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February 12, 2004

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

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**Subject: 3rd 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 3rd Quarter 2003 operation 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). Note that the PMP has been revised and approved by the NYSDEC, and the revised PMP will go into effect during 2004. During the quarter approximately 282,900 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 September 23, 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.

Shallow Water-Bearing Zone (SWBZ)

A water table contour map representing pumping conditions in the Shallow Water-Bearing Zone on September 23, 2003 is provided as Figure 1. Water table drawdown conditions at the site remained consistent with the data recorded during the previous two quarters with little change in groundwater contour configurations. The 3rd Quarter drawdown data matched the 1st Quarter groundwater elevations. Shallow groundwater was extracted at an average rate of 1.36 gallons per minute (gpm) from the NPL Area from RW-1S and RW-2S. The groundwater extraction rate from RW-3S, located in the AST/UST Area, averaged 0.05 gpm during the quarter.

No groundwater was extracted from the UST Area. Recovery wells RW-4S and RW-5S were rendered inoperable since November 2, 2002 after the demolition of the electrical and groundwater discharge lines during the UST Area tank removal.

URS
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205
Tel: 412.788.2717
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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 September 23, 2003 are provided as Figure 2. Similar to the shallow zone, the deep zone cone of depression was similar to the previous quarters of 2003 with the 3rd Quarter groundwater elevations matching the 1st Quarter data. Groundwater was extracted from the deep zone at an average rate of 2.13 gpm over the reporting period.

WATER QUALITY RESULTS

Third 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 August 14, 2003. The monthly influent/effluent samples were collected on July 29, 2003, September 4, 2003 and September 30, 2003. Note that monthly influent/effluent samples representative of the month of August were initially collected on August 28, 2003, but were broken in transit to the laboratory. URS re-sampled the influent/effluent on September 4, 2003. 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 6. Tables 7-10 summarize 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 August sampling round included: 1,1 DCE (7.8 ug/L), cis-1,2-DCE (970 ug/L), trans-1,2-DCE (8.1 ug/L), TCE (3,900 ug/L) and vinyl chloride (41 ug/L) – all other VOC's were non-detect. TCE, vinyl chloride, and cis-1,2-DCE concentrations increased as compared to the 2nd Quarter sampling, but concentrations have been variable from quarter-to-quarter over time. Low levels for 1,1-DCE and trans-1,2-DCE continue to be detected just above detection limits.

VOC's detected at RW-2S (Table 3) included TCE (390 ug/L), cis-1,2-DCE (140 ug/L), and vinyl chloride (2.8 ug/L) – all other VOCs were below detection limits. These concentrations are comparable to 1st Quarter values, and similar to RW-1S, the concentrations are variable from quarter-to-quarter.

NPL Area – Lower Fine Sand Water Bearing Zone

VOC's detected at RW-1D (Table 5) during the 3rd Quarter sampling included 1,1-DCE (11 ug/L), cis-1,2-DCE (1,600 ug/L), trans-1,2-DCE (19 ug/L), and TCE (37 ug/L) – all other VOC's were non-detect. These compounds showed a slight decrease in concentration as compared to the last sampling round, and are comparable to previous values for this location.

Compounds detected at RW-2D (Table 6) included: vinyl chloride (1,000 ug/L), 1,1-DCE (22 ug/L), cis-1,2-DCE (4,500 ug/L), trans-1,2-DCE (29 ug/L), TCE (600 ug/L), and benzene (9.2 ug/L). Cis-1,2-DCE has shown a decreasing trend over the last 3 quarterly sampling events. TCE and vinyl chloride have shown variable concentration over the same time period. Benzene, 1,1-DCE and trans-1,2-DCE have remained at constant levels.

AST/UST Area

VOC's detected at RW-3S (Table 4) during the 3rd Quarter were isopropylbenzene (13 ug/L), benzene (17 ug/L), ethylbenzene (33 ug/L) and total xylenes (15 ug/L) – all other VOCs were non-detect. All constituents continue to show a decrease from the 1st Quarter concentrations.

Treatment Plant Influent/Effluent

The waste stream influent and effluent concentrations for the 3rd Quarter of 2003 are shown on Tables 7-10. 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 3rd Quarter included: benzene (5.4 to 6.8 ug/L), 1,1-DCE (9.3 to 15 ug/L), cis-1,2-DCE (2,400 to 3,300 ug/L), trans-1,2-DCE (11 to 14 ug/L), TCE (560 to 580 ug/L), and vinyl chloride (380 to 560 ug/L). Influent concentration ranges were similar to those recorded during previous quarters of the year.

VOC's detected in the treatment system effluent during the 3rd Quarter included cis-1,2-DCE (5.6 to 6.7 ug/L) and vinyl chloride (490 to 770 ug/L).

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 1266.

Sincerely yours,



Mark J. Dowiak
Project Manager

cc: Tim King – The Dow Chemical Company
Keith Dodrill - URS
John Ross - URS
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

TABLES

Table 1
3rd Quarter Sampling
August 14, 2003
Recovery Well Analytical Results

Volatile Compounds (Method 8260B)	Site GW RAOs (ug/L)	RW-1S (ug/L)	RW-1D (ug/L)	RW-2S (ug/L)	RW-2D (ug/L)	RW-3S (ug/L)	Trip Blank (ug/L)
Acetone	-	<10	<10	<10	<10	<10	24
Benzene	-	<1	<1	<1	9.2	17	<1
2-Butanone	-	<10	<10	<10	<10	<10	<10
Chloroform	-	<5	<5	<5	<5	<5	<5
Isopropylbenzene (Cumene)	-	<5	<5	<5	<5	13	<5
1,1-Dichloroethane	-	<5	<5	<5	<5	<5	<5
1,1-Dichloroethene	-	7.8	11	<5	22	<5	<5
cis-1,2-Dichloroethene	-	970	1,600	140	4,500	<5	<5
trans-1,2-Dichloroethene	5	8.1	19	<5	29	<5	<5
Ethylbenzene	5	<5	<5	<5	<5	33	<5
4-Methyl-2-pentanone	-	<10	<10	<10	<10	<10	<10
Methylene Chloride	-	<5	<5	<5	<5	<5	89
Tetrachloroethene	-	<5	<5	<5	<5	<5	<5
Toluene	5	<5	<5	<5	<5	<5	<5
Trichloroethene	5	3,900	37	390	600	<5	<5
Vinyl Chloride	5	41	<2	2.8	1,000	<2	<2
Total Xylenes	5	<5	<5	<5	<5	15	<5

Table 2
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)	May-03 (ug/L)	Aug-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	<10	<10
Benzene	-	NA	< 25	< 5	< 5	<100	<5	<25	< 5	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1
2-Butanone	-	NA	120	< 10	< 10	<200	<5	<50	< 10	<5	<5	<5	<5	<10	<5	9	<5	<5	<5	<5	<10	<5	<10	<10	<10	<10	<10	<10
Chloroform	-	NA	< 25	< 5	< 5	<100	<5	<25	< 5	<1	<1	<1	<1	<5	<1	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Isopropylbenzene	-	NA	NA	< 5	< 5	<100	<5	<25	< 5	<1	<1	<1	<1	<5	<1	14	6.1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethene	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5	<5	<5	<5	5.4	5.4	<5	8.4	<5	9.5	<5	7.8
cis-1,2-Dichloroethene	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	44	530	1,200	780	760	59	1,100	66	1,000	190	970
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	<5	8.1
Ethylbenzene	5	NA	< 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	<5	<5
Methylene 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	<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	1,400	3,900
Toluene	5	NA	< 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	<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	26	41
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	<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	NA	< 0.10	NA	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10
Aroclor-1221	0.1	NA	< 0.20	NA	< 0.3	< 0.3	<0.1	<0.2	< 0.2	< 0.2	<0.20	<0.20	<0.10	<0.20
Aroclor-1232	0.1	NA	< 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	NA	< 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	NA	< 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	<1	< 0.10	NA	< 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	NA	< 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.

** 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)	May-03 (ug/L)	Aug-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	<10	<10
Benzene	-	NA	< 5	< 250	< 5	<25	<1	<5	< 5	<1	<10	<1	<1	<5	<1	<2	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1
2-Butanone	-	NA	< 10	< 500	< 10	<50	<5	<10	< 10	<5	<50	<5	<5	<10	<5	21	<5	<5	<5	<5	<10	<5	<10	<10	<10	<10	<10	<10
Chloroform	-	NA	< 5	< 250	< 5	<25	<1	<5	< 5	<1	<10	<1	<1	<5	<1	<2	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Isopropylbenzene	-	NA	NA	< 250	< 5	<25	<1	<5	< 5	<1	<10	<1	<1	<5	<1	2	1.54	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethene	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	32	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
cis-1,2-Dichloroethene		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	620	400	500	110	99	6.6	210	8.9	120	32	140
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	<5	<5
Ethylbenzene	5	NA	< 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	<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	<5	<5
Tetrachloroethene	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.93	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Toluene	5	NA	< 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	<5	<5
1,1,2-Trichloroethane	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.05	<5	<5	<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	69	390
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	<2	2.8
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	<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	NA	< 0.10	NA	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10
Aroclor-1221	0.1	NA	< 0.20	NA	< 0.3	< 0.3	<0.1	<0.2	< 0.2	< 0.2	<0.20	<0.20	<0.10	<0.20
Aroclor-1232	0.1	NA	< 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	NA	< 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	NA	< 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	<1/<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	NA	< 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.

** 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)	May-03 (ug/L)	Aug-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	<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	10	17
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	<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	<5	<5
Isopropylbenzene	-	NA	< 500	160	<250	71	110	24	83	3	34	39	13	47	50	24	17	38	27	56	<5	15	<5	13	25	6.8	13
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	<5	<5
cis-1,2-Dichloroethene	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	<5	<5	<5	6.3	<5	<5	<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	<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	42	33
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	<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	140	<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	<5	<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	<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	125	15

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	NA	< 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	NA	< 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.
- 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)	May-03 (ug/L)	Aug-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	<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	7.6	<1
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	<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	<5	<5
Chloromethane	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	4	<2	<1	<5	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Isopropylbenzene	-	NA	< 5	< 5	<5	<1	<5	< 5	<1	<1	<2	<2	<1	<5	<1	<1	<5	<5	<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	19	11
cis-1,2-Dichloroethene		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,500	1,700	1,400	180	3,000	2,300	1,400	1,300	1,700	2,200	1,600
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	22	19
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	<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	<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	<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	46	37
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	<2	<2
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	<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	NA	< 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	NA	< 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)	May-03 (ug/L)	Aug-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	<10	<10
Benzene	-	NA	< 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	11	9.2
2-Butanone	-	NA	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	<10	<10
Chloroform	-	NA	< 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	<5	<5
Isopropylbenzene	-	NA	NA	< 50	< 5	<250	<25/<25	<120	< 5	<1	<1	<1	<20	<5	<10	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethene	-	NA	<5	<50	<5	<250	<25	>120	<5	5	6	<1	65	6	<10	12	25	17	16	25	25	33	<5	32	22	26	23	22
cis-1,2-Dichloroethene		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5,200	4,200	7,900	7,800	12,000	50	7,900	4,300	6,000	5,000	4,500
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	21	29
Ethylbenzene	5	NA	< 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	<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	<5	<5
Tetrachloroethene	-	NA	<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	<5	<5
Toluene	5	NA	< 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	<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	840	600
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	960	1,000
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	<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	NA	< 0.10	NA	< 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	NA	< 0.20	NA	< 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	NA	< 0.10	NA	< 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	NA	< 0.10	NA	< 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	NA	< 0.10	NA	< 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	NA	< 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	NA	< 0.10	NA	< 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

NA = Not analyzed

Table 7

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

Compound	Jan-30-03 (ug/L)	Feb-27-03 (ug/L)	Mar-30-03 (ug/L)	Apr-30-03 (ug/L)	May-31-03 (ug/L)	June-29-03 (ug/L)	Jul-29-03 (ug/L)	Sept-4-03 (ug/L)	Sept-30-03 (ug/L)	Oct-03 (ug/L)	Nov-03 (ug/L)	Dec-03 (ug/L)
Acetone	<10	<10	<10	<500	<10	<10	<10	<10	<10			
Benzene	7.3	5.3	4.7	<50	5.5	6.1	5.4	5.7	6.8			
2-Butanone	<10	<10	<10	<500	<10	<10	<10	<10	<10			
Chloroform	<5	<5	<5	<50	<5	<5	<5	<5	<5			
Chloromethane	<5	<5	<5	<50	<5	<5	<5	<5	<5			
Isopropylbenzene (Cumene)	<5	<5	<5	<50	<5	<5	<5	<5	<5			
1,1-Dichloroethene	15	13	9.6	<50	12	9.7	11	9.3	15			
cis-1,2-Dichloroethene	4,300	3,500	2,300	3,400	2,900	3,300	2,400	2,500	3,300			
trans-1,2-Dichloroethene	30	14	10	<50	13	13	11	13	14			
Ethylbenzene	<5	<5	<5	<50	<5	<5	<5	<5	<5			
Methylene Chloride	<5	<5	<5	<50	<5	<5	<5	<5	<5			
Toluene	<5	<5	<5	<50	<5	<5	<5	<5	<5			
Trichloroethene	390	410	270	560	470	380	560	580	580			
Vinyl Chloride	640	530	540	500	410	560	460	380	560			
Total Xylenes	<5	<5	<5	<100	<5	<5	<5	<5	<5			
Pre-Carb TOTAL VOCs	5,382.3	4,472.3	3,134.3	4,460	3,810.5	4,268.8	3,447.4	3,488.0	4,476			

Notes:

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

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

Third Carbon Placed online on November 29, 2002

Primary Carbon unit taken offline on June 12, 2003

Secondary and Third Units moved to Primary and Secondary positions respectively on June 12, 2003

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

NS = Not Sampled

NA= Not Analyzed

Table 8

**Primary Carbon Effluent
POTW Monthly Monitoring Summary**

Compound	Jan-30-03 (ug/L)	Feb-27-03 (ug/L)	Mar-30-03 (ug/L)	Apr-30-03 (ug/L)	May-31-03 (ug/L)	June-29-03 (ug/L)	Jul-29-03 (ug/L)	Sept-4-03 (ug/L)	Sept-30-03 (ug/L)	Oct-03 (ug/L)	Nov-03 (ug/L)	Dec-03 (ug/L)
Acetone	<10	<10	<10	<500	<10	<10	<10	<10	<10			
Benzene	<1	<1	<1	<50	<1	<1	<1	<1	<1			
2-Butanone	<10	<10	<10	<500	<10	<10	<10	<10	<10			
Chloroform	<5	<5	<5	<50	<5	<5	<5	<5	<5			
Chloromethane	<5	<5	<5	<50	<5	<5	<5	<5	<5			
Isopropylbenzene (Cumene)	<5	<5	<5	<50	<5	<5	<5	<5	<5			
1,1-Dichloroethene	<5	5.3	6.1	<50	7.4	<5	<5	<5	<5			
cis-1,2-Dichloroethene	1,500	2,000	2,700	3,100	3,200	180	400	950	1500			
trans-1,2-Dichloroethene	140	5.5	5.1	<50	14	<5	<5	<5	<5			
Ethylbenzene	<5	<5	<5	<50	<5	<5	<5	<5	<5			
Methylene Chloride	<5	<5	<5	<50	<5	<5	<5	<5	<5			
Toluene	<5	<5	<5	<50	<5	<5	<5	<5	<5			
Trichloroethene	12	34	28	<50	15	<5	<5	<5	<5			
Vinyl Chloride	620	660	900	530	430	910	830	590	560			
Total Xylenes	<5	<5	<5	<100	<5	<5	<5	<5	<5			
Primary-Carb TOTAL VOCs	2,272	2,705	3,639.2	3,630	3,652	1,090	1,230	1,540	2,060			

Notes:

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

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

Third Carbon Placed online on November 29, 2002

Primary Carbon unit taken offline on June 12, 2003

Secondary and Third Units moved to Primary and Secondary positions respectively on June 12, 2003

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.

NS = Not Sampled

NA= Not Analyzed

Table 9

**Secondary Carbon Effluent
POTW Monthly Monitoring Summary**

Compound	Jan-30-03 (ug/L)	Feb-27-03 (ug/L)	Mar-30-03 (ug/L)	Apr-30-03 (ug/L)	May-31-03 (ug/L)	June-29-03 (ug/L)	Jul-29-03 (ug/L)	Sept-4-03 (ug/L)	Sept-30-03 (ug/L)	Oct-03 (ug/L)	Nov-03 (ug/L)	Dec-03 (ug/L)
Acetone	NA	<10	<10	<100	<10	<10	<10	<10	<10			
Benzene	NA	<1	<1	<10	<1	<1	<1	<1	<1			
2-Butanone	NA	<10	<10	<100	<10	<10	<10	<10	<10			
Chloroform	NA	<5	<5	<10	<5	<5	<5	<5	<5			
Chloromethane	NA	<5	<5	<10	<5	<5	<5	<5	<5			
Isopropylbenzene (Cumene)	NA	<5	<5	<10	<5	<5	<5	<5	<5			
1,1-Dichloroethene	NA	<5	<5	<10	<5	<5	<5	<5	<5			
cis-1,2-Dichloroethene	NA	<5	<5	<10	18	9.1	5.6	6.3	6.7			
trans-1,2-Dichloroethene	NA	<5	<5	<10	<5	<5	<5	<5	<5			
Ethylbenzene	NA	<5	<5	<10	<5	<5	<5	<5	<5			
Methylene Chloride	NA	<5	<5	<10	<5	<5	<5	<5	<5			
Toluene	NA	<5	<5	<10	<5	<5	<5	<5	<5			
Trichloroethene	NA	<5	<5	<10	<5	<5	<5	<5	<5			
Vinyl Chloride	NA	690	910	740	590	650	490	750	770			
Total Xylenes	NA	<5	<5	<20	<5	<5	<5	<5	<5			
Secondary TOTAL VOCs	NA	690	910	740	608	659.1	495.6	756.3	776.7			

Notes:

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

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

Third Carbon Placed online on November 29, 2002

Primary Carbon unit taken offline on June 12, 2003

Secondary and Third Units moved to Primary and Secondary positions respectively on June 12, 2003

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.

NS = Not Sampled

NA= Not Analyzed

Table 10

**Third Carbon Effluent
POTW Monthly Monitoring Summary**

Compound	Jan-30-03 Post Carb	Feb-27-03 Post Carb	Mar-30-03 Post Carb	Apr-30-03 Post Carb	May-31-03 Post Carb	June-29-03 Offline	Jul-29-03 Offline	Sept-4-03 Offline	Sept-30-03 Offline	Oct-03 Offline	Nov-03	Dec-03
	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)		(ug/L)	(ug/L)
Acetone	<10	<10	<10	<10	<10	NS	NS	NS	NS			
Benzene	<1	<1	<1	<1	<1	NS	NS	NS	NS			
2-Butanone	<10	<10	<10	<10	<10	NS	NS	NS	NS			
Chloroform	<5	<5	<5	<5	<5	NS	NS	NS	NS			
Chloromethane	<5	<5	<5	<5	<5	NS	NS	NS	NS			
Isopropylbenzene (Cumene)	<5	<5	<5	<5	<5	NS	NS	NS	NS			
1,1-Dichloroethene	<5	<5	<5	<5	<5	NS	NS	NS	NS			
cis-1,2-Dichloroethene	6.9	6.7	7.8	6.5	5.7	NS	NS	NS	NS			
trans-1,2-Dichloroethene	<5	<5	<5	<5	<5	NS	NS	NS	NS			
Ethylbenzene	<5	<5	<5	<5	<5	NS	NS	NS	NS			
Methylene Chloride	<5	<5	<5	<5	<5	NS	NS	NS	NS			
Toluene	<5	<5	<5	<5	<5	NS	NS	NS	NS			
Trichloroethene	<5	<5	<5	<5	<5	NS	NS	NS	NS			
Vinyl Chloride	<2	<2	11	77	360	NS	NS	NS	NS			
Total Xylenes	<5	<5	<5	<5	<5	NS	NS	NS	NS			
Third Carbon TOTAL VOCs	6.9	6.7	18.8	83.5	366	NA	NA	NA	NA	NA		

Notes:

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

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

Third Carbon Placed online on November 29, 2002

Primary Carbon unit taken offline on June 12, 2003

Secondary and Third Units moved to Primary and Secondary positions respectively on June 12, 2003

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.

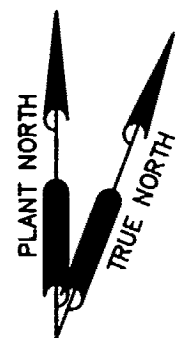
Post-Carbon sample results represent system effluent from the secondary carbon vessel (or the third carbon vessel if used) to the POTW.

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

NS = Not Sampled

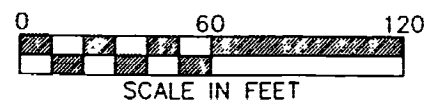
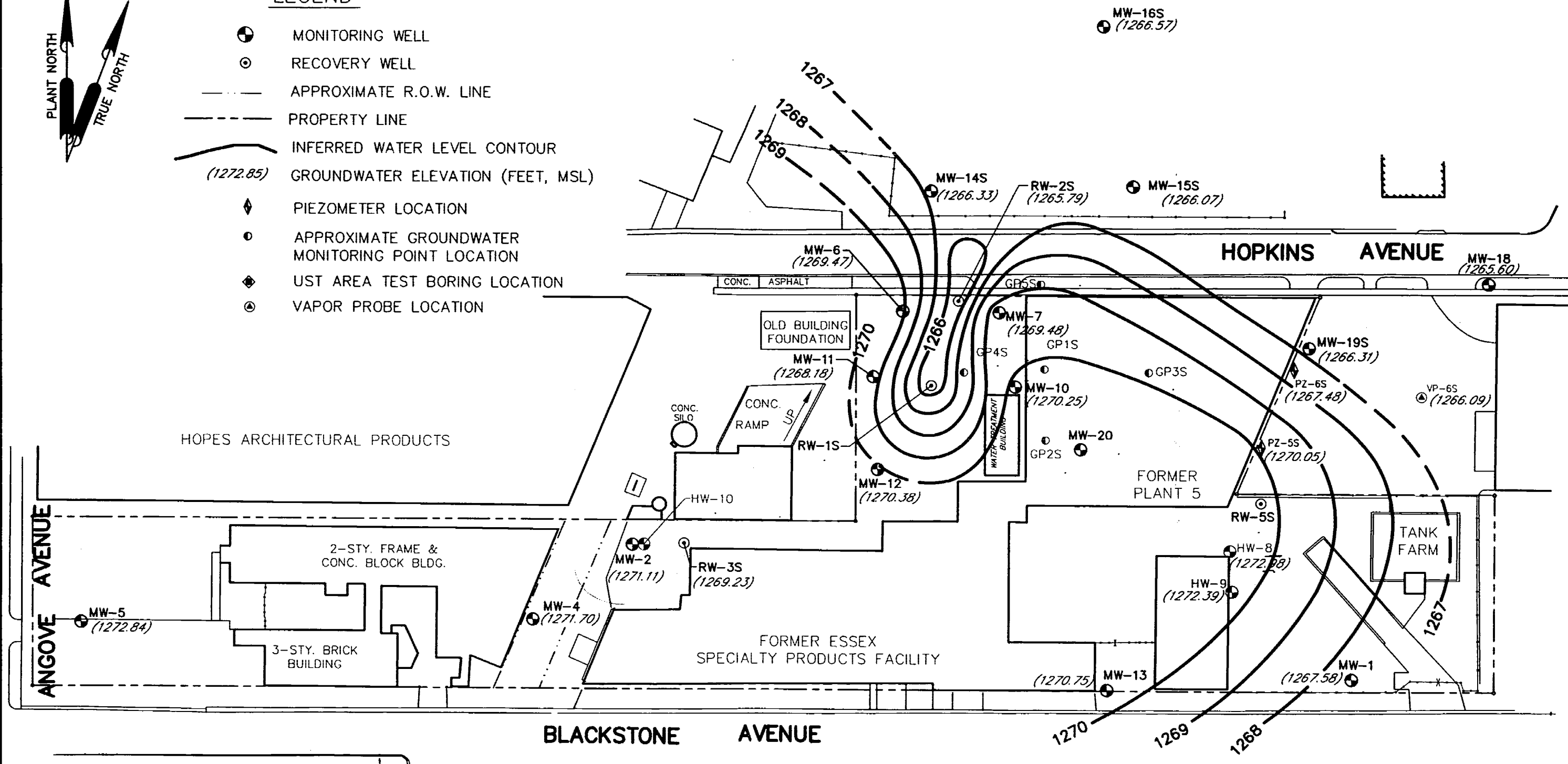
NA= Not Analyzed

FIGURES



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



SCALE IN FEET

URS

WATER TABLE CONTOUR MAP SEPTEMBER 23, 2003

ESSEX/HOPE SITE

JAMESTOWN, NY

CLIENT: ESSEX SPECIALTY PRODUCTS, INC.

JOB NUMBER: 801419.2040

SCALE: AS SHOWN

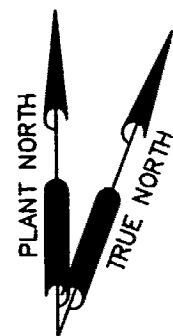
FIGURE
NUMBER

1

REV
0

FILE: J:\ESSEX\HOP\7138\801419\092303-S.DWG

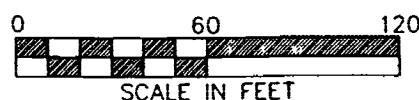
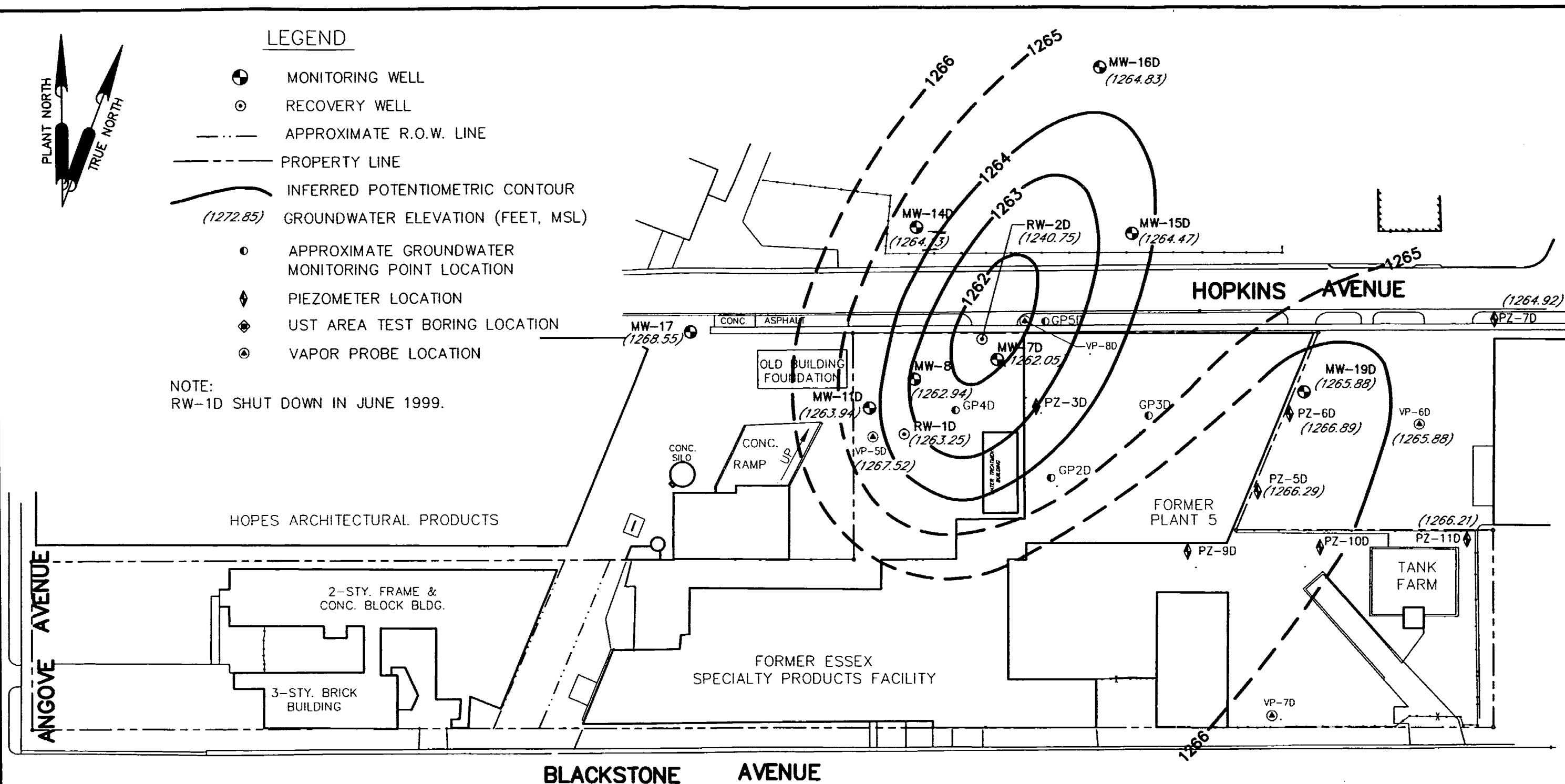
VERTICAL BENCH MARK INFORMATION CAME FROM U.S.G.S. PLAQUE U-88-S.E. ABUTT. ERIE R.R. BRIDGE
OVR BUFFALO ST., ELEV.=1296.034 (NATIONAL GEODETIC VERTICAL DATUM, 1929).



LEGEND

- MONITORING WELL
- RECOVERY WELL
- - - APPROXIMATE R.O.W. LINE
- - - PROPERTY LINE
- INFERRED POTENTIOMETRIC CONTOUR
- (1272.85) 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.



SCALE IN FEET

URS

POTENTIOMETRIC CONTOUR MAP LOWER FINE SAND WATER BEARING ZONE SEPTEMBER 23, 2003

ESSEX/HOPE SITE

JAMESTOWN, NY

CLIENT: ESSEX SPECIALTY PRODUCTS, INC.

JOB NUMBER: 801419.2040

SCALE: AS SHOWN

FIGURE
NUMBER

2

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\092303-D.DWG

APPENDIX A
WATER LEVEL MEASUREMENT DATA

Groundwater Extraction System Monitoring Data
2003 Water Levels
September and November 2003
Essex/Hope Site Remedial Action
Jamestown, New York
URS Project No. 801419

Well No.	Northing	Easting	Reference Elevation (ft msl)	Screened Zone	September 23, 2003	
					Depth to Water	Groundwater Elevation (ft msl)
MW-1	9758.7161	10383.6499	1250.48	Shallow WBZ	12.90	1267.58
MW-2	9837.1531	9959.6857	1279.87	Shallow WBZ	Dry	Dry
MW-4	9792.3277	9960.7631	1281.02	Shallow WBZ	9.32	1271.70
MW-5	9789.6222	9831.761	1280.82	Shallow WBZ	7.98	1272.84
MW-6*	9977.1197	10118.8762	1277.98	Shallow WBZ	8.51	1269.47
MW-7*	9876.8467	10175.6797	1277.73	Shallow WBZ	8.25	1269.48
MW-10	9932.4702	10185.7078	1277.94	Shallow WBZ	7.69	1270.25
MW-11*	9937.9912	10101.7016	1277.75	Shallow WBZ	9.57	1268.18
MW-12	9883.0674	10104.8278	1278.18	Shallow WBZ	7.80	1270.38
MW-13	9752.0619	10240.2934	1278.12	Shallow WBZ	7.37	1270.75
MW-14S	10048.7753	10135.5198	1280.25	Shallow WBZ	13.92	1266.33
MW-15S	10051.8272	10254.4862	1279.55	Shallow WBZ	13.48	1266.07
MW-16S	10146.7788	10238.8582	1279.32	Shallow WBZ	12.75	1266.57
MW-18	9994	10485	1275.59	Shallow WBZ	9.99	1265.60
MW-18S	9956.1454	10358.207	1276.82	Shallow WBZ	10.51	1266.31
MW-20	9895.0082	10224.2128	1278.64	Shallow WBZ	NA	NA
HW-8	9834.684	10312.0885	1277.81	Shallow WBZ	4.83	1272.98
HW-9	9810.5264	10313.3873	1280.78	Shallow WBZ	8.39	1272.39
HW-10	9837.2976	9988.7406	1279.55	Shallow WBZ	8.44	1271.11
RW-1S	9932.8951	10135.8706	1276.06	Shallow WBZ	10.52	1265.54
RW-2S*	9983.3801	10151.6403	1278.59	Shallow WBZ	10.80	1265.79
RW-3S	9838.0594	9990.4502	1278.29	Shallow WBZ	9.08	1269.23
RW-4S	9839.8053	10221.6768	1277.34	Shallow WBZ	Destroyed	NA
RW-5S	9863.2271	10330.2425	1277.43	Shallow WBZ	NA	NA
MW-7D*	9973.2593	10174.8524	1277.8	Lower Fine Sand WBZ	15.75	1262.05
MW-8	9959.6089	10127.6898	1277.97	Lower Fine Sand WBZ	15.03	1262.94
MW-11D	9942.3792	10101.1482	1277.85	Lower Fine Sand WBZ	13.91	1263.94
MW-14D	10049.5051	10129.1897	1280.01	Lower Fine Sand WBZ	15.88	1264.13
MW-15D	10045.5811	10255.205	1279.46	Lower Fine Sand WBZ	14.99	1264.47
MW-16D	10143.9497	10238.9005	1279.05	Lower Fine Sand WBZ	14.22	1264.83
MW-17	9987.6315	9995.5207	1278.7	Lower Fine Sand WBZ	10.15	1268.55
MW-19D	9951.569	10355.9748	1276.21	Lower Fine Sand WBZ	10.33	1265.86
RW-1D	9928.5997	10121.3968	1276.84	Lower Fine Sand WBZ	13.39	1263.25
RW-2D	9983.0619	10167.3168	1278.46	Lower Fine Sand WBZ	35.71	1240.75
MW-7DD*	9970.8547	10178.2698	1277.74	Glacial Till	2.19	1275.55
GP-1S	9954.39*	10203.02*	1278.98	Shallow WBZ	NA	NA
GP-2S	9914.89*	10201.04*	1278.63	Shallow WBZ	NA	NA
GP-2D	9914.91*	10207.84*	1278.7	Lower Fine Sand WBZ	NA	NA
GP-3S	9941.13*	10284.03*	1278.87	Shallow WBZ	NA	NA
GP-3D	9937.38*	10284.53*	1278.77	Lower Fine Sand WBZ	NA	NA
GP-4S	9940.88*	10154.97*	1278.06	Shallow WBZ	8.43	1269.63
GP-4D	9940.85*	10151.57*	1278.08	Lower Fine Sand WBZ	14.33	1263.75
GP-5S	9993.54*	10200.34*	1277.44	Shallow WBZ	8.44	1269.00
GP-5D	9993.55*	10290.21*	1277.37	Lower Fine Sand WBZ	NA	NA
PZ-1S			1277.97	Shallow WBZ	8.49	1269.48
PZ-1D			1277.75	Lower Fine Sand WBZ	11.95	1265.80
PZ-2D			1277.86	Lower Fine Sand WBZ	11.41	1266.45
PZ-3D			1279.02	Lower Fine Sand WBZ	NA	NA
PZ-4D			1278.94	Lower Fine Sand WBZ	NA	NA
PZ-5S			1276.56	Shallow WBZ	6.51	1270.05
PZ-5D			1276.52	Lower Fine Sand WBZ	10.23	1268.29
PZ-6S			1276.77	Shallow WBZ	9.28	1267.48
PZ-6D			1276.57	Lower Fine Sand WBZ	9.68	1268.89
PZ-7D			1275.83	Lower Fine Sand WBZ	10.91	1264.92
PZ-8D			1278.63	Lower Fine Sand WBZ	NA	NA
PZ-9D			1278.04	Lower Fine Sand WBZ	12.18	1265.86
PZ-10D			1277.58	Lower Fine Sand WBZ		1277.58
PZ-11D			1276.7	Lower Fine Sand WBZ	10.49	1266.21
TW-01			1279.1	Shallow WBZ	Destroyed	NA
VP-5D			1278.2	Lower Fine Sand WBZ	10.68	1267.52
VP-6S			1276.62	Upper Gravel of LFSWBZ	10.53	1268.09
VP-6D			1276.71	Lower Fine Sand WBZ	10.83	1265.88
VP-7D			1278.87	Lower Fine Sand WBZ	12.38	1266.49
VP-8D			1277.37	Lower Fine Sand WBZ	10.24	1267.13
Comments 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 10/11/00 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, and HW-7 destroyed during UST removal operations.					2157 Days of System Operation	

APPENDIX B

LABORATORY CERTIFICATES OF ANALYSIS

August 29, 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 August 15, 2003. Please reference Pace project number 03-3286 when inquiring about this report.

Client Site: Essex-Hope
Client Ref.: 801419.2030

Pace Sample Identification	Client Sample Identification
0308-1214	RW-1S
0308-1215	RW-1D
0308-1216	RW-2S

Pace Sample Identification	Client Sample Identification
0308-1217	RW-2D
0308-1218	RW-3S
0308-1219	Trip Blank

General Comments: Cooler temperature 10 ° 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: vlt

Enclosures

REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, Inc.



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

Lab Project ID: 03-3286
Lab Sample ID: 0308-1214
Client Sample ID: RW-1S
Sample Matrix: Aqueous

Date Sampled: 08/14/2003
Date Received: 08/15/2003

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	08/18/2003	0023527-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	MAK	08/18/2003	0023527-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	08/18/2003	0023527-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	7.8	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	970	50	ug/l	MAK	08/18/2003	0023527-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	8.1	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	08/18/2003	0023527-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	08/18/2003	0023527-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0308-1214
Client Sample ID: RW-1S

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Trichloroethene	8260B ⁽¹⁾	3900	50	ug/l	MAK	08/18/2003	0023527-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	41	2.0	ug/l	MAK	08/18/2003	0023527-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<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: 03-3286
Lab Sample ID: 0308-1215
Client Sample ID: RW-1D
Sample Matrix: Aqueous

Date Sampled: 08/14/2003
Date Received: 08/15/2003

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	08/18/2003	0023527-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	MAK	08/18/2003	0023527-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	08/18/2003	0023527-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	11	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	1600	50	ug/l	MAK	08/18/2003	0023527-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	19	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	08/18/2003	0023527-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	08/18/2003	0023527-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0

(Continued)

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Lab Sample ID: 0308-1215
Client Sample ID: RW-1D

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Trichloroethene	8260B ⁽¹⁾	37	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	<2.0	2.0	ug/l	MAK	08/18/2003	0023527-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<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: 03-3286
Lab Sample ID: 0308-1216
Client Sample ID: RW-2S
Sample Matrix: Aqueous

Date Sampled: 08/14/2003
Date Received: 08/15/2003

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	08/18/2003	0023527-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	MAK	08/18/2003	0023527-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	08/18/2003	0023527-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	140	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	08/18/2003	0023527-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	08/18/2003	0023527-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0

(Continued)

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Lab Sample ID: 0308-1216
Client Sample ID: RW-2S

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Trichloroethene	8260B ⁽¹⁾	390	10	ug/l	CMS	08/19/2003	0023594-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	2.8	2.0	ug/l	MAK	08/18/2003	0023527-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<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: 03-3286
Lab Sample ID: 0308-1217
Client Sample ID: RW-2D
Sample Matrix: Aqueous

Date Sampled: 08/14/2003
Date Received: 08/15/2003

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	08/18/2003	0023527-1	<10
Benzene	8260B ⁽¹⁾	9.2	1.0	ug/l	MAK	08/18/2003	0023527-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	08/18/2003	0023527-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	22	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	4500	50	ug/l	MAK	08/18/2003	0023527-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	29	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	08/18/2003	0023527-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	08/18/2003	0023527-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0

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Lab Sample ID: 0308-1217

Client Sample ID: RW-2D

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Trichloroethene	8260B ⁽¹⁾	600	50	ug/l	MAK	08/18/2003	0023527-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	1000	100	ug/l	MAK	08/18/2003	0023527-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<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: 03-3286
Lab Sample ID: 0308-1218
Client Sample ID: RW-3S
Sample Matrix: Aqueous

Date Sampled: 08/14/2003
Date Received: 08/15/2003

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	08/18/2003	0023527-1	<10
Benzene	8260B ⁽¹⁾	17	1.0	ug/l	MAK	08/18/2003	0023527-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	08/18/2003	0023527-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Cumene	8260B ⁽¹⁾	13	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	33	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	08/18/2003	0023527-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	08/18/2003	0023527-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0308-1218

Client Sample ID: RW-3S

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Trichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	<2.0	2.0	ug/l	MAK	08/18/2003	0023527-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	15	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<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: 03-3286
Lab Sample ID: 0308-1219
Client Sample ID: Trip Blank
Sample Matrix: Aqueous

Date Sampled: 08/14/2003
Date Received: 08/15/2003

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⁾	24	10	ug/l	MAK	08/18/2003	0023527-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	MAK	08/18/2003	0023527-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	08/18/2003	0023527-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	08/18/2003	0023527-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	08/18/2003	0023527-1	<10
Methylene chloride	8260B ⁽¹⁾	89	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0308-1219

Client Sample ID: Trip Blank

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Trichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	<2.0	2.0	ug/l	MAK	08/18/2003	0023527-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	08/18/2003	0023527-1	<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.

692366

Required Client Information: Section A

Company: URS Corp.
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: _____
PO: _____
Project Name: Essex-Hope 3rd Quarter Samples
Project Number: 801419.2030

Page: _____ of _____

To Be Completed by Pace Analytical and Client Section C

Quote Reference: _____
Project Manager: _____
Project #: 03-3286
Profile #: _____
Requested Analysis: _____

ITEM #	Section D										Required Client Information:										Valid Matrix Codes		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																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
<u>Fed. Express</u>	<u>837738696954</u>	<u>8-14-03</u>	<u>1</u>		<u>John S. Ross</u>	<u>8-14-03</u>	<u>1700</u>	<u>Fed Express</u>	<u>8-14-03</u>	<u>1700</u>

SAMPLE CONDITION	SAMPLE NOTES
Temp in °C <u>10</u>	
Received on Ice <u>(Y)N</u>	
Sealed Cooler <u>(Y)N</u>	
Samples Intact <u>(Y)N</u>	

Additional Comments: _____

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: John S. Ross

SIGNATURE of SAMPLER: John S. Ross

DATE Signed: (MM / DD / YY) 8-14-03

August 7, 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 July 30, 2003. Please reference Pace project number 03-3040 when inquiring about this report.

Client Site: Essex-Hope
Client Ref.: 801419.2030

Pace Sample Identification	Client Sample Identification
0307-2288	Pre-Carb
0307-2289	Primary Effluent
0307-2290	Post-Carb
0307-2291	Trip Blank

General Comments: Cooler temperature 6 ° 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: 03-3040
Lab Sample ID: 0307-2288
Client Sample ID: Pre-Carb
Sample Matrix: Aqueous

Date Sampled: 07/29/2003
Date Received: 07/30/2003

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	08/01/2003	0023200-1	<10
Benzene	8260B ⁽¹⁾	5.4	1.0	ug/l	JEC	08/01/2003	0023200-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	JEC	08/01/2003	0023200-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	11	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	2400	50	ug/l	MAK	07/31/2003	0023153-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	11	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	JEC	08/01/2003	0023200-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	JEC	08/01/2003	0023200-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0307-2288
Client Sample ID: Pre-Carb

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
Trichloroethene	8260B ⁽¹⁾	560	50	ug/l	MAK	07/31/2003	0023153-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	460	100	ug/l	MAK	07/31/2003	0023153-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<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

Lab Project ID: 03-3040
Lab Sample ID: 0307-2289
Client Sample ID: Primary Effluent
Sample Matrix: Aqueous

Date Sampled: 07/29/2003
Date Received: 07/30/2003

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	JEC	08/01/2003	0023200-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	JEC	08/01/2003	0023200-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	JEC	08/01/2003	0023200-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	400	50	ug/l	MAK	07/31/2003	0023153-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	JEC	08/01/2003	0023200-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	JEC	08/01/2003	0023200-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0307-2289
Client Sample ID: Primary Effluent

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
Trichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	830	100	ug/l	MAK	07/31/2003	0023153-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	JEC	08/01/2003	0023200-1	<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: 03-3040
Lab Sample ID: 0307-2290
Client Sample ID: Post-Carb
Sample Matrix: Aqueous

Date Sampled: 07/29/2003
Date Received: 07/30/2003

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	07/31/2003	0023153-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	MAK	07/31/2003	0023153-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	07/31/2003	0023153-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	5.6	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	07/31/2003	0023153-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	07/31/2003	0023153-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0307-2290
Client Sample ID: Post-Carb

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
Trichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	490	20	ug/l	CMS	07/31/2003	0023170-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<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. Sample 0307-2290 was composited from 4 samples prior to analysis.

REPORT OF LABORATORY ANALYSIS

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Client Site: Essex-Hope
Client Ref.: 801419.2030

Date Sampled: 07/29/2003
Date Received: 07/30/2003

2000

Lab Sample ID: 0307-2291
Client Sample ID: Trip Blank

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
Trichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	<2.0	2.0	ug/l	MAK	07/31/2003	0023153-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/31/2003	0023153-1	<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.

772647

Required Client Information: Section A

Company: **URS Corp**

Address: **4955 Stenbenville 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 #: **03-3040**

Profile #: _____

Requested Analysis: _____

ITEM #	Section D										Required Client Information:										Valid Matrix Codes		MATRIX CODE	DATE COLLECTED mm / dd / yy	TIME COLLECTED hh mm a/p	# Containers	Preservatives							Remarks / Lab ID			
	SAMPLE ID													MATRIX	CODE	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													WATER	WT																						
1	P	R	E	-	C	A	R	B										WT	7-29-03	1500	2				X												07-2288
2	P	R	I	M	A	R	Y	E	F	F	L	U	E	N	T					1500	1																-2289
3	P	O	S	T	-	C	A	R	B										1500																		
4	P	O	S	T	-	C	A	R	B										1530																		
5	P	O	S	T	-	C	A	R	B										1600																	-2290	
6	P	O	S	T	-	C	A	R	B										1630																		
7	T	R	I	P	-	B	L	A	N	K																										-2291	
8																																					
9																																					
10																																					
11																																					
12																																					

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
FED-EX	8377386965	7-29-03	1		John S. Ross URS	7-29-03	1715	FED EXPRESS	7-29-03	1715

SAMPLE CONDITION

Temp in °C: **6**

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 S. Ross**

SIGNATURE OF SAMPLER: *John S. Ross*

DATE Signed: (MM / DD / YY) **7-29-03**

Additional Comments:

September 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 September 8, 2003. Please reference Pace project number 03-3672 when inquiring about this report.

Client Site: Essex-Hope
Client Ref.: 801419.2030

Pace Sample Identification	Client Sample Identification
0309-0818	Pre-Carb
0309-0819	Primary Effluent
0309-0820	Post-Carb
0309-0821	Trip Blank

General Comments: Cooler temperature 9 ° 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

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: 03-3672
Lab Sample ID: 0309-0818
Client Sample ID: Pre-Carb
Sample Matrix: Aqueous

Date Sampled: 09/04/2003
Date Received: 09/08/2003

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	09/09/2003	0024068-1	<10
Benzene	8260B ⁽¹⁾	5.7	1.0	ug/l	MAK	09/09/2003	0024068-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	09/09/2003	0024068-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	9.3	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	2500	50	ug/l	MAK	09/09/2003	0024068-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	13	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	09/09/2003	0024068-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	09/09/2003	0024068-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0309-0818
Client Sample ID: Pre-Carb

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Trichloroethene	8260B ⁽¹⁾	580	50	ug/l	MAK	09/09/2003	0024068-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	380	2.0	ug/l	MAK	09/09/2003	0024068-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<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: 03-3672
Lab Sample ID: 0309-0819
Client Sample ID: Primary Effluent
Sample Matrix: Aqueous

Date Sampled: 09/04/2003
Date Received: 09/08/2003

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	09/09/2003	0024068-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	MAK	09/09/2003	0024068-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	09/09/2003	0024068-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	950	50	ug/l	MAK	09/09/2003	0024068-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	09/09/2003	0024068-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	09/09/2003	0024068-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0309-0819
Client Sample ID: Primary Effluent

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Trichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	590	100	ug/l	MAK	09/09/2003	0024068-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<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: 03-3672
Lab Sample ID: 0309-0820
Client Sample ID: Post-Carb
Sample Matrix: Aqueous

Date Sampled: 09/04/2003
Date Received: 09/08/2003

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	09/09/2003	0024068-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	MAK	09/09/2003	0024068-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	09/09/2003	0024068-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	6.3	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	09/09/2003	0024068-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	09/09/2003	0024068-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0309-0820
Client Sample ID: Post-Carb

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Trichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	750	20	ug/l	MAK	09/10/2003	0024095-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<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. Sample 0309-0820 was composited from 4 samples prior to analysis.

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: 03-3672
Lab Sample ID: 0309-0821
Client Sample ID: Trip Blank
Sample Matrix: Aqueous

Date Sampled: 09/04/2003

Date Received: 09/08/2003

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	09/09/2003	0024068-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	MAK	09/09/2003	0024068-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	09/09/2003	0024068-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	09/09/2003	0024068-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	09/09/2003	0024068-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0309-0821

Client Sample ID: Trip Blank

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Trichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	<2.0	2.0	ug/l	MAK	09/09/2003	0024068-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	09/09/2003	0024068-1	<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.

692365

Required Client Information: Section A

Company: **URS Corp**
Address: **4955 Steubenville Pike Suite 200**
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: **1** of **1**

To Be Completed by Pace Analytical and Client Section C

Quote Reference:
Project Manager:
Project #: **03-3672**
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						
Fed-Express	83773869654	9-5-03	1		John S. Ross	9-5-03										
SAMPLE CONDITION				SAMPLE NOTES												
Temp in °C	9															
Received on Ice	Q/N															

Additional Comments:
OTOC

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

John S. Ross

SIGNATURE of SAMPLER:

John S. Ross

DATE Signed: (MM / DD / YY)

October 8, 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 October 2, 2003. Please reference Pace project number 03-4091 when inquiring about this report.

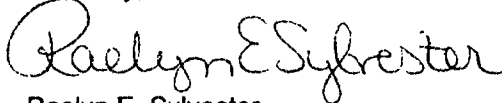
Client Site: Essex-Hope
Client Ref.: 801419.2030

Pace Sample Identification	Client Sample Identification
0310-0587	Pre-Carb
0310-0588	Primary Effluent
0310-0589	Post-Carb
0310-0590	Trip Blank

General Comments: Cooler temperature 2 ° 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: 03-4091
Lab Sample ID: 0310-0587
Client Sample ID: Pre-Carb
Sample Matrix: Aqueous

Date Sampled: 09/30/2003
Date Received: 10/02/2003

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	10/03/2003	0024672-1	<10
Benzene	8260B ⁽¹⁾	6.8	1.0	ug/l	MAK	10/03/2003	0024672-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	10/03/2003	0024672-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	15	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	3300	50	ug/l	MAK	10/03/2003	0024672-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	14	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	10/03/2003	0024672-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	10/03/2003	0024672-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0310-0587
Client Sample ID: Pre-Carb

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Trichloroethene	8260B ⁽¹⁾	580	50	ug/l	MAK	10/03/2003	0024672-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	560	100	ug/l	MAK	10/03/2003	0024672-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<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: 03-4091
Lab Sample ID: 0310-0588
Client Sample ID: Primary Effluent
Sample Matrix: Aqueous

Date Sampled: 09/30/2003
Date Received: 10/02/2003

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	10/03/2003	0024672-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	MAK	10/03/2003	0024672-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	10/03/2003	0024672-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	1500	50	ug/l	MAK	10/03/2003	0024672-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	10/03/2003	0024672-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	10/03/2003	0024672-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0310-0588
Client Sample ID: Primary Effluent

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Trichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	560	100	ug/l	MAK	10/03/2003	0024672-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<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: 03-4091
Lab Sample ID: 0310-0589
Client Sample ID: Post-Carb
Sample Matrix: Aqueous

Date Sampled: 09/30/2003
Date Received: 10/02/2003

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	10/03/2003	0024672-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	MAK	10/03/2003	0024672-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	10/03/2003	0024672-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	6.7	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	10/03/2003	0024672-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	10/03/2003	0024672-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0310-0589
Client Sample ID: Post-Carb

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Trichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	770	20	ug/l	MAK	10/03/2003	0024672-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<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. Sample 0310-0589 was composited from 4 samples prior to analysis.

REPORT OF LABORATORY ANALYSIS

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Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Lab Project ID: 03-4091
Lab Sample ID: 0310-0590
Client Sample ID: Trip Blank
Sample Matrix: Aqueous

Date Sampled: 09/30/2003
Date Received: 10/02/2003

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	10/03/2003	0024672-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	MAK	10/03/2003	0024672-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	10/03/2003	0024672-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	10/03/2003	0024672-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	10/03/2003	0024672-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0310-0590
Client Sample ID: Trip Blank

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Trichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	<2.0	2.0	ug/l	MAK	10/03/2003	0024672-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	10/03/2003	0024672-1	<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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730227

Required Client Information: Section A

Company: **URS Corp.**
 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: _____
 PO: _____
 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 #: **03-4091**
 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
Fed. Express	839738696645	10-1-03	1		John S. Ross - URS	10-1-03	1630	Fed. Express	10-1-03	1630

SAMPLE CONDITION

SAMPLE NOTES

Temp in °C: **2**
 Received on Ice: **Y/N**
 Sealed Cooler: **Y/N**
 Samples Intact: **Y/N**

Combine (4) post carb samples into (1) for Analysis

Additional Comments:

0100

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

John Ross

SIGNATURE of SAMPLER:

John S. Ross

DATE Signed: (MM / DD / YY)

9-30-03

RECEIVED

FEB 13 2004

NYSDEC REG 9

FOIL
___REL___UNREL