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TECHNICAL MEMORANDUM
REVISION 2.0

SEPTEMBER 1998 GROUNDWATER MONITORING AND RESIDENTIAL WELL SAMPLING RESULTS

INDUSTRIAL EXCESS LANDFILL
UNIONTOWN, OHIO

Prepared for

U.S. Environmental Protection Agency
Region 5
Chicago, Illinois

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1.0 INTRODUCTION

As part of the groundwater sampling activities for remedial design studies at the Industrial Excess Landfill (IEL) site in Uniontown, Ohio, Tetra Tech EM Inc. (Tetra Tech), formerly PRC Environmental Management, Inc. (PRC), collected groundwater samples from groundwater monitoring and residential wells at and near the site in September 1998. Data obtained from this round of groundwater sampling will be used to refine the characterization of groundwater contamination in monitoring and residential wells. This work is being performed under U.S. Environmental Protection Agency (EPA) Work Assignment No. 014-RDRD-05W2, Contract No. 68-W7-0003.

In September 1998, Tetra Tech collected groundwater samples from 23 monitoring wells and 6 residential wells. Groundwater samples were collected and analyzed for volatile organic compounds (VOC); semivolatile organic compounds (SVOC); and inorganic compounds, including unfiltered metals and filtered metals. The residential well samples were analyzed for VOCs, SVOCs, and unfiltered metals but not filtered metals. The locations of the monitoring and residential wells sampled are shown in Figures 1 and 2, respectively.

Groundwater samples collected from monitoring and residential wells in September 1998 were analyzed by EPA Contract Laboratory Program (CLP) laboratories for the parameters described in Section 3.0 of this technical memorandum. Samples collected from residential wells for unfiltered metal analysis were analyzed by EPA's Central Regional Laboratory (CRL).

This technical memorandum discusses groundwater sampling locations, laboratory procedures and analytical parameters, data validation, a summary of analytical results, and tentatively identified compounds (TIC). References used to prepare this technical memorandum appear at the end of the document. Analytical data for monitoring and residential well samples collected in September 1998 are presented in Appendixes A and B, respectively.

2.0 GROUNDWATER SAMPLING LOCATIONS

Groundwater samples were collected from 23 monitoring wells in September 1998. The primary criterion used to select the monitoring wells to be sampled was detection of high concentrations of inorganics in previous sampling events. Most of the monitoring wells that have previously shown high

concentrations of inorganics lie west of the site. Information concerning analytical parameters for the monitoring well samples is presented in Section 3.0. Figure 1 shows the locations of the 23 shallow (s), intermediate (i), and deep (d) monitoring wells sampled during September 1998, which are listed below.

MW-1d	MW-12i	MW-20d	MW-25s
MW-2d	MW-12d	MW-21s	MW-25i
MW-6s	MW-18s	MW-21i	MW-27s
MW-11s	MW-18i	MW-23s	MW-27i
MW-11i	MW-20s	MW-24s	MW-27d
MW-11d	MW-20i	MW-24i	

Groundwater samples were also collected from 6 residential wells. Two of the residential wells, RW-28 and RW-70, had been previously sampled. The remaining four residential wells, RW-101, RW-102, RW-103, and RW-104, had not been previously sampled. None of the homes served by the residential wells sampled is connected to a city water supply. Figure 2 shows the locations of the 6 residential wells sampled during September 1998, which are listed below.

RW-28	RW-101	RW-103
RW-70	RW-102	RW-104

3.0 LABORATORY PROCEDURES AND ANALYTICAL PARAMETERS

Analyses of monitoring well samples were performed by laboratories participating in the EPA CLP. Analyses of residential well samples were performed by a laboratory participating in the EPA CLP for low-concentration organic compounds and by EPA CRL for unfiltered metals. All CLP laboratories were required to conform to calibration procedures and frequencies specified in the CLP statements of work for organic, inorganic, and low-concentration organic analyses (EPA 1994b, 1994c, 1996).

Samples sent to CLP laboratories were analyzed using routine analytical services (RAS). RAS analyses for VOCs, SVOCs, unfiltered metals, and filtered metals were performed on samples collected from monitoring wells. RAS analyses for low-concentration VOCs and SVOCs were performed on samples collected from residential wells. Samples sent to EPA CRL were analyzed using special analytical services (SAS). SAS analysis for unfiltered metals was performed on samples collected from residential wells.

No samples for analysis for pesticides and polychlorinated biphenyls (PCB) were collected from monitoring wells or residential wells during September 1998. Pesticide and PCB analyses were not performed because (1) past detections of pesticides have been sporadic and attributed to sources other than IEL and (2) PCBs have never been detected at IEL.

4.0 DATA VALIDATION

EPA CLP data reduction, validation, and reporting were conducted by EPA CRL in accordance with the CLP statements of work. CRL validated the data in accordance with EPA's national functional guidelines for evaluating organic and inorganic data (EPA 1994a). Data that did not meet these requirements were either rejected completely or accepted with data qualifiers by CRL. Tetra Tech reviewed the validated data for accuracy, completeness, and appropriate use of qualifiers as specified in the CLP statements of work (EPA 1994b, 1994c, 1996). Brief descriptions of data qualifiers presented in Appendixes A and B are presented below.

- U: The compound is an analytical parameter but was not detected. The associated numerical value is the sample quantitation limit.
- J: The result is an estimated value. The compound was detected in the sample at a concentration below the contract-required detection limit but at a concentration greater than 0 for organic compounds and above the instrument detection limit for inorganic compounds.
- B: The compound was detected in the associated blank as well as in the sample.
- R: The result was rejected because the analytical procedures were not properly conformed to or because the sample holding time was exceeded.
- UJ: The compound was not detected, but laboratory recovery was below the contract-required detection limit; therefore, the nondetect is an estimated value.
- E: The concentration of the compound exceeds the standard calibration range.
- N: Presumptive evidence of a compound is present. This qualifier is used only to show that TICs were identified based on a mass spectra library search during sample analysis for SVOCs.

5.0 SUMMARY OF ANALYTICAL RESULTS

Tetra Tech reviewed all validated data received from EPA for accuracy, completeness, and appropriate use of qualifiers. After Tetra Tech's review, the data were entered in a database for evaluation. The appendixes to this technical memorandum contain the data from the database. Appendix A contains monitoring well sample analytical results, and Appendix B contains residential well sample analytical results.

5.1 MONITORING WELL SAMPLING RESULTS

This section discusses analytical results for the groundwater monitoring well samples collected in September 1998. The analytical results for all monitoring well samples collected are included in Appendix A. Table 1 on page 10 compares monitoring well contaminant concentrations detected historically (PRC 1994) and in September 1998 with maximum contaminant levels (MCL).

The analytical results indicate that the only conclusive VOC contamination consisted of the VOCs detected in the samples from monitoring wells MW-11i and MW-21s. In MW-11i, vinyl chloride was detected at a concentration (2 micrograms per liter [μg/L]) that is less than the maximum historical concentration (3 μg/L) at MW-11i and equal to the MCL. Chloroethane, which has no MCL, was also detected in MW-11i at 2 μg/L. Toluene was detected in MW-11i at a concentration (10 μg/L) less than its MCL (1,000 μg/L), and appears to be a laboratory contaminant.

The analytical results show that the VOC contamination in MW-21s has changed little since the previous sampling events (Table 1). VOCs detected in MW-21s in September 1998 include benzene (3 μg/L); chloroethane (42 μg/L); 1,1-dichloroethane (41 μg/L); 1,2-dichloroethene (16 μg/L); 1,2-dichloroethane (7 μg/L); toluene (2 μg/L); and vinyl chloride (8 μg/L). Of the VOCs detected, 1,2-dichloroethane and vinyl chloride were present at concentrations that exceeded their respective MCLs of 5 and 2 μg/L. However, the detected concentrations of 1,2-DCA and vinyl chloride were lower than their maximum historical concentrations of 8 and 9 μg/L, respectively.

Although VOC contamination was reported in other September 1998 samples, examination of the data reveals that the apparent VOC contamination may not reflect environmental contamination. Most VOCs detected were identified in the associated trip blank or are a common laboratory contaminant. Specifically, toluene and methylene chloride were detected in the following monitoring wells: toluene in

MW-1d, MW-2d, MW-6s, MW-11s, MW-11i, MW-11d, MW-18s, MW-18i, MW-20s, MW-20i, MW-20d, MW-21i, MW-23s, MW-24s, MW-25i, MW-25s, MW-27i, and MW-27d; and methylene chloride in MW-23s, MW-24s, MW-24i, MW-25s, MW-25i, MW-27s, MW-27i, and MW-27d. The highest concentrations of toluene (520 µg/L) and methylene chloride (5 µg/L) were found in MW-6s and MW-24i, respectively. Toluene and methylene chloride were also found in the trip blanks for MW-6s (570 µg/L) and MW-24i (3 µg/L), respectively. All detectable levels of toluene and methylene chloride were below or equal to their MCLs of 1,000 and 5 µg/L, respectively. Acetone and carbon disulfide, which like methylene chloride are common laboratory contaminants, were also found. Acetone was found in MW-20i, MW-25s, and MW-27i at concentrations equal to or below 14 µg/L. One VOC (tetrachloroethane), which was not detected in an associated trip blank and is not a common laboratory contaminant, was found at a low level (1 µg/L) in MW-18s.

The only SVOC detected in the September 1998 samples was bis(2-ethylhexyl)phthalate, a common laboratory contaminant. This SVOC was detected in MW-1d (5 µg/L), MW-11s (1 µg/L), MW-11d (1 µg/L), and MW-18i (1 µg/L). These detections may also be attributable to laboratory contamination.

Overall, most of the metal contamination in the monitoring wells sampled during September 1998 appears to have decreased significantly from the levels reported in previous sampling events. Exceptions include relatively nontoxic, soluble metals such as calcium and magnesium that define the "hardness" of the water; manganese; and potassium. These metals have exhibited relatively constant concentrations in site groundwater over the years.

In several monitoring wells, the concentrations of metals exceeded or equaled their respective MCLs. In most instances, the filtered sample result is below the MCL while the unfiltered sample result equals or exceeds the MCL. Unfiltered sample results that equal or exceed MCLs include chromium in MW-11s at 164 µg/L, MW-18i at 147 µg/L, MW-24i at 100 µg/L, and MW-27i at 115 µg/L; thallium in MW-27s at 2.5 µg/L; and nickel in MW-18i at 202 µg/L and MW-25i at 150 µg/L. In addition, the unfiltered sample concentration for lead (32.5 µg/L) was above MCL in MW-18s. The MCLs for chromium, nickel, and lead are 100, 100, and 15 µg/L, respectively. The nickel concentrations in both the filtered (113 µg/L) and unfiltered (150 µg/L) samples from MW-25i exceed the MCL. The nickel results for MW-25i, however, are lower than the maximum filtered (306 µg/L) and unfiltered (352 µg/L) historical concentrations. Finally, for MW-25i, the filtered sample result for mercury (7.0 µg/L) is above the MCL (2 µg/L).

5.2 RESIDENTIAL WELL SAMPLING RESULTS

This section discusses analytical results for the residential well samples collected in September 1998. The analytical results for all the residential well samples collected are included in Appendix B. Table 2 on page 57 compares these analytical results with MCLs.

The analytical results for residential well samples collected in September 1998 do not indicate the presence of organic contamination. The only VOC detected, toluene, was present in six (RW-28, RW-70, RW-101, RW-103, RW-103-D, RW-104) of the seven residential well samples at estimated concentrations less than 0.9 μg/L. However, the estimated toluene concentration in the associated trip blank (TB03) was 0.7 μg/L. Hence, the toluene concentrations in the residential well samples are believed to be associated with laboratory contamination. The only SVOC detected in the residential wells was bis(2-ethylhexyl)phthalate, which was present at an estimated concentration of 4 μg/L in RW-104; this SVOC has a health-based MCL of 6 μg/L. Because bis(2-ethylhexyl)phthalate is a common laboratory contaminant, the analytical results are believed to be associated with laboratory contamination.

Analytical results for the residential well samples also do not indicate the presence of metal contamination. The only metals previously linked with IEL that were detected in September 1998 residential well samples are arsenic (in RW-28, RW-101, RW-102, RW-103, and RW-103-D) and barium (in RW-28, RW-70, RW-101, RW-102, RW-103, and RW-103-D). Detected concentrations of arsenic ($\leq$ 5 μg/L) and barium ($\leq$ 320 μg/L) were less than 50 and 2,000 μg/L, the respective MCLs for these metals.

6.0 TENTATIVELY IDENTIFIED COMPOUNDS

The target compound list (TCL) includes organic compounds that could be encountered at a hazardous waste site. The CLP RAS statement of work requires the laboratory to analyze samples for compounds on the TCL; however, the analyses for VOCs and SVOCs may identify additional organic compounds not on the TCL. These additional compounds are shown as peaks on the chromatogram. When this occurs, the CLP laboratory is required to identify the 30 highest peaks (10 VOC peaks and 20 SVOC peaks) using computerized searches of a library containing mass spectra. When the library and unknown compound mass spectra match to a certain degree, the compound or general class of compounds is identified. However, the assigned identity is highly uncertain in most cases. Estimated concentrations

are also highly uncertain and could be orders of magnitude higher or lower than actual concentrations. Therefore, identities assigned to TICs may be inaccurate, and their quantitation is certainly inaccurate. TICs for monitoring well samples are presented in Appendixes A-2 and A-4, and TICs for residential well samples are presented in Appendixes B-2 and B-4.

REFERENCES

PRC Environmental Management, Inc. (PRC). 1994. "Final Technical Memorandum, March 1993 Groundwater Monitoring, Residential, and Observation Well Sampling Results, Industrial Excess Landfill Site." February.

U.S. Environmental Protection Agency (EPA). 1994a. "National Functional Guidelines for Organic and Inorganic Data Review." Contract Laboratory Program. February.

EPA. 1994b. "Contract Laboratory Program Statement of Work of Organics Analysis, Multi-Media, Multi-Concentration." OLM03.1. August.

EPA. 1994c. "Contract Laboratory Program Statement of Work of Inorganics Analysis, Multi-Media, Multi-Concentration." ILM04.0.

EPA. 1996. "Contract Laboratory Program Statement of Work of Organics Analysis, Low Concentration Water." OLC02.1. February.

TABLE 1

COMPARISON OF SEPTEMBER 1998 GROUNDWATER MONITORING WELL ANALYTICAL RESULTS WITH PREVIOUS RESULTS (1990-1993) AND MCLs
(Concentrations in μg/L)

Sampling Location	Compound	Previous Results (Range)	September 1998 Result	MCL
MW-1d	Organic			
	alpha-Chlordane	Not detected (ND)-0.002	Not analyzed (NA)	2
	bis(2-ethylhexyl)phthalate	ND-58	5	6
	Carbon disulfide	ND-4	ND	None (--)
	delta-BHC	ND-0.0022	NA	6
	Diethylphthalate	ND-0.5	ND	--
	Di-n-octylphthalate	ND-11	ND	--
	Endrin	ND-0.003	NA	2
	Endosulan II	ND-0.02	NA	--
	gamma-BHC (Lindane)	ND-0.018	NA	0.2
	gamma-Chlordane	ND-0.001	NA	2
	Heptachlor epoxide	ND-0.02	NA	0.2
	Methoxychlor	ND-0.018	NA	40
	Phenol	ND-0.7	ND	--
	Toluene	ND-1	7	1,000
	Unfiltered Metal			
	Aluminum	51.1-1070	241	--
	Antimony	ND-15.7	ND	6
	Arsenic	1.2-5.6	6.0	50
	Barium	55.4-325	390	2,000
	Beryllium	ND-216	ND	4
	Cadmium	ND-79.4	4.1	5
	Calcium	32,300-136,000	131,000	--
	Chromium	ND-67.4	1.1	100
	Cobalt	ND-8.9	ND	--
	Copper	ND-41.2	2.2	1,300
	Iron	1,400-3,960	2,510	--
	Lead	ND-27.4	2.4	15

TABLE 1 (Continued)

COMPARISON OF SEPTEMBER 1998 GROUNDWATER MONITORING WELL ANALYTICAL RESULTS WITH PREVIOUS RESULTS (1990-1993) AND MCLs
(Concentrations in µg/L)

Sampling Location	Compound	Previous Results (Range)	September 1998 Result	MCL
MW-1d	Magnesium	4,510-31,500	27,600	--
(Continued)	Manganese	41.5-207	202	--
	Mercury	ND	0.8	2
	Nickel	ND-83.5	12.2	100
	Potassium	1,900-7,470	2,700	--
	Selenium	ND-1.2	ND	50
	Sodium	3,990-60,000	56,400	--
	Thallium	ND-3.5	ND	2
	Zinc	ND-181	11.7	--
	Filtered Metal			
	Aluminum	ND-71.8	ND	--
	Arsenic	ND-6.2	5	50
	Barium	34.4-324	379	2,000
	Beryllium	ND-5	ND	4
	Cadmium	ND-126	ND	5
	Calcium	31,300-137,000	132,000	--
	Chromium	ND-16	ND	100
	Copper	ND-8.6	ND	1,300
	Iron	ND-1,660	1,510	--
	Lead	ND-3.5	ND	15
	Magnesium	4,250-31,700	27,700	--
	Manganese	23.8-209	184	--
	Nickel	ND-18.9	11.1	100
	Potassium	2,160-7,220	2,630	--
	Selenium	ND-1	ND	50
	Sodium	4,150-60,600	57,900	--
	Thallium	ND-4.8	ND	2
	Zinc	ND-59.9	16.7	--

TABLE 1 (Continued)

COMPARISON OF SEPTEMBER 1998 GROUNDWATER MONITORING WELL ANALYTICAL RESULTS WITH PREVIOUS RESULTS (1990-1993) AND MCLs
(Concentrations in µg/L)

Sampling Location	Compound	Previous Results (Range)	September 1998 Result	MCL
MW-2d	Organic			
	Acetone	ND-120	ND	--
	bis(2-Ethylhexyl)phthalate	ND-64	ND	6
	2-Butanone	ND	44	--
	Carbon disulfide	ND-2	ND	--
	Bromodichloromethane	ND-1	ND	100
	4,4'-DDT	ND-0.009	NA	--
	Dibromochloromethane	ND-2	ND	--
	1,1-Dichloroethane	ND-0.5	ND	--
	Di-n-butylphthalate	ND-2	ND	--
	Di-n-octylphthalate	ND-32	ND	--
	Bromoform	ND-2	ND	100
	Endosulfan Sulfate	ND-0.081	NA	--
	Endrin aldehyde	ND-0.112	NA	--
	Endrin	ND-0.005	NA	2
	Ethylbenzene	ND-2	ND	700
	Phenol	ND-12	ND	--
	Toluene	ND-4	1	1,000
	Xylene (total)	ND-2	ND	10,000
	Unfiltered Metal			
	Aluminum	ND-227	ND	--
	Arsenic	ND-15.8	ND	50
	Barium	77.4-133	140	2,000
	Beryllium	ND-11.7	ND	4
	Cadmium	ND-4.2	ND	5
	Calcium	48,100-81,300	91,300	--
	Chromium	ND-67.9	ND	100
	Cobalt	ND-12.4	ND	--
	Copper	ND-1,500	3.4	1,300

TABLE 1 (Continued)

COMPARISON OF SEPTEMBER 1998 GROUNDWATER MONITORING WELL ANALYTICAL RESULTS WITH PREVIOUS RESULTS (1990-1993) AND MCLs
(Concentrations in μg/L)

Sampling Location	Compound	Previous Results (Range)	September 1998 Result	MCL
MW-2d	Iron	1,510-97,600	3,470	--
(Continued)	Lead	ND-53.2	ND	15
	Magnesium	15,500-20,000	19,900	--
	Manganese	86.6-470	85.0	--
	Mercury	ND	0.40	2
	Nickel	ND-313	ND	100
	Potassium	993-9,300	1,030	--
	Sodium	5,470-22,000	9,980	--
	Thallium	ND-1.8	ND	2
	Vanadium	ND-5	ND	--
	Zinc	8.3-125	7.0	--
	Filtered Metal			
	Aluminum	ND-87	ND	--
	Barium	40.3-122	145	2,000
	Beryllium	ND-3	ND	4
	Calcium	34,300-83,300	94,700	--
	Copper	ND-17	ND	1,300
	Iron	ND-1,060	1,190	--
	Lead	ND-2.5	ND	15
	Magnesium	15,200-20,600	20,600	--
	Manganese	15-104	79.6	--
	Mercury	ND	1.1	2
	Potassium	1,080-8,420	1,220	--
	Sodium	5,200-18,600	10,300	--
	Thallium	ND-4.1	ND	2
	Zinc	ND-10.8	6.6	--

TABLE 1 (Continued)

COMPARISON OF SEPTEMBER 1998 GROUNDWATER MONITORING WELL ANALYTICAL RESULTS WITH PREVIOUS RESULTS (1990-1993) AND MCLs
(Concentrations in μg/L)

Sampling Location	Compound	Previous Results (Range)	September 1998 Result	MCL
MW-6s	Organic			
	bis(2-Ethylhexyl)phthalate	ND-0.6	ND	6
	Carbon disulfide	ND-17	ND	--
	Dieldrin	ND-0.0014	NA	--
	Di-n-octylphthalate	ND-2	ND	--
	Endrin ketone	ND-0.0017	NA	--
	Heptachlor epoxide	ND-0.0033	NA	0.2
	Toluene	ND-1	520	1,000
	Unfiltered Metal			
	Aluminum	1,340-10,900	55.0	--
	Arsenic	3.9-14.4	ND	50
	Barium	87.2-236	69.0	2,000
	Beryllium	ND-4	ND	4
	Cadmium	ND-5	ND	5
	Calcium	51,700-107,000	58,200	--
	Chromium	ND-15.5	ND	100
	Cobalt	ND-10.1	ND	--
	Copper	ND-27	2.2	1,300
	Iron	4,010-23,700	7,950	--
	Lead	10.3-66.5	ND	15
	Magnesium	8,670-21,500	9,730	--
	Manganese	246-951	412	--
	Mercury	ND-0.22	ND	2
	Nickel	ND-27.8	ND	100
	Potassium	2,170-17,100	6,010	--
	Sodium	8,770-54,800	24,000	--
	Thallium	ND-1.2	ND	2
	Vanadium	ND-20.2	ND	--
	Zinc	27.8-127	26.3	--

TABLE 1 (Continued)

COMPARISON OF SEPTEMBER 1998 GROUNDWATER MONITORING WELL ANALYTICAL RESULTS WITH PREVIOUS RESULTS (1990-1993) AND MCLs (Concentrations in μg/L)

Sampling Location	Compound	Previous Results (Range)	September 1998 Result	MCL
MW-6s	Filtered Metal			
(Continued)	Aluminum	58-6,400	178	--
	Antimony	ND-19.7	ND	6
	Arsenic	ND-7.4	ND	50
	Barium	35.5-137	67.1	2,000
	Beryllium	ND-4	ND	4
	Cadmium	ND-3	ND	5
	Calcium	38,000-81,700	55,600	--
	Chromium	ND-3.4	ND	100
	Cobalt	ND-6	2.2	--
	Copper	ND-18.3	2.4	1,300
	Iron	943-9,450	7,870	--
	Lead	ND-49.5	ND	15
	Magnesium	4,920-16,100	9,300	--
	Manganese	366-823	395	--
	Nickel	ND-12	2.0	100
	Potassium	3,330-17,400	5,520	--
	Sodium	8,880-54,700	22,500	--
	Thallium	ND-1.1	ND	2
	Vanadium	ND	3.3	--
	Zinc	13.1-51	25.3	--

TABLE 1 (Continued)

COMPARISON OF SEPTEMBER 1998 GROUNDWATER MONITORING WELL ANALYTICAL RESULTS WITH PREVIOUS RESULTS (1990-1993) AND MCLs (Concentrations in μg/L)

Sampling Location	Compound	Previous Results (Range)	September 1998 Result	MCL
MW-11s	Organic			
	bis(2-Ethylhexyl)phthalate	ND	1	6
	Di-n-butylphthalate	ND-18	ND	--
	Endrin aldehyde	ND-0.005	NA	--
	Endosulfan II	ND-0.0077	NA	--
	gamma-BHC (Lindane)	ND-0.0057	NA	0.2
	Methylene chloride	ND-1	ND	5
	Toluene	ND	8	1,000
	Unfiltered Metal			
	Aluminum	55.5-5,170	1,240	--
	Arsenic	ND-10.7	8.4	50
	Barium	32.6-131	54.7	2,000
	Beryllium	ND-5	ND	4
	Cadmium	ND-5	ND	5
	Calcium	227,000-256,000	255,000	--
	Chromium	ND-22.5	164	100
	Cobalt	ND-9.2	13.5	--
	Copper	6.7-15.3	12.7	1,300
	Iron	317-27,300	17,900	--
	Lead	ND-18.3	4.3	15
	Magnesium	47,700-64,400	45,900	--
	Manganese	50-1,600	1,180	--
	Nickel	ND-97.8	93.6	100
	Potassium	ND-5,170	3,380	--
	Sodium	37,200-51,800	51,300	--
	Thallium	ND-1.2	ND	2
	Vanadium	ND-12	3.7	--
	Zinc	ND-60.2	32.6	--

TABLE 1 (Continued)

COMPARISON OF SEPTEMBER 1998 GROUNDWATER MONITORING WELL ANALYTICAL RESULTS WITH PREVIOUS RESULTS (1990-1993) AND MCLs (Concentrations in μg/L)

Sampling Location	Compound	Previous Results (Range)	September 1998 Result	MCL
MW-11s	Filtered Metal			
(Continued)	Aluminum	ND-85	12.0	--
	Arsenic	ND-1.7	ND	50
	Barium	29.8-54.9	33.9	2,000
	Beryllium	ND-5	ND	4
	Calcium	212,000-245,000	270,000	--
	Chromium	ND-6	1.0	100
	Cobalt	ND-5.6	ND	--
	Copper	ND-10	ND	1,300
	Iron	150-985	290	--
	Lead	ND-1.7	1.0	15
	Magnesium	45,800-58,000	48,100	--
	Manganese	ND-552	57.2	--
	Nickel	ND-125	41.8	100
	Potassium	ND-3,550	3,270	--
	Sodium	37,300-55,000	51,100	--
	Thallium	ND-1.2	ND	2
	Vanadium	ND-4.1	ND	--
	Zinc	ND-11.8	11.8	--

TABLE 1 (Continued)

COMPARISON OF SEPTEMBER 1998 GROUNDWATER MONITORING WELL ANALYTICAL RESULTS WITH PREVIOUS RESULTS (1990-1993) AND MCLs
(Concentrations in μg/L)

Sampling Location	Compound	Previous Results (Range)	September 1998 Result	MCL
MW-11i	Organic			
	Acetone	ND-1	ND	--
	Benzene	ND-3	ND	5
	bis(2-Ethylhexyl)phthalate	ND-85	ND	6
	Carbon disulfide	ND-1	ND	--
	Chloroethane	ND	2/2	--
	Toluene	ND-1	10/ND[a]	1,000
	Vinyl chloride	ND-3	2/ND	2
	Unfiltered Metal			
	Aluminum	ND-866	12.8/12.0	--
	Arsenic	ND-3	3.6/3.1	50
	Barium	128-171	172.0/170.0	2,000
	Beryllium	ND-3	ND	4
	Calcium	125,000-156,000	170,000/167,000	--
	Chromium	ND-69.6	1.0/1.0	100
	Cobalt	ND-4.9	ND	--
	Copper	ND-11.2	ND	1,300
	Iron	2,290-5,000	4,280/4,220	--
	Magnesium	32,300-39,400	41,900/41,300	--
	Manganese	177-229	180/178	--
	Nickel	45-130	51.5/51.1	100
	Potassium	2,330-3,320	3,260/3,180	--
	Sodium	122,000-136,000	150,000/145,000	--
	Vanadium	ND-5.5	ND	--
	Zinc	ND-41.2	27.0/11.1	--
	Lead	ND-11.1	1.4/1.2	15
	Filtered Metal			
	Aluminum	ND-104	12.0/ND	--
	Arsenic	ND-3.7	2.7/ND	50

TABLE 1 (Continued)

COMPARISON OF SEPTEMBER 1998 GROUNDWATER MONITORING WELL ANALYTICAL RESULTS WITH PREVIOUS RESULTS (1990-1993) AND MCLs (Concentrations in μg/L)

Sampling Location	Compound	Previous Results (Range)	September 1998 Result	MCL
MW-11i	Barium	139-169	166/164	2,000
(Continued)	Beryllium	ND-3	ND	4
	Calcium	133,000-155,000	163,000/166,000	--
	Chromium	ND	1.0/ND	100
	Cobalt	ND-4.6	ND	--
	Copper	ND-6.2	ND	1,300
	Iron	1,290-2,760	4,140/4,170	--
	Lead	ND-5.5	1.3/ND	15
	Magnesium	32,400-40,100	40,500/41,500	--
	Manganese	183-211	175/175	--
	Nickel	35-50	49.7/49.9	100
	Potassium	2,700-3,320	3,080/3,190	--
	Sodium	127,000-140,000	148,000/137,000	--
	Zinc	3.4-12.4	8.3/7.0	--

Note:

[a] Sample result/duplicate result

TABLE 1 (Continued)

COMPARISON OF SEPTEMBER 1998 GROUNDWATER MONITORING WELL ANALYTICAL RESULTS WITH PREVIOUS RESULTS (1990-1993) AND MCLs (Concentrations in μg/L)

Sampling Location	Compound	Previous Results (Range)	September 1998 Result	MCL
MW-11d	Organic			
	Benzene	ND-1	ND	5
	bis(2-Ethylhexyl)phthalate	ND-94	1	6
	Carbon disulfide	ND-3	ND	--
	4,4'-DDT	ND-0.012	NA	--
	Di-n-octylphthalate	ND-3	ND	--
	Endosulfan II	ND-0.006	NA	--
	Endrin aldehyde	ND-0.029	NA	--
	gamma-BHC (Lindane)	ND-0.0033	NA	0.2
	Heptachlor	ND-0.0014	NA	--
	Methylene chloride	ND-9	ND	5
	Phenol	ND-1	ND	--
	Toluene	ND-2	1	1,000
	Unfiltered Metal			
	Aluminum	127-574	2,490	--
	Arsenic	ND-4.2	6.0	50
	Barium	184-361	342	2,000
	Beryllium	ND-5	ND	4
	Calcium	57,000-70,900	91,600	--
	Chromium	ND-35.3	9.3	100
	Cobalt	ND-21.8	21.6	--
	Copper	ND-24.6	9.6	1,300
	Iron	1,330-8,890	23,100	--
	Lead	1.4-29.9	11.6	15
	Magnesium	12,300-15,700	18,400	--
	Manganese	45.1-45[1]	510	--
	Nickel	ND-62.5	33.0	100
	Potassium	ND-4,460	2,050	--
	Selenium	ND-3	ND	50

TABLE 1 (Continued)

COMPARISON OF SEPTEMBER 1998 GROUNDWATER MONITORING WELL ANALYTICAL RESULTS WITH PREVIOUS RESULTS (1990-1993) AND MCLs (Concentrations in μg/L)

Sampling Location	Compound	Previous Results (Range)	September 1998 Result	MCL
MW-20d (Continued)	Arsenic	ND-1	ND	50
	Barium	134-141	168	2,000
	Cadmium	ND	1.4	5
	Calcium	46,600-49,800	50,600	--
	Iron	ND-190	800	--
	Lead	ND	1.6	15
	Magnesium	9,490-10,300	10,500	--
	Manganese	47.3-55.2	32.4	--
	Potassium	ND-1,810	2,040	--
	Sodium	13,400-15,700	15,300	--
	Zinc	1.2-4	7.7	--

TABLE 1 (Continued)

COMPARISON OF SEPTEMBER 1998 GROUNDWATER MONITORING WELL ANALYTICAL RESULTS WITH PREVIOUS RESULTS (1990-1993) AND MCLs
(Concentrations in μg/L)

Sampling Location	Compound	Previous Results (Range)	September 1998 Result	MCL
MW-21s	Organic			
	Benzene	ND-17	3	5
	bis(2-Ethylhexyl)phthalate	ND-12	ND	6
	Carbon disulfide	ND-7	ND	--
	Chloroethane	ND-13	42	--
	1,1-Dichloroethane	ND-56	41	--
	1,2-Dichloroethene (total)	ND-20	16	--
	1,2-Dichloroethane	ND-8	7	5
	Di-n-butylphthalate	ND-2	ND	--
	Di-n-octylphthalate	ND-13	ND	--
	Methylene chloride	ND-4	ND	5
	Toluene	ND	2	1,000
	Vinyl chloride	ND-9	8	2
	Unfiltered Metal			
	Aluminum	154-10,300	1,900	--
	Antimony	ND-20.9	ND	6
	Arsenic	ND-14.4	7.5	50
	Barium	206-303	300	2,000
	Beryllium	ND-1.5	ND	4
	Cadmium	ND-2.2	ND	5
	Calcium	131,000-182,000	177,000	--
	Chromium	ND-72.5	8.4	100
	Cobalt	ND-22.7	5.4	--
	Copper	ND-33	6.6	1,300
	Iron	8,670-52,300	17,900	--
	Lead	ND-20.7	4.7	15
	Magnesium	40,500-52,200	59,100	--
	Manganese	402-2,100	433	--
	Nickel	15.6-134	60.3	100

TABLE 1 (Continued)

COMPARISON OF SEPTEMBER 1998 GROUNDWATER MONITORING WELL ANALYTICAL RESULTS WITH PREVIOUS RESULTS (1990-1993) AND MCLs (Concentrations in μg/L)

Sampling Location	Compound	Previous Results (Range)	September 1998 Result	MCL
MW-21s (Continued)	Potassium	7,350-9,160	6,850	--
	Sodium	94,300-124,000	125,000	--
	Vanadium	ND-26.4	ND	--
	Zinc	3.9-103	29.9	--
	Filtered Metal			
	Aluminum	ND-80.9	ND	--
	Arsenic	ND-3.4	7.0	50
	Barium	172-225	293	2,000
	Calcium	136,000-165,000	178,000	--
	Chromium	ND	2.2	100
	Cobalt	ND-7.5	2.8	--
	Copper	ND-6.2	ND	1,300
	Iron	8,320-12,500	12,500	--
	Lead	ND-1.4	ND	15
	Magnesium	37,400-43,700	59,200	--
	Manganese	287-2,150	320	--
	Nickel	ND-58.4	54.4	100
	Potassium	6,620-8,000	6,540	--
	Sodium	78,700-120,000	134,000	--
	Zinc	ND-18.6	14.0	--

TABLE 1 (Continued)

COMPARISON OF SEPTEMBER 1998 GROUNDWATER MONITORING WELL ANALYTICAL RESULTS WITH PREVIOUS RESULTS (1990-1993) AND MCLs (Concentrations in μg/L)

Sampling Location	Compound	Previous Results (Range)	September 1998 Result	MCL
MW-21i	Organic			
	Acetone	ND-4	ND	--
	Dieldrin	ND-0.006	NA	--
	Diethylphthalate	ND-2	ND	--
	Di-n-butylphthalate	ND-1	ND	--
	Di-n-octylphthalate	ND-1	ND	--
	Ethylbenzene	ND-1	ND	700
	Phenol	ND-3	ND	--
	Toluene	ND	0.9	1,000
	Unfiltered Metal			
	Aluminum	189-51,700	352	--
	Antimony	ND-15	ND	6
	Arsenic	4.2-40.9	8.8	50
	Barium	270-729	231	2,000
	Beryllium	ND-5	ND	4
	Calcium	75,600-224,000	61,200	--
	Chromium	ND-137	2.4	100
	Cobalt	ND-83.4	ND	--
	Copper	ND-183	ND	1,300
	Iron	1,580-176,000	1,420	--
	Lead	ND-155	ND	15
	Magnesium	18,800-61,600	14,800	--
	Manganese	141-5,010	121	--
	Mercury	ND-0.77	ND	2
	Nickel	34.2-195	ND	100
	Potassium	2,100-15,100	1,930	--
	Sodium	24,200-80,100	8,750	--
	Vanadium	ND-104	ND	--
	Zinc	ND-589	9.2	--

TABLE 1 (Continued)

COMPARISON OF SEPTEMBER 1998 GROUNDWATER MONITORING WELL ANALYTICAL RESULTS WITH PREVIOUS RESULTS (1990-1993) AND MCLs
(Concentrations in μg/L)

Sampling Location	Compound	Previous Results (Range)	September 1998 Result	MCL
MW-21i	Filtered Metal			
(Continued)	Aluminum	ND-109	ND	--
	Arsenic	3.4-9.5	7.1	50
	Barium	210-377	231	2,000
	Calcium	63,600-94,000	61,000	--
	Chromium	ND	2.2	100
	Iron	37-1,310	203	--
	Lead	ND-2.5	ND	15
	Magnesium	15,700-23,500	14,700	--
	Manganese	95.7-162	83.7	--
	Nickel	19.7-54.2	ND	100
	Potassium	ND-2,560	1,860	--
	Selenium	ND-1.3	ND	50
	Sodium	26,800-86,700	11,700	--
	Zinc	ND-119	1.6	--

TABLE 1 (Continued)

COMPARISON OF SEPTEMBER 1998 GROUNDWATER MONITORING WELL ANALYTICAL RESULTS WITH PREVIOUS RESULTS (1990-1993) AND MCLs
(Concentrations in μg/L)

Sampling Location	Compound	Previous Results (Range)	September 1998 Result	MCL
MW-23s	Organic			
	alpha-Chlordane	ND-0.013	NA	2
	beta-BHC	ND-0.01	NA	--
	bis(2-Ethylhexyl)phthalate	ND-1	ND	6
	Chloroethane	ND-0.6	ND	--
	4,4'-DDD	ND-0.014	NA	--
	4,4'-DDT	ND-0.0075	NA	--
	1,1-Dichloroethane	ND-1	ND	--
	Dieldrin	ND-0.0028	NA	--
	Di-n-butylphthalate	ND-1	ND	--
	Di-n-octylphthalate	ND-1	ND	--
	Endrin	ND-0.003	NA	2
	Endrin aldehyde	ND-0.016	NA	--
	Endrin ketone	ND-0.011	NA	----
	Endosulfan II	ND-0.004	NA	--
	Endosulfan sulfate	ND-0.005	NA	--
	gamma-Chlordane	ND-0.0019	NA	2
	Heptachlor	ND-0.005	NA	0.4
	Heptachlor epoxide	ND-0.018	NA	0.2
	Methylene chloride	ND-4	2	5
	Phenol	ND-4	ND	--
	Toluene	ND	44	1,000
	Unfiltered Metal			
	Aluminum	8,900-40,200	52.6	--
	Antimony	ND-315	ND	6
	Arsenic	14-54.8	ND	50
	Barium	426-928	501	2,000
	Beryllium	1.3-9.1	ND	4
	Cadmium	ND-11.8	ND	5
	Calcium	165,000-572,000	153,000	--

TABLE 1 (Continued)

COMPARISON OF SEPTEMBER 1998 GROUNDWATER MONITORING WELL ANALYTICAL RESULTS WITH PREVIOUS RESULTS (1990-1993) AND MCLs
(Concentrations in µg/L)

Sampling Location	Compound	Previous Results (Range)	September 1998 Result	MCL
MW-23s	Chromium	17.5-95.5	ND	100
(Continued)	Cobalt	13.2-75.6	ND	--
	Copper	30-110	4.2	1,300
	Iron	46,800-296,000	8,720	--
	Lead	34.5-205	2.0	15
	Magnesium	41,300-131,000	46,900	--
	Manganese	1,160-8,770	202	--
	Mercury	ND-0.55	ND	2
	Nickel	41.5-175	17.8	100
	Potassium	5,680-14,400	12,900	--
	Sodium	65,300-88,900	72,800	--
	Thallium	ND-1.3	ND	2
	Vanadium	22.4-123	ND	--
	Zinc	154-903	10.3	--
	Filtered Metal			
	Aluminum	ND-148	ND	--
	Antimony	ND-22.5	ND	6
	Arsenic	ND-7.8	ND	50
	Barium	305-497	474	2,000
	Calcium	121,000-138,000	145,000	--
	Copper	ND	2.3	1,300
	Iron	843-6,100	7,740	--
	Lead	ND-1.7	ND	15
	Magnesium	32,300-44,200	44,800	--
	Manganese	207-277	187	--
	Mercury	ND-.23	ND	2
	Nickel	ND-14.2	16.3	100
	Potassium	4,910- 9,610	12,700	--
	Sodium	74,000-84,800	67,900	--
	Thallium	ND-9	ND	2

TABLE 1 (Continued)

COMPARISON OF SEPTEMBER 1998 GROUNDWATER MONITORING WELL ANALYTICAL RESULTS WITH PREVIOUS RESULTS (1990-1993) AND MCLs
(Concentrations in µg/L)

Sampling Location	Compound	Previous Results (Range)	September 1998 Result	MCL
MW-23s (Continued)	Zinc	ND-14.9	ND	--

TABLE 1 (Continued)

COMPARISON OF SEPTEMBER 1998 GROUNDWATER MONITORING WELL ANALYTICAL RESULTS WITH PREVIOUS RESULTS (1990-1993) AND MCLs
(Concentrations in µg/L)

Sampling Location	Compound	Previous Results (Range)	September 1998 Result	MCL
MW-24s	Organic			
	bis(2-Ethylhexyl)phthalate	ND-1	ND	6
	Endosulfan sulfate	ND-0.0027	NA	--
	Methylene chloride	ND	4	5
	Phenol	ND-1	ND	--
	Toluene	ND	14	1,000
	Unfiltered Metal			
	Aluminum	568-145,000	ND	--
	Antimony	ND-161	ND	6
	Arsenic	3.3-132	5.2	50
	Barium	194-2,320	158	2,000
	Beryllium	ND-95.7	ND	4
	Cadmium	ND-8	ND	5
	Calcium	134,000-491,000	174,000	--
	Chromium	ND-214	ND	100
	Cobalt	ND-274	ND	--
	Copper	9.3-1,020	ND	1,300
	Iron	4,490-694,000	3,800	--
	Lead	5.8-659	ND	15
	Magnesium	33,700-191,000	37,700	--
	Manganese	261-10,400	237	--
	Mercury	ND-0.5	ND	2
	Nickel	16.6-649	14.4	100
	Potassium	4,140-86,100	2,630	--
	Selenium	ND-13	ND	50
	Sodium	2,110-97,100	91,400	--
	Thallium	ND-2.2	ND	2
	Vanadium	ND-232	ND	--
	Zinc	13.5-3,090	6.1	--

TABLE 1 (Continued)

COMPARISON OF SEPTEMBER 1998 GROUNDWATER MONITORING WELL ANALYTICAL RESULTS WITH PREVIOUS RESULTS (1990-1993) AND MCLs
(Concentrations in µg/L)

Sampling Location	Compound	Previous Results (Range)	September 1998 Result	MCL
MW-24s	Filtered Metal			
(Continued)	Aluminum	ND-124	ND	--
	Arsenic	ND-7.1	ND	50
	Barium	196-243	151	2,000
	Calcium	130,000-155,000	165,000	--
	Chromium	ND-11.1	ND	100
	Copper	ND-11	ND	1,300
	Iron	107-27,100	3,640	--
	Lead	ND-2	ND	15
	Magnesium	31,200-36,500	36,000	--
	Manganese	ND-237	227	--
	Nickel	ND-16.6	13.3	100
	Potassium	2,060-3,800	2,420	--
	Sodium	89,600-101,000	79,500	--
	Zinc	ND-27.2	14.7	--

TABLE 1 (Continued)

COMPARISON OF SEPTEMBER 1998 GROUNDWATER MONITORING WELL ANALYTICAL RESULTS WITH PREVIOUS RESULTS (1990-1993) AND MCLs
(Concentrations in μg/L)

Sampling Location	Compound	Previous Results (Range)	September 1998 Result	MCL
MW-24i	Organic			
	bis(2-Ethylhexyl)phthalate	ND-220	ND	6
	Chloroform	ND-2	ND	100
	Di-n-octylphthalate	ND-10	ND	--
	Methylene chloride	ND	5	5
	Phenol	ND-1	ND	--
	Unfiltered Metal			
	Aluminum	92.8-3,980	153	--
	Arsenic	ND-4.3	ND	50
	Barium	146-192	123	2,000
	Beryllium	ND-2.3	ND	4
	Calcium	114,000-157,000	141,000	--
	Chromium	ND-739	100	100
	Cobalt	ND-9.3	ND	--
	Copper	ND-25.4	ND	1,300
	Iron	1,580-14,200	1,790	--
	Lead	ND-26.4	ND	15
	Magnesium	27,600-37,000	32,200	--
	Manganese	146-467	156	--
	Nickel	ND-1,240	22.8	100
	Potassium	ND-3,770	2,200	--
	Sodium	85,600-112,000	72,900	--
	Thallium	ND-1.1	ND	2
	Vanadium	ND-13.2	ND	--
	Zinc	ND-127	8.2	--
	Filtered Metal			
	Aluminum	ND-87.7	ND	--
	Arsenic	ND-2.4	ND	50
	Barium	84.1-178	122	2,000

TABLE 1 (Continued)

COMPARISON OF SEPTEMBER 1998 GROUNDWATER MONITORING WELL ANALYTICAL RESULTS WITH PREVIOUS RESULTS (1990-1993) AND MCLs
(Concentrations in µg/L)

Sampling Location	Compound	Previous Results (Range)	September 1998 Result	MCL
MW-24i (Continued)	Calcium	98,3000-156,000	145,000	--
	Cobalt	ND-17	ND	--
	Copper	ND-5.6	ND	1,300
	Iron	251-2,470	1,160	--
	Lead	ND-7.2	ND	15
	Magnesium	31,300-36,800	33,000	--
	Manganese	161-290	152	--
	Nickel	ND-1,700	16.6	100
	Potassium	ND-2,880	2,250	--
	Sodium	92,500-125,000	73,300	--
	Zinc	8.1-132	5.4	--

TABLE 1 (Continued)

COMPARISON OF SEPTEMBER 1998 GROUNDWATER MONITORING WELL ANALYTICAL RESULTS WITH PREVIOUS RESULTS (1990-1993) AND MCLs (Concentrations in μg/L)

Sampling Location	Compound	Previous Results (Range)	September 1998 Result	MCL
MW-25s	Organic			
	Acetone	ND-8	8	--
	Aldrin	ND-0.001	ND	--
	alpha-Chlordane	ND-0.0036	NA	2
	bis(2-Ethylhexyl)phthalate	ND-0.9	ND	6
	Carbon disulfide	ND-3	ND	--
	Di-n-butylphthalate	ND-0.7	ND	--
	Di-n-octylphthalate	ND-4	ND	--
	Endrin aldehyde	0.0059	NA	--
	Heptachlor	0.0021	NA	0.4
	Methylene chloride	ND	4	5
	Naphthalene	ND-1	ND	--
	Phenanthrene	ND-1	ND	--
	Toluene	ND	33	1,000
	Unfiltered Metal			
	Aluminum	577-42,700	263	--
	Antimony	ND-175	ND	6
	Arsenic	ND-44.2	ND	50
	Barium	98.3-821	102	2,000
	Beryllium	ND-24	ND	4
	Cadmium	ND-8.7	ND	5
	Calcium	91,000-385,000	124,000	--
	Chromium	ND-160	2.2	100
	Cobalt	ND-107	2.5	--
	Copper	13-240	3.3	1,300
	Iron	2,220-177,000	997	--
	Lead	4.4-214	ND	15
	Magnesium	16,700-79,300	23,300	--
	Manganese	423-14,000	300	--

TABLE 1 (Continued)

COMPARISON OF SEPTEMBER 1998 GROUNDWATER MONITORING WELL ANALYTICAL RESULTS WITH PREVIOUS RESULTS (1990-1993) AND MCLs (Concentrations in µg/L)

Sampling Location	Compound	Previous Results (Range)	September 1998 Result	MCL
MW-25s (Continued)	Mercury	ND-0.39	ND	2
	Nickel	28.7-206	16.6	100
	Potassium	2,590-8,660	2,860	--
	Sodium	35,400-86,900	41,200	--
	Thallium	ND-1.4	ND	2
	Vanadium	ND-102	ND	--
	Zinc	12.7-655	10.5	--
	Filtered Metal			
	Aluminum	ND-80.7	ND	--
	Barium	91.1-304	95.4	2,000
	Calcium	83,300-118,000	120,000	--
	Copper	ND-7.1	ND	1,300
	Iron	39.3-138	ND	--
	Lead	ND-3.8	ND	15
	Magnesium	15,400-27,300	22,500	--
	Manganese	335-2,160	201	--
	Nickel	ND-30.8	8.5	100
	Potassium	2,530-4,410	2,700	--
	Selenium	ND-2.9	ND	50
	Sodium	34,400-83,700	47,900	--
	Thallium	ND-1.1	ND	2
	Zinc	ND-7.5	27.2	--

TABLE 1 (Continued)

COMPARISON OF SEPTEMBER 1998 GROUNDWATER MONITORING WELL ANALYTICAL RESULTS WITH PREVIOUS RESULTS (1990-1993) AND MCLs
(Concentrations in μg/L)

Sampling Location	Compound	Previous Results (Range)	September 1998 Result	MCL
MW-25i	Organic			
	Aldrin	ND-0.005	ND	--
	bis(2-Ethylhexyl)phthalate	ND-150	ND	6
	beta-BHC	ND-0.001	NA	
	Bromodichloromethane	ND-2	ND	100
	Bromoform	ND-3	ND	100
	Chloroform	ND-2	ND	100
	Dibromomethane	ND-3	ND	100
	Di-n-butylphthalate	ND-0.6	ND	--
	Di-n-octylphthalate	ND-15	ND	--
	Endosulfan sulfate	ND-0.019	NA	--
	gamma-Chlordane	ND-0.002	NA	2
	Methoxychlor	ND-0.041	NA	40
	Methylene chloride	ND	2	5
	Pyrene	ND-0.9	ND	--
	Toluene	ND	21	1,000
	Unfiltered Metal			
	Aluminum	161-1,050	648	--
	Antimony	ND-18.3	ND	6
	Arsenic	1.8-4	ND	50
	Barium	191-293	176	2,000
	Cadmium	ND-4.4	ND	5
	Calcium	121,000-149,000	146,000	--
	Chromium	ND-341	89.8	100
	Cobalt	ND-4.4	3.3	--
	Copper	ND-9	3.9	1,300
	Iron	3,920-8,050	5,520	--
	Lead	3.3-50.2	1.4	15
	Magnesium	25,200-31,700	29,000	--

TABLE 1 (Continued)

COMPARISON OF SEPTEMBER 1998 GROUNDWATER MONITORING WELL ANALYTICAL RESULTS WITH PREVIOUS RESULTS (1990-1993) AND MCLs
(Concentrations in µg/L)

Sampling Location	Compound	Previous Results (Range)	September 1998 Result	MCL
MW-25i	Manganese	162-290	244	--
(Continued)	Mercury	ND-0.44	0.50	2
	Nickel	ND-352	150	100
	Potassium	3,950-26,100	3,570	--
	Sodium	176,000-234,000	155,000	--
	Vanadium	ND-5.1	2.6	--
	Zinc	4.6-149	19.8	--
	Filtered Metal			
	Aluminum	ND-21.3	ND	--
	Arsenic	ND-4.6	ND	50
	Barium	130-322	163	2,000
	Calcium	105,000-156,000	144,000	--
	Cobalt	ND	5.6	--
	Copper	ND-8.1	ND	1,300
	Iron	847-7,610	2,970	--
	Lead	ND-1.5	ND	15
	Magnesium	22,200-33,000	28,500	--
	Manganese	174-188	214	--
	Mercury	ND	7.0	2
	Nickel	ND-306	113	100
	Potassium	3,920-26,500	3,170	--
	Sodium	163,000-242,000	154,000	--
	Thallium	ND-1.1	ND	2
	Zinc	ND-84.7	7.7	--

TABLE 1 (Continued)

COMPARISON OF SEPTEMBER 1998 GROUNDWATER MONITORING WELL ANALYTICAL RESULTS WITH PREVIOUS RESULTS (1990-1993) AND MCLs (Concentrations in μg/L)

Sampling Location	Compound	Previous Results (Range)	September 1998 Result	MCL
MW-27s	Organic			
	alpha-Chlordane	ND-0.0021	NA	2
	bis(2-Ethylhexyl)phthalate	ND-0.8	ND	6
	4,4'-DDE	ND-0.004	NA	--
	Di-n-octylphthalate	ND-3	ND	--
	Heptachlor	ND-0.002	NA	0.4
	Methoxychlor	ND-0.0094	NA	40
	Methylene chloride	ND	3	5
	Toluene	ND-1	ND	1,000
	Unfiltered Metal			
	Aluminum	4,070-153,000	12.0	--
	Antimony	ND-133	ND	6
	Arsenic	5.9-22.5	ND	50
	Barium	187-2,210	176	2,000
	Beryllium	ND-121	ND	4
	Cadmium	ND-14	ND	5
	Calcium	125,000-1,130,000	137,000	--
	Chromium	13.9-297	9.2	100
	Cobalt	9.8-349	ND	--
	Copper	30.7-1,750	ND	1,300
	Iron	18,200-1,070,000	107	--
	Lead	16.1-700	1.8	15
	Magnesium	29,300-422,000	27,900	--
	Manganese	460-16,400	18.2	--
	Mercury	ND-2.6	ND	2
	Nickel	ND-735	14.1	100
	Potassium	3,600-24,000	3,060	--
	Sodium	29,900-554,000	79,100	--
	Thallium	ND-3.4	2.5	2

TABLE 1 (Continued)

COMPARISON OF SEPTEMBER 1998 GROUNDWATER MONITORING WELL ANALYTICAL RESULTS WITH PREVIOUS RESULTS (1990-1993) AND MCLs (Concentrations in μg/L)

Sampling Location	Compound	Previous Results (Range)	September 1998 Result	MCL
MW-27s (Continued)	Vanadium	12.3-311	ND	--
	Zinc	76.9-4,160	15.8	--
	Filtered Metal			
	Aluminum	ND-77.2	12	--
	Arsenic	ND-2.2	ND	50
	Barium	125-147	177	2,000
	Calcium	104,000-120,000	137,000	--
	Chromium	ND	1.0	100
	Iron	ND-59.4	12.0	--
	Lead	ND	1.5	15
	Magnesium	22,400-26,000	28,100	--
	Manganese	186-455	18.1	--
	Nickel	ND	11.2	100
	Potassium	ND-2,770	2,910	--
	Sodium	30,500-66,400	79,000	--
	Zinc	ND-4.8	6.7	--

TABLE 1 (Continued)

COMPARISON OF SEPTEMBER 1998 GROUNDWATER MONITORING WELL ANALYTICAL RESULTS WITH PREVIOUS RESULTS (1990-1993) AND MCLs (Concentrations in μg/L)

Sampling Location	Compound	Previous Results (Range)	September 1998 Result	MCL
MW-27i	Organic			
	Acetone	ND	7 ND[a]	--
	Carbon disulfide	ND-22	ND	--
	Chloroform	ND-1	ND	100
	Methylene chloride	ND-22	4/2	5
	Phenol	ND-3	ND	--
	Toluene	ND	12/2	1,000
	Unfiltered Metal			
	Aluminum	78.4-9,070	154/102	--
	Arsenic	ND-18.8	6.0/6.7	50
	Barium	81.4-122	297/277	2,000
	Cadmium	ND-2.6	ND	5
	Calcium	90,700-116,000	162,000/154,000	--
	Chromium	ND-94.2	115/94.1	100
	Cobalt	ND-15.2	ND	--
	Copper	ND-62.6	ND	1,300
	Iron	1,130-32,500	3,310/3,030	--
	Lead	ND-102	ND	15
	Magnesium	23,300-28,100	36,300/34,800	--
	Manganese	117-673	184/175	--
	Nickel	17.1-83.8	48.0/45.7	100
	Potassium	ND-5,250	2,720/2,480	--
	Sodium	57,100-97,000	89,600/83,200	--
	Thallium	ND-1.4	ND	2
	Vanadium	ND-19.7	ND	--
	Zinc	3-187	13.7/6.8	--
	Filtered Metal			
	Barium	42.4-117	284/287	2,000
	Calcium	77,700-127,000	158,000/162,000	--

TABLE 1 (Continued)

COMPARISON OF SEPTEMBER 1998 GROUNDWATER MONITORING WELL ANALYTICAL RESULTS WITH PREVIOUS RESULTS (1990-1993) AND MCLs
(Concentrations in µg/L)

Sampling Location	Compound	Previous Results (Range)	September 1998 Result	MCL
MW-27i (Continued)	Iron	265-2,720	2,330/2,390	--
	Magnesium	16,900-31,200	35,400/36,300	--
	Manganese	121-167	174/177	--
	Nickel	12.1-21.5	42.8/44.5	100
	Potassium	ND-4,360	2,550/2,640	--
	Sodium	65,000-91,700	87,900/86,600	--
	Zinc	ND-59.8	10.8/5.4	--

Note:

[a] Sample result/duplicate result

TABLE 1 (Continued)

COMPARISON OF SEPTEMBER 1998 GROUNDWATER MONITORING WELL ANALYTICAL RESULTS WITH PREVIOUS RESULTS (1990-1993) AND MCLs
(Concentrations in µg/L)

Sampling Location	Compound	Previous Results (Range)	September 1998 Result	MCL
MW-27d	Organic			
	bis(2-Ethylhexyl)phthalate	ND-91	ND	6
	Bromodichloromethane	ND-1	ND	100
	Bromoform	ND-1	ND	100
	Carbon disulfide	ND-2	ND	--
	Chloroform	ND-2	ND	100
	Dibromochloromethane	ND-2	ND	--
	Di-n-butylphthalate	ND-0.5	ND	--
	Di-n-octylphthalate	ND-6	ND	--
	4,4'-DDT	ND-0.015	NA	--
	gamma-chlordane	ND-0.0027	NA	2
	Methylene chloride	ND	4	5
	Heptachlor	ND-0.0072	NA	0.4
	Toluene	ND	2	1,000
	Unfiltered Metal			
	Aluminum	160-360	283	--
	Antimony	ND-17	ND	6
	Arsenic	ND-4.9	21.7	50
	Barium	126-164	199	2,000
	Cadmium	ND-3.6	ND	5
	Calcium	67,100-95,700	82,700	--
	Chromium	13.5-94.3	3.2	100
	Cobalt	ND-4.6	ND	--
	Copper	ND-24.3	4.1	1,300
	Iron	190-2,220	5,040	--
	Lead	3.3-60.9	5.2	15
	Magnesium	14,400-20,600	17,900	--
	Manganese	76.2-339	86.0	--
	Nickel	ND-39.7	8.2	100

TABLE 1 (Continued)

COMPARISON OF SEPTEMBER 1998 GROUNDWATER MONITORING WELL ANALYTICAL RESULTS WITH PREVIOUS RESULTS (1990-1993) AND MCLs
(Concentrations in µg/L)

Sampling Location	Compound	Previous Results (Range)	September 1998 Result	MCL
MW-27d (Continued)	Potassium	ND-3,010	1,620	--
	Sodium	27,100-54,600	37,800	--
	Thallium	ND-1.1	ND	2
	Zinc	6.2-53.4	33.9	--
	Filtered Metal			
	Aluminum	ND-69.7	12.0	--
	Arsenic	ND-4.1	4.2	50
	Barium	118-163	179	2,000
	Calcium	67,100-95,800	82,600	--
	Chromium	ND	1.0	100
	Cobalt	ND-7.6	ND	--
	Iron	352-1,270	945	--
	Lead	ND	1.6	15
	Magnesium	14,500-21,100	17,800	--
	Manganese	70-221	73.6	--
	Nickel	ND-12.5	6.4	100
	Potassium	ND-2,400	1,380	--
	Sodium	26,500-51,200	34,800	--
	Thallium	ND-1	ND	2
	Zinc	2.1-18.8	10.4	--

TABLE 2

COMPARISON OF SEPTEMBER 1998 RESIDENTIAL WELL ANALYTICAL RESULTS WITH MCLs
(Concentrations in μg/L)

Sampling Location	Compound	September 1998 Result	MCL
RW-28	Organic		
	Toluene	0.7	1,000
	Metal		
	Arsenic	2	50
	Barium	187	2,000
	Calcium	123,000	--
	Iron	3,560	--
	Magnesium	23,000	--
	Manganese	219	--
	Potassium	1,350	--
	Sodium	90,100	--

Sampling Location	Compound	September 1998 Result	MCL
RW-70	Organic		
	Toluene	0.6	1,000
	Metal		
	Barium	320	2,000
	Calcium	121,000	--
	Iron	803	--
	Magnesium	25,200	--
	Manganese	58.3	--
	Potassium	990	--
	Sodium	20,700	--

TABLE 2 (Continued)

COMPARISON OF SEPTEMBER 1998 RESIDENTIAL WELL ANALYTICAL RESULTS WITH MCLs
(Concentrations in μg/L)

Sampling Location	Compound	September 1998 Result	MCL
RW-101	Organic		
	Toluene	0.9	1,000
	Metal		
	Arsenic	2	50
	Barium	290	2,000
	Calcium	135,000	--
	Iron	1,280	--
	Magnesium	27,700	--
	Manganese	162	--
	Potassium	1,620	--
	Sodium	56,000	--

Sampling Location	Compound	September 1998 Result	MCL
RW-102	Metal		
	Arsenic	5	50
	Barium	156	2,000
	Calcium	65,500	--
	Iron	897	--
	Magnesium	13,900	--
	Manganese	41.7	--
	Potassium	1,110	--
	Sodium	4,220	--

TABLE 2 (Continued)

COMPARISON OF SEPTEMBER 1998 RESIDENTIAL WELL ANALYTICAL RESULTS WITH MCLs
(Concentrations in μg/L)

Sampling Location	Compound	September 1998 Result	MCL
RW-103	Organic		
	Toluene	0.7	1,000
	Metal		
	Arsenic	2	50
	Barium	263	2,000
	Calcium	148,000	--
	Iron	3,780	--
	Magnesium	32,800	--
	Manganese	146	--
	Potassium	1,660	--
	Sodium	47,600	--

Sampling Location	Compound	September 1998 Result	MCL
RW-103-D	Organic		
	Toluene	0.7	1,000
	Metal		
	Arsenic	2	50
	Barium	261	2,000
	Calcium	146,000	--
	Iron	3,730	--
	Magnesium	32,400	--
	Manganese	144	--
	Potassium	1,590	--
	Sodium	47,100	--

TABLE 2 (Continued)

COMPARISON OF SEPTEMBER 1998 RESIDENTIAL WELL ANALYTICAL RESULTS WITH MCLs
(Concentrations in μg/L)

Sampling Location	Compound	September 1998 Result	MCL
RW-104	Organic		
	bis(2-Ethylhexyl)phthalate	4	6
	Toluene	0.9	1,000
	Metal		
	Magnesium	115	--
	Sodium	267,000	--

Note:

Residential well samples were analyzed for unfiltered metals.

APPENDIX A

MONITORING WELL SAMPLE ANALYTICAL RESULTS FOR SEPTEMBER 1998

APPENDIX A-1

VOLATILE ORGANIC COMPOUNDS

(18 Pages)

SDG NO. EBNZ0
SDG NO. ECDJ3
SDG NO. ECDL4
SDG NO. ECDL7

SDG NO. EBZN0
(Concentrations in µg/L)

Sampling Location:	IE-13-MW-12d	IE-13-MW-12i	IE-13-MW-TB01	IE-13-MW-20d	IE-13-MW-20s	IE-13-MW-20i	IE-13-MW-20i-D
Sample Number:	EBNZ0	EBNZ1	EBNZ2	ECDG9	ECDH0	ECDH1	ECDH2
Sampling Device:	Pump	Pump	Pump	Pump	Pump	Pump	Pump
Date Sampled:	09/15/98	09/15/98	09/15/98	09/17/98	09/17/98	09/17/98	09/17/98
VOC	Result	Result	Result	Result	Result	Result	Result
Chloromethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromomethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Vinyl Chloride	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene Chloride	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	10 U	10 U	10 U	10 U	10 U	14	10 U
Carbon Disulfide	10 U	10 U	10 U	3 J	5 J	5 J	10 U
1,1-Dichloroethene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Total 1,2-Dichloroethene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Butanone	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,1-Trichloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon Tetrachloride	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromodichloromethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloropropane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Cis-1,3-Dichloropropene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trichloroethene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trans-1,3-Dichloropropene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromoform	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Tetrachloroethene	10 U	10 U	10 U	10 U	10 U	10 U	10 U

SDG NO. EBZN0
(Concentrations in µg/L)

Sampling Location:	IE-13-MW-12d	IE-13-MW-12i	IE-13-MW-TB01	IE-13-MW-20d	IE-13-MW-20s	IE-13-MW-20i	IE-13-MW-20i-D
Sample Number:	EBNZ0	EBNZ1	EBNZ2	ECDG9	ECDH0	ECDH1	ECDH2
Sampling Device:	Pump	Pump	Pump	Pump	Pump	Pump	Pump
Date Sampled:	09/15/98	09/15/98	09/15/98	09/17/98	09/17/98	09/17/98	09/17/98
VOC	Result	Result	Result	Result	Result	Result	Result
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Toluene	10 U	10 U	10 U	60	47	37	23
Chlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Styrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Xylene (total)	10 U	10 U	10 U	10 U	10 U	10 U	10 U

SDG NO. EBZN0
(Concentrations in µg/L)

Sampling Location:	IE-13-MW-20i	IE-13-MW-20i	IE-13-MW-23s	IE-13-MW-TB02	IE-13-MW-6s	IE-13-MW-TB04
Sample Number:	ECDH2MS	ECDH2MSD	ECDH3	ECDH4	ECDN3	ECDN4
Sampling Device:	Pump	Pump	Pump	Pump	Pump	Pump
Date Sampled:	09/17/98	09/17/98	09/17/98	09/17/98	09/18/98	09/18/98
VOC	Result	Result	Result	Result	Result	Result
Chloromethane	10 U	10 U	10 U	10 U	50 U	50 U
Bromomethane	10 U	10 U	10 U	10 U	50 U	50 U
Vinyl Chloride	10 U	10 U	10 U	10 U	50 U	50 U
Chloroethane	10 U	10 U	10 U	10 U	50 U	50 U
Methylene Chloride	10 U	10 U	2 J	10 U	50 U	11 J
Acetone	10 U	10 U	10 U	10 U	50 U	50 U
Carbon Disulfide	10 U	10 U	10 U	10 U	50 U	50 U
1,1-Dichloroethene	47	47	10 U	10 U	50 U	50 U
1,1-Dichloroethane	10 U	10 U	10 U	10 U	50 U	50 U
Total 1,2-Dichloroethene	10 U	10 U	10 U	10 U	50 U	50 U
Chloroform	10 U	10 U	10 U	10 U	50 U	50 U
1,2-Dichloroethane	10 U	10 U	10 U	10 U	50 U	50 U
2-Butanone	10 U	10 U	10 U	10 U	50 U	50 U
1,1,1-Trichloroethane	10 U	10 U	10 U	10 U	50 U	50 U
Carbon Tetrachloride	10 U	10 U	10 U	10 U	50 U	50 U
Bromodichloromethane	10 U	10 U	10 U	10 U	50 U	50 U
1,2-Dichloropropane	10 U	10 U	10 U	10 U	50 U	50 U
Cis-1,3-Dichloropropene	10 U	10 U	10 U	10 U	50 U	50 U
Trichloroethene	46	50	10 U	10 U	50 U	50 U
Dibromochloromethane	10 U	10 U	10 U	10 U	50 U	50 U
1,1,2-Trichloroethane	10 U	10 U	10 U	10 U	50 U	50 U
Benzene	58	59	10 U	10 U	50 U	50 U
Trans-1,3-Dichloropropene	10 U	10 U	10 U	10 U	50 U	50 U
Bromoform	10 U	10 U	10 U	10 U	50 U	50 U
4-Methyl-2-pentanone	10 U	10 U	10 U	10 U	50 U	50 U
2-Hexanone	10 U	10 U	10 U	10 U	50 U	50 U
Tetrachloroethene	10 U	10 U	10 U	10 U	50 U	50 U

SDG NO. EBZN0
(Concentrations in µg/L)

Sampling Location:	IE-13-MW-20i	IE-13-MW-20i	IE-13-MW-23s	IE-13-MW-TB02	IE-13-MW-6s	IE-13-MW-TB04
Sample Number:	ECDH2MS	ECDH2MSD	ECDH3	ECDH4	ECDN3	ECDN4
Sampling Device:	Pump	Pump	Pump	Pump	Pump	Pump
Date Sampled:	09/17/98	09/17/98	09/17/98	09/17/98	09/18/98	09/18/98
VOC	Result	Result	Result	Result	Result	Result
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U	10 U	50 U	50 U
Toluene	79	81	44	140	520	570
Chlorobenzene	57	57	10 U	10 U	50 U	50 U
Ethylbenzene	10 U	10 U	10 U	10 U	50 U	50 U
Styrene	10 U	10 U	10 U	10 U	50 U	50 U
Xylene (total)	10 U	10 U	10 U	10 U	50 U	50 U

SDG NO. ECDJ3
(Concentrations in µg/L)

Sampling Location:	IE-13-FB01	IE-13-MW-27d	IE-13-MW-27s	IE-13-TB06	IE-13-FB02	IE-13-MW-27i
Sample Number:	ECDJ3	ECDJ4	ECDJ5	ECDJ6	ECDJ7	ECDJ8
Sampling Device:	Pump	Pump	Pump	Pump	Pump	Pump
Date Sampled:	09/21/98	09/22/98	09/22/98	09/22/98	09/22/98	09/22/98
VOC	Result	Result	Result	Result	Result	Result
Chloromethane	10 U	10 U	10 U	10 U	10 U	10 U
Bromomethane	10 U	10 U	10 U	10 U	10 U	10 U
Vinyl Chloride	10 U	10 U	10 U	10 U	10 U	10 U
Chloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Methylene Chloride	10 U	4 J	3 J	4 J	10 U	4 J
Acetone	10 U	10 U	10 U	10 U	10 U	7 J
Carbon Disulfide	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethene	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Total 1,2-Dichloroethene	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform	20	10 U	10 U	50	33	10 U
1,2-Dichloroethane	10 U	10 U	10 U	10 U	10 U	10 U
2-Butanone	10 U	10 U	10 U	10 U	10 U	10 U
1,1,1-Trichloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Carbon Tetrachloride	10 U	10 U	10 U	10 U	10 U	10 U
Bromodichloromethane	2 J	10 U	10 U	4 J	4 J	10 U
1,2-Dichloropropane	10 U	10 U	10 U	10 U	10 U	10 U
Cis-1,3-Dichloropropene	10 U	10 U	10 U	10 U	10 U	10 U
Trichloroethene	10 U	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	10 U	10 U	10 U	10 U	10 U	10 U
Trans-1,3-Dichloropropene	10 U	10 U	10 U	10 U	10 U	10 U
Bromoform	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	10 U	10 U	10 U	10 U	10 U	10 U
Tetrachloroethene	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Toluene	10 U	2 J	10 U	10 U	10 U	12

SDG NO. ECDJ3
(Concentrations in µg/L)

Sampling Location:	IE-13-FB01	IE-13-MW-27d	IE-13-MW-27s	IE-13-TB06	IE-13-FB02	IE-13-MW-27i
Sample Number:	ECDJ3	ECDJ4	ECDJ5	ECDJ6	ECDJ7	ECDJ8
Sampling Device:	Pump	Pump	Pump	Pump	Pump	Pump
Date Sampled:	09/21/98	09/22/98	09/22/98	09/22/98	09/22/98	09/22/98
VOC	Result	Result	Result	Result	Result	Result
Chlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	10 U	10 U	10 U	10 U	10 U	10 U
Styrene	10 U	10 U	10 U	10 U	10 U	10 U
Xylene (total)	10 U	10 U	10 U	10 U	10 U	10 U

SDG NO. ECDJ3
(Concentrations in µg/L)

Sampling Location:	IE-13-MW-27i-D	IE-13-MW-24i	IE-13-MW-24s	IE-13-TB07	IE-13-MW-25s	IE-13-MW-25i
Sample Number:	ECDJ9	ECDK0	ECDK1	ECDK2	ECDK6	ECDK7
Sampling Device:	Pump	Pump	Pump	Pump	Pump	Pump
Date Sampled:	09/23/98	09/23/98	09/23/98	09/23/98	09/23/98	09/23/98
VOC	Result	Result	Result	Result	Result	Result
Chloromethane	10 U	10 U	10 U	10 U	10 U	10 U
Bromomethane	10 U	10 U	10 U	10 U	10 U	10 U
Vinyl Chloride	10 U	10 U	10 U	10 U	10 U	10 U
Chloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Methylene Chloride	2 J	5 J	4 J	3 J	4 J	2 J
Acetone	10 U	10 U	10 U	10 U	8 J	10 U
Carbon Disulfide	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethene	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Total 1,2-Dichloroethene	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloroethane	10 U	10 U	10 U	10 U	10 U	10 U
2-Butanone	10 U	10 U	10 U	10 U	10 U	10 U
1,1,1-Trichloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Carbon Tetrachloride	10 U	10 U	10 U	10 U	10 U	10 U
Bromodichloromethane	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloropropane	10 U	10 U	10 U	10 U	10 U	10 U
Cis-1,3-Dichloropropene	10 U	10 U	10 U	10 U	10 U	10 U
Trichloroethene	10 U	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	10 U	10 U	10 U	10 U	10 U	10 U
Trans-1,3-Dichloropropene	10 U	10 U	10 U	10 U	10 U	10 U
Bromoform	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	10 U	10 U	10 U	10 U	10 U	10 U
Tetrachloroethene	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Toluene	2 J	10 U	14	10 U	33	21

SDG NO. ECDJ3
(Concentrations in µg/L)

Sampling Location:	IE-13-MW-27i-D	IE-13-MW-24i	IE-13-MW-24s	IE-13-TB07	IE-13-MW-25s	IE-13-MW-25i
Sample Number:	ECDJ9	ECDK0	ECDK1	ECDK2	ECDK6	ECDK7
Sampling Device:	Pump	Pump	Pump	Pump	Pump	Pump
Date Sampled:	09/23/98	09/23/98	09/23/98	09/23/98	09/23/98	09/23/98
VOC	Result	Result	Result	Result	Result	Result
Chlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	10 U	10 U	10 U	10 U	10 U	10 U
Styrene	10 U	10 U	10 U	10 U	10 U	10 U
Xylene (total)	10 U	10 U	10 U	10 U	10 U	10 U

SDG NO. ECDJ3
(Concentrations in µg/L)

Sampling Location:	IE-13-MW-11i	IE-13-MW-11i-D	IE-13-MW-11i-D	IE-13-MW-11i-D	IE-13-MW-11d	IE-13-MW-11s
Sample Number:	ECDK8	ECDK9	ECDK9MS	ECDK9MSD	ECDL0	ECDL1
Sampling Device:	Pump	Pump	Pump	Pump	Pump	Bailer
Date Sampled:	09/24/98	9/24/98	9/24/98	09/24/98	09/24/98	09/24/98
VOC	Result	Result	Result	Result	Result	Result
Chloromethane	10 U	10 U	10 U	10 U	10 U	10 U
Bromomethane	10 U	10 U	10 U	10 U	10 U	10 U
Vinyl Chloride	2 J	10 U	2 J	2 J	10 U	10 U
Chloroethane	2 J	2 J	3 J	3 J	10 U	10 U
Methylene Chloride	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	10 U	10 U	10 U	10 U	10 U	10 U
Carbon Disulfide	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethene	10 U	10 U	53	53	10 U	10 U
1,1-Dichloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Total 1,2-Dichloroethene	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloroethane	10 U	10 U	10 U	10 U	10 U	10 U
2-Butanone	10 U	10 U	10 U	10 U	10 U	10 U
1,1,1-Trichloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Carbon Tetrachloride	10 U	10 U	10 U	10 U	10 U	10 U
Bromodichloromethane	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloropropane	10 U	10 U	10 U	10 U	10 U	10 U
Cis-1,3-Dichloropropene	10 U	10 U	10 U	10 U	10 U	10 U
Trichloroethene	10 U	10 U	53	52	10 U	10 U
Dibromochloromethane	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	10 U	10 U	52	50	10 U	10 U
Trans-1,3-Dichloropropene	10 U	10 U	10 U	10 U	10 U	10 U
Bromoform	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	10 U	10 U	10 U	10 U	10 U	10 U
Tetrachloroethene	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Toluene	10	10 U	56	50	1 J	8 J

SDG NO. ECDJ3
(Concentrations in µg/L)

Sampling Location:	IE-13-MW-11i	IE-13-MW-11i-D	IE-13-MW-11i-D	IE-13-MW-11i-D	IE-13-MW-11d	IE-13-MW-11s
Sample Number:	ECDK8	ECDK9	ECDK9MS	ECDK9MSD	ECDL0	ECDL1
Sampling Device:	Pump	Pump	Pump	Pump	Pump	Bailer
Date Sampled:	09/24/98	9/24/98	9/24/98	09/24/98	09/24/98	09/24/98
VOC	Result	Result	Result	Result	Result	Result
Chlorobenzene	10 U	10 U	52	50	10 U	10 U
Ethylbenzene	10 U	10 U	10 U	10 U	10 U	10 U
Styrene	10 U	10 U	10 U	10 U	10 U	10 U
Xylene (total)	10 U	10 U	10 U	10 U	10 U	10 U

SDG NO. ECDJ3
(Concentrations in µg/L)

Sampling Location:	IE-13-TB-08	IE-13-TB-08	IE-13-TB-45
Sample Number:	ECDL2	ECDL3	ECDN5
Sampling Device:	Pump	Pump	Pump
Date Sampled:	09/24/98	09/24/98	09/21/98
VOC	Result	Result	Result
Chloromethane	10 U	10 U	10 U
Bromomethane	10 U	10 U	10 U
Vinyl Chloride	10 U	10 U	10 U
Chloroethane	10 UJ	10 U	10 U
Methylene Chloride	10 U	10 U	3 J
Acetone	10 U	16	10 U
Carbon Disulfide	10 U	10 U	10 U
1,1-Dichloroethene	10 U	10 U	10 U
1,1-Dichloroethane	10 U	10 U	10 U
Total 1,2-Dichloroethene	10 U	10 U	10 U
Chloroform	10 U	10 U	47
1,2-Dichloroethane	10 U	10 U	10 U
2-Butanone	10 U	23	10 U
1,1,1-Trichloroethane	10 U	10 U	10 U
Carbon Tetrachloride	10 U	10 U	10 U
Bromodichloromethane	10 U	10 U	4 J
1,2-Dichloropropane	10 U	10 U	10 U
Cis-1,3-Dichloropropene	10 U	10 U	10 U
Trichloroethene	10 U	10 U	10 U
Dibromochloromethane	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U	10 U	10 U
Benzene	10 U	10 U	10 U
Trans-1,3-Dichloropropene	10 U	10 U	10 U
Bromoform	10 U	10 U	10 U
4-Methyl-2-pentanone	10 U	10 U	10 U
2-Hexanone	10 U	10 U	10 U
Tetrachloroethene	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U
Toluene	10 U	4 J	1 J

SDG NO. ECDJ3
(Concentrations in µg/L)

Sampling Location:	IE-13-TB-08	IE-13-TB-08	IE-13-TB-45
Sample Number:	ECDL2	ECDL3	ECDN5
Sampling Device:	Pump	Pump	Pump
Date Sampled:	09/24/98	09/24/98	09/21/98
VOC	Result	Result	Result
Chlorobenzene	10 U	10 U	10 U
Ethylbenzene	10 U	10 U	10 U
Styrene	10 U	10 U	10 U
Xylene (total)	10 U	10 U	10 U

SDG No. ECDL4
(Concentrations in µg/L)

Sampling Location:	IE-13-MW-2d	IE-13-TB09	IE-13-TB09	IE-13-TB09	IE-13-MW-1d
Sample Number:	ECDL4	ECDL5	ECDL5MS	ECDL5MSD	ECDL6
Sampling Device:	Pump	Pump	Pump	Pump	Pump
Date Sampled:	09/25/98	09/25/98	09/25/98	09/25/98	09/25/98
VOC	Result	Result	Result	Result	Result
Chloromethane	10 U	10 U	10 U	10 U	10 U
Bromomethane	10 U	10 U	10 U	10 U	10 U
Vinyl Chloride	10 U	10 U	10 U	10 U	10 U
Chloroethane	10 U	10 UJ	10 U	10 U	10 UJ
Methylene Chloride	10 U	10 U	10 U	10 U	10 U
Acetone	10 U	11	10 U	10 U	10 U
Carbon Disulfide	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethene	10 U	10 UJ	50	43	10 U
1,1-Dichloroethane	10 U	10 U	10 U	10 U	10 U
Total 1,2-Dichloroethene	10 U	10 U	10 U	10 U	10 U
Chloroform	10 U	10 U	10 U	10 U	10 U
1,2-Dichloroethane	10 U	10 U	10 U	10 U	10 U
2-Butanone	44	40	51	54	10 U
1,1,1-Trichloroethane	10 U	10 U	10 U	10 U	10 U
Carbon Tetrachloride	10 U	10 U	10 U	10 U	10 U
Bromodichloromethane	10 U	10 U	10 U	10 U	10 U
1,2-Dichloropropane	10 U	10 U	10 U	10 U	10 U
Cis-1,3-Dichloropropene	10 U	10 U	10 U	10 U	10 U
Trichloroethene	10 U	10 U	47	42	10 U
Dibromochloromethane	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U	10 U	10 U	10 U	10 U
Benzene	10 U	10 UJ	48	42	10 U
Trans-1,3-Dichloropropene	10 U	10 U	10 U	10 U	10 U
Bromoform	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	10 U	10 U	10 U	10 U	10 U
2-Hexanone	10 UJ	10 U	10 UJ	10 UJ	10 U
Tetrachloroethene	10 U	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U	10 U	10 U
Toluene	1 J	11 J	50	44	7 J

SDG No. ECDL4
(Concentrations in µg/L)

Sampling Location:	IE-13-MW-2d	IE-13-TB09	IE-13-TB09	IE-13-TB09	IE-13-MW-1d
Sample Number:	ECDL4	ECDL5	ECDL5MS	ECDL5MSD	ECDL6
Sampling Device:	Pump	Pump	Pump	Pump	Pump
Date Sampled:	09/25/98	09/25/98	09/25/98	09/25/98	09/25/98
VOC	Result	Result	Result	Result	Result
Chlorobenzene	10 U	10 U	48	43	10 U
Ethylbenzene	10 U	10 U	10 U	10 U	10 U
Styrene	10 U	10 U	10 U	10 U	10 U
Xylene (total)	10 U	10 U	10 U	10 U	10 U

SDG NO. ECDL7
(Concentrations in µg/L)

Sampling Location:	IE-13-MW-21i	IE-13-MW-21s	IE-13-MW-21s	IE-13-MW-18i	IE-13-MW-18i-D	IE-13-MW-18s
Sample Number:	ECDL7	ECDL8	ECDL8DL	ECDL9	ECDM0	ECDM1
Sampling Device:	Pump	Pump	Pump	Pump	Pump	Bailer
Date Sampled:	09/28/98	09/28/98	09/28/98	09/28/98	09/28/98	09/28/98
VOC	Result	Result	Result	Result	Result	Result
Chloromethane	1 U	1 U	2 U	1 U	1 U	1 U
Bromomethane	1 U	1 U	2 U	1 U	1 U	1 U
Vinyl Chloride	1 U	8	8 D	1 U	1 U	1 U
Chloroethane	1 U	38 E	42 D	1 U	1 U	1 U
Methylene Chloride	2 U	2 U	3 DJ	2 U	2 U	1 J
Acetone	5 U	5 U	12 U	5 U	5 U	5 U
Carbon Disulfide	1 U	1 U	2 U	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	2 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	41 E	41 D	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	16	15 D	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	2 U	1 U	1 U	1 U
Chloroform	1 U	1 U	2 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	7	6 D	1 U	1 U	1 U
2-Butanone	5 U	5 U	12 U	5 U	5 U	5 U
Bromochloromethane	1 U	1 U	2 U	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	2 U	1 U	1 U	1 U
Carbon Tetrachloride	1 U	1 U	2 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	2 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	2 U	1 U	1 U	1 U
Cis-1,3-Dichloropropene	1 U	1 U	2 U	1 U	1 U	1 U
Trichloroethene	1 U	1 U	2 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	2 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	2 U	1 U	1 U	1 U
Benzene	1 U	3	4 D	1 U	1 U	1 U
Trans-1,3-Dichloropropene	1 U	1 U	2 U	1 U	1 U	1 U
Bromoform	1 U	1 U	2 U	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	12 U	5 U	5 U	5 U
2-Hexanone	5 U	5 U	12 U	5 U	5 U	5 U
Tetrachloroethene	1 U	1 U	2 U	1 U	1 U	1

SDG NO. ECDL7
(Concentrations in µg/L)

Sampling Location:	IE-13-MW-21i	IE-13-MW-21s	IE-13-MW-21s	IE-13-MW-18i	IE-13-MW-18i-D	IE-13-MW-18s
Sample Number:	ECDL7	ECDL8	ECDL8DL	ECDL9	ECDM0	ECDM1
Sampling Device:	Pump	Pump	Pump	Pump	Pump	Bailer
Date Sampled:	09/28/98	09/28/98	09/28/98	09/28/98	09/28/98	09/28/98
VOC	Result	Result	Result	Result	Result	Result
1,1,2,2-Tetrachloroethane	1 U	1 U	2 U	1 U	1 U	1 U
1,2-Dichloromethane	1 U	1 U	2 U	1 U	1 U	1 U
Toluene	0.9 J	2	2 U	2	2	2
Chlorobenzene	1 U	1 U	2 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	2 U	1 U	1 U	1 U
Styrene	1 U	1 U	2 U	1 U	1 U	1 U
Xylene (total)	1 U	1 U	2 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	2 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	2 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	2 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	1 U	1 U	2 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	1 U	1 U	2 U	1 U	1 U	1 U

SDG NO. ECDL7
(Concentrations in µg/L)

Sampling Location:	IE-13-MW-TB10	IE-13-MW-TB11
Sample Number:	ECDM2	ECDM3
Sampling Device:	Pump	Pump
Date Sampled:	09/28/98	09/28/98
VOC	Result	Result
Chloromethane	1 U	1 U
Bromomethane	1 U	1 U
Vinyl Chloride	1 U	1 U
Chloroethane	1 U	1 U
Methylene Chloride	2 U	2 U
Acetone	16 U	17 U
Carbon Disulfide	1 U	1 U
1,1-Dichloroethene	1 U	1 U
1,1-Dichloroethane	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U
Chloroform	1 U	1 U
1,2-Dichloroethane	1 U	1 U
2-Butanone	58	56
Bromochloromethane	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U
Carbon Tetrachloride	1 U	1 U
Bromodichloromethane	1 U	1 U
1,2-Dichloropropane	1 U	1 U
Cis-1,3-Dichloropropene	1 U	1 U
Trichloroethene	1 U	1 U
Dibromochloromethane	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U
Benzene	1 U	0.7 J
Trans-1,3-Dichloropropene	1 U	1 U
Bromoform	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U
2-Hexanone	2 J	2 J
Tetrachloroethene	1 U	1 U

SDG NO. ECDL7
(Concentrations in µg/L)

Sampling Location:	IE-13-MW-TB10	IE-13-MW-TB11
Sample Number:	ECDM2	ECDM3
Sampling Device:	Pump	Pump
Date Sampled:	09/28/98	09/28/98
VOC	Result	Result
1,1,2,2-Tetrachloroethane	1 U	1 U
1,2-Dichloromethane	1 U	1 U
Toluene	2	4
Chlorobenzene	1 U	1 U
Ethylbenzene	1 U	0.6 J
Styrene	1 U	1 U
Xylene (total)	0.7 J	0.7 J
1,3-Dichlorobenzene	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U
1,2-Dibromo-3-chloropropane	1 U	1 U
1,2,4-Trichlorobenzene	1 U	1 U

APPENDIX A-2

TENTATIVELY IDENTIFIED VOLATILE ORGANIC COMPOUNDS

(One Page)

TENTATIVELY IDENTIFIED VOLATILE ORGANIC COMPOUNDS

Sampling Location	Sample No.	VOC	Estimated Concentration (µg/L)
MW-1d	ECDL6	Silanol, Trimethyl-	20.000
MW-6s	ECDN3	Unknown Hydrocarbon	27.000
		Unknown Hydrocarbon	41.000
		Unknown Cycloalkane	27.000
MW-11s	ECDL1	Silanol, Trimethyl-	58.000
MW-11i	ECDK8	Silanol, Trimethyl-	59.000
MW-11i-D	ECDK9	Silanol, Trimethyl-	11.000
MW-11d	ECDL0	Silanol, Trimethyl-	42.000
MW-12i	EBNZ1	Cyclotrisiloxane	8.000
		Cyclotrisiloxane	6.000
		Unknown	7.000
MW-12d	EBNZ0	Cyclotrisiloxane	14.000
MW-18i-D	ECDM0	Silanol, Trimethyl-	3
MW-20s	ECDH0	Unknown	6.000
MW-20i	ECDH1	Unknown	11.000
MW-20i-D	ECDH2	Unknown Hydrocarbon	5.000
MW-20d	ECDG9	Unknown	13.000
		Unknown	11.000
		Unknown	11.000
MW-21s	ECDL8	Ether	4
		Unknown	3
		Cyclotetrasiloxane, Octameth	2
		Unknown	2
MW-23s	ECDH3	Unknown	14.000
MW-24s	ECDK1	Silanol, Trimethyl-	18.000
MW-24i	ECDK0	Silanol, Trimethyl-	13.000
MW-25s	ECDK6	Silanol, Trimethyl-	57.000
MW-25i	ECDK7	Silanol, Trimethyl-	37.000
MW-27s	ECDJ5	Silanol, Trimethyl-	41.000
MW-27i	ECDJ8	Silanol, Trimethyl-	72.000
MW-27i-D	ECDJ9	Silanol, Trimethyl-	20.000
MW-27d	ECDJ4	Silanol, Trimethyl-	20.000

APPENDIX A-3

SEMIVOLATILE ORGANIC COMPOUNDS

(20 Pages)

SDG NO. EBNZ0
SDG NO. ECDJ3
SDG NO. ECDL4
SDG NO. ECDL7

SDG NO. EBZN0
(Concentrations in µg/L)

Sampling Location:	IE-13-MW-12d	IE-13-MW-12i	IE-13-MW-20d	IE-13-MW-20s	IE-13-MW-20i	IE-13-MW-20i	IE-13-MW-20i-D
Sample Number:	EBNZ0	EBNZ1	ECDG9	ECDH0	ECDH1	ECDH1RE	ECDH2
Sampling Device:	Pump	Pump	Pump	Pump	Pump	Pump	Pump
Date Sampled:	09/15/98	09/15/98	09/17/98	09/17/98	09/17/98	09/17/98	09/17/98
SVOC	Result	Result	Result	Result	Result	Result	Result
Phenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Chloroethyl)ether	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,2'-oxybis(1-chloropropane)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitroso-di-n-propylamine	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nitrobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Isophorone	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitrophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Chloroethoxy)methane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloroaniline	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4,6-Trichlorophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	25 U	25 U	25 U	25 U	25 U	25 U	25 U
2-Chloronaphthalene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitroaniline	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Dimethylphthalate	10 U	10 U	10 U	10 U	10 U	10 U	10 U

SDG NO. EBZN0
(Concentrations in μg/L)

Sampling Location:	IE-13-MW-12d	IE-13-MW-12i	IE-13-MW-20d	IE-13-MW-20s	IE-13-MW-20i	IE-13-MW-20i	IE-13-MW-20i-D
Sample Number:	EBNZ0	EBNZ1	ECDG9	ECDH0	ECDH1	ECDH1RE	ECDH2
Sampling Device:	Pump	Pump	Pump	Pump	Pump	Pump	Pump
Date Sampled:	09/15/98	09/15/98	09/17/98	09/17/98	09/17/98	09/17/98	09/17/98
SVOC	Result	Result	Result	Result	Result	Result	Result
Acenaphthylene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
3-Nitroaniline	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Acenaphthene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	25 U	25 U	25 U	25 U	25 U	25 U	25 U
4-Nitrophenol	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Dibenzofuran	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Diethylphthalate	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chlorophenyl-phenylether	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitroaniline	25 U	25 U	25 U	25 U	25 U	25 U	25 U
4,6-Dinitro-2-methylphenol	25 U	25 U	25 U	25 U	25 U	25 U	25 U
N-Nitrosodiphenylamine	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Bromophenyl-phenylether	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pentachlorophenol	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Phenanthrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbazole	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-butylphthalate	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Butylbenzylphthalate	10 U	10 U	10 U	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)anthracene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Ethylhexyl)phthalate	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-octylphthalate	10 U	10 U	10 U	10 U	10 U	10 U	10 U

SDG NO. EBZN0
(Concentrations in µg/L)

Sampling Location:	IE-13-MW-12d	IE-13-MW-12i	IE-13-MW-20d	IE-13-MW-20s	IE-13-MW-20i	IE-13-MW-20i	IE-13-MW-20i-D
Sample Number:	EBNZ0	EBNZ1	ECDG9	ECDH0	ECDH1	ECDH1RE	ECDH2
Sampling Device:	Pump	Pump	Pump	Pump	Pump	Pump	Pump
Date Sampled	09/15/98	09/15/98	09/17/98	09/17/98	09/17/98	09/17/98	09/17/98
SVOC	Result	Result	Result	Result	Result	Result	Result
Benzo(b)fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10 U	10 U	10 U	10 U	10 U	10 U	10 U

SDG NO. EBZN0
(Concentrations in µg/L)

Sampling Location:	IE-13-MW-20i	IE-13-MW-20i	IE-13-MW-23s	IE-13-MW-6s
Sample Number:	ECDH2MS	ECDH2MSD	ECDH3	ECDN3
Sampling Device:	Pump	Pump	Pump	Pump
Date Sampled:	09/17/98	09/17/98	09/17/98	09/18/98
SVOC	Result	Result	Result	Result
Phenol	44 B	48 B	10 U	10 U
bis(2-Chloroethyl)ether	10 U	10 U	10 U	10 U
2-Chlorophenol	44	51	10 U	10 U
1,3-Dichlorobenzene	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	25	28	10 U	10 U
1,2-Dichlorobenzene	10 U	10 U	10 U	10 U
2-Methylphenol	10 U	10 U	10 U	10 U
2,2'-oxybis(1-chloropropane)	10 U	10 U	10 U	10 U
4-Methylphenol	10 U	10 U	10 U	10 U
N-Nitroso-di-n-propylamine	29	35	10 U	10 U
Hexachloroethane	10 U	10 U	10 U	10 U
Nitrobenzene	10 U	10 U	10 U	10 U
Isophorone	10 U	10 U	10 U	10 U
2-Nitrophenol	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	10 U	10 U	10 U	10 U
bis(2-Chloroethoxy)methane	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	28	29	10 U	10 U
Naphthalene	10 U	10 U	10 U	10 U
4-Chloroaniline	10 U	10 U	10 U	10 U
Hexachlorobutadiene	10 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	44	54	10 U	10 U
2-Methylnaphthalene	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	10 U	10 U	10 U	10 U
2,4,6-Trichlorophenol	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	25 U	25 U	25 U	25 U
2-Chloronaphthalene	10 U	10 U	10 U	10 U
2-Nitroaniline	25 U	25 U	25 U	25 U
Dimethylphthalate	10 U	10 U	10 U	10 U

SDG NO. EBZN0
(Concentrations in µg/L)

Sampling Location:	IE-13-MW-20i	IE-13-MW-20i	IE-13-MW-23s	IE-13-MW-6s
Sample Number:	ECDH2MS	ECDH2MSD	ECDH3	ECDN3
Sampling Device:	Pump	Pump	Pump	Pump
Date Sampled:	09/17/98	09/17/98	09/17/98	09/18/98
SVOC	Result	Result	Result	Result
Acenaphthylene	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	10 U	10 U	10 U	10 U
3-Nitroaniline	25 U	25 U	25 U	25 U
Acenaphthene	32	32	10 U	10 U
2,4-Dinitrophenol	25 U	25 U	25 U	25 U
4-Nitrophenol	52	48	25 U	25 U
Dibenzofuran	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	30	32	10 U	10 U
Diethylphthalate	10 U	10 U	10 U	10 U
4-Chlorophenyl-phenylether	10 U	10 U	10 U	10 U
Fluorene	10 U	10 U	10 U	10 U
4-Nitroaniline	25 U	25 U	25 U	25 U
4,6-Dinitro-2-methylphenol	25 U	25 U	25 U	25 U
N-Nitrosodiphenylamine	10 U	10 U	10 U	10 U
4-Bromophenyl-phenylether	10 U	10 U	10 U	10 U
Hexachlorobenzene	10 U	10 U	10 U	10 U
Pentachlorophenol	46	60	25 U	25 U
Phenanthrene	10 U	10 U	10 U	10 U
Anthracene	10 U	10 U	10 U	10 U
Carbazole	10 U	10 U	10 U	10 U
Di-n-butylphthalate	10 U	10 U	10 U	10 U
Fluoranthene	10 U	10 U	10 U	10 U
Pyrene	33	35	10 U	10 U
Butylbenzylphthalate	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	10 U	10 U	10 U	10 U
Benzo(a)anthracene	10 U	10 U	10 U	10 U
Chrysene	10 U	10 U	10 U	10 U
bis(2-Ethylhexyl)phthalate	10 U	10 U	10 U	10 U
Di-n-octylphthalate	10 U	10 U	10 U	10 U

SDG NO. EBZN0
(Concentrations in μg/L)

Sampling Location:	IE-13-MW-20i	IE-13-MW-20i	IE-13-MW-23s	IE-13-MW-6s
Sample Number:	ECDH2MS	ECDH2MSD	ECDH3	ECDN3
Sampling Device:	Pump	Pump	Pump	Pump
Date Sampled:	09/17/98	09/17/98	09/17/98	09/18/98
SVOC	Result	Result	Result	Result
Benzo(b)fluoranthene	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10 U	10 U	10 U	10 U
Benzo(a)pyrene	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10 U	10 U	10 U	10 U

SDG NO. ECDJ3
(Concentrations in µg/L)

Sampling Location:	IE-13-FB01	IE-13-MW-27d	IE-13-MW-27s	IE-13-FB02	IE-13-MW-27i	IE-13-MW-27i-D	IE-13-MW-24i
Sample Number:	ECDJ3	ECDJ4	ECDJ5	ECDJ7	ECDJ8	ECDJ9	ECDK0
Sampling Device:	Pump	Pump	Pump	Pump	Pump	Pump	Pump
Date Sampled:	09/21/98	09/22/98	09/22/98	09/22/98	09/22/98	09/23/98	09/23/98
SVOC	Result	Result	Result	Result	Result	Result	Result
Phenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Chloroethyl)ether	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,2'-oxybis(1-chloropropane)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methylphenol	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitroso-di-n-propylamine	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nitrobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Isophorone	10 U	10 UJ	10 UJ	10 U	10 U	10 U	10 U
2-Nitrophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Chloroethoxy)methane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloroaniline	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene	10 U	10 UJ	10 UJ	10 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U
2,4,6-Trichlorophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	25 U	25 U	25 U	25 U	25 U	25 U	25 U
2-Chloronaphthalene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitroaniline	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Dimethylphthalate	10 U	10 U	10 U	10 U	10 U	10 U	10 U

SDG NO. ECDJ3
(Concentrations in µg/L)

Sampling Location:	IE-13-FB01	IE-13-MW-27d	IE-13-MW-27s	IE-13-FB02	IE-13-MW-27i	IE-13-MW-27i-D	IE-13-MW-24i
Sample Number:	ECDJ3	ECDJ4	ECDJ5	ECDJ7	ECDJ8	ECDJ9	ECDK0
Sampling Device:	Pump	Pump	Pump	Pump	Pump	Pump	Pump
Date Sampled:	09/21/98	09/22/98	09/22/98	09/22/98	09/22/98	09/23/98	09/23/98
SVOC	Result	Result	Result	Result	Result	Result	Result
Acenaphthylene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
3-Nitroaniline	25 UJ	25 UJ	25 UJ	25 U	25 U	25 U	25 U
Acenaphthene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	25 UJ	25 UJ	25 UJ	25 U	25 U	25 U	25 U
4-Nitrophenol	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Dibenzofuran	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Diethylphthalate	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chlorophenyl-phenylether	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitroaniline	25 U	25 U	25 U	25 U	25 U	25 U	25 U
4,6-Dinitro-2-methylphenol	25 U	25 UJ	25 UJ	25 U	25 U	25 U	25 U
N-Nitrosodiphenylamine	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Bromophenyl-phenylether	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pentachlorophenol	25 U	25 UJ	25 UJ	25 U	25 U	25 U	25 U
Phenanthrene	10 U	10 UJ	10 UJ	10 U	10 U	10 U	10 U
Anthracene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbazole	10 U	10 UJ	10 UJ	10 U	10 U	10 U	10 U
Di-n-butylphthalate	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Butylbenzylphthalate	10 U	10 U	10 U	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	10 U	10 UJ	10 UJ	10 U	10 U	10 U	10 U
Benzo(a)anthracene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Ethylhexyl)phthalate	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-octylphthalate	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U

SDG NO. ECDJ3
(Concentrations in µg/L)

Sampling Location:	IE-13-FB01	IE-13-MW-27d	IE-13-MW-27s	IE-13-FB02	IE-13-MW-27i	IE-13-MW-27i-D	IE-13-MW-24i
Sample Number:	ECDJ3	ECDJ4	ECDJ5	ECDJ7	ECDJ8	ECDJ9	ECDK0
Sampling Device:	Pump	Pump	Pump	Pump	Pump	Pump	Pump
Date Sampled:	09/21/98	09/22/98	09/22/98	09/22/98	09/22/98	09/23/98	09/23/98
SVOC	Result	Result	Result	Result	Result	Result	Result
Benzo(b)fluoranthene	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10 U	10 U	10 U	10 U	10 U	10 U	10 U

SDG NO. ECDJ3
(Concentrations in µg/L)

Sampling Location:	IE-13-MW-24s	IE-13-MW-25s	IE-13-MW-25i	IE-13-MW-11i	IE-13-MW-11i-D	IE-13-MW-11i-D
Sample Number:	ECDK1	ECDK6	ECDK7	ECDK8	ECDK9	ECDK9MS
Sampling Device:	Pump	Pump	Pump	Pump	Pump	Pump
Date Sampled:	09/23/98	09/23/98	09/23/98	09/24/98	09/24/98	09/24/98
SVOC	Result	Result	Result	Result	Result	Result
Phenol	10 U	10 U	10 U	10 U	10 U	50
bis(2-Chloroethyl)ether	10 U	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol	10 U	10 U	10 U	10 U	10 U	46
1,3-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	31
1,2-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U
2,2'-oxybis(1-chloropropane)	10 U	10 U	10 U	10 U	10 U	10 U
4-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitroso-di-n-propylamine	10 U	10 U	10 U	10 U	10 U	39
Hexachloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Nitrobenzene	10 U	10 U	10 U	10 U	10 U	10 U
Isophorone	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitrophenol	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Chloroethoxy)methane	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	10 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U	10 U	10 U	32
Naphthalene	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloroaniline	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	10 U	10 U	10 U	10 U	10 U	58
2-Methylnaphthalene	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	10 U	10 U	10 U	10 U	10 U	10 U
2,4,6-Trichlorophenol	10 U	10 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	25 U	25 U	25 U	25 U	25 U	25 U
2-Chloronaphthalene	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitroaniline	25 U	25 U	25 U	25 U	25 U	25 U
Dimethylphthalate	10 U	10 U	10 U	10 U	10 U	10 U

SDG NO. ECDJ3
(Concentrations in µg/L)

Sampling Location:	IE-13-MW-24s	IE-13-MW-25s	IE-13-MW-25i	IE-13-MW-11i	IE-13-MW-11i-D	IE-13-MW-11i-D
Sample Number:	ECDK1	ECDK6	ECDK7	ECDK8	ECDK9	ECDK9MS
Sampling Device:	Pump	Pump	Pump	Pump	Pump	Pump
Date Sampled:	09/23/98	09/23/98	09/23/98	09/24/98	09/24/98	09/24/98
SVOC	Result	Result	Result	Result	Result	Result
Acenaphthylene	10 U	10 U	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	10 U	10 U	10 U	10 U	10 U	10 U
3-Nitroaniline	25 U	25 U	25 U	25 U	25 U	25 U
Acenaphthene	10 U	10 U	10 U	10 U	10 U	41
2,4-Dinitrophenol	25 U	25 U	25 UJ	25 UJ	25 UJ	25 UJ
4-Nitrophenol	25 U	25 U	25 U	25 U	25 U	66
Dibenzofuran	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	10 U	10 U	10 U	10 U	10 U	36
Diethylphthalate	10 U	10 U	10 U	10 U	10 U	10 U
4-Chlorophenyl-phenylether	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitroaniline	25 U	25 U	25 UJ	25 U	25 U	25 U
4,6-Dinitro-2-methylphenol	25 U	25 U	25 U	25 U	25 U	25 U
N-Nitrosodiphenylamine	10 U	10 U	10 U	10 U	10 U	10 U
4-Bromophenyl-phenylether	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U
Pentachlorophenol	25 U	25 U	25 U	25 U	25 UJ	79
Phenanthrene	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10 U	10 U	10 U	10 U	10 U	10 U
Carbazole	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-butylphthalate	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	10 U	10 U	10 U	10 U	10 U	39
Butylbenzylphthalate	10 U	10 U	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)anthracene	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Ethylhexyl)phthalate	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-octylphthalate	10 U	10 U	10 U	10 U	10 U	10 U

SDG NO. ECDJ3
(Concentrations in µg/L)

Sampling Location:	IE-13-MW-24s	IE-13-MW-25s	IE-13-MW-25i	IE-13-MW-11i	IE-13-MW-11i-D	IE-13-MW-11i-D
Sample Number:	ECDK1	ECDK6	ECDK7	ECDK8	ECDK9	ECDK9MS
Sampling Device:	Pump	Pump	Pump	Pump	Pump	Pump
Date Sampled:	09/23/98	09/23/98	09/23/98	09/24/98	09/24/98	09/24/98
SVOC	Result	Result	Result	Result	Result	Result
Benzo(b)fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	10 U	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10 U	10 U	10 U	10 U	10 U	10 U

SDG NO. ECDJ3
(Concentrations in µg/L)

Sampling Location:	IE-13-MW-11i-D	IE-13-MW-11d	IE-13-MW-11s	IE-13-MW-FB03
Sample Number:	ECDK9MSD	ECDL0	ECDL1	ECDL3
Sampling Device:	Pump	Pump	Bailer	Pump
Date Sampled:	09/24/98	09/24/98	09/24/98	09/24/98
SVOC	Result	Result	Result	Result
Phenol	50	10 U	10 U	10 U
bis(2-Chloroethyl)ether	10 U	10 U	10 U	10 U
2-Chlorophenol	50	10 U	10 U	10 U
1,3-Dichlorobenzene	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	33	10 U	10 U	10 U
1,2-Dichlorobenzene	10 U	10 U	10 U	10 U
2-Methylphenol	10 U	10 U	10 U	10 U
2,2'-oxybis(1-chloropropane)	10 U	10 U	10 U	10 U
4-Methylphenol	10 U	10 U	10 U	10 U
N-Nitroso-di-n-propylamine	38	10 U	10 U	10 U
Hexachloroethane	10 U	10 U	10 U	10 U
Nitrobenzene	10 U	10 U	10 U	10 U
Isophorone	10 U	10 U	10 U	10 U
2-Nitrophenol	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	10 U	10 U	10 U	10 U
bis(2-Chloroethoxy)methane	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	33	10 U	10 U	10 U
Naphthalene	10 U	10 U	10 U	10 U
4-Chloroaniline	10 U	10 U	10 U	10 U
Hexachlorobutadiene	10 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	60	10 U	10 U	10 U
2-Methylnaphthalene	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	10 U	10 U	10 U	10 U
2,4,6-Trichlorophenol	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	25 U	25 U	25 U	25 U
2-Chloronaphthalene	10 U	10 U	10 U	10 U
2-Nitroaniline	25 U	25 U	25 U	25 U
Dimethylphthalate	10 U	10 U	10 U	10 U

SDG NO. ECDJ3
(Concentrations in µg/L)

Sampling Location:	IE-13-MW-11i-D	IE-13-MW-11d	IE-13-MW-11s	IE-13-MW-FB03
Sample Number:	ECDK9MSD	ECDL0	ECDL1	ECDL3
Sampling Device:	Pump	Pump	Bailer	Pump
Date Sampled:	09/24/98	09/24/98	09/24/98	09/24/98
SVOC	Result	Result	Result	Result
Acenaphthylene	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	10 U	10 U	10 U	10 U
3-Nitroaniline	25 U	25 U	25 U	25 U
Acenaphthene	41	10 U	10 U	10 U
2,4-Dinitrophenol	25 UJ	25 UJ	25 UJ	25 UJ
4-Nitrophenol	63	25 U	25 U	25 U
Dibenzofuran	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	39	10 U	10 U	10 U
Diethylphthalate	10 U	10 U	10 U	10 U
4-Chlorophenyl-phenylether	10 U	10 U	10 U	10 U
Fluorene	10 U	10 U	10 U	10 U
4-Nitroaniline	25 U	25 U	25 U	25 U
4,6-Dinitro-2-methylphenol	25 U	25 U	25 U	25 U
N-Nitrosodiphenylamine	10 U	10 U	10 U	10 U
4-Bromophenyl-phenylether	10 U	10 U	10 U	10 U
Hexachlorobenzene	10 U	10 U	10 U	10 U
Pentachlorophenol	80	25 U	25 U	25 U
Phenanthrene	10 U	10 U	10 U	10 U
Anthracene	10 U	10 U	10 U	10 U
Carbazole	10 U	10 U	10 U	10 U
Di-n-butylphthalate	10 U	10 U	10 U	10 U
Fluoranthene	10 U	10 U	10 U	10 U
Pyrene	41	10 U	10 U	10 U
Butylbenzylphthalate	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	10 U	10 U	10 U	10 U
Benzo(a)anthracene	10 U	10 U	10 U	10 U
Chrysene	10 U	10 U	10 U	10 U
bis(2-Ethylhexyl)phthalate	10 U	10 U	1 J	10 U
Di-n-octylphthalate	10 U	10 U	10 U	10 U

SDG NO. ECDJ3
(Concentrations in µg/L)

Sampling Location:	IE-13-MW-11i-D	IE-13-MW-11d	IE-13-MW-11s	IE-13-MW-FB03
Sample Number:	ECDK9MSD	ECDL0	ECDL1	ECDL3
Sampling Device:	Pump	Pump	Bailer	Pump
Date Sampled:	09/24/98	09/24/98	09/24/98	09/24/98
SVOC	Result	Result	Result	Result
Benzo(b)fluoranthene	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10 U	10 U	10 U	10 U
Benzo(a)pyrene	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10 U	10 U	10 U	10 U

SDG NO. ECDL4
(Concentrations in µg/L)

Sampling Location:	IE-13-MW-2d	IE-13-MW-2d	IE-13-MW-2d	IE-13-MW-1d
Sample Number:	ECDL4	ECDL4MS	ECDL4MSD	ECDL6
Sampling Device:	Pump	Pump	Pump	Pump
Date Sampled:	09/25/98	09/25/98	09/25/98	09/25/98
SVOC	Result	Result	Result	Result
Phenol	10 U	50	47	10 U
bis(2-Chloroethyl)ether	10 U	10 U	10 U	10 U
2-Chlorophenol	10 U	49	54	10 U
1,3-Dichlorobenzene	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	10 U	31	28	10 U
1,2-Dichlorobenzene	10 U	10 U	10 U	10 U
2-Methylphenol	10 U	10 U	10 U	10 U
2,2'-oxybis(1-chloropropane)	10 U	10 U	10 U	10 U
4-Methylphenol	10 U	10 U	10 U	10 U
N-Nitroso-di-n-propylamine	10 U	31	31	10 U
Hexachloroethane	10 U	10 U	10 U	10 U
Nitrobenzene	10 U	10 U	10 U	10 U
Isophorone	10 U	10 U	10 U	10 U
2-Nitrophenol	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	10 U	10 U	10 U	10 U
bis(2-Chloroethoxy)methane	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	33	27	10 U
Naphthalene	10 U	10 U	10 U	10 U
4-Chloroaniline	10 U	10 U	10 U	10 U
Hexachlorobutadiene	10 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	10 U	57	55	10 U
2-Methylnaphthalene	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	10 U	10 U	10 U	10 U
2,4,6-Trichlorophenol	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	25 U	25 U	25 U	25 U
2-Chloronaphthalene	10 U	10 U	10 U	10 U
2-Nitroaniline	25 U	25 U	25 U	25 U
Dimethylphthalate	10 U	10 U	10 U	10 U

SDG NO. ECDL4
(Concentrations in µg/L)

Sampling Location:	IE-13-MW-2d	IE-13-MW-2d	IE-13-MW-2d	IE-13-MW-1d
Sample Number:	ECDL4	ECDL4MS	ECDL4MSD	ECDL6
Sampling Device:	Pump	Pump	Pump	Pump
Date Sampled:	09/25/98	09/25/98	09/25/98	09/25/98
SVOC	Result	Result	Result	Result
Acenaphthylene	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	10 U	10 U	10 U	10 U
3-Nitroaniline	25 U	25 U	25 U	25 U
Acenaphthene	10 U	38	35	10 U
2,4-Dinitrophenol	25 UJ	25 UJ	25 UJ	25 UJ
4-Nitrophenol	25 UJ	61	58	25 U
Dibenzofuran	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	10 U	47	38	10 U
Diethylphthalate	10 U	10 U	10 U	10 U
4-Chlorophenyl-phenylether	10 U	10 U	10 U	10 U
Fluorene	10 U	10 U	10 U	10 U
4-Nitroaniline	25 UJ	25 U	25 U	25 U
4,6-Dinitro-2-methylphenol	25 U	25 U	25 U	25 U
N-Nitrosodiphenylamine	10 U	10 U	10 U	10 U
4-Bromophenyl-phenylether	10 U	10 U	10 U	10 U
Hexachlorobenzene	10 U	10 U	10 U	10 U
Pentachlorophenol	25 UJ	75 J	77 J	25 UJ
Phenanthrene	10 U	10 U	10 U	10 U
Anthracene	10 U	10 U	10 U	10 U
Carbazole	10 U	10 U	10 U	10 U
Di-n-butylphthalate	10 U	10 U	10 U	10 U
Fluoranthene	10 U	10 U	10 U	10 U
Pyrene	10 U	38	44	10 U
Butylbenzylphthalate	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	10 U	10 U	10 U	10 U
Benzo(a)anthracene	10 U	10 U	10 U	10 U
Chrysene	10 U	10 U	10 U	10 U
bis(2-Ethylhexyl)phthalate	10 U	10 U	10 U	5 J
Di-n-octylphthalate	10 U	10 U	10 U	10 U

SDG NO. ECDL4
(Concentrations in µg/L)

Sampling Location:	IE-13-MW-2d	IE-13-MW-2d	IE-13-MW-2d	IE-13-MW-1d
Sample Number:	ECDL4	ECDL4MS	ECDL4MSD	ECDL6
Sampling Device:	Pump	Pump	Pump	Pump
Date Sampled:	09/25/98	09/25/98	09/25/98	09/25/98
SVOC	Result	Result	Result	Result
Benzo(b)fluoranthene	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10 U	10 U	10 U	10 U
Benzo(a)pyrene	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10 U	10 U	10 U	10 U

SDG NO. ECDL7
(Concentrations in µg/L)

Sampling Location:	IE-13-MW-21i	IE-13-MW-21s	IE-13-MW-18i	IE-13-MW-18i-D	IE-13-MW-18s
Sample Number:	ECDL7	ECDL8	ECDL9	ECDM0	ECDM1
Sampling Device:	Pump	Pump	Pump	Pump	Bailer
Date Sampled:	09/28/98	09/28/98	09/28/98	09/28/98	09/28/98
SVOC	Result	Result	Result	Result	Result
Phenol	5 U	5 U	5 U	5 U	5 U
bis(2-Chloroethyl)ether	5 U	5 U	5 U	5 U	5 U
2-Chlorophenol	5 U	5 U	5 U	5 U	5 U
2-Methylphenol	5 U	5 U	5 U	5 U	5 U
2,2'-oxybis(1-chloropropane)	5 U	5 U	5 U	5 U	5 U
4-Methylphenol	5 U	5 U	5 U	5 U	5 U
N-Nitroso-di-n-propylamine	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	5 U	5 U	5 U	5 U	5 U
Nitrobenzene	5 U	5 U	5 U	5 U	5 U
Isophorone	5 U	5 U	5 U	5 U	5 U
2-Nitrophenol	5 U	5 U	5 U	5 U	5 U
2,4-Dimethylphenol	5 U	5 U	5 U	5 U	5 U
bis(2-Chloroethoxy)methane	5 U	5 U	5 U	5 U	5 U
2,4-Dichlorophenol	5 U	5 U	5 U	5 U	5 U
Naphthalene	5 U	5 U	5 U	5 U	5 U
4-Chloroaniline	5 U	5 U	5 U	5 U	5 U
Hexachlorobutadiene	5 U	5 U	5 U	5 U	5 U
4-Chloro-3-methylphenol	5 U	5 U	5 U	5 U	5 U
2-Methylnaphthalene	5 U	5 U	5 U	5 U	5 U
Hexachlorocyclopentadiene	5 U	5 U	5 U	5 U	5 U
2,4,6-Trichlorophenol	5 U	5 U	5 U	5 U	5 U
2,4,5-Trichlorophenol	20 U	20 U	20 U	20 U	20 U
2-Chloronaphthalene	5 U	5 U	5 U	5 U	5 U
2-Nitroaniline	20 U	20 U	20 U	20 U	20 U
Dimethylphthalate	5 U	5 U	5 U	5 U	5 U
Acenaphthylene	5 U	5 U	5 U	5 U	5 U
2,6-Dinitrotoluene	5 U	5 U	5 U	5 U	5 U
3-Nitroaniline	20 U	20 U	20 U	20 U	20 U
Acenaphthene	5 U	5 U	5 U	5 U	5 U
2,4-Dinitrophenol	20 U	20 U	20 U	20 U	20 U
4-Nitrophenol	20 U	20 U	20 U	20 U	20 U

SDG NO. ECDL7
(Concentrations in µg/L)

Sampling Location:	IE-13-MW-21i	IE-13-MW-21s	IE-13-MW-18i	IE-13-MW-18i-D	IE-13-MW-18s
Sample Number:	ECDL7	ECDL8	ECDL9	ECDM0	ECDM1
Sampling Device:	Pump	Pump	Pump	Pump	Bailer
Date Sampled:	09/28/98	09/28/98	09/28/98	09/28/98	09/28/98
SVOC	Result	Result	Result	Result	Result
Dibenzofuran	5 U	5 U	5 U	5 U	5 U
2,4-Dinitrotoluene	5 U	5 U	5 U	5 U	5 U
Diethylphthalate	5 U	5 U	5 U	5 U	5 U
4-Chlorophenyl-phenylether	5 U	5 U	5 U	5 U	5 U
Fluorene	5 U	5 U	5 U	5 U	5 U
4-Nitroaniline	20 U	20 U	20 U	20 U	20 U
4,6-Dinitro-2-methylphenol	20 U	20 U	20 U	20 U	20 U
N-Nitrosodiphenylamine	5 U	5 U	5 U	5 U	5 U
4-Bromophenyl-phenylether	5 U	5 U	5 U	5 U	5 U
Hexachlorobenzene	5 U	5 U	5 U	5 U	5 U
Pentachlorophenol	20 U	20 U	20 U	20 U	20 U
Phenanthrene	5 U	5 U	5 U	5 U	5 U
Anthracene	5 U	5 U	5 U	5 U	5 U
Di-n-butylphthalate	5 U	5 U	5 U	5 U	5 U
Fluoranthene	5 U	5 U	5 U	5 U	5 U
Pyrene	5 U	5 U	5 U	5 U	5 U
Butylbenzylphthalate	5 U	5 U	5 U	5 U	5 U
3,3'-Dichlorobenzidine	5 U	5 U	5 U	5 U	5 U
Benzo(a)anthracene	5 U	5 U	5 U	5 U	5 U
Chrysene	5 U	5 U	5 U	5 U	5 U
bis(2-Ethylhexyl)phthalate	5 U	5 U	1 J	1 J	5 U
Di-n-octylphthalate	5 U	5 U	5 U	5 U	5 U
Benzo(b)fluoranthene	5 U	5 U	5 U	5 U	5 U
Benzo(k)fluoranthene	5 U	5 U	5 U	5 U	5 U
Benzo(a)pyrene	5 U	5 U	5 U	5 U	5 U
Indeno(1,2,3-cd)pyrene	5 U	5 U	5 U	5 U	5 U
Dibenz(a,h)anthracene	5 U	5 U	5 U	5 U	5 U
Benzo(g,h,i)perylene	5 U	5 U	5 U	5 U	5 U

APPENDIX A-4

TENTATIVELY IDENTIFIED SEMIVOLATILE ORGANIC COMPOUNDS

(Six Pages)

TENTATIVELY IDENTIFIED SEMIVOLATILE ORGANIC COMPOUNDS

Sampling Location	Sample No.	SVOC	Estimated Concentration (µg/L)
MW-6s	ECDH3	Urea, Tetramethyl-	4.000
		Unknown	2.000
		Cyclopentasiloxane, Decamethyl-	2.000
		Unknown	4.000
		Benzene, 1,3-Bis(1-Methylethenyl)	2.000
		Unknown	6.000
MW-11s	ECDL1	Trichloropropene	6.000
		Cyclohexenol (BC)	7.000
		Unknown	2.000
		Cyclohexenone (BC)	3.000
		Trichloropropene (BC)	52.000
		Unknown (BC)	32.000
		Unknown	5.000
		Unknown	5.000
		Unknown	2.000
		Unknown	3.000
		Unknown	3.000
		Unknown	7.000
		Unknown	5.000
		Unknown Acid Ester (BC)	2.000
		Unknown	3.000

TENTATIVELY IDENTIFIED SEMIVOLATILE ORGANIC COMPOUNDS (Continued)

Sampling Location	Sample No.	SVOC	Estimated Concentration (µg/L)
MW-11i	ECDK8	Trichloroproene	3.000
		Cyclohexenol (BC)	9.000
		Unknown	18.000
		Unknown	3.000
		Unknown	3.000
		Unknwon	3.000
		Cyclohexenone (BC)	3.000
		Trichloropropene (BC)	49.000
		Urea, Tetramethyl-	3.000
		Unknown	3.000
		Unknown	4.000
		Unknown	22.000
		Unknown	27.000
		Unknown	14.000
		Unknown	25.000
		Unknown	10.000
		Unknown	19.000
		Unknown	12.000
		Benzothiazole	3.000
		Unknown	5.000
		Unknown	2.000
		Unknown	3.000
		Unknown	6.000
		Unknown	10.000
		Unknown	6.000
		Unknown	7.000
		Unknown	3.000
		Unknown	3.000
		Unknown	5.000
		Unknown	3.000
		Unknown	160.000
		Unknown	56.000
		Unknown	11.000

TENTATIVELY IDENTIFIED SEMIVOLATILE ORGANIC COMPOUNDS (Continued)

Sampling Location	Sample No.	SVOC	Estimated Concentration (µg/L)
MW-11i-D	ECDK9	Cyclohexenol	3.000
		Unknown	5.000
		Unknown	3.000
		Unknown	7.000
		Cyclohexenone	4.000
		Trichloropropene	5.000
		Unknown	2.000
		Unknown	36.000
		Unknown	17.000
		Unknown	3.000
		Unknown	2.000
		Unknown	35.000
		Unknown	6.000
		Unknown	2.000
		Unknown	8.000
		Unknown	3.000
		Unknown	4.000
		Unknown	2.000
		Unknown	3.000
		Unknown	5.000
		Unknown	3.000
		Unknown	130.000
		Unknown	45.000
		Unknown	42.000
		Unknown	10.000
MW-11d	ECDL0	Trichloropropene	2.000
		Cyclohexenol (BC)	5.000
		Cyclohexenone (BC)	3.000
		Trichloropropene (BC)	28.000
		Unknown (BC)	17.000
		Unknown	3.000
MW-12d	EBNZ0	Unknown Organic Acid	4.000
		Unknown Organic Acid	3.000
MW-18i	ECDL9	Unknown	17
MW-18i-D	ECDM0	Unknown	12
MW-20s	ECDH0	Unknown	3.000
		Trichloropropene	3.000

TENTATIVELY IDENTIFIED SEMIVOLATILE ORGANIC COMPOUNDS (Continued)

Sampling Location	Sample No.	SVOC	Estimated Concentration (µg/L)
MW-20i	ECDH1	Propanoic Acid, -Methyl, -Methyl	2.000
		Unknown	2.000
		Unknown	3.000
		Unknown	3.000
		Unknown	5.000
		Unknown	10.000
		Unknown	3.000
		Unknown	37.000
		Unknown	7.000
		Unknown	3.000
		Unknown	2.000
		Unknown	7.000
		Unknown	13.000
		Unknown	4.000
		Unknown	4.000
		Unknown	4.000
		Unknown	27.000
		Unknown	8.000
		Unknown	14.000
		Unknown	7.000
		Unknown	4.000
		Unknown	4.000
		Unknown	5.000
		Unknown	5.000
		Unknown	2.000
		Unknown	3.000
		Unknown	2.000
MW-20i	ECDH1RE	Propanoic Acid, -Methyl, -Methyl	3.000
		Unknown	4.000
		Unknown	3.000
		Unknown	5.000
		Unknown	5.000
		Unknown	25.000
		Unknown	2.000
		Cyclohexasiloxane, Dodecamethyl-	2.000
		Unknown	2.000
		Unknown	2.000
MW-20d	ECDG9	Butylated Hydroxytoluene	2.000
MW-21s	ECDL8	Butyl Glycolate	61
		Unknown	23
		Ethanol, 2-[2-(2-Methoxyetho	40
		Morpholine, 4-Acetyl-	23
		Unknown	14
		Unknown	140
		Unknown	62

TENTATIVELY IDENTIFIED SEMIVOLATILE ORGANIC COMPOUNDS (Continued)

Sampling Location	Sample No.	SVOC	Estimated Concentration (µg/L)
MW-24s	ECDK1	Cyclohexenol	2.000
		Cyclohexenone (BC)	3.000
MW-24i	ECDK0	Cyclohexenol	2.000
		Cyclohexenone (BC)	3.000
		Unknown	5.000
		Unknown	3.000
		Unknown Acid Ester	3.000
MW-25s	ECDK6	Cyclohexenone (BC)	3.000
MW-25i	ECDK7	Cyclohexenol	3.000
		Trichloropropene	11.000
		Unknown	3.000
		Unknown Phthalate	2.000
		Unknown	2.000
MW-27s	ECDJ5	Cyclohexenol (BC)	2.000
		Cyclohexenone (BC)	2.000
		Unknown Siloxane	2.000
		Unknown Acid Ester	2.000
		Unknown	3.000
MW-27i	ECDJ8	Cyclohexenol	5.000
		Unknown	5.000
		Trichloropropene	11.000
		Unknown	2.000
		Unknown	18.000
		Unknown	6.000
		Unknown	4.000
		Unknown	16.000
		Unknown	5.000
		Unknown	2.000
		Unknown	2.000
		Unknown	2.000
		Unknown	2.000
		Unknown	140.000
		Unknown	70.000
		Unknown	3.000
		Unknown	2.000

TENTATIVELY IDENTIFIED SEMIVOLATILE ORGANIC COMPOUNDS (Continued)

Sampling Location	Sample No.	SVOC	Estimated Concentration (µg/L)
MW-27i-D	ECDJ9	Cyclohexenol	4.000
		Unknown	4.000
		Unknown	2.000
		Cyclohexenone (BC)	3.000
		Trichloropropene	3.000
		Unknown	15.000
		Unknown	5.000
		Unknown	2.000
		Unknown	12.000
		Unknown	4.000
		Unknown	2.000
		Unknown	120.000
		Unknown	59.000
		Unknown	2.000
MW-27d	ECDJ4	Cyclohexenol (BC)	3.000
		Cyclohexenone (BC)	2.000
		Unknown	2.000
		Unknown	23.000
		Unknown	9.000
		Unknown	4.000

APPENDIX A-5

FILTERED AND UNFILTERED METALS

(10 Pages)

SDG NO. MEARN1
SDG NO. MEBDW1
SDG NO. MEBDX5
SDG NO. MEBDY0
SDG NO. MEBPY8

SDG NO. MEARN1
(Concentrations in μg/L)

Sampling Location	IE-13-MW-2d	IE-13-MW-2d	IE-13-MW-1d	IE-13-MW-1d	IE-13-MW-27i	IE-13-MW-27i	IE-13-MW-24i
Sample Number:	MEARF9	MEARG1	MEARG2	MEARG3	MEARN1	MEARN2	MEARN3
Sampling Device:	Pump	Pump	Pump	Pump	Pump	Pump	Pump
Unfiltered/Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered
Date Sampled:	09/25/98	09/25/98	09/25/98	09/25/98	09/23/98	09/23/98	09/23/98
Metal	Result	Result	Result	Result	Result	Result	Result
Aluminum	19.0 U	19.0 U	241	19.0 U	154	19.0 U	153
Antimony	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Arsenic	5.0 U	5.0 U	6.0	5.0	6.0	5.0 U	5.0 U
Barium	140	145	390	379	297	284	123
Beryllium	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cadmium	1.0 U	1.0 U	4.1	1.0 U	1.0 U	1.0 U	1.0 U
Calcium	91,300	94,700	131,000	132,000	162,000	158,000	141,000
Chromium	1.0 U	1.0 U	1.1	1.0 U	115	1.0 U	100
Cobalt	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Copper	3.4 J	2.0 U	2.2 J	2.0 U	2.0 U	2.0 U	2.0 U
Iron	3,470	1,190	2,510	1,510	3,310	2,330	1,790
Lead	1.0 U	1.0 U	2.4 J	1.0 U	1.0 U	1.0 U	1.0 U
Magnesium	19,900	20,600	27,600	27,700	36,300	35,400	32,200
Manganese	85.0	79.6	202	184	184	174	156
Mercury	0.40 J	1.1 J	0.80 J	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	2.0 U	2.0 U	12.2	11.1	48.0	42.8	22.8
Potassium	1,030	1,220	2,700	2,630	2,720	2,550	2,200
Selenium	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Silver	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Sodium	9,980	10,300	56,400	57,900	89,600	87,900	72,900
Thallium	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Vanadium	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Zinc	7.0 J	6.6 J	11.7 J	16.7 J	13.7 J	10.8 J	8.2 J

SDG NO. MEARN1
(Concentrations in µg/L)

Sampling Location:	IE-13-MW-24i	IE-13-MW-24s	IE-13-MW-24s	IE-13-MW-25s	IE-13-MW-25s	IE-13-MW-25i	IE-13-MW-25i	IE-13-MW-11i-D
Sample Number:	MEARN4	MEARN5	MEARN6	MEARN7	MEARN8	MEARPO	MEARP1	MEARP5
Sampling Device:	Pump	Pump	Pump	Pump	Pump	Pump	Pump	Pump
Unfiltered/Filtered	Filtered	Filtered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered	Filtered
Date Sampled:	09/23/98	09/23/98	09/23/98	09/23/98	09/23/98	09/23/98	09/23/98	09/24/98
Metal	Result	Result	Result	Result	Result	Result	Result	Result
Aluminum	19.0 U	19.0 U	19.0 U	263	19.0 U	648	19.0 U	19.0 U
Antimony	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Arsenic	5.0 U	5.0 U	5.2	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Barium	122	151	158	102	95.4	176	163	164
Beryllium	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cadmium	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Calcium	145,000	165,000	174,000	124,000	120,000	146,000	144,000	166,000
Chromium	1.0 U	1.0 U	1.0 U	2.2	1.0 U	89.8	1.0 U	1.0 U
Cobalt	2.0 U	2.0 U	2.0 U	2.5	2.0 U	3.3	5.6	2.0 U
Copper	2.0 U	2.0 U	2.0 U	3.3 J	2.0 U	3.9 J	2.0 U	2.0 U
Iron	1,160	3,640	3,800	997	18.0 U	5,520	2,970	4,170
Lead	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.4 J	1.0 U	1.0 U
Magnesium	33,000	36,000	37,700	23,300	22,500	29,000	28,500	41,500
Manganese	152	227	237	300	201	244	214	175
Mercury	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 J	7.0 J	0.20 U
Nickel	16.6	13.3	14.4	16.6	8.5	150	113	49.9
Potassium	2,250	2,420	2,630	2,860	2,700	3,570	3,170	3,190
Selenium	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Silver	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Sodium	73,300	79,500	91,400	41,200	47,900	155,000	154,000	137,000
Thallium	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Vanadium	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.6	2.0 U	2.0 U
Zinc	5.4 J	14.7 J	6.1 J	10.5 J	27.2 J	19.8 J	7.7 J	7.0 J

SDG NO. MEARN1
(Concentrations in µg/L)

Sampling Location	IE-13-FB02	IE-13-MW-27i-D	IE-13-MW-27i-D	IE-13-FB02
Sample Number:	MEAWP7	MEAWP8	MEAWP9	MEBDY4
Sampling Device:	Pump	Pump	Pump	Pump
Unfiltered/Filtered	Unfiltered	Unfiltered	Filtered	Filtered+AT3
Date Sampled:	09/23/98	09/23/98	09/23/98	09/23/98
Metal	Result	Result	Result	Result
Aluminum	19.0 U	102 J	19.0 U	19.0 U
Antimony	5.0 U	5.0 U	5.0 U	5.0 U
Arsenic	5.0 U	6.7	5.0 U	5.0 U
Barium	1.0 U	277	287	1.0 U
Beryllium	1.0 U	1.0 U	1.0 U	1.0 U
Cadmium	1.0 U	1.0 U	1.0 U	1.0 U
Calcium	221	154,000	162,000	147 J
Chromium	1.0 U	94.1	1.0 U	1.0 U
Cobalt	2.0 U	2.0 U	2.0 U	2.0 U
Copper	2.6	2.0 U	2.0 U	2.0 U
Iron	18.0 U	3,030	2,390	18.0 U
Lead	1.0 U	1.0 U	1.0 U	1.0 U
Magnesium	40.4 J	34,800	36,300	53.4 J
Manganese	1.2	175	177	1.0 U
Mercury	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	2.0 U	45.7	44.5	2.0 U
Potassium	79.0 U	2,480	2,640	79.0 U
Selenium	5.0 U	5.0 U	5.0 U	5.0 U
Silver	2.0 U	2.0 U	2.0 U	2.0 U
Sodium	365	83,200	86,600	307 J
Thallium	4.0 U	4.0 U	4.0 U	4.0 U
Vanadium	2.0 U	2.0 U	2.0 U	2.0 U
Zinc	29.3 J	6.8 J	5.4 J	14.5 J

SDG NO. MEBDW1
(Concentrations in µg/L)

Sampling Location:	IE-13-MW-12d	IE-13-MW-12d	IE-13-MW-12i	IE-13-MW-12i	IE-13-MW-12i	IE-13-MW-12i	IE-13-MW-20s
Sample Number:	MEBDW1	MEBDW2	MEBDW3	MEBDW4	MEBDW5	MEBDW6	MEBDW7
Sampling Device:	Pump	Pump	Pump	Pump	Bailer	Bailer	Pump
Unfiltered/Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Filtered
Date Sampled:	09/15/98	09/15/98	09/15/98	09/15/98	09/15/98	09/15/98	09/17/98
Metal	Result	Result	Result	Result	Result	Result	Result
Aluminum	455	19.0 U	107	19.0 U	1,140	19.0 U	19.0 U
Antimony	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Arsenic	5.0 U	5.0 U	5.0 U	5.0 U	5.0	5.0	7.2
Barium	246	240	208	218	263	242	170
Beryllium	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cadmium	1.0 U	1.0 U	1.3	1.2	10.3	1.4	1.0 U
Calcium	146,000	145,000	146,000	148,000	160,000	150,000	75,400
Chromium	1.0 U	1.0 U	1.9	1.0 U	66.2	1.0 U	1.0 U
Cobalt	2.0 U	2.0 U	2.0 U	2.0 U	4.0	2.0 U	2.0 U
Copper	2.5	2.0 U	2.0 U	2.0 U	12.3	2.0 U	2.0 U
Iron	3,550	3,040	1,560	1,500	7,700	1,620	442
Lead	2.7	1.0 U	1.0 U	1.0 U	10.2	1.0 U	1.0 U
Magnesium	26,200	26,200	27,500	27,900	30,200	28,400	16,500
Manganese	189	187	257	258	513	297	96.8
Mercury	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	2.0 U	2.0 U	8.5	7.0	86.7	9.9	2.0 U
Potassium	1,600	1,540	2,880	2,960	3,180	2,950	549 J
Selenium	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Silver	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Sodium	55,400 J	53,800 J	175,000 J	170,000 J	166,000 J	170,000 J	4,860 J
Thallium	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Vanadium	2.0 U	2.0 U	2.0 U	2.0 U	5.0	2.0 U	2.0 U
Zinc	15.4	5.1	30.4	47.4	186	25.5	6.6

SDG NO. MEBDW1
(Concentrations in µg/L)

Sampling Location	IE-13-MW-20s	IE-13-MW-20i-D	IE-13-MW-20i-D	IE-13-MW-20i	IE-13-MW-20d	IE-13-MW-20d
Sample Number	MEBDW8	MEBDW9	MEBDX0	MEBDX2	MEBDX3	MEBDX4
Sampling Device	Pump	Pump	Pump	Pump	Pump	Pump
Unfiltered/Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
Date Sampled	09/17/98	09/17/98	09/17/98	09/17/98	09/17/98	09/17/98
Metal	Result	Result	Result	Result	Result	Result
Aluminum	930	3,170	35.4	19.0 U	1,070	37.6
Antimony	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Arsenic	9.1	5.8	5.0 U	5.0 U	5.0 U	5.0 U
Barium	170	232	187	188	184	168
Beryllium	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cadmium	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.4
Calcium	74,600	113,000	92,300	93,900	50,900	50,600
Chromium	1.8	5.7	1.0 U	1.0 U	2.8	1.0 U
Cobalt	2.0 U	4.9	2.0 U	2.0 U	2.0 U	2.0 U
Copper	2.1	10.4	2.0 U	2.0 U	9.1	2.0 U
Iron	2,320	13,400	805	809	3,600	800
Lead	1.1	7.9	5.0	1.0 U	3.0	1.6
Magnesium	16,600	26,500	21,900	22,100	10,800	10,500
Manganese	129	749	309	303	50.5	32.4
Mercury	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	2.0 U	9.7	2.0 U	2.0 U	2.9	2.0 U
Potassium	1,220	2,910	1,930	1,930	2,140	2,040
Selenium	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Silver	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Sodium	6,080 J	8,920 J	6,440 J	6,370 J	16,800 J	15,300 J
Thallium	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Vanadium	2.0 U	8.2	2.0 U	2.0 U	2.0 U	2.0 U
Zinc	17.7	48.8	14.4	9.8	22.0	7.7

SDG NO. MEBDX5
(Concentrations in µg/L)

Sampling Location:	IE-13-MW-20i	IE-13-MW-23s	IE-13-MW-23s	IE-13-MW-6s	IE-13-MW-6s
Sample Number:	MEBDX5	MEBDX6	MEBDX7	MEBDX8	MEBDX9
Sampling Device:	Pump	Pump	Pump	Pump	Pump
Unfiltered/Filtered	Unfiltered	Unfiltered	Filtered	Filtered	Unfiltered
Date Sampled	09/17/98	09/17/98	09/17/98	09/18/98	09/18/98
Metal	Result	Result	Result	Result	Result
Aluminum	2,770 J	52.6 J	19.0 U	178 J	55.0 J
Antimony	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Arsenic	6.7	5.0 U	5.0 U	5.0 U	5.0 U
Barium	217	501	474	67.1	69.0
Beryllium	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cadmium	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Calcium	107,000	153,000	145,000	55,600	58,200
Chromium	5.3	1.0 U	1.0 U	1.0 U	1.0 U
Cobalt	4.5	2.0 U	2.0 U	2.2	2.0 U
Copper	11.4	4.2	2.3	2.4	2.2
Iron	12,300	8,720	7,740	7,870	7,950
Lead	8.4	2.0	1.0 U	1.0 U	1.0 U
Magnesium	24,800	46,900	44,800	9,300	9,730
Manganese	684	202	187	395	412
Mercury	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	9.1	17.8	16.3	2.0	2.0 U
Potassium	2,490	12,900 J	12,700 J	5,520	6,010
Selenium	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Silver	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Sodium	8,080	72,800 J	67,900 J	22,500 J	24,000 J
Thallium	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Vanadium	6.4	2.0 U	2.0 U	3.3	2.0 U
Zinc	34.3	10.3	5.0 U	25.3	26.3

SDG NO. MEBDY0
(Concentrations in µg/L)

Sampling Location	IE-13-MW-11s	IE-13-MW-11s	IE-13-FB03	IE-13-FB03	IE-13-MW-11d	IE-13-MW-11d	IE-13-MW-11i	IE-13-MW-11i
Sample Number:	MEARF5	MEARF6	MEARF7	MEARF8	MEARG0	MEARN9	MEARP2	MEARP3
Sampling Device:	Bailer	Bailer	Pump	Pump	Pump	Pump	Pump	Pump
Unfiltered/Filtered	Filtered	Unfiltered	Unfiltered	Filtered	Filtered	Unfiltered	Fitlered	Unfiltered
Date Sampled:	09/24/98	09/24/98	09/24/98	09/24/98	09/24/98	09/24/98	09/24/98	09/24/98
Metal	Result	Result	Result	Result	Result	Result	Result	Result
Aluminum	12.0 J	1240.0 J	12.0 J	12.0 J	12.0 J	2490.0 J	12.0 J	12.8 J
Antimony	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Arsenic	2.0 U	8.4	2.0 U	2.0 U	3.1	6.0	2.7	3.6
Barium	33.9	54.7	1.0 U	1.0 U	258.0	342.0	166.0	172.0
Beryllium	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cadmium	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Calcium	270,000	255,000	338	296	78,100	91,600	163,000	170,000
Chromium	1.0 J	164.0 J	1.0 J	1.0 J	1.0 J	9.3 J	1.0 J	1.0 J
Cobalt	2.0 U	13.5	2.0 U	2.0 U	2.0 U	21.6	2.0 U	2.0 U
Copper	2.0 U	12.7	2.0 U	2.1	2.0 U	9.6 J	2.0 U	2.0 U
Iron	290 J	17900 J	12 J	12 J	755 J	23100 J	4140 J	4280 J
Lead	1.0 J	4.3 J	1.8 J	1.2 J	1.5 J	11.6 J	1.3 J	1.4 J
Magnesium	48,100	45,900	22 U	22 U	16,700	18,400	40,500	41,900
Manganese	57.2 J	1180.0 J	1.0 J	5.3 J	117.0 J	510.0 J	175.0 J	180.0 J
Mercury	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	41.8 J	93.6 J	1.0 J	1.0 J	1.0 J	33.0 J	49.7 J	51.5 J
Potassium	3,270	3,380	128 U	128 U	1,590	2,050	3,080	3,260
Selenium	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Silver	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Sodium	51,100 J	51,300 J	131	118	7,380	8,840	148,000 J	150,000 J
Thallium	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.2 U	2.0 U	2.0 U
Vanadium	1.0 U	3.7	1.0 U	1.0 U	1.0 U	8.2	1.0 U	1.0 U
Zinc	11.8 J	32.6 J	19.0 J	24.7 J	9.6 J	57.9 J	8.3 J	27.0 J

SDG NO. MEBDY0
(Concentrations in µg/L)

Sampling Location	IE-13-MW-11i-D	IE-13-FB-01	IE-13-FB-01	IE-13-MW-27s	IE-13-MW-27s	IE-13-MW-27d	IE-13-MW-27d
Sample Number:	MEARP4	MEBDY0	MEBDY1	MEBDY2	MEBDY3	MEZW98	MEZW99
Sampling Device:	Pump	Pump	Pump	Pump	Pump	Pump	Pump
Unfiltered/Filtered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
Date Sampled:	09/24/98	09/24/98	09/21/98	09/22/98	09/22/98	09/22/98	09/22/98
Metal	Result	Result	Result	Result	Result	Result	Result
Aluminum	12.0 J	12.0 J	12.0 J	12.0 J	12.0 J	283.0 J	12.0 J
Antimony	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Arsenic	3.1	2.0 U	2.0 U	2.0 U	2.0 U	21.7	4.2
Barium	170.0	1.0 U	1.0 U	176.0	177.0	199.0	179.0
Beryllium	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cadmium	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Calcium	167,000	362	337	137,000	137,000	82,700	82,600
Chromium	1.0 J	1.0 J	1.0 J	9.2 J	1.0 J	3.2 J	1.0 J
Cobalt	2.0 U	2.0 U	2.5	2.0 U	2.0 U	2.0 U	2.0 U
Copper	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.1 J	2.0 U
Iron	4220 J	12 J	12 J	107 J	12 J	5040 J	945 J
Lead	1.2 J	2.6 J	2.3 J	1.8 J	1.5 J	5.2 J	1.6 J
Magnesium	41,300	22 U	22 U	27,900	28,100	17,900	17,800
Manganese	178.0 J	1.0 J	6.0 J	18.2 J	18.1 J	86.0 J	73.6 J
Mercury	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	51.1 J	1.0 J	1.0 J	14.1 J	11.2 J	8.2 J	6.4 J
Potassium	3,180	128 U	128 U	3,060	2,910	1,620	1,380
Selenium	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Silver	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Sodium	145,000 J	202	141	79,100 J	79,000 J	37,800 J	34,800 J
Thallium	2.0 U	2.3 J	3.3 J	2.5 J	2.0 U	2.0 U	2.0 U
Vanadium	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Zinc	11.1 J	39.2 J	48.4 J	15.8 J	6.7 J	33.9 J	10.4 J

SDG NO. MEBPY8
(Concentrations in ug/L)

Sampling Location	IE-13-MW-21i	IE-13-MW-21i	IE-13-MW-21s	IE-13-MW-21s	IE-13-MW-18i	IE-13-MW-18i	IE-13-MW-18i-D
Sample Number:	MEBPY8	MEBPY9	MEBPZ0	MEBPZ1	MEBPZ2	MEBPZ3	MEBPZ4
Sampling Device:	Pump	Pump	Pump	Pump	Pump	Pump	Pump
Unfiltered/Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered
Date Sampled:	09/28/98	09/28/98	09/28/98	09/28/98	09/28/98	09/28/98	09/28/98
Metal	Result	Result	Result	Result	Result	Result	Result
Aluminum	352	33.1 U	1,900	33.1 U	33.1 U	33.1 U	33.1 U
Antimony	7.8 U	7.8 U	7.8 U	7.8 U	7.8 U	7.8 U	7.8 U
Arsenic	8.8 J	7.1 J	7.5 J	7.0 J	4.5 J	4.5 J	4.5 J
Barium	231	231	300	293	388	356	376
Beryllium	0.30 U	0.30 U	0.3 U	0.30 U	0.30 U	0.30 U	0.30 U
Cadmium	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
Calcium	61,200	61,000	177,000	178,000	91,900	86,000	89,600
Chromium	2.4 J	2.2 J	8.4 J	2.2 J	147 J	2.2 J	68.3 J
Cobalt	1.4 U	1.4 U	5.4	2.8	2.4	2.7	2.6
Copper	2.8 U	2.8 U	6.6 J	2.8 U	4.4 J	2.8 U	3.5 J
Iron	1,420 J	203 J	17,900 J	12,500 J	1,950 J	1,340 J	1,800 J
Lead	2.7 U	2.7 U	4.7	2.7 U	2.7 U	2.7 U	2.7 U
Magnesium	14,800	14,700	59,100	59,200	20,900	19,500	20,300
Manganese	121	83.7	433	320	226	214	224
Mercury	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Nickel	5.3 U	5.3 U	60.3 J	54.4 J	202	187	194
Potassium	1,930 J	1,860 J	6,850	6,540	4,050	3,800	3,960
Selenium	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
Silver	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
Sodium	8,750 J	11,700 J	125,000	134,000	44,700	42,800	44,000
Thallium	6.6 UJ	6.6 UJ	6.6 UJ	6.6 UJ	6.6 UJ	6.6 UJ	6.6 UJ
Vanadium	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U
Zinc	9.2 J	1.6 J	29.9 J	14.0 J	8.4 J	6.0 J	1.6 J

SDG NO. MEBPY8
(Concentrations in ug/L)

Sampling Location	IE-13-MW-18i-D	IE-13-MW-18s	IE-13-MW-18s
Sample Number:	MEBPZ5	MEBPZ6	MEBPZ7
Sampling Device:	Pump	Bailer	Bailer
Unfiltered/Filtered	Filtered	Unfiltered	Filtered
Date Sampled:	09/28/98	09/28/98	09/28/98
Metal	Result	Result	Result
Aluminum	33.1 U	14,600	33.1 U
Antimony	7.8 U	7.8 U	7.8 U
Arsenic	4.5 J	25.5 J	4.5 J
Barium	363	274	110
Beryllium	0.30 U	1.1 J	0.30 U
Cadmium	1.8 U	1.8 U	1.8 U
Calcium	88,000	24,900	19,300
Chromium	2.2 J	73.6 J	3.5 J
Cobalt	3.0	22.2	1.4 U
Copper	2.8 U	70.1	2.8 U
Iron	1,300 J	45,600 J	38.9 J
Lead	2.7 U	32.5	2.7 U
Magnesium	20,000	64,400	42,600
Manganese	215	3,420	1.9 U
Mercury	0.10 U	0.10 U	0.10 U
Nickel	181	75.9 J	5.3 U
Potassium	3,780	5,270	1,590 J
Selenium	3.7	2.8	2.3 U
Silver	2.8 U	2.8 UJ	2.8 U
Sodium	43,400	13,500	15,700
Thallium	6.6 UJ	6.6 UJ	6.6 UJ
Vanadium	3.5 U	26.4 J	3.5 U
Zinc	6.2 J	214 J	4.6 J

APPENDIX B

RESIDENTIAL WELL SAMPLE ANALYTICAL RESULTS FOR SEPTEMBER 1998

APPENDIX B-1

VOLATILE ORGANIC COMPOUNDS

(Two Pages)

SDG NO. ECDH5

SDG NO. ECDH5
(Concentration in µg/L)

Sampling Location:	IE-13-RW101	IE-13-RW102	IE-13-RW103	IE-13-RW103-D	IE-13-RW70	IE-13-RW104	IE-13-RW105	IE-13-TB03
Sample Number:	ECDH5	ECDH6	ECDH7	ECDH8	ECDH9	ECDJ0	ECDJ1	ECDJ2
Date Sampled:	09/17/98	09/17/98	09/17/98	09/17/98	09/17/98	09/17/98	09/17/98	09/17/98
VOC	Result	Result	Result	Result	Result	Result	Result	Result
Chloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Acetone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Disulfide	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

SDG NO. ECDH5
(Concentration in µg/L)

Sampling Location:	IE-13-RW101	IE-13-RW102	IE-13-RW103	IE-13-RW103-D	IE-13-RW70	IE-13-RW104	IE-13-RW105	IE-13-TB03
Sample Number:	ECDH5	ECDH6	ECDH7	ECDH8	ECDH9	ECDJ0	ECDJ1	ECDJ2
Date Sampled:	09/17/98	09/17/98	09/17/98	09/17/98	09/17/98	09/17/98	09/17/98	09/17/98
VOC	Result	Result	Result	Result	Result	Result	Result	Result
1,2-Dibromomethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	0.9 J	1 U	0.7 J	0.7 J	0.6 J	0.9 J	0.7 J	0.7 J
Chlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylene (total)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

APPENDIX B-2

TENTATIVELY IDENTIFIED VOLATILE ORGANIC COMPOUNDS

(One Page)

TENTATIVELY IDENTIFIED VOLATILE ORGANIC COMPOUNDS

Sampling Location	Sample No.	VOC	Estimated Concentration (µg/L)
RW-103-D	ECDH8	Trimethyl-silanol	4
RW-104	ECDJ0	Trimethyl-silanol	4

APPENDIX B-3

SEMIVOLATILE ORGANIC COMPOUNDS

(Two Pages)

SDG NO. ECDH5

SDG NO. ECDH5
(Concentrations in µg/L)

Sampling Location:	IE-13-RW101	IE-13-RW102	IE-13-RW103	IE-13-RW103-D	IE-13-RW-70	IE-13-RW104	IE-13-RW105
Sample Number	ECDH5	ECDH6	ECDH7	ECDH8	ECDH9	ECDJ0	ECDJ1
Date Sampled:	09/17/98	09/17/98	09/17/98	09/17/98	09/17/98	09/17/98	09/17/98
SVOC	Result	Result	Result	Result	Result	Result	Result
Phenol	5 U	5 U	5 U	5 U	5 U	5 U	5 U
bis(2-Chloroethyl)ether	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Chlorophenol	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Methylphenol	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,2'-oxybis(1-chloropropane)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methylphenol	5 U	5 U	5 U	5 U	5 U	5 U	5 U
N-Nitroso-di-n-propylamine	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Nitrobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Isophorone	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Nitrophenol	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,4-Dimethylphenol	5 U	5 U	5 U	5 U	5 U	5 U	5 U
bis(2-Chloroethoxy)methane	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,4-Dichlorophenol	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Naphthalene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Chloroaniline	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Hexachlorobutadiene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Chloro-3-methylphenol	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Methylnaphthalene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Hexachlorocyclopentadiene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,4,6-Trichlorophenol	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,4,5-Trichlorophenol	20 U	20 U	20 U	20 U	20 U	20 U	20 U
2-Chloronaphthalene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Nitroaniline	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Dimethylphthalate	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acenaphthylene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,6-Dinitrotoluene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
3-Nitroaniline	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Acenaphthene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,4-Dinitrophenol	20 U	20 U	20 U	20 U	20 U	20 U	20 U

SDG NO. ECDH5
(Concentrations in µg/L)

Sampling Location:	IE-13-RW101	IE-13-RW102	IE-13-RW103	IE-13-RW103-D	IE-13-RW-70	IE-13-RW104	IE-13-RW105
Sample Number:	ECDH5	ECDH6	ECDH7	ECDH8	ECDH9	ECDJ0	ECDJ1
Date Sampled:	09/17/98	09/17/98	09/17/98	09/17/98	09/17/98	09/17/98	09/17/98
SVOC	Result	Result	Result	Result	Result	Result	Result
4-Nitrophenol	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,4-Dinitrotoluene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Diethylphthalate	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Chlorophenyl-phenylether	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Fluorene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Nitroaniline	20 U	20 U	20 U	20 U	20 U	20 U	20 U
4,6-Dinitro-2-methylphenol	20 U	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodiphenylamine	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Bromophenyl-phenylether	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Hexachlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Pentachlorophenol	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Phenanthrene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Anthracene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Di-n-butylphthalate	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Fluoranthene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Pyrene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Butylbenzylphthalate	5 U	5 U	5 U	5 U	5 U	5 U	5 U
3,3'-Dichlorobenzidine	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzo(a)anthracene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chrysene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
bis(2-Ethylhexyl)phthalate	5 U	5 U	5 U	5 U	5 U	4 J	5 U
Di-n-octylphthalate	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzo(b)fluoranthene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzo(k)fluoranthene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzo(a)pyrene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Indeno(1,2,3-cd)pyrene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dibenz(a,h)anthracene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzo(g,h,i)perylene	5 U	5 U	5 U	5 U	5 U	5 U	5 U

APPENDIX B-4

TENTATIVELY IDENTIFIED SEMIVOLATILE ORGANIC COMPOUNDS

(One Page)

TENTATIVELY IDENTIFIED SEMIVOLATILE ORGANIC COMPOUNDS

Sampling Location	Sample No.	SVOC	Estimated Concentration (µg/L)
RW-103-D	ECDH8	Unknown	11

APPENDIX B-5

METALS

(One Page)

SAMPLE BATCH NO. 980232

SAMPLE BATCH NO. 980232
(Concentration in µg/L)

Sampling Location:	IE-13-RW-101	IE-13-RW-102	IE-13-RW-103	IE-13-RW-103-D	IE-13-RW-70	IE-13-RW-104	IE-13-RW-105
Sample Number:	98TG01S01	98TG01S02	98TG01S03	98TG01D03	98TG01S04	98TG01S05	98TG01S06
Date Sampled	09/17/98	09/17/98	09/17/98	09/17/98	09/17/98	09/17/98	09/17/98
Unfiltered Metal	Result	Result	Result	Result	Result	Result	Result
Aluminum	200 U	200 U	200 U	200 U	200 U	200 U	200 U
Antimony	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Arsenic	2	5	2	2	0.8 U	0.8 U	2
Barium	290	156	263	261	320	6 U	187
Beryllium	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Cadmium	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Calcium	135,000	65,500	148,000	146,000	121,000	500 U	123,000
Chromium	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Cobalt	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Copper	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Iron	1,280	897	3,780	3,730	803	80 U	3,560
Lead	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Magnesium	27,700	13,900	32,800	32,400	25,200	115	23,000
Manganese	162	41.7	146	144	58.3	5 U	219
Nickel	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Potassium	1,620	1,110	1,660	1,590	990	500 U	1,350
Selenium	2 U	1 U	2 U	2 U	2 U	2 U	2 U
Silver	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Sodium	56,000	4,220	47,600	47,100	20,700	267,000	90,100
Thallium	12 U	2 U	6 U	6 U	6 U	16 U	4 U
Vanadium	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Zinc	40 U	40 U	40 U	40 U	40 U	40 U	40 U