND	ND	0.2	52.5	663.1	249.8	46.6	28.7	67.7	30.46	14.8	1.15	2.9	ND	3.3
gamma terpinene	ppm	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
fenchone	ppm	ND	15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13.1	ND	0.5	ND	35.2	0.6	19.3	4.2	3.2	0.8	0.1	4.1	0.3	ND	ND	ND
d-camphor	ppm	1.1	17.4	ND	0.9	0.9	1.2	ND	ND	1.5	ND	ND	ND	ND	31.7	*	1.5	0.1	67.2	115.2	35.6	7.7	4.1	13.9	6.4	3.2	0.5	ND	ND	4.4
2,4-Dimethylphenol	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,5&3,4 dimethyl phenol	ppm	138.2	62.6	0.4	0.8	0.7	3.5	ND	ND	ND	ND	ND	ND	0.4	31.2	0.9	0.3	0.6	19.9	234.1	88.8	21.4	0.4	9.6	2.1	0.1	0.2	ND	*	ND
2 ally phenol	ppm	4.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*	ND	0.2	ND	6.9	29.4	45.8	*	2.1	10.3	ND	2.6	0.1	ND	ND	ND
2-methylphenol	ppm	177.9	34.1	5.6	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	12.2	0.7	0.8	0.5	ND	21	7.5	3.1	3.6	25.1	11.8	7.1	0.5	ND	ND	ND
4-methylphenol	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3,4-methylphenol	ppm	4.2	183.2	ND	ND	ND	9.4	ND	ND	ND	ND	ND	ND	ND	24	ND	2.1	ND	ND	ND	16.1	6.6	8.1	49	2	6.8	1.2	ND	ND	ND
1-methylnaphthalene	ppm	1.8	0.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8	ND	ND	ND	43.2	73.5	26.2	5.4	3.4	7.9	3.5	1.9	0.1	ND	ND	ND
2-methylnaphthalene	ppm	1.6	0.9	6.6	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	81.3	144.8	53	8.8	6.5	15.5	6.4	3.6	0.2	ND	ND	ND
4,6-Dinitro-o-cresol	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dinitrophenol	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorophenol	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenol (acid extractable)	ppm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
-: not analyzed
ND: not detected above reporting limit
ppm = parts per million
*: concentration needs to be calculated manually
Detection limits were not readily available in several of the source documents used to compile this table.
DMS: Drilling Mud Samples

Data Sources:
IT Corporation, 1987 (May). Remedial Investigation Report. Cabot Carbon/Koppers Company Site, Gainesville, Florida. ("IT RI '87")
Weston, 1992 (August). Analytical Results from Sampling in the Suspect Lagoon Area. Eastern Portion of the Cabot Carbon/Koppers Superfund Site, Gainesville, Florida. ("Weston '92")
Hunter/ESE, 1989 (September). Remedial Investigation/Risk Assessment at the Cabot Carbon/Koppers Site, Gainesville, Florida. Volumes I, II and III. ("RI/RA '89")
Upchurch (ERM-South, Inc.), 1996 (December). Summary of Findings and Opinions With Respect to the Pending Litigation Cabot Corporation v. Beazer East, Inc., et al. Gainesville, Florida. ("Upchurch '96")
Zoltek, John Jr., John J McCreary, et al. 1982 (April). Toxic Wastes & Phenolic Groundwater in the Upper Hogtown Creek Region. Department of Environmental Engineering Sciences, University of Florida, Gainesville. ("Zoltek '82")

A.2

Pre-remedy (Pre-1995) Groundwater Data Summary

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

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-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.

µg/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.

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

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-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 Carcinogenic PAHs	ND	NS	0.8	ND	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	0.003
ITW-8	Benzene	25	NS	14	12	NS	NS	NS	NS	NS	NS	16	NS	NS	NS	1
	Chromium	80	NS	7	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	*100
	Arsenic	1	NS	ND	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	50
	Phenol	890	NS	720	NS	NS	NS	NS	NS	NS	NS	350	NS	NS	NS	2,630
	Naphthalene	48	NS	15	NS	NS	NS	NS	NS	NS	NS	8.2	NS	NS	NS	18
	Acenaphthylene	ND	NS	73	NS	NS	NS	NS	NS	NS	NS	100	NS	NS	NS	130
	Acenaphthene	ND	ND	ND	NS	NS	NS	NS	NS	NS	NS	22	NS	NS	NS	260
	Fluorene	ND	ND	ND	NS	NS	NS	NS	NS	NS	NS	1.2	NS	NS	NS	323
ITW-9	Benzene	40	NS	ND	NS	NS	NS	NS	47	NS	NS	31	NS	NS	NS	1
	Chromium	170	NS	14	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	*100
	Arsenic	4	NS	ND	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	50
	Naphthalene	ND	ND	ND	NS	NS	NS	NS	NS	NS	NS	30	NS	NS	NS	18
	Acenaphthylene	ND	ND	ND	NS	NS	NS	NS	NS	NS	NS	120	NS	NS	NS	130
	Acenaphthene	ND	ND	ND	NS	NS	NS	NS	NS	NS	NS	54	NS	NS	NS	260
	Fluorene	ND	ND	ND	NS	NS	NS	NS	NS	NS	NS	3.6	NS	NS	NS	323
	Phenanthrene	ND	ND	ND	NS	NS	NS	NS	NS	NS	NS	0.5	NS	NS	NS	130
	Phenol	76	NS	180	NS	NS	NS	NS	NS	NS	NS	190	NS	NS	NS	2,630
	Benzene	<10	NS	31	NS	NS	NS	NS	22	NS	NS	ND	NS	NS	NS	1

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

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-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
	Pyrene	ND	NS	ND	0.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	130
	Total Potentially Carcinogenic PAHs	ND	NS	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003
	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
ITW-12	Phenol	ND	NS	ND	ND	ND	ND	ND	ND	8,500	ND	ND	ND	ND	ND	2,630
	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 Carcinogenic PAHs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.47	ND	ND	0.003
ITW-13	Benzene	100	ND	130	140	130	82	49	65	55	75	64	59	62	66	1

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

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-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
ITW-15	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
	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
	Acenaphthylene	ND	NS	120	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	130
ITW-16	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
ITW-17	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
	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

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

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

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

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

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)
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 Carcinogenic PAHs	NS	<61	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003
ESE-006	Benzene	NS	<100	50	49	59	45	75	130	56	48	86	85	90	150	1
	Chromium	NS	230	64	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	*100
	Phenol	NS	81	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2,630
	Naphthalene	NS	340	560	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	130
	Fluorene	NS	ND	24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	323
	Phenanthrene	NS	ND	7.9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	130
	Benzene	NS	320	65	NS	NS	60	NS	NS	NS	NS	NS	NS	NS	NS	1
ESE-007	Chromium	NS	45.7	96	47	26	11	9	24	22	5	ND	15	9	10	*100
	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 Carcinogenic PAHs	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.29	ND	ND	0.003
	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 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)
ITF-1 ++	Benzene	ND	ND	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1
	Toluene	ND	ND	1.6	1.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**
	Ethylbenzene	ND	ND	1.4	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**
	Xylenes	NS	NS	3.1	4.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**
ITF-2 ++	Benzene	ND	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1
	Toluene	ND	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**
	Ethylbenzene	ND	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**
	Xylenes	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	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	ND	ND	ND	ND	ND	ND	ND	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.

µg/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.

A.3

1996 Groundwater Investigation Results

Date Collected	Client Sample ID	Matrix	Parameter Type	Parameter	Units	PRL	Concentration	PDF Page
8/24/1996	CCS-GW GP9-12	Groundwater	Organics	2,4,6-Tribromophenol - Surrogate	%		65	48
8/24/1996	CCS-GW GP9-12	Groundwater	Organics	2,4-Dimethylphenol	ug/L	50	1700	48
8/24/1996	CCS-GW GP9-12	Groundwater	Organics	2-Fluorophenol - Surrogate	%		42	48
8/24/1996	CCS-GW GP9-12	Groundwater	Organics	Pentachlorophenol	ug/L	50	ND	48
8/24/1996	CCS-GW GP9-12	Groundwater	Organics	Phenol	ug/L	50	750	48
8/24/1996	CCS-GW GP9-12	Groundwater	Polynuclear Aromatic Hydrocarbons	Naphthalene	ug/L	2.8	ND	48
8/24/1996	CCS-GW GP9-12	Groundwater	Polynuclear Aromatic Hydrocarbons	Acenaphthylene	ug/L	5.1	ND	48
8/24/1996	CCS-GW GP9-12	Groundwater	Polynuclear Aromatic Hydrocarbons	1-Methylnaphthalene	ug/L	5.7	12	48
8/24/1996	CCS-GW GP9-12	Groundwater	Polynuclear Aromatic Hydrocarbons	2-Methylnaphthalene	ug/L	2.8	ND	48
8/24/1996	CCS-GW GP9-12	Groundwater	Polynuclear Aromatic Hydrocarbons	Acenaphthene	ug/L	2.6	ND	48
8/24/1996	CCS-GW GP9-12	Groundwater	Polynuclear Aromatic Hydrocarbons	Fluorene	ug/L	0.7	2.6	48
8/24/1996	CCS-GW GP9-12	Groundwater	Polynuclear Aromatic Hydrocarbons	Phenanthrene	ug/L	0.18	0.39	48
8/24/1996	CCS-GW GP9-12	Groundwater	Polynuclear Aromatic Hydrocarbons	Anthracene	ug/L	0.13	0.18	48
8/24/1996	CCS-GW GP9-12	Groundwater	Polynuclear Aromatic Hydrocarbons	Fluoranthene	ug/L	0.26	0.85	48
8/24/1996	CCS-GW GP9-12	Groundwater	Polynuclear Aromatic Hydrocarbons	Pyrene	ug/L	0.14	0.21	48
8/24/1996	CCS-GW GP9-12	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(a)anthracene	ug/L	0.13	ND	48
8/24/1996	CCS-GW GP9-12	Groundwater	Polynuclear Aromatic Hydrocarbons	Chrysene	ug/L	0.19	ND	48
8/24/1996	CCS-GW GP9-12	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(b)fluoranthene	ug/L	0.21	ND	48
8/24/1996	CCS-GW GP9-12	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(k)fluoranthene	ug/L	0.05	ND	48
8/24/1996	CCS-GW GP9-12	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(a)pyrene	ug/L	0.2	ND	48
8/24/1996	CCS-GW GP9-12	Groundwater	Polynuclear Aromatic Hydrocarbons	Dibenzo(a,h)anthracene	ug/L	1	ND	48
8/24/1996	CCS-GW GP9-12	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(g,h,i)perylene	ug/L	0.45	ND	48
8/24/1996	CCS-GW GP9-12	Groundwater	Polynuclear Aromatic Hydrocarbons	Indeno(1,2,3-cd)pyrene	ug/L	0.11	ND	48
8/24/1996	CCS-GW GP9-12	Groundwater	Polynuclear Aromatic Hydrocarbons	Total Naphthalene	ug/L	2.8	12	48
8/24/1996	CCS-GW GP9-12	Groundwater	Polynuclear Aromatic Hydrocarbons	Carbazole (Surrogate)	%		88	48
8/24/1996	CCS-GW GP9-12	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Benzene	ug/L	12	74	48
8/24/1996	CCS-GW GP9-12	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Toluene	ug/L	20	360	49
8/24/1996	CCS-GW GP9-12	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Ethylbenzene	ug/L	18	84	49
8/24/1996	CCS-GW GP9-12	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Xylenes	ug/L	18	200	49
8/24/1996	CCS-GW GP9-12	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Total VOA	ug/L	12	718	49
8/24/1996	CCS-GW GP9-12	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Methyl Tert-Butyl Ether	ug/L	100	ND	49
8/24/1996	CCS-GW GP9-12	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Surrogate Recovery	%		94	49
8/25/1996	CCS GP6-9.5	Groundwater	Organics	2,4,6-Tribromophenol - Surrogate	%		69	50
8/25/1996	CCS GP6-9.5	Groundwater	Organics	2,4-Dimethylphenol	ug/L	10	150	50
8/25/1996	CCS GP6-9.5	Groundwater	Organics	2-Fluorophenol - Surrogate	%		35	50
8/25/1996	CCS GP6-9.5	Groundwater	Organics	Pentachlorophenol	ug/L	10	ND	50
8/25/1996	CCS GP6-9.5	Groundwater	Organics	Phenol	ug/L	10	ND	50
8/25/1996	CCS GP6-9.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Naphthalene	ug/L	2.8	19	50

Date Collected	Client Sample ID	Matrix	Parameter Type	Parameter	Units	PRL	Concentration	PDF Page
8/25/1996	CCS GP6-9.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Acenaphthylene	ug/L	5.1	8.1	50
8/25/1996	CCS GP6-9.5	Groundwater	Polynuclear Aromatic Hydrocarbons	1-Methylnaphthalene	ug/L	5.7	26	50
8/25/1996	CCS GP6-9.5	Groundwater	Polynuclear Aromatic Hydrocarbons	2-Methylnaphthalene	ug/L	2.8	10	50
8/25/1996	CCS GP6-9.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Acenaphthene	ug/L	2.6	19	50
8/25/1996	CCS GP6-9.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Fluorene	ug/L	0.7	3.2	50
8/25/1996	CCS GP6-9.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Phenanthrene	ug/L	0.18	8.1	50
8/25/1996	CCS GP6-9.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Anthracene	ug/L	0.13	0.85	50
8/25/1996	CCS GP6-9.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Fluoranthene	ug/L	0.26	ND	50
8/25/1996	CCS GP6-9.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Pyrene	ug/L	0.14	ND	50
8/25/1996	CCS GP6-9.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(a)anthracene	ug/L	0.13	ND	50
8/25/1996	CCS GP6-9.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Chrysene	ug/L	0.19	ND	50
8/25/1996	CCS GP6-9.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(b)fluoranthene	ug/L	0.21	ND	50
8/25/1996	CCS GP6-9.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(k)fluoranthene	ug/L	0.05	ND	50
8/25/1996	CCS GP6-9.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(a)pyrene	ug/L	0.2	ND	50
8/25/1996	CCS GP6-9.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Dibenzo(a,h)anthracene	ug/L	1	ND	50
8/25/1996	CCS GP6-9.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(g,h,i)perylene	ug/L	0.45	ND	50
8/25/1996	CCS GP6-9.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Indeno(1,2,3-cd)pyrene	ug/L	0.11	ND	50
8/25/1996	CCS GP6-9.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Total Naphthalene	ug/L	2.8	55	50
8/25/1996	CCS GP6-9.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Carbazole (Surrogate)	%		95	50
8/25/1996	CCS GP6-9.5	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Benzene	ug/L	12	140	50
8/25/1996	CCS GP6-9.5	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Toluene	ug/L	20	440	51
8/25/1996	CCS GP6-9.5	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Ethylbenzene	ug/L	18	150	51
8/25/1996	CCS GP6-9.5	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Xylenes	ug/L	18	180	51
8/25/1996	CCS GP6-9.5	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Total VOA	ug/L	12	910	51
8/25/1996	CCS GP6-9.5	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Methyl Tert-Butyl Ether	ug/L	100	ND	51
8/25/1996	CCS GP6-9.5	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Surrogate Recovery	%		117	51
8/25/1996	CCS GP6-16.5	Groundwater	Organics	2,4,6-Tribromophenol - Surrogate	%		58	52
8/25/1996	CCS GP6-16.5	Groundwater	Organics	2,4-Dimethylphenol	ug/L	10	79	52
8/25/1996	CCS GP6-16.5	Groundwater	Organics	2-Fluorophenol - Surrogate	%		29	52
8/25/1996	CCS GP6-16.5	Groundwater	Organics	Pentachlorophenol	ug/L	10	ND	52
8/25/1996	CCS GP6-16.5	Groundwater	Organics	Phenol	ug/L	10	ND	52
8/25/1996	CCS GP6-16.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Naphthalene	ug/L	2.8	89	52
8/25/1996	CCS GP6-16.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Acenaphthylene	ug/L	5.1	21	52
8/25/1996	CCS GP6-16.5	Groundwater	Polynuclear Aromatic Hydrocarbons	1-Methylnaphthalene	ug/L	5.7	47	52
8/25/1996	CCS GP6-16.5	Groundwater	Polynuclear Aromatic Hydrocarbons	2-Methylnaphthalene	ug/L	2.8	27	52
8/25/1996	CCS GP6-16.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Acenaphthene	ug/L	2.6	56	52
8/25/1996	CCS GP6-16.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Fluorene	ug/L	0.7	4.9	52
8/25/1996	CCS GP6-16.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Phenanthrene	ug/L	0.18	5.7	52

Date Collected	Client Sample ID	Matrix	Parameter Type	Parameter	Units	PRL	Concentration	PDF Page
8/25/1996	CCS GP6-16.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Anthracene	ug/L	0.13	1.2	52
8/25/1996	CCS GP6-16.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Fluoranthene	ug/L	0.26	ND	52
8/25/1996	CCS GP6-16.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Pyrene	ug/L	0.14	0.29	52
8/25/1996	CCS GP6-16.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(a)anthracene	ug/L	0.13	0.53	52
8/25/1996	CCS GP6-16.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Chrysene	ug/L	0.19	ND	52
8/25/1996	CCS GP6-16.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(b)fluoranthene	ug/L	0.21	ND	52
8/25/1996	CCS GP6-16.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(k)fluoranthene	ug/L	0.05	ND	52
8/25/1996	CCS GP6-16.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(a)pyrene	ug/L	0.2	ND	52
8/25/1996	CCS GP6-16.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Dibenzo(a,h)anthracene	ug/L	1	ND	52
8/25/1996	CCS GP6-16.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(g,h,i)perylene	ug/L	0.45	ND	52
8/25/1996	CCS GP6-16.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Indeno(1,2,3-cd)pyrene	ug/L	0.11	ND	52
8/25/1996	CCS GP6-16.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Total Naphthalene	ug/L	2.8	163	52
8/25/1996	CCS GP6-16.5	Groundwater	Polynuclear Aromatic Hydrocarbons	Carbazole (Surrogate)	%		150 (3)	52
8/25/1996	CCS GP6-16.5	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Benzene	ug/L	12	160	52
8/25/1996	CCS GP6-16.5	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Toluene	ug/L	20	1300 (1)	53
8/25/1996	CCS GP6-16.5	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Ethylbenzene	ug/L	18	470 (1)	53
8/25/1996	CCS GP6-16.5	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Xylenes	ug/L	18	750 (1)	53
8/25/1996	CCS GP6-16.5	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Total VOA	ug/L	12	2680	53
8/25/1996	CCS GP6-16.5	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Methyl Tert-Butyl Ether	ug/L	100	ND	53
8/25/1996	CCS GP6-16.5	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Surrogate Recovery	%		ND	53
8/25/1996	CCS GW GP4-9	Groundwater	Organics	2,4,6-Tribromophenol - Surrogate	%		27	54
8/25/1996	CCS GW GP4-9	Groundwater	Organics	2,4-Dimethylphenol	ug/L	10	ND	54
8/25/1996	CCS GW GP4-9	Groundwater	Organics	2-Fluorophenol - Surrogate	%		23	54
8/25/1996	CCS GW GP4-9	Groundwater	Organics	Pentachlorophenol	ug/L	10	ND	54
8/25/1996	CCS GW GP4-9	Groundwater	Organics	Phenol	ug/L	10	ND	54
8/25/1996	CCS GW GP4-9	Groundwater	Polynuclear Aromatic Hydrocarbons	Naphthalene	ug/L	2.8	ND	54
8/25/1996	CCS GW GP4-9	Groundwater	Polynuclear Aromatic Hydrocarbons	Acenaphthylene	ug/L	5.1	ND	54
8/25/1996	CCS GW GP4-9	Groundwater	Polynuclear Aromatic Hydrocarbons	1-Methylnaphthalene	ug/L	5.7	ND	54
8/25/1996	CCS GW GP4-9	Groundwater	Polynuclear Aromatic Hydrocarbons	2-Methylnaphthalene	ug/L	2.8	ND	54
8/25/1996	CCS GW GP4-9	Groundwater	Polynuclear Aromatic Hydrocarbons	Acenaphthene	ug/L	2.6	ND	54
8/25/1996	CCS GW GP4-9	Groundwater	Polynuclear Aromatic Hydrocarbons	Fluorene	ug/L	0.7	ND	54
8/25/1996	CCS GW GP4-9	Groundwater	Polynuclear Aromatic Hydrocarbons	Phenanthrene	ug/L	0.18	ND	54
8/25/1996	CCS GW GP4-9	Groundwater	Polynuclear Aromatic Hydrocarbons	Anthracene	ug/L	0.13	ND	54
8/25/1996	CCS GW GP4-9	Groundwater	Polynuclear Aromatic Hydrocarbons	Fluoranthene	ug/L	0.26	ND	54
8/25/1996	CCS GW GP4-9	Groundwater	Polynuclear Aromatic Hydrocarbons	Pyrene	ug/L	0.14	ND	54
8/25/1996	CCS GW GP4-9	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(a)anthracene	ug/L	0.13	0.28	54
8/25/1996	CCS GW GP4-9	Groundwater	Polynuclear Aromatic Hydrocarbons	Chrysene	ug/L	0.19	0.23	54
8/25/1996	CCS GW GP4-9	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(b)fluoranthene	ug/L	0.21	0.68	54

Date Collected	Client Sample ID	Matrix	Parameter Type	Parameter	Units	PRL	Concentration	PDF Page
8/25/1996	CCS GW GP4-9	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(k)fluoranthene	ug/L	0.05	0.26	54
8/25/1996	CCS GW GP4-9	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(a)pyrene	ug/L	0.2	0.59	54
8/25/1996	CCS GW GP4-9	Groundwater	Polynuclear Aromatic Hydrocarbons	Dibenzo(a,h)anthracene	ug/L	1	ND	54
8/25/1996	CCS GW GP4-9	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(g,h,i)perylene	ug/L	0.45	0.98	54
8/25/1996	CCS GW GP4-9	Groundwater	Polynuclear Aromatic Hydrocarbons	Indeno(1,2,3-cd)pyrene	ug/L	0.11	ND	54
8/25/1996	CCS GW GP4-9	Groundwater	Polynuclear Aromatic Hydrocarbons	Total Naphthalene	ug/L	2.8	ND	54
8/25/1996	CCS GW GP4-9	Groundwater	Polynuclear Aromatic Hydrocarbons	Carbazole (Surrogate)	%		49	54
8/25/1996	CCS GW GP4-9	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Benzene	ug/L	0.6	ND	54
8/25/1996	CCS GW GP4-9	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Toluene	ug/L	1	ND (1)	55
8/25/1996	CCS GW GP4-9	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Ethylbenzene	ug/L	9	ND	55
8/25/1996	CCS GW GP4-9	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Xylenes	ug/L	0.9	ND (1)	55
8/25/1996	CCS GW GP4-9	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Total VOA	ug/L	0.6	ND	55
8/25/1996	CCS GW GP4-9	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Methyl Tert-Butyl Ether	ug/L	5	ND	55
8/25/1996	CCS GW GP4-9	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Surrogate Recovery	%		118	55
8/25/1996	CCS GW GP4-17	Groundwater	Organics	2,4,6-Tribromophenol - Surrogate	%		37	56
8/25/1996	CCS GW GP4-17	Groundwater	Organics	2,4-Dimethylphenol	ug/L	10	ND	56
8/25/1996	CCS GW GP4-17	Groundwater	Organics	2-Fluorophenol - Surrogate	%		21	56
8/25/1996	CCS GW GP4-17	Groundwater	Organics	Pentachlorophenol	ug/L	10	ND	56
8/25/1996	CCS GW GP4-17	Groundwater	Organics	Phenol	ug/L	10	ND	56
8/25/1996	CCS GW GP4-17	Groundwater	Polynuclear Aromatic Hydrocarbons	Naphthalene	ug/L	2.8	ND	56
8/25/1996	CCS GW GP4-17	Groundwater	Polynuclear Aromatic Hydrocarbons	Acenaphthylene	ug/L	5.1	12	56
8/25/1996	CCS GW GP4-17	Groundwater	Polynuclear Aromatic Hydrocarbons	1-Methylnaphthalene	ug/L	5.7	34	56
8/25/1996	CCS GW GP4-17	Groundwater	Polynuclear Aromatic Hydrocarbons	2-Methylnaphthalene	ug/L	2.8	69	56
8/25/1996	CCS GW GP4-17	Groundwater	Polynuclear Aromatic Hydrocarbons	Acenaphthene	ug/L	2.6	120	56
8/25/1996	CCS GW GP4-17	Groundwater	Polynuclear Aromatic Hydrocarbons	Fluorene	ug/L	0.7	ND	56
8/25/1996	CCS GW GP4-17	Groundwater	Polynuclear Aromatic Hydrocarbons	Phenanthrene	ug/L	0.18	1.5	56
8/25/1996	CCS GW GP4-17	Groundwater	Polynuclear Aromatic Hydrocarbons	Anthracene	ug/L	0.13	0.4	56
8/25/1996	CCS GW GP4-17	Groundwater	Polynuclear Aromatic Hydrocarbons	Fluoranthene	ug/L	0.26	ND	56
8/25/1996	CCS GW GP4-17	Groundwater	Polynuclear Aromatic Hydrocarbons	Pyrene	ug/L	0.14	1.1	56
8/25/1996	CCS GW GP4-17	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(a)anthracene	ug/L	0.13	ND	56
8/25/1996	CCS GW GP4-17	Groundwater	Polynuclear Aromatic Hydrocarbons	Chrysene	ug/L	0.19	ND	56
8/25/1996	CCS GW GP4-17	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(b)fluoranthene	ug/L	0.21	ND	56
8/25/1996	CCS GW GP4-17	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(k)fluoranthene	ug/L	0.05	ND	56
8/25/1996	CCS GW GP4-17	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(a)pyrene	ug/L	0.2	ND	56
8/25/1996	CCS GW GP4-17	Groundwater	Polynuclear Aromatic Hydrocarbons	Dibenzo(a,h)anthracene	ug/L	1	ND	56
8/25/1996	CCS GW GP4-17	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(g,h,i)perylene	ug/L	0.45	ND	56
8/25/1996	CCS GW GP4-17	Groundwater	Polynuclear Aromatic Hydrocarbons	Indeno(1,2,3-cd)pyrene	ug/L	0.11	ND	56
8/25/1996	CCS GW GP4-17	Groundwater	Polynuclear Aromatic Hydrocarbons	Total Naphthalene	ug/L	2.8	103	56

Date Collected	Client Sample ID	Matrix	Parameter Type	Parameter	Units	PRL	Concentration	PDF Page
8/25/1996	CCS GW GP4-17	Groundwater	Polynuclear Aromatic Hydrocarbons	Carbazole (Surrogate)	%		124	56
8/25/1996	CCS GW GP4-17	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Benzene	ug/L	0.6	3.4	56
8/25/1996	CCS GW GP4-17	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Toluene	ug/L	1	1.1	57
8/25/1996	CCS GW GP4-17	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Ethylbenzene	ug/L	0.9	ND	57
8/25/1996	CCS GW GP4-17	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Xylenes	ug/L	0.9	ND	57
8/25/1996	CCS GW GP4-17	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Total VOA	ug/L	0.6	4.5	57
8/25/1996	CCS GW GP4-17	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Methyl Tert-Butyl Ether	ug/L	5	ND	57
8/25/1996	CCS GW GP4-17	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Surrogate Recovery	%		114	57
8/25/1996	CCS GW GP5-8	Groundwater	Organics	2,4,6-Tribromophenol - Surrogate	%		ND (4)	58
8/25/1996	CCS GW GP5-8	Groundwater	Organics	2,4-Dimethylphenol	ug/L	500	5400	58
8/25/1996	CCS GW GP5-8	Groundwater	Organics	2-Fluorophenol - Surrogate	%		ND (4)	58
8/25/1996	CCS GW GP5-8	Groundwater	Organics	Pentachlorophenol	ug/L	500	ND	58
8/25/1996	CCS GW GP5-8	Groundwater	Organics	Phenol	ug/L	500	ND	58
8/25/1996	CCS GW GP5-8	Groundwater	Polynuclear Aromatic Hydrocarbons	Naphthalene	ug/L	2.8	270	58
8/25/1996	CCS GW GP5-8	Groundwater	Polynuclear Aromatic Hydrocarbons	Acenaphthylene	ug/L	5.1	650	58
8/25/1996	CCS GW GP5-8	Groundwater	Polynuclear Aromatic Hydrocarbons	1-Methylnaphthalene	ug/L	5.7	81	58
8/25/1996	CCS GW GP5-8	Groundwater	Polynuclear Aromatic Hydrocarbons	2-Methylnaphthalene	ug/L	2.8	380	58
8/25/1996	CCS GW GP5-8	Groundwater	Polynuclear Aromatic Hydrocarbons	Acenaphthene	ug/L	2.6	710	58
8/25/1996	CCS GW GP5-8	Groundwater	Polynuclear Aromatic Hydrocarbons	Fluorene	ug/L	0.7	33	58
8/25/1996	CCS GW GP5-8	Groundwater	Polynuclear Aromatic Hydrocarbons	Phenanthrene	ug/L	0.18	12	58
8/25/1996	CCS GW GP5-8	Groundwater	Polynuclear Aromatic Hydrocarbons	Anthracene	ug/L	0.13	6.8	58
8/25/1996	CCS GW GP5-8	Groundwater	Polynuclear Aromatic Hydrocarbons	Fluoranthene	ug/L	0.26	8.1	58
8/25/1996	CCS GW GP5-8	Groundwater	Polynuclear Aromatic Hydrocarbons	Pyrene	ug/L	0.14	5.1	58
8/25/1996	CCS GW GP5-8	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(a)anthracene	ug/L	0.13	ND	58
8/25/1996	CCS GW GP5-8	Groundwater	Polynuclear Aromatic Hydrocarbons	Chrysene	ug/L	0.19	40	58
8/25/1996	CCS GW GP5-8	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(b)fluoranthene	ug/L	0.21	3.2	58
8/25/1996	CCS GW GP5-8	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(k)fluoranthene	ug/L	0.05	ND	58
8/25/1996	CCS GW GP5-8	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(a)pyrene	ug/L	0.2	ND	58
8/25/1996	CCS GW GP5-8	Groundwater	Polynuclear Aromatic Hydrocarbons	Dibenzo(a,h)anthracene	ug/L	1	ND	58
8/25/1996	CCS GW GP5-8	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(g,h,i)perylene	ug/L	0.45	ND	58
8/25/1996	CCS GW GP5-8	Groundwater	Polynuclear Aromatic Hydrocarbons	Indeno(1,2,3-cd)pyrene	ug/L	0.11	ND	58
8/25/1996	CCS GW GP5-8	Groundwater	Polynuclear Aromatic Hydrocarbons	Total Naphthalene	ug/L	2.8	461	58
8/25/1996	CCS GW GP5-8	Groundwater	Polynuclear Aromatic Hydrocarbons	Carbazole (Surrogate)	%		ND (2)	58
8/25/1996	CCS GW GP5-8	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Benzene	ug/L	300	450	59
8/25/1996	CCS GW GP5-8	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Toluene	ug/L	500	12000	59
8/25/1996	CCS GW GP5-8	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Ethylbenzene	ug/L	450	7000	59
8/25/1996	CCS GW GP5-8	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Xylenes	ug/L	450	23000	59
8/25/1996	CCS GW GP5-8	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Total VOA	ug/L	300	42450	59

Date Collected	Client Sample ID	Matrix	Parameter Type	Parameter	Units	PRL	Concentration	PDF Page
8/25/1996	CCS GW GP5-8	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Methyl Tert-Butyl Ether	ug/L	2500	ND	59
8/25/1996	CCS GW GP5-8	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Surrogate Recovery	%		100	59
8/25/1996	CCS GW GP5-15	Groundwater	Organics	2,4,6-Tribromophenol - Surrogate	%		52	60
8/25/1996	CCS GW GP5-15	Groundwater	Organics	2,4-Dimethylphenol	ug/L	10	290	60
8/25/1996	CCS GW GP5-15	Groundwater	Organics	2-Fluorophenol - Surrogate	%		40	60
8/25/1996	CCS GW GP5-15	Groundwater	Organics	Pentachlorophenol	ug/L	10	ND	60
8/25/1996	CCS GW GP5-15	Groundwater	Organics	Phenol	ug/L	10	ND	60
8/25/1996	CCS GW GP5-15	Groundwater	Polynuclear Aromatic Hydrocarbons	Naphthalene	ug/L	2.8	ND	60
8/25/1996	CCS GW GP5-15	Groundwater	Polynuclear Aromatic Hydrocarbons	Acenaphthylene	ug/L	5.1	ND	60
8/25/1996	CCS GW GP5-15	Groundwater	Polynuclear Aromatic Hydrocarbons	1-Methylnaphthalene	ug/L	5.7	ND	60
8/25/1996	CCS GW GP5-15	Groundwater	Polynuclear Aromatic Hydrocarbons	2-Methylnaphthalene	ug/L	2.8	ND	60
8/25/1996	CCS GW GP5-15	Groundwater	Polynuclear Aromatic Hydrocarbons	Acenaphthene	ug/L	2.6	ND	60
8/25/1996	CCS GW GP5-15	Groundwater	Polynuclear Aromatic Hydrocarbons	Fluorene	ug/L	0.7	ND	60
8/25/1996	CCS GW GP5-15	Groundwater	Polynuclear Aromatic Hydrocarbons	Phenanthrene	ug/L	0.18	0.59	60
8/25/1996	CCS GW GP5-15	Groundwater	Polynuclear Aromatic Hydrocarbons	Anthracene	ug/L	0.13	ND	60
8/25/1996	CCS GW GP5-15	Groundwater	Polynuclear Aromatic Hydrocarbons	Fluoranthene	ug/L	0.26	ND	60
8/25/1996	CCS GW GP5-15	Groundwater	Polynuclear Aromatic Hydrocarbons	Pyrene	ug/L	0.14	ND	60
8/25/1996	CCS GW GP5-15	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(a)anthracene	ug/L	0.13	ND	60
8/25/1996	CCS GW GP5-15	Groundwater	Polynuclear Aromatic Hydrocarbons	Chrysene	ug/L	0.19	1.9	60
8/25/1996	CCS GW GP5-15	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(b)fluoranthene	ug/L	0.21	ND	60
8/25/1996	CCS GW GP5-15	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(k)fluoranthene	ug/L	0.05	ND	60
8/25/1996	CCS GW GP5-15	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(a)pyrene	ug/L	0.2	ND	60
8/25/1996	CCS GW GP5-15	Groundwater	Polynuclear Aromatic Hydrocarbons	Dibenzo(a,h)anthracene	ug/L	1	ND	60
8/25/1996	CCS GW GP5-15	Groundwater	Polynuclear Aromatic Hydrocarbons	Benzo(g,h,i)perylene	ug/L	0.45	ND	60
8/25/1996	CCS GW GP5-15	Groundwater	Polynuclear Aromatic Hydrocarbons	Indeno(1,2,3-cd)pyrene	ug/L	0.11	ND	60
8/25/1996	CCS GW GP5-15	Groundwater	Polynuclear Aromatic Hydrocarbons	Total Naphthalene	ug/L	2.8	ND	60
8/25/1996	CCS GW GP5-15	Groundwater	Polynuclear Aromatic Hydrocarbons	Carbazole (Surrogate)	%		104	60
8/25/1996	CCS GW GP5-15	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Benzene	ug/L	0.6	53	61
8/25/1996	CCS GW GP5-15	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Toluene	ug/L	1	290 (8)	61
8/25/1996	CCS GW GP5-15	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Ethylbenzene	ug/L	0.9	340 (8)	61
8/25/1996	CCS GW GP5-15	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Xylenes	ug/L	0.9	750 (8)	61
8/25/1996	CCS GW GP5-15	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Total VOA	ug/L	0.6	1380	61
8/25/1996	CCS GW GP5-15	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Methyl Tert-Butyl Ether	ug/L	5	ND	61
8/25/1996	CCS GW GP5-15	Groundwater	BTEX/MTBE 8020 Volatile Aromatics	Surrogate Recovery	%		90	61
8/21/1996	CCS-S GP3-8	Groundwater	Inorganics	Alkalinity, Total as CAC03 EPA 310.1	mg/kg	50	240	62
8/21/1996	CCS-S GP3-8	Groundwater	Inorganics	Ammonium as Nitrogen	mg/kg	30	ND	62
8/21/1996	CCS-S GP3-8	Groundwater	Inorganics	Chloride EPA 300.0	mg/kg	10	ND	62
8/21/1996	CCS-S GP3-8	Groundwater	Inorganics	Nitrogen, Ammonia SM4500NH3-E	mg/kg	30	ND	62

Date Collected	Client Sample ID	Matrix	Parameter Type	Parameter	Units	PRL	Concentration	PDF Page
8/21/1996	CCS-S GP3-8	Groundwater	Inorganics	Nitrogen, Kjeldahl SM4500-Norg B	mg/kg	30	140	62
8/21/1996	CCS-S GP3-8	Groundwater	Inorganics	Nitrogen, Nitrate EPA 300.0	mg/kg	10	ND	62
8/21/1996	CCS-S GP3-8	Groundwater	Inorganics	Nitrogen, Nitrite SM4500-N02 B	mg/kg	0.2	ND	62
8/21/1996	CCS-S GP3-8	Groundwater	Inorganics	Phosphorus, Total EPA 365.2	mg/kg	5	28	62
8/21/1996	CCS-S GP3-8	Groundwater	Inorganics	Sulfate, as S04 EPA 300.0	mg/kg	50	ND	62
8/23/1996	CCS-S GP8-7	Groundwater	Inorganics	Alkalinity, Total as CAC03 EPA 310.1	mg/kg	50	58	63
8/23/1996	CCS-S GP8-7	Groundwater	Inorganics	Ammonium as Nitrogen	mg/kg	30	ND	63
8/23/1996	CCS-S GP8-7	Groundwater	Inorganics	Chloride EPA 300.0	mg/kg	10	53	63
8/23/1996	CCS-S GP8-7	Groundwater	Inorganics	Nitrogen, Ammonia SM4500NH3-E	mg/kg	30	ND	63
8/23/1996	CCS-S GP8-7	Groundwater	Inorganics	Nitrogen, Kjeldahl SM4500-Norg B	mg/kg	30	ND	63
8/23/1996	CCS-S GP8-7	Groundwater	Inorganics	Nitrogen, Nitrate EPA 300.0	mg/kg	10	ND	63
8/23/1996	CCS-S GP8-7	Groundwater	Inorganics	Nitrogen, Nitrite SM4500-N02 B	mg/kg	0.25	ND	63
8/23/1996	CCS-S GP8-7	Groundwater	Inorganics	Phosphorus, Total EPA 365.2	mg/kg	5	96	63
8/23/1996	CCS-S GP8-7	Groundwater	Inorganics	Sulfate, as S04 EPA 300.0	mg/kg	50	59	63
8/23/1996	CCS-S GP8-7D	Groundwater	Inorganics	Alkalinity, Total as CAC03 EPA 310.1	mg/kg	50	64	64
8/23/1996	CCS-S GP8-7D	Groundwater	Inorganics	Ammonium as Nitrogen	mg/kg	30	ND	64
8/23/1996	CCS-S GP8-7D	Groundwater	Inorganics	Chloride EPA 300.0	mg/kg	10	26	64
8/23/1996	CCS-S GP8-7D	Groundwater	Inorganics	Nitrogen, Ammonia SM4500NH3-E	mg/kg	30	ND	64
8/23/1996	CCS-S GP8-7D	Groundwater	Inorganics	Nitrogen, Kjeldahl SM4500-Norg B	mg/kg	0.3	55	64
8/23/1996	CCS-S GP8-7D	Groundwater	Inorganics	Nitrogen, Nitrate EPA 300.0	mg/kg	10	ND	64
8/23/1996	CCS-S GP8-7D	Groundwater	Inorganics	Nitrogen, Nitrite SM4500-N02 B	mg/kg	0.25	ND	64
8/23/1996	CCS-S GP8-7D	Groundwater	Inorganics	Phosphorus, Total EPA 365.2	mg/kg	5	87	64
8/23/1996	CCS-S GP8-7D	Groundwater	Inorganics	Sulfate, as S04 EPA 300.0	mg/kg	50	ND	64

Notes:

Data from Core Laboratories, 1996

A.4
Post-remedy (1996-2016) Groundwater Data Summary

Summary of Surficial Aquifer Groundwater Data
May 1996 - November 2000
Eastern Site, Gainesville, Florida

WELL DESIGNATION	PARAMETERS	May-96	Aug-96	Dec-96	Mar-97	Jun-97	Sep-97	Dec-97	Mar-98	May-98	Sep-98	Dec-98	Apr-99	Jun-99	Sep-99	Dec-99	Mar-00	Jun-00	Sep-00	Nov-00	ROD Clean-up Goal
ITW-1	Chromium	NS	ND	NS	ND	NS	ND	NS	ND	NS	ND	NS	5.7	NS	ND	8.8	5.2	ND	ND	3.1	50
ITW-1	Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	260
ITW-1	Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1310
ITW-1	Fluorene	NS	ND	NS	ND	NS	ND	NS	ND	NS	ND	NS	ND	NS	ND	1.1	0.77	0.75	0.86	1	323
ITW-1	Naphthalene	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	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	130
ITW-1	1- Methylnaphthalene	ND	ND	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	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ITW-2	Benzene	ND	ND	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	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ITW-2	Acenaphthene	NS	ND	NS	ND	NS	ND	NS	ND	NS	ND	NS	ND	NS	ND	1	ND	ND	ND	1.4	260
ITW-2	Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1310
ITW-2	Fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ITW-2	Fluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	323
ITW-2	Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18
ITW-2	Phenanthrene	ND	ND	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	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	130
ITW-2	2- Methylnaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ITW-2	Chromium	NS	ND	NS	ND	NS	3	NS	5.5	NS	39	NS	7.4	NS	25	15	18	15	5	14	50
ITW-10	Benzene	NS	NS	NS	NS	NS	NS	NS	NS	1.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1
ITW-10	Total Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	*
ITW-10	Acenaphthylene	NS	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	130
ITW-10	Fluorene	NS	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	323
ITW-10	Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	4.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	18
ITW-10	Phenol	NS	NS	NS	NS	NS	NS	NS	NS	270	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2630
ITW-10	2,4- Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	65	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	*
ITW-10	2- Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	*
ITW-10	3&4- Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	*
ITW-10	Chromium	NS	NS	NS	NS	NS	NS	NS	NS	4.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50
ITW-11	Benzene	NS	NS	NS	NS	NS	NS	NS	NS	1.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1
ITW-11	Acenaphthylene	NS	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	130
ITW-11	Fluorene	NS	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	323
ITW-11	Phenanthrene	NS	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	130
ITW-11	Pyrene	NS	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	130
ITW-11	Total Potentially Carcinogenic PAHs	NS	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.003
ITW-11	Phenol	NS	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2630
ITW-11	2,4- Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	61	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	*
ITW-11	Arsenic	NS	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50
ITW-11	Chromium	NS	NS	NS	NS	NS	NS	NS	NS	16	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50
ITW-13	Benzene	110	ND	92	120	120	100	99	8.9	93	63	67	25	97	94	110	81	88	100	100	1
ITW-13	Toluene	NS	NS	NS	NS	NS	NS	NS	NS	440	250	270	25	360	340	490	590	780	800	470	*
ITW-13	Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	320	170	190	25	360	260	310	240	210	310	310	*
ITW-13	Total Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	250	142	142	50	540	84	281	202	120	269	244	*
ITW-13	Acenaphthene	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	260
ITW-13	Acenaphthylene	ND	47	52	22	29	28	74	34	38	53	9.4	1	49	79	53	66	72	36	170	130
ITW-13	Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1310
ITW-13	Benzo (a) anthracene	ND	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	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	PAH
ITW-13	Fluorene	2.1	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	323
ITW-13	Naphthalene	85	51	62	53	66	55	90	38	41	65	37	1	70	65	73	84	64	48	81	18
ITW-13	Phenanthrene	0.28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23	ND	ND	0.16	ND	ND	130

Summary of Surficial Aquifer Groundwater Data
May 1996 - November 2000
Eastern Site, Gainesville, Florida

WELL DESIGNATION	PARAMETERS	May-96	Aug-96	Dec-96	Mar-97	Jun-97	Sep-97	Dec-97	Mar-98	May-98	Sep-98	Dec-98	Apr-99	Jun-99	Sep-99	Dec-99	Mar-00	Jun-00	Sep-00	Nov-00	ROD Clean-up Goal
ITW-13	Total Potentially Carcinogenic PAHs	0.39	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003
ITW-13	1- Methylnaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	2.1	ND	1.6	1	3.6	ND	8.6	7.8	8.5	ND	5.3	*
ITW-13	2- Methylnaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	1.9	ND	1.4	1	5	2.8	11	12	9.8	ND	6.6	*
ITW-13	Phenol	6200	4700	6300	8900	8600	7500	8300	5600	6000	11000	7300	1000	8100	12000	9400	12000	10000	12000	10000	2630
ITW-13	2,4- Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	1600	3100	2100	10	2800	4200	3100	5000	3500	4600	ND	*
ITW-13	2- Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ITW-13	3&4- Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ITW-13	Arsenic	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
ITW-13	Chromium	ND	ND	ND	2.7	4.2	4.6	5	6.3	6.5	12	16	2	6.5	20	19	8.3	2.8	8.2	24	50
ITW-14	Benzene	140	ND	140	220	79	82	57	5.1	160	26	46	100	94	57	89	81	91	36	92	1
ITW-14	Toluene	NS	NS	NS	NS	NS	NS	NS	NS	2200	500	680	100	840	110	890	730	950	530	1200	*
ITW-14	Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	470	120	130	100	390	720	300	170	130	120	210	*
ITW-14	Total Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	2000	474	478	200	840	185	720	760	499	480	860	*
ITW-14	Acenaphthene	2700	2200	ND	ND	ND	ND	440	52	ND	ND	130	1	NS	410	260	1200	540	6600	790	260
ITW-14	Acenaphthylene	1500	ND	ND	3000	ND	8700	1700	270	350	710	1800	50	NS	1200	860	4400	1700	28000	3300	130
ITW-14	Anthracene	28	37	ND	610	ND	400	130	7.2	ND	17	21	0.1	NS	36	32	270	94	2000	240	1310
ITW-14	Benzo (a) anthracene	NS	NS	NS	NS	NS	NS	NS	NS	NS	56	230	0.1	NS	ND	150	1100	110	3500	440	0.003
ITW-14	Benzo (a) pyrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	11	ND	NS	10	ND	ND	ND	<200	<100	0.003
ITW-14	Benzo (b) fluoranthene	NS	NS	NS	NS	NS	NS	NS	NS	NS	24	90	0.05	NS	ND	ND	400	16	1500	250	0.003
ITW-14	Benzo (g,h,i) perylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	500	<120	0.003
ITW-14	Benzo (k) flouranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	0.003
ITW-14	Chrysene	NS	NS	NS	NS	NS	NS	NS	NS	NS	330	570	0.1	NS	320	250	1500	150	7600	1000	0.003
ITW-14	Dibenzo (a,h) anthracene	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	33	ND	NS	ND	ND	ND	ND	<200	<100	0.003
ITW-14	Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003
ITW-14	Fluoranthene	NS	NS	NS	NS	NS	NS	NS	NS	NS	90	230	0.25	NS	170	140	600	160	8800	900	*
ITW-14	Fluorene	220	380	ND	1800	4400	1600	560	47	53	94	540	0.1	NS	370	340	1600	480	8500	1200	323
ITW-14	Naphthalene	1300	670	ND	2500	8200	4200	760	170	140	360	1200	50	NS	640	440	1800	790	14000	1300	18
ITW-14	Phenanthrene	140	240	ND	1500	5000	2800	530	31	40	78	310	0.5	NS	200	170	970	340	3900	740	130
ITW-14	Pyrene	100	ND	ND	ND	ND	970	300	ND	ND	18	26	0.1	NS	78	41	360	100	2300	170	130
ITW-14	1- Methylnaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	92	ND	440	1	NS	530	490	2300	540	11000	1600	*
ITW-14	2- Methylnaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	84	140	630	1	NS	560	480	2400	900	14000	1900	*
ITW-14	Total Potentially Carcinogenic PAHs	337.6	41	6000	ND	ND	ND	26	ND	ND	410	934	171	NS	330	400	3000	276	12600	1690	0.003
ITW-14	Phenol	3700	ND	5500	3200	8500	580	ND	3300	9000	2100	4400	400	NS	2100	4300	4600	4100	1200	4500	2630
ITW-14	2,4- Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	2500	4400	ND	10	NS	6000	6200	9400	8600	5000	9400	*
ITW-14	2- Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ITW-14	3&4- Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ITW-14	Arsenic	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	50
ITW-14	Chromium	ND	ND	ND	11	32	4	ND	12	ND	ND		4.6	7.9	4.9	25	20	4.8	2.4	44	50
WMW-17E	Benzene	4.2	3.9	4	2.5	4.3	3.7	3.5	3.5	2.3	1.8	ND	ND	NS	ND	NS	NS	ND	ND	ND	1
WMW-17E	Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	ND	1.6	ND	ND	NS	ND	NS	NS	5.1	ND	ND	*
WMW-17E	Total Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	11	3.2	1.1	ND	NS	ND	NS	NS	5.6	ND	ND	*
WMW-17E	Acenaphthene	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	260
WMW-17E	Acenaphthylene	ND	ND	ND	1.7	4.4	7.2	8.1	2.5	1.3	3.9	1.5	ND	1.2	1.2	NS	NS	5.1	ND	ND	130
WMW-17E	Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	1310
WMW-17E	Fluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	323
WMW-17E	Naphthalene	ND	ND	ND	2.6	10	11	11	3.6	2.1	5.1	1.6	1	1.4	ND	NS	NS	3.6	ND	ND	18
WMW-17E	Phenanthrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	130
WMW-17E	Pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	130
WMW-17E	Total Potentially Carcinogenic PAHs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	0.003
WMW-17E	1- Methylnaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	*
WMW-17E	2- Methylnaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	*

Summary of Surficial Aquifer Groundwater Data
May 1996 - November 2000
Eastern Site, Gainesville, Florida

WELL DESIGNATION	PARAMETERS	May-96	Aug-96	Dec-96	Mar-97	Jun-97	Sep-97	Dec-97	Mar-98	May-98	Sep-98	Dec-98	Apr-99	Jun-99	Sep-99	Dec-99	Mar-00	Jun-00	Sep-00	Nov-00	ROD Clean-up Goal
WMW-17E	2,4- Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	28	34	ND	ND	ND	ND	NS	NS	15	ND	ND	*
WMW-17E	PCP	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	0.1
WMW-17E	Phenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	2630
WMW-17E	Chromium	6	ND	ND	ND	3.1	ND	ND	2.2	2.6	4.5	ND	9.4	6.6	7.1	NS	NS	22	2.2	7	50
WMW-18E	Benzene	ND	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
WMW-18E	Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	ND	1.4	2	1	ND	ND	ND	ND	ND	ND	ND	*
WMW-18E	Total Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	1.3	1.2	ND	1.7	ND	ND	ND	*
WMW-18E	Acenaphthene																	ND	ND	ND	260
WMW-18E	Acenaphthylene	ND	ND	ND	ND	ND	3.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	130
WMW-18E	Benzo(b)flouranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.11	ND	0.3	ND	0.14	ND	ND	0.003
WMW-18E	Fluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	323
WMW-18E	Naphthalene	ND	ND	ND	ND	ND	8.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18
WMW-18E	Phenanthrene																	ND	ND	ND	130
WMW-18E	Pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	130
WMW-18E	Total Potentially Carcinogenic PAHs	ND	ND	ND	ND	ND	0.1	0.14	ND	ND	ND	ND	ND	0.11	ND	0.3	ND	0.14	ND	ND	0.003
WMW-18E	1- Methylnaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	*
WMW-18E	2- Methylnaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	*
WMW-18E	PCP	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
WMW-18E	2,4- Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	46	62	58	10	12	47	ND	76	11	ND	ND	*
WMW-18E	Arsenic	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	13	ND	ND	50
WMW-18E	Chromium	34	22	20	15	32	22	13	15	16	29	20	2	NS	22	20	19	170	23	11	50
ESE-002	Benzene	NS	NS	NS	2	2.9	2.3	1.7	1.8	ND	ND	ND	ND	2.2	ND	ND	ND	1.6	ND	ND	1
ESE-002	Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ESE-002	Total Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	ND	2.9	1.1	2	4.2	1	ND	1.5	1.5	3.8	ND	*
ESE-002	Acenaphthene	NS	NS	NS	ND	10	16	80	ND	12	20	49	1	35	30	1	4	50	32	5	260
ESE-002	Acenaphthylene	NS	NS	NS	ND	ND	2.7	3.9	ND	1.9	6.1	4.5	ND	4.6	1.6	ND	ND	4	3.7	ND	130
ESE-002	Anthracene	NS	NS	NS	0.17	0.16	0.31	0.62	ND	ND	0.97	0.9	0.1	1.1	2.7	ND	0.22	1.1	1.6	0.39	1310
ESE-002	Benzo(a)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.11	0.003
ESE-002	Chrysene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003
ESE-002	Fluoranthene	NS	NS	NS	NS	NS	NS	NS	NS	1.2	2	0.79	ND	0.96	5.7	ND	3.8	5.9	5.2	2.6	*
ESE-002	Fluorene	NS	NS	NS	1.3	7.9	15	60	0.55	4.8	13	22	0.5	23	24	ND	2	28	17	4.4	323
ESE-002	Naphthalene	NS	NS	NS	4.6	22	62	420	2.5	31	54	58	1	85	61	ND	2.3	6.9	31	ND	18
ESE-002	Phenanthrene	NS	NS	NS	1.3	3	6.8	49	0.79	1.5	21	22	0.2	4.8	24	ND	2.5	17	27	2.4	130
ESE-002	Pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	3.6	1.6	130
ESE-002	1- Methylnaphthalene	NS	NS	NS	0.44	0.66	0.78	0.69	ND	0.76	1.2	0.81	ND	0.43	1.4	ND	2.4	15	12	ND	*
ESE-002	2-Methylnaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	6.1	1	10	9.5	ND	1.2	24	13	ND	*
ESE-002	Total Potentially Carcinogenic PAHs	NS	NS	NS	NS	NS	NS	NS	NS	18	36	81	1	54	44	ND	2.1	ND	ND	0.11	0.003
ESE-002	Phenol	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1800	ND	ND	2630
ESE-002	2,4- Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	670	ND	ND	*
ESE-002	Chromium	NS	NS	NS	3.9	2.4	ND	ND	7	6	3.2	ND	32	6.5	9.3	10	11	7.6	5.4	12	50
ESE-004	Benzene	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
ESE-004	Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	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	130
ESE-004	Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1310
ESE-004	Fluorene	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	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	130
ESE-004	2,4- Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ESE-004	Phenol	15	83	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2630
ESE-004	Chromium	6	ND	ND	5.1	4.4	5.8	4.3	3.8	5.3	4.1	ND	33	14	6.8	10	14	18	7	8.4	50
ESE-005	Benzene	NS	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1

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May 1996 - November 2000
Eastern Site, Gainesville, Florida

WELL DESIGNATION	PARAMETERS	May-96	Aug-96	Dec-96	Mar-97	Jun-97	Sep-97	Dec-97	Mar-98	May-98	Sep-98	Dec-98	Apr-99	Jun-99	Sep-99	Dec-99	Mar-00	Jun-00	Sep-00	Nov-00	ROD Clean-up Goal
ESE-005	Chromium	NS	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50
ESE-005	PCP	NS	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.1
ESE-005	Phenol	NS	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2630
ESE-005	Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	18
ESE-005	Acenaphthylene	NS	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	130
ESE-005	Acenaphthene	NS	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	260
ESE-005	Fluorene	NS	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	323
ESE-005	Phenanthrene	NS	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	130
ESE-005	Anthracene	NS	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1310
ESE-005	Pyrene	NS	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	130
ESE-005	Total Potentially Carcinogenic PAHs	NS	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.003
ESE-007	Benzene	7.4	ND	3.4	7	4.5	4.2	2.8	ND	1.2	4.4	7	1	7.4	4.7	12	7.9	<25	22	19	1
ESE-007	Toluene	NS	NS	NS	NS	NS	NS	NS	NS	18	66	48	1	160	25	300	75	480	280	350	*
ESE-007	Ethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	6.1	20	10	1	34	16	45	30	42	62	62	*
ESE-007	Total Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	5.7	26.7	10.3	2	43	4.7	85	33	35	91	85	*
ESE-007	Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	260
ESE-007	Acenaphthylene	ND	ND	ND	3.3	ND	ND	3.6	1.9	ND	6.2	ND	2.3	6	3.2	6.1	6.4	12	8	6.9	130
ESE-007	Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1310
ESE-007	Fluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	323
ESE-007	Naphthalene	ND	ND	ND	7.1	5.3	4.3	3.8	ND	ND	5.9	1.4	1	6.7	4.6	7.1	8.9	7.5	11	9.5	18
ESE-007	Phenanthrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	130
ESE-007	1-Methylnaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	1.7	1.5	2	1.7	*
ESE-007	2-Methylnaphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	1.2	1.2	1.6	1.6	1.2	ND	1.8	*
ESE-007	Total Potentially Carcinogenic PAHs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003
ESE-007	Phenol	220	89	230	910	540	720	360	110	97	540	280	10	900	670	1500	2900	1700	4000	4600	2630
ESE-007	2,4- Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	23	130	66	10	33	670	520	790	630	640	<200	*
ESE-007	2- Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ESE-007	3&4- Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ESE-007	Arsenic	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	41	ND	ND	50
ESE-007	Chromium	10	8	16	22	9.9	8.5	6.1	10	20	33	16	2	NS	30	8.8	16	510	32	65	50

Notes:
All results are in ug/l (micrograms per liter).
ND = Not detected above the MDL.
NS = Not sampled for indicated compound.
* = 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.
** = Free-phase product was observed in the groundwater sample collected at ITW-14 during the September 2007 sampling event.
PAH = Included as Total Potentially Carcinogenic PAHs.
Bolded values meet or exceed indicated ROD cleanup goals.

Summary of Surficial Aquifer Groundwater Data

March 2001 - December 2005

Eastern Site, Gainesville, Florida

WELL DESIGNATION	PARAMETERS	Mar-01	Jun-01	Oct-01	Jan-02	Mar-02	Jun-02	Sep-02	Dec-02	Mar-03	Jun-03	Sep-03	Dec-03	Mar-04	Jun-04	Sep-04	Dec-04	Mar-05	Jun-05	Sep-05	Dec-05	ROD Clean- up Goal
ITW-1	Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
ITW-1	Acenaphthene	1.4	ND	ND	ND	ND	ND	ND	ND	0.67	ND	0.72	0.6	0.19	0.50	0.47	ND	ND	ND	ND	ND	260
ITW-1	Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.079	0.044	ND	ND	ND	ND	ND	1310
ITW-1	Fluorene	0.93	0.56	ND	1	1.1	0.74	ND	0.66	0.92	0.54	0.81	0.49	0.32	0.31	0.37	ND	ND	ND	ND	ND	323
ITW-1	Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.60	ND	ND	ND	ND	ND	18
ITW-1	Phenanthrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.045	ND	ND	ND	ND	ND	ND	130
ITW-1	1- Methylnaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.52	ND	ND	ND	ND	ND	ND	*
ITW-1	2- Methylnaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.66	ND	ND	ND	ND	ND	ND	*
ITW-2	Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	1
ITW-2	Total Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	*
ITW-2	Acenaphthene	1.3	2	ND	ND	ND	ND	ND	ND	ND	0.66	1.3	0.8	0.12	67	ND	ND	ND	ND	ND	ND	260
ITW-2	Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	1310
ITW-2	Fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10	ND	ND	ND	ND	ND	ND	*
ITW-2	Fluorene	ND	0.69	1.3	1.7	2.2	1.2	1.3	1.1	0.98	1	1.6	1.3	0.61	52	0.19	ND	0.56	ND	0.52	ND	323
ITW-2	Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	28	ND	ND	ND	ND	ND	ND	18
ITW-2	Phenanthrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	42	ND	ND	ND	ND	ND	ND	130
ITW-2	Pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	ND	ND	ND	ND	ND	ND	130
ITW-2	2- Methylnaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	58	ND	ND	ND	ND	ND	ND	*
ITW-2	Chromium	ND	ND	ND	ND	ND	16	32	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
ITW-10	Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1
ITW-10	Total Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	*
ITW-10	Acenaphthylene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	130
ITW-10	Fluorene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	323
ITW-10	Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	18
ITW-10	Phenol	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2630
ITW-10	2,4- Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	*
ITW-10	2- Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	*
ITW-10	3&4- Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	*
ITW-10	Chromium	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50
ITW-11	Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1
ITW-11	Acenaphthylene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	130
ITW-11	Fluorene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	323
ITW-11	Phenanthrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	130
ITW-11	Pyrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	130
ITW-11	Total Potentially Carcinogenic PAHs	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.003
ITW-11	Phenol	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2630
ITW-11	2,4- Dimethylphenol	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	*
ITW-11	Arsenic	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50
ITW-11	Chromium	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50
ITW-13	Benzene	90	79	92	93	81	NS	71	78	82	85	55	120	61	72	ND	63	ND	ND	ND	58	1
ITW-13	Toluene	750	820	620	550	620	NS	590	460	460	430	250	350	250	300	350	230	190	170	170	270	*
ITW-13	Ethylbenzene	310	300	340	320	350	NS	270	320	320	300	220	370	240	240	260	250	190	230	240	260	*
ITW-13	Total Xylenes	228	242	232	229	222	NS	162	171	208	174	116	255	154	135	144	150	120	150	140	160	*
ITW-13	Acenaphthene	ND	ND	ND	ND	<5	NS	ND	ND	ND	0.52	ND	ND	0.17	ND	ND	ND	ND	ND	ND	ND	260
ITW-13	Acenaphthylene	19	86	ND	ND	34	NS	63	53	56	24	ND	ND	13	1.2	12	ND	ND	ND	9.8	ND	130
ITW-13	Anthracene	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	0.0084	ND	ND	ND	ND	ND	ND	ND	1310
ITW-13	Benzo (a) anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.012	ND	ND	ND	ND	ND	ND	ND	0.003
ITW-13	Benzo (b) fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.031	ND	ND	ND	ND	ND	ND	ND	0.003
ITW-13	Fluorene	ND	0.72	ND	ND	<2.5	NS	0.9	0.52	0.56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	323
ITW-13	Naphthalene	55	88	66	64	52	NS	78	68	84	55	80	35	28	36	34	ND	24	23	21	31	18
ITW-13	Phenanthrene	ND	0.21	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	130
ITW-13	Total Potentially Carcinogenic PAHs	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	0.043	ND	ND	ND	ND	ND	ND	ND	0.003
ITW-13	1- Methylnaphthalene	8.7	7.3	8.6	6.7	5.8	NS	5.3	5.4	2.5	4.3	ND	3	1.2	ND	ND	ND	ND	ND	ND	ND	*
ITW-13	2- Methylnaphthalene	10	12	8.8	8.7	7.9	NS	6	8.1	5.8	5.5	ND	3.4	2.4	1.5	0.99	ND	ND	ND	1.6	ND	*
ITW-13	Phenol	8200	7700	11000	9000	8200	NS	8600	9600	9000	4100	2000	5800	7700	4200	10000	5300	2400	ND	940	5200	2630
ITW-13	2,4- Dimethylphenol	3100	4800	3400	2600	4100	NS	2500	3700	3000	3300	2600	2000	2800	2200	2700	2900	1800	990	2600	2200	*

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ITW-13	2- Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	NS	NS	1800	440	1700	NS	*
ITW-13	3&4- Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	NS	NS	6000	950	2700	NS	*
ITW-13	Arsenic	12	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	ND	50
ITW-13	Chromium	13	ND	ND	ND	ND	NS	14	14	22	ND	ND	ND	12	ND	ND	ND	14	ND	ND	ND	50
ITW-14	Benzene	<25	<25	25	62	54	NS	39	33	ND	ND	30	45	31	43	ND	33	26	ND	ND	ND	1
ITW-14	Toluene	490	380	460	850	860	NS	740	610	490	360	590	880	540	730	300	630	440	470	380	350	*
ITW-14	Ethylbenzene	140	120	140	190	190	NS	190	140	130	120	120	210	140	140	ND	150	110	130	110	94	*
ITW-14	Total Xylenes	465	429	465	620	590	NS	490	453	468	345	395	624	389	444	ND	470	320	440	330	270	*
ITW-14	Acenaphthene	54	160	90	59	<100	NS	220	360	170	66	34	36	240	77	4.8	60	ND	ND	ND	ND	260
ITW-14	Acenaphthylene	360	920	560	ND	700	NS	1800	1100	1000	440	ND	76	1000	370	83	ND	ND	ND	420	ND	130
ITW-14	Anthracene	18	36	20	4.4	18	NS	39	62	44	12	ND	9.1	76	0.30	2.7	ND	ND	ND	26.0	3.2	1310
ITW-14	Benzo (a) anthracene	15	110	93	22	28	NS	220	310	180	51	ND	3.8	ND	ND	ND	ND	ND	ND	ND	2.8	0.003
ITW-14	Benzo (a) pyrene	ND	<13	ND	ND	<20	NS	ND	ND	7.3	1.1	ND	ND	17	ND	ND	ND	ND	ND	ND	4.6	0.003
ITW-14	Benzo (b) fluoranthene	13	88	19	4.6	12	NS	46	44	60	4.8	ND	ND	120	75	ND	ND	ND	ND	ND	ND	0.003
ITW-14	Benzo (g,h,i) perylene	ND	<16	ND	ND	<25	NS	ND	ND	ND	ND	ND	ND	8.1	3.8	ND	ND	ND	ND	ND	11.0	0.003
ITW-14	Benzo (k) flouranthene	NS	NS	0.59	ND	<5	NS	ND	ND	ND	ND	ND	ND	24	16	ND	ND	ND	ND	ND	9.5	0.003
ITW-14	Chrysene	26	260	13	27	160	NS	240	340	260	56	ND	4	ND	28	ND	ND	900	ND	170	5.7	0.003
ITW-14	Dibenzo (a,h) anthracene	ND	<13	24	ND	<20	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.3	0.003
ITW-14	Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	34	24	ND	ND	ND	ND	ND	0.7	0.003
ITW-14	Fluoranthene	45	130	63	16	93	NS	160	230	120	52	ND	17	ND	260	ND	ND	ND	ND	ND	140	*
ITW-14	Fluorene	77	69	89	53	83	NS	200	290	230	99	ND	20	350	260	20	ND	ND	ND	ND	ND	323
ITW-14	Naphthalene	290	210	380	33	330	NS	1000	570	520	310	460	200	930	1000	170	530	ND	ND	400	ND	18
ITW-14	Phenanthrene	50	78	64	6.9	57	NS	200	220	190	43	42	69	480	240	20	120	210	ND	140	ND	130
ITW-14	Pyrene	13	100	30	4.3	<10	NS	29	ND	7.3	11	ND	13	ND	24	ND	ND	ND	ND	ND	23	130
ITW-14	1- Methylnaphthalene	110	260	180	150	180	NS	390	450	300	130	300	140	410	230	41	350	ND	ND	170	ND	*
ITW-14	2- Methylnaphthalene	180	350	210	140	100	NS	530	440	180	150	220	200	1200	690	60	470	ND	ND(J)	250	ND	*
ITW-14	Total Potentially Carcinogenic PAHs	54	458	149.59	53.6	200	NS	506	694	507.3	112.9	ND	7.8	195	143	0	0	900	0	170	26.6	0.003
ITW-14	Phenol	130	<250	730	3600	3300	NS	1100	900	ND	140	ND	280	ND	1100	ND	750	ND	290	ND	ND	2630
ITW-14	2,4- Dimethylphenol	940	2000	3300	6300	7000	NS	3100	3600	1800	1900	4700	2000	8400	ND	2600	4600	1800	4400	1900	2700	*
ITW-14	2- Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	NS	NS	1800	2200	640	NS	*
ITW-14	3&4- Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	NS	NS	3500	2700	1000	NS	*
ITW-14	Arsenic	ND	ND	ND	ND	ND	NS	ND	14	21	16	14	15	12	ND	11	ND	ND	ND	ND	ND	50
ITW-14	Chromium	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
WMW-17E	Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
WMW-17E	Ethylbenzene	ND	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
WMW-17E	Total Xylenes	ND	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
WMW-17E	Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.37	0.26	ND	0.30	ND	ND	ND	ND	ND	ND	260
WMW-17E	Acenaphthylene	ND	1.4	ND	ND	ND	1.1	1.1	ND	ND	ND	ND	ND	0.14	0.48	ND	ND	ND	ND	ND	ND	130
WMW-17E	Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.010	ND	ND	ND	ND	ND	ND	1310
WMW-17E	Fluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	323
WMW-17E	Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.40	ND	ND	ND	ND	ND	ND	18
WMW-17E	Phenanthrene	ND	ND	ND	ND	ND	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	ND	ND	ND	ND	ND	130
WMW-17E	Total Potentially Carcinogenic PAHs	ND	ND	ND	ND	ND	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	ND	ND	ND	ND	ND	ND	ND	ND	0.089	ND	ND	ND	ND	ND	ND	*
WMW-17E	2- Methylnaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.32	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	ND	ND	ND	ND	ND	*
WMW-17E	PCP	ND	ND	<10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1
WMW-17E	Phenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
WMW-17E	Chromium	ND	ND	ND	ND	ND	73	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
WMW-18E	Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
WMW-18E	Ethylbenzene	ND	ND	ND	ND	ND	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	ND	ND	ND	ND	ND	*
WMW-18E	Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.056	0.12	ND	ND	ND	ND	ND	260
WMW-18E	Acenaphthylene	ND	ND	ND	ND	ND	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	0.26	ND	ND	ND	ND	ND	ND	ND	0.0047	ND	ND	ND	ND	ND	ND	0.003

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WMW-18E	Fluorene	ND	ND	ND	ND	ND	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	ND	ND	ND	ND	ND	18
WMW-18E	Phenanthrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.029	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	ND	ND	ND	ND	ND	130
WMW-18E	Total Potentially Carcinogenic PAHs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0047	ND	ND	ND	ND	ND	ND	0.003
WMW-18E	1- Methylnaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.14	ND	ND	ND	ND	ND	ND	*
WMW-18E	2- Methylnaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.28	ND	ND	ND	ND	ND	ND	*
WMW-18E	PCP	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1
WMW-18E	2,4- Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
WMW-18E	Arsenic	ND	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
WMW-18E	Chromium	ND	37	ND	ND	ND	110	23	14	66	67	12	12	12	21	ND	10	17	13	10	17	50
ESE-002	Benzene	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	2.3	ND	ND	ND	1
ESE-002	Ethylbenzene	ND	ND	15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ESE-002	Total Xylenes	ND	ND	1.1	ND	ND	2.1	ND	2.1	2	1	ND	3.3	2	ND	ND	3.1	5.2	ND	ND	6.8	*
ESE-002	Acenaphthene	5.1	12	12	2	10	20	39	65	4.8	18	10	16	64	0.50	35	18	41	ND	24	5	260
ESE-002	Acenaphthylene	ND	ND	2.5	ND	ND	ND	7.9	2.4	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	130
ESE-002	Anthracene	1.3	1.3	1.2	0.18	0.64	2.3P	0.54	3.9	0.55	1.8	0.91	1.0	1.3	0.015	1.1	2.0	ND	ND	ND	0.7	1310
ESE-002	Benzo(a)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.034	ND	ND	ND	ND	ND	ND	ND	0.003
ESE-002	Chrysene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.057	ND	0.021	ND	ND	ND	ND	ND	0.003
ESE-002	Fluoranthene	4.3	3.5	5.8	1.4	3.4	3.9P	6	8.7	3.8	9.4	6.2	5.7	9.8	ND	7.3	8.2	ND	ND	8.5	5.6	*
ESE-002	Fluorene	4	4.2	7.7	0.56	8.9	11Y	2.8	53	4.9	12	8.4	14	54	1.1	30.0	12.0	35.0	ND	22	4.5	323
ESE-002	Naphthalene	ND	ND	21	ND	ND	4.3	150	36	1.8	5.6	3	10	65	ND	ND	6.2	ND	ND	ND	3	18
ESE-002	Phenanthrene	9.8	ND	4.3	0.6	5.7	17Y	4.4	82	4.7	34	7.5	18.0	38.0	0.035	37	24	36	11	15	4	130
ESE-002	Pyrene	0.83	1.2	1.6	1	1.6	2.7	2.3	4.1	1.8	3.3	4.1	3.1	3.1	ND	ND	4.4	ND	ND	ND	3.6	130
ESE-002	1- Methylnaphthalene	ND	ND	3.6	1.1	ND	2.5P	19	21	1.1	3.4	2.3	3.9	30	0.22	ND	4.1	ND	ND	ND	1.6	*
ESE-002	2-Methylnaphthalene	3	3	6.6	3.9	ND	23	36	65	5.1	14	3.7	8.2	110.0	1.3	6.0	4.0	ND	ND	48	15	*
ESE-002	Total Potentially Carcinogenic PAHs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.091	ND	0.021	ND	ND	ND	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	2630
ESE-002	2,4- Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND	12	ND	ND	12	ND	ND	ND	ND	13	ND	ND	22	*
ESE-002	Chromium	ND	ND	ND	ND	ND	58	13	ND	ND	ND	ND	ND	ND	ND	ND	12	ND	ND	ND	ND	50
ESE-004	Benzene	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	ND	ND	1.6	1.8	4.3	ND	5.1	ND	2.2	1.3	2.2	1.7	1.6	ND	2.0	1.3	1.8	1.3	ND	*
ESE-004	Acenaphthylene	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	1310
ESE-004	Fluorene	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	ND	ND	ND	ND	ND	ND	ND	ND	0.38	ND	0.48	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	130
ESE-004	2,4- Dimethylphenol	ND	ND	ND	11	10	ND	ND	22	ND	ND	13	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	2630
ESE-004	Chromium	ND	ND	ND	ND	ND	15	20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
ESE-005	Benzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1
ESE-005	Chromium	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	50
ESE-005	PCP	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.1
ESE-005	Phenol	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2630
ESE-005	Naphthalene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	18
ESE-005	Acenaphthylene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	130
ESE-005	Acenaphthene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	260
ESE-005	Fluorene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	323
ESE-005	Phenanthrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	130
ESE-005	Anthracene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1310
ESE-005	Pyrene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	130
ESE-005	Total Potentially Carcinogenic PAHs	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.003
ESE-007	Benzene	19	17	14	20	6.6	ND	12	12	2.8	2.6	1.8	1.8	1.2	8	ND	ND	2.3	3.1	1.8	ND	1
ESE-007	Toluene	270	340	380	360	110	380	320	300	9.6	26	6.8	3.8	3.3	78	62	25	22	33	7.8	43	*
ESE-007	Ethylbenzene	60	57	58	68	27	37	53	47	42	8.2	6.3	4.9	4	24	ND	10	7.7	11	6	11	*
ESE-007	Total Xylenes	73	68	61	72	28	ND	40	45	10.4	9.4	5.3	4.9	4	20.7	ND	ND	7.6	10	5.6	10	*

Summary of Surficial Aquifer Groundwater Data
March 2001 - December 2005
Eastern Site, Gainesville, Florida

WELL DESIGNATION	PARAMETERS	Mar-01	Jun-01	Oct-01	Jan-02	Mar-02	Jun-02	Sep-02	Dec-02	Mar-03	Jun-03	Sep-03	Dec-03	Mar-04	Jun-04	Sep-04	Dec-04	Mar-05	Jun-05	Sep-05	Dec-05	ROD Clean- up Goal
ESE-007	Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.14	ND	ND	ND(J)	ND	ND	260
ESE-007	Acenaphthylene	ND	15	6.2	ND	4.8	ND	5.6	7.5	ND	1.5	ND	ND	ND	1.2	1.8	ND	ND	1.3(J)	ND	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	1310
ESE-007	Fluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	323
ESE-007	Naphthalene	9.7	7	8.2	7.6	4.9	7.3	7.4	7.7	2.6	2.2	3.8	2.3	1.5	4.2	3.5	5.2	1.9	2.3	2.3	ND	18
ESE-007	Phenanthrene	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	2.4	ND	2.8	2	ND	ND	1.4	1.1	ND	ND	ND	0.58	ND	ND	ND	ND	ND	ND	ND	ND	*
ESE-007	2-Methylnaphthalene	1.7	ND	2.5	1.7	ND	ND	1.3	1.3	ND	ND	ND	0.54	ND	ND	ND	ND	ND	ND	ND	ND	*
ESE-007	Total Potentially Carcinogenic PAHs	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	5800	6800	5100	4600	1900	470	4500	3700	650	390	52	28	33	650	1000	290	40	330	130	490	2630
ESE-007	2,4- Dimethylphenol	660	<800	630	700	380	540	550	580	140	80	62	40	41	280	210	ND	35	99	64	95	*
ESE-007	2- Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	NS	NS	15	61	36	67	*
ESE-007	3&4- Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	NS	NS	79	320	170	360	*
ESE-007	Arsenic	16	ND	12	10	ND	35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
ESE-007	Chromium	13	21	96	ND	ND	560	1900	180	22	190	1900	1900	87	490	510	240	63	37	24	11	50

Notes:
All results are in ug/l (micrograms per liter).
ND = Not detected above the MDL.
NS = Not sampled for indicated compound.
* = 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.
** = Free-phase product was observed in the groundwater sample collected at ITW-14 during the September 2007 sampling event
PAH = Included as Total Potentially Carcinogenic PAHs.
Bolded values meet or exceed indicated ROD cleanup goals.

Summary of Surficial Aquifer Groundwater Data
March 2006 - December 2010
Eastern Site, Gainesville, Florida

WELL DESIGNATION	PARAMETERS	Mar-06	Jun-06	Sep-06	Dec-06	Mar-07	Jun-07	Sep-07	Dec-07	Mar-08	Jun-08	Sep-08	Dec-08	Mar-09	Jun-09	Sep-09	Dec-09	Mar-10	Jun-10	Spet-10	Dec-10	ROD Clean- up Goal	
ITW-1	Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50	
ITW-1	Acenaphthene	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	260	
ITW-1	Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,310	
ITW-1	Fluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	323	
ITW-1	Naphthalene	ND	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	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	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*	
ITW-1	2- Methylnaphthalene	ND	ND	ND	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	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	+	ND	ND	ND	Dry	1	
ITW-2	Total Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	+	ND	ND	ND	Dry	*	
ITW-2	Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	Dry	260	
ITW-2	Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	Dry	1,310	
ITW-2	Fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	Dry	*	
ITW-2	Fluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	Dry	323	
ITW-2	Naphthalene	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	Dry	18	
ITW-2	Phenanthrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	Dry	130	
ITW-2	Pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	Dry	130	
ITW-2	2- Methylnaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	Dry	*	
ITW-2	Chromium	ND	ND	ND	ND	ND	12	ND	ND	ND	ND	ND	ND	ND	26	ND	ND	ND	ND	ND	Dry	50	
ITW-13	Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	260	280	700	*
ITW-13	Benzene	64	88	81	87	81	88	81	74	100	73	86	93	91	88	86	98	67	78	93	83	1	
ITW-13	2 Butanone (MEK)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	160	140	340	*	
ITW-13	Toluene	280	280	310	290	310	440	390	280	420	320	330	290	370	330	310	260	170	260	330	400	*	
ITW-13	Ethylbenzene	260	280	280	300	270	270	260	270	350	320	290	220	280	310	300	170	140	260	350	280	*	
ITW-13	2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	46	46	61	*	
ITW-13	4-Methyl-2-Pentanone (MIBK)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	23	ND	*	
ITW-13	Total Xylenes	160	190	190	190	180	180	170	160	210	200	180	120	170	180	180	98	85	170	190	160	*	
ITW-13	Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	260	
ITW-13	Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	130	
ITW-13	Anthracene	ND	ND	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	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003	
ITW-13	Benzo (b) fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003	
ITW-13	Fluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	323	
ITW-13	Naphthalene	54	48	45	26	ND	45	71	41	53	38	50	37	19	24	29	14	13	39	40	40	18	
ITW-13	Phenanthrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	130	
ITW-13	Total Potentially Carcinogenic PAHs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003	
ITW-13	1- Methylnaphthalene	2.7	4.6	3.3	ND	ND	5.8	ND	2.3	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*	
ITW-13	2- Methylnaphthalene	4.1	3.9	3.7	ND	ND	3.4	ND	2.4	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*	
ITW-13	Phenol	6200	13000	8800	4600	1500	3100	6100	6300	5900	8300	8100	7800	4700	7500	5100	8300	4300	5100	3000	8700	2630	
ITW-13	2,4- Dimethylphenol	1800	3100	2600	1900	830	1800	2200	2000	2300	2400	3300	2000	2000	2900	2200	2400	2400	2200	2200	2100	*	
ITW-13	2- Methylphenol	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	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	*	
ITW-13	Arsenic	10	ND	ND	ND	ND	ND	ND	ND	12	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50	
ITW-13	Chromium	ND	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50	
ITW-14	Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	230	160	*	
ITW-14	Benzene	25	31	57	47	26	ND	ND	39	46	28	32	42	54	41	35	55	51	46	48	47	1	
ITW-14	Toluene	440	420	790	650	230	670	500	580	700	430	380	610	830	580	470	770	650	640	870	800	*	
ITW-14	Ethylbenzene	120	120	210	150	97	200	120	160	160	120	110	150	190	180	130	200	190	200	230	190	*	
ITW-14	Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	22	ND	22	*	
ITW-14	Total Xylenes	320	350	620	470	280	640	380	470	480	380	320	420	560	470	370	560	570	520	660	550	*	
ITW-14	Acenaphthene	ND	ND	23	250	ND	ND	ND	ND	17	ND	ND	ND	160	ND	ND	6	30	ND	820	ND	260	
ITW-14	Acenaphthylene	ND	ND	480	610	320	240	**4900	ND	380	260	560	490	990	140	1700	64	300	890	2600	730	130	
ITW-14	Anthracene	3.0	3.0	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1310	
ITW-14	Benzo (a) anthracene	3.4	1.0	2.2	ND	ND	3.4	**100	0.2	ND	ND	ND	ND	39.0	ND	200.0	ND	7.1	64.0	84.0	35.0	0.003	
ITW-14	Benzo (a) pyrene	5.7	1.8	3.7	ND	ND	0.57	**45	ND	5	ND	12	ND	49	ND	61	ND	24	6.7	120.0	45.0	0.003	
ITW-14	Benzo (b) fluoranthene	ND	1.3	23	120	ND	27	**1300	1.2	15	13	31	ND	150	8.3	400	ND	35	73	490	110	0.003	
ITW-14	Benzo (g,h,i) pery																						

Summary of Surficial Aquifer Groundwater Data
March 2006 - December 2010
Eastern Site, Gainesville, Florida

WELL DESIGNATION	PARAMETERS	Mar-06	Jun-06	Sep-06	Dec-06	Mar-07	Jun-07	Sep-07	Dec-07	Mar-08	Jun-08	Sep-08	Dec-08	Mar-09	Jun-09	Sep-09	Dec-09	Mar-10	Jun-10	Spet-10	Dec-10	ROD Clean- up Goal
ITW-14	2- Methylnaphthalene	ND	91	100	200	97	120	**4200	60	80	130	190	160	600	70	1500	32	230	290	1100	360	*
ITW-14	Total Potentially Carcinogenic PAHs	24.6	15	61.3	120	0	84.07	0.00	5.1	20	29	122	0	601	30	2435	0	189	401.5	1605	850	0.003
ITW-14	Phenol	ND	220	640	520	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,630
ITW-14	2,4- Dimethylphenol	3000	4300	4800	4900	11000	3900	1700	2600	3900	6100	4000	4500	6000	8100	4100	5200	4600	6100	3500	4100	*
ITW-14	2- Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	*
ITW-14	3&4- Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	*
ITW-14	Arsenic	ND	ND	ND	ND	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	ND	ND	ND	ND	ND	50
WMW-17E	Benzene	ND	ND	ND	ND	ND	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	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
WMW-17E	Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
WMW-17E	Total Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	3.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	*
WMW-17E	Acenaphthene	ND	ND	ND	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	2.3	2.5	ND	ND	5.7	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	130
WMW-17E	Anthracene	ND	ND	ND	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	ND	ND	ND	ND	ND	323
WMW-17E	Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	2.6	2.5	1.6	1.7	ND	ND	ND	ND	ND	ND	1.2	ND	18
WMW-17E	Phenanthrene	ND	ND	ND	ND	ND	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	ND	ND	ND	ND	ND	130
WMW-17E	Total Potentially Carcinogenic PAHs	ND	ND	ND	ND	ND	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	ND	ND	ND	1.3	2	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	*
WMW-17E	2- Methylnaphthalene	ND	ND	ND	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	ND	ND	ND	ND	13	*
WMW-17E	PCP	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1
WMW-17E	Phenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,630
WMW-17E	Chromium	ND	12	11	55	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	46	ND	50
WMW-18E	Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
WMW-18E	Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
WMW-18E	Ethylbenzene	ND	ND	ND	ND	ND	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	ND	ND	ND	ND	ND	*
WMW-18E	Acenaphthene	ND	ND	ND	ND	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	ND	ND	ND	ND	ND	130
WMW-18E	Benzo(b)flouranthene	ND	ND	ND	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	ND	ND	ND	ND	ND	323
WMW-18E	Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18
WMW-18E	Phenanthrene	ND	ND	ND	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	ND	ND	ND	ND	ND	130
WMW-18E	Total Potentially Carcinogenic PAHs	ND	ND	ND	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	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
WMW-18E	2- Methylnaphthalene	ND	ND	ND	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	ND	ND	ND	ND	ND	0.1
WMW-18E	2,4- Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
WMW-18E	Chromium	73	70	170	220	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND	ND	ND	ND	ND	50
WMW-18E	Arsenic	ND	ND	14	20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
ESE-002	Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ESE-002	Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
ESE-002	Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ESE-002	Total Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ESE-002	Acenaphthene	2.7	ND	3	16	ND	2	28	ND	ND	20	9.6	37.0	18.0	2.6	11.0	17.0	43.0	8.9	12.0	6.7	260
ESE-002	Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5	1.6	ND	ND	1.0	ND	ND	5.8	ND	130
ESE-002	Anthracene	ND	ND	ND	ND	ND	ND	5.7	2.8	ND	2.3	ND	ND	ND	ND	2.1	1.3	3.3	ND	5.2	2.2	1,310
ESE-002	Fluorathene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ESE-002	Benzo(a)anthracene	ND	ND	ND	ND	ND	ND	0.23	0.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	PAH
ESE-002	Chrysene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	PAH
ESE-002	Fluoranthene	4.7	5.3	6.6	ND	4.7	2.6	ND	18	9	9.1	6.1	10	12	ND	14	6.1	9.7	10	ND	8.3	*
ESE-002	Fluorene	3.6	7.8	2.1	3.8	2.3	1.5	34	ND	ND	11	ND	21	9	ND	4	ND	28	2.1	7	2.5	323
ESE-002	Naphthalene	ND	ND	ND	ND	ND	0.93	ND	ND	ND	2.6	ND	24	18	ND	1.9	4.5	40	ND	3.2	3.2	18
ESE-002	Phenanthrene	3.5	4.8	ND	ND	ND	ND	10	ND	ND	21	ND	13	4	ND	8.5	13	29	3.8	6.4	15	130
ESE-002	Pyrene	2.5	2.5	2.7	2.6	1.6	1.5	4.8	11	3.9	4.2	4.1	4.2	5.5	1.2	5.1	3.1	4.9	7.0	3.6	4.4	130
ESE-002	1- Methylnaphthalene	ND	3.4	ND	7.5	ND	ND	ND	ND	ND	2.4	ND	11	4.7	ND	2.9	2.8	10	ND	1.8	2.1	*
ESE-002	2-Methyln																					

Summary of Surficial Aquifer Groundwater Data
March 2006 - December 2010
Eastern Site, Gainesville, Florida

WELL DESIGNATION	PARAMETERS	Mar-06	Jun-06	Sep-06	Dec-06	Mar-07	Jun-07	Sep-07	Dec-07	Mar-08	Jun-08	Sep-08	Dec-08	Mar-09	Jun-09	Sep-09	Dec-09	Mar-10	Jun-10	Spet-10	Dec-10	ROD Clean- up Goal
ESE-004	Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ESE-004	Benzene	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	ND	ND	ND	ND	ND	ND	ND	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	130
ESE-004	Anthracene	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	323
ESE-004	Naphthalene	ND	ND	ND	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	130
ESE-004	2,4- Dimethylphenol	14	ND	ND	ND	ND	ND	ND	ND	ND	ND	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	2,630
ESE-004	Chromium	ND	ND	12	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
ESE-007	Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	61	*
ESE-007	Benzene	1.1	4.7	3	11	9.5	20	14	12	9.3	11	6.8	5.2	1.8	2.8	3.1	5.6	2.6	2.7	ND	6.4	1
ESE-007	2-Butanone (MEK)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	27.0	*
ESE-007	Toluene	11	26	2.2	190	210	290	190	160	120	170	7.1	5.2	1.1	3.7	4.5	15	5.7	6.0	ND	22.0	*
ESE-007	Ethylbenzene	3.9	13	1.5	29	31	56	37	34	31	40	14	14	2.6	6.9	5.9	11	5.9	6.0	ND	19.0	*
ESE-007	Total Xylenes	3.9	14	4.5	31	30	61	44	39	34	44	17	13	3.4	9.1	8.6	13	6.5	7.7	ND	19	*
ESE-007	Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	260
ESE-007	Acenaphthylene	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	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	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	323
ESE-007	Naphthalene	ND	1.6	1.6	ND	4.5	10	12	6.6	3.7	7.5	2.1	1.1	1.4	1.1	2.1	6.2	2	ND	ND	ND	18
ESE-007	Phenanthrene	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	ND	0.93	2.5	ND	ND	ND	1.9	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	*
ESE-007	2-Methylnaphthalene	ND	ND	ND	ND	ND	1.3	ND	ND	ND	1.4	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	*
ESE-007	Total Potentially Carcinogenic PAHs	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	230	270	58	1400	3400	1500	2000	1400	390	2700	ND	16	ND	33	41	ND	77	98	61	160	2,630
ESE-007	2,4- Dimethylphenol	56	140	36	330	600	520	680	410	230	500	220	88	48	59	64	ND	56	71	64	170	*
ESE-007	2- Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	*
ESE-007	3&4- Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	*
ESE-007	Arsenic	ND	14	ND	20	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
ESE-007	Chromium	11	110	150	230	ND	ND	ND	ND	ND	ND	ND	ND	ND	28	ND	ND	ND	ND	ND	ND	50

Notes:
+ = ITW-2 VOC sample bottle broken.
All results are in ug/l (micrograms per liter).
ND = Not detected above the MDL.
NS = Not sampled for indicated compound.
NA = Not analyzed
* = 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.
** = Free-phase product was observed in the groundwater sample collected at ITW-14 during the September 2007 sampling event.
PAH = Included as Total Potentially Carcinogenic PAHs.
Bolded values meet or exceed indicated ROD cleanup goals.
p = The % RPD between the primary and confirmation column/detector is > 40%. The lower value has been reported.
E = Result exceeded calibration range.

Summary of Surficial Aquifer Groundwater Data
March 2011 - December 2015
Eastern Site, Gainesville, Florida

WELL DESIGNATION	PARAMETERS	Mar-11	Jun-11	Aug-11	Nov-11	Mar-12	Jun-12	Aug-12	Dec-12	Mar-13	May-13	Sep-13	Dec-13	Mar-14	Jun-14	Aug-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	ROD Clean- up Goal
ITW-1	Acetone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	12	ND	*
ITW-1	Methyl tert-butyl ether (MTBE)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	0.32 J	ND	*
ITW-1	Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
ITW-1	Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	260
ITW-1	Acetophenone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	ND	ND	0.61 J F1	ND	ND	*
ITW-1	Anthracene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1310
ITW-1	Fluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	323
ITW-1	Naphthalene	ND	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	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	130
ITW-1	Diethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	0.14 J	ND	ND	ND	ND	*
ITW-1	Di-n-octyl-phthalate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	ND	ND	ND	ND	0.29 J	ND	*
ITW-2	Acetone	NS	NS	NS	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NS	NS	NS	ND	ND	ND	ND	9.4 J	ND	14	*
ITW-2	Benzene	NS	NS	NS	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
ITW-2	Total Xylenes	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ITW-2	Acenaphthene	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	260
ITW-2	Anthracene	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1310
ITW-2	Fluoranthene	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ITW-2	Fluorene	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	323
ITW-2	Naphthalene	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18
ITW-2	Phenanthrene	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	130
ITW-2	Pyrene	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	130
ITW-2	2- Methylnaphthalene	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ITW-2	2,4-Dichlorophenol	NS	NS	NS	Drt	Drt	Drt	Drt	Drt	Drt	Drt	NS	NS	NS	2.1	ND	ND	ND	ND	ND	ND	*
ITW-2	Di-n-octyl-phthalate	NS	NS	NS	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NS	NS	NS	NA	ND	ND	ND	ND	0.22 J	ND	*
ITW-2	Chromium	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ND	ND	ND	ND	ND	2.3 J	ND	ND	1.7 J	ND	50
ITW-13	Acetone	430	600	950	280	490	1100	1400	860	260	190	360	1300	420	ND	240	240	140	340	230	97	*
ITW-13	Benzene	80	110	79	70	75	130	78	91	75	73	86	59	60	96	83	69	75	73	71	63	1
ITW-13	2 Butanone (MEK)	210	320	240	180	260	450	250	240	ND	110	120	100	65	51	89	110	79	86	130	48	*
ITW-13	Cis-1-2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	3.6 J	8.2	3.6	3.3	3.2	*
ITW-13	p-Isopropyltoluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	230	330	270	ND	260	*
ITW-13	Toluene	350	550	360	490	680	1600	560	570	440	530	410	250	260	370	330	300	ND	350	310	300	*
ITW-13	Ethylbenzene	260	380	240	250	250	480	250	340	300	340	320	210	210	300	280	250	240	300	260	290	*
ITW-13	2-Hexanone	ND	66	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	33 J	34	32	40	28	*
ITW-13	Isopropylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	9.5	ND	8.5	9.9	11	*
ITW-13	4-Methyl-2-Pentanone (MIBK)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	440	ND	ND	ND	ND	20 J	20	17	18	15	*
ITW-13	p-Isopropyltoluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	220	ND	230	ND	*
ITW-13	Trichlorethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	3.4	ND	ND	ND	*
ITW-13	1,2,3-Trichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	ND	1.3	ND	ND	*
ITW-13	1,2,4-Trimethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	20	17	21	23	*
ITW-13	1,3,5-Trimethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	3.5	2.7	3.5	ND	*
ITW-13	Total Xylenes	160	210	150	150	180	310	140	ND	170	190	180	120	120	160	160	160	140	160	150	160	*
ITW-13	Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	260
ITW-13	Acenaphthylene	ND	17	84	37	54	47	ND	26	24	ND	ND	ND	ND	ND	ND	ND	ND	9.1 J	ND	54	130
ITW-13	Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.7 J	ND	ND	ND	ND	1310
ITW-13	Benzo (a) anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003
ITW-13	Benzo (a) pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.5 J	ND	ND	ND	0.003
ITW-13	Benzo (b) fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003
ITW-13	Chrysene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3 J	ND	ND	ND	0.003
ITW-13	Fluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	323
ITW-13	Naphthalene	36	25	53	27	35	250	62	53	49	47	97	ND	53	ND	ND	60	61	55	92	62	18
ITW-13	Phenanthrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.8 J	8.0 J	ND	ND	ND	130
ITW-13	Total Potentially Carcinogenic PAHs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003
ITW-13	1- Methylnaphthalene	ND	ND	18	ND	ND	NS	NS	NS	NS	NS	ND	ND	ND	NS	NS	NS	NS	NS	NS	NS	*
ITW-13	2- Methylnaphthalene	ND	ND	24	ND	ND	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	ND	7.8 J	5.6 J	ND	6.0 J	*
ITW-13	Phenol	4400	7000	4700	3700	6300	3400	4000	4200	1300	1100	2,300	1,800	960	640	1,600	1,800	2,300	2,500	3,500	1,400	2630
ITW-13	2,4- Dimethylphenol	2000	2800	2200	2200	3500	2100	2000	2900	2000	1900	3,300	2,400	3,100	2,300	1,100	2,700	2,900	2,900	3,500	2,200	*
ITW-13	2- Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,700	ND	2,000	2,100	2,100	2,600	1,500	*
ITW-13	3&4- Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,500	3,400	6,700	6,400	7,100	14,000	4,800	*
ITW-13	Arsenic	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11 J	10 J	50
ITW-13	Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
ITW-14	Acetone	ND	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	22	35	8.0 J	15	*
ITW-14	Benzene	33	33	38	45	47	19	15	26	34	34	36	23	29	35	ND	30	36	32	18	31	1
ITW-14	Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15	ND	ND	ND	ND	ND	ND	ND	ND	*
ITW-14	Cis-1-2-Dichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	3.6	ND	4.0 J	ND	*
ITW-14	2-Butanone (MEK)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	*

Summary of Surficial Aquifer Groundwater Data
March 2011 - December 2015
Eastern Site, Gainesville, Florida

WELL DESIGNATION	PARAMETERS	Mar-11	Jun-11	Aug-11	Nov-11	Mar-12	Jun-12	Aug-12	Dec-12	Mar-13	May-13	Sep-13	Dec-13	Mar-14	Jun-14	Aug-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	ROD Clean- up Goal
ITW-14	Carbon Disulfide	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	ND	1.1 J	*
ITW-14	Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	ND	3.8	*
ITW-14	Toluene	550	570	560	710	900	290	220	560	560	560	550	57	440	470	430	470	550	530	230	510	*
ITW-14	Ethylbenzene	160	150	180	180	250	75	69	160	150	150	140	110	140	120	120	150	160	170	110	170	*
ITW-14	Isopropylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	16	21	12	13	23	*
ITW-14	p-Isopropyltoluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	430	530	630	ND	520	*
ITW-14	Styrene	23	ND	29	29	ND	9.6	9.7	ND	ND	28	ND	8.4	12	8.8	ND	ND	ND	ND	ND	10	*
ITW-14	1,2,4-Trimethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	93	71	67	100	*
ITW-14	1,3,5-Trimethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	18	11	13	18	*
ITW-14	Total Xylenes	450	420	500	530	790	260	240	470	450	480	430	300	410	360	350	430	480	460	330	470	*
ITW-14	Acenaphthene	55	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	ND	28	ND	ND	12	14	14	17	8.1	260
ITW-14	Acenaphthylene	210	270	300	490	660	130	80	220	300	24	25	ND	ND	ND	ND	13	19	22	17	12	130
ITW-14	Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8 J	2.9	3.4	1.8 J	ND	1310
ITW-14	Benzo (a) anthracene	ND	ND	5.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003
ITW-14	Benzo (a) pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003
ITW-14	Benzo (b) fluoranthene	ND	15.0	ND	24	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003
ITW-14	Benzo (g,h,i) perylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ITW-14	Benzo (k) flouranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003
ITW-14	1,1-Biphenyl	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	6.6 J	7.6 J	4.8 J	4.0 J	*
ITW-14	Chrysene	ND	85.0	10	120	130	39	70	74	35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003
ITW-14	Dibenzofuran	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	5.6 J	4.0 J	3.7 J	2.7 J	*
ITW-14	Dibenzo (a,h) anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003
ITW-14	Indeno(1,2,3-cd)pyrene	ND	4.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003
ITW-14	Fluoranthene	31	280	44p	190	320	45	70	39	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ITW-14	Fluorene	19	58	ND	35	78	ND	ND	18	17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.0	323
ITW-14	Naphthalene	180	180	160	170	200	500	40	190	210	180	200	130	270	120	94	85	380	330	150	120	18
ITW-14	Phenanthrene	ND	48.0	10.0	33.0	60.0	12.0	16.0	11	7.4	ND	10	ND	35	ND	ND	6.7	9.5	15	8.7	7.3	130
ITW-14	Pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5 J	130
ITW-14	1- Methylnaphthalene	65	200	75	270	280	NS	NS	NS	NS	NS	NS	ND	ND	NS	NS	NS	NS	NS	NS	NS	*
ITW-14	2- Methylnaphthalene	50	110	82	110	190	NS	NS	NS	NS	NS	NS	ND	ND	45	39	41	120	120	71	55	*
ITW-14	Total Potentially Carcinogenic PAHs	ND	105	15.6	144.0	130.0	39.0	70.0	74	35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003
ITW-14	Phenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.5 J	2630
ITW-14	2,4- Dimethylphenol	1900	ND	2800	ND	ND	890	640	1900	2400	2300	2,500	1,500	1,200	1,000	1,300	1,100	2,700	2,600	690	41	*
ITW-14	2- Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	240	ND	ND	210	ND	ND	230	*
ITW-14	3&4- Methylphenol	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	80	83	300	51	150	*
ITW-14	Nitrobenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	140	ND	ND	ND	ND	ND	ND	*
ITW-14	Arsenic	ND	ND	ND	ND	ND	ND	20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.3 J	6.8 J	50
ITW-14	Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
WMW-17E	Acetone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	ND	180	*
WMW-17E	Benzene	ND	ND	ND	ND	1.1	2.1	1.5	ND	ND	ND	ND	ND	ND	ND	ND	0.96 J	1.0	ND	ND	ND	1
WMW-17E	Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	ND	3.8	*
WMW-17E	Ethylbenzene	ND	ND	3.0	ND	ND	4.0	2.7	ND	ND	ND	ND	ND	ND	ND	1.8	0.95 J	0.69 J	ND	ND	ND	*
WMW-17E	Isopropylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	1.0	1.1	0.55 J	1.2	0.52 J	*
WMW-17E	Toluene	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
WMW-17E	Total Xylenes	2.9	ND	7.8	3.7	5.5	3.3	ND	2	ND	ND	ND	ND	ND	ND	6.3	3.4	2.7	0.63 J	ND	ND	*
WMW-17E	Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.54	0.51	ND	0.58	0.53	0.39	0.53	0.49	0.42	0.73	0.68	260
WMW-17E	Acenaphthylene	ND	ND	ND	ND	3.6	5.0	1.3	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2	ND	130
WMW-17E	Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1310
WMW-17E	Acetophenone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	ND	ND	ND	ND	0.37 J	ND	*
WMW-17E	Fluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	323
WMW-17E	Naphthalene	1.4	ND	3.2	ND	3.3	29 E	4.0	17	2.5	2.3	1.1	2.6	2.7	1.7	3.5	3.6	2.2	1.8	2.8	2.2	18
WMW-17E	Phenanthrene	ND	ND	ND	ND	ND	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	ND	ND	ND	ND	ND	130
WMW-17E	Total Potentially Carcinogenic PAHs	ND	ND	ND	ND	ND	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	1.0	NS	NS	NS	NS	NS	NS	ND	ND	NS	NS	NS	NS	NS	NS	NS	*
WMW-17E	2- Methylnaphthalene	ND	ND	ND	ND	ND	NS	NS	NS	NS	NS	NS	ND	ND	ND	0.35	0.46	0.34	0.21	0.59	0.22	*
WMW-17E	2,4- Dimethylphenol	ND	ND	43	23	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND	18	7.0	3.7	ND	ND	ND	*
WMW-17E	PCP	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1
WMW-17E	Phenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	2630
WMW-17E	Di-n-octyl-phthalate	NS	NS	NS	NS	NS	NS	NS	NS	NS</												

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WMW-18E	Total Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
WMW-18E	Acetophenone	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	0.33 J	ND	ND	ND	ND	*
WMW-18E	Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.47	ND	ND	ND	ND	ND	ND	ND	ND	ND	260
WMW-18E	Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35	ND	ND	ND	ND	ND	ND	ND	0.3	ND	130
WMW-18E	Benzo(b)flouranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003
WMW-18E	Fluorene	ND	ND	ND	ND	ND	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	ND	ND	ND	ND	ND	18
WMW-18E	Phenanthrene	ND	ND	ND	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	ND	ND	ND	ND	ND	130
WMW-18E	Total Potentially Carcinogenic PAHs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003
WMW-18E	2- Methylnaphthalene	ND	ND	ND	ND	ND	NS	NS	NS	NS	NS	NS	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	ND	ND	ND	ND	ND	0.1
WMW-18E	2,4- Dimethylphenol	ND	ND	ND	15.0	15.0	11.0	ND	ND	ND	ND	ND	ND	ND	ND	2.7	1.0	ND	11	6.9	2.4	*
WMW-18E	Chromium	ND	ND	ND	11.0	10.0	11.0	ND	ND	10	ND	ND	ND	ND	ND	ND	6.7 J	5.7 J	8.1 J	6.4 J	6.6 J	50
WMW-18E	Arsenic	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
ESE-002	Acetone	61	130	ND	ND	240	ND	ND	ND	ND	ND	130	72	54	ND	ND	ND	ND	24	ND	ND	*
ESE-002	Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
ESE-002	Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	ND	14	*
ESE-002	Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ESE-002	Total Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ESE-002	Acenaphthene	27.0	6.0	24.0	3.5	ND	20	3.8	ND	ND	0.63	2.6	ND	1.5	0.41	0.94	0.2	0.93	0.18 J	1.4	2.7	260
ESE-002	Acenaphthylene	1.7	ND	ND	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	130
ESE-002	Anthracene	2.7	ND	7.8p	ND	ND	0.24	ND	1.7	0.83	0.53	0.72	ND	1.5	0.24	0.43	0.1 J	0.34	ND	1.9	2.0	1310
ESE-002	Fluorathene	ND	ND	ND	ND	ND	ND	2.4	8.9	3.3	ND	ND	ND	ND	ND	ND	0.98	ND	0.45	ND	ND	*
ESE-002	Benzo(a)anthracene	ND	ND	0.21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.13 J	0.14 J	0.003
ESE-002	1,1-Biphenyl	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	0.11 J	ND	0.20 J	0.28 J	*
ESE-002	Chrysene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.076 J	0.081 J	0.003
ESE-002	Dibenzofuran	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	1.0	ND	0.69	ND	0.52 J	2.5	*
ESE-002	Fluoranthene	ND	8.8p	ND	2.5	ND	1.0	8.2	ND	ND	2.2	0.94	ND	5.4	1.7	1.1	ND	0.66	ND	4.3	6.3	*
ESE-002	Fluorene	22	ND	11	ND	ND	15	ND	6.4	3.9	0.98	5.7	ND	5.1	0.48	2.1	0.2	1.3	ND	0.85	5.1	323
ESE-002	Naphthalene	18	ND	10p	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.12 J	ND	18
ESE-002	Phenanthrene	ND	3.7	ND	ND	ND	2.8	19	16	8.6	7.4	7.6	ND	23	ND	ND	1.1	ND	0.98	ND	29	130
ESE-002	Pyrene	ND	ND	3.6	ND	ND	0.70	1.50	ND	2.7	1.3	0.73	ND	ND	ND	ND	0.45	ND	0.28	ND	ND	130
ESE-002	1- Methylnaphthalene	4.9P	ND	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	NS	NS	NS	*
ESE-002	2-Methylnaphthalene	30	1.5p	12	0.96	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.13 J	ND	0.33	0.37	*
ESE-002	Phenanthrene	18	3.3	2.3	1.8	ND	2.8	ND	ND	ND	ND	ND	ND	ND	3.1	5.4	ND	5.1	ND	19	ND	130
ESE-002	Pyrene	ND	ND	ND	ND	ND	ND	ND	4.8	ND	ND	ND	ND	2.6	0.84	0.73	ND	0.38	ND	2.8	3.8	130
ESE-002	Total Potentially Carcinogenic PAHs	ND	ND	0.21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	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	2630
ESE-002	2,4- Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ESE-002	Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
ESE-004	Acetone	170	ND	ND	ND	ND	ND	ND	37	ND	ND	ND	50	ND	ND	ND	13	ND	17	ND	ND	*
ESE-004	Benzene	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	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ESE-004	Acenaphthylene	ND	ND	ND	ND	2.6	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	1310
ESE-004	Fluorene	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	ND	2.1	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	130
ESE-004	2,4- Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	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	2630
ESE-004	Chromium	ND	ND	ND	ND	ND	39	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4 J	3.9 J	3.2 J	ND	4.9 J	50
ESE-007	Acetone	30	ND	ND	ND	160	130	36	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ESE-007	Benzene	2.9	4.2	6.2	3.9	13.0	9.0	4.8	4.2	3.0	3.7	1.8	1.4	1.3	1.4	ND	1.1	1.0	1.3	1.5	1.4	1
ESE-007	2-Butanone (MEK)	ND	ND	ND	ND	58.0	56	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ESE-007	Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	ND	5.0	*
ESE-007	Toluene	7.9	3.3	17.0	ND	110.0	75	18	5.4	ND	ND	ND	ND	ND	ND	ND	0.66 J	0.51 J	ND	ND	0.55 J	*
ESE-007	Ethylbenzene	6.5	4.7	14.0	3.3	41.0	31	14	14	7.0	9.0	2.3	2.1	1.8	1.2	ND	1.9	1.5	ND	2.1	1.5	*
ESE-007	Isopropylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	0.51 J	0.46 J	0.57 J	0.66 J	0.49 J	*
ESE-007	Total Xylenes	7.2	6.2	11	4.9	41	30	14	15	7.6	9.3	3.8	4.3	4.1	2.9	ND	2.8	2.4	1.4	3.3	2.3	*
ESE-007	1,2,4-Trimethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	0.84 J	ND	1.1	0.63 J	*
ESE-007	Acenaphthene	ND	ND	ND	ND	ND																

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ESE-007	Naphthalene	ND	ND	ND	ND	ND	70	2.6	ND	ND	3.7	2.8	ND	2.7	1.4	1.8	1.6 J	1.0	0.16 J	2.2	1.3	18
ESE-007	Phenanthrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	130
ESE-007	Total Potentially Carcinogenic PAHs	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	83	85	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2630
ESE-007	Diethylphthalate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3.0	ND	ND	ND	ND	ND	ND	*
ESE-007	2,4- Dimethylphenol	46	ND	68	ND	420	370	150	76	37	28	28	ND	26	16	19	17 J	6.7	1.2 J	14.0	10	*
ESE-007	2- Methylphenol	ND	ND	ND	ND	ND	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ESE-007	3&4- Methylphenol	ND	ND	ND	ND	ND	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	*
ESE-007	Arsenic	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.3 J	ND	50
ESE-007	Chromium	ND	12	ND	110	12	13	ND	ND	ND	ND	ND	10	ND	ND	ND	11	11	13	9.7 J	10	50

Notes:
+ = ITW-2 VOC sample bottle broken
All results are in ug/l (micrograms per liter).
ND = Not detected above the MDL.
NS = Not sampled for indicated compound.
NA = Not analyzed
* = 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.
** = Free-phase product was observed in the groundwater sample collected at ITW-14 during the September 2007 sampling event.
PAH = Included as Total Potentially Carcinogenic PAHs.
Bolded values meet or exceed indicated ROD cleanup goals.
p=The % RPD between the primary and confirmation column/detector is > 40%. The lower value has been reported
E = Result exceeded calibration range.

A.5

Groundwater Data Summary – Expanded Sampling Events

Table A.5.1 Expanded Scope Groundwater Quality Data - March 2005

Detected Compounds of Concern	ROD Cleanup Level	Well Units	ITW-1	ITW-2	ITW-4	ITW-6	ITW-7	ITW-8	ITW-9	ITW-11	ITW-15	ITW-16	ITF-3	ITW-13	ITW-14	WMW-17E	WMW-18E	ESE-002	ESE-004	ESE-007
Benzene	1	µg/L				22	27	15	11						26			2.3		2.3
Acenaphthene	260	µg/L				32														
Acenaphthylene	130	µg/L					42													
Anthracene	1310	µg/L																		
Fluorene	323	µg/L	0.56			27												35		
Naphthalene	18	µg/L				210	32				4.6	1.6	7.6	2						1.9
Phenanthrene	130	µg/L				5.7									210			36		
Pyrene	130	µg/L																		
Total Potentially Carcinogenic PAHs	0.003	µg/L									0.32				900					
Phenol	2630	µg/L					260				94			2400						40
Arsenic	50	µg/L				20														
Chromium	100*	µg/L				97		100		13	20	550		14			17			63

Notes:

Blank = Non-detect

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

Bold = Analyte detected above ROD cleanup goal

Table A.5.2 Expanded Scope Groundwater Quality Data – March 2005 Terpenes and Terpenoids

Well Designation	Compound	Concentration (µg/L)
ITW-4	All Compounds	ND
ITW-8	Borneol	160
	Camphor	650
ITW-9	Camphor	2000
	Cineole	110
ITW-11	Camphene	0.72
	Limonene	0.96

Note:

ND = Non-detect

Table A.5.3 Groundwater Quality Data - June-August 2008

Detected Compounds of Concern	ROD Cleanup Level	Well Units	ITW-1	ITW-2	ITW-4	ESE-005	ESE-006	ITW-6	ITW-7	ITW-8	ITW-9	ITW-11	ITW-15	ITW-16	ITF-3 (June- 2008) ^a	ITF-3 (Aug- 2008) ^a
Benzene	1	µg/L				10	37	3	4.4	14	21		2.8	2.1	1.2	
Ethylbenzene	*	µg/L				110	140	65	4.1	18	65		8.7	1.1		
Toluene	*	µg/L				24	48	34		170	720		190			
Xylenes, Total	*	µg/L				230	140	97	3.1	33	83	4.3	13	11		2.1
MTBE	*	µg/L														
Acenaphthene	260	µg/L					7.2	40								
Acenaphthylene	130	µg/L														
Anthracene	1310	µg/L														
Benzo(b)fluoranthene	*	µg/L														
Chrysene	*	µg/L														
Fluoranthene	*	µg/L					28									
Fluorene	323	µg/L						13								
1-Methylnaphthalene	*	µg/L					70	46								
2-Methylnaphthalene	*	µg/L					53	45								
Naphthalene	18	µg/L					63	250						6.7	20	11
Phenanthrene	130	µg/L					20									
Pyrene	130	µg/L														
Total Potentially Carcinogenic PAHs	0.003	µg/L														
Phenol	2630	µg/L								82			120		29	
2,4-Dimethylphenol	*	µg/L				31		110		240	1000		39			
Arsenic	50	µg/L														
Chromium	100**	µg/L				22		67		13				220		

Notes:

Blank = Non-detect

* No ROD cleanup goal for the compound.

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

Data in **bold** indicate exceedances of the ROD cleanup goal.

a) ITF-3 was re-sampled in August 2008 due to the presence of sediments in the well during the June 2008 sampling event.

Table A.5.3 Groundwater Quality Data - June-August 2008

Detected Compounds of Concern	ROD Cleanup Level	Well Units	ITW-13	ITW-14	ESE-007	WMW- 17E	WMW- 18E	ESE-002	ESE-004
Benzene	1	µg/L	73	28	11				
Ethylbenzene	*	µg/L	320	120	40				
Toluene	*	µg/L	320	430	170				
Xylenes, Total	*	µg/L	200	380	44				
MTBE	*	µg/L							
Acenaphthene	260	µg/L						20	
Acenaphthylene	130	µg/L		260					
Anthracene	1310	µg/L						2.3	
Benzo(b)fluoranthene	*	µg/L		13					
Chrysene	*	µg/L		16					
Fluoranthene	*	µg/L		79				9.1	
Fluorene	323	µg/L		36				11	
1-Methylnaphthalene	*	µg/L		150	1.9	2		2.4	
2-Methylnaphthalene	*	µg/L		130	1.4			11	
Naphthalene	18	µg/L	38	260	7.5	2.5		2.6	
Phenanthrene	130	µg/L		15				21	
Pyrene	130	µg/L						4.2	
Total Potentially Carcinogenic PAHs	0.003	µg/L		29					
Phenol	2630	µg/L	8300		2700				
2,4-Dimethylphenol	*	µg/L	2400	6100	500				
Arsenic	50	µg/L	10						
Chromium	100**	µg/L							

Notes:

Blank = Non-detect

* No ROD cleanup goal for the compound.

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

Data in **bold** indicate exceedances of the ROD cleanup goal.

a) ITF-3 was re-sampled in August 2008 due to the presence of sediments in the well during the June 2008 sampling event.

Table A.5.4 Groundwater Quality Data – June-August 2008 Terpenes and Terpenoids

Well Designation	Compound	Concentration (µg/L)
ITF-3	All Compounds	ND
ITW-4	All Compounds	ND
ITW-8	Camphor	840
	Cineole	43
ITW-9	Camphor	2400
	Cineole	55
ITW-11	All Compounds	ND

Note:

ND = Non-detect

Appendix B

Sediment Tar Removal Report

FINAL
Tar Removal Completion Report
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

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1 Introduction

The purpose of this report is to document the details of the 2011 tar removal work completed by Cabot Corporation (Cabot) in Springstead and Hogtown Creeks (creeks) in Gainesville, Florida. The project, which involved the successful removal of visible and accessible tar deposits from 14 accumulation areas in the creeks, was performed in accordance with the US EPA-approved Tar Removal Work Plan, dated January 3, 2011 (Gradient and Weston, 2011). The project was a cooperative effort between Cabot, US Environmental Protection Agency (US EPA) Region 4, Florida Department of Environmental Protection (FDEP), Alachua County Environmental Protection Department (ACEPD) and the City of Gainesville. The tar removal activities were completed between February and April 2011. The results of the confirmatory sediment sampling, conducted after tar removal activities were completed, demonstrated that polynuclear aromatic hydrocarbons (PAHs) were either not detected or detected at low concentrations, consistent with background, in most of the confirmation samples. The residual PAH concentrations are expected to pose an insignificant risk to human health and the environment, and are expected to further attenuate over time.

2 Background

Springstead and Hogtown Creeks are urbanized creeks located downstream of the Cabot Carbon/Koppers Superfund Site in Gainesville, Florida ("Site"; Figure 1). Although operations at the Cabot Carbon facility ceased in 1966, historical facility-related inputs, including storm and waste water discharges and a breach of former pine products lagoon by a developer, may have contributed Cabot-related contamination to Springstead and Hogtown Creeks. The Koppers wood treating facility, which stopped operating in 2009, discharged untreated storm water from 1916 onwards to these creeks. In addition, storm and waste water discharges from several other commercial properties in the area and storm water from roads and highways also flow into the creeks.

2.1 Summary of Sediment Investigations

A number of investigations have been undertaken to evaluate sediment quality in Springstead and Hogtown Creeks. While the objective of some of these studies was general characterization of conditions, others were undertaken in response to citizen observations of tar within the creeks, *i.e.*, were biased towards areas believed to be affected by tar. These prior studies generally found the presence of low levels of volatile organic compounds (VOCs) and semi-volatile organics in sediments, with the highest concentrations being detected in the same general areas. However, recent investigations undertaken by ACEPD (2009, 2010a,b) were the most comprehensive in scope, the best indicator of pre-tar removal creek conditions, and a relatively accurate locator and delineator of tar deposits in the creeks. Consequently, the tar removal plan relied heavily on the findings of the ACEPD studies and supplemental verification surveys.

In 2008, a comprehensive field reconnaissance survey and follow-up, focused sediment chemical characterization program was undertaken by ACEPD to characterize sediment quality in the creeks (ACEPD, 2009). The field reconnaissance portion of the 2008 ACEPD sediment investigation was extremely thorough and included advancement of sediment probes at hundreds of locations, including depositional areas and exposed sand bars, in Springstead and Hogtown Creeks. The field reconnaissance identified the presence of tar-like material, typically at a depth of 18 to 24 inches below the creek bed, at 10 discrete locations. The sediment chemical characterization results for sediment samples collected at

the 10 locations indicated the presence of PAHs, although at relatively low concentrations.¹ PAHs are ubiquitous in the environment, especially in an urban setting, and may also be attributed to sources such as "cigarette smoke, vehicle exhausts, asphalt roads, coal, coal tar, wildfires, agricultural burning, residential wood burning, municipal and industrial waste incineration" (ATSDR, 1995).

In 2010, ACEPD performed supplemental sediment surveys in areas that were not investigated in the 2008 study. Visual and olfactory reconnaissance of these areas using a similar approach to that previously used by ACEPD revealed the presence of additional locations with buried tar deposits and staining (ACEPD, 2010a,b). Although several impacted locations were identified during this survey, only a fraction of these locations (~20%) contained recoverable volume of tar and/or showed heavy staining. Due to the relatively low contaminant concentrations associated with the tarry materials, and their depth and inaccessibility, these areas were expected to pose insignificant risks to human health and the environment.

Overall, the ACEPD studies were well-designed, thorough, and well-implemented, and successfully defined the tar impacted areas within the creeks.

2.2 Human Health and Ecological Risks

The PAH concentrations in the 2008 ACEPD samples, which were collected in areas with heavy tar staining (*i.e.*, biased high), were compared to regulatory screening benchmarks (Figures 2 and 3; Gradient and Weston, 2011). To assess ecological risks or potential risks posed to sediment dwelling organisms, the sediment data were compared to Florida's conservative sediment screening benchmarks, referred to as Probable Effect Concentrations (PECs). With the exception of two sediment samples, the PECs for total PAHs were exceeded only in deep sediment samples (Figure 2). However, the PECs are not generally applicable to deep sediment samples, because benthic organisms are only present in shallow sediments. Thus, based on pre-remediation PAH levels in the creek sediments, risks to ecological receptors were expected to be insignificant, and only expected to be associated with isolated areas.

A comparison of the Benzo(a)pyrene Total Equivalent (BAP-TEQ) levels in creek sediments to the conservative, site-specific, Alternate Cleanup Target Levels (ACTLs) range of 0.5 to 1 mg/kg (Roberts and Stuchal, 2010b), developed by University of Florida for human health protection, indicated

¹ Note, PAHs are a minor component of pine tar. The primary components of pine tar (*e.g.*, phenols) were not detected in the sediment samples.

that any exceedances of the ACTLs were marginal, isolated, and in sediment that is currently not accessible (Figure 3). In addition, the arithmetic mean of the BAP-TEQ concentration for the creek sediment samples (0.6 mg/kg)² were within the range of proposed ACTLs. Thus, the pre-remediation PAH concentrations in the creek sediments were expected to pose insignificant risks to human health.

2.3 Record of Decision Requirements

In February 2011, US EPA issued an updated Record of Decision (ROD) addressing the Koppers portion of the Superfund Site (US EPA, 2011). This ROD also addressed contamination in off-Site media, including sediments and surface water in Springstead and Hogtown Creeks. Specifically, the ROD-selected remedy for the sediments and surface water in Springstead and Hogtown Creeks included (US EPA, 2011, pp. 19):

- "Excavation and removal of impacted sediments in excess of levels shown to likely cause an adverse effect when in direct contact (Probable Effects Concentration)"; and
- "Monitored natural recovery of remaining impacted sediment until concentrations reach threshold effects concentrations [TECs] (contaminant concentrations above these levels could adversely affect a plant or animal) or background levels."

The objectives, approach and results of the tar removal project are discussed in detail in the following sections.

² Note, US EPA guidance specifies that the average contaminant concentration within an exposure unit should be used to assess human health risks.

3 Tar Removal Objectives and Approach

3.1 Removal Objectives

Overall, an examination of the detected PAH concentrations in sediments and the depth of the tar deposits indicated that they were inaccessible and likely to pose insignificant human health and ecological risks. However, there was a possibility, although small, that the buried tar deposits could be mobilized during hurricanes and flooding events. Additionally, the presence of the tar was an aesthetic issue and had raised concerns in the local community. Thus, Cabot decided to excavate and remove tar from 19 targeted locations: a) where significant tar accumulation had been observed by ACEPD and subsequent surveys; and b) that could be readily accessed using equipment (*i.e.*, backhoes, *etc.*) necessary to remove impacted sediments. Although visual and olfactory observations were used to select the sediment removal locations, the remediation of these locations would also generally result in the removal of sediments that showed PEC and ACTL exceedances during the 2008 ACEPD study. In general, the proposed tar removal approach balanced the environmental and human health benefit from the removal action with the harm caused in accessing and disrupting the creeks during the removal process.

Specifically, the objectives of the tar removal project were as follows:

- Address the local community's concerns associated with the tar deposits;
- Eliminate risk of tar-affected sediment mobilization;
- Address exceedances of the PECs associated with the presence of tar; and
- Address any potential human health risks associated with exposures to the tar-affected sediments, although such risks were expected to be insignificant.

Overall, the removal of tar affected sediments would provide further protection to human health and the environment, address the community related concerns associated with the presence of tar in the creek sediments, and be consistent with the updated ROD (US EPA, 2011). The 19 sediment locations that were identified for tar removal in the 2011 work plan are listed in Table 1 and shown in Figure 4.

3.2 Removal Approach

The primary objective for the project was the removal of tar from the creeks. In general, the following approach was used to conduct the tar removal:

1. In each of the areas pre-selected for removal (Table 1; Figure 4), Cabot, with assistance from ACEPD, undertook additional field delineation using sediment probes. Visual and olfactory data were used to accurately define and mark the lateral and vertical extent of tar-affected sediments requiring removal.
2. In each area, the thickness of "clean" sediments that overlay the tar-affected sediments were defined for segregation/reuse during sediment removal.
3. Once the tar-affected sediments were delineated in each area, sediments were removed using either manual or mechanical techniques. To the extent possible, clean, surficial sediments were segregated, staged and reused. Excavated sediments were placed in a dewatering box (*i.e.*, a specially designed roll-off container).
4. Additional sediment probing was conducted upon reaching the previously established excavation limits to evaluate if all tar in the targeted area had been addressed. If tar was detected on the probe, excavation continued. If no tar was detected on the probes, excavation of the tar deposits was deemed to be complete. This process was repeated until no tar was detected on the probes.
5. The excavated sediments were transported to and stored at a central staging area. Water accumulated during excavation and dewatering activities was tested and then discharged at the Cabot lift station for treatment by the local POTW.
6. Once the sediments dried sufficiently, they were transported to Clark Environmental's thermal treatment facility in Mulberry, Florida.
7. Either segregated clean sediments or available sediments in the creek were used to fill-in the removal areas to at least half of the excavated depth.
8. Although the removal action was not being undertaken to address potential risks associated with chemical exposures, confirmation sampling was performed after tar removal, to determine PAH concentrations in the sediments left-in-place.

The next section of the report provides additional details of the means and methods used to conduct the sediment removal work.

4 Tar Removal Implementation

4.1 Pre Mobilization Activities

Pre-mobilization activities included characterizing the tar deposits prior to removal and disposal, securing property access, developing project specific health and safety and air monitoring plans, securing a work staging area, and conducting public outreach.

4.1.1 Waste Characterization

Representative samples of the tar deposits targeted for removal were collected and characterized for disposal. Based on the characterization, the material was categorized as a non-hazardous waste and was deemed suitable for thermal treatment at the Clark Environmental's high temperature thermal treatment facility located in Mulberry, Florida.

4.1.2 Property Access

Property access agreements were secured from owners of properties located along the creeks to allow for access to the tar removal locations. Overall, the property owners were cooperative in allowing access and helpful in supporting the execution of the work. In all, 15 different properties were utilized to access the creek banks and remove the tar deposits from the proposed locations. However, access was denied to the property that contained locations SC and 13 (Figure 4). Thus, tar deposits at both locations were left in place.

4.1.3 Health & Safety

A site specific health and safety plan (HASP) was prepared in accordance with OSHA requirements prior to mobilization for field activities. This document included a summary of relevant site historical information, a task by task hazard assessment of physical, chemical, radiological, and biological hazards. The HASP also included a description of the air monitoring program, including instruments and action levels used for monitoring. Additionally, the HASP included a description of health and safety equipment requirements, a decontamination plan, a traffic control plan and an emergency response plan.

The creek restoration work was completed in Modified Level D personal protective equipment (PPE). The Modified Level D PPE provided protection from dermal contact with contamination; however, no respiratory protection was required or provided. Pine tar is an extremely thick, viscous and sticky material, and thus, workers removing and handling the tar deposits wore rubber boots/waders and gloves. Supervisors and other workers outside the immediate excavation zones did not need special protective clothing.

A detailed air monitoring plan was also developed. Risk evaluations determined that air monitoring should include organic vapor monitoring and particulate monitoring. Additionally, as a precautionary measure, air samples were collected using SUMMA canisters and submitted for laboratory analysis. Details of the air monitoring program are discussed in Section 4.2.5.

4.1.4 Public Outreach

Public outreach for the creek restoration efforts included preparation and distribution of a project fact sheet, and multiple press releases to local television, radio and print media prior to project mobilization. The fact sheet is provided in Appendix A. Additionally, ACEPD officials, Cabot personnel, and contractor personnel participated in media interviews, and were made available to answer questions from local citizens. The project was also opened for filming and photography as a portion of a Superfund Arts project being conducted by Santa Fe Community College.

4.2 Implementation Approach

A total of 19 areas with tar deposits were identified and agreed upon for removal based on visual and olfactory observations made during the 2008 and 2010 ACEPD studies. Efforts were made to access and remove tar from each of these areas. Tar impacted sediments were effectively removed from the following 14 locations: SS5, SS2, 75 (surface exposure), 58, 9, SD/S3/10, SA, 60, 61, 62, HB/H7, H4, H4A/1, and HA. The tar deposits at the remaining 5 locations were inaccessible, due to reasons described below, and thus, could not be removed. The tar removal locations are listed in Table 1 and shown in Figure 4. Photographs of the tar removal efforts are provided in Appendix B. A detailed discussion of the tar removal project is provided in the sections below.

4.2.1 Work Staging Area

A work staging area was established in the northern portion of the Recycling Services of America property located at 2874 NE 1st Terrace Gainesville, Florida. The work staging area included an office trailer, an equipment and vehicle parking area, a materials staging area, and a sediment containment area.

4.2.2 Erosion Control

Erosion control measures were used in the staging area and at the excavation sites. In the staging area, silt fencing was placed along the edge of the work area, where surface soils were exposed, to prevent sediment erosion into surrounding ditches and surface water. Silt fencing was also installed at the top of the stream banks in sediment excavation areas to control potential sediment runoff. Crushed concrete was also added to the staging area access road to make the road more stable for vehicle traffic and reduce erosion potential during rain events.

4.2.3 Water Control

Water was controlled in the targeted excavation areas using a pump-around system. The pump-around system consisted of dams made with either sand bags or plastic Jersey type barriers positioned both upstream and downstream of the target excavation area. The sandbags were typically more effective in blocking the water on the upstream side and the Jersey type barriers were more effective on the downstream end of the work zone. The upstream and downstream barriers were covered with plastic sheeting to improve their performance. In some instances an additional row of sand bags were used between the upstream and downstream dams to control creek bed seepage.

Water was extracted and pumped from upstream of the upstream barrier *via* a flexible 6-inch hose placed around the excavation area and discharged downstream of the downstream dam. A diesel powered trailer mounted pump was used. In some instances it was necessary to use two 6-inch pumps to handle the stream flow. Smaller gasoline powered 2-inch diameter pumps were also used to remove water seeping in to the excavation site from the creek bed between the upstream and downstream dams. For smaller tar deposits, sand bags were used to create a berm and isolate the area to be excavated. Hand shovels were then used to excavate the impacted sediments from these areas.

4.2.4 Turbidity Control and Monitoring

Turbidity in and downstream of the excavation areas was controlled using a combination of 6-inch wattles, hay bales, and plastic sheeting. Plastic sheeting was placed on top of the stream bed at the downstream pump discharge to prevent the discharge water from stirring up the bottom sediments. Two or more rows of wattles and hay bales were placed downstream of the downstream water control barrier. The wattles were fastened to the banks and the hay bales were fastened to the stream bed using stakes. The turbidity control devices were placed in the stream before any other stream activities began and were left in place (except for rain events) until all in-stream activities had been completed. Absorbent floating booms were also placed in front of the hay bales and wattles to absorb any floating product or tar globules that was accidentally released from the excavation area. Additionally, absorbents pads were used to soak up tar released into the excavation water, within the contained areas.

Turbidity monitoring was conducted on an hourly basis, both upstream of the work area and immediately downstream of the last row of hay bales and wattles, using a turbidity meter. The meter was calibrated every day in accordance with the manufacturer's specifications and using vendor supplied calibration solutions. Turbidity monitoring began as soon as in-stream activities were started and the monitoring continued until in-stream activities were completed. The downstream measurements were typically taken prior to upstream measurements. In accordance with FDEP regulations, which requires that the downstream turbidity readings be within 29 NTU of the upstream or background measurement, upstream measurements were not recorded if the downstream measurement was less than 29 NTU.

In general, the downstream turbidity was maintained within 29 NTU of background or upstream measurements throughout most of the project execution. However, in a few excavation areas where naturally occurring clays were already exposed in the stream bed, clay was readily suspended in water and caused the turbidity measurements to exceed 29 NTU. This condition was typically short lived and downstream turbidity returned to background values within one to two hours. A summary of the turbidity measurements recorded in each excavation area is provided in Table 2. Personnel from ACEPD routinely visited the excavation work sites to inspect the water and turbidity control devices and review the turbidity monitoring data.

4.2.5 Air Monitoring

Pre-Removal Monitoring

In accordance with the air monitoring plan, baseline air monitoring (pre pine tar removal) was conducted at select locations along the creek to evaluate ambient air conditions for the project area. A set of five background air samples (4 samples and 1 duplicate) were collected on February 1, 2011, *i.e.*, prior to the start of sediment removal activities. The SUMMA canisters were positioned both upwind and downwind of the tar deposits. A map of the air sampling locations is provided as Figure 5. The pre-excavation air samples were analyzed for terpenes, including alpha-Pinene and beta-Pinene, and tentatively identified compounds (TICs), 3-carene and alpha-terpineol, using EPA Method TO15. The analytical results for the samples showed no detections of alpha-pinene and beta-pinene. The TICs, 3-carene and alpha-terpineol, were also not detected in the samples. The analytical results for the air monitoring samples are summarized in Table 3. The laboratory reports for the air samples are provided in Appendix C.

Additionally, pre-removal monitoring was performed at select locations for particulates using a MIE DataRAM with PM₁₀ heads and for VOCs using a RAE® Photo ionization Detector instrument (Figure 5). The instruments were calibrated in accordance with the manufacturer's specifications prior to use. Results showed elevated background concentrations in Springstead Creek behind Holbrook Travel at the upwind monitoring station. These elevated concentrations were attributed to morning and late afternoon traffic on 13th Street, because background readings decreased as the traffic volume decreased on the nearby four lane road.

Monitoring During Removal Action

During sediment excavation activities, continuous air monitoring for dust and organic vapors was conducted upwind and downwind of the excavation sites, in accordance with the air monitoring plan. The particulate monitoring was conducted using a MIE DataRAM with PM₁₀ heads and the VOC monitoring was conducted using a RAE® Photo ionization Detector instrument. The instruments were calibrated daily in accordance with the manufacturer's specifications. The instruments were placed on top of 30-gallon plastic trash cans and the locations of the instruments were adjusted to maintain an upwind and downwind position relative to the work zone. Periodically, measurements were taken within the open

excavation area. The occupational and residential action levels were not exceeded either for particulates or VOCs. A summary of the air monitoring action levels is provided in Table 4.

The air monitoring program during sediment excavation activities also included collection of air samples in SUMMA canisters. A set of five air samples (4 samples and 1 duplicate) were collected on March 15, 2011 during the excavation of sediments at location H4A/1. The samples were collected over a 4 hour period and the SUMMA canisters were positioned in upwind and downwind positions. Similar to the pre-removal samples, the air samples collected during excavation were analyzed for terpenes, including alpha-Pinene and beta-Pinene, and TICs, 3-carene and alpha-terpineol, using EPA Method TO15. The analytical results for the samples showed no detections of alpha-pinene, beta-pinene and the TICs, 3-carene and alpha-terpineol. The analytical results for the air monitoring samples are summarized in Table 3. The laboratory reports for the air samples are provided in Appendix C.

Overall, based on the field air monitoring data and the laboratory analytical results for the air samples, there were no significant emissions related to the excavation activities that detrimentally affected the workers or the surrounding residents.

4.2.6 Tar Removal

As previously mentioned, a total of 19 locations were identified in the creek for tar removal based on the results of the 2008 and 2010 ACEPD investigations (Figure 4). These locations were selected because they showed evidence of tar contamination and were accessible to removal equipment. As discussed in the Work Plan, although the S9/S10 area was found to contain tar deposits during the 2008 ACEPD investigation, it was not selected for sediment removal due to concerns regarding access and erosion of the banks. The north stream bank is already highly eroded and is within a few feet of the apartment building foundation. Additionally, these locations contain low levels of PAHs (ACEPD, 2009). The 19 selected sediment removal locations were agreed upon in a meeting with ACEPD, FDEP, US EPA and Cabot on November 4, 2010. Of the 19 selected locations, tar deposits could not be removed from the following 5 locations for the reasons listed below:

- Location SC – Property access was denied;
- Location 13 – Property access was denied;
- Location 56 – Buried under bricks, difficult to access and concerns about erosion outweighed the need for tar removal;

- Location 59 – Buried underneath creek bank; difficult to access and concerns about erosion outweighed the need for tar removal; and
- Location 6 – Unable to access creek; mucky, soft soil conditions approaching creek bank.

Note, the access constraints associated with above-listed locations 6, 56, and 59 were discussed at length with ACEPD and the City of Gainesville representatives, who agreed that it was prudent to leave the tar deposits in-place to avoid long-term damage to the creeks.

In addition, due to access constraints at location 75, only the portion of the tar deposits exposed at the surface was removed. The locations from which tar deposits were removed are listed in Table 1 and shown in Figure 4.

Prior to excavation activities, Cabot personnel, with assistance from ACEPD staff, used an insulated soil probe rod to clearly delineate and mark the lateral and vertical extents of the area containing tar at each location. Additionally, the creek bed was cleared of obstructions (*e.g.*, logs, debris, *etc.*) to allow access to the excavation sites. Any trash cleared from the work area was accumulated in roll-off containers for off-Site disposal.

Excavation of the pine tar deposits was conducted using a small track mounted excavator. Excavated sediments were directly loaded into a 1 cubic yard steel box equipped with lifting hooks that was lifted in and out of the creek bed using a rubber tired Lull Telehandler forklift (Lull). At the first location, SS5, the sediment was loaded in to large geotextile bags (*i.e.*, Super Sacks). However, releasing the sediment from the bags proved to be too time consuming and the steel box was used for excavated sediments at the remaining locations.

The Lull was positioned such that it did not encroach on the stream banks and the extending forks were able to lift the sediment box in and out of the creek bed without damaging the banks. The sediments were transported in the Lull from the top of the creek bank to a dewatering box located at the nearest access road. The dewatering box contained a screened bottom covered with a nonwoven geotextile, fabric. The water in the sediment drained into a bottom compartment in the dewatering box, separating it from the sediment.

Once the dewatering box was filled with excavated sediments, the sediment was transported back to the work staging area and the dewatering box was dumped into the lined sediment containment area.

The water accumulated in the bottom of the dewatering box was pumped into a 6,900 gallon capacity poly-tank located adjacent to the sediment containment area.

A total of approximately 115 tons of impacted sediments were excavated from the creek during the tar removal effort. In general, the actual volume of the tar deposits found at each location was significantly less than the estimated volume.

4.2.7 Sediment Drying

Excavated sediments were dumped from the dewatering boxes into the sediment containment area, located on the western side of the work staging area. This area consisted of 40-mil plastic sheeting surrounded by hay bales to form a barrier dike. The 40-mil plastic was draped over the hay bales and the ground surface was graded and sloped to allow water draining from the excavated sediments to collect at the southwest corner of the containment area. The accumulated water was periodically pumped into the storage tank located adjacent to the sediment containment area. The excavated sediments were covered with plastic sheeting to control odors and to prevent contact with rainfall.

4.2.8 Sediment Transportation & Disposal

After the excavated sediments had been accumulated and sufficiently dried, the sediments were loaded into dump trucks using a rubber tired front end loader. A layer of sediment was left on the bottom of the containment area until the final load was removed to protect the liner from contact with the loader blade. The trucks transported the sediment to Clark Environmental's thermal treatment facility in Mulberry, Florida. A total of approximately 115 tons of sediments were transported off-site and thermally treated. The soil recycling certificates are provided in Appendix D.

The thermal treatment process included screening out any remaining debris greater than 2 inches in size. This debris was disposed of at an FDEP permitted landfill. The sediment was then sent through a desorber cyclone, which is an 8 foot long stainless steel drum that contains rotating flights that turn the sediment and create a curtain of dirt as it moves through the drum. The sediment inside the drum is then heated to temperatures ranging from 700 to 900°F. The dust is separated from the incinerated sediments in a cyclone. The dust is deposited by augers into the desorber's direct flame for reburning at temperatures ranging from 1100 to 1200°F. The extracted sediments are then reheated in an oxidizer to 1500-1600° F and then cooled on the way to the bag house. The dust accumulated in the bag house is

added back to the treated sediment. The heated sediment is cooled with water spray and stock piled for post burn testing. If the treated sediment does not pass the post burn testing, it is re-incinerated. If the treated sediment passes the post burn testing, it is placed in the clean soil pile and can be resold for commercial applications.

4.2.9 Restoration & Enhancements

The areas affected by the pine tar deposit removal were restored upon completion of excavation activities. These areas included the stream bed, the stream bank, the stream access routes, and the sediment loading areas. The property owners were directly consulted regarding the details of restoration at their respective properties. The restoration of each property was customized based on the desires of the property owner.

In the stream bed, the excavated area was filled to at least one half of the total excavated depth using surrounding, clean sediments from nearby sand bars. In some instances the excavated area was filled completely, if adequate sediment was available. Impacts to the stream bank were limited to foot traffic and lowering the excavator in and out of the stream bed. The stream banks were restored by covering them with organic erosion control matting composed of woven coconut husk. The matting was fastened in place with 6-inch U-shaped spikes.

The access points to the stream banks and the sediment loading areas were restored by smoothing out any ruts. In some of the upland areas away from the stream, grass seed was sown based on the property owner's preference and hay was placed on top of the seed. In the Gainesville City park, where locations H4A/1 and HA were excavated, some of the small branches and small trees that were removed to clear a safe path were chipped into mulch. This mulch was spread on the restored access paths to help aid the return of vegetation.

In some instances, property enhancements were carried out based on discussions with the property owners. Cabot willingly provided these enhancements as a token of appreciation for granting access for the stream restoration. These enhancements included removing fallen trees and trash from the stream bed, mowing over-grown vegetation around buildings, placement of gravel in a driveway, and removing a tree at the stream bank at risk of being blown over onto adjacent properties. Trees were

purchased and planted on this same property in accordance with the City of Gainesville mitigation requirements.

4.2.10 Demobilization

Equipment and materials were removed from each excavation site as the work was completed at that location. The sediment containment area was disassembled, and all equipment and materials were removed from the staging area by April 1, 2011. Accumulated solid non-hazardous waste was disposed of at the local landfill.

5 Confirmation Sampling

The primary objective of the tar removal project was to address the local community's concerns regarding the tar's presence in the creeks. Consequently, the visual presence of tar was used to define the limits of removal. The tar removal project also aimed to minimize any potential risks to human health and the environment. In order to assess the residual contaminant concentrations in sediments and associated risks, if any, confirmation sampling was performed, after the completion of sediment excavation activities in the creeks.

The objectives, methodology, and results of the confirmation sampling program are discussed in the sections below.

5.1 Sampling Objectives

The objective of the confirmation sampling program was to document concentrations of PAHs, if any, remaining in the creek after the removal of tar deposits from the areas targeted for remediation. Given the numerous sources of PAHs, especially in urban settings, the confirmation sampling program and the data analysis approach only addressed the tar removal areas and not the other areas. In addition, there are other compounds present in the creek sediments (*e.g.*, dioxins, arsenic) unrelated to the pine tar, that were not addressed by the confirmation sampling.

5.2 Sampling Methodology

Grab sediments were collected, based on FDEP's recommendation, from the creek bed, post tar-removal.³ Samples were collected from the bottom of the excavation or the creek bed, prior to backfilling and restoration of the creek. Samples were not collected from the creek banks, since tar deposits were generally found in the inundated portion of the creeks. Note, up to more than 2 feet of sediment was back filled in the creek to address safety concerns (*i.e.*, to prevent a potential recreator from stumbling and falling into the excavated area), thus the confirmation samples represent concentrations measured in deep sediments, buried under approximately 12 to 24 inches of overlying sediments.

³ The initial confirmatory sampling plan submitted to US EPA proposed collection of composite samples from each excavation area. However, FDEP requested that grab samples be collected instead from each excavation area.

The general sampling approach was to collect one sample from small excavation areas (<10 cubic yards), two from medium sized areas (10 to 20 cubic yards), and three or more from large areas (>20 cubic yards). Duplicate samples were also collected for quality control purposes. With the exception of locations 61 and 75, at least one grab sample was collected from each excavation area. Location 61 contained a small tar deposit, which was excavated by hand, and was surrounded by other deposits where post excavation samples were collected. Confirmation samples were not collected from location 75 because only surficial tar was accessible for removal in this area, and it is likely that some impacted material was left-in-place. In addition, since tar deposits 58 and 9 were found to be continuous, these were combined into one work area for excavation and sampling purposes. Similarly, deposits SA and 62 were combined into one work area.

Overall, a total of 22 grab post-excavation confirmatory sediment samples were collected for analysis of PAHs (Method 8270C). Additionally, a total of 8 samples were collected for analysis of total organic carbon (TOC) (Method 9060).⁴ Samples were collected directly into laboratory containers and shipped in a cooler with ice to Test America Labs in Savannah, GA. Table 5 provides a summary of the confirmatory sediment samples collected from each excavation area.

5.3 Sampling Results

A summary of the post-excavation confirmatory sediment sampling results is provided in Table 6. The laboratory reports for the confirmatory sediment samples are provided in Appendix E. Total PAH and BAP-TEQ concentrations in the post-excavation sediment samples are shown in Figures 6a/b and 7a/b, respectively. In general, an evaluation of the confirmatory sediment sampling results indicated that PAH sediment concentrations in the targeted areas have declined significantly, post tar removal, *i.e.*, in comparison to pre-remediation PAH levels in these areas (Figure 2 and 3). At several locations, such as SS5, S22, SA/62, and H4, total PAH concentrations have decreased by at least an order of magnitude (Figure 6b *versus* Figure 2). Similarly, concentrations of BAP-TEQ also declined by several fold in sediments following the removal of tar deposits from the creeks (Figure 7b *versus* Figure 3).

⁴ TOC data provide an indication of the bioavailability of PAHs to benthic organisms and can assist with developing a refined understanding of environmental risks.

5.3.1 Choice of Screening Benchmarks

In order to place the sediment sampling results in perspective, the post-excavation confirmatory sediment data were screened against regulatory benchmarks developed for protection of ecological and human health. As discussed in Section 2.3, the updated ROD that was issued by US EPA for the Site in February 2011 stated that the selected remedy for the creeks should remove "impacted sediments in excess of levels shown to likely cause an adverse effect when in direct contact (Probable Effects Concentration)" (US EPA, 2011, pp. 19). Thus, the PEC for total PAHs (23 mg/kg) was used as the primary benchmark to assess PAH levels in the confirmatory sediment samples and evaluate the effectiveness of the tar removal work.

A risk assessment previously conducted by Florida Department of Health (FDOH) using pre-tar removal sediment data collected by ACEPD (2009) found that the risks to human health associated with current and future exposure to small amounts of PAH impacted sediments in the creeks are insignificant (FDOH, 2010). Regardless, a secondary screening was performed to assess risks to human health from direct contact with sediments in the creeks. From a human health standpoint, given the exposure setting, only risks *via* recreational exposures to the creek sediments need to be considered. Previous risk assessment work done by the University of Florida, at the request of FDEP, that led to the development of site-specific, risk-based ACTLs for recreational exposures (Roberts and Stuchal, 2010b), provides a helpful framework to screen and understand post tar-removal human health risks.

The University of Florida developed ACTLs for BAP-TEQ in sediments for protection of human health from direct contact with sediments during recreational activities (Roberts and Stuchal, 2010a,b). The evaluation utilized a conservative exposure frequency of 104 days per year. The ACTLs were developed for "exposed" sediments on creek banks, creek bottoms and sand bars, *i.e.*, material that is not submerged underwater. According to US EPA Region 4 guidance, submerged sediments are not expected to pose human health risks, since any material that is underwater would be mostly washed off during contact (Roberts and Stuchal, 2010a,b). Given that the tar deposits found in the creeks were generally submerged and the confirmation samples were obtained from inundated portions of the creek beds, the ACTLs serve as an extremely conservative benchmark for assessing post tar-removal human health risks.

5.3.2 Screening Results

For the purpose of the screening analysis, all available sediment analytical data that are reflective of post tar removal conditions within the creeks (*i.e.*, confirmation sampling results and data from locations that could not be addressed due to access or other constraints) were used. These data were screened against both PECs and ACTLs.

Figures 6a and b present a comparison of the post tar-removal sediment concentrations to the Florida PECs, whereas Figures 7a and b present a comparison against human health-based ACTLs. In addition to comparing the data on a point to point basis, the plots also compare the 95% Upper Confidence Level of the mean (UCLM) for each section of the creek or exposure unit to the screening benchmarks. The use of the 95% UCLM, which is consistent with US EPA guidance for risk assessment (US EPA, 1989, 1997), provides an indication of risks on average within an exposure unit.

Total PAH Levels versus PECs

A review of the post tar-removal sampling results indicate that the measured total PAH levels on average are less than the Florida PEC of 23 mg/kg within both shallow and deep sediments in North Main St. Ditch and Springstead Creek (Figures 6a).⁵ The average total PAH concentration in Hogtown Creek, however, marginally exceeds the Florida PEC (28.3 *vs.* 23 mg/kg) (Figure 6a). The point by point comparison indicates that total PAH levels in sediments exceed the PEC at two locations – 60 and HA (Figure 6b), and shows a marginal exceedance (24 *vs.* 23 mg/kg) in the deep sediment sample collected at location S9, which could not be addressed due to access issues (Figure 6b). Although isolated exceedances of the PAH PEC are present at a few locations post tar-removal, tar-related risks to environmental receptors (benthic organisms) within the creeks are expected to be insignificant because:

- Tar from all accessible locations has been removed.
- After tar and affected sediments were removed, clean sediments from the creek were used to fill-in the removal areas. Consequently, the confirmation sediment samples collected post tar-removal are represent concentrations in deep sediments, and are not accessible to benthic organisms.
- The 95% UCLM concentration for creek segments, a more appropriate indicator of potential risks associated with sediments, are less than or comparable to the PECs.

⁵ Note, the calculated average concentrations for each exposure unit included pre-remediation data for locations that could not be remediated due to access issues.

Overall, a comparison of the post tar removal sediment sampling results against the PEC for total PAHs demonstrates ecological risks associated with exposure to creek sediments are expected to be insignificant. At the few locations, where PECs are exceeded, concentrations over time are expected to attenuate and attain background concentrations and/or comply with the TECs.

BAP-TEQ Levels versus ACTLs

As previously discussed, site-specific ACTLs were used as secondary benchmarks to evaluate potential human health risks associated with post tar removal sediments. The post tar-removal sampling results indicate that the BAP-TEQ levels on-average (95% UCLM) in North Main Street Ditch and Springstead Creek are either below or within the range of ACTLs developed for the Site (Figure 7a). However, the average BAP-TEQ level in sediments within Hogtown Creek marginally exceeds the upper bound ACTL (1.26 *vs.* 1.0 mg/kg) (Figure 7a). A point by point comparison of the BAP-TEQ levels in the sediment samples to the ACTLs showed that the ACTLs were exceeded at two locations – 60 and HA, and in the deep sediment sample collected at location SC, which could not be addressed due to access issues (Figure 7b).

The results of the screening analysis showed that, on average, the creek sediment data are less than or comparable to the human health-based ACTLs. Any exceedances of ACTLs associated with residual tar in the creeks do not represent a significant risk to human health for the following reasons:

- Tar from all accessible locations has been removed;
- Any tar deposits left behind are isolated, buried at depth (*i.e.*, >12 inches below the creek bottom), and inaccessible. Given that these tar deposits could not be accessed with machinery during remedial efforts, they are also expected to be inaccessible to potential human receptors.
- Any tar deposits left behind in the creek are also submerged underwater. Submerged material would wash off during contact and is not expected to pose risks to humans *via* direct contact – as stated in US EPA Region 4 risk assessment guidance (Roberts and Stuchal, 2010a,b).

Overall, the results of the primary and secondary screening analyses indicate that the tar removal project successfully removed a significant portion of the tar deposits in each excavation area and reduced the PAH concentrations in the creek sediments to levels that, on average, are expected to pose insignificant risks to ecological and human health.

6 Summary and Conclusions

Pine tar identified in the sections of Springstead and Hogtown Creeks downstream of the Cabot/Koppers Superfund Site has been successfully removed. Pine tar was found and delineated by a series of studies undertaken by ACEPD and Cabot between 2008 and 2010. Although contaminant concentrations (for PAHs, a minor constituent of pine tar) were low and the tar was generally present in deep sediments (18 to 24 inches below the creek bed), resulting in insignificant human health and environmental risks, Cabot decided to excavate and remove the tar since the tar was sticky, had a distinct color/odor, and was a cause of concern for the local community. Cabot worked cooperatively with US EPA, FDEP, ACEPD and the City of Gainesville to develop a Work Plan that identified tar deposits for removal and outlined the removal approach. The Work Plan, which was approved by US EPA in January 2011, was implemented between February and April 2011. Key findings and conclusion from this work are:

- Approximately 140 yd³ of tar and affected sediments were removed from the creeks, and treated *via* thermal destruction at a facility located in Mulberry, Florida. The materials removed represents a vast majority of the tar that had been identified in the creeks.
- Tar could not be removed from a few of the locations identified in the US EPA approved Work Plan due to access constraints and/or land owners' refusal to provide property access needed for removing the tar. At locations with access constraints, the tar was left-in-place because concerns regarding bank erosion and long-term damage to the creeks outweighed the need for tar removal. An examination of the post tar removal concentrations in the creek (including data from areas where tar could not be removed) indicates that post tar removal creek sediments are expected to pose insignificant risks to human health and the environment.
- After tar removal activities had been completed, a total of 22 confirmation sediment samples were collected from the creek bed and analyzed for PAHs, a minor constituent of pine tar. However, it is widely acknowledged in the scientific literature that there are a multitude of PAH sources in urban settings, such as the Site. The post tar removal sediment concentration measurements were compared to total PAH PEC, the ecological risk benchmark specified in the updated ROD. In addition, sediment concentrations were also compared to site-specific, recreational exposure-based, human health benchmarks or ACTLs, developed by the University of Florida.
- A comparison of the post tar-removal total PAH sediment concentrations, on-average (95% UCLM), are less than or comparable to the PEC. Therefore, post tar removal sediment concentrations are expected to pose insignificant risks to environmental receptors. At the few locations, where PECs are exceeded, concentrations over time are expected to attenuate and attain background concentrations and/or comply with the PAH TEC.

- A comparison of the post tar-removal sediment concentrations to ACTLs indicates that sediment concentrations, on-average (95% UCLM), within the creeks are generally below or comparable to the ACTLs. Furthermore, since the available data represents sediment samples from the inundated portions of the creek – any sediment that is potentially contacted by humans is expected to wash off, further reducing human health risks. Therefore, post tar removal sediment concentrations are expected to pose insignificant risks to human health.

To summarize, the tar removal Work Plan, approved by US EPA, has been successfully implemented at the Site. The post tar removal sediment concentrations are expected to pose insignificant risks to human and ecological health. Sediment concentrations are expected to further attenuate over time and attain background concentrations and/or comply with the PAH TEC.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 1995. "Toxicological Profile for Polycyclic Aromatic Hydrocarbons." U.S. Department of Health and Human Services. August.

Alachua County Environmental Protection Dept. (ACEPD). 2009. "Sediment Quality in Springstead and Hogtown Creeks Near the Cabot - Koppers Superfund Site." Report to US EPA, Region IV. 58p. August

Alachua County Environmental Protection Dept. (ACEPD). 2010a. "Supplemental Creek Sediment Survey of Hogtown Creek Downstream of Cabot - Koppers Superfund Site." Task 5- US EPA Cooperative Agreement V97468702. 9p. September.

Alachua County Environmental Protection Dept. (ACEPD). 2010b. "Summary Report -- Supplemental Sediment Survey for Tarry Deposits in Springstead and Hogtown Creeks Downstream of the Cabot-Koppers Superfund Site." 4p. October.

FDOH. 2010. "Health Consultation. Springstead and Hogtown Creek Sediments. Cabot Carbon-Koppers Hazardous Waste Site, Gainesville, Alachua County, Florida. EPA Facility ID: FLD980709356." June 23.

Gradient; Weston Solutions. 2011. "Updated Tar Removal Work Plan, Cabot Carbon/Koppers Superfund Site, Gainesville, Florida (Final)." Report to Cabot Corp. 60p. January 3.

Roberts, SM; Stuchal, LD. [University of Florida, Center for Environmental and Human Toxicology]. 2010a. "Letter to L. Mora-Applegate (Florida Dept. of Environmental Protection) re: Dioxin and benzo(a)pyrene in off-site sediment for the Koppers, Inc. Superfund site." 3p. August 16.

Roberts, SM.; Stuchal, LD. [University of Florida, Center for Environmental and Human Toxicology]. May 10, 2010b. "Letter to L. Mora-Applegate (Florida Dept. of Environmental Protection) re: Alternative criteria for exposed creek banks and bottoms downstream from the Cabot Carbon/Koppers site." 3p. May 10.

US EPA. 1989. "Risk Assessment Guidance for Superfund (RAGS). Volume I: Human Health Evaluation Manual (Part A) (Interim Final)." NTIS PB90-155581 ; EPA-540/1-89-002. December.

US EPA, Office of Solid Waste and Emergency Response. 1997. "Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments (Interim Final)." June.

US EPA Region IV. 2011. "Record of Decision, Summary of Remedial Alternative Selection, Cabot Carbon/Koppers Superfund Site, Gainesville, Alachua County, Florida." 703p. February.

Tables

Table 1
Summary of Tar Removal Locations
Cabot Carbon/Koppers Superfund Site, Gainesville, FL

Tar-Removal Location ID	Sediment Removal Y/N	Sediment Removed in Cubic Yards	Extents of Excavation			Comments
			Coordinate Description	GPS Coordinates		
				North	West	
SS 5	Yes	15	NE Corner	29.68157756	-82.32254787	
			NW Corner	29.68159831	-82.32254527	
			SE Corner	29.68157892	-82.32261984	
			SW Corner	29.68157443	-82.32256551	
SS 2	Yes	3	North	29.684175	-82.324351	
			South	29.684148	-82.324375	
SC/S4	No	NA				Property access refused
SD/S3/10	Yes	27	NE Corner	29.685093	-82.340284	
			NW Corner	29.685123	-82.340365	
			SE Corner	29.685058	-82.340288	
			SW Corner	29.685091	-82.340379	
SA/62	Yes	10	NE Corner	29.684916	-82.340881	Deposits SA and 62 were continuous
			NW Corner	29.684964	-82.340897	
			SE Corner	29.68491	-82.340898	
			SW Corner	29.684916	-82.340932	
HB/H7	Yes	1.5	Center	29.68493	-82.34154	
H4	Yes	1	Center	29.6819364	-82.3422123	
H4A/1	Yes	51	NE Corner	29.6801983	-82.3416218	
			NW Corner	29.6801957	-82.3416397	
			SE Corner	29.6801368	-82.3415632	
			SW 1	29.6801242	-82.3415971	
			SW 2	29.6800723	-82.3415986	
			SW Corner	29.6800674	-82.3416184	
HA	Yes	7	North	29.679592	-82.341906	
			South	29.679555	-82.341944	
			East	29.679558	-82.341911	
			West	29.679575	-82.341936	
56	No	NA				Buried under piles of bricks
59	No	NA				Buried in creek bank; no seepage observed
13	No	NA				Property access refused
58/9	Yes	10	NE Corner	29.685128	-82.340074	Deposits 58 and 9 were continuous
			NW Corner	29.685139	-82.340122	
			SE Corner	29.685124	-82.340092	
			SW Corner	29.685122	-82.340143	
6	No	NA				Unable to access creek in this area
60	Yes	12	NE Corner	29.684904	-82.340481	
			NW Corner	29.684961	-82.340489	
			SE Corner	29.684899	-82.340506	
			SW Corner	29.684941	-82.340538	
61	Yes	1	Center	29.684818	-82.340706	
75	Yes	1	Center	29.687154	-82.337008	Surface deposits were excavated
Total Sediment Removed		139.5				

Note:

1) NA - Not Applicable.

Table 2
Turbidity Measurements
Cabot Carbon/Koppers Superfund Site, Gainesville, FL

Work Area	Date	Time	Up-Stream	Downstream	Difference	Comments
SS 5	2/11/2011	11:45	1.5	6.78	5.28	
		12:20	4.13	30.3	26.17	
		13:20	--	19	NA	
		15:10	--	25	NA	
		17:20				
	2/12/2011	8:30	2.36	3.85	1.49	
		9:40	--	9.98	NA	
		10:20	--	21.9	NA	
		11:20	--	14.2	NA	
		12:45	--	75.7	NA	Stopped using 2-inch pump in excavation
	2/14/2011	13:50	--	4.98	NA	
		10:45	1.46	29.7	28.24	
		11:15	--	205	NA	
		12:00	--	7.8	NA	
		12:50	--	4.98	NA	
		14:20	--	3.75	NA	
		15:10	--	4.87	NA	
		16:20	--	3.79	NA	
SD/S3/10	2/16/2011	9:45	2.56	12.8	10.24	
		14:30	--	3.96	NA	
	2/17/2011	8:20	2.64	3.48	0.84	
		9:20	--	3.76	NA	
		10:15	--	5.01	NA	
		11:05	--	9.9	NA	
		12:15	--	4.92	NA	
		14:05	--	3.74	NA	
		15:20	--	5.39	NA	
	2/18/2011	17:15	--	7.31	NA	
		9:50	1.88	25.1	23.22	
		10:25	--	3.67	NA	
		11:30	--	3.15	NA	
		14:05	--	18.6	NA	
		15:15	--	2.6	NA	
		16:20	--	20.2	NA	
SS 2	2/23/2011	9:30	2	13.9	11.9	
		10:40	--	3.41	NA	
		11:20	--	4.37	NA	
		11:45	--	2.76	NA	
		12:30	--	20.2	NA	
SD/S3/10		11:10	--	3.67	NA	
		12:00	--	4.81	NA	
60	3/2/2011	8:00	1.77	41.5	39.8	Foot traffic on clay exposed in stream bed
		9:10	--	7.53	NA	
		9:35	--	7.5	NA	
		10:42	--	2.83	NA	
		11:20	--	4.73	NA	
		12:45	--	7.03	NA	
		13:45	--	3.33	NA	
		14:50	--	2.52	NA	
		15:35	--	2.14	NA	
		17:50	--	6.7	NA	
61 & SA/62	3/4/2011	13:00	1.48	19.8	18.3	
		14:00	--	12.3	NA	
		14:50	--	18.2	NA	
		15:35	--	34.6	NA	Turned off 2-inch pump near excavation
		16:30	--	25.1	NA	
		17:10	--	210	NA	Dams taken down
		17:35	--	26	NA	

Table 2
Turbidity Measurements
Cabot Carbon/Koppers Superfund Site, Gainesville, FL

Work Area	Date	Time	Up-Stream	Downstream	Difference	Comments
HA	3/9/2011	13:00	1.81	7.45	5.64	
		15:25	---	5.56	NA	
		16:25	---	6.95	NA	
		17:15	---	3.89	NA	
		18:30	---	5.81	NA	
H4A/1	3/16/2011	10:10	1.51	7.59	6.08	
		11:15	---	7.37	NA	
		12:50	---	3.5	NA	
		13:50	---	6.93	NA	
		14:20	---	12.6	NA	
		15:00	---	5.39	NA	
		15:50	---	5.64	NA	
		16:30	---	15.7	NA	
		17:20	---	30.7	NA	
		18:15	---	12.6	NA	
		19:30	---	12.9	NA	
	3/17/2011	10:00	2.03	5.97	3.94	
		10:50	---	10.1	NA	
		11:45	---	5.11	NA	
		13:00	---	5.36	NA	
		16:15	---	21.6	NA	
	3/18/2011	11:20	1.64	11	9.36	
		12:15	---	9.69	NA	
		13:25	---	9.36	NA	
		14:00	---	28.1	NA	
		14:50	---	6.65	NA	
	3/21/2011	17:15	---	26.8	NA	
		10:05	2.84	8.84	6	
		11:00	---	9.48	NA	
		12:00	---	14.8	NA	
		12:50	---	14.9	NA	
		14:10	---	10.2	NA	
		15:00	---	9.41	NA	
		16:10	---	25.1	NA	
		17:00	---	14.1	NA	
		18:05	---	8.14	NA	
		19:10	---	9.36	NA	

Notes:

- 1) Turbidity measurements in Nephelometric Turbidity Units (NTUs).
- 2) Turbidity measurements taken for machine excavated deposits only.
- 3) Only one upstream measurement taken for each sample location per day.
- 4) NA - Not Applicable; indicates difference in turbidity was not estimated because upstream sample was not measured.

Table 3
Summary of Air Sampling Data
Cabot Carbon/Koppers Superfund Site, Gainesville, FL

Sample ID	Location Description	Analytes	Result	Comment
			($\mu\text{g}/\text{m}^3$)	
PTR01022011-01N	Upwind of Tar Deposit SS5	Alpha Pinene	< 55	Background Sample
		Beta Pinene	< 55	
		3-Carene	ND	
		Alpha-Terpinol	ND	
PTR-01022011-02N	Upwind of Tar Deposits 9, 58, 59, SD, 10, 60, 62	Alpha Pinene	< 53	Background Sample
		Beta Pinene	< 53	
		3-Carene	ND	
		Alpha-Terpinol	ND	
PTR01022011-03N	Downwind of Tar Deposits HA, H4, H4A	Alpha Pinene	< 54	Background Sample
		Beta Pinene	< 54	
		3-Carene	ND	
		Alpha-Terpinol	ND	
PTR01022011-03D	Duplicate for Sample 03N	Alpha Pinene	< 55	Background Sample
		Beta Pinene	< 55	
		3-Carene	ND	
		Alpha-Terpinol	ND	
PTR01022011-04N	Downwind of Tar Deposits 9, 58, 59, SD, 10, 60, 62	Alpha Pinene	< 53	Background Sample (Duplicate)
		Beta Pinene	< 53	
		3-Carene	ND	
		Alpha-Terpinol	ND	
Air South	Upwind of Deposit H4A	Alpha Pinene	< 49	Sample During Excavation
		Beta Pinene	< 49	
		3-Carene	ND	
		Alpha-Terpinol	ND	
Air West	Upwind of Deposit H4A	Alpha Pinene	< 50	Sample During Excavation
		Beta Pinene	< 50	
		3-Carene	ND	
		Alpha-Terpinol	ND	
Air East 2	Downwind of Deposit H4A	Alpha Pinene	< 50	Sample During Excavation
		Beta Pinene	< 50	
		3-Carene	ND	
		Alpha-Terpinol	ND	
Air East 1	Downwind of Deposit H4A	Alpha Pinene	< 48	Sample During Excavation
		Beta Pinene	< 48	
		3-Carene	ND	
		Alpha-Terpinol	ND	
Air North	Downwind of Tar Deposit H4A	Alpha Pinene	< 48	Sample During Excavation
		Beta Pinene	< 48	
		3-Carene	ND	
		Alpha-Terpinol	ND	

Notes:

- 1) Air samples analyzed using Modified US EPA Method TO15 GC/MS Full Scan.
- 2) The action level for pine tar constituents is 16,000 $\mu\text{g}/\text{m}^3$ (see Air Monitoring Plan, dated 1-24-2011).
- 3) 3-Carene and alpha-Terpinol are reported as tentatively identified compounds (TICs).
- 4) ND - Non-Detect; < indicates less than the reported value (actual measurement not available).

Table 4
Summary of Air Monitoring Levels
Cabot Carbon/Koppers Superfund Site, Gainesville, FL

Constituents of Concern	Health-Based Action Levels		Instrument Monitoring Limit	
	Occupational	Ambient Air	Occupational	Ambient Air
VOCs	7 ppm Turpentine	2.8 ppm Turpentine	20 ppm as Isobutylene ¹	8 ppm as Isobutylene ⁽¹⁾
PM ₁₀	NA	0.15 mg/m ³	NA	0.15 mg/m ³ 1 mg/m ³ ⁽²⁾

Notes:

1) The instrument monitoring limit was determined for a PID calibrated with isobutylene using the calibration response factor of 0.3 for turpentine (Attachment B).

2) 0.15 mg/m³ is a daily average value and 1 mg/m³ is a ceiling limit.

Table 5
Summary of Confirmatory Sediment Samples
Cabot Carbon/Koppers Superfund Site, Gainesville, FL

Tar-Removal Location ID	Sediment Removal Y/N	Number of Confirmatory Samples Collected	Confirmatory Sample ID	Comments
SS5	Yes	3	SS5-01A, SS5-02A, SS5-03A	
SS2	Yes	2	SS2-01, SS2-02	
SC/S4	No	NA	--	
SD/S3/10	Yes	5	SD10-01, SD10-01A, SD10-01B, SD10-02, SD-10-03	
SA/62	Yes	3	62-01, 62-02, 62-03	Locations SA and 62 were combined
HB/H7	Yes	1	HB/H7-01	
H4	Yes	1	H4-01	
H4A/1	Yes	7	H4A-01, H4A-02, H4A-03, H4A-04, H4A-05, H4A-06, H4A-07	
HA	Yes	2	HA-01, HA-02	
56	No	NA	--	
59	No	NA	--	
13	No	NA	--	
58/9	Yes	3	SB9-01, SB9-02, SB9-03	Locations 58 and 9 were combined
6	No	NA	--	
60	Yes	3	60-01, 60-02, 60-03	
61	Yes	0	--	Small tar deposit area
75	Yes	0	--	

Note:

1) NA - Not Applicable.

Table 6
Summary of Confirmatory Sediment Data
Cabot Carbon/Koppers Superfund Site, Gainesville, FL

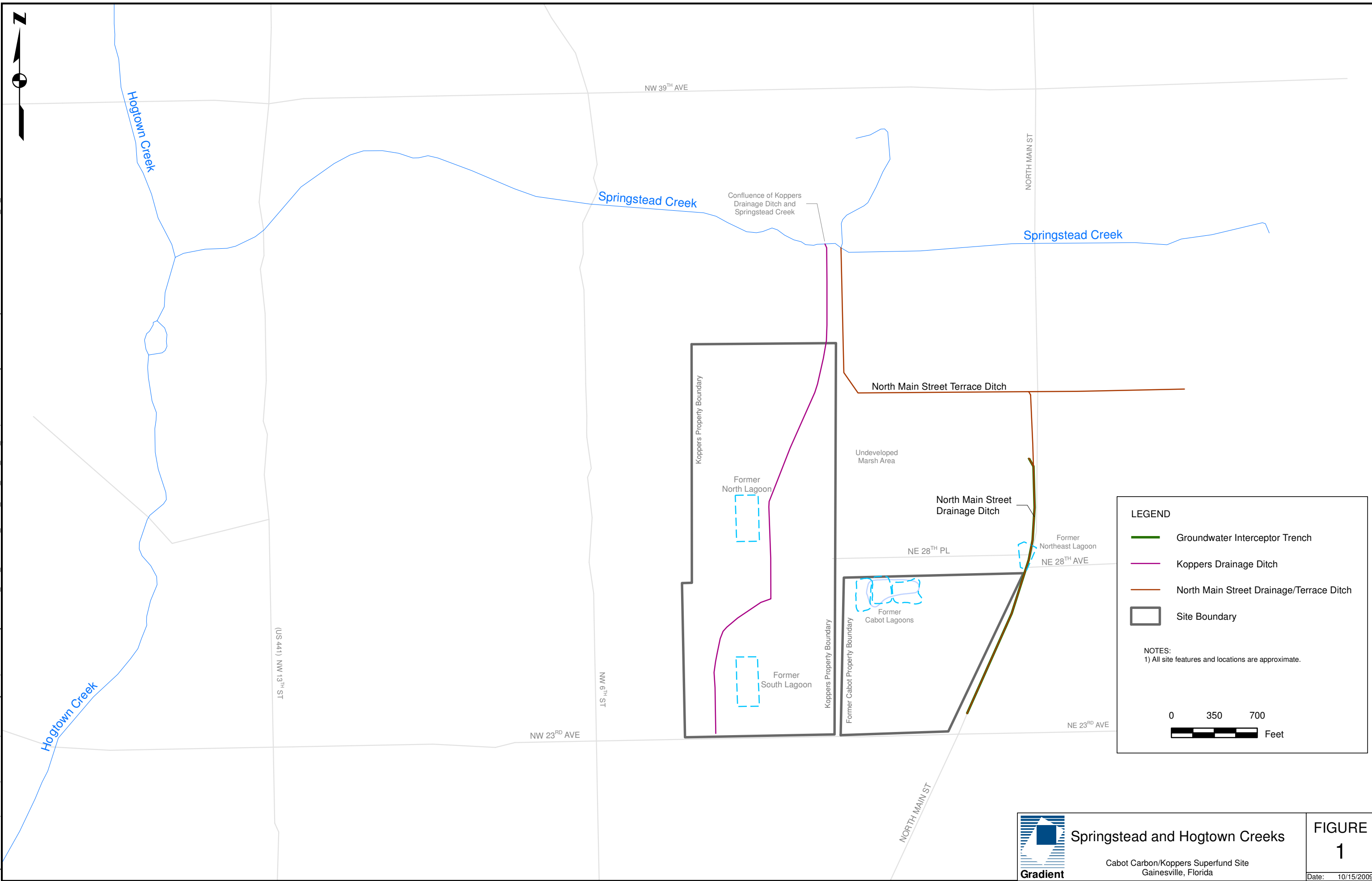
Compound	SS5					SS2			SB-9					SD/10					60					62					HA		H4A							H4		HB/H7															
	SS5-01A		SS5-02A		SS5-03A	SS2-01		SS2-02	SB-901		SB9-02		SB9-03		SD/10-01B		SD-1001A		SD-10-02		SD-10-03		60-01		60-02		60-03		62-01		62-02		62-03		HA-01		HA-02		H4A-01		H4A-02		H4A-03		H4A-04		H4A-05		H4A-06		H4A-07		H4-01		HB/H7-01
Benzo[g,h,i]perylene	26	U	25	U	380	U	40	U	NA	26	U	27	U	NA	140	150	50	J	38	NA	190	J	120	NA	26	U	26	U	NA	630	NA	79	J	26	U	220	J	NA	91	J	28	U	25	U	390	U	390	U							
Benzo[k]fluoranthene	78	U	74	U	380	U	70	J	NA	78	U	80	U	NA	170	260	71	J	58	J	NA	510	370	NA	76	U	76	U	NA	1700	NA	120	J	77	U	75	U	NA	79	U	81	U	75	U	390	U	390	U							
Acenaphthene	110	J	47	U	380	U	40	U	NA	49	U	50	U	NA	40	40	41	U	40	J	NA	3000	340	NA	48	U	48	U	NA	2600	NA	310	J	48	U	47	U	NA	50	U	51	U	48	U	390	U	390	U							
Acenaphthylene	43	U	41	U	380	U	40	U	NA	43	U	44	U	NA	40	U	41	J	38	U	NA	2300	350	NA	42	U	42	U	NA	1800	NA	43	U	42	U	41	U	NA	44	U	45	U	42	U	390	U	390	U							
Benzo[a]anthracene	35	J	31	U	380	U	98	NA	NA	32	U	33	U	NA	150	400	130	100	100	NA	1300	680	NA	44	J	32	U	NA	3000	NA	250	J	32	U	31	U	NA	33	U	34	U	31	U	390	U	390	U								
Benzo[a]pyrene	63	U	60	U	380	U	110	NA	NA	62	U	64	U	NA	200	320	100	J	80	NA	860	440	NA	61	U	61	U	NA	2100	NA	170	J	61	U	110	J	NA	63	U	65	U	60	U	390	U	390	U								
Benzo[b]fluoranthene	46	U	43	U	380	U	79	J	NA	46	U	47	U	NA	200	310	110	59	J	NA	440	420	NA	44	U	45	U	NA	1300	NA	120	J	45	U	44	U	NA	46	U	48	U	44	U	390	U	390	U								
1-Methylnaphthalene	120	J	35	U	380	U	38	U	NA	37	U	38	U	NA	37	U	38	U	36	U	NA	4400	530	NA	36	U	36	U	NA	1200	NA	420	37	U	36	U	NA	38	U	39	U	36	U	390	U	390	U								
2-Methylnaphthalene	89	J	43	U	380	U	40	U	NA	46	U	47	U	NA	40	U	40	U	38	U	NA	4900	700	NA	44	U	45	U	NA	680	NA	560	45	U	44	U	NA	46	U	48	U	44	U	390	U	390	U								
Chrysene	39	J	24	U	380	U	130	NA	NA	25	U	26	U	NA	210	510	160	130	NA	1500	860	NA	55	J	25	U	NA	3500	NA	270	J	51	J	24	U	NA	26	U	26	U	24	U	390	U	390	U									
Dibenz(a,h)anthracene	47	U	45	U	380	U	40	U	NA	47	U	48	U	NA	40	U	40	U	38	U	NA	190	U	47	U	NA	46	U	46	U	NA	220	U	NA	47	U	46	U	210	J	NA	79	J	49	U	45	U	390	U	390	U				
Fluoranthene	100	J	37	U	380	U	40	U	NA	38	U	39	U	NA	380	990	240	340	NA	190	U	1600	NA	65	J	38	U	NA	220	U	NA	920	210	J	37	U	NA	60	J	40	U	49	J	390	U	390	U								
Fluorene	70	J	41	U	380	U	40	U	NA	43	U	44	U	NA	40	U	40	U	40	J	NA	2100	310	NA	42	U	42	U	NA	2000	NA	43	U	42	U	41	U	NA	44	U	45	U	42	U	390	U	390	U							
Indeno[1,2,3-cd]pyrene	34	U	32	U	380	U	40	U	NA	34	U	34	U	NA	130	140	41	U	38	U	NA	230	J	120	NA	33	U	33	U	NA	630	NA	89	J	33	U	230	J	NA	82	J	35	U	32	U	390	U	390	U						
Naphthalene	99	J	34	U	380	U	47	J	NA	36	U	37	U	NA	40	U	40	U	38	U	NA	1500	340	NA	35	U	35	U	NA	220	U	NA	36	U	35	U	34	U	NA	37	U	38	U	35	U	390	U	390	U						
Phenanthrene	360	J	31	U	380	U	110	NA	NA	77	J	33	J	NA	93	260	74	J	120	NA	15000	1700	NA	130	J	78	J	NA	14000	NA	1600	130	J	31	U	NA	33	U	34	U	31	U	390	U	390	U									
Pyrene	33	U	31	U	380	U	250	NA	NA	32	U	33	U	NA	370	910	260	320	NA	3500	1400	NA	55	J	32	U	NA	7600	NA	590	160	J	31	U	NA	45	J	34	U	38	J	390	U	390	U										
Anthracene	30	U	29	U	380	U	40	U	NA	30	U	31	U	NA	40	U	86	41	U	64	J	NA	2400	460	NA	29	U	29	U	NA	3100	NA	290	J	31	J	29	U	NA	31	U	31	U	29	U	390	U	390	U						
Dibenzofuran	NA	NA	NA	NA	NA	82	U	NA	NA	NA	NA	NA	NA	NA	81	U	81	U	82	U	77	U	NA	390	U	250	J	NA	460	U	NA	40	U	39	<	38	U	NA	40	U	41	U	38	U	390	U	390	U							
Total PAH	1422	U	703	U	6840	U	1374	U	NA	781	U	755	U	NA	2441	4696	1643	1692	NA	44900	11037	NA	950	U	808	U	NA	46960	NA	5997	1190	U	1353	U	NA	967	U	812	U	768	U	7410	U	7410	U										
Total BAP-TEQ	122.3	U	116.4	U	878.2	U	172.5	U	NA	121.0	U	124.2	U	NA	289.9	U	448.1	U	170.0	U	138.4	U	1253.6	U	613.6	U	NA	2833.5	NA	119.9	U	118.8	U	NA	2833.5	NA	264.4	U	118.8	U	351.3	U	NA	158.9	U	126.5	U	116.5	U	901.3	U	901.3	U		
TOC (mg/kg)					3000	U			5400					3000	U			3000	U	5700				3000	U					16000									3000	U															

Notes:

- 1) Sediment data in $\mu\text{g/kg}$
- 2) U indicates values detected below reporting limit
- 3) NA - Not Available/Not Analyzed

Figures

Project No.: 204079; PM: MHS; Author: MMK; Checked By: ACC; Coordinate System: NAD 1983 StatePlane Florida North FIPS 0903 Feet; File Path: G:\Projects\204079\Graphics\CADGIS\105\204079-105 22 Creeks.mxd



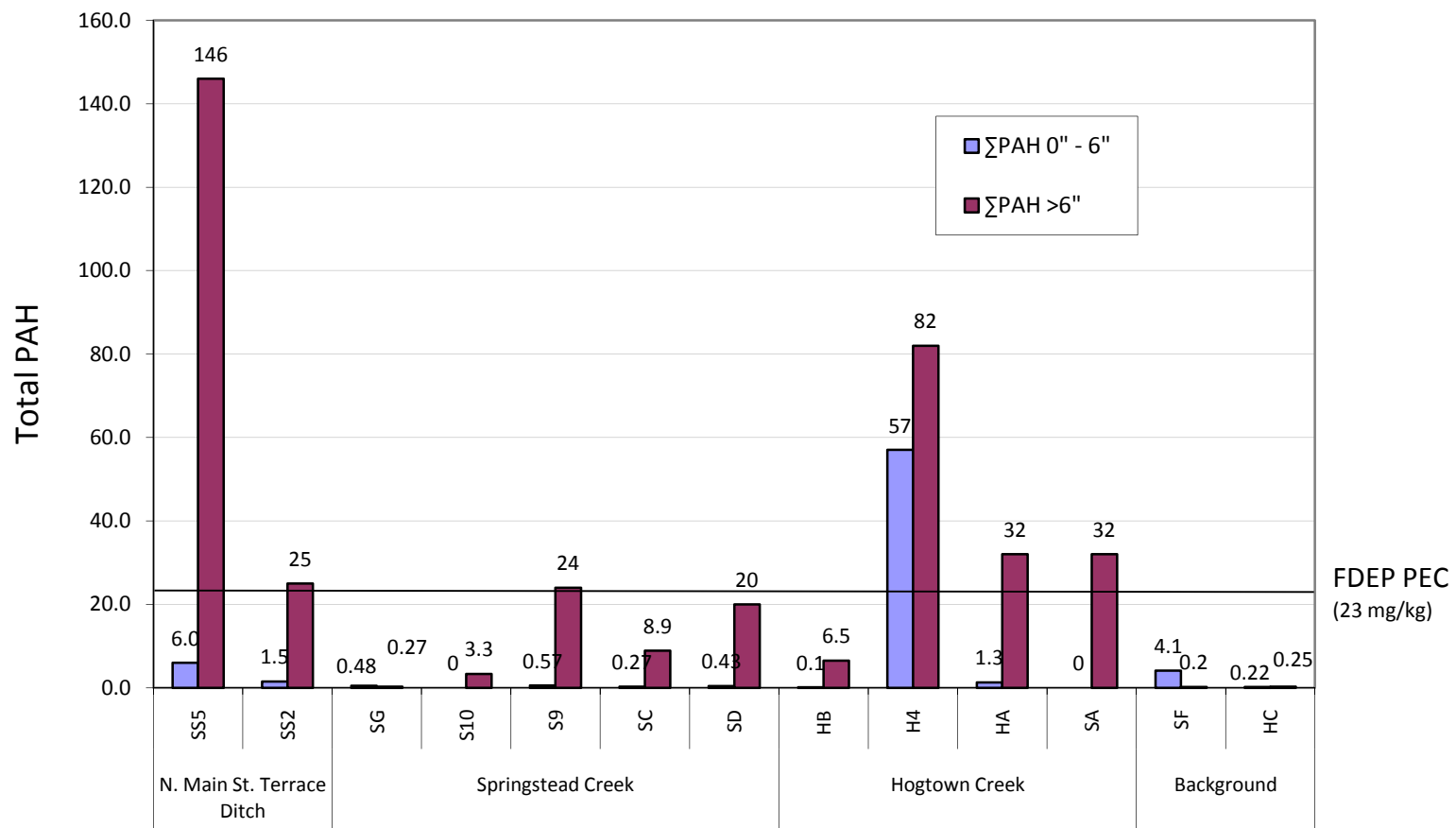
Springstead and Hogtown Creeks

Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

FIGURE
1

Date: 10/15/2009

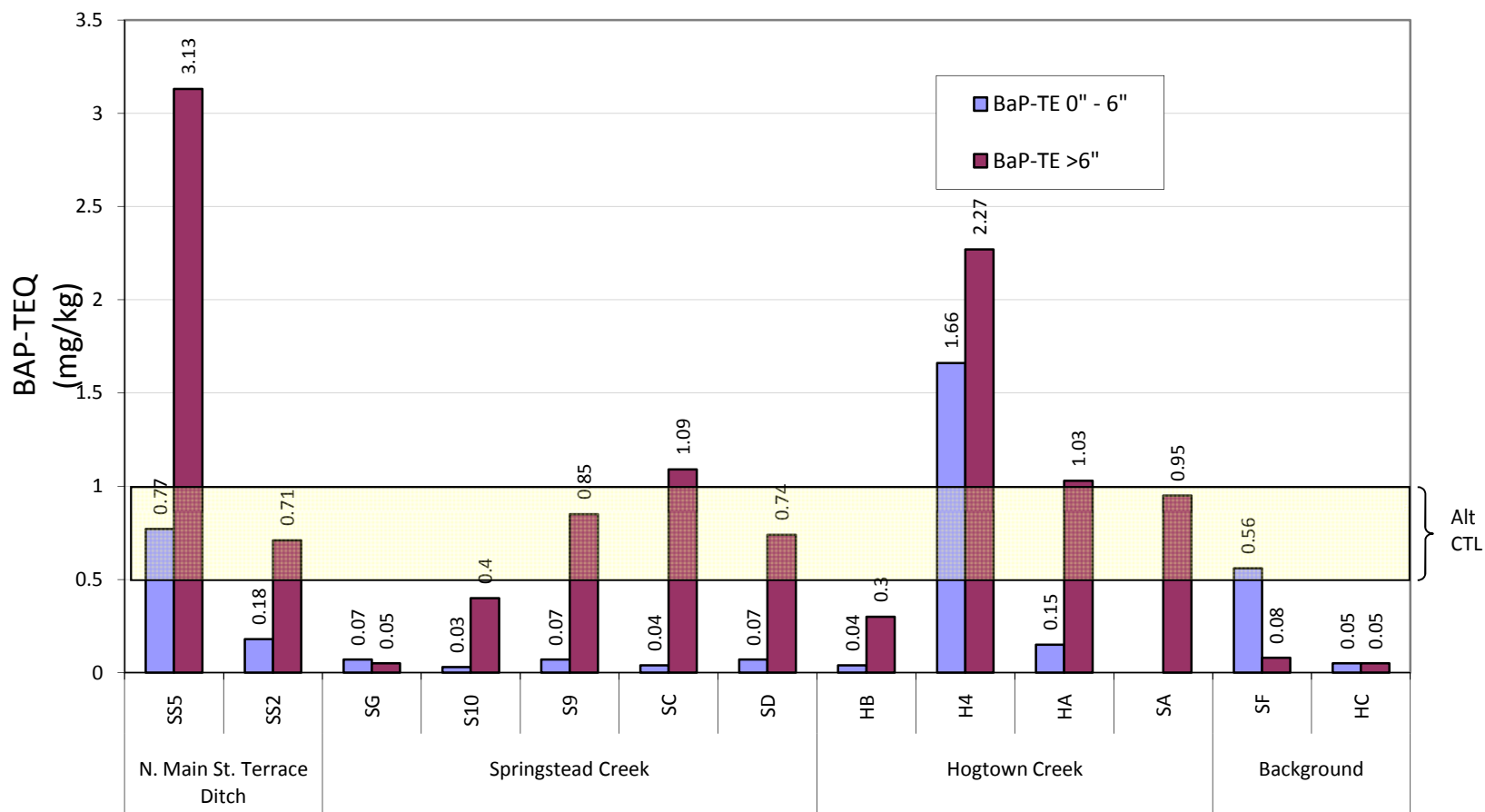
Figure 2
Pre-Remediation Sediment Data: Total PAH Concentrations
Cabot Carbon/Koppers Superfund Site



Notes:

1) PECs are not applicable to deep sediments.

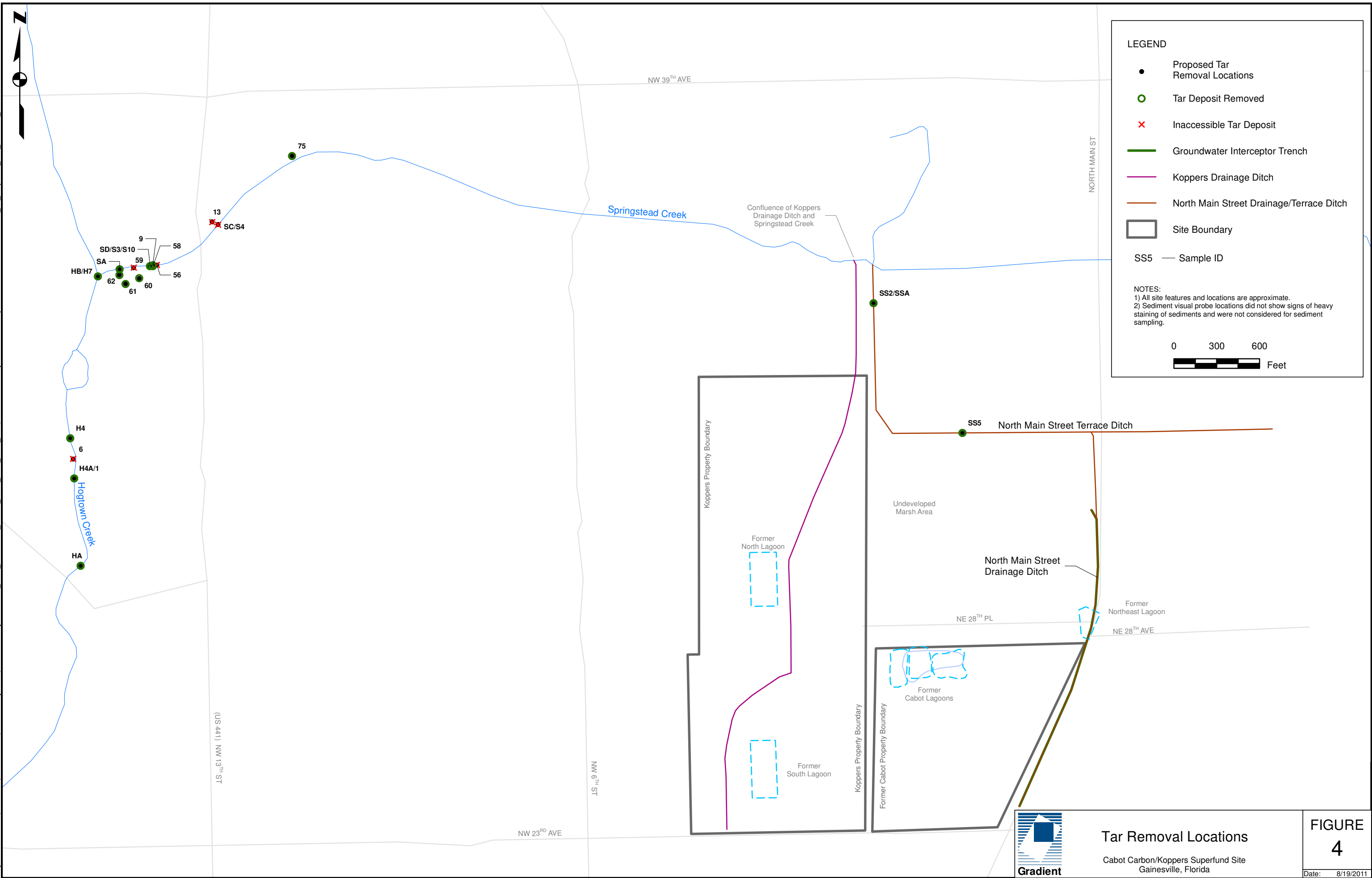
Figure 3
Pre-Remediation Sediment Data: BAP-TEQ Levels
Cabot Carbon/Koppers Superfund Site



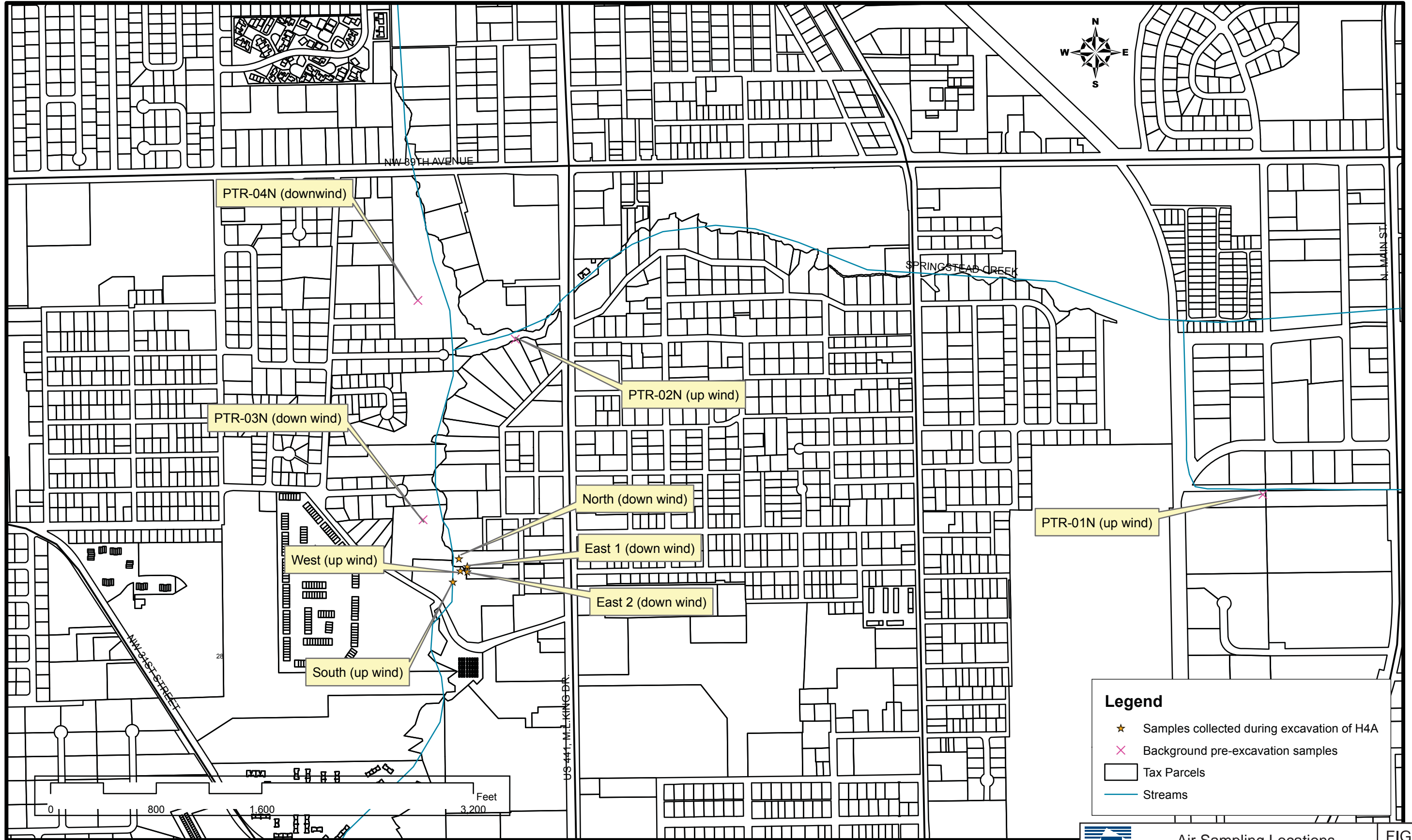
NOTES:

"Alt CTL": Alternate Cleanup Target Levels for BAP-TEQ were developed by the University of Florida (Roberts and Stuchal, 2010a,b).

Project No.: 204079; PM: MHS; Author: MMK; Checked By: MHS; Coordinate System: NAD 1983 StatePlane Florida North FIPS 0903 Feet; File Path: G:\Projects\204079\Graphics\CAD\GIS\105204079-105_32_Proposed Sed Removal_Locs.mxd



Project No.: 204079; PM: MHS; Drawn By: MMJ; Checked By: MHS; File Path: G:\Projects\204079\Graphics\NonCAD\AirSampleLocs.ai



SOURCE: Weston, 2011.



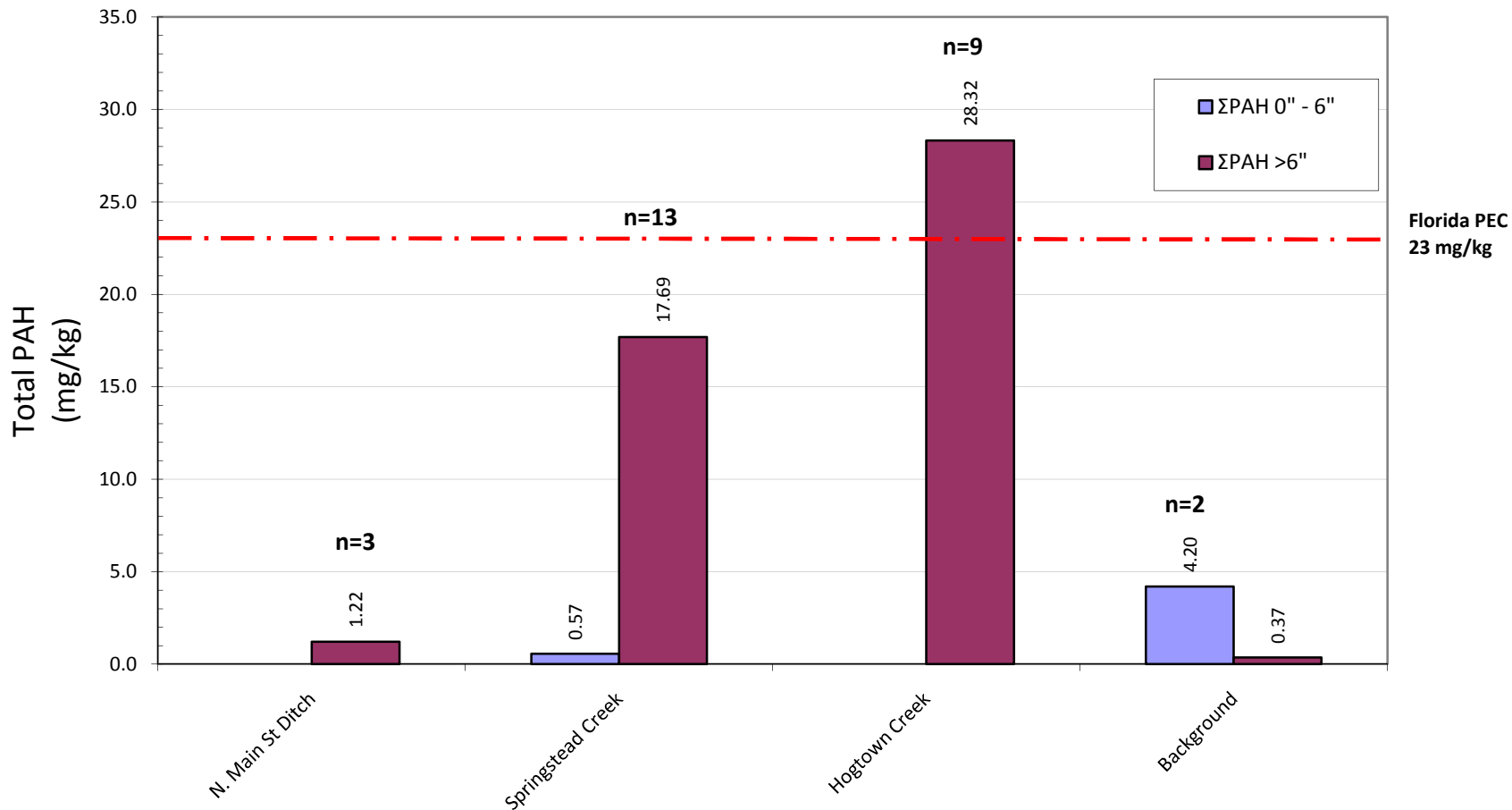
Air Sampling Locations
Springstead and Hogtown Creeks

Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

FIGURE
5

Date: 7/20/2011

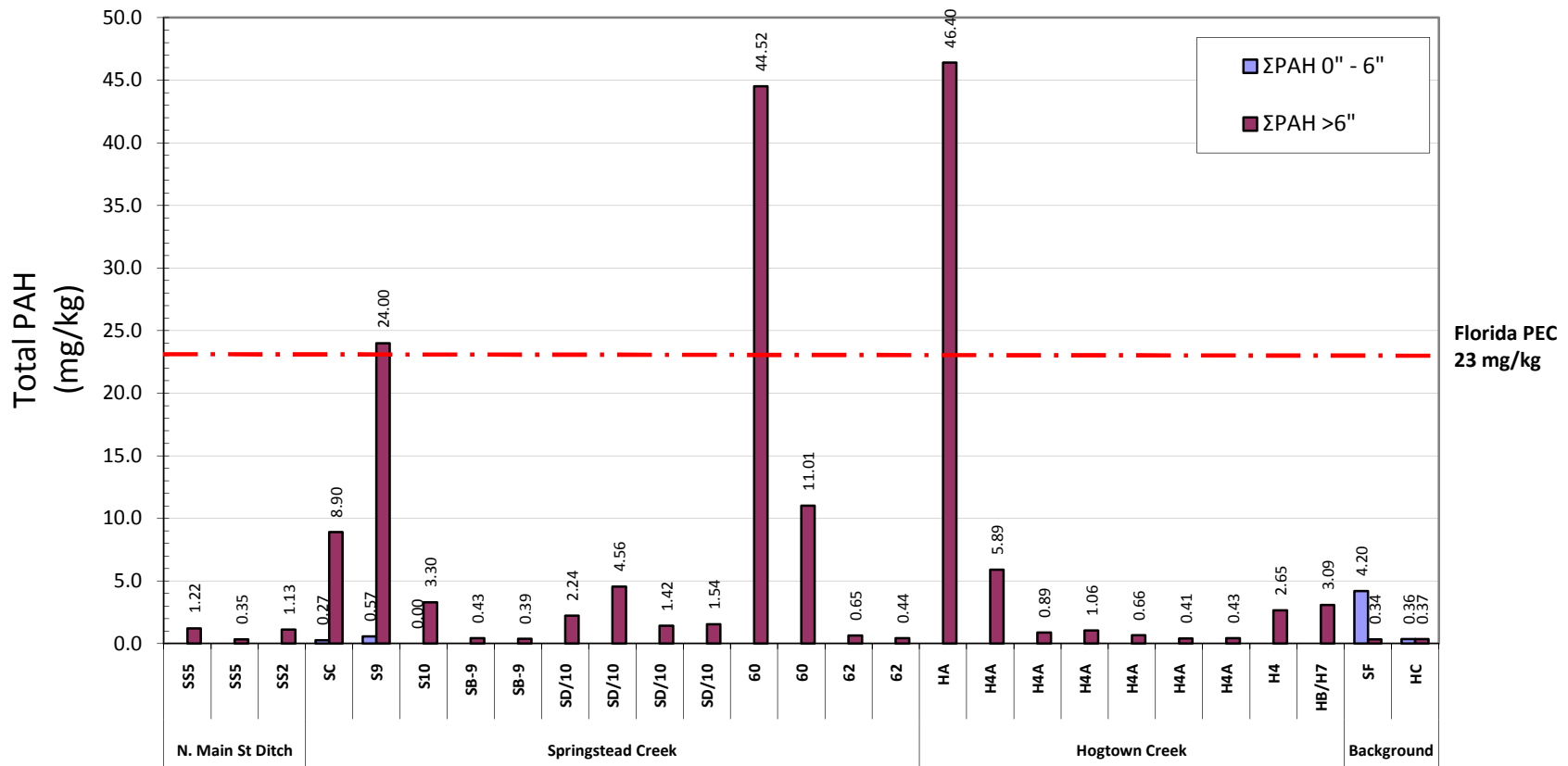
Figure 6a
Post-Excavation Sediment Data: Total PAH vs. Florida PEC - 95% UCLM
Cabot Carbon/Koppers Superfund Site



NOTES:

- 1) PECs are not applicable to deep sediments.
- 2) 95% UCLM calculated using ProUCL 4.1 for Springstead Creek and Hogtown Creek deep samples (> 6").
- 3) For shallow samples (0"-6"), N Main St. Ditch and Background samples, maximum values assumed due to limited data set.

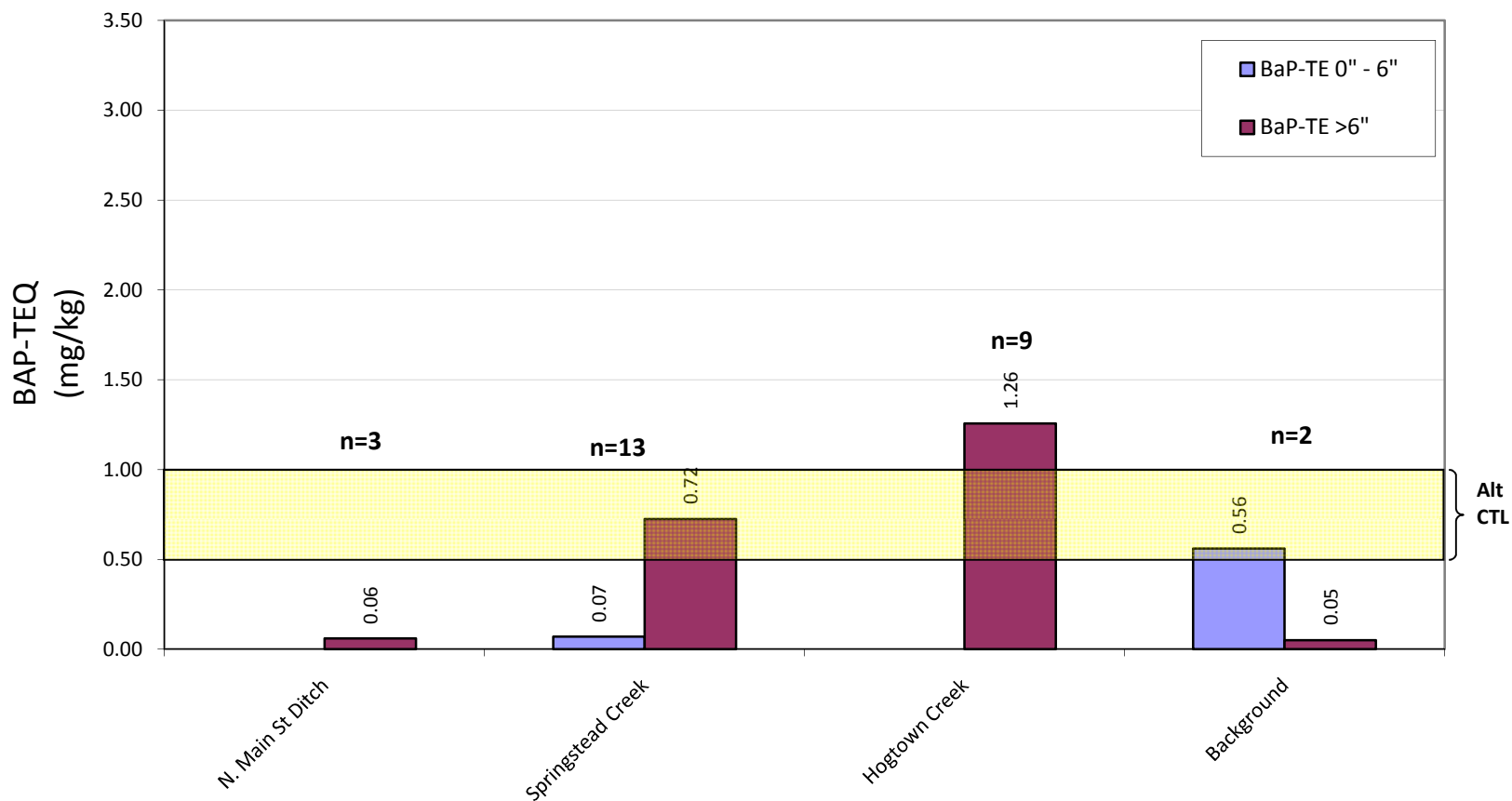
Figure 6b
Post-Excavation Sediment Data: Total PAH vs. Florida PEC - All Data
Cabot Carbon/Koppers Superfund Site



NOTES:

1) PECs are not applicable to deep sediments.

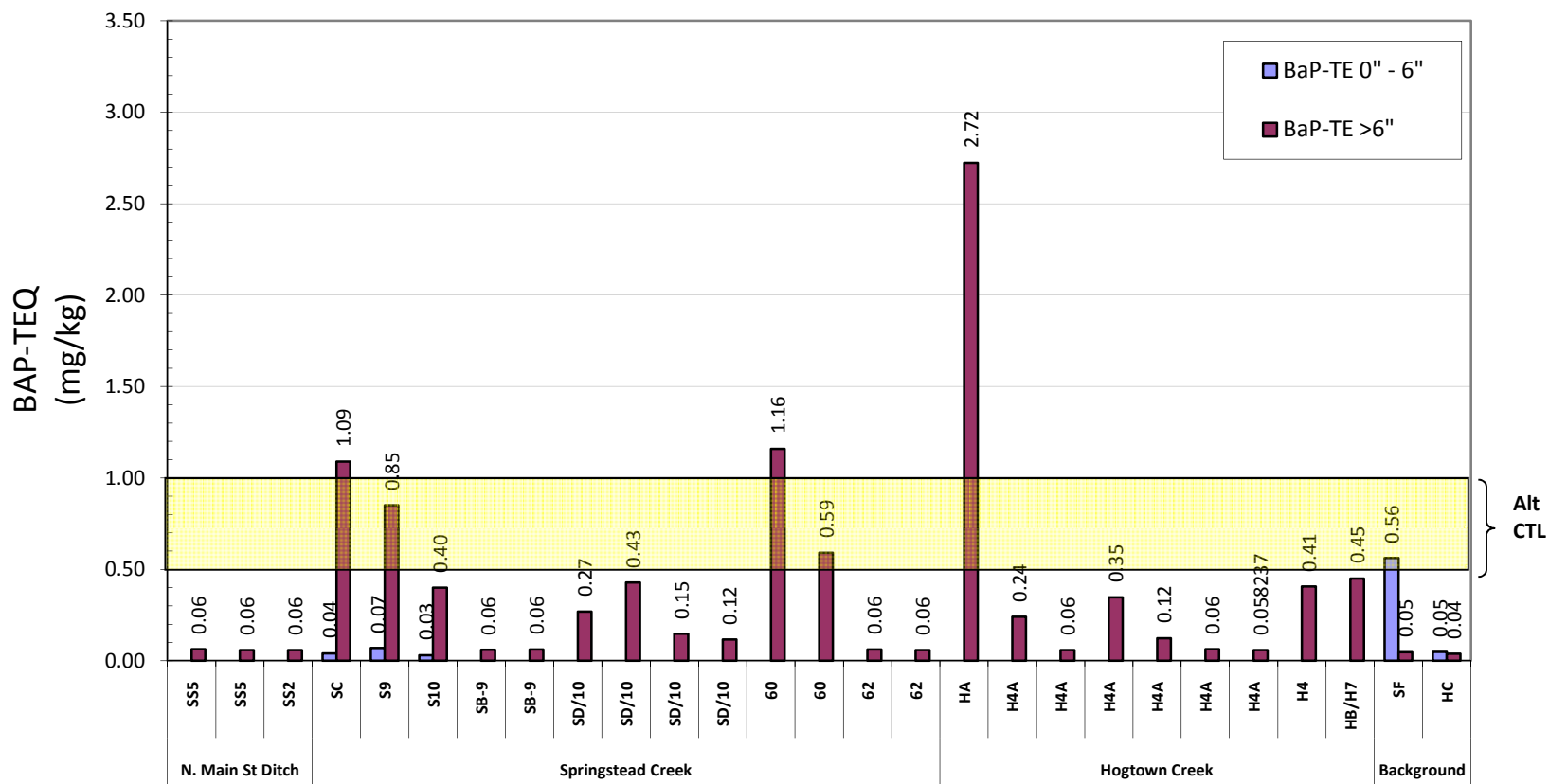
Figure 7a
Post-Excavation Sediment Data: BAP-TEQ vs. ACTLs - 95% UCLM
Cabot Carbon/Koppers Superfund Site



NOTES:

- 1) "Alt CTL": Alternate Cleanup Target Levels for BAP-TEQ were developed by the University of Florida (Roberts and Stuchal, 2010a,b).
- 2) 95% UCLM calculated using ProUCL 4.1 for Springstead Creek and Hogtown Creek deep samples (> 6").
- 3) For shallow samples (0"-6"), N Main St. Ditch and Background samples, maximum values assumed due to limited data set.

Figure 7b
Post-Excavation Sediment Data: BAP-TEQ vs. ACTLs - All Data
Cabot Carbon/Koppers Superfund Site



NOTES:

"Alt CTL": Alternate Cleanup Target Levels for BAP-TEQ were developed by the University of Florida (Roberts and Stuchal, 2010a,b).

Appendix A

Project Fact Sheet

Springstead and Hogtown Creeks Pine Tar Removal Plan

What:

Cabot Corp will begin the clean up of the Springstead and Hogtown Creeks, to remove isolated deposits of pine tar in the creeks. Cabot's contractor, Weston Solutions, will be carrying out this work.

Why:

Recently, the Alachua County Environmental Protection Department (ACEPD) located and identified specific locations along the creek where pine tar is present. Cabot believes that the best course of action is to remove them and submitted a plan to the United States Environmental Protection Agency (USEPA) and Florida Department of Environmental Protection (FDEP), ACEPD, and the City of Gainesville to do just that. This work is an interim removal action to address areas of the creeks containing significant tarry deposits and address citizens concern regarding potential contact with those deposits. It is not intended to address all site related contamination in the creek nor is it the final Superfund remedy.

Where:

The clean up is focused on 17 isolated areas in the creeks which were identified in a comprehensive study done by ACEPD.

When:

The plan has been reviewed, commented on and approved by the USEPA, FDEP, ACEPD and the City of Gainesville. It is expected that the work will be done in January and February 2011, a time when rainfall in Gainesville is usually low. The work is expected to take up to one to two days at each clean up area. Appropriate property access will be sought to undertake the work.

Clean Up Plan Elements:

- Remove pine tar deposits from all 17 areas in the creeks.
- Removal will be conducted using small-sized back hoes and similar equipment.
- Removed material will be transported to a central location for appropriate disposal off site.
- Odor control measures will be implemented since pine tars have an odor. Some odors may be noticeable near the work area. Air monitoring will be conducted.
- Properties and work areas affected by this work will be restored.

Background

- Cabot operated a pine tar plant that distilled pine oil and tar from pine trees into a variety of products. Cabot's plant operations ceased in 1966 and the property was sold to a local developer.
- After Cabot sold the facility, the property was redeveloped, during which time some of the contents of the pine processing lagoons were bulldozed and released.
- Some of the released pine tar entered Springstead and Hogtown Creeks. Accordingly, the Florida Department of Environmental Protection ordered the developer to clean up the release.
- In the 1990s, Cabot installed and continues to maintain a multi-million dollar, 2000-foot long groundwater interceptor trench along North Main Street to address any pine tar related impacts to the groundwater. Recent studies confirm that this remedial system is working effectively.
- Federal, state, and local environmental agencies, among others have previously examined potential impacts to the creek. Last year and earlier this year the ACEPD conducted comprehensive investigations and identified residual pine tar in 17 localized areas, most are 18–24 inches below the creek bed.
- These locations are the focus of Cabot's creek clean up efforts.

For over 25 years, Cabot has proactively implemented remedial actions at its portion of the Superfund Site and has worked cooperatively with regulatory authorities to ensure that these actions remain protective of human health and the environment.

If you have questions or need additional information, please contact:

Mark Taylor, Project Manager
Weston Solutions
Tel: 904-261-3085
Email: Mark.Taylor@WestonSolutions.com

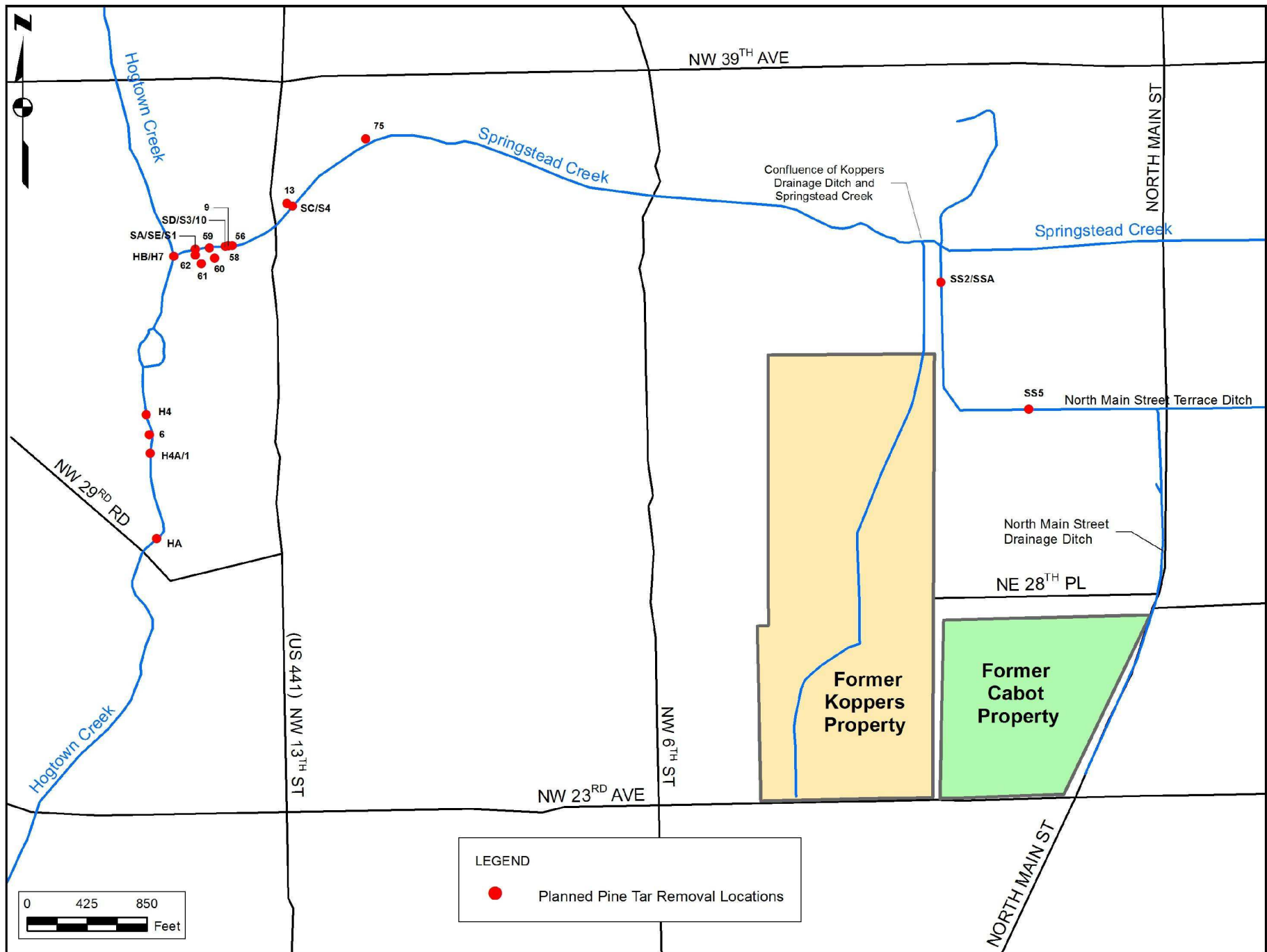
Wayne M. Reiber,
Manager, Environmental Assessment &
Remediation
Cabot Corporation
Tel: 617-342-6023
Email: wayne_reiber@cabot-corp.com

You can also contact:

Scott Miller
Remedial Project Manager, United States Environmental Protection Agency
Tel: (404) 562-9120
E-mail: Miller.Scott@epamail.epa.gov

John Mousa
Pollution Prevention Manager, Alachua County Environmental Protection Department
Tel: (352) 264-6805
E-mail: jjm@alachuacounty.us

Anthony Dennis
Environmental Health Director, Alachua County Health Department
Tel: (352) 334-7931
E-mail: Anthony_Dennis@doh.state.fl.us



Appendix B

Project Photographs



Sediment containment area located in northwest corner of staging area



Silt fencing at staging area



Air monitoring equipment downwind of excavation at location SS5



Lifting of Super Sack at tar deposit location SS5



Diesel powered pump used to move water around creek excavation



Downstream Jersey barrier dam with plastic sheeting covering stream bed to reduce turbidity



Excavator used to remove pine tar deposits



Excavation in progress at location 58 & 9 behind Holbrook Travel



Excavation at deposit H4A in City of Gainesville Park on 29th Road



Excavator lowered into Springstead Creek at deposit SS2



Sediment dewatering box being loaded for transport to staging area



Turbidity meter showing downstream reading on 3-21-2011



Jersey type barriers at staging area used for downstream dams



Excavation at location SD/10



Downstream dam with plastic sheeting on the stream bottom with hay bales & absorbent booms



Steel box used to transport sediments from creek bed



Downstream turbidity controls



Loading truck with stock piled sediment at the work staging area



HDPE Mats used to reduce ground impact from equipment traffic



Erosion control matting at 29th Road Park



Clearing of flower beds at Holbrook Travel



Grass seeding with hay cover behind Holbrook Travel



Replacement tree at 29th Road Park



Replacement tree at Shea Property



Slope at 29th Road Park with vegetation returning.



New grass in work area at Holbrook Travel

Appendix C

Air Testing Data

2/11/2011

Mr. Brian Benson

Weston Solutions, Inc.

1625 Pumphrey Avenue

Auburn AL 36832-4303

Project Name: Cabot-Hogtown Crk

Project #: 05791.004.005.0003.0

Workorder #: 1102072

Dear Mr. Brian Benson

The following report includes the data for the above referenced project for sample(s) received on 2/3/2011 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15/TICs are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Ausha Scott

Project Manager

WORK ORDER #: 1102072

Work Order Summary

CLIENT: Mr. Brian Benson
Weston Solutions, Inc.
1625 Pumphrey Avenue
Auburn, AL 36832-4303

BILL TO: Accounts Payable-Norcross
Weston Solutions, Inc.
5430 Metric Place
Suite 100
Norcross, GA 30092-2550

PHONE: 334-466-5600

P.O. # 0074294

FAX: 334-466-5660

PROJECT # 05791.004.005.0003.0 Cabot-Hogtown

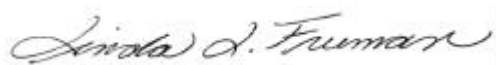
DATE RECEIVED: 02/03/2011

CONTACT: Crk
Ausha Scott

DATE COMPLETED: 02/11/2011

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	PTR-01022011-01N	Modified TO-15/TICs	9.8 "Hg	5 psi
02A	PTR-01022011-02N	Modified TO-15/TICs	9.0 "Hg	5 psi
03A	PTR-01022011-03N	Modified TO-15/TICs	9.4 "Hg	5 psi
04A	PTR-01022011-03D	Modified TO-15/TICs	9.8 "Hg	5 psi
05A	PTR-01022011-04N	Modified TO-15/TICs	8.8 "Hg	5 psi
06A	Lab Blank	Modified TO-15/TICs	NA	NA
07A	CCV	Modified TO-15/TICs	NA	NA
08A	LCS	Modified TO-15/TICs	NA	NA
08AA	LCSD	Modified TO-15/TICs	NA	NA

CERTIFIED BY:



Laboratory Director

DATE: 02/11/11

Certification numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763,
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719

Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,

Accreditation number: E87680, Effective date: 07/01/09, Expiration date: 06/30/11

Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

**LABORATORY NARRATIVE
EPA Method TO-15
Weston Solutions, Inc.
Workorder# 1102072**

Five 6 Liter Summa Canister samples were received on February 03, 2011. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

Specific analytes that are requested by the client to be reported as tentatively identified compounds (TICs) are determined by searching for each compound's characteristic spectra. If no chromatographic peak displaying the compound specific spectra exists, then the TIC is reported as not detected. Please note that the laboratory has not evaluated the stability of any heretofore tentatively identified compound in the vapor phase or for efficiency of recovery through the analytical system.

The reported CCV for each daily batch may be derived from more than one analytical file due to the client's request for non-standard compounds.

Non-standard compounds may have different acceptance criteria than the standard TO-14A/TO-15 compound list as per contract or verbal agreement.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ - Non-detected compound associated with low bias in the CCV and/or LCS.

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates

as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

**Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN**

Client Sample ID: PTR-01022011-01N

Lab ID#: 1102072-01A

No Detections Were Found.

Client Sample ID: PTR-01022011-02N

Lab ID#: 1102072-02A

No Detections Were Found.

Client Sample ID: PTR-01022011-03N

Lab ID#: 1102072-03A

No Detections Were Found.

Client Sample ID: PTR-01022011-03D

Lab ID#: 1102072-04A

No Detections Were Found.

Client Sample ID: PTR-01022011-04N

Lab ID#: 1102072-05A

No Detections Were Found.

Client Sample ID: PTR-01022011-01N

Lab ID#: 1102072-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	2020910	Date of Collection: 2/1/11 4:30:00 PM
Dil. Factor:	1.99	Date of Analysis: 2/9/11 02:00 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
alpha-Pinene	10	Not Detected	55	Not Detected
beta-Pinene	10	Not Detected	55	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
3-Carene	13466-78-9	NA	Not Detected
alpha-Terpineol	98-55-5	NA	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	94	70-130

Client Sample ID: PTR-01022011-02N

Lab ID#: 1102072-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	2020911	Date of Collection: 2/1/11 4:42:00 PM
Dil. Factor:	1.91	Date of Analysis: 2/9/11 02:37 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
alpha-Pinene	9.6	Not Detected	53	Not Detected
beta-Pinene	9.6	Not Detected	53	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
3-Carene	13466-78-9	NA	Not Detected
alpha-Terpineol	98-55-5	NA	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	91	70-130

Client Sample ID: PTR-01022011-03N

Lab ID#: 1102072-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	2020912	Date of Collection: 2/1/11 5:04:00 PM
Dil. Factor:	1.95	Date of Analysis: 2/9/11 03:13 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
alpha-Pinene	9.8	Not Detected	54	Not Detected
beta-Pinene	9.8	Not Detected	54	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
3-Carene	13466-78-9	NA	Not Detected
alpha-Terpineol	98-55-5	NA	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	90	70-130

Client Sample ID: PTR-01022011-03D

Lab ID#: 1102072-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	2020913	Date of Collection: 2/1/11 5:04:00 PM
Dil. Factor:	1.99	Date of Analysis: 2/9/11 03:52 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
alpha-Pinene	10	Not Detected	55	Not Detected
beta-Pinene	10	Not Detected	55	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
3-Carene	13466-78-9	NA	Not Detected
alpha-Terpineol	98-55-5	NA	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	84	70-130

Client Sample ID: PTR-01022011-04N

Lab ID#: 1102072-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	2020914	Date of Collection: 2/1/11
Dil. Factor:	1.90	Date of Analysis: 2/9/11 04:27 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
alpha-Pinene	9.5	Not Detected	53	Not Detected
beta-Pinene	9.5	Not Detected	53	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
3-Carene	13466-78-9	NA	Not Detected
alpha-Terpineol	98-55-5	NA	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	107	70-130
4-Bromofluorobenzene	95	70-130

Client Sample ID: Lab Blank

Lab ID#: 1102072-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	2020909a	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 2/9/11 01:00 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
alpha-Pinene	5.0	Not Detected	28	Not Detected
beta-Pinene	5.0	Not Detected	28	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
3-Carene	13466-78-9	NA	Not Detected
alpha-Terpineol	98-55-5	NA	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	91	70-130

Client Sample ID: CCV

Lab ID#: 1102072-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	2020902	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 2/9/11 09:09 AM

Compound	%Recovery
----------	-----------

alpha-Pinene	95
beta-Pinene	95

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	104	70-130

Client Sample ID: LCS

Lab ID#: 1102072-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	2020903	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 2/9/11 09:38 AM

Compound	%Recovery
alpha-Pinene	Not Spiked
beta-Pinene	Not Spiked

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	90	70-130
4-Bromofluorobenzene	102	70-130

Client Sample ID: LCSD

Lab ID#: 1102072-08AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	2020904	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 2/9/11 10:07 AM

Compound	%Recovery
alpha-Pinene	Not Spiked
beta-Pinene	Not Spiked

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	91	70-130
4-Bromofluorobenzene	102	70-130

4/19/2011

Mr. Brian Benson

Weston Solutions, Inc.

1625 Pumphrey Avenue

Auburn AL 36832-4303

Project Name: Cabot Pine Tar

Project #: 05791.004.005.0003

Workorder #: 1103664

Dear Mr. Brian Benson

The following report includes the data for the above referenced project for sample(s) received on 3/30/2011 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Ausha Scott

Project Manager

WORK ORDER #: 1103664

Work Order Summary

CLIENT: Mr. Brian Benson
Weston Solutions, Inc.
1625 Pumphrey Avenue
Auburn, AL 36832-4303

BILL TO: Accounts Payable-Norcross
Weston Solutions, Inc.
5430 Metric Place
Suite 100
Norcross, GA 30092-2550

PHONE: 334-466-5600

P.O. # 74294

FAX: 334-466-5660

PROJECT # 05791.004.005.0003 Cabot Pine Tar

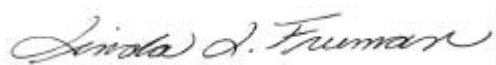
DATE RECEIVED: 03/30/2011

CONTACT: Ausha Scott

DATE COMPLETED: 04/18/2011

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	AIR SOUTH	Modified TO-15	7.0 "Hg	5 psi
02A	AIR WEST	Modified TO-15	7.4 "Hg	5 psi
03A	AIR EAST 2	Modified TO-15	7.4 "Hg	5 psi
04A	AIR EAST 1	Modified TO-15	6.8 "Hg	5 psi
05A	AIR NORTH	Modified TO-15	6.8 "Hg	5 psi
06A	Lab Blank	Modified TO-15	NA	NA
07A	CCV	Modified TO-15	NA	NA

CERTIFIED BY:



Laboratory Director

DATE: 04/18/11

Certification numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763,
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719

Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,

Accreditation number: E87680, Effective date: 07/01/09, Expiration date: 06/30/11

Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
EPA Method TO-15
Weston Solutions, Inc.
Workorder# 1103664

Five 6 Liter Summa Canister samples were received on March 30, 2011. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

Sample collection date was incomplete on the Chain of Custody for samples AIR SOUTH, AIR WEST, AIR EAST 2, AIR EAST 1, and AIR NORTH. The year of collection was assumed to be 2011.

Analytical Notes

Specific analytes that are requested by the client to be reported as tentatively identified compounds (TICs) are determined by searching for each compound's characteristic spectra. If no chromatographic peak displaying the compound specific spectra exists, then the TIC is reported as not detected. Please note that the laboratory has not evaluated the stability of any heretofore tentatively identified compound in the vapor phase or for efficiency of recovery through the analytical system.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV and/or LCS.

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

**Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN**

Client Sample ID: AIR SOUTH

Lab ID#: 1103664-01A

No Detections Were Found.

Client Sample ID: AIR WEST

Lab ID#: 1103664-02A

No Detections Were Found.

Client Sample ID: AIR EAST 2

Lab ID#: 1103664-03A

No Detections Were Found.

Client Sample ID: AIR EAST 1

Lab ID#: 1103664-04A

No Detections Were Found.

Client Sample ID: AIR NORTH

Lab ID#: 1103664-05A

No Detections Were Found.

Client Sample ID: AIR SOUTH

Lab ID#: 1103664-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3041314	Date of Collection: 3/15/11 5:20:00 PM
Dil. Factor:	1.75	Date of Analysis: 4/13/11 06:02 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
alpha-Pinene	8.8	Not Detected	49	Not Detected
beta-Pinene	8.8	Not Detected	49	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
3-Carene	13466-78-9	NA	Not Detected
alpha-Terpineol	98-55-5	NA	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	93	70-130
4-Bromofluorobenzene	115	70-130

Client Sample ID: AIR WEST

Lab ID#: 1103664-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3041315	Date of Collection: 3/15/11 5:20:00 PM
Dil. Factor:	1.78	Date of Analysis: 4/13/11 06:33 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
alpha-Pinene	8.9	Not Detected	50	Not Detected
beta-Pinene	8.9	Not Detected	50	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
3-Carene	13466-78-9	NA	Not Detected
alpha-Terpineol	98-55-5	NA	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	91	70-130
4-Bromofluorobenzene	107	70-130

Client Sample ID: AIR EAST 2

Lab ID#: 1103664-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3041316	Date of Collection: 3/15/11 5:20:00 PM
Dil. Factor:	1.78	Date of Analysis: 4/13/11 06:51 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
alpha-Pinene	8.9	Not Detected	50	Not Detected
beta-Pinene	8.9	Not Detected	50	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
3-Carene	13466-78-9	NA	Not Detected
alpha-Terpineol	98-55-5	NA	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	112	70-130

Client Sample ID: AIR EAST 1

Lab ID#: 1103664-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3041317	Date of Collection: 3/15/11 5:20:00 PM
Dil. Factor:	1.73	Date of Analysis: 4/13/11 07:12 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
alpha-Pinene	8.6	Not Detected	48	Not Detected
beta-Pinene	8.6	Not Detected	48	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
3-Carene	13466-78-9	NA	Not Detected
alpha-Terpineol	98-55-5	NA	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	91	70-130
4-Bromofluorobenzene	108	70-130

Client Sample ID: AIR NORTH

Lab ID#: 1103664-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3041320	Date of Collection: 3/15/11 5:20:00 PM
Dil. Factor:	1.73	Date of Analysis: 4/13/11 08:54 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
alpha-Pinene	8.6	Not Detected	48	Not Detected
beta-Pinene	8.6	Not Detected	48	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
3-Carene	13466-78-9	NA	Not Detected
alpha-Terpineol	98-55-5	NA	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	110	70-130

Client Sample ID: Lab Blank

Lab ID#: 1103664-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3041313a	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/13/11 04:12 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
alpha-Pinene	5.0	Not Detected	28	Not Detected
beta-Pinene	5.0	Not Detected	28	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
3-Carene	13466-78-9	NA	Not Detected
alpha-Terpineol	98-55-5	NA	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	94	70-130
1,2-Dichloroethane-d4	91	70-130
4-Bromofluorobenzene	109	70-130

Client Sample ID: CCV

Lab ID#: 1103664-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3041307a	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/13/11 10:56 AM

Compound	%Recovery
----------	-----------

alpha-Pinene	100
beta-Pinene	107

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	116	70-130

Appendix D

Soil Recycling Certificates

Invoice #48656

CERTIFICATE OF TREATMENT

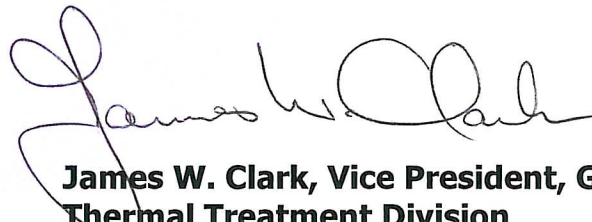
This is to certify that Clark Environmental, Inc. received 115.34 Tons of Non-Regulated Industrial Waste material from:

**GENERATOR: CABOT CORPORATION
2874 NE 1st TERRACE
GAINESVILLE, FLORIDA**

ON: MARCH 18 – MARCH 29, 2011

and that said material has been processed by Thermal Treatment as certified by post burn analytical number(s) CP3809 and CP3810. All work is performed to meet and exceed all EPA and DEP Guidelines.

June 20, 2011



**James W. Clark, Vice President, General Manager
Thermal Treatment Division**



T3141
115.34 ✓



1910 Harden Boulevard
Suite 101
Lakeland, FL 33803
(863) 686-4271 Phone
(863) 686-4389 Fax

Clark Environmental, Inc.
755 Prairie Industrial Parkway
Mulberry, FL 33860

Project Name: Clark Environmental - Postburn
Project Number: CP3809
Project Location: Mulberry, FL
Project Manager: John Warren

Reported:
12-Apr-11 07:50
Lab Work Order (COC): 1104074

CP3809
1104074-01 (Soil)

Analyte	Result	PQL	MDL	Units	Dilution	%Rec	%Rec Limits	Qualifiers
Prepared: 08-Apr-11 14:00								
EPA Method 8260B - VOA/BTEX+MTBE				Analyzed: 08-Apr-11 19:50		Batch: B104076		
Methyl tert-Butyl Ether (MTBE)	U	0.00197	0.000862	mg/kg dry	0.909			
Benzene	0.00245	0.00197	0.000369	mg/kg dry	0.909			
Toluene	0.00334	0.00197	0.000453	mg/kg dry	0.909			
Ethylbenzene	0.000716	0.00493	0.000496	mg/kg dry	0.909			I
m- & p-Xylenes	0.00203	0.00986	0.000887	mg/kg dry	0.909			I
o-Xylene	0.000955	0.00197	0.000432	mg/kg dry	0.909			I
Surrogate: Toluene-d8	0.0649			mg/kg dry		120 %	80-120	
Prepared: 08-Apr-11 15:34								
EPA Method 8270C - PAHs				Analyzed: 08-Apr-11 22:20		Batch: B104063		
1-Methylnaphthalene	U	0.0543	0.0244	mg/kg dry	1			
2-Methylnaphthalene	U	0.0543	0.0340	mg/kg dry	1			
Acenaphthene	U	0.0543	0.0349	mg/kg dry	1			
Acenaphthylene	U	0.0543	0.0116	mg/kg dry	1			
Anthracene	U	0.0543	0.0173	mg/kg dry	1			
Benzo(a)anthracene	U	0.0543	0.0170	mg/kg dry	1			
Benzo(a)pyrene	U	0.0543	0.0161	mg/kg dry	1			
Benzo(b)fluoranthene	U	0.0543	0.0202	mg/kg dry	1			
Benzo(g,h,i)perylene	U	0.0543	0.0242	mg/kg dry	1			
Benzo(k)fluoranthene	U	0.0543	0.0283	mg/kg dry	1			
Chrysene	U	0.0543	0.0214	mg/kg dry	1			
Dibenzo(a,h)anthracene	U	0.0543	0.0172	mg/kg dry	1			
Fluoranthene	U	0.0543	0.0161	mg/kg dry	1			
Fluorene	U	0.0543	0.0232	mg/kg dry	1			



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(863) 686-4389 Fax

Clark Environmental, Inc.
755 Prairie Industrial Parkway
Mulberry, FL 33860

Project Name: Clark Environmental - Postburn
Project Number: CP3809
Project Location: Mulberry, FL
Project Manager: John Warren

Reported:
12-Apr-11 07:50
Lab Work Order (COC): 1104074

CP3809

1104074-01 (Soil)

Analyte	Result	PQL	MDL	Units	Dilution	%Rec	%Rec Limits	Qualifiers
EPA Method 8270C - PAHs								
					Prepared: 08-Apr-11 15:34			
					Analyzed: 08-Apr-11 22:20		Batch: B104063	
Indeno(1,2,3-cd)pyrene	U	0.0543	0.0259	mg/kg dry	1			
Naphthalene	U	0.0543	0.0230	mg/kg dry	1			
Phenanthrene	U	0.0543	0.0129	mg/kg dry	1			
Pyrene	U	0.0543	0.0218	mg/kg dry	1			
Surrogate: 2-Fluorobiphenyl	0.724			mg/kg dry		80 %	60-100	
Petroleum Hydrocarbons by GC/FID								
					Prepared: 08-Apr-11 15:36			
					Analyzed: 08-Apr-11 20:40		Batch: B104064	
FL-PRO (C8-C40)	6.81	4.34	2.96	mg/kg dry	1			
Surrogate: o-Terphenyl	3.54			mg/kg dry		98 %	62-109	
Surrogate: n-Nonatriacontane	3.09			mg/kg dry		85 %	60-118	
EPA Method 6010B - Metals by ICP								
					Prepared: 11-Apr-11 10:36			
					Analyzed: 11-Apr-11 11:33		Batch: B104070	
Arsenic	1.57	0.434	0.180	mg/kg dry	1			
Cadmium	0.0723	0.0217	0.0130	mg/kg dry	1			
Chromium	5.24	0.434	0.227	mg/kg dry	1			
Lead	7.24	0.434	0.136	mg/kg dry	1			
SM 2540G - % Dry Solids								
					Prepared: 11-Apr-11 07:25			
					Analyzed: 11-Apr-11 12:44		Batch: B104075	
% Dry Solids	92.2	0.100	0.100	% by Weight	1			

1104074



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Chain of Custody Record

Company: Clark Environmental, Inc.						Project Name: Clark Environmental, Inc.								Page 1 of 1			
Address: 755 Prairie Industrial Parkway Mulberry, FL 33860						Project #: Thermal Treatment Facility								DEP Form #: 62-770.900(2)			
Phone: 425-4884 Fax: 425-4642						Project Manager: John Warren								Form Title: Chain of Custody Record			
						Project Location: Mulberry, FL								Effective Date: September 23, 1997			
Sampled by [Print Name(s)] / Affiliation <i>J. Spaul / Valerius</i> / Clark Environmental, Inc.						Preservatives (see codes) I I I I I								FDEP Facility No.: Project Name:			
Sampler(s) Signature(s) <i>[Signature]</i>						Analyses Requested 8260B (VOA) FL-PRO (TRPH) 8270 (PAHs) 4 RCRA Metals Total Solids								REQUESTED DUE DATE / /			
Item No.	Field ID No.	Sampled Date	Sampled Time	Grab or Composite	Matrix (see codes)	Number of Containers	8260B (VOA)	FL-PRO (TRPH)	8270 (PAHs)	4 RCRA Metals	Total Solids	Remarks		Lab. No.			
1	CP 3809	4-8-11	1:40 pm	Grab	SO	3	X	X	X	X	X	Post-Treatment					
Shipment Method						<= Total Number of Containers											
Out: / /	Via:	Item No.	Relinquished by / Affiliation		Date	Time	Accepted by / Affiliation		Date	Time							
Returned: / /	Via:	1	<i>Spaul / JCEI</i>		4-8-11	1345	<i>M. [Signature]</i>		4-8-11	1345							
Additional Comments:																	
Cooler No.(s) / Temperature(s) (°C)						Sampling Kit No.			Equipment ID No.								
2.0 <i>(UNLAWFUL) °C WET ICE</i>																	
MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) O = Other (specify)																	
PRESERVATIVE CODES: H = Hydrochloric acid + ice I = Ice only N = Nitric acid + ice S = Sulfuric acid + ice O = Other (specify)																	



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Clark Environmental, Inc.
755 Prairie Industrial Parkway
Mulberry, FL 33860

Project Name: Clark Environmental - Postburn
Project Number: CP3810
Project Location: Mulberry, FL
Project Manager: John Warren

Reported:
20-Apr-11 10:14
Lab Work Order (COC): 1104138

CP3810

1104138-01 (Soil)

Analyte	Result	PQL	MDL	Units	Dilution	%Rec	%Rec Limits	Qualifiers
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Prepared: 18-Apr-11 15:12

EPA Method 8260B - VOA/BTEX+MTBE

Analyzed: 18-Apr-11 16:58

Batch: B104136

Methyl tert-Butyl Ether (MTBE)	U	0.00185	0.000809	mg/kg dry	0.892			
Benzene	0.00250	0.00185	0.000346	mg/kg dry	0.892			
Toluene	0.00184	0.00185	0.000426	mg/kg dry	0.892			I
Ethylbenzene	U	0.00463	0.000465	mg/kg dry	0.892			
m- & p-Xylenes	U	0.00926	0.000832	mg/kg dry	0.892			
o-Xylene	U	0.00185	0.000406	mg/kg dry	0.892			
Surrogate: Toluene-d8	0.0513			mg/kg dry		99 %	80-120	

Prepared: 18-Apr-11 12:24

EPA Method 8270C - PAHs

Analyzed: 18-Apr-11 23:30

Batch: B104114

1-Methylnaphthalene	U	0.0519	0.0234	mg/kg dry	1			
2-Methylnaphthalene	U	0.0519	0.0325	mg/kg dry	1			
Acenaphthene	U	0.0519	0.0334	mg/kg dry	1			
Acenaphthylene	U	0.0519	0.0111	mg/kg dry	1			
Anthracene	U	0.0519	0.0165	mg/kg dry	1			
Benzo(a)anthracene	0.0198	0.0519	0.0162	mg/kg dry	1			I
Benzo(a)pyrene	0.0186	0.0519	0.0154	mg/kg dry	1			I
Benzo(b)fluoranthene	0.0240	0.0519	0.0194	mg/kg dry	1			I
Benzo(g,h,i)perylene	U	0.0519	0.0232	mg/kg dry	1			
Benzo(k)fluoranthene	U	0.0519	0.0271	mg/kg dry	1			
Chrysene	U	0.0519	0.0205	mg/kg dry	1			
Dibenzo(a,h)anthracene	U	0.0519	0.0164	mg/kg dry	1			
Fluoranthene	0.0197	0.0519	0.0154	mg/kg dry	1			I
Fluorene	U	0.0519	0.0222	mg/kg dry	1			



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Clark Environmental, Inc.
755 Prairie Industrial Parkway
Mulberry, FL 33860

Project Name: Clark Environmental - Postburn
Project Number: CP3810
Project Location: Mulberry, FL
Project Manager: John Warren

Reported:
20-Apr-11 10:14
Lab Work Order (COC): 1104138

CP3810

1104138-01 (Soil)

Analyte	Result	PQL	MDL	Units	Dilution	%Rec	%Rec Limits	Qualifiers
<div> <div>Prepared: 18-Apr-11 12:24</div> <div> <div>EPA Method 8270C - PAHs</div> <div>Analyzed: 18-Apr-11 23:30</div> <div>Batch: B104114</div> </div> </div>								
Indeno(1,2,3-cd)pyrene	U	0.0519	0.0248	mg/kg dry	1			
Naphthalene	U	0.0519	0.0220	mg/kg dry	1			
Phenanthrene	U	0.0519	0.0124	mg/kg dry	1			
Pyrene	U	0.0519	0.0208	mg/kg dry	1			
Surrogate: 2-Fluorobiphenyl	0.613			mg/kg dry		71 %	56.1-95.2	
<div> <div>Prepared: 18-Apr-11 14:33</div> <div> <div>Petroleum Hydrocarbons by GC/FID</div> <div>Analyzed: 18-Apr-11 21:25</div> <div>Batch: B104126</div> </div> </div>								
FL-PRO (C8-C40)	32.9	4.15	2.83	mg/kg dry	1			
Surrogate: o-Terphenyl	2.99			mg/kg dry		87 %	62-109	
Surrogate: n-Nonatriacontane	2.40			mg/kg dry		69 %	60-118	
<div> <div>Prepared: 18-Apr-11 14:24</div> <div> <div>EPA Method 6010B - Metals by ICP</div> <div>Analyzed: 18-Apr-11 16:13</div> <div>Batch: B104124</div> </div> </div>								
Arsenic	1.52	0.415	0.172	mg/kg dry	1			
Cadmium	U	0.0208	0.0125	mg/kg dry	1			
Chromium	4.67	0.415	0.217	mg/kg dry	1			
Lead	11.6	0.415	0.130	mg/kg dry	1			
<div> <div>Prepared: 18-Apr-11 12:15</div> <div> <div>SM 2540G - % Dry Solids</div> <div>Analyzed: 19-Apr-11 10:00</div> <div>Batch: B104130</div> </div> </div>								
% Dry Solids	96.3	0.100	0.100	% by Weight	1			

1104138



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Appendix E

Post Excavation Sediment Data Package

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Savannah

5102 LaRoche Avenue

Savannah, GA 31404

Tel: (912)354-7858

TestAmerica Job ID: 680-65837-2

Client Project/Site: Springstead & Hogtown Creek

For:

Weston Solutions, Inc.

94072 Summer Breeze Drive

Fernandina Beach, Florida 32034

Attn: Mr. Mark Taylor



Authorized for release by:

06/03/2011 04:49:58 PM

Abbie Yant

Project Manager I

abbie.yant@testamericainc.com

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www.testamericainc.com

Results relate only to the items tested and the sample(s) as received by the laboratory. The test results in this report meet all 2003 NELAC requirements for accredited parameters, exceptions are noted in this report. Pursuant to NELAC, this report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Case Narrative

Client: Weston Solutions, Inc.
Project/Site: Springstead & Hogtown Creek

TestAmerica Job ID: 680-65837-2

Job ID: 680-65837-2

Laboratory: TestAmerica Savannah

Narrative

Job Narrative 680-65837-2

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

GC/MS Semi VOA

Method(s) 8270C LL: The following sample(s) was prepped outside the method defined holding time because the request for the test was made after the holding time for the sample expired: LOC HA-01 (680-66657-1), LOC60-01 (680-66244-7), LOC60-02 (680-66244-8), SD/10-01B (680-66244-6), SD-10-01 (680-65837-8), SD-10-01A (680-65837-12), SD-10-02 (680-65837-9), SS2-01 (680-66244-4).

Method(s) 8270C LL: The following sample(s) was diluted due to the nature of the sample matrix : LOC HA-01 (680-66657-1), LOC60-01 (680-66244-7), LOC60-02 (680-66244-8), SD/10-01B (680-66244-6), SD-10-01 (680-65837-8), SD-10-01A (680-65837-12), SD-10-02 (680-65837-9), SS2-01 (680-66244-4). As such, surrogate recoveries are not reported, and elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

Sample Summary

Client: Weston Solutions, Inc.
Project/Site: Springstead & Hogtown Creek

TestAmerica Job ID: 680-65837-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-65837-8	SD-10-01	Solid	02/17/11 17:40	02/22/11 09:19
680-65837-9	SD-10-02	Solid	02/17/11 17:45	02/22/11 09:19
680-65837-12	SD-10-01A	Solid	02/18/11 11:50	02/22/11 09:19
680-66244-4	SS2-01	Solid	02/23/11 12:00	03/08/11 09:25
680-66244-6	SD/10-01B	Solid	02/25/11 12:15	03/08/11 09:25
680-66244-7	LOC60-01	Solid	03/02/11 16:30	03/08/11 09:25
680-66244-8	LOC60-02	Solid	03/02/11 16:35	03/08/11 09:25
680-66657-1	LOC HA-01	Solid	03/09/11 17:00	03/23/11 09:47

Method Summary

Client: Weston Solutions, Inc.
Project/Site: Springstead & Hogtown Creek

TestAmerica Job ID: 680-65837-2

Method	Method Description	Protocol	Laboratory
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL SAV
Moisture	Percent Moisture	EPA	TAL SAV

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Definitions/Glossary

Client: Weston Solutions, Inc.
Project/Site: Springstead & Hogtown Creek

TestAmerica Job ID: 680-65837-2

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
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.
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis.
EPA	United States Environmental Protection Agency
ND	Not Detected above the reporting level.
MDL	Method Detection Limit
RL	Reporting Limit
RE, RE1 (etc.)	Indicates a Re-extraction or Reanalysis of the sample.
%R	Percent Recovery
RPD	Relative Percent Difference, a measure of the relative difference between two points.

Detection Summary

Client: Weston Solutions, Inc.
Project/Site: Springstead & Hogtown Creek

TestAmerica Job ID: 680-65837-2

Client Sample ID: SD-10-01

Lab Sample ID: 680-65837-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Benzo[a]anthracene	130	H	82	41	ug/Kg	10		☼	8270C LL	Total/NA
Benzo[b]fluoranthene	110	H	82	41	ug/Kg	10		☼	8270C LL	Total/NA
Benzo[k]fluoranthene	71	J H	82	25	ug/Kg	10		☼	8270C LL	Total/NA
Benzo[g,h,i]perylene	50	J H	82	41	ug/Kg	10		☼	8270C LL	Total/NA
Benzo[a]pyrene	100	H	82	15	ug/Kg	10		☼	8270C LL	Total/NA
Chrysene	160	H	82	41	ug/Kg	10		☼	8270C LL	Total/NA
Fluoranthene	240	H	82	41	ug/Kg	10		☼	8270C LL	Total/NA
Phenanthrene	74	J H	82	29	ug/Kg	10		☼	8270C LL	Total/NA
Pyrene	260	H	82	41	ug/Kg	10		☼	8270C LL	Total/NA

Client Sample ID: SD-10-02

Lab Sample ID: 680-65837-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acenaphthene	40	J H	77	38	ug/Kg	10		☼	8270C LL	Total/NA
Anthracene	64	J H	77	38	ug/Kg	10		☼	8270C LL	Total/NA
Benzo[a]anthracene	100	H	77	38	ug/Kg	10		☼	8270C LL	Total/NA
Benzo[b]fluoranthene	59	J H	77	38	ug/Kg	10		☼	8270C LL	Total/NA
Benzo[k]fluoranthene	58	J H	77	23	ug/Kg	10		☼	8270C LL	Total/NA
Benzo[a]pyrene	80	H	77	14	ug/Kg	10		☼	8270C LL	Total/NA
Chrysene	130	H	77	38	ug/Kg	10		☼	8270C LL	Total/NA
Fluoranthene	340	H	77	38	ug/Kg	10		☼	8270C LL	Total/NA
Fluorene	40	J H	77	38	ug/Kg	10		☼	8270C LL	Total/NA
Phenanthrene	120	H	77	28	ug/Kg	10		☼	8270C LL	Total/NA
Pyrene	320	H	77	38	ug/Kg	10		☼	8270C LL	Total/NA

Client Sample ID: SD-10-01A

Lab Sample ID: 680-65837-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acenaphthylene	41	J H	81	40	ug/Kg	10		☼	8270C LL	Total/NA
Anthracene	86	H	81	40	ug/Kg	10		☼	8270C LL	Total/NA
Benzo[a]anthracene	400	H	81	40	ug/Kg	10		☼	8270C LL	Total/NA
Benzo[b]fluoranthene	310	H	81	40	ug/Kg	10		☼	8270C LL	Total/NA
Benzo[k]fluoranthene	260	H	81	24	ug/Kg	10		☼	8270C LL	Total/NA
Benzo[g,h,i]perylene	150	H	81	40	ug/Kg	10		☼	8270C LL	Total/NA
Benzo[a]pyrene	320	H	81	15	ug/Kg	10		☼	8270C LL	Total/NA
Chrysene	510	H	81	40	ug/Kg	10		☼	8270C LL	Total/NA
Fluoranthene	990	H	81	40	ug/Kg	10		☼	8270C LL	Total/NA
Indeno[1,2,3-cd]pyrene	140	H	81	40	ug/Kg	10		☼	8270C LL	Total/NA
Phenanthrene	260	H	81	29	ug/Kg	10		☼	8270C LL	Total/NA
Pyrene	910	H	81	40	ug/Kg	10		☼	8270C LL	Total/NA

Client Sample ID: SS2-01

Lab Sample ID: 680-66244-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Benzo[a]anthracene	98	H	82	40	ug/Kg	10		☼	8270C LL	Total/NA
Benzo[b]fluoranthene	79	J H	82	40	ug/Kg	10		☼	8270C LL	Total/NA
Benzo[k]fluoranthene	70	J H	82	25	ug/Kg	10		☼	8270C LL	Total/NA
Benzo[a]pyrene	110	H	82	15	ug/Kg	10		☼	8270C LL	Total/NA
Chrysene	130	H	82	40	ug/Kg	10		☼	8270C LL	Total/NA
Naphthalene	47	J H	82	40	ug/Kg	10		☼	8270C LL	Total/NA
Phenanthrene	110	H	82	29	ug/Kg	10		☼	8270C LL	Total/NA
Pyrene	250	H	82	40	ug/Kg	10		☼	8270C LL	Total/NA

Detection Summary

Client: Weston Solutions, Inc.
Project/Site: Springstead & Hogtown Creek

TestAmerica Job ID: 680-65837-2

Client Sample ID: SD/10-01B

Lab Sample ID: 680-66244-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Benzo[a]anthracene	150	H	81	40	ug/Kg	10		☼	8270C LL	Total/NA
Benzo[b]fluoranthene	200	H	81	40	ug/Kg	10		☼	8270C LL	Total/NA
Benzo[k]fluoranthene	170	H	81	24	ug/Kg	10		☼	8270C LL	Total/NA
Benzo[g,h,i]perylene	140	H	81	40	ug/Kg	10		☼	8270C LL	Total/NA
Benzo[a]pyrene	200	H	81	14	ug/Kg	10		☼	8270C LL	Total/NA
Chrysene	210	H	81	40	ug/Kg	10		☼	8270C LL	Total/NA
Fluoranthene	380	H	81	40	ug/Kg	10		☼	8270C LL	Total/NA
Indeno[1,2,3-cd]pyrene	130	H	81	40	ug/Kg	10		☼	8270C LL	Total/NA
Phenanthrene	93	H	81	29	ug/Kg	10		☼	8270C LL	Total/NA
Pyrene	370	H	81	40	ug/Kg	10		☼	8270C LL	Total/NA

Client Sample ID: LOC60-01

Lab Sample ID: 680-66244-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acenaphthene	3000	H	390	190	ug/Kg	50		☼	8270C LL	Total/NA
Acenaphthylene	2300	H	390	190	ug/Kg	50		☼	8270C LL	Total/NA
Anthracene	2400	H	390	190	ug/Kg	50		☼	8270C LL	Total/NA
Benzo[a]anthracene	1300	H	390	190	ug/Kg	50		☼	8270C LL	Total/NA
Benzo[b]fluoranthene	440	H	390	190	ug/Kg	50		☼	8270C LL	Total/NA
Benzo[k]fluoranthene	510	H	390	120	ug/Kg	50		☼	8270C LL	Total/NA
Benzo[g,h,i]perylene	190	J H	390	190	ug/Kg	50		☼	8270C LL	Total/NA
Benzo[a]pyrene	860	H	390	70	ug/Kg	50		☼	8270C LL	Total/NA
Chrysene	1500	H	390	190	ug/Kg	50		☼	8270C LL	Total/NA
Fluorene	2100	H	390	190	ug/Kg	50		☼	8270C LL	Total/NA
Indeno[1,2,3-cd]pyrene	230	J H	390	190	ug/Kg	50		☼	8270C LL	Total/NA
2-Methylnaphthalene	4900	H	390	190	ug/Kg	50		☼	8270C LL	Total/NA
1-Methylnaphthalene	4400	H	390	180	ug/Kg	50		☼	8270C LL	Total/NA
Naphthalene	1500	H	390	190	ug/Kg	50		☼	8270C LL	Total/NA
Phenanthrene	15000	H	390	140	ug/Kg	50		☼	8270C LL	Total/NA
Pyrene	3500	H	390	190	ug/Kg	50		☼	8270C LL	Total/NA

Client Sample ID: LOC60-02

Lab Sample ID: 680-66244-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acenaphthene	340	H	96	47	ug/Kg	10		☼	8270C LL	Total/NA
Acenaphthylene	350	H	96	47	ug/Kg	10		☼	8270C LL	Total/NA
Anthracene	460	H	96	47	ug/Kg	10		☼	8270C LL	Total/NA
Benzo[a]anthracene	680	H	96	47	ug/Kg	10		☼	8270C LL	Total/NA
Benzo[b]fluoranthene	420	H	96	47	ug/Kg	10		☼	8270C LL	Total/NA
Benzo[k]fluoranthene	370	H	96	29	ug/Kg	10		☼	8270C LL	Total/NA
Benzo[g,h,i]perylene	120	H	96	47	ug/Kg	10		☼	8270C LL	Total/NA
Benzo[a]pyrene	440	H	96	17	ug/Kg	10		☼	8270C LL	Total/NA
Chrysene	860	H	96	47	ug/Kg	10		☼	8270C LL	Total/NA
Dibenzofuran	250	J H	470	96	ug/Kg	10		☼	8270C LL	Total/NA
Fluoranthene	1600	H	96	47	ug/Kg	10		☼	8270C LL	Total/NA
Fluorene	310	H	96	47	ug/Kg	10		☼	8270C LL	Total/NA
Indeno[1,2,3-cd]pyrene	120	H	96	47	ug/Kg	10		☼	8270C LL	Total/NA
2-Methylnaphthalene	700	H	96	47	ug/Kg	10		☼	8270C LL	Total/NA
1-Methylnaphthalene	530	H	96	45	ug/Kg	10		☼	8270C LL	Total/NA
Naphthalene	340	H	96	47	ug/Kg	10		☼	8270C LL	Total/NA
Phenanthrene	1700	H	96	35	ug/Kg	10		☼	8270C LL	Total/NA
Pyrene	1400	H	96	47	ug/Kg	10		☼	8270C LL	Total/NA

Detection Summary

Client: Weston Solutions, Inc.
Project/Site: Springstead & Hogtown Creek

TestAmerica Job ID: 680-65837-2

Client Sample ID: LOC HA-01

Lab Sample ID: 680-66657-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acenaphthene	2600	H	460	220	ug/Kg	50		☼	8270C LL	Total/NA
Acenaphthylene	1800	H	460	220	ug/Kg	50		☼	8270C LL	Total/NA
Anthracene	3100	H	460	220	ug/Kg	50		☼	8270C LL	Total/NA
Benzo[a]anthracene	3000	H	460	220	ug/Kg	50		☼	8270C LL	Total/NA
Benzo[b]fluoranthene	1300	H	460	220	ug/Kg	50		☼	8270C LL	Total/NA
Benzo[k]fluoranthene	1700	H	460	140	ug/Kg	50		☼	8270C LL	Total/NA
Benzo[g,h,i]perylene	630	H	460	220	ug/Kg	50		☼	8270C LL	Total/NA
Benzo[a]pyrene	2100	H	460	82	ug/Kg	50		☼	8270C LL	Total/NA
Chrysene	3500	H	460	220	ug/Kg	50		☼	8270C LL	Total/NA
Fluorene	2000	H	460	220	ug/Kg	50		☼	8270C LL	Total/NA
Indeno[1,2,3-cd]pyrene	630	H	460	220	ug/Kg	50		☼	8270C LL	Total/NA
2-Methylnaphthalene	680	H	460	220	ug/Kg	50		☼	8270C LL	Total/NA
1-Methylnaphthalene	1200	H	460	210	ug/Kg	50		☼	8270C LL	Total/NA
Phenanthrene	14000	H	460	160	ug/Kg	50		☼	8270C LL	Total/NA
Pyrene	7600	H	460	220	ug/Kg	50		☼	8270C LL	Total/NA

Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Springstead & Hogtown Creek

TestAmerica Job ID: 680-65837-2

Client Sample ID: SD-10-01

Lab Sample ID: 680-65837-8

Date Collected: 02/17/11 17:40

Matrix: Solid

Date Received: 02/22/11 09:19

Percent Solids: 81.0

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<41	H	82	41	ug/Kg	☼	05/12/11 17:45	05/17/11 11:01	10
Acenaphthylene	<41	H	82	41	ug/Kg	☼	05/12/11 17:45	05/17/11 11:01	10
Anthracene	<41	H	82	41	ug/Kg	☼	05/12/11 17:45	05/17/11 11:01	10
Benzo[a]anthracene	130	H	82	41	ug/Kg	☼	05/12/11 17:45	05/17/11 11:01	10
Benzo[b]fluoranthene	110	H	82	41	ug/Kg	☼	05/12/11 17:45	05/17/11 11:01	10
Benzo[k]fluoranthene	71	J H	82	25	ug/Kg	☼	05/12/11 17:45	05/17/11 11:01	10
Benzo[g,h,i]perylene	50	J H	82	41	ug/Kg	☼	05/12/11 17:45	05/17/11 11:01	10
Benzo[a]pyrene	100	H	82	15	ug/Kg	☼	05/12/11 17:45	05/17/11 11:01	10
Chrysene	160	H	82	41	ug/Kg	☼	05/12/11 17:45	05/17/11 11:01	10
Dibenz(a,h)anthracene	<41	H	82	41	ug/Kg	☼	05/12/11 17:45	05/17/11 11:01	10
Dibenzofuran	<82	H	410	82	ug/Kg	☼	05/12/11 17:45	05/17/11 11:01	10
Fluoranthene	240	H	82	41	ug/Kg	☼	05/12/11 17:45	05/17/11 11:01	10
Fluorene	<41	H	82	41	ug/Kg	☼	05/12/11 17:45	05/17/11 11:01	10
Indeno[1,2,3-cd]pyrene	<41	H	82	41	ug/Kg	☼	05/12/11 17:45	05/17/11 11:01	10
2-Methylnaphthalene	<41	H	82	41	ug/Kg	☼	05/12/11 17:45	05/17/11 11:01	10
1-Methylnaphthalene	<38	H	82	38	ug/Kg	☼	05/12/11 17:45	05/17/11 11:01	10
Naphthalene	<41	H	82	41	ug/Kg	☼	05/12/11 17:45	05/17/11 11:01	10
Phenanthrene	74	J H	82	29	ug/Kg	☼	05/12/11 17:45	05/17/11 11:01	10
Pyrene	260	H	82	41	ug/Kg	☼	05/12/11 17:45	05/17/11 11:01	10
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	0	D	11 - 130				05/12/11 17:45	05/17/11 11:01	10
Nitrobenzene-d5	0	D	18 - 130				05/12/11 17:45	05/17/11 11:01	10
Terphenyl-d14	0	D	27 - 130				05/12/11 17:45	05/17/11 11:01	10

Client Sample ID: SD-10-02

Lab Sample ID: 680-65837-9

Date Collected: 02/17/11 17:45

Matrix: Solid

Date Received: 02/22/11 09:19

Percent Solids: 86.4

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	40	J H	77	38	ug/Kg	☼	05/12/11 17:45	05/17/11 11:28	10
Acenaphthylene	<38	H	77	38	ug/Kg	☼	05/12/11 17:45	05/17/11 11:28	10
Anthracene	64	J H	77	38	ug/Kg	☼	05/12/11 17:45	05/17/11 11:28	10
Benzo[a]anthracene	100	H	77	38	ug/Kg	☼	05/12/11 17:45	05/17/11 11:28	10
Benzo[b]fluoranthene	59	J H	77	38	ug/Kg	☼	05/12/11 17:45	05/17/11 11:28	10
Benzo[k]fluoranthene	58	J H	77	23	ug/Kg	☼	05/12/11 17:45	05/17/11 11:28	10
Benzo[g,h,i]perylene	<38	H	77	38	ug/Kg	☼	05/12/11 17:45	05/17/11 11:28	10
Benzo[a]pyrene	80	H	77	14	ug/Kg	☼	05/12/11 17:45	05/17/11 11:28	10
Chrysene	130	H	77	38	ug/Kg	☼	05/12/11 17:45	05/17/11 11:28	10
Dibenz(a,h)anthracene	<38	H	77	38	ug/Kg	☼	05/12/11 17:45	05/17/11 11:28	10
Dibenzofuran	<77	H	380	77	ug/Kg	☼	05/12/11 17:45	05/17/11 11:28	10
Fluoranthene	340	H	77	38	ug/Kg	☼	05/12/11 17:45	05/17/11 11:28	10
Fluorene	40	J H	77	38	ug/Kg	☼	05/12/11 17:45	05/17/11 11:28	10
Indeno[1,2,3-cd]pyrene	<38	H	77	38	ug/Kg	☼	05/12/11 17:45	05/17/11 11:28	10
2-Methylnaphthalene	<38	H	77	38	ug/Kg	☼	05/12/11 17:45	05/17/11 11:28	10
1-Methylnaphthalene	<36	H	77	36	ug/Kg	☼	05/12/11 17:45	05/17/11 11:28	10
Naphthalene	<38	H	77	38	ug/Kg	☼	05/12/11 17:45	05/17/11 11:28	10
Phenanthrene	120	H	77	28	ug/Kg	☼	05/12/11 17:45	05/17/11 11:28	10
Pyrene	320	H	77	38	ug/Kg	☼	05/12/11 17:45	05/17/11 11:28	10

TestAmerica Savannah

Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Springstead & Hogtown Creek

TestAmerica Job ID: 680-65837-2

Client Sample ID: SD-10-02

Lab Sample ID: 680-65837-9

Date Collected: 02/17/11 17:45

Matrix: Solid

Date Received: 02/22/11 09:19

Percent Solids: 86.4

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	0	D	11 - 130	05/12/11 17:45	05/17/11 11:28	10
Nitrobenzene-d5	0	D	18 - 130	05/12/11 17:45	05/17/11 11:28	10
Terphenyl-d14	0	D	27 - 130	05/12/11 17:45	05/17/11 11:28	10

Client Sample ID: SD-10-01A

Lab Sample ID: 680-65837-12

Date Collected: 02/18/11 11:50

Matrix: Solid

Date Received: 02/22/11 09:19

Percent Solids: 82.1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<40	H	81	40	ug/Kg	☼	05/12/11 17:45	05/17/11 11:55	10
Acenaphthylene	41	J H	81	40	ug/Kg	☼	05/12/11 17:45	05/17/11 11:55	10
Anthracene	86	H	81	40	ug/Kg	☼	05/12/11 17:45	05/17/11 11:55	10
Benzo[a]anthracene	400	H	81	40	ug/Kg	☼	05/12/11 17:45	05/17/11 11:55	10
Benzo[b]fluoranthene	310	H	81	40	ug/Kg	☼	05/12/11 17:45	05/17/11 11:55	10
Benzo[k]fluoranthene	260	H	81	24	ug/Kg	☼	05/12/11 17:45	05/17/11 11:55	10
Benzo[g,h,i]perylene	150	H	81	40	ug/Kg	☼	05/12/11 17:45	05/17/11 11:55	10
Benzo[a]pyrene	320	H	81	15	ug/Kg	☼	05/12/11 17:45	05/17/11 11:55	10
Chrysene	510	H	81	40	ug/Kg	☼	05/12/11 17:45	05/17/11 11:55	10
Dibenz(a,h)anthracene	<40	H	81	40	ug/Kg	☼	05/12/11 17:45	05/17/11 11:55	10
Dibenzofuran	<81	H	400	81	ug/Kg	☼	05/12/11 17:45	05/17/11 11:55	10
Fluoranthene	990	H	81	40	ug/Kg	☼	05/12/11 17:45	05/17/11 11:55	10
Fluorene	<40	H	81	40	ug/Kg	☼	05/12/11 17:45	05/17/11 11:55	10
Indeno[1,2,3-cd]pyrene	140	H	81	40	ug/Kg	☼	05/12/11 17:45	05/17/11 11:55	10
2-Methylnaphthalene	<40	H	81	40	ug/Kg	☼	05/12/11 17:45	05/17/11 11:55	10
1-Methylnaphthalene	<38	H	81	38	ug/Kg	☼	05/12/11 17:45	05/17/11 11:55	10
Naphthalene	<40	H	81	40	ug/Kg	☼	05/12/11 17:45	05/17/11 11:55	10
Phenanthrene	260	J H	81	29	ug/Kg	☼	05/12/11 17:45	05/17/11 11:55	10
Pyrene	910	H	81	40	ug/Kg	☼	05/12/11 17:45	05/17/11 11:55	10
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	0	D	11 - 130				05/12/11 17:45	05/17/11 11:55	10
Nitrobenzene-d5	0	D	18 - 130				05/12/11 17:45	05/17/11 11:55	10
Terphenyl-d14	0	D	27 - 130				05/12/11 17:45	05/17/11 11:55	10

Client Sample ID: SS2-01

Lab Sample ID: 680-66244-4

Date Collected: 02/23/11 12:00

Matrix: Solid

Date Received: 03/08/11 09:25

Percent Solids: 81.5

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<40	H	82	40	ug/Kg	✱	05/12/11 17:45	05/17/11 12:22	10
Acenaphthylene	<40	H	82	40	ug/Kg	✱	05/12/11 17:45	05/17/11 12:22	10
Anthracene	<40	H	82	40	ug/Kg	✱	05/12/11 17:45	05/17/11 12:22	10
Benzo[a]anthracene	98	H	82	40	ug/Kg	✱	05/12/11 17:45	05/17/11 12:22	10
Benzo[b]fluoranthene	79	J H	82	40	ug/Kg	✱	05/12/11 17:45	05/17/11 12:22	10
Benzo[k]fluoranthene	70	J H	82	25	ug/Kg	✱	05/12/11 17:45	05/17/11 12:22	10
Benzo[g,h,i]perylene	<40	H	82	40	ug/Kg	✱	05/12/11 17:45	05/17/11 12:22	10
Benzo[a]pyrene	110	H	82	15	ug/Kg	✱	05/12/11 17:45	05/17/11 12:22	10
Chrysene	130	H	82	40	ug/Kg	✱	05/12/11 17:45	05/17/11 12:22	10
Dibenz(a,h)anthracene	<40	H	82	40	ug/Kg	✱	05/12/11 17:45	05/17/11 12:22	10

TestAmerica Savannah

Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Springstead & Hogtown Creek

TestAmerica Job ID: 680-65837-2

Client Sample ID: SS2-01

Date Collected: 02/23/11 12:00

Date Received: 03/08/11 09:25

Lab Sample ID: 680-66244-4

Matrix: Solid

Percent Solids: 81.5

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	<82	H	400	82	ug/Kg	☼	05/12/11 17:45	05/17/11 12:22	10
Fluoranthene	<40	H	82	40	ug/Kg	☼	05/12/11 17:45	05/17/11 12:22	10
Fluorene	<40	H	82	40	ug/Kg	☼	05/12/11 17:45	05/17/11 12:22	10
Indeno[1,2,3-cd]pyrene	<40	H	82	40	ug/Kg	☼	05/12/11 17:45	05/17/11 12:22	10
2-Methylnaphthalene	<40	H	82	40	ug/Kg	☼	05/12/11 17:45	05/17/11 12:22	10
1-Methylnaphthalene	<38	H	82	38	ug/Kg	☼	05/12/11 17:45	05/17/11 12:22	10
Naphthalene	47	J H	82	40	ug/Kg	☼	05/12/11 17:45	05/17/11 12:22	10
Phenanthrene	110	H	82	29	ug/Kg	☼	05/12/11 17:45	05/17/11 12:22	10
Pyrene	250	H	82	40	ug/Kg	☼	05/12/11 17:45	05/17/11 12:22	10
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	0	D	11 - 130				05/12/11 17:45	05/17/11 12:22	10
Nitrobenzene-d5	0	D	18 - 130				05/12/11 17:45	05/17/11 12:22	10
Terphenyl-d14	0	D	27 - 130				05/12/11 17:45	05/17/11 12:22	10

Client Sample ID: SD/10-01B

Date Collected: 02/25/11 12:15

Date Received: 03/08/11 09:25

Lab Sample ID: 680-66244-6

Matrix: Solid

Percent Solids: 82.2

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<40	H	81	40	ug/Kg	☼	05/12/11 17:45	05/17/11 12:49	10
Acenaphthylene	<40	H	81	40	ug/Kg	☼	05/12/11 17:45	05/17/11 12:49	10
Anthracene	<40	H	81	40	ug/Kg	☼	05/12/11 17:45	05/17/11 12:49	10
Benzo[a]anthracene	150	H	81	40	ug/Kg	☼	05/12/11 17:45	05/17/11 12:49	10
Benzo[b]fluoranthene	200	H	81	40	ug/Kg	☼	05/12/11 17:45	05/17/11 12:49	10
Benzo[k]fluoranthene	170	H	81	24	ug/Kg	☼	05/12/11 17:45	05/17/11 12:49	10
Benzo[g,h,i]perylene	140	H	81	40	ug/Kg	☼	05/12/11 17:45	05/17/11 12:49	10
Benzo[a]pyrene	200	H	81	14	ug/Kg	☼	05/12/11 17:45	05/17/11 12:49	10
Chrysene	210	H	81	40	ug/Kg	☼	05/12/11 17:45	05/17/11 12:49	10
Dibenz(a,h)anthracene	<40	H	81	40	ug/Kg	☼	05/12/11 17:45	05/17/11 12:49	10
Dibenzofuran	<81	H	400	81	ug/Kg	☼	05/12/11 17:45	05/17/11 12:49	10
Fluoranthene	380	H	81	40	ug/Kg	☼	05/12/11 17:45	05/17/11 12:49	10
Fluorene	<40	H	81	40	ug/Kg	☼	05/12/11 17:45	05/17/11 12:49	10
Indeno[1,2,3-cd]pyrene	130	H	81	40	ug/Kg	☼	05/12/11 17:45	05/17/11 12:49	10
2-Methylnaphthalene	<40	H	81	40	ug/Kg	☼	05/12/11 17:45	05/17/11 12:49	10
1-Methylnaphthalene	<37	H	81	37	ug/Kg	☼	05/12/11 17:45	05/17/11 12:49	10
Naphthalene	<40	H	81	40	ug/Kg	☼	05/12/11 17:45	05/17/11 12:49	10
Phenanthrene	93	H	81	29	ug/Kg	☼	05/12/11 17:45	05/17/11 12:49	10
Pyrene	370	H	81	40	ug/Kg	☼	05/12/11 17:45	05/17/11 12:49	10
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	0	D	11 - 130				05/12/11 17:45	05/17/11 12:49	10
Nitrobenzene-d5	0	D	18 - 130				05/12/11 17:45	05/17/11 12:49	10
Terphenyl-d14	0	D	27 - 130				05/12/11 17:45	05/17/11 12:49	10

Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Springstead & Hogtown Creek

TestAmerica Job ID: 680-65837-2

Client Sample ID: LOC60-01

Lab Sample ID: 680-66244-7

Date Collected: 03/02/11 16:30

Matrix: Solid

Date Received: 03/08/11 09:25

Percent Solids: 84.9

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	3000	H	390	190	ug/Kg	☼	05/12/11 17:45	06/02/11 20:27	50
Acenaphthylene	2300	H	390	190	ug/Kg	☼	05/12/11 17:45	06/02/11 20:27	50
Anthracene	2400	H	390	190	ug/Kg	☼	05/12/11 17:45	06/02/11 20:27	50
Benzo[a]anthracene	1300	H	390	190	ug/Kg	☼	05/12/11 17:45	06/02/11 20:27	50
Benzo[b]fluoranthene	440	H	390	190	ug/Kg	☼	05/12/11 17:45	06/02/11 20:27	50
Benzo[k]fluoranthene	510	H	390	120	ug/Kg	☼	05/12/11 17:45	06/02/11 20:27	50
Benzo[g,h,i]perylene	190	J H	390	190	ug/Kg	☼	05/12/11 17:45	06/02/11 20:27	50
Benzo[a]pyrene	860	H	390	70	ug/Kg	☼	05/12/11 17:45	06/02/11 20:27	50
Chrysene	1500	H	390	190	ug/Kg	☼	05/12/11 17:45	06/02/11 20:27	50
Dibenz(a,h)anthracene	<190	H	390	190	ug/Kg	☼	05/12/11 17:45	06/02/11 20:27	50
Dibenzofuran	<390	H	1900	390	ug/Kg	☼	05/12/11 17:45	06/02/11 20:27	50
Fluoranthene	<190	H	390	190	ug/Kg	☼	05/12/11 17:45	06/02/11 20:27	50
Fluorene	2100	H	390	190	ug/Kg	☼	05/12/11 17:45	06/02/11 20:27	50
Indeno[1,2,3-cd]pyrene	230	J H	390	190	ug/Kg	☼	05/12/11 17:45	06/02/11 20:27	50
2-Methylnaphthalene	4900	H	390	190	ug/Kg	☼	05/12/11 17:45	06/02/11 20:27	50
1-Methylnaphthalene	4400	H	390	180	ug/Kg	☼	05/12/11 17:45	06/02/11 20:27	50
Naphthalene	1500	H	390	190	ug/Kg	☼	05/12/11 17:45	06/02/11 20:27	50
Phenanthrene	15000	H	390	140	ug/Kg	☼	05/12/11 17:45	06/02/11 20:27	50
Pyrene	3500	H	390	190	ug/Kg	☼	05/12/11 17:45	06/02/11 20:27	50

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	0	D	11 - 130	05/12/11 17:45	06/02/11 20:27	50
Nitrobenzene-d5	0	D	18 - 130	05/12/11 17:45	06/02/11 20:27	50
Terphenyl-d14	0	D	27 - 130	05/12/11 17:45	06/02/11 20:27	50

Client Sample ID: LOC60-02

Lab Sample ID: 680-66244-8

Date Collected: 03/02/11 16:35

Matrix: Solid

Date Received: 03/08/11 09:25

Percent Solids: 68.6

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	340	H	96	47	ug/Kg	☼	05/12/11 17:45	05/17/11 13:43	10
Acenaphthylene	350	H	96	47	ug/Kg	☼	05/12/11 17:45	05/17/11 13:43	10
Anthracene	460	H	96	47	ug/Kg	☼	05/12/11 17:45	05/17/11 13:43	10
Benzo[a]anthracene	680	H	96	47	ug/Kg	☼	05/12/11 17:45	05/17/11 13:43	10
Benzo[b]fluoranthene	420	H	96	47	ug/Kg	☼	05/12/11 17:45	05/17/11 13:43	10
Benzo[k]fluoranthene	370	H	96	29	ug/Kg	☼	05/12/11 17:45	05/17/11 13:43	10
Benzo[g,h,i]perylene	120	H	96	47	ug/Kg	☼	05/12/11 17:45	05/17/11 13:43	10
Benzo[a]pyrene	440	H	96	17	ug/Kg	☼	05/12/11 17:45	05/17/11 13:43	10
Chrysene	860	H	96	47	ug/Kg	☼	05/12/11 17:45	05/17/11 13:43	10
Dibenz(a,h)anthracene	<47	H	96	47	ug/Kg	☼	05/12/11 17:45	05/17/11 13:43	10
Dibenzofuran	250	J H	470	96	ug/Kg	☼	05/12/11 17:45	05/17/11 13:43	10
Fluoranthene	1600	H	96	47	ug/Kg	☼	05/12/11 17:45	05/17/11 13:43	10
Fluorene	310	H	96	47	ug/Kg	☼	05/12/11 17:45	05/17/11 13:43	10
Indeno[1,2,3-cd]pyrene	120	H	96	47	ug/Kg	☼	05/12/11 17:45	05/17/11 13:43	10
2-Methylnaphthalene	700	H	96	47	ug/Kg	☼	05/12/11 17:45	05/17/11 13:43	10
1-Methylnaphthalene	530	H	96	45	ug/Kg	☼	05/12/11 17:45	05/17/11 13:43	10
Naphthalene	340	H	96	47	ug/Kg	☼	05/12/11 17:45	05/17/11 13:43	10
Phenanthrene	1700	H	96	35	ug/Kg	☼	05/12/11 17:45	05/17/11 13:43	10
Pyrene	1400	H	96	47	ug/Kg	☼	05/12/11 17:45	05/17/11 13:43	10

TestAmerica Savannah

Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Springstead & Hogtown Creek

TestAmerica Job ID: 680-65837-2

Client Sample ID: LOC60-02

Date Collected: 03/02/11 16:35

Date Received: 03/08/11 09:25

Lab Sample ID: 680-66244-8

Matrix: Solid

Percent Solids: 68.6

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	0	D	11 - 130	05/12/11 17:45	05/17/11 13:43	10
Nitrobenzene-d5	0	D	18 - 130	05/12/11 17:45	05/17/11 13:43	10
Terphenyl-d14	0	D	27 - 130	05/12/11 17:45	05/17/11 13:43	10

Client Sample ID: LOC HA-01

Date Collected: 03/09/11 17:00

Date Received: 03/23/11 09:47

Lab Sample ID: 680-66657-1

Matrix: Solid

Percent Solids: 73.4

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	2600	H	460	220	ug/Kg	☼	05/12/11 17:45	06/02/11 20:54	50
Acenaphthylene	1800	H	460	220	ug/Kg	☼	05/12/11 17:45	06/02/11 20:54	50
Anthracene	3100	H	460	220	ug/Kg	☼	05/12/11 17:45	06/02/11 20:54	50
Benzo[a]anthracene	3000	H	460	220	ug/Kg	☼	05/12/11 17:45	06/02/11 20:54	50
Benzo[b]fluoranthene	1300	H	460	220	ug/Kg	☼	05/12/11 17:45	06/02/11 20:54	50
Benzo[k]fluoranthene	1700	H	460	140	ug/Kg	☼	05/12/11 17:45	06/02/11 20:54	50
Benzo[g,h,i]perylene	630	H	460	220	ug/Kg	☼	05/12/11 17:45	06/02/11 20:54	50
Benzo[a]pyrene	2100	H	460	82	ug/Kg	☼	05/12/11 17:45	06/02/11 20:54	50
Chrysene	3500	H	460	220	ug/Kg	☼	05/12/11 17:45	06/02/11 20:54	50
Dibenz(a,h)anthracene	<220	H	460	220	ug/Kg	☼	05/12/11 17:45	06/02/11 20:54	50
Dibenzofuran	<460	H	2200	460	ug/Kg	☼	05/12/11 17:45	06/02/11 20:54	50
Fluoranthene	<220	H	460	220	ug/Kg	☼	05/12/11 17:45	06/02/11 20:54	50
Fluorene	2000	H	460	220	ug/Kg	☼	05/12/11 17:45	06/02/11 20:54	50
Indeno[1,2,3-cd]pyrene	630	H	460	220	ug/Kg	☼	05/12/11 17:45	06/02/11 20:54	50
2-Methylnaphthalene	680	H	460	220	ug/Kg	☼	05/12/11 17:45	06/02/11 20:54	50
1-Methylnaphthalene	1200	H	460	210	ug/Kg	☼	05/12/11 17:45	06/02/11 20:54	50
Naphthalene	<220	H	460	220	ug/Kg	☼	05/12/11 17:45	06/02/11 20:54	50
Phenanthrene	14000	H	460	160	ug/Kg	☼	05/12/11 17:45	06/02/11 20:54	50
Pyrene	7600	H	460	220	ug/Kg	☼	05/12/11 17:45	06/02/11 20:54	50
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	0	D	11 - 130				05/12/11 17:45	06/02/11 20:54	50
Nitrobenzene-d5	0	D	18 - 130				05/12/11 17:45	06/02/11 20:54	50
Terphenyl-d14	0	D	27 - 130				05/12/11 17:45	06/02/11 20:54	50

QC Sample Results

Client: Weston Solutions, Inc.
Project/Site: Springstead & Hogtown Creek

TestAmerica Job ID: 680-65837-2

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: MB 680-202758/9-A

Matrix: Solid

Analysis Batch: 203148

Client Sample ID: MB 680-202758/9-A

Prep Type: Total/NA

Prep Batch: 202758

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<3.3		6.6	3.3	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
Acenaphthylene	<3.3		6.6	3.3	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
Anthracene	<3.3		6.6	3.3	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
Benzo[a]anthracene	<3.3		6.6	3.3	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
Benzo[b]fluoranthene	<3.3		6.6	3.3	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
Benzo[k]fluoranthene	<2.0		6.6	2.0	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
Benzo[g,h,i]perylene	<3.3		6.6	3.3	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
Benzo[a]pyrene	<1.2		6.6	1.2	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
Chrysene	<3.3		6.6	3.3	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
Dibenz(a,h)anthracene	<3.3		6.6	3.3	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
Dibenzofuran	<6.6		33	6.6	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
Fluoranthene	<3.3		6.6	3.3	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
Fluorene	<3.3		6.6	3.3	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
Indeno[1,2,3-cd]pyrene	<3.3		6.6	3.3	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
2-Methylnaphthalene	<3.3		6.6	3.3	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
1-Methylnaphthalene	<3.1		6.6	3.1	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
Naphthalene	<3.3		6.6	3.3	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
Phenanthrene	<2.4		6.6	2.4	ug/Kg		05/12/11 17:45	05/17/11 04:41	1
Pyrene	<3.3		6.6	3.3	ug/Kg		05/12/11 17:45	05/17/11 04:41	1

Surrogate	MB % Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	75		11 - 130	05/12/11 17:45	05/17/11 04:41	1
Nitrobenzene-d5	74		18 - 130	05/12/11 17:45	05/17/11 04:41	1
Terphenyl-d14	95		27 - 130	05/12/11 17:45	05/17/11 04:41	1

Lab Sample ID: LCS 680-202758/10-A

Matrix: Solid

Analysis Batch: 203148

Client Sample ID: LCS 680-202758/10-A

Prep Type: Total/NA

Prep Batch: 202758

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	Limits
Acenaphthene	66.3	41.6		ug/Kg		63	13 - 130
Acenaphthylene	66.3	46.5		ug/Kg		70	10 - 130
Anthracene	66.3	45.2		ug/Kg		68	18 - 130
Benzo[a]anthracene	66.3	49.3		ug/Kg		74	16 - 130
Benzo[b]fluoranthene	66.3	46.9		ug/Kg		71	18 - 130
Benzo[k]fluoranthene	66.3	50.3		ug/Kg		76	22 - 130
Benzo[g,h,i]perylene	66.3	43.4		ug/Kg		65	21 - 130
Benzo[a]pyrene	66.3	50.5		ug/Kg		76	18 - 139
Chrysene	66.3	46.6		ug/Kg		70	12 - 130
Dibenz(a,h)anthracene	66.3	43.8		ug/Kg		66	17 - 130
Dibenzofuran	332	212		ug/Kg		64	20 - 130
Fluoranthene	66.3	46.5		ug/Kg		70	14 - 130
Fluorene	66.3	45.1		ug/Kg		68	10 - 130
Indeno[1,2,3-cd]pyrene	66.3	44.2		ug/Kg		67	11 - 130
2-Methylnaphthalene	66.3	40.8		ug/Kg		62	20 - 130
1-Methylnaphthalene	66.3	43.1		ug/Kg		65	14 - 130
Naphthalene	66.3	42.5		ug/Kg		64	10 - 130
Phenanthrene	66.3	45.7		ug/Kg		69	18 - 130
Pyrene	66.3	51.3		ug/Kg		77	11 - 136

TestAmerica Savannah

QC Sample Results

Client: Weston Solutions, Inc.
Project/Site: Springstead & Hogtown Creek

TestAmerica Job ID: 680-65837-2

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCS 680-202758/10-A

Matrix: Solid

Analysis Batch: 203148

Client Sample ID: LCS 680-202758/10-A

Prep Type: Total/NA

Prep Batch: 202758

Surrogate	LCS		Limits
	% Recovery	Qualifier	
2-Fluorobiphenyl	68		11 - 130
Nitrobenzene-d5	69		18 - 130
Terphenyl-d14	79		27 - 130

Lab Chronicle

Client: Weston Solutions, Inc.
Project/Site: Springstead & Hogtown Creek

TestAmerica Job ID: 680-65837-2

Client Sample ID: SD-10-01

Date Collected: 02/17/11 17:40

Date Received: 02/22/11 09:19

Lab Sample ID: 680-65837-8

Matrix: Solid

Percent Solids: 81.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			202758	05/12/11 17:45	JW	TAL SAV
Total/NA	Analysis	8270C LL		10	203148	05/17/11 11:01	ND	TAL SAV
Total/NA	Analysis	Moisture		1	202887	05/13/11 14:45	CE	TAL SAV

Client Sample ID: SD-10-02

Date Collected: 02/17/11 17:45

Date Received: 02/22/11 09:19

Lab Sample ID: 680-65837-9

Matrix: Solid

Percent Solids: 86.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			202758	05/12/11 17:45	JW	TAL SAV
Total/NA	Analysis	8270C LL		10	203148	05/17/11 11:28	ND	TAL SAV
Total/NA	Analysis	Moisture		1	202887	05/13/11 14:45	CE	TAL SAV

Client Sample ID: SD-10-01A

Date Collected: 02/18/11 11:50

Date Received: 02/22/11 09:19

Lab Sample ID: 680-65837-12

Matrix: Solid

Percent Solids: 82.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			202758	05/12/11 17:45	JW	TAL SAV
Total/NA	Analysis	8270C LL		10	203148	05/17/11 11:55	ND	TAL SAV
Total/NA	Analysis	Moisture		1	202887	05/13/11 14:45	CE	TAL SAV

Client Sample ID: SS2-01

Date Collected: 02/23/11 12:00

Date Received: 03/08/11 09:25

Lab Sample ID: 680-66244-4

Matrix: Solid

Percent Solids: 81.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			202758	05/12/11 17:45	JW	TAL SAV
Total/NA	Analysis	8270C LL		10	203148	05/17/11 12:22	ND	TAL SAV
Total/NA	Analysis	Moisture		1	202887	05/13/11 14:45	CE	TAL SAV

Client Sample ID: SD/10-01B

Date Collected: 02/25/11 12:15

Date Received: 03/08/11 09:25

Lab Sample ID: 680-66244-6

Matrix: Solid

Percent Solids: 82.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			202758	05/12/11 17:45	JW	TAL SAV
Total/NA	Analysis	8270C LL		10	203148	05/17/11 12:49	ND	TAL SAV
Total/NA	Analysis	Moisture		1	202887	05/13/11 14:45	CE	TAL SAV

Lab Chronicle

Client: Weston Solutions, Inc.
Project/Site: Springstead & Hogtown Creek

TestAmerica Job ID: 680-65837-2

Client Sample ID: LOC60-01

Date Collected: 03/02/11 16:30

Date Received: 03/08/11 09:25

Lab Sample ID: 680-66244-7

Matrix: Solid

Percent Solids: 84.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			202758	05/12/11 17:45	JW	TAL SAV
Total/NA	Analysis	8270C LL		50	204675	06/02/11 20:27	ND	TAL SAV
Total/NA	Analysis	Moisture		1	202887	05/13/11 14:45	CE	TAL SAV

Client Sample ID: LOC60-02

Date Collected: 03/02/11 16:35

Date Received: 03/08/11 09:25

Lab Sample ID: 680-66244-8

Matrix: Solid

Percent Solids: 68.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			202758	05/12/11 17:45	JW	TAL SAV
Total/NA	Analysis	8270C LL		10	203148	05/17/11 13:43	ND	TAL SAV
Total/NA	Analysis	Moisture		1	202887	05/13/11 14:45	CE	TAL SAV

Client Sample ID: LOC HA-01

Date Collected: 03/09/11 17:00

Date Received: 03/23/11 09:47

Lab Sample ID: 680-66657-1

Matrix: Solid

Percent Solids: 73.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			202758	05/12/11 17:45	JW	TAL SAV
Total/NA	Analysis	8270C LL		50	204675	06/02/11 20:54	ND	TAL SAV
Total/NA	Analysis	Moisture		1	202887	05/13/11 14:45	CE	TAL SAV

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Certification Summary

Client: Weston Solutions, Inc.
Project/Site: Springstead & Hogtown Creek

TestAmerica Job ID: 680-65837-2

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Savannah		USDA		SAV 3-04
TestAmerica Savannah	A2LA	DoD ELAP	0	0399-01
TestAmerica Savannah	A2LA	ISO/IEC 17025	0	399.01
TestAmerica Savannah	Alabama	State Program	4	41450
TestAmerica Savannah	Arkansas	Arkansas DOH	6	N/A
TestAmerica Savannah	Arkansas	State Program	6	88-0692
TestAmerica Savannah	California	NELAC	9	3217CA
TestAmerica Savannah	Colorado	State Program	8	N/A
TestAmerica Savannah	Connecticut	State Program	1	PH-0161
TestAmerica Savannah	Delaware	State Program	3	N/A
TestAmerica Savannah	Florida	NELAC	4	E87052
TestAmerica Savannah	Georgia	Georgia EPD	4	N/A
TestAmerica Savannah	Georgia	State Program	4	803
TestAmerica Savannah	Guam	State Program	9	09-005r
TestAmerica Savannah	Hawaii	State Program	9	N/A
TestAmerica Savannah	Illinois	NELAC	5	200022
TestAmerica Savannah	Indiana	State Program	5	N/A
TestAmerica Savannah	Iowa	State Program	7	353
TestAmerica Savannah	Kansas	NELAC	7	E-10322
TestAmerica Savannah	Kentucky	Kentucky UST	4	18
TestAmerica Savannah	Kentucky	State Program	4	90084
TestAmerica Savannah	Louisiana	NELAC	6	30690
TestAmerica Savannah	Louisiana	NELAC	6	LA100015
TestAmerica Savannah	Maine	State Program	1	GA00006
TestAmerica Savannah	Maryland	State Program	3	250
TestAmerica Savannah	Massachusetts	State Program	1	M-GA006
TestAmerica Savannah	Michigan	State Program	5	9925
TestAmerica Savannah	Mississippi	State Program	4	N/A
TestAmerica Savannah	Montana	State Program	8	CERT0081
TestAmerica Savannah	Nebraska	State Program	7	TestAmerica-Savannah
TestAmerica Savannah	Nevada	State Program	9	GA6
TestAmerica Savannah	New Jersey	NELAC	2	GA769
TestAmerica Savannah	New Mexico	State Program	6	N/A
TestAmerica Savannah	New York	NELAC	2	10842
TestAmerica Savannah	North Carolina	North Carolina DENR	4	269
TestAmerica Savannah	North Carolina	North Carolina PHL	4	13701
TestAmerica Savannah	Oklahoma	State Program	6	9984
TestAmerica Savannah	Pennsylvania	NELAC	3	68-00474
TestAmerica Savannah	Puerto Rico	State Program	2	GA00006
TestAmerica Savannah	Rhode Island	State Program	1	LAO00244
TestAmerica Savannah	South Carolina	State Program	4	98001
TestAmerica Savannah	Tennessee	State Program	4	TN02961
TestAmerica Savannah	Texas	NELAC	6	T104704185-08-TX
TestAmerica Savannah	Vermont	State Program	1	87052
TestAmerica Savannah	Virginia	State Program	3	302
TestAmerica Savannah	Washington	State Program	10	C1794
TestAmerica Savannah	West Virginia	West Virginia DEP	3	94
TestAmerica Savannah	West Virginia	West Virginia DHHR (DW)	3	9950C
TestAmerica Savannah	Wisconsin	State Program	5	999819810
TestAmerica Savannah	Wyoming	State Program	8	8TMS-Q

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Savannah

5102 LaRoche Avenue

Savannah, GA 31404

Tel: (912)354-7858

TestAmerica Job ID: 680-66657-1

Client Project/Site: Cabot Springstead & Hogtown Creek

Revision: 1

For:

Weston Solutions, Inc.

94072 Summer Breeze Drive

Fernandina Beach, Florida 32034

Attn: Mark Taylor



Authorized for release by:

04/15/2011 10:54:51 AM

Abbie Yant

Project Manager I

abbie.yant@testamericainc.com

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Case Narrative

Client: Weston Solutions, Inc.
Project/Site: Cabot Springstead & Hogtown Creek

TestAmerica Job ID: 680-66657-1

Job ID: 680-66657-1

Laboratory: TestAmerica Savannah

Narrative

Job Narrative
680-66657-1

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

GC/MS Semi VOA

Method(s) 8270C: The following sample(s) was diluted due to the nature of the sample matrix LOC HA-01 (680-66657-1). As such, surrogate recoveries are not reported, and elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

Sample Summary

Client: Weston Solutions, Inc.

TestAmerica Job ID: 680-66657-1

Project/Site: Cabot Springstead & Hogtown Creek

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-66657-1	LOC HA-01	Solid	03/09/11 17:00	03/23/11 09:47
680-66657-2	LOC HA-02	Solid	03/09/11 17:10	03/23/11 09:47
680-66657-3	LOC H4A-01	Solid	03/18/11 14:40	03/23/11 09:47
680-66657-4	LOC H4A-02	Solid	03/18/11 14:45	03/23/11 09:47
680-66657-5	LOC H4A-03	Solid	03/21/11 13:00	03/23/11 09:47
680-66657-6	LOC H4A-04	Solid	03/21/11 13:05	03/23/11 09:47
680-66657-7	LOC H4A-05	Solid	03/21/11 15:35	03/23/11 09:47
680-66657-8	LOC H4A-06	Solid	03/21/11 18:30	03/23/11 09:47
680-66657-9	LOC H4A-07	Solid	03/21/11 18:35	03/23/11 09:47

Method Summary

Client: Weston Solutions, Inc.
Project/Site: Cabot Springstead & Hogtown Creek

TestAmerica Job ID: 680-66657-1

Method	Method Description	Protocol	Laboratory
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL SAV
9060	Organic Carbon, Total (TOC)	SW846	TAL SAV

Protocol References:

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

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Qualifier Definition/Glossary

Client: Weston Solutions, Inc.
Project/Site: Cabot Springstead & Hogtown Creek

TestAmerica Job ID: 680-66657-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
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.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis.
EPA	United States Environmental Protection Agency
ND	Not Detected above the reporting level.
MDL	Method Detection Limit
RL	Reporting Limit
RE, RE1 (etc.)	Indicates a Re-extraction or Reanalysis of the sample.
%R	Percent Recovery
RPD	Relative Percent Difference, a measure of the relative difference between two points.

Detection Summary

Client: Weston Solutions, Inc.
Project/Site: Cabot Springstead & Hogtown Creek

TestAmerica Job ID: 680-66657-1

Client Sample ID: LOC HA-01

Lab Sample ID: 680-66657-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Benzo[g,h,i]perylene	640	J	4500	300	ug/Kg	10		☼	8270C	Total/NA
Benzo[k]fluoranthene	1300	J	4500	880	ug/Kg	10		☼	8270C	Total/NA
Acenaphthene	4100	J	4500	560	ug/Kg	10		☼	8270C	Total/NA
Benzo[a]anthracene	2700	J	4500	370	ug/Kg	10		☼	8270C	Total/NA
Benzo[a]pyrene	1600	J	4500	710	ug/Kg	10		☼	8270C	Total/NA
Benzo[b]fluoranthene	1200	J	4500	520	ug/Kg	10		☼	8270C	Total/NA
1-Methylnaphthalene	5700		4500	420	ug/Kg	10		☼	8270C	Total/NA
2-Methylnaphthalene	4800		4500	520	ug/Kg	10		☼	8270C	Total/NA
Chrysene	3500	J	4500	290	ug/Kg	10		☼	8270C	Total/NA
Fluoranthene	11000		4500	440	ug/Kg	10		☼	8270C	Total/NA
Fluorene	4000	J	4500	490	ug/Kg	10		☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	680	J	4500	380	ug/Kg	10		☼	8270C	Total/NA
Phenanthrene	23000		4500	370	ug/Kg	10		☼	8270C	Total/NA
Pyrene	7100		4500	370	ug/Kg	10		☼	8270C	Total/NA
Anthracene	4200	J	4500	340	ug/Kg	10		☼	8270C	Total/NA

Client Sample ID: LOC HA-02

Lab Sample ID: 680-66657-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Total Organic Carbon	16000		3000		mg/Kg	1			9060	Total/NA

Client Sample ID: LOC H4A-01

Lab Sample ID: 680-66657-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Benzo[g,h,i]perylene	79	J	400	27	ug/Kg	1		☼	8270C	Total/NA
Benzo[k]fluoranthene	120	J	400	78	ug/Kg	1		☼	8270C	Total/NA
Acenaphthene	310	J	400	49	ug/Kg	1		☼	8270C	Total/NA
Benzo[a]anthracene	250	J	400	33	ug/Kg	1		☼	8270C	Total/NA
Benzo[a]pyrene	170	J	400	63	ug/Kg	1		☼	8270C	Total/NA
Benzo[b]fluoranthene	120	J	400	46	ug/Kg	1		☼	8270C	Total/NA
1-Methylnaphthalene	420		400	37	ug/Kg	1		☼	8270C	Total/NA
2-Methylnaphthalene	560		400	46	ug/Kg	1		☼	8270C	Total/NA
Chrysene	270	J	400	25	ug/Kg	1		☼	8270C	Total/NA
Fluoranthene	920		400	39	ug/Kg	1		☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	89	J	400	34	ug/Kg	1		☼	8270C	Total/NA
Phenanthrene	1600		400	33	ug/Kg	1		☼	8270C	Total/NA
Pyrene	590		400	33	ug/Kg	1		☼	8270C	Total/NA
Anthracene	290	J	400	30	ug/Kg	1		☼	8270C	Total/NA

Client Sample ID: LOC H4A-02

Lab Sample ID: 680-66657-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Chrysene	51	J	390	25	ug/Kg	1		☼	8270C	Total/NA
Fluoranthene	210	J	390	38	ug/Kg	1		☼	8270C	Total/NA
Phenanthrene	130	J	390	32	ug/Kg	1		☼	8270C	Total/NA
Pyrene	160	J	390	32	ug/Kg	1		☼	8270C	Total/NA
Anthracene	31	J	390	29	ug/Kg	1		☼	8270C	Total/NA

Client Sample ID: LOC H4A-03

Lab Sample ID: 680-66657-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Benzo[g,h,i]perylene	220	J	380	25	ug/Kg	1		☼	8270C	Total/NA
Benzo[a]pyrene	110	J	380	60	ug/Kg	1		☼	8270C	Total/NA
Dibenz(a,h)anthracene	210	J	380	45	ug/Kg	1		☼	8270C	Total/NA

TestAmerica Savannah

Detection Summary

Client: Weston Solutions, Inc.
Project/Site: Cabot Springstead & Hogtown Creek

TestAmerica Job ID: 680-66657-1

Client Sample ID: LOC H4A-03 (Continued)

Lab Sample ID: 680-66657-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Indeno[1,2,3-cd]pyrene	230	J	380	32	ug/Kg	1	☼	8270C	Total/NA

Client Sample ID: LOC H4A-04

Lab Sample ID: 680-66657-6

No Detections.

Client Sample ID: LOC H4A-05

Lab Sample ID: 680-66657-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[g,h,i]perylene	91	J	400	27	ug/Kg	1	☼	8270C	Total/NA
Dibenz(a,h)anthracene	79	J	400	48	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	60	J	400	39	ug/Kg	1	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	82	J	400	34	ug/Kg	1	☼	8270C	Total/NA
Pyrene	45	J	400	33	ug/Kg	1	☼	8270C	Total/NA

Client Sample ID: LOC H4A-06

Lab Sample ID: 680-66657-8

No Detections.

Client Sample ID: LOC H4A-07

Lab Sample ID: 680-66657-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	49	J	380	37	ug/Kg	1	☼	8270C	Total/NA
Pyrene	38	J	380	31	ug/Kg	1	☼	8270C	Total/NA

Analytical Data

Client: Weston Solutions, Inc.
Project/Site: Cabot Springstead & Hogtown Creek

TestAmerica Job ID: 680-66657-1

Client Sample ID: LOC HA-01

Lab Sample ID: 680-66657-1

Date Collected: 03/09/11 17:00

Matrix: Solid

Date Received: 03/23/11 09:47

Percent Solids: 73.4

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	640	J	4500	300	ug/Kg	☼	03/23/11 15:25	03/25/11 15:16	10
Benzo[k]fluoranthene	1300	J	4500	880	ug/Kg	☼	03/23/11 15:25	03/25/11 15:16	10
Acenaphthene	4100	J	4500	560	ug/Kg	☼	03/23/11 15:25	03/25/11 15:16	10
Acenaphthylene	<490		4500	490	ug/Kg	☼	03/23/11 15:25	03/25/11 15:16	10
Benzo[a]anthracene	2700	J	4500	370	ug/Kg	☼	03/23/11 15:25	03/25/11 15:16	10
Benzo[a]pyrene	1600	J	4500	710	ug/Kg	☼	03/23/11 15:25	03/25/11 15:16	10
Benzo[b]fluoranthene	1200	J	4500	520	ug/Kg	☼	03/23/11 15:25	03/25/11 15:16	10
1-Methylnaphthalene	5700		4500	420	ug/Kg	☼	03/23/11 15:25	03/25/11 15:16	10
2-Methylnaphthalene	4800		4500	520	ug/Kg	☼	03/23/11 15:25	03/25/11 15:16	10
Chrysene	3500	J	4500	290	ug/Kg	☼	03/23/11 15:25	03/25/11 15:16	10
Dibenz(a,h)anthracene	<530		4500	530	ug/Kg	☼	03/23/11 15:25	03/25/11 15:16	10
Fluoranthene	11000		4500	440	ug/Kg	☼	03/23/11 15:25	03/25/11 15:16	10
Fluorene	4000	J	4500	490	ug/Kg	☼	03/23/11 15:25	03/25/11 15:16	10
Indeno[1,2,3-cd]pyrene	680	J	4500	380	ug/Kg	☼	03/23/11 15:25	03/25/11 15:16	10
Naphthalene	<410		4500	410	ug/Kg	☼	03/23/11 15:25	03/25/11 15:16	10
Phenanthrene	23000		4500	370	ug/Kg	☼	03/23/11 15:25	03/25/11 15:16	10
Pyrene	7100		4500	370	ug/Kg	☼	03/23/11 15:25	03/25/11 15:16	10
Anthracene	4200	J	4500	340	ug/Kg	☼	03/23/11 15:25	03/25/11 15:16	10
Dibenzofuran	<450		4500	450	ug/Kg	☼	03/23/11 15:25	03/25/11 15:16	10

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	0	D	58 - 130	03/23/11 15:25	03/25/11 15:16	10
Nitrobenzene-d5	0	D	46 - 130	03/23/11 15:25	03/25/11 15:16	10
Terphenyl-d14	0	D	60 - 130	03/23/11 15:25	03/25/11 15:16	10

Client Sample ID: LOC HA-02

Lab Sample ID: 680-66657-2

Date Collected: 03/09/11 17:10

Matrix: Solid

Date Received: 03/23/11 09:47

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	16000		3000		mg/Kg			03/28/11 11:15	1

Client Sample ID: LOC H4A-01

Lab Sample ID: 680-66657-3

Date Collected: 03/18/11 14:40

Matrix: Solid

Date Received: 03/23/11 09:47

Percent Solids: 82.5

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	79	J	400	27	ug/Kg	☼	03/24/11 16:15	03/25/11 18:47	1
Benzo[k]fluoranthene	120	J	400	78	ug/Kg	☼	03/24/11 16:15	03/25/11 18:47	1
Acenaphthene	310	J	400	49	ug/Kg	☼	03/24/11 16:15	03/25/11 18:47	1
Acenaphthylene	<43		400	43	ug/Kg	☼	03/24/11 16:15	03/25/11 18:47	1
Benzo[a]anthracene	250	J	400	33	ug/Kg	☼	03/24/11 16:15	03/25/11 18:47	1
Benzo[a]pyrene	170	J	400	63	ug/Kg	☼	03/24/11 16:15	03/25/11 18:47	1
Benzo[b]fluoranthene	120	J	400	46	ug/Kg	☼	03/24/11 16:15	03/25/11 18:47	1
1-Methylnaphthalene	420		400	37	ug/Kg	☼	03/24/11 16:15	03/25/11 18:47	1
2-Methylnaphthalene	560		400	46	ug/Kg	☼	03/24/11 16:15	03/25/11 18:47	1
Chrysene	270	J	400	25	ug/Kg	☼	03/24/11 16:15	03/25/11 18:47	1
Dibenz(a,h)anthracene	<47		400	47	ug/Kg	☼	03/24/11 16:15	03/25/11 18:47	1
Fluoranthene	920		400	39	ug/Kg	☼	03/24/11 16:15	03/25/11 18:47	1

TestAmerica Savannah

Analytical Data

Client: Weston Solutions, Inc.
Project/Site: Cabot Springstead & Hogtown Creek

TestAmerica Job ID: 680-66657-1

Client Sample ID: LOC H4A-01

Lab Sample ID: 680-66657-3

Date Collected: 03/18/11 14:40

Matrix: Solid

Date Received: 03/23/11 09:47

Percent Solids: 82.5

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	<43		400	43	ug/Kg	☼	03/24/11 16:15	03/25/11 18:47	1
Indeno[1,2,3-cd]pyrene	89	J	400	34	ug/Kg	☼	03/24/11 16:15	03/25/11 18:47	1
Naphthalene	<36		400	36	ug/Kg	☼	03/24/11 16:15	03/25/11 18:47	1
Phenanthrene	1600		400	33	ug/Kg	☼	03/24/11 16:15	03/25/11 18:47	1
Pyrene	590		400	33	ug/Kg	☼	03/24/11 16:15	03/25/11 18:47	1
Anthracene	290	J	400	30	ug/Kg	☼	03/24/11 16:15	03/25/11 18:47	1
Dibenzofuran	<40		400	40	ug/Kg	☼	03/24/11 16:15	03/25/11 18:47	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	75		58 - 130	03/24/11 16:15	03/25/11 18:47	1
Nitrobenzene-d5	71		46 - 130	03/24/11 16:15	03/25/11 18:47	1
Terphenyl-d14	76		60 - 130	03/24/11 16:15	03/25/11 18:47	1

Client Sample ID: LOC H4A-02

Lab Sample ID: 680-66657-4

Date Collected: 03/18/11 14:45

Matrix: Solid

Date Received: 03/23/11 09:47

Percent Solids: 83.7

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	<26		390	26	ug/Kg	☼	03/24/11 16:15	03/25/11 18:19	1
Benzo[k]fluoranthene	<77		390	77	ug/Kg	☼	03/24/11 16:15	03/25/11 18:19	1
Acenaphthene	<48		390	48	ug/Kg	☼	03/24/11 16:15	03/25/11 18:19	1
Acenaphthylene	<42		390	42	ug/Kg	☼	03/24/11 16:15	03/25/11 18:19	1
Benzo[a]anthracene	<32		390	32	ug/Kg	☼	03/24/11 16:15	03/25/11 18:19	1
Benzo[a]pyrene	<61		390	61	ug/Kg	☼	03/24/11 16:15	03/25/11 18:19	1
Benzo[b]fluoranthene	<45		390	45	ug/Kg	☼	03/24/11 16:15	03/25/11 18:19	1
1-Methylnaphthalene	<37		390	37	ug/Kg	☼	03/24/11 16:15	03/25/11 18:19	1
2-Methylnaphthalene	<45		390	45	ug/Kg	☼	03/24/11 16:15	03/25/11 18:19	1
Chrysene	51	J	390	25	ug/Kg	☼	03/24/11 16:15	03/25/11 18:19	1
Dibenz(a,h)anthracene	<46		390	46	ug/Kg	☼	03/24/11 16:15	03/25/11 18:19	1
Fluoranthene	210	J	390	38	ug/Kg	☼	03/24/11 16:15	03/25/11 18:19	1
Fluorene	<42		390	42	ug/Kg	☼	03/24/11 16:15	03/25/11 18:19	1
Indeno[1,2,3-cd]pyrene	<33		390	33	ug/Kg	☼	03/24/11 16:15	03/25/11 18:19	1
Naphthalene	<35		390	35	ug/Kg	☼	03/24/11 16:15	03/25/11 18:19	1
Phenanthrene	130	J	390	32	ug/Kg	☼	03/24/11 16:15	03/25/11 18:19	1
Pyrene	160	J	390	32	ug/Kg	☼	03/24/11 16:15	03/25/11 18:19	1
Anthracene	31	J	390	29	ug/Kg	☼	03/24/11 16:15	03/25/11 18:19	1
Dibenzofuran	<39		390	39	ug/Kg	☼	03/24/11 16:15	03/25/11 18:19	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	82		58 - 130	03/24/11 16:15	03/25/11 18:19	1
Nitrobenzene-d5	74		46 - 130	03/24/11 16:15	03/25/11 18:19	1
Terphenyl-d14	94		60 - 130	03/24/11 16:15	03/25/11 18:19	1

Client Sample ID: LOC H4A-03

Lab Sample ID: 680-66657-5

Date Collected: 03/21/11 13:00

Matrix: Solid

Date Received: 03/23/11 09:47

Percent Solids: 86.5

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	220	J	380	25	ug/Kg	☼	03/24/11 16:15	03/25/11 16:27	1

TestAmerica Savannah

Analytical Data

Client: Weston Solutions, Inc.
Project/Site: Cabot Springstead & Hogtown Creek

TestAmerica Job ID: 680-66657-1

Client Sample ID: LOC H4A-03

Lab Sample ID: 680-66657-5

Date Collected: 03/21/11 13:00

Matrix: Solid

Date Received: 03/23/11 09:47

Percent Solids: 86.5

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	<75		380	75	ug/Kg	☼	03/24/11 16:15	03/25/11 16:27	1
Acenaphthene	<47		380	47	ug/Kg	☼	03/24/11 16:15	03/25/11 16:27	1
Acenaphthylene	<41		380	41	ug/Kg	☼	03/24/11 16:15	03/25/11 16:27	1
Benzo[a]anthracene	<31		380	31	ug/Kg	☼	03/24/11 16:15	03/25/11 16:27	1
Benzo[a]pyrene	110	J	380	60	ug/Kg	☼	03/24/11 16:15	03/25/11 16:27	1
Benzo[b]fluoranthene	<44		380	44	ug/Kg	☼	03/24/11 16:15	03/25/11 16:27	1
1-Methylnaphthalene	<36		380	36	ug/Kg	☼	03/24/11 16:15	03/25/11 16:27	1
2-Methylnaphthalene	<44		380	44	ug/Kg	☼	03/24/11 16:15	03/25/11 16:27	1
Chrysene	<24		380	24	ug/Kg	☼	03/24/11 16:15	03/25/11 16:27	1
Dibenz(a,h)anthracene	210	J	380	45	ug/Kg	☼	03/24/11 16:15	03/25/11 16:27	1
Fluoranthene	<37		380	37	ug/Kg	☼	03/24/11 16:15	03/25/11 16:27	1
Fluorene	<41		380	41	ug/Kg	☼	03/24/11 16:15	03/25/11 16:27	1
Indeno[1,2,3-cd]pyrene	230	J	380	32	ug/Kg	☼	03/24/11 16:15	03/25/11 16:27	1
Naphthalene	<34		380	34	ug/Kg	☼	03/24/11 16:15	03/25/11 16:27	1
Phenanthrene	<31		380	31	ug/Kg	☼	03/24/11 16:15	03/25/11 16:27	1
Pyrene	<31		380	31	ug/Kg	☼	03/24/11 16:15	03/25/11 16:27	1
Anthracene	<29		380	29	ug/Kg	☼	03/24/11 16:15	03/25/11 16:27	1
Dibenzofuran	<38		380	38	ug/Kg	☼	03/24/11 16:15	03/25/11 16:27	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	85		58 - 130	03/24/11 16:15	03/25/11 16:27	1
Nitrobenzene-d5	83		46 - 130	03/24/11 16:15	03/25/11 16:27	1
Terphenyl-d14	97		60 - 130	03/24/11 16:15	03/25/11 16:27	1

Client Sample ID: LOC H4A-04

Lab Sample ID: 680-66657-6

Date Collected: 03/21/11 13:05

Matrix: Solid

Date Received: 03/23/11 09:47

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	<3000		3000		mg/Kg			03/28/11 11:15	1

Client Sample ID: LOC H4A-05

Lab Sample ID: 680-66657-7

Date Collected: 03/21/11 15:35

Matrix: Solid

Date Received: 03/23/11 09:47

Percent Solids: 81.7

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	91	J	400	27	ug/Kg	☼	03/24/11 16:15	03/25/11 16:55	1
Benzo[k]fluoranthene	<79		400	79	ug/Kg	☼	03/24/11 16:15	03/25/11 16:55	1
Acenaphthene	<50		400	50	ug/Kg	☼	03/24/11 16:15	03/25/11 16:55	1
Acenaphthylene	<44		400	44	ug/Kg	☼	03/24/11 16:15	03/25/11 16:55	1
Benzo[a]anthracene	<33		400	33	ug/Kg	☼	03/24/11 16:15	03/25/11 16:55	1
Benzo[a]pyrene	<63		400	63	ug/Kg	☼	03/24/11 16:15	03/25/11 16:55	1
Benzo[b]fluoranthene	<46		400	46	ug/Kg	☼	03/24/11 16:15	03/25/11 16:55	1
1-Methylnaphthalene	<38		400	38	ug/Kg	☼	03/24/11 16:15	03/25/11 16:55	1
2-Methylnaphthalene	<46		400	46	ug/Kg	☼	03/24/11 16:15	03/25/11 16:55	1
Chrysene	<26		400	26	ug/Kg	☼	03/24/11 16:15	03/25/11 16:55	1
Dibenz(a,h)anthracene	79	J	400	48	ug/Kg	☼	03/24/11 16:15	03/25/11 16:55	1
Fluoranthene	60	J	400	39	ug/Kg	☼	03/24/11 16:15	03/25/11 16:55	1
Fluorene	<44		400	44	ug/Kg	☼	03/24/11 16:15	03/25/11 16:55	1

TestAmerica Savannah

Analytical Data

Client: Weston Solutions, Inc.
Project/Site: Cabot Springstead & Hogtown Creek

TestAmerica Job ID: 680-66657-1

Client Sample ID: LOC H4A-05

Lab Sample ID: 680-66657-7

Date Collected: 03/21/11 15:35

Matrix: Solid

Date Received: 03/23/11 09:47

Percent Solids: 81.7

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	82	J	400	34	ug/Kg	☼	03/24/11 16:15	03/25/11 16:55	1
Naphthalene	<37		400	37	ug/Kg	☼	03/24/11 16:15	03/25/11 16:55	1
Phenanthrene	<33		400	33	ug/Kg	☼	03/24/11 16:15	03/25/11 16:55	1
Pyrene	45	J	400	33	ug/Kg	☼	03/24/11 16:15	03/25/11 16:55	1
Anthracene	<31		400	31	ug/Kg	☼	03/24/11 16:15	03/25/11 16:55	1
Dibenzofuran	<40		400	40	ug/Kg	☼	03/24/11 16:15	03/25/11 16:55	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	80		58 - 130				03/24/11 16:15	03/25/11 16:55	1
Nitrobenzene-d5	73		46 - 130				03/24/11 16:15	03/25/11 16:55	1
Terphenyl-d14	95		60 - 130				03/24/11 16:15	03/25/11 16:55	1

Client Sample ID: LOC H4A-06

Lab Sample ID: 680-66657-8

Date Collected: 03/21/11 18:30

Matrix: Solid

Date Received: 03/23/11 09:47

Percent Solids: 79.2

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	<28		410	28	ug/Kg	☼	03/24/11 16:15	03/25/11 17:23	1
Benzo[k]fluoranthene	<81		410	81	ug/Kg	☼	03/24/11 16:15	03/25/11 17:23	1
Acenaphthene	<51		410	51	ug/Kg	☼	03/24/11 16:15	03/25/11 17:23	1
Acenaphthylene	<45		410	45	ug/Kg	☼	03/24/11 16:15	03/25/11 17:23	1
Benzo[a]anthracene	<34		410	34	ug/Kg	☼	03/24/11 16:15	03/25/11 17:23	1
Benzo[a]pyrene	<65		410	65	ug/Kg	☼	03/24/11 16:15	03/25/11 17:23	1
Benzo[b]fluoranthene	<48		410	48	ug/Kg	☼	03/24/11 16:15	03/25/11 17:23	1
1-Methylnaphthalene	<39		410	39	ug/Kg	☼	03/24/11 16:15	03/25/11 17:23	1
2-Methylnaphthalene	<48		410	48	ug/Kg	☼	03/24/11 16:15	03/25/11 17:23	1
Chrysene	<26		410	26	ug/Kg	☼	03/24/11 16:15	03/25/11 17:23	1
Dibenz(a,h)anthracene	<49		410	49	ug/Kg	☼	03/24/11 16:15	03/25/11 17:23	1
Fluoranthene	<40		410	40	ug/Kg	☼	03/24/11 16:15	03/25/11 17:23	1
Fluorene	<45		410	45	ug/Kg	☼	03/24/11 16:15	03/25/11 17:23	1
Indeno[1,2,3-cd]pyrene	<35		410	35	ug/Kg	☼	03/24/11 16:15	03/25/11 17:23	1
Naphthalene	<38		410	38	ug/Kg	☼	03/24/11 16:15	03/25/11 17:23	1
Phenanthrene	<34		410	34	ug/Kg	☼	03/24/11 16:15	03/25/11 17:23	1
Pyrene	<34		410	34	ug/Kg	☼	03/24/11 16:15	03/25/11 17:23	1
Anthracene	<31		410	31	ug/Kg	☼	03/24/11 16:15	03/25/11 17:23	1
Dibenzofuran	<41		410	41	ug/Kg	☼	03/24/11 16:15	03/25/11 17:23	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	77		58 - 130				03/24/11 16:15	03/25/11 17:23	1
Nitrobenzene-d5	71		46 - 130				03/24/11 16:15	03/25/11 17:23	1
Terphenyl-d14	87		60 - 130				03/24/11 16:15	03/25/11 17:23	1

Client Sample ID: LOC H4A-07

Lab Sample ID: 680-66657-9

Date Collected: 03/21/11 18:35

Matrix: Solid

Date Received: 03/23/11 09:47

Percent Solids: 85.4

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	<25		380	25	ug/Kg	☼	03/24/11 16:15	03/25/11 17:51	1
Benzo[k]fluoranthene	<75		380	75	ug/Kg	☼	03/24/11 16:15	03/25/11 17:51	1

TestAmerica Savannah

Analytical Data

Client: Weston Solutions, Inc.
Project/Site: Cabot Springstead & Hogtown Creek

TestAmerica Job ID: 680-66657-1

Client Sample ID: LOC H4A-07

Lab Sample ID: 680-66657-9

Date Collected: 03/21/11 18:35

Matrix: Solid

Date Received: 03/23/11 09:47

Percent Solids: 85.4

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<48		380	48	ug/Kg	☼	03/24/11 16:15	03/25/11 17:51	1
Acenaphthylene	<42		380	42	ug/Kg	☼	03/24/11 16:15	03/25/11 17:51	1
Benzo[a]anthracene	<31		380	31	ug/Kg	☼	03/24/11 16:15	03/25/11 17:51	1
Benzo[a]pyrene	<60		380	60	ug/Kg	☼	03/24/11 16:15	03/25/11 17:51	1
Benzo[b]fluoranthene	<44		380	44	ug/Kg	☼	03/24/11 16:15	03/25/11 17:51	1
1-Methylnaphthalene	<36		380	36	ug/Kg	☼	03/24/11 16:15	03/25/11 17:51	1
2-Methylnaphthalene	<44		380	44	ug/Kg	☼	03/24/11 16:15	03/25/11 17:51	1
Chrysene	<24		380	24	ug/Kg	☼	03/24/11 16:15	03/25/11 17:51	1
Dibenz(a,h)anthracene	<45		380	45	ug/Kg	☼	03/24/11 16:15	03/25/11 17:51	1
Fluoranthene	49	J	380	37	ug/Kg	☼	03/24/11 16:15	03/25/11 17:51	1
Fluorene	<42		380	42	ug/Kg	☼	03/24/11 16:15	03/25/11 17:51	1
Indeno[1,2,3-cd]pyrene	<32		380	32	ug/Kg	☼	03/24/11 16:15	03/25/11 17:51	1
Naphthalene	<35		380	35	ug/Kg	☼	03/24/11 16:15	03/25/11 17:51	1
Phenanthrene	<31		380	31	ug/Kg	☼	03/24/11 16:15	03/25/11 17:51	1
Pyrene	38	J	380	31	ug/Kg	☼	03/24/11 16:15	03/25/11 17:51	1
Anthracene	<29		380	29	ug/Kg	☼	03/24/11 16:15	03/25/11 17:51	1
Dibenzofuran	<38		380	38	ug/Kg	☼	03/24/11 16:15	03/25/11 17:51	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	74		58 - 130	03/24/11 16:15	03/25/11 17:51	1
Nitrobenzene-d5	72		46 - 130	03/24/11 16:15	03/25/11 17:51	1
Terphenyl-d14	92		60 - 130	03/24/11 16:15	03/25/11 17:51	1

Quality Control Data

Client: Weston Solutions, Inc.
Project/Site: Cabot Springstead & Hogtown Creek

TestAmerica Job ID: 680-66657-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-197931/15-A

Matrix: Solid

Analysis Batch: 198030

Client Sample ID: MB 680-197931/15-A

Prep Type: Total/NA

Prep Batch: 197931

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	<22		330	22	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
Benzo[k]fluoranthene	<65		330	65	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
Acenaphthene	<41		330	41	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
Acenaphthylene	<36		330	36	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
Benzo[a]anthracene	<27		330	27	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
Benzo[a]pyrene	<52		330	52	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
Benzo[b]fluoranthene	<38		330	38	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
1-Methylnaphthalene	<31		330	31	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
2-Methylnaphthalene	<38		330	38	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
Chrysene	<21		330	21	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
Dibenz(a,h)anthracene	<39		330	39	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
Fluoranthene	<32		330	32	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
Fluorene	<36		330	36	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
Indeno[1,2,3-cd]pyrene	<28		330	28	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
Naphthalene	<30		330	30	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
Phenanthrene	<27		330	27	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
Pyrene	<27		330	27	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
Anthracene	<25		330	25	ug/Kg		03/23/11 15:25	03/24/11 13:43	1
Dibenzofuran	<33		330	33	ug/Kg		03/23/11 15:25	03/24/11 13:43	1

Surrogate	MB % Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	80		58 - 130	03/23/11 15:25	03/24/11 13:43	1
Nitrobenzene-d5	65		46 - 130	03/23/11 15:25	03/24/11 13:43	1
Terphenyl-d14	85		60 - 130	03/23/11 15:25	03/24/11 13:43	1

Lab Sample ID: LCS 680-197931/16-A

Matrix: Solid

Analysis Batch: 198030

Client Sample ID: LCS 680-197931/16-A

Prep Type: Total/NA

Prep Batch: 197931

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	Limits
Benzo[g,h,i]perylene	3320	3080		ug/Kg		93	54 - 130
Benzo[k]fluoranthene	3320	2800		ug/Kg		84	57 - 130
Acenaphthene	3320	2440		ug/Kg		74	58 - 130
Acenaphthylene	3320	2750		ug/Kg		83	58 - 130
Benzo[a]anthracene	3320	2880		ug/Kg		87	62 - 130
Benzo[a]pyrene	3320	3220		ug/Kg		97	68 - 131
Benzo[b]fluoranthene	3320	3020		ug/Kg		91	53 - 130
1-Methylnaphthalene	3320	2370		ug/Kg		71	48 - 130
2-Methylnaphthalene	3320	2430		ug/Kg		73	55 - 130
Chrysene	3320	2890		ug/Kg		87	62 - 130
Dibenz(a,h)anthracene	3320	3070		ug/Kg		93	56 - 130
Fluoranthene	3320	3000		ug/Kg		90	62 - 130
Fluorene	3320	2750		ug/Kg		83	58 - 130
Indeno[1,2,3-cd]pyrene	3320	3280		ug/Kg		99	52 - 130
Naphthalene	3320	2490		ug/Kg		75	54 - 130
Phenanthrene	3320	2950		ug/Kg		89	61 - 130
Pyrene	3320	2720		ug/Kg		82	59 - 130
Anthracene	3320	2880		ug/Kg		87	60 - 130
Dibenzofuran	3320	2660		ug/Kg		80	56 - 130

TestAmerica Savannah

Quality Control Data

Client: Weston Solutions, Inc.
Project/Site: Cabot Springstead & Hogtown Creek

TestAmerica Job ID: 680-66657-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 680-197931/16-A

Matrix: Solid

Analysis Batch: 198030

Client Sample ID: LCS 680-197931/16-A

Prep Type: Total/NA

Prep Batch: 197931

	LCS	LCS	
Surrogate	% Recovery	Qualifier	Limits
2-Fluorobiphenyl	78		58 - 130
Nitrobenzene-d5	62		46 - 130
Terphenyl-d14	78		60 - 130

Lab Sample ID: MB 680-198062/14-A

Matrix: Solid

Analysis Batch: 198226

Client Sample ID: MB 680-198062/14-A

Prep Type: Total/NA

Prep Batch: 198062

Analyte	MB	MB							
	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	<22		330	22	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
Benzo[k]fluoranthene	<65		330	65	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
Acenaphthene	<41		330	41	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
Acenaphthylene	<36		330	36	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
Benzo[a]anthracene	<27		330	27	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
Benzo[a]pyrene	<52		330	52	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
Benzo[b]fluoranthene	<38		330	38	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
1-Methylnaphthalene	<31		330	31	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
2-Methylnaphthalene	<38		330	38	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
Chrysene	<21		330	21	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
Dibenz(a,h)anthracene	<39		330	39	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
Fluoranthene	<32		330	32	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
Fluorene	<36		330	36	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
Indeno[1,2,3-cd]pyrene	<28		330	28	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
Naphthalene	<30		330	30	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
Phenanthrene	<27		330	27	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
Pyrene	<27		330	27	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
Anthracene	<25		330	25	ug/Kg		03/24/11 16:15	03/25/11 15:31	1
Dibenzofuran	<33		330	33	ug/Kg		03/24/11 16:15	03/25/11 15:31	1

	MB	MB							
Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
2-Fluorobiphenyl	78		58 - 130	03/24/11 16:15	03/25/11 15:31	1			
Nitrobenzene-d5	78		46 - 130	03/24/11 16:15	03/25/11 15:31	1			
Terphenyl-d14	93		60 - 130	03/24/11 16:15	03/25/11 15:31	1			

Lab Sample ID: LCS 680-198062/15-A

Matrix: Solid

Analysis Batch: 198226

Client Sample ID: LCS 680-198062/15-A

Prep Type: Total/NA

Prep Batch: 198062

Analyte	Spike	LCS	LCS						
	Added	Result	Qualifier	Unit	D	% Rec	% Rec.	Limits	
Benzo[g,h,i]perylene	3330	2630		ug/Kg		79		54 - 130	
Benzo[k]fluoranthene	3330	3410		ug/Kg		102		57 - 130	
Acenaphthene	3330	3070		ug/Kg		92		58 - 130	
Acenaphthylene	3330	3230		ug/Kg		97		58 - 130	
Benzo[a]anthracene	3330	3350		ug/Kg		101		62 - 130	
Benzo[a]pyrene	3330	3640		ug/Kg		109		68 - 131	
Benzo[b]fluoranthene	3330	3310		ug/Kg		99		53 - 130	
1-Methylnaphthalene	3330	2750		ug/Kg		83		48 - 130	
2-Methylnaphthalene	3330	2920		ug/Kg		88		55 - 130	
Chrysene	3330	3300		ug/Kg		99		62 - 130	

TestAmerica Savannah

Quality Control Data

Client: Weston Solutions, Inc.
Project/Site: Cabot Springstead & Hogtown Creek

TestAmerica Job ID: 680-66657-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 680-198062/15-A

Matrix: Solid

Analysis Batch: 198226

Client Sample ID: LCS 680-198062/15-A

Prep Type: Total/NA

Prep Batch: 198062

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Dibenz(a,h)anthracene	3330	2710		ug/Kg		81	56 - 130
Fluoranthene	3330	3270		ug/Kg		98	62 - 130
Fluorene	3330	3180		ug/Kg		95	58 - 130
Indeno[1,2,3-cd]pyrene	3330	2560		ug/Kg		77	52 - 130
Naphthalene	3330	2830		ug/Kg		85	54 - 130
Phenanthrene	3330	3280		ug/Kg		98	61 - 130
Pyrene	3330	3430		ug/Kg		103	59 - 130
Anthracene	3330	3280		ug/Kg		98	60 - 130
Dibenzofuran	3330	3070		ug/Kg		92	56 - 130

Surrogate	LCS % Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	87		58 - 130
Nitrobenzene-d5	84		46 - 130
Terphenyl-d14	94		60 - 130

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 680-198526/1

Matrix: Solid

Analysis Batch: 198526

Client Sample ID: MB 680-198526/1

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	<3000		3000		mg/Kg			03/28/11 11:15	1

Lab Sample ID: LCS 680-198526/2

Matrix: Solid

Analysis Batch: 198526

Client Sample ID: LCS 680-198526/2

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Total Organic Carbon	60000	65000		mg/Kg		108	60 - 140

Lab Sample ID: 680-66657-2 MS

Matrix: Solid

Analysis Batch: 198526

Client Sample ID: LOC HA-02

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	% Rec	% Rec. Limits
Total Organic Carbon	16000		65900	80300		mg/Kg		98	60 - 140

Lab Chronicle

Client: Weston Solutions, Inc.
Project/Site: Cabot Springstead & Hogtown Creek

TestAmerica Job ID: 680-66657-1

Client Sample ID: LOC HA-01

Date Collected: 03/09/11 17:00

Date Received: 03/23/11 09:47

Lab Sample ID: 680-66657-1

Matrix: Solid

Percent Solids: 73.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			197931	03/23/11 15:25	JW	TestAmerica Savannah
Total/NA	Analysis	8270C		10	198220	03/25/11 15:16	LH	TestAmerica Savannah

Client Sample ID: LOC HA-02

Date Collected: 03/09/11 17:10

Date Received: 03/23/11 09:47

Lab Sample ID: 680-66657-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	9060		1	198526	03/28/11 11:15	KB	TestAmerica Savannah

Client Sample ID: LOC H4A-01

Date Collected: 03/18/11 14:40

Date Received: 03/23/11 09:47

Lab Sample ID: 680-66657-3

Matrix: Solid

Percent Solids: 82.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			198062	03/24/11 16:15	JW	TestAmerica Savannah
Total/NA	Analysis	8270C		1	198226	03/25/11 18:47	LH	TestAmerica Savannah

Client Sample ID: LOC H4A-02

Date Collected: 03/18/11 14:45

Date Received: 03/23/11 09:47

Lab Sample ID: 680-66657-4

Matrix: Solid

Percent Solids: 83.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			198062	03/24/11 16:15	JW	TestAmerica Savannah
Total/NA	Analysis	8270C		1	198226	03/25/11 18:19	LH	TestAmerica Savannah

Client Sample ID: LOC H4A-03

Date Collected: 03/21/11 13:00

Date Received: 03/23/11 09:47

Lab Sample ID: 680-66657-5

Matrix: Solid

Percent Solids: 86.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			198062	03/24/11 16:15	JW	TestAmerica Savannah
Total/NA	Analysis	8270C		1	198226	03/25/11 16:27	LH	TestAmerica Savannah

Client Sample ID: LOC H4A-04

Date Collected: 03/21/11 13:05

Date Received: 03/23/11 09:47

Lab Sample ID: 680-66657-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	9060		1	198526	03/28/11 11:15	KB	TestAmerica Savannah

TestAmerica Savannah

Lab Chronicle

Client: Weston Solutions, Inc.
Project/Site: Cabot Springstead & Hogtown Creek

TestAmerica Job ID: 680-66657-1

Client Sample ID: LOC H4A-05

Date Collected: 03/21/11 15:35

Date Received: 03/23/11 09:47

Lab Sample ID: 680-66657-7

Matrix: Solid

Percent Solids: 81.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			198062	03/24/11 16:15	JW	TestAmerica Savannah
Total/NA	Analysis	8270C		1	198226	03/25/11 16:55	LH	TestAmerica Savannah

Client Sample ID: LOC H4A-06

Date Collected: 03/21/11 18:30

Date Received: 03/23/11 09:47

Lab Sample ID: 680-66657-8

Matrix: Solid

Percent Solids: 79.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			198062	03/24/11 16:15	JW	TestAmerica Savannah
Total/NA	Analysis	8270C		1	198226	03/25/11 17:23	LH	TestAmerica Savannah

Client Sample ID: LOC H4A-07

Date Collected: 03/21/11 18:35

Date Received: 03/23/11 09:47

Lab Sample ID: 680-66657-9

Matrix: Solid

Percent Solids: 85.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3546			198062	03/24/11 16:15	JW	TestAmerica Savannah
Total/NA	Analysis	8270C		1	198226	03/25/11 17:51	LH	TestAmerica Savannah

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

Chain of Custody Record

COC No:
680-31845.2
Page:
Page 2 of 3
Job #:

Client Information

Client Contact:
Mr. Ralph McKee
Company:
Weston Solutions, Inc.

Sample:
TIM MAYER
Phone:
(770) 500-6069

Lab ID:
Yant, Abbie G
E-Mail:
abbie.yant@testamericainc.com

Carrier Tracking No(s):

Analysis Requested

5430 Metric Place Suite 100

STANDARD TAT

DOCKROSS

GA. 30092

Phone:
904-261-3086 (Tel)

Email:
TIMOTHY.MAYER@WESTONSCIENTISTS.COM

Project Name:

Cabot

Site:

SPRINGSTRAID / HOGTOWN CREEK

PO #:
62999

06791-000-001-0004 05791-004-005

Project #:

68000815

SSOW#

0003-00

Sample Identification

Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=tissue, A=air)	Field Filtered Sample (Yes or No)	601DB - As, Cd, Cr, Cu, Pb	8260B - TCL Sublist	8270C - TCL SVOCs	8270C - PAHs	TOC	Total Number of Containers	Special Instructions/Note:
9 MARCH	17:00	C	Solid	X	N	N	N	N	X		
9 MARCH	17:10	C	Solid						X		
18 MARCH	14:40	C	Solid					X			
18 MARCH	14:45	C	Solid					X			
21 MARCH	13:00	C	Solid					X			
21 MARCH	13:05	C	Solid						X		
21 MARCH	15:35	C	Solid					X			
21 MARCH	18:30	C	Solid					X			
21 MARCH	18:35	C	Solid					X			
			Solid								
			Solid								

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Deliverable Requested: I, II, III, IV, Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements:

Empty Kit Relinquished by:

Date:

Time:

Method of Shipment:

Relinquished by:

Date/Time:

Company:

Received by:

Date/Time:

Company:

Relinquished by:

Date/Time:

Company:

Received by:

Date/Time:

Company:

Relinquished by:

Date/Time:

Company:

Received by:

Date/Time:

Company:

Custody Seals Intact:
Δ Yes Δ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Certification Summary

Client: Weston Solutions, Inc.
Project/Site: Cabot Springstead & Hogtown Creek

TestAmerica Job ID: 680-66657-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Savannah		USDA		SAV 3-04
TestAmerica Savannah	A2LA	DoD ELAP	0	0399-01
TestAmerica Savannah	A2LA	ISO/IEC 17025	0	399.01
TestAmerica Savannah	Alabama	State Program	4	41450
TestAmerica Savannah	Arkansas	Arkansas DOH	6	N/A
TestAmerica Savannah	Arkansas	State Program	6	88-0692
TestAmerica Savannah	California	NELAC	9	3217CA
TestAmerica Savannah	Colorado	State Program	8	N/A
TestAmerica Savannah	Connecticut	State Program	1	PH-0161
TestAmerica Savannah	Delaware	State Program	3	N/A
TestAmerica Savannah	Florida	NELAC	4	E87052
TestAmerica Savannah	Georgia	Georgia EPD	4	N/A
TestAmerica Savannah	Georgia	State Program	4	803
TestAmerica Savannah	Guam	State Program	9	09-005r
TestAmerica Savannah	Hawaii	State Program	9	N/A
TestAmerica Savannah	Illinois	NELAC	5	200022
TestAmerica Savannah	Indiana	State Program	5	N/A
TestAmerica Savannah	Iowa	State Program	7	353
TestAmerica Savannah	Kansas	NELAC	7	E-10322
TestAmerica Savannah	Kentucky	Kentucky UST	4	18
TestAmerica Savannah	Kentucky	State Program	4	90084
TestAmerica Savannah	Louisiana	NELAC	6	30690
TestAmerica Savannah	Louisiana	NELAC	6	LA100015
TestAmerica Savannah	Maine	State Program	1	GA00006
TestAmerica Savannah	Maryland	State Program	3	250
TestAmerica Savannah	Massachusetts	State Program	1	M-GA006
TestAmerica Savannah	Michigan	State Program	5	9925
TestAmerica Savannah	Mississippi	State Program	4	N/A
TestAmerica Savannah	Montana	State Program	8	CERT0081
TestAmerica Savannah	Nebraska	State Program	7	TestAmerica-Savannah
TestAmerica Savannah	Nevada	State Program	9	GA6
TestAmerica Savannah	New Jersey	NELAC	2	GA769
TestAmerica Savannah	New Mexico	State Program	6	N/A
TestAmerica Savannah	New York	NELAC	2	10842
TestAmerica Savannah	North Carolina	North Carolina DENR	4	269
TestAmerica Savannah	North Carolina	North Carolina PHL	4	13701
TestAmerica Savannah	Oklahoma	State Program	6	9984
TestAmerica Savannah	Pennsylvania	NELAC	3	68-00474
TestAmerica Savannah	Puerto Rico	State Program	2	GA00006
TestAmerica Savannah	Rhode Island	State Program	1	LAO00244
TestAmerica Savannah	South Carolina	State Program	4	98001
TestAmerica Savannah	Tennessee	State Program	4	TN02961
TestAmerica Savannah	Texas	NELAC	6	T104704185-08-TX
TestAmerica Savannah	Vermont	State Program	1	87052
TestAmerica Savannah	Virginia	State Program	3	302
TestAmerica Savannah	Washington	State Program	10	C1794
TestAmerica Savannah	West Virginia	West Virginia DEP	3	94
TestAmerica Savannah	West Virginia	West Virginia DHHR (DW)	3	9950C
TestAmerica Savannah	Wisconsin	State Program	5	999819810
TestAmerica Savannah	Wyoming	State Program	8	8TMS-Q

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

ANALYTICAL REPORT

Job Number: 680-65837-1

Job Description: Springstead & Hogtown Creek

For:

Weston Solutions, Inc.
94072 Summer Breeze Drive
Fernandina Beach, FL 32034
Attention: Mr. Mark Taylor



Approved for release.
Abbie G Yant
Project Manager I
4/15/2011 10:26 AM

Abbie G Yant
Project Manager I
abbie.yant@testamericainc.com
04/15/2011
Revision: 1

The test results in this report meet NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted. Results pertain only to samples listed in this report. This report may not be reproduced, except in full, without the written approval of the laboratory. Questions should be directed to the person who signed this report.

Savannah Certifications and ID #s: A2LA: 0399.01; AL: 41450; ARDEQ: 88-0692; ARDOH; CA: 03217CA; CO; CT: PH0161; DE; FL: E87052; GA: 803; Guam; HI; IL: 200022; IN; IA: 353; KS: E-10322; KY EPPC: 90084; KY UST; LA DEQ: 30690; LA DHH: LA080008; ME: 2008022; MD: 250; MA: M-GA006; MI: 9925; MS; NFESC: 249; NV: GA00006; NJ: GA769; NM; NY: 10842; NC DWQ: 269; NC DHHS: 13701; PA: 68-00474; PR: GA00006; RI: LAO00244; SC: 98001001; TN: TN0296; TX: T104704185; USEPA: GA00006; VT: VT-87052; VA: 00302; WA; WV DEP: 094; WV DHHR: 9950 C; WI DNR: 999819810; WY/EPAR8: 8TMS-Q

TestAmerica Laboratories, Inc.

TestAmerica Savannah 5102 LaRoche Avenue, Savannah, GA 31404
Tel (912) 354-7858 Fax (912) 352-0165 www.testamericainc.com



Job Narrative
680-65837-1

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

GC/MS Semi VOA

Method(s) 8270C: The following sample(s) was diluted due to the nature of the sample matrix: SD-10-01 (680-65837-8), SD-10-01A (680-65837-12), SD-10-02 (680-65837-9). Sample is dark, viscous and sticking to the vial. 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: SD-10-01 (680-65837-8), SD-10-01A (680-65837-12), SD-10-02 (680-65837-9).

No other analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

METHOD SUMMARY

Client: Weston Solutions, Inc.

Job Number: 680-65837-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Semivolatile Organic Compounds (GC/MS)	TAL SAV	SW846 8270C	
Microwave Extraction	TAL SAV		SW846 3546
Organic Carbon, Total (TOC)	TAL SAV	SW846 9060	
Percent Moisture	TAL SAV	EPA Moisture	

Lab References:

TAL SAV = TestAmerica Savannah

Method References:

EPA = US Environmental Protection Agency

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: 680-65837-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
680-65837-1	SS5-01A-DUP	Solid	02/14/2011 1110	02/22/2011 0919
680-65837-2	SS5-01A	Solid	02/14/2011 1115	02/22/2011 0919
680-65837-3	SS5-02A	Solid	02/14/2011 1550	02/22/2011 0919
680-65837-4	SS5-03A	Solid	02/14/2011 1550	02/22/2011 0919
680-65837-5	SB-9-01	Solid	02/17/2011 1245	02/22/2011 0919
680-65837-6	SB-9-02	Solid	02/17/2011 1250	02/22/2011 0919
680-65837-7	SB-9-03	Solid	02/17/2011 1250	02/22/2011 0919
680-65837-8	SD-10-01	Solid	02/17/2011 1740	02/22/2011 0919
680-65837-9	SD-10-02	Solid	02/17/2011 1745	02/22/2011 0919
680-65837-10	SD-10-03	Solid	02/17/2011 1750	02/22/2011 0919
680-65837-11	SD-10-03DUP	Solid	02/17/2011 1755	02/22/2011 0919
680-65837-12	SD-10-01A	Solid	02/18/2011 1150	02/22/2011 0919
680-65837-13	SD-10-02A	Solid	02/18/2011 1155	02/22/2011 0919

Analytical Data

Client: Weston Solutions, Inc.

Job Number: 680-65837-1

Client Sample ID: SS5-01A-DUP

Lab Sample ID: 680-65837-1

Date Sampled: 02/14/2011 1110

Client Matrix: Solid

% Moisture: 15.6

Date Received: 02/22/2011 0919

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	680-195203	Instrument ID:	MSG
Prep Method:	3546	Prep Batch:	680-195008	Lab File ID:	g5792.d
Dilution:	1.0			Initial Weight/Volume:	30.26 g
Analysis Date:	02/23/2011 2321			Final Weight/Volume:	1 mL
Prep Date:	02/22/2011 1625			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzo[g,h,i]perylene		<26		26	390
Benzo[k]fluoranthene		<76		76	390
Acenaphthene		<48		48	390
Acenaphthylene		<42		42	390
Benzo[a]anthracene		<32		32	390
Benzo[a]pyrene		<61		61	390
Benzo[b]fluoranthene		<45		45	390
1-Methylnaphthalene		<36		36	390
2-Methylnaphthalene		<45		45	390
Chrysene		<25		25	390
Dibenz(a,h)anthracene		<46		46	390
Fluoranthene		<38		38	390
Fluorene		<42		42	390
Indeno[1,2,3-cd]pyrene		<33		33	390
Naphthalene		<35		35	390
Phenanthrene		82	J	32	390
Pyrene		<32		32	390
Anthracene		<29		29	390

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	72		58 - 130
Nitrobenzene-d5	60		46 - 130
Terphenyl-d14	78		60 - 130

Analytical Data

Client: Weston Solutions, Inc.

Job Number: 680-65837-1

Client Sample ID: SS5-01A

Lab Sample ID: 680-65837-2

Date Sampled: 02/14/2011 1115

Client Matrix: Solid

% Moisture: 17.1

Date Received: 02/22/2011 0919

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	680-195203	Instrument ID:	MSG
Prep Method:	3546	Prep Batch:	680-195008	Lab File ID:	g5793.d
Dilution:	1.0			Initial Weight/Volume:	30.06 g
Analysis Date:	02/23/2011 2349			Final Weight/Volume:	1 mL
Prep Date:	02/22/2011 1625			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzo[g,h,i]perylene		<26		26	400
Benzo[k]fluoranthene		<78		78	400
Acenaphthene		110	J	49	400
Acenaphthylene		<43		43	400
Benzo[a]anthracene		35	J	33	400
Benzo[a]pyrene		<63		63	400
Benzo[b]fluoranthene		<46		46	400
1-Methylnaphthalene		120	J	37	400
2-Methylnaphthalene		89	J	46	400
Chrysene		39	J	25	400
Dibenz(a,h)anthracene		<47		47	400
Fluoranthene		100	J	39	400
Fluorene		70	J	43	400
Indeno[1,2,3-cd]pyrene		<34		34	400
Naphthalene		99	J	36	400
Phenanthrene		360	J	33	400
Pyrene		<33		33	400
Anthracene		<30		30	400

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	81		58 - 130
Nitrobenzene-d5	70		46 - 130
Terphenyl-d14	89		60 - 130

Analytical Data

Client: Weston Solutions, Inc.

Job Number: 680-65837-1

Client Sample ID: SS5-02A

Lab Sample ID: 680-65837-3

Date Sampled: 02/14/2011 1550

Client Matrix: Solid

% Moisture: 12.8

Date Received: 02/22/2011 0919

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	680-195203	Instrument ID:	MSG
Prep Method:	3546	Prep Batch:	680-195008	Lab File ID:	g5794.d
Dilution:	1.0			Initial Weight/Volume:	30.07 g
Analysis Date:	02/24/2011 0017			Final Weight/Volume:	1 mL
Prep Date:	02/22/2011 1625			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzo[g,h,i]perylene		<25		25	380
Benzo[k]fluoranthene		<74		74	380
Acenaphthene		<47		47	380
Acenaphthylene		<41		41	380
Benzo[a]anthracene		<31		31	380
Benzo[a]pyrene		<60		60	380
Benzo[b]fluoranthene		<43		43	380
1-Methylnaphthalene		<35		35	380
2-Methylnaphthalene		<43		43	380
Chrysene		<24		24	380
Dibenz(a,h)anthracene		<45		45	380
Fluoranthene		<37		37	380
Fluorene		<41		41	380
Indeno[1,2,3-cd]pyrene		<32		32	380
Naphthalene		<34		34	380
Phenanthrene		<31		31	380
Pyrene		<31		31	380
Anthracene		<29		29	380

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	83		58 - 130
Nitrobenzene-d5	73		46 - 130
Terphenyl-d14	100		60 - 130

Analytical Data

Client: Weston Solutions, Inc.

Job Number: 680-65837-1

Client Sample ID: SB-9-01

Lab Sample ID: 680-65837-5

Date Sampled: 02/17/2011 1245

Client Matrix: Solid

% Moisture: 16.6

Date Received: 02/22/2011 0919

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	680-195748	Instrument ID:	MSG
Prep Method:	3546	Prep Batch:	680-195008	Lab File ID:	g5902.d
Dilution:	1.0			Initial Weight/Volume:	30.01 g
Analysis Date:	03/02/2011 1924			Final Weight/Volume:	1 mL
Prep Date:	02/22/2011 1625			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzo[g,h,i]perylene		<26		26	400
Benzo[k]fluoranthene		<78		78	400
Acenaphthene		<49		49	400
Acenaphthylene		<43		43	400
Benzo[a]anthracene		<32		32	400
Benzo[a]pyrene		<62		62	400
Benzo[b]fluoranthene		<46		46	400
1-Methylnaphthalene		<37		37	400
2-Methylnaphthalene		<46		46	400
Chrysene		<25		25	400
Dibenz(a,h)anthracene		<47		47	400
Fluoranthene		<38		38	400
Fluorene		<43		43	400
Indeno[1,2,3-cd]pyrene		<34		34	400
Naphthalene		<36		36	400
Phenanthrene		77	J	32	400
Pyrene		<32		32	400
Anthracene		<30		30	400

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	73		58 - 130
Nitrobenzene-d5	65		46 - 130
Terphenyl-d14	77		60 - 130

Analytical Data

Client: Weston Solutions, Inc.

Job Number: 680-65837-1

Client Sample ID: SB-9-02

Lab Sample ID: 680-65837-6

Date Sampled: 02/17/2011 1250

Client Matrix: Solid

% Moisture: 19.0

Date Received: 02/22/2011 0919

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	680-195203	Instrument ID:	MSG
Prep Method:	3546	Prep Batch:	680-195008	Lab File ID:	g5796.d
Dilution:	1.0			Initial Weight/Volume:	30.07 g
Analysis Date:	02/24/2011 0114			Final Weight/Volume:	1 mL
Prep Date:	02/22/2011 1625			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzo[g,h,i]perylene		<27		27	410
Benzo[k]fluoranthene		<80		80	410
Acenaphthene		<50		50	410
Acenaphthylene		<44		44	410
Benzo[a]anthracene		<33		33	410
Benzo[a]pyrene		<64		64	410
Benzo[b]fluoranthene		<47		47	410
1-Methylnaphthalene		<38		38	410
2-Methylnaphthalene		<47		47	410
Chrysene		<26		26	410
Dibenz(a,h)anthracene		<48		48	410
Fluoranthene		<39		39	410
Fluorene		<44		44	410
Indeno[1,2,3-cd]pyrene		<34		34	410
Naphthalene		<37		37	410
Phenanthrene		33	J	33	410
Pyrene		<33		33	410
Anthracene		<31		31	410

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	77		58 - 130
Nitrobenzene-d5	54		46 - 130
Terphenyl-d14	83		60 - 130

Analytical Data

Client: Weston Solutions, Inc.

Job Number: 680-65837-1

Client Sample ID: SD-10-01

Lab Sample ID: 680-65837-8

Date Sampled: 02/17/2011 1740

Client Matrix: Solid

% Moisture: 19.0

Date Received: 02/22/2011 0919

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	680-195567	Instrument ID:	MSN
Prep Method:	3546	Prep Batch:	680-195008	Lab File ID:	n1325.d
Dilution:	10			Initial Weight/Volume:	30.39 g
Analysis Date:	02/26/2011 1256			Final Weight/Volume:	1 mL
Prep Date:	02/22/2011 1625			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzo[g,h,i]perylene		780	J	270	4000
Benzo[k]fluoranthene		<790		790	4000
Acenaphthene		<500		500	4000
Acenaphthylene		<440		440	4000
Benzo[a]anthracene		<330		330	4000
Benzo[a]pyrene		<630		630	4000
Benzo[b]fluoranthene		<460		460	4000
1-Methylnaphthalene		<380		380	4000
2-Methylnaphthalene		<460		460	4000
Chrysene		<260		260	4000
Dibenz(a,h)anthracene		630	J	480	4000
Fluoranthene		460	J	390	4000
Fluorene		<440		440	4000
Indeno[1,2,3-cd]pyrene		760	J	340	4000
Naphthalene		<370		370	4000
Phenanthrene		<330		330	4000
Pyrene		400	J	330	4000
Anthracene		<300		300	4000

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	0	D	58 - 130
Nitrobenzene-d5	0	D	46 - 130
Terphenyl-d14	0	D	60 - 130

Analytical Data

Client: Weston Solutions, Inc.

Job Number: 680-65837-1

Client Sample ID: SD-10-02

Lab Sample ID: 680-65837-9

Date Sampled: 02/17/2011 1745

Client Matrix: Solid

% Moisture: 13.6

Date Received: 02/22/2011 0919

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	680-195567	Instrument ID:	MSN
Prep Method:	3546	Prep Batch:	680-195008	Lab File ID:	n1326.d
Dilution:	10			Initial Weight/Volume:	30.31 g
Analysis Date:	02/26/2011 1324			Final Weight/Volume:	1 mL
Prep Date:	02/22/2011 1625			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzo[g,h,i]perylene		<250		250	3800
Benzo[k]fluoranthene		<740		740	3800
Acenaphthene		<470		470	3800
Acenaphthylene		<410		410	3800
Benzo[a]anthracene		<310		310	3800
Benzo[a]pyrene		<600		600	3800
Benzo[b]fluoranthene		<440		440	3800
1-Methylnaphthalene		<350		350	3800
2-Methylnaphthalene		<440		440	3800
Chrysene		<240		240	3800
Dibenz(a,h)anthracene		<450		450	3800
Fluoranthene		<370		370	3800
Fluorene		<410		410	3800
Indeno[1,2,3-cd]pyrene		<320		320	3800
Naphthalene		<340		340	3800
Phenanthrene		<310		310	3800
Pyrene		<310		310	3800
Anthracene		<290		290	3800

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	0	D	58 - 130
Nitrobenzene-d5	0	D	46 - 130
Terphenyl-d14	0	D	60 - 130

Analytical Data

Client: Weston Solutions, Inc.

Job Number: 680-65837-1

Client Sample ID: SD-10-01A

Lab Sample ID: 680-65837-12

Date Sampled: 02/18/2011 1150

Client Matrix: Solid

% Moisture: 17.9

Date Received: 02/22/2011 0919

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	680-195567	Instrument ID:	MSN
Prep Method:	3546	Prep Batch:	680-195008	Lab File ID:	n1327.d
Dilution:	10			Initial Weight/Volume:	30.23 g
Analysis Date:	02/26/2011 1352			Final Weight/Volume:	1 mL
Prep Date:	02/22/2011 1625			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzo[g,h,i]perylene		280	J	270	4000
Benzo[k]fluoranthene		<790		790	4000
Acenaphthene		<500		500	4000
Acenaphthylene		<440		440	4000
Benzo[a]anthracene		510	J	330	4000
Benzo[a]pyrene		<630		630	4000
Benzo[b]fluoranthene		590	J	460	4000
1-Methylnaphthalene		<370		370	4000
2-Methylnaphthalene		<460		460	4000
Chrysene		610	J	250	4000
Dibenz(a,h)anthracene		<470		470	4000
Fluoranthene		1800	J	390	4000
Fluorene		<440		440	4000
Indeno[1,2,3-cd]pyrene		<340		340	4000
Naphthalene		<360		360	4000
Phenanthrene		2100	J	330	4000
Pyrene		1200	J	330	4000
Anthracene		420	J	300	4000

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	0	D	58 - 130
Nitrobenzene-d5	0	D	46 - 130
Terphenyl-d14	0	D	60 - 130

Analytical Data

Client: Weston Solutions, Inc.

Job Number: 680-65837-1

General Chemistry**Client Sample ID: SS5-03A**

Lab Sample ID: 680-65837-4

Date Sampled: 02/14/2011 1550

Client Matrix: Solid

Date Received: 02/22/2011 0919

Analyte	Result	Qual	Units	RL	Dil	Method
Total Organic Carbon	<3000		mg/Kg	3000	1.0	9060
Analysis Batch: 680-196053		Analysis Date: 03/04/2011 1015				DryWt Corrected: N

Analyte	Result	Qual	Units	RL	Dil	Method
Percent Moisture	12		%	0.010	1.0	Moisture
Analysis Batch: 680-195060		Analysis Date: 02/23/2011 0952				DryWt Corrected: N

Analytical Data

Client: Weston Solutions, Inc.

Job Number: 680-65837-1

General Chemistry**Client Sample ID: SB-9-03**

Lab Sample ID: 680-65837-7

Date Sampled: 02/17/2011 1250

Client Matrix: Solid

Date Received: 02/22/2011 0919

Analyte	Result	Qual	Units	RL	Dil	Method
Total Organic Carbon	<3000		mg/Kg	3000	1.0	9060
Analysis Batch: 680-196053			Analysis Date: 03/04/2011 1015			DryWt Corrected: N

Analyte	Result	Qual	Units	RL	Dil	Method
Percent Moisture	17		%	0.010	1.0	Moisture
Analysis Batch: 680-195060			Analysis Date: 02/23/2011 0952			DryWt Corrected: N

Analytical Data

Client: Weston Solutions, Inc.

Job Number: 680-65837-1

General Chemistry**Client Sample ID: SD-10-03**

Lab Sample ID: 680-65837-10

Date Sampled: 02/17/2011 1750

Client Matrix: Solid

Date Received: 02/22/2011 0919

Analyte	Result	Qual	Units	RL	Dil	Method
Total Organic Carbon	5700		mg/Kg	3000	1.0	9060
Analysis Batch: 680-196053		Analysis Date: 03/04/2011 1015				DryWt Corrected: N

Analyte	Result	Qual	Units	RL	Dil	Method
Percent Moisture	19		%	0.010	1.0	Moisture
Analysis Batch: 680-195060		Analysis Date: 02/23/2011 0952				DryWt Corrected: N

Analytical Data

Client: Weston Solutions, Inc.

Job Number: 680-65837-1

General Chemistry**Client Sample ID:** SD-10-03DUP

Lab Sample ID: 680-65837-11

Date Sampled: 02/17/2011 1755

Client Matrix: Solid

Date Received: 02/22/2011 0919

Analyte	Result	Qual	Units	RL	Dil	Method
Total Organic Carbon	3300		mg/Kg	3000	1.0	9060
Analysis Batch: 680-196053		Analysis Date: 03/04/2011 1015				DryWt Corrected: N

Analyte	Result	Qual	Units	RL	Dil	Method
Percent Moisture	23		%	0.010	1.0	Moisture
Analysis Batch: 680-195060		Analysis Date: 02/23/2011 0952				DryWt Corrected: N

Analytical Data

Client: Weston Solutions, Inc.

Job Number: 680-65837-1

General Chemistry**Client Sample ID:** SD-10-02A

Lab Sample ID: 680-65837-13

Date Sampled: 02/18/2011 1155

Client Matrix: Solid

Date Received: 02/22/2011 0919

Analyte	Result	Qual	Units	RL	Dil	Method
Total Organic Carbon	<3000		mg/Kg	3000	1.0	9060
Analysis Batch: 680-196053		Analysis Date: 03/04/2011 1015				DryWt Corrected: N

Analyte	Result	Qual	Units	RL	Dil	Method
Percent Moisture	20		%	0.010	1.0	Moisture
Analysis Batch: 680-195060		Analysis Date: 02/23/2011 0952				DryWt Corrected: N

DATA REPORTING QUALIFIERS

Client: Weston Solutions, Inc.

Job Number: 680-65837-1

Lab Section	Qualifier	Description
GC/MS Semi VOA	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	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.

Quality Control Results

Client: Weston Solutions, Inc.

Job Number: 680-65837-1

Method Blank - Batch: 680-195008

Method: 8270C Preparation: 3546

Lab Sample ID: MB 680-195008/9-A
Client Matrix: Solid
Dilution: 1.0
Analysis Date: 02/23/2011 2226
Prep Date: 02/22/2011 1625
Leach Date: N/A

Analysis Batch: 680-195203
Prep Batch: 680-195008
Leach Batch: N/A
Units: ug/Kg

Instrument ID: MSG
Lab File ID: g5790.d
Initial Weight/Volume: 30.09 g
Final Weight/Volume: 1 mL
Injection Volume: 1 uL

Analyte	Result	Qual	MDL	RL
Benzo[g,h,i]perylene	<22		22	330
Benzo[k]fluoranthene	<65		65	330
Acenaphthene	<41		41	330
Acenaphthylene	<36		36	330
Benzo[a]anthracene	<27		27	330
Benzo[a]pyrene	<52		52	330
Benzo[b]fluoranthene	<38		38	330
1-Methylnaphthalene	<31		31	330
2-Methylnaphthalene	<38		38	330
Chrysene	<21		21	330
Dibenz(a,h)anthracene	<39		39	330
Fluoranthene	<32		32	330
Fluorene	<36		36	330
Indeno[1,2,3-cd]pyrene	<28		28	330
Naphthalene	<30		30	330
Phenanthrene	<27		27	330
Pyrene	<27		27	330
Anthracene	<25		25	330
Surrogate	% Rec	Acceptance Limits		
2-Fluorobiphenyl	80	58 - 130		
Nitrobenzene-d5	64	46 - 130		
Terphenyl-d14	95	60 - 130		

Quality Control Results

Client: Weston Solutions, Inc.

Job Number: 680-65837-1

Lab Control Sample - Batch: 680-195008

Method: 8270C

Preparation: 3546

Lab Sample ID: LCS 680-195008/10-A
 Client Matrix: Solid
 Dilution: 1.0
 Analysis Date: 02/23/2011 2253
 Prep Date: 02/22/2011 1625
 Leach Date: N/A

Analysis Batch: 680-195203
 Prep Batch: 680-195008
 Leach Batch: N/A
 Units: ug/Kg

Instrument ID: MSG
 Lab File ID: g5791.d
 Initial Weight/Volume: 30.02 g
 Final Weight/Volume: 1 mL
 Injection Volume: 1 uL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Benzo[g,h,i]perylene	3330	3200	96	54 - 130	
Benzo[k]fluoranthene	3330	3090	93	57 - 130	
Acenaphthene	3330	2800	84	58 - 130	
Acenaphthylene	3330	2940	88	58 - 130	
Benzo[a]anthracene	3330	3140	94	62 - 130	
Benzo[a]pyrene	3330	3610	108	68 - 131	
Benzo[b]fluoranthene	3330	3180	96	53 - 130	
1-Methylnaphthalene	3330	2720	82	48 - 130	
2-Methylnaphthalene	3330	2840	85	55 - 130	
Chrysene	3330	3140	94	62 - 130	
Dibenz(a,h)anthracene	3330	3000	90	56 - 130	
Fluoranthene	3330	3120	94	62 - 130	
Fluorene	3330	2940	88	58 - 130	
Indeno[1,2,3-cd]pyrene	3330	3240	97	52 - 130	
Naphthalene	3330	2940	88	54 - 130	
Phenanthrene	3330	3130	94	61 - 130	
Pyrene	3330	3240	97	59 - 130	
Anthracene	3330	3070	92	60 - 130	
Surrogate	% Rec		Acceptance Limits		
2-Fluorobiphenyl	82		58 - 130		
Nitrobenzene-d5	75		46 - 130		
Terphenyl-d14	90		60 - 130		

Quality Control Results

Client: Weston Solutions, Inc.

Job Number: 680-65837-1

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 680-195008

Method: 8270C
Preparation: 3546

MS Lab Sample ID:	680-65837-1	Analysis Batch:	680-195203	Instrument ID:	MSG
Client Matrix:	Solid	Prep Batch:	680-195008	Lab File ID:	g5797.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.24 g
Analysis Date:	02/24/2011 0141			Final Weight/Volume:	1 mL
Prep Date:	02/22/2011 1625			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	680-65837-1	Analysis Batch:	680-195567	Instrument ID:	MSN
Client Matrix:	Solid	Prep Batch:	680-195008	Lab File ID:	n1328.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.03 g
Analysis Date:	02/26/2011 1420			Final Weight/Volume:	1 mL
Prep Date:	02/22/2011 1625			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Benzo[g,h,i]perylene	95	91	41 - 143	4	50		
Benzo[k]fluoranthene	96	84	45 - 142	12	50		
Acenaphthene	85	80	46 - 142	6	50		
Acenaphthylene	87	81	46 - 142	6	50		
Benzo[a]anthracene	93	93	51 - 141	1	50		
Benzo[a]pyrene	105	105	58 - 142	0	50		
Benzo[b]fluoranthene	87	90	40 - 143	4	50		
1-Methylnaphthalene	81	79	34 - 144	1	50		
2-Methylnaphthalene	85	84	43 - 143	1	50		
Chrysene	94	93	51 - 141	1	50		
Dibenz(a,h)anthracene	90	91	44 - 142	2	50		
Fluoranthene	88	94	51 - 141	8	50		
Fluorene	88	88	46 - 142	1	50		
Indeno[1,2,3-cd]pyrene	99	101	39 - 143	2	50		
Naphthalene	85	81	41 - 143	4	50		
Phenanthrene	91	90	50 - 142	1	50		
Pyrene	94	90	47 - 142	3	50		
Anthracene	92	89	48 - 142	3	50		
Surrogate	MS % Rec		MSD % Rec		Acceptance Limits		
2-Fluorobiphenyl	80		82		58 - 130		
Nitrobenzene-d5	75		77		46 - 130		
Terphenyl-d14	85		90		60 - 130		