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June 3, 2003

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Mr. Maurice Moore
Division of Hazardous Waste Remediation
NYSDEC
270 Michigan Ave.
Buffalo, NY 14203-2999

NYSDEC - REG. 9
FOIL
REL UNREL

**Subject: 1st Quarter 2003 Performance Monitoring Report
Essex/Hope Site Jamestown, New York
URS Project No. 801419**

Dear Mr. Moore:

This letter report is a summary of the 1st Quarter 2002 operational performance for the remedial system at the above-referenced site. This report is submitted in accordance with the June 1997 Performance Monitoring Plan (PMP) prepared by Radian International LLC (now URS Corp). During the quarter approximately 440,876 gallons of water were treated and discharged to the City of Jamestown POTW. The following sections discuss the data on groundwater quality sampling and groundwater flow. Soil sampling was not conducted during this reporting period.

GROUNDWATER FLOW EVALUATION

Water level measurements were taken on February 6, 2003 and March 17, 2003 during the reporting quarter. Water level data is provided in Appendix A of this report. Groundwater contour maps representative of pumping conditions during the reporting period are provided as Figures 1 and 2. The following discussions review the flow conditions of the Shallow (water table) and Lower Fine Sand (deep) water-bearing zones.

The recovery wells RW-1S, -2S, -3S, 2D, and 1D were redeveloped by jetting in March 2003 to increase pumping efficiency. A thorough cleaning of the discharge line and pump of RW-2D was completed during the month of February. The groundwater pumps for RW-1S, -2S, -3S, and -2D were disassembled and cleaned during the month of March to improve efficiency and prolong motor life.

The treatment system was shut down between 3/18/03 and 4/13/03 for repairs. During the cleaning of the equalization tank, it was noted that the level control system float assembly was corroded and no longer usable. This control assembly consists of a series of 5 floats along a sealed metallic rod (approximately 8 feet in length) with internal wiring and magnetic reed switches. The corrosion occurred beneath the 2nd (from the bottom) float, which is the high water/pump on switch. This corrosion resulted in a breach along the circumference of the rod. It was at this location that the rod broke. The float switch assembly was replaced with intrinsically safe conductance flux probes and relays. The system and all components are in accordance with Class 1 Division 1 electrical safety requirements for the area.

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Shallow Water-Bearing Zone (SWBZ)

Water table contour maps representing pumping conditions in the Shallow Water-Bearing Zone on March 17, 2003 is provided as Figure 1. Water table drawdown conditions at the site remained relatively similar to previous data recorded during 2002. A general trend in the SWBZ showed tighter contour intervals indicating a slightly steeper cone of depression; the potentiometric contour map showed a more elliptical pattern with decreased contour spacing, as compared to the 2002 annual data. Shallow groundwater was extracted at an average rate of 0.70 gallons per minute (gpm) from the NPL Area, 0.034 gpm from the AST/UST Area.

Recovery wells RW-4S and RW-5S are inoperable as of November 2, 2002 because of demolition of the electrical and groundwater discharge lines during the UST Area tank removal.

Lower Fine Sand Water-Bearing Zone

Deep zone groundwater extraction is conducted from Recovery Well RW-2D in the NPL Area. No groundwater is pumped from RW-1D, which was shut down in June of 1999 with the approval of the NYSDEC. Potentiometric surface contour maps representing pumping conditions on Mar 17, 2003 are provided as Figure 2. The cone of depression around RW-2D is similar to the 4th Quarter 2002 data with the potentiometric surface elevations approximately 2-ft higher in elevation. Groundwater was extracted from the deep zone at an average rate of 2.56 gpm over the reporting period.

WATER QUALITY RESULTS

First Quarter 2003 performance monitoring included quarterly sampling of all recovery wells and monthly influent and effluent sampling of the treatment system. The recovery well samples were taken on February 22, 2003. The monthly influent/effluent samples were collected on January 30, 2003, February 27, 2003 and March 30, 2003; their monthly pumping rates are 192,184 gal, 147,302 gal, and 101,390 gal, respectively. Pace Analytical of Export, Pennsylvania analyzed the samples for volatile organic compounds (VOC's) by US EPA Method 8260B. The recovery well analytical results are summarized in Table 1. Historical analytical results for individual recovery wells are summarized in Tables 2 through 8. Table 9 summarizes the monthly influent and effluent sample results. Copies of the laboratory data packages for the quarterly samples and the monthly treatment plant influent and effluent samples are found in Appendix B. The following sections discuss the analytical data for each remedial area.

NPL Area – Shallow Zone

VOC's detected in RW-1S (Table 2) during the March sampling round included: TCE (4000 ug/L), vinyl chloride (120 ug/L), cis-1,2-DCE (1000 ug/L), and trans-1,2-DCE (7 ug/L) - all other VOC's were non-detect. TCE increased from 210 ug/l, vinyl chloride increased from 12 ug/l, and cis 1,2-DCE increased from 66 ug/l as recorded during the previous quarterly sampling event. Results for 1,1-DCE, and trans-1,2-DCE remained at similar levels.

VOC's detected at RW-2S (Table 3) included TCE (340 ug/L), vinyl chloride (6.4 ug/L) and cis-1,2-DCE (120 ug/L) -- all other VOCs were below detection limits. These compounds have shown a decreasing trend over the previous year. TCE has decreased by an order of magnitude since September 2001 where it was detected at 2,900 ug/L. Vinyl chloride detected at 470 ug/L in November 2000 has decreased in concentration. Cis-1,2-DCE first analyzed in March 2001 at 620 ug/L also shows decline in concentration. Note that these compounds initially increased after the zero-valent iron injection activities in the NPL Area in August 2000. The increased concentrations were attributed to subsurface disturbance from the injection activities and chemical reactions.

NPL Area -- Lower Fine Sand Water Bearing Zone

VOC's detected at RW-1D (Table 7) during the 1st Quarter included vinyl chloride (11 ug/L), 1,1-DCE (14 ug/L), cis-1,2-DCE (1700 ug/L), trans-1,2-DCE (15 ug/L), TCE (34 ug/L), and benzene (4.8 ug/L) - all other VOC's were non-detect. Cis-1,2-DCE concentrations remain relatively similar. 1,1-DCE and trans-1,2-DCE showed slight increases in concentration as compared to previous data. Vinyl chloride has been decreasing from 910 ug/L in November 2000 to 11 ug/L detected in February 2003. TCE and benzene remained relatively similar to previous concentration data.

Compounds detected at RW-2D (Table 8) included: vinyl chloride (1,100 ug/L), 1,1-DCE (26 ug/L), cis-1,2-DCE (6,000 ug/L), TCE (490 ug/L), and benzene (9.7 ug/L). Cis-1,2-DCE and vinyl chloride, breakdown components of TCE, continue to show increases in concentration. 1,1-DCE, trans-1,2-DCE and benzene remained at concentrations comparable to previous data.

AST/UST Area

VOC's detected at RW-3S (Table 4) during the 1st Quarter were isopropylbenzene (25 ug/L), benzene (40 ug/L), ethylbenzene (150 ug/L) and total xylenes (152 ug/L). All other VOCs were non-detect. Of these compounds, cis-1,2-DCE had not previously been detected at this location. Vinyl chloride has been detected at times between 2 and 11 ug/L, but is now non-detect. Benzene, Isopropylbenzene, ethylbenzene and xylenes concentrations showed an increase.

Treatment Plant Influent/Effluent

The waste stream influent and effluent concentrations for the 1st Quarter of 2002 are shown on Table 9. Influent data (Pre-Carb) reflect a composite from all the groundwater extraction wells prior to pre-treatment. Primary Carbon data represents the effluent from the first carbon treatment vessel prior to the second treatment vessel. Effluent data (Post-Carb) represents pre-treated water prior to discharge to the City of Jamestown Publicly Owned Treatment Works (POTW). System influent data as related to extracted groundwater conditions for the quarter are discussed below.

VOC's detected in the influent during the 1st Quarter included: vinyl chloride (540 ug/L), 1,1-DCE (9.6 ug/L), cis-1,2-DCE (2,300 ug/L), trans-1,2-DCE (10 ug/L), TCE (270ug/L), , benzene (4.7 ug/L). Influent concentration ranges were similar to those recorded during the 4th Quarter of 2002.

VOC's detected in the primary carbon vessel effluent during March 2003 included vinyl chloride (900 ug/L), 1,1-DCE (6.1 ug/L), TCE (28 ug/L), and cis-1,2-DCE (2700 ug/L); all other constituents were non detect. Approximately 3639.2 ug/L total VOCs was detected in the system effluent sample collected on March 30, 2003.

VOC's detected in the secondary carbon vessel effluent during March 2003 showed vinyl chloride (910 ug/L); all other VOC's were non detect. Approximately 910 ug/L total VOCs was detected in the system effluent sample collected on March 30, 2003.

VOC's detected in the treatment system effluent during March 2003 included vinyl chloride (11 ug/L), and cis-1,2-DCE (7.8 ug/L); all other VOC's were non detect. Approximately 18.8 ug/L total VOCs was detected in the system effluent sample collected on March 30, 2003.

ANALYTICAL LABORATORY

Antech Ltd. has been purchased by Pace Analytical Services, Inc. As of May 1, 2002, the performance monitoring samples will be analyzed by Pace Analytical Services, Inc at the same laboratory location in Export, Pennsylvania. The existing New York State Laboratory Certification held by Antech Ltd. will be maintained by Pace Analytical Services, Inc.

CLOSING

This letter report has been prepared to satisfy the reporting requirements stipulated in the Performance Monitoring Plan and to evaluate remediation effectiveness on a quarterly basis. If you have any questions or desire additional information, please do not hesitate to call me at (412) 788-2717 Extension 1269.

Sincerely yours,



Mark J. Dowiak
Project Manager

cc: Ben Baker
John Ross
Dr. Anders G. Carlson – NY State Dept. of Health
Cameron O'Connor – NY State Dept. of Health
Andrew English – Chief, Bur. of Western Remedial Action
Glen R. Bailey – Dept. of Environmental Enforcement
Randall Peterson – Jamestown Board of Public Utilities
Carlo J. Montisano – Custom Production MFG., Inc

Table 1
RW-1S
Quarterly Sample Results

Volatile Compounds (Method 8260B)	Site GW RAOs (ug/L)	Aug-95 (ug/L)**	Jul-97 (ug/L)*	Oct-97 (ug/L)	Dec-97 (ug/L)	Mar-98 (ug/L)*	Jun-98 (ug/L)*	Sept-98 (ug/L)*	Nov-98 (ug/L)*	Feb-99 (ug/L)	May-99 (ug/L)	Aug-99 (ug/L)	Nov-99 (ug/L)	Feb-00 (ug/L)	Apr-00 (ug/L)	Aug-00 (ug/L)	Nov-00 (ug/L)	Mar-01 (ug/L)	Jul-02-01 (ug/L)	Sept-01 (ug/L)	Jan-06-02 (ug/L)	Mar-02 (ug/L)	Jul-05-02 (ug/L)	Sept-02 (ug/L)	Dec-02 (ug/L)	Feb-03 (ug/L)
Acetone	-	10	< 58 ^B	< 10	< 10	<200	<25	<50	< 10	<5	<5	9	<5	<10	<5	15 ^B	<5	<5	<5	<5	50	<5	14	<10	<10	<10
Benzene	-		< 25	< 5	< 5	<100	<5	<25	< 5	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
2-Butanone	-		120	< 10	< 10	<200	<5	<50	< 10	<5	<5	<5	<5	<10	<5	9	<5	<5	<5	<5	<10	<5	<10	<10	<10	<10
Chloroform	-		< 25	< 5	< 5	<100	<5	<25	< 5	<1	<1	<1	<1	<5	<1	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5
Isopropylbenzene	-			< 5	< 5	<100	<5	<25	< 5	<1	<1	<1	<1	<5	<1	14	6.1	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethene	-																2.5	<5	<5	<5	5.4	5.4	<5	8.4	<5	9.5
cis-1,2-Dichloroethene	-																	44	530	1,200	780	760	59	1,100	66	1,000
trans-1,2-Dichloroethene	5	1,700	160	< 5	< 5	<100	<5	<25	9	2	2	<1	<1	<5	<1	77	7.2	<5	<5	11	<5	12	<5	5.2	<5	7.0
Ethylbenzene	5		< 25	< 5	< 5	<100	<5	<25	< 5	<1	<1	<1	<1	<5	<1	9	2.52	<5	<5	<5	<5	<5	77	<5	<5	<5
Methylenc Chloride	-	<17	< 35 ^B	11	< 5	<100	18	10 J	< 5	<1	1 ^B	2	2 ^B	<5	4 ^B	8	6.01 ^B	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	5	3,500	460	< 5	1,900 D	12,000	910	570	1,300	180 D	590	41	37	41	24	150	120	100	1,500	3,300	1,800	2,300	360	2,400	210	4,000
Toluene	5		< 25	< 5	< 5	<100	<5	<25	< 5	<1	<1	<1	<1	<5	<1	4	1.34	<5	<5	<5	<5	<5	38	<5	<5	<5
Vinyl Chloride	5	240	< 25	< 5	32	110	<5	11 J	20	6	3	1	<1	<5	<1	470 D	320 D	28	150	160	180	87	<2	26	12	120
Total Xylenes	5	4	< 25	< 5	< 5	<100	<5	<25	< 5	<1	<1	2	5	<5	<3	78	22	<5	<5	<5	<5	<5	480	<5	<5	<5

Polychlorinated Biphenyls (PCBs) (Method 8080)	Site GW RAOs (ug/L)	Aug-95 (ug/L)**	Jul-97 (ug/L)*	Oct-97 (ug/L)	Dec-97 (ug/L)	Mar-98 (ug/L)*	Jun-98 (ug/L)*	Sept-98 (ug/L)*	Nov-98 (ug/L)*	Feb-99 (ug/L)	May-99 (ug/L)	Aug-99 (ug/L)	Nov-99 (ug/L)	Feb-00 (ug/L)
Aroclor-1016	0.1		< 0.10	N/A	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10
Aroclor-1221	0.1		< 0.20	N/A	< 0.3	< 0.3	<0.1	<0.2	< 0.2	< 0.2	<0.20	<0.20	<0.10	<0.20
Aroclor-1232	0.1		< 0.10	N/A	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10
Aroclor-1242	0.1		< 0.10	N/A	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10
Aroclor-1248	0.1		< 0.10	N/A	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10
Aroclor-1254	0.1	<1	< 0.10	N/A	< 0.3	< 0.3	<0.1	0.032 J	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10
Aroclor-1260	0.1		< 0.10	N/A	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10

Notes:

B = Qualified as non-detected due to blank contamination

D.* = Analyzed with dilution. See laboratory reports for dilution factors.

** Sample results reported represent the highest values obtained from the 5.5 hr and 29 hr samples.

E = Concentration exceeded calibration range of instrument.

J = Estimated Concentration

NA = Not Analyzed

Table 3
RW-2S
Quarterly Sample Results

Volatile Compounds (Method 8260B)	Site GW RAOs (ug/L)	Aug-95 (ug/L)**	Jul-97 (ug/L)*	Oct-97 (ug/L)	Dec-97 (ug/L)	Mar-98 (ug/L)*	Jun-98 (ug/L)*	Sept-98 (ug/L)*	Nov-98 (ug/L)*	Feb-99 (ug/L)	May-99 (ug/L)	Aug-99 (ug/L)	Nov-99 (ug/L)	Feb-00 (ug/L)	Apr-00 (ug/L)	Aug-00 (ug/L)	Nov-00 (ug/L)	Mar-01 (ug/L)	Jul-02-01 (ug/L)	Sept-01 (ug/L)	Jan-06-02 (ug/L)	Mar-02 (ug/L)	Jul-05-02 (ug/L)	Sept-02 (ug/L)	Dec-02 (ug/L)	Feb-03 (ug/L)
Acetone	-	<10/<10	< 10	< 500	< 10	<50	<5	<10	< 10	<5	<50	<5	<5	<10	<5	65 ^B	<5	<5	<5	<5	<10	<5	<10	<10	<10	<10
Benzene	-		< 5	< 250	< 5	<25	<1	<5	< 5	<1	<10	<1	<1	<5	<1	<2	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1
2-Butanone	-		< 10	< 500	< 10	<50	<5	<10	< 10	<5	<50	<5	<5	<10	<5	21	<5	<5	<5	<5	<10	<5	<10	<10	<10	<10
Chloroform	-		< 5	< 250	< 5	<25	<1	<5	< 5	<1	<10	<1	<1	<5	<1	<2	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5
Isopropylbenzene	-			< 250	< 5	<25	<1	<5	< 5	<1	<10	<1	<1	<5	<1	2	1.54	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethene	-																32	<5	<5	<5	<5	<5	<5	<5	<5	<5
cis-1,2-Dichloroethene																		620	400	500	110	99	6.6	210	8.9	120
trans-1,2-Dichloroethene	5	2,200/2,600	130	< 250	< 5	<25	<1	17	< 5	<1	<10	<1	<1	<5	<1	92	56	6.7	<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	5		< 5	< 250	< 5	<25	<1	<5	< 5	<1	<10	3	<1	<5	<1	2	1.34	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methylene Chloride	-	<10/<10	< 13 ^B	880	< 5	30	<1	2 J	< 5	<1	36 ^B	<1	5 ^B	<5	4 ^B	48 ^B	4.23 ^B	<5	<5	<5	<5	<5	<5	<5	<5	<5
Tetrachloroethene	-																2.93	<5	<5	<5	<5	<5	<5	<5	<5	<5
Toluene	5		< 5	< 250	< 5	<25	<1	<5	< 5	<1	<10	<1	<1	<5	<1	<2	2.01	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,2-Trichloroethane	-																1.05	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	5	7,700/10,000	410 D	3,700	750 D	380	120	970 E	1,100	1,900 D	2,700	1,500 D	17	46	490 D	43	6,400 D	1,500	2,200	2,900	22	7.7	200	630	7.2	340
Vinyl Chloride	5	100/81	< 5	< 250	< 5	<25	<1	<5	6	4	<10	2	<1	<5	<1	180	470 D	120	38	<2	15	5.6	<2	7.4	<2	6.4
Total Xylenes	5	<10/10	< 5	< 250	< 5	<25	<1	<5	< 5	<1	<10	20	2	<5	<3	17	13	<5	<5	<5	<5	<5	6.5	<5	<5	<5

Polychlorinated Biphenyls (PCBs) (Method 8080)	Site GW RAOs (ug/L)	Aug-95 (ug/L)**	Jul-97 (ug/L)*	Oct-97 (ug/L)	Dec-97 (ug/L)	Mar-98 (ug/L)*	Jun-98 (ug/L)*	Sept-98 (ug/L)*	Nov-98 (ug/L)*	Feb-99 (ug/L)	May-99 (ug/L)	Aug-99 (ug/L)	Nov-99 (ug/L)	Feb-00 (ug/L)
Aroclor-1016	0.1		< 0.10	N/A	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10
Aroclor-1221	0.1		< 0.20	N/A	< 0.3	< 0.3	<0.1	<0.2	< 0.2	< 0.2	<0.20	<0.20	<0.10	<0.20
Aroclor-1232	0.1		< 0.10	N/A	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10
Aroclor-1242	0.1		< 0.10	N/A	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10
Aroclor-1248	0.1		< 0.10	N/A	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10
Aroclor-1254	0.1	<1/<1	< 0.10	N/A	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10
Aroclor-1260	0.1		< 0.10	N/A	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10

Notes:

B = Qualified as non-detect due to blank contamination

D,* = Analyzed with dilution. See laboratory reports for dilution factors.

** Sample results reported represent the highest values obtained from the 5.5 hr and 29 hr samples.

E = Concentration exceeded calibration range of instrument.

J = Estimated Concentration

NA = Not Analyzed

Table 4
RW-3S
Quarterly Sample Results

Volatile Compounds (Method 8260B)	Site GW RAOs (ug/L)	Jul-97 (ug/L)*	Oct-97 (ug/L)	Dec-97 (ug/L)	Mar-98 (ug/L)*	Jun-98 (ug/L)*	Sept-98 (ug/L)*	Nov-98 (ug/L)*	Feb-99 (ug/L)	May-99 (ug/L)	Aug-99 (ug/L)	Nov-99 (ug/L)	Feb-00 (ug/L)	Apr-00 (ug/L)	Aug-00 (ug/L)	Nov-00 (ug/L)	Mar-01 (ug/L)	Jul-02-01 (ug/L)	Sept-01 (ug/L)	Jan-06-02 (ug/L)	Mar-02 (ug/L)	Jul-05-02 (ug/L)	Sept-02 (ug/L)	Dec-02 (ug/L)	Feb-03 (ug/L)
Acetone	-	< 2000	< 1000	14	<500	<50	<100	< 10	<5	15	<5	<10	10	18 ^B	<5	<10	<5	<5	<5	<10	<5	<10	<10	<10	<10
Benzene	-	< 1000	< 500	21	<250	15	16 J	9	17	<2	7	11	<5	12	18	11	7.7	35	21	52	1.3	<1	1.6	16	40
2-Butanone	-	< 2000	< 1000	< 10	<500	<50	<100	< 10	<5	<10	<5	<10	<10	<10	<5	<10	<5	<5	<5	<10	<5	<10	<10	<10	<10
Chloroform	-	< 1000	< 500	< 5	<250	<10	<50	< 5	<1	<2	<1	<2	<5	<2	<1	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5
Isopropylbenzene	-		< 500	160	<250	71	110	24	83	3	34	39	13	47	50	24	17	38	27	56	<5	15	<5	13	25
1,1-Dichloroethane	-	<1000	<500	<5	<250	<50	<50	<5	2	<2	<1	<2	<5	<2	<1	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5
cis-1,2-Dichloroethene	-																<5	<5	<5	<5	6.3	<5	<5	<5	<5
trans-1,2-Dichloroethene	5	< 1000	< 500	< 5	<250	<10	<50	< 5	<1	<2	<1	<2	<5	<2	<1	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	5	1,800	740	1,100 D	940	510	600	780	490 D	12	140	190	81	180	210 D	120	96	190	95	310	11	97	9.1	<5	150
Methylene Chloride	-	< 1000	< 500	< 5	360	<10	<50	< 5	<1	12 ^B	<1	2 ^B	<5	57 ^B	<1	12	<5	<5	<5	<5	<5	<5	<5	<5	<5
Toluene	5	7,700	4,800	3,700 D	1,700	430	180	< 250	83	3	15	8	6	6	2	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	5	< 1000	< 500	< 5	<250	<10	<50	< 5	87 D	<2	<1	2	<10	<2	2	2.66	<5	<5	<5	<5	<5	<5	<5	8.2	<5
Vinyl Chloride	5	< 1000	< 500	11	<250	<10	<50	< 5	11	<2	<1	<2	<5	<2	2	<2	<2	<2	<2	<5	17	<2	<2	<2	<2
Total Xylenes	5	22,000	11,000	13,000 D	13,000	5,100	4,200 E	20,000	3,100 D	370	700 D	640	370 D	440	150	93	184	279	99	590	55	95	63.4	<5	152

Polychlorinated Biphenyls (PCBs) (Method 8080)	Site GW RAOs (ug/L)	Jul-97 (ug/L)*	Oct-97 (ug/L)	Dec-97 (ug/L)	Mar-98 (ug/L)*	Jun-98 (ug/L)*	Sept-98 (ug/L)*	Nov-98 (ug/L)*	Feb-99 (ug/L)	May-99 (ug/L)	Aug-99 (ug/L)	Nov-99 (ug/L)	Feb-00 (ug/L)
Aroclor-1016	0.1	< 0.10	N/A	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10
Aroclor-1221	0.1	< 0.20	N/A	< 0.3	< 0.3	<0.1	<0.2	< 0.2	< 0.2	<0.20	<0.20	<0.10	<0.20
Aroclor-1232	0.1	< 0.10	N/A	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10
Aroclor-1242	0.1	< 0.10	N/A	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10
Aroclor-1248	0.1	< 0.10	N/A	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10
Aroclor-1254	0.1	< 0.10	N/A	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10
Aroclor-1260	0.1	< 0.10	N/A	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10

Notes:

B = Qualified as non-detect due to blank contamination

D,* = Analyzed with dilution. See laboratory reports for dilution factors.

E = Concentration exceeded calibration range of instrument.

J = Estimated Concentration

NA = Not Analyzed

Table 5
RW-1D
Quarterly Sample Results

Volatile Compounds (Method 8260B)	Site GW RAOs (ug/L)	Jul-97 (ug/L)*	Oct-97 (ug/L)	Dec-97 (ug/L)	Mar-98 (ug/L)*	Jun-98 (ug/L)*	Sept-98 (ug/L)*	Nov-98 (ug/L)*	Feb-99 (ug/L)	May-99 (ug/L)	Aug-99 (ug/L)	Nov-99 (ug/L)	Apr-8-00 (ug/L)	Apr-30-00 (ug/L)	Aug-00 (ug/L)	Nov-00 (ug/L)	Apr-05-01 (ug/L)	Jul-02-01 (ug/L)	Sept-01 (ug/L)	Jan-06-02 (ug/L)	Mar-02 (ug/L)	Jul-05-02 (ug/L)	Sept-02 (ug/L)	Dec-02 (ug/L)	Feb-03 (ug/L)
Acetone	-	< 19 ^B	< 10	< 10	37	<5	<10	< 10	<5	<5	<10	<10	14 ^B	<25	4 J ^B	<5	<5	<5	<5	12	<5	<10	<10	<10	<10
Benzene	-	< 5	< 5	< 5	<5	<1	<5	< 5	2	2	<2	6	23	17	4	14	3.7	6.0	3.6	<5	9.7	6.6	3.6	5.6	4.8
2-Butanone	-	< 10	< 10	< 10	<10	<5	<10	< 10	<5	<5	<10	<10	<5	<25	<5	<5	<5	<5	<5	<10	<5	<10	<10	<10	<10
Chloroform	-	< 5	< 5	< 5	<5	<1	<5	< 5	<1	<1	<2	<2	1	<5	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloromethane	-										4	<2	<1	<5	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5
Isopropylbenzene	-		< 5	< 5	<5	<1	<5	< 5	<1	<1	<2	<2	<1	<5	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethene	-	<5	<5	<5	<5	<1	<5	<5	3	4	2	54	85	53	11	41	10	12	12	<5	25	15	11	11	14
cis-1,2-Dichloroethene																	1,500	1,700	1,400	180	3,000	2,300	1,400	1,300	1,700
trans-1,2-Dichloroethene	5	26	< 5	< 5	<5	2	2 J	< 5	4	4	16	43	110	84	17	52	14	12	17	<5	41	9.4	6.8	13	15
Ethylbenzene	5	< 5	< 5	< 5	<5	<1	<5	< 5	<1	<1	<2	<2	<1	<5	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methylene Chloride	-	< 8 ^B	14	< 5	<5	3	2 J	< 5	<1	1 ^B	3	24 ^B	11 ^B	27 ^B	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5
Toluene	5	< 5	< 5	< 5	<5	<1	<5	< 5	<1	<1	<2	<2	<1	<5	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	5	< 5	< 5	< 5	<5	<1	3 J	6	<10 ^B	19	<2	38	8	25	16	150	<5	14	73	<5	62	8.1	39	14	34
Vinyl Chloride	5	23	29	93	200	200	130	130	140 D	210	120	830 D	450 D	530	25	910 D	<2	110	130	360	52	<100	26	<2	11
Total Xylenes	5	< 5	< 5	< 5	<5	<1	<5	< 5	<1	<1	<2	<2	<3	<15	<3	<1	<5	<5	<5	<5	<5	15	<5	<5	<5

Polychlorinated Biphenyls (PCBs) (Method 8080)	Site GW RAOs (ug/L)	Jul-97 (ug/L)*	Oct-97 (ug/L)	Dec-97 (ug/L)	Mar-98 (ug/L)*	Jun-98 (ug/L)*	Sept-98 (ug/L)*	Nov-98 (ug/L)*	Feb-99 (ug/L)	May-99 (ug/L)	Aug-99 (ug/L)	Nov-99 (ug/L)	Feb-00 (ug/L)
Aroclor-1016	0.1	< 0.10	N/A	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10
Aroclor-1221	0.1	< 0.20	N/A	< 0.3	< 0.3	<0.1	<0.2	< 0.2	< 0.2	<0.20	<0.20	<0.10	<0.20
Aroclor-1232	0.1	< 0.10	NA	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10
Aroclor-1242	0.1	< 0.10	NA	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10
Aroclor-1248	0.1	< 0.10	NA	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10
Aroclor-1254	0.1	< 0.10	NA	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10
Aroclor-1260	0.1	< 0.10	NA	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10

Notes:

B = Qualified as non-detect due to blank contamination

D,* = Analyzed with dilution. See laboratory reports for dilution factors.

J = Estimated Concentration

NA = Not Analyzed

Table 6
RW-2D
Quarterly Sample Results

Volatile Compounds (Method 8260B)	Site GW RAOs (ug/L)	Aug-95 (ug/L)**	Jul-97 (ug/L)*	Oct-97 (ug/L)	Dec-97 (ug/L)	Mar-98 (ug/L)*	Jun-98 (ug/L)*	Sept-98 (ug/L)*	Nov-98 (ug/L)*	Feb-99 (ug/L)	May-99 (ug/L)	Aug-99 (ug/L)	Nov-99 (ug/L)	Feb-00 (ug/L)	Apr-00 (ug/L)	Aug-00 (ug/L)	Nov-00 (ug/L)	Mar-01 (ug/L)	Jul-02-01 (ug/L)	Sept-01 (ug/L)	Jan-06-02 (ug/L)	Mar-02 (ug/L)	Jul-05-02 (ug/L)	Sept-02 (ug/L)	Dec-02 (ug/L)	Feb-03 (ug/L)
Acetone	-	<10	< 90 ^B	< 100	< 10	<500	<130/<130	<250	< 10	<5	<5	<5	<100	<10	120 ^B	<5	<5	<5	<5	<5	<10	<10	<10	<10	<10	<10
Benzene	-		< 5	< 50	< 5	<250	<25/<25	<120	< 5	<1	<1	2	<20	<5	<10	3	4.7	6.5	7.2	7.5	9.2	9.9	9.1	9.5	9.7	9.7
2-Butanone	-		130	270	< 10	<500	<25/<25	<250	< 10	<5	<5	<5	<100	<10	<50	16	<5	<5	<5	<5	<10	<5	28	<10	<10	<10
Chloroform	-		< 5	< 50	< 5	<250	<25/<25	<120	< 5	<1	<1	<1	<20	<5	<10	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5
Isopropylbenzene	-			< 50	< 5	<250	<25/<25	<120	< 5	<1	<1	<1	<20	<5	<10	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethene	-		<5	<50	<5	<250	<25	>120	<5	5	6	<1	65	6	<10	12	25	17	16	25	25	33	<5	32	22	26
cis-1,2-Dichloroethene																		5,200	4,200	7,900	7,800	12,000	50	7,900	4,300	6,000
trans-1,2-Dichloroethene	5	200	320 D	< 50	< 5	<250	<25/<25	<120	< 5	5	5	5	94	7	<10	11	19	27	27	32	41	29	7.8	26	18	26
Ethylbenzene	5		< 5	< 50	< 5	<250	<25/<25	<120	< 5	<1	<1	2	<20	7	<10	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methylene Chloride	-	<10	< 12 ^B	340	< 5	<250	<25/<25	80 J	< 5	<1	1 ^B	<1	260 ^B	<5	410 ^B	<1	3.06 ^B	<5	<5	<5	<5	<5	<5	<5	<5	<5
Tetrachloroethene	-		<5	<50	<5	<250	<25	<120	<5	1	1	1	<20	<5	<10	<1	1.04	<5	<5	<5	<5	<5	<5	<5	<5	<5
Toluene	5		< 5	< 50	< 5	<250	<25/<25	<120	< 5	<1	<1	<1	<20	<5	<10	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	5	5,600	2,200 D	1,900 D	4,500 D	4,900	2,200/2,500	3,200	4,700	4,500 D	4,000	2,800 D	18,000 D	1,900 D	3,100	3,000 D	4,400 D	1,100	270	330	310	150	<5	210	110	490
Vinyl Chloride	5	32	32	< 50	71	<250	83/<25	110 J	150	190	280	190 D	<20	210	150	160 D	120 D	530	610	1,300	1,100	1,700	55	1,300	1,600	1,100
Total Xylenes	5	<10	< 5	< 50	< 5	<250	<25/<25	<120	< 5	<2 ^B	2	13	<20	38	<30	<3	1.49	<5	<5	<5	8.9	<5	12	<5	<5	<5

Polychlorinated Biphenyls (PCBs) (Method 8080)	Site GW RAOs (ug/L)	Aug-95 (ug/L)**	Jul-97 (ug/L)*	Oct-97 (ug/L)	Dec-97 (ug/L)	Mar-98 (ug/L)*	Jun-98 (ug/L)*	Sept-98 (ug/L)*	Nov-98 (ug/L)*	Feb-99 (ug/L)	May-99 (ug/L)	Aug-99 (ug/L)	Nov-99 (ug/L)	Feb-00 (ug/L)
Aroclor-1016	0.1		< 0.10	N/A	< 0.3	< 0.3	<0.1/<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10
Aroclor-1221	0.1		< 0.20	N/A	< 0.3	< 0.3	<0.1/<0.1	<0.2	< 0.2	< 0.2	<0.20	<0.20	<0.10	<0.20
Aroclor-1232	0.1		< 0.10	N/A	< 0.3	< 0.3	<0.1/<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10
Aroclor-1242	0.1		< 0.10	N/A	< 0.3	< 0.3	<0.1/<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10
Aroclor-1248	0.1		< 0.10	N/A	< 0.3	< 0.3	<0.1/<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10
Aroclor-1254	0.1	<1	< 0.10	N/A	< 0.3	< 0.3	<0.1/<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10
Aroclor-1260	0.1		< 0.10	N/A	< 0.3	< 0.3	<0.1/<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10

Notes:

B = Qualified as non-detect due to blank contamination

D,* = Analyzed with dilution. See laboratory reports for dilution factors.

** Sample results reported represent the highest values obtained from the 5.5 hr and 29 hr samples.

J = Estimated Concentration

N/A = Not analyzed

Table 7

**Pre-Carbon Analytical Results
POTW Monthly Monitoring Summary**

Compound	Jan-03 (ug/L)	Feb-03 (ug/L)	Mar-03 (ug/L)	Apr-03 (ug/L)	May-03 (ug/L)	June-03 (ug/L)	Jul-03 (ug/L)	Aug-03 (ug/L)	Sep-03 (ug/L)	Oct-03 (ug/L)	Nov-03 (ug/L)	Dec-03 (ug/L)
Acetone	<10	<10	<10									
Benzene	7.3	5.3	4.7									
2-Butanone	<10	<10	<10									
Chloroform	<5	<5	<5									
Chloromethane	<5	<5	<5									
Isopropylbenzene (Cumene)	<5	<5	<5									
1,1-Dichloroethene	15	13	9.6									
cis-1,2-Dichloroethene	4,300	3,500	2,300									
trans-1,2-Dichloroethene	30	14	10									
Ethylbenzene	<5	<5	<5									
Methylene Chloride	<5	<5	<5									
Toluene	<5	<5	<5									
Trichloroethene	390	410	270									
Vinyl Chloride	640	530	540									
Total Xylenes	<5	<5	<5									
Pre-Carb TOTAL VOCs	5,382.3	4,472.3	3,134.3									

Notes:

POTW Discharge Limit = 2,130 ug/L Total Toxic Organics (VOCs)

Primary and Secondary Carbon Units changed out on April 13, 2002

Primary and Secondary Carbon Units changed out on August 8, 2002

Third Carbon Placed online on November 29, 2002

Pre-Carbon sample results represent system influent.

Primary Carbon sample results represent effluent from the first carbon vessel in the two (2) carbon vessel system

Post-Carbon sample results represent system effluent from the secondary carbon vessel (or the third carbon vessel if used) to the POTW

Post-Carbon sample is a laboratory prepared composite of four (4) grab samples taken at 30-minute intervals

B = Qualified as non-detect due to blank contamination

D = Analyzed with dilution, see laboratory reports for dilution factor

J = Estimated Concentration

ND = Non detect

NS = Not Sampled

NA= Not Analyzed

Table 8

**Primary Carbon Effluent
POTW Monthly Monitoring Summary**

Compound	Jan-03 (ug/L)	Feb-03 (ug/L)	Mar-03 (ug/L)	Apr-03 (ug/L)	May-03 (ug/L)	June-03 (ug/L)	Jul-03 (ug/L)	Aug-03 (ug/L)	Sep-03 (ug/L)	Oct-03 (ug/L)	Nov-03 (ug/L)	Dec-03 (ug/L)
Acetone	<10	<10	<10									
Benzene	<1	<1	<1									
2-Butanone	<10	<10	<10									
Chloroform	<5	<5	<5									
Chloromethane	<5	<5	<5									
Isopropylbenzene (Cumene)	<5	<5	<5									
1,1-Dichloroethene	<5	5.3	6.1									
cis-1,2-Dichloroethene	1,500	2,000	2,700									
trans-1,2-Dichloroethene	140	5.5	5.1									
Ethylbenzene	<5	<5	<5									
Methylene Chloride	<5	<5	<5									
Toluene	<5	<5	<5									
Trichloroethene	12	34	28									
Vinyl Chloride	620	660	900									
Total Xylenes	<5	<5	<5									
Primary-Carb TOTAL VOCs	2,272	2,705	3,639.2									

Notes:

POTW Discharge Limit = 2,130 ug/L Total Toxic Organics (VOCs)

Primary and Secondary Carbon Units changed out on April 13, 2002

Primary and Secondary Carbon Units changed out on August 8, 2002

Third Carbon Placed online on November 29, 2002

Pre-Carbon sample results represent system influent.

Primary Carbon sample results represent effluent from the first carbon vessel in the two (2) carbon vessel system

Post-Carbon sample results represent system effluent from the secondary carbon vessel (or the third carbon vessel if used) to the POTW.

Post-Carbon sample is a laboratory prepared composite of four (4) grab samples taken at 30-minute intervals.

B = Qualified as non-detected due to blank contamination

D = Analyzed with dilution, see laboratory reports for dilution factor

J = Estimated Concentration

ND = Non detect

NS = Not Sampled

NA= Not Analyzed

Table 9

**Secondary Carbon Effluent
POTW Monthly Monitoring Summary**

Compound	Jan-03 (ug/L)	Feb-03 (ug/L)	Mar-03 (ug/L)	Apr-03 (ug/L)	May-03 (ug/L)	June-03 (ug/L)	Jul-03 (ug/L)	Aug-03 (ug/L)	Sep-03 (ug/L)	Oct-03 (ug/L)	Nov-03 (ug/L)	Dec-03 (ug/L)
Acetone	NA	<10	<10									
Benzene	NA	<1	<1									
2-Butanone	NA	<10	<10									
Chloroform	NA	<5	<5									
Chloromethane	NA	<5	<5									
Isopropylbenzene (Cumene)	NA	<5	<5									
1,1-Dichloroethene	NA	<5	<5									
cis-1,2-Dichloroethene	NA	<5	<5									
trans-1,2-Dichloroethene	NA	<5	<5									
Ethylbenzene	NA	<5	<5									
Methylene Chloride	NA	<5	<5									
Toluene	NA	<5	<5									
Trichloroethene	NA	<5	<5									
Vinyl Chloride	NA	690	910									
Total Xylenes	NA	<5	<5									
Secondary TOTAL VOCs	NA	690	910									

Notes:

POTW Discharge Limit = 2,130 ug/L Total Toxic Organics (VOCs)

Primary and Secondary Carbon Units changed out on April 13, 2002

Primary and Secondary Carbon Units changed out on August 8, 2002

Third Carbon Placed online on November 29, 2002

Pre-Carbon sample results represent system influent.

Primary Carbon sample results represent effluent from the first carbon vessel in the two (2) carbon vessel system.

Post-Carbon sample results represent system effluent from the secondary carbon vessel (or the third carbon vessel if used) to the POTW.

Post-Carbon sample is a laboratory prepared composite of four (4) grab samples taken at 30-minute intervals.

B = Qualified as non-detected due to blank contamination

D = Analyzed with dilution, see laboratory reports for dilution factor

J = Estimated Concentration

ND = Non detected

NS = Not Sampled

NA = Not Analyzed

Table 10

**Third Carbon Effluent
POTW Monthly Monitoring Summary**

Compound	Jan-03 Post Carb (ug/L)	Feb-03 Post Carb (ug/L)	Mar-03 Post Carb (ug/L)	Apr-03 Post Carb (ug/L)	May-03 Post Carb (ug/L)	June-03 Post Carb (ug/L)	Jul-03 Post Carb (ug/L)	Aug-03 Post Carb (ug/L)	Sep-03 Post Carb (ug/L)	Oct-03 Post Carb (ug/L)	Nov-03 Post Carb (ug/L)	Dec-03 Post Carb (ug/L)
Acetone	<10	<10	<10									
Benzene	<1	<1	<1									
2-Butanone	<10	<10	<10									
Chloroform	<5	<5	<5									
Chloromethane	<5	<5	<5									
Isopropylbenzene (Cumene)	<5	<5	<5									
1,1-Dichloroethene	<5	<5	<5									
cis-1,2-Dichloroethene	6.9	6.7	7.8									
trans-1,2-Dichloroethene	<5	<5	<5									
Ethylbenzene	<5	<5	<5									
Methylene Chloride	<5	<5	<5									
Toluene	<5	<5	<5									
Trichloroethene	<5	<5	<5									
Vinyl Chloride	<2	<2	11									
Total Xylenes	<5	<5	<5									
Third Carbon TOTAL VOCs	6.9	6.7	18.8									

Notes:

POTW Discharge Limit = 2,130 ug/L Total Toxic Organics (VOCs)

Primary and Secondary Carbon Units changed out on April 13, 2002

Primary and Secondary Carbon Units changed out on August 8, 2002

Third Carbon Placed online on November 29, 2002

Pre-Carbon sample results represent system influent.

Primary Carbon sample results represent effluent from the first carbon vessel in the two (2) carbon vessel system

Post-Carbon sample results represent system effluent from the secondary carbon vessel (or the third carbon vessel if used) to the POTW

Post-Carbon sample is a laboratory prepared composite of four (4) grab samples taken at 30-minute intervals.

B = Qualified as non-detected due to blank contamination

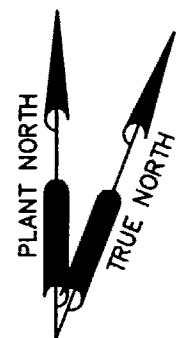
D = Analyzed with dilution, see laboratory reports for dilution factor

J = Estimated Concentration

ND = Non detected

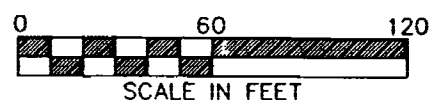
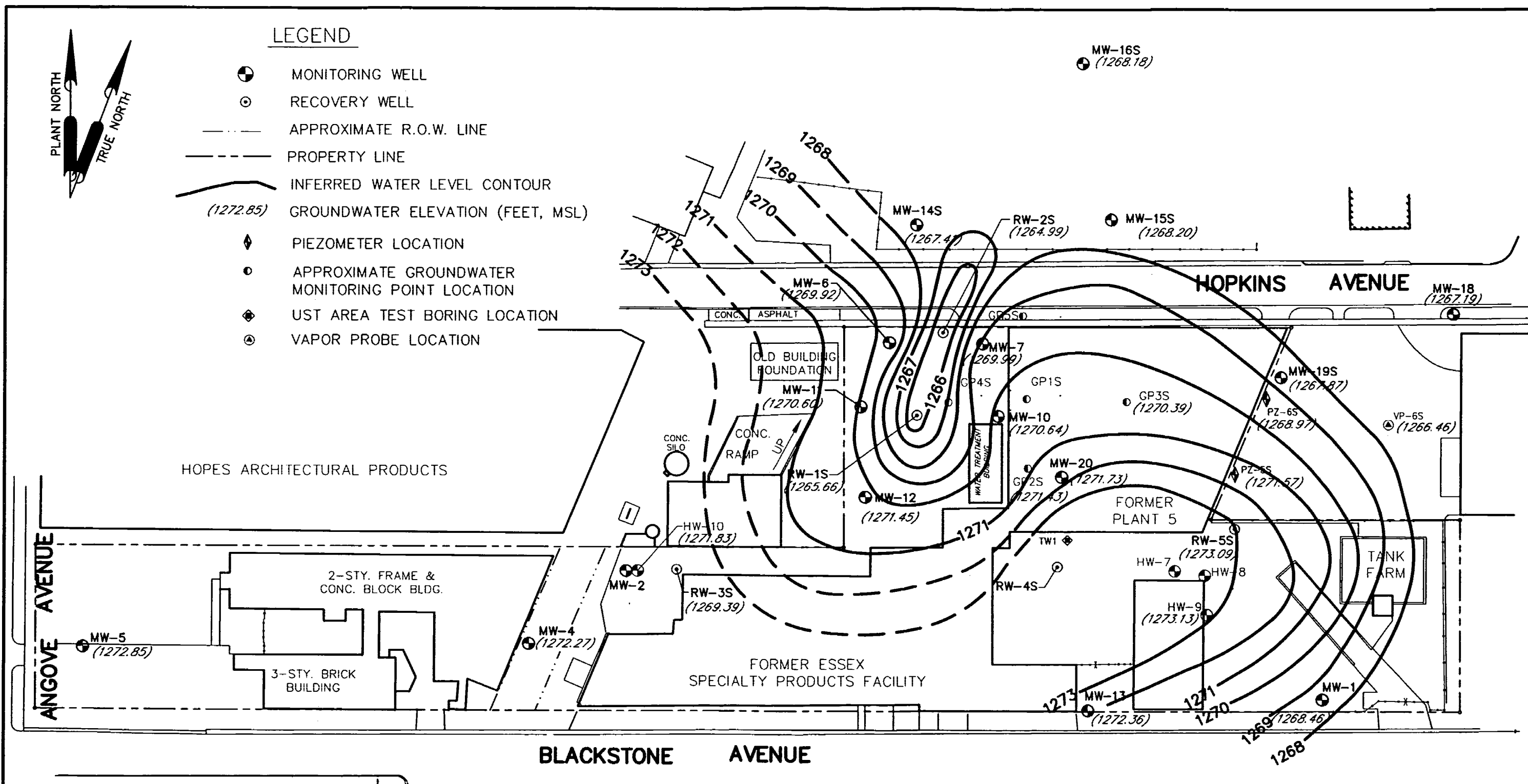
NS = Not Sampled

NA= Not Analyzed



LEGEND

- MONITORING WELL
- RECOVERY WELL
- APPROXIMATE R.O.W. LINE
- PROPERTY LINE
- INFERRED WATER LEVEL CONTOUR
- GROUNDWATER ELEVATION (FEET, MSL)
- PIEZOMETER LOCATION
- APPROXIMATE GROUNDWATER MONITORING POINT LOCATION
- UST AREA TEST BORING LOCATION
- VAPOR PROBE LOCATION



URS

WATER TABLE CONTOUR MAP MARCH 17, 2003

ESSEX/HOPE SITE

JAMESTOWN, NY

CLIENT: ESSEX SPECIALTY PRODUCTS, INC.

JOB NUMBER: 801419.2040

SCALE: AS SHOWN

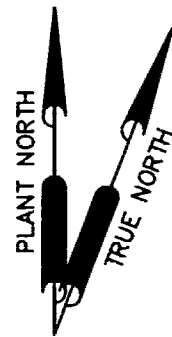
FIGURE
NUMBER

1

REV
0

VERTICAL BENCH MARK INFORMATION CAME FROM U.S.G.S. PLAQUE U-88-S.E. ABUTT. ERIE R.R. BRIDGE
OVER BUFFALO ST., ELEV.=1296.034 (NATIONAL GEODETIC VERTICAL DATUM, 1929).

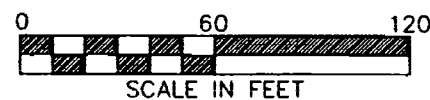
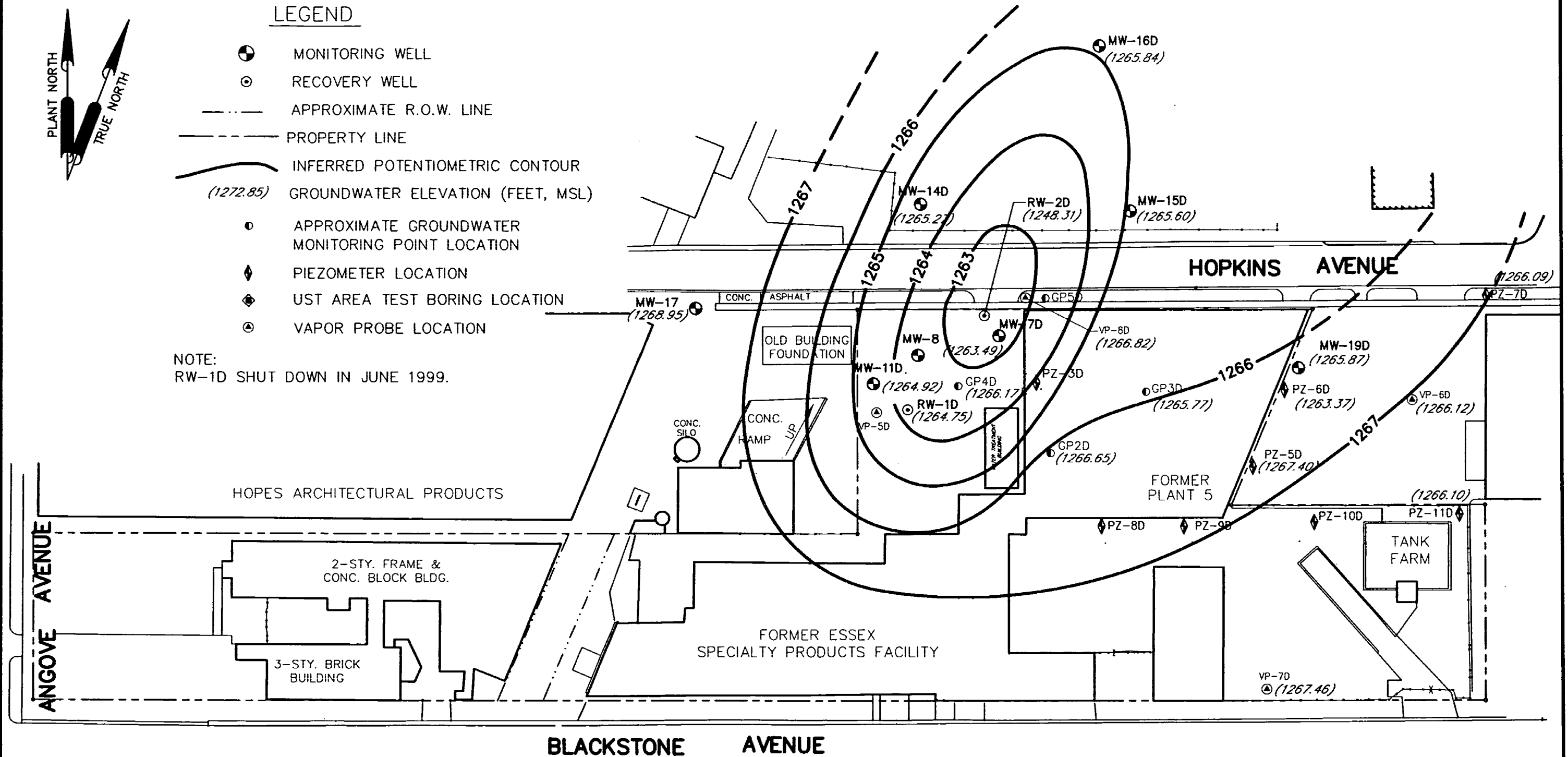
FILE: J:\ESSEX\HOP\7138\801419\031703-S.DWG



LEGEND

- MONITORING WELL
- RECOVERY WELL
- APPROXIMATE R.O.W. LINE
- PROPERTY LINE
- INFERRED POTENTIOMETRIC CONTOUR
- GROUNDWATER ELEVATION (FEET, MSL)
- APPROXIMATE GROUNDWATER MONITORING POINT LOCATION
- PIEZOMETER LOCATION
- UST AREA TEST BORING LOCATION
- VAPOR PROBE LOCATION

NOTE:
RW-1D SHUT DOWN IN JUNE 1999.



VERTICAL BENCH MARK INFORMATION CAME FROM U.S.G.S. PLAQUE U-88-S.E. ABUTT. ERIE R.R. BRIDGE OVER BUFFALO ST., ELEV.=1296.034 (NATIONAL GEODETIC VERTICAL DATUM, 1929).

URS

POTENTIOMETRIC CONTOUR MAP LOWER FINE SAND WATER BEARING ZONE MARCH 17, 2003

ESSEX/HOPE SITE

JAMESTOWN, NY

CLIENT: ESSEX SPECIALTY PRODUCTS, INC.

JOB NUMBER: 801419.2040

SCALE: AS SHOWN

FIGURE NUMBER 2

REV 0

APPENDIX A

WATER LEVEL MEASUREMENT DATA

**Groundwater Extraction System Monitoring Data
2003 Water Levels**

**Essex/Hope Site Remedial Action
Jamestown, New York
URS Project No. 801419**

Well No.	Northing	Easting	Reference Elevation (ft msl)	Screened Zone	February 6, 2003		March 17, 2003	
					Depth to Water	Groundwater Elevation (ft msl)	Depth to Water	Groundwater Elevation (ft msl)
MW-1	9753 7161	10363 6499	1280.48	Shallow WBZ	12.79	1267.69	12.02	1268.46
MW-2	9837 1531	9959 6857	1279.87	Shallow WBZ	8.44		NA	NA
MW-4	9792 3277	9900 7631	1281.02	Shallow WBZ		1261.02	8.75	1272.27
MW-5	9789 6222	9631 761	1280.82	Shallow WBZ	8.04	1272.78	7.97	1272.85
MW-6*	9977 1197	10118 8762	1277.98	Shallow WBZ	8.15	1269.83	8.06	1269.92
MW-7*	9976 8467	10175 6797	1277.73	Shallow WBZ	8.51	1269.22	7.74	1269.99
MW-10	9932 4702	10185 7076	1277.94	Shallow WBZ		1277.94	7.3	1270.64
MW-11*	9937 9912	10101 7016	1277.75	Shallow WBZ		1277.75	7.15	1270.60
MW-12	9883 0874	10104 9278	1278.18	Shallow WBZ	7.88	1270.30	6.73	1271.45
MW-13	9752 0619	10240 2934	1278.12	Shallow WBZ	8.59	1269.53	5.76	1272.36
MW-14S	13048 7753	10135 5198	1280.25	Shallow WBZ	13.49	1266.76	12.84	1267.41
MW-15S	10051 8272	10254 4862	1279.55	Shallow WBZ	12.41	1287.14	11.35	1268.20
MW-16S	10146 7786	10236 8582	1279.32	Shallow WBZ	12.04	1287.28	11.14	1268.18
MW-18	9994	10485	1275.58	Shallow WBZ	9.71	1265.88	8.4	1267.19
MW-19S	9956 1454	10358 207	1276.82	Shallow WBZ	10.09	1296.73	8.95	1267.67
MW-20	9895 0082	10224 2128	1278.64	Shallow WBZ	8.63	1272.01	6.91	1271.73
HW-1	9874 8053	10079 0259	1281.91	Shallow WBZ	NA	NA	NA	NA
HW-2	9977 8477	10079 7882	1281.13	Shallow WBZ	NA	NA	NA	NA
HW-3	9866 163	9957 6007	1283.24	Shallow WBZ	NA	NA	NA	NA
HW-7	9837 3164	10293 8428	1277.55	Shallow WBZ	Destroyed	NA	NA	NA
HW-8	9834 864	10312 0885	1277.81	Shallow WBZ	NA	NA	NA	NA
HW-9	9810 5264	10313 3873	1280.78	Shallow WBZ	8.37	1277.41	7.65	1273.13
HW-10	9837 2970	9966 7406	1279.55	Shallow WBZ	NA	NA	7.72	1271.83
SP-10	9815 1646	9977 9909	1279.03	Shallow WBZ	NA	NA	NA	NA
SP-11	9839 7566	9977 9072	1279.23	Shallow WBZ	NA	NA	NA	NA
SP-12	9833 1836	9958 7423	1279.68	Shallow WBZ	NA	NA	NA	NA
SP-13	9819 5009	9958 5764	1279.87	Shallow WBZ	NA	NA	NA	NA
SP-14	9807 2232	9967 0477	1279.39	Shallow WBZ	NA	NA	NA	NA
SP-15	9840 6722	10209 4525	1278.65	Shallow WBZ	NA	NA	NA	NA
SP-16	9840 3119	10250 4484	1277.84	Shallow WBZ	NA	NA	NA	NA
SP-17	9845 107	10287 5591	1277.58	Shallow WBZ	NA	NA	NA	NA
SP-18	9655 8471	10323 265	1277.4	Shallow WBZ	NA	NA	NA	NA
SDO-1	N/A	N/A	N/A	Shallow WBZ	NA	NA	NA	NA
RW-1S	9932 8951	10135 8706	1278.06	Shallow WBZ	10.21	1265.85	10.4	1265.68
RW-2S*	9983 3801	10151 8403	1276.58	Shallow WBZ	6.75	1269.84	11.60	1264.95
RW-3S	9838 0594	9990 4502	1278.29	Shallow WBZ	8.37	1269.92	8.9	1269.38
RW-4S	9839 8053	10221 6768	1277.34	Shallow WBZ	Destroyed	NA	NA	NA
RW-5S	9863 2271	10330 2425	1277.43	Shallow WBZ	4.99	1272.44	4.34	1273.08
MW-7D*	9973 2593	10174 8524	1277.8	Lower Fine Sand WBZ	15.25	1262.55	14.31	1253.48
MW-8	9959 6089	10127 8888	1277.97	Lower Fine Sand WBZ	13.00	1264.97	NA	NA
MW-11D	9942 3782	10101 1482	1277.85	Lower Fine Sand WBZ	No Access	NA	12.93	1264.92
MW-14D	10049 5051	10129 1897	1280.01	Lower Fine Sand WBZ	15.64	1264.37	14.74	1255.27
MW-15D	10045 5811	10255 205	1279.46	Lower Fine Sand WBZ	14.70	1264.78	13.86	1265.60
MW-16D	10143 9497	10236 6005	1279.05	Lower Fine Sand WBZ	13.88	1265.17	13.21	1255.84
MW-17	9987 6315	9995 5207	1278.7	Lower Fine Sand WBZ	10.80	NA	10.84	1257.88
MW-19D	9951 569	10355 9748	1278.21	Lower Fine Sand WBZ	10.50	1265.71	10.34	1255.67
RW-1D	9926 5997	10121 3968	1278.64	Lower Fine Sand WBZ	11.50	1265.14	11.89	1254.75
RW-2D	9983 0819	10167 3188	1278.48	Lower Fine Sand WBZ	12.71	1263.75	28.15	1248.31
MW-7DD*	9970 8547	10176 2698	1277.74	Glacial Till	NA	NA	NA	NA
GP-1S	9954.39*	10203.02*	1278.98	Shallow WBZ	NA	NA	NA	NA
GP-2S	9914.89*	10201.04*	1278.83	Shallow WBZ	6.70	1271.93	7.20	1271.43
GP-2D	9914.91*	10207.84*	1278.7	Lower Fine Sand WBZ	13.02	1265.68	12.05	1268.65
GP-3S	9941.13*	10264.03*	1278.87	Shallow WBZ	8.45	1270.42	8.48	1270.35
GP-3D	9937.38*	10264.53*	1278.77	Lower Fine Sand WBZ	14.00	1264.77	13	1255.77
GP-4S	9940.86*	10154.97*	1278.08	Shallow WBZ	NA	NA	NA	NA
GP-4D	9940.85*	10151.57*	1278.08	Lower Fine Sand WBZ	NA	NA	NA	NA
GP-5S	9993.54*	10203.34*	1277.44	Shallow WBZ	NA	NA	NA	NA
GP-5D	9993.55*	10290.21*	1277.37	Lower Fine Sand WBZ	NA	NA	NA	NA
PZ-1S			1277.97	Shallow WBZ	NA	NA	NA	NA
PZ-1D			1277.75	Lower Fine Sand WBZ	NA	NA	NA	NA
PZ-2D			1277.86	Lower Fine Sand WBZ	NA	NA	NA	NA
PZ-3D			1279.02	Lower Fine Sand WBZ	NA	NA	NA	NA
PZ-4D			1278.94	Lower Fine Sand WBZ	NA	NA	NA	NA
PZ-5S			1278.58	Shallow WBZ	5.74	1270.82	4.99	1271.57
PZ-5D			1278.52	Lower Fine Sand WBZ	10.49	1268.03	9.12	1267.40
PZ-6S			1278.77	Shallow WBZ	8.40	1268.37	7.8	1268.07
PZ-6D			1276.57	Lower Fine Sand WBZ	10.13	1266.44	13.2	1263.37
PZ-7D			1275.83	Lower Fine Sand WBZ	10.48	1265.35	9.74	1266.09
PZ-8D			1278.63	Lower Fine Sand WBZ	Destroyed	NA	NA	NA
PZ-9D			1278.04	Lower Fine Sand WBZ	No Access	NA	NA	NA
PZ-10D			1277.58	Lower Fine Sand WBZ	No Access	NA	NA	NA
PZ-11D			1276.7	Lower Fine Sand WBZ	10.60	1258.10	10.6	1266.10
TW-01			1279.1	Shallow WBZ	Destroyed	NA	NA	NA
VP-5D			1278.2	Lower Fine Sand WBZ	No Access	NA	11.22	1266.98
VP-6S			1278.62	Upper Gravel of LFSWBZ	No Access	NA	9.16	1267.46
VP-6D			1276.71	Lower Fine Sand WBZ	No Access	NA	9.59	1267.12
VP-7D			1278.87	Lower Fine Sand WBZ	12.54	1266.33	11.41	1267.46
VP-8D			1277.37	Lower Fine Sand WBZ	10.45	1268.92	10.55	1266.82
Comments					1928 Days of System Operation		Days of System Operation	
WBZ - Water Bearing Zone								
* = Estimated Coordinate								
MW-5 TOC elev. altered from 1280.91 ft msl to 1280.82 ft msl on May 5, 2000								
* Wells resurveyed on 10/1/00 due to uplift of concrete from injection work.								
RW-4S and RW-5S taken offline in October 2002 for UST Removal.								
Wells RW-4S, TW-01, PZ-8D and HW-7 destroyed during UST removal operation								

APPENDIX B

LABORATORY CERTIFICATES OF ANALYSIS

March 4, 2003

Mr. Keith Dodrill
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Dear Mr. Dodrill:

Enclosed are analytical results for samples submitted to Pace Analytical by URS Corporation. The samples were received on February 25, 2003. Please reference Pace project number 03-0636 when inquiring about this report.

Client Site: Essex-Hope
Client Ref.: 801419.2030

Pace Sample Identification	Client Sample Identification
0302-1400	RW-1S
0302-1401	RW-1D
0302-1402	RW-2S

Pace Sample Identification	Client Sample Identification
0302-1403	RW-2D
0302-1404	RW-3S
0302-1405	Trip Blank

General Comments: Cooler temperature 4 ° C upon receipt. Ice was present.

Please call me if you have any questions regarding the information contained within this report.

Sincerely,



Raelyn E. Sylvester
Project Manager

REC: jld

Enclosures

REPORT OF LABORATORY ANALYSIS

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Mr. Keith Dodrill
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Lab Project ID: 03-0636
Lab Sample ID: 0302-1400
Client Sample ID: RW-1S
Sample Matrix: Aqueous

Date Sampled: 02/22/2003
Date Received: 02/25/2003

Client Site: Essex-Hope
Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	MAK	02/27/2003	0019381-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	MAK	02/27/2003	0019381-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	02/27/2003	0019381-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	9.5	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	1000	50	ug/l	MAK	02/27/2003	0019392-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	7.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	02/27/2003	0019381-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	02/27/2003	0019381-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0302-1400
Client Sample ID: RW-1S

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Trichloroethene	8260B ⁽¹⁾	4000	50	ug/l	MAK	02/27/2003	0019392-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	120	2.0	ug/l	MAK	02/27/2003	0019381-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0

⁽¹⁾ U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

REPORT OF LABORATORY ANALYSIS

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Mr. Keith Dodrill
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Client Site: Essex-Hope
Client Ref.: 801419.2030

Pace Analytical Services, Inc.
5203 Triangle Lane
Export, PA 15632
Phone: 724.733.1161
Fax: 724.327.7793

Lab Project ID: 03-0636
Lab Sample ID: 0302-1401
Client Sample ID: RW-1D
Sample Matrix: Aqueous

Date Sampled: 02/22/2003
Date Received: 02/25/2003

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	MAK	02/27/2003	0019381-1	<10
Benzene	8260B ⁽¹⁾	4.8	1.0	ug/l	MAK	02/27/2003	0019381-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	02/27/2003	0019381-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	14	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	1700	10	ug/l	MAK	02/28/2003	0019397-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	15	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	02/27/2003	0019381-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	02/27/2003	0019381-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0

(Continued)

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Lab Sample ID: 0302-1401
Client Sample ID: RW-1D

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Trichloroethene	8260B ⁽¹⁾	34	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	11	2.0	ug/l	MAK	02/27/2003	0019381-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0

⁽¹⁾ U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

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Lab Project ID: 03-0636
Lab Sample ID: 0302-1402
Client Sample ID: RW-2S
Sample Matrix: Aqueous

Date Sampled: 02/22/2003
Date Received: 02/25/2003

Client Site: Essex-Hope
Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	MAK	02/27/2003	0019381-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	MAK	02/27/2003	0019381-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	02/27/2003	0019381-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	120	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	02/27/2003	0019381-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	02/27/2003	0019381-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0

(Continued)

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Lab Sample ID: 0302-1402
Client Sample ID: RW-2S

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Trichloroethene	8260B ⁽¹⁾	340	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	6.4	2.0	ug/l	MAK	02/27/2003	0019381-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0

⁽¹⁾ U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

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Lab Project ID: 03-0636
Lab Sample ID: 0302-1403
Client Sample ID: RW-2D
Sample Matrix: Aqueous

Date Sampled: 02/22/2003
Date Received: 02/25/2003

Client Site: Essex-Hope
Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	MAK	02/27/2003	0019381-1	<10
Benzene	8260B ⁽¹⁾	9.7	1.0	ug/l	MAK	02/27/2003	0019381-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	02/27/2003	0019381-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	26	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	6000	50	ug/l	MAK	02/27/2003	0019392-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	26	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	02/27/2003	0019381-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	02/27/2003	0019381-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0

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Lab Sample ID: 0302-1403
Client Sample ID: RW-2D

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Trichloroethene	8260B ⁽¹⁾	490	50	ug/l	MAK	02/27/2003	0019392-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	1100	100	ug/l	MAK	02/27/2003	0019392-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0

⁽¹⁾ U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

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Lab Project ID: 03-0636
Lab Sample ID: 0302-1404
Client Sample ID: RW-3S
Sample Matrix: Aqueous

Date Sampled: 02/22/2003
Date Received: 02/25/2003

Client Site: Essex-Hope
Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	MAK	02/27/2003	0019381-1	<10
Benzene	8260B ⁽¹⁾	40	1.0	ug/l	MAK	02/27/2003	0019381-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	02/27/2003	0019381-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Cumene	8260B ⁽¹⁾	25	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	150	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	02/27/2003	0019381-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	02/27/2003	0019381-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0

(Continued)

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Lab Sample ID: 0302-1404
Client Sample ID: RW-3S

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Trichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	<2.0	2.0	ug/l	MAK	02/27/2003	0019381-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	110	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
o-Xylene	8260B ⁽¹⁾	42	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0

⁽¹⁾ U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

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Lab Project ID: 03-0636
Lab Sample ID: 0302-1405
Client Sample ID: Trip Blank
Sample Matrix: Aqueous

Date Sampled: 02/22/2003
Date Received: 02/25/2003

Client Site: Essex-Hope
Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	MAK	02/27/2003	0019381-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	MAK	02/27/2003	0019381-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	02/27/2003	0019381-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	02/27/2003	0019381-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	02/27/2003	0019381-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0302-1405

Client Sample ID: Trip Blank

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Trichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	<2.0	2.0	ug/l	MAK	02/27/2003	0019381-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	02/27/2003	0019381-1	<5.0

⁽¹⁾ U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

691381

Required Client Information: Section A

Company: **URS**
Address: **4455 Steubenville Pike**
Twin Towers Suite 250
Pittsburgh PA 15205
Phone: **412-788-2717** Fax:

Required Client Information: Section B
Report To: **Keith Dodrill**

Copy To:
Invoice To:
PO:
Project Name: **Essex-Hope**
Project Number: **801419.2030**

Page: **1** of **1**

To Be Completed by Pace Analytical and Client **Section C**

Quota Reference:
Project Manager:
Project #: **03-0636**
Profile #:
Requested Analysis:

Section D										Required Client Information:										Valid Matrix Codes		MATRIX CODE	DATE COLLECTED	TIME COLLECTED	# Containers	Preservatives							Remarks / Lab ID																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
ITEM #	SAMPLE ID										MATRIX	CODE	mm / dd / yy	hh:mm a/p	Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol					Other																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
	One character per box. (A-Z, 0-9 / -)										Sample IDs MUST BE UNIQUE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Fed-Ex	837138697034	2-24-03	1		John Ross - URS	2-24-03	1600	Fed-Ex	2-24-03	1600
SAMPLE CONDITION					SAMPLE NOTES					
Temp in °C	4									
Received on Ice	Y/N									
Sealed Cooler	X/N									
Samples Intact	Y/N									

Additional Comments: **Quarterly Samples**

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: **John S. Ross**
SIGNATURE of SAMPLER: **John S. Ross**
DATE Signed: (MM/DD/YY) **2-22-03 1300**

March 17, 2003

Mr. Keith Dodrill
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Dear Mr. Dodrill:

Enclosed are analytical results for samples submitted to Pace Analytical by URS Corporation. The samples were received on March 3, 2003. Please reference Pace project number 03-0767 when inquiring about this report.

Client Site: Essex-Hope
Client Ref.: 801419.2030

Pace Sample Identification	Client Sample Identification
0303-0131	Pre-Carb
0303-0132	Primary Effluent
0303-0133	Secondary Effluent
0303-0134	Post-Carb
0303-0135	Trip Blank

General Comments: Cooler temperature 4 ° C upon receipt. Ice was present.

Please call me if you have any questions regarding the information contained within this report.

Sincerely,



Raelyn E. Sylvester
Project Manager

REC: jld

Enclosures

REPORT OF LABORATORY ANALYSIS

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Mr. Keith Dodrill
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Lab Project ID: 03-0767
Lab Sample ID: 0303-0131
Client Sample ID: Pre-Carb
Sample Matrix: Aqueous

Date Sampled: 02/27/2003

Date Received: 03/03/2003

Client Site: Essex-Hope

Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	MAK	03/11/2003	0019625-1	<10
Benzene	8260B ⁽¹⁾	5.3	1.0	ug/l	MAK	03/11/2003	0019625-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	03/11/2003	0019625-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	13	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	3500	50	ug/l	MAK	03/11/2003	0019625-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	14	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	03/11/2003	0019625-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	03/11/2003	0019625-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0303-0131
Client Sample ID: Pre-Carb

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Trichloroethene	8260B ⁽¹⁾	410	50	ug/l	MAK	03/11/2003	0019625-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	530	100	ug/l	MAK	03/11/2003	0019625-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0

⁽¹⁾ U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

REPORT OF LABORATORY ANALYSIS

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Mr. Keith Dodrill
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Lab Project ID: 03-0767
Lab Sample ID: 0303-0132
Client Sample ID: Primary Effluent
Sample Matrix: Aqueous

Date Sampled: 02/27/2003
Date Received: 03/03/2003

Client Site: Essex-Hope
Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	MAK	03/11/2003	0019625-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	MAK	03/11/2003	0019625-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	03/11/2003	0019625-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	5.3	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	2000	50	ug/l	MAK	03/11/2003	0019625-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	5.5	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	03/11/2003	0019625-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	03/11/2003	0019625-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0303-0132
Client Sample ID: Primary Effluent

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Trichloroethene	8260B ⁽¹⁾	34	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	660	100	ug/l	MAK	03/11/2003	0019625-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0

⁽¹⁾ U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

REPORT OF LABORATORY ANALYSIS

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Mr. Keith Dodrill
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Lab Project ID: 03-0767
Lab Sample ID: 0303-0133
Client Sample ID: Secondary Effluent
Sample Matrix: Aqueous

Date Sampled: 02/27/2003
Date Received: 03/03/2003

Client Site: Essex-Hope
Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	MAK	03/11/2003	0019625-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	MAK	03/11/2003	0019625-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	03/11/2003	0019625-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	03/11/2003	0019625-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	03/11/2003	0019625-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0303-0133
Client Sample ID: Secondary Effluent

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Trichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	690	20	ug/l	MAK	03/12/2003	0019654-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0

⁽¹⁾ U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

REPORT OF LABORATORY ANALYSIS

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Mr. Keith Dodrill
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Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Lab Project ID: 03-0767
Lab Sample ID: 0303-0134
Client Sample ID: Post-Carb
Sample Matrix: Aqueous

Date Sampled: 02/27/2003
Date Received: 03/03/2003

Client Site: Essex-Hope
Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	MAK	03/11/2003	0019625-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	MAK	03/11/2003	0019625-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	03/11/2003	0019625-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	6.7	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	03/11/2003	0019625-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	03/11/2003	0019625-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0303-0134
Client Sample ID: Post-Carb

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Trichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	<2.0	2.0	ug/l	MAK	03/11/2003	0019625-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0

⁽¹⁾ U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

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Mr. Keith Dodrill
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Lab Project ID: 03-0767
Lab Sample ID: 0303-0135
Client Sample ID: Trip Blank
Sample Matrix: Aqueous

Date Sampled: 02/27/2003
Date Received: 03/03/2003

Client Site: Essex-Hope
Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	MAK	03/11/2003	0019625-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	MAK	03/11/2003	0019625-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	03/11/2003	0019625-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	03/11/2003	0019625-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	03/11/2003	0019625-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0303-0135

Client Sample ID: Trip Blank

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Trichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	<2.0	2.0	ug/l	MAK	03/11/2003	0019625-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	03/11/2003	0019625-1	<5.0

⁽¹⁾ U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

691214

Required Client Information: Section A

Company: **URS**

Address: **4955 Steubenville Pike
Twin Towers Suite 250
Pittsburgh PA 15205**

Phone: **412-788-2717** Fax:

Required Client Information: Section B

Report To: **Keith Dodrill**

Copy To:

Invoice To:

P.O.

Project Name: **Essex-Hope**

Project Number: **801419.2030**

Page: of

To Be Completed by Pace Analytical and Client Section C

Quote Reference:

Project Manager:

Project #: **03-0727**

Profile #:

Requested Analysis:

ITEM #	Section D Required Client Information:										Valid Matrix Codes MATRIX CODE WATER WT SOIL SL OIL OL WIPE WP AIR AR TISSUE TS OTHER OT	MATRIX CODE	DATE COLLECTED mm / dd / yy	TIME COLLECTED hh:mm a/p	# Containers	Preservatives							Remarks / Lab ID																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
	SAMPLE ID One character per box. (A-Z, 0-9 / . -) Sample IDs MUST BE UNIQUE															Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol		Other																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
1	P	R	E	-	C	A	R	B					WT	2-27-03	1600	2									X																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Fed. Express	837738697001	2-28-03	1		John S. Rose URS	2-28-03	1600	Fed. Ex	2-28-03	
SAMPLE CONDITION					SAMPLE NOTES					
Temp in °C					Combine 4 post-Carb					
Received on Ice					Samples into 1 for analysis					
Sealed Cooler										
Samples Intact										

Additional Comments:
ZT00

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: **John Ross**

SIGNATURE of SAMPLER: **John S. Rose**

DATE Signed (MM / DD / YY): **2-27-03 1830**

February 13, 2003

Mr. Keith Dodrill
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Dear Mr. Dodrill:

Enclosed are analytical results for samples submitted to Pace Analytical by URS Corporation. The samples were received on February 3, 2003. Please reference Pace project number 03-0412 when inquiring about this report.

Client Site: Essex-Hope
Client Ref.: 801419.2030

Pace Sample Identification	Client Sample Identification
0302-0394	Pre-Carb
0302-0395	Primary Effluent
0302-0396	Post-Carb
0302-0397	Trip Blank

General Comments: Cooler temperature 4.0 ° C upon receipt. Ice was present.

Please call me if you have any questions regarding the information contained within this report.

Sincerely,



Raelyn E. Sylvester
Project Manager

REC: jld

Enclosures

REPORT OF LABORATORY ANALYSIS

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Mr. Keith Dodrill
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Lab Project ID: 03-0412
Lab Sample ID: 0302-0394
Client Sample ID: Pre-Carb
Sample Matrix: Aqueous

Date Sampled: 01/30/2003
Date Received: 02/03/2003

Client Site: Essex-Hope
Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	JEC	02/05/2003	0018886-1	<10
Benzene	8260B ⁽¹⁾	7.3	1.0	ug/l	JEC	02/05/2003	0018886-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	JEC	02/05/2003	0018886-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	15	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	4300	50	ug/l	JEC	02/05/2003	0018886-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	30	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	JEC	02/05/2003	0018886-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	JEC	02/05/2003	0018886-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0302-0394
Client Sample ID: Pre-Carb

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Trichloroethene	8260B ⁽¹⁾	390	50	ug/l	JEC	02/05/2003	0018886-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	640	100	ug/l	JEC	02/05/2003	0018886-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0

⁽¹⁾ U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

REPORT OF LABORATORY ANALYSIS

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Mr. Keith Dodrill
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Lab Project ID: 03-0412
Lab Sample ID: 0302-0395
Client Sample ID: Primary Effluent
Sample Matrix: Aqueous

Date Sampled: 01/30/2003

Date Received: 02/03/2003

Client Site: Essex-Hope

Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	JEC	02/05/2003	0018886-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	JEC	02/05/2003	0018886-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	JEC	02/05/2003	0018886-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	1500	50	ug/l	JEC	02/05/2003	0018886-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	14	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	JEC	02/05/2003	0018886-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	JEC	02/05/2003	0018886-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0302-0395
Client Sample ID: Primary Effluent

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Trichloroethene	8260B ⁽¹⁾	12	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	620	100	ug/l	JEC	02/05/2003	0018886-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0

⁽¹⁾ U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

REPORT OF LABORATORY ANALYSIS

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Mr. Keith Dodrill
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Lab Project ID: 03-0412
Lab Sample ID: 0302-0396
Client Sample ID: Post-Carb
Sample Matrix: Aqueous

Date Sampled: 01/30/2003
Date Received: 02/03/2003

Client Site: Essex-Hope
Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	JEC	02/05/2003	0018886-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	JEC	02/05/2003	0018886-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	JEC	02/05/2003	0018886-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	6.9	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	JEC	02/05/2003	0018886-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	JEC	02/05/2003	0018886-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0302-0396

Client Sample ID: Post-Carb

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Trichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	<2.0	2.0	ug/l	JEC	02/05/2003	0018886-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0

⁽¹⁾ U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

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Mr. Keith Dodrill
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Lab Project ID: 03-0412
Lab Sample ID: 0302-0397
Client Sample ID: Trip Blank
Sample Matrix: Aqueous

Date Sampled: 01/30/2003
Date Received: 02/03/2003

Client Site: Essex-Hope
Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	JEC	02/05/2003	0018886-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	JEC	02/05/2003	0018886-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	JEC	02/05/2003	0018886-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	JEC	02/05/2003	0018886-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	JEC	02/05/2003	0018886-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0302-0397
Client Sample ID: Trip Blank

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Trichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	<2.0	2.0	ug/l	JEC	02/05/2003	0018886-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	02/05/2003	0018886-1	<5.0

⁽¹⁾ U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

REPORT OF LABORATORY ANALYSIS

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

692280

Required Client Information: Section A

Company: **URS Corp.**
Address: **Twin Towers Suite 250**
4955 Steubenville Pike
Pittsburgh PA 15205
Phone: **412-758-2717** Fax: _____

Required Client Information: Section B

Report To: **Keith Dodrill**
Copy To: _____
Invoice To: _____
P.O.: _____
Project Name: **Essex-Hope**
Project Number: **801419.2030**

Page: **of**

To Be Completed by Pace Analytical and Client Section C

Quote Reference: _____
Project Manager: **RES**
Project #: **03-0412**
Profile #: _____
Requested Analysis: _____

ITEM #	Section D										Required Client Information:										Valid Matrix Codes										DATE COLLECTED										TIME COLLECTED										Preservatives										Remarks / Lab ID																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
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SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Fed-Ex	837738647045	1-31-03	1		John S. Ross	1-31-03	1600	Fed-Ex	1-31-03	1600

SAMPLE CONDITION
Temp in °C: **4.0**
Received on Ice: ☒ Y/N
Sealed Cooler: ☒ Y/N
Samples Intact: ☒ Y/N

SAMPLE NOTES
Combine 4 Post-carb Samples into 1 for Analysis

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: **John S. Ross**
SIGNATURE of SAMPLER: *John S. Ross*
DATE Signed: (MM/DD/YY) **1-30-03 1700**

ESSEX/HOPE
MARCH 2003
POTW

April 15, 2003

Mr. Keith Dodrill
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Dear Mr. Dodrill:

Enclosed are analytical results for samples submitted to Pace Analytical by URS Corporation. The samples were received on April 1, 2003. Please reference Pace project number 03-1188 when inquiring about this report.

Client Site: Essex-Hope
Client Ref.: 801419.2030

Pace Sample Identification	Client Sample Identification
0304-0456	Pre-Carb
0304-0457	Primary Effluent
0304-0458	Secondary Effluent
0304-0459	Post-Carb
0304-0460	Trip Blank

General Comments: Cooler temperature 3 ° C upon receipt. Ice was present.

Please call me if you have any questions regarding the information contained within this report.

Sincerely,



Raelyn E. Sylvester
Project Manager

REC: jld

Enclosures

REPORT OF LABORATORY ANALYSIS

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Mr. Keith Dodrill
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Lab Project ID: 03-1188
Lab Sample ID: 0304-0456
Client Sample ID: Pre-Carb
Sample Matrix: Aqueous

Date Sampled: 03/30/2003
Date Received: 04/01/2003

Client Site: Essex-Hope
Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	MAK	04/12/2003	0020460-1	<10
Benzene	8260B ⁽¹⁾	4.7	1.0	ug/l	MAK	04/12/2003	0020460-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	04/12/2003	0020460-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	9.6	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	2300	50	ug/l	MAK	04/12/2003	0020460-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	10	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	04/12/2003	0020460-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	04/12/2003	0020460-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0304-0456
Client Sample ID: Pre-Carb

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Trichloroethene	8260B ⁽¹⁾	270	50	ug/l	MAK	04/12/2003	0020460-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	540	100	ug/l	MAK	04/12/2003	0020460-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0

⁽¹⁾ U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

REPORT OF LABORATORY ANALYSIS

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Mr. Keith Dodrill
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Lab Project ID: 03-1188
Lab Sample ID: 0304-0457
Client Sample ID: Primary Effluent
Sample Matrix: Aqueous

Date Sampled: 03/30/2003
Date Received: 04/01/2003

Client Site: Essex-Hope
Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	MAK	04/12/2003	0020460-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	MAK	04/12/2003	0020460-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	04/12/2003	0020460-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	6.1	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	2700	50	ug/l	MAK	04/12/2003	0020460-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	5.1	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	04/12/2003	0020460-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	04/12/2003	0020460-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0304-0457
Client Sample ID: Primary Effluent

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Trichloroethene	8260B ⁽¹⁾	28	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	900	100	ug/l	MAK	04/12/2003	0020460-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0

⁽¹⁾ U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

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Lab Project ID: 03-1188
Lab Sample ID: 0304-0458
Client Sample ID: Secondary Effluent
Sample Matrix: Aqueous

Date Sampled: 03/30/2003
Date Received: 04/01/2003

Client Site: Essex-Hope
Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	MAK	04/13/2003	0020458-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	MAK	04/13/2003	0020458-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	04/13/2003	0020458-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	04/13/2003	0020458-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	04/13/2003	0020458-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0

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REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0304-0458

Client Sample ID: Secondary Effluent

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0
Trichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	910	20	ug/l	MAK	04/12/2003	0020460-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/13/2003	0020458-1	<5.0

⁽¹⁾ U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

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Pittsburgh, PA 15205

Lab Project ID: 03-1188
Lab Sample ID: 0304-0459
Client Sample ID: Post-Carb
Sample Matrix: Aqueous

Date Sampled: 03/30/2003
Date Received: 04/01/2003

Client Site: Essex-Hope
Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	MAK	04/12/2003	0020460-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	MAK	04/12/2003	0020460-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	04/12/2003	0020460-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	7.8	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	04/12/2003	0020460-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	04/12/2003	0020460-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0

(Continued)

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Lab Sample ID: 0304-0459
Client Sample ID: Post-Carb

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Trichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	11	2.0	ug/l	MAK	04/12/2003	0020460-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0

⁽¹⁾ U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

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Lab Project ID: 03-1188
Lab Sample ID: 0304-0460
Client Sample ID: Trip Blank
Sample Matrix: Aqueous

Date Sampled: 03/30/2003
Date Received: 04/01/2003

Client Site: Essex-Hope
Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	MAK	04/12/2003	0020460-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	MAK	04/12/2003	0020460-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	04/12/2003	0020460-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	04/12/2003	0020460-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	04/12/2003	0020460-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0304-0460
Client Sample ID: Trip Blank

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Trichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	<2.0	2.0	ug/l	MAK	04/12/2003	0020460-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	04/12/2003	0020460-1	<5.0

⁽¹⁾ U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

REPORT OF LABORATORY ANALYSIS

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

691174

Required Client Information: Section A

Company: **URS**

Address: **4955 Steubenville Pike**
Twin Towers Suite 250
Pittsburgh, PA 15205

Phone: **412-788-2717** Fax: _____

Required Client Information: Section B

Report To: **Keith Dodrill**

Copy To: _____

Invoice To: _____

P.O. _____

Project Name: **Essex-Hope**

Project Number: **801419.2030**

Page: _____ of _____

Client Information (Check quote/contract):

Requested Due Date: _____ TAT: _____

* Turn around times less than 14 days subject to laboratory and contractual obligations and may result in a Rush Turnaround Surcharge.
Turn Around Time (TAT) in calendar days.

To Be Completed by Pace Analytical and Client Section C

Quote Reference: _____

Project Manager: _____

Project #: **03-1188**

Profile #: _____

Requested Analysis: _____

ITEM #	Section D										Required Client Information:										Valid Matrix Codes		MATRIX CODE	DATE COLLECTED	TIME COLLECTED	# Containers	Preservatives								Remarks / Lab ID																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	SAMPLE ID										One character per box. (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE										MATRIX	CODE					Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
FEDERAL Express	839666727645	3-31-03	1		John S. Ross URS	3-31-03	1600	FED EXPRESS	4-1-03	11:00

SAMPLE CONDITION

Temp in °C: **3**

Received on Ice: ☒ Y/N

Sealed Cooler: ☒ Y/N

Samples Intact: ☒ Y/N

SAMPLE NOTES

Combine 4 Post-Carb Samples into 1 for Analysis.

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: **John Ross**

SIGNATURE of SAMPLER: *John S. Ross*

DATE Signed: (MM / DD / YY)

Additional Comments:
3166