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Aerovox Facility - Conceptual Site Model

New Bedford Harbor Superfund Site - New Bedford, Massachusetts

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APPENDIX B

SUMMARY OF THE ENSR 2004-2005 STORMWATER AND GROUNDWATER INVESTIGATION

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B.1 INTRODUCTION

This appendix contains the results of the stormwater and groundwater sampling ENSR conducted in 2004 and 2005 at the Aerovox Facility in New Bedford, Massachusetts. ENSR conducted groundwater sampling to measure concentrations of polychlorinated biphenyls (PCBs) and other contaminants in the fall of 2005. During this sampling groundwater elevations were also measured. ENSR collected stormwater samples during two storm events one in the late summer 2004 and one in the spring 2005. The concentrations of PCBs and metals were measured in these samples. The data collected in these efforts was used to support an assessment of potential PCB migration offsite through groundwater and stormwater.

This document only includes brief discussions of the methods and implications of the results. More detailed information on these subjects are available the Aerovox Stormwater Field Sampling Plan (ENSR 2004), the Field Sampling Plan for Groundwater Sampling at the Aerovox Facility (ENSR 2005), and the project Quality Assurance Program Plan (QAPP) (Jacobs 2005). Discussions about the implications of the data presented here are included in Sections 4 and 5 of the main body of this report.

B.2 STORMWATER

In 2004 and 2005, ENSR measured concentrations of PCBs and metals in stormwater and baseflow in the stormwater system at the Aerovox Site. Samples were collected for analysis at various locations and under various conditions to support estimation of PCB transport via the stormwater pathway.

The majority of stormwater on the Aerovox property drains through a stormwater system consisting of surface troughs and subsurface pipes. The total area that drains to the stormwater system is estimated to be 8 acres of the 10-acre site. Thus, approximately 80% of the runoff from the property is conveyed by this system. This runoff is carried through two surface troughs and two subsurface storm pipe systems. These drain to the New Bedford Harbor at four discharge points (Figures B-1, B-2). The only areas not draining to the stormwater system are portions of property the bordering Belleview Avenue and along the harbor.

The two concrete surface troughs run parallel to the north and south sides of the manufacturing building (Figures B-1, B-3). These troughs primarily collect runoff from the building roof and convey it to outfalls marked by stations SW-10 and SW-11 (Figure B-1). The area drained by these troughs is estimated to be approximately 2.8 acres (Figure B-2).

Much of the remaining property is drained through a system consisting of two subsurface pipes and a series of catch basins. These pipes receive runoff from the parking lot and most of the pump house roof through five catch basins. These catch basins drain approximately 5.2 acres of the site (Figure B-2). Catch basins at monitoring locations SW09 and SW13 drain to a City of New Bedford stormwater collection line that runs along Hadley Street to the South of the site and discharges to the Harbor at the City Outfall (Figure B-1).

Characterizing flow from the subsurface drainage lines is difficult due to several complicating factors. First, the City Outfall on Hadley Street and the outfall located at monitoring site SW12 are located in the intertidal zone. As a result, these pipes are inundated with harbor water during each high tide and drain during each low tide. Second, the subsurface pipes are old and likely cracked. Therefore, groundwater and subsurface soils may interact with water in the pipes. As a result of these factors, waters draining from the outfall at monitoring location SW 12 and the City outfall may consist of harbor water, groundwater, and/or stormwater.

B.2.1 Methods

Two stormwater monitoring surveys were conducted; one on September 16-18, 2004 and the other on May 20-24, 2005. Stormwater samples were collected at two outfalls (SW-10 and SW-11) and four catch basins (SW-02, SW-03, SW-09, and SW-13) in the stormwater system (Figure B-1) during rainfall events. Baseflow samples were collected during dry weather periods from three catch basins (SW-02, SW-03, and SW-13) and one outfall (SW-12) (Figure B-1). Initially, sampling was also planned for the City outfall location. However, because it was partially submerged during much of the tidal cycle, it was not possible to collect representative runoff samples.

Sampling Protocol

A brief description of the stormwater sampling is provided below. A more detailed description is provided in the Stormwater Field Sampling Plan (ENSR 2004). The following three types of samples were collected during each sampling event:

- Baseflow samples were collected prior to a storm event. Baseflow samples are representative of the flow of water in the storm drain during periods without precipitation. This flow is potentially due to groundwater leakage into the pipes.

- First-flush stormwater samples were collected after the first 0.25 inches of rainfall. First-flush samples were collected using automated stormwater sampling equipment. The automated samplers have precipitation gauges that trigger automatic collection of water samples after a set amount (0.25 inches in this case) of rainfall. First-flush samples were collected to capture runoff from early in storm events when pollutant loads are highest because materials that have accumulated since the previous rainfall are washed from surfaces into the storm drain system.

- Steady-state stormwater samples were collected by automated samplers one hour after collection of the first-flush samples. These samples are intended to be representative of stormwater after the initial flush of contaminants is washed from surfaces.

Not all planned samples were collected because there was sometimes insufficient water depth in the drain for the automated sampler to be able to pump or the intake to the sample line was clogged with debris.

Analytical Methods

Samples collected during stormwater sampling events were analyzed for PCB Aroclors, metals, and total suspended solids (TSS) in the laboratory. Prior to sending the samples to the lab, the pH and conductivity of the samples were measured. A brief description of the methods used to analyze metals and PCBs is included below. More detailed information is available in the Stormwater Field Sampling Plan (ENSR 2004) and the project QAPP (Jacobs 2005).

- PCBs: The concentrations of seven Aroclors (Aroclors 1016, 1221, 1232, 1242, 1248, 1254, and 1260) were measured using USEPA method 8082. Total PCB concentrations were calculated by summing individual Aroclor concentrations. When individual Aroclor concentrations were less than the laboratory reporting limit, a value of half the reporting limit was used in the summation calculation.

- Target Analyte List Metals: The total concentrations of the 17 target analyte list metals were measured using USEPA method 6020.

B.2.2 Results

The specific conductivity of samples from the stormwater system ranged from below detection to 10.60 milliSeimens/centimeter (mS/cm) (Table B-1). Baseflow samples generally had higher conductivity than stormwater samples (Table B-1). The majority of stormwater samples had conductivities below detection. The highest conductivity measured in stormwater was 3.10 mS/cm. The conductivity of the baseflow samples ranged from 0.20 to 10.60 mS/cm (Table B-1).

TSS concentrations in stormwater ranged from less than 4 mg/L to 71 mg/L, with most TSS concentrations less than 10 mg/L (Table B-2). These relatively low values suggest that significant loads of solids were not carried by stormwater during the two storm events that were sampled.

PCB concentrations in the stormwater and baseflow samples ranged from 0.14 to 12.8 µg/L (Table B-3). The highest measurements were obtained in first flush stormwater samples from SW-03 (12.8 µg/L) and in baseflow at locations SW-02 (8.6 µg/L) and SW-03 (5.8 µg/L) (Table B-3).

In most cases, metals concentrations were higher in stormwater than baseflow. Copper and zinc had elevated concentrations in many baseflow and stormwater samples. Copper concentrations ranged from 4.8 to 50.2 µg/L; zinc concentrations ranged from 35.3 to 1,880 µg/L (Table B-4). Total concentrations of the following metals were below the ambient water quality criteria for the dissolved form of the metal in all samples: arsenic, cadmium, mercury, nickel, selenium, and silver.

B.3 GROUNDWATER

Groundwater wells at the Aerovox site had not been sampled since 1998; therefore, ENSR conducted a survey of groundwater elevations and groundwater quality in 2005 to provide an up to date data set. First the wells were located, sounded, and re-developed. The surveys consisted of sampling water from the 13 wells on the aerovox site, taking static groundwater elevation measurements and deploying continuously recording water level meters in monitoring wells and the harbor. The objective of these surveys was to obtain information to support an analysis of the potential transport of PCBs from the Aerovox site through groundwater.

B.3.1 Methods

Well Development

Wells were re-developed to remove sediments and debris that had accumulated since they were last developed. During development, surging and pumping were done by hand with the Watera® apparatus and a Shurflo® diaphragm pump. Turbidity was monitored after every 3-5 gallons were pumped from the wells. Each of the 13 wells was purged until the turbidity of the water being withdrawn from the wells was consistently low. In general, approximately 1 hour of low-flow pumping was required to reach steady-state conditions at each of the wells. The development of the groundwater wells was completed approximately 1 month prior to the actual sampling of the wells.

Water-Level Measurements

ENSR measured continuous and static water-levels in 2005. Continuous water levels were measured using a miniTROLL® in-situ pressure transducers. Transducers were deployed in the Harbor, and in a well in the upper aquifer and a well in the lower aquifer from May 10, 2005 to May 24, 2005. Static groundwater levels were measured using a water level tape during water quality sampling.

Sampling

ENSR collected water quality samples from 13 existing wells on the Aerovox property on September 13 and 14 2005 (Figure B-4). Ten of the wells are paired, with one in the surface aquifer the other extending into the deeper aquifer. Wells were sampled using a stainless steel bladder pump with a Teflon® bladder. Water was pumped to the surface through a ¼" Teflon® tube where it was routed through a YSI® multi-meter connected to a flow-through cell for real-time determination of water quality parameters (temperature, pH, and specific conductance). Turbidity measurements were made during well purging using a LaMotte turbidity meter.

Analysis

Groundwater samples collected from each of the 13 wells at the Aerovox facility were analyzed for TSS, 58 different volatile organic compounds (VOCs), and PCB Arocolors. The analytical methods are summarized below. More information on these methods is available in the project QAPP (Jacobs 2005).

- The concentrations of seven Arocolors (Aroclors 1016, 1221, 1232, 1242, 1248, 1254, and 1260) were measured using USEPA method 8082. Total PCB concentrations were calculated by summing individual Aroclor concentrations. When individual Aroclor concentrations were less than the laboratory reporting limit, a value of half the reporting limit was used in the summation calculation.

- The concentrations of 58 VOCs were measured using USEPA method 8260B.

B.3.2 Groundwater Level Monitoring Results

Upper System

Groundwater levels measured during water quality sampling in the upper aquifer ranged from 2.61 feet to 3.16 feet (Wells MW-2A, MW-3A, MW-4A, MW-6A, and MW-7A in Figure B-5). Water levels were highest in the area bounded by the sheet piling cutoff wall. Lower water levels were measured outside this area and to the west (Figure B-5). Groundwater flow in the upper aquifer in the region bounded by the sheet piling wall and building foundation (wells MW-3A, MW-4A, and MW-7A in Figure B-5) is unlikely to be significant. Outside of this area, the spatial distribution of groundwater levels in the upper aquifer is insufficient to describe groundwater flow patterns (Figure B-5).

Continuous groundwater level monitoring results indicate that the upper aquifer is isolated from the harbor by the sheet piling cutoff wall. Groundwater elevations in the upper harbor do not appear to be influenced by tidal changes in the water levels in the Harbor (Figure B-6).

During the much of the monitoring period the elevation of groundwater in the upper aquifer gradually decreased. However, after a rainfall event on May 18, a small increase in groundwater elevation occured. This may indicate that some of the rainfall from this event infiltrated through cracks in the pavement and re-charged the perched aquifer. After approximately May 21, the groundwater elevation increases slightly, possibly due to rainfall events on May 21, 23, and 24 or due to slight infiltration from the harbor during very high tides (Figure B-6).

Lower System

Water levels measured during water quality sampling indicate that groundwater flow is generally from the northwest towards the harbor (Figure B-6). Water levels in the three wells in the western portion of the site were highest in the northwestern corner of the property and decreased towards the Harbor. Water levels in wells in the eastern portion of the site were influenced by tide stage in the harbor and therefore are not useful for assessing the general direction of groundwater flow in the lower aquifer.

Groundwater elevations in the lower aquifer were 0.7 to 2.1 feet lower in the deep aquifer than the shallow aquifer in the wells east of the manufacturing building (Figure B-6). This indicates that in this portion of the property the upper aquifer is isolated from the lower aquifer. In wells MW-6 and MW-6A, the difference between the upper and lower aquifer was much less suggesting the lower and upper aquifer are not as isolated from one another in this region of the property (Figure B-6).

The water level measurements recorded by the continuously recording water level meters indicate that the water levels in the lower aquifer are directly affected by the tide stage in the harbor. Water levels measured at well 7 in the deeper aquifer varied by 1 to 2 feet (peak to trough) with the same frequency and direction as the waters of New Bedford Harbor (Figure B-6).

B.3.3 Groundwater Quality Monitoring Results

There were no strong spatial trends in the basic water quality parameters (TSS, pH, temperature, and salinity) except for temperature. Groundwater temperatures were lower in deep wells than in shallow wells (Table B-5). In the lower aquifer temperatures ranged from 15 to 21 °C. In the upper aquifer temperatures ranged from 19-30 °C (Table B-5). Total suspended solids (TSS) concentrations ranged from 2.7 mg/L to 32 mg/L. Specific conductivity ranged from 130 mS/cm to 5,300 mS/cm (Table B-5). Groundwater pH values varied from 4.58 to 6.94 S.U. (Table B-5). Turbidity ranged from 2.7 to 32 Nephelometric Turbidity Units (NTU) (Table B-5). A petroleum odor was noticeable at most wells and in some cases oil sheens were observed (Table B-5).

PCBs were detected in 7 of the 13 groundwater samples (Table B-6). The highest total PCB concentration measured was 35.40 µg/L at well MW-6. The next highest measurement was significantly lower (4.53 µg/L in well MW-4A)(Table B-6). Wells in the northwestern corner of the property had higher PCB concentrations than the rest of the property (Figure B-7). Data on the concentrations of individual Aroclors in these samples are in Table F-3 of Appendix F.

The results for VOCs are dominated by six compounds. Concentrations of 37 of the 57 VOC compounds were below the detection limit (5 µg/L) in groundwater from all wells. The VOCs detected are dominated by the following: 1,3-dichlorobenzene, 1,4-dichlorobenzene, chlorobenzene, cis-1,2-

dichloroethane, vinyl chloride, and trichloroethane. The highest VOC concentrations were measured in well MW-7 and MW-8S (Table B-7). Chlorobenzene in groundwater from MW-2 was the only VOC detected above the MCP [310 CMR 40.0974(2)] GW-3 standard. The complete VOC groundwater data set is available in Table F-4 of Appendix F.

B.4 REFERENCES

ENSR 2004. Field Sampling Plan Addendum New Bedford Harbor Superfund Site. Attachment 9. Aerovox Stormwater Sampling. September 2004.

ENSR 2005. Field Sampling Plan for Groundwater Sampling at Aerovox Facility. Summer 2005. New Bedford Harbor Superfund Site – New Bedford, Massachusetts

Jacobs Engineering 2005. Quality Assurance Program Plan. New Bedford, Harbor, Massachusetts. May 2005.

Table B-1. Stormwater Specific Conductivity

Drainage Locations	Station	Month	Specific Conductivity (mS/cm)		
			Baseflow	Stormwater First Flush	Stormwater Steady State
Subsurface Drainage	SW-02	Sep-04	0.20	0.30	0.20
		May-05	0.30	--	--
	SW-03	Sep-04	4.00	0.10	<0.1
		May-05	4.40	0.10	--
	SW-09	Sep-04	--	<0.1	<0.1
		May-05	--	--	--
	SW-12	May-05	0.80	--	--
	SW-13	Sep-04	1.70	0.10	<0.1
		May-05	10.60	--	--
Surface Drainage	SW-10	Sep-04	--	<0.1	<0.1
		May-05	--	<0.1	--
	SW-11	Sep-04	--	<0.1	3.10
		May-05	--	--	--

Table B-2. TSS Concentrations in Stormwater

Drainage Locations	Sampling Station	Month Year	Total Suspended Solids (mg/L)		
			Baseflow	Stormwater First Flush	Stormwater Steady State
Subsurface Drainage	SW-02	Sep-04	<4	<4	<4
		May-05	<4	--	--
	SW-03	Sep-04	13	71	10
		May-05	14	<4	--
	SW-09	Sep-04	--	7.2	<4
		May-05	--	--	--
	SW-12	May-05	<4	--	--
	SW-13	Sep-04	<4	<4	<4
		May-05	9.6	--	--
Surface Drainage	SW-10	Sep-04	--	5.2	<4
		May-05	--	<4	NS
	SW-11	Sep-04	--	<4	<4
		May-05	--	--	--

Table B-3. Total PCB Concentrations in Stormwater

Drainage Locations	Sampling Station	Month Year	PCB Concentrations (ug/L)		
			Baseflow	Stormwater First Flush	Stormwater Steady State
Subsurface Drainage	SW-02	Sep-04	8.6	0.67	0.60
		May-05	2.5	--	--
	SW-03	Sep-04	5.8	12.8	3.5
		May-05	0.82	0.85	--
	SW-09	Sep-04	--	0.14	0.14
		May-05	--	--	--
	SW-12	May-05	2.61	--	--
	SW-13	Sep-04	3.9	0.14	0.14
		May-05	1.6	--	--
Surface Drainage	SW-10	Sep-04	--	4.7	3.6
		May-05	--	1.3	--
	SW-11	Sep-04	--	0.14	0.14
		May-05	--	--	--

Table B-4. Metals Concentrations in Stormwater and Baseflow Samples taken in September 2005 (concentrations in ug/L)

Station	Sample Type	Aluminum[1]	Antimony[1]	Arsenic[1]	Barium[1]	Beryllium[1]	Cadmium[1]	Calcium[1]	Chromium[1]	Cobalt[1]	Copper[1]	Iron[1]	Lead[1]
SW-02	Baseflow	30.9*	0.96*	<3	6.7	<0.05	0.17*	3,630	9.6	0.32*	34.4	158	9.4
	First Flush	30.8*	0.77*	<3	4.5	<0.05	0.1*	3,070	2.6*	0.23*	23.5	132	14.2
	Steady State	19.8*	0.73*	<3	4.8	<0.05	0.12*	2,500	2.6*	0.2*	29.8	113	10.4
SW-03	Baseflow	46*	1.1	<3	115	<0.05	0.1*	23,900	6.3	0.63*	19.3	2,150	10.1
	First Flush	560	1.1	<3	17.6	<0.05	0.24*	3,180	6.5	0.66*	50.2	1,430	89.7
	Steady State	133*	0.74*	<3	6.6	<0.05	0.07*	1,710	3.7	0.22*	16.2	233	22.5
SW-09	First Flush	165*	0.72*	<3	5.2	<0.05	0.46*	1,390	2.7*	0.31*	7.7	155	13.4
	Steady State	79.6*	0.6*	<3	3.6	<0.05	0.3*	1,340	1.4*	0.18*	4.8	67.7*	3.7
SW-10	First Flush	93.8*	0.77*	3.6*	9.6	<0.05	0.21*	1,790	3.8	0.36*	29.3	163	22.7
	Steady State	52.2*	0.97*	4.8*	7.3	<0.05	0.21*	1,670	3.7	0.32*	23.5	69.1*	7.8
SW-11	First Flush	25.6*	1.2	<3	4.8	<0.05	0.27*	1,380	1.7*	0.35*	32	92.7*	13.5
	Steady State	30*	1.4	3.3*	9.5	<0.05	0.28*	26,600	1.9*	0.46*	35.2	420	11.8
SW-12	Baseflow	28.2*	1.1	<3	101	<0.05	0.09*	27,900	6	0.53*	15.5	1,770	4.6
SW-13	Baseflow	89*	0.58*	<3	9.3	<0.05	0.22*	43,600	5.6	0.39*	8.4	284	6.6
SW-City Outfall	Baseflow	67*	0.73*	4.4*	24.7	<0.05	0.1*	109,000	3*	0.7*	22.6	828	5.2

Station	Sample Type	Mangnesium[1]	Manganese[1]	Mercury	Nickel[1]	Potassium[1]	Selenium[1]	Silver[1]	Sodium[1]	Thallium[1]	Vanadium[1]	Zinc[1]	
SW-02	Baseflow	4,130	11.8	<0.01	3.1	1,650	2.4*	<0.05	29,000	1.8*	14.5	628	
	First Flush	6,800	8	<0.02	2.6	2,160	2.3*	<0.05	51,600	0.27*	6.3	538	
	Steady State	4,160	7.4	<0.03	2.4	1,600	4.4*	<0.05	35,200	0.22*	6.4	518	
SW-03	Baseflow	46,500	131	<0.01	3	18,700	1.8*	<0.05	408,000	0.77*	7.6	364	
	First Flush	4,720	28.2	<0.02	5.4	1,800	1.7*	0.07*	38,400	0.2*	13.7	633	
	Steady State	1,660	11.5	<0.02	2.1	932*	2.5*	<0.05	15,000	<0.15	6	377	
SW-09	First Flush	335	14	<0.02	2.7	538*	<1.4	<0.05	2,000	<0.15	5.6	223	
	Steady State	299	7.8	<0.03	1.7	502*	<1.4	0.05*	1,950	0.28*	4.2*	180	
SW-10	First Flush	439	12.9	<0.03	3.7	582*	1.6*	0.07*	1,990	0.18*	9.3	605	
	Steady State	377	13.7	<0.03	3	588*	<1.4	<0.05	1,780	2.3	13.9	582	
SW-11	First Flush	584	10.1	<0.03	3.9	495*	<1.4	<0.05	4,860	2.7	9.8	1,880	
	Steady State	77,600	28.1	<0.02	4.6	24,300	2.3*	<0.05	612,000	1.2*	10.9	1,750	
SW-12	Baseflow	53,600	129	<0.01	2.9	23,100	2.2*	<0.05	487,000	0.45*	6.4	312	
SW-13	Baseflow	130,000	19.8	<0.01	3.9	40,100	3.7*	<0.05	1,010,000	0.27*	12.1	309	
SW-City Outfall	Baseflow	318,000	82.8	<0.03	4.4	101,000	5.3	0.07*	2,730,000	0.38*	2.6*	35.3	

[1]Samples run at secondary dilution factor

*Indicates that the result was below the reporting limit but above the instrument detection limit.

Table B-5. Groundwater Quality Results

	Well ID	Sampling Depth Below Grade (ft)	TSS (mg/L)	Temp (°C)	Specific Conductivity (mS/cm)	pH (S.U.)	Turbidity (NTU)	Observation Notes
Shallow Aquifer	MW-2A	-4.6	20	30	970	6.87	4.5	Clear with slight petroleum odor, sheen.
	MW-3A	-5.9	26	26	1,500	6.70	5.4	Clear with slight petroleum odor, sheen.
	MW-4A	-8.6	--	30	240	5.55	6.8	Slight petroleum odor.
	MW-6A	-9.7	12	19	130	5.67	--	Light gray, no odor.
	MW-7A	-7.0	28	26	5,300	6.90	--	Slight petroleum odor, sheen.
	MW-8S	-5.2	19	25	2,000	6.94	12	Clear, very strong H2S odor, no sheen.
Lower Aquifer	MW-2	-14.2	7.6	21	1,600	6.30	11	Clear with slight petroleum odor, sheen.
	MW-3	-11.5	32	24	1,800	6.80	7.3	Clear with slight petroleum odor, sheen.
	MW-4	-16.9	16	20	650	5.45	6	Slight petroleum odor.
	MW-4B	-24.9	< 4	23	1,500	4.58	4.1	Clear with no odor.
	MW-5	-16.8	8.8	17	1,300	5.32	32	Cloudy, light brown.
	MW-6	-26.7	< 4	15	2,300	5.44	2.7	No color, no odor.
	MW-7	-14.6	< 4	17	1,300	6.45	--	Clear with slight petroleum odor, sheen.

Table B-6. Total PCB Concentrations in Groundwater

	Well ID	Total PCB Conc.[1] (ug/L)
Shallow Aquifer	MW-2A	< 0.35
	MW-3A	0.62
	MW-4A	4.53
	MW-6A	2.35
	MW-7A	< 0.35
	MW-8S	4.43
Lowert Aquifer	MW-2	< 0.35
	MW-3	< 0.35
	MW-4	< 0.35
	MW-4B	2.05
	MW-5	< 0.35
	MW-6	35.40
	MW-7	0.91

[1]Total PCBs are calculated as the sum of 7 Aroclors. When individual Aroclor concentrations were below the laboratory reporting limit, a value of half the reporting limit was used in the summation calculation.

< indicates below detection limit

Table B-7. Summary of Groundwater VOC Concentrations

Well ID	Date	Type	Deep/ Shallow	TSS (mg/L)	T_VOC[1] (ug/L)	DL[2] (ug/L)	Elevated Constituents	GW-3[3] (ug/L)	Component[4]
MW-2	9/14/2005	Sample	Deep	7.6	1,115	276	1,3-DICHLOROBENZENE = 150 UG/L / 1,4-DICHLOROBENZENE = 170 UG/L / CHLOROBENZENE = 660 UG/L	8,000 8,000 500	88%
MW-2A	9/14/2005	Sample	Shallow	20	217	276	-----	-----	-----
MW-3	9/14/2005	Sample	Deep	32	662	276	CHLOROBENZENE = 460 UG/L	500	69%
MW-3A	9/14/2005	Sample	Shallow	26	636	276	CHLOROBENZENE = 450 UG/L	500	71%
MW-4	9/13/2005	Sample	Deep	16	1,228	276	1,4-DICHLOROBENZENE = 200 UG/L / CIS-1,2-DICHLOROETHENE = 230 UG/L / VINYL CHLORIDE = 550 UG/L	8,000 50,000 40,000	90%
MW-4A	9/14/2005	Sample	Shallow		143	276	-----	-----	-----
MW-4B	9/14/2005	Sample	Deep	< 4	6,049	276	TRICHLOROETHENE = 5600 UG/L	20,000	93%
MW-5	9/15/2005	Sample	Deep	8.8	135	276	-----	-----	-----
MW-6	9/13/2005	Sample	Deep	< 4	3,361	276	TRICHLOROETHENE = 2800 UG/L	20,000	83%
MW-6A	9/13/2005	Sample	Shallow	12	296	276	TRICHLOROETHENE = 140 UG/L	20,000	47%
MW-7	9/13/2005	Sample	Deep	< 4	16,080	276	CIS-1,2-DICHLOROETHENE = 3400 UG/L / TRICHLOROETHENE 12000 UG/L	50,000 20,000	96%
MW-7A	9/13/2005	Sample	Shallow	28	165	276	-----	-----	-----
MW-8S	9/14/2005	Sample	Shallow	19	22,544	276	CIS-1,2-DICHLOROETHENE = 16000 UG/L / VINYL CHLORIDE 6200 UG/L	50,000 40,000	98%

[1]Total VOCs were calculated using half the laboratory reporting limit for compounds that were not detected.
[2]Detection limit for TVOCs. Calculated as the sum of the individual detection limits for all VOCs.
[3]Massachusetts groundwater GW-3 standard.
[4]Percentage of TVOCs attributed to the elevated constituents

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Figure B-1: Aerovox Site with Stormdrain Network and Drainage Zones Indicated

ENSR | AECOM

Sources:MassGIS 2-m orthophotos
NAD 83 Mass State Plane m
ME scale 1:35000
Figure Generated: 23 January 2006 (KRD)

Feet
0 50 100 200

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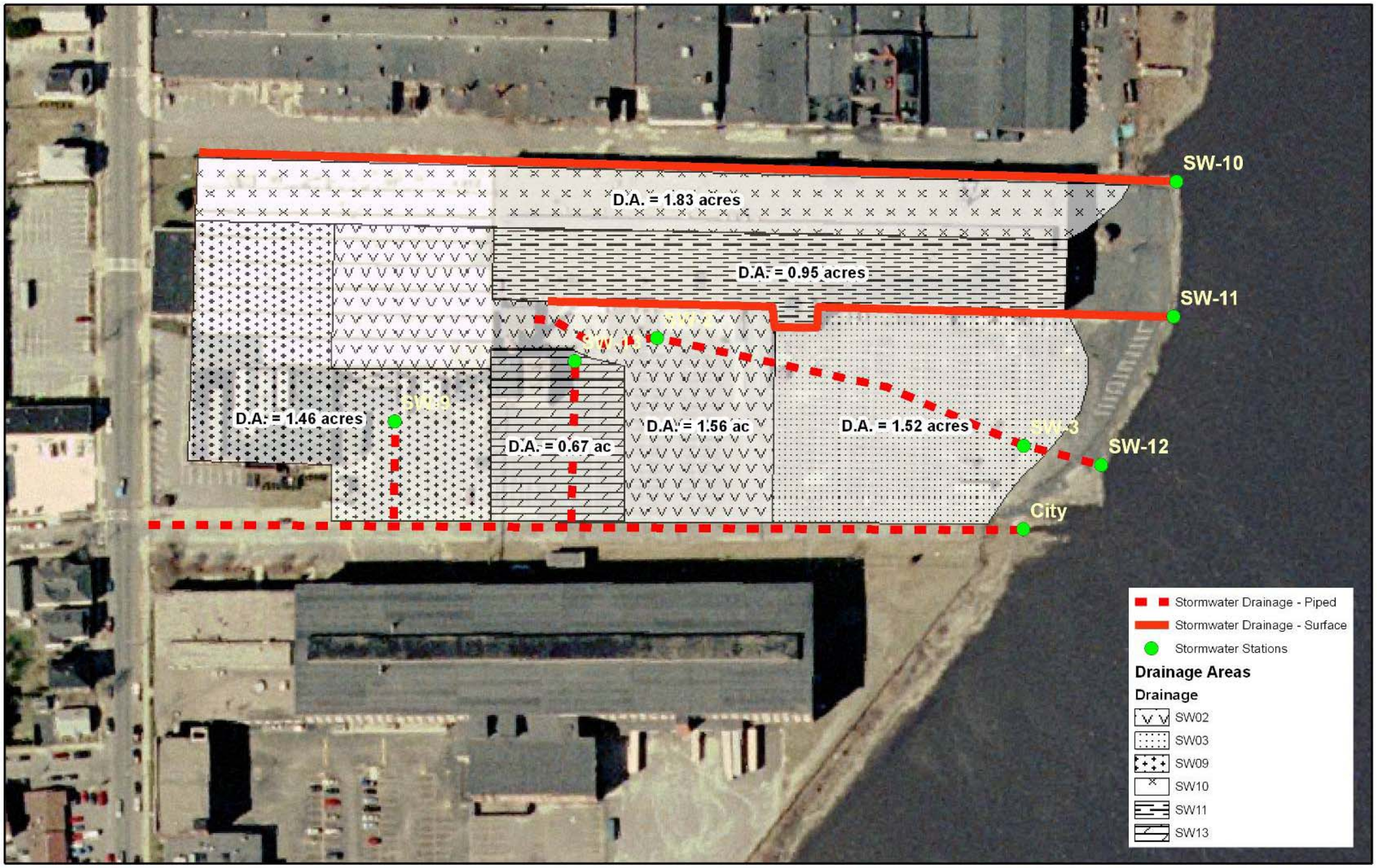

Figure B-2: Aerovox Site with Stormdrain Network and Areas of Drainage Zones Indicated

ENSR | AECOM

Sources:MassGIS 2-m orthophotos
NAD 83 Mass State Plane m
ME scale 1:35000
Figure Generated: 23 January 2006 (KRD)

Feet
0 50 100 200

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a) Drainage Trough along South Side of Building

b) Discharge Point of Drainage Trough (SW-11 in Figure 2-1)

Figure B-3. Photographs of Aerovox Surface Drainage System

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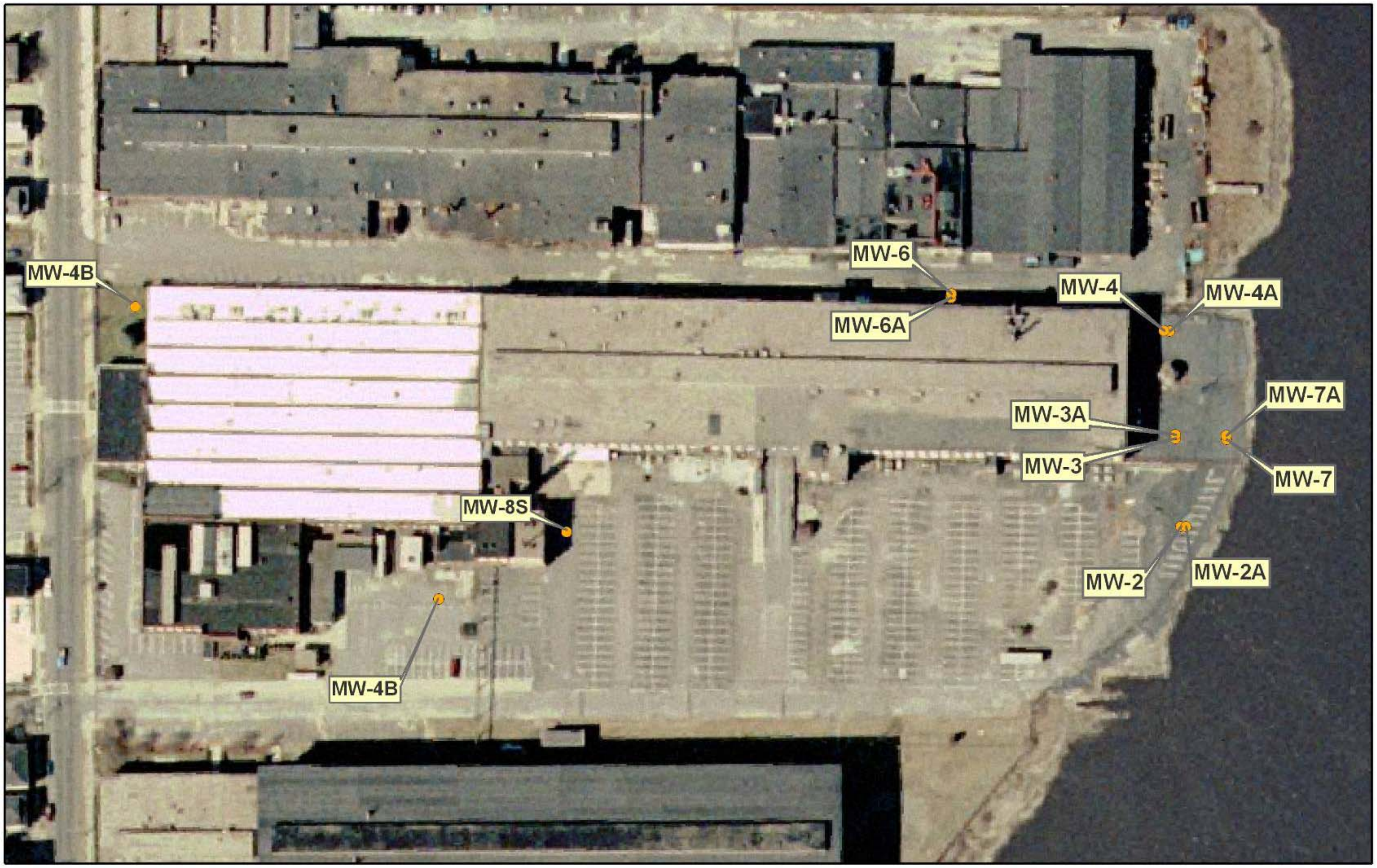

Figure B-4: Groundwater Monitoring Wells

ENSR | AECOM

Sources:MassGIS 2-m orthophotos
NAD 83 Mass State Plane m
ME scale 1:35000
Figure Generated: 23 January 2006 (KRD)

Feet
0 50 100 200

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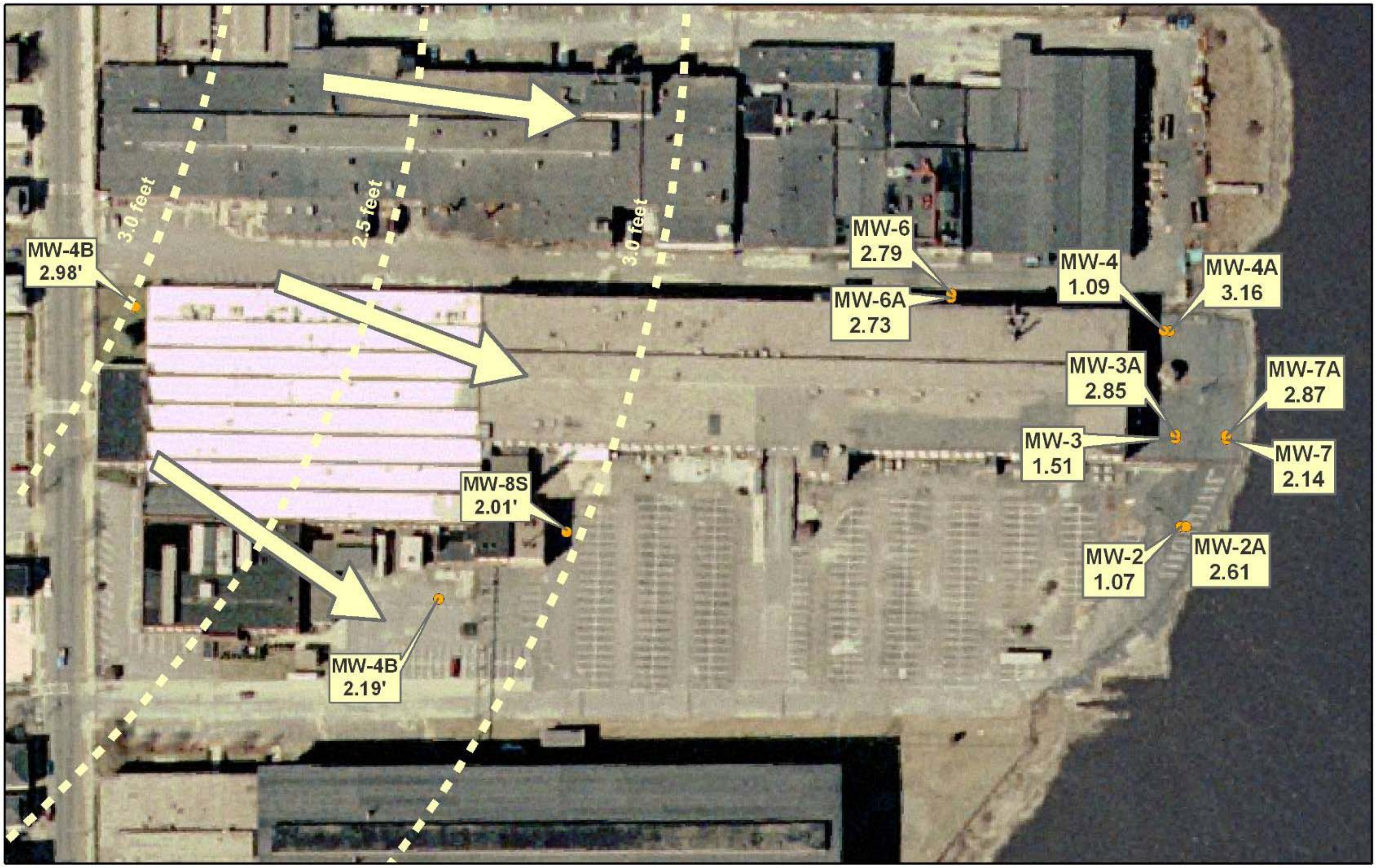

Figure B-5: September 15, 2005 Groundwater Elevations and Estimated Groundwater Flow Direction

ENSR | AECOM

Sources:MassGIS 2-m orthophotos
NAD 83 Mass State Plane m
ME scale 1:35000
Figure Generated: 23 January 2006 (KRD)

Feet
0 50 100 200

Elevations in feet relative to mean sea level (MSL)

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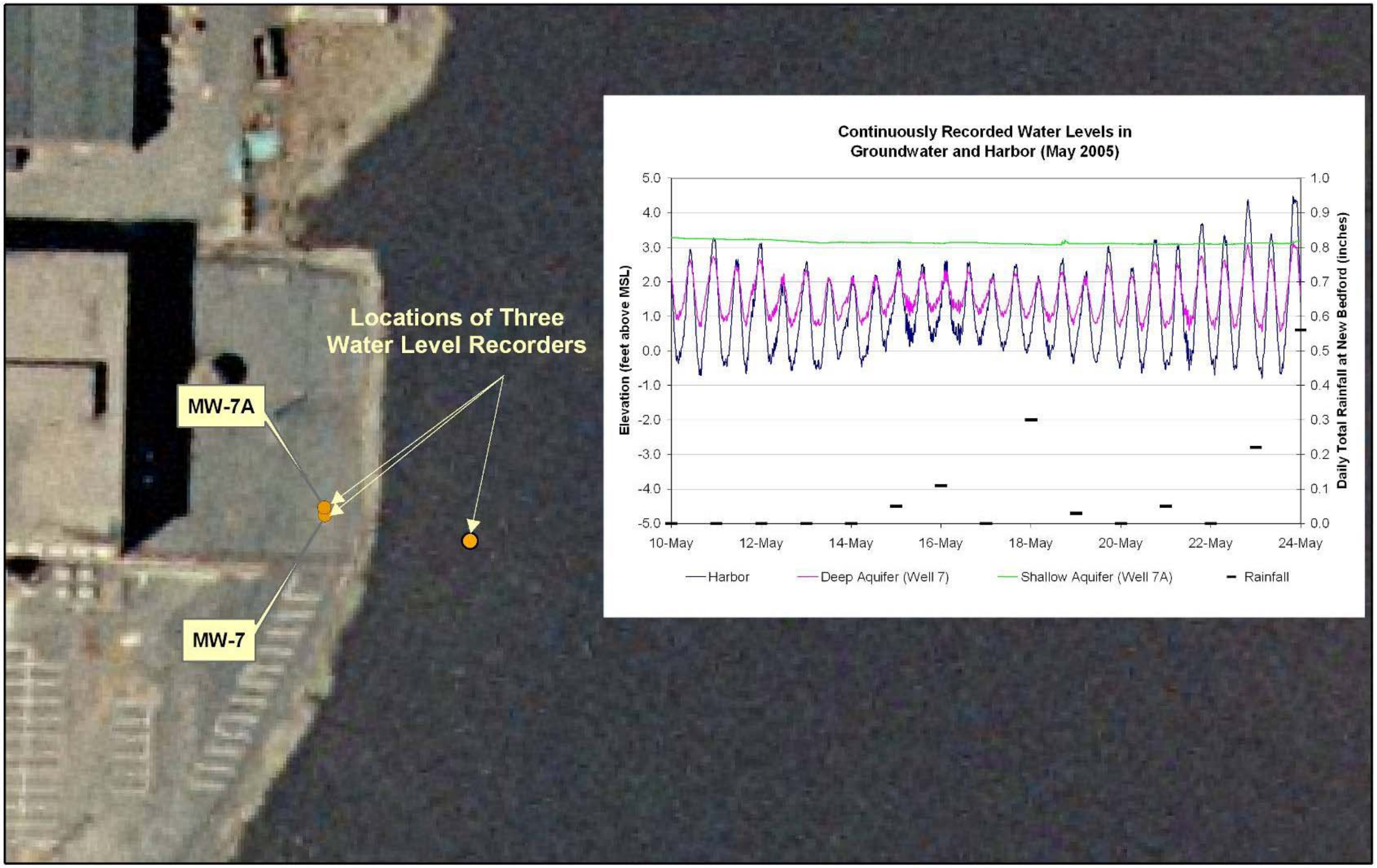

Figure B-6: Continuously Recorded Groundwater Elevations

ENSR | AECOM

Sources:MassGIS 2-m orthophotos
NAD 83 Mass State Plane m
ME scale 1:35000
Figure Generated: 23 January 2006 (KRD)

0 50 100 200 Feet

J:\Water\ProjectFiles\P90\9000NBH\Task_1400_Aerovox_CSM\figures_jpgs\Figure_B-6.mxd

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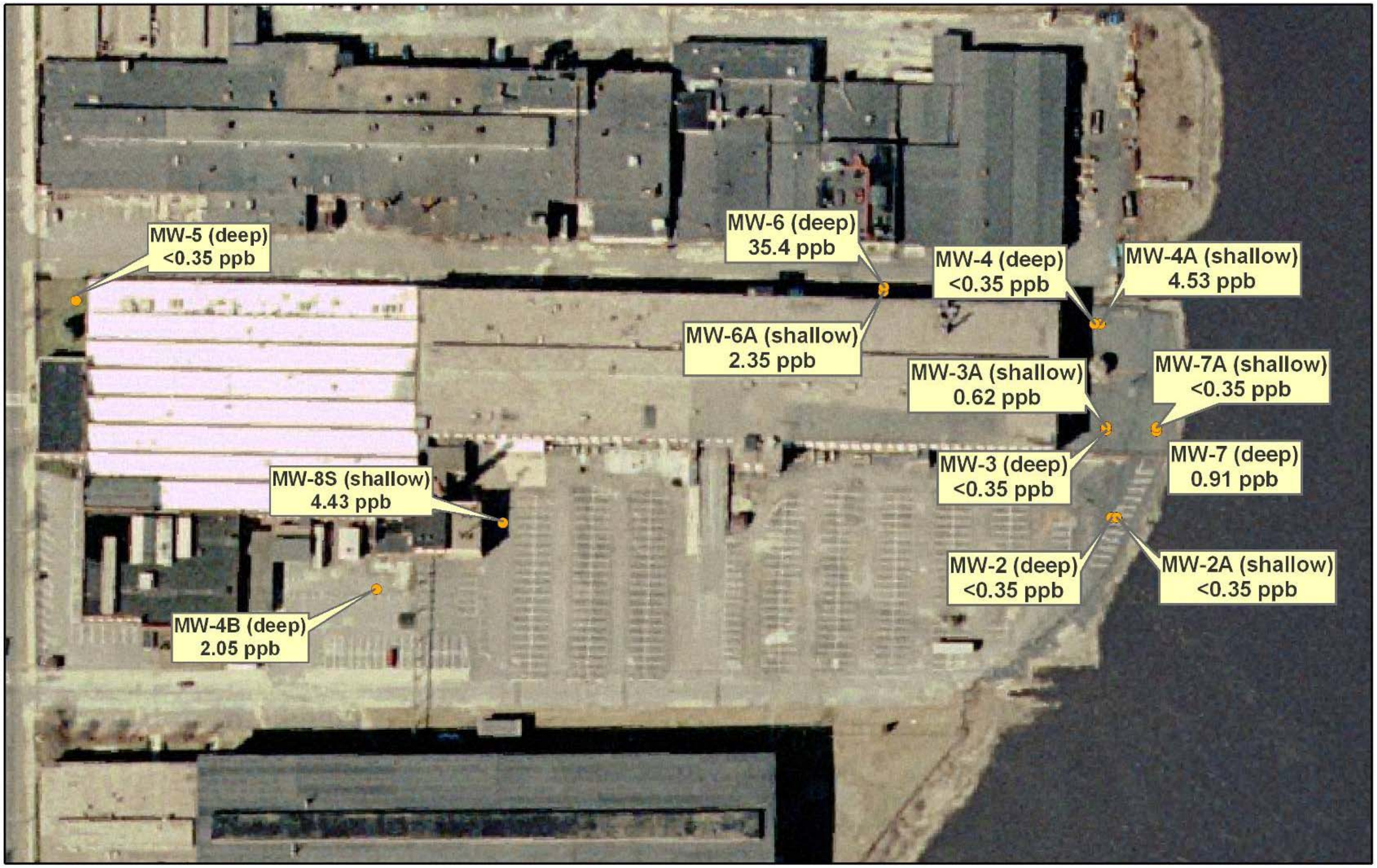

Figure B-7: September 15, 2005 Groundwater Total PCB Concentrations

ENSR | AECOM

Sources:MassGIS 2-m orthophotos
NAD 83 Mass State Plane m
ME scale 1:35000
Figure Generated: 23 January 2006 (KRD)

Feet
0 50 100 200

Elevations in feet relative to mean sea level (MSL)

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EXECUTIVE SUMMARY

The Aerovox site consists of a rectangular 10 acre plot in New Bedford, MA, directly abutting the waters of Upper New Bedford Harbor. Originally developed in the early 1900's, Aerovox Inc. occupied the site from 1938 through 2001 and used polychlorinated biphenyls (PCBs) in the manufacture of electrical components there from 1947 to 1978. During this period, PCBs used in the manufacturing were released within the building and on the site as well as to the municipal sanitary system and the adjacent harbor, resulting in extensive contamination of the building, the overall site, and harbor sediments. Based on the extent of contamination and concerns of risk to human health and the environment, New Bedford Harbor was added to the National Priorities List in 1983 as a designated Superfund site.

The evaluation presented in this report was performed to assess the ongoing potential for site-related PCBs to be transported to the adjacent harbor. The evaluation included a review of historical investigations that were performed to characterize the contamination at the site. Based on this review a conceptual site model was developed identifying the various pathways for PCB mass flux from the site. A focused investigation was also performed to provide more recent data on PCB concentrations in the groundwater beneath the site and stormwater discharged from the site as input to the mass flux assessment.

Based on a review of historical sampling at the site, the mass of PCBs in the soils beneath the site was estimated at over 100,000 kg. Although not quantified, a large mass of PCBs is also expected to be contained within the building structure and contents. Four pathways were identified for potential transport of PCBs from the site to the harbor: stormwater drainage, groundwater discharge, migration of separate phase oil (DNAPL), and airborne transport. DNAPL migration and airborne transport were not considered to be significant transport mechanisms at present, but could increase in potential with deterioration of the building roof and outer shell and paved areas (for airborne transport) and with deterioration of the sheet-pile barrier that currently exists between the site and the harbor (DNAPL migration).

The current PCB mass flux into the harbor through the stormwater system at the site was estimated at less than 0.5 kg/year under current conditions at the site. This low value is attributed to the limited contact that precipitation has with contaminated material given that the majority of the site is occupied by the building and paved or capped open space. The mass flux via the stormwater pathway could increase significantly with deterioration of the building roof and outer shell as well as deterioration of the paved surfaces allowing precipitation falling over the site expanded contact with contaminated materials.

The mass flux of PCBs transported with the groundwater discharging to the harbor was also estimated at less than 0.5 kg/year under current conditions at the site. This relatively low value is partially attributed to the sheet-pile barrier wall installed as a barrier to connection of the shallow groundwater

system with the harbor and partially attributed to the low solubility of PCBs in water. Although changes in site conditions could cause short term increases in the mass flux through the groundwater pathway, the discharge of groundwater with low concentrations of PCBs is expected to persist for an extended period of time (decades or longer).

1.0 INTRODUCTION

This report provides a summary of available information regarding polychlorinated biphenyl (PCB) contamination present at the Aerovox site which abuts the New Bedford Harbor Superfund Site. Existing site data were reviewed, and a limited investigation was performed to provide additional information on stormwater runoff from the site and groundwater beneath the site. The combined historical and new data were used to provide a screening-level assessment of potential loss of PCBs from the site to the adjacent waters of New Bedford Harbor.

1.1 Introduction to the Aerovox Site

The Aerovox site consists of a nearly rectangular 10 acre plot in New Bedford, MA, directly abutting the waters of Upper New Bedford Harbor (Figure 1-1). The entire site is developed, with approximately 40% building and 60% parking area or paved open space (Figure 1-2). Originally developed in the early 1900's, Aerovox, Inc. purchased the site in 1938 and used PCBs in the manufacture of capacitors there from 1947 to 1978. PCBs used in manufacturing were released within the building and on the site as well as to the municipal sanitary system and the adjacent harbor, resulting in extensive contamination of the building, the overall site, and harbor sediments (USEPA, 1998). Based on the extent of contamination and concerns of risk to human health and the environment, the site was added to the Superfund National Priorities List in 1983.

The Aerovox site is nearly flat, sloping gently from west to east; the western edge of the property is approximately 14 feet above mean sea level (MSL), dropping to 4-7 feet above MSL along the harbor (BBL, 1998a). The developed portion of the site consists of two large, adjoining brick buildings and several smaller buildings (Figures 1-2, 1-3). The remainder of the site is asphalt paved parking area or paved open space. The site is bounded by industrial development to the north and south, residential and commercial development to the west and the harbor to the east.

Investigations performed in the 1980's and 1990's identified PCB contamination throughout much of the building, in the soils and groundwater beneath the site, and in the surrounding harbor sediments (Gushue and Cummings, 1984; Ebasco, 1989; BBL, 1998a). Remediation activities already performed at the site include the installation of an impermeable cap and sheet-pile cutoff wall along the harbor in 1984 and removal of fuel oil storage tanks in 1988 and surrounding petroleum-contaminated soils in 1990 (BBL 1998a). Dredging of harbor sediments is ongoing as part of remediation of the New Bedford Harbor Superfund Site.

1.2 Conceptual Site Model for Off-Site PCB Transport

The PCB contamination at the Aerovox site potentially serves as a long-term source of contamination to the adjacent harbor. PCB sources include the building itself (with PCB saturated flooring and walls as well as surfaces covered with dust or oil film), the paved parking/open space areas (with PCB contaminated dust or films on the surface or with PCBs impregnated into the asphalt), and the unsaturated and saturated soils beneath the site (with PCBs bound to soil particles, dissolved in interstitial pore water, or present as a separate phase liquid (oil)). With exposure to the environment, PCBs can be mobilized from each of these sources and transported away from the site and into the harbor. Figure 1-4 provides a schematic diagram of the Aerovox site showing the potential pathways for PCB migration. These potential pathways include:

- Runoff of Contaminated Precipitation – Precipitation falling over the site can pick up PCB contamination on the roof and outer surfaces of the building as well as on the paved open space. PCBs can then be mobilized by the rain water or melting snow or ice and transported bound to particulate or dissolved within the water. A limited amount of runoff occurs directly from the open space into the harbor (pathway 1 in Figure 1-4), but the majority of precipitation is collected into open channel or below grade drainage systems that lead to the harbor (pathway 2 in Figure 1-4).
- Migration of Contaminated Groundwater – Although much of the surface of the site is covered with impervious surface, precipitation that infiltrates through cracks and joints in the pavement can pick up PCB contamination as it moves through the unsaturated zone. This contamination, primarily in the dissolved phase, can be transported to the water table and incorporated into the groundwater system. More importantly, there is still groundwater flow beneath the site in spite of the impervious surface cover. This flow is generally oriented from the west to the east with discharge to the harbor. Hence, as clean groundwater crosses beneath the site, it can pick up PCB contamination, primarily in the dissolved phase. Contaminated groundwater can discharge directly to the near-shore harbor from the upper aquifer (pathway 3 in Figure 1-4) although it has been restricted with the installation of the sheet-pile cut-off wall along the harbor. Contaminated groundwater can also discharge to the harbor after entering the below-grade stormwater collection system where it intersects the water table (pathway 2 in Figure 1-4). Contaminated groundwater in the lower aquifer system is expected to discharge further out into the harbor (pathway 4 in Figure 1-4).
- Migration of PCB Oil – The historical release of separate phase PCB oil within the building and the surrounding area likely resulted in residual contamination of the soils beneath the site (pockets of oil filling in portions of the interstitial pore space between soil grains) as well as the potential for pools of oil residing above zones of lower permeability material. As the density of the PCB mixtures used at the site was greater than that of water (PCBs are classified as a dense non-aqueous phase liquid or DNAPL), PCB oils that historically drained through the soil could have continued a downward migration below the water table, potentially pooling above bedrock or the zone of low permeability peat identified beneath the site (confining layer in Figure 1-4) and moving laterally along the rock or peat layer. Given the length of time since PCB use was active at the Aerovox facility, any PCBs in the

form of DNAPL are expected to be in stable configuration, contributing to groundwater contamination (pathways 3 and 4 in Figure 1-4), but not actively migrating off site.

- Atmospheric Transport – Transport of PCBs in air occurs either by wind-induced transport of dust or debris with bound PCBs or by volatilization and gas-phase transport (pathway 5 in Figure 1-4).

This summary report was prepared with the goal of developing a conceptual site model of PCB fate and transport for the Aerovox site that could be used to compare the potential magnitude and persistence of offsite transport for each pathway described above. Data for other contaminants has also been reviewed where available.

1.3 Report Overview

This report provides the following:

- Background information on the Aerovox facility and previous investigations and remedial actions at the site, as well as relevant information on PCB characteristics (Section 2);
- A summary of existing PCB sources at the Aerovox site (Section 3);
- An evaluation of the potential for PCB transport from the site to New Bedford Harbor via surface runoff (Section 4), groundwater movement (Section 5), separate phase (oil) movement (Section 6), and atmospheric transport (Section 7) pathways;
- A comparison of the relative magnitude and expected persistence of the different transport pathways (Section 8); and
- Reference material reviewed and used in the preparation of this report (Section 9).

Included appendices provide a set of site photos (Appendix A), a summary of the limited stormwater and groundwater investigation performed as part of this review (Appendix B), and a tabular summary of the site PCB and related chemical data used in this review (Appendix C – Building Data, Appendix D – Soil Data, Appendix E – Stormwater Data, Appendix F – Groundwater Data).

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New Bedford Harbor Superfund Site

Figure 1-1: Aerial Photograph of New Bedford Harbor with the Aerovox Site Indicated

Sources:MassGIS 2-m orthophotos
NAD 83 Mass State Plane m
ME scale 1:35000
Figure Generated: 23 January 2006 (KRD)

Miles
0 0.25 0.5 1

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U.S. Army Corps of Engineers
New Bedford Harbor Superfund Site

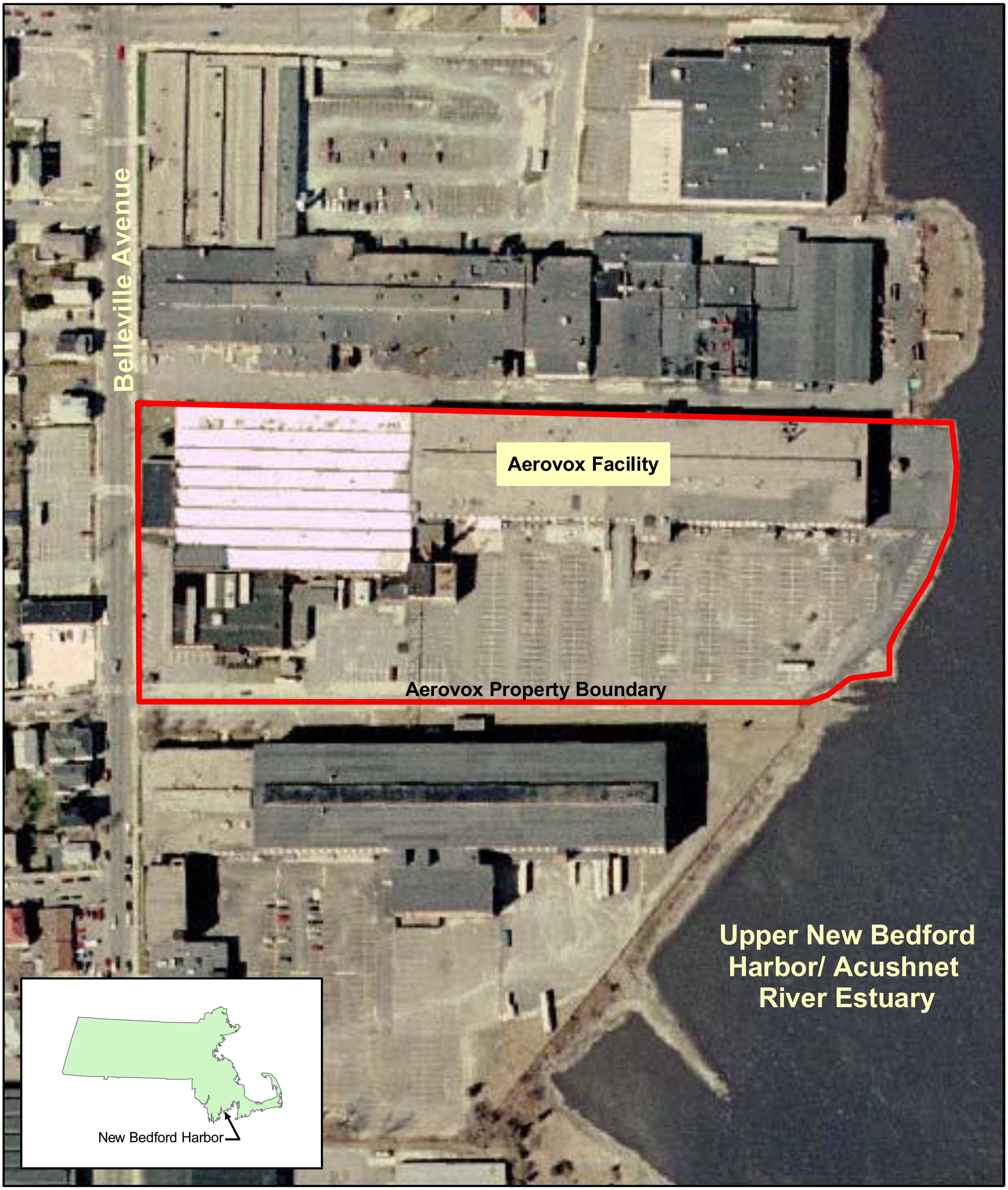

Figure 1-2: Aerial Photograph of the Aerovox Site

Sources:MassGIS 2-m orthophotos
NAD 83 Mass State Plane m
ME scale 1:35000
Figure Generated: 23 January 2006 (KRD)

Feet
0 50 100 200

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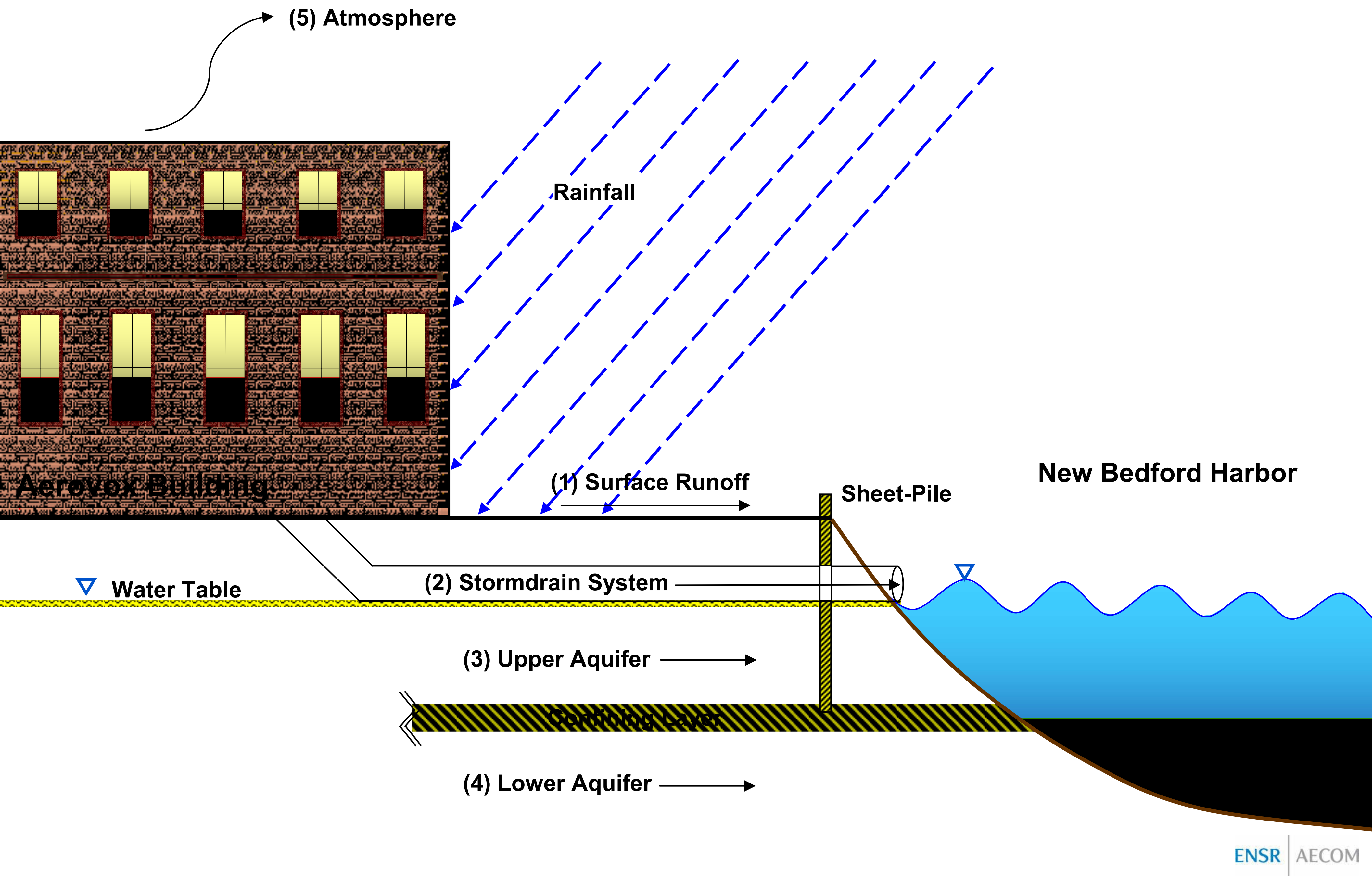
Figure 1-3 Photographs of the Aerovox Site Taken from the Air, the Parking Lot, and the Harbor

Figure 1-4 Conceptual Diagram of Potential PCB Transport Pathways from the Aerovox Site



2.0 OVERVIEW OF HISTORIC PCB CONTAMINATION

This section provides a brief description of the Aerovox site history (Section 2.1) and the associated history of the New Bedford Harbor Superfund Site (Section 2.2). A summary of remedial actions performed at the Aerovox site is presented in Section 2.3, and a review of key site investigations is provided in Section 2.4. A review of related PCB terms and characteristics is provided in Section 2.5.

2.1 Aerovox Site History

A timeline depicting major events at the Aerovox site as well as at the overall New Bedford Harbor Superfund Site is provided in Figure 2-1. First developed as a manufacturing site in the early 1900's, Aerovox, Inc. purchased the site in 1938. Aerovox used PCBs in the manufacture of electrical capacitors and filters at the site from 1947 to 1978 (Ebasco, 1989), as shown in red on the timeline. Large amounts of PCBs are known to have been used at the Aerovox facility, although only partial records are available. For example, over a 3 year period, 1973-1975, it was reported that more than 4 million pounds of PCB oil was used at the Aerovox facility (Ebasco, 1989), representing a rate of over 1.3 million pounds per year. Various Aroclors were used throughout the history of the site with different types preferred during different time periods. During the 1950s, use of Aroclor 1254 was dominant; in the 1960s, Aroclor 1242 was used; and in the 1970's, Aroclor 1016 was used most extensively (Ebasco, 1989).

Limited information was found in previous reports regarding the specific storage and use of the PCB oil and PCB-laden materials during manufacturing operations at the Aerovox site. Figure 2-2 provides a map of the Aerovox manufacturing building with uses of building areas indicated (BBL, 1998a). Based on review of the map and available summary information, PCB oil was stored and heavily used in the pump room and impregnation area at the far western end of building, but was also found in the assembly area at the eastern end of building along with solvents, lubricants, and paints.

While PCBs were being actively used in manufacturing at the Aerovox site (1947-1978), they were released into the air, the soil, and the receiving water body, the Acushnet River Estuary, also referred to as Upper New Bedford Harbor. PCBs were released to the adjacent harbor directly through discharge pipes and trenches, through the sanitary sewer network and the associated combined sewer overflows (CSO), through groundwater, and through the discard of capacitors directly into the river (MDPH, 1995). As a result of these discharges over an extended time period, sediments in the adjacent Upper Harbor became highly contaminated with PCBs, with sediments containing percent-level contamination or separate phase PCB oil in the area near the site. As a result of the high levels of contamination and the associated concerns of risk to human health and the environment, the entire New Bedford Harbor was declared a Superfund site and placed on the National Priorities List in 1983.

The following list provides a more detailed timeline of the history of the Aerovox site and relevant activities at the New Bedford Harbor Superfund Site to supplement the timeline provided in Figure 2-1.

- ca 1916 – The large manufacturing building on the Aerovox site is built (Stanley, 1994).
- 1938 – Aerovox, Inc. purchases the site (Stanley, 1994).
- 1947 – Aerovox, Inc. begins to use PCBs in the manufacture of capacitors (Ebasco, 1989).
- 1976 – The USEPA finds PCB-contaminated sediments and marine life in New Bedford Harbor (EPA, 1990).
- 1978 – The manufacture and sale of PCBs is banned in the United States under the Toxic Substances Control Act (TSCA). Aerovox ceases acquisition of PCBs for the New Bedford manufacturing facility (use of existing stocks of PCB oil may have continued after this date).
- 1979 – The Massachusetts Department of Public Health (MADPH) restricts fishing and prohibits lobstering in New Bedford Harbor due to elevated PCB levels.
- 1982 – The USEPA proposes New Bedford Harbor for the Superfund National Priorities List (NPL).
- 1982 – A consent agreement between Aerovox, Inc., the USEPA and MADEQ (now MADEP) requires Aerovox to install a cap and a cutoff wall to isolate contaminated soil/groundwater from the harbor and to perform groundwater monitoring.
- 1983 – New Bedford Harbor is finalized on the Superfund NPL.
- 1983-84 – A sheet pile cut-off wall and impermeable cap are installed around and over the highly contaminated eastern portion of the Aerovox site adjacent to the Upper Harbor.
- ca 1984 – The paper "On-Site Containment of PCB-Contaminated Soils at Aerovox, Inc." (Gushue and Cummings) summarizes a series of site investigations by GHR.
- 1988 – Two 10,000 gallon fuel oil storage tanks and one 250 gallon condensate collection tank are removed from the Aerovox site (BBL, 1998a).
- 1988-89 – Pilot study performed in the Upper Harbor evaluating dredging and disposal technologies (USACE, 1989).
- 1990 – Petroleum contaminated soils are excavated from the area where the tanks were removed in 1988, and a petroleum recovery system is installed (BBL, 1998a).
- 1990 – The EPA issues a record of decision (ROD) for dredging of sediments with high PCB concentrations (hot spot areas) in Upper New Bedford Harbor near the Aerovox site (USEPA, 1990).

- 1990 – Summary of existing Aerovox facility stormwater data prepared (B&V Waste Science and Technolgy, 1990 as presented in Stanley, 1994).
- 1994-95 – Dredging of Upper Harbor sediments with extremely high PCB concentrations ("hot spot" dredging) is performed near the Aerovox site (USEPA, 1997).
- 1997-98 – Sampling of the interior of the Aerovox facility reveals elevated levels of PCBs on some work surfaces and equipment (BBL, 1998a).
- 1998 – Aerovox Engineering Evaluation/Cost Analysis and Building Demolition Alternative report for removal of contaminated materials (BBL, 1998a and b).
- 1998 – ROD issued for remaining Upper and Lower Harbor remediation (USEPA, 1998).
- 1999 – Aerovox agrees to demolish the manufacturing building and cap the site by 2011.
- 2000 – Pre-Design Field Test conducted in the Upper Harbor to assess dredging/material handling technologies and determine performance standards for further remedial dredging (FWENC, 2001).
- 2001 – All manufacturing operations terminated at the Aerovox facility.
- 2001 – Contaminated shoreline soils and sediment in the extreme northern portion of the Upper Harbor (Early Action Area, approximately 0.5 miles north of the Aerovox site) are excavated, and the area is restored (TTFW, 2005).
- 2003 – Contaminated shoreline soils and channel sediment in the vicinity of the Wood St. Bridge in the northern portion of the Upper Harbor (approximately 0.25 to 0.5 miles north of the Aerovox site) are excavated, and the area is restored (TTFW, 2005).
- 2004 – Remedial dredging of highly contaminated sediments in the vicinity of the Aerovox site is performed from Sept.-Nov. with coarse material removal, dewatering, and transport for offsite disposal (Jacobs, 2005).
- 2004 – Maintenance of the cap is performed, and stored chemicals and wastes are removed from the buildings by an EPA team.
- 2005 – Remedial dredging of the highly contaminated sediments in the vicinity of the Aerovox site continues from Sept.-Nov. (Jacobs Engineering, in preparation).

2.2 New Bedford Harbor Superfund Site

The New Bedford Harbor Superfund Site extends from the shallow northern reaches of the Acushnet River Estuary (just north of the Aerovox site), south through the commercial harbor of New Bedford and out beyond the City's hurricane barrier into 17,000 adjacent acres of Buzzards Bay. The

Superfund Site is divided into three areas: the Upper, Lower, and Outer Harbors defined by geographical features of the Harbor and gradients of sediment contamination (Figure 1-1).

The primary source of PCBs to the Upper Harbor was the Aerovox site, and as a result, the highest concentrations of sediment contaminants were found in the area of the harbor adjacent to the Aerovox site (EPA, 1999). Transport of contaminated sediment, contaminated debris, and floating oil by tidal, river, and wind driven currents along with release of contaminated material to the municipal sanitary system with discharge at CSOs and the outfall of the treatment facility resulted in nearly complete contamination of Upper Harbor sediments and decreasing levels and frequency of contamination in the Lower and Outer Harbors.

The segment of New Bedford Harbor adjacent to the Aerovox site is approximately 500 feet wide with depths up to 6 feet deep (mean low water) and with a broad expanse exposed at low tide (Figure 2-3). The Harbor experiences a mean tidal range of approximately 3.7 feet and a maximum tidal range during spring tide conditions of approximately 4.6 feet. The Acushnet River enters the Upper Harbor approximately 0.5 miles north of the Aerovox site, representing a small portion (averaging less than 1%) of the average total flow through the Upper Harbor.

Through an Interagency Agreement between the USEPA and the U.S. Army Corps of Engineers, New England District (USACE), the USACE is responsible for carrying out the design and implementation of the remedial measures at the New Bedford Harbor Superfund Site. Approximately 14,000 cubic yards of the most contaminated sediments ("hot spots" with separate phase PCB oil and total PCB concentrations in excess of 100,000 mg/l or 10%) were removed from 1994 to 1995 under the first ROD (USEPA, 1990). Under the second ROD, approximately 900,000 cubic yards of PCB-contaminated sediments were targeted for removal from the remaining area of the Upper Harbor as well as portions of the Lower Harbor (USEPA, 1998). In the Upper Harbor subtidal sediments above 10 mg/kg PCBs were designated for remediation (USEPA, 1998). Intertidal sediments with PCB concentrations above 1 mg/kg were designated for remediation in specific area adjacent to residences, and intertidal sediments with concentrations above 25 mg/kg were designated for remediation along other areas prone to shoreline activity. Remedial dredging is ongoing with approximately 15,000 cubic yards removed from the Upper Harbor near the Aerovox site in the late summer/fall of 2004 (Jacobs, 2005) and 28,000 cubic yards removed from the same are in the late summer/fall of 2005 (Jacobs, in preparation).

To reduce human exposure to PCBs, the Massachusetts Department of Public Health has restricted all forms of fishing (finfish, shellfish, lobster) within the Upper and Lower Harbors since 1979 and with more limited restrictions in the Outer Harbor (Ebasco, 1989). Additional description and information on the New Bedford Harbor Superfund Site can be found at:

http://www.epa.gov/ne/nbh

2.3 Remedial Action at the Aerovox Site

Remedial actions performed at the Aerovox site include installation of a sheet-pile cutoff wall and capping of unpaved surfaces adjacent to the harbor, removal of fuel oil storage tanks and contaminated soils, and removal of stored chemicals and wastes from the buildings. Each of these remedial actions is summarized below.

Installation of Sheet-Pile Cutoff Wall

In 1982, as part of a consent order, EPA and MADEQ (now MADEP) required Aerovox to install a sheet-pile cutoff wall along the boundary between the site and the Upper Harbor, with additional sections running from the harbor to the Aerovox building, as shown in Figure 2-4. The sheet-pile wall was designed to serve as a barrier between PCB contaminated soils on the site and New Bedford Harbor by eliminating the direct connection between the shallow groundwater system and the harbor.

The sheet pile was installed in 1984 in three sections. The largest section ran approximately 400 feet along the entire eastern border of the site, creating a subsurface barrier between the site and New Bedford Harbor. The sheet piles were driven vertically into the ground to a depth of 9 to 13 feet below grade to tie into a subsurface confining layer of peat that had been previously identified beneath the site (Gushue and Cummings, 1984) (Section 5 provides a description of site geology and the groundwater flow system). This depth was considered sufficient to isolate the shallow upper groundwater flow system from direct connection to New Bedford Harbor.

Two additional sheet-pile walls were constructed perpendicular to the harbor edge, running from the Aerovox building foundation to the sheet-pile wall along the eastern site boundary (Figure 2-4). The highest levels of PCB contamination had been detected in the area between the Aerovox building and the harbor, and the two additional sheet-pile walls combined with the foundation of the eastern end of the Aerovox building effectively isolated this area.

Installation of an Impermeable Cap

Also as part of the 1982 Consent Order, EPA and MADEQ required Aerovox to cap exposed soils containing high PCB concentrations. As shown in Figure 2-4, the capped area included the zone between the building and the harbor as well as a strip between the paved parking area and the harbor and a narrow strip to the north of the building. Soils in this area had total PCB concentrations of up to 10,600 mg/kg and were exposed to surface water runoff, infiltration to underlying groundwater, and airborne transport (Gushue and Cummings, 1984). The cap was designed to isolate contaminated soils from these potential transport pathways and consisted of a 2.5 inch thick hydraulic asphalt concrete layer. The cap covered the area between the eastern edge of the building and the harbor, between the edge of the paved parking area and the harbor, and along an 8-foot wide strip to the north of the building (Figure 2-4). The total area capped was approximately 33,000 square feet (Gushue and

Cummings, 1984). Maintenance of the capped area was performed by the EPA in 2004 including filling of cracks and resurfacing.

Removal of Fuel Oil Storage Tanks

In 1988, two 10,000 gallon fuel oil storage tanks and one 250 gallon condensate collection tank were removed from the central portion of the Aerovox site (Figure 2-2 from BBL, 1998a). As a follow-up in 1990, petroleum contaminated soils were excavated from the oil containment bunker area, and a petroleum recovery system was installed to remove subsurface product. The excavated soils were treated onsite and recycled into an asphalt base course (BBL, 1998a). Neither the extent of soils removed from the oil containment bunker area nor specific information regarding the on-site treatment were described in the BBL report.

Removal of Chemicals and Waste

Following the sampling that revealed elevated PCB levels on work surfaces within the Aerovox building, operations at the facility were terminated in 2001. Although PCBs were no longer in use at the facility, other chemicals were used in the manufacturing process (oils, solvents, paints, etc.), and these were left in place when operations were terminated. An EPA team surveyed the site in 2004, and chemicals and wastes of concern were identified, drummed, and removed from the site.

2.4 Overview of Previous Site Investigations

Numerous investigations have been conducted at the Aerovox site and the overall New Bedford Harbor Superfund Site related to PCB contamination. The majority of available data and information related to the Aerovox site and potential pathways for PCB transport to New Bedford Harbor were obtained for this report from the following three previous investigations.

- Site investigations performed by GHR in the early 1980s and summarized in the paper, "On-Site Containment of PCB-Contaminated Soils at Aerovox" (Gushue and Cummings, 1984);
- Review of existing stormwater data by B&V Science and Technology Corp. as part of a work plan prepared by Stanley Consultants Environmental, Inc. (1994); and
- Engineering Evaluation/Cost Analysis and Building Demolition Alternative Report at Aerovox, Inc. (BBL, 1998).

Each of these documents is briefly summarized below. Additional stormwater and groundwater data were collected at the Aerovox site in 2004-05 to support this investigation. This additional investigation was performed by ENSR, and a brief description is provided below, and a full summary is presented in Appendix B of this report. A complete list of reference materials used to create this report is provided in Section 9.

1984 Summary of On-Site Containment of PCB-Contaminated Soils

This paper, authored by Gushue and Cummings (1984), provided a summary of two investigations: *Report of Sampling and Analysis Program at the Aerovox Property* (GHR, 1982) and *Report of Evaluation of Remedial Alternatives for the Aerovox Property* (GHR, 1983). The objectives of the investigations were to 1) assess surface and subsurface soil contamination, focusing on PCBs but also including VOCs; 2) characterize the groundwater flow system in the study area and assess the potential for PCBs to be transported with groundwater to the harbor; and 3) evaluate remedial alternatives. The first phase of the investigation consisted of an evaluation of PCB levels in surficial soils to depths of 2 feet. A second phase included the the performance of deeper borings and installation of groundwater monitoring wells at eight on-site locations.

The Gushue and Cummings paper provides summary tables of PCB concentrations in soils and groundwater and a written summary of VOC concentrations. The geology and groundwater flow system were described, and groundwater flow beneath the site was estimated. The flow rate and concentration data were used to estimate the associated PCB flux to the harbor (estimated at less than 3 pounds per year). Finally, the paper presents remedial alternatives reviewed for the site, and provides a description of the recommended remedy, installation of a sheet-pile cut-off wall along the harbor and capping of unpaved areas with PCB contaminated soils.

1994 Summary of Stormwater Runoff and Existing Data

A workplan was developed by Stanley Consultants Environmental, Inc. (1994) to perform a detailed stormwater study as part of an agreement between the EPA, MADEP, and Aerovox Inc. Although the plan was not implemented, it provided a good overall summary of stormwater runoff and the collections system at the Aerovox site. The workplan also included a summary prepared by B&V Waste Science and Technology Corporation in 1990 as an appendix that presented PCB concentrations in stormwater samples from the site from 1983 through 1990. The report provides summary statistics calculated for various portions of the 1983-90 record.

1998 Aerovox EE/CA and Building Demolition Alternative Report

The Engineering Evaluation and Cost Analysis (EE/CA), conducted by BBL (1998a), supported the assessment of the removal of the Aerovox facility by providing an analysis of the effectiveness, feasibility, and costs of suitable removal action alternatives. The EE/CA included an Aerovox site characterization that reviewed existing site information and also presented the results of the following additional investigations: 1) Evaluation of PCBs within the Aerovox building, both in building materials and on equipment (November 1997); 2) Evaluation of contamination in the soils beneath the concrete flooring of the building (February 1998); 3) Performance of additional soil borings and evaluation of soil and groundwater contamination (May-June 1998). The full set of results is presented in tables and summary figures in the EE/CA, and those results are summarized throughout this report.

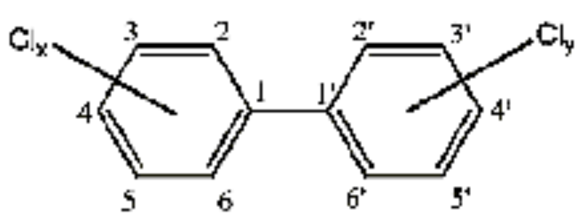
The Demolition Alternative Report (BBL, 1998b) presented a technical description and cost estimate for implementing a plan to demolish the former Aerovox manufacturing facility. The document summarized relevant background information, presented a summary of previous investigation activities, described the building demolition plan, and summarized the estimated costs associated with implementing the plan. The report presented four demolition alternatives with a wide range of cost and design assumptions.

2004-05 Aerovox Stormwater and Groundwater Investigation

Additional stormwater and groundwater sampling was performed by ENSR in 2004-05 to provide more recent data and additional observations in support of the transport evaluation presented in this report. Stormwater samples were collected during a late summer rainfall event in 2004 and a spring rainfall event in 2005. First flush samples were collected during the initial stages of runoff as well as steady state samples later in the storm event. Some drains were found to have baseflow (i.e., groundwater) present during dry weather periods, and samples were collected to characterize this flow also. All 13 of the monitoring wells were re-developed in 2005 and sampled using low-flow sampling techniques. Both the stormwater and groundwater samples were analyzed for PCBs. Additionally, stormwater samples were analyzed for metals, and groundwater samples were analyzed for VOCs. Results of the stormwater sampling are summarized in Section 4, and groundwater results are summarized in Section 5. A more complete summary of the methods and results is presented in Appendix B.

2.5 PCB Background Information

Polychlorinated biphenyls (PCBs) belong to the organochlorine family of anthropogenic organic chemicals and consist of a biphenyl molecule to which between 2 and 10 chlorine atoms are attached. 209 different PCB compounds, called congeners, are possible as the number and position of the chlorine atoms vary around the biphenyl rings. PCB molecules that share a common number of chlorine atoms, such as dichlorobiphenyls, trichlorobiphenyls, etc., are called a homolog group. Individual members of a homolog group that vary in the position of the chlorine atoms are called isomers, such as 2,2',3,4' terachlorobiphenyl , where the numbers refer to specific positions and the prime indicates the second ring. The general structure for all PCBs is shown below.



Complex mixtures of PCBs were produced in the United States by the Monsanto Corporation between 1930 and 1977 under the trade name Aroclor and marketed for uses such as dielectric fluids in capacitors and transformers. PCB Aroclor products used a numbering system where the last two digits of a four digit ID indicated the average weight percent chlorine of the mixture, i.e., Aroclor 1221 is about 21% chlorine. The most common Aroclors produced were 1221, 1232, 1242, 1016, 1248, 1254, 1260, 1262, 1268, and 1270. Aroclor 1016 violates the above naming convention in that it is about 40-42% chlorine like Aroclor 1242.

Physical Properties - Some important physical properties of the three most common Aroclors reported to be used at the Aerovox facility (Aroclors 1016, 1242, and 1254) are presented in Table 2-1. The densities of these Aroclors are approximately 40% to 50% greater than that of water. As such PCB oil composed of these Aroclors is classified as a dense non-aqueous phase liquid (DNAPL). When released to unsaturated soils (either directly at the surface or through cracks or joints in in flooring and pipes), DNAPLs like PCBs move downward under the action of gravity and capillary forces. Upon reaching the water table, DNAPL can continue the downward migration through the saturated soils, displacing water if there is sufficient product thickness. PCBs are relatively insoluble in water, ranging from approximately 0.1 to 0.5 mg/l for Aroclors 1016, 1242, and 1254 (as compared to an organic solvent such as trichloroethylene with a solubility of 1100 mg/l). These Aroclors also have relatively low vapor pressures, indicating limited volatility. These properties, coupled with a limited degradation potential under most circumstances result in the persistence of PCBs as a source of contamination once released to the environment.

Methods of Analysis - EPA methods for PCB analysis have been tailored to various regulatory programs in a variety of matrices and have evolved over time with technological improvements. EPA Methods 608 and 8080 were packed column low resolution gas chromatography methods with electron capture detection (GC/ECD). EPA 608 was designed for water and wastewater analyses, and EPA 8080 was intended for groundwater, soils, sediments, and solid wastes. These methods are capable of detecting and quantifying PCBs as Aroclor mixtures but lack the resolution to quantify individual PCB congeners. The methods rely on recognizing the unique pattern of peaks for each Aroclor in the ECD chromatogram and quantifying the PCBs based on total peak area of the pattern.

As higher resolution capillary columns became available EPA allowed the use of capillary columns as an option in these older methods. EPA method 8082 is a capillary column method with ECD detection that replaced 8080 for PCB analysis in aqueous, solid, and tissue matrices. ECD detection is very sensitive and highly selective for organochlorine compounds, but it is subject to interferences by non-PCB substances. The higher resolution allows quantifying PCBs as either individual congeners (a small subset of the 209 possible) or as Aroclor mixtures. Quantifying total PCBs based on a small congener set relies on assumptions about the relationship between the congener subset and total PCBs. EPA Method 1668A is the most advanced and recent method for analysis of PCBs as congeners. It utilizes very high resolution capillary column gas chromatography combined with high resolution mass spectrometry (HRGC/HRMS) and allows the specific identification and quantitation by mass spectrometry of all 209 PCB congeners. This technique provides the most sensitive and accurate determination of total PCBs in water, soil, sediment, tissue, and air. Complete congener data also allow the assessment of risk based on the most toxic individual PCBs with dioxin-like effects.

Unless otherwise noted, the PCB concentrations presented in this report are based on analysis of Aroclors and represent the sum of the individual Aroclors.

Table 2-1 Properties of Selected Aroclors

Property	Aroclor 1016	Aroclor 1242	Aroclor 1254
Molecular weight	257.9[a]	266.5[a]	328[a]
Color	Clear	Clear	Light yellow
Physical state	Oil	Oil	Viscous liquid
Boiling point,°C	325-356	325-366	365-390
Density, g/cm³ at 25°C	1.37	1.38	1.54
Odor	No data	Mild hydrocarbon[b]	Mild hydrocarbon[b]
Solubility: water, mg/L	0.42 (25°C)[c]	0.24[a]; 0.34 (25°C)[c]; 0.10 (24°C)[d]	0.012[c]; 0.057 (24°C)
Vapor pressure, mm HG at 25°C	4×10^{-4} [a]	4.06×10^{-4} [a]	7.71×10^{-5} [a]

[a] EPA 1979h; data on temperature not available.
[b] NIOSH 1997
[c] Paris et al. 1978
[d] Hollifield, 1979

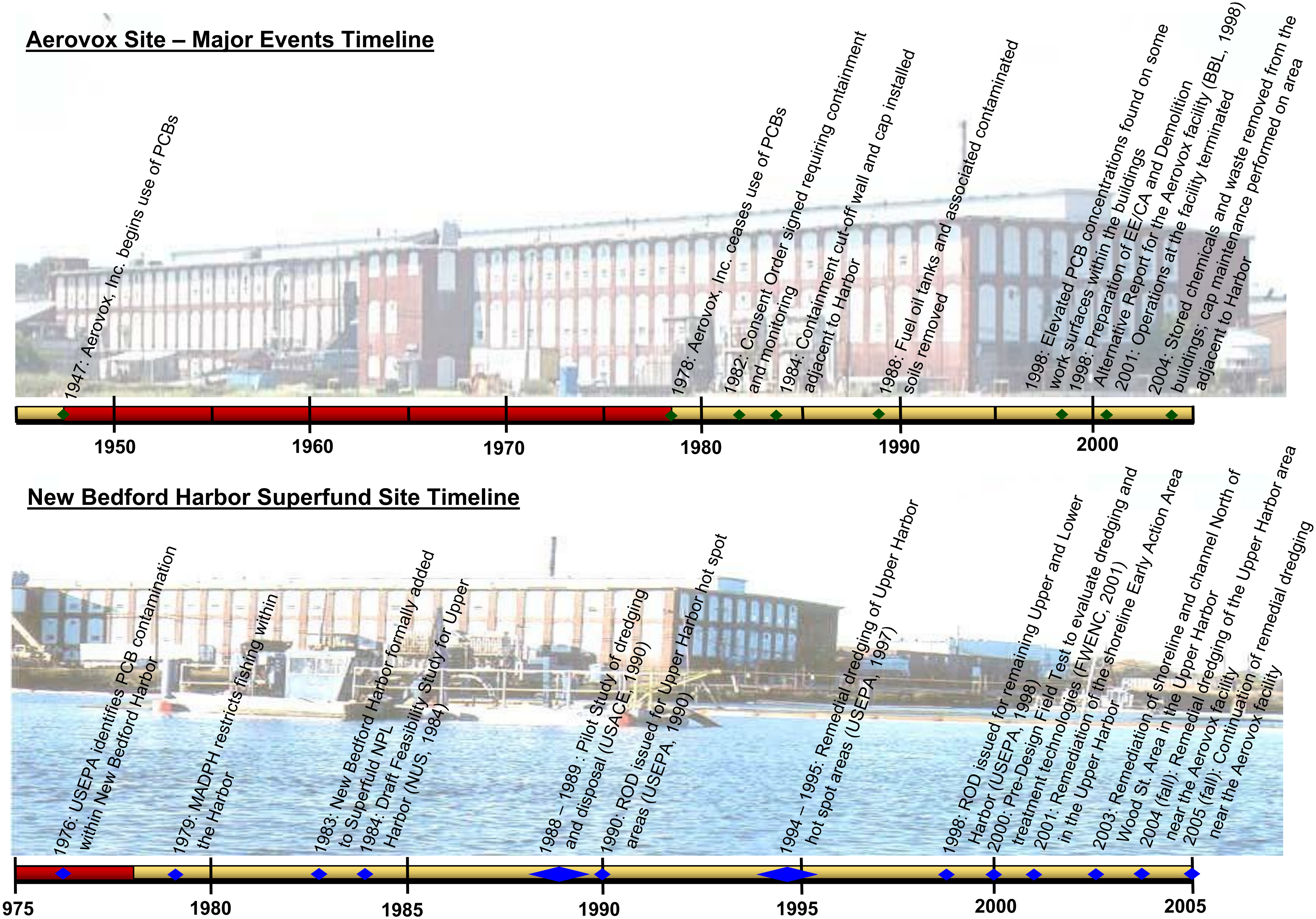


Figure 2-1 Timeline of Major Events at the Aerovox Site and in New Bedford Harbor

Indicates period of PCB use in manufacturing at Aerovox

Sources: Stanley 1994; Ebasco 1989; EPA 1990; BBL 1998a; EPA 1999; USACE 2003

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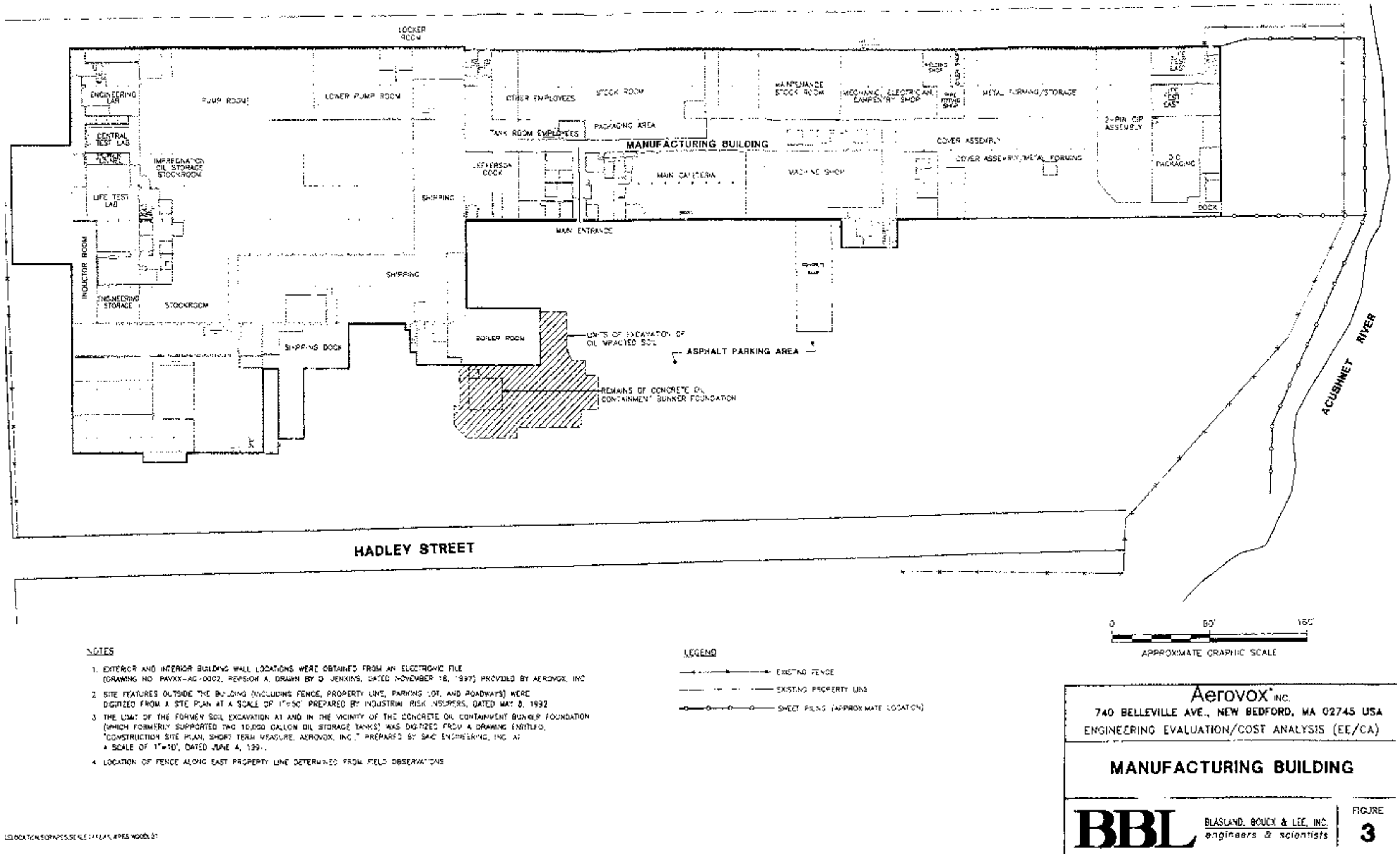
Figure 2-2 Site Plan of Aerovox Manufacturing Building Noting Historical Uses of Building Areas and Soil Excavation Area (BBL 1998a)



U.S. Army Corps of Engineers
New Bedford Harbor Superfund Site

Figure 2-3: Aerovox Site and Adjacent New Bedford Harbor

Sources:MassGIS 2-m orthophotos
NAD 83 Mass State Plane m
ME scale 1:35000
Figure Generated: 23 January 2006 (KRD)

Feet
0 50100 200 300

J:\Water\ProjectFiles\P90\9000NBH\Task_1400_Aerovox_CSM\figures_jpgs\Figure 2-3.mxd

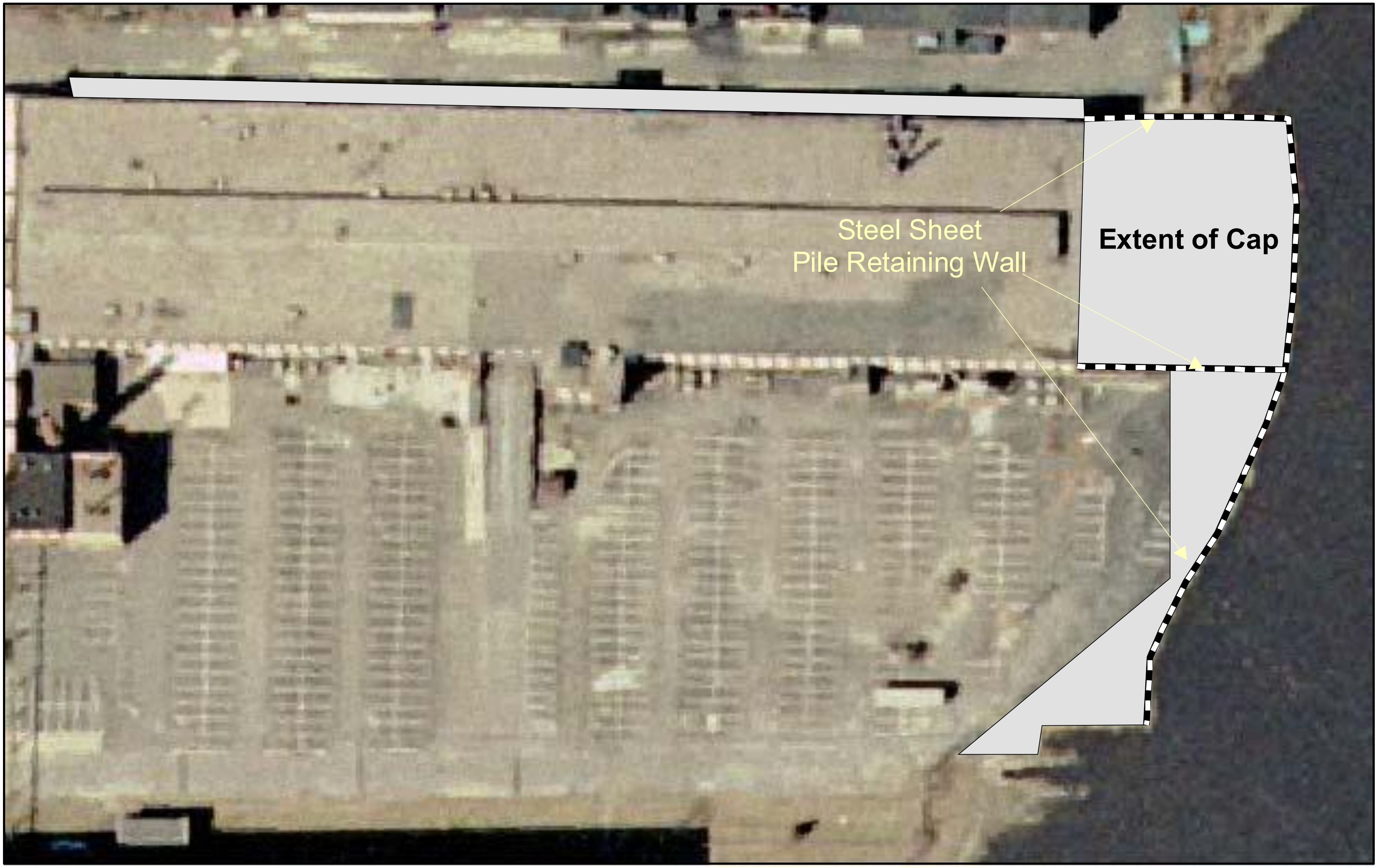


Figure 2-4: Aerovox Site with Locations of Cutoff Wall and Cap Indicated

Sources:MassGIS 2-m orthophotos
NAD 83 Mass State Plane m
ME scale 1:3500
Figure Generated: 23 January 2006 (KRD)

Feet
0 50 100

3.0 CHARACTERIZATION OF EXISTING PCB SOURCES AT THE AEROVOX SITE

This section provides a summary of available information on the extent of PCB contamination at the Aerovox site. Source materials for this section included the 1998 engineering evaluation (BBL, 1998a), the 1995 public health assessment (MDPH, 1995), and the summary presented in paper by Gushue and Cummings (1984). The previous investigations divided the site into a series of areas shown in Figure 3-1, based on site features or levels of contamination. These included the building itself, parking lot materials, and soils beneath the site as reviewed below. Summary tables of the reviewed data are presented in Appendices C (building materials), D (soils), E (stormwater) and F (groundwater).

3.1 PCBs in the Aerovox Building

Wipe and dust samples from interior building surfaces as well as core samples of interior building materials collected as part of the BBL study (1998a) revealed significant PCB contamination throughout the Aerovox building. The identified contamination included:

- The wood floor on the second and third floors of the eastern section of the building and on the second floor in the western as well as the concrete floor in the western section of the building contained PCBs at concentrations greater than 50 mg/kg with a maximum reported concentration of 56,000 mg/kg (~6%).
- Dust and dirt scrape samples from floor areas throughout the building all had concentrations greater than 50 mg/kg with a maximum reported concentration of 2000 mg/kg.
- Wipe samples collected from nonporous interior building surfaces at many locations contained PCBs at concentrations greater than the 10 µg/100 cm^2 TSCA PCB Spill Policy cleanup objective for interior surfaces.
- Wipe samples collected from the surfaces of much of the building equipment also contained PCBs at concentrations greater than 10 µg/100 cm^2.

Based on these concentrations, a significant mass of PCBs is contained within the building itself. However, for the analysis of potential PCB transport presented in this report, it was assumed that PCBs within the confines of the building were not available for mobilization and transport.

3.2 PCBs in Parking Lot Pavement

As part of the BBL study (1998a), pavement samples were collected from 18 locations throughout the parking lot area and were composited into four sample sets representing eastern, east-central, west-central, and western areas of the site (Figure 3-2). PCB concentrations increased from west to east

(Table 3-1, Figure 3-2), with concentrations of approximately 140 mg/kg over the eastern half of the site.

3.3 PCBs in Site Soils

PCB contamination has been detected in soils throughout the Aerovox site (BBL, 1998a; Gushue and Cummings, 1984). As part of the earlier studies, samples were collected from beneath the building areas (borings performed through the concrete slab), beneath the parking areas (borings performed through the pavement), from the unpaved area to the west of the building, and from the areas to the north and east of the building (originally unpaved, but capped in 1984). Maximum PCB concentrations at each boring location are presented in Figure 3-3, and additional data are included in Appendix D.

Beneath Building

PCB concentrations detected in the soils beneath the building slab were variable, with some values quite high (Figure 3-3). The highest PCB concentrations were found beneath the pump room in the western portion of the building, with values ranging up to 18,000 mg/kg (1.8%) total PCBs in the 0-1 foot interval. PCBs were detected at all locations sampled beneath the pump room. The two deepest samples from this area were collected from 1 to 4 feet below the slab, and both had high concentrations (2,000 to 4,100 mg/kg) (BBL, 1998a). Concentrations were also variable beneath the manufacturing building, but were not as high as the pump room; concentrations were below 2 mg/kg at some sampling locations with a maximum value of 180 mg/kg for a sample collected near the eastern end of the building.

Beneath Parking Lot

PCB contamination was also found in soils collected from beneath the paved parking area at the majority of locations sampled (Figure 3-3). Similar to the PCBs detected in the pavement samples, concentrations were lower in the western portion of the site, and the maximum concentration (2,900 mg/kg) was found in a shallow sample (0-1 foot) in the eastern portion of the paved parking area. PCB concentrations generally decreased with depth, but were detected in the majority of samples above 8 feet in depth (Gushue and Cummings, 1984; BBL, 1998a).

Unpaved Areas

Soils along the narrow strip of land to the north of the building, between the building and the harbor, and along the strip of land between the parking lot and the harbor were characterized prior to capping of these areas in 1984. Results were presented in Gushue and Cummings (1984) as ranges of concentrations for each area without noting specific locations. As presented in Figure 3-3, concentrations were quite high, ranging up to 6,900 mg/kg to the north of the building, to 10,600 mg/kg to the east of the building, and to 4,800 mg/kg to the east of the parking area.

PCBs as DNAPL

The initial characterization of the Aerovox site took place before there was widespread awareness of dense non-aqueous phase liquid (DNAPL) as an important aspect of subsurface contamination. Following the guidance that was later developed by the USEPA (1991), PCBs can be assumed to exist as DNAPL beneath and/or surrounding the Aerovox site with a high degree of probability based on the amount of PCBs used at the site, the history of operation, and concentrations identified within soils and groundwater beneath the site. Given the soil concentrations, PCBs were likely released at the surface in the vicinity of the pump room (via floor drains and cracks or joints in the slab) and to the north and east of the building (potentially discharged directly to the unpaved surface or from overflows during filling from the exterior fill pipe). The quantity of PCBs existing as DNAPL and the specific location in the subsurface are uncertain and would be difficult to determine given the lack of methodology for remotely identifying PCBs from the surface and their ability to move large distances laterally along a bedrock or more consolidated material interfaces. For the purpose of this assessment, it was sufficient to assume that PCBs exist in DNAPL form beneath the site as a long term source of contamination to groundwater moving beneath the site (Section 5).

3.4 Estimation of Total PCB Mass in Site Soils

An estimate of total PCB mass in soils beneath the Aerovox site was calculated using the measured PCB concentrations in site soils. Using the set of areas defined by physical features or levels of contamination shown in Figure 3-1, the mass of PCBs beneath each area was calculated using available concentration data as detailed in Table 3-3. One to three depth layers were defined for each area of the site based on available data. The calculation included the following assumptions:

- The maximum total PCB concentration reported for a given area and depth layer was applied to the entire layer. This assumption was expected to bias the estimate to a higher value.
- The depth of contamination was not assumed to extend beyond the deepest sample depth. As significant PCB concentrations were detected in the deepest sample at some locations, this assumption biased the estimate to a lower value.
- The calculation did not include any explicit accounting for potential DNAPL zones where PCBs could be pooled at depth with % level concentrations. This assumption could bias the estimate to a lower value.

Using the method outlined above and presented in Table 3-3, a total of 109,000 kg of PCBs was estimated in the soils beneath the Aerovox site. The largest mass of PCBs was calculated for the soils beneath the pump room, beneath the area east of the building, and beneath the eastern portion of the parking lot, with these areas accounting for over 90% (102,000 kg) of the total mass estimated for the site. Although the assumptions noted above make this calculation a very rough estimate, it does not appear unrealistic given the amount of PCBs used at the site (estimated at 1.3 million pounds or 590,000 kg per year for the period in the early 1970's – Ebasco, 1989) and the length of time (approximately 30 years) that PCBs were in use at the site.

Table 3-1. Summary of PCB Concentrations Reported in Aerovox Parking Area Pavement

Date	Parking Lot Area	Composite Sample Groupings	Total PCBs[1] (mg/kg)
5/19/1998	Eastern	SB-6, SB-7, SB-15, SB-16	136
5/20/1998	East-Central	SB-4, SB-5, SB-13, SB-14	140
5/21/1998	West-Central	SB-3, SB-10, SB-11, SB-12	33
5/21/1998	Western	SB-2, SB-8	1.1

[1]PCB data from BBL, 1998a. PCB analysis method USEPA SW-846 method 8082. Total assumed to be sum of Aroclor concentrations.

Table 3-2 Estimated Total Mass of PCBs in Soils beneath the Aerovox Site Based on Historical Data

Location	Depth Range (ft)	Maximum PCB Concentration (mg/kg)	Volume (cubic-yards)[1]	Estimated PCB Mass in Soil (kg)[2]
East of Building[3] 0.75 acres (32,700 ft2)	0 - 0.5	4600	610	3,700
	0.5 - 1.5	10600	1,210	16,890
	1.5 - 2.0	7100	610	5,700
	2.0 - 4.0	990	2,420	3,160
	4.0 - 8.0	1800	4,840	11,470
	Total	-----	**9,690**	**40,920**
Mfg. Building[4] 3.32 acres (144,400 ft2)	0 - 1.0	180	5,350	1,270
	Total	-----	**5,350**	**1,270**
Pump Room[4] 0.95 acres (41,400 ft2)	0 - 0.5	18000	770	18,250
	0.5 - 2.0	4100	2,300	12,420
	Total	-----	**3,070**	**30,670**
Parking Lot East[4] 1.62 acres (70,700 ft2)	0 - 2.0	120	5,230	830
	2.0 - 5.0'	2900	7,850	29,980
	Total	-----	**13,080**	**30,810**
Parking Lot West[4] 2.29 acres (99,700 ft2)	0 - 1.0	100	3,690	490
	1.0 - 2.0	16	3,690	80
	Total		**7,380**	**570**
North of Building[3,5] 0.53 acres (22,900 ft2)	0 - 0.5	6900	420	3,820
	0.5 - 1.5	500	850	560
	1.5 - 2.0	345	420	191
	2.0 - 4.0	23	1,700	51
	Total	-----	**3,390**	**4,620**
West of Building[4] 0.28 acres (12,200 ft2)	0 - 1.0	0.14	450	0.08
	1.0 - 2.0	0.64	450	0.38
	Total	-----	**900**	**0.46**
Total Site Area			**42,900**	**108,900**

[1]Soil Volume = (area)x(depth interval)
[2]Mass of PCB = (soil volume)X(porosity)x(soil density)x(PCB concentration); where porosity is assumed to be 35% and soil particle density is assumed to be 2,650 kg/m^3
[3]Data from Gushue and Cummings
[4]Data from BBL 1998a. PCB ansalysis method USEPA SW-846 method 8082.
[5]Area north of building calculated using length of building and an estimated width of 2.5 meters

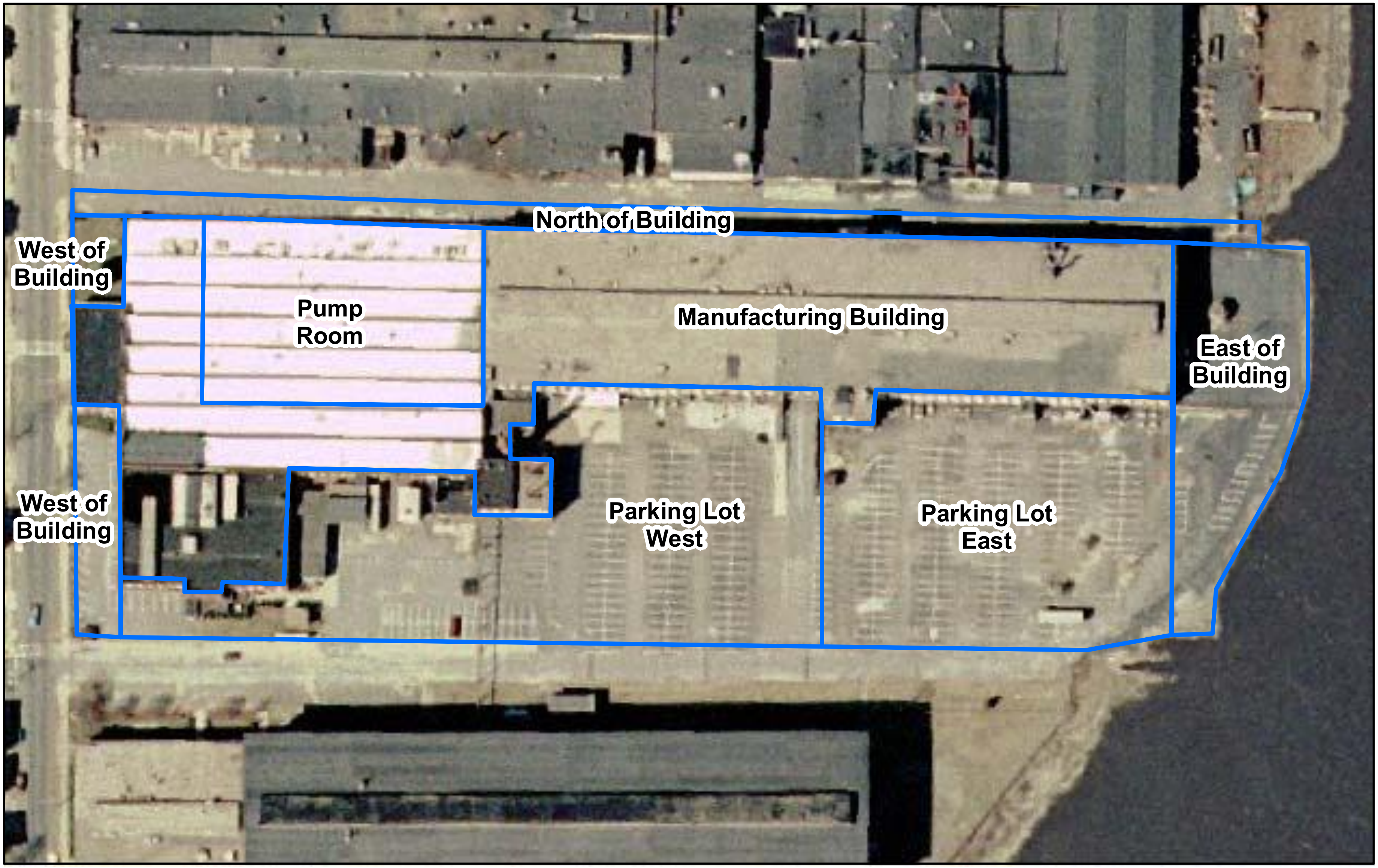


Figure 3-1: Aerovox Site with PCB Source Areas Identified

ENSR | AECOM

Sources:MassGIS 2-m orthophotos
NAD 83 Mass State Plane m
ME scale 1:35000
Figure Generated: 23 January 2006 (KRD)

Feet
0 50 100 200

J:\Water\ProjectFiles\P90\9000NBH\Task_1400_Aerovox_CSM\figures_jpgs\Figure 3-1.mxd

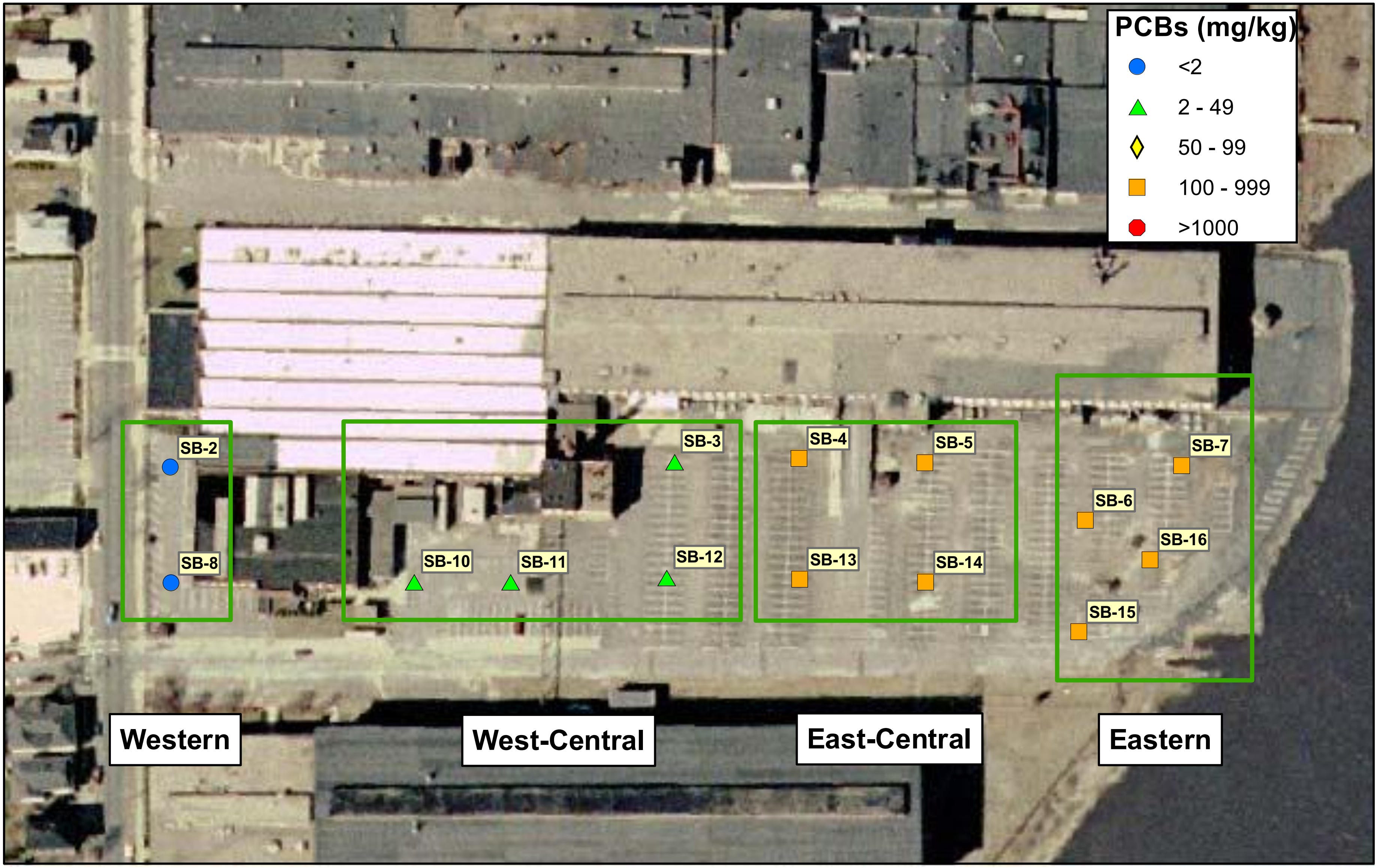


Figure 3-2: Aerovox Site with PCB Concentrations from Parking Area Asphalt Samples (BBL, 1998a)

Feet
0 50 100 200

Note: Samples within each bounded group were composited for analysis.
-Reported concentration assumed to be the sum of individual Aroclors

ENSR | AECOM

Sources:MassGIS 2-m orthophotos
NAD 83 Mass State Plane m
ME scale 1:35000
Figure Generated: 23 January 2006 (KRD)

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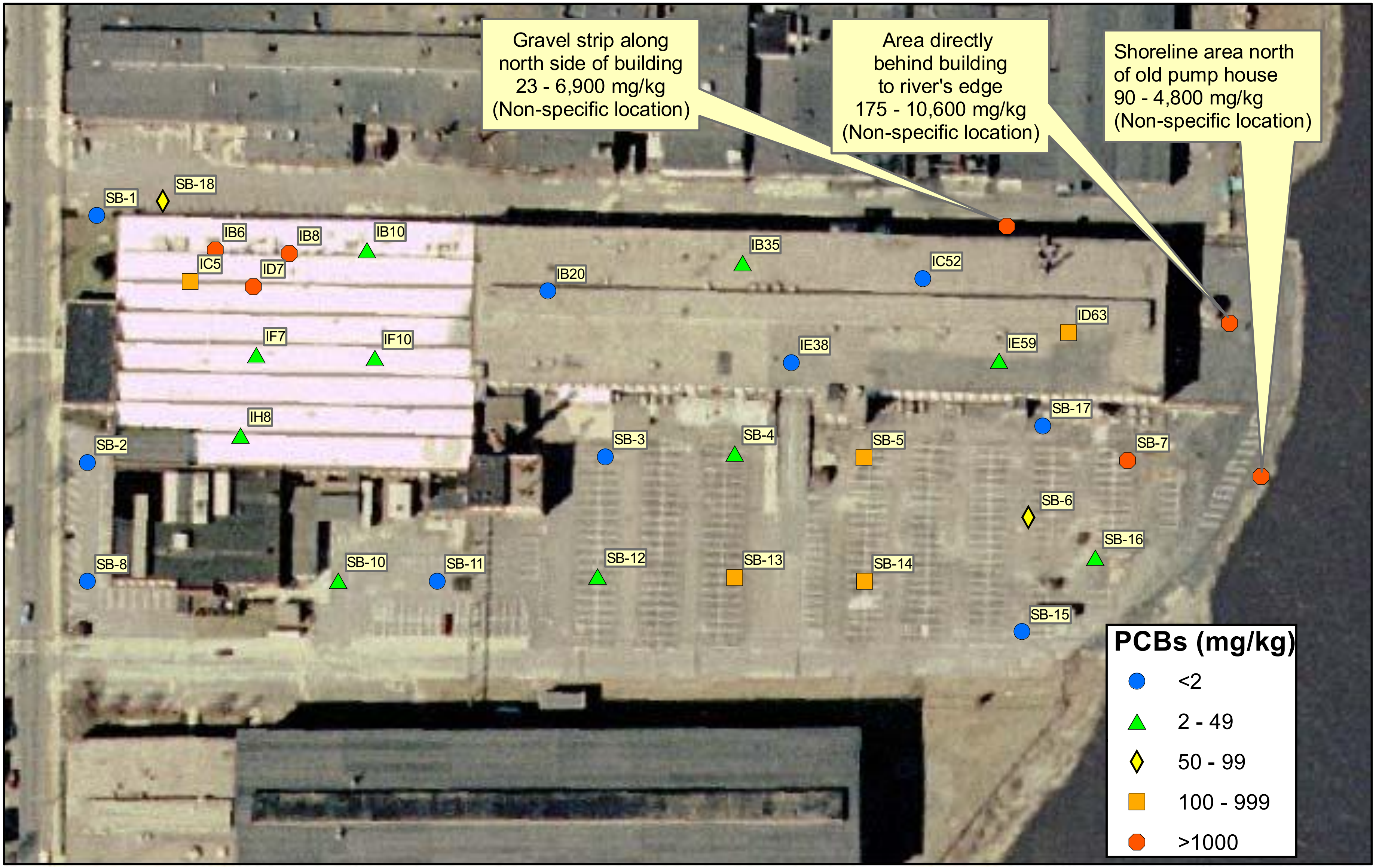

Figure 3-3: Aerovox Site with Maximum Soil PCB Concentrations (Gushue & Cummings, 1984; BBL, 1998a)

ENSR | AECOM

Sources:MassGIS 2-m orthophotos
NAD 83 Mass State Plane m
ME scale 1:35000
Figure Generated: 23 January 2006 (KRD)

0 50 100 200 Feet

4.0 POTENTIAL FOR PCB TRANSPORT VIA STORMWATER RUNOFF

Available data were reviewed to determine the potential magnitude of PCB transport to the harbor via stormwater runoff. Source materials used in this evaluation included a 1994 stormwater study work plan that included historical summary data (Stanley, 1994), data from the EPA PCS database, and a focused investigation performed by ENSR (reported in Appendix B).

4.1 Description of the Stormwater Drainage Network

Figure 4-1 provides an aerial view of the Aerovox site with the stormwater drainage network and outfall locations indicated. Approximately 80% of drainage from the 10 acre site is collected by this network, consisting of two above ground and two subsurface drain lines as described below. The remaining 20% of the site includes the eastern boundary that drains directly to the harbor and a narrow strip along the western boundary that is collected along Belleview Avenue and ultimately drains to the harbor.

Surface Drains

Two of the four drainage lines are entirely above ground, as indicated by solid red line in the Figure 4-1. These lines run along the base of the large building and terminate at outfalls into the harbor (at monitoring locations SW-10 and SW-11 in Figure 4-1), draining nearly all of the manufacturing building roof and a portion of the roof of the western section of the building. These surface drains consist of concrete troughs approximately 1 foot in depth running parallel to the building (Appendix A, photo 8). The outfalls at locations SW-10 and SW-11 drain an area of approximately 2.8 acres (Figure 4-2). Given the impervious roof and the short drainage distance, response of this system to rainfall events is swift and short in duration following the event. Melting ice and snow on the building roof causes a more continuous, lower rate discharge.

Subsurface Drains

Drainage from approximately 5.2 acres of the site is collected by a series of catch basins and routed through two subsurface lines that discharge to the harbor at the outfall at monitoring station SW-12 and the City outfall at the southeastern corner of the site (Figures 4-1 and 4-2; Appendix A, photos 10-12). Characterizing flow and sampling the termination of these lines were difficult as the outfalls are vertically positioned within the intertidal zone, i.e., the outfalls are exposed at the mid to lower stages of the tide and submerged at high tide. As a result, the lower section of these drain lines are partially inundated with harbor water during each high tide and drained during each low tide. Portions of these lines also appear to intersect the shallow groundwater system, and groundwater entering cracks and pipe junctions during high water table conditions causes baseflow during some dry weather periods.

4.2 Historically Measured PCBs in Runoff

Stormwater drainage network samples were collected and analyzed for PCB concentrations during several past investigations. Based on these limited sampling data, PCB concentrations in stormwater appear to have decreased over time as summarized below:

- Prior to 1984, total PCB concentrations up to 1,080 ug/L were measured in stormwater drainage network samples. This was prior to installation of the asphalt cap over exposed soils along the eastern portion and northern boundary of the site (B and V Waste Science and Technology, 1990 as reported in Stanley, 1994).
- During the period from 1985 to 1990, PCB concentrations ranged from 8 to 177 ug/L in storm drainage network samples following installation of the containment cap (B and V Waste Science and Technology as reported in Stanley, 1994).
- During the period from 2001 to 2002, PCB concentrations ranged from 2 to 12 ug/L in stormwater samples collected at several locations in the drainage network during seven separate storm events (USEPA PCS database, 2005a).

4.3 2004-05 Stormwater Monitoring

Sampling of stormwater runoff was performed in 2004-05 to provide more recent PCB data. In addition, samples were analyzed for metals and total suspended solids, and estimates of the flow through the drainage system were performed to help quantify potential mass flux into the harbor. Sampling was performed at seven locations shown in Figure 4-1 and included:

- Two surface drainage outfall locations, SW-10 and SW-11;
- One subsurface drainage outfall location, SW-12 ;
- Two subsurface drainage points (SW-2 and SW-3) on the SW-12 drainage line; and
- Two subsurface drainage points (SW-9 and SW-13) that connect to the City of New Bedford Hadley Street outfall line to the south of the site.

The sampling included collection of baseflow samples (collected during dry weather periods), first flush samples (collected early during a rainfall event), and steady-state samples (collected later in the rainfall event) during two events (September 2004 and May 2005). A detailed description of the methods and results is provided in Appendix B to this report, and results are summarized below.

Total suspended solids (TSS) concentrations were measured as part of the stormwater monitoring program and are summarized in Table 4-1. TSS concentrations in the majority of samples were below the detection limit of 4 mg/L. The maximum TSS measured was 71 mg/L, for a first flush sample at location SW-03 draining the parking area. The predominance of lower TSS values indicated that a large amount of particulate had not built up over the site that was available for mobilization by the rainfall events.

The PCB concentrations measured in the stormwater samples from the 2004-05 monitoring events were similar in magnitude to those measured in 2001-02. For the first flush samples collected near the beginning of the storm event, PCB concentrations ranged from less than 0.5 ug/L to a maximum of 13 ug/L at location SW-03 draining the parking area, the location with the highest measured TSS value (Table 4-2, Figure 4-1). Concentrations dropped for the steady-state samples collected later in the storm event ranging from less than 0.5 ug/L to a maximum of 3.6 ug/L at location SW-10 draining the northern portion of the building area. PCB concentrations in the baseflow samples collected during dry weather conditions were higher on average, ranging from 0.8 to 8.6 ug/L (Table 4-2) but the amount of flow within the drain line was quite low.

For the total metals analysis, copper and zinc values appeared to be the most elevated. Copper concentrations ranged from 4.8 to 50 ug/L with the highest value reported for a first flush sample at station SW-03 (parking area sample with the highest TSS and PCB concentrations). Zinc concentrations ranged from 35 to 1,900 ug/L with the highest value reported for a first flush sample at station SW-11 (outfall for the open drain line along the southern side of the building). A complete summary of the metals data can be found in Table B-4 (Appendix B to this report).

4.4 Estimation of Transport Potential via Stormwater

Based on the results of the 2004-05 sampling effort, the potential transport of PCBs from the Aerovox site to the harbor was estimated using the following approach:

- Runoff from the site to the harbor was calculated assuming the average annual precipitation rate reported for New Bedford (42.5 inches/year), a drainage area of 8 acres (estimated area of the site that drains through the monitored lines), and a runoff coefficient of 0.9 (90% of the precipitation falling over the predominantly impervious site leaves as runoff). The 0.9 runoff coefficient represents a conservative assumption (likely to over predict runoff) based on suggested values of 0.7 to 0.95 for asphalt pavement and 0.75 to 0.95 for roof material (Viessman and Lewis, 1996).
- For mass loading, all precipitation was assumed to carry the maximum total PCB concentration measured during the 2004-05 sampling (13 ug/L). As the baseflow samples were likely more representative of a groundwater flux, they were included in the groundwater assessment presented in Section 5.4.

Using the approach outlined above, the total annual stormwater runoff from the site was estimated at approximately 32 million liters, and the mass of PCBs leaving the site via stormwater was estimated at approximately 0.4 kg/year. Even with the conservative assumption that all runoff contained PCBs at the highest concentration measured in the recent sampling, the estimated mass flux is very low. This is because of the relatively stable conditions that currently exist at the site, i.e. the building surfaces and paved areas have been left relatively clean with repeated washing by storm events since operations were terminated at the facility and most sources of PCBs (within the building or beneath the pavement) were isolated from contact with precipitation. Given the large amount of precipitation that falls over the site on an annual basis, the potential for significant transport of PCBs remains with deterioration of the roof and outer shell of the building as well as deterioration of the paved surfaces over time.

Table 4-1 TSS Concentrations in Stormwater 2004-05

Drainage Locations	Sampling Station	Month Year	Total Suspended Solids (mg/L)		
			Baseflow	Stormwater First Flush	Stormwater Steady State
Subsurface Drainage	SW-02	Sep-04	<4	<4	<4
		May-05	<4	--	--
	SW-03	Sep-04	13	71	10
		May-05	14	<4	--
	SW-09	Sep-04	--	7.2	<4
		May-05	--	--	--
	SW-12	May-05	<4	--	--
	SW-13	Sep-04	<4	<4	<4
		May-05	9.6	--	--
Surface Drainage	SW-10	Sep-04	--	5.2	<4
		May-05	--	<4	--
	SW-11	Sep-04	--	<4	<4
		May-05	--	--	--

Table 4-2 Total PCB Concentrations in Stormwater 2004-05

Drainage Locations	Sampling Station	Month Year	Total PCB Concentration (ug/L)		
			Baseflow	Stormwater First Flush	Stormwater Steady State
Subsurface Drainage	SW-02	Sep-04	8.6	0.67	0.60
		May-05	2.5	--	--
	SW-03	Sep-04	5.8	12.8	3.5
		May-05	0.82	0.85	--
	SW-09	Sep-04	--	0.14	0.14
		May-05	--	--	--
	SW-12	May-05	2.6	--	--
	SW-13	Sep-04	3.9	0.14	0.14
		May-05	1.6	--	--
Surface Drainage	SW-10	Sep-04	--	4.7	3.6
		May-05	--	1.3	--
	SW-11	Sep-04	--	0.14	0.14
		May-05	--	--	--
Total PCBs based on sum of Aroclors					

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Figure 4-1: Aerovox Site with Stormdrain Network and Drainage Zones Indicated

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Sources:MassGIS 2-m orthophotos
NAD 83 Mass State Plane m
ME scale 1:35000
Figure Generated: 23 January 2006 (KRD)

Feet
0 50 100 200

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U.S. Army Corps of Engineers
New Bedford Harbor Superfund Site

US Army Corps of Engineers
New England District

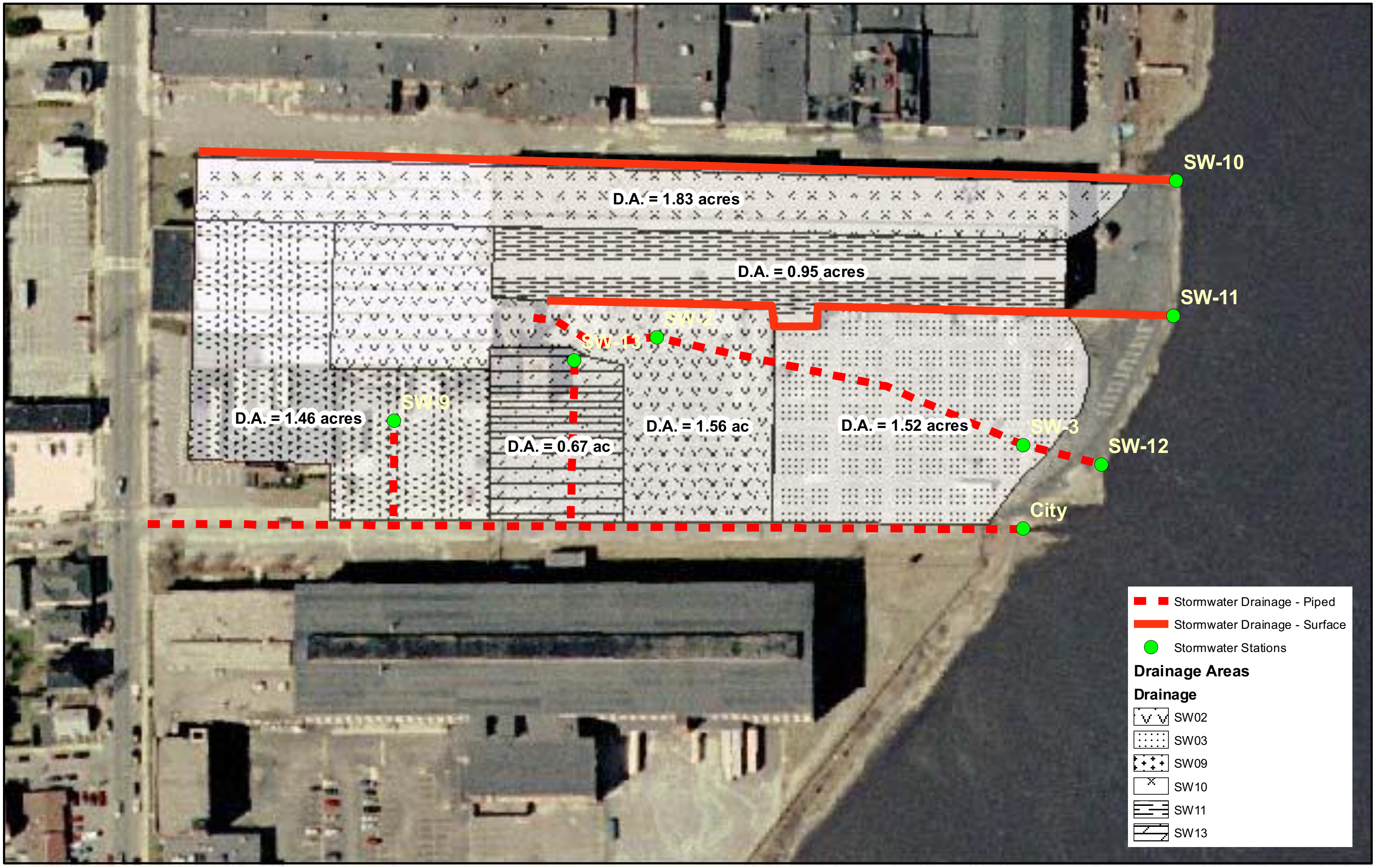

Figure 4-2: Aerovox Site with Stormdrain Network and Areas of Drainage Zones Indicated

ENSR | AECOM

Sources:MassGIS 2-m orthophotos
NAD 83 Mass State Plane m
ME scale 1:35000
Figure Generated: 23 January 2006 (KRD)

Feet
0 50 100 200

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5.0 POTENTIAL FOR PCB TRANSPORT VIA GROUNDWATER FLOW

Available data were reviewed to determine the potential magnitude of PCB transport to the harbor via groundwater flow. Source materials used in this evaluation included the Gushue and Cummings summary paper (1994), investigations performed as part of the EE/CA (BBL, 1998a), and a focused investigation performed by ENSR (reported in Appendix B).

5.1 Description of the Groundwater Flow System

Geology

The Aerovox site lies on the western shoreline of the north-south trending Acushnet River valley. Regionally, the geology is characterized by crystalline bedrock, and during the Pleistocene glaciation bedrock in the region was eroded into valleys and ridges with relatively low relief. The glaciation was also responsible for the soils overlying bedrock, which can range from well sorted (and highly permeable) sands and gravel to dense till (BBL, 1998a). The Acushnet River valley is approximately 4 miles wide in the vicinity of the Aerovox site, with the estuary encompassing only a small portion of the center of the valley.

The Aerovox site slopes gently from west to east toward the harbor, dropping from approximately 14 feet above mean sea level (MSL) along Bellville Avenue to approximately 4 feet MSL adjacent to the harbor. The subsurface geology of the Aerovox site is relatively complex, with soil type and depth to bedrock varying widely across the site. The three geologic cross sections presented in the EE/CA (BBL, 1998a) have been reproduced for this report (cross section locations in Figure 5-1 and cross sections in Figures 5-2 through 5-4), and the major soil and material types are described below:

- Fill – Fill material consisting of a mixture of sand, gravel, debris, and refuse underlay the majority of the site ranging in depth from 2 to 6 feet.
- Shallow Sand and Gravel – An unsorted mixture of fine to coarse sand and fine to medium gravel was identified immediately below the fill, up to 5 feet in thickness.
- Peat – A layer of peat was identified beneath the surficial fill/sand and gravel over the eastern portion of the site at a depth of approximately 5 to 10 feet below the surface. The layer was approximately 2 feet thick and included organic material in varying states of decomposition as well as varied matrix material. The peat layer was not identified beneath the western portion of the site, potentially the result of the original excavation/development of the site.

- Sorted Sand – Fine to medium, generally well-sorted sand was identified at most locations. The sand unit was found primarily beneath the peat in the eastern portion of the site with a thickness of greater than 10 feet in some locations.

- Deeper Sand and Gravel – A deeper unsorted mixture of fine to coarse sand and gravel was identified beneath some areas of the western portion of the site with a thickness of up to 10 feet.

- Till – Till was only identified at one boring location in the northwest corner of the site, residing beneath the deeper sand and gravel unit.

- Bedrock – A bedrock ridge was identified beneath the western portion of the site, rising to within approximately 2 feet of the ground surface at boring location SB-11 (Figures 5-1 and 5-2). The rock was identified as a gneissic schist containing some fracturing as well as a weathered zone several feet thick (GHR, 1989 in BBL, 1998a)

Groundwater Flow

The Acushnet River valley has large expanses of wetlands outside of the developed areas adjacent to the harbor and within approximately 1 mile to the east or west of the axis of the valley. Groundwater recharge in these wetland areas is expected to drive a regional groundwater flow system toward the axis of the valley and to the south toward Buzzards Bay. For the portion of the valley where the Aerovox site is located, the regional flow is expected to be directed to the southeast or south.

To characterize the groundwater flow system and groundwater quality beneath the Aerovox site, monitoring wells were installed across the site as part of the initial investigations performed in the early 1980's (Gushue and Cummings, 1984). Thirteen wells remain in service, with the majority of the wells located in the area of higher soil contamination near the harbor (Figure 5-5). Depth to groundwater at the site ranges from approximately 4 feet below grade in wells near the harbor to nearly 12 feet below grade at MW-5 in the northwestern corner of the site.

The earlier investigations identified two groundwater flow systems beneath the site:

- A shallow system was identified across the eastern portion of the site within the fill and sand and gravel unit, and perched above the low permeability peat layer. Water level measurements within this system revealed a hydraulic connection to the harbor during more extreme high tide events. This prompted the installation of the sheet-pile wall to better isolate the shallow system from the harbor waters.

- A deeper groundwater system was identified in the more uniform sand unit found beneath the confining peat layer in the eastern portion and connecting to sand and sand and gravel units beneath the western portion of the site. This system was identified as connected to the harbor waters (hydraulic head measurements within the deeper wells near the harbor responded to changes in tidal elevations). Regional groundwater flow is expected to occur within this zone, with flow likely extending beneath the shallow Upper Harbor bottom and with accompanying groundwater discharge.

Extensive monitoring of groundwater levels was performed from 1993 to 2002 to confirm that the shallow groundwater system remained isolated from the harbor (reported in BBL, 1998a). Water level measurements were performed during full moon (spring tide) conditions during the spring and fall of each year. The measurements demonstrated that the shallow system remained isolated from the harbor, even during the high tide periods. Measurements in the deeper groundwater system revealed a gradient reversal at high tide (indicating groundwater movement from the harbor toward the site). However, as point measurements of hydraulic head were made only at high and low tide, the temporal extent of the gradient reversal could not be determined.

To better characterize the flow system, a series of water level measurements were performed by ENSR as part of this investigation. Nearly synoptic measurements performed in all of the wells supported the assumed general regional flow direction of groundwater beneath the site to the southeast (Table 5-1, Figure 5-6). To characterize the dynamics of the groundwater-harbor interaction, continuous recording water level meters were installed in a shallow well (MW-7A) and deep well (MW-7) adjacent to the harbor as well as in the harbor itself for a two week period in May 2005. The water level records for all three measurement points are presented in Figure 5-7 along with a record of precipitation for the period. The tidal record showed cycling from higher amplitude spring tides to lower amplitude neap tides through the monitoring period. Water levels within the shallow well MW-7A were very stable over the entire monitoring period, indicating that the shallow system was hydraulically isolated from the harbor.

Hydraulic head measured in well MW-7 closely tracked the tidal fluctuations, indicating a strong hydraulic connection between the deeper system and the harbor. During the highest stages of the tide, the hydraulic gradient was directed to the west, from the harbor to the deeper system under the site (i.e., water levels were higher in the harbor). However, during the majority of each tidal cycle, the gradient was directed to the east, from the deeper system under the site to the harbor. These fluctuations indicate that although some reversal of flow direction may occur during the higher stages of the tide, on average the flow is directed toward the harbor, with discharge of groundwater expected along the shoreline or further out into the harbor.

5.2 Historical Measurements of PCBs in Groundwater

Earliest measurements of groundwater quality were performed in the early 1980s and reported in Gushue and Cummings (1984). Both filtered (dissolved fraction) and unfiltered (particulate + dissolved fractions) PCBs were analyzed. Filtered sample PCB concentrations ranged from <3 to 5 ug/L in the shallow system and from <3 to 7.5 ug/L in the deeper system with the highest concentration reported in well MW-4 between the building and the harbor. Unfiltered sample PCB concentrations ranged from

2 to 216 ug/L in the shallow system and from 1.5 to 20 ug/L in the deeper system. As this sampling was performed prior to the widespread adoption of low flow sampling techniques, the unfiltered sample concentrations may have been biased high.

Water samples were collected again in May 1998 as part of the EE/CA and reported in BBL (1998a). These samples were collected using low flow techniques, and unfiltered samples were analyzed for PCBs. PCBs were detected in three of the six shallow wells with concentrations ranging from 3 to 36 ug/L (Table 5-2), and the highest concentration was recorded in well MW-4A between the building and the harbor. PCBs were only detected in one of the seven deep wells, with a concentration of 33 ug/L reported for well MW-6 to the north of the building (Table 5-2).

5.3 2005 Groundwater Monitoring

Additional groundwater monitoring was performed by ENSR in September 2005 to provide more recent data for this evaluation. The monitoring included the water level measurements noted above in Section 5.1 as well as re-development of the wells and low flow sampling. Analysis of unfiltered samples included PCBs as well as general water quality and VOCs. The results are summarized below, and additional information on the sampling effort can be found in Appendix B.

Water Quality Measurements, TSS, and Observations

Table 5-3 provides a summary of general observations during sampling, field measured water quality parameters, and laboratory analyzed TSS. A petroleum odor was noted for water drawn from most of the wells, and an oily sheen was noted for the wells located along the eastern portion of the site. Groundwater temperatures were quite high at a number of wells, particularly for the shallow groundwater system located just beneath the black asphalt that covers much of the site. TSS levels were generally low, attributed to the recent development of the wells and low flow sampling.

PCB Concentrations

The PCB concentrations measured in the 2005 samples were similar to the 1998 values for the shallow wells (Table 5-2). PCBs were detected in four of the six shallow wells with concentrations ranging from 0.6 to 4.5 ug/L, and the highest concentration was again recorded in well MW-4A between the building and the harbor. For the deeper wells, PCBs were detected in three of the seven wells in 2005, with concentrations ranging from 0.9 to 35 ug/L. The highest concentration in the deep wells was again reported for well MW-6 to the north of the building (Table 5-2, Figure 5-8).

VOC Concentrations

VOCs were detected in concentrations greater than 1,000 ug/L (total VOCs) at six of the 13 monitoring wells (Table 5-4) with concentrations varying widely across the site. The highest concentrations were found in shallow well MW-8S in the central portion of the site and deep well MW-7 adjacent to the harbor (Figure 5-5). Constituents detected in highest concentrations were consistently trichloroethene and dichloroethene.

5.4 Estimation of Transport Potential via Groundwater

The assessment of potential transport of PCBs to the harbor via groundwater included the potential mass flux leaving the site with groundwater that discharges to the subsurface storm drains during dry weather periods as well as the mass flux associated with groundwater moving beneath the site and discharging to the harbor along the shoreline or further out into the harbor.

Baseflow in Storm Drains

Based on visual observations during the 2004-05 stormwater monitoring, the maximum dry weather base flow was estimated at approximately 3000 gallons/day. This flow rate was multiplied by the maximum PCB concentration measured in the baseflow, approximately 9 ug/L, to provide an estimate of PCB mass flux within the baseflow. The resulting estimated mass flux was approximately 0.04 kg/yr, conservatively assuming continuous discharge through the storm drain on a daily basis at the maximum measured concentration throughout the year.

Groundwater Flow Beneath the Site

Groundwater flow beneath the site is somewhat complex given the varied geologic units identified at the site, the dynamic relationship with the varying tidal water level at the harbor, and the sheet-pile wall isolating a portion of the shallow system. A relatively simple, but conservative, estimate of potential mass flux to the harbor via the groundwater system was performed as follows:

- Groundwater flow was estimated using Darcy's Law assuming a hydraulic conductivity of 200 gallons/(ft^2 *day) (typical value for a relatively clean sand), a hydraulic gradient of 0.0024 ft/ft (measured across the western portion of the site between wells MW-5 and MW-4B or MW-5S), and a down gradient cross sectional area of 13,500 ft^2 (a site width of approximately 450 ft perpendicular to groundwater flow and an assumed depth (thickness) of the sand layer of 30 ft).
- PCB mass flux was estimated assuming that all groundwater discharging to the harbor from beneath the site carried the maximum PCB concentration measured in the 2005 monitoring effort (35 ug/L measured in well MW-6).

Using the above approach, groundwater flow beneath the site discharging to the harbor was estimated at approximately 6,500 gallons/day. Multiplying the groundwater discharge by the maximum measured groundwater PCB concentration (35 ug/L) yielded a PCB mass flux estimate of 0.31 kg/yr.

Summing the annual flux of PCBs from the storm drain baseflow estimate (0.04 kg/yr) with the flux estimate from the groundwater system (0.31 kg/yr) yields a total PCB flux via groundwater of approximately 0.4 kg/yr. This is consistent with the estimate presented in Gushue and Cummings (1984) of less than 3 pounds (1.4 kg) per year, with the majority of the flux at that time estimated to occur from the shallow groundwater system (now isolated with the sheet-pile wall).

Table 5-1 Groundwater Elevations Measured September 15, 2005

	Well ID	Water Level Elevation (feet MSL)
Shallow Aquifer	MW-2A	2.61
	MW-3A	2.85
	MW-4A	3.16
	MW-6A	2.73
	MW-7A	2.87
	MW-8S	2.01
Lowert Aquifer	MW-2	1.07
	MW-3	1.51
	MW-4	1.09
	MW-4B	2.19
	MW-5	2.98
	MW-6	2.79
	MW-7	2.14

Table 5-2 Total PCB Concentrations in Groundwater, May 1998 and September 2005

	Well ID	Total PCB[1] (ug/L) May 1998	Total PCB[2] (ug/L) Sept. 2005
Shallow Aquifer	MW-2A	< 48	< 0.35
	MW-3A	<5	0.62
	MW-4A	36	4.5
	MW-6A	9.4	2.4
	MW-7A	<0.48	< 0.35
	MW-8S	3	4.4
Lowert Aquifer	MW-2	<5	< 0.35
	MW-3	<0.48	< 0.35
	MW-4	<2.5	< 0.35
	MW-4B	<0.48	2.1
	MW-5	<0.48	< 0.35
	MW-6	33	35
	MW-7	<0.48	0.91

[1]From BBL (1998a) – method for calculating total PCBs was not specified.
[2]From ENSR (Appendix B) - total PCBs were calculated as the sum of 7 Aroclors. When individual Aroclor concentrations were below the laboratory reporting limit, a value of half the reporting limit was used in the summation calculation.
< indicates below detection limit for all Arochlors

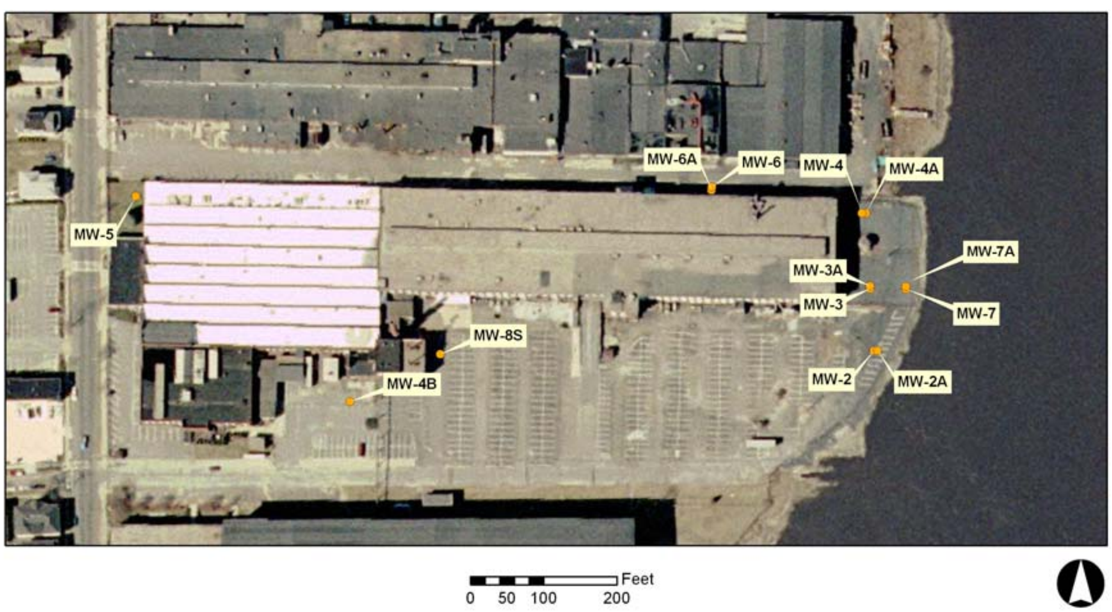

Table 5-3 Groundwater Sampling Field Measurements, September 2005

	Well ID	Sampling Depth Below Grade (ft)	TSS (mg/L)	Temp (°C)	Specific Conductancd (mS/cm)	pH	Turbidity (NTU)	Observation Notes
Shallow Aquifer	MW-2A	-4.6	20	30	970	6.87	4.5	Clear with slight petroleum odor, sheen.
	MW-3A	-5.9	26	26	1,500	6.70	5.4	Clear with slight petroleum odor, sheen.
	MW-4A	-8.6	--	30	240	5.55	6.8	Slight petroleum odor.
	MW-6A	-9.7	12	19	130	5.67	--	Light gray, no odor.
	MW-7A	-7.0	28	26	5,300	6.90	--	Slight petroleum odor, sheen.
	MW-8S	-5.2	19	25	2,000	6.94	12	Clear, very strong H2S odor, no sheen.
Lower Aquifer	MW-2	-14.2	7.6	21	1,600	6.30	11	Clear with slight petroleum odor, sheen.
	MW-3	-11.5	32	24	1,800	6.80	7.3	Clear with slight petroleum odor, sheen.
	MW-4	-16.9	16	20	650	5.45	6	Slight petroleum odor.
	MW-4B	-24.9	< 4	23	1,500	4.58	4.1	Clear with no odor.
	MW-5	-16.8	8.8	17	1,300	5.32	32	Cloudy, light brown.
	MW-6	-26.7	< 4	15	2,300	5.44	2.7	No color, no odor.
	MW-7	-14.6	< 4	17	1,300	6.45	--	Clear with slight petroleum odor, sheen.

Table 5-4 Summary of Groundwater VOC Concentrations in Groundwater, September 2005

Well ID	Deep/ Shallow	TSS (mg/L)	Total VOC[1] (ug/L)	Elevated Constituents	GW-3[2] (ug/L)	Component[3]
MW-2	Deep	7.6	1,100	1,3-DICHLOROBENZENE = 150 UG/L / 1,4-DICHLOROBENZENE = 170 UG/L / CHLOROBENZENE = 660 UG/L	8,000 8,000 500	88%
MW-2A	Shallow	20	220	-----	-----	-----
MW-3	Deep	32	660	CHLOROBENZENE = 460 UG/L	500	69%
MW-3A	Shallow	26	640	CHLOROBENZENE = 450 UG/L	500	71%
MW-4	Deep	16	1,200	1,4-DICHLOROBENZENE = 200 UG/L / CIS-1,2-DICHLOROETHENE = 230 UG/L / VINYL CHLORIDE = 550 UG/L	8,000 50,000 40,000	90%
MW-4A	Shallow		140	-----	-----	-----
MW-4B	Deep	< 4	6,000	TRICHLOROETHENE = 5600 UG/L	20,000	93%
MW-5	Deep	8.8	140	-----	-----	-----
MW-6	Deep	< 4	3,400	TRICHLOROETHENE = 2800 UG/L	20,000	83%
MW-6A	Shallow	12	300	TRICHLOROETHENE = 140 UG/L	20,000	47%
MW-7	Deep	< 4	16,000	CIS-1,2-DICHLOROETHENE = 3400 UG/L / TRICHLOROETHENE 12000 UG/L	50,000 20,000	96%
MW-7A	Shallow	28	170	-----	-----	-----
MW-8S	Shallow	19	23,000	CIS-1,2-DICHLOROETHENE = 16000 UG/L / VINYL CHLORIDE 6200 UG/L	50,000 40,000	98%

[1]Total VOCs were calculated using half the laboratory reporting limit for compounds that were not detected.
[2]Massachusetts groundwater GW-3 standard
[3]Percentage of total VOCs attributed to the elevated constituents

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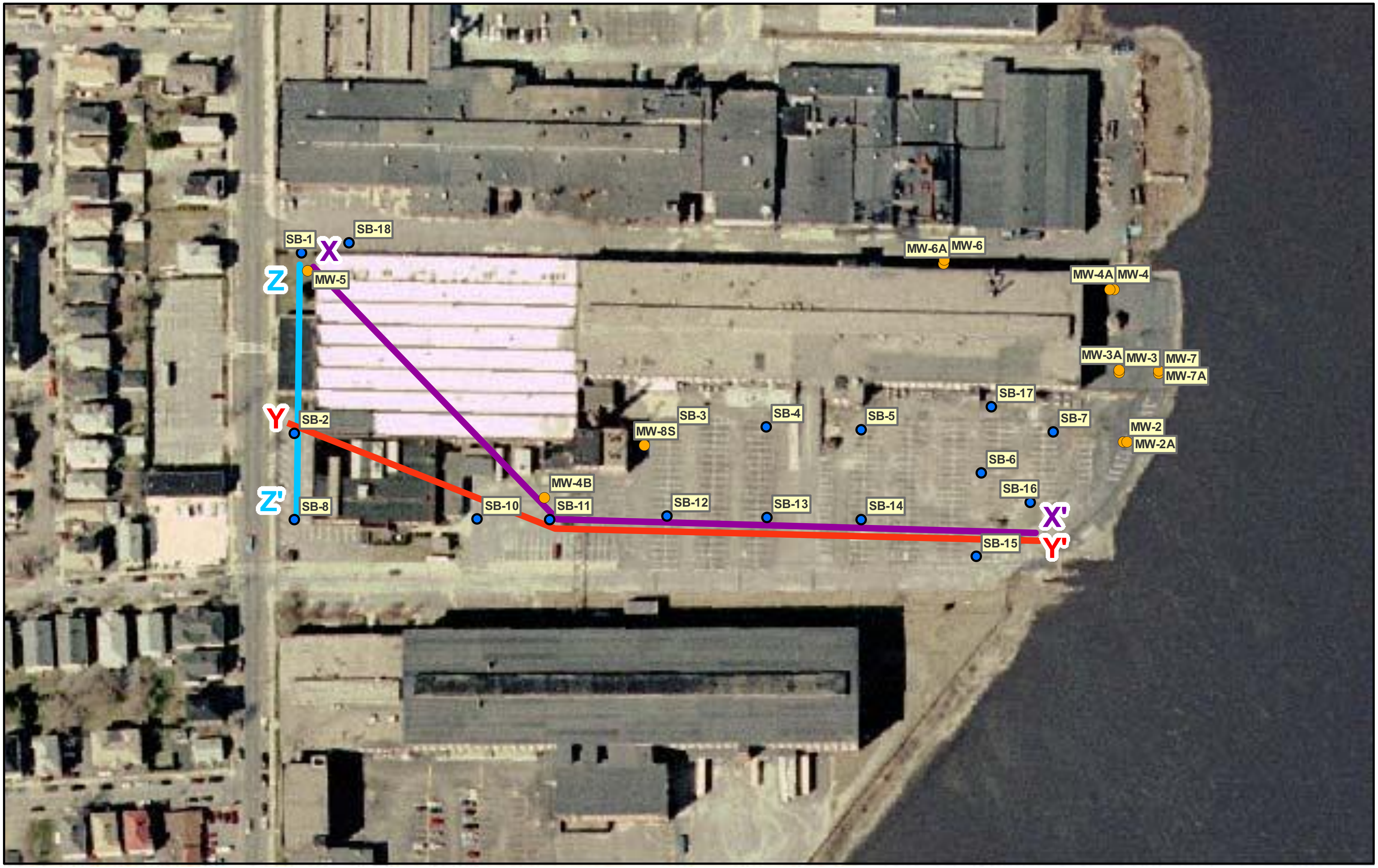

Figure 5-1: Aerovox Site with Locations of 1998 Geologic Cross Sections Indicated (from BBL, 1998a)

ENSR | AECOM

Sources:MassGIS 2-m orthophotos
NAD 83 Mass State Plane m
ME scale 1:35000
Figure Generated: 23 January 2006 (KRD)

Feet
0 50 100 200

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Figure 5-2 Aerovox Site Geologic Cross Section X-X’ (from BBL, 1998a)

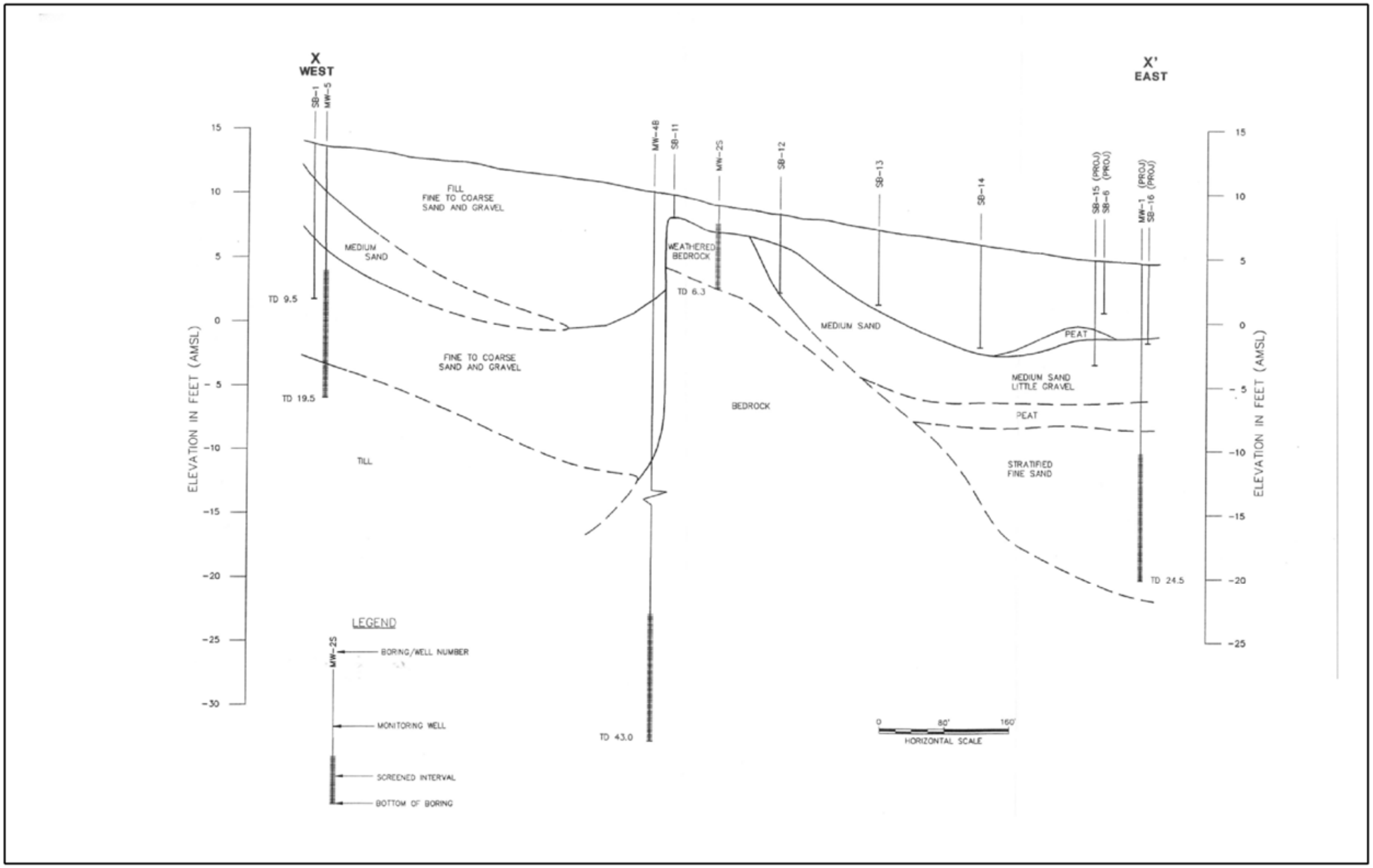


Figure 5-3 Aerovox Site Geologic Cross Section Y-Y' (from BBL, 1998a)

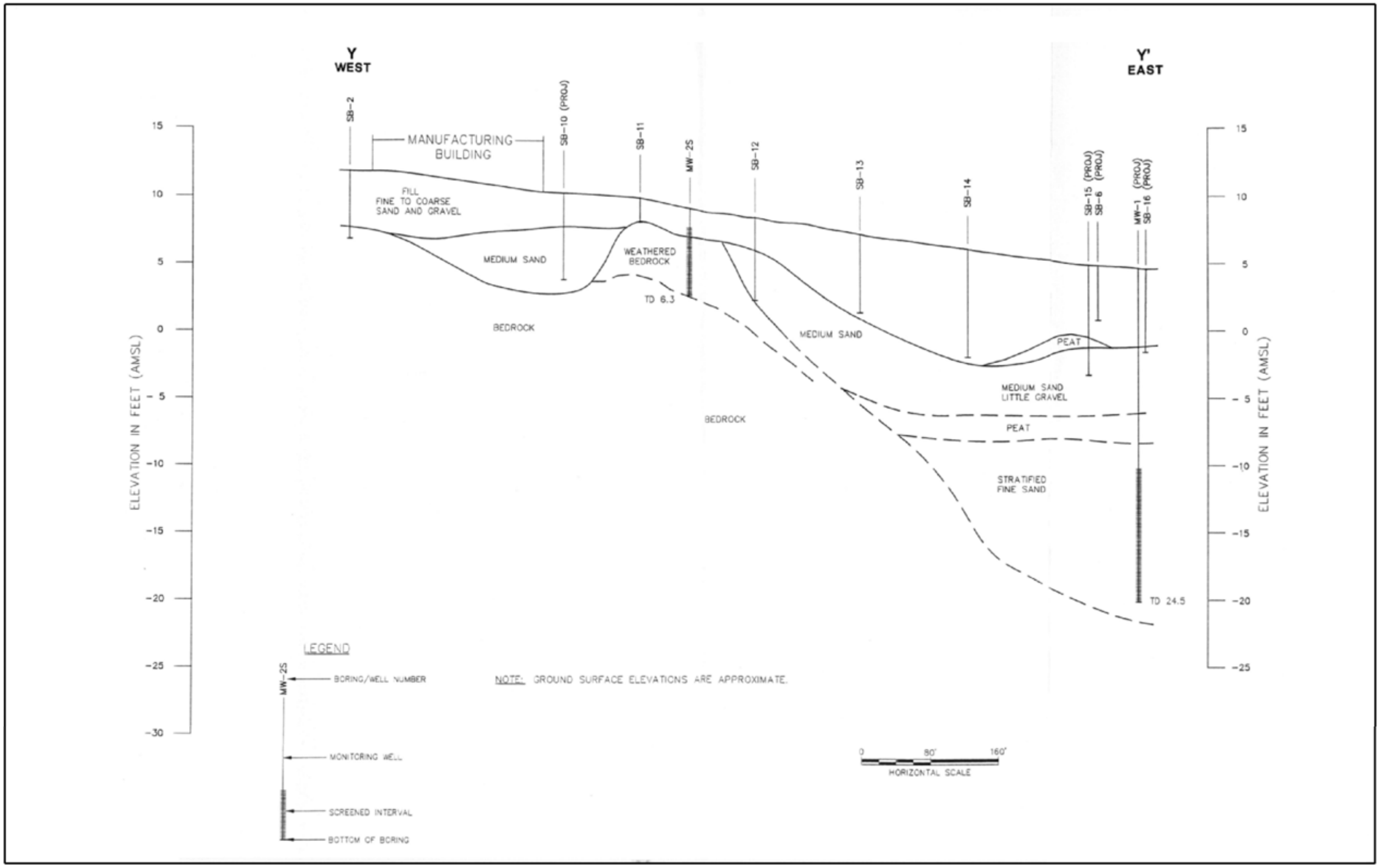
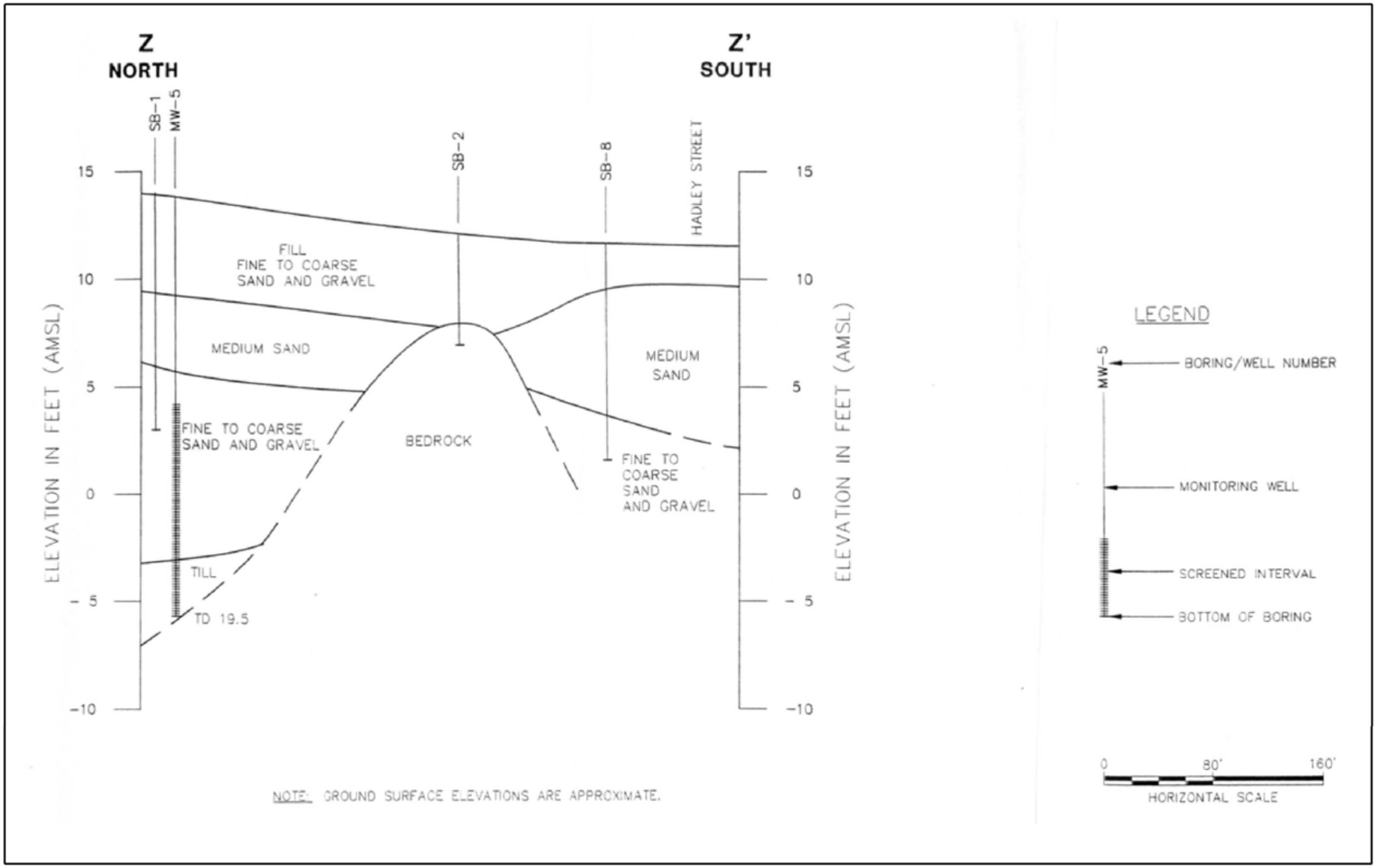


Figure 5-4 Aerovox Site Geologic Cross Section Z-Z' (from BBL, 1998a)



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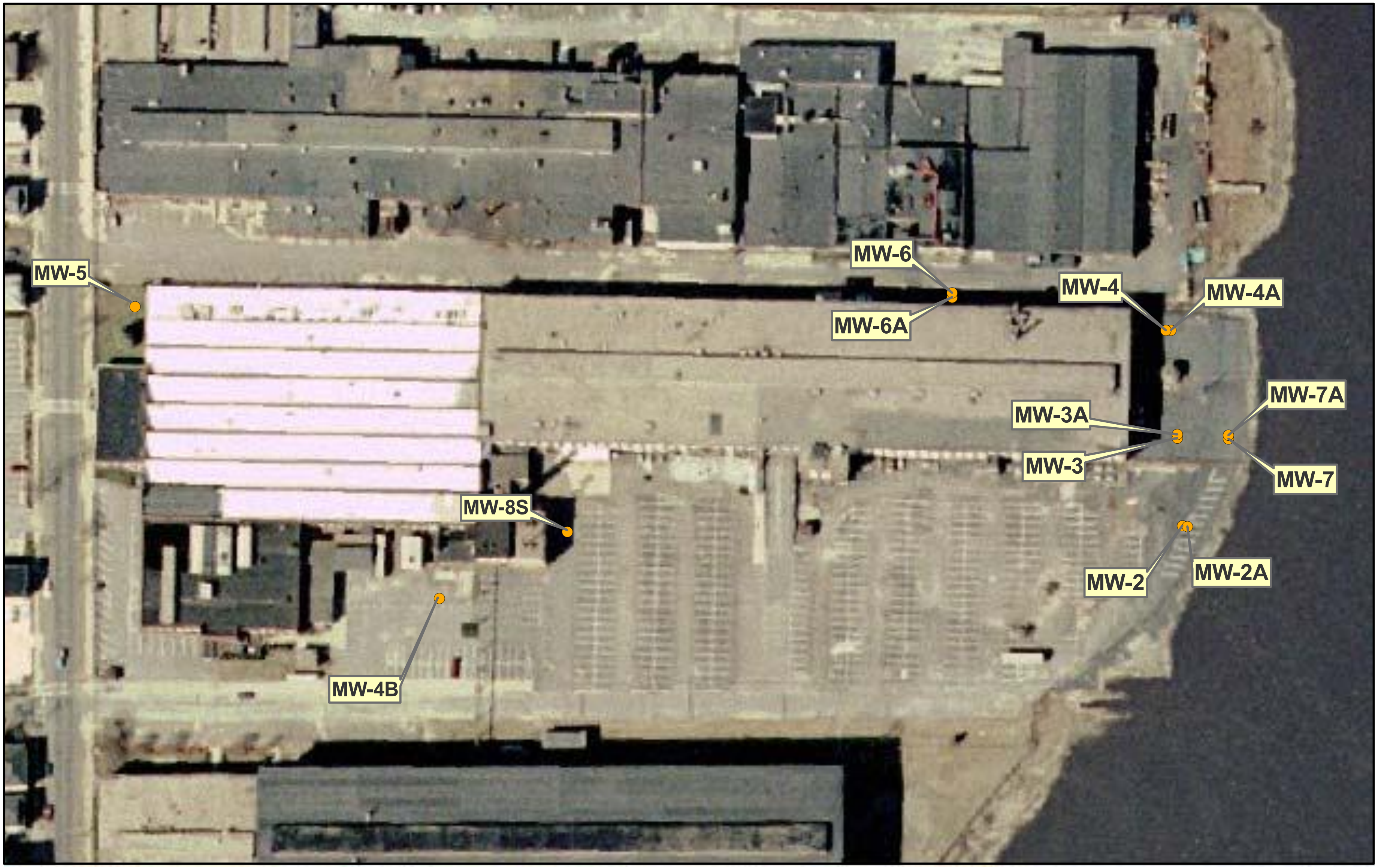

Figure 5-5: Groundwater Monitoring Wells

ENSR | AECOM

Sources:MassGIS 2-m orthophotos
NAD 83 Mass State Plane m
ME scale 1:35000
Figure Generated: 23 January 2006 (KRD)

0 50 100 200 Feet

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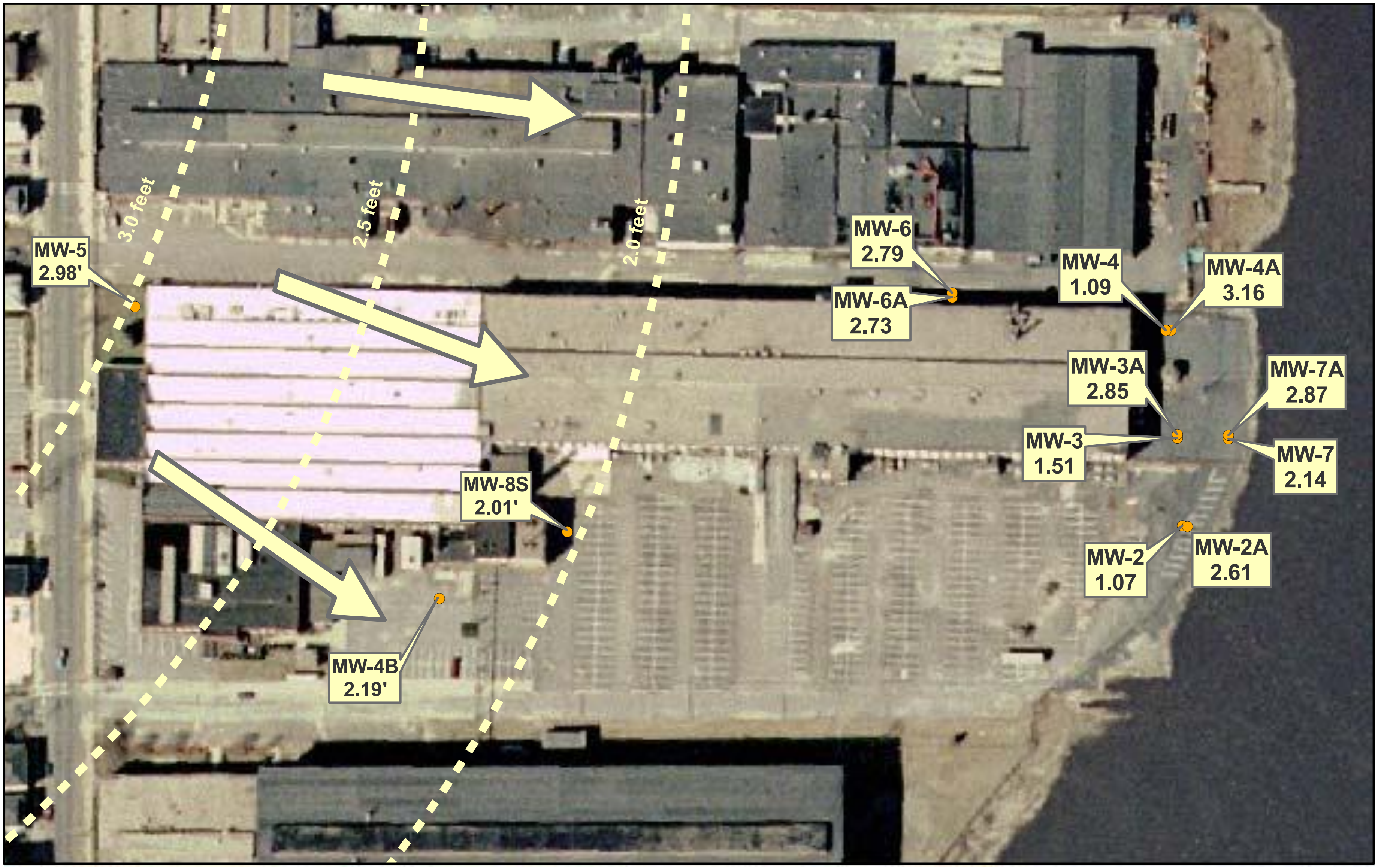

Figure 5-6: September 15, 2005 Groundwater Elevations and Estimated Groundwater Flow Direction

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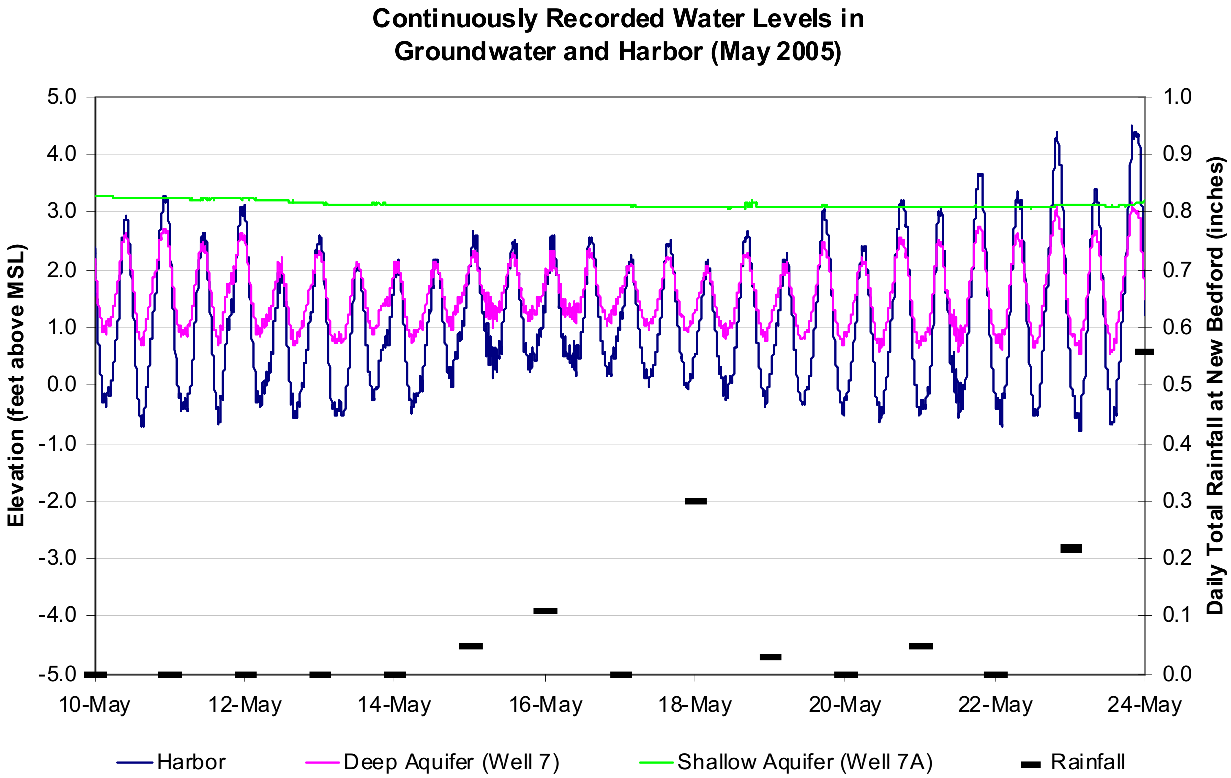
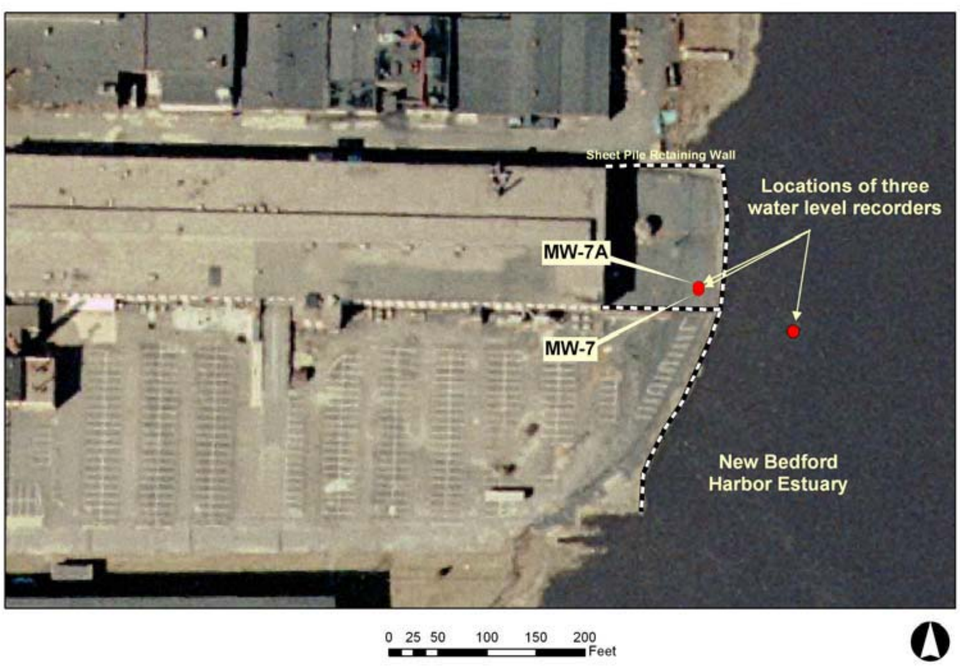
Sources:MassGIS 2-m orthophotos
NAD 83 Mass State Plane m
ME scale 1:35000
Figure Generated: 23 January 2006 (KRD)

Feet
0 50 100 200

Elevations in feet relative to mean sea level (MSL)

Figure 5-7 Continuously Recorded Groundwater and Surface Water Elevations, May 2005





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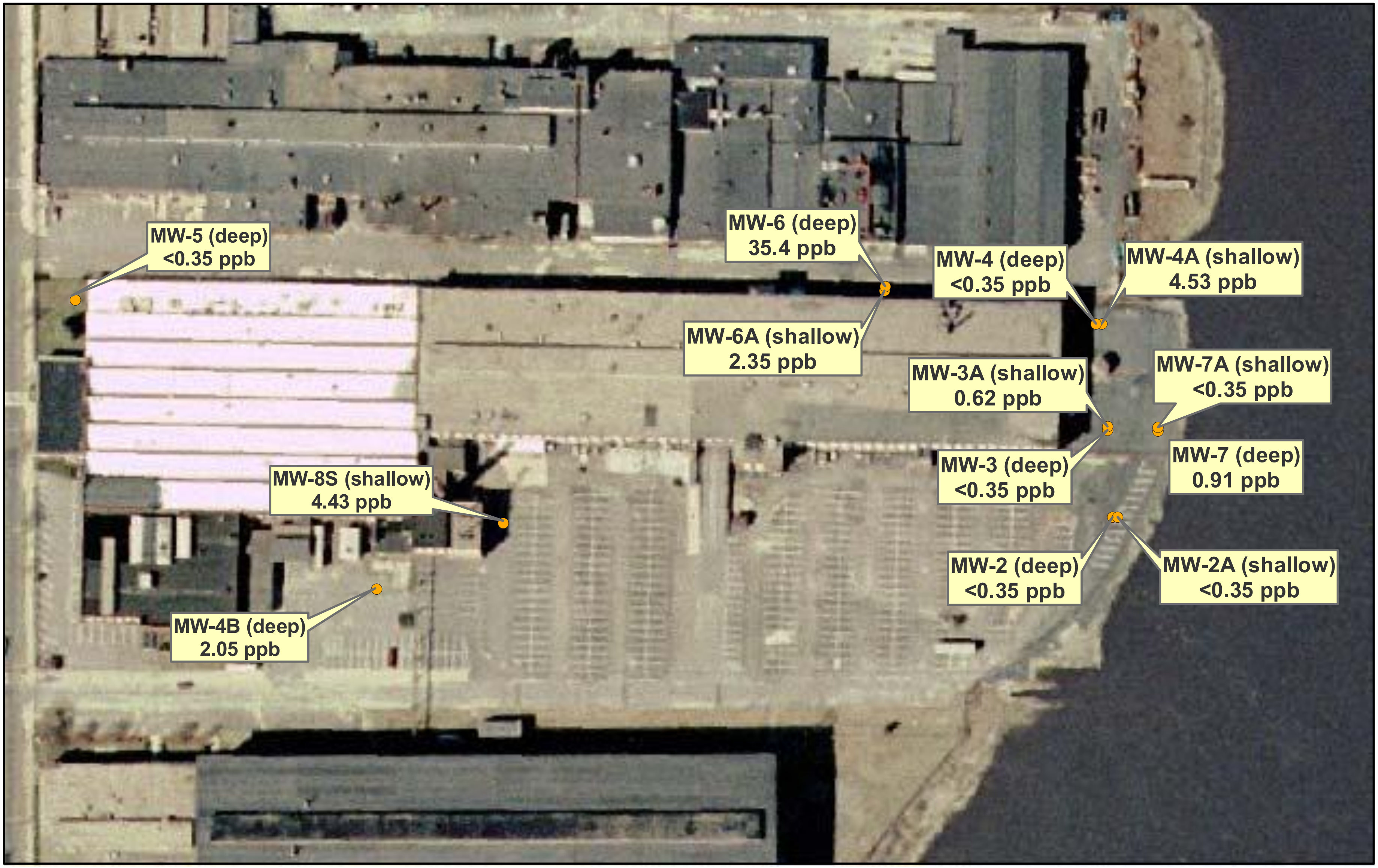

Figure 5-8: September 15, 2005 Groundwater Total PCB Concentrations

ENSR | AECOM

Sources:MassGIS 2-m orthophotos
NAD 83 Mass State Plane m
ME scale 1:35000
Figure Generated: 23 January 2006 (KRD)

Feet
0 50 100 200

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6.0 POTENTIAL FOR PCB MIGRATION AS DNAPL

As PCBs were used at the Aerovox site in the liquid (oil) state, contamination beneath portions of the site likely includes residual pockets or pooled areas of PCB oil. Because the density of the PCB oil is greater than that of water, it is termed a dense non-aqueous phase liquid (DNAPL). Given that PCBs have not been in use at the Aerovox site for nearly 30 years, PCBs that exist as DNAPL beneath the site are expected to be in a stable configuration, providing a source of contamination to infiltrating precipitation (if located above the water table) or to passing groundwater (if located below the water table), but not moving as a separate phase liquid. Future demolition activities at the site that include significant vibration or excavation, with potential exposure to increased infiltration, could mobilize PCBs that currently exist as DNAPL pooled beneath the slab of the building. However, any further migration of DNPAL is expected to be limited in extent given the length of time since PCBs were actively used at the site.

Given the site history and soil and groundwater concentrations, PCBs also likely exist in DNAPL form beneath the capped area between the building and the harbor, potentially residing above the low permeability peat layer. As the sheet-pile wall isolating this area from the harbor deteriorates over time, holes or gaps in the wall could allow for direct discharge of PCB oil into the harbor.

7.0 POTENTIAL FOR PCB TRANSPORT VIA AIRBORNE PATHWAYS

Monitoring of airborne concentrations of PCBs has been performed on a number of occasions to characterize potential exposure levels at the Aerovox facility as well as for the overall Upper Harbor during baseline conditions and during periods of active remediation (MDPH, 1995; Kevrick, 2001; USACE, 2001). Although no additional monitoring or formal assessment of the existing air monitoring data was performed as part of this evaluation, a general summary of potential transport pathways is provided below.

Transport of Vapor Phase PCBs

Although PCBs have relatively low vapor pressures (Table 2-1), volatilization does occur, particularly at increased temperatures. Ambient air monitoring performed in the vicinity of the Aerovox building has revealed elevated airborne concentrations (MDPH, 1995; Kevrick, 2001; USACE, 2001). Release of vapor phase PCBs is expected from the overall building as well as through the paved areas of the site, particularly during the summer months. Some of this PCB mass may be transferred to harbor waters, through direct dissolution or "raining out" during precipitation events. However, release of vapor phase PCBs is expected to be ongoing throughout much of the Upper Harbor, where there are high sediment PCB concentrations and shallow water conditions (with some areas exposed at low tide). Given these conditions, the release of vapor phase PCBs from the Aerovox site is not considered a significant transport pathway for PCBs to reach harbor waters and sediments. Note that this report does not include an evaluation of the impacts to site abutters from elevated airborne PCB levels; a review of recent data can be found in USEPA (2005b).

Transport of Airborne Particulate

PCBs bound to particulate matter can also be transported from the site to the harbor by the wind. Although no formal investigation of particulate transport has been performed at the site, it is not expected to be significant at the present time given the results of the stormwater monitoring reported in Section 4. If large amounts of PCB-containing particulate were being mobilized from the building, the first flush samples of stormwater draining the paved parking area would have had a larger signature of suspended solids and PCBs. However, given the relatively high concentrations of PCBs detected in the interior of the building, the potential for airborne transport of particulate containing PCBs is expected to increase with deterioration of the building roof and outer shell over time.

8.0 SUMMARY OF PCB TRANSPORT PATHWAYS

The review of PCB sources presented in Section 3 identified a potentially large mass of PCBs residing in the subsurface beneath the Aerovox site (>100,000 kg). The building itself is also identified as containing a large, but unquantified mass of PCBs. The transport pathways that could allow site-related PCBs to be transferred to harbor waters or sediments are summarized in Table 8-1. In general, the predicted mass flux of PCBs via each pathway is quite low at present, but has the potential to increase as described below:

- Stormwater Drainage – The PCB mass flux into the harbor through the stormwater system at the Aerovox site was estimated at approximately 0.4 kg/year under the current conditions at the site. This low value is attributed to the limited contact that precipitation has with contaminated material given that the majority of the site is occupied by the building and paved or capped open space. The mass flux via the stormwater pathway could increase significantly with deterioration of the building roof and outer shell as well as deterioration of the paved surfaces allowing precipitation falling over the site expanded contact with contaminated materials.

- Groundwater Discharge – The groundwater flow system beneath the site is relatively complex given the number of different soil types, the presence of bedrock at varying depths, the sheet-pile wall installed along the harbor, and the tidally varying water levels within the harbor. A simple, but conservative estimate of PCB mass flux to the harbor through the groundwater system was performed with a calculated value of approximately 0.4 kg/year. This relatively low value is consistent with the low solubility of PCBs in water. There is the potential for short term increases in the mass flux with changes in the groundwater flow system that increase the overall discharge rate or increase the contact of groundwater with the PCB sources in the subsurface. However, given the amount of PCBs that potentially reside in the subsurface, the discharge of groundwater with low concentrations of PCBs is expected to continue for an extended period of time (decades or longer).

- DNAPL Migration – The movement of PCBs as a separate phase liquid (DNAPL) is not considered to be a pathway of significant mass flux at present. However, given that separate phase PCBs likely reside in the subsurface between the building and the harbor, future deterioration of the sheet-pile wall that isolates this area from the harbor could allow for discharge of PCBs as DNAPL.

- Airborne Transport – Transport of vapor phase PCB from the site and subsequent transfer of PCB mass to harbor waters or sediments is not considered to be a significant pathway for mass flux at present or in the future. Although assumed to be minimal at present, airborne transport of particulate containing PCBs could become a more significant transport pathway with deterioration of the building and paved surfaces at the site. It should be noted that this report does not include an evaluation of the impacts to site abutters from elevated airborne PCB levels; a review of recent data can be found in USEPA (2005b).

Table 8-1 Summary of Potential PCB Mass Flux from the Aerovox Site to the Harbor

Transport Pathway	Potential PCB Flux	Notes
Stormwater Drainage	0.4 kg/year	Potential for significant increase in mass flux with deterioration of building and paved surfaces.
Groundwater Discharge (general flow beneath the site + assumed leakage into storm drains)	0.4 kg/year	Flux at this rate is expected to persist for decades - potential for short term increases in mass flux with change in groundwater flow system.
DNAPL Migration	Not formally assessed – assumed minimal at present	Potential for DNAPL discharge to harbor with deterioration of sheet-pile wall.
Airborne Transport	Not formally assessed – assumed minimal at present	Potential for significant increase with deterioration of the building and paved surfaces.

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APPENDIX A

PHOTOGRAPHS OF THE AEROVOX SITE

This appendix contains photographs of the Aerovox Site taken by ENSR staff.

Appendix A

Appendix A is an onsite photographic reference of the Aerovox facility located in New Bedford, MA. Figure A-1 provides an aerial map view of the Aerovox site, and Figures A-2 and A-3 provide additional aerial perspectives. All of the 28 on-site photographs presented in the appendix are referenced according to number. Figure A-1 depicts the location and direction of each photograph by number and an arrow. Panoramic views are indicated by arced lines.

U.S. Army Corps of Engineers
New Bedford Harbor Superfund Site

Figure A-1. Aerovox Site Photo Reference

Map Source:
NAD 83 Mass State Plane ft
Date: 02.02.06

ENSR | AECOM

0 50 100 200 300 Feet

Stormwater stations - ENSR, 2004-05
Direction of photograph
① Photograph number

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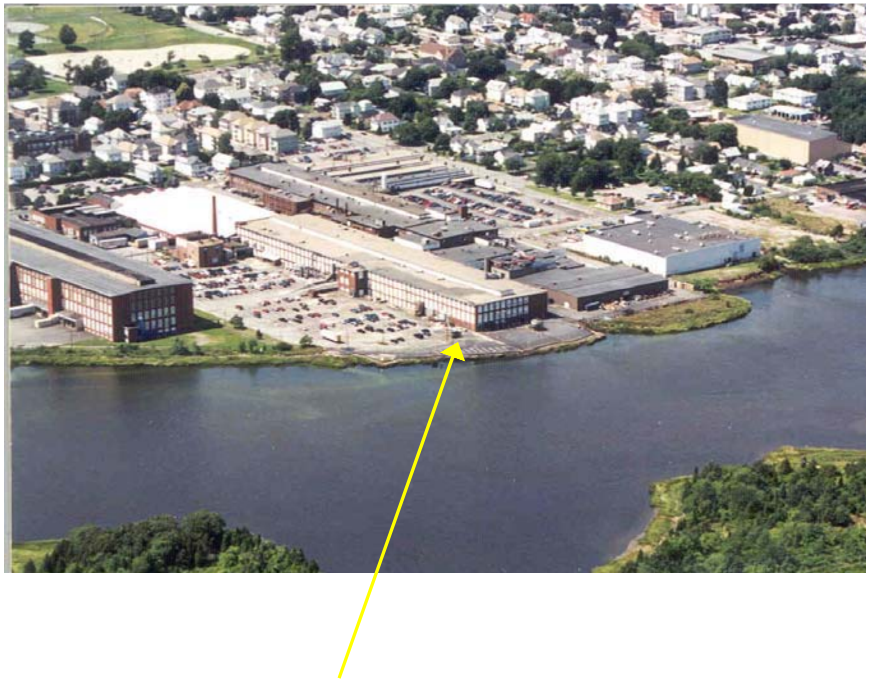
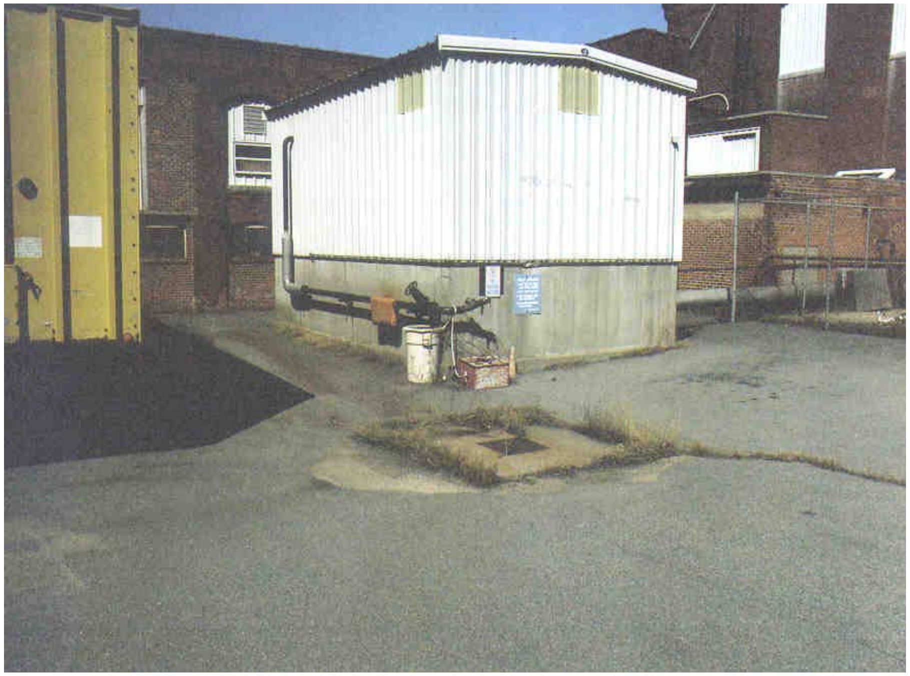


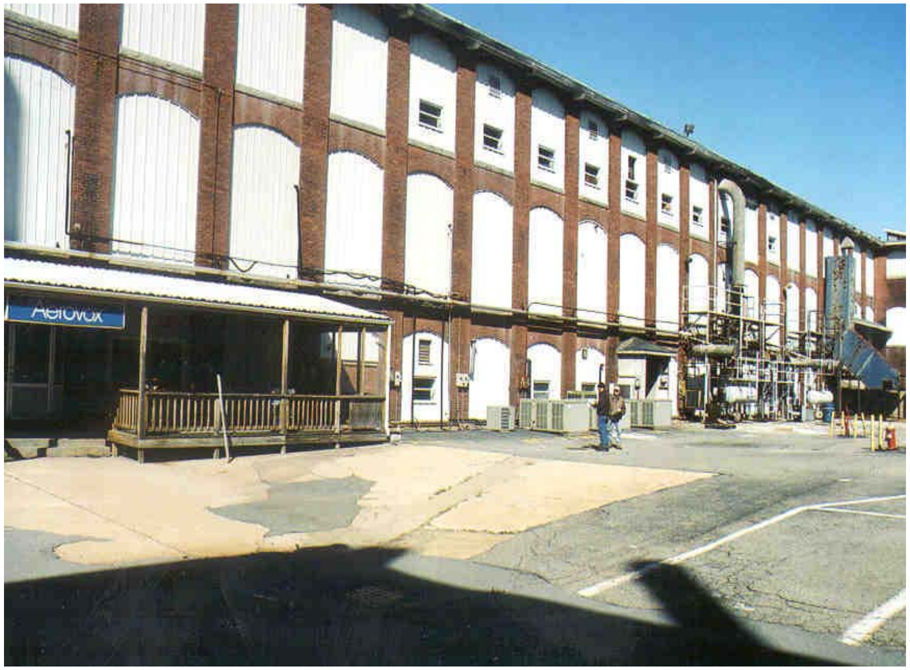
A2) Aerial View of the Aerovox Facility.

A3) Aerial View of the Aerovox Facility.



1) Southwestern side of Aerovox.

2) Stormwater catch basin SW-9 southwestern side of Aerovox site.

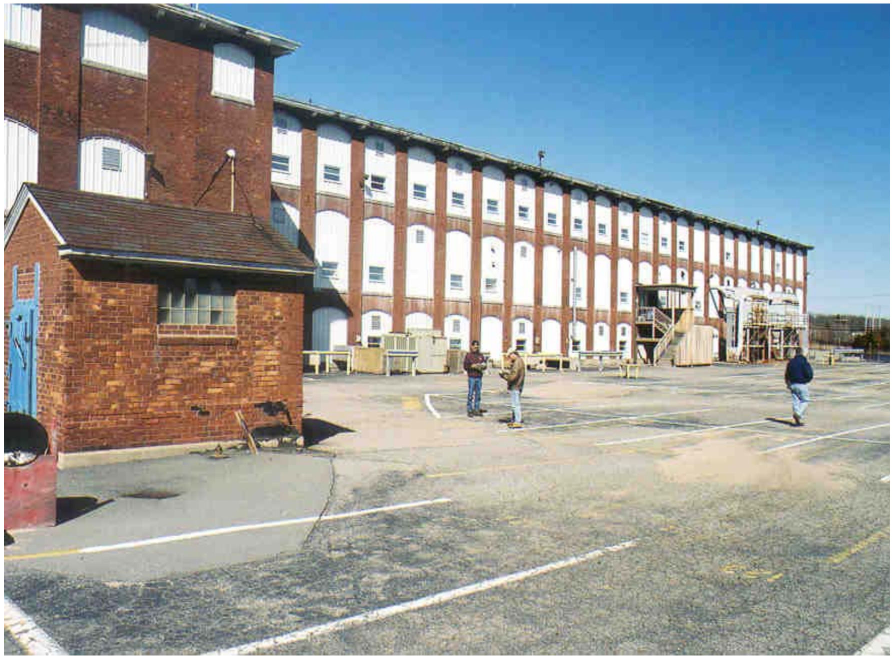


3) Southcentral side of Aerovox building with catch basin SW-13 in lower right hand corner.

4) Southcentral side of Aerovox building, main entrance on the left.

5) Southcentral portion of Aerovox site facing east.

6) Southeastern side of Aerovox building facing east.



7) Southeastern side of Aerovox site facing east.

8) Drainage channel along southern side of Aerovox building facing east.

9) Upper Harbor shoreline along the eastern edge of the Aerovox site facing north. The stormwater outfall (monitoring point SW-12) is in the rocks at the left edge of the photograph.

10) Upper Harbor to the south of the Aerovox site. City of New Bedford, Hadley St. stormwater outfall discharges to the harbor on the right of the photograph.

11) Looking down at edge of capped area and sheet-pile wall
and stone rip rap at stormwater outlet (monitoring point SW-12).

12) Looking through stone rip rap at stormwater outfall
(monitoring point SW-12).

13) Eastern capped area of the Aerovox site adjacent to the Upper Harbor. The harbor is frozen in this photograph and sheet piles used in the 2004 dredging effort are apparent.

14) Eastern capped area of the Aerovox site adjacent to the Upper Harbor. The harbor is frozen in this photograph and sheet piles used in the 2004 dredging effort are apparent.

15) Capped northeastern portion of the Aerovox site. Northern open drainage channel is apparent in the far left of the photograph.

16) Third floor assembly area in the eastern portion of the building.

17) Subfloor drainage in the eastern portion of the building.

18) Subfloor drainage in the eastern portion of the building.

19) Subfloor cutout with standing water in the eastern portion of the building.

20) Subfloor drainage in the eastern portion of the building.

21) Mechanical systems with apparent spillage, eastern portion of the building.

22) Subfloor drainage with standing water in the western portion of the building.

23) Stormwater catch basin – monitoring point SW-1.

24) Stormwater catch basin – monitoring point SW-9.

25) Stormwater catch basin – monitoring point SW-13.

26) Panoramic view of southwestern portion of Aerovox site.

27) Panoramic view of south central portion of Aerovox site.

28) Panoramic view of eastern capped area between the building and the harbor.

APPENDIX B

SUMMARY OF THE ENSR 2004-2005 STORMWATER AND GROUNDWATER INVESTIGATION

CONTENTS

LIST OF TABLES

LIST OF FIGURES

B.1 INTRODUCTION

This appendix contains the results of the stormwater and groundwater sampling ENSR conducted in 2004 and 2005 at the Aerovox Facility in New Bedford, Massachusetts. ENSR conducted groundwater sampling to measure concentrations of polychlorinated biphenyls (PCBs) and other contaminants in the fall of 2005. During this sampling groundwater elevations were also measured. ENSR collected stormwater samples during two storm events one in the late summer 2004 and one in the spring 2005. The concentrations of PCBs and metals were measured in these samples. The data collected in these efforts was used to support an assessment of potential PCB migration offsite through groundwater and stormwater.

This document only includes brief discussions of the methods and implications of the results. More detailed information on these subjects are available the Aerovox Stormwater Field Sampling Plan (ENSR 2004), the Field Sampling Plan for Groundwater Sampling at the Aerovox Facility (ENSR 2005), and the project Quality Assurance Program Plan (QAPP) (Jacobs 2005). Discussions about the implications of the data presented here are included in Sections 4 and 5 of the main body of this report.

B.2 STORMWATER

In 2004 and 2005, ENSR measured concentrations of PCBs and metals in stormwater and baseflow in the stormwater system at the Aerovox Site. Samples were collected for analysis at various locations and under various conditions to support estimation of PCB transport via the stormwater pathway.

The majority of stormwater on the Aerovox property drains through a stormwater system consisting of surface troughs and subsurface pipes. The total area that drains to the stormwater system is estimated to be 8 acres of the 10-acre site. Thus, approximately 80% of the runoff from the property is conveyed by this system. This runoff is carried through two surface troughs and two subsurface storm pipe systems. These drain to the New Bedford Harbor at four discharge points (Figures B-1, B-2). The only areas not draining to the stormwater system are portions of property the bordering Belleview Avenue and along the harbor.

The two concrete surface troughs run parallel to the north and south sides of the manufacturing building (Figures B-1, B-3). These troughs primarily collect runoff from the building roof and convey it to outfalls marked by stations SW-10 and SW-11 (Figure B-1). The area drained by these troughs is estimated to be approximately 2.8 acres (Figure B-2).

Much of the remaining property is drained through a system consisting of two subsurface pipes and a series of catch basins. These pipes receive runoff from the parking lot and most of the pump house roof through five catch basins. These catch basins drain approximately 5.2 acres of the site (Figure B-2). Catch basins at monitoring locations SW09 and SW13 drain to a City of New Bedford stormwater collection line that runs along Hadley Street to the South of the site and discharges to the Harbor at the City Outfall (Figure B-1).

Characterizing flow from the subsurface drainage lines is difficult due to several complicating factors. First, the City Outfall on Hadley Street and the outfall located at monitoring site SW12 are located in the intertidal zone. As a result, these pipes are inundated with harbor water during each high tide and drain during each low tide. Second, the subsurface pipes are old and likely cracked. Therefore, groundwater and subsurface soils may interact with water in the pipes. As a result of these factors, waters draining from the outfall at monitoring location SW 12 and the City outfall may consist of harbor water, groundwater, and/or stormwater.

B.2.1 Methods

Two stormwater monitoring surveys were conducted; one on September 16-18, 2004 and the other on May 20-24, 2005. Stormwater samples were collected at two outfalls (SW-10 and SW-11) and four catch basins (SW-02, SW-03, SW-09, and SW-13) in the stormwater system (Figure B-1) during rainfall events. Baseflow samples were collected during dry weather periods from three catch basins (SW-02, SW-03, and SW-13) and one outfall (SW-12) (Figure B-1). Initially, sampling was also planned for the City outfall location. However, because it was partially submerged during much of the tidal cycle, it was not possible to collect representative runoff samples.

Sampling Protocol

A brief description of the stormwater sampling is provided below. A more detailed description is provided in the Stormwater Field Sampling Plan (ENSR 2004). The following three types of samples were collected during each sampling event:

- Baseflow samples were collected prior to a storm event. Baseflow samples are representative of the flow of water in the storm drain during periods without precipitation. This flow is potentially due to groundwater leakage into the pipes.

- First-flush stormwater samples were collected after the first 0.25 inches of rainfall. First-flush samples were collected using automated stormwater sampling equipment. The automated samplers have precipitation gauges that trigger automatic collection of water samples after a set amount (0.25 inches in this case) of rainfall. First-flush samples were collected to capture runoff from early in storm events when pollutant loads are highest because materials that have accumulated since the previous rainfall are washed from surfaces into the storm drain system.

- Steady-state stormwater samples were collected by automated samplers one hour after collection of the first-flush samples. These samples are intended to be representative of stormwater after the initial flush of contaminants is washed from surfaces.

Not all planned samples were collected because there was sometimes insufficient water depth in the drain for the automated sampler to be able to pump or the intake to the sample line was clogged with debris.

Analytical Methods

Samples collected during stormwater sampling events were analyzed for PCB Aroclors, metals, and total suspended solids (TSS) in the laboratory. Prior to sending the samples to the lab, the pH and conductivity of the samples were measured. A brief description of the methods used to analyze metals and PCBs is included below. More detailed information is available in the Stormwater Field Sampling Plan (ENSR 2004) and the project QAPP (Jacobs 2005).

- PCBs: The concentrations of seven Aroclors (Aroclors 1016, 1221, 1232, 1242, 1248, 1254, and 1260) were measured using USEPA method 8082. Total PCB concentrations were calculated by summing individual Aroclor concentrations. When individual Aroclor concentrations were less than the laboratory reporting limit, a value of half the reporting limit was used in the summation calculation.

- Target Analyte List Metals: The total concentrations of the 17 target analyte list metals were measured using USEPA method 6020.

B.2.2 Results

The specific conductivity of samples from the stormwater system ranged from below detection to 10.60 milliSeimens/centimeter (mS/cm) (Table B-1). Baseflow samples generally had higher conductivity than stormwater samples (Table B-1). The majority of stormwater samples had conductivities below detection. The highest conductivity measured in stormwater was 3.10 mS/cm. The conductivity of the baseflow samples ranged from 0.20 to 10.60 mS/cm (Table B-1).

TSS concentrations in stormwater ranged from less than 4 mg/L to 71 mg/L, with most TSS concentrations less than 10 mg/L (Table B-2). These relatively low values suggest that significant loads of solids were not carried by stormwater during the two storm events that were sampled.

PCB concentrations in the stormwater and baseflow samples ranged from 0.14 to 12.8 µg/L (Table B-3). The highest measurements were obtained in first flush stormwater samples from SW-03 (12.8 µg/L) and in baseflow at locations SW-02 (8.6 µg/L) and SW-03 (5.8 µg/L) (Table B-3).

In most cases, metals concentrations were higher in stormwater than baseflow. Copper and zinc had elevated concentrations in many baseflow and stormwater samples. Copper concentrations ranged from 4.8 to 50.2 µg/L; zinc concentrations ranged from 35.3 to 1,880 µg/L (Table B-4). Total concentrations of the following metals were below the ambient water quality criteria for the dissolved form of the metal in all samples: arsenic, cadmium, mercury, nickel, selenium, and silver.

B.3 GROUNDWATER

Groundwater wells at the Aerovox site had not been sampled since 1998; therefore, ENSR conducted a survey of groundwater elevations and groundwater quality in 2005 to provide an up to date data set. First the wells were located, sounded, and re-developed. The surveys consisted of sampling water from the 13 wells on the aerovox site, taking static groundwater elevation measurements and deploying continuously recording water level meters in monitoring wells and the harbor. The objective of these surveys was to obtain information to support an analysis of the potential transport of PCBs from the Aerovox site through groundwater.

B.3.1 Methods

Well Development

Wells were re-developed to remove sediments and debris that had accumulated since they were last developed. During development, surging and pumping were done by hand with the Watera® apparatus and a Shurflo® diaphragm pump. Turbidity was monitored after every 3-5 gallons were pumped from the wells. Each of the 13 wells was purged until the turbidity of the water being withdrawn from the wells was consistently low. In general, approximately 1 hour of low-flow pumping was required to reach steady-state conditions at each of the wells. The development of the groundwater wells was completed approximately 1 month prior to the actual sampling of the wells.

Water-Level Measurements

ENSR measured continuous and static water-levels in 2005. Continuous water levels were measured using a miniTROLL® in-situ pressure transducers. Transducers were deployed in the Harbor, and in a well in the upper aquifer and a well in the lower aquifer from May 10, 2005 to May 24, 2005. Static groundwater levels were measured using a water level tape during water quality sampling.

Sampling

ENSR collected water quality samples from 13 existing wells on the Aerovox property on September 13 and 14 2005 (Figure B-4). Ten of the wells are paired, with one in the surface aquifer the other extending into the deeper aquifer. Wells were sampled using a stainless steel bladder pump with a Teflon® bladder. Water was pumped to the surface through a ¼" Teflon® tube where it was routed through a YSI® multi-meter connected to a flow-through cell for real-time determination of water quality parameters (temperature, pH, and specific conductance). Turbidity measurements were made during well purging using a LaMotte turbidity meter.

Analysis

Groundwater samples collected from each of the 13 wells at the Aerovox facility were analyzed for TSS, 58 different volatile organic compounds (VOCs), and PCB Arocolors. The analytical methods are summarized below. More information on these methods is available in the project QAPP (Jacobs 2005).

- The concentrations of seven Arocolors (Aroclors 1016, 1221, 1232, 1242, 1248, 1254, and 1260) were measured using USEPA method 8082. Total PCB concentrations were calculated by summing individual Aroclor concentrations. When individual Aroclor concentrations were less than the laboratory reporting limit, a value of half the reporting limit was used in the summation calculation.

- The concentrations of 58 VOCs were measured using USEPA method 8260B.

B.3.2 Groundwater Level Monitoring Results

Upper System

Groundwater levels measured during water quality sampling in the upper aquifer ranged from 2.61 feet to 3.16 feet (Wells MW-2A, MW-3A, MW-4A, MW-6A, and MW-7A in Figure B-5). Water levels were highest in the area bounded by the sheet piling cutoff wall. Lower water levels were measured outside this area and to the west (Figure B-5). Groundwater flow in the upper aquifer in the region bounded by the sheet piling wall and building foundation (wells MW-3A, MW-4A, and MW-7A in Figure B-5) is unlikely to be significant. Outside of this area, the spatial distribution of groundwater levels in the upper aquifer is insufficient to describe groundwater flow patterns (Figure B-5).

Continuous groundwater level monitoring results indicate that the upper aquifer is isolated from the harbor by the sheet piling cutoff wall. Groundwater elevations in the upper harbor do not appear to be influenced by tidal changes in the water levels in the Harbor (Figure B-6).

During the much of the monitoring period the elevation of groundwater in the upper aquifer gradually decreased. However, after a rainfall event on May 18, a small increase in groundwater elevation occured. This may indicate that some of the rainfall from this event infiltrated through cracks in the pavement and re-charged the perched aquifer. After approximately May 21, the groundwater elevation increases slightly, possibly due to rainfall events on May 21, 23, and 24 or due to slight infiltration from the harbor during very high tides (Figure B-6).

Lower System

Water levels measured during water quality sampling indicate that groundwater flow is generally from the northwest towards the harbor (Figure B-6). Water levels in the three wells in the western portion of the site were highest in the northwestern corner of the property and decreased towards the Harbor. Water levels in wells in the eastern portion of the site were influenced by tide stage in the harbor and therefore are not useful for assessing the general direction of groundwater flow in the lower aquifer.

Groundwater elevations in the lower aquifer were 0.7 to 2.1 feet lower in the deep aquifer than the shallow aquifer in the wells east of the manufacturing building (Figure B-6). This indicates that in this portion of the property the upper aquifer is isolated from the lower aquifer. In wells MW-6 and MW-6A, the difference between the upper and lower aquifer was much less suggesting the lower and upper aquifer are not as isolated from one another in this region of the property (Figure B-6).

The water level measurements recorded by the continuously recording water level meters indicate that the water levels in the lower aquifer are directly affected by the tide stage in the harbor. Water levels measured at well 7 in the deeper aquifer varied by 1 to 2 feet (peak to trough) with the same frequency and direction as the waters of New Bedford Harbor (Figure B-6).

B.3.3 Groundwater Quality Monitoring Results

There were no strong spatial trends in the basic water quality parameters (TSS, pH, temperature, and salinity) except for temperature. Groundwater temperatures were lower in deep wells than in shallow wells (Table B-5). In the lower aquifer temperatures ranged from 15 to 21 °C. In the upper aquifer temperatures ranged from 19-30 °C (Table B-5). Total suspended solids (TSS) concentrations ranged from 2.7 mg/L to 32 mg/L. Specific conductivity ranged from 130 mS/cm to 5,300 mS/cm (Table B-5). Groundwater pH values varied from 4.58 to 6.94 S.U. (Table B-5). Turbidity ranged from 2.7 to 32 Nephelometric Turbidity Units (NTU) (Table B-5). A petroleum odor was noticeable at most wells and in some cases oil sheens were observed (Table B-5).

PCBs were detected in 7 of the 13 groundwater samples (Table B-6). The highest total PCB concentration measured was 35.40 µg/L at well MW-6. The next highest measurement was significantly lower (4.53 µg/L in well MW-4A)(Table B-6). Wells in the northwestern corner of the property had higher PCB concentrations than the rest of the property (Figure B-7). Data on the concentrations of individual Aroclors in these samples are in Table F-3 of Appendix F.

The results for VOCs are dominated by six compounds. Concentrations of 37 of the 57 VOC compounds were below the detection limit (5 µg/L) in groundwater from all wells. The VOCs detected are dominated by the following: 1,3-dichlorobenzene, 1,4-dichlorobenzene, chlorobenzene, cis-1,2-

dichloroethane, vinyl chloride, and trichloroethane. The highest VOC concentrations were measured in well MW-7 and MW-8S (Table B-7). Chlorobenzene in groundwater from MW-2 was the only VOC detected above the MCP [310 CMR 40.0974(2)] GW-3 standard. The complete VOC groundwater data set is available in Table F-4 of Appendix F.

B.4 REFERENCES

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ENSR 2005. Field Sampling Plan for Groundwater Sampling at Aerovox Facility. Summer 2005. New Bedford Harbor Superfund Site – New Bedford, Massachusetts

Jacobs Engineering 2005. Quality Assurance Program Plan. New Bedford, Harbor, Massachusetts. May 2005.

Table B-1. Stormwater Specific Conductivity

Drainage Locations	Station	Month	Specific Conductivity (mS/cm)		
			Baseflow	Stormwater First Flush	Stormwater Steady State
Subsurface Drainage	SW-02	Sep-04	0.20	0.30	0.20
		May-05	0.30	--	--
	SW-03	Sep-04	4.00	0.10	<0.1
		May-05	4.40	0.10	--
	SW-09	Sep-04	--	<0.1	<0.1
		May-05	--	--	--
	SW-12	May-05	0.80	--	--
	SW-13	Sep-04	1.70	0.10	<0.1
		May-05	10.60	--	--
Surface Drainage	SW-10	Sep-04	--	<0.1	<0.1
		May-05	--	<0.1	--
	SW-11	Sep-04	--	<0.1	3.10
		May-05	--	--	--

Table B-2. TSS Concentrations in Stormwater

Drainage Locations	Sampling Station	Month Year	Total Suspended Solids (mg/L)		
			Baseflow	Stormwater First Flush	Stormwater Steady State
Subsurface Drainage	SW-02	Sep-04	<4	<4	<4
		May-05	<4	--	--
	SW-03	Sep-04	13	71	10
		May-05	14	<4	--
	SW-09	Sep-04	--	7.2	<4
		May-05	--	--	--
	SW-12	May-05	<4	--	--
	SW-13	Sep-04	<4	<4	<4
		May-05	9.6	--	--
Surface Drainage	SW-10	Sep-04	--	5.2	<4
		May-05	--	<4	NS
	SW-11	Sep-04	--	<4	<4
		May-05	--	--	--

Table B-3. Total PCB Concentrations in Stormwater

Drainage Locations	Sampling Station	Month Year	PCB Concentrations (ug/L)		
			Baseflow	Stormwater First Flush	Stormwater Steady State
Subsurface Drainage	SW-02	Sep-04	8.6	0.67	0.60
		May-05	2.5	--	--
	SW-03	Sep-04	5.8	12.8	3.5
		May-05	0.82	0.85	--
	SW-09	Sep-04	--	0.14	0.14
		May-05	--	--	--
	SW-12	May-05	2.61	--	--
	SW-13	Sep-04	3.9	0.14	0.14
		May-05	1.6	--	--
Surface Drainage	SW-10	Sep-04	--	4.7	3.6
		May-05	--	1.3	--
	SW-11	Sep-04	--	0.14	0.14
		May-05	--	--	--

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Table B-4. Metals Concentrations in Stormwater and Baseflow Samples taken in September 2005 (concentrations in ug/L)

Station	Sample Type	Aluminum[1]	Antimony[1]	Arsenic[1]	Barium[1]	Beryllium[1]	Cadmium[1]	Calcium[1]	Chromium[1]	Cobalt[1]	Copper[1]	Iron[1]	Lead[1]
SW-02	Baseflow	30.9*	0.96*	<3	6.7	<0.05	0.17*	3,630	9.6	0.32*	34.4	158	9.4
	First Flush	30.8*	0.77*	<3	4.5	<0.05	0.1*	3,070	2.6*	0.23*	23.5	132	14.2
	Steady State	19.8*	0.73*	<3	4.8	<0.05	0.12*	2,500	2.6*	0.2*	29.8	113	10.4
SW-03	Baseflow	46*	1.1	<3	115	<0.05	0.1*	23,900	6.3	0.63*	19.3	2,150	10.1
	First Flush	560	1.1	<3	17.6	<0.05	0.24*	3,180	6.5	0.66*	50.2	1,430	89.7
	Steady State	133*	0.74*	<3	6.6	<0.05	0.07*	1,710	3.7	0.22*	16.2	233	22.5
SW-09	First Flush	165*	0.72*	<3	5.2	<0.05	0.46*	1,390	2.7*	0.31*	7.7	155	13.4
	Steady State	79.6*	0.6*	<3	3.6	<0.05	0.3*	1,340	1.4*	0.18*	4.8	67.7*	3.7
SW-10	First Flush	93.8*	0.77*	3.6*	9.6	<0.05	0.21*	1,790	3.8	0.36*	29.3	163	22.7
	Steady State	52.2*	0.97*	4.8*	7.3	<0.05	0.21*	1,670	3.7	0.32*	23.5	69.1*	7.8
SW-11	First Flush	25.6*	1.2	<3	4.8	<0.05	0.27*	1,380	1.7*	0.35*	32	92.7*	13.5
	Steady State	30*	1.4	3.3*	9.5	<0.05	0.28*	26,600	1.9*	0.46*	35.2	420	11.8
SW-12	Baseflow	28.2*	1.1	<3	101	<0.05	0.09*	27,900	6	0.53*	15.5	1,770	4.6
SW-13	Baseflow	89*	0.58*	<3	9.3	<0.05	0.22*	43,600	5.6	0.39*	8.4	284	6.6
SW-City Outfall	Baseflow	67*	0.73*	4.4*	24.7	<0.05	0.1*	109,000	3*	0.7*	22.6	828	5.2

Station	Sample Type	Mangnesium[1]	Manganese[1]	Mercury	Nickel[1]	Potassium[1]	Selenium[1]	Silver[1]	Sodium[1]	Thallium[1]	Vanadium[1]	Zinc[1]
SW-02	Baseflow	4,130	11.8	<0.01	3.1	1,650	2.4*	<0.05	29,000	1.8*	14.5	628
	First Flush	6,800	8	<0.02	2.6	2,160	2.3*	<0.05	51,600	0.27*	6.3	538
	Steady State	4,160	7.4	<0.03	2.4	1,600	4.4*	<0.05	35,200	0.22*	6.4	518
SW-03	Baseflow	46,500	131	<0.01	3	18,700	1.8*	<0.05	408,000	0.77*	7.6	364
	First Flush	4,720	28.2	<0.02	5.4	1,800	1.7*	0.07*	38,400	0.2*	13.7	633
	Steady State	1,660	11.5	<0.02	2.1	932*	2.5*	<0.05	15,000	<0.15	6	377
SW-09	First Flush	335	14	<0.02	2.7	538*	<1.4	<0.05	2,000	<0.15	5.6	223
	Steady State	299	7.8	<0.03	1.7	502*	<1.4	0.05*	1,950	0.28*	4.2*	180
SW-10	First Flush	439	12.9	<0.03	3.7	582*	1.6*	0.07*	1,990	0.18*	9.3	605
	Steady State	377	13.7	<0.03	3	588*	<1.4	<0.05	1,780	2.3	13.9	582
SW-11	First Flush	584	10.1	<0.03	3.9	495*	<1.4	<0.05	4,860	2.7	9.8	1,880
	Steady State	77,600	28.1	<0.02	4.6	24,300	2.3*	<0.05	612,000	1.2*	10.9	1,750
SW-12	Baseflow	53,600	129	<0.01	2.9	23,100	2.2*	<0.05	487,000	0.45*	6.4	312
SW-13	Baseflow	130,000	19.8	<0.01	3.9	40,100	3.7*	<0.05	1,010,000	0.27*	12.1	309
SW-City Outfall	Baseflow	318,000	82.8	<0.03	4.4	101,000	5.3	0.07*	2,730,000	0.38*	2.6*	35.3

[1]Samples run at secondary dilution factor

*Indicates that the result was below the reporting limit but above the instrument detection limit.

Table B-5. Groundwater Quality Results

	Well ID	Sampling Depth Below Grade (ft)	TSS (mg/L)	Temp (°C)	Specific Conductivity (mS/cm)	pH (S.U.)	Turbidity (NTU)	Observation Notes
Shallow Aquifer	MW-2A	-4.6	20	30	970	6.87	4.5	Clear with slight petroleum odor, sheen.
	MW-3A	-5.9	26	26	1,500	6.70	5.4	Clear with slight petroleum odor, sheen.
	MW-4A	-8.6	--	30	240	5.55	6.8	Slight petroleum odor.
	MW-6A	-9.7	12	19	130	5.67	--	Light gray, no odor.
	MW-7A	-7.0	28	26	5,300	6.90	--	Slight petroleum odor, sheen.
	MW-8S	-5.2	19	25	2,000	6.94	12	Clear, very strong H2S odor, no sheen.
Lower Aquifer	MW-2	-14.2	7.6	21	1,600	6.30	11	Clear with slight petroleum odor, sheen.
	MW-3	-11.5	32	24	1,800	6.80	7.3	Clear with slight petroleum odor, sheen.
	MW-4	-16.9	16	20	650	5.45	6	Slight petroleum odor.
	MW-4B	-24.9	< 4	23	1,500	4.58	4.1	Clear with no odor.
	MW-5	-16.8	8.8	17	1,300	5.32	32	Cloudy, light brown.
	MW-6	-26.7	< 4	15	2,300	5.44	2.7	No color, no odor.
	MW-7	-14.6	< 4	17	1,300	6.45	--	Clear with slight petroleum odor, sheen.

Table B-6. Total PCB Concentrations in Groundwater

	Well ID	Total PCB Conc.[1] (ug/L)
Shallow Aquifer	MW-2A	< 0.35
	MW-3A	0.62
	MW-4A	4.53
	MW-6A	2.35
	MW-7A	< 0.35
	MW-8S	4.43
Lowert Aquifer	MW-2	< 0.35
	MW-3	< 0.35
	MW-4	< 0.35
	MW-4B	2.05
	MW-5	< 0.35
	MW-6	35.40
	MW-7	0.91

[1]Total PCBs are calculated as the sum of 7 Aroclors. When individual Aroclor concentrations were below the laboratory reporting limit, a value of half the reporting limit was used in the summation calculation.

< indicates below detection limit

Table B-7. Summary of Groundwater VOC Concentrations

Well ID	Date	Type	Deep/ Shallow	TSS (mg/L)	T_VOC[1] (ug/L)	DL[2] (ug/L)	Elevated Constituents	GW-3[3] (ug/L)	Component[4]
MW-2	9/14/2005	Sample	Deep	7.6	1,115	276	1,3-DICHLOROBENZENE = 150 UG/L / 1,4-DICHLOROBENZENE = 170 UG/L / CHLOROBENZENE = 660 UG/L	8,000 8,000 500	88%
MW-2A	9/14/2005	Sample	Shallow	20	217	276	-----	-----	-----
MW-3	9/14/2005	Sample	Deep	32	662	276	CHLOROBENZENE = 460 UG/L	500	69%
MW-3A	9/14/2005	Sample	Shallow	26	636	276	CHLOROBENZENE = 450 UG/L	500	71%
MW-4	9/13/2005	Sample	Deep	16	1,228	276	1,4-DICHLOROBENZENE = 200 UG/L / CIS-1,2-DICHLOROETHENE = 230 UG/L / VINYL CHLORIDE = 550 UG/L	8,000 50,000 40,000	90%
MW-4A	9/14/2005	Sample	Shallow		143	276	-----	-----	-----
MW-4B	9/14/2005	Sample	Deep	< 4	6,049	276	TRICHLOROETHENE = 5600 UG/L	20,000	93%
MW-5	9/15/2005	Sample	Deep	8.8	135	276	-----	-----	-----
MW-6	9/13/2005	Sample	Deep	< 4	3,361	276	TRICHLOROETHENE = 2800 UG/L	20,000	83%
MW-6A	9/13/2005	Sample	Shallow	12	296	276	TRICHLOROETHENE = 140 UG/L	20,000	47%
MW-7	9/13/2005	Sample	Deep	< 4	16,080	276	CIS-1,2-DICHLOROETHENE = 3400 UG/L / TRICHLOROETHENE 12000 UG/L	50,000 20,000	96%
MW-7A	9/13/2005	Sample	Shallow	28	165	276	-----	-----	-----
MW-8S	9/14/2005	Sample	Shallow	19	22,544	276	CIS-1,2-DICHLOROETHENE = 16000 UG/L / VINYL CHLORIDE 6200 UG/L	50,000 40,000	98%

[1]Total VOCs were calculated using half the laboratory reporting limit for compounds that were not detected.
[2]Detection limit for TVOCs. Calculated as the sum of the individual detection limits for all VOCs.
[3]Massachusetts groundwater GW-3 standard.
[4]Percentage of TVOCs attributed to the elevated constituents

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Figure B-1: Aerovox Site with Stormdrain Network and Drainage Zones Indicated

ENSR | AECOM

Sources:MassGIS 2-m orthophotos
NAD 83 Mass State Plane m
ME scale 1:35000
Figure Generated: 23 January 2006 (KRD)

Feet
0 50 100 200

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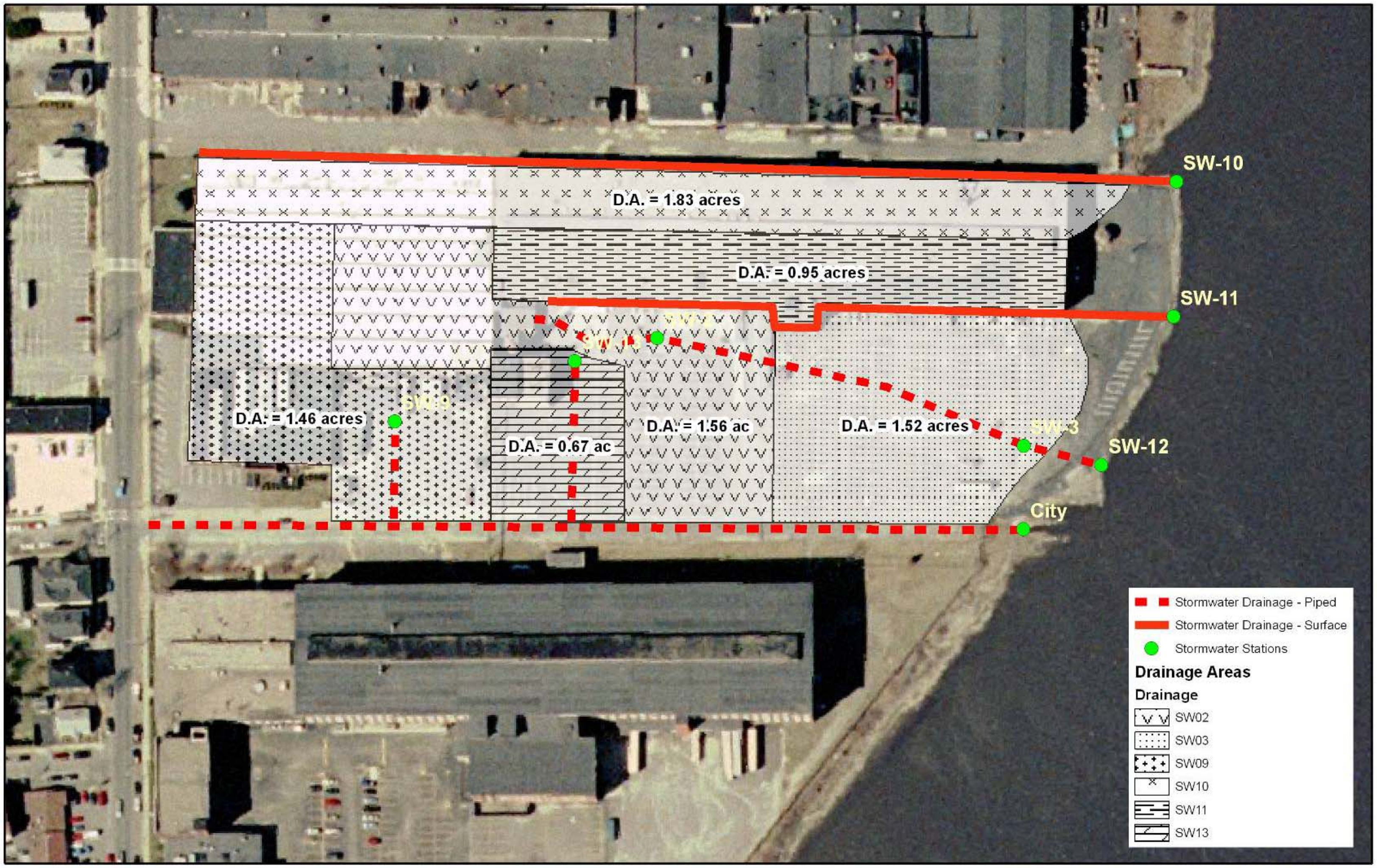

Figure B-2: Aerovox Site with Stormdrain Network and Areas of Drainage Zones Indicated

ENSR | AECOM

Sources:MassGIS 2-m orthophotos
NAD 83 Mass State Plane m
ME scale 1:35000
Figure Generated: 23 January 2006 (KRD)

Feet
0 50 100 200

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a) Drainage Trough along South Side of Building

b) Discharge Point of Drainage Trough (SW-11 in Figure 2-1)

Figure B-3. Photographs of Aerovox Surface Drainage System

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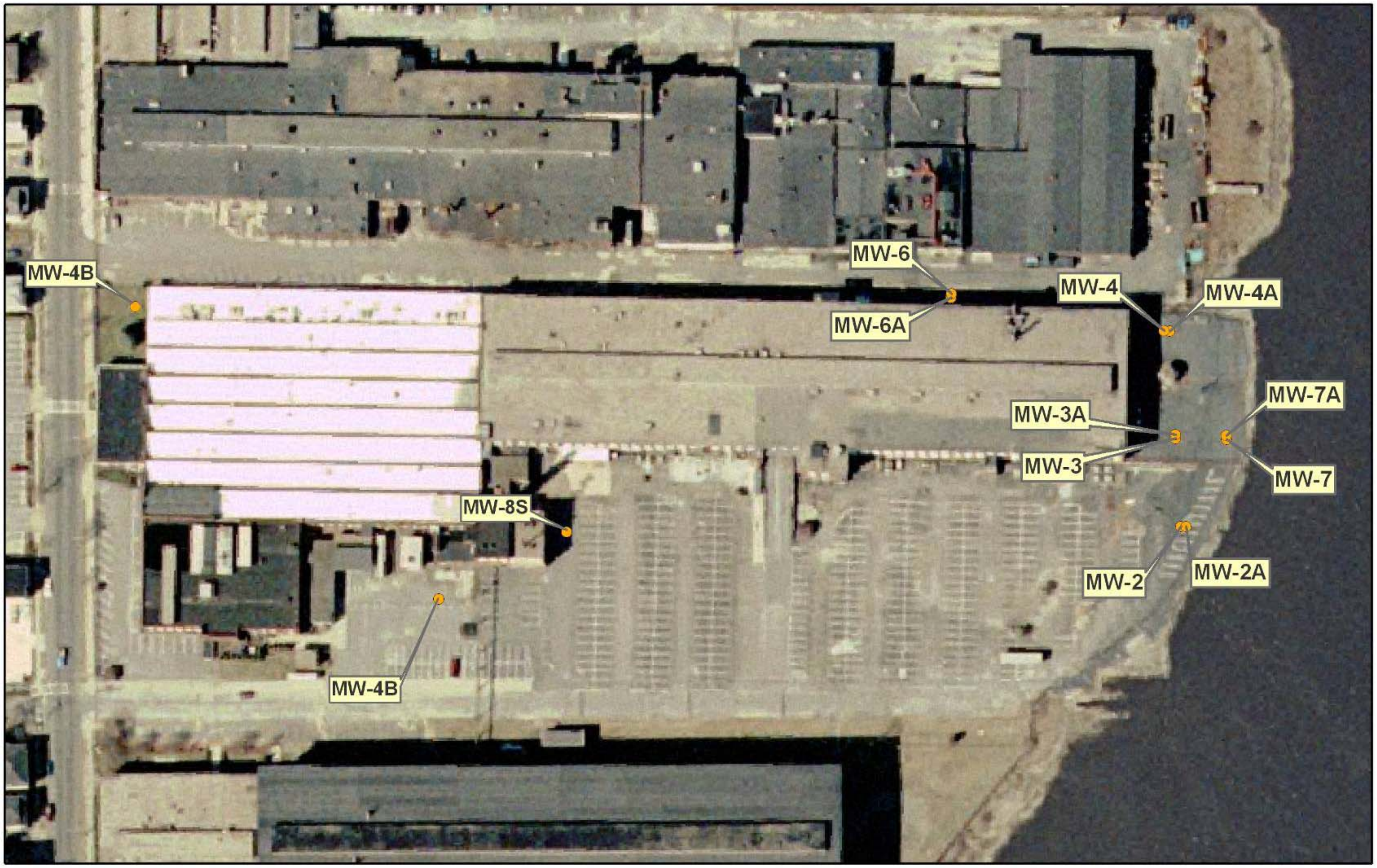

Figure B-4: Groundwater Monitoring Wells

ENSR | AECOM

Sources:MassGIS 2-m orthophotos
NAD 83 Mass State Plane m
ME scale 1:35000
Figure Generated: 23 January 2006 (KRD)

Feet
0 50 100 200

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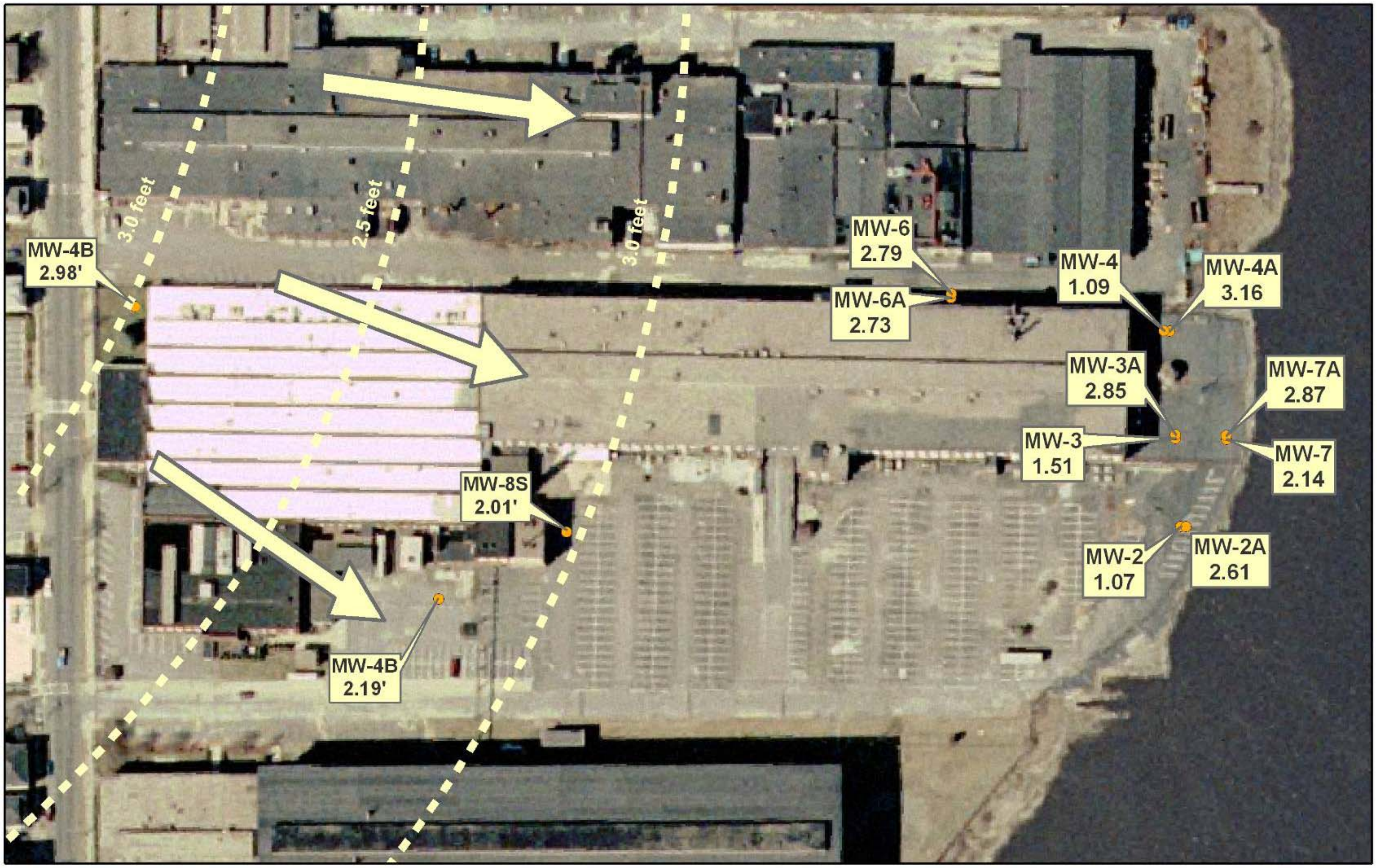

Figure B-5: September 15, 2005 Groundwater Elevations and Estimated Groundwater Flow Direction

ENSR | AECOM

Sources:MassGIS 2-m orthophotos
NAD 83 Mass State Plane m
ME scale 1:35000
Figure Generated: 23 January 2006 (KRD)

Feet
0 50 100 200

Elevations in feet relative to mean sea level (MSL)

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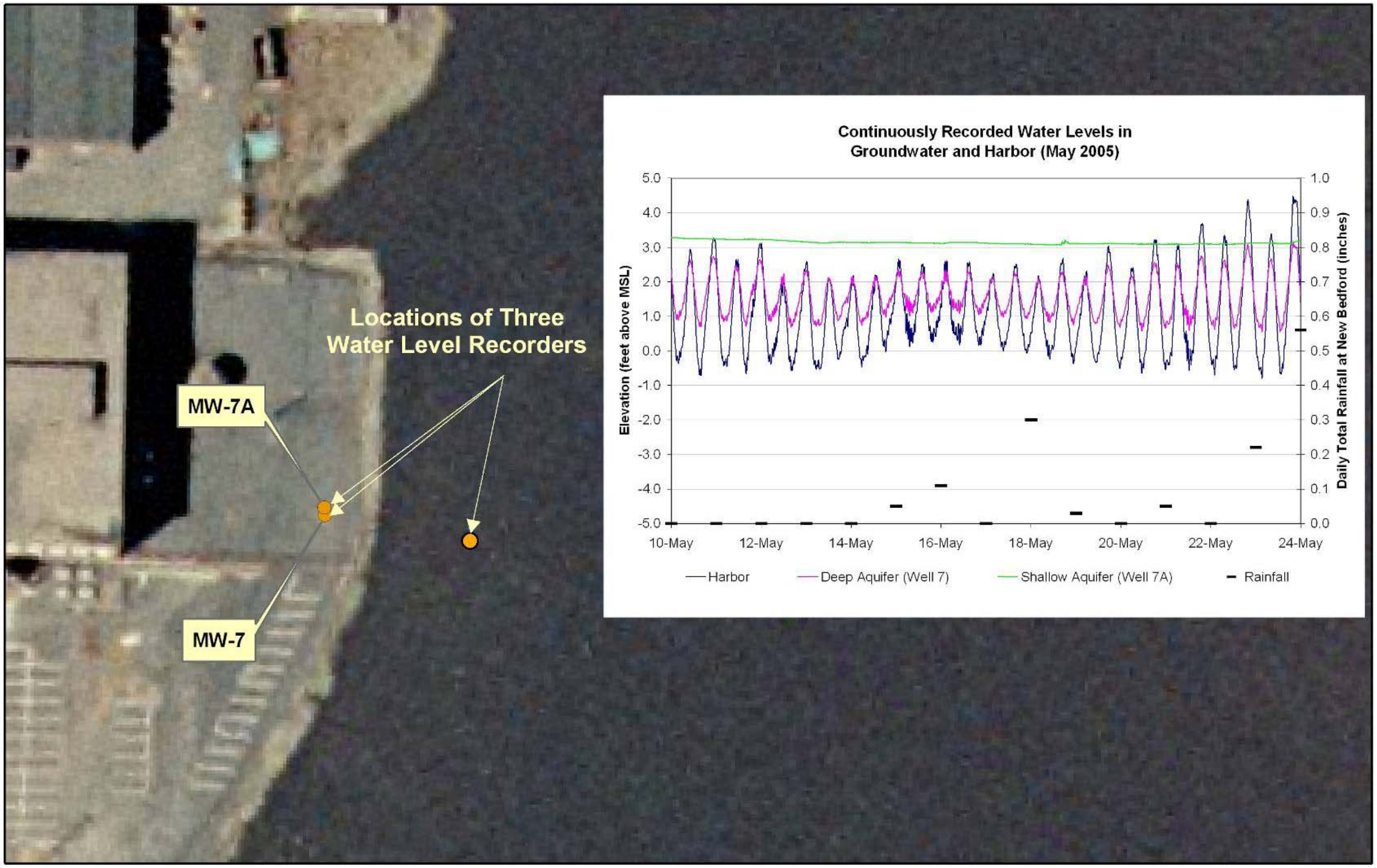

Figure B-6: Continuously Recorded Groundwater Elevations

ENSR | AECOM

Sources:MassGIS 2-m orthophotos
NAD 83 Mass State Plane m
ME scale 1:35000
Figure Generated: 23 January 2006 (KRD)

0 50 100 200 Feet

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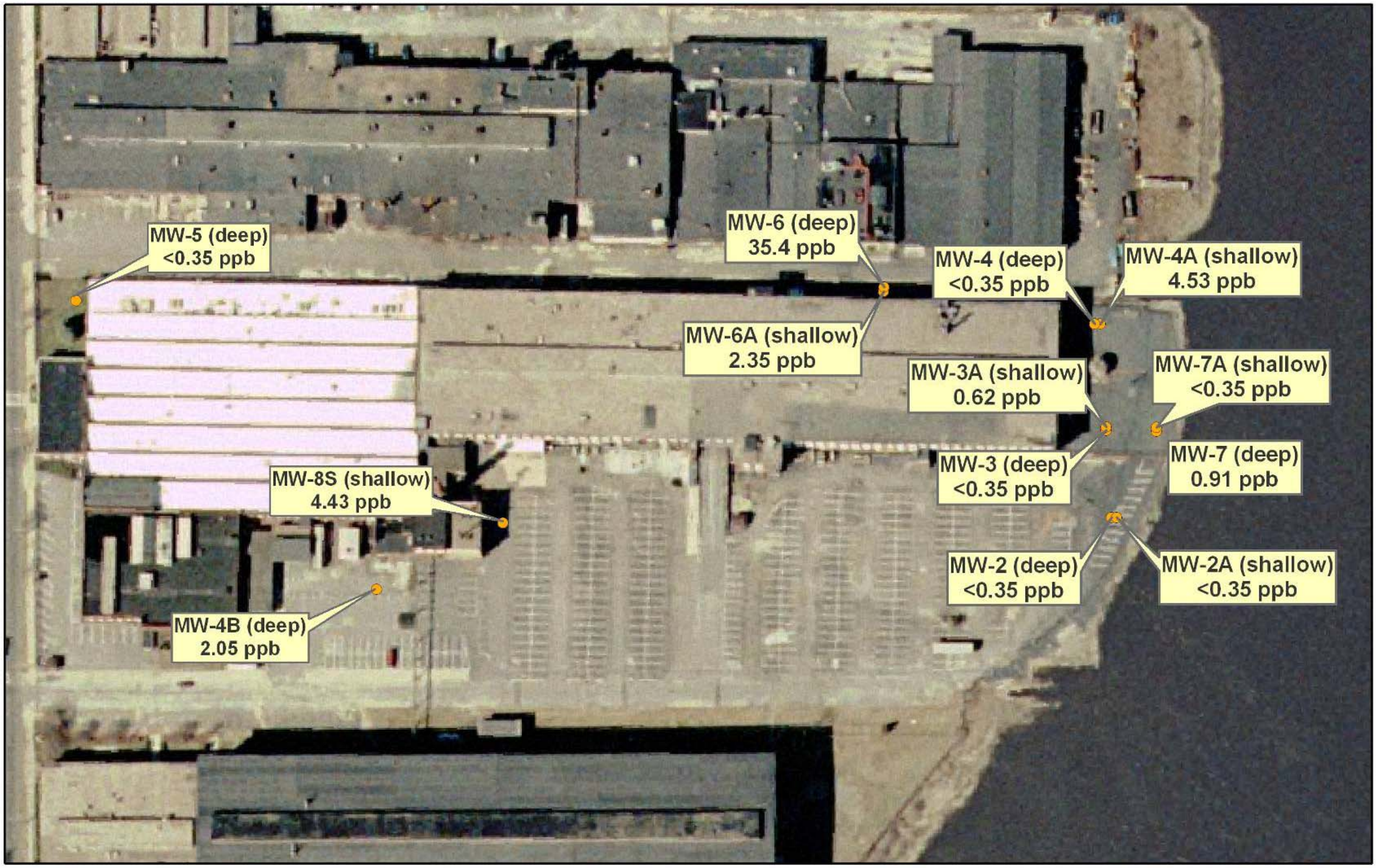

Figure B-7: September 15, 2005 Groundwater Total PCB Concentrations

ENSR | AECOM

Sources:MassGIS 2-m orthophotos
NAD 83 Mass State Plane m
ME scale 1:35000
Figure Generated: 23 January 2006 (KRD)

Feet
0 50 100 200

Elevations in feet relative to mean sea level (MSL)

APPENDIX C

BUILDING MATERIAL PCB DATA

This appendix presents the results of PCB scrape and core samples of building materials and wipe samples of building materials and equipment surfaces. All data in this appendix is from BBL (1998). PCB concentrations in scrape and core samples are presented in Table C-1. Table C-2 contains the results of wipe samples taken from non-porous surfaces in the building.

Table C-1. Building Material:PCB Data

Location	Year Collected	Sample Type	Material	Total PCB concentration[1]	Source
1st floor east section	1997	Full core	Brick wall (painted)	7.4	BBL 1998
1st floor east section	1997	Scrape	Composite	880	BBL 1998
1st floor east section	1997	Scrape	Composite	121	BBL 1998
1st floor east section	1997	Scrape	Composite	420	BBL 1998
1st floor across sections	1997	Scrape	Composite	2,010	BBL 1998
1st floor across sections	1997	Scrape	Composite	950	BBL 1998
1st floor across sections	1997	Scrape	Composite	268	BBL 1998
2nd floor east section	1997	Full core	Wood floor (stained)	1,900	BBL 1998
2nd floor east section	1997	Full core	Wood floor (stained)	5,600	BBL 1998
2nd floor east section	1997	Full core	Wood floor (stained)	106	BBL 1998
2nd floor east section	1997	Scrape	Composite	260	BBL 1998
2nd floor east section	1997	Scrape	Composite	490	BBL 1998
2nd floor east section	1997	Full core	Brick wall (painted)	8	BBL 1998
2nd floor east section	1997	Full core	Brick wall (painted)	2.5	BBL 1998
2nd floor west section	1997	Full core	Wood floor (stained)	145	BBL 1998
2nd floor west section	1997	Full core	Wood floor (stained)	56,000	BBL 1998
2nd floor west section	1997	Full core	Wood floor (stained)	28	BBL 1998
2nd floor west section	1997	Full core	Concrete floor (stained)	12.7	BBL 1998
2nd floor west section	1997	Full core	Concrete floor (stained)	156	BBL 1998
2nd floor west section	1997	Full core	Ceiling beam (painted	28.3	BBL 1998
2nd floor west section	1997	Scrape	Composite	1,020	BBL 1998
2nd floor west section	1997	Full core	Brick wall (painted)	3.6	BBL 1998
2nd floor west section	1997	Full core	Brick wall (painted)	26.4	BBL 1998
2nd floor across sections	1997	Scrape	Composite	300	BBL 1998
3rd floor east section	1997	Full core	Wood floor (stained)	86	BBL 1998
3rd floor east section	1997	Full core	brick wall (stained)	2.48	BBL 1998
3rd floor east section	1997	Full core	Wood floor (stained)	204	BBL 1998
3rd floor east section	1997	Scrape	Composite	1,170	BBL 1998
3rd floor east section	1997	Scrape	Composite	470	BBL 1998

[1]Information on the method used for calculating total PCBs was not available.

Table C-2. Building Surface Wipe Samples: PCB Data

Location	Year Collected	Sample ID	Total PCBs (µg/100cm²)[1]	Source
First Floor - Eastern Section				
Concrete floor (painted)	1997	1-FW-1	18.0	BBL 1998
Top of electrical duct. Horizontal steel surface (painted).	1997	1-AW-2	20.8	BBL 1998
Concrete floor (painted)	1997	1-FW-3	350.0	BBL 1998
Brick wall (painted)	1997	1-WW-4	15.4	BBL 1998
Concrete floor (painted)	1997	1-FW-5	59.0	BBL 1998
Top of start/stop panel of air compressor. Horizontal metal surface (painted).	1997	1-EW-1	66.0	BBL 1998
Topo of horizontal metal plate (painted).	1997	1-EW-2	330.0	BBL 1998
Side of drying oven #4. Horizontal steel surface (painted).	1997	1-EW-3	13.7	BBL 1998
Side of rear base leg of federal press. Horizontal metal surface (painted).	1997	1-EW-4	199.0	BBL 1998
First Floor - Western Section				
Wood Column (painted)	1997	1-AW-6	10.5	BBL 1998
Elevated light fixture	1997	1-AW-7	84.0	BBL 1998
Inside left door of despatch oven	1997	1-EW-5	<2.5	BBL 1998
"I" Beam. Horizontal painted steel surface (pre-clean).	1997	1-PSW-1	520.0	BBL 1998
"I" Beam. Horizontal painted steel surface (post-clean)	1997	1-PSA-1A	226.0	BBL 1998
Second Floor - Eastern Section				
Wood Floor	1997	2-FW-4	17.8	BBL 1998
Tile Floor	1997	2-FW-5	14.8	BBL 1998
Tile Floor	1997	2-FW-6	14.6	BBL 1998
Tile Floor	1997	2-FW-7	3.3	BBL 1998
Top of stainless steel horizontal surface	1997	2-EW-2	217.0	BBL 1998
Top of machine housing	1997	2-EW-3	2.5	BBL 1998
Horizontal diamond steel plate (pre-clean)	1997	2-PSW-1	163.0	BBL 1998
Horizontal diamond steel plate (post-clean:washed)	1997	2-PSW-1A	34.0	BBL 1998
Second Floor - Western Section				
Top of electrical box. Horizontal painted steel surface (painted).	1997	2-AW-2	235.0	BBL 1998
Wood Floor (painted)	1997	2-FW-3	90.0	BBL 1998

[1]Information was not available on the method used to calculate total PCB

Table C-2. Building Surface Wipe Samples: PCB Data

Location	Year Collected	Sample ID	Total PCBs ($\mu g/100cm^2$)[1]	Source
Top of electrical box. Horizontal painted steel surface (painted).	1997	2-AW-1	320.0	BBL 1998
Base of press. Horizontal steel surface (painted).	1997	2-EW-1	16.0	BBL 1998
Third Floor - Eastern Section				
Tile Floor	1997	3-FW-1	22.6	BBL 1998
Tile Floor	1997	3-FW-2	176.0	BBL 1998
Tile Floor	1997	3-FW-3	98.0	BBL 1998
Tile Floor	1997	3-FW-4	30.0	BBL 1998
Top of assembly machine. Horizontal metal surface (painted).	1997	3-EW-1	15.2	BBL 1998
Top of gear housing of lead welding machine. Horizontal metal surface (painted).	1997	3-EW-2	11.9	BBL 1998
Top of shelf of domino ink jet. Horizontal metal surface (painted).	1997	3-EW-3	265.0	BBL 1998
Top of Base unit of metal winder. Horizontal metal surface (painted).	1997	3-EW-4	68.0	BBL 1998
Top of test/sort machine. Horizontal metal surface (painted).	1997	3-EW-5	<2.5	BBL 1998

[1]Information was not available on the method used to calculate total PCB

APPENDIX D

SOIL DATA

This appendix contains data on the concentrations of VOCs and PCBs in soil from the Aerovox property. PCB concentrations in stormwater are presented in Table D-1. These data are from BBL (1998) and Gushue and Cummings (1984). Data on the concentrations of VOCs in soil are presented in Table D-2. All VOC data is from BBL (1998).

Table D-1 Soil: PCB Data

Location	Year Collected	Well No./Sample ID	Depth	Total PCB Concentration (µg/g)[1]	Source
Behind Building to river	1984	NA	0 ft	1,335-4,565	Gushue and Cummings 1984
Behind Building to river	1984	NA	1 ft	2,025-10,560	Gushue and Cummings 1984
Behind Building to river	1984	NA	2 ft	175-7,095	Gushue and Cummings 1984
Behind Building to river	1984	3	2-4 ft	790	Gushue and Cummings 1984
Behind Building to river	1984	7	2-4 ft	158	Gushue and Cummings 1984
Behind Building to river	1984	3	4-8 ft	138	Gushue and Cummings 1984
Behind Building to river	1984	4	4-8 ft	72	Gushue and Cummings 1984
Behind Building to river	1984	7	4-8 ft	1,790	Gushue and Cummings 1984
Behind Building to river	1984	3	>8 ft	<1	Gushue and Cummings 1984
Behind Building to river	1984	4	>8 ft	23	Gushue and Cummings 1984
Behind Building to river	1984	7	>8 ft	7	Gushue and Cummings 1984
Beneath concrete floor	1998	IB10	0-2 in	12	BBl 1998
Beneath concrete floor	1998	IB20	0-2 in	1	BBl 1998
Beneath concrete floor	1998	IB35	0-2 in	20	BBl 1998
Beneath concrete floor	1998	IB6	0-2 in	18,000	BBl 1998
Beneath concrete floor	1998	IB8	0-2 in	1,800	BBl 1998
Beneath concrete floor	1998	IC5	0-2 in	980	BBl 1998
Beneath concrete floor	1998	IC52	0-2 in	0	BBl 1998
Beneath concrete floor	1998	ID63	0-2 in	180	BBl 1998
Beneath concrete floor	1998	ID7	0-2 in	14,000	BBl 1998
Beneath concrete floor	1998	IE38	0-2 in	1	BBl 1998
Beneath concrete floor	1998	IE59	0-2 in	11	BBl 1998
Beneath concrete floor	1998	IF10	0-2 in	12	BBl 1998
Beneath concrete floor	1998	IF7	0-2 in	13	BBl 1998
Beneath concrete floor	1998	IH6	0-2 in	2	BBl 1998
Beneath concrete floor	1998	IB6	2-6 in	3,200	BBl 1998
Beneath concrete floor	1998	ID7	2-6 in	4,900	BBl 1998
Beneath concrete floor	1998	IB-6	1-2 ft	4,100	BBl 1998
Beneath concrete floor	1998	ID-7	3-4 ft	2,000	BBl 1998
Beneath floor of manufacturing	1998	IB-6	1-2 in	4,100	BBl 1998
Beneath floor of manufacturing	1998	ID-7	3-4 in	2,000	BBl 1998
Beneath parking area	1998	SB-11-1.5	0.5-1.5 in	1	BBl 1998
Beneath parking area	1998	SB-05-2	1-2 in	178	BBl 1998
Beneath parking area	1998	SB-17-2	1-2 ft	0	BBl 1998
Beneath parking area	1998	SB-07-5	4-5 in	2,900	BBl 1998
Beneath parking area	1998	SB-17-5	4-5 ft	1	BBl 1998
Beneath parking area	1998	SB-02-1	0-1 ft	0	BBl 1998
Beneath parking area	1998	SB-06-1	0-1 ft	65	BBl 1998
Beneath parking area	1998	SB-07-2	0-1 ft	120	BBl 1998
Beneath parking area	1998	SB-08-1	0-1 ft	0	BBl 1998
Beneath parking area	1998	SB-10-1	0-1 ft	4	BBl 1998
Beneath parking area	1998	SB-12-1	0-1 ft	8	BBl 1998
Beneath parking area	1998	SB-13-1	0-1 ft	100	BBl 1998
Beneath parking area	1998	SB-18-1	0-1 ft	84	BBl 1998
Beneath parking area	1998	SB-11-1.5	0.5-1.5ft	1	BBl 1998
Beneath parking area	1998	SB-01-2	1-2 ft	1	BBl 1998
Beneath parking area	1998	SB-03-2	1-2 ft	0	BBl 1998
Beneath parking area	1998	SB-04-2	1-2 ft	16	BBl 1998
Beneath parking area	1998	SB-15-2	1-2 ft	0	BBl 1998
Beneath parking area	1998	SB-16-2	1-2 ft	12	BBl 1998
Beneath parking area	1998	SB-14-5	4-5 ft	310	BBl 1998
Beneath parking area	1998	SB-14-5D	4-5 ft	170	BBl 1998
Gravel Strip N Side of Building	1984	NA	0 ft	4,940-6,870	Gushue and Cummings 1984
Gravel Strip N Side of Building	1984	NA	1 ft	270-500	Gushue and Cummings 1984
Gravel Strip N Side of Building	1984	NA	2 ft	75-945	Gushue and Cummings 1984

[1]Information was not available on the method used to calculate TPCBs

Table D-1 Soil: PCB Data

Location	Year Collected	Well No./Sample ID	Depth	Total PCB Concentration (µg/g)[1]	Source
Gravel Strip N Side of Building	1984	6	2-4 ft	23	Gushue and Cummings 1984
Gravel Strip N Side of Building	1984	6	>8 ft	<2[2]	Gushue and Cummings 1984
MW-4	1982	MW-4	4-6 ft	72	BBL 1998 - Attachment 5
MW-4	1982	MW-4	10-12 ft	23	BBL 1998 - Attachment 5
MW-4	1982	MW-4	18-20 ft	trace	BBL 1998 - Attachment 5
MW-5	1982	MW-5	2-4 ft	<2	BBL 1998 - Attachment 5
MW-5	1982	MW-5	9-12 ft	trace	BBL 1998 - Attachment 5
MW-6	1982	MW-6	2-4 ft	23	BBL 1998 - Attachment 5
MW-6	1982	MW-6	12-14 ft	<2	BBL 1998 - Attachment 5
Shoreline N of Pump house	1984	NA	0 ft	1,995-4,835	Gushue and Cummings 1984
Shoreline N of Pump house	1984	NA	2 ft	3,770	Gushue and Cummings 1984
Shoreline N of Pump house	1984	2	2-4 ft	90	Gushue and Cummings 1984
Shoreline N of Pump house	1984	2	4-8 ft	1,385	Gushue and Cummings 1984
Shoreline N of Pump house	1984	2	>8 ft	<2	Gushue and Cummings 1984
Shoreline S of Pump House	1984	NA	0 ft	365-3,030	Gushue and Cummings 1984
Shoreline S of Pump House	1984	NA	2 ft	<2-13	Gushue and Cummings 1984
Shoreline S of Pump House	1984	1	2-4 ft	160	Gushue and Cummings 1984
Shoreline S of Pump House	1984	1	4-8 ft	<2	Gushue and Cummings 1984
Shoreline S of Pump House	1984	1	>8 ft	<1	Gushue and Cummings 1984

[1]Information was not available on the method used to calculate TPCBs

Table D-2. Soil: Volatile Organic Carbon Data

Year Collected	Sample ID	Depth (ft)	Analyte	Concentration (µg/g)	Source
1998	ID-7	3-4	Dichlorodifluoromethane	<0.210	BBL 1998
1998	ID-7	3-4	Chloromethane	<0.210	BBL 1998
1998	ID-7	3-4	Vinyl Chloride	<0.210	BBL 1998
1998	ID-7	3-4	Bromomethane	<0.210	BBL 1998
1998	ID-7	3-4	Chloroethane	<0.210	BBL 1998
1998	ID-7	3-4	Trichloroflouromethane	<0.210	BBL 1998
1998	ID-7	3-4	1,1-Dichloroethylene	<0.210	BBL 1998
1998	ID-7	3-4	Methylene Chloride	<0.210	BBL 1998
1998	ID-7	3-4	1,1-Dichloroethane	<0.210	BBL 1998
1998	ID-7	3-4	cis-1,2-Dichloroethylene	<0.210	BBL 1998
1998	ID-7	3-4	trans-1,2-Dichloroethylene	<0.210	BBL 1998
1998	ID-7	3-4	2,2-Dichloropropane	<0.210	BBL 1998
1998	ID-7	3-4	Bromochloromethane	<0.210	BBL 1998
1998	ID-7	3-4	Chloroform	<0.210	BBL 1998
1998	ID-7	3-4	1,1,1-Trichloroethane	<0.210	BBL 1998
1998	ID-7	3-4	Carbon Tetrachloride	<0.210	BBL 1998
1998	ID-7	3-4	1,1-Dichloropropene	<0.210	BBL 1998
1998	ID-7	3-4	Benzene	<0.210	BBL 1998
1998	ID-7	3-4	1,2-Dichloroethane	<0.210	BBL 1998
1998	ID-7	3-4	Trichloroethylene	30	BBL 1998
1998	ID-7	3-4	1,2-Dichloropropane	<0.210	BBL 1998
1998	ID-7	3-4	Dibromomethane	<0.210	BBL 1998
1998	ID-7	3-4	Bromodichloromethane	<0.210	BBL 1998
1998	ID-7	3-4	Toluene	<0.210	BBL 1998
1998	ID-7	3-4	1,1,2-Trichloroethane	<0.210	BBL 1998
1998	ID-7	3-4	Tetrachloroethylene	1.2	BBL 1998
1998	ID-7	3-4	1,3-Dichloropropane	<0.210	BBL 1998
1998	ID-7	3-4	Dibromochloromethane	<0.210	BBL 1998
1998	ID-7	3-4	1,2-Dibromoethane	<0.210	BBL 1998
1998	ID-7	3-4	Chlorobenzene	<0.210	BBL 1998
1998	ID-7	3-4	Ethylbenzene	<0.210	BBL 1998
1998	ID-7	3-4	1,1,1,2-Tetrachloroethane	<0.210	BBL 1998
1998	ID-7	3-4	m,p-Xylene	<0.210	BBL 1998
1998	ID-7	3-4	Styrene	<0.210	BBL 1998
1998	ID-7	3-4	o-Xylene	<0.210	BBL 1998
1998	ID-7	3-4	Isopropylbenzene	<0.210	BBL 1998
1998	ID-7	3-4	n-Propylbenzene	<0.210	BBL 1998
1998	ID-7	3-4	tert-Butylbenzene	<0.210	BBL 1998
1998	ID-7	3-4	Bromoform	<0.210	BBL 1998
1998	ID-7	3-4	1,1,2,2-Tetrachloroethane	<0.210	BBL 1998
1998	ID-7	3-4	1,2,3-Trichloropropane	<0.210	BBL 1998
1998	ID-7	3-4	Bromobenzene	<0.210	BBL 1998
1998	ID-7	3-4	1,2,4-Trimethylbenzene	<0.210	BBL 1998
1998	ID-7	3-4	1,3,5-Trimethylbenzene	<0.210	BBL 1998
1998	ID-7	3-4	2-Chlorotoluene	<0.210	BBL 1998
1998	ID-7	3-4	4-Chlorotoluene	<0.210	BBL 1998
1998	ID-7	3-4	sec-Butylbenzene	<0.210	BBL 1998
1998	ID-7	3-4	p-Isopropyltoluene	<0.210	BBL 1998
1998	ID-7	3-4	1,3-Dichlorobenzene	<0.210	BBL 1998

Table D-2. Soil: Volatile Organic Carbon Data

Year Collected	Sample ID	Depth (ft)	Analyte	Concentration (µg/g)	Source
1998	ID-7	3-4	1,4-Dichlorobenzene	<0.210	BBL 1998
1998	ID-7	3-4	1,2-Dichlorobenzene	<0.210	BBL 1998
1998	ID-7	3-4	n-Butylbenzene	<0.210	BBL 1998
1998	ID-7	3-4	1,2-dibromo-3-chloropropane	<0.210	BBL 1998
1998	ID-7	3-4	1,2,4-Trichlorobenzene	1.5	BBL 1998
1998	ID-7	3-4	Hexachlorobutadiene	<0.210	BBL 1998
1998	ID-7	3-4	Napthalene	<0.210	BBL 1998
1998	ID-7	3-4	1,2,3-trichlorbenzene	0.72	BBL 1998
1998	SB-01-8	6-8	Dichlorodifluoromethane	<0.21	BBL 1998
1998	SB-01-8	6-8	Chloromethane	<0.21	BBL 1998
1998	SB-01-8	6-8	Vinyl Chloride	<0.21	BBL 1998
1998	SB-01-8	6-8	Bromomethane	<0.21	BBL 1998
1998	SB-01-8	6-8	Chloroethane	<0.21	BBL 1998
1998	SB-01-8	6-8	Trichloroflouromethane	<0.21	BBL 1998
1998	SB-01-8	6-8	1,1-Dichloroethylene	<0.21	BBL 1998
1998	SB-01-8	6-8	Methylene Chloride	<0.21	BBL 1998
1998	SB-01-8	6-8	1,1-Dichloroethane	<0.21	BBL 1998
1998	SB-01-8	6-8	cis-1,2-Dichloroethylene	<0.21	BBL 1998
1998	SB-01-8	6-8	trans-1,2-Dichloroethylene	<0.21	BBL 1998
1998	SB-01-8	6-8	2,2-Dichloropropane	<0.21	BBL 1998
1998	SB-01-8	6-8	Bromochloromethane	<0.21	BBL 1998
1998	SB-01-8	6-8	Chloroform	<0.21	BBL 1998
1998	SB-01-8	6-8	1,1,1-Trichloroethane	<0.21	BBL 1998
1998	SB-01-8	6-8	Carbon Tetrachloride	<0.21	BBL 1998
1998	SB-01-8	6-8	1,1-Dichloropropene	<0.21	BBL 1998
1998	SB-01-8	6-8	Benzene	<0.21	BBL 1998
1998	SB-01-8	6-8	1,2-Dichloroethane	<0.21	BBL 1998
1998	SB-01-8	6-8	Trichloroethylene	<0.21	BBL 1998
1998	SB-01-8	6-8	1,2-Dichloropropane	<0.21	BBL 1998
1998	SB-01-8	6-8	Dibromomethane	<0.21	BBL 1998
1998	SB-01-8	6-8	Bromodichloromethane	<0.21	BBL 1998
1998	SB-01-8	6-8	Toluene	<0.21	BBL 1998
1998	SB-01-8	6-8	1,1,2-Trichloroethane	<0.21	BBL 1998
1998	SB-01-8	6-8	Tetrachloroethylene	<0.21	BBL 1998
1998	SB-01-8	6-8	1,3-Dichloropropane	<0.21	BBL 1998
1998	SB-01-8	6-8	Dibromochloromethane	<0.21	BBL 1998
1998	SB-01-8	6-8	1,2-Dibromoethane	<0.21	BBL 1998
1998	SB-01-8	6-8	Chlorobenzene	<0.21	BBL 1998
1998	SB-01-8	6-8	Ethylbenzene	<0.21	BBL 1998
1998	SB-01-8	6-8	1,1,1,2-Tetrachloroethane	<0.21	BBL 1998
1998	SB-01-8	6-8	m,p-Xylene	<0.21	BBL 1998
1998	SB-01-8	6-8	Styrene	<0.21	BBL 1998
1998	SB-01-8	6-8	o-Xylene	<0.21	BBL 1998
1998	SB-01-8	6-8	Isopropylbenzene	<0.21	BBL 1998
1998	SB-01-8	6-8	n-Propylbenzene	<0.21	BBL 1998
1998	SB-01-8	6-8	tert-Butylbenzene	<0.21	BBL 1998
1998	SB-01-8	6-8	Bromoform	<0.21	BBL 1998
1998	SB-01-8	6-8	1,1,2,2-Tetrachloroethane	<0.21	BBL 1998
1998	SB-01-8	6-8	1,2,3-Trichloropropane	<0.21	BBL 1998

Table D-2. Soil: Volatile Organic Carbon Data

Year Collected	Sample ID	Depth (ft)	Analyte	Concentration (µg/g)	Source
1998	SB-01-8	6-8	Bromobenzene	<0.21	BBL 1998
1998	SB-01-8	6-8	1,2,4-Trimethylbenzene	<0.21	BBL 1998
1998	SB-01-8	6-8	1,3,5-Trimethylbenzene	<0.21	BBL 1998
1998	SB-01-8	6-8	2-Chlorotoluene	<0.21	BBL 1998
1998	SB-01-8	6-8	4-Chlorotoluene	<0.21	BBL 1998
1998	SB-01-8	6-8	sec-Butylbenzene	<0.21	BBL 1998
1998	SB-01-8	6-8	p-Isopropyltoluene	<0.21	BBL 1998
1998	SB-01-8	6-8	1,3-Dichlorobenzene	<0.21	BBL 1998
1998	SB-01-8	6-8	1,4-Dichlorobenzene	<0.21	BBL 1998
1998	SB-01-8	6-8	1,2-Dichlorobenzene	<0.21	BBL 1998
1998	SB-01-8	6-8	n-Butylbenzene	<0.21	BBL 1998
1998	SB-01-8	6-8	1,2-dibromo-3-chloropropane	<0.21	BBL 1998
1998	SB-01-8	6-8	1,2,4-Trichlorobenzene	<0.21	BBL 1998
1998	SB-01-8	6-8	Hexachlorobutadiene	<0.21	BBL 1998
1998	SB-01-8	6-8	Napthalene	<0.21	BBL 1998
1998	SB-01-8	6-8	1,2,3-trichlorbenzene	<0.21	BBL 1998
1998	SB-02-2	0-2	Dichlorodifluoromethane	<0.23	BBL 1998
1998	SB-02-2	0-2	Chloromethane	<0.23	BBL 1998
1998	SB-02-2	0-2	Vinyl Chloride	<0.23	BBL 1998
1998	SB-02-2	0-2	Bromomethane	<0.23	BBL 1998
1998	SB-02-2	0-2	Chloroethane	<0.23	BBL 1998
1998	SB-02-2	0-2	Trichloroflouromethane	<0.23	BBL 1998
1998	SB-02-2	0-2	1,1-Dichloroethylene	<0.23	BBL 1998
1998	SB-02-2	0-2	Methylene Chloride	<0.23	BBL 1998
1998	SB-02-2	0-2	1,1-Dichloroethane	<0.23	BBL 1998
1998	SB-02-2	0-2	cis-1,2-Dichloroethylene	<0.23	BBL 1998
1998	SB-02-2	0-2	trans-1,2-Dichloroethylene	<0.23	BBL 1998
1998	SB-02-2	0-2	2,2-Dichloropropane	<0.23	BBL 1998
1998	SB-02-2	0-2	Bromochloromethane	<0.23	BBL 1998
1998	SB-02-2	0-2	Chloroform	<0.23	BBL 1998
1998	SB-02-2	0-2	1,1,1-Trichloroethane	<0.23	BBL 1998
1998	SB-02-2	0-2	Carbon Tetrachloride	<0.23	BBL 1998
1998	SB-02-2	0-2	1,1-Dichloropropene	<0.23	BBL 1998
1998	SB-02-2	0-2	Benzene	<0.23	BBL 1998
1998	SB-02-2	0-2	1,2-Dichloroethane	<0.23	BBL 1998
1998	SB-02-2	0-2	Trichloroethylene	<0.23	BBL 1998
1998	SB-02-2	0-2	1,2-Dichloropropane	<0.23	BBL 1998
1998	SB-02-2	0-2	Dibromomethane	<0.23	BBL 1998
1998	SB-02-2	0-2	Bromodichloromethane	<0.23	BBL 1998
1998	SB-02-2	0-2	Toluene	<0.23	BBL 1998
1998	SB-02-2	0-2	1,1,2-Trichloroethane	<0.23	BBL 1998
1998	SB-02-2	0-2	Tetrachloroethylene	<0.23	BBL 1998
1998	SB-02-2	0-2	1,3-Dichloropropane	<0.23	BBL 1998
1998	SB-02-2	0-2	Dibromochloromethane	<0.23	BBL 1998
1998	SB-02-2	0-2	1,2-Dibromoethane	<0.23	BBL 1998
1998	SB-02-2	0-2	Chlorobenzene	<0.23	BBL 1998
1998	SB-02-2	0-2	Ethylbenzene	<0.23	BBL 1998
1998	SB-02-2	0-2	1,1,1,2-Tetrachloroethane	<0.23	BBL 1998
1998	SB-02-2	0-2	m,p-Xylene	<0.23	BBL 1998

Table D-2. Soil: Volatile Organic Carbon Data

Year Collected	Sample ID	Depth (ft)	Analyte	Concentration (µg/g)	Source
1998	SB-02-2	0-2	Styrene	<0.23	BBL 1998
1998	SB-02-2	0-2	o-Xylene	<0.23	BBL 1998
1998	SB-02-2	0-2	Isopropylbenzene	<0.23	BBL 1998
1998	SB-02-2	0-2	n-Propylbenzene	<0.23	BBL 1998
1998	SB-02-2	0-2	tert-Butylbenzene	<0.23	BBL 1998
1998	SB-02-2	0-2	Bromoform	<0.23	BBL 1998
1998	SB-02-2	0-2	1,1,2,2-Tetrachloroethane	<0.23	BBL 1998
1998	SB-02-2	0-2	1,2,3-Trichloropropane	<0.23	BBL 1998
1998	SB-02-2	0-2	Bromobenzene	<0.23	BBL 1998
1998	SB-02-2	0-2	1,2,4-Trimethylbenzene	<0.23	BBL 1998
1998	SB-02-2	0-2	1,3,5-Trimethylbenzene	<0.23	BBL 1998
1998	SB-02-2	0-2	2-Chlorotoluene	<0.23	BBL 1998
1998	SB-02-2	0-2	4-Chlorotoluene	<0.23	BBL 1998
1998	SB-02-2	0-2	sec-Butylbenzene	<0.23	BBL 1998
1998	SB-02-2	0-2	p-Isopropyltoluene	<0.23	BBL 1998
1998	SB-02-2	0-2	1,3-Dichlorobenzene	<0.23	BBL 1998
1998	SB-02-2	0-2	1,4-Dichlorobenzene	<0.23	BBL 1998
1998	SB-02-2	0-2	1,2-Dichlorobenzene	<0.23	BBL 1998
1998	SB-02-2	0-2	n-Butylbenzene	<0.23	BBL 1998
1998	SB-02-2	0-2	1,2-dibromo-3-chloropropane	<0.23	BBL 1998
1998	SB-02-2	0-2	1,2,4-Trichlorobenzene	<0.23	BBL 1998
1998	SB-02-2	0-2	Hexachlorobutadiene	<0.23	BBL 1998
1998	SB-02-2	0-2	Napthalene	<0.23	BBL 1998
1998	SB-02-2	0-2	1,2,3-trichlorbenzene	<0.23	BBL 1998
1998	SB-03-2	0-2	Dichlorodifluoromethane	<0.23	BBL 1998
1998	SB-03-2	0-2	Chloromethane	<0.23	BBL 1998
1998	SB-03-2	0-2	Vinyl Chloride	<0.23	BBL 1998
1998	SB-03-2	0-2	Bromomethane	<0.23	BBL 1998
1998	SB-03-2	0-2	Chloroethane	<0.23	BBL 1998
1998	SB-03-2	0-2	Trichloroflouromethane	<0.23	BBL 1998
1998	SB-03-2	0-2	1,1-Dichloroethylene	<0.23	BBL 1998
1998	SB-03-2	0-2	Methylene Chloride	<0.23	BBL 1998
1998	SB-03-2	0-2	1,1-Dichloroethane	<0.23	BBL 1998
1998	SB-03-2	0-2	cis-1,2-Dichloroethylene	<0.23	BBL 1998
1998	SB-03-2	0-2	trans-1,2-Dichloroethylene	<0.23	BBL 1998
1998	SB-03-2	0-2	2,2-Dichloropropane	<0.23	BBL 1998
1998	SB-03-2	0-2	Bromochloromethane	<0.23	BBL 1998
1998	SB-03-2	0-2	Chloroform	<0.23	BBL 1998
1998	SB-03-2	0-2	1,1,1-Trichloroethane	<0.23	BBL 1998
1998	SB-03-2	0-2	Carbon Tetrachloride	<0.23	BBL 1998
1998	SB-03-2	0-2	1,1-Dichloropropene	<0.23	BBL 1998
1998	SB-03-2	0-2	Benzene	<0.23	BBL 1998
1998	SB-03-2	0-2	1,2-Dichloroethane	<0.23	BBL 1998
1998	SB-03-2	0-2	Trichloroethylene	<0.23	BBL 1998
1998	SB-03-2	0-2	1,2-Dichloropropane	<0.23	BBL 1998
1998	SB-03-2	0-2	Dibromomethane	<0.23	BBL 1998
1998	SB-03-2	0-2	Bromodichloromethane	<0.23	BBL 1998
1998	SB-03-2	0-2	Toluene	<0.23	BBL 1998
1998	SB-03-2	0-2	1,1,2-Trichloroethane	<0.23	BBL 1998

Table D-2. Soil: Volatile Organic Carbon Data

Year Collected	Sample ID	Depth (ft)	Analyte	Concentration (µg/g)	Source
1998	SB-03-2	0-2	Tetrachloroethylene	<0.23	BBL 1998
1998	SB-03-2	0-2	1,3-Dichloropropane	<0.23	BBL 1998
1998	SB-03-2	0-2	Dibromochloromethane	<0.23	BBL 1998
1998	SB-03-2	0-2	1,2-Dibromoethane	<0.23	BBL 1998
1998	SB-03-2	0-2	Chlorobenzene	<0.23	BBL 1998
1998	SB-03-2	0-2	Ethylbenzene	<0.23	BBL 1998
1998	SB-03-2	0-2	1,1,1,2-Tetrachloroethane	<0.23	BBL 1998
1998	SB-03-2	0-2	m,p-Xylene	<0.23	BBL 1998
1998	SB-03-2	0-2	Styrene	<0.23	BBL 1998
1998	SB-03-2	0-2	o-Xylene	<0.23	BBL 1998
1998	SB-03-2	0-2	Isopropylbenzene	<0.23	BBL 1998
1998	SB-03-2	0-2	n-Propylbenzene	<0.23	BBL 1998
1998	SB-03-2	0-2	tert-Butylbenzene	<0.23	BBL 1998
1998	SB-03-2	0-2	Bromoform	<0.23	BBL 1998
1998	SB-03-2	0-2	1,1,2,2-Tetrachloroethane	<0.23	BBL 1998
1998	SB-03-2	0-2	1,2,3-Trichloropropane	<0.23	BBL 1998
1998	SB-03-2	0-2	Bromobenzene	<0.23	BBL 1998
1998	SB-03-2	0-2	1,2,4-Trimethylbenzene	<0.23	BBL 1998
1998	SB-03-2	0-2	1,3,5-Trimethylbenzene	<0.23	BBL 1998
1998	SB-03-2	0-2	2-Chlorotoluene	<0.23	BBL 1998
1998	SB-03-2	0-2	4-Chlorotoluene	<0.23	BBL 1998
1998	SB-03-2	0-2	sec-Butylbenzene	<0.23	BBL 1998
1998	SB-03-2	0-2	p-Isopropyltoluene	<0.23	BBL 1998
1998	SB-03-2	0-2	1,3-Dichlorobenzene	<0.23	BBL 1998
1998	SB-03-2	0-2	1,4-Dichlorobenzene	<0.23	BBL 1998
1998	SB-03-2	0-2	1,2-Dichlorobenzene	<0.23	BBL 1998
1998	SB-03-2	0-2	n-Butylbenzene	<0.23	BBL 1998
1998	SB-03-2	0-2	1,2-dibromo-3-chloropropane	<0.23	BBL 1998
1998	SB-03-2	0-2	1,2,4-Trichlorobenzene	<0.23	BBL 1998
1998	SB-03-2	0-2	Hexachlorobutadiene	<0.23	BBL 1998
1998	SB-03-2	0-2	Napthalene	<0.23	BBL 1998
1998	SB-03-2	0-2	1,2,3-trichlorbenzene	<0.23	BBL 1998
1998	SB-03-2D	0-2	Dichlorodifluoromethane	<0.23	BBL 1998
1998	SB-03-2D	0-2	Chloromethane	<0.23	BBL 1998
1998	SB-03-2D	0-2	Vinyl Chloride	<0.23	BBL 1998
1998	SB-03-2D	0-2	Bromomethane	<0.23	BBL 1998
1998	SB-03-2D	0-2	Chloroethane	<0.23	BBL 1998
1998	SB-03-2D	0-2	Trichloroflouromethane	<0.23	BBL 1998
1998	SB-03-2D	0-2	1,1-Dichloroethylene	<0.23	BBL 1998
1998	SB-03-2D	0-2	Methylene Chloride	<0.23	BBL 1998
1998	SB-03-2D	0-2	1,1-Dichloroethane	<0.23	BBL 1998
1998	SB-03-2D	0-2	cis-1,2-Dichloroethylene	<0.23	BBL 1998
1998	SB-03-2D	0-2	trans-1,2-Dichloroethylene	<0.23	BBL 1998
1998	SB-03-2D	0-2	2,2-Dichloropropane	<0.23	BBL 1998
1998	SB-03-2D	0-2	Bromochloromethane	<0.23	BBL 1998
1998	SB-03-2D	0-2	Chloroform	<0.23	BBL 1998
1998	SB-03-2D	0-2	1,1,1-Trichloroethane	<0.23	BBL 1998
1998	SB-03-2D	0-2	Carbon Tetrachloride	<0.23	BBL 1998
1998	SB-03-2D	0-2	1,1-Dichloropropene	<0.23	BBL 1998

Table D-2. Soil: Volatile Organic Carbon Data

Year Collected	Sample ID	Depth (ft)	Analyte	Concentration (µg/g)	Source
1998	SB-03-2D	0-2	Benzene	<0.23	BBL 1998
1998	SB-03-2D	0-2	1,2-Dichloroethane	<0.23	BBL 1998
1998	SB-03-2D	0-2	Trichloroethylene	<0.23	BBL 1998
1998	SB-03-2D	0-2	1,2-Dichloropropane	<0.23	BBL 1998
1998	SB-03-2D	0-2	Dibromomethane	<0.23	BBL 1998
1998	SB-03-2D	0-2	Bromodichloromethane	<0.23	BBL 1998
1998	SB-03-2D	0-2	Toluene	<0.23	BBL 1998
1998	SB-03-2D	0-2	1,1,2-Trichloroethane	<0.23	BBL 1998
1998	SB-03-2D	0-2	Tetrachloroethylene	<0.23	BBL 1998
1998	SB-03-2D	0-2	1,3-Dichloropropane	<0.23	BBL 1998
1998	SB-03-2D	0-2	Dibromochloromethane	<0.23	BBL 1998
1998	SB-03-2D	0-2	1,2-Dibromoethane	<0.23	BBL 1998
1998	SB-03-2D	0-2	Chlorobenzene	<0.23	BBL 1998
1998	SB-03-2D	0-2	Ethylbenzene	<0.23	BBL 1998
1998	SB-03-2D	0-2	1,1,1,2-Tetrachloroethane	<0.23	BBL 1998
1998	SB-03-2D	0-2	m,p-Xylene	<0.23	BBL 1998
1998	SB-03-2D	0-2	Styrene	<0.23	BBL 1998
1998	SB-03-2D	0-2	o-Xylene	<0.23	BBL 1998
1998	SB-03-2D	0-2	Isopropylbenzene	<0.23	BBL 1998
1998	SB-03-2D	0-2	n-Propylbenzene	<0.23	BBL 1998
1998	SB-03-2D	0-2	tert-Butylbenzene	<0.23	BBL 1998
1998	SB-03-2D	0-2	Bromoform	<0.23	BBL 1998
1998	SB-03-2D	0-2	1,1,2,2-Tetrachloroethane	<0.23	BBL 1998
1998	SB-03-2D	0-2	1,2,3-Trichloropropane	<0.23	BBL 1998
1998	SB-03-2D	0-2	Bromobenzene	<0.23	BBL 1998
1998	SB-03-2D	0-2	1,2,4-Trimethylbenzene	<0.23	BBL 1998
1998	SB-03-2D	0-2	1,3,5-Trimethylbenzene	<0.23	BBL 1998
1998	SB-03-2D	0-2	2-Chlorotoluene	<0.23	BBL 1998
1998	SB-03-2D	0-2	4-Chlorotoluene	<0.23	BBL 1998
1998	SB-03-2D	0-2	sec-Butylbenzene	<0.23	BBL 1998
1998	SB-03-2D	0-2	p-Isopropyltoluene	<0.23	BBL 1998
1998	SB-03-2D	0-2	1,3-Dichlorobenzene	<0.23	BBL 1998
1998	SB-03-2D	0-2	1,4-Dichlorobenzene	<0.23	BBL 1998
1998	SB-03-2D	0-2	1,2-Dichlorobenzene	<0.23	BBL 1998
1998	SB-03-2D	0-2	n-Butylbenzene	<0.23	BBL 1998
1998	SB-03-2D	0-2	1,2-dibromo-3-chloropropane	<0.23	BBL 1998
1998	SB-03-2D	0-2	1,2,4-Trichlorobenzene	<0.23	BBL 1998
1998	SB-03-2D	0-2	Hexachlorobutadiene	<0.23	BBL 1998
1998	SB-03-2D	0-2	Napthalene	<0.23	BBL 1998
1998	SB-03-2D	0-2	1,2,3-trichlorbenzene	<0.23	BBL 1998
1998	SB-04-2	0-2	Dichlorodifluoromethane	<0.22	BBL 1998
1998	SB-04-2	0-2	Chloromethane	<0.22	BBL 1998
1998	SB-04-2	0-2	Vinyl Chloride	<0.22	BBL 1998
1998	SB-04-2	0-2	Bromomethane	<0.22	BBL 1998
1998	SB-04-2	0-2	Chloroethane	<0.22	BBL 1998
1998	SB-04-2	0-2	Trichloroflouromethane	<0.22	BBL 1998
1998	SB-04-2	0-2	1,1-Dichloroethylene	<0.22	BBL 1998
1998	SB-04-2	0-2	Methylene Chloride	<0.22	BBL 1998
1998	SB-04-2	0-2	1,1-Dichloroethane	<0.22	BBL 1998

Table D-2. Soil: Volatile Organic Carbon Data

Year Collected	Sample ID	Depth (ft)	Analyte	Concentration (µg/g)	Source
1998	SB-04-2	0-2	cis-1,2-Dichloroethylene	<0.22	BBL 1998
1998	SB-04-2	0-2	trans-1,2-Dichloroethylene	<0.22	BBL 1998
1998	SB-04-2	0-2	2,2-Dichloropropane	<0.22	BBL 1998
1998	SB-04-2	0-2	Bromochloromethane	<0.22	BBL 1998
1998	SB-04-2	0-2	Chloroform	<0.22	BBL 1998
1998	SB-04-2	0-2	1,1,1-Trichloroethane	<0.22	BBL 1998
1998	SB-04-2	0-2	Carbon Tetrachloride	<0.22	BBL 1998
1998	SB-04-2	0-2	1,1-Dichloropropene	<0.22	BBL 1998
1998	SB-04-2	0-2	Benzene	<0.22	BBL 1998
1998	SB-04-2	0-2	1,2-Dichloroethane	<0.22	BBL 1998
1998	SB-04-2	0-2	Trichloroethylene	<0.22	BBL 1998
1998	SB-04-2	0-2	1,2-Dichloropropane	<0.22	BBL 1998
1998	SB-04-2	0-2	Dibromomethane	<0.22	BBL 1998
1998	SB-04-2	0-2	Bromodichloromethane	<0.22	BBL 1998
1998	SB-04-2	0-2	Toluene	<0.22	BBL 1998
1998	SB-04-2	0-2	1,1,2-Trichloroethane	<0.22	BBL 1998
1998	SB-04-2	0-2	Tetrachloroethylene	<0.22	BBL 1998
1998	SB-04-2	0-2	1,3-Dichloropropane	<0.22	BBL 1998
1998	SB-04-2	0-2	Dibromochloromethane	<0.22	BBL 1998
1998	SB-04-2	0-2	1,2-Dibromoethane	<0.22	BBL 1998
1998	SB-04-2	0-2	Chlorobenzene	<0.22	BBL 1998
1998	SB-04-2	0-2	Ethylbenzene	<0.22	BBL 1998
1998	SB-04-2	0-2	1,1,1,2-Tetrachloroethane	<0.22	BBL 1998
1998	SB-04-2	0-2	m,p-Xylene	<0.22	BBL 1998
1998	SB-04-2	0-2	Styrene	<0.22	BBL 1998
1998	SB-04-2	0-2	o-Xylene	<0.22	BBL 1998
1998	SB-04-2	0-2	Isopropylbenzene	<0.22	BBL 1998
1998	SB-04-2	0-2	n-Propylbenzene	<0.22	BBL 1998
1998	SB-04-2	0-2	tert-Butylbenzene	<0.22	BBL 1998
1998	SB-04-2	0-2	Bromoform	<0.22	BBL 1998
1998	SB-04-2	0-2	1,1,2,2-Tetrachloroethane	<0.22	BBL 1998
1998	SB-04-2	0-2	1,2,3-Trichloropropane	<0.22	BBL 1998
1998	SB-04-2	0-2	Bromobenzene	<0.22	BBL 1998
1998	SB-04-2	0-2	1,2,4-Trimethylbenzene	<0.22	BBL 1998
1998	SB-04-2	0-2	1,3,5-Trimethylbenzene	<0.22	BBL 1998
1998	SB-04-2	0-2	2-Chlorotoluene	<0.22	BBL 1998
1998	SB-04-2	0-2	4-Chlorotoluene	<0.22	BBL 1998
1998	SB-04-2	0-2	sec-Butylbenzene	<0.22	BBL 1998
1998	SB-04-2	0-2	p-Isopropyltoluene	<0.22	BBL 1998
1998	SB-04-2	0-2	1,3-Dichlorobenzene	<0.22	BBL 1998
1998	SB-04-2	0-2	1,4-Dichlorobenzene	<0.22	BBL 1998
1998	SB-04-2	0-2	1,2-Dichlorobenzene	<0.22	BBL 1998
1998	SB-04-2	0-2	n-Butylbenzene	<0.22	BBL 1998
1998	SB-04-2	0-2	1,2-dibromo-3-chloropropane	<0.22	BBL 1998
1998	SB-04-2	0-2	1,2,4-Trichlorobenzene	<0.22	BBL 1998
1998	SB-04-2	0-2	Hexachlorobutadiene	<0.22	BBL 1998
1998	SB-04-2	0-2	Napthalene	<0.22	BBL 1998
1998	SB-04-2	0-2	1,2,3-trichlorbenzene	<0.22	BBL 1998
1998	SB-05-2	0-2	Dichlorodifluoromethane	<0.23	BBL 1998

Table D-2. Soil: Volatile Organic Carbon Data

Year Collected	Sample ID	Depth (ft)	Analyte	Concentration (µg/g)	Source
1998	SB-05-2	0-2	Chloromethane	<0.23	BBL 1998
1998	SB-05-2	0-2	Vinyl Chloride	<0.23	BBL 1998
1998	SB-05-2	0-2	Bromomethane	<0.23	BBL 1998
1998	SB-05-2	0-2	Chloroethane	<0.23	BBL 1998
1998	SB-05-2	0-2	Trichloroflouromethane	<0.23	BBL 1998
1998	SB-05-2	0-2	1,1-Dichloroethylene	<0.23	BBL 1998
1998	SB-05-2	0-2	Methylene Chloride	<0.23	BBL 1998
1998	SB-05-2	0-2	1,1-Dichloroethane	<0.23	BBL 1998
1998	SB-05-2	0-2	cis-1,2-Dichloroethylene	<0.23	BBL 1998
1998	SB-05-2	0-2	trans-1,2-Dichloroethylene	<0.23	BBL 1998
1998	SB-05-2	0-2	2,2-Dichloropropane	<0.23	BBL 1998
1998	SB-05-2	0-2	Bromochloromethane	<0.23	BBL 1998
1998	SB-05-2	0-2	Chloroform	<0.23	BBL 1998
1998	SB-05-2	0-2	1,1,1-Trichloroethane	<0.23	BBL 1998
1998	SB-05-2	0-2	Carbon Tetrachloride	<0.23	BBL 1998
1998	SB-05-2	0-2	1,1-Dichloropropene	<0.23	BBL 1998
1998	SB-05-2	0-2	Benzene	<0.23	BBL 1998
1998	SB-05-2	0-2	1,2-Dichloroethane	<0.23	BBL 1998
1998	SB-05-2	0-2	Trichloroethylene	0.24	BBL 1998
1998	SB-05-2	0-2	1,2-Dichloropropane	<0.23	BBL 1998
1998	SB-05-2	0-2	Dibromomethane	<0.23	BBL 1998
1998	SB-05-2	0-2	Bromodichloromethane	<0.23	BBL 1998
1998	SB-05-2	0-2	Toluene	<0.23	BBL 1998
1998	SB-05-2	0-2	1,1,2-Trichloroethane	<0.23	BBL 1998
1998	SB-05-2	0-2	Tetrachloroethylene	<0.23	BBL 1998
1998	SB-05-2	0-2	1,3-Dichloropropane	<0.23	BBL 1998
1998	SB-05-2	0-2	Dibromochloromethane	<0.23	BBL 1998
1998	SB-05-2	0-2	1,2-Dibromoethane	<0.23	BBL 1998
1998	SB-05-2	0-2	Chlorobenzene	<0.23	BBL 1998
1998	SB-05-2	0-2	Ethylbenzene	<0.23	BBL 1998
1998	SB-05-2	0-2	1,1,1,2-Tetrachloroethane	<0.23	BBL 1998
1998	SB-05-2	0-2	m,p-Xylene	<0.23	BBL 1998
1998	SB-05-2	0-2	Styrene	<0.23	BBL 1998
1998	SB-05-2	0-2	o-Xylene	<0.23	BBL 1998
1998	SB-05-2	0-2	Isopropylbenzene	<0.23	BBL 1998
1998	SB-05-2	0-2	n-Propylbenzene	<0.23	BBL 1998
1998	SB-05-2	0-2	tert-Butylbenzene	<0.23	BBL 1998
1998	SB-05-2	0-2	Bromoform	<0.23	BBL 1998
1998	SB-05-2	0-2	1,1,2,2-Tetrachloroethane	<0.23	BBL 1998
1998	SB-05-2	0-2	1,2,3-Trichloropropane	<0.23	BBL 1998
1998	SB-05-2	0-2	Bromobenzene	<0.23	BBL 1998
1998	SB-05-2	0-2	1,2,4-Trimethylbenzene	<0.23	BBL 1998
1998	SB-05-2	0-2	1,3,5-Trimethylbenzene	<0.23	BBL 1998
1998	SB-05-2	0-2	2-Chlorotoluene	<0.23	BBL 1998
1998	SB-05-2	0-2	4-Chlorotoluene	<0.23	BBL 1998
1998	SB-05-2	0-2	sec-Butylbenzene	<0.23	BBL 1998
1998	SB-05-2	0-2	p-Isopropyltoluene	<0.23	BBL 1998
1998	SB-05-2	0-2	1,3-Dichlorobenzene	<0.23	BBL 1998
1998	SB-05-2	0-2	1,4-Dichlorobenzene	<0.23	BBL 1998

Table D-2. Soil: Volatile Organic Carbon Data

Year Collected	Sample ID	Depth (ft)	Analyte	Concentration (µg/g)	Source
1998	SB-05-2	0-2	1,2-Dichlorobenzene	<0.23	BBL 1998
1998	SB-05-2	0-2	n-Butylbenzene	<0.23	BBL 1998
1998	SB-05-2	0-2	1,2-dibromo-3-chloropropane	<0.23	BBL 1998
1998	SB-05-2	0-2	1,2,4-Trichlorobenzene	<0.23	BBL 1998
1998	SB-05-2	0-2	Hexachlorobutadiene	<0.23	BBL 1998
1998	SB-05-2	0-2	Napthalene	0.39	BBL 1998
1998	SB-05-2	0-2	1,2,3-trichlorbenzene	<0.23	BBL 1998
1998	SB-06-2	0-2	Dichlorodifluoromethane	<0.21	BBL 1998
1998	SB-06-2	0-2	Chloromethane	<0.21	BBL 1998
1998	SB-06-2	0-2	Vinyl Chloride	<0.21	BBL 1998
1998	SB-06-2	0-2	Bromomethane	<0.21	BBL 1998
1998	SB-06-2	0-2	Chloroethane	<0.21	BBL 1998
1998	SB-06-2	0-2	Trichloroflouromethane	<0.21	BBL 1998
1998	SB-06-2	0-2	1,1-Dichloroethylene	<0.21	BBL 1998
1998	SB-06-2	0-2	Methylene Chloride	<0.21	BBL 1998
1998	SB-06-2	0-2	1,1-Dichloroethane	<0.21	BBL 1998
1998	SB-06-2	0-2	cis-1,2-Dichloroethylene	<0.21	BBL 1998
1998	SB-06-2	0-2	trans-1,2-Dichloroethylene	<0.21	BBL 1998
1998	SB-06-2	0-2	2,2-Dichloropropane	<0.21	BBL 1998
1998	SB-06-2	0-2	Bromochloromethane	<0.21	BBL 1998
1998	SB-06-2	0-2	Chloroform	<0.21	BBL 1998
1998	SB-06-2	0-2	1,1,1-Trichloroethane	<0.21	BBL 1998
1998	SB-06-2	0-2	Carbon Tetrachloride	<0.21	BBL 1998
1998	SB-06-2	0-2	1,1-Dichloropropene	<0.21	BBL 1998
1998	SB-06-2	0-2	Benzene	<0.21	BBL 1998
1998	SB-06-2	0-2	1,2-Dichloroethane	<0.21	BBL 1998
1998	SB-06-2	0-2	Trichloroethylene	<0.21	BBL 1998
1998	SB-06-2	0-2	1,2-Dichloropropane	<0.21	BBL 1998
1998	SB-06-2	0-2	Dibromomethane	<0.21	BBL 1998
1998	SB-06-2	0-2	Bromodichloromethane	<0.21	BBL 1998
1998	SB-06-2	0-2	Toluene	<0.21	BBL 1998
1998	SB-06-2	0-2	1,1,2-Trichloroethane	<0.21	BBL 1998
1998	SB-06-2	0-2	Tetrachloroethylene	<0.21	BBL 1998
1998	SB-06-2	0-2	1,3-Dichloropropane	<0.21	BBL 1998
1998	SB-06-2	0-2	Dibromochloromethane	<0.21	BBL 1998
1998	SB-06-2	0-2	1,2-Dibromoethane	<0.21	BBL 1998
1998	SB-06-2	0-2	Chlorobenzene	<0.21	BBL 1998
1998	SB-06-2	0-2	Ethylbenzene	<0.21	BBL 1998
1998	SB-06-2	0-2	1,1,1,2-Tetrachloroethane	<0.21	BBL 1998
1998	SB-06-2	0-2	m,p-Xylene	<0.21	BBL 1998
1998	SB-06-2	0-2	Styrene	<0.21	BBL 1998
1998	SB-06-2	0-2	o-Xylene	<0.21	BBL 1998
1998	SB-06-2	0-2	Isopropylbenzene	<0.21	BBL 1998
1998	SB-06-2	0-2	n-Propylbenzene	<0.21	BBL 1998
1998	SB-06-2	0-2	tert-Butylbenzene	<0.21	BBL 1998
1998	SB-06-2	0-2	Bromoform	<0.21	BBL 1998
1998	SB-06-2	0-2	1,1,2,2-Tetrachloroethane	<0.21	BBL 1998
1998	SB-06-2	0-2	1,2,3-Trichloropropane	<0.21	BBL 1998
1998	SB-06-2	0-2	Bromobenzene	<0.21	BBL 1998

Table D-2. Soil: Volatile Organic Carbon Data

Year Collected	Sample ID	Depth (ft)	Analyte	Concentration (µg/g)	Source
1998	SB-06-2	0-2	1,2,4-Trimethylbenzene	<0.21	BBL 1998
1998	SB-06-2	0-2	1,3,5-Trimethylbenzene	<0.21	BBL 1998
1998	SB-06-2	0-2	2-Chlorotoluene	<0.21	BBL 1998
1998	SB-06-2	0-2	4-Chlorotoluene	<0.21	BBL 1998
1998	SB-06-2	0-2	sec-Butylbenzene	<0.21	BBL 1998
1998	SB-06-2	0-2	p-Isopropyltoluene	<0.21	BBL 1998
1998	SB-06-2	0-2	1,3-Dichlorobenzene	<0.21	BBL 1998
1998	SB-06-2	0-2	1,4-Dichlorobenzene	<0.21	BBL 1998
1998	SB-06-2	0-2	1,2-Dichlorobenzene	<0.21	BBL 1998
1998	SB-06-2	0-2	n-Butylbenzene	<0.21	BBL 1998
1998	SB-06-2	0-2	1,2-dibromo-3-chloropropane	<0.21	BBL 1998
1998	SB-06-2	0-2	1,2,4-Trichlorobenzene	<0.21	BBL 1998
1998	SB-06-2	0-2	Hexachlorobutadiene	<0.21	BBL 1998
1998	SB-06-2	0-2	Napthalene	<0.21	BBL 1998
1998	SB-06-2	0-2	1,2,3-trichlorbenzene	<0.21	BBL 1998
1998	SB-07-5	4-5	Dichlorodifluoromethane	<0.22	BBL 1998
1998	SB-07-5	4-5	Chloromethane	<0.22	BBL 1998
1998	SB-07-5	4-5	Vinyl Chloride	<0.22	BBL 1998
1998	SB-07-5	4-5	Bromomethane	<0.22	BBL 1998
1998	SB-07-5	4-5	Chloroethane	<0.22	BBL 1998
1998	SB-07-5	4-5	Trichloroflouromethane	<0.22	BBL 1998
1998	SB-07-5	4-5	1,1-Dichloroethylene	<0.22	BBL 1998
1998	SB-07-5	4-5	Methylene Chloride	<0.22	BBL 1998
1998	SB-07-5	4-5	1,1-Dichloroethane	<0.22	BBL 1998
1998	SB-07-5	4-5	cis-1,2-Dichloroethylene	<0.22	BBL 1998
1998	SB-07-5	4-5	trans-1,2-Dichloroethylene	<0.22	BBL 1998
1998	SB-07-5	4-5	2,2-Dichloropropane	<0.22	BBL 1998
1998	SB-07-5	4-5	Bromochloromethane	<0.22	BBL 1998
1998	SB-07-5	4-5	Chloroform	<0.22	BBL 1998
1998	SB-07-5	4-5	1,1,1-Trichloroethane	<0.22	BBL 1998
1998	SB-07-5	4-5	Carbon Tetrachloride	<0.22	BBL 1998
1998	SB-07-5	4-5	1,1-Dichloropropene	<0.22	BBL 1998
1998	SB-07-5	4-5	Benzene	<0.22	BBL 1998
1998	SB-07-5	4-5	1,2-Dichloroethane	<0.22	BBL 1998
1998	SB-07-5	4-5	Trichloroethylene	<0.22	BBL 1998
1998	SB-07-5	4-5	1,2-Dichloropropane	<0.22	BBL 1998
1998	SB-07-5	4-5	Dibromomethane	<0.22	BBL 1998
1998	SB-07-5	4-5	Bromodichloromethane	<0.22	BBL 1998
1998	SB-07-5	4-5	Toluene	<0.22	BBL 1998
1998	SB-07-5	4-5	1,1,2-Trichloroethane	<0.22	BBL 1998
1998	SB-07-5	4-5	Tetrachloroethylene	<0.22	BBL 1998
1998	SB-07-5	4-5	1,3-Dichloropropane	<0.22	BBL 1998
1998	SB-07-5	4-5	Dibromochloromethane	<0.22	BBL 1998
1998	SB-07-5	4-5	1,2-Dibromoethane	<0.22	BBL 1998
1998	SB-07-5	4-5	Chlorobenzene	<0.22	BBL 1998
1998	SB-07-5	4-5	Ethylbenzene	<0.22	BBL 1998
1998	SB-07-5	4-5	1,1,1,2-Tetrachloroethane	<0.22	BBL 1998
1998	SB-07-5	4-5	m,p-Xylene	<0.22	BBL 1998
1998	SB-07-5	4-5	Styrene	<0.22	BBL 1998

Table D-2. Soil: Volatile Organic Carbon Data

Year Collected	Sample ID	Depth (ft)	Analyte	Concentration (µg/g)	Source
1998	SB-07-5	4-5	o-Xylene	<0.22	BBL 1998
1998	SB-07-5	4-5	Isopropylbenzene	<0.22	BBL 1998
1998	SB-07-5	4-5	n-Propylbenzene	<0.22	BBL 1998
1998	SB-07-5	4-5	tert-Butylbenzene	<0.22	BBL 1998
1998	SB-07-5	4-5	Bromoform	<0.22	BBL 1998
1998	SB-07-5	4-5	1,1,2,2-Tetrachloroethane	<0.22	BBL 1998
1998	SB-07-5	4-5	1,2,3-Trichloropropane	<0.22	BBL 1998
1998	SB-07-5	4-5	Bromobenzene	<0.22	BBL 1998
1998	SB-07-5	4-5	1,2,4-Trimethylbenzene	<0.22	BBL 1998
1998	SB-07-5	4-5	1,3,5-Trimethylbenzene	<0.22	BBL 1998
1998	SB-07-5	4-5	2-Chlorotoluene	<0.22	BBL 1998
1998	SB-07-5	4-5	4-Chlorotoluene	<0.22	BBL 1998
1998	SB-07-5	4-5	sec-Butylbenzene	<0.22	BBL 1998
1998	SB-07-5	4-5	p-Isopropyltoluene	<0.22	BBL 1998
1998	SB-07-5	4-5	1,3-Dichlorobenzene	<0.22	BBL 1998
1998	SB-07-5	4-5	1,4-Dichlorobenzene	<0.22	BBL 1998
1998	SB-07-5	4-5	1,2-Dichlorobenzene	<0.22	BBL 1998
1998	SB-07-5	4-5	n-Butylbenzene	<0.22	BBL 1998
1998	SB-07-5	4-5	1,2-dibromo-3-chloropropane	<0.22	BBL 1998
1998	SB-07-5	4-5	1,2,4-Trichlorobenzene	0.44	BBL 1998
1998	SB-07-5	4-5	Hexachlorobutadiene	<0.22	BBL 1998
1998	SB-07-5	4-5	Napthalene	0.33	BBL 1998
1998	SB-07-5	4-5	1,2,3-trichlorbenzene	1.1	BBL 1998
1998	SB-08-2	0-2	Dichlorodifluoromethane	<0.22	BBL 1998
1998	SB-08-2	0-2	Chloromethane	<0.22	BBL 1998
1998	SB-08-2	0-2	Vinyl Chloride	<0.22	BBL 1998
1998	SB-08-2	0-2	Bromomethane	<0.22	BBL 1998
1998	SB-08-2	0-2	Chloroethane	<0.22	BBL 1998
1998	SB-08-2	0-2	Trichloroflouromethane	<0.22	BBL 1998
1998	SB-08-2	0-2	1,1-Dichloroethylene	<0.22	BBL 1998
1998	SB-08-2	0-2	Methylene Chloride	<0.22	BBL 1998
1998	SB-08-2	0-2	1,1-Dichloroethane	<0.22	BBL 1998
1998	SB-08-2	0-2	cis-1,2-Dichloroethylene	<0.22	BBL 1998
1998	SB-08-2	0-2	trans-1,2-Dichloroethylene	<0.22	BBL 1998
1998	SB-08-2	0-2	2,2-Dichloropropane	<0.22	BBL 1998
1998	SB-08-2	0-2	Bromochloromethane	<0.22	BBL 1998
1998	SB-08-2	0-2	Chloroform	<0.22	BBL 1998
1998	SB-08-2	0-2	1,1,1-Trichloroethane	<0.22	BBL 1998
1998	SB-08-2	0-2	Carbon Tetrachloride	<0.22	BBL 1998
1998	SB-08-2	0-2	1,1-Dichloropropene	<0.22	BBL 1998
1998	SB-08-2	0-2	Benzene	<0.22	BBL 1998
1998	SB-08-2	0-2	1,2-Dichloroethane	<0.22	BBL 1998
1998	SB-08-2	0-2	Trichloroethylene	<0.22	BBL 1998
1998	SB-08-2	0-2	1,2-Dichloropropane	<0.22	BBL 1998
1998	SB-08-2	0-2	Dibromomethane	<0.22	BBL 1998
1998	SB-08-2	0-2	Bromodichloromethane	<0.22	BBL 1998
1998	SB-08-2	0-2	Toluene	<0.22	BBL 1998
1998	SB-08-2	0-2	1,1,2-Trichloroethane	<0.22	BBL 1998
1998	SB-08-2	0-2	Tetrachloroethylene	<0.22	BBL 1998

Table D-2. Soil: Volatile Organic Carbon Data

Year Collected	Sample ID	Depth (ft)	Analyte	Concentration (µg/g)	Source
1998	SB-08-2	0-2	1,3-Dichloropropane	<0.22	BBL 1998
1998	SB-08-2	0-2	Dibromochloromethane	<0.22	BBL 1998
1998	SB-08-2	0-2	1,2-Dibromoethane	<0.22	BBL 1998
1998	SB-08-2	0-2	Chlorobenzene	<0.22	BBL 1998
1998	SB-08-2	0-2	Ethylbenzene	<0.22	BBL 1998
1998	SB-08-2	0-2	1,1,1,2-Tetrachloroethane	<0.22	BBL 1998
1998	SB-08-2	0-2	m,p-Xylene	<0.22	BBL 1998
1998	SB-08-2	0-2	Styrene	<0.22	BBL 1998
1998	SB-08-2	0-2	o-Xylene	<0.22	BBL 1998
1998	SB-08-2	0-2	Isopropylbenzene	<0.22	BBL 1998
1998	SB-08-2	0-2	n-Propylbenzene	<0.22	BBL 1998
1998	SB-08-2	0-2	tert-Butylbenzene	<0.22	BBL 1998
1998	SB-08-2	0-2	Bromoform	<0.22	BBL 1998
1998	SB-08-2	0-2	1,1,2,2-Tetrachloroethane	<0.22	BBL 1998
1998	SB-08-2	0-2	1,2,3-Trichloropropane	<0.22	BBL 1998
1998	SB-08-2	0-2	Bromobenzene	<0.22	BBL 1998
1998	SB-08-2	0-2	1,2,4-Trimethylbenzene	<0.22	BBL 1998
1998	SB-08-2	0-2	1,3,5-Trimethylbenzene	<0.22	BBL 1998
1998	SB-08-2	0-2	2-Chlorotoluene	<0.22	BBL 1998
1998	SB-08-2	0-2	4-Chlorotoluene	<0.22	BBL 1998
1998	SB-08-2	0-2	sec-Butylbenzene	<0.22	BBL 1998
1998	SB-08-2	0-2	p-Isopropyltoluene	<0.22	BBL 1998
1998	SB-08-2	0-2	1,3-Dichlorobenzene	<0.22	BBL 1998
1998	SB-08-2	0-2	1,4-Dichlorobenzene	<0.22	BBL 1998
1998	SB-08-2	0-2	1,2-Dichlorobenzene	<0.22	BBL 1998
1998	SB-08-2	0-2	n-Butylbenzene	<0.22	BBL 1998
1998	SB-08-2	0-2	1,2-dibromo-3-chloropropane	<0.22	BBL 1998
1998	SB-08-2	0-2	1,2,4-Trichlorobenzene	<0.22	BBL 1998
1998	SB-08-2	0-2	Hexachlorobutadiene	<0.22	BBL 1998
1998	SB-08-2	0-2	Napthalene	<0.22	BBL 1998
1998	SB-08-2	0-2	1,2,3-trichlorbenzene	<0.22	BBL 1998

APPENDIX E

STORMWATER

This appendix contains data on the concentration of PCBs and metals in stormwater. Table E-1 contains historic PCB concentrations and more recent values from ENSR's 2004 and 2005 stormwater investigation. Table E-2 contains data on metals concentrations in stormwater collected by ENSR in 2004 and 2005.

Table E-1. Stormwater: PCB Data

Date Collected	Location	Sample Type	PCB Congener	Concentration (µg/L)	Source
9/30/02	na	Stormwater	Total PCB[1]	<1	PCS Database
6/30/02	na	Stormwater	Total PCB[1]	2	PCS Database
3/31/02	na	Stormwater	Total PCB[1]	5	PCS Database
12/31/01	na	Stormwater	Total PCB[1]	<1	PCS Database
9/30/01	na	Stormwater	Total PCB[1]	1	PCS Database
6/30/01	na	Stormwater	Total PCB[1]	5	PCS Database
3/31/01	na	Stormwater	Total PCB[1]	3	PCS Database
1994	SW08	Stormwater	Total PCB[1]	41.18	Stanley 1994
1994	SW11	Stormwater	Total PCB[1]	26.04	Stanley 1994
1994	SW12	Stormwater	Total PCB[1]	12.55	Stanley 1994
1994	City outfall (?)	Stormwater	Total PCB[1]	13.32	Stanley 1994
09/16/04	City Outfall	Baseflow	AROCLOR-1016	<0.51	ENSR Data
09/16/04	City Outfall	Baseflow	AROCLOR-1221	<0.51	ENSR Data
09/16/04	City Outfall	Baseflow	AROCLOR-1232	<0.51	ENSR Data
09/16/04	City Outfall	Baseflow	AROCLOR-1242	2.7	ENSR Data
09/16/04	City Outfall	Baseflow	AROCLOR-1248	<0.51	ENSR Data
09/16/04	City Outfall	Baseflow	AROCLOR-1254	<0.51	ENSR Data
09/16/04	City Outfall	Baseflow	AROCLOR-1260	<0.51	ENSR Data
09/16/04	City Outfall	Baseflow	Total PCB[2]	4.23	ENSR Data
09/16/04	SW-02	Baseflow	AROCLOR-1016	<0.5	ENSR Data
09/16/04	SW-02	Baseflow	AROCLOR-1221	<0.5	ENSR Data
09/16/04	SW-02	Baseflow	AROCLOR-1232	<0.5	ENSR Data
09/16/04	SW-02	Baseflow	AROCLOR-1242	7.3	ENSR Data
09/16/04	SW-02	Baseflow	AROCLOR-1248	<0.5	ENSR Data
09/16/04	SW-02	Baseflow	AROCLOR-1254	<0.5	ENSR Data
09/16/04	SW-02	Baseflow	AROCLOR-1260	<0.5	ENSR Data
09/16/04	SW-02	Baseflow	Total PCB[2]	8.6	ENSR Data
09/16/04	SW-03	Baseflow	AROCLOR-1016	<0.5	ENSR Data
09/16/04	SW-03	Baseflow	AROCLOR-1221	<0.5	ENSR Data
09/16/04	SW-03	Baseflow	AROCLOR-1232	<0.5	ENSR Data
09/16/04	SW-03	Baseflow	AROCLOR-1242	3.1	ENSR Data
09/16/04	SW-03	Baseflow	AROCLOR-1248	<0.5	ENSR Data
09/16/04	SW-03	Baseflow	AROCLOR-1254	1.4	ENSR Data
09/16/04	SW-03	Baseflow	AROCLOR-1260	<0.5	ENSR Data
09/16/04	SW-03	Baseflow	Total PCB[2]	5.75	ENSR Data
09/16/04	SW-13	Baseflow	AROCLOR-1016	<0.5	ENSR Data
09/16/04	SW-13	Baseflow	AROCLOR-1221	<0.5	ENSR Data
09/16/04	SW-13	Baseflow	AROCLOR-1232	<0.5	ENSR Data
09/16/04	SW-13	Baseflow	AROCLOR-1242	2.4	ENSR Data
09/16/04	SW-13	Baseflow	AROCLOR-1248	<0.5	ENSR Data
09/16/04	SW-13	Baseflow	AROCLOR-1254	<0.5	ENSR Data
09/16/04	SW-13	Baseflow	AROCLOR-1260	<0.5	ENSR Data
09/16/04	SW-13	Baseflow	Total PCB[2]	5.1	ENSR Data
09/18/04	SW-02	Stormwater - First Flush	AROCLOR-1016	<0.05	ENSR Data
09/18/04	SW-02	Stormwater - First Flush	AROCLOR-1221	<0.05	ENSR Data
09/18/04	SW-02	Stormwater - First Flush	AROCLOR-1232	<0.05	ENSR Data
09/18/04	SW-02	Stormwater - First Flush	AROCLOR-1242	0.52	ENSR Data
09/18/04	SW-02	Stormwater - First Flush	AROCLOR-1248	<0.05	ENSR Data
09/18/04	SW-02	Stormwater - First Flush	AROCLOR-1254	<0.05	ENSR Data
09/18/04	SW-02	Stormwater - First Flush	AROCLOR-1260	<0.05	ENSR Data
09/18/04	SW-02	Stormwater - First Flush	Total PCB[2]	0.67	ENSR Data
09/18/04	SW-02	Stormwater - Steady State	AROCLOR-1016	<0.05	ENSR Data
09/18/04	SW-02	Stormwater - Steady State	AROCLOR-1221	<0.05	ENSR Data

[1]Information was not available on the method used to calculate total PCBs.
[2]Total PCBs were calculated as the sum of 7 Aroclors. Half the detection limit was used for non detects.

Table E-1. Stormwater: PCB Data

Date Collected	Location	Sample Type	PCB Congener	Concentration (µg/L)	Source
09/18/04	SW-02	Stormwater - Steady State	AROCLOR-1232	<0.05	ENSR Data
09/18/04	SW-02	Stormwater - Steady State	AROCLOR-1242	0.45	ENSR Data
09/18/04	SW-02	Stormwater - Steady State	AROCLOR-1248	<0.05	ENSR Data
09/18/04	SW-02	Stormwater - Steady State	AROCLOR-1254	<0.05	ENSR Data
09/18/04	SW-02	Stormwater - Steady State	AROCLOR-1260	<0.05	ENSR Data
09/18/04	SW-02	Stormwater - Steady State	Total PCB[2]	0.6	ENSR Data
09/18/04	SW-03	Stormwater - First Flush	AROCLOR-1016	<0.5	ENSR Data
09/18/04	SW-03	Stormwater - First Flush	AROCLOR-1221	<0.5	ENSR Data
09/18/04	SW-03	Stormwater - First Flush	AROCLOR-1232	<0.5	ENSR Data
09/18/04	SW-03	Stormwater - First Flush	AROCLOR-1242	2.2	ENSR Data
09/18/04	SW-03	Stormwater - First Flush	AROCLOR-1248	<0.5	ENSR Data
09/18/04	SW-03	Stormwater - First Flush	AROCLOR-1254	8.2	ENSR Data
09/18/04	SW-03	Stormwater - First Flush	AROCLOR-1260	8.2	ENSR Data
09/18/04	SW-03	Stormwater - First Flush	Total PCB[2]	12.8	ENSR Data
09/18/04	SW-03	Stormwater - Steady State	AROCLOR-1016	<0.5	ENSR Data
09/18/04	SW-03	Stormwater - Steady State	AROCLOR-1221	<0.5	ENSR Data
09/18/04	SW-03	Stormwater - Steady State	AROCLOR-1232	<0.5	ENSR Data
09/18/04	SW-03	Stormwater - Steady State	AROCLOR-1242	0.55	ENSR Data
09/18/04	SW-03	Stormwater - Steady State	AROCLOR-1248	<0.5	ENSR Data
09/18/04	SW-03	Stormwater - Steady State	AROCLOR-1254	1.7	ENSR Data
09/18/04	SW-03	Stormwater - Steady State	AROCLOR-1260	<0.5	ENSR Data
09/18/04	SW-03	Stormwater - Steady State	Total PCB[2]	3.5	ENSR Data
09/18/04	SW-09	Stormwater - First Flush	AROCLOR-1016	<0.04	ENSR Data
09/18/04	SW-09	Stormwater - First Flush	AROCLOR-1221	<0.04	ENSR Data
09/18/04	SW-09	Stormwater - First Flush	AROCLOR-1232	<0.04	ENSR Data
09/18/04	SW-09	Stormwater - First Flush	AROCLOR-1242	<0.04	ENSR Data
09/18/04	SW-09	Stormwater - First Flush	AROCLOR-1248	<0.04	ENSR Data
09/18/04	SW-09	Stormwater - First Flush	AROCLOR-1254	<0.04	ENSR Data
09/18/04	SW-09	Stormwater - First Flush	AROCLOR-1260	<0.04	ENSR Data
09/18/04	SW-09	Stormwater - First Flush	Total PCB[2]	0.14	ENSR Data
09/18/04	SW-09	Stormwater - Steady State	AROCLOR-1016	<0.04	ENSR Data
09/18/04	SW-09	Stormwater - Steady State	AROCLOR-1221	<0.04	ENSR Data
09/18/04	SW-09	Stormwater - Steady State	AROCLOR-1232	<0.04	ENSR Data
09/18/04	SW-09	Stormwater - Steady State	AROCLOR-1242	<0.04	ENSR Data
09/18/04	SW-09	Stormwater - Steady State	AROCLOR-1248	<0.04	ENSR Data
09/18/04	SW-09	Stormwater - Steady State	AROCLOR-1254	<0.04	ENSR Data
09/18/04	SW-09	Stormwater - Steady State	AROCLOR-1260	<0.04	ENSR Data
09/18/04	SW-09	Stormwater - Steady State	Total PCB[2]	0.14	ENSR Data
09/18/04	SW-10	Stormwater - First Flush	AROCLOR-1016	<0.5	ENSR Data
09/18/04	SW-10	Stormwater - First Flush	AROCLOR-1221	<0.5	ENSR Data
09/18/04	SW-10	Stormwater - First Flush	AROCLOR-1232	<0.5	ENSR Data
09/18/04	SW-10	Stormwater - First Flush	AROCLOR-1242	<0.5	ENSR Data
09/18/04	SW-10	Stormwater - First Flush	AROCLOR-1248	<0.5	ENSR Data
09/18/04	SW-10	Stormwater - First Flush	AROCLOR-1254	3.2	ENSR Data
09/18/04	SW-10	Stormwater - First Flush	AROCLOR-1260	<0.5	ENSR Data
09/18/04	SW-10	Stormwater - First Flush	Total PCB[2]	4.7	ENSR Data
09/18/04	SW-10	Stormwater - Steady State	AROCLOR-1016	<0.5	ENSR Data
09/18/04	SW-10	Stormwater - Steady State	AROCLOR-1221	<0.5	ENSR Data
09/18/04	SW-10	Stormwater - Steady State	AROCLOR-1232	<0.5	ENSR Data
09/18/04	SW-10	Stormwater - Steady State	AROCLOR-1242	<0.5	ENSR Data
09/18/04	SW-10	Stormwater - Steady State	AROCLOR-1248	<0.5	ENSR Data
09/18/04	SW-10	Stormwater - Steady State	AROCLOR-1254	2.1	ENSR Data
09/18/04	SW-10	Stormwater - Steady State	AROCLOR-1260	<0.5	ENSR Data
09/18/04	SW-10	Stormwater - Steady State	Total PCB[2]	3.6	ENSR Data

[1]Information was not available on the method used to calculate total PCBs.

[2]Total PCBs were calculated as the sum of 7 Aroclors. Half the detection limit was used for non detects.

Table E-1. Stormwater: PCB Data

Date Collected	Location	Sample Type	PCB Congener	Concentration (μg/L)	Source
09/18/04	SW-11	Stormwater - First Flush	AROCLOR-1016	<0.04	ENSR Data
09/18/04	SW-11	Stormwater - First Flush	AROCLOR-1221	<0.04	ENSR Data
09/18/04	SW-11	Stormwater - First Flush	AROCLOR-1232	<0.04	ENSR Data
09/18/04	SW-11	Stormwater - First Flush	AROCLOR-1242	<0.04	ENSR Data
09/18/04	SW-11	Stormwater - First Flush	AROCLOR-1248	<0.04	ENSR Data
09/18/04	SW-11	Stormwater - First Flush	AROCLOR-1254	<0.04	ENSR Data
09/18/04	SW-11	Stormwater - First Flush	AROCLOR-1260	<0.04	ENSR Data
09/18/04	SW-11	Stormwater - First Flush	Total PCB[2]	0.14	ENSR Data
09/18/04	SW-11	Stormwater - Steady State	AROCLOR-1016	<0.04	ENSR Data
09/18/04	SW-11	Stormwater - Steady State	AROCLOR-1221	<0.04	ENSR Data
09/18/04	SW-11	Stormwater - Steady State	AROCLOR-1232	<0.04	ENSR Data
09/18/04	SW-11	Stormwater - Steady State	AROCLOR-1242	<0.04	ENSR Data
09/18/04	SW-11	Stormwater - Steady State	AROCLOR-1248	<0.04	ENSR Data
09/18/04	SW-11	Stormwater - Steady State	AROCLOR-1254	<0.04	ENSR Data
09/18/04	SW-11	Stormwater - Steady State	AROCLOR-1260	<0.04	ENSR Data
09/18/04	SW-11	Stormwater - Steady State	Total PCB[2]	0.14	ENSR Data
09/18/04	SW-13	Stormwater - First Flush	AROCLOR-1016	<0.04	ENSR Data
09/18/04	SW-13	Stormwater - First Flush	AROCLOR-1221	<0.04	ENSR Data
09/18/04	SW-13	Stormwater - First Flush	AROCLOR-1232	<0.04	ENSR Data
09/18/04	SW-13	Stormwater - First Flush	AROCLOR-1242	<0.04	ENSR Data
09/18/04	SW-13	Stormwater - First Flush	AROCLOR-1248	<0.04	ENSR Data
09/18/04	SW-13	Stormwater - First Flush	AROCLOR-1254	<0.04	ENSR Data
09/18/04	SW-13	Stormwater - First Flush	AROCLOR-1260	<0.04	ENSR Data
09/18/04	SW-13	Stormwater - First Flush	Total PCB[2]	0.14	ENSR Data
09/18/04	SW-13	Stormwater - Steady State	AROCLOR-1016	<0.04	ENSR Data
09/18/04	SW-13	Stormwater - Steady State	AROCLOR-1221	<0.04	ENSR Data
09/18/04	SW-13	Stormwater - Steady State	AROCLOR-1232	<0.04	ENSR Data
09/18/04	SW-13	Stormwater - Steady State	AROCLOR-1242	<0.04	ENSR Data
09/18/04	SW-13	Stormwater - Steady State	AROCLOR-1248	<0.04	ENSR Data

[1]Information was not available on the method used to calculate total PCBs.
[2]Total PCBs were calculated as the sum of 7 Aroclors. Half the detection limit was used for non detects.

Table E-1. Stormwater: PCB Data

Date Collected	Location	Sample Type	PCB Congener	Concentration (µg/L)	Source
09/18/04	SW-13	Stormwater - Steady State	AROCLOR-1254	<0.04	ENSR Data
09/18/04	SW-13	Stormwater - Steady State	AROCLOR-1260	<0.04	ENSR Data
09/18/04	SW-13	Stormwater - Steady State	Total PCB[2]	0.14	ENSR Data
05/20/05	SW-02	Baseflow	AROCLOR-1016	<0.05	ENSR Data
05/20/05	SW-02	Baseflow	AROCLOR-1221	<0.05	ENSR Data
05/20/05	SW-02	Baseflow	AROCLOR-1232	<0.05	ENSR Data
05/20/05	SW-02	Baseflow	AROCLOR-1242	2.2	ENSR Data
05/20/05	SW-02	Baseflow	AROCLOR-1248	<0.05	ENSR Data
05/20/05	SW-02	Baseflow	AROCLOR-1254	0.15	ENSR Data
05/20/05	SW-02	Baseflow	AROCLOR-1260	<0.05	ENSR Data
05/20/05	SW-02	Baseflow	Total PCB[2]	2.5	ENSR Data
05/20/05	SW-03	Baseflow	AROCLOR-1016	<0.05	ENSR Data
05/20/05	SW-03	Baseflow	AROCLOR-1221	<0.05	ENSR Data
05/20/05	SW-03	Baseflow	AROCLOR-1232	<0.05	ENSR Data
05/20/05	SW-03	Baseflow	AROCLOR-1242	4.6	ENSR Data
05/20/05	SW-03	Baseflow	AROCLOR-1248	<0.05	ENSR Data
05/20/05	SW-03	Baseflow	AROCLOR-1254	0.69	ENSR Data
05/20/05	SW-03	Baseflow	AROCLOR-1260	<0.05	ENSR Data
05/20/05	SW-03	Baseflow	Total PCB[2]	0.82	ENSR Data
05/20/05	SW-13	Baseflow	AROCLOR-1016	<0.05	ENSR Data
05/20/05	SW-13	Baseflow	AROCLOR-1221	<0.05	ENSR Data
05/20/05	SW-13	Baseflow	AROCLOR-1232	<0.05	ENSR Data
05/20/05	SW-13	Baseflow	AROCLOR-1242	1.4	ENSR Data
05/20/05	SW-13	Baseflow	AROCLOR-1248	<0.05	ENSR Data
05/20/05	SW-13	Baseflow	AROCLOR-1254	0.09	ENSR Data
05/20/05	SW-13	Baseflow	AROCLOR-1260	<0.05	ENSR Data
05/20/05	SW-13	Baseflow	Total PCB[2]	1.62	ENSR Data
05/24/05	SW-03	Stormwater - First Flush	AROCLOR-1016	<0.05	ENSR Data
05/24/05	SW-03	Stormwater - First Flush	AROCLOR-1221	<0.05	ENSR Data
05/24/05	SW-03	Stormwater - First Flush	AROCLOR-1232	<0.05	ENSR Data
05/24/05	SW-03	Stormwater - First Flush	AROCLOR-1242	0.52	ENSR Data
05/24/05	SW-03	Stormwater - First Flush	AROCLOR-1248	<0.05	ENSR Data
05/24/05	SW-03	Stormwater - First Flush	AROCLOR-1254	0.2	ENSR Data
05/24/05	SW-03	Stormwater - First Flush	AROCLOR-1260	<0.05	ENSR Data
05/24/05	SW-03	Stormwater - First Flush	Total PCB[2]	0.85	ENSR Data
05/24/05	SW-10	Stormwater - First Flush	AROCLOR-1016	<0.05	ENSR Data
05/24/05	SW-10	Stormwater - First Flush	AROCLOR-1221	<0.05	ENSR Data
05/24/05	SW-10	Stormwater - First Flush	AROCLOR-1232	<0.05	ENSR Data
05/24/05	SW-10	Stormwater - First Flush	AROCLOR-1242	0.23	ENSR Data
05/24/05	SW-10	Stormwater - First Flush	AROCLOR-1248	<0.05	ENSR Data
05/24/05	SW-10	Stormwater - First Flush	AROCLOR-1254	0.91	ENSR Data
05/24/05	SW-10	Stormwater - First Flush	AROCLOR-1260	<0.05	ENSR Data
05/24/05	SW-10	Stormwater - First Flush	Total PCB[2]	1.27	ENSR Data
05/24/05	SW-12	Baseflow	AROCLOR-1016	<0.05	ENSR Data
05/24/05	SW-12	Baseflow	AROCLOR-1221	<0.05	ENSR Data
05/24/05	SW-12	Baseflow	AROCLOR-1232	<0.05	ENSR Data
05/24/05	SW-12	Baseflow	AROCLOR-1242	2.2	ENSR Data
05/24/05	SW-12	Baseflow	AROCLOR-1248	<0.05	ENSR Data
05/24/05	SW-12	Baseflow	AROCLOR-1254	0.28	ENSR Data
05/24/05	SW-12	Baseflow	AROCLOR-1260	<0.05	ENSR Data
05/24/05	SW-12	Baseflow	Total PCB[2]	2.61	ENSR Data

[1]Information was not available on the method used to calculate total PCBs.

[2]Total PCBs were calculated as the sum of 7 Aroclors. Half the detection limit was used for non detects.

Table E-2. Stormwater: Metals Data

Date Collected	Location	Sample Type	Analyte	Concentration (µg/L)	Lab Qual Code	Source
09/16/04	STW-02	Baseflow	ALUMINUM	30.9	BD	ENSR Data
09/16/04	STW-03	Baseflow	ALUMINUM	46	BD	ENSR Data
09/16/04	STW-12	Baseflow	ALUMINUM	28.2	BD	ENSR Data
09/16/04	STW-13	Baseflow	ALUMINUM	89	BD	ENSR Data
09/16/04	City Outfall	Baseflow	ALUMINUM	67	BD	ENSR Data
09/16/04	STW-02	Baseflow	ANTIMONY	0.96	BD	ENSR Data
09/16/04	STW-03	Baseflow	ANTIMONY	1.1	D	ENSR Data
09/16/04	STW-12	Baseflow	ANTIMONY	1.1	D	ENSR Data
09/16/04	STW-13	Baseflow	ANTIMONY	0.58	BD	ENSR Data
09/16/04	City Outfall	Baseflow	ANTIMONY	0.73	BD	ENSR Data
09/16/04	STW-02	Baseflow	ARSENIC	1.5	UD	ENSR Data
09/16/04	STW-03	Baseflow	ARSENIC	1.5	UD	ENSR Data
09/16/04	STW-12	Baseflow	ARSENIC	1.5	UD	ENSR Data
09/16/04	STW-13	Baseflow	ARSENIC	1.5	UD	ENSR Data
09/16/04	City Outfall	Baseflow	ARSENIC	4.4	BD	ENSR Data
09/16/04	STW-02	Baseflow	BARIUM	6.7	D	ENSR Data
09/16/04	STW-03	Baseflow	BARIUM	115	D	ENSR Data
09/16/04	STW-12	Baseflow	BARIUM	101	D	ENSR Data
09/16/04	STW-13	Baseflow	BARIUM	9.3	D	ENSR Data
09/16/04	City Outfall	Baseflow	BARIUM	24.7	D	ENSR Data
09/16/04	STW-02	Baseflow	BERYLLIUM	0.025	UD	ENSR Data
09/16/04	STW-03	Baseflow	BERYLLIUM	0.025	UD	ENSR Data
09/16/04	STW-12	Baseflow	BERYLLIUM	0.025	UD	ENSR Data
09/16/04	STW-13	Baseflow	BERYLLIUM	0.025	UD	ENSR Data
09/16/04	City Outfall	Baseflow	BERYLLIUM	0.025	UD	ENSR Data
09/16/04	STW-02	Baseflow	CADMIUM	0.17	BD	ENSR Data
09/16/04	STW-03	Baseflow	CADMIUM	0.1	BD	ENSR Data
09/16/04	STW-12	Baseflow	CADMIUM	0.09	BD	ENSR Data
09/16/04	STW-13	Baseflow	CADMIUM	0.22	BD	ENSR Data
09/16/04	City Outfall	Baseflow	CADMIUM	0.1	BD	ENSR Data
09/16/04	STW-02	Baseflow	CALCIUM	3,630	D	ENSR Data
09/16/04	STW-03	Baseflow	CALCIUM	23,900	D	ENSR Data
09/16/04	STW-12	Baseflow	CALCIUM	27,900	D	ENSR Data
09/16/04	STW-13	Baseflow	CALCIUM	43,600	D	ENSR Data
09/16/04	City Outfall	Baseflow	CALCIUM	109,000	D	ENSR Data
09/16/04	STW-02	Baseflow	CHROMIUM	9.6	D	ENSR Data
09/16/04	STW-03	Baseflow	CHROMIUM	6.3	D	ENSR Data
09/16/04	STW-12	Baseflow	CHROMIUM	6	D	ENSR Data
09/16/04	STW-13	Baseflow	CHROMIUM	5.6	D	ENSR Data
09/16/04	City Outfall	Baseflow	CHROMIUM	3	BD	ENSR Data
09/16/04	STW-02	Baseflow	COBALT	0.32	BD	ENSR Data
09/16/04	STW-03	Baseflow	COBALT	0.63	BD	ENSR Data
09/16/04	STW-12	Baseflow	COBALT	0.53	BD	ENSR Data
09/16/04	STW-13	Baseflow	COBALT	0.39	BD	ENSR Data
09/16/04	City Outfall	Baseflow	COBALT	0.7	BD	ENSR Data
09/16/04	STW-02	Baseflow	COPPER	34.4	D	ENSR Data
09/16/04	STW-03	Baseflow	COPPER	19.3	D	ENSR Data
09/16/04	STW-12	Baseflow	COPPER	15.5	D	ENSR Data
09/16/04	STW-12	Baseflow	COPPER	15.5	D	ENSR Data
09/16/04	STW-13	Baseflow	COPPER	8.4	D	ENSR Data

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D- Run at dilution
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Table E-2. Stormwater: Metals Data

Date Collected	Location	Sample Type	Analyte	Concentration (µg/L)	Lab Qual Code	Source
09/16/04	STW-13	Baseflow	COPPER	8.4	D	ENSR Data
09/16/04	City Outfall	Baseflow	COPPER	22.6	D	ENSR Data
09/16/04	STW-02	Baseflow	IRON	158	D	ENSR Data
09/16/04	STW-03	Baseflow	IRON	2,150	D	ENSR Data
09/16/04	STW-12	Baseflow	IRON	1,770	D	ENSR Data
09/16/04	STW-13	Baseflow	IRON	284	D	ENSR Data
09/16/04	City Outfall	Baseflow	IRON	828	D	ENSR Data
09/16/04	STW-02	Baseflow	LEAD	9.4	D	ENSR Data
09/16/04	STW-03	Baseflow	LEAD	10.1	D	ENSR Data
09/16/04	STW-12	Baseflow	LEAD	4.6	D	ENSR Data
09/16/04	STW-13	Baseflow	LEAD	6.6	D	ENSR Data
09/16/04	City Outfall	Baseflow	LEAD	5.2	D	ENSR Data
09/16/04	STW-02	Baseflow	MAGNESIUM	4,130	D	ENSR Data
09/16/04	STW-03	Baseflow	MAGNESIUM	46,500	D	ENSR Data
09/16/04	STW-12	Baseflow	MAGNESIUM	53,600	D	ENSR Data
09/16/04	STW-13	Baseflow	MAGNESIUM	130,000	D	ENSR Data
09/16/04	City Outfall	Baseflow	MAGNESIUM	318,000	D	ENSR Data
09/16/04	STW-02	Baseflow	MANGANESE	11.8	D	ENSR Data
09/16/04	STW-03	Baseflow	MANGANESE	131	D	ENSR Data
09/16/04	STW-12	Baseflow	MANGANESE	129	D	ENSR Data
09/16/04	STW-13	Baseflow	MANGANESE	19.8	D	ENSR Data
09/16/04	City Outfall	Baseflow	MANGANESE	82.8	D	ENSR Data
09/16/04	STW-02	Baseflow	MERCURY	0.01	U	ENSR Data
09/16/04	STW-03	Baseflow	MERCURY	0.01	U	ENSR Data
09/16/04	STW-12	Baseflow	MERCURY	0.01	U	ENSR Data
09/16/04	STW-13	Baseflow	MERCURY	0.01	U	ENSR Data
09/16/04	City Outfall	Baseflow	MERCURY	0.03	B	ENSR Data
09/16/04	STW-02	Baseflow	NICKEL	3.1	D	ENSR Data
09/16/04	STW-03	Baseflow	NICKEL	3	D	ENSR Data
09/16/04	STW-12	Baseflow	NICKEL	2.9	D	ENSR Data
09/16/04	STW-13	Baseflow	NICKEL	3.9	D	ENSR Data
09/16/04	City Outfall	Baseflow	NICKEL	4.4	D	ENSR Data
09/16/04	STW-02	Baseflow	POTASSIUM	1,650	D	ENSR Data
09/16/04	STW-03	Baseflow	POTASSIUM	18,700	D	ENSR Data
09/16/04	STW-12	Baseflow	POTASSIUM	23,100	D	ENSR Data
09/16/04	STW-13	Baseflow	POTASSIUM	40,100	D	ENSR Data
09/16/04	City Outfall	Baseflow	POTASSIUM	101,000	D	ENSR Data
09/16/04	STW-02	Baseflow	SELENIUM	2.4	BD	ENSR Data
09/16/04	STW-03	Baseflow	SELENIUM	1.8	BD	ENSR Data
09/16/04	STW-12	Baseflow	SELENIUM	2.2	BD	ENSR Data
09/16/04	STW-13	Baseflow	SELENIUM	3.7	BD	ENSR Data
09/16/04	City Outfall	Baseflow	SELENIUM	5.3	D	ENSR Data
09/16/04	STW-02	Baseflow	SILVER	0.025	UD	ENSR Data
09/16/04	STW-03	Baseflow	SILVER	0.025	UD	ENSR Data
09/16/04	STW-12	Baseflow	SILVER	0.025	UD	ENSR Data
09/16/04	STW-13	Baseflow	SILVER	0.025	UD	ENSR Data
09/16/04	City Outfall	Baseflow	SILVER	0.07	BD	ENSR Data
09/16/04	STW-02	Baseflow	SODIUM	29,000	D	ENSR Data
09/16/04	STW-03	Baseflow	SODIUM	408,000	D	ENSR Data
09/16/04	STW-12	Baseflow	SODIUM	487,000	D	ENSR Data

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Table E-2. Stormwater: Metals Data

Date Collected	Location	Sample Type	Analyte	Concentration (µg/L)	Lab Qual Code	Source
09/16/04	STW-13	Baseflow	SODIUM	1,010,000	D	ENSR Data
09/16/04	City Outfall	Baseflow	SODIUM	2,730,000	D	ENSR Data
09/16/04	STW-02	Baseflow	THALLIUM	1.8	BD	ENSR Data
09/16/04	STW-03	Baseflow	THALLIUM	0.77	BD	ENSR Data
09/16/04	STW-12	Baseflow	THALLIUM	0.45	BD	ENSR Data
09/16/04	STW-13	Baseflow	THALLIUM	0.27	BD	ENSR Data
09/16/04	City Outfall	Baseflow	THALLIUM	0.38	BD	ENSR Data
09/16/04	STW-02	Baseflow	VANADIUM	14.5	D	ENSR Data
09/16/04	STW-03	Baseflow	VANADIUM	7.6	D	ENSR Data
09/16/04	STW-12	Baseflow	VANADIUM	6.4	D	ENSR Data
09/16/04	STW-13	Baseflow	VANADIUM	12.1	D	ENSR Data
09/16/04	City Outfall	Baseflow	VANADIUM	2.6	BD	ENSR Data
09/16/04	STW-02	Baseflow	ZINC	628	D	ENSR Data
09/16/04	STW-03	Baseflow	ZINC	364	D	ENSR Data
09/16/04	STW-12	Baseflow	ZINC	312	D	ENSR Data
09/16/04	STW-13	Baseflow	ZINC	309	D	ENSR Data
09/16/04	City Outfall	Baseflow	ZINC	35.3	D	ENSR Data
09/18/04	STW-02	First Flush Stormwater	ALUMINUM	30.8	BD	ENSR Data
09/18/04	STW-02	Steady State Stormwater	ALUMINUM	19.8	BD	ENSR Data
09/18/04	STW-03	First Flush Stormwater	ALUMINUM	560	D	ENSR Data
09/18/04	STW-03	Steady State Stormwater	ALUMINUM	133	BD	ENSR Data
09/18/04	STW-09	First Flush Stormwater	ALUMINUM	165	BD	ENSR Data
09/18/04	STW-09	Steady State Stormwater	ALUMINUM	79.6	BD	ENSR Data
09/18/04	STW-10	First Flush Stormwater	ALUMINUM	93.8	BD	ENSR Data
09/18/04	STW-10	Steady State Stormwater	ALUMINUM	52.2	BD	ENSR Data
09/18/04	STW-11	First Flush Stormwater	ALUMINUM	25.6	BD	ENSR Data
09/18/04	STW-11	Steady State Stormwater	ALUMINUM	30	BD	ENSR Data
09/18/04	STW-13	First Flush Stormwater	ALUMINUM	54.2	BD	ENSR Data
09/18/04	STW-13	Steady State Stormwater	ALUMINUM	24.4	BD	ENSR Data
09/18/04	STW-02	First Flush Stormwater	ANTIMONY	0.77	BD	ENSR Data
09/18/04	STW-02	Steady State Stormwater	ANTIMONY	0.73	BD	ENSR Data
09/18/04	STW-03	First Flush Stormwater	ANTIMONY	1.1	D	ENSR Data
09/18/04	STW-03	Steady State Stormwater	ANTIMONY	0.74	BD	ENSR Data
09/18/04	STW-09	First Flush Stormwater	ANTIMONY	0.72	BD	ENSR Data
09/18/04	STW-09	Steady State Stormwater	ANTIMONY	0.6	BD	ENSR Data
09/18/04	STW-10	First Flush Stormwater	ANTIMONY	0.77	BD	ENSR Data
09/18/04	STW-10	Steady State Stormwater	ANTIMONY	0.97	BD	ENSR Data
09/18/04	STW-11	First Flush Stormwater	ANTIMONY	1.2	D	ENSR Data
09/18/04	STW-11	Steady State Stormwater	ANTIMONY	1.4	D	ENSR Data
09/18/04	STW-13	First Flush Stormwater	ANTIMONY	0.32	BD	ENSR Data
09/18/04	STW-13	Steady State Stormwater	ANTIMONY	0.41	BD	ENSR Data
09/18/04	STW-02	First Flush Stormwater	ARSENIC	1.5	UD	ENSR Data
09/18/04	STW-02	Steady State Stormwater	ARSENIC	1.5	UD	ENSR Data
09/18/04	STW-03	First Flush Stormwater	ARSENIC	1.5	UD	ENSR Data
09/18/04	STW-03	Steady State Stormwater	ARSENIC	1.5	UD	ENSR Data
09/18/04	STW-09	First Flush Stormwater	ARSENIC	1.5	UD	ENSR Data
09/18/04	STW-09	Steady State Stormwater	ARSENIC	1.5	UD	ENSR Data
09/18/04	STW-10	First Flush Stormwater	ARSENIC	3.6	BD	ENSR Data
09/18/04	STW-10	Steady State Stormwater	ARSENIC	4.8	BD	ENSR Data
09/18/04	STW-11	First Flush Stormwater	ARSENIC	1.5	UD	ENSR Data

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Table E-2. Stormwater: Metals Data

Date Collected	Location	Sample Type	Analyte	Concentration (µg/L)	Lab Qual Code	Source
09/18/04	STW-11	Steady State Stormwater	ARSENIC	3.3	BD	ENSR Data
09/18/04	STW-13	First Flush Stormwater	ARSENIC	1.5	UD	ENSR Data
09/18/04	STW-13	Steady State Stormwater	ARSENIC	1.5	UD	ENSR Data
09/18/04	STW-02	First Flush Stormwater	BARIUM	4.5	D	ENSR Data
09/18/04	STW-02	Steady State Stormwater	BARIUM	4.8	D	ENSR Data
09/18/04	STW-03	First Flush Stormwater	BARIUM	17.6	D	ENSR Data
09/18/04	STW-03	Steady State Stormwater	BARIUM	6.6	D	ENSR Data
09/18/04	STW-09	First Flush Stormwater	BARIUM	5.2	D	ENSR Data
09/18/04	STW-09	Steady State Stormwater	BARIUM	3.6	D	ENSR Data
09/18/04	STW-10	First Flush Stormwater	BARIUM	9.6	D	ENSR Data
09/18/04	STW-10	Steady State Stormwater	BARIUM	7.3	D	ENSR Data
09/18/04	STW-11	First Flush Stormwater	BARIUM	4.8	D	ENSR Data
09/18/04	STW-11	Steady State Stormwater	BARIUM	9.5	D	ENSR Data
09/18/04	STW-13	First Flush Stormwater	BARIUM	2.2	D	ENSR Data
09/18/04	STW-13	Steady State Stormwater	BARIUM	1.3	D	ENSR Data
09/18/04	STW-02	First Flush Stormwater	BERYLLIUM	0.025	UD	ENSR Data
09/18/04	STW-02	Steady State Stormwater	BERYLLIUM	0.025	UD	ENSR Data
09/18/04	STW-03	First Flush Stormwater	BERYLLIUM	0.025	UD	ENSR Data
09/18/04	STW-03	Steady State Stormwater	BERYLLIUM	0.025	UD	ENSR Data
09/18/04	STW-09	First Flush Stormwater	BERYLLIUM	0.025	UD	ENSR Data
09/18/04	STW-09	Steady State Stormwater	BERYLLIUM	0.025	UD	ENSR Data
09/18/04	STW-10	First Flush Stormwater	BERYLLIUM	0.025	UD	ENSR Data
09/18/04	STW-10	Steady State Stormwater	BERYLLIUM	0.025	UD	ENSR Data
09/18/04	STW-11	First Flush Stormwater	BERYLLIUM	0.025	UD	ENSR Data
09/18/04	STW-11	Steady State Stormwater	BERYLLIUM	0.025	UD	ENSR Data
09/18/04	STW-13	First Flush Stormwater	BERYLLIUM	0.025	UD	ENSR Data
09/18/04	STW-13	Steady State Stormwater	BERYLLIUM	0.025	UD	ENSR Data
09/18/04	STW-02	First Flush Stormwater	CADMIUM	0.1	BD	ENSR Data
09/18/04	STW-02	Steady State Stormwater	CADMIUM	0.12	BD	ENSR Data
09/18/04	STW-03	First Flush Stormwater	CADMIUM	0.24	BD	ENSR Data
09/18/04	STW-03	Steady State Stormwater	CADMIUM	0.07	BD	ENSR Data
09/18/04	STW-09	First Flush Stormwater	CADMIUM	0.46	BD	ENSR Data
09/18/04	STW-09	Steady State Stormwater	CADMIUM	0.3	BD	ENSR Data
09/18/04	STW-10	First Flush Stormwater	CADMIUM	0.21	BD	ENSR Data
09/18/04	STW-10	Steady State Stormwater	CADMIUM	0.21	BD	ENSR Data
09/18/04	STW-11	First Flush Stormwater	CADMIUM	0.27	BD	ENSR Data
09/18/04	STW-11	Steady State Stormwater	CADMIUM	0.28	BD	ENSR Data
09/18/04	STW-13	First Flush Stormwater	CADMIUM	0.18	BD	ENSR Data
09/18/04	STW-13	Steady State Stormwater	CADMIUM	0.21	BD	ENSR Data
09/18/04	STW-02	First Flush Stormwater	CALCIUM	3,070	D	ENSR Data
09/18/04	STW-02	Steady State Stormwater	CALCIUM	2,500	D	ENSR Data
09/18/04	STW-03	First Flush Stormwater	CALCIUM	3,180	D	ENSR Data
09/18/04	STW-03	Steady State Stormwater	CALCIUM	1,710	D	ENSR Data
09/18/04	STW-09	First Flush Stormwater	CALCIUM	1,390	D	ENSR Data
09/18/04	STW-09	Steady State Stormwater	CALCIUM	1,340	D	ENSR Data
09/18/04	STW-10	First Flush Stormwater	CALCIUM	1,790	D	ENSR Data
09/18/04	STW-10	Steady State Stormwater	CALCIUM	1,670	D	ENSR Data
09/18/04	STW-11	First Flush Stormwater	CALCIUM	1,380	D	ENSR Data
09/18/04	STW-11	Steady State Stormwater	CALCIUM	26,600	D	ENSR Data
09/18/04	STW-13	First Flush Stormwater	CALCIUM	904	D	ENSR Data

Lab Qual. Codes:

D- Run at dilution

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B - below reporting limit but above the insrument detection limit

Table E-2. Stormwater: Metals Data

Date Collected	Location	Sample Type	Analyte	Concentration (µg/L)	Lab Qual Code	Source
09/18/04	STW-13	Steady State Stormwater	CALCIUM	1,050	D	ENSR Data
09/18/04	STW-02	First Flush Stormwater	CHROMIUM	2.6	BD	ENSR Data
09/18/04	STW-02	Steady State Stormwater	CHROMIUM	2.6	BD	ENSR Data
09/18/04	STW-03	First Flush Stormwater	CHROMIUM	6.5	D	ENSR Data
09/18/04	STW-03	Steady State Stormwater	CHROMIUM	3.7	D	ENSR Data
09/18/04	STW-09	First Flush Stormwater	CHROMIUM	2.7	BD	ENSR Data
09/18/04	STW-09	Steady State Stormwater	CHROMIUM	1.4	BD	ENSR Data
09/18/04	STW-10	First Flush Stormwater	CHROMIUM	3.8	D	ENSR Data
09/18/04	STW-10	Steady State Stormwater	CHROMIUM	3.7	D	ENSR Data
09/18/04	STW-11	First Flush Stormwater	CHROMIUM	1.7	BD	ENSR Data
09/18/04	STW-11	Steady State Stormwater	CHROMIUM	1.9	BD	ENSR Data
09/18/04	STW-13	First Flush Stormwater	CHROMIUM	2.7	BD	ENSR Data
09/18/04	STW-13	Steady State Stormwater	CHROMIUM	2.2	BD	ENSR Data
09/18/04	STW-02	First Flush Stormwater	COBALT	0.23	BD	ENSR Data
09/18/04	STW-02	Steady State Stormwater	COBALT	0.2	BD	ENSR Data
09/18/04	STW-03	First Flush Stormwater	COBALT	0.66	BD	ENSR Data
09/18/04	STW-03	Steady State Stormwater	COBALT	0.22	BD	ENSR Data
09/18/04	STW-09	First Flush Stormwater	COBALT	0.31	BD	ENSR Data
09/18/04	STW-09	Steady State Stormwater	COBALT	0.18	BD	ENSR Data
09/18/04	STW-10	First Flush Stormwater	COBALT	0.36	BD	ENSR Data
09/18/04	STW-10	Steady State Stormwater	COBALT	0.32	BD	ENSR Data
09/18/04	STW-11	First Flush Stormwater	COBALT	0.35	BD	ENSR Data
09/18/04	STW-11	Steady State Stormwater	COBALT	0.46	BD	ENSR Data
09/18/04	STW-13	First Flush Stormwater	COBALT	0.16	BD	ENSR Data
09/18/04	STW-13	Steady State Stormwater	COBALT	0.15	BD	ENSR Data
09/18/04	STW-02	First Flush Stormwater	COPPER	23.5	D	ENSR Data
09/18/04	STW-02	Steady State Stormwater	COPPER	29.8	D	ENSR Data
09/18/04	STW-03	First Flush Stormwater	COPPER	50.2	D	ENSR Data
09/18/04	STW-03	Steady State Stormwater	COPPER	16.2	D	ENSR Data
09/18/04	STW-09	First Flush Stormwater	COPPER	7.7	D	ENSR Data
09/18/04	STW-09	Steady State Stormwater	COPPER	4.8	D	ENSR Data
09/18/04	STW-10	First Flush Stormwater	COPPER	29.3	D	ENSR Data
09/18/04	STW-10	Steady State Stormwater	COPPER	23.5	D	ENSR Data
09/18/04	STW-11	First Flush Stormwater	COPPER	32	D	ENSR Data
09/18/04	STW-11	Steady State Stormwater	COPPER	35.2	D	ENSR Data
09/18/04	STW-13	First Flush Stormwater	COPPER	6.2	D	ENSR Data
09/18/04	STW-13	Steady State Stormwater	COPPER	5.6	D	ENSR Data
09/18/04	STW-02	First Flush Stormwater	IRON	132	D	ENSR Data
09/18/04	STW-02	Steady State Stormwater	IRON	113	D	ENSR Data
09/18/04	STW-03	First Flush Stormwater	IRON	1430	D	ENSR Data
09/18/04	STW-03	Steady State Stormwater	IRON	233	D	ENSR Data
09/18/04	STW-09	First Flush Stormwater	IRON	155	D	ENSR Data
09/18/04	STW-09	Steady State Stormwater	IRON	67.7	BD	ENSR Data
09/18/04	STW-10	First Flush Stormwater	IRON	163	D	ENSR Data
09/18/04	STW-10	Steady State Stormwater	IRON	69.1	BD	ENSR Data
09/18/04	STW-11	First Flush Stormwater	IRON	92.7	BD	ENSR Data
09/18/04	STW-11	Steady State Stormwater	IRON	420	D	ENSR Data
09/18/04	STW-13	First Flush Stormwater	IRON	117	D	ENSR Data
09/18/04	STW-13	Steady State Stormwater	IRON	59	BD	ENSR Data
09/18/04	STW-02	First Flush Stormwater	LEAD	14.2	D	ENSR Data

Lab Qual. Codes:
D- Run at dilution
U - Not detected
B - below reporting limit but above the insrument detection limit

Table E-2. Stormwater: Metals Data

Date Collected	Location	Sample Type	Analyte	Concentration (µg/L)	Lab Qual Code	Source
09/18/04	STW-02	Steady State Stormwater	LEAD	10.4	D	ENSR Data
09/18/04	STW-03	First Flush Stormwater	LEAD	89.7	D	ENSR Data
09/18/04	STW-03	Steady State Stormwater	LEAD	22.5	D	ENSR Data
09/18/04	STW-09	First Flush Stormwater	LEAD	13.4	D	ENSR Data
09/18/04	STW-09	Steady State Stormwater	LEAD	3.7	D	ENSR Data
09/18/04	STW-10	First Flush Stormwater	LEAD	22.7	D	ENSR Data
09/18/04	STW-10	Steady State Stormwater	LEAD	7.8	D	ENSR Data
09/18/04	STW-11	First Flush Stormwater	LEAD	13.5	D	ENSR Data
09/18/04	STW-11	Steady State Stormwater	LEAD	11.8	D	ENSR Data
09/18/04	STW-13	First Flush Stormwater	LEAD	6.4	D	ENSR Data
09/18/04	STW-13	Steady State Stormwater	LEAD	1.5	D	ENSR Data
09/18/04	STW-02	First Flush Stormwater	MAGNESIUM	6,800	D	ENSR Data
09/18/04	STW-02	Steady State Stormwater	MAGNESIUM	4,160	D	ENSR Data
09/18/04	STW-03	First Flush Stormwater	MAGNESIUM	4,720	D	ENSR Data
09/18/04	STW-03	Steady State Stormwater	MAGNESIUM	1,660	D	ENSR Data
09/18/04	STW-09	First Flush Stormwater	MAGNESIUM	335	D	ENSR Data
09/18/04	STW-09	Steady State Stormwater	MAGNESIUM	299	D	ENSR Data
09/18/04	STW-10	First Flush Stormwater	MAGNESIUM	439	D	ENSR Data
09/18/04	STW-10	Steady State Stormwater	MAGNESIUM	377	D	ENSR Data
09/18/04	STW-11	First Flush Stormwater	MAGNESIUM	584	D	ENSR Data
09/18/04	STW-11	Steady State Stormwater	MAGNESIUM	77,600	D	ENSR Data
09/18/04	STW-13	First Flush Stormwater	MAGNESIUM	1,740	D	ENSR Data
09/18/04	STW-13	Steady State Stormwater	MAGNESIUM	1,510	D	ENSR Data
09/18/04	STW-02	First Flush Stormwater	MANGANESE	8	D	ENSR Data
09/18/04	STW-02	Steady State Stormwater	MANGANESE	7.4	D	ENSR Data
09/18/04	STW-03	First Flush Stormwater	MANGANESE	28.2	D	ENSR Data
09/18/04	STW-03	Steady State Stormwater	MANGANESE	11.5	D	ENSR Data
09/18/04	STW-09	First Flush Stormwater	MANGANESE	14	D	ENSR Data
09/18/04	STW-09	Steady State Stormwater	MANGANESE	7.8	D	ENSR Data
09/18/04	STW-10	First Flush Stormwater	MANGANESE	12.9	D	ENSR Data
09/18/04	STW-10	Steady State Stormwater	MANGANESE	13.7	D	ENSR Data
09/18/04	STW-11	First Flush Stormwater	MANGANESE	10.1	D	ENSR Data
09/18/04	STW-11	Steady State Stormwater	MANGANESE	28.1	D	ENSR Data
09/18/04	STW-13	First Flush Stormwater	MANGANESE	5.9	D	ENSR Data
09/18/04	STW-13	Steady State Stormwater	MANGANESE	5.2	D	ENSR Data
09/18/04	STW-02	First Flush Stormwater	MERCURY	0.02	B	ENSR Data
09/18/04	STW-02	Steady State Stormwater	MERCURY	0.03	B	ENSR Data
09/18/04	STW-03	First Flush Stormwater	MERCURY	0.02	B	ENSR Data
09/18/04	STW-03	Steady State Stormwater	MERCURY	0.02	B	ENSR Data
09/18/04	STW-09	First Flush Stormwater	MERCURY	0.02	B	ENSR Data
09/18/04	STW-09	Steady State Stormwater	MERCURY	0.03	B	ENSR Data
09/18/04	STW-10	First Flush Stormwater	MERCURY	0.03	B	ENSR Data
09/18/04	STW-10	Steady State Stormwater	MERCURY	0.03	B	ENSR Data
09/18/04	STW-11	First Flush Stormwater	MERCURY	0.03	B	ENSR Data
09/18/04	STW-11	Steady State Stormwater	MERCURY	0.02	B	ENSR Data
09/18/04	STW-13	First Flush Stormwater	MERCURY	0.03	B	ENSR Data
09/18/04	STW-13	Steady State Stormwater	MERCURY	0.03	B	ENSR Data
09/18/04	STW-02	First Flush Stormwater	NICKEL	2.6	D	ENSR Data
09/18/04	STW-02	Steady State Stormwater	NICKEL	2.4	D	ENSR Data
09/18/04	STW-03	First Flush Stormwater	NICKEL	5.4	D	ENSR Data

Lab Qual. Codes:
D- Run at dilution
U - Not detected
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Table E-2. Stormwater: Metals Data

Date Collected	Location	Sample Type	Analyte	Concentration (µg/L)	Lab Qual Code	Source
09/18/04	STW-03	Steady State Stormwater	NICKEL	2.1	D	ENSR Data
09/18/04	STW-09	First Flush Stormwater	NICKEL	2.7	D	ENSR Data
09/18/04	STW-09	Steady State Stormwater	NICKEL	1.7	D	ENSR Data
09/18/04	STW-10	First Flush Stormwater	NICKEL	3.7	D	ENSR Data
09/18/04	STW-10	Steady State Stormwater	NICKEL	3	D	ENSR Data
09/18/04	STW-11	First Flush Stormwater	NICKEL	3.9	D	ENSR Data
09/18/04	STW-11	Steady State Stormwater	NICKEL	4.6	D	ENSR Data
09/18/04	STW-13	First Flush Stormwater	NICKEL	2.3	D	ENSR Data
09/18/04	STW-13	Steady State Stormwater	NICKEL	2.1	D	ENSR Data
09/18/04	STW-02	First Flush Stormwater	POTASSIUM	2,160	D	ENSR Data
09/18/04	STW-02	Steady State Stormwater	POTASSIUM	1,600	D	ENSR Data
09/18/04	STW-03	First Flush Stormwater	POTASSIUM	1,800	D	ENSR Data
09/18/04	STW-03	Steady State Stormwater	POTASSIUM	932	BD	ENSR Data
09/18/04	STW-09	First Flush Stormwater	POTASSIUM	538	BD	ENSR Data
09/18/04	STW-09	Steady State Stormwater	POTASSIUM	502	BD	ENSR Data
09/18/04	STW-10	First Flush Stormwater	POTASSIUM	582	BD	ENSR Data
09/18/04	STW-10	Steady State Stormwater	POTASSIUM	588	BD	ENSR Data
09/18/04	STW-11	First Flush Stormwater	POTASSIUM	495	BD	ENSR Data
09/18/04	STW-11	Steady State Stormwater	POTASSIUM	24,300	D	ENSR Data
09/18/04	STW-13	First Flush Stormwater	POTASSIUM	740	BD	ENSR Data
09/18/04	STW-13	Steady State Stormwater	POTASSIUM	784	BD	ENSR Data
09/18/04	STW-02	First Flush Stormwater	SELENIUM	2.3	BD	ENSR Data
09/18/04	STW-02	Steady State Stormwater	SELENIUM	4.4	BD	ENSR Data
09/18/04	STW-03	First Flush Stormwater	SELENIUM	1.7	BD	ENSR Data
09/18/04	STW-03	Steady State Stormwater	SELENIUM	2.5	BD	ENSR Data
09/18/04	STW-09	First Flush Stormwater	SELENIUM	0.7	UD	ENSR Data
09/18/04	STW-09	Steady State Stormwater	SELENIUM	0.7	UD	ENSR Data
09/18/04	STW-10	First Flush Stormwater	SELENIUM	1.6	BD	ENSR Data
09/18/04	STW-10	Steady State Stormwater	SELENIUM	0.7	UD	ENSR Data
09/18/04	STW-11	First Flush Stormwater	SELENIUM	0.7	UD	ENSR Data
09/18/04	STW-11	Steady State Stormwater	SELENIUM	2.3	BD	ENSR Data
09/18/04	STW-13	First Flush Stormwater	SELENIUM	0.7	UD	ENSR Data
09/18/04	STW-13	Steady State Stormwater	SELENIUM	0.7	UD	ENSR Data
09/18/04	STW-02	First Flush Stormwater	SILVER	0.025	UD	ENSR Data
09/18/04	STW-02	Steady State Stormwater	SILVER	0.025	UD	ENSR Data
09/18/04	STW-03	First Flush Stormwater	SILVER	0.07	BD	ENSR Data
09/18/04	STW-03	Steady State Stormwater	SILVER	0.025	UD	ENSR Data
09/18/04	STW-09	First Flush Stormwater	SILVER	0.025	UD	ENSR Data
09/18/04	STW-09	Steady State Stormwater	SILVER	0.05	BD	ENSR Data
09/18/04	STW-10	First Flush Stormwater	SILVER	0.07	BD	ENSR Data
09/18/04	STW-10	Steady State Stormwater	SILVER	0.025	UD	ENSR Data
09/18/04	STW-11	First Flush Stormwater	SILVER	0.025	UD	ENSR Data
09/18/04	STW-11	Steady State Stormwater	SILVER	0.025	UD	ENSR Data
09/18/04	STW-13	First Flush Stormwater	SILVER	0.025	UD	ENSR Data
09/18/04	STW-13	Steady State Stormwater	SILVER	0.025	UD	ENSR Data
09/18/04	STW-02	First Flush Stormwater	SODIUM	51,600	D	ENSR Data
09/18/04	STW-02	Steady State Stormwater	SODIUM	35,200	D	ENSR Data
09/18/04	STW-03	First Flush Stormwater	SODIUM	38,400	D	ENSR Data
09/18/04	STW-03	Steady State Stormwater	SODIUM	15,000	D	ENSR Data
09/18/04	STW-09	First Flush Stormwater	SODIUM	2,000	D	ENSR Data

Lab Qual. Codes:
D- Run at dilution
U - Not detected
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Table E-2. Stormwater: Metals Data

Date Collected	Location	Sample Type	Analyte	Concentration (µg/L)	Lab Qual Code	Source
09/18/04	STW-09	Steady State Stormwater	SODIUM	1,950	D	ENSR Data
09/18/04	STW-10	First Flush Stormwater	SODIUM	1,990	D	ENSR Data
09/18/04	STW-10	Steady State Stormwater	SODIUM	1,780	D	ENSR Data
09/18/04	STW-11	First Flush Stormwater	SODIUM	4,860	D	ENSR Data
09/18/04	STW-11	Steady State Stormwater	SODIUM	612,000	D	ENSR Data
09/18/04	STW-13	First Flush Stormwater	SODIUM	14,500	D	ENSR Data
09/18/04	STW-13	Steady State Stormwater	SODIUM	13,700	D	ENSR Data
09/18/04	STW-02	First Flush Stormwater	THALLIUM	0.27	BD	ENSR Data
09/18/04	STW-02	Steady State Stormwater	THALLIUM	0.22	BD	ENSR Data
09/18/04	STW-03	First Flush Stormwater	THALLIUM	0.2	BD	ENSR Data
09/18/04	STW-03	Steady State Stormwater	THALLIUM	0.075	UD	ENSR Data
09/18/04	STW-09	First Flush Stormwater	THALLIUM	0.075	UD	ENSR Data
09/18/04	STW-09	Steady State Stormwater	THALLIUM	0.28	BD	ENSR Data
09/18/04	STW-10	First Flush Stormwater	THALLIUM	0.18	BD	ENSR Data
09/18/04	STW-10	Steady State Stormwater	THALLIUM	2.3	D	ENSR Data
09/18/04	STW-11	First Flush Stormwater	THALLIUM	2.7	D	ENSR Data
09/18/04	STW-11	Steady State Stormwater	THALLIUM	1.2	BD	ENSR Data
09/18/04	STW-13	First Flush Stormwater	THALLIUM	0.77	BD	ENSR Data
09/18/04	STW-13	Steady State Stormwater	THALLIUM	0.37	BD	ENSR Data
09/18/04	STW-02	First Flush Stormwater	VANADIUM	6.3	D	ENSR Data
09/18/04	STW-02	Steady State Stormwater	VANADIUM	6.4	D	ENSR Data
09/18/04	STW-03	First Flush Stormwater	VANADIUM	13.7	D	ENSR Data
09/18/04	STW-03	Steady State Stormwater	VANADIUM	6	D	ENSR Data
09/18/04	STW-09	First Flush Stormwater	VANADIUM	5.6	D	ENSR Data
09/18/04	STW-09	Steady State Stormwater	VANADIUM	4.2	BD	ENSR Data
09/18/04	STW-10	First Flush Stormwater	VANADIUM	9.3	D	ENSR Data
09/18/04	STW-10	Steady State Stormwater	VANADIUM	13.9	D	ENSR Data
09/18/04	STW-11	First Flush Stormwater	VANADIUM	9.8	D	ENSR Data
09/18/04	STW-11	Steady State Stormwater	VANADIUM	10.9	D	ENSR Data
09/18/04	STW-13	First Flush Stormwater	VANADIUM	6.7	D	ENSR Data
09/18/04	STW-13	Steady State Stormwater	VANADIUM	6.5	D	ENSR Data
09/18/04	STW-02	First Flush Stormwater	ZINC	538	D	ENSR Data
09/18/04	STW-02	Steady State Stormwater	ZINC	518	D	ENSR Data
09/18/04	STW-03	First Flush Stormwater	ZINC	633	D	ENSR Data
09/18/04	STW-03	Steady State Stormwater	ZINC	377	D	ENSR Data
09/18/04	STW-09	First Flush Stormwater	ZINC	223	D	ENSR Data
09/18/04	STW-09	Steady State Stormwater	ZINC	180	D	ENSR Data
09/18/04	STW-10	First Flush Stormwater	ZINC	605	D	ENSR Data
09/18/04	STW-10	Steady State Stormwater	ZINC	582	D	ENSR Data
09/18/04	STW-11	First Flush Stormwater	ZINC	1,880	D	ENSR Data
09/18/04	STW-11	Steady State Stormwater	ZINC	1,750	D	ENSR Data
09/18/04	STW-13	First Flush Stormwater	ZINC	219	D	ENSR Data
09/18/04	STW-13	Steady State Stormwater	ZINC	251	D	ENSR Data

Lab Qual. Codes:
D- Run at dilution
U - Not detected
B - below reporting limit but above the insrument detection limit

APPENDIX F

GROUNDWATER DATA

This appendix contains the following data on groundwater contamination and hydraulic head.

- Table F-1 contains hydraulic head data. Data for the period from 1993 to 2002 are the result of monitoring conducted in the fall and spring during the full moon period by SAIC Engineering (for 1993-2001) and East Coast Engineering (2002). These data were obtained from monitoring reports submitted to the EPA. In addition, this table includes hydraulic head data from ENSR monitoring in 2005.
- Table F-2 contains data on total PCB concentrations in groundwater. Data are from historical sources and the ENSR 2005 groundwater investigation.
- Table F-3 contains data on the concentrations of individual aroclors in samples from the 2005 groundwater sampling conducted by ENSR. Total PCBs from these samples are also presented in Table F-2.
- Table F-4 contains data on volatile organic compounds (VOCs) in groundwater. Data are from the 2005 ENSR investigation and BBL (1998).

Table F-1. Groundwater: Hydraulic Head Data

Date Collected	Well	Aquifer	Tide Stage	Elevation (ft)[1]	Source
09/29/93	2	Deep	High	2.01	SAIC Engineering
09/29/93	2	Deep	Low	1.22	SAIC Engineering
09/29/93	3	Deep	High	1.95	SAIC Engineering
09/29/93	3	Deep	Low	1.18	SAIC Engineering
09/29/93	4	Deep	High	5.04	SAIC Engineering
09/29/93	4	Deep	Low	0.85	SAIC Engineering
09/29/93	7	Deep	High	2.14	SAIC Engineering
09/29/93	7	Deep	Low	0.64	SAIC Engineering
09/29/93	2A	Shallow	High	2.84	SAIC Engineering
09/29/93	2A	Shallow	Low	2.82	SAIC Engineering
09/29/93	3A	Shallow	High	1.91	SAIC Engineering
09/29/93	3A	Shallow	Low	2.59	SAIC Engineering
09/29/93	4A	Shallow	High	2.53	SAIC Engineering
09/29/93	4A	Shallow	Low	2.53	SAIC Engineering
09/29/93	7A	Shallow	High	2.68	SAIC Engineering
09/29/93	7A	Shallow	Low	2.67	SAIC Engineering
09/30/93	2	Deep	High	2.52	SAIC Engineering
09/30/93	2	Deep	Low	1.41	SAIC Engineering
09/30/93	3	Deep	High	1.95	SAIC Engineering
09/30/93	3	Deep	Low	1.13	SAIC Engineering
09/30/93	4	Deep	High	2.1	SAIC Engineering
09/30/93	4	Deep	Low	0.69	SAIC Engineering
09/30/93	7	Deep	High	2.27	SAIC Engineering
09/30/93	7	Deep	Low	0.59	SAIC Engineering
09/30/93	2A	Shallow	High	2.72	SAIC Engineering
09/30/93	2A	Shallow	Low	2.85	SAIC Engineering
09/30/93	3A	Shallow	High	1.91	SAIC Engineering
09/30/93	3A	Shallow	Low	2.8	SAIC Engineering
09/30/93	4A	Shallow	High	2.54	SAIC Engineering
09/30/93	4A	Shallow	Low	2.55	SAIC Engineering
09/30/93	7A	Shallow	High	2.66	SAIC Engineering
09/30/93	7A	Shallow	Low	2.68	SAIC Engineering
10/01/93	2	Deep	High	1.92	SAIC Engineering
10/01/93	2	Deep	Low	1.12	SAIC Engineering
10/01/93	3	Deep	High	1.85	SAIC Engineering
10/01/93	3	Deep	Low	1.28	SAIC Engineering
10/01/93	4	Deep	High	2.06	SAIC Engineering
10/01/93	4	Deep	Low	0.82	SAIC Engineering
10/01/93	7	Deep	High	2.2	SAIC Engineering
10/01/93	7	Deep	Low	0.73	SAIC Engineering
10/01/93	2A	Shallow	High	2.59	SAIC Engineering
10/01/93	2A	Shallow	Low	2.67	SAIC Engineering
10/01/93	3A	Shallow	Low	2.24	SAIC Engineering
10/01/93	4A	Shallow	High	2.52	SAIC Engineering
10/01/93	4A	Shallow	Low	2.52	SAIC Engineering
10/01/93	7A	Shallow	High	2.65	SAIC Engineering
10/01/93	7A	Shallow	Low	2.66	SAIC Engineering
03/26/94	2	Deep	High	2.61	SAIC Engineering
03/26/94	2	Deep	Low	1.78	SAIC Engineering

[1]Well elevations are measured relative to mean sea level datum.

Table F-1. Groundwater: Hydraulic Head Data

Date Collected	Well	Aquifer	Tide Stage	Elevation (ft)[1]	Source
03/26/94	3	Deep	High	2.49	SAIC Engineering
03/26/94	3	Deep	Low	1.64	SAIC Engineering
03/26/94	4	Deep	High	2.67	SAIC Engineering
03/26/94	4	Deep	Low	1.07	SAIC Engineering
03/26/94	7	Deep	High	2.84	SAIC Engineering
03/26/94	7	Deep	Low	0.83	SAIC Engineering
03/26/94	2A	Shallow	High	3.27	SAIC Engineering
03/26/94	2A	Shallow	Low	3.27	SAIC Engineering
03/26/94	3A	Shallow	High	2.69	SAIC Engineering
03/26/94	4A	Shallow	High	3.35	SAIC Engineering
03/26/94	4A	Shallow	Low	3.32	SAIC Engineering
03/26/94	7A	Shallow	High	3.01	SAIC Engineering
03/26/94	7A	Shallow	Low	2.99	SAIC Engineering
03/27/94	2	Deep	High	2.7	SAIC Engineering
03/27/94	2	Deep	Low	1.8	SAIC Engineering
03/27/94	3	Deep	High	2.58	SAIC Engineering
03/27/94	4	Deep	High	2.81	SAIC Engineering
03/27/94	7	Deep	High	2.99	SAIC Engineering
03/27/94	2A	Shallow	High	3.26	SAIC Engineering
03/27/94	2A	Shallow	Low	3.4	SAIC Engineering
03/27/94	3A	Shallow	High	2.56	SAIC Engineering
03/27/94	4A	Shallow	High	3.27	SAIC Engineering
03/27/94	7A	Shallow	High	2.98	SAIC Engineering
03/28/94	2	Deep	High	2.92	SAIC Engineering
03/28/94	2	Deep	Low	1.78	SAIC Engineering
03/28/94	3	Deep	High	2.74	SAIC Engineering
03/28/94	3	Deep	Low	1.77	SAIC Engineering
03/28/94	4	Deep	High	2.99	SAIC Engineering
03/28/94	4	Deep	Low	1.2	SAIC Engineering
03/28/94	7	Deep	High	3.03	SAIC Engineering
03/28/94	7	Deep	Low	0.97	SAIC Engineering
03/28/94	2A	Shallow	High	3.66	SAIC Engineering
03/28/94	2A	Shallow	Low	3.53	SAIC Engineering
03/28/94	3A	Shallow	High	2.76	SAIC Engineering
03/28/94	3A	Shallow	Low	2.78	SAIC Engineering
03/28/94	4A	Shallow	High	3.6	SAIC Engineering
03/28/94	4A	Shallow	Low	3.66	SAIC Engineering
03/28/94	7A	Shallow	High	3.07	SAIC Engineering
03/28/94	7A	Shallow	Low	3.1	SAIC Engineering
09/18/94	2	Deep	High	3.44	SAIC Engineering
09/18/94	2	Deep	Low	1.71	SAIC Engineering
09/18/94	3	Deep	High	1.95	SAIC Engineering
09/18/94	3	Deep	Low	1.11	SAIC Engineering
09/18/94	4	Deep	High	2.14	SAIC Engineering
09/18/94	4	Deep	Low	0.84	SAIC Engineering
09/18/94	7	Deep	High	2.4	SAIC Engineering
09/18/94	7	Deep	Low	0.63	SAIC Engineering
09/18/94	2A	Shallow	High	3.47	SAIC Engineering
09/18/94	2A	Shallow	Low	2.82	SAIC Engineering

[1]Well elevations are measured relative to mean sea level datum.

Table F-1. Groundwater: Hydraulic Head Data

Date Collected	Well	Aquifer	Tide Stage	Elevation (ft)[1]	Source
09/18/94	3A	Shallow	High	2	SAIC Engineering
09/18/94	3A	Shallow	Low	2	SAIC Engineering
09/18/94	4A	Shallow	High	2.77	SAIC Engineering
09/18/94	4A	Shallow	Low	2.64	SAIC Engineering
09/18/94	7A	Shallow	High	2.78	SAIC Engineering
09/18/94	7A	Shallow	Low	2.77	SAIC Engineering
09/19/94	2	Deep	High	2.92	SAIC Engineering
09/19/94	2	Deep	Low	2.92	SAIC Engineering
09/19/94	3	Deep	High	1.97	SAIC Engineering
09/19/94	3	Deep	Low	1.28	SAIC Engineering
09/19/94	4	Deep	High	2.11	SAIC Engineering
09/19/94	7	Deep	High	2.29	SAIC Engineering
09/19/94	7	Deep	Low	0.63	SAIC Engineering
09/19/94	2A	Shallow	High	3.26	SAIC Engineering
09/19/94	2A	Shallow	Low	3.21	SAIC Engineering
09/19/94	3A	Shallow	High	2.14	SAIC Engineering
09/19/94	3A	Shallow	Low	1.9	SAIC Engineering
09/19/94	4A	Shallow	High	2.64	SAIC Engineering
09/19/94	7A	Shallow	High	2.77	SAIC Engineering
09/19/94	7A	Shallow	Low	2.76	SAIC Engineering
09/20/94	2	Deep	High	3.44	SAIC Engineering
09/20/94	2	Deep	Low	2.07	SAIC Engineering
09/20/94	3	Deep	High	1.95	SAIC Engineering
09/20/94	3	Deep	Low	1.32	SAIC Engineering
09/20/94	4	Deep	High	2.14	SAIC Engineering
09/20/94	4	Deep	Low	0.81	SAIC Engineering
09/20/94	7	Deep	High	2.4	SAIC Engineering
09/20/94	7	Deep	Low	0.7	SAIC Engineering
09/20/94	2A	Shallow	High	3.47	SAIC Engineering
09/20/94	2A	Shallow	Low	3.16	SAIC Engineering
09/20/94	3A	Shallow	High	2	SAIC Engineering
09/20/94	3A	Shallow	Low	1.99	SAIC Engineering
09/20/94	4A	Shallow	High	2.77	SAIC Engineering
09/20/94	4A	Shallow	Low	2.41	SAIC Engineering
09/20/94	7A	Shallow	High	2.78	SAIC Engineering
09/20/94	7A	Shallow	Low	2.76	SAIC Engineering
03/15/95	2	Deep	High	1.82	SAIC Engineering
03/15/95	2	Deep	Low	1.7	SAIC Engineering
03/15/95	3	Deep	High	1.77	SAIC Engineering
03/15/95	3	Deep	Low	1.11	SAIC Engineering
03/15/95	4	Deep	High	1.89	SAIC Engineering
03/15/95	4	Deep	Low	0.39	SAIC Engineering
03/15/95	7	Deep	High	2.03	SAIC Engineering
03/15/95	7	Deep	Low	0.25	SAIC Engineering
03/15/95	2A	Shallow	High	2.95	SAIC Engineering
03/15/95	2A	Shallow	Low	2.93	SAIC Engineering
03/15/95	3A	Shallow	High	2.71	SAIC Engineering
03/15/95	3A	Shallow	Low	1.85	SAIC Engineering
03/15/95	4A	Shallow	High	2.88	SAIC Engineering

[1]Well elevations are measured relative to mean sea level datum.

Table F-1. Groundwater: Hydraulic Head Data

Date Collected	Well	Aquifer	Tide Stage	Elevation (ft)[1]	Source
03/15/95	4A	Shallow	Low	2.87	SAIC Engineering
03/15/95	7A	Shallow	High	2.67	SAIC Engineering
03/15/95	7A	Shallow	Low	2.67	SAIC Engineering
03/16/95	2	Deep	High	2	SAIC Engineering
03/16/95	2	Deep	Low	1.51	SAIC Engineering
03/16/95	3	Deep	High	1.95	SAIC Engineering
03/16/95	3	Deep	Low	1.1	SAIC Engineering
03/16/95	4	Deep	High	2.13	SAIC Engineering
03/16/95	4	Deep	Low	0.32	SAIC Engineering
03/16/95	7	Deep	High	2.32	SAIC Engineering
03/16/95	7	Deep	Low	0.2	SAIC Engineering
03/16/95	2A	Shallow	High	2.93	SAIC Engineering
03/16/95	2A	Shallow	Low	2.91	SAIC Engineering
03/16/95	3A	Shallow	High	1.93	SAIC Engineering
03/16/95	3A	Shallow	Low	1.86	SAIC Engineering
03/16/95	4A	Shallow	High	2.88	SAIC Engineering
03/16/95	4A	Shallow	Low	2.84	SAIC Engineering
03/16/95	7A	Shallow	High	2.67	SAIC Engineering
03/16/95	7A	Shallow	Low	2.67	SAIC Engineering
03/17/95	2	Deep	High	1.57	SAIC Engineering
03/17/95	2	Deep	Low	2.07	SAIC Engineering
03/17/95	3	Deep	High	1.5	SAIC Engineering
03/17/95	3	Deep	Low	1.32	SAIC Engineering
03/17/95	4	Deep	High	0.35	SAIC Engineering
03/17/95	4	Deep	Low	0.81	SAIC Engineering
03/17/95	7	Deep	High	0.22	SAIC Engineering
03/17/95	7	Deep	Low	0.7	SAIC Engineering
03/17/95	2A	Shallow	High	3.19	SAIC Engineering
03/17/95	2A	Shallow	Low	3.16	SAIC Engineering
03/17/95	3A	Shallow	High	1.9	SAIC Engineering
03/17/95	3A	Shallow	Low	1.99	SAIC Engineering
03/17/95	4A	Shallow	High	2.87	SAIC Engineering
03/17/95	4A	Shallow	Low	2.41	SAIC Engineering
03/17/95	7A	Shallow	High	2.68	SAIC Engineering
03/17/95	7A	Shallow	Low	2.76	SAIC Engineering
09/07/95	2	Deep	High	2.62	SAIC Engineering
09/07/95	2	Deep	Low	1.27	SAIC Engineering
09/07/95	3	Deep	High	1.9	SAIC Engineering
09/07/95	3	Deep	Low	0.9	SAIC Engineering
09/07/95	4	Deep	High	2.25	SAIC Engineering
09/07/95	4	Deep	Low	0.14	SAIC Engineering
09/07/95	7	Deep	High	2.49	SAIC Engineering
09/07/95	7	Deep	Low	0.09	SAIC Engineering
09/07/95	2A	Shallow	High	2.27	SAIC Engineering
09/07/95	2A	Shallow	Low	2.3	SAIC Engineering
09/07/95	3A	Shallow	High	2.2	SAIC Engineering
09/07/95	3A	Shallow	Low	1.86	SAIC Engineering
09/07/95	4A	Shallow	High	2.19	SAIC Engineering
09/07/95	4A	Shallow	Low	2.19	SAIC Engineering

[1]Well elevations are measured relative to mean sea level datum.

Table F-1. Groundwater: Hydraulic Head Data

Date Collected	Well	Aquifer	Tide Stage	Elevation (ft)[1]	Source
09/07/95	7A	Shallow	High	2.64	SAIC Engineering
09/07/95	7A	Shallow	Low	2.68	SAIC Engineering
09/08/95	2	Deep	High	3.09	SAIC Engineering
09/08/95	2	Deep	Low	0.97	SAIC Engineering
09/08/95	3	Deep	High	1.85	SAIC Engineering
09/08/95	3	Deep	Low	0.59	SAIC Engineering
09/08/95	4	Deep	High	2.3	SAIC Engineering
09/08/95	4	Deep	Low	-0.15	SAIC Engineering
09/08/95	7	Deep	High	2.57	SAIC Engineering
09/08/95	7	Deep	Low	-0.17	SAIC Engineering
09/08/95	2A	Shallow	High	2.55	SAIC Engineering
09/08/95	2A	Shallow	Low	2.44	SAIC Engineering
09/08/95	3A	Shallow	High	2.49	SAIC Engineering
09/08/95	3A	Shallow	Low	1.86	SAIC Engineering
09/08/95	4A	Shallow	High	2.17	SAIC Engineering
09/08/95	4A	Shallow	Low	2.17	SAIC Engineering
09/08/95	7A	Shallow	High	2.66	SAIC Engineering
09/08/95	7A	Shallow	Low	2.6	SAIC Engineering
09/09/95	2	Deep	High	2.17	SAIC Engineering
09/09/95	2	Deep	Low	1.77	SAIC Engineering
09/09/95	3	Deep	High	1.85	SAIC Engineering
09/09/95	3	Deep	Low	0.85	SAIC Engineering
09/09/95	4	Deep	High	2.37	SAIC Engineering
09/09/95	4	Deep	Low	0.12	SAIC Engineering
09/09/95	7	Deep	High	2.64	SAIC Engineering
09/09/95	7	Deep	Low	0.02	SAIC Engineering
09/09/95	2A	Shallow	High	2.44	SAIC Engineering
09/09/95	2A	Shallow	Low	2.46	SAIC Engineering
09/09/95	3A	Shallow	High	2.16	SAIC Engineering
09/09/95	3A	Shallow	Low	1.95	SAIC Engineering
09/09/95	4A	Shallow	High	2.17	SAIC Engineering
09/09/95	4A	Shallow	Low	2.16	SAIC Engineering
09/09/95	7A	Shallow	High	2.66	SAIC Engineering
09/09/95	7A	Shallow	Low	2.54	SAIC Engineering
03/04/96	2	Deep	High	1.52	SAIC Engineering
03/04/96	2	Deep	Low	1.47	SAIC Engineering
03/04/96	3	Deep	High	1.55	SAIC Engineering
03/04/96	3	Deep	Low	1.5	SAIC Engineering
03/04/96	4	Deep	High	1.52	SAIC Engineering
03/04/96	4	Deep	Low	0.11	SAIC Engineering
03/04/96	7	Deep	High	1.57	SAIC Engineering
03/04/96	7	Deep	Low	0.02	SAIC Engineering
03/04/96	2A	Shallow	High	3.27	SAIC Engineering
03/04/96	2A	Shallow	Low	3.28	SAIC Engineering
03/04/96	3A	Shallow	High	1.97	SAIC Engineering
03/04/96	3A	Shallow	Low	1.96	SAIC Engineering
03/04/96	4A	Shallow	High	2.94	SAIC Engineering
03/04/96	4A	Shallow	Low	2.94	SAIC Engineering
03/04/96	7A	Shallow	High	2.77	SAIC Engineering

[1]Well elevations are measured relative to mean sea level datum.

Table F-1. Groundwater: Hydraulic Head Data

Date Collected	Well	Aquifer	Tide Stage	Elevation (ft)[1]	Source
03/04/96	7A	Shallow	Low	2.78	SAIC Engineering
03/05/96	2	Deep	High	1.7	SAIC Engineering
03/05/96	2	Deep	Low	1.47	SAIC Engineering
03/05/96	3	Deep	High	1.7	SAIC Engineering
03/05/96	3	Deep	Low	1.45	SAIC Engineering
03/05/96	4	Deep	High	1.81	SAIC Engineering
03/05/96	4	Deep	Low	0.54	SAIC Engineering
03/05/96	7	Deep	High	1.89	SAIC Engineering
03/05/96	7	Deep	Low	0.56	SAIC Engineering
03/05/96	2A	Shallow	High	3.2	SAIC Engineering
03/05/96	2A	Shallow	Low	3.28	SAIC Engineering
03/05/96	3A	Shallow	High	1.98	SAIC Engineering
03/05/96	3A	Shallow	Low	2.02	SAIC Engineering
03/05/96	4A	Shallow	High	2.91	SAIC Engineering
03/05/96	4A	Shallow	Low	2.93	SAIC Engineering
03/05/96	7A	Shallow	High	2.77	SAIC Engineering
03/05/96	7A	Shallow	Low	2.79	SAIC Engineering
03/06/96	2	Deep	High	2.08	SAIC Engineering
03/06/96	2	Deep	Low	1.47	SAIC Engineering
03/06/96	3	Deep	High	2.02	SAIC Engineering
03/06/96	3	Deep	Low	1.36	SAIC Engineering
03/06/96	4	Deep	High	2.24	SAIC Engineering
03/06/96	4	Deep	Low	0.47	SAIC Engineering
03/06/96	7	Deep	High	2.33	SAIC Engineering
03/06/96	7	Deep	Low	0.34	SAIC Engineering
03/06/96	2A	Shallow	High	3.71	SAIC Engineering
03/06/96	2A	Shallow	Low	3.75	SAIC Engineering
03/06/96	3A	Shallow	High	2.09	SAIC Engineering
03/06/96	3A	Shallow	Low	2.11	SAIC Engineering
03/06/96	4A	Shallow	High	3.81	SAIC Engineering
03/06/96	4A	Shallow	Low	3.87	SAIC Engineering
03/06/96	7A	Shallow	High	2.85	SAIC Engineering
03/06/96	7A	Shallow	Low	2.87	SAIC Engineering
09/25/96	2	Deep	High	3.01	SAIC Engineering
09/25/96	2	Deep	Low	1.77	SAIC Engineering
09/25/96	3	Deep	High	2.87	SAIC Engineering
09/25/96	3	Deep	Low	1.55	SAIC Engineering
09/25/96	4	Deep	High	3.14	SAIC Engineering
09/25/96	4	Deep	Low	0.71	SAIC Engineering
09/25/96	7	Deep	High	3.3	SAIC Engineering
09/25/96	7	Deep	Low	0.66	SAIC Engineering
09/25/96	2A	Shallow	High	3.48	SAIC Engineering
09/25/96	2A	Shallow	Low	3.37	SAIC Engineering
09/25/96	3A	Shallow	High	2.79	SAIC Engineering
09/25/96	3A	Shallow	Low	2.78	SAIC Engineering
09/25/96	4A	Shallow	High	3.25	SAIC Engineering
09/25/96	4A	Shallow	Low	3.215	SAIC Engineering
09/25/96	7A	Shallow	High	3.11	SAIC Engineering
09/25/96	7A	Shallow	Low	3.13	SAIC Engineering

[1]Well elevations are measured relative to mean sea level datum.

Table F-1. Groundwater: Hydraulic Head Data

Date Collected	Well	Aquifer	Tide Stage	Elevation (ft)[1]	Source
09/26/96	2	Deep	High	2.84	SAIC Engineering
09/26/96	2	Deep	Low	1.89	SAIC Engineering
09/26/96	3	Deep	High	2.76	SAIC Engineering
09/26/96	3	Deep	Low	1.9	SAIC Engineering
09/26/96	4	Deep	High	3.1	SAIC Engineering
09/26/96	4	Deep	Low	0.73	SAIC Engineering
09/26/96	7	Deep	High	3.34	SAIC Engineering
09/26/96	7	Deep	Low	0.48	SAIC Engineering
09/26/96	2A	Shallow	High	3.23	SAIC Engineering
09/26/96	2A	Shallow	Low	3.27	SAIC Engineering
09/26/96	3A	Shallow	High	2.7	SAIC Engineering
09/26/96	3A	Shallow	Low	2.48	SAIC Engineering
09/26/96	4A	Shallow	High	3.22	SAIC Engineering
09/26/96	4A	Shallow	Low	3.2	SAIC Engineering
09/26/96	7A	Shallow	High	3.1	SAIC Engineering
09/26/96	7A	Shallow	Low	3.11	SAIC Engineering
09/27/96	2	Deep	High	2.81	SAIC Engineering
09/27/96	2	Deep	Low	1.85	SAIC Engineering
09/27/96	3	Deep	High	2.67	SAIC Engineering
09/27/96	3	Deep	Low	1.35	SAIC Engineering
09/27/96	4	Deep	High	2.99	SAIC Engineering
09/27/96	4	Deep	Low	0.69	SAIC Engineering
09/27/96	7	Deep	High	3.26	SAIC Engineering
09/27/96	7	Deep	Low	0.37	SAIC Engineering
09/27/96	2A	Shallow	High	3.22	SAIC Engineering
09/27/96	2A	Shallow	Low	3.26	SAIC Engineering
09/27/96	3A	Shallow	High	2.46	SAIC Engineering
09/27/96	3A	Shallow	Low	2.79	SAIC Engineering
09/27/96	4A	Shallow	High	3.14	SAIC Engineering
09/27/96	4A	Shallow	Low	3.16	SAIC Engineering
09/27/96	7A	Shallow	High	3.08	SAIC Engineering
09/27/96	7A	Shallow	Low	3.08	SAIC Engineering
03/22/97	2	Deep	High	2.32	SAIC Engineering
03/22/97	2	Deep	Low	1.77	SAIC Engineering
03/22/97	3	Deep	High	2.31	SAIC Engineering
03/22/97	3	Deep	Low	1.57	SAIC Engineering
03/22/97	4	Deep	High	2.29	SAIC Engineering
03/22/97	4	Deep	Low	0.94	SAIC Engineering
03/22/97	7	Deep	High	2.56	SAIC Engineering
03/22/97	7	Deep	Low	0.84	SAIC Engineering
03/22/97	2A	Shallow	High	3.32	SAIC Engineering
03/22/97	2A	Shallow	Low	3.32	SAIC Engineering
03/22/97	3A	Shallow	High	2.23	SAIC Engineering
03/22/97	3A	Shallow	Low	2.67	SAIC Engineering
03/22/97	4A	Shallow	High	3.09	SAIC Engineering
03/22/97	4A	Shallow	Low	3.17	SAIC Engineering
03/22/97	7A	Shallow	High	2.96	SAIC Engineering
03/22/97	7A	Shallow	Low	2.93	SAIC Engineering
03/23/97	2	Deep	High	2.13	SAIC Engineering

[1]Well elevations are measured relative to mean sea level datum.

Table F-1. Groundwater: Hydraulic Head Data

Date Collected	Well	Aquifer	Tide Stage	Elevation (ft)[1]	Source
03/23/97	3	Deep	High	2.08	SAIC Engineering
03/23/97	4	Deep	High	2.25	SAIC Engineering
03/23/97	7	Deep	High	2.4	SAIC Engineering
03/23/97	2A	Shallow	High	3.1	SAIC Engineering
03/23/97	3A	Shallow	High	2.13	SAIC Engineering
03/23/97	4A	Shallow	High	3.18	SAIC Engineering
03/23/97	7A	Shallow	High	2.88	SAIC Engineering
03/24/97	2	Deep	High	1.94	SAIC Engineering
03/24/97	2	Deep	Low	1.72	SAIC Engineering
03/24/97	3	Deep	High	1.88	SAIC Engineering
03/24/97	3	Deep	Low	0.9	SAIC Engineering
03/24/97	4	Deep	High	2.09	SAIC Engineering
03/24/97	4	Deep	Low	1.43	SAIC Engineering
03/24/97	7	Deep	High	2.2	SAIC Engineering
03/24/97	7	Deep	Low	0.05	SAIC Engineering
03/24/97	2A	Shallow	High	2.96	SAIC Engineering
03/24/97	2A	Shallow	Low	2.97	SAIC Engineering
03/24/97	3A	Shallow	High	1.95	SAIC Engineering
03/24/97	3A	Shallow	Low	2.71	SAIC Engineering
03/24/97	4A	Shallow	High	3.09	SAIC Engineering
03/24/97	4A	Shallow	Low	3.11	SAIC Engineering
03/24/97	7A	Shallow	High	2.86	SAIC Engineering
03/24/97	7A	Shallow	Low	2.88	SAIC Engineering
03/11/98	2	Deep	High	2.42	SAIC Engineering
03/11/98	2	Deep	Low	1.88	SAIC Engineering
03/11/98	3	Deep	High	2.38	SAIC Engineering
03/11/98	3	Deep	Low	1.52	SAIC Engineering
03/11/98	4	Deep	High	2.56	SAIC Engineering
03/11/98	4	Deep	Low	0.78	SAIC Engineering
03/11/98	7	Deep	High	2.6	SAIC Engineering
03/11/98	7	Deep	Low	0.71	SAIC Engineering
03/11/98	2A	Shallow	High	3.33	SAIC Engineering
03/11/98	2A	Shallow	Low	3.32	SAIC Engineering
03/11/98	3A	Shallow	High	2.6	SAIC Engineering
03/11/98	3A	Shallow	Low	2.91	SAIC Engineering
03/11/98	4A	Shallow	High	3.32	SAIC Engineering
03/11/98	4A	Shallow	Low	3.31	SAIC Engineering
03/11/98	7A	Shallow	High	3.04	SAIC Engineering
03/11/98	7A	Shallow	Low	3.04	SAIC Engineering
03/12/98	2	Deep	High	2.366	SAIC Engineering
03/12/98	2	Deep	Low	1.82	SAIC Engineering
03/12/98	3	Deep	High	2.3	SAIC Engineering
03/12/98	3	Deep	Low	1.58	SAIC Engineering
03/12/98	4	Deep	High	2.48	SAIC Engineering
03/12/98	4	Deep	Low	0.82	SAIC Engineering
03/12/98	7	Deep	High	2.53	SAIC Engineering
03/12/98	7	Deep	Low	0.71	SAIC Engineering
03/12/98	2A	Shallow	High	3.21	SAIC Engineering
03/12/98	2A	Shallow	Low	3.24	SAIC Engineering

[1]Well elevations are measured relative to mean sea level datum.

Table F-1. Groundwater: Hydraulic Head Data

Date Collected	Well	Aquifer	Tide Stage	Elevation (ft)[1]	Source
03/12/98	3A	Shallow	High	2.53	SAIC Engineering
03/12/98	3A	Shallow	Low	2.43	SAIC Engineering
03/12/98	4A	Shallow	High	3.24	SAIC Engineering
03/12/98	4A	Shallow	Low	3.24	SAIC Engineering
03/12/98	7A	Shallow	High	3.01	SAIC Engineering
03/12/98	7A	Shallow	Low	3.02	SAIC Engineering
03/13/98	2	Deep	High	2.04	SAIC Engineering
03/13/98	2	Deep	Low	1.99	SAIC Engineering
03/13/98	3	Deep	High	2.03	SAIC Engineering
03/13/98	3	Deep	Low	1.3	SAIC Engineering
03/13/98	4	Deep	High	2.19	SAIC Engineering
03/13/98	4	Deep	Low	0.55	SAIC Engineering
03/13/98	7	Deep	High	2.23	SAIC Engineering
03/13/98	7	Deep	Low	0.41	SAIC Engineering
03/13/98	2A	Shallow	High	3.02	SAIC Engineering
03/13/98	2A	Shallow	Low	3.12	SAIC Engineering
03/13/98	3A	Shallow	High	2.42	SAIC Engineering
03/13/98	3A	Shallow	Low	2.3	SAIC Engineering
03/13/98	4A	Shallow	High	3.17	SAIC Engineering
03/13/98	4A	Shallow	Low	3.16	SAIC Engineering
03/13/98	7A	Shallow	High	2.97	SAIC Engineering
03/13/98	7A	Shallow	Low	2.98	SAIC Engineering
10/04/98	2	Deep	High	2.36	SAIC Engineering
10/04/98	2	Deep	Low	0.72	SAIC Engineering
10/04/98	3	Deep	High	1.75	SAIC Engineering
10/04/98	3	Deep	Low	0.7	SAIC Engineering
10/04/98	4	Deep	High	2.12	SAIC Engineering
10/04/98	4	Deep	Low	-0.07	SAIC Engineering
10/04/98	7	Deep	High	2.44	SAIC Engineering
10/04/98	7	Deep	Low	-0.16	SAIC Engineering
10/04/98	2A	Shallow	High	2.91	SAIC Engineering
10/04/98	2A	Shallow	Low	2.86	SAIC Engineering
10/04/98	3A	Shallow	High	1.9	SAIC Engineering
10/04/98	3A	Shallow	Low	1.89	SAIC Engineering
10/04/98	4A	Shallow	High	2.1	SAIC Engineering
10/04/98	4A	Shallow	Low	2.11	SAIC Engineering
10/04/98	7A	Shallow	High	2.71	SAIC Engineering
10/04/98	7A	Shallow	Low	2.71	SAIC Engineering
10/05/98	2	Deep	High	1.96	SAIC Engineering
10/05/98	2	Deep	Low	0.52	SAIC Engineering
10/05/98	3	Deep	High	1.78	SAIC Engineering
10/05/98	3	Deep	Low	0.69	SAIC Engineering
10/05/98	4	Deep	High	2.11	SAIC Engineering
10/05/98	4	Deep	Low	-0.02	SAIC Engineering
10/05/98	7	Deep	High	2.32	SAIC Engineering
10/05/98	7	Deep	Low	-0.11	SAIC Engineering
10/05/98	2A	Shallow	High	2.8	SAIC Engineering
10/05/98	2A	Shallow	Low	2.8	SAIC Engineering
10/05/98	3A	Shallow	High	1.78	SAIC Engineering

[1]Well elevations are measured relative to mean sea level datum.

Table F-1. Groundwater: Hydraulic Head Data

Date Collected	Well	Aquifer	Tide Stage	Elevation (ft)[1]	Source
10/05/98	3A	Shallow	Low	1.94	SAIC Engineering
10/05/98	4A	Shallow	High	2.09	SAIC Engineering
10/05/98	4A	Shallow	Low	2.09	SAIC Engineering
10/05/98	7A	Shallow	High	2.7	SAIC Engineering
10/05/98	7A	Shallow	Low	2.73	SAIC Engineering
10/06/98	2	Deep	High	1.97	SAIC Engineering
10/06/98	2	Deep	Low	0.47	SAIC Engineering
10/06/98	3	Deep	High	1.82	SAIC Engineering
10/06/98	3	Deep	Low	0.63	SAIC Engineering
10/06/98	4	Deep	High	2.24	SAIC Engineering
10/06/98	4	Deep	Low	-0.1	SAIC Engineering
10/06/98	7	Deep	High	2.56	SAIC Engineering
10/06/98	7	Deep	Low	-0.18	SAIC Engineering
10/06/98	2A	Shallow	High	2.77	SAIC Engineering
10/06/98	2A	Shallow	Low	2.81	SAIC Engineering
10/06/98	3A	Shallow	High	1.93	SAIC Engineering
10/06/98	3A	Shallow	Low	1.77	SAIC Engineering
10/06/98	4A	Shallow	High	2.06	SAIC Engineering
10/06/98	4A	Shallow	Low	2.05	SAIC Engineering
10/06/98	7A	Shallow	High	2.75	SAIC Engineering
10/06/98	7A	Shallow	Low	2.79	SAIC Engineering
09/24/99	2	Deep	High	2.06	SAIC Engineering
09/24/99	2	Deep	Low	1.22	SAIC Engineering
09/24/99	3	Deep	High	1.95	SAIC Engineering
09/24/99	3	Deep	Low	1.32	SAIC Engineering
09/24/99	4	Deep	High	2.17	SAIC Engineering
09/24/99	4	Deep	Low	0.59	SAIC Engineering
09/24/99	7	Deep	High	2.41	SAIC Engineering
09/24/99	7	Deep	Low	0.52	SAIC Engineering
09/24/99	2A	Shallow	High	3.02	SAIC Engineering
09/24/99	2A	Shallow	Low	3.02	SAIC Engineering
09/24/99	3A	Shallow	High	2.38	SAIC Engineering
09/24/99	3A	Shallow	Low	1.95	SAIC Engineering
09/24/99	4A	Shallow	High	2.52	SAIC Engineering
09/24/99	4A	Shallow	Low	2.54	SAIC Engineering
09/24/99	7A	Shallow	High	2.82	SAIC Engineering
09/24/99	7A	Shallow	Low	2.89	SAIC Engineering
09/25/99	2	Deep	High	2.53	SAIC Engineering
09/25/99	2	Deep	Low	0.96	SAIC Engineering
09/25/99	3	Deep	High	2.18	SAIC Engineering
09/25/99	3	Deep	Low	1.14	SAIC Engineering
09/25/99	4	Deep	High	2.4	SAIC Engineering
09/25/99	4	Deep	Low	0.31	SAIC Engineering
09/25/99	7	Deep	High	2.59	SAIC Engineering
09/25/99	7	Deep	Low	0.24	SAIC Engineering
09/25/99	2A	Shallow	High	3.04	SAIC Engineering
09/25/99	2A	Shallow	Low	3.02	SAIC Engineering
09/25/99	3A	Shallow	High	2.01	SAIC Engineering
09/25/99	3A	Shallow	Low	1.96	SAIC Engineering

[1]Well elevations are measured relative to mean sea level datum.

Table F-1. Groundwater: Hydraulic Head Data

Date Collected	Well	Aquifer	Tide Stage	Elevation (ft)[1]	Source
09/25/99	4A	Shallow	High	2.52	SAIC Engineering
09/25/99	4A	Shallow	Low	2.52	SAIC Engineering
09/25/99	7A	Shallow	High	2.83	SAIC Engineering
09/25/99	7A	Shallow	Low	2.83	SAIC Engineering
09/26/99	2	Deep	High	2.56	SAIC Engineering
09/26/99	2	Deep	Low	2.47	SAIC Engineering
09/26/99	3	Deep	High	2.08	SAIC Engineering
09/26/99	3	Deep	Low	1.13	SAIC Engineering
09/26/99	4	Deep	High	2.69	SAIC Engineering
09/26/99	4	Deep	Low	0.27	SAIC Engineering
09/26/99	7	Deep	High	3.38	SAIC Engineering
09/26/99	7	Deep	Low	0.15	SAIC Engineering
09/26/99	2A	Shallow	High	2.91	SAIC Engineering
09/26/99	2A	Shallow	Low	2.92	SAIC Engineering
09/26/99	3A	Shallow	High	1.91	SAIC Engineering
09/26/99	3A	Shallow	Low	3	SAIC Engineering
09/26/99	4A	Shallow	High	2.23	SAIC Engineering
09/26/99	4A	Shallow	Low	2.46	SAIC Engineering
09/26/99	7A	Shallow	High	2.82	SAIC Engineering
09/26/99	7A	Shallow	Low	2.85	SAIC Engineering
03/18/00	2	Deep	High	2.36	SAIC Engineering
03/18/00	2	Deep	Low	0.95	SAIC Engineering
03/18/00	3	Deep	High	2.26	SAIC Engineering
03/18/00	3	Deep	Low	1.23	SAIC Engineering
03/18/00	4	Deep	High	2.59	SAIC Engineering
03/18/00	4	Deep	Low	0.39	SAIC Engineering
03/18/00	7	Deep	High	2.77	SAIC Engineering
03/18/00	7	Deep	Low	0.26	SAIC Engineering
03/18/00	2A	Shallow	High	3.41	SAIC Engineering
03/18/00	2A	Shallow	Low	3.41	SAIC Engineering
03/18/00	3A	Shallow	High	2.36	SAIC Engineering
03/18/00	3A	Shallow	Low	2.29	SAIC Engineering
03/18/00	4A	Shallow	High	3.31	SAIC Engineering
03/18/00	4A	Shallow	Low	3.37	SAIC Engineering
03/18/00	7A	Shallow	High	3.12	SAIC Engineering
03/18/00	7A	Shallow	Low	3.14	SAIC Engineering
03/19/00	2	Deep	High	2.6	SAIC Engineering
03/19/00	2	Deep	Low	1.18	SAIC Engineering
03/19/00	3	Deep	High	2.41	SAIC Engineering
03/19/00	3	Deep	Low	1.32	SAIC Engineering
03/19/00	4	Deep	High	2.57	SAIC Engineering
03/19/00	4	Deep	Low	0.56	SAIC Engineering
03/19/00	7	Deep	High	2.84	SAIC Engineering
03/19/00	7	Deep	Low	0.47	SAIC Engineering
03/19/00	2A	Shallow	High	3.33	SAIC Engineering
03/19/00	2A	Shallow	Low	3.34	SAIC Engineering
03/19/00	3A	Shallow	High	2.36	SAIC Engineering
03/19/00	3A	Shallow	Low	2.34	SAIC Engineering
03/19/00	4A	Shallow	High	3.3	SAIC Engineering

[1]Well elevations are measured relative to mean sea level datum.

Table F-1. Groundwater: Hydraulic Head Data

Date Collected	Well	Aquifer	Tide Stage	Elevation (ft)[1]	Source
03/19/00	4A	Shallow	Low	3.28	SAIC Engineering
03/19/00	7A	Shallow	High	3.09	SAIC Engineering
03/19/00	7A	Shallow	Low	3.06	SAIC Engineering
03/20/00	2	Deep	High	2.53	SAIC Engineering
03/20/00	2	Deep	Low	1.41	SAIC Engineering
03/20/00	3	Deep	High	2.43	SAIC Engineering
03/20/00	3	Deep	Low	1.37	SAIC Engineering
03/20/00	4	Deep	High	2.83	SAIC Engineering
03/20/00	4	Deep	Low	0.59	SAIC Engineering
03/20/00	7	Deep	High	3.07	SAIC Engineering
03/20/00	7	Deep	Low	0.51	SAIC Engineering
03/20/00	2A	Shallow	High	3.31	SAIC Engineering
03/20/00	2A	Shallow	Low	3.29	SAIC Engineering
03/20/00	3A	Shallow	High	2.4	SAIC Engineering
03/20/00	3A	Shallow	Low	2.5	SAIC Engineering
03/20/00	4A	Shallow	High	3.24	SAIC Engineering
03/20/00	4A	Shallow	Low	3.21	SAIC Engineering
03/20/00	7A	Shallow	High	3.06	SAIC Engineering
03/20/00	7A	Shallow	Low	3.04	SAIC Engineering
09/12/00	2	Deep	High	2.78	SAIC Engineering
09/12/00	2	Deep	Low	1.38	SAIC Engineering
09/12/00	3	Deep	High	1.77	SAIC Engineering
09/12/00	3	Deep	Low	1.13	SAIC Engineering
09/12/00	4	Deep	High	1.8	SAIC Engineering
09/12/00	4	Deep	Low	0.41	SAIC Engineering
09/12/00	7	Deep	High	1.94	SAIC Engineering
09/12/00	7	Deep	Low	0.35	SAIC Engineering
09/12/00	2A	Shallow	High	2.95	SAIC Engineering
09/12/00	2A	Shallow	Low	2.94	SAIC Engineering
09/12/00	3A	Shallow	High	2.54	SAIC Engineering
09/12/00	3A	Shallow	Low	2.01	SAIC Engineering
09/12/00	4A	Shallow	High	2.53	SAIC Engineering
09/12/00	4A	Shallow	Low	2.54	SAIC Engineering
09/12/00	7A	Shallow	High	2.93	SAIC Engineering
09/12/00	7A	Shallow	Low	2.91	SAIC Engineering
09/13/00	2	Deep	High	2.57	SAIC Engineering
09/13/00	2	Deep	Low	1.48	SAIC Engineering
09/13/00	3	Deep	High	1.84	SAIC Engineering
09/13/00	3	Deep	Low	1.02	SAIC Engineering
09/13/00	4	Deep	High	2.03	SAIC Engineering
09/13/00	4	Deep	Low	0.41	SAIC Engineering
09/13/00	7	Deep	High	2.25	SAIC Engineering
09/13/00	7	Deep	Low	0.31	SAIC Engineering
09/13/00	2A	Shallow	High	3.13	SAIC Engineering
09/13/00	2A	Shallow	Low	3.1	SAIC Engineering
09/13/00	3A	Shallow	High	2.73	SAIC Engineering
09/13/00	3A	Shallow	Low	3.01	SAIC Engineering
09/13/00	4A	Shallow	High	2.53	SAIC Engineering
09/13/00	4A	Shallow	Low	2.53	SAIC Engineering

[1]Well elevations are measured relative to mean sea level datum.

Table F-1. Groundwater: Hydraulic Head Data

Date Collected	Well	Aquifer	Tide Stage	Elevation (ft)[1]	Source
09/13/00	7A	Shallow	High	2.99	SAIC Engineering
09/13/00	7A	Shallow	Low	3.03	SAIC Engineering
09/14/00	2	Deep	High	2.81	SAIC Engineering
09/14/00	2	Deep	Low	1.7	SAIC Engineering
09/14/00	3	Deep	High	1.8	SAIC Engineering
09/14/00	3	Deep	Low	1.15	SAIC Engineering
09/14/00	4	Deep	High	2.08	SAIC Engineering
09/14/00	4	Deep	Low	0.54	SAIC Engineering
09/14/00	7	Deep	High	2.32	SAIC Engineering
09/14/00	7	Deep	Low	0.48	SAIC Engineering
09/14/00	2A	Shallow	High	3	SAIC Engineering
09/14/00	2A	Shallow	Low	3	SAIC Engineering
09/14/00	3A	Shallow	High	1.97	SAIC Engineering
09/14/00	3A	Shallow	Low	2.82	SAIC Engineering
09/14/00	4A	Shallow	High	2.53	SAIC Engineering
09/14/00	4A	Shallow	Low	2.51	SAIC Engineering
09/14/00	7A	Shallow	High	2.96	SAIC Engineering
09/14/00	7A	Shallow	Low	2.95	SAIC Engineering
03/08/01	2	Deep	High	2.92	SAIC Engineering
03/08/01	2	Deep	Low	1.39	SAIC Engineering
03/08/01	3	Deep	High	2.82	SAIC Engineering
03/08/01	3	Deep	Low	1.6	SAIC Engineering
03/08/01	4	Deep	High	3.59	SAIC Engineering
03/08/01	4	Deep	Low	0.75	SAIC Engineering
03/08/01	7	Deep	High	3.26	SAIC Engineering
03/08/01	7	Deep	Low	0.65	SAIC Engineering
03/08/01	2A	Shallow	High	3.7	SAIC Engineering
03/08/01	2A	Shallow	Low	3.76	SAIC Engineering
03/08/01	3A	Shallow	High	2.65	SAIC Engineering
03/08/01	3A	Shallow	Low	2.58	SAIC Engineering
03/08/01	4A	Shallow	High	2.85	SAIC Engineering
03/08/01	4A	Shallow	Low	3.38	SAIC Engineering
03/08/01	7A	Shallow	High	3.21	SAIC Engineering
03/08/01	7A	Shallow	Low	3.21	SAIC Engineering
03/09/01	2	Deep	High	2.87	SAIC Engineering
03/09/01	2	Deep	Low	1.39	SAIC Engineering
03/09/01	3	Deep	High	2.78	SAIC Engineering
03/09/01	3	Deep	Low	1.61	SAIC Engineering
03/09/01	4	Deep	High	3.1	SAIC Engineering
03/09/01	4	Deep	Low	0.84	SAIC Engineering
03/09/01	7	Deep	High	3.34	SAIC Engineering
03/09/01	7	Deep	Low	0.74	SAIC Engineering
03/09/01	2A	Shallow	High	3.62	SAIC Engineering
03/09/01	2A	Shallow	Low	3.65	SAIC Engineering
03/09/01	3A	Shallow	High	2.7	SAIC Engineering
03/09/01	3A	Shallow	Low	2.74	SAIC Engineering
03/09/01	4A	Shallow	High	3.35	SAIC Engineering
03/09/01	4A	Shallow	Low	3.34	SAIC Engineering
03/09/01	7A	Shallow	High	3.21	SAIC Engineering

[1]Well elevations are measured relative to mean sea level datum.

Table F-1. Groundwater: Hydraulic Head Data

Date Collected	Well	Aquifer	Tide Stage	Elevation (ft)[1]	Source
03/09/01	7A	Shallow	Low	3.18	SAIC Engineering
03/10/01	2	Deep	High	2.85	SAIC Engineering
03/10/01	2	Deep	Low	1.7	SAIC Engineering
03/10/01	3	Deep	High	2.75	SAIC Engineering
03/10/01	3	Deep	Low	1.15	SAIC Engineering
03/10/01	4	Deep	High	3	SAIC Engineering
03/10/01	4	Deep	Low	0.54	SAIC Engineering
03/10/01	7	Deep	High	3.24	SAIC Engineering
03/10/01	7	Deep	Low	0.48	SAIC Engineering
03/10/01	2A	Shallow	High	3.8	SAIC Engineering
03/10/01	2A	Shallow	Low	3	SAIC Engineering
03/10/01	3A	Shallow	High	2.86	SAIC Engineering
03/10/01	3A	Shallow	Low	2.82	SAIC Engineering
03/10/01	4A	Shallow	High	3.49	SAIC Engineering
03/10/01	4A	Shallow	Low	2.51	SAIC Engineering
03/10/01	7A	Shallow	High	3.24	SAIC Engineering
03/10/01	7A	Shallow	Low	2.95	SAIC Engineering
10/01/01	2	Deep	High	2.62	SAIC Engineering
10/01/01	2	Deep	Low	2.6	SAIC Engineering
10/01/01	3	Deep	High	2.07	SAIC Engineering
10/01/01	3	Deep	Low	1.74	SAIC Engineering
10/01/01	4	Deep	High	2.15	SAIC Engineering
10/01/01	4	Deep	Low	1.04	SAIC Engineering
10/01/01	7	Deep	High	2.48	SAIC Engineering
10/01/01	7	Deep	Low	0.9	SAIC Engineering
10/01/01	2A	Shallow	High	3.53	SAIC Engineering
10/01/01	2A	Shallow	Low	3.46	SAIC Engineering
10/01/01	3A	Shallow	High	2.82	SAIC Engineering
10/01/01	3A	Shallow	Low	2.18	SAIC Engineering
10/01/01	4A	Shallow	High	3.37	SAIC Engineering
10/01/01	4A	Shallow	Low	3.45	SAIC Engineering
10/01/01	7A	Shallow	High	3.09	SAIC Engineering
10/01/01	7A	Shallow	Low	3.14	SAIC Engineering
10/02/01	2	Deep	High	2.47	SAIC Engineering
10/02/01	2	Deep	Low	1.84	SAIC Engineering
10/02/01	3	Deep	High	2.17	SAIC Engineering
10/02/01	3	Deep	Low	1.36	SAIC Engineering
10/02/01	4	Deep	High	2.33	SAIC Engineering
10/02/01	4	Deep	Low	1.11	SAIC Engineering
10/02/01	7	Deep	High	2.57	SAIC Engineering
10/02/01	7	Deep	Low	0.88	SAIC Engineering
10/02/01	2A	Shallow	High	3.22	SAIC Engineering
10/02/01	2A	Shallow	Low	3.22	SAIC Engineering
10/02/01	3A	Shallow	High	2.24	SAIC Engineering
10/02/01	3A	Shallow	Low	2.04	SAIC Engineering
10/02/01	4A	Shallow	High	3.41	SAIC Engineering
10/02/01	4A	Shallow	Low	3.39	SAIC Engineering
10/02/01	7A	Shallow	High	3.12	SAIC Engineering
10/02/01	7A	Shallow	Low	3.12	SAIC Engineering

[1]Well elevations are measured relative to mean sea level datum.

Table F-1. Groundwater: Hydraulic Head Data

Date Collected	Well	Aquifer	Tide Stage	Elevation (ft)[1]	Source
10/03/01	2	Deep	High	2.5	SAIC Engineering
10/03/01	2	Deep	Low	1.7	SAIC Engineering
10/03/01	3	Deep	High	2.12	SAIC Engineering
10/03/01	3	Deep	Low	1.23	SAIC Engineering
10/03/01	4	Deep	High	2.26	SAIC Engineering
10/03/01	4	Deep	Low	0.91	SAIC Engineering
10/03/01	7	Deep	High	2.48	SAIC Engineering
10/03/01	7	Deep	Low	0.75	SAIC Engineering
10/03/01	2A	Shallow	High	3.13	SAIC Engineering
10/03/01	2A	Shallow	Low	3.13	SAIC Engineering
10/03/01	3A	Shallow	High	2.77	SAIC Engineering
10/03/01	3A	Shallow	Low	2.05	SAIC Engineering
10/03/01	4A	Shallow	High	3.33	SAIC Engineering
10/03/01	4A	Shallow	Low	3.32	SAIC Engineering
10/03/01	7A	Shallow	High	3.08	SAIC Engineering
10/03/01	7A	Shallow	Low	3.1	SAIC Engineering
03/27/02	2	Deep	High	2.41	East Coast Engineering
03/27/02	2	Deep	Low	0.83	East Coast Engineering
03/27/02	3	Deep	High	2.32	East Coast Engineering
03/27/02	3	Deep	Low	1.07	East Coast Engineering
03/27/02	4	Deep	High	2.44	East Coast Engineering
03/27/02	4	Deep	Low	0.38	East Coast Engineering
03/27/02	7	Deep	High	2.69	East Coast Engineering
03/27/02	7	Deep	Low	-0.72	East Coast Engineering
03/27/02	2A	Shallow	High	3.72	East Coast Engineering
03/27/02	2A	Shallow	Low	3.88	East Coast Engineering
03/27/02	3A	Shallow	High	2.24	East Coast Engineering
03/27/02	3A	Shallow	Low	2.15	East Coast Engineering
03/27/02	4A	Shallow	High	3.67	East Coast Engineering
03/27/02	4A	Shallow	Low	3.85	East Coast Engineering
03/27/02	7A	Shallow	High	3.44	East Coast Engineering
03/27/02	7A	Shallow	Low	3.58	East Coast Engineering
03/28/02	2	Deep	High	2.37	East Coast Engineering
03/28/02	2	Deep	Low	0.81	East Coast Engineering
03/28/02	3	Deep	High	2.27	East Coast Engineering
03/28/02	3	Deep	Low	1.06	East Coast Engineering
03/28/02	4	Deep	High	2.45	East Coast Engineering
03/28/02	4	Deep	Low	0.35	East Coast Engineering
03/28/02	7	Deep	High	2.68	East Coast Engineering
03/28/02	7	Deep	Low	0.23	East Coast Engineering
03/28/02	2A	Shallow	High	3.46	East Coast Engineering
03/28/02	2A	Shallow	Low	3.46	East Coast Engineering
03/28/02	3A	Shallow	High	2.25	East Coast Engineering
03/28/02	3A	Shallow	Low	2.23	East Coast Engineering
03/28/02	4A	Shallow	High	3.53	East Coast Engineering
03/28/02	4A	Shallow	Low	3.51	East Coast Engineering
03/28/02	7A	Shallow	High	3.34	East Coast Engineering
03/28/02	7A	Shallow	Low	3.32	East Coast Engineering
03/29/02	2	Deep	High	2.44	East Coast Engineering

[1]Well elevations are measured relative to mean sea level datum.

Table F-1. Groundwater: Hydraulic Head Data

Date Collected	Well	Aquifer	Tide Stage	Elevation (ft)[1]	Source
03/29/02	2	Deep	Low	0.85	East Coast Engineering
03/29/02	3	Deep	High	2.32	East Coast Engineering
03/29/02	3	Deep	Low	1.08	East Coast Engineering
03/29/02	4	Deep	High	2.55	East Coast Engineering
03/29/02	4	Deep	Low	0.58	East Coast Engineering
03/29/02	7	Deep	High	2.88	East Coast Engineering
03/29/02	7	Deep	Low	0.54	East Coast Engineering
03/29/02	2A	Shallow	High	3.42	East Coast Engineering
03/29/02	2A	Shallow	Low	3.36	East Coast Engineering
03/29/02	3A	Shallow	High	2.27	East Coast Engineering
03/29/02	3A	Shallow	Low	2.22	East Coast Engineering
03/29/02	4A	Shallow	High	3.45	East Coast Engineering
03/29/02	4A	Shallow	Low	3.42	East Coast Engineering
03/29/02	7A	Shallow	High	3.23	East Coast Engineering
03/29/02	7A	Shallow	Low	3.22	East Coast Engineering
10/21/02	2	Deep	High	1.16	East Coast Engineering
10/21/02	2	Deep	Low	1.77	East Coast Engineering
10/21/02	3	Deep	High	1.3	East Coast Engineering
10/21/02	3	Deep	Low	1.75	East Coast Engineering
10/21/02	4	Deep	High	0.75	East Coast Engineering
10/21/02	4	Deep	Low	2.01	East Coast Engineering
10/21/02	7	Deep	High	0.7	East Coast Engineering
10/21/02	7	Deep	Low	2.18	East Coast Engineering
10/21/02	2A	Shallow	High	2.99	East Coast Engineering
10/21/02	2A	Shallow	Low	3.01	East Coast Engineering
10/21/02	3A	Shallow	High	2.14	East Coast Engineering
10/21/02	3A	Shallow	Low	2.12	East Coast Engineering
10/21/02	4A	Shallow	High	3.29	East Coast Engineering
10/21/02	4A	Shallow	Low	3.29	East Coast Engineering
10/21/02	7A	Shallow	High	3.1	East Coast Engineering
10/21/02	7A	Shallow	Low	3.11	East Coast Engineering
10/22/02	2	Deep	High	1.22	East Coast Engineering
10/22/02	2	Deep	Low	1.46	East Coast Engineering
10/22/02	3	Deep	High	1.37	East Coast Engineering
10/22/02	3	Deep	Low	1.48	East Coast Engineering
10/22/02	4	Deep	High	0.82	East Coast Engineering
10/22/02	4	Deep	Low	1.64	East Coast Engineering
10/22/02	7	Deep	High	0.84	East Coast Engineering
10/22/02	7	Deep	Low	1.65	East Coast Engineering
10/22/02	2A	Shallow	High	2.91	East Coast Engineering
10/22/02	2A	Shallow	Low	2.91	East Coast Engineering
10/22/02	3A	Shallow	High	2.05	East Coast Engineering
10/22/02	3A	Shallow	High	2.08	East Coast Engineering
10/22/02	4A	Shallow	High	3.25	East Coast Engineering
10/22/02	4A	Shallow	Low	3.26	East Coast Engineering
10/22/02	7A	Shallow	High	3.06	East Coast Engineering
10/22/02	7A	Shallow	Low	3.07	East Coast Engineering
10/23/02	2	Deep	High	1.36	East Coast Engineering
10/23/02	2	Deep	Low	1.44	East Coast Engineering

[1]Well elevations are measured relative to mean sea level datum.

Table F-1. Groundwater: Hydraulic Head Data

Date Collected	Well	Aquifer	Tide Stage	Elevation (ft)[1]	Source
10/23/02	3	Deep	High	1.47	East Coast Engineering
10/23/02	3	Deep	Low	1.47	East Coast Engineering
10/23/02	4	Deep	High	1.06	East Coast Engineering
10/23/02	4	Deep	Low	1.6	East Coast Engineering
10/23/02	7	Deep	High	1.08	East Coast Engineering
10/23/02	7	Deep	Low	1.71	East Coast Engineering
10/23/02	2A	Shallow	High	3.26	East Coast Engineering
10/23/02	2A	Shallow	Low	2.88	East Coast Engineering
10/23/02	3A	Shallow	Low	2.05	East Coast Engineering
10/23/02	3A	Shallow	Low	2.04	East Coast Engineering
10/23/02	4A	Shallow	High	3.21	East Coast Engineering
10/23/02	4A	Shallow	Low	3.22	East Coast Engineering
10/23/02	7A	Shallow	High	3.09	East Coast Engineering
10/23/02	7A	Shallow	Low	3.04	East Coast Engineering
5/11/2005	2	Deep	High	2.2	ENSR Data
5/11/2005	3	Deep	Slack	2.23	ENSR Data
5/11/2005	4	Deep	Slack	1.74	ENSR Data
5/11/2005	6	Deep	Slack	3.22	ENSR Data
5/11/2005	7	Deep	High	1.83	ENSR Data
5/11/2005	2A	Shallow	High	3.56	ENSR Data
5/11/2005	3A	Shallow	High	3.02	ENSR Data
5/11/2005	4A	Shallow	Slack	3.57	ENSR Data
5/11/2005	4B	Deep	High	3.04	ENSR Data
5/11/2005	6A	Shallow	Slack	2.24	ENSR Data
5/11/2005	7A	Shallow	High	3.4	ENSR Data
5/11/2005	8S	Shallow	High	2.69	ENSR Data
9/14/2005	2	Deep	Low	1.07	ENSR Data
9/14/2005	3	Deep	High	1.51	ENSR Data
9/14/2005	4	Deep	Slack	1.09	ENSR Data
9/14/2005	5	Deep	Slack	2.98	ENSR Data
9/14/2005	6	Deep	Slack	2.79	ENSR Data
9/14/2005	7	Deep	Slack	2.14	ENSR Data
9/14/2005	2A	Shallow	slack	2.61	ENSR Data
9/14/2005	3A	Shallow	Slack	2.85	ENSR Data
9/14/2005	4A	Shallow	Slack	3.16	ENSR Data
9/14/2005	4B	Shallow	Slack	2.19	ENSR Data
9/14/2005	6A	Shallow	Slack	2.73	ENSR Data
9/14/2005	7A	Shallow	Low	2.87	ENSR Data
9/14/2005	8S	Shallow	Slack	2.01	ENSR Data

[1]Well elevations are measured relative to mean sea level datum.

Table F-2. Groundwater: Total PCB Data

Date	Well ID	Total PCB Concentration (µg/L)	Method	Source
na	5	<0.5[1]	Dissolved	Gushue and Cummings 1984
na	3A	<4.0[1]	Dissolved	Gushue and Cummings 1984
na	4A	<5.0[1]	Dissolved	Gushue and Cummings 1984
na	7A	<3.0[1]	Dissolved	Gushue and Cummings 1984
na	3	<1.8-5.0[1]	Dissolved	Gushue and Cummings 1984
na	4	<0.5-7.5[1]	Dissolved	Gushue and Cummings 1984
na	7	<1.8-4.4[1]	Dissolved	Gushue and Cummings 1984
na	Unknown (from text)	2-216[1]	Unfiltered	Gushue and Cummings 1984
na	Unknown (from text)	1.5-<20[1]	Unfiltered	Gushue and Cummings 1984
05/27/98	MW-8S	3[1]	8082	BBL 1998
05/27/98	MW-6A	9.6[1]	8082	BBL 1998
05/27/98	MW-2	<5[1]	8082	BBL 1998
05/26/98	MW-3	<0.48[1]	8082	BBL 1998
05/27/98	MW-4	<2.5[1]	8082	BBL 1998
05/28/98	MW-4B	<0.48[1]	8082	BBL 1998
05/27/98	MW-5	<0.5[1]	8082	BBL 1998
05/27/98	MW-6	33[1]	8082	BBL 1998
05/26/98	MW-7	<0.48[1]	8082	BBL 1998
05/27/98	MW-2A	<48[1]	8082	BBL 1998
05/26/98	MW-3A	<5[1]	8082	BBL 1998
05/27/98	MW-4A	36[1]	8082	BBL 1998
05/26/98	MW-7A	<0.48[1]	8082	BBL 1998
09/14/05	MW-2	<0.175[2]	8082	ENSR Data
09/14/05	MW-2A	<0.175[2]	8082	ENSR Data
09/14/05	MW-3	<0.175[2]	8082	ENSR Data
09/14/05	MW-3A	0.62[2]	8082	ENSR Data
09/14/05	MW-4	<0.175[2]	8082	ENSR Data
09/14/05	MW-4A	4.53[2]	8082	ENSR Data
09/14/05	MW-4B	2.05[2]	8082	ENSR Data
09/14/05	MW-5	0.27[2]	8082	ENSR Data
09/14/05	MW-5-EB	0.3[2]	8082	ENSR Data
09/14/05	MW-5-REP	0.25[2]	8082	ENSR Data
09/14/05	MW-6	35.4[2]	8082	ENSR Data
09/14/05	MW-6A	2.35[2]	8082	ENSR Data
09/14/05	MW-7	0.91[2]	8082	ENSR Data
09/14/05	MW-7A	<0.175[2]	8082	ENSR Data
09/14/05	MW-8S	4.425[2]	8082	ENSR Data

[1]Information was not available on the method used to calculate TPCBs

[2]Total PCBs were calculated as the sum of 7 aroclors. Non detects were included as half the detection limit

F-3. Groundwater: PCB Congener Data

Date	Well ID	PCB Congener	Concentration (µg/L)	Source
09/14/05	MW-2	PCB-1016	<0.05	ENSR Data
09/14/05	MW-2	PCB-1221	<0.05	ENSR Data
09/14/05	MW-2	PCB-1232	<0.05	ENSR Data
09/14/05	MW-2	PCB-1242	<0.05	ENSR Data
09/14/05	MW-2	PCB-1248	<0.05	ENSR Data
09/14/05	MW-2	PCB-1254	<0.05	ENSR Data
09/14/05	MW-2	PCB-1260	<0.05	ENSR Data
09/14/05	MW-2	Total PCB[1]	<0.175	ENSR Data
09/14/05	MW-2A	PCB-1016	<0.05	ENSR Data
09/14/05	MW-2A	PCB-1221	<0.05	ENSR Data
09/14/05	MW-2A	PCB-1232	<0.05	ENSR Data
09/14/05	MW-2A	PCB-1242	<0.05	ENSR Data
09/14/05	MW-2A	PCB-1248	<0.05	ENSR Data
09/14/05	MW-2A	PCB-1254	<0.05	ENSR Data
09/14/05	MW-2A	PCB-1260	<0.05	ENSR Data
09/14/05	MW-2A	Total PCB[1]	<0.175	ENSR Data
09/14/05	MW-3	PCB-1016	<0.05	ENSR Data
09/14/05	MW-3	PCB-1221	<0.05	ENSR Data
09/14/05	MW-3	PCB-1232	<0.05	ENSR Data
09/14/05	MW-3	PCB-1242	<0.05	ENSR Data
09/14/05	MW-3	PCB-1248	<0.05	ENSR Data
09/14/05	MW-3	PCB-1254	<0.05	ENSR Data
09/14/05	MW-3	PCB-1260	<0.05	ENSR Data
09/14/05	MW-3	Total PCB[1]	<0.175	ENSR Data
09/14/05	MW-3A	PCB-1016	<0.05	ENSR Data
09/14/05	MW-3A	PCB-1221	<0.05	ENSR Data
09/14/05	MW-3A	PCB-1232	<0.05	ENSR Data
09/14/05	MW-3A	PCB-1242	<0.05	ENSR Data
09/14/05	MW-3A	PCB-1248	<0.05	ENSR Data
09/14/05	MW-3A	PCB-1254	0.47	ENSR Data
09/14/05	MW-3A	PCB-1260	<0.05	ENSR Data
09/14/05	MW-3A	Total PCB[1]	0.62	ENSR Data
09/13/05	MW-4	PCB-1016	<0.05	ENSR Data
09/13/05	MW-4	PCB-1221	<0.05	ENSR Data
09/13/05	MW-4	PCB-1232	<0.05	ENSR Data
09/13/05	MW-4	PCB-1242	<0.05	ENSR Data
09/13/05	MW-4	PCB-1248	<0.05	ENSR Data
09/13/05	MW-4	PCB-1254	<0.05	ENSR Data
09/13/05	MW-4	PCB-1260	<0.05	ENSR Data
09/14/05	MW-4	Total PCB[1]	<0.175	ENSR Data
09/14/05	MW-4A	PCB-1016	<0.05	ENSR Data
09/14/05	MW-4A	PCB-1221	<0.05	ENSR Data
09/14/05	MW-4A	PCB-1232	<0.05	ENSR Data
09/14/05	MW-4A	PCB-1242	1.80	ENSR Data
09/14/05	MW-4A	PCB-1248	<0.05	ENSR Data
09/14/05	MW-4A	PCB-1254	2.60	ENSR Data
09/14/05	MW-4A	PCB-1260	<0.05	ENSR Data
09/14/05	MW-4A	Total PCB[1]	4.53	ENSR Data

[1]Total PCBs were calculated as the sum of 7 aroclors. Non detects were included as half the detection limit.

F-3. Groundwater: PCB Congener Data

Date	Well ID	PCB Congener	Concentration (µg/L)	Source
09/14/05	MW-4B	PCB-1016	<0.05	ENSR Data
09/14/05	MW-4B	PCB-1221	<0.05	ENSR Data
09/14/05	MW-4B	PCB-1232	<0.05	ENSR Data
09/14/05	MW-4B	PCB-1242	1.90	ENSR Data
09/14/05	MW-4B	PCB-1248	<0.05	ENSR Data
09/14/05	MW-4B	PCB-1254	<0.05	ENSR Data
09/14/05	MW-4B	PCB-1260	<0.05	ENSR Data
09/14/05	MW-4B	Total PCB[1]	2.05	ENSR Data
09/15/05	MW-5	PCB-1016	<0.05	ENSR Data
09/15/05	MW-5	PCB-1221	<0.05	ENSR Data
09/15/05	MW-5	PCB-1232	<0.05	ENSR Data
09/15/05	MW-5	PCB-1242	<0.05	ENSR Data
09/15/05	MW-5	PCB-1248	<0.05	ENSR Data
09/15/05	MW-5	PCB-1254	0.12	ENSR Data
09/15/05	MW-5	PCB-1260	<0.05	ENSR Data
09/14/05	MW-5	Total PCB[1]	0.27	ENSR Data
09/15/05	MW-5 -EB	PCB-1016	<0.05	ENSR Data
09/15/05	MW-5 -EB	PCB-1221	<0.05	ENSR Data
09/15/05	MW-5 -EB	PCB-1232	<0.05	ENSR Data
09/15/05	MW-5 -EB	PCB-1242	0.15	ENSR Data
09/15/05	MW-5 -EB	PCB-1248	<0.05	ENSR Data
09/15/05	MW-5 -EB	PCB-1254	<0.05	ENSR Data
09/15/05	MW-5 -EB	PCB-1260	<0.05	ENSR Data
09/14/05	MW-5-EB	Total PCB[1]	0.30	ENSR Data
09/15/05	MW-5-REP	PCB-1016	<0.05	ENSR Data
09/15/05	MW-5-REP	PCB-1221	<0.05	ENSR Data
09/15/05	MW-5-REP	PCB-1232	<0.05	ENSR Data
09/15/05	MW-5-REP	PCB-1242	0.05	ENSR Data
09/15/05	MW-5-REP	PCB-1248	<0.05	ENSR Data
09/15/05	MW-5-REP	PCB-1254	0.07	ENSR Data
09/15/05	MW-5-REP	PCB-1260	<0.05	ENSR Data
09/14/05	MW-5-REP	Total PCB[1]	0.25	ENSR Data
09/13/05	MW-6	PCB-1016	2.40	ENSR Data
09/13/05	MW-6	PCB-1221	2.40	ENSR Data
09/13/05	MW-6	PCB-1232	2.40	ENSR Data
09/13/05	MW-6	PCB-1242	21.00	ENSR Data
09/13/05	MW-6	PCB-1248	2.40	ENSR Data
09/13/05	MW-6	PCB-1254	2.40	ENSR Data
09/13/05	MW-6	PCB-1260	2.40	ENSR Data
09/14/05	MW-6	Total PCB[1]	35.40	ENSR Data
09/13/05	MW-6A	PCB-1016	<0.05	ENSR Data
09/13/05	MW-6A	PCB-1221	<0.05	ENSR Data
09/13/05	MW-6A	PCB-1232	<0.05	ENSR Data
09/13/05	MW-6A	PCB-1242	<0.05	ENSR Data
09/13/05	MW-6A	PCB-1248	<0.05	ENSR Data
09/13/05	MW-6A	PCB-1254	2.20	ENSR Data
09/13/05	MW-6A	PCB-1260	<0.05	ENSR Data
09/14/05	MW-6A	Total PCB[1]	2.35	ENSR Data

[1]Total PCBs were calculated as the sum of 7 aroclors. Non detects were included as half the detection limit.

F-3. Groundwater: PCB Congener Data

Date	Well ID	PCB Congener	Concentration (µg/L)	Source
09/13/05	MW-7	PCB-1016	<0.05	ENSR Data
09/13/05	MW-7	PCB-1221	<0.05	ENSR Data
09/13/05	MW-7	PCB-1232	<0.05	ENSR Data
09/13/05	MW-7	PCB-1242	0.76	ENSR Data
09/13/05	MW-7	PCB-1248	<0.05	ENSR Data
09/13/05	MW-7	PCB-1254	<0.05	ENSR Data
09/13/05	MW-7	PCB-1260	<0.05	ENSR Data
09/14/05	MW-7	Total PCB[1]	1.06	ENSR Data
09/13/05	MW-7A	PCB-1016	<0.05	ENSR Data
09/13/05	MW-7A	PCB-1221	<0.05	ENSR Data
09/13/05	MW-7A	PCB-1232	<0.05	ENSR Data
09/13/05	MW-7A	PCB-1242	<0.05	ENSR Data
09/13/05	MW-7A	PCB-1248	<0.05	ENSR Data
09/13/05	MW-7A	PCB-1254	<0.05	ENSR Data
09/13/05	MW-7A	PCB-1260	<0.05	ENSR Data
09/14/05	MW-7A	Total PCB[1]	<0.175	ENSR Data
09/14/05	MW-8S	PCB-1016	<0.05	ENSR Data
09/14/05	MW-8S	PCB-1221	<0.05	ENSR Data
09/14/05	MW-8S	PCB-1232	<0.05	ENSR Data
09/14/05	MW-8S	PCB-1242	3.10	ENSR Data
09/14/05	MW-8S	PCB-1248	<0.05	ENSR Data
09/14/05	MW-8S	PCB-1254	1.20	ENSR Data
09/14/05	MW-8S	PCB-1260	<0.05	ENSR Data
09/14/05	MW-8S	Total PCB[1]	4.43	ENSR Data

[1]Total PCBs were calculated as the sum of 7 aroclors. Non detects were included as half the detection limit.

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
5/26/1998	MW-3	1,1,1,2-Tetrachloroethane	<25	BBL 1998
5/26/1998	MW-3A	1,1,1,2-Tetrachloroethane	<50	BBL 1998
5/26/1998	MW-7	1,1,1,2-Tetrachloroethane	<250	BBL 1998
5/26/1998	MW-7A	1,1,1,2-Tetrachloroethane	<5	BBL 1998
5/27/1998	MW-2	1,1,1,2-Tetrachloroethane	<25	BBL 1998
5/27/1998	MW-2A	1,1,1,2-Tetrachloroethane	<5	BBL 1998
5/27/1998	MW-4	1,1,1,2-Tetrachloroethane	<50	BBL 1998
5/27/1998	MW-4A	1,1,1,2-Tetrachloroethane	<5	BBL 1998
5/27/1998	MW-5	1,1,1,2-Tetrachloroethane	<5	BBL 1998
5/27/1998	MW-6	1,1,1,2-Tetrachloroethane	<250	BBL 1998
5/27/1998	MW-6A	1,1,1,2-Tetrachloroethane	<5	BBL 1998
5/27/1998	MW-8S	1,1,1,2-Tetrachloroethane	<5	BBL 1998
5/28/1998	MW-4B	1,1,1,2-Tetrachloroethane	<5	BBL 1998
5/26/1998	MW-3	1,1,1-Trichloroethane	<25	BBL 1998
5/26/1998	MW-3A	1,1,1-Trichloroethane	<50	BBL 1998
5/26/1998	MW-7	1,1,1-Trichloroethane	<250	BBL 1998
5/26/1998	MW-7A	1,1,1-Trichloroethane	<5	BBL 1998
5/27/1998	MW-2	1,1,1-Trichloroethane	<25	BBL 1998
5/27/1998	MW-2A	1,1,1-Trichloroethane	<5	BBL 1998
5/27/1998	MW-4	1,1,1-Trichloroethane	<50	BBL 1998
5/27/1998	MW-4A	1,1,1-Trichloroethane	<5	BBL 1998
5/27/1998	MW-5	1,1,1-Trichloroethane	<5	BBL 1998
5/27/1998	MW-6	1,1,1-Trichloroethane	<250	BBL 1998
5/27/1998	MW-6A	1,1,1-Trichloroethane	<5	BBL 1998
5/27/1998	MW-8S	1,1,1-Trichloroethane	<5	BBL 1998
5/28/1998	MW-4B	1,1,1-Trichloroethane	41	BBL 1998
5/26/1998	MW-3	1,1,2,2-Tetrachloroethane	<25	BBL 1998
5/26/1998	MW-3A	1,1,2,2-Tetrachloroethane	<50	BBL 1998
5/26/1998	MW-7	1,1,2,2-Tetrachloroethane	<250	BBL 1998
5/26/1998	MW-7A	1,1,2,2-Tetrachloroethane	<5	BBL 1998
5/27/1998	MW-2	1,1,2,2-Tetrachloroethane	<25	BBL 1998
5/27/1998	MW-2A	1,1,2,2-Tetrachloroethane	<5	BBL 1998
5/27/1998	MW-4	1,1,2,2-Tetrachloroethane	<50	BBL 1998
5/27/1998	MW-4A	1,1,2,2-Tetrachloroethane	<5	BBL 1998
5/27/1998	MW-5	1,1,2,2-Tetrachloroethane	<5	BBL 1998
5/27/1998	MW-6	1,1,2,2-Tetrachloroethane	<250	BBL 1998
5/27/1998	MW-6A	1,1,2,2-Tetrachloroethane	<5	BBL 1998
5/27/1998	MW-8S	1,1,2,2-Tetrachloroethane	<5	BBL 1998
5/28/1998	MW-4B	1,1,2,2-Tetrachloroethane	<5	BBL 1998
5/26/1998	MW-3	1,1,2-Trichloroethane	<25	BBL 1998
5/26/1998	MW-3A	1,1,2-Trichloroethane	<50	BBL 1998
5/26/1998	MW-7	1,1,2-Trichloroethane	<250	BBL 1998
5/26/1998	MW-7A	1,1,2-Trichloroethane	<5	BBL 1998
5/27/1998	MW-2	1,1,2-Trichloroethane	<25	BBL 1998
5/27/1998	MW-2A	1,1,2-Trichloroethane	<5	BBL 1998
5/27/1998	MW-4	1,1,2-Trichloroethane	<50	BBL 1998
5/27/1998	MW-4A	1,1,2-Trichloroethane	<5	BBL 1998
5/27/1998	MW-5	1,1,2-Trichloroethane	<5	BBL 1998
5/27/1998	MW-6	1,1,2-Trichloroethane	<250	BBL 1998

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
5/27/1998	MW-6A	1,1,2-Trichloroethane	<5	BBL 1998
5/27/1998	MW-8S	1,1,2-Trichloroethane	<5	BBL 1998
5/28/1998	MW-4B	1,1,2-Trichloroethane	<5	BBL 1998
5/26/1998	MW-3	1,1-Dichloroethane	<25	BBL 1998
5/26/1998	MW-3A	1,1-Dichloroethane	<50	BBL 1998
5/26/1998	MW-7	1,1-Dichloroethane	<250	BBL 1998
5/26/1998	MW-7A	1,1-Dichloroethane	<5	BBL 1998
5/27/1998	MW-2	1,1-Dichloroethane	<25	BBL 1998
5/27/1998	MW-2A	1,1-Dichloroethane	<5	BBL 1998
5/27/1998	MW-4	1,1-Dichloroethane	<50	BBL 1998
5/27/1998	MW-4A	1,1-Dichloroethane	<5	BBL 1998
5/27/1998	MW-5	1,1-Dichloroethane	<5	BBL 1998
5/27/1998	MW-6	1,1-Dichloroethane	<250	BBL 1998
5/27/1998	MW-6A	1,1-Dichloroethane	<5	BBL 1998
5/27/1998	MW-8S	1,1-Dichloroethane	<5	BBL 1998
5/28/1998	MW-4B	1,1-Dichloroethane	9	BBL 1998
5/26/1998	MW-3	1,1-Dichloroethylene	<25	BBL 1998
5/26/1998	MW-3A	1,1-Dichloroethylene	<50	BBL 1998
5/26/1998	MW-7	1,1-Dichloroethylene	<250	BBL 1998
5/26/1998	MW-7A	1,1-Dichloroethylene	<5	BBL 1998
5/27/1998	MW-2	1,1-Dichloroethylene	<25	BBL 1998
5/27/1998	MW-2A	1,1-Dichloroethylene	<5	BBL 1998
5/27/1998	MW-4	1,1-Dichloroethylene	<50	BBL 1998
5/27/1998	MW-4A	1,1-Dichloroethylene	<5	BBL 1998
5/27/1998	MW-5	1,1-Dichloroethylene	<5	BBL 1998
5/27/1998	MW-6	1,1-Dichloroethylene	<250	BBL 1998
5/27/1998	MW-6A	1,1-Dichloroethylene	<5	BBL 1998
5/27/1998	MW-8S	1,1-Dichloroethylene	<5	BBL 1998
5/28/1998	MW-4B	1,1-Dichloroethylene	37	BBL 1998
5/26/1998	MW-3	1,1-Dichloropropene	<25	BBL 1998
5/26/1998	MW-3A	1,1-Dichloropropene	<50	BBL 1998
5/26/1998	MW-7	1,1-Dichloropropene	<250	BBL 1998
5/26/1998	MW-7A	1,1-Dichloropropene	<5	BBL 1998
5/27/1998	MW-2	1,1-Dichloropropene	<25	BBL 1998
5/27/1998	MW-2A	1,1-Dichloropropene	<5	BBL 1998
5/27/1998	MW-4	1,1-Dichloropropene	<50	BBL 1998
5/27/1998	MW-4A	1,1-Dichloropropene	<5	BBL 1998
5/27/1998	MW-5	1,1-Dichloropropene	<5	BBL 1998
5/27/1998	MW-6	1,1-Dichloropropene	<250	BBL 1998
5/27/1998	MW-6A	1,1-Dichloropropene	<5	BBL 1998
5/27/1998	MW-8S	1,1-Dichloropropene	<5	BBL 1998
5/28/1998	MW-4B	1,1-Dichloropropene	<5	BBL 1998
5/26/1998	MW-3	1,2,3-trichlorbenzene	<25	BBL 1998
5/26/1998	MW-3A	1,2,3-trichlorbenzene	<50	BBL 1998
5/26/1998	MW-7	1,2,3-trichlorbenzene	<250	BBL 1998
5/26/1998	MW-7A	1,2,3-trichlorbenzene	<5	BBL 1998
5/27/1998	MW-2	1,2,3-trichlorbenzene	<25	BBL 1998
5/27/1998	MW-2A	1,2,3-trichlorbenzene	<5	BBL 1998
5/27/1998	MW-4	1,2,3-trichlorbenzene	<50	BBL 1998

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
5/27/1998	MW-4A	1,2,3-trichlorbenzene	<5	BBL 1998
5/27/1998	MW-5	1,2,3-trichlorbenzene	<5	BBL 1998
5/27/1998	MW-6	1,2,3-trichlorbenzene	<250	BBL 1998
5/27/1998	MW-6A	1,2,3-trichlorbenzene	<5	BBL 1998
5/27/1998	MW-8S	1,2,3-trichlorbenzene	<5	BBL 1998
5/28/1998	MW-4B	1,2,3-trichlorbenzene	<5	BBL 1998
5/26/1998	MW-3	1,2,3-Trichloropropane	<25	BBL 1998
5/26/1998	MW-3A	1,2,3-Trichloropropane	<50	BBL 1998
5/26/1998	MW-7	1,2,3-Trichloropropane	<250	BBL 1998
5/26/1998	MW-7A	1,2,3-Trichloropropane	<5	BBL 1998
5/27/1998	MW-2	1,2,3-Trichloropropane	<25	BBL 1998
5/27/1998	MW-2A	1,2,3-Trichloropropane	<5	BBL 1998
5/27/1998	MW-4	1,2,3-Trichloropropane	<50	BBL 1998
5/27/1998	MW-4A	1,2,3-Trichloropropane	<5	BBL 1998
5/27/1998	MW-5	1,2,3-Trichloropropane	<5	BBL 1998
5/27/1998	MW-6	1,2,3-Trichloropropane	<250	BBL 1998
5/27/1998	MW-6A	1,2,3-Trichloropropane	<5	BBL 1998
5/27/1998	MW-8S	1,2,3-Trichloropropane	<5	BBL 1998
5/28/1998	MW-4B	1,2,3-Trichloropropane	<5	BBL 1998
5/26/1998	MW-3	1,2,4-Trichlorobenzene	<25	BBL 1998
5/26/1998	MW-3A	1,2,4-Trichlorobenzene	<50	BBL 1998
5/26/1998	MW-7	1,2,4-Trichlorobenzene	<250	BBL 1998
5/26/1998	MW-7A	1,2,4-Trichlorobenzene	<5	BBL 1998
5/27/1998	MW-2	1,2,4-Trichlorobenzene	<25	BBL 1998
5/27/1998	MW-2A	1,2,4-Trichlorobenzene	<5	BBL 1998
5/27/1998	MW-4	1,2,4-Trichlorobenzene	<50	BBL 1998
5/27/1998	MW-4A	1,2,4-Trichlorobenzene	<5	BBL 1998
5/27/1998	MW-5	1,2,4-Trichlorobenzene	<5	BBL 1998
5/27/1998	MW-6	1,2,4-Trichlorobenzene	<250	BBL 1998
5/27/1998	MW-6A	1,2,4-Trichlorobenzene	<5	BBL 1998
5/27/1998	MW-8S	1,2,4-Trichlorobenzene	<5	BBL 1998
5/28/1998	MW-4B	1,2,4-Trichlorobenzene	5	BBL 1998
5/26/1998	MW-3	1,2,4-Trimethylbenzene	<25	BBL 1998
5/26/1998	MW-3A	1,2,4-Trimethylbenzene	<50	BBL 1998
5/26/1998	MW-7	1,2,4-Trimethylbenzene	<250	BBL 1998
5/26/1998	MW-7A	1,2,4-Trimethylbenzene	<5	BBL 1998
5/27/1998	MW-2	1,2,4-Trimethylbenzene	<25	BBL 1998
5/27/1998	MW-2A	1,2,4-Trimethylbenzene	<5	BBL 1998
5/27/1998	MW-4	1,2,4-Trimethylbenzene	<50	BBL 1998
5/27/1998	MW-4A	1,2,4-Trimethylbenzene	<5	BBL 1998
5/27/1998	MW-5	1,2,4-Trimethylbenzene	<5	BBL 1998
5/27/1998	MW-6	1,2,4-Trimethylbenzene	<250	BBL 1998
5/27/1998	MW-6A	1,2,4-Trimethylbenzene	<5	BBL 1998
5/27/1998	MW-8S	1,2,4-Trimethylbenzene	<5	BBL 1998
5/28/1998	MW-4B	1,2,4-Trimethylbenzene	<5	BBL 1998
5/26/1998	MW-3	1,2-dibromo-3-chloropropane	<25	BBL 1998
5/26/1998	MW-3A	1,2-dibromo-3-chloropropane	<50	BBL 1998
5/26/1998	MW-7	1,2-dibromo-3-chloropropane	<250	BBL 1998
5/26/1998	MW-7A	1,2-dibromo-3-chloropropane	<5	BBL 1998

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
5/27/1998	MW-2	1,2-dibromo-3-chloropropane	<25	BBL 1998
5/27/1998	MW-2A	1,2-dibromo-3-chloropropane	<5	BBL 1998
5/27/1998	MW-4	1,2-dibromo-3-chloropropane	<50	BBL 1998
5/27/1998	MW-4A	1,2-dibromo-3-chloropropane	<5	BBL 1998
5/27/1998	MW-5	1,2-dibromo-3-chloropropane	<5	BBL 1998
5/27/1998	MW-6	1,2-dibromo-3-chloropropane	<250	BBL 1998
5/27/1998	MW-6A	1,2-dibromo-3-chloropropane	<5	BBL 1998
5/27/1998	MW-8S	1,2-dibromo-3-chloropropane	<5	BBL 1998
5/28/1998	MW-4B	1,2-dibromo-3-chloropropane	<5	BBL 1998
5/26/1998	MW-3	1,2-Dibromoethane	<25	BBL 1998
5/26/1998	MW-3A	1,2-Dibromoethane	<50	BBL 1998
5/26/1998	MW-7	1,2-Dibromoethane	<250	BBL 1998
5/26/1998	MW-7A	1,2-Dibromoethane	<5	BBL 1998
5/27/1998	MW-2	1,2-Dibromoethane	<25	BBL 1998
5/27/1998	MW-2A	1,2-Dibromoethane	<5	BBL 1998
5/27/1998	MW-4	1,2-Dibromoethane	<50	BBL 1998
5/27/1998	MW-4A	1,2-Dibromoethane	<5	BBL 1998
5/27/1998	MW-5	1,2-Dibromoethane	<5	BBL 1998
5/27/1998	MW-6	1,2-Dibromoethane	<250	BBL 1998
5/27/1998	MW-6A	1,2-Dibromoethane	<5	BBL 1998
5/27/1998	MW-8S	1,2-Dibromoethane	<5	BBL 1998
5/28/1998	MW-4B	1,2-Dibromoethane	<5	BBL 1998
5/26/1998	MW-3	1,2-Dichlorobenzene	<25	BBL 1998
5/26/1998	MW-3A	1,2-Dichlorobenzene	<50	BBL 1998
5/26/1998	MW-7	1,2-Dichlorobenzene	<250	BBL 1998
5/26/1998	MW-7A	1,2-Dichlorobenzene	<5	BBL 1998
5/27/1998	MW-2	1,2-Dichlorobenzene	<25	BBL 1998
5/27/1998	MW-2A	1,2-Dichlorobenzene	<5	BBL 1998
5/27/1998	MW-4	1,2-Dichlorobenzene	<50	BBL 1998
5/27/1998	MW-4A	1,2-Dichlorobenzene	<5	BBL 1998
5/27/1998	MW-5	1,2-Dichlorobenzene	<5	BBL 1998
5/27/1998	MW-6	1,2-Dichlorobenzene	<250	BBL 1998
5/27/1998	MW-6A	1,2-Dichlorobenzene	<5	BBL 1998
5/27/1998	MW-8S	1,2-Dichlorobenzene	<5	BBL 1998
5/28/1998	MW-4B	1,2-Dichlorobenzene	<5	BBL 1998
5/26/1998	MW-3	1,2-Dichloroethane	<25	BBL 1998
5/26/1998	MW-3A	1,2-Dichloroethane	<50	BBL 1998
5/26/1998	MW-7	1,2-Dichloroethane	<250	BBL 1998
5/26/1998	MW-7A	1,2-Dichloroethane	<5	BBL 1998
5/27/1998	MW-2	1,2-Dichloroethane	<25	BBL 1998
5/27/1998	MW-2A	1,2-Dichloroethane	<5	BBL 1998
5/27/1998	MW-4	1,2-Dichloroethane	<50	BBL 1998
5/27/1998	MW-4A	1,2-Dichloroethane	<5	BBL 1998
5/27/1998	MW-5	1,2-Dichloroethane	<5	BBL 1998
5/27/1998	MW-6	1,2-Dichloroethane	<250	BBL 1998
5/27/1998	MW-6A	1,2-Dichloroethane	<5	BBL 1998
5/27/1998	MW-8S	1,2-Dichloroethane	<5	BBL 1998
5/28/1998	MW-4B	1,2-Dichloroethane	<5	BBL 1998
5/26/1998	MW-3	1,2-Dichloropropane	<25	BBL 1998

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
5/26/1998	MW-3A	1,2-Dichloropropane	<50	BBL 1998
5/26/1998	MW-7	1,2-Dichloropropane	<250	BBL 1998
5/26/1998	MW-7A	1,2-Dichloropropane	<5	BBL 1998
5/27/1998	MW-2	1,2-Dichloropropane	<25	BBL 1998
5/27/1998	MW-2A	1,2-Dichloropropane	<5	BBL 1998
5/27/1998	MW-4	1,2-Dichloropropane	<50	BBL 1998
5/27/1998	MW-4A	1,2-Dichloropropane	<5	BBL 1998
5/27/1998	MW-5	1,2-Dichloropropane	<5	BBL 1998
5/27/1998	MW-6	1,2-Dichloropropane	<250	BBL 1998
5/27/1998	MW-6A	1,2-Dichloropropane	<5	BBL 1998
5/27/1998	MW-8S	1,2-Dichloropropane	<5	BBL 1998
5/28/1998	MW-4B	1,2-Dichloropropane	<5	BBL 1998
5/26/1998	MW-3	1,3,5-Trimethylbenzene	<25	BBL 1998
5/26/1998	MW-3A	1,3,5-Trimethylbenzene	<50	BBL 1998
5/26/1998	MW-7	1,3,5-Trimethylbenzene	<250	BBL 1998
5/26/1998	MW-7A	1,3,5-Trimethylbenzene	<5	BBL 1998
5/27/1998	MW-2	1,3,5-Trimethylbenzene	<25	BBL 1998
5/27/1998	MW-2A	1,3,5-Trimethylbenzene	<5	BBL 1998
5/27/1998	MW-4	1,3,5-Trimethylbenzene	<50	BBL 1998
5/27/1998	MW-4A	1,3,5-Trimethylbenzene	<5	BBL 1998
5/27/1998	MW-5	1,3,5-Trimethylbenzene	<5	BBL 1998
5/27/1998	MW-6	1,3,5-Trimethylbenzene	<250	BBL 1998
5/27/1998	MW-6A	1,3,5-Trimethylbenzene	<5	BBL 1998
5/27/1998	MW-8S	1,3,5-Trimethylbenzene	<5	BBL 1998
5/28/1998	MW-4B	1,3,5-Trimethylbenzene	<5	BBL 1998
5/26/1998	MW-3	1,3-Dichlorobenzene	<25	BBL 1998
5/26/1998	MW-3A	1,3-Dichlorobenzene	<50	BBL 1998
5/26/1998	MW-7	1,3-Dichlorobenzene	<250	BBL 1998
5/26/1998	MW-7A	1,3-Dichlorobenzene	<5	BBL 1998
5/27/1998	MW-2	1,3-Dichlorobenzene	150	BBL 1998
5/27/1998	MW-2A	1,3-Dichlorobenzene	<5	BBL 1998
5/27/1998	MW-4	1,3-Dichlorobenzene	<50	BBL 1998
5/27/1998	MW-4A	1,3-Dichlorobenzene	<5	BBL 1998
5/27/1998	MW-5	1,3-Dichlorobenzene	<5	BBL 1998
5/27/1998	MW-6	1,3-Dichlorobenzene	<250	BBL 1998
5/27/1998	MW-6A	1,3-Dichlorobenzene	<5	BBL 1998
5/27/1998	MW-8S	1,3-Dichlorobenzene	<5	BBL 1998
5/28/1998	MW-4B	1,3-Dichlorobenzene	<5	BBL 1998
5/26/1998	MW-3	1,3-Dichloropropane	<25	BBL 1998
5/26/1998	MW-3A	1,3-Dichloropropane	<50	BBL 1998
5/26/1998	MW-7	1,3-Dichloropropane	<250	BBL 1998
5/26/1998	MW-7A	1,3-Dichloropropane	<5	BBL 1998
5/27/1998	MW-2	1,3-Dichloropropane	<25	BBL 1998
5/27/1998	MW-2A	1,3-Dichloropropane	<5	BBL 1998
5/27/1998	MW-4	1,3-Dichloropropane	<50	BBL 1998
5/27/1998	MW-4A	1,3-Dichloropropane	<5	BBL 1998
5/27/1998	MW-5	1,3-Dichloropropane	<5	BBL 1998
5/27/1998	MW-6	1,3-Dichloropropane	<250	BBL 1998
5/27/1998	MW-6A	1,3-Dichloropropane	<5	BBL 1998

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
5/27/1998	MW-8S	1,3-Dichloropropane	<5	BBL 1998
5/28/1998	MW-4B	1,3-Dichloropropane	<5	BBL 1998
5/26/1998	MW-3	1,4-Dichlorobenzene	35	BBL 1998
5/26/1998	MW-3A	1,4-Dichlorobenzene	<50	BBL 1998
5/26/1998	MW-7	1,4-Dichlorobenzene	<250	BBL 1998
5/26/1998	MW-7A	1,4-Dichlorobenzene	<5	BBL 1998
5/27/1998	MW-2	1,4-Dichlorobenzene	220	BBL 1998
5/27/1998	MW-2A	1,4-Dichlorobenzene	7	BBL 1998
5/27/1998	MW-4	1,4-Dichlorobenzene	110	BBL 1998
5/27/1998	MW-4A	1,4-Dichlorobenzene	<5	BBL 1998
5/27/1998	MW-5	1,4-Dichlorobenzene	<5	BBL 1998
5/27/1998	MW-6	1,4-Dichlorobenzene	<250	BBL 1998
5/27/1998	MW-6A	1,4-Dichlorobenzene	<5	BBL 1998
5/27/1998	MW-8S	1,4-Dichlorobenzene	<5	BBL 1998
5/28/1998	MW-4B	1,4-Dichlorobenzene	<5	BBL 1998
5/26/1998	MW-3	2,2-Dichloropropane	<25	BBL 1998
5/26/1998	MW-3A	2,2-Dichloropropane	<50	BBL 1998
5/26/1998	MW-7	2,2-Dichloropropane	<250	BBL 1998
5/26/1998	MW-7A	2,2-Dichloropropane	<5	BBL 1998
5/27/1998	MW-2	2,2-Dichloropropane	<25	BBL 1998
5/27/1998	MW-2A	2,2-Dichloropropane	<5	BBL 1998
5/27/1998	MW-4	2,2-Dichloropropane	<50	BBL 1998
5/27/1998	MW-4A	2,2-Dichloropropane	<5	BBL 1998
5/27/1998	MW-5	2,2-Dichloropropane	<5	BBL 1998
5/27/1998	MW-6	2,2-Dichloropropane	<250	BBL 1998
5/27/1998	MW-6A	2,2-Dichloropropane	<5	BBL 1998
5/27/1998	MW-8S	2,2-Dichloropropane	<5	BBL 1998
5/28/1998	MW-4B	2,2-Dichloropropane	<5	BBL 1998
5/26/1998	MW-3	2-Chlorotoluene	<25	BBL 1998
5/26/1998	MW-3A	2-Chlorotoluene	<50	BBL 1998
5/26/1998	MW-7	2-Chlorotoluene	<250	BBL 1998
5/26/1998	MW-7A	2-Chlorotoluene	<5	BBL 1998
5/27/1998	MW-2	2-Chlorotoluene	<25	BBL 1998
5/27/1998	MW-2A	2-Chlorotoluene	<5	BBL 1998
5/27/1998	MW-4	2-Chlorotoluene	<50	BBL 1998
5/27/1998	MW-4A	2-Chlorotoluene	<5	BBL 1998
5/27/1998	MW-5	2-Chlorotoluene	<5	BBL 1998
5/27/1998	MW-6	2-Chlorotoluene	<250	BBL 1998
5/27/1998	MW-6A	2-Chlorotoluene	<5	BBL 1998
5/27/1998	MW-8S	2-Chlorotoluene	<5	BBL 1998
5/28/1998	MW-4B	2-Chlorotoluene	<5	BBL 1998
5/26/1998	MW-3	4-Chlorotoluene	<25	BBL 1998
5/26/1998	MW-3A	4-Chlorotoluene	<50	BBL 1998
5/26/1998	MW-7	4-Chlorotoluene	<250	BBL 1998
5/26/1998	MW-7A	4-Chlorotoluene	<5	BBL 1998
5/27/1998	MW-2	4-Chlorotoluene	<25	BBL 1998
5/27/1998	MW-2A	4-Chlorotoluene	<5	BBL 1998
5/27/1998	MW-4	4-Chlorotoluene	<50	BBL 1998
5/27/1998	MW-4A	4-Chlorotoluene	<5	BBL 1998

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
5/27/1998	MW-5	4-Chlorotoluene	<5	BBL 1998
5/27/1998	MW-6	4-Chlorotoluene	<250	BBL 1998
5/27/1998	MW-6A	4-Chlorotoluene	<5	BBL 1998
5/27/1998	MW-8S	4-Chlorotoluene	<5	BBL 1998
5/28/1998	MW-4B	4-Chlorotoluene	<5	BBL 1998
5/26/1998	MW-3	Benzene	<25	BBL 1998
5/26/1998	MW-3A	Benzene	60	BBL 1998
5/26/1998	MW-7	Benzene	<250	BBL 1998
5/26/1998	MW-7A	Benzene	35	BBL 1998
5/27/1998	MW-2	Benzene	<25	BBL 1998
5/27/1998	MW-2A	Benzene	<5	BBL 1998
5/27/1998	MW-4	Benzene	<50	BBL 1998
5/27/1998	MW-4A	Benzene	<5	BBL 1998
5/27/1998	MW-5	Benzene	<5	BBL 1998
5/27/1998	MW-6	Benzene	<250	BBL 1998
5/27/1998	MW-6A	Benzene	<5	BBL 1998
5/27/1998	MW-8S	Benzene	<5	BBL 1998
5/28/1998	MW-4B	Benzene	<5	BBL 1998
5/26/1998	MW-3	Bromobenzene	<25	BBL 1998
5/26/1998	MW-3A	Bromobenzene	<50	BBL 1998
5/26/1998	MW-7	Bromobenzene	<250	BBL 1998
5/26/1998	MW-7A	Bromobenzene	<5	BBL 1998
5/27/1998	MW-2	Bromobenzene	<25	BBL 1998
5/27/1998	MW-2A	Bromobenzene	<5	BBL 1998
5/27/1998	MW-4	Bromobenzene	<50	BBL 1998
5/27/1998	MW-4A	Bromobenzene	<5	BBL 1998
5/27/1998	MW-5	Bromobenzene	<5	BBL 1998
5/27/1998	MW-6	Bromobenzene	<250	BBL 1998
5/27/1998	MW-6A	Bromobenzene	<5	BBL 1998
5/27/1998	MW-8S	Bromobenzene	<5	BBL 1998
5/28/1998	MW-4B	Bromobenzene	<5	BBL 1998
5/26/1998	MW-3	Bromochloromethane	<25	BBL 1998
5/26/1998	MW-3A	Bromochloromethane	<50	BBL 1998
5/26/1998	MW-7	Bromochloromethane	<250	BBL 1998
5/26/1998	MW-7A	Bromochloromethane	<5	BBL 1998
5/27/1998	MW-2	Bromochloromethane	<25	BBL 1998
5/27/1998	MW-2A	Bromochloromethane	<5	BBL 1998
5/27/1998	MW-4	Bromochloromethane	<50	BBL 1998
5/27/1998	MW-4A	Bromochloromethane	<5	BBL 1998
5/27/1998	MW-5	Bromochloromethane	<5	BBL 1998
5/27/1998	MW-6	Bromochloromethane	<250	BBL 1998
5/27/1998	MW-6A	Bromochloromethane	<5	BBL 1998
5/27/1998	MW-8S	Bromochloromethane	<5	BBL 1998
5/28/1998	MW-4B	Bromochloromethane	<5	BBL 1998
5/26/1998	MW-3	Bromodichloromethane	<25	BBL 1998
5/26/1998	MW-3A	Bromodichloromethane	<50	BBL 1998
5/26/1998	MW-7	Bromodichloromethane	<250	BBL 1998
5/26/1998	MW-7A	Bromodichloromethane	<5	BBL 1998
5/27/1998	MW-2	Bromodichloromethane	<25	BBL 1998

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
5/27/1998	MW-2A	Bromodichloromethane	<5	BBL 1998
5/27/1998	MW-4	Bromodichloromethane	<50	BBL 1998
5/27/1998	MW-4A	Bromodichloromethane	<5	BBL 1998
5/27/1998	MW-5	Bromodichloromethane	<5	BBL 1998
5/27/1998	MW-6	Bromodichloromethane	<250	BBL 1998
5/27/1998	MW-6A	Bromodichloromethane	<5	BBL 1998
5/27/1998	MW-8S	Bromodichloromethane	<5	BBL 1998
5/28/1998	MW-4B	Bromodichloromethane	<5	BBL 1998
5/26/1998	MW-3	Bromoform	<25	BBL 1998
5/26/1998	MW-3A	Bromoform	<50	BBL 1998
5/26/1998	MW-7	Bromoform	<250	BBL 1998
5/26/1998	MW-7A	Bromoform	<5	BBL 1998
5/27/1998	MW-2	Bromoform	<25	BBL 1998
5/27/1998	MW-2A	Bromoform	<5	BBL 1998
5/27/1998	MW-4	Bromoform	<50	BBL 1998
5/27/1998	MW-4A	Bromoform	<5	BBL 1998
5/27/1998	MW-5	Bromoform	<5	BBL 1998
5/27/1998	MW-6	Bromoform	<250	BBL 1998
5/27/1998	MW-6A	Bromoform	<5	BBL 1998
5/27/1998	MW-8S	Bromoform	<5	BBL 1998
5/28/1998	MW-4B	Bromoform	<5	BBL 1998
5/26/1998	MW-3	Bromomethane	<25	BBL 1998
5/26/1998	MW-3A	Bromomethane	<50	BBL 1998
5/26/1998	MW-7	Bromomethane	<250	BBL 1998
5/26/1998	MW-7A	Bromomethane	<5	BBL 1998
5/27/1998	MW-2	Bromomethane	<25	BBL 1998
5/27/1998	MW-2A	Bromomethane	<5	BBL 1998
5/27/1998	MW-4	Bromomethane	<50	BBL 1998
5/27/1998	MW-4A	Bromomethane	<5	BBL 1998
5/27/1998	MW-5	Bromomethane	<5	BBL 1998
5/27/1998	MW-6	Bromomethane	<250	BBL 1998
5/27/1998	MW-6A	Bromomethane	<5	BBL 1998
5/27/1998	MW-8S	Bromomethane	<5	BBL 1998
5/28/1998	MW-4B	Bromomethane	<5	BBL 1998
5/26/1998	MW-3	Carbon Tetrachloride	<25	BBL 1998
5/26/1998	MW-3A	Carbon Tetrachloride	<50	BBL 1998
5/26/1998	MW-7	Carbon Tetrachloride	<250	BBL 1998
5/26/1998	MW-7A	Carbon Tetrachloride	<5	BBL 1998
5/27/1998	MW-2	Carbon Tetrachloride	<25	BBL 1998
5/27/1998	MW-2A	Carbon Tetrachloride	<5	BBL 1998
5/27/1998	MW-4	Carbon Tetrachloride	<50	BBL 1998
5/27/1998	MW-4A	Carbon Tetrachloride	<5	BBL 1998
5/27/1998	MW-5	Carbon Tetrachloride	<5	BBL 1998
5/27/1998	MW-6	Carbon Tetrachloride	<250	BBL 1998
5/27/1998	MW-6A	Carbon Tetrachloride	<5	BBL 1998
5/27/1998	MW-8S	Carbon Tetrachloride	<5	BBL 1998
5/28/1998	MW-4B	Carbon Tetrachloride	<5	BBL 1998
5/26/1998	MW-3	Chlorobenzene	47	BBL 1998
5/26/1998	MW-3A	Chlorobenzene	1000	BBL 1998

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
5/26/1998	MW-7	Chlorobenzene	<250	BBL 1998
5/26/1998	MW-7A	Chlorobenzene	<5	BBL 1998
5/27/1998	MW-2	Chlorobenzene	570	BBL 1998
5/27/1998	MW-2A	Chlorobenzene	19	BBL 1998
5/27/1998	MW-4	Chlorobenzene	55	BBL 1998
5/27/1998	MW-4A	Chlorobenzene	<5	BBL 1998
5/27/1998	MW-5	Chlorobenzene	<5	BBL 1998
5/27/1998	MW-6	Chlorobenzene	<250	BBL 1998
5/27/1998	MW-6A	Chlorobenzene	<5	BBL 1998
5/27/1998	MW-8S	Chlorobenzene	<5	BBL 1998
5/28/1998	MW-4B	Chlorobenzene	<5	BBL 1998
5/26/1998	MW-3	Chloroethane	<25	BBL 1998
5/26/1998	MW-3A	Chloroethane	<50	BBL 1998
5/26/1998	MW-7	Chloroethane	<250	BBL 1998
5/26/1998	MW-7A	Chloroethane	<5	BBL 1998
5/27/1998	MW-2	Chloroethane	<25	BBL 1998
5/27/1998	MW-2A	Chloroethane	<5	BBL 1998
5/27/1998	MW-4	Chloroethane	<50	BBL 1998
5/27/1998	MW-4A	Chloroethane	<5	BBL 1998
5/27/1998	MW-5	Chloroethane	<5	BBL 1998
5/27/1998	MW-6	Chloroethane	<250	BBL 1998
5/27/1998	MW-6A	Chloroethane	<5	BBL 1998
5/27/1998	MW-8S	Chloroethane	<5	BBL 1998
5/28/1998	MW-4B	Chloroethane	<5	BBL 1998
5/26/1998	MW-3	Chloroform	<25	BBL 1998
5/26/1998	MW-3A	Chloroform	<50	BBL 1998
5/26/1998	MW-7	Chloroform	<250	BBL 1998
5/26/1998	MW-7A	Chloroform	<5	BBL 1998
5/27/1998	MW-2	Chloroform	<25	BBL 1998
5/27/1998	MW-2A	Chloroform	<5	BBL 1998
5/27/1998	MW-4	Chloroform	<50	BBL 1998
5/27/1998	MW-4A	Chloroform	<5	BBL 1998
5/27/1998	MW-5	Chloroform	<5	BBL 1998
5/27/1998	MW-6	Chloroform	<250	BBL 1998
5/27/1998	MW-6A	Chloroform	<5	BBL 1998
5/27/1998	MW-8S	Chloroform	<5	BBL 1998
5/28/1998	MW-4B	Chloroform	9	BBL 1998
5/26/1998	MW-3	Chloromethane	<25	BBL 1998
5/26/1998	MW-3A	Chloromethane	<50	BBL 1998
5/26/1998	MW-7	Chloromethane	<250	BBL 1998
5/26/1998	MW-7A	Chloromethane	<5	BBL 1998
5/27/1998	MW-2	Chloromethane	<25	BBL 1998
5/27/1998	MW-2A	Chloromethane	<5	BBL 1998
5/27/1998	MW-4	Chloromethane	<50	BBL 1998
5/27/1998	MW-4A	Chloromethane	<5	BBL 1998
5/27/1998	MW-5	Chloromethane	<5	BBL 1998
5/27/1998	MW-6	Chloromethane	<250	BBL 1998
5/27/1998	MW-6A	Chloromethane	<5	BBL 1998
5/27/1998	MW-8S	Chloromethane	<5	BBL 1998

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
5/28/1998	MW-4B	Chloromethane	<5	BBL 1998
5/26/1998	MW-3	cis-1,2-Dichloroethylene	98	BBL 1998
5/26/1998	MW-3A	cis-1,2-Dichloroethylene	<50	BBL 1998
5/26/1998	MW-7	cis-1,2-Dichloroethylene	2900	BBL 1998
5/26/1998	MW-7A	cis-1,2-Dichloroethylene	<5	BBL 1998
5/27/1998	MW-2	cis-1,2-Dichloroethylene	<25	BBL 1998
5/27/1998	MW-2A	cis-1,2-Dichloroethylene	<5	BBL 1998
5/27/1998	MW-4	cis-1,2-Dichloroethylene	850	BBL 1998
5/27/1998	MW-4A	cis-1,2-Dichloroethylene	9	BBL 1998
5/27/1998	MW-5	cis-1,2-Dichloroethylene	<5	BBL 1998
5/27/1998	MW-6	cis-1,2-Dichloroethylene	890	BBL 1998
5/27/1998	MW-6A	cis-1,2-Dichloroethylene	95	BBL 1998
5/27/1998	MW-8S	cis-1,2-Dichloroethylene	29	BBL 1998
5/28/1998	MW-4B	cis-1,2-Dichloroethylene	470	BBL 1998
5/26/1998	MW-3	Dibromochloromethane	<25	BBL 1998
5/26/1998	MW-3A	Dibromochloromethane	<50	BBL 1998
5/26/1998	MW-7	Dibromochloromethane	<250	BBL 1998
5/26/1998	MW-7A	Dibromochloromethane	<5	BBL 1998
5/27/1998	MW-2	Dibromochloromethane	<25	BBL 1998
5/27/1998	MW-2A	Dibromochloromethane	<5	BBL 1998
5/27/1998	MW-4	Dibromochloromethane	<50	BBL 1998
5/27/1998	MW-4A	Dibromochloromethane	<5	BBL 1998
5/27/1998	MW-5	Dibromochloromethane	<5	BBL 1998
5/27/1998	MW-6	Dibromochloromethane	<250	BBL 1998
5/27/1998	MW-6A	Dibromochloromethane	<5	BBL 1998
5/27/1998	MW-8S	Dibromochloromethane	<5	BBL 1998
5/28/1998	MW-4B	Dibromochloromethane	<5	BBL 1998
5/26/1998	MW-3	Dibromomethane	<25	BBL 1998
5/26/1998	MW-3A	Dibromomethane	<50	BBL 1998
5/26/1998	MW-7	Dibromomethane	<250	BBL 1998
5/26/1998	MW-7A	Dibromomethane	<5	BBL 1998
5/27/1998	MW-2	Dibromomethane	<25	BBL 1998
5/27/1998	MW-2A	Dibromomethane	<5	BBL 1998
5/27/1998	MW-4	Dibromomethane	<50	BBL 1998
5/27/1998	MW-4A	Dibromomethane	<5	BBL 1998
5/27/1998	MW-5	Dibromomethane	<5	BBL 1998
5/27/1998	MW-6	Dibromomethane	<250	BBL 1998
5/27/1998	MW-6A	Dibromomethane	<5	BBL 1998
5/27/1998	MW-8S	Dibromomethane	<5	BBL 1998
5/28/1998	MW-4B	Dibromomethane	<5	BBL 1998
5/26/1998	MW-3	Dichlorodifluoromethane	<25	BBL 1998
5/26/1998	MW-3A	Dichlorodifluoromethane	<50	BBL 1998
5/26/1998	MW-7	Dichlorodifluoromethane	<250	BBL 1998
5/26/1998	MW-7A	Dichlorodifluoromethane	<5	BBL 1998
5/27/1998	MW-2	Dichlorodifluoromethane	<25	BBL 1998
5/27/1998	MW-2A	Dichlorodifluoromethane	<5	BBL 1998
5/27/1998	MW-4	Dichlorodifluoromethane	<50	BBL 1998
5/27/1998	MW-4A	Dichlorodifluoromethane	<5	BBL 1998
5/27/1998	MW-5	Dichlorodifluoromethane	<5	BBL 1998

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
5/27/1998	MW-6	Dichlorodifluoromethane	<250	BBL 1998
5/27/1998	MW-6A	Dichlorodifluoromethane	<5	BBL 1998
5/27/1998	MW-8S	Dichlorodifluoromethane	<5	BBL 1998
5/28/1998	MW-4B	Dichlorodifluoromethane	<5	BBL 1998
5/26/1998	MW-3	Ethylbenzene	150	BBL 1998
5/26/1998	MW-3A	Ethylbenzene	95	BBL 1998
5/26/1998	MW-7	Ethylbenzene	<250	BBL 1998
5/26/1998	MW-7A	Ethylbenzene	<5	BBL 1998
5/27/1998	MW-2	Ethylbenzene	<25	BBL 1998
5/27/1998	MW-2A	Ethylbenzene	<5	BBL 1998
5/27/1998	MW-4	Ethylbenzene	<50	BBL 1998
5/27/1998	MW-4A	Ethylbenzene	<5	BBL 1998
5/27/1998	MW-5	Ethylbenzene	<5	BBL 1998
5/27/1998	MW-6	Ethylbenzene	<250	BBL 1998
5/27/1998	MW-6A	Ethylbenzene	<5	BBL 1998
5/27/1998	MW-8S	Ethylbenzene	<5	BBL 1998
5/28/1998	MW-4B	Ethylbenzene	<5	BBL 1998
5/26/1998	MW-3	Hexachlorobutadiene	<25	BBL 1998
5/26/1998	MW-3A	Hexachlorobutadiene	<50	BBL 1998
5/26/1998	MW-7	Hexachlorobutadiene	<250	BBL 1998
5/26/1998	MW-7A	Hexachlorobutadiene	<5	BBL 1998
5/27/1998	MW-2	Hexachlorobutadiene	<25	BBL 1998
5/27/1998	MW-2A	Hexachlorobutadiene	<5	BBL 1998
5/27/1998	MW-4	Hexachlorobutadiene	<50	BBL 1998
5/27/1998	MW-4A	Hexachlorobutadiene	<5	BBL 1998
5/27/1998	MW-5	Hexachlorobutadiene	<5	BBL 1998
5/27/1998	MW-6	Hexachlorobutadiene	<250	BBL 1998
5/27/1998	MW-6A	Hexachlorobutadiene	<5	BBL 1998
5/27/1998	MW-8S	Hexachlorobutadiene	<5	BBL 1998
5/28/1998	MW-4B	Hexachlorobutadiene	<5	BBL 1998
5/26/1998	MW-3	Isopropylbenzene	<25	BBL 1998
5/26/1998	MW-3A	Isopropylbenzene	<50	BBL 1998
5/26/1998	MW-7	Isopropylbenzene	<250	BBL 1998
5/26/1998	MW-7A	Isopropylbenzene	<5	BBL 1998
5/27/1998	MW-2	Isopropylbenzene	<25	BBL 1998
5/27/1998	MW-2A	Isopropylbenzene	<5	BBL 1998
5/27/1998	MW-4	Isopropylbenzene	<50	BBL 1998
5/27/1998	MW-4A	Isopropylbenzene	<5	BBL 1998
5/27/1998	MW-5	Isopropylbenzene	<5	BBL 1998
5/27/1998	MW-6	Isopropylbenzene	<250	BBL 1998
5/27/1998	MW-6A	Isopropylbenzene	<5	BBL 1998
5/27/1998	MW-8S	Isopropylbenzene	<5	BBL 1998
5/28/1998	MW-4B	Isopropylbenzene	<5	BBL 1998
5/26/1998	MW-3	m,p-Xylene	<25	BBL 1998
5/26/1998	MW-3A	m,p-Xylene	<50	BBL 1998
5/26/1998	MW-7	m,p-Xylene	<250	BBL 1998
5/26/1998	MW-7A	m,p-Xylene	<5	BBL 1998
5/27/1998	MW-2	m,p-Xylene	<25	BBL 1998
5/27/1998	MW-2A	m,p-Xylene	<5	BBL 1998

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
5/27/1998	MW-4	m,p-Xylene	<50	BBL 1998
5/27/1998	MW-4A	m,p-Xylene	<5	BBL 1998
5/27/1998	MW-5	m,p-Xylene	<5	BBL 1998
5/27/1998	MW-6	m,p-Xylene	<250	BBL 1998
5/27/1998	MW-6A	m,p-Xylene	<5	BBL 1998
5/27/1998	MW-8S	m,p-Xylene	<5	BBL 1998
5/28/1998	MW-4B	m,p-Xylene	<5	BBL 1998
5/26/1998	MW-3	Methylene Chloride	<25	BBL 1998
5/26/1998	MW-3A	Methylene Chloride	<50	BBL 1998
5/26/1998	MW-7	Methylene Chloride	<250	BBL 1998
5/26/1998	MW-7A	Methylene Chloride	<5	BBL 1998
5/27/1998	MW-2	Methylene Chloride	<25	BBL 1998
5/27/1998	MW-2A	Methylene Chloride	<5	BBL 1998
5/27/1998	MW-4	Methylene Chloride	<50	BBL 1998
5/27/1998	MW-4A	Methylene Chloride	<5	BBL 1998
5/27/1998	MW-5	Methylene Chloride	<5	BBL 1998
5/27/1998	MW-6	Methylene Chloride	<250	BBL 1998
5/27/1998	MW-6A	Methylene Chloride	<5	BBL 1998
5/27/1998	MW-8S	Methylene Chloride	<5	BBL 1998
5/28/1998	MW-4B	Methylene Chloride	12	BBL 1998
5/26/1998	MW-3	Napthalene	<25	BBL 1998
5/26/1998	MW-3A	Napthalene	<50	BBL 1998
5/26/1998	MW-7	Napthalene	<250	BBL 1998
5/26/1998	MW-7A	Napthalene	<5	BBL 1998
5/27/1998	MW-2	Napthalene	<25	BBL 1998
5/27/1998	MW-2A	Napthalene	18	BBL 1998
5/27/1998	MW-4	Napthalene	<50	BBL 1998
5/27/1998	MW-4A	Napthalene	<5	BBL 1998
5/27/1998	MW-5	Napthalene	<5	BBL 1998
5/27/1998	MW-6	Napthalene	<250	BBL 1998
5/27/1998	MW-6A	Napthalene	<5	BBL 1998
5/27/1998	MW-8S	Napthalene	<5	BBL 1998
5/28/1998	MW-4B	Napthalene	<5	BBL 1998
5/26/1998	MW-3	n-Butylbenzene	<25	BBL 1998
5/26/1998	MW-3A	n-Butylbenzene	<50	BBL 1998
5/26/1998	MW-7	n-Butylbenzene	<250	BBL 1998
5/26/1998	MW-7A	n-Butylbenzene	<5	BBL 1998
5/27/1998	MW-2	n-Butylbenzene	<25	BBL 1998
5/27/1998	MW-2A	n-Butylbenzene	<5	BBL 1998
5/27/1998	MW-4	n-Butylbenzene	<50	BBL 1998
5/27/1998	MW-4A	n-Butylbenzene	<5	BBL 1998
5/27/1998	MW-5	n-Butylbenzene	<5	BBL 1998
5/27/1998	MW-6	n-Butylbenzene	<250	BBL 1998
5/27/1998	MW-6A	n-Butylbenzene	<5	BBL 1998
5/27/1998	MW-8S	n-Butylbenzene	<5	BBL 1998
5/28/1998	MW-4B	n-Butylbenzene	<5	BBL 1998
5/26/1998	MW-3	n-Propylbenzene	<25	BBL 1998
5/26/1998	MW-3A	n-Propylbenzene	<50	BBL 1998
5/26/1998	MW-7	n-Propylbenzene	<250	BBL 1998

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
5/26/1998	MW-7A	n-Propylbenzene	<5	BBL 1998
5/27/1998	MW-2	n-Propylbenzene	<25	BBL 1998
5/27/1998	MW-2A	n-Propylbenzene	<5	BBL 1998
5/27/1998	MW-4	n-Propylbenzene	<50	BBL 1998
5/27/1998	MW-4A	n-Propylbenzene	<5	BBL 1998
5/27/1998	MW-5	n-Propylbenzene	<5	BBL 1998
5/27/1998	MW-6	n-Propylbenzene	<250	BBL 1998
5/27/1998	MW-6A	n-Propylbenzene	<5	BBL 1998
5/27/1998	MW-8S	n-Propylbenzene	<5	BBL 1998
5/28/1998	MW-4B	n-Propylbenzene	<5	BBL 1998
5/26/1998	MW-3	o-Xylene	<25	BBL 1998
5/26/1998	MW-3A	o-Xylene	<50	BBL 1998
5/26/1998	MW-7	o-Xylene	<250	BBL 1998
5/26/1998	MW-7A	o-Xylene	<5	BBL 1998
5/27/1998	MW-2	o-Xylene	<25	BBL 1998
5/27/1998	MW-2A	o-Xylene	<5	BBL 1998
5/27/1998	MW-4	o-Xylene	<50	BBL 1998
5/27/1998	MW-4A	o-Xylene	<5	BBL 1998
5/27/1998	MW-5	o-Xylene	<5	BBL 1998
5/27/1998	MW-6	o-Xylene	<250	BBL 1998
5/27/1998	MW-6A	o-Xylene	<5	BBL 1998
5/27/1998	MW-8S	o-Xylene	<5	BBL 1998
5/28/1998	MW-4B	o-Xylene	<5	BBL 1998
5/26/1998	MW-3	p-Isopropyltoluene	<25	BBL 1998
5/26/1998	MW-3A	p-Isopropyltoluene	<50	BBL 1998
5/26/1998	MW-7	p-Isopropyltoluene	<250	BBL 1998
5/26/1998	MW-7A	p-Isopropyltoluene	<5	BBL 1998
5/27/1998	MW-2	p-Isopropyltoluene	<25	BBL 1998
5/27/1998	MW-2A	p-Isopropyltoluene	<5	BBL 1998
5/27/1998	MW-4	p-Isopropyltoluene	<50	BBL 1998
5/27/1998	MW-4A	p-Isopropyltoluene	<5	BBL 1998
5/27/1998	MW-5	p-Isopropyltoluene	<5	BBL 1998
5/27/1998	MW-6	p-Isopropyltoluene	<250	BBL 1998
5/27/1998	MW-6A	p-Isopropyltoluene	<5	BBL 1998
5/27/1998	MW-8S	p-Isopropyltoluene	<5	BBL 1998
5/28/1998	MW-4B	p-Isopropyltoluene	<5	BBL 1998
5/26/1998	MW-3	sec-Butylbenzene	<25	BBL 1998
5/26/1998	MW-3A	sec-Butylbenzene	<50	BBL 1998
5/26/1998	MW-7	sec-Butylbenzene	<250	BBL 1998
5/26/1998	MW-7A	sec-Butylbenzene	<5	BBL 1998
5/27/1998	MW-2	sec-Butylbenzene	<25	BBL 1998
5/27/1998	MW-2A	sec-Butylbenzene	<5	BBL 1998
5/27/1998	MW-4	sec-Butylbenzene	<50	BBL 1998
5/27/1998	MW-4A	sec-Butylbenzene	<5	BBL 1998
5/27/1998	MW-5	sec-Butylbenzene	<5	BBL 1998
5/27/1998	MW-6	sec-Butylbenzene	<250	BBL 1998
5/27/1998	MW-6A	sec-Butylbenzene	<5	BBL 1998
5/27/1998	MW-8S	sec-Butylbenzene	<5	BBL 1998
5/28/1998	MW-4B	sec-Butylbenzene	<5	BBL 1998

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
5/26/1998	MW-3	Styrene	<25	BBL 1998
5/26/1998	MW-3A	Styrene	<50	BBL 1998
5/26/1998	MW-7	Styrene	<250	BBL 1998
5/26/1998	MW-7A	Styrene	<5	BBL 1998
5/27/1998	MW-2	Styrene	<25	BBL 1998
5/27/1998	MW-2A	Styrene	<5	BBL 1998
5/27/1998	MW-4	Styrene	<50	BBL 1998
5/27/1998	MW-4A	Styrene	<5	BBL 1998
5/27/1998	MW-5	Styrene	<5	BBL 1998
5/27/1998	MW-6	Styrene	<250	BBL 1998
5/27/1998	MW-6A	Styrene	<5	BBL 1998
5/27/1998	MW-8S	Styrene	<5	BBL 1998
5/28/1998	MW-4B	Styrene	<5	BBL 1998
5/26/1998	MW-3	tert-Butylbenzene	<25	BBL 1998
5/26/1998	MW-3A	tert-Butylbenzene	<50	BBL 1998
5/26/1998	MW-7	tert-Butylbenzene	<250	BBL 1998
5/26/1998	MW-7A	tert-Butylbenzene	<5	BBL 1998
5/27/1998	MW-2	tert-Butylbenzene	<25	BBL 1998
5/27/1998	MW-2A	tert-Butylbenzene	<5	BBL 1998
5/27/1998	MW-4	tert-Butylbenzene	<50	BBL 1998
5/27/1998	MW-4A	tert-Butylbenzene	<5	BBL 1998
5/27/1998	MW-5	tert-Butylbenzene	<5	BBL 1998
5/27/1998	MW-6	tert-Butylbenzene	<250	BBL 1998
5/27/1998	MW-6A	tert-Butylbenzene	<5	BBL 1998
5/27/1998	MW-8S	tert-Butylbenzene	<5	BBL 1998
5/28/1998	MW-4B	tert-Butylbenzene	<5	BBL 1998
5/26/1998	MW-3	Tetrachloroethylene	<25	BBL 1998
5/26/1998	MW-3A	Tetrachloroethylene	<50	BBL 1998
5/26/1998	MW-7	Tetrachloroethylene	<250	BBL 1998
5/26/1998	MW-7A	Tetrachloroethylene	<5	BBL 1998
5/27/1998	MW-2	Tetrachloroethylene	<25	BBL 1998
5/27/1998	MW-2A	Tetrachloroethylene	<5	BBL 1998
5/27/1998	MW-4	Tetrachloroethylene	<50	BBL 1998
5/27/1998	MW-4A	Tetrachloroethylene	<5	BBL 1998
5/27/1998	MW-5	Tetrachloroethylene	<5	BBL 1998
5/27/1998	MW-6	Tetrachloroethylene	<250	BBL 1998
5/27/1998	MW-6A	Tetrachloroethylene	17	BBL 1998
5/27/1998	MW-8S	Tetrachloroethylene	<5	BBL 1998
5/28/1998	MW-4B	Tetrachloroethylene	33	BBL 1998
5/26/1998	MW-3	Toluene	<25	BBL 1998
5/26/1998	MW-3A	Toluene	<50	BBL 1998
5/26/1998	MW-7	Toluene	<250	BBL 1998
5/26/1998	MW-7A	Toluene	<5	BBL 1998
5/27/1998	MW-2	Toluene	<25	BBL 1998
5/27/1998	MW-2A	Toluene	<5	BBL 1998
5/27/1998	MW-4	Toluene	<50	BBL 1998
5/27/1998	MW-4A	Toluene	<5	BBL 1998
5/27/1998	MW-5	Toluene	<5	BBL 1998
5/27/1998	MW-6	Toluene	<250	BBL 1998

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
5/27/1998	MW-6A	Toluene	<5	BBL 1998
5/27/1998	MW-8S	Toluene	<5	BBL 1998
5/28/1998	MW-4B	Toluene	<5	BBL 1998
5/26/1998	MW-3	trans-1,2-Dichloroethylene	<25	BBL 1998
5/26/1998	MW-3A	trans-1,2-Dichloroethylene	<50	BBL 1998
5/26/1998	MW-7	trans-1,2-Dichloroethylene	<250	BBL 1998
5/26/1998	MW-7A	trans-1,2-Dichloroethylene	<5	BBL 1998
5/27/1998	MW-2	trans-1,2-Dichloroethylene	<25	BBL 1998
5/27/1998	MW-2A	trans-1,2-Dichloroethylene	<5	BBL 1998
5/27/1998	MW-4	trans-1,2-Dichloroethylene	<50	BBL 1998
5/27/1998	MW-4A	trans-1,2-Dichloroethylene	<5	BBL 1998
5/27/1998	MW-5	trans-1,2-Dichloroethylene	<5	BBL 1998
5/27/1998	MW-6	trans-1,2-Dichloroethylene	<250	BBL 1998
5/27/1998	MW-6A	trans-1,2-Dichloroethylene	<5	BBL 1998
5/27/1998	MW-8S	trans-1,2-Dichloroethylene	<5	BBL 1998
5/28/1998	MW-4B	trans-1,2-Dichloroethylene	<5	BBL 1998
5/26/1998	MW-3	Trichloroethylene	<25	BBL 1998
5/26/1998	MW-3A	Trichloroethylene	<50	BBL 1998
5/26/1998	MW-7	Trichloroethylene	8900	BBL 1998
5/26/1998	MW-7A	Trichloroethylene	<5	BBL 1998
5/27/1998	MW-2	Trichloroethylene	<25	BBL 1998
5/27/1998	MW-2A	Trichloroethylene	<5	BBL 1998
5/27/1998	MW-4	Trichloroethylene	<50	BBL 1998
5/27/1998	MW-4A	Trichloroethylene	10	BBL 1998
5/27/1998	MW-5	Trichloroethylene	<5	BBL 1998
5/27/1998	MW-6	Trichloroethylene	5000	BBL 1998
5/27/1998	MW-6A	Trichloroethylene	<5	BBL 1998
5/27/1998	MW-8S	Trichloroethylene	<5	BBL 1998
5/28/1998	MW-4B	Trichloroethylene	3600	BBL 1998
5/26/1998	MW-3	Trichloroflouromethane	<25	BBL 1998
5/26/1998	MW-3A	Trichloroflouromethane	<50	BBL 1998
5/26/1998	MW-7	Trichloroflouromethane	<250	BBL 1998
5/26/1998	MW-7A	Trichloroflouromethane	<5	BBL 1998
5/27/1998	MW-2	Trichloroflouromethane	<25	BBL 1998
5/27/1998	MW-2A	Trichloroflouromethane	<5	BBL 1998
5/27/1998	MW-4	Trichloroflouromethane	<50	BBL 1998
5/27/1998	MW-4A	Trichloroflouromethane	<5	BBL 1998
5/27/1998	MW-5	Trichloroflouromethane	<5	BBL 1998
5/27/1998	MW-6	Trichloroflouromethane	<250	BBL 1998
5/27/1998	MW-6A	Trichloroflouromethane	<5	BBL 1998
5/27/1998	MW-8S	Trichloroflouromethane	<5	BBL 1998
5/28/1998	MW-4B	Trichloroflouromethane	<5	BBL 1998
5/26/1998	MW-3	Vinyl Chloride	270	BBL 1998
5/26/1998	MW-3A	Vinyl Chloride	76	BBL 1998
5/26/1998	MW-7	Vinyl Chloride	520	BBL 1998
5/26/1998	MW-7A	Vinyl Chloride	<5	BBL 1998
5/27/1998	MW-2	Vinyl Chloride	<25	BBL 1998
5/27/1998	MW-2A	Vinyl Chloride	<5	BBL 1998
5/27/1998	MW-4	Vinyl Chloride	490	BBL 1998

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
5/27/1998	MW-4A	Vinyl Chloride	<5	BBL 1998
5/27/1998	MW-5	Vinyl Chloride	<5	BBL 1998
5/27/1998	MW-6	Vinyl Chloride	<250	BBL 1998
5/27/1998	MW-6A	Vinyl Chloride	<5	BBL 1998
5/27/1998	MW-8S	Vinyl Chloride	<5	BBL 1998
5/28/1998	MW-4B	Vinyl Chloride	55	BBL 1998
9/14/05	MW-2	1,1,1,2-TETRACHLOROETHANE	<5	ENSR Data
9/14/05	MW-2A	1,1,1,2-TETRACHLOROETHANE	<5	ENSR Data
9/14/05	MW-3	1,1,1,2-TETRACHLOROETHANE	<5	ENSR Data
9/14/05	MW-3A	1,1,1,2-TETRACHLOROETHANE	<5	ENSR Data
9/13/05	MW-4	1,1,1,2-TETRACHLOROETHANE	<5	ENSR Data
9/14/05	MW-4A	1,1,1,2-TETRACHLOROETHANE	<5	ENSR Data
9/14/05	MW-4B	1,1,1,2-TETRACHLOROETHANE	<5	ENSR Data
9/15/05	MW-5	1,1,1,2-TETRACHLOROETHANE	<5	ENSR Data
9/15/05	MW-5 -EB	1,1,1,2-TETRACHLOROETHANE	<5	ENSR Data
9/15/05	MW-5-REP	1,1,1,2-TETRACHLOROETHANE	<5	ENSR Data
9/15/05	MW-5-TB	1,1,1,2-TETRACHLOROETHANE	<5	ENSR Data
9/13/05	MW-6	1,1,1,2-TETRACHLOROETHANE	<5	ENSR Data
9/13/05	MW-6A	1,1,1,2-TETRACHLOROETHANE	<5	ENSR Data
9/13/05	MW-7	1,1,1,2-TETRACHLOROETHANE	<5	ENSR Data
9/13/05	MW-7A	1,1,1,2-TETRACHLOROETHANE	<5	ENSR Data
9/14/05	MW-8S	1,1,1,2-TETRACHLOROETHANE	<5	ENSR Data
9/14/05	MW-2	1,1,1-TRICHLOROETHANE	<5	ENSR Data
9/14/05	MW-2A	1,1,1-TRICHLOROETHANE	<5	ENSR Data
9/14/05	MW-3	1,1,1-TRICHLOROETHANE	<5	ENSR Data
9/14/05	MW-3A	1,1,1-TRICHLOROETHANE	<5	ENSR Data
9/13/05	MW-4	1,1,1-TRICHLOROETHANE	<5	ENSR Data
9/14/05	MW-4A	1,1,1-TRICHLOROETHANE	<5	ENSR Data
9/14/05	MW-4B	1,1,1-TRICHLOROETHANE	36	ENSR Data
9/15/05	MW-5	1,1,1-TRICHLOROETHANE	<5	ENSR Data
9/15/05	MW-5 -EB	1,1,1-TRICHLOROETHANE	<5	ENSR Data
9/15/05	MW-5-REP	1,1,1-TRICHLOROETHANE	<5	ENSR Data
9/15/05	MW-5-TB	1,1,1-TRICHLOROETHANE	<5	ENSR Data
9/13/05	MW-6	1,1,1-TRICHLOROETHANE	19	ENSR Data
9/13/05	MW-6A	1,1,1-TRICHLOROETHANE	<5	ENSR Data
9/13/05	MW-7	1,1,1-TRICHLOROETHANE	<5	ENSR Data
9/13/05	MW-7A	1,1,1-TRICHLOROETHANE	<5	ENSR Data
9/14/05	MW-8S	1,1,1-TRICHLOROETHANE	<5	ENSR Data
9/14/05	MW-2	1,1,2,2-TETRACHLOROETHANE	<5	ENSR Data
9/14/05	MW-2A	1,1,2,2-TETRACHLOROETHANE	<5	ENSR Data
9/14/05	MW-3	1,1,2,2-TETRACHLOROETHANE	<5	ENSR Data
9/14/05	MW-3A	1,1,2,2-TETRACHLOROETHANE	<5	ENSR Data
9/13/05	MW-4	1,1,2,2-TETRACHLOROETHANE	<5	ENSR Data
9/14/05	MW-4A	1,1,2,2-TETRACHLOROETHANE	<5	ENSR Data
9/14/05	MW-4B	1,1,2,2-TETRACHLOROETHANE	<5	ENSR Data
9/15/05	MW-5	1,1,2,2-TETRACHLOROETHANE	<5	ENSR Data
9/15/05	MW-5 -EB	1,1,2,2-TETRACHLOROETHANE	<5	ENSR Data
9/15/05	MW-5-REP	1,1,2,2-TETRACHLOROETHANE	<5	ENSR Data
9/15/05	MW-5-TB	1,1,2,2-TETRACHLOROETHANE	<5	ENSR Data

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
9/13/05	MW-6	1,1,2,2-TETRACHLOROETHANE	<5	ENSR Data
9/13/05	MW-6A	1,1,2,2-TETRACHLOROETHANE	<5	ENSR Data
9/13/05	MW-7	1,1,2,2-TETRACHLOROETHANE	<5	ENSR Data
9/13/05	MW-7A	1,1,2,2-TETRACHLOROETHANE	<5	ENSR Data
9/14/05	MW-8S	1,1,2,2-TETRACHLOROETHANE	<5	ENSR Data
9/14/05	MW-2	1,1,2-TRICHLOROETHANE	<5	ENSR Data
9/14/05	MW-2A	1,1,2-TRICHLOROETHANE	<5	ENSR Data
9/14/05	MW-3	1,1,2-TRICHLOROETHANE	<5	ENSR Data
9/14/05	MW-3A	1,1,2-TRICHLOROETHANE	<5	ENSR Data
9/13/05	MW-4	1,1,2-TRICHLOROETHANE	<5	ENSR Data
9/14/05	MW-4A	1,1,2-TRICHLOROETHANE	<5	ENSR Data
9/14/05	MW-4B	1,1,2-TRICHLOROETHANE	2*	ENSR Data
9/15/05	MW-5	1,1,2-TRICHLOROETHANE	<5	ENSR Data
9/15/05	MW-5 -EB	1,1,2-TRICHLOROETHANE	<5	ENSR Data
9/15/05	MW-5-REP	1,1,2-TRICHLOROETHANE	<5	ENSR Data
9/15/05	MW-5-TB	1,1,2-TRICHLOROETHANE	<5	ENSR Data
9/13/05	MW-6	1,1,2-TRICHLOROETHANE	1*	ENSR Data
9/13/05	MW-6A	1,1,2-TRICHLOROETHANE	<5	ENSR Data
9/13/05	MW-7	1,1,2-TRICHLOROETHANE	15	ENSR Data
9/13/05	MW-7A	1,1,2-TRICHLOROETHANE	<5	ENSR Data
9/14/05	MW-8S	1,1,2-TRICHLOROETHANE	<5	ENSR Data
9/14/05	MW-2	1,1-DICHLOROETHANE	0.9*	ENSR Data
9/14/05	MW-2A	1,1-DICHLOROETHANE	0.5*	ENSR Data
9/14/05	MW-3	1,1-DICHLOROETHANE	<5	ENSR Data
9/14/05	MW-3A	1,1-DICHLOROETHANE	<5	ENSR Data
9/13/05	MW-4	1,1-DICHLOROETHANE	0.5*	ENSR Data
9/14/05	MW-4A	1,1-DICHLOROETHANE	<5	ENSR Data
9/14/05	MW-4B	1,1-DICHLOROETHANE	6	ENSR Data
9/15/05	MW-5	1,1-DICHLOROETHANE	<5	ENSR Data
9/15/05	MW-5 -EB	1,1-DICHLOROETHANE	<5	ENSR Data
9/15/05	MW-5-REP	1,1-DICHLOROETHANE	<5	ENSR Data
9/15/05	MW-5-TB	1,1-DICHLOROETHANE	<5	ENSR Data
9/13/05	MW-6	1,1-DICHLOROETHANE	3*	ENSR Data
9/13/05	MW-6A	1,1-DICHLOROETHANE	<5	ENSR Data
9/13/05	MW-7	1,1-DICHLOROETHANE	6	ENSR Data
9/13/05	MW-7A	1,1-DICHLOROETHANE	<5	ENSR Data
9/14/05	MW-8S	1,1-DICHLOROETHANE	63	ENSR Data
9/14/05	MW-2	1,1-DICHLOROETHENE	<1	ENSR Data
9/14/05	MW-2A	1,1-DICHLOROETHENE	<1	ENSR Data
9/14/05	MW-3	1,1-DICHLOROETHENE	<1	ENSR Data
9/14/05	MW-3A	1,1-DICHLOROETHENE	<1	ENSR Data
9/13/05	MW-4	1,1-DICHLOROETHENE	0.9*	ENSR Data
9/14/05	MW-4A	1,1-DICHLOROETHENE	<1	ENSR Data
9/14/05	MW-4B	1,1-DICHLOROETHENE	20	ENSR Data
9/15/05	MW-5	1,1-DICHLOROETHENE	<1	ENSR Data
9/15/05	MW-5 -EB	1,1-DICHLOROETHENE	<1	ENSR Data
9/15/05	MW-5-REP	1,1-DICHLOROETHENE	<1	ENSR Data
9/15/05	MW-5-TB	1,1-DICHLOROETHENE	<1	ENSR Data
9/13/05	MW-6	1,1-DICHLOROETHENE	5	ENSR Data

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
9/13/05	MW-6A	1,1-DICHLOROETHENE	<1	ENSR Data
9/13/05	MW-7	1,1-DICHLOROETHENE	18	ENSR Data
9/13/05	MW-7A	1,1-DICHLOROETHENE	<1	ENSR Data
9/14/05	MW-8S	1,1-DICHLOROETHENE	63	ENSR Data
9/14/05	MW-2	1,1-DICHLOROPROPENE	<5	ENSR Data
9/14/05	MW-2A	1,1-DICHLOROPROPENE	<5	ENSR Data
9/14/05	MW-3	1,1-DICHLOROPROPENE	<5	ENSR Data
9/14/05	MW-3A	1,1-DICHLOROPROPENE	<5	ENSR Data
9/13/05	MW-4	1,1-DICHLOROPROPENE	<5	ENSR Data
9/14/05	MW-4A	1,1-DICHLOROPROPENE	<5	ENSR Data
9/14/05	MW-4B	1,1-DICHLOROPROPENE	<5	ENSR Data
9/15/05	MW-5	1,1-DICHLOROPROPENE	<5	ENSR Data
9/15/05	MW-5 -EB	1,1-DICHLOROPROPENE	<5	ENSR Data
9/15/05	MW-5-REP	1,1-DICHLOROPROPENE	<5	ENSR Data
9/15/05	MW-5-TB	1,1-DICHLOROPROPENE	<5	ENSR Data
9/13/05	MW-6	1,1-DICHLOROPROPENE	<5	ENSR Data
9/13/05	MW-6A	1,1-DICHLOROPROPENE	<5	ENSR Data
9/13/05	MW-7	1,1-DICHLOROPROPENE	<5	ENSR Data
9/13/05	MW-7A	1,1-DICHLOROPROPENE	<5	ENSR Data
9/14/05	MW-8S	1,1-DICHLOROPROPENE	<5	ENSR Data
9/14/05	MW-2	1,2,3-TRICHLOROBENZENE	<5	ENSR Data
9/14/05	MW-2A	1,2,3-TRICHLOROBENZENE	<5	ENSR Data
9/14/05	MW-3	1,2,3-TRICHLOROBENZENE	<5	ENSR Data
9/14/05	MW-3A	1,2,3-TRICHLOROBENZENE	<5	ENSR Data
9/13/05	MW-4	1,2,3-TRICHLOROBENZENE	<5	ENSR Data
9/14/05	MW-4A	1,2,3-TRICHLOROBENZENE	<5	ENSR Data
9/14/05	MW-4B	1,2,3-TRICHLOROBENZENE	<5	ENSR Data
9/15/05	MW-5	1,2,3-TRICHLOROBENZENE	<5	ENSR Data
9/15/05	MW-5 -EB	1,2,3-TRICHLOROBENZENE	<5	ENSR Data
9/15/05	MW-5-REP	1,2,3-TRICHLOROBENZENE	<5	ENSR Data
9/15/05	MW-5-TB	1,2,3-TRICHLOROBENZENE	<5	ENSR Data
9/13/05	MW-6	1,2,3-TRICHLOROBENZENE	12	ENSR Data
9/13/05	MW-6A	1,2,3-TRICHLOROBENZENE	<5	ENSR Data
9/13/05	MW-7	1,2,3-TRICHLOROBENZENE	9	ENSR Data
9/13/05	MW-7A	1,2,3-TRICHLOROBENZENE	<5	ENSR Data
9/14/05	MW-8S	1,2,3-TRICHLOROBENZENE	<5	ENSR Data
9/14/05	MW-2	1,2,3-TRICHLOROPROPANE	<5	ENSR Data
9/14/05	MW-2A	1,2,3-TRICHLOROPROPANE	<5	ENSR Data
9/14/05	MW-3	1,2,3-TRICHLOROPROPANE	<5	ENSR Data
9/14/05	MW-3A	1,2,3-TRICHLOROPROPANE	<5	ENSR Data
9/13/05	MW-4	1,2,3-TRICHLOROPROPANE	<5	ENSR Data
9/14/05	MW-4A	1,2,3-TRICHLOROPROPANE	<5	ENSR Data
9/14/05	MW-4B	1,2,3-TRICHLOROPROPANE	<5	ENSR Data
9/15/05	MW-5	1,2,3-TRICHLOROPROPANE	<5	ENSR Data
9/15/05	MW-5 -EB	1,2,3-TRICHLOROPROPANE	<5	ENSR Data
9/15/05	MW-5-REP	1,2,3-TRICHLOROPROPANE	<5	ENSR Data
9/15/05	MW-5-TB	1,2,3-TRICHLOROPROPANE	<5	ENSR Data
9/13/05	MW-6	1,2,3-TRICHLOROPROPANE	<5	ENSR Data
9/13/05	MW-6A	1,2,3-TRICHLOROPROPANE	<5	ENSR Data

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
9/13/05	MW-7	1,2,3-TRICHLOROPROPANE	<5	ENSR Data
9/13/05	MW-7A	1,2,3-TRICHLOROPROPANE	<5	ENSR Data
9/14/05	MW-8S	1,2,3-TRICHLOROPROPANE	<5	ENSR Data
9/14/05	MW-2	1,2,4-TRICHLOROBENZENE	<5	ENSR Data
9/14/05	MW-2A	1,2,4-TRICHLOROBENZENE	<5	ENSR Data
9/14/05	MW-3	1,2,4-TRICHLOROBENZENE	<5	ENSR Data
9/14/05	MW-3A	1,2,4-TRICHLOROBENZENE	<5	ENSR Data
9/13/05	MW-4	1,2,4-TRICHLOROBENZENE	2*	ENSR Data
9/14/05	MW-4A	1,2,4-TRICHLOROBENZENE	<5	ENSR Data
9/14/05	MW-4B	1,2,4-TRICHLOROBENZENE	7	ENSR Data
9/15/05	MW-5	1,2,4-TRICHLOROBENZENE	<5	ENSR Data
9/15/05	MW-5 -EB	1,2,4-TRICHLOROBENZENE	<5	ENSR Data
9/15/05	MW-5-REP	1,2,4-TRICHLOROBENZENE	<5	ENSR Data
9/15/05	MW-5-TB	1,2,4-TRICHLOROBENZENE	<5	ENSR Data
9/13/05	MW-6	1,2,4-TRICHLOROBENZENE	41	ENSR Data
9/13/05	MW-6A	1,2,4-TRICHLOROBENZENE	<5	ENSR Data
9/13/05	MW-7	1,2,4-TRICHLOROBENZENE	52	ENSR Data
9/13/05	MW-7A	1,2,4-TRICHLOROBENZENE	<5	ENSR Data
9/14/05	MW-8S	1,2,4-TRICHLOROBENZENE	<5	ENSR Data
9/14/05	MW-2	1,2,4-TRIMETHYLBENZENE	0.4*	ENSR Data
9/14/05	MW-2A	1,2,4-TRIMETHYLBENZENE	<5	ENSR Data
9/14/05	MW-3	1,2,4-TRIMETHYLBENZENE	0.3*	ENSR Data
9/14/05	MW-3A	1,2,4-TRIMETHYLBENZENE	0.3*	ENSR Data
9/13/05	MW-4	1,2,4-TRIMETHYLBENZENE	<5	ENSR Data
9/14/05	MW-4A	1,2,4-TRIMETHYLBENZENE	<5	ENSR Data
9/14/05	MW-4B	1,2,4-TRIMETHYLBENZENE	<5	ENSR Data
9/15/05	MW-5	1,2,4-TRIMETHYLBENZENE	<5	ENSR Data
9/15/05	MW-5 -EB	1,2,4-TRIMETHYLBENZENE	<5	ENSR Data
9/15/05	MW-5-REP	1,2,4-TRIMETHYLBENZENE	<5	ENSR Data
9/15/05	MW-5-TB	1,2,4-TRIMETHYLBENZENE	<5	ENSR Data
9/13/05	MW-6	1,2,4-TRIMETHYLBENZENE	<5	ENSR Data
9/13/05	MW-6A	1,2,4-TRIMETHYLBENZENE	<5	ENSR Data
9/13/05	MW-7	1,2,4-TRIMETHYLBENZENE	<5	ENSR Data
9/13/05	MW-7A	1,2,4-TRIMETHYLBENZENE	<5	ENSR Data
9/14/05	MW-8S	1,2,4-TRIMETHYLBENZENE	<5	ENSR Data
9/14/05	MW-2	1,2-DIBROMO-3-CHLOROPROPANE	<5	ENSR Data
9/14/05	MW-2A	1,2-DIBROMO-3-CHLOROPROPANE	<5	ENSR Data
9/14/05	MW-3	1,2-DIBROMO-3-CHLOROPROPANE	<5	ENSR Data
9/14/05	MW-3A	1,2-DIBROMO-3-CHLOROPROPANE	<5	ENSR Data
9/13/05	MW-4	1,2-DIBROMO-3-CHLOROPROPANE	<5	ENSR Data
9/14/05	MW-4A	1,2-DIBROMO-3-CHLOROPROPANE	<5	ENSR Data
9/14/05	MW-4B	1,2-DIBROMO-3-CHLOROPROPANE	<5	ENSR Data
9/15/05	MW-5	1,2-DIBROMO-3-CHLOROPROPANE	<5	ENSR Data
9/15/05	MW-5 -EB	1,2-DIBROMO-3-CHLOROPROPANE	<5	ENSR Data
9/15/05	MW-5-REP	1,2-DIBROMO-3-CHLOROPROPANE	<5	ENSR Data
9/15/05	MW-5-TB	1,2-DIBROMO-3-CHLOROPROPANE	<5	ENSR Data
9/13/05	MW-6	1,2-DIBROMO-3-CHLOROPROPANE	<5	ENSR Data
9/13/05	MW-6A	1,2-DIBROMO-3-CHLOROPROPANE	<5	ENSR Data
9/13/05	MW-7	1,2-DIBROMO-3-CHLOROPROPANE	<5	ENSR Data

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
9/13/05	MW-7A	1,2-DIBROMO-3-CHLOROPROPANE	<5	ENSR Data
9/14/05	MW-8S	1,2-DIBROMO-3-CHLOROPROPANE	<5	ENSR Data
9/14/05	MW-2	1,2-DIBROMOETHANE	<5	ENSR Data
9/14/05	MW-2A	1,2-DIBROMOETHANE	<5	ENSR Data
9/14/05	MW-3	1,2-DIBROMOETHANE	<5	ENSR Data
9/14/05	MW-3A	1,2-DIBROMOETHANE	<5	ENSR Data
9/13/05	MW-4	1,2-DIBROMOETHANE	<5	ENSR Data
9/14/05	MW-4A	1,2-DIBROMOETHANE	<5	ENSR Data
9/14/05	MW-4B	1,2-DIBROMOETHANE	<5	ENSR Data
9/15/05	MW-5	1,2-DIBROMOETHANE	<5	ENSR Data
9/15/05	MW-5 -EB	1,2-DIBROMOETHANE	<5	ENSR Data
9/15/05	MW-5-REP	1,2-DIBROMOETHANE	<5	ENSR Data
9/15/05	MW-5-TB	1,2-DIBROMOETHANE	<5	ENSR Data
9/13/05	MW-6	1,2-DIBROMOETHANE	<5	ENSR Data
9/13/05	MW-6A	1,2-DIBROMOETHANE	<5	ENSR Data
9/13/05	MW-7	1,2-DIBROMOETHANE	<5	ENSR Data
9/13/05	MW-7A	1,2-DIBROMOETHANE	<5	ENSR Data
9/14/05	MW-8S	1,2-DIBROMOETHANE	<5	ENSR Data
9/14/05	MW-2	1,2-DICHLOROBENZENE	9	ENSR Data
9/14/05	MW-2A	1,2-DICHLOROBENZENE	0.9*	ENSR Data
9/14/05	MW-3	1,2-DICHLOROBENZENE	0.6*	ENSR Data
9/14/05	MW-3A	1,2-DICHLOROBENZENE	0.7*	ENSR Data
9/13/05	MW-4	1,2-DICHLOROBENZENE	10	ENSR Data
9/14/05	MW-4A	1,2-DICHLOROBENZENE	<5	ENSR Data
9/14/05	MW-4B	1,2-DICHLOROBENZENE	0.9*	ENSR Data
9/15/05	MW-5	1,2-DICHLOROBENZENE	<5	ENSR Data
9/15/05	MW-5 -EB	1,2-DICHLOROBENZENE	<5	ENSR Data
9/15/05	MW-5-REP	1,2-DICHLOROBENZENE	<5	ENSR Data
9/15/05	MW-5-TB	1,2-DICHLOROBENZENE	<5	ENSR Data
9/13/05	MW-6	1,2-DICHLOROBENZENE	0.3*	ENSR Data
9/13/05	MW-6A	1,2-DICHLOROBENZENE	<5	ENSR Data
9/13/05	MW-7	1,2-DICHLOROBENZENE	2*	ENSR Data
9/13/05	MW-7A	1,2-DICHLOROBENZENE	<5	ENSR Data
9/14/05	MW-8S	1,2-DICHLOROBENZENE	0.3*	ENSR Data
9/14/05	MW-2	1,2-DICHLOROETHANE	<5	ENSR Data
9/14/05	MW-2A	1,2-DICHLOROETHANE	<5	ENSR Data
9/14/05	MW-3	1,2-DICHLOROETHANE	<5	ENSR Data
9/14/05	MW-3A	1,2-DICHLOROETHANE	<5	ENSR Data
9/13/05	MW-4	1,2-DICHLOROETHANE	<5	ENSR Data
9/14/05	MW-4A	1,2-DICHLOROETHANE	<5	ENSR Data
9/14/05	MW-4B	1,2-DICHLOROETHANE	4*	ENSR Data
9/15/05	MW-5	1,2-DICHLOROETHANE	<5	ENSR Data
9/15/05	MW-5 -EB	1,2-DICHLOROETHANE	<5	ENSR Data
9/15/05	MW-5-REP	1,2-DICHLOROETHANE	<5	ENSR Data
9/15/05	MW-5-TB	1,2-DICHLOROETHANE	<5	ENSR Data
9/13/05	MW-6	1,2-DICHLOROETHANE	<5	ENSR Data
9/13/05	MW-6A	1,2-DICHLOROETHANE	<5	ENSR Data
9/13/05	MW-7	1,2-DICHLOROETHANE	<5	ENSR Data
9/13/05	MW-7A	1,2-DICHLOROETHANE	<5	ENSR Data

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
9/14/05	MW-8S	1,2-DICHLOROETHANE	0.3*	ENSR Data
9/14/05	MW-2	1,2-DICHLOROETHANE-D4	111	ENSR Data
9/14/05	MW-2A	1,2-DICHLOROETHANE-D4	118	ENSR Data
9/14/05	MW-3	1,2-DICHLOROETHANE-D4	113	ENSR Data
9/14/05	MW-3A	1,2-DICHLOROETHANE-D4	114	ENSR Data
9/13/05	MW-4	1,2-DICHLOROETHANE-D4	114	ENSR Data
9/14/05	MW-4A	1,2-DICHLOROETHANE-D4	85	ENSR Data
9/14/05	MW-4B	1,2-DICHLOROETHANE-D4	89	ENSR Data
9/15/05	MW-5	1,2-DICHLOROETHANE-D4	124	ENSR Data
9/15/05	MW-5 -EB	1,2-DICHLOROETHANE-D4	96	ENSR Data
9/15/05	MW-5-REP	1,2-DICHLOROETHANE-D4	107	ENSR Data
9/15/05	MW-5-TB	1,2-DICHLOROETHANE-D4	96	ENSR Data
9/13/05	MW-6	1,2-DICHLOROETHANE-D4	115	ENSR Data
9/13/05	MW-6A	1,2-DICHLOROETHANE-D4	119	ENSR Data
9/13/05	MW-7	1,2-DICHLOROETHANE-D4	115	ENSR Data
9/13/05	MW-7A	1,2-DICHLOROETHANE-D4	118	ENSR Data
9/14/05	MW-8S	1,2-DICHLOROETHANE-D4	102	ENSR Data
9/14/05	MW-2	1,2-DICHLOROPROPANE	<5	ENSR Data
9/14/05	MW-2A	1,2-DICHLOROPROPANE	<5	ENSR Data
9/14/05	MW-3	1,2-DICHLOROPROPANE	<5	ENSR Data
9/14/05	MW-3A	1,2-DICHLOROPROPANE	<5	ENSR Data
9/13/05	MW-4	1,2-DICHLOROPROPANE	<5	ENSR Data
9/14/05	MW-4A	1,2-DICHLOROPROPANE	<5	ENSR Data
9/14/05	MW-4B	1,2-DICHLOROPROPANE	<5	ENSR Data
9/15/05	MW-5	1,2-DICHLOROPROPANE	<5	ENSR Data
9/15/05	MW-5 -EB	1,2-DICHLOROPROPANE	<5	ENSR Data
9/15/05	MW-5-REP	1,2-DICHLOROPROPANE	<5	ENSR Data
9/15/05	MW-5-TB	1,2-DICHLOROPROPANE	<5	ENSR Data
9/13/05	MW-6	1,2-DICHLOROPROPANE	<5	ENSR Data
9/13/05	MW-6A	1,2-DICHLOROPROPANE	<5	ENSR Data
9/13/05	MW-7	1,2-DICHLOROPROPANE	<5	ENSR Data
9/13/05	MW-7A	1,2-DICHLOROPROPANE	<5	ENSR Data
9/14/05	MW-8S	1,2-DICHLOROPROPANE	<5	ENSR Data
9/14/05	MW-2	1,3,5-TRIMETHYLBENZENE	<5	ENSR Data
9/14/05	MW-2A	1,3,5-TRIMETHYLBENZENE	<5	ENSR Data
9/14/05	MW-3	1,3,5-TRIMETHYLBENZENE	<5	ENSR Data
9/14/05	MW-3A	1,3,5-TRIMETHYLBENZENE	<5	ENSR Data
9/13/05	MW-4	1,3,5-TRIMETHYLBENZENE	<5	ENSR Data
9/14/05	MW-4A	1,3,5-TRIMETHYLBENZENE	<5	ENSR Data
9/14/05	MW-4B	1,3,5-TRIMETHYLBENZENE	<5	ENSR Data
9/15/05	MW-5	1,3,5-TRIMETHYLBENZENE	<5	ENSR Data
9/15/05	MW-5 -EB	1,3,5-TRIMETHYLBENZENE	<5	ENSR Data
9/15/05	MW-5-REP	1,3,5-TRIMETHYLBENZENE	<5	ENSR Data
9/15/05	MW-5-TB	1,3,5-TRIMETHYLBENZENE	<5	ENSR Data
9/13/05	MW-6	1,3,5-TRIMETHYLBENZENE	<5	ENSR Data
9/13/05	MW-6A	1,3,5-TRIMETHYLBENZENE	<5	ENSR Data
9/13/05	MW-7	1,3,5-TRIMETHYLBENZENE	<5	ENSR Data
9/13/05	MW-7A	1,3,5-TRIMETHYLBENZENE	<5	ENSR Data
9/14/05	MW-8S	1,3,5-TRIMETHYLBENZENE	<5	ENSR Data

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
9/14/05	MW-2	1,3-DICHLOROBENZENE	150	ENSR Data
9/14/05	MW-2A	1,3-DICHLOROBENZENE	4*	ENSR Data
9/14/05	MW-3	1,3-DICHLOROBENZENE	16	ENSR Data
9/14/05	MW-3A	1,3-DICHLOROBENZENE	15	ENSR Data
9/13/05	MW-4	1,3-DICHLOROBENZENE	56	ENSR Data
9/14/05	MW-4A	1,3-DICHLOROBENZENE	<5	ENSR Data
9/14/05	MW-4B	1,3-DICHLOROBENZENE	2*	ENSR Data
9/15/05	MW-5	1,3-DICHLOROBENZENE	<5	ENSR Data
9/15/05	MW-5 -EB	1,3-DICHLOROBENZENE	<5	ENSR Data
9/15/05	MW-5-REP	1,3-DICHLOROBENZENE	<5	ENSR Data
9/15/05	MW-5-TB	1,3-DICHLOROBENZENE	<5	ENSR Data
9/13/05	MW-6	1,3-DICHLOROBENZENE	1*	ENSR Data
9/13/05	MW-6A	1,3-DICHLOROBENZENE	<5	ENSR Data
9/13/05	MW-7	1,3-DICHLOROBENZENE	19	ENSR Data
9/13/05	MW-7A	1,3-DICHLOROBENZENE	<5	ENSR Data
9/14/05	MW-8S	1,3-DICHLOROBENZENE	1*	ENSR Data
9/14/05	MW-2	1,3-DICHLOROPROPANE	<5	ENSR Data
9/14/05	MW-2A	1,3-DICHLOROPROPANE	<5	ENSR Data
9/14/05	MW-3	1,3-DICHLOROPROPANE	<5	ENSR Data
9/14/05	MW-3A	1,3-DICHLOROPROPANE	<5	ENSR Data
9/13/05	MW-4	1,3-DICHLOROPROPANE	<5	ENSR Data
9/14/05	MW-4A	1,3-DICHLOROPROPANE	<5	ENSR Data
9/14/05	MW-4B	1,3-DICHLOROPROPANE	<5	ENSR Data
9/15/05	MW-5	1,3-DICHLOROPROPANE	<5	ENSR Data
9/15/05	MW-5 -EB	1,3-DICHLOROPROPANE	<5	ENSR Data
9/15/05	MW-5-REP	1,3-DICHLOROPROPANE	<5	ENSR Data
9/15/05	MW-5-TB	1,3-DICHLOROPROPANE	<5	ENSR Data
9/13/05	MW-6	1,3-DICHLOROPROPANE	<5	ENSR Data
9/13/05	MW-6A	1,3-DICHLOROPROPANE	<5	ENSR Data
9/13/05	MW-7	1,3-DICHLOROPROPANE	<5	ENSR Data
9/13/05	MW-7A	1,3-DICHLOROPROPANE	<5	ENSR Data
9/14/05	MW-8S	1,3-DICHLOROPROPANE	<5	ENSR Data
9/14/05	MW-2	1,4-DICHLOROBENZENE	170	ENSR Data
9/14/05	MW-2A	1,4-DICHLOROBENZENE	14	ENSR Data
9/14/05	MW-3	1,4-DICHLOROBENZENE	49	ENSR Data
9/14/05	MW-3A	1,4-DICHLOROBENZENE	50	ENSR Data
9/13/05	MW-4	1,4-DICHLOROBENZENE	200	ENSR Data
9/14/05	MW-4A	1,4-DICHLOROBENZENE	<5	ENSR Data
9/14/05	MW-4B	1,4-DICHLOROBENZENE	7	ENSR Data
9/15/05	MW-5	1,4-DICHLOROBENZENE	<5	ENSR Data
9/15/05	MW-5 -EB	1,4-DICHLOROBENZENE	<5	ENSR Data
9/15/05	MW-5-REP	1,4-DICHLOROBENZENE	<5	ENSR Data
9/15/05	MW-5-TB	1,4-DICHLOROBENZENE	<5	ENSR Data
9/13/05	MW-6	1,4-DICHLOROBENZENE	<5	ENSR Data
9/13/05	MW-6A	1,4-DICHLOROBENZENE	<5	ENSR Data
9/13/05	MW-7	1,4-DICHLOROBENZENE	32	ENSR Data
9/13/05	MW-7A	1,4-DICHLOROBENZENE	<5	ENSR Data
9/14/05	MW-8S	1,4-DICHLOROBENZENE	4*	ENSR Data
9/14/05	MW-2	2,2-DICHLOROPROPANE	<5	ENSR Data

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
9/14/05	MW-2A	2,2-DICHLOROPROPANE	<5	ENSR Data
9/14/05	MW-3	2,2-DICHLOROPROPANE	<5	ENSR Data
9/14/05	MW-3A	2,2-DICHLOROPROPANE	<5	ENSR Data
9/13/05	MW-4	2,2-DICHLOROPROPANE	<5	ENSR Data
9/14/05	MW-4A	2,2-DICHLOROPROPANE	<5	ENSR Data
9/14/05	MW-4B	2,2-DICHLOROPROPANE	<5	ENSR Data
9/15/05	MW-5	2,2-DICHLOROPROPANE	<5	ENSR Data
9/15/05	MW-5 -EB	2,2-DICHLOROPROPANE	<5	ENSR Data
9/15/05	MW-5-REP	2,2-DICHLOROPROPANE	<5	ENSR Data
9/15/05	MW-5-TB	2,2-DICHLOROPROPANE	<5	ENSR Data
9/13/05	MW-6	2,2-DICHLOROPROPANE	<5	ENSR Data
9/13/05	MW-6A	2,2-DICHLOROPROPANE	<5	ENSR Data
9/13/05	MW-7	2,2-DICHLOROPROPANE	<5	ENSR Data
9/13/05	MW-7A	2,2-DICHLOROPROPANE	<5	ENSR Data
9/14/05	MW-8S	2,2-DICHLOROPROPANE	<5	ENSR Data
9/14/05	MW-2	2,4,5,6-TETRACHLORO-META-XYLENE	45	ENSR Data
9/14/05	MW-2A	2,4,5,6-TETRACHLORO-META-XYLENE	47	ENSR Data
9/14/05	MW-3	2,4,5,6-TETRACHLORO-META-XYLENE	52	ENSR Data
9/14/05	MW-3A	2,4,5,6-TETRACHLORO-META-XYLENE	52	ENSR Data
9/13/05	MW-4	2,4,5,6-TETRACHLORO-META-XYLENE	39	ENSR Data
9/14/05	MW-4A	2,4,5,6-TETRACHLORO-META-XYLENE	54	ENSR Data
9/14/05	MW-4B	2,4,5,6-TETRACHLORO-META-XYLENE	81	ENSR Data
9/15/05	MW-5	2,4,5,6-TETRACHLORO-META-XYLENE	71	ENSR Data
9/15/05	MW-5 -EB	2,4,5,6-TETRACHLORO-META-XYLENE	53	ENSR Data
9/15/05	MW-5-REP	2,4,5,6-TETRACHLORO-META-XYLENE	56	ENSR Data
9/13/05	MW-6	2,4,5,6-TETRACHLORO-META-XYLENE	0	ENSR Data
9/13/05	MW-6A	2,4,5,6-TETRACHLORO-META-XYLENE	66	ENSR Data
9/13/05	MW-7	2,4,5,6-TETRACHLORO-META-XYLENE	152	ENSR Data
9/13/05	MW-7A	2,4,5,6-TETRACHLORO-META-XYLENE	60	ENSR Data
9/14/05	MW-8S	2,4,5,6-TETRACHLORO-META-XYLENE	55	ENSR Data
9/14/05	MW-2	2-CHLOROTOLUENE	<5	ENSR Data
9/14/05	MW-2A	2-CHLOROTOLUENE	<5	ENSR Data
9/14/05	MW-3	2-CHLOROTOLUENE	<5	ENSR Data
9/14/05	MW-3A	2-CHLOROTOLUENE	<5	ENSR Data
9/13/05	MW-4	2-CHLOROTOLUENE	<5	ENSR Data
9/14/05	MW-4A	2-CHLOROTOLUENE	<5	ENSR Data
9/14/05	MW-4B	2-CHLOROTOLUENE	<5	ENSR Data
9/15/05	MW-5	2-CHLOROTOLUENE	<5	ENSR Data
9/15/05	MW-5 -EB	2-CHLOROTOLUENE	<5	ENSR Data
9/15/05	MW-5-REP	2-CHLOROTOLUENE	<5	ENSR Data
9/15/05	MW-5-TB	2-CHLOROTOLUENE	<5	ENSR Data
9/13/05	MW-6	2-CHLOROTOLUENE	<5	ENSR Data
9/13/05	MW-6A	2-CHLOROTOLUENE	<5	ENSR Data
9/13/05	MW-7	2-CHLOROTOLUENE	<5	ENSR Data
9/13/05	MW-7A	2-CHLOROTOLUENE	<5	ENSR Data
9/14/05	MW-8S	2-CHLOROTOLUENE	<5	ENSR Data
9/14/05	MW-2	4-BROMOFLUOROBENZENE	94	ENSR Data
9/14/05	MW-2A	4-BROMOFLUOROBENZENE	95	ENSR Data
9/14/05	MW-3	4-BROMOFLUOROBENZENE	93	ENSR Data

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
9/14/05	MW-3A	4-BROMOFLUOROBENZENE	96	ENSR Data
9/13/05	MW-4	4-BROMOFLUOROBENZENE	95	ENSR Data
9/14/05	MW-4A	4-BROMOFLUOROBENZENE	94	ENSR Data
9/14/05	MW-4B	4-BROMOFLUOROBENZENE	98	ENSR Data
9/15/05	MW-5	4-BROMOFLUOROBENZENE	95	ENSR Data
9/15/05	MW-5 -EB	4-BROMOFLUOROBENZENE	97	ENSR Data
9/15/05	MW-5-REP	4-BROMOFLUOROBENZENE	99	ENSR Data
9/15/05	MW-5-TB	4-BROMOFLUOROBENZENE	97	ENSR Data
9/13/05	MW-6	4-BROMOFLUOROBENZENE	92	ENSR Data
9/13/05	MW-6A	4-BROMOFLUOROBENZENE	93	ENSR Data
9/13/05	MW-7	4-BROMOFLUOROBENZENE	97	ENSR Data
9/13/05	MW-7A	4-BROMOFLUOROBENZENE	94	ENSR Data
9/14/05	MW-8S	4-BROMOFLUOROBENZENE	100	ENSR Data
9/14/05	MW-2	4-CHLOROTOLUENE	<5	ENSR Data
9/14/05	MW-2A	4-CHLOROTOLUENE	<5	ENSR Data
9/14/05	MW-3	4-CHLOROTOLUENE	<5	ENSR Data
9/14/05	MW-3A	4-CHLOROTOLUENE	<5	ENSR Data
9/13/05	MW-4	4-CHLOROTOLUENE	<5	ENSR Data
9/14/05	MW-4A	4-CHLOROTOLUENE	<5	ENSR Data
9/14/05	MW-4B	4-CHLOROTOLUENE	<5	ENSR Data
9/15/05	MW-5	4-CHLOROTOLUENE	<5	ENSR Data
9/15/05	MW-5 -EB	4-CHLOROTOLUENE	<5	ENSR Data
9/15/05	MW-5-REP	4-CHLOROTOLUENE	<5	ENSR Data
9/15/05	MW-5-TB	4-CHLOROTOLUENE	<5	ENSR Data
9/13/05	MW-6	4-CHLOROTOLUENE	<5	ENSR Data
9/13/05	MW-6A	4-CHLOROTOLUENE	<5	ENSR Data
9/13/05	MW-7	4-CHLOROTOLUENE	<5	ENSR Data
9/13/05	MW-7A	4-CHLOROTOLUENE	<5	ENSR Data
9/14/05	MW-8S	4-CHLOROTOLUENE	<5	ENSR Data
9/14/05	MW-2	4-ISOPROPYLTOLUENE	<5	ENSR Data
9/14/05	MW-2A	4-ISOPROPYLTOLUENE	<5	ENSR Data
9/14/05	MW-3	4-ISOPROPYLTOLUENE	<5	ENSR Data
9/14/05	MW-3A	4-ISOPROPYLTOLUENE	<5	ENSR Data
9/13/05	MW-4	4-ISOPROPYLTOLUENE	<5	ENSR Data
9/14/05	MW-4A	4-ISOPROPYLTOLUENE	<5	ENSR Data
9/14/05	MW-4B	4-ISOPROPYLTOLUENE	<5	ENSR Data
9/15/05	MW-5	4-ISOPROPYLTOLUENE	<5	ENSR Data
9/15/05	MW-5 -EB	4-ISOPROPYLTOLUENE	<5	ENSR Data
9/15/05	MW-5-REP	4-ISOPROPYLTOLUENE	<5	ENSR Data
9/15/05	MW-5-TB	4-ISOPROPYLTOLUENE	<5	ENSR Data
9/13/05	MW-6	4-ISOPROPYLTOLUENE	<5	ENSR Data
9/13/05	MW-6A	4-ISOPROPYLTOLUENE	<5	ENSR Data
9/13/05	MW-7	4-ISOPROPYLTOLUENE	<5	ENSR Data
9/13/05	MW-7A	4-ISOPROPYLTOLUENE	<5	ENSR Data
9/14/05	MW-8S	4-ISOPROPYLTOLUENE	<5	ENSR Data
9/14/05	MW-2	BENZENE	6	ENSR Data
9/14/05	MW-2A	BENZENE	3*	ENSR Data
9/14/05	MW-3	BENZENE	10	ENSR Data
9/14/05	MW-3A	BENZENE	7	ENSR Data

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
9/13/05	MW-4	BENZENE	3*	ENSR Data
9/14/05	MW-4A	BENZENE	<5	ENSR Data
9/14/05	MW-4B	BENZENE	1*	ENSR Data
9/15/05	MW-5	BENZENE	<5	ENSR Data
9/15/05	MW-5 -EB	BENZENE	<5	ENSR Data
9/15/05	MW-5-REP	BENZENE	<5	ENSR Data
9/15/05	MW-5-TB	BENZENE	<5	ENSR Data
9/13/05	MW-6	BENZENE	<5	ENSR Data
9/13/05	MW-6A	BENZENE	<5	ENSR Data
9/13/05	MW-7	BENZENE	5*	ENSR Data
9/13/05	MW-7A	BENZENE	38	ENSR Data
9/14/05	MW-8S	BENZENE	<5	ENSR Data
9/14/05	MW-2	BROMOBENZENE	<5	ENSR Data
9/14/05	MW-2A	BROMOBENZENE	<5	ENSR Data
9/14/05	MW-3	BROMOBENZENE	<5	ENSR Data
9/14/05	MW-3A	BROMOBENZENE	<5	ENSR Data
9/13/05	MW-4	BROMOBENZENE	<5	ENSR Data
9/14/05	MW-4A	BROMOBENZENE	<5	ENSR Data
9/14/05	MW-4B	BROMOBENZENE	<5	ENSR Data
9/15/05	MW-5	BROMOBENZENE	<5	ENSR Data
9/15/05	MW-5 -EB	BROMOBENZENE	<5	ENSR Data
9/15/05	MW-5-REP	BROMOBENZENE	<5	ENSR Data
9/15/05	MW-5-TB	BROMOBENZENE	<5	ENSR Data
9/13/05	MW-6	BROMOBENZENE	<5	ENSR Data
9/13/05	MW-6A	BROMOBENZENE	<5	ENSR Data
9/13/05	MW-7	BROMOBENZENE	<5	ENSR Data
9/13/05	MW-7A	BROMOBENZENE	<5	ENSR Data
9/14/05	MW-8S	BROMOBENZENE	<5	ENSR Data
9/14/05	MW-2	BROMOCHLOROMETHANE	<5	ENSR Data
9/14/05	MW-2A	BROMOCHLOROMETHANE	<5	ENSR Data
9/14/05	MW-3	BROMOCHLOROMETHANE	<5	ENSR Data
9/14/05	MW-3A	BROMOCHLOROMETHANE	<5	ENSR Data
9/13/05	MW-4	BROMOCHLOROMETHANE	<5	ENSR Data
9/14/05	MW-4A	BROMOCHLOROMETHANE	<5	ENSR Data
9/14/05	MW-4B	BROMOCHLOROMETHANE	<5	ENSR Data
9/15/05	MW-5	BROMOCHLOROMETHANE	<5	ENSR Data
9/15/05	MW-5 -EB	BROMOCHLOROMETHANE	<5	ENSR Data
9/15/05	MW-5-REP	BROMOCHLOROMETHANE	<5	ENSR Data
9/15/05	MW-5-TB	BROMOCHLOROMETHANE	<5	ENSR Data
9/13/05	MW-6	BROMOCHLOROMETHANE	<5	ENSR Data
9/13/05	MW-6A	BROMOCHLOROMETHANE	<5	ENSR Data
9/13/05	MW-7	BROMOCHLOROMETHANE	<5	ENSR Data
9/13/05	MW-7A	BROMOCHLOROMETHANE	<5	ENSR Data
9/14/05	MW-8S	BROMOCHLOROMETHANE	<5	ENSR Data
9/14/05	MW-2	BROMODICHLOROMETHANE	<5	ENSR Data
9/14/05	MW-2A	BROMODICHLOROMETHANE	<5	ENSR Data
9/14/05	MW-3	BROMODICHLOROMETHANE	<5	ENSR Data
9/14/05	MW-3A	BROMODICHLOROMETHANE	<5	ENSR Data
9/13/05	MW-4	BROMODICHLOROMETHANE	<5	ENSR Data

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
9/14/05	MW-4A	BROMODICHLOROMETHANE	<5	ENSR Data
9/14/05	MW-4B	BROMODICHLOROMETHANE	<5	ENSR Data
9/15/05	MW-5	BROMODICHLOROMETHANE	<5	ENSR Data
9/15/05	MW-5 -EB	BROMODICHLOROMETHANE	<5	ENSR Data
9/15/05	MW-5-REP	BROMODICHLOROMETHANE	<5	ENSR Data
9/15/05	MW-5-TB	BROMODICHLOROMETHANE	<5	ENSR Data
9/13/05	MW-6	BROMODICHLOROMETHANE	<5	ENSR Data
9/13/05	MW-6A	BROMODICHLOROMETHANE	<5	ENSR Data
9/13/05	MW-7	BROMODICHLOROMETHANE	<5	ENSR Data
9/13/05	MW-7A	BROMODICHLOROMETHANE	<5	ENSR Data
9/14/05	MW-8S	BROMODICHLOROMETHANE	<5	ENSR Data
9/14/05	MW-2	BROMOFORM	<5	ENSR Data
9/14/05	MW-2A	BROMOFORM	<5	ENSR Data
9/14/05	MW-3	BROMOFORM	<5	ENSR Data
9/14/05	MW-3A	BROMOFORM	<5	ENSR Data
9/13/05	MW-4	BROMOFORM	<5	ENSR Data
9/14/05	MW-4A	BROMOFORM	<5	ENSR Data
9/14/05	MW-4B	BROMOFORM	<5	ENSR Data
9/15/05	MW-5	BROMOFORM	<5	ENSR Data
9/15/05	MW-5 -EB	BROMOFORM	<5	ENSR Data
9/15/05	MW-5-REP	BROMOFORM	<5	ENSR Data
9/15/05	MW-5-TB	BROMOFORM	<5	ENSR Data
9/13/05	MW-6	BROMOFORM	<5	ENSR Data
9/13/05	MW-6A	BROMOFORM	<5	ENSR Data
9/13/05	MW-7	BROMOFORM	<5	ENSR Data
9/13/05	MW-7A	BROMOFORM	<5	ENSR Data
9/14/05	MW-8S	BROMOFORM	<5	ENSR Data
9/14/05	MW-2	BROMOMETHANE	<2	ENSR Data
9/14/05	MW-2A	BROMOMETHANE	<2	ENSR Data
9/14/05	MW-3	BROMOMETHANE	<2	ENSR Data
9/14/05	MW-3A	BROMOMETHANE	<2	ENSR Data
9/13/05	MW-4	BROMOMETHANE	<2	ENSR Data
9/14/05	MW-4A	BROMOMETHANE	<2	ENSR Data
9/14/05	MW-4B	BROMOMETHANE	<2	ENSR Data
9/15/05	MW-5	BROMOMETHANE	<2	ENSR Data
9/15/05	MW-5 -EB	BROMOMETHANE	<2	ENSR Data
9/15/05	MW-5-REP	BROMOMETHANE	<2	ENSR Data
9/15/05	MW-5-TB	BROMOMETHANE	<2	ENSR Data
9/13/05	MW-6	BROMOMETHANE	<2	ENSR Data
9/13/05	MW-6A	BROMOMETHANE	<2	ENSR Data
9/13/05	MW-7	BROMOMETHANE	<2	ENSR Data
9/13/05	MW-7A	BROMOMETHANE	<2	ENSR Data
9/14/05	MW-8S	BROMOMETHANE	<2	ENSR Data
9/14/05	MW-2	CARBON TETRACHLORIDE	<5	ENSR Data
9/14/05	MW-2A	CARBON TETRACHLORIDE	<5	ENSR Data
9/14/05	MW-3	CARBON TETRACHLORIDE	<5	ENSR Data
9/14/05	MW-3A	CARBON TETRACHLORIDE	<5	ENSR Data
9/13/05	MW-4	CARBON TETRACHLORIDE	<5	ENSR Data
9/14/05	MW-4A	CARBON TETRACHLORIDE	<5	ENSR Data

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
9/14/05	MW-4B	CARBON TETRACHLORIDE	2*	ENSR Data
9/15/05	MW-5	CARBON TETRACHLORIDE	<5	ENSR Data
9/15/05	MW-5 -EB	CARBON TETRACHLORIDE	<5	ENSR Data
9/15/05	MW-5-REP	CARBON TETRACHLORIDE	<5	ENSR Data
9/15/05	MW-5-TB	CARBON TETRACHLORIDE	<5	ENSR Data
9/13/05	MW-6	CARBON TETRACHLORIDE	<5	ENSR Data
9/13/05	MW-6A	CARBON TETRACHLORIDE	<5	ENSR Data
9/13/05	MW-7	CARBON TETRACHLORIDE	<5	ENSR Data
9/13/05	MW-7A	CARBON TETRACHLORIDE	<5	ENSR Data
9/14/05	MW-8S	CARBON TETRACHLORIDE	<5	ENSR Data
9/14/05	MW-2	CHLOROBENZENE	660	ENSR Data
9/14/05	MW-2A	CHLOROBENZENE	49	ENSR Data
9/14/05	MW-3	CHLOROBENZENE	460	ENSR Data
9/14/05	MW-3A	CHLOROBENZENE	450	ENSR Data
9/13/05	MW-4	CHLOROBENZENE	67	ENSR Data
9/14/05	MW-4A	CHLOROBENZENE	<5	ENSR Data
9/14/05	MW-4B	CHLOROBENZENE	3*	ENSR Data
9/15/05	MW-5	CHLOROBENZENE	<5	ENSR Data
9/15/05	MW-5 -EB	CHLOROBENZENE	<5	ENSR Data
9/15/05	MW-5-REP	CHLOROBENZENE	<5	ENSR Data
9/15/05	MW-5-TB	CHLOROBENZENE	<5	ENSR Data
9/13/05	MW-6	CHLOROBENZENE	0.9*	ENSR Data
9/13/05	MW-6A	CHLOROBENZENE	<5	ENSR Data
9/13/05	MW-7	CHLOROBENZENE	120	ENSR Data
9/13/05	MW-7A	CHLOROBENZENE	<5	ENSR Data
9/14/05	MW-8S	CHLOROBENZENE	2*	ENSR Data
9/14/05	MW-2	CHLOROETHANE	<5	ENSR Data
9/14/05	MW-2A	CHLOROETHANE	<5	ENSR Data
9/14/05	MW-3	CHLOROETHANE	<5	ENSR Data
9/14/05	MW-3A	CHLOROETHANE	<5	ENSR Data
9/13/05	MW-4	CHLOROETHANE	<5	ENSR Data
9/14/05	MW-4A	CHLOROETHANE	<5	ENSR Data
9/14/05	MW-4B	CHLOROETHANE	<5	ENSR Data
9/15/05	MW-5	CHLOROETHANE	<5	ENSR Data
9/15/05	MW-5 -EB	CHLOROETHANE	<5	ENSR Data
9/15/05	MW-5-REP	CHLOROETHANE	<5	ENSR Data
9/15/05	MW-5-TB	CHLOROETHANE	<5	ENSR Data
9/13/05	MW-6	CHLOROETHANE	<5	ENSR Data
9/13/05	MW-6A	CHLOROETHANE	<5	ENSR Data
9/13/05	MW-7	CHLOROETHANE	1*	ENSR Data
9/13/05	MW-7A	CHLOROETHANE	<5	ENSR Data
9/14/05	MW-8S	CHLOROETHANE	<5	ENSR Data
9/14/05	MW-2	CHLOROFORM	<5	ENSR Data
9/14/05	MW-2A	CHLOROFORM	<5	ENSR Data
9/14/05	MW-3	CHLOROFORM	<5	ENSR Data
9/14/05	MW-3A	CHLOROFORM	<5	ENSR Data
9/13/05	MW-4	CHLOROFORM	<5	ENSR Data
9/14/05	MW-4A	CHLOROFORM	<5	ENSR Data
9/14/05	MW-4B	CHLOROFORM	8	ENSR Data

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
9/15/05	MW-5	CHLOROFORM	1*	ENSR Data
9/15/05	MW-5 -EB	CHLOROFORM	<5	ENSR Data
9/15/05	MW-5-REP	CHLOROFORM	1*	ENSR Data
9/15/05	MW-5-TB	CHLOROFORM	<5	ENSR Data
9/13/05	MW-6	CHLOROFORM	2*	ENSR Data
9/13/05	MW-6A	CHLOROFORM	<5	ENSR Data
9/13/05	MW-7	CHLOROFORM	2*	ENSR Data
9/13/05	MW-7A	CHLOROFORM	<5	ENSR Data
9/14/05	MW-8S	CHLOROFORM	<5	ENSR Data
9/14/05	MW-2	CHLOROMETHANE	0.5*	ENSR Data
9/14/05	MW-2A	CHLOROMETHANE	<5	ENSR Data
9/14/05	MW-3	CHLOROMETHANE	<5	ENSR Data
9/14/05	MW-3A	CHLOROMETHANE	<5	ENSR Data
9/13/05	MW-4	CHLOROMETHANE	<5	ENSR Data
9/14/05	MW-4A	CHLOROMETHANE	<5	ENSR Data
9/14/05	MW-4B	CHLOROMETHANE	<5	ENSR Data
9/15/05	MW-5	CHLOROMETHANE	<5	ENSR Data
9/15/05	MW-5 -EB	CHLOROMETHANE	<5	ENSR Data
9/15/05	MW-5-REP	CHLOROMETHANE	<5	ENSR Data
9/15/05	MW-5-TB	CHLOROMETHANE	0.5*	ENSR Data
9/13/05	MW-6	CHLOROMETHANE	<5	ENSR Data
9/13/05	MW-6A	CHLOROMETHANE	<5	ENSR Data
9/13/05	MW-7	CHLOROMETHANE	<5	ENSR Data
9/13/05	MW-7A	CHLOROMETHANE	<5	ENSR Data
9/14/05	MW-8S	CHLOROMETHANE	<5	ENSR Data
9/14/05	MW-2	CIS-1,2-DICHLOROETHENE	<5	ENSR Data
9/14/05	MW-2A	CIS-1,2-DICHLOROETHENE	1*	ENSR Data
9/14/05	MW-3	CIS-1,2-DICHLOROETHENE	<5	ENSR Data
9/14/05	MW-3A	CIS-1,2-DICHLOROETHENE	<5	ENSR Data
9/13/05	MW-4	CIS-1,2-DICHLOROETHENE	230	ENSR Data
9/14/05	MW-4A	CIS-1,2-DICHLOROETHENE	4*	ENSR Data
9/14/05	MW-4B	CIS-1,2-DICHLOROETHENE	180	ENSR Data
9/15/05	MW-5	CIS-1,2-DICHLOROETHENE	<5	ENSR Data
9/15/05	MW-5 -EB	CIS-1,2-DICHLOROETHENE	<5	ENSR Data
9/15/05	MW-5-REP	CIS-1,2-DICHLOROETHENE	<5	ENSR Data
9/15/05	MW-5-TB	CIS-1,2-DICHLOROETHENE	<5	ENSR Data
9/13/05	MW-6	CIS-1,2-DICHLOROETHENE	310	ENSR Data
9/13/05	MW-6A	CIS-1,2-DICHLOROETHENE	15	ENSR Data
9/13/05	MW-7	CIS-1,2-DICHLOROETHENE	3400	ENSR Data
9/13/05	MW-7A	CIS-1,2-DICHLOROETHENE	0.3*	ENSR Data
9/14/05	MW-8S	CIS-1,2-DICHLOROETHENE	16000	ENSR Data
9/14/05	MW-2	DECACHLOROBIPHENYL	27	ENSR Data
9/14/05	MW-2A	DECACHLOROBIPHENYL	52	ENSR Data
9/14/05	MW-3	DECACHLOROBIPHENYL	53	ENSR Data
9/14/05	MW-3A	DECACHLOROBIPHENYL	24	ENSR Data
9/13/05	MW-4	DECACHLOROBIPHENYL	31	ENSR Data
9/14/05	MW-4A	DECACHLOROBIPHENYL	77	ENSR Data
9/14/05	MW-4B	DECACHLOROBIPHENYL	71	ENSR Data
9/15/05	MW-5	DECACHLOROBIPHENYL	47	ENSR Data

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
9/15/05	MW-5 -EB	DECACHLOROBIPHENYL	54	ENSR Data
9/15/05	MW-5-REP	DECACHLOROBIPHENYL	44	ENSR Data
9/13/05	MW-6	DECACHLOROBIPHENYL	0	ENSR Data
9/13/05	MW-6A	DECACHLOROBIPHENYL	46	ENSR Data
9/13/05	MW-7	DECACHLOROBIPHENYL	24	ENSR Data
9/13/05	MW-7A	DECACHLOROBIPHENYL	50	ENSR Data
9/14/05	MW-8S	DECACHLOROBIPHENYL	53	ENSR Data
9/14/05	MW-2	DIBROMOCHLOROMETHANE	<5	ENSR Data
9/14/05	MW-2A	DIBROMOCHLOROMETHANE	<5	ENSR Data
9/14/05	MW-3	DIBROMOCHLOROMETHANE	<5	ENSR Data
9/14/05	MW-3A	DIBROMOCHLOROMETHANE	<5	ENSR Data
9/13/05	MW-4	DIBROMOCHLOROMETHANE	<5	ENSR Data
9/14/05	MW-4A	DIBROMOCHLOROMETHANE	<5	ENSR Data
9/14/05	MW-4B	DIBROMOCHLOROMETHANE	<5	ENSR Data
9/15/05	MW-5	DIBROMOCHLOROMETHANE	<5	ENSR Data
9/15/05	MW-5 -EB	DIBROMOCHLOROMETHANE	<5	ENSR Data
9/15/05	MW-5-REP	DIBROMOCHLOROMETHANE	<5	ENSR Data
9/15/05	MW-5-TB	DIBROMOCHLOROMETHANE	<5	ENSR Data
9/13/05	MW-6	DIBROMOCHLOROMETHANE	<5	ENSR Data
9/13/05	MW-6A	DIBROMOCHLOROMETHANE	<5	ENSR Data
9/13/05	MW-7	DIBROMOCHLOROMETHANE	<5	ENSR Data
9/13/05	MW-7A	DIBROMOCHLOROMETHANE	<5	ENSR Data
9/14/05	MW-8S	DIBROMOCHLOROMETHANE	<5	ENSR Data
9/14/05	MW-2	DIBROMOFLUOROMETHANE	96	ENSR Data
9/14/05	MW-2A	DIBROMOFLUOROMETHANE	102	ENSR Data
9/14/05	MW-3	DIBROMOFLUOROMETHANE	99	ENSR Data
9/14/05	MW-3A	DIBROMOFLUOROMETHANE	100	ENSR Data
9/13/05	MW-4	DIBROMOFLUOROMETHANE	100	ENSR Data
9/14/05	MW-4A	DIBROMOFLUOROMETHANE	94	ENSR Data
9/14/05	MW-4B	DIBROMOFLUOROMETHANE	99	ENSR Data
9/15/05	MW-5	DIBROMOFLUOROMETHANE	104	ENSR Data
9/15/05	MW-5 -EB	DIBROMOFLUOROMETHANE	99	ENSR Data
9/15/05	MW-5-REP	DIBROMOFLUOROMETHANE	104	ENSR Data
9/15/05	MW-5-TB	DIBROMOFLUOROMETHANE	98	ENSR Data
9/13/05	MW-6	DIBROMOFLUOROMETHANE	102	ENSR Data
9/13/05	MW-6A	DIBROMOFLUOROMETHANE	101	ENSR Data
9/13/05	MW-7	DIBROMOFLUOROMETHANE	100	ENSR Data
9/13/05	MW-7A	DIBROMOFLUOROMETHANE	102	ENSR Data
9/14/05	MW-8S	DIBROMOFLUOROMETHANE	107	ENSR Data
9/14/05	MW-2	DIBROMOMETHANE	<5	ENSR Data
9/14/05	MW-2A	DIBROMOMETHANE	<5	ENSR Data
9/14/05	MW-3	DIBROMOMETHANE	<5	ENSR Data
9/14/05	MW-3A	DIBROMOMETHANE	<5	ENSR Data
9/13/05	MW-4	DIBROMOMETHANE	<5	ENSR Data
9/14/05	MW-4A	DIBROMOMETHANE	<5	ENSR Data
9/14/05	MW-4B	DIBROMOMETHANE	<5	ENSR Data
9/15/05	MW-5	DIBROMOMETHANE	<5	ENSR Data
9/15/05	MW-5 -EB	DIBROMOMETHANE	<5	ENSR Data
9/15/05	MW-5-REP	DIBROMOMETHANE	<5	ENSR Data

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
9/15/05	MW-5-TB	DIBROMOMETHANE	<5	ENSR Data
9/13/05	MW-6	DIBROMOMETHANE	<5	ENSR Data
9/13/05	MW-6A	DIBROMOMETHANE	<5	ENSR Data
9/13/05	MW-7	DIBROMOMETHANE	<5	ENSR Data
9/13/05	MW-7A	DIBROMOMETHANE	<5	ENSR Data
9/14/05	MW-8S	DIBROMOMETHANE	<5	ENSR Data
9/14/05	MW-2	DICHLORODIFLUOROMETHANE	<5	ENSR Data
9/14/05	MW-2A	DICHLORODIFLUOROMETHANE	<5	ENSR Data
9/14/05	MW-3	DICHLORODIFLUOROMETHANE	<5	ENSR Data
9/14/05	MW-3A	DICHLORODIFLUOROMETHANE	<5	ENSR Data
9/13/05	MW-4	DICHLORODIFLUOROMETHANE	<5	ENSR Data
9/14/05	MW-4A	DICHLORODIFLUOROMETHANE	<5	ENSR Data
9/14/05	MW-4B	DICHLORODIFLUOROMETHANE	<5	ENSR Data
9/15/05	MW-5	DICHLORODIFLUOROMETHANE	<5	ENSR Data
9/15/05	MW-5 -EB	DICHLORODIFLUOROMETHANE	<5	ENSR Data
9/15/05	MW-5-REP	DICHLORODIFLUOROMETHANE	<5	ENSR Data
9/15/05	MW-5-TB	DICHLORODIFLUOROMETHANE	<5	ENSR Data
9/13/05	MW-6	DICHLORODIFLUOROMETHANE	<5	ENSR Data
9/13/05	MW-6A	DICHLORODIFLUOROMETHANE	<5	ENSR Data
9/13/05	MW-7	DICHLORODIFLUOROMETHANE	<5	ENSR Data
9/13/05	MW-7A	DICHLORODIFLUOROMETHANE	<5	ENSR Data
9/14/05	MW-8S	DICHLORODIFLUOROMETHANE	<5	ENSR Data
9/14/05	MW-2	ETHYLBENZENE	<5	ENSR Data
9/14/05	MW-2A	ETHYLBENZENE	0.9*	ENSR Data
9/14/05	MW-3	ETHYLBENZENE	1*	ENSR Data
9/14/05	MW-3A	ETHYLBENZENE	<5	ENSR Data
9/13/05	MW-4	ETHYLBENZENE	<5	ENSR Data
9/14/05	MW-4A	ETHYLBENZENE	<5	ENSR Data
9/14/05	MW-4B	ETHYLBENZENE	<5	ENSR Data
9/15/05	MW-5	ETHYLBENZENE	<5	ENSR Data
9/15/05	MW-5 -EB	ETHYLBENZENE	<5	ENSR Data
9/15/05	MW-5-REP	ETHYLBENZENE	<5	ENSR Data
9/15/05	MW-5-TB	ETHYLBENZENE	<5	ENSR Data
9/13/05	MW-6	ETHYLBENZENE	<5	ENSR Data
9/13/05	MW-6A	ETHYLBENZENE	<5	ENSR Data
9/13/05	MW-7	ETHYLBENZENE	<5	ENSR Data
9/13/05	MW-7A	ETHYLBENZENE	0.3*	ENSR Data
9/14/05	MW-8S	ETHYLBENZENE	2*	ENSR Data
9/14/05	MW-2	HEXACHLOROBUTADIENE	<1	ENSR Data
9/14/05	MW-2A	HEXACHLOROBUTADIENE	<1	ENSR Data
9/14/05	MW-3	HEXACHLOROBUTADIENE	<1	ENSR Data
9/14/05	MW-3A	HEXACHLOROBUTADIENE	<1	ENSR Data
9/13/05	MW-4	HEXACHLOROBUTADIENE	<1	ENSR Data
9/14/05	MW-4A	HEXACHLOROBUTADIENE	<1	ENSR Data
9/14/05	MW-4B	HEXACHLOROBUTADIENE	<1	ENSR Data
9/15/05	MW-5	HEXACHLOROBUTADIENE	<1	ENSR Data
9/15/05	MW-5 -EB	HEXACHLOROBUTADIENE	<1	ENSR Data
9/15/05	MW-5-REP	HEXACHLOROBUTADIENE	<1	ENSR Data
9/15/05	MW-5-TB	HEXACHLOROBUTADIENE	<1	ENSR Data

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
9/13/05	MW-6	HEXACHLOROBUTADIENE	<1	ENSR Data
9/13/05	MW-6A	HEXACHLOROBUTADIENE	<1	ENSR Data
9/13/05	MW-7	HEXACHLOROBUTADIENE	<1	ENSR Data
9/13/05	MW-7A	HEXACHLOROBUTADIENE	<1	ENSR Data
9/14/05	MW-8S	HEXACHLOROBUTADIENE	<1	ENSR Data
9/14/05	MW-2	ISOPROPYLBENZENE	1*	ENSR Data
9/14/05	MW-2A	ISOPROPYLBENZENE	<5	ENSR Data
9/14/05	MW-3	ISOPROPYLBENZENE	3*	ENSR Data
9/14/05	MW-3A	ISOPROPYLBENZENE	2*	ENSR Data
9/13/05	MW-4	ISOPROPYLBENZENE	0.8*	ENSR Data
9/14/05	MW-4A	ISOPROPYLBENZENE	<5	ENSR Data
9/14/05	MW-4B	ISOPROPYLBENZENE	<5	ENSR Data
9/15/05	MW-5	ISOPROPYLBENZENE	<5	ENSR Data
9/15/05	MW-5 -EB	ISOPROPYLBENZENE	<5	ENSR Data
9/15/05	MW-5-REP	ISOPROPYLBENZENE	<5	ENSR Data
9/15/05	MW-5-TB	ISOPROPYLBENZENE	<5	ENSR Data
9/13/05	MW-6	ISOPROPYLBENZENE	<5	ENSR Data
9/13/05	MW-6A	ISOPROPYLBENZENE	<5	ENSR Data
9/13/05	MW-7	ISOPROPYLBENZENE	0.9*	ENSR Data
9/13/05	MW-7A	ISOPROPYLBENZENE	<5	ENSR Data
9/14/05	MW-8S	ISOPROPYLBENZENE	<5	ENSR Data
9/14/05	MW-2	M-,P-XYLENE	4*	ENSR Data
9/14/05	MW-2A	M-,P-XYLENE	0.6*	ENSR Data
9/14/05	MW-3	M-,P-XYLENE	0.9*	ENSR Data
9/14/05	MW-3A	M-,P-XYLENE	0.7*	ENSR Data
9/13/05	MW-4	M-,P-XYLENE	<5	ENSR Data
9/14/05	MW-4A	M-,P-XYLENE	<5	ENSR Data
9/14/05	MW-4B	M-,P-XYLENE	<5	ENSR Data
9/15/05	MW-5	M-,P-XYLENE	<5	ENSR Data
9/15/05	MW-5 -EB	M-,P-XYLENE	<5	ENSR Data
9/15/05	MW-5-REP	M-,P-XYLENE	<5	ENSR Data
9/15/05	MW-5-TB	M-,P-XYLENE	<5	ENSR Data
9/13/05	MW-6	M-,P-XYLENE	<5	ENSR Data
9/13/05	MW-6A	M-,P-XYLENE	<5	ENSR Data
9/13/05	MW-7	M-,P-XYLENE	0.6*	ENSR Data
9/13/05	MW-7A	M-,P-XYLENE	2*	ENSR Data
9/14/05	MW-8S	M-,P-XYLENE	4*	ENSR Data
9/14/05	MW-2	METHYLENE CHLORIDE	<5	ENSR Data
9/14/05	MW-2A	METHYLENE CHLORIDE	<5	ENSR Data
9/14/05	MW-3	METHYLENE CHLORIDE	<5	ENSR Data
9/14/05	MW-3A	METHYLENE CHLORIDE	<5	ENSR Data
9/13/05	MW-4	METHYLENE CHLORIDE	<5	ENSR Data
9/14/05	MW-4A	METHYLENE CHLORIDE	<5	ENSR Data
9/14/05	MW-4B	METHYLENE CHLORIDE	5	ENSR Data
9/15/05	MW-5	METHYLENE CHLORIDE	<5	ENSR Data
9/15/05	MW-5 -EB	METHYLENE CHLORIDE	<5	ENSR Data
9/15/05	MW-5-REP	METHYLENE CHLORIDE	<5	ENSR Data
9/15/05	MW-5-TB	METHYLENE CHLORIDE	<5	ENSR Data
9/13/05	MW-6	METHYLENE CHLORIDE	<5	ENSR Data

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
9/13/05	MW-6A	METHYLENE CHLORIDE	<5	ENSR Data
9/13/05	MW-7	METHYLENE CHLORIDE	<5	ENSR Data
9/13/05	MW-7A	METHYLENE CHLORIDE	<5	ENSR Data
9/14/05	MW-8S	METHYLENE CHLORIDE	<5	ENSR Data
9/14/05	MW-2	NAPHTHALENE	2*	ENSR Data
9/14/05	MW-2A	NAPHTHALENE	32	ENSR Data
9/14/05	MW-3	NAPHTHALENE	18	ENSR Data
9/14/05	MW-3A	NAPHTHALENE	0.7*	ENSR Data
9/13/05	MW-4	NAPHTHALENE	<5	ENSR Data
9/14/05	MW-4A	NAPHTHALENE	<5	ENSR Data
9/14/05	MW-4B	NAPHTHALENE	<5	ENSR Data
9/15/05	MW-5	NAPHTHALENE	<5	ENSR Data
9/15/05	MW-5 -EB	NAPHTHALENE	4*	ENSR Data
9/15/05	MW-5-REP	NAPHTHALENE	<5	ENSR Data
9/15/05	MW-5-TB	NAPHTHALENE	<5	ENSR Data
9/13/05	MW-6	NAPHTHALENE	<5	ENSR Data
9/13/05	MW-6A	NAPHTHALENE	<5	ENSR Data
9/13/05	MW-7	NAPHTHALENE	<5	ENSR Data
9/13/05	MW-7A	NAPHTHALENE	<5	ENSR Data
9/14/05	MW-8S	NAPHTHALENE	<5	ENSR Data
9/14/05	MW-2	N-BUTYLBENZENE	<5	ENSR Data
9/14/05	MW-2A	N-BUTYLBENZENE	<5	ENSR Data
9/14/05	MW-3	N-BUTYLBENZENE	<5	ENSR Data
9/14/05	MW-3A	N-BUTYLBENZENE	<5	ENSR Data
9/13/05	MW-4	N-BUTYLBENZENE	<5	ENSR Data
9/14/05	MW-4A	N-BUTYLBENZENE	<5	ENSR Data
9/14/05	MW-4B	N-BUTYLBENZENE	<5	ENSR Data
9/15/05	MW-5	N-BUTYLBENZENE	<5	ENSR Data
9/15/05	MW-5 -EB	N-BUTYLBENZENE	<5	ENSR Data
9/15/05	MW-5-REP	N-BUTYLBENZENE	<5	ENSR Data
9/15/05	MW-5-TB	N-BUTYLBENZENE	<5	ENSR Data
9/13/05	MW-6	N-BUTYLBENZENE	<5	ENSR Data
9/13/05	MW-6A	N-BUTYLBENZENE	<5	ENSR Data
9/13/05	MW-7	N-BUTYLBENZENE	<5	ENSR Data
9/13/05	MW-7A	N-BUTYLBENZENE	<5	ENSR Data
9/14/05	MW-8S	N-BUTYLBENZENE	<5	ENSR Data
9/14/05	MW-2	N-PROPYLBENZENE	0.5*	ENSR Data
9/14/05	MW-2A	N-PROPYLBENZENE	<5	ENSR Data
9/14/05	MW-3	N-PROPYLBENZENE	0.6*	ENSR Data
9/14/05	MW-3A	N-PROPYLBENZENE	<5	ENSR Data
9/13/05	MW-4	N-PROPYLBENZENE	<5	ENSR Data
9/14/05	MW-4A	N-PROPYLBENZENE	<5	ENSR Data
9/14/05	MW-4B	N-PROPYLBENZENE	<5	ENSR Data
9/15/05	MW-5	N-PROPYLBENZENE	<5	ENSR Data
9/15/05	MW-5 -EB	N-PROPYLBENZENE	<5	ENSR Data
9/15/05	MW-5-REP	N-PROPYLBENZENE	<5	ENSR Data
9/15/05	MW-5-TB	N-PROPYLBENZENE	<5	ENSR Data
9/13/05	MW-6	N-PROPYLBENZENE	<5	ENSR Data
9/13/05	MW-6A	N-PROPYLBENZENE	<5	ENSR Data

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
9/13/05	MW-7	N-PROPYLBENZENE	<5	ENSR Data
9/13/05	MW-7A	N-PROPYLBENZENE	<5	ENSR Data
9/14/05	MW-8S	N-PROPYLBENZENE	<5	ENSR Data
9/14/05	MW-2	O-XYLENE	<5	ENSR Data
9/14/05	MW-2A	O-XYLENE	0.6*	ENSR Data
9/14/05	MW-3	O-XYLENE	0.5*	ENSR Data
9/14/05	MW-3A	O-XYLENE	0.5*	ENSR Data
9/13/05	MW-4	O-XYLENE	0.4*	ENSR Data
9/14/05	MW-4A	O-XYLENE	<5	ENSR Data
9/14/05	MW-4B	O-XYLENE	<5	ENSR Data
9/15/05	MW-5	O-XYLENE	<5	ENSR Data
9/15/05	MW-5 -EB	O-XYLENE	<5	ENSR Data
9/15/05	MW-5-REP	O-XYLENE	<5	ENSR Data
9/15/05	MW-5-TB	O-XYLENE	<5	ENSR Data
9/13/05	MW-6	O-XYLENE	<5	ENSR Data
9/13/05	MW-6A	O-XYLENE	<5	ENSR Data
9/13/05	MW-7	O-XYLENE	0.6*	ENSR Data
9/13/05	MW-7A	O-XYLENE	<5	ENSR Data
9/14/05	MW-8S	O-XYLENE	2*	ENSR Data
09/14/05	MW-2	SEC-BUTYLBENZENE	<0.05	ENSR Data
09/14/05	MW-2A	SEC-BUTYLBENZENE	<0.05	ENSR Data
09/14/05	MW-3	SEC-BUTYLBENZENE	<0.05	ENSR Data
09/14/05	MW-3A	SEC-BUTYLBENZENE	<0.05	ENSR Data
09/13/05	MW-4	SEC-BUTYLBENZENE	<0.05	ENSR Data
09/14/05	MW-4A	SEC-BUTYLBENZENE	<0.05	ENSR Data
09/14/05	MW-4B	SEC-BUTYLBENZENE	<0.05	ENSR Data
09/15/05	MW-5	SEC-BUTYLBENZENE	<0.05	ENSR Data
09/15/05	MW-5 -EB	SEC-BUTYLBENZENE	<0.05	ENSR Data
09/15/05	MW-5-REP	SEC-BUTYLBENZENE	<0.05	ENSR Data
09/15/05	MW-5-TB	SEC-BUTYLBENZENE	2.4	ENSR Data
09/13/05	MW-6	SEC-BUTYLBENZENE	<0.05	ENSR Data
09/13/05	MW-6A	SEC-BUTYLBENZENE	<0.05	ENSR Data
09/13/05	MW-7	SEC-BUTYLBENZENE	<0.05	ENSR Data
09/13/05	MW-7A	SEC-BUTYLBENZENE	<0.05	ENSR Data
09/14/05	MW-8S	SEC-BUTYLBENZENE	<0.05	ENSR Data
9/14/05	MW-2	STYRENE	<0.05	ENSR Data
9/14/05	MW-2A	STYRENE	<0.05	ENSR Data
9/14/05	MW-3	STYRENE	<0.05	ENSR Data
9/14/05	MW-3A	STYRENE	<0.05	ENSR Data
9/13/05	MW-4	STYRENE	<0.05	ENSR Data
9/14/05	MW-4A	STYRENE	<0.05	ENSR Data
9/14/05	MW-4B	STYRENE	<0.05	ENSR Data
9/15/05	MW-5	STYRENE	<0.05	ENSR Data
9/15/05	MW-5 -EB	STYRENE	<0.05	ENSR Data
9/15/05	MW-5-REP	STYRENE	2.4	ENSR Data
9/15/05	MW-5-TB	STYRENE	<0.05	ENSR Data
9/13/05	MW-6	STYRENE	<0.05	ENSR Data
9/13/05	MW-6A	STYRENE	<0.05	ENSR Data
9/13/05	MW-7	STYRENE	<0.05	ENSR Data

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
9/13/05	MW-7A	STYRENE	<0.05	ENSR Data
9/14/05	MW-8S	STYRENE	<0.05	ENSR Data
9/14/05	MW-2	TERT-BUTYLBENZENE	<0.05	ENSR Data
9/14/05	MW-2A	TERT-BUTYLBENZENE	<0.05	ENSR Data
9/14/05	MW-3	TERT-BUTYLBENZENE	<0.05	ENSR Data
9/14/05	MW-3A	TERT-BUTYLBENZENE	<0.05	ENSR Data
9/13/05	MW-4	TERT-BUTYLBENZENE	<0.05	ENSR Data
9/14/05	MW-4A	TERT-BUTYLBENZENE	<0.05	ENSR Data
9/14/05	MW-4B	TERT-BUTYLBENZENE	<0.05	ENSR Data
9/15/05	MW-5	TERT-BUTYLBENZENE	<0.05	ENSR Data
9/15/05	MW-5 -EB	TERT-BUTYLBENZENE	2.4	ENSR Data
9/15/05	MW-5-REP	TERT-BUTYLBENZENE	<0.05	ENSR Data
9/15/05	MW-5-TB	TERT-BUTYLBENZENE	<0.05	ENSR Data
9/13/05	MW-6	TERT-BUTYLBENZENE	<0.05	ENSR Data
9/13/05	MW-6A	TERT-BUTYLBENZENE	<0.05	ENSR Data
9/13/05	MW-7	TERT-BUTYLBENZENE	<0.05	ENSR Data
9/13/05	MW-7A	TERT-BUTYLBENZENE	<0.05	ENSR Data
9/14/05	MW-8S	TERT-BUTYLBENZENE	<0.05	ENSR Data
9/14/05	MW-2	TETRACHLOROETHENE	<0.05	ENSR Data
9/14/05	MW-2A	TETRACHLOROETHENE	<0.05	ENSR Data
9/14/05	MW-3	TETRACHLOROETHENE	1.8	ENSR Data
9/14/05	MW-3A	TETRACHLOROETHENE	1.9	ENSR Data
9/13/05	MW-4	TETRACHLOROETHENE	<0.05	ENSR Data
9/14/05	MW-4A	TETRACHLOROETHENE	0.15	ENSR Data
9/14/05	MW-4B	TETRACHLOROETHENE	0.05*	ENSR Data
9/15/05	MW-5	TETRACHLOROETHENE	21	ENSR Data
9/15/05	MW-5 -EB	TETRACHLOROETHENE	<0.05	ENSR Data
9/15/05	MW-5-REP	TETRACHLOROETHENE	0.76	ENSR Data
9/15/05	MW-5-TB	TETRACHLOROETHENE	<0.05	ENSR Data
9/13/05	MW-6	TETRACHLOROETHENE	3.1	ENSR Data
9/13/05	MW-6A	TETRACHLOROETHENE	<0.05	ENSR Data
9/13/05	MW-7	TETRACHLOROETHENE	<0.05	ENSR Data
9/13/05	MW-7A	TETRACHLOROETHENE	<0.05	ENSR Data
9/14/05	MW-8S	TETRACHLOROETHENE	<0.05	ENSR Data
9/14/05	MW-2	TOLUENE	<0.05	ENSR Data
9/14/05	MW-2A	TOLUENE	<0.05	ENSR Data
9/14/05	MW-3	TOLUENE	<0.05	ENSR Data
9/14/05	MW-3A	TOLUENE	<0.05	ENSR Data
9/13/05	MW-4	TOLUENE	<0.05	ENSR Data
9/14/05	MW-4A	TOLUENE	<0.05	ENSR Data
9/14/05	MW-4B	TOLUENE	2.4	ENSR Data
9/15/05	MW-5	TOLUENE	<0.05	ENSR Data
9/15/05	MW-5 -EB	TOLUENE	<0.05	ENSR Data
9/15/05	MW-5-REP	TOLUENE	<0.05	ENSR Data
9/15/05	MW-5-TB	TOLUENE	<0.05	ENSR Data
9/13/05	MW-6	TOLUENE	<0.05	ENSR Data
9/13/05	MW-6A	TOLUENE	<0.05	ENSR Data
9/13/05	MW-7	TOLUENE	<0.05	ENSR Data
9/13/05	MW-7A	TOLUENE	0.47	ENSR Data

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
9/14/05	MW-8S	TOLUENE	<0.05	ENSR Data
9/14/05	MW-2	TOLUENE-D8	2.6	ENSR Data
9/14/05	MW-2A	TOLUENE-D8	<0.05	ENSR Data
9/14/05	MW-3	TOLUENE-D8	0.12	ENSR Data
9/14/05	MW-3A	TOLUENE-D8	<0.05	ENSR Data
9/13/05	MW-4	TOLUENE-D8	0.07	ENSR Data
9/14/05	MW-4A	TOLUENE-D8	2.4	ENSR Data
9/14/05	MW-4B	TOLUENE-D8	2.2	ENSR Data
9/15/05	MW-5	TOLUENE-D8	<0.05	ENSR Data
9/15/05	MW-5 -EB	TOLUENE-D8	<0.05	ENSR Data
9/15/05	MW-5-REP	TOLUENE-D8	1.2	ENSR Data
9/15/05	MW-5-TB	TOLUENE-D8	<0.05	ENSR Data
9/13/05	MW-6	TOLUENE-D8	<0.05	ENSR Data
9/13/05	MW-6A	TOLUENE-D8	<0.05	ENSR Data
9/13/05	MW-7	TOLUENE-D8	<0.05	ENSR Data
9/13/05	MW-7A	TOLUENE-D8	<0.05	ENSR Data
9/14/05	MW-8S	TOLUENE-D8	<0.05	ENSR Data
9/14/05	MW-2	TRANS-1,2-DICHLOROETHENE	<0.05	ENSR Data
9/14/05	MW-2A	TRANS-1,2-DICHLOROETHENE	<0.05	ENSR Data
9/14/05	MW-3	TRANS-1,2-DICHLOROETHENE	<0.05	ENSR Data
9/14/05	MW-3A	TRANS-1,2-DICHLOROETHENE	<0.05	ENSR Data
9/13/05	MW-4	TRANS-1,2-DICHLOROETHENE	2.4	ENSR Data
9/14/05	MW-4A	TRANS-1,2-DICHLOROETHENE	<0.05	ENSR Data
9/14/05	MW-4B	TRANS-1,2-DICHLOROETHENE	<0.05	ENSR Data
9/15/05	MW-5	TRANS-1,2-DICHLOROETHENE	<0.05	ENSR Data
9/15/05	MW-5 -EB	TRANS-1,2-DICHLOROETHENE	<0.05	ENSR Data
9/15/05	MW-5-REP	TRANS-1,2-DICHLOROETHENE	<5	ENSR Data
9/15/05	MW-5-TB	TRANS-1,2-DICHLOROETHENE	<5	ENSR Data
9/13/05	MW-6	TRANS-1,2-DICHLOROETHENE	0.4*	ENSR Data
9/13/05	MW-6A	TRANS-1,2-DICHLOROETHENE	<5	ENSR Data
9/13/05	MW-7	TRANS-1,2-DICHLOROETHENE	<5	ENSR Data
9/13/05	MW-7A	TRANS-1,2-DICHLOROETHENE	<5	ENSR Data
9/14/05	MW-8S	TRANS-1,2-DICHLOROETHENE	<5	ENSR Data
9/14/05	MW-2	TRICHLOROETHENE	<5	ENSR Data
9/14/05	MW-2A	TRICHLOROETHENE	<5	ENSR Data
9/14/05	MW-3	TRICHLOROETHENE	<5	ENSR Data
9/14/05	MW-3A	TRICHLOROETHENE	<5	ENSR Data
9/13/05	MW-4	TRICHLOROETHENE	<5	ENSR Data
9/14/05	MW-4A	TRICHLOROETHENE	<5	ENSR Data
9/14/05	MW-4B	TRICHLOROETHENE	<5	ENSR Data
9/15/05	MW-5	TRICHLOROETHENE	<5	ENSR Data
9/15/05	MW-5 -EB	TRICHLOROETHENE	<5	ENSR Data
9/15/05	MW-5-REP	TRICHLOROETHENE	7.6	ENSR Data
9/15/05	MW-5-TB	TRICHLOROETHENE	20	ENSR Data
9/13/05	MW-6	TRICHLOROETHENE	32	ENSR Data
9/13/05	MW-6A	TRICHLOROETHENE	26	ENSR Data
9/13/05	MW-7	TRICHLOROETHENE	16	ENSR Data
9/13/05	MW-7A	TRICHLOROETHENE	<4	ENSR Data
9/14/05	MW-8S	TRICHLOROETHENE	8.8	ENSR Data

* - Estimated value

Table F-4. Groundwater: Volatile Organic Carbon (VOC) Data

Date	Well ID	Analyte	Concentration (µg/L)	Source
9/14/05	MW-2	TRICHLOROFLUOROMETHANE	<4	ENSR Data
9/14/05	MW-2A	TRICHLOROFLUOROMETHANE	4.8	ENSR Data
9/14/05	MW-3	TRICHLOROFLUOROMETHANE	<4	ENSR Data
9/14/05	MW-3A	TRICHLOROFLUOROMETHANE	12	ENSR Data
9/13/05	MW-4	TRICHLOROFLUOROMETHANE	<4	ENSR Data
9/14/05	MW-4A	TRICHLOROFLUOROMETHANE	28	ENSR Data
9/14/05	MW-4B	TRICHLOROFLUOROMETHANE	19	ENSR Data
9/15/05	MW-5	TRICHLOROFLUOROMETHANE	<5	ENSR Data
9/15/05	MW-5 -EB	TRICHLOROFLUOROMETHANE	<5	ENSR Data
9/15/05	MW-5-REP	TRICHLOROFLUOROMETHANE	<5	ENSR Data
9/15/05	MW-5-TB	TRICHLOROFLUOROMETHANE	<5	ENSR Data
9/13/05	MW-6	TRICHLOROFLUOROMETHANE	<5	ENSR Data
9/13/05	MW-6A	TRICHLOROFLUOROMETHANE	<5	ENSR Data
9/13/05	MW-7	TRICHLOROFLUOROMETHANE	<5	ENSR Data
9/13/05	MW-7A	TRICHLOROFLUOROMETHANE	<5	ENSR Data
9/14/05	MW-8S	TRICHLOROFLUOROMETHANE	<5	ENSR Data
9/14/05	MW-2	VINYL CHLORIDE	<5	ENSR Data
9/14/05	MW-2A	VINYL CHLORIDE	<5	ENSR Data
9/14/05	MW-3	VINYL CHLORIDE	<5	ENSR Data
9/14/05	MW-3A	VINYL CHLORIDE	<5	ENSR Data
9/13/05	MW-4	VINYL CHLORIDE	<5	ENSR Data
9/14/05	MW-4A	VINYL CHLORIDE	<5	ENSR Data
9/14/05	MW-4B	VINYL CHLORIDE	<5	ENSR Data
9/15/05	MW-5	VINYL CHLORIDE	<5	ENSR Data
9/15/05	MW-5 -EB	VINYL CHLORIDE	<5	ENSR Data
9/15/05	MW-5-REP	VINYL CHLORIDE	<5	ENSR Data
9/15/05	MW-5-TB	VINYL CHLORIDE	<5	ENSR Data
9/13/05	MW-6	VINYL CHLORIDE	<5	ENSR Data
9/13/05	MW-6A	VINYL CHLORIDE	<5	ENSR Data
9/13/05	MW-7	VINYL CHLORIDE	<5	ENSR Data
9/13/05	MW-7A	VINYL CHLORIDE	<5	ENSR Data
9/14/05	MW-8S	VINYL CHLORIDE	<5	ENSR Data
9/14/05	MW-2	XYLENES (TOTAL)	<5	ENSR Data
9/14/05	MW-2A	XYLENES (TOTAL)	<5	ENSR Data
9/14/05	MW-3	XYLENES (TOTAL)	<5	ENSR Data
9/14/05	MW-3A	XYLENES (TOTAL)	<5	ENSR Data
9/13/05	MW-4	XYLENES (TOTAL)	<5	ENSR Data
9/14/05	MW-4A	XYLENES (TOTAL)	<5	ENSR Data
9/14/05	MW-4B	XYLENES (TOTAL)	<5	ENSR Data
9/15/05	MW-5	XYLENES (TOTAL)	<5	ENSR Data
9/15/05	MW-5 -EB	XYLENES (TOTAL)	<5	ENSR Data
9/15/05	MW-5-REP	XYLENES (TOTAL)	<5	ENSR Data
9/15/05	MW-5-TB	XYLENES (TOTAL)	<5	ENSR Data
9/13/05	MW-6	XYLENES (TOTAL)	<5	ENSR Data
9/13/05	MW-6A	XYLENES (TOTAL)	<5	ENSR Data
9/13/05	MW-7	XYLENES (TOTAL)	48	ENSR Data
9/13/05	MW-7A	XYLENES (TOTAL)	1*	ENSR Data
9/14/05	MW-8S	XYLENES (TOTAL)	<5	ENSR Data

* - Estimated value