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URS

September 4, 2002

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

Subject: **2nd Quarter 2002 Performance Monitoring Report**
Essex/Hope Site — Jamestown, New York
URS Project No. 801419

Dear Mr. Moore:

This letter report is a summary of the 2nd Quarter 2002 operational performance for the remedial system at the above-referenced site in accordance with the June 1997 Performance Monitoring Plan (PMP) prepared by Radian International LLC. During the quarter approximately 390,160 gallons of water was treated and discharged to the City of Jamestown POTW from the site. The following sections discuss the data on groundwater quality sampling and groundwater flow. No soil sampling related to the system performance monitoring was conducted during this reporting period.

GROUNDWATER FLOW EVALUATION

Water level measurements were taken on May 7, 2002, May 22, 2002 and June 25, 2002 during the reporting quarter. Water level data is provided in Appendix A of this report. Groundwater contour maps representative of pumping conditions during the reporting period are provided as Figures 1 and 2. The following discussions review the flow conditions of the shallow (water table) and Lower Fine Sand (deep) water-bearing zones.

The shallow recovery wells (RW-1S, -2S, -3S, -4S and RW-5S) were redeveloped by jetting during the month of June 2002 to maintain pumping efficiency in the shallow zone. The pump and discharge piping of RW-2D was cleaned out by treatment using phosphoric acid in May 2002 to remove plugging of the equipment by the accumulation of ferric oxide precipitates.

Shallow Water-Bearing Zone

Water table contour maps representing pumping conditions in the upper water-bearing zone on May 22, 2002 is provided as Figure 1. Groundwater drawdown conditions for the 2nd Quarter were similar to the 1st Quarter of 2002, with groundwater elevations remaining relatively consistent. Shallow groundwater was extracted at an average rate of 1.24 gallons per minute (gpm) from the NPL Area, 0.03 gpm from the AST/UST Area and 0.21 gpm from the UST Area.

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. A potentiometric surface contour map representing pumping conditions on May 22, 2002 is provided as Figures 2. Pumping efficiency degraded at RW-2D during the month of April 2002, due to restriction of groundwater flow by precipitate buildup in the pump and discharge piping.

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After clean out of the equipment the week of May 6, 2002, the cone of depression around RW-2D re-developed to a configuration similar to the 1st Quarter conditions.
The cone of depression increased by June of 2002 with potentiometric groundwater elevations approximately 1-foot lower in elevation. Groundwater was extracted from the deep zone at a rate between 1.6 to 1.9 gpm over the reporting period.

WATER QUALITY RESULTS

Second Quarter 2002 performance monitoring included quarterly sampling of all recovery wells and monthly influent and effluent sampling of the onsite pre-treatment system. The recovery well samples were taken on July 5, 2002, the monthly influent/effluent samples were collected on April 23, 2002, May 30, 2002, and June 28, 2002. Pace Analytical Laboratories of Export, Pennsylvania analyzed the samples for volatile organic compounds (VOC's) by US EPA Method 8260B. The recovery well analytical results are summarized in Table 1. Historical analytical results for individual recovery wells are summarized in Tables 2 through 8. Table 9 summarizes the monthly influent and effluent sample results. Copies of the laboratory data packages for the quarterly samples and the monthly treatment plant influent and effluent samples are found in Appendix B. The following sections discuss the analytical data for each remedial area.

NPL Area – Shallow Zone
Constituents detected in RW-1S (Table 2) during the July sampling round included: acetone (14 ug/L), cis-1,2-DCE (59 ug/L), TCE (360 ug/L), toluene (38 ug/L), ethylbenzene (77 ug/L) and xylenes (480 ug/L) - all other VOC's were non-detect. Acetone has been periodically detected at this location at low levels. Cis-1,2-DCE concentrations are the lowest since July 2001 where concentrations have ranged from 530 to 1,200 ug/L. TCE concentrations showed an order of magnitude decrease from the last several rounds after July 2001 where concentrations ranged from 1,500 to 2,300 ug/L. Toluene, ethylbenzene and xylenes are not typically encountered at this well location, the probable source of these constituents is groundwater capture from the UST Area. Vinyl Chloride, which showed increasing concentrations after the Pilot Permeable Reactive Wall (PRW) installation in 2000 was below detection limits for this round.

Constituents detected at RW-2S (Table 3) included cis-1,2-DCE (6.6 ug/L), TCE (200 ug/L) and xylenes (6.5 ug/L) – all other VOCs were below detection limits. Cis-1,2-DCE has shown a decreasing trend from 620 ug/L since it was first analyzed for in March 2001. TCE concentrations are higher for this round as compared to the two previous sampling rounds where concentrations were detected at 22 and 7.7 ug/L. Overall, TCE concentrations have declined as compared to the period between November 2000 and September 2001 where values ranged between 1,500 to 6,400 ug/L. Xylenes have periodically been detected at this well at low concentrations.

NPL Area – Lower Fine Sand Water Bearing Zone
Constituents detected at RW-1D (Table 7) included 1,1-DCE (15 ug/L), cis-1,2-DCE (2,300 ug/L), trans-1,2-DCE (9.4 ug/L), TCE (8.1 ug/L), benzene (6.6 ug/L) and xylenes (15 ug/L) - all other VOC's were non-detect. Cis-1,2-DCE concentrations decreased from the last quarter sampling where concentrations were detected at 3,000 ug/L. 1,1-DCE, trans-1,2-DCE, TCE and benzene concentrations have remained similar to historic data when these constituents are periodically detected. Xylenes, typically below detection limits, were positively detected for the first time at 15 ug/L.

Vinyl chloride (reported at less than 100 ug/L) has shown a decreasing trend in concentration at RW-1D since the beginning of 2002 where it was detected at 360 ug/L.
Compounds detected at RW-2D (Table 8) included: vinyl chloride (55 ug/L), cis-1,2-DCE (50 ug/L), trans-1,2-DCE (7.8 ug/L), 2-Butanone (28 ug/L), benzene (9.1 ug/L) and xylenes (12 ug/L). This is the first sampling round where TCE has been reduced to below a detection limit of 5 ug/L since the installation of the pilot permeable reactive wall (PRW) around the recovery well. Cis-1,2-DCE and vinyl chloride have both shown an order of magnitude decrease in concentration since the 1st Quarter sampling. Trans-1,2-DCE has decreased to levels consistent with pre-PRW installation. Xylenes and 2-Butanone levels are consistent with previous periodic detection at this location.

AST/UST Area
Constituents detected at RW-3S (Table 4) included isopropylbenzene (15 ug/L), toluene (140 ug/L), ethylbenzene (97 ug/L) and xylenes (95 ug/L) - all other VOCs were non-detect. Toluene has not been detected at this location since August 2000 at 2 ug/L. The last time toluene concentrations were detected at equivalent values was in 1998. All other compounds detected were similar in concentration to historical patterns.

UST Area
Constituents detected at RW-4S (Table 5) included acetone (25 ug/L), isopropylbenzene (190 ug/L), benzene (21 ug/L), toluene (7,000 ug/L), ethylbenzene (14,000 ug/L) and xylenes (101,000 ug/L) - all other VOC's were non-detect. Acetone, isopropylbenzene and benzene remained at levels similar to previous data. Toluene, ethylbenzene and xylenes all showed an increase in concentration for this round as compared to the previous year's data, but historical analysis shows that detection for these compounds has been variable over time.

Constituents detected at RW-5S (Table 6) included isopropylbenzene (51 ug/L), benzene (29 ug/L), toluene (6.6 ug/L), ethylbenzene (180,000 ug/L) and xylenes (35 ug/L) – all other VOCs were non-detect. Concentrations for isopropylbenzene slightly increased as compared to previous rounds where this compound was detected at 15 ug/l in March 2002 and 6.9 ug/l in September 2001. Benzene was detected during this round for the first time at this location. Toluene remained at similar concentrations. Ethylbenzene was detected at approximately twice the level as previously observed over the past year. Xylenes showed a significant decrease from the 1st Quarter analysis where the compound was detected at 274 ug/L. Note that xylenes have typically shown variable concentrations over time at this area.

Treatment Plant Influent/Effluent
The waste stream influent and effluent concentrations for the 2nd Quarter of 2002 are provided on Table 9. Influent data (Pre-Carb) reflect a composite from all the groundwater extraction wells prior to pre-treatment. Primary Carbon data represents the effluent from the first carbon treatment unit prior to the second treatment unit. 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.

Constituent ranges detected in the influent during the 2nd Quarter included: acetone (1,600 ug/L in May 2002), benzene (3.6 to 5.5 ug/L), isopropylbenzene (5.9 to 6.8 ug/L), 1,1-DCE (6.8 to 13 ug/L), cis-1,2-DCE (3,000 to 3,600 ug/L), trans-1,2-DCE (7.2 to 12 ug/L), ethylbenzene (380 to 610 ug/L), toluene (190 to 270 ug/L), TCE (100 to 260 ug/L), vinyl chloride (510 to 540 ug/L) and xylenes (3,190 to 4,900 ug/L).

Constituents detected in the system effluent during June 2002 included acetone (2,800 ug/L) and vinyl chloride (3.4 ug/L). The site pre-treatment system effluent exceeded the POTW discharge permit limit of 2,130 ug/L for this sampling event. After receipt of the June analytical results on July 22, 2002, the discharge was reported to the Jamestown Board of Public Utilities (BPU) by telephone on July 23, 2002 and in correspondence dated July 25, 2002. A new carbon treatment vessel was placed online in the secondary position of the 2-vessel treatment system on July 22, 2002. At this time, the primary carbon unit was taken offline, and the unit previously in the second position was placed in the primary position. On August 9, 2002, the carbon was changed out in the two used vessels, and the secondary unit placed online on July 22, 2002 was moved to the primary position.

Review of the recovery well analytical data indicates that the source of the acetone in the pre-treatment system is not from the site groundwater. A potential source of the acetone may be from the UST Area tank fluids that were pretreated through carbon in January 2002 after completion of the December 2001 tank cleaning activities. These fluids, which exhibited a white pigment after carbon treatment, were retained onsite until approval was obtained from the Jamestown BPU to process the fluids through the site pre-treatment system. Approximately 2,000-gallons of this fluid was processed through the system during May and June 2002. Note that acetone is a common laboratory contaminant, and the detection for this compound may not be associated with the site.

CLOSING

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

Sincerely yours,

Keith Dodrill /dh

Keith A. Dodrill
Project Manager

cc: Ben Baker
John Ross
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
Recovery Well Analytical Results
2nd Quarter Sampling
July 5, 2002

Volatile Compounds (Method 8260A)	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)	RW-4S (ug/L)	RW-5S (ug/L)	Trip Blank (ug/L)
Chloromethane	-	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl Chloride	5	<2	<100	<2	**55**	<2	<2	<2	<2
Methylene Chloride	-	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	-	**14**	<10	<10	<10	<10	**25**	<10	<10
1,1-Dichloroethene	-	<5	**15**	<5	<5	<5	<5	<5	<5
cis-1,2-Dichloroethene	-	**59**	**2,300**	**6.6**	**50**	<5	<5	<5	<5
trans-1,2-Dichloroethene	5	<5	**9.4**	<5	**7.8**	<5	<5	<5	<5
1,1-Dichloroethane	-	<5	<5	<5	<5	<5	<5	<5	<5
Chloroform	-	<5	<5	<5	<5	<5	<5	<5	<5
2-Butanone	-	<10	<10	<10	**28**	<10	<10	<10	<10
4-Methyl-2-pentanone	-	<10	<10	<10	<10	<10	<10	<10	<10
Trichloroethene	5	**360**	**8.1**	**200**	<5	<5	<5	<5	<5
Isopropylbenzene	-	<5	<5	<5	<5	**15**	**190**	**51**	<5
Benzene	-	<1	**6.6**	<1	**9.1**	<1	**21**	**29**	<1
Tetrachloroethene	-	<5	<5	<5	<5	<5	<5	<5	<5
Toluene	5	**38**	<5	<5	<5	**140**	**7,000**	**6.6**	<5
Ethylbenzene	5	**77**	<5	<5	<5	**97**	**14,000**	**180**	<5
Total Xylenes	5	**480**	**15**	**6.5**	**12**	**95**	**101,000**	**35**	<5

Table 2
RW-1S
Quarterly Sample Results

Volatile Compounds (Method 8260)	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)
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
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
Acetone	-	10	< 58[B]	< 10	< 10	<200	<25	<50	< 10	<5	<5	9	<5	<10	<5	15[B]	<5	<5	<5	<5	<5	50	<5	14
1,1-Dichloroethene	-																2.5	<5	<5	<5	5.4	5.4	<5
cis-1,2-Dichloroethene	-																	44	530	1,200	780	760	59
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
Chloroform	-		< 25	< 5	< 5	<100	<5	<25	< 5	<1	<1	<1	<1	<5	<1	<1	<1	<5	<5	<5	<5	<5	<5
2-Butanone	-		120	< 10	< 10	<200	<5	<50	< 10	<5	<5	<5	<5	<10	<5	9	<5	<5	<5	<5	<5	<10	<5	<10
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
Isopropylbenzene	-			< 5	< 5	<100	<5	<25	< 5	<1	<1	<1	<1	<5	<1	14	6.1	<5	<5	<5	<5	<5	<5
Benzene	-		< 25	< 5	< 5	<100	<5	<25	< 5	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1
Toluene	5		< 25	< 5	< 5	<100	<5	<25	< 5	<1	<1	<1	<1	<5	<1	4	1.34	<5	<5	<5	<5	<5	38
Ethylbenzene	5		< 25	< 5	< 5	<100	<5	<25	< 5	<1	<1	<1	<1	<5	<1	9	2.52	<5	<5	<5	<5	<5	77
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

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

Notes:

B = Qualified as non-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

N/A = Not analyzed

Table 3
RW-2S
Quarterly Sample Results

Volatile Compounds (Method 8260A)	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)
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
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
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
1,1-Dichloroethene	-																32	<5	<5	<5	<5	<5	<5
cis-1,2-Dichloroethene																		620	400	500	110	99	6.6
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
Chloroform	-		< 5	< 250	< 5	<25	<1	<5	< 5	<1	<10	<1	<1	<5	<1	<2	<1	<5	<5	<5	<5	<5	<5
2-Butanone	-		< 10	< 500	< 10	<50	<5	<10	< 10	<5	<50	<5	<5	<10	<5	21	<5	<5	<5	<5	<10	<5	<10
1,1,2-Trichloroethane	-																1.05	<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
Isopropylbenzene	-			< 250	< 5	<25	<1	<5	< 5	<1	<10	<1	<1	<5	<1	2	1.54	<5	<5	<5	<5	<5	<5
Benzene	-		< 5	< 250	< 5	<25	<1	<5	< 5	<1	<10	<1	<1	<5	<1	<2	<1	<1	<1	<1	<5	<1	<1
Tetrachloroethene	-																2.93	<5	<5	<5	<5	<5	<5
Toluene	5		< 5	< 250	< 5	<25	<1	<5	< 5	<1	<10	<1	<1	<5	<1	<2	2.01	<5	<5	<5	<5	<5	<5
Ethylbenzene	5		< 5	< 250	< 5	<25	<1	<5	< 5	<1	<10	3	<1	<5	<1	2	1.34	<5	<5	<5	<5	<5	<5
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

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

Notes:

B = Qualified as non-detect due to blank contamination

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

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

E = Concentration exceeded calibration range of instrument.

J = Estimated Concentration

N/A = Not analyzed

Table 4
RW-3S
Quarterly Sample Results

Volatile Compounds (Method 8260A)	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)
Vinyl Chloride	5	< 1000	< 500	11	<250	<10	<50	< 5	11	<2	<1	<2	<5	<2	2	<2	<2	<2	<2	<5	17	<2
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
Acetone	-	< 2000	< 1000	14	<500	<50	<100	< 10	<5	15	<5	<10	10	18[B]	<5	<10	<5	<5	<5	<10	<5	<10
cis-1 2-Dichloroethene	-																<5	<5	<5	<5	6.3	<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
1,1-Dichloroethane	-	<1000	<500	<5	<250	<50	<50	<5	2	<2	<1	<2	<5	<2	<1	<2	<5	<5	<5	<5	<5	<5
Chloroform	-	< 1000	< 500	< 5	<250	<10	<50	< 5	<1	<2	<1	<2	<5	<2	<1	<2	<5	<5	<5	<5	<5	<5
2-Butanone	-	< 2000	< 1000	< 10	<500	<50	<100	< 10	<5	<10	<5	<10	<10	<10	<5	<10	<5	<5	<5	<10	<5	<10
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
Isopropylbenzene	-		< 500	160	<250	71	110	24	83	3	34	39	13	47	50	24	17	38	27	56	<5	15
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
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
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
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

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

Notes:

B = Qualified as non-detect due to blank contamination

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

E = Concentration exceeded calibration range of instrument

J = Estimated Concentration

N/A = Not analyzed

Table 5
RW-4S
Quarterly Sample Results

Volatile Compounds (Method 8260A)	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-00 (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)
Vinyl Chloride	5	< 1000	< 100	< 25	<2500	<100	<500	< 5	<250	<500	<1	<500	<5	<250	<1	<500	<2	<2	<2	<5	<5	<2
Methylene Chloride	-	< 1200[B]	220	< 25	6,500	<100	<500	< 5	<250	1,300 D	<1	5,600[B]	<5	1100[B]	<1	1,600	<5	<5	<5	<5	<5	<5
Acetone	-	< 3200[B]	< 200	800	<5000	<500	<1000	58	<1300	<2,500	87	<2500	67	1600[B]	44 [B]	<2500	27	18	15	33	29	25
cis-1,2-Dichloroethene	-																<5	<5	7.4	<5	9.3	<5
trans-1,2-Dichloroethene	5	< 1000	< 100	< 25	<2500	<100	<500	< 5	<250	<500	<1	<500	<5	<250	<1	<500	<5	<5	<5	<5	<5	<5
Chloroform	-	< 1000	< 100	< 25	<2500	<100	<500	< 5	<250	<500	<1	<500	<5	<250	<1	<500	<5	<5	<5	<5	<5	<5
1,2-Dichloroethane	-	<1000	<100	<25	<2500	<100	<500	<5	<250	<500	1	<500	<5	<250	<1	<500	<5	<5	<5	<5	<5	<5
2-Butanone	-	< 2000	< 200	82	<5000	<500	<1000	< 10	<1300	<2,500	13	<2500	<10	<1300	<5	<2500	<5	6.5	<5	<10	<5	<10
4-Methyl-2-pentanone	-																	14	14	14	20	<10
Trichloroethene	5	< 1000	< 100	< 25	<2500	<100	<500	< 5	<250	540	2	<500	<5	<250	2	770	<5	<5	<5	<5	<5	<5
Isopropylbenzene	-		< 100	210	<2500	130	310 J	43	<250	<500	210	<500	130	<250	260 E	<500	150	140	180	120	170	190
Benzene	-	< 1000	< 100	26	<2500	<100	<500	6	<250	<500	25	<500	19	<250	27	<500	20	26	25	14	18	21
Toluene	5	6,100	< 100	3,100 D	<2500	1,600	8,400	110,000	2,500	390	4,700 D	3,800	2,900 D	6,500	7,200 D	5,400	4,700	4,500	3,600	3,100	2,500	7,000
Ethylbenzene	5	7,800	550	17,000 D	9,400	8,800	19,000	18,000	11,000	12,000	15,000 D	13,000	160	12,000	14,000[D]	11,000	11,000	9,000	<5	7,900	<5	14,000
Total Xylenes	5	45,000	3,000	97,000 D	51,000	46,000	97,000 E	110,000	72,000	77,000	81,000 D	80,000	57,000 D	87,000	81,000 DE	74,000	72,000	65,000	63,000	64,000	88,000	101,000

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-00 (ug/L)	Feb-00 (ug/L)
Aroclor-1016	0.1	< 0.10	N/A	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10
Aroclor-1221	0.1	< 0.20	N/A	< 0.3	< 0.3	<0.1	<0.2	< 0.2	< 0.2	< 0.2	<0.20	<0.10	<0.20
Aroclor-1232	0.1	< 0.10	N/A	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10
Aroclor-1242	0.1	< 0.10	N/A	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10
Aroclor-1248	0.1	< 0.10	N/A	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10
Aroclor-1254	0.1	< 0.10	N/A	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10
Aroclor-1260	0.1	0.092 J	N/A	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	< 0.1	<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

N/A = Not analyzed

Table 6
RW-5S
Quarterly Sample Results

Volatile Compounds (Method 8260A)	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)
Vinyl Chloride	5	< 100	< 100	< 10	<10	<2	<25	< 5	<1	2	<1	<1	<5	<1	<1	<100	<2	<2	14	<5	<5	<2
Methylene Chloride	-	< 130[B]	580	< 10	<10	8	<25	34	1	1[B]	<1	2[B]	<5	4[B]	9	340	<5	<5	<5	<5	<5	<5
Acetone	-	< 200	< 200	< 20	<20	<10	33 J	11	<5	<5	<5	<5	<10	<5	16[B]	<500	<5	<5	<5	14	35	<10
cis-1,2-Dichloroethene																	<5	<5	180	<5	<5	<5
trans-1,2-Dichloroethene	5	< 100	< 100	< 10	<10	<2	<25	< 5	<1	<1	<1	<1	<5	<1	<1	<100	<5	<5	<5	<5	<5	<5
Chloroform	-	< 100	< 100	< 10	<10	<2	<25	< 5	<1	<1	<1	<1	<5	<1	<1	<100	<5	<5	<5	<5	<5	<5
2-Butanone	-	< 200	440	< 20	<20	66	69	< 10	<5	<5	<5	<5	<10	<5	<1	<500	<5	<5	<5	<10	<5	<10
1,2-Dichloropropane		<100	<100	<10	<10	<2	<25	<5	<1	<5	1	<1	<5	<1	<1	<100	<5	<5	<5	<5	<5	<5
Trichloroethene	5	< 100	< 100	< 10	<10	34	<25	7	<2[B]	7	<1	<1	<5	<1	<1	<100	<5	<5	6.2	<5	<5	<5
Isopropylbenzene	-		< 100	< 10	<10	6	8 J	11	7	<1	4	3	<5	5	4	170	<5	<5	6.9	<5	15	51
Benzene	-	< 100	< 100	< 10	<10	<2	<25	< 5	<1	<1	<1	<1	<5	<1	<1	<100	<1	<1	<1	<5	<5	29
Toluene	5	< 100	< 100	17	15	520	890	320	94	7	16	<1	<5	15	7	6,100	<5	12	370	<5	8.9	6.6
Ethylbenzene	5	620	420	35	<10	57	92	120	74	3	53	22	<5	41	29	16,000	35	20	91	<5	83	180
Total Xylenes	5	2,000	2,300	410	86	520	640	570	330	26	660 D	53	12	82	68	73,000 D	186	231	445	11	274	35

Polychlorinated Biphenyls (PCBs) (Method 8080)	Site GW RAOs (ug/L)	Jul-97 (ug/L)*	Oct-97 (ug/L)	Dec-97 (ug/L)	Mar-98 (ug/L)*	Jun-98 (ug/L)*	Sept-98 (ug/L)*	Nov-98 (ug/L)*	Feb-99 (ug/L)	May-99 (ug/L)	Aug-99 (ug/L)	Nov-99 (ug/L)	Feb-00 (ug/L)
Aroclor-1016	0.1	< 0.10	N/A	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10
Aroclor-1221	0.1	< 0.20	N/A	< 0.3	< 0.3	<0.1	<0.2	< 0.2	< 0.2	<0.20	<0.20	<0.10	<0.20
Aroclor-1232	0.1	< 0.10	N/A	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10
Aroclor-1242	0.1	< 0.10	N/A	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10
Aroclor-1248	0.1	< 0.10	N/A	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10
Aroclor-1254	0.1	< 0.10	N/A	0.28 J	< 0.3	<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10
Aroclor-1260	0.1	0.042 J	N/A	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10

Notes:

The November 2000 analytical data is considered suspect and non-representative of Recovery Well RW-5S.

B = Qualified as non-detect due to blank contamination

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

J = Estimated Concentration

N/A = Not analyzed

Table 7
RW-1D
Quarterly Sample Results

Volatile Compounds (Method 8260A)	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)
Chloromethane	-										4	<2	<1	<5	<1	<1	<5	<5	<5	<5	<5	<5
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
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
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
1,1-Dichloroethene	-	<5	<5	<5	<5	<1	<5	<5	3	4	2	54	85	53	11	41	10	12	12	<5	25	15
cis-1,2-Dichloroethene																	1,500	1,700	1,400	180	3,000	2,300
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
Chloroform	-	< 5	< 5	< 5	<5	<1	<5	< 5	<1	<1	<2	<2	1	<5	<1	<1	<5	<5	<5	<5	<5	<5
2-Butanone	-	< 10	< 10	< 10	<10	<5	<10	< 10	<5	<5	<10	<10	<5	<25	<5	<5	<5	<5	<5	<10	<5	<10
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
Isopropylbenzene	-		< 5	< 5	<5	<1	<5	< 5	<1	<1	<2	<2	<1	<5	<1	<1	<5	<5	<5	<5	<5	<5
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
Toluene	5	< 5	< 5	< 5	<5	<1	<5	< 5	<1	<1	<2	<2	<1	<5	<1	<1	<5	<5	<5	<5	<5	<5
Ethylbenzene	5	< 5	< 5	< 5	<5	<1	<5	< 5	<1	<1	<2	<2	<1	<5	<1	<1	<5	<5	<5	<5	<5	<5
Total Xylenes	5	< 5	< 5	< 5	<5	<1	<5	< 5	<1	<1	<2	<2	<3	<15	<3	<1	<5	<5	<5	<5	<5	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	N/A	< 0.3	< 0.3	<0.1	<0 1	< 0.1	< 0 1	<0 10	<0.10	<0 10	<0.10
Aroclor-1221	0.1	< 0.20	N/A	< 0.3	< 0.3	<0.1	<0.2	< 0.2	< 0.2	<0 20	<0.20	<0 10	<0.20
Aroclor-1232	0.1	< 0.10	N/A	< 0.3	< 0.3	<0.1	<0 1	< 0.1	< 0 1	<0 10	<0.10	<0 10	<0.10
Aroclor-1242	0.1	< 0.10	N/A	< 0.3	< 0.3	<0.1	<0 1	< 0.1	< 0.1	<0.10	<0 10	<0 10	<0.10
Aroclor-1248	0.1	< 0.10	N/A	< 0.3	< 0.3	<0.1	<0 1	< 0.1	< 0 1	<0 10	<0 10	<0 10	<0.10
Aroclor-1254	0.1	< 0.10	N/A	< 0.3	< 0.3	<0.1	<0 1	< 0.1	< 0.1	<0.10	<0.10	<0 10	<0.10
Aroclor-1260	0.1	< 0.10	N/A	< 0.3	< 0.3	<0.1	<0 1	< 0.1	< 0 1	<0 10	<0 10	<0 10	<0.10

Notes:

B = Qualified as non-detect due to blank contamination

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

J = Estimated Concentration

N/A = Not analyzed

Table 8
RW-2D
Quarterly Sample Results

Volatile Compounds (Method 8260A)	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)
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
Methylene Chloride	-	<10	< 12[a]	340	< 5	<250	<25/<25	80 J	< 5	<1	1[a]	<1	260[a]	<5	410[a]	<1	3 06[a]	<5	<5	<5	<5	<5	<5
Acetone	-	<10	< 90[a]	< 100	< 10	<500	<130/<130	<250	< 10	<5	<5	<5	<100	<10	120[a]	<5	<5	<5	<5	<5	<10	<10	<10
1 1-Dichloroethene	-		<5	<50	<5	<250	<25	>120	<5	5	6	<1	65	6	<10	12	25	17	16	25	25	33	<5
cis-1,2-Dichloroethene																		5,200	4,200	7,900	7,800	12,000	50
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
Chloroform	-		< 5	< 50	< 5	<250	<25/<25	<120	< 5	<1	<1	<1	<20	<5	<10	<1	<1	<5	<5	<5	<5	<5	<5
2-Butanone	-		130	270	< 10	<500	<25/<25	<250	< 10	<5	<5	<5	<100	<10	<50	16	<5	<5	<5	<5	<10	<5	28
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
Isopropylbenzene	-			< 50	< 5	<250	<25/<25	<120	< 5	<1	<1	<1	<20	<5	<10	<1	<1	<5	<5	<5	<5	<5	<5
Benzene	-		< 5	< 50	< 5	<250	<25/<25	<120	< 5	<1	<1	2	<20	<5	<10	3	4.7	6.5	7.2	7.5	9.2	9.9	9.1
Tetrachloroethene	-		<5	<50	<5	<250	<25	<120	<5	1	1	1	<20	<5	<10	<1	1.04	<5	<5	<5	<5	<5	<5
Toluene	5		< 5	< 50	< 5	<250	<25/<25	<120	< 5	<1	<1	<1	<20	<5	<10	<1	<1	<5	<5	<5	<5	<5	<5
Ethylbenzene	5		< 5	< 50	< 5	<250	<25/<25	<120	< 5	<1	<1	2	<20	7	<10	<1	<1	<5	<5	<5	<5	<5	<5
Total Xylenes	5	<10	< 5	< 50	< 5	<250	<25/<25	<120	< 5	<2[a]	2	13	<20	38	<30	<3	1.49	<5	<5	<5	8.9	<5	12

Polychlorinated Biphenyls (PCBs) (Method 8080)	Site GW RAOs (ug/L)	Aug-95 (ug/L)**	Jul-97 (ug/L)*	Oct-97 (ug/L)	Dec-97 (ug/L)	Mar-98 (ug/L)*	Jun-98 (ug/L)*	Sept-98 (ug/L)*	Nov-98 (ug/L)*	Feb-99 (ug/L)	May-99 (ug/L)	Aug-99 (ug/L)	Nov-99 (ug/L)	Feb-00 (ug/L)
Aroclor-1016	0 1		< 0.10	N/A	< 0 3	< 0 3	<0 1/<0 1	<0.1	< 0.1	< 0 1	<0.10	<0.10	<0 10	<0 10
Aroclor-1221	0 1		< 0.20	N/A	< 0 3	< 0 3	<0 1/<0 1	<0.2	< 0 2	< 0 2	<0.20	<0.20	<0.10	<0 20
Aroclor-1232	0 1		< 0 10	N/A	< 0 3	< 0 3	<0 1/<0 1	<0.1	< 0 1	< 0 1	<0.10	<0 10	<0 10	<0 10
Aroclor-1242	0 1		< 0 10	N/A	< 0 3	< 0 3	<0 1/<0 1	<0.1	< 0 1	< 0 1	<0.10	<0 10	<0 10	<0 10
Aroclor-1248	0 1		< 0 10	N/A	< 0 3	< 0 3	<0 1/<0 1	<0.1	< 0 1	< 0 1	<0.10	<0 10	<0 10	<0 10
Aroclor-1254	0.1	<1	< 0 10	N/A	< 0 3	< 0 3	<0 1/<0 1	<0.1	< 0 1	< 0 1	<0.10	<0 10	<0 10	<0 10
Aroclor-1260	0.1		< 0 10	N/A	< 0 3	< 0 3	<0 1/<0 1	<0.1	< 0 1	< 0 1	<0.10	<0 10	<0 10	<0 10

Notes:

B = Qualified as non-detect due to blank contamination

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

** Sample results reported represent the highest values obtained from the 5 5 hr and 29 hr samples.

J = Estimated Concentration

N/A = Not analyzed

Table 9
POTW Monthly Monitoring Summary
2002 System Influent/Effluent Data
Volatile Organic Compounds

Pre-Carbon Analytical Results	Jan-27-02 (ug/L)	Mar-1-02 (ug/L)	Mar-28-02 (ug/L)	Apr-25-02 (ug/L)	May-30-02 (ug/L)	June-28-02 (ug/L)	Jul-02 (ug/L)	Aug-02 (ug/L)	Sep-02 (ug/L)	Oct-02 (ug/L)	Nov-02 (ug/L)	Dec-02 (ug/L)
Acetone	<5.0	62	14	<5.0	1,600	<10.0						
Benzene	7.2	6.5	3.8	3.6	5.5	4.3						
2-Butanone	<5.0	<5.0	<5.0	<5.0	45	<10.0						
Chloroform	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0						
Chloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0						
Isopropylbenzene (Cumene)	6.5	9.6	7	5.9	6.1	6.8						
1,1-Dichloroethene	18	11	9.2	10	13	6.8						
cis-1,2-Dichloroethene	5,700	4,700	3,500	3,000	3,600	3,200						
trans-1,2-Dichloroethene	34	41	9.3	7.2	12	7.3						
Ethylbenzene	400	460	510	380	380	610						
Methylene Chloride	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0						
Toluene	170	250	240	190	200	270						
Trichloroethene	320	240	230	<250	260	100						
Vinyl Chloride	720	640	520	520	540	510						
Total Xylenes	3,740	3,210	4,200	3,270	3,190	4,900						
Pre-Carb TOTAL VOCs	11,115.7	9,630.1	9,243.3	7,386.7	9,851.6	9,615.2						

Primary Carbon Analytical Results	Jan-27-02 (ug/L)	Mar-1-02 (ug/L)	Mar-28-02 (ug/L)	Apr-02 (ug/L)	May-02 (ug/L)	June-28-02 (ug/L)	Jul-02 (ug/L)	Aug-02 (ug/L)	Sep-02 (ug/L)	Oct-02 (ug/L)	Nov-02 (ug/L)	Dec-02 (ug/L)
Acetone	<0.5	3,700	270	<5.0	1,200	2,300						
Benzene	<1	<1.0	<1.0	<1.0	<1.0	<1.0						
2-Butanone	<0.5	13	29	<5.0	<5.0	37						
Chloroform	<0.5	<5.0	<5.0	<5.0	<5.0	<5.0						
Chloromethane	<0.5	<5.0	<5.0	<5.0	<5.0	<5.0						
Isopropylbenzene (Cumene)	<0.5	<5.0	<5.0	<5.0	<5.0	<5.0						
1,1-Dichloroethene	<0.5	<5.0	<5.0	<5.0	<5.0	<5.0						
cis-1,2-Dichloroethene	9	27	110	7.3	19	370						
trans-1,2-Dichloroethene	<0.5	<5.0	<5.0	<5.0	<5.0	<5.0						
Ethylbenzene	<0.5	<5.0	<5.0	<5.0	<5.0	6.3						
Methylene Chloride	<0.5	<5.0	<5.0	<5.0	<5.0	<5.0						
Toluene	<0.5	<5.0	<5.0	<5.0	<5.0	<5.0						
Trichloroethene	<0.5	<5.0	<5.0	<5.0	<5.0	<5.0						
Vinyl Chloride	700	1,300	1,100	14	78	670						
Total Xylenes	<0.5	<5.0	7.9	<5.0	<5.0	52						
Primary-Carb TOTAL VOCs	709	5,040	1,516.9	21.3	1,297	3,435.3						

Post-Carbon Analytical Results	Jan-27-02 (ug/L)	Mar-1-02 (ug/L)	Mar-28-02 (ug/L)	Apr-02 (ug/L)	May-02 (ug/L)	June-28-02 (ug/L)	Jul-02 (ug/L)	Aug-02 (ug/L)	Sep-02 (ug/L)	Oct-02 (ug/L)	Nov-02 (ug/L)	Dec-02 (ug/L)
Acetone	<5.0	1,500	1,900	11	<5.0	2,800						
Benzene	<1	<1.0	<5.0	<1.0	<1.0	<1.0						
2-Butanone	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0						
Chloroform	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0						
Chloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0						
Isopropylbenzene (Cumene)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0						
1,1-Dichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0						
cis-1,2-Dichloroethene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0						
trans-1,2-Dichloroethene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0						
Ethylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0						
Methylene Chloride	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0						
Toluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0						
Trichloroethene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0						
Vinyl Chloride	<2	8.2	240	3.4	2.4	3.4						
Total Xylenes	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0						
Post-Carb TOTAL VOCs	ND	1,508.2	2,140	14.4	2.4	2,803.4						

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

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

Pre-Carbon sample results represent system influent.
Primary Carbon sample results represent effluent from the first carbon vessel in the two (2) carbon vessel system.
Post-Carbon sample results represent system effluent from the secondary carbon vessel to the POTW.

B = Qualified as non-detect due to blank contamination
D = Analyzed with dilution, see laboratory reports for dilution factor
J = Estimated Concentration
ND = Non detect
NS = Not Sampled
NA= Not Analyzed

FIGURES

LEGEND

- MONITORING WELL
- RECOVERY WELL
- APPROXIMATE R.O.W. LINE
- PROPERTY LINE
- INFERRED WATER LEVEL CONTOUR
- (1272.85) GROUNDWATER ELEVATION (FEET, MSL)
- PIEZOMETER LOCATION
- APPROXIMATE GROUNDWATER MONITORING POINT LOCATION
- UST AREA TEST BORING LOCATION
- VAPOR PROBE LOCATION

PLANT NORTH
TRUE NORTH

HOPES ARCHITECTURAL PRODUCTS

MW-16S (1268.09)

MW-14S (1267.85) RW-2S (1268.48) MW-15S (1267.88)

HOPKINS AVENUE

MW-6 (1269.97)

CONC. ASPHALT

GP5S (1269.43)

MW-18 (1267.08)

MW-7 (1270.11)

OLD BUILDING FOUNDATION

MW-11 (1269.81)

(1270.03) GP4S

GP1S (1271.52)

GP3S (1270.23)

MW-19S (1267.60)

PZ-6S (1268.67)

VP-6S (1267.20)

MW-10 (1270.83)

CONC. SILO

CONC. RAMP UP

WATER TREATMENT BUILDING

RW-1S (1265.48)

GP2S (1271.55)

MW-20 (1270.68)

PZ-5S (1270.51)

MW-12 (1270.57)

FORMER PLANT 5

HW-10

TW1 (1273.39)

RW-5S (1269.45)

TANK FARM

HW-7 (1272.29)

HW-8 (1273.35)

RW-4S (1268.68)

HW-9 (1271.97)

MW-2 (1271.44)

RW-3S (1269.67)

2-STY. FRAME & CONC. BLOCK BLDG.

MW-5 (1272.77)

MW-4 (1271.83)

3-STY. BRICK BUILDING

FORMER ESSEX SPECIALTY PRODUCTS FACILITY

MW-13 (1271.62)

MW-1 (1268.10)

ANGOVE AVENUE

BLACKSTONE AVENUE

1272 1270 1269 1268 1267 1271

0 60 120
SCALE IN FEET

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).

00080105000202KOC

URS

WATER TABLE CONTOUR MAP
MAY 22, 2002

ESSEX/HOPE SITE — JAMESTOWN, NY

CLIENT: ESSEX SPECIALTY PRODUCTS, INC. — JOB NUMBER: 801419.2010

SCALE: AS SHOWN — FIGURE NUMBER 1 — REV 0

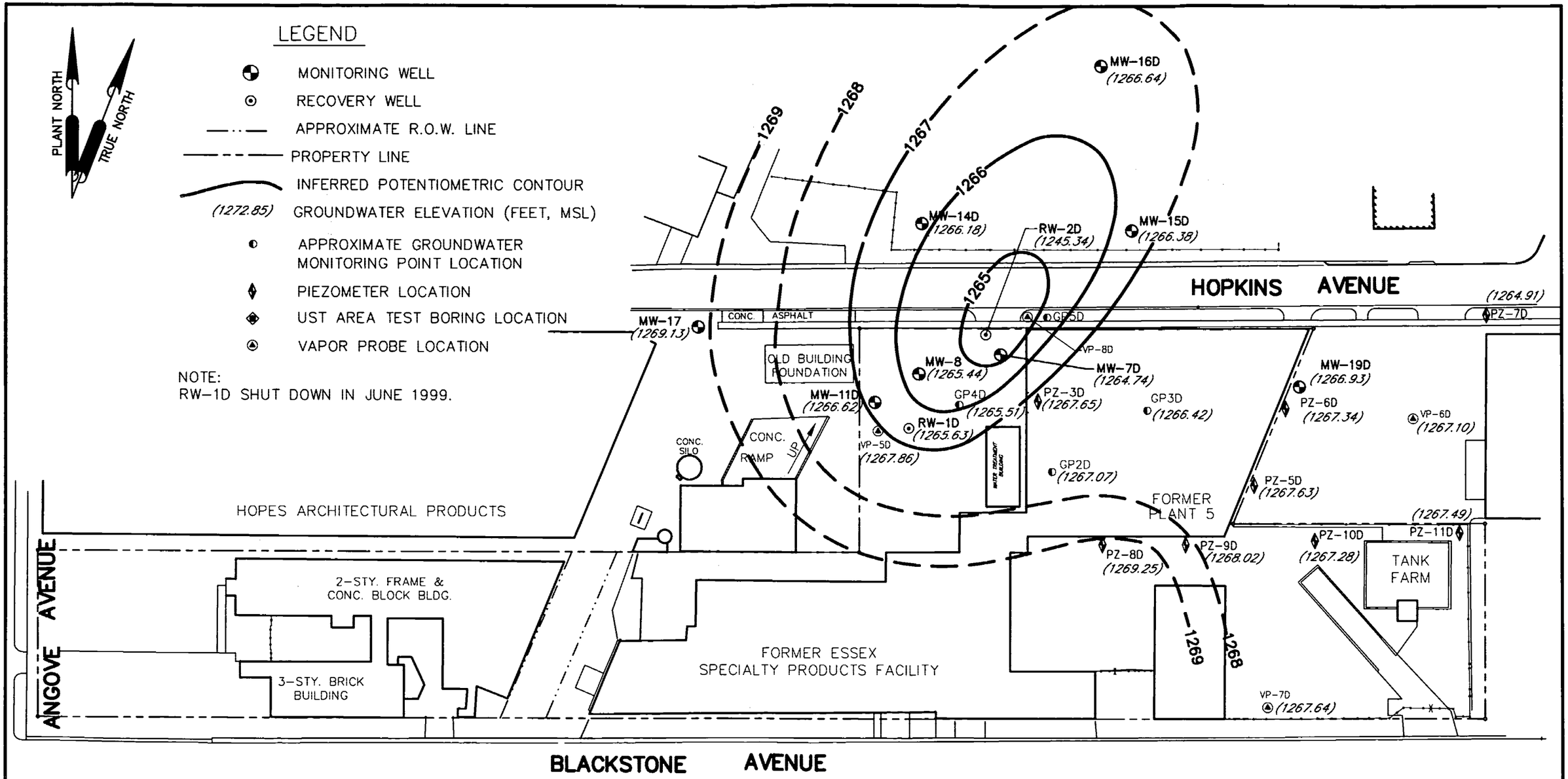
FILE: J:\ESSEXHOP\7138\801419\801419110.DWG

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.

PLANT NORTH
TRUE NORTH



0 60 120
SCALE IN FEET

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:ESSEXHOP\7138\801419\80141911.DWG

00 08 01 06 00 02 OK 0G

URS

POTENTIOMETRIC CONTOUR MAP LOWER FINE SAND WATER BEARING ZONE MAY 22, 2002

ESSEX/HOPE SITE — JAMESTOWN, NY

CLIENT: ESSEX SPECIALTY PRODUCTS, INC. — JOB NUMBER: 801419.2010

SCALE: AS SHOWN — FIGURE NUMBER 2 — REV 0

APPENDIX A

WATER LEVEL MEASUREMENT DATA

Groundwater Extraction System Monitoring Data
January through March 2002 Water Levels

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

Well No.	Northing	Easting	Reference Elevation (ft msl)	Screened Zone	January 16, 2002		February 20, 2002		March 28, 2002	
					Depth to Water	Groundwater Elevation (ft msl)	Depth to Water	Groundwater Elevation (ft msl)	Depth to Water (ft toc)	Groundwater Elevation (ft msl)
MW-1	9758.7161	10383.6499	1280.48	Shallow WBZ	13.58	1266.92	12.80	1267.68	12.11	1268.37
MW-2	9837.1531	9959.6857	1279.87	Shallow WBZ	Dry	NA	Dry	NA	8.07	1271.80
MW-4	9792.3277	9900.7631	1281.02	Shallow WBZ	9.56	1271.46	9.41	1271.61	9.02	1272
MW-5	9789.6222	9631.761	1280.82	Shallow WBZ	8.21	1272.61	8.05	1272.77	7.91	1272.91
MW-6*	9977.1197	10118.8762	1277.98	Shallow WBZ	8.43	1269.55	8.08	1269.9	7.93	1270.05
MW-7*	9976.6467	10175.6797	1277.73	Shallow WBZ	7.81	1269.92	7.84	1269.89	7.61	1270.12
MW-10	9932.4702	10185.7078	1277.94	Shallow WBZ	7.32	1270.62	7.67	1270.27	5.71	1272.23
MW-11*	9937.9912	10101.7016	1277.75	Shallow WBZ	8.82	1268.93	8.60	1269.15	7.46	1270.29
MW-12	9883.0874	10104.9278	1278.18	Shallow WBZ	9.67	1268.51	8.11	1270.07	6.98	1271.2
MW-13	9752.0619	10240.2934	1278.12	Shallow WBZ	11.74	1266.38	8.40	1269.72	5.93	1272.19
MW-14S	10048.7753	10135.5198	1280.25	Shallow WBZ	13.43	1266.82	12.66	1267.59	12.27	1267.98
MW-15S	10051.8272	10254.4862	1279.55	Shallow WBZ	13.36	1266.19	12.54	1267.01	11.72	1267.83
MW-16S	10146.7788	10236.8582	1279.32	Shallow WBZ	12.73	1266.59	12.08	1267.24	11.30	1268.02
MW-18	9994	10465	1275.59	Shallow WBZ	10.09	1265.50	9.43	1266.16	8.71	1266.88
MW-19S	9956.1454	10358.207	1276.82	Shallow WBZ	10.16	1266.66	9.87	1266.95	8.99	1267.83
MW-20	9895.0082	10224.2128	1278.64	Shallow WBZ	6.61	1272.03	7.08	1271.56	5.94	1272.7
HW-1	9874.8053	10079.0259	1281.91	Shallow WBZ	NA	NA	NA	NA	NA	NA
HW-2	9977.6477	10079.7882	1281.13	Shallow WBZ	NA	NA	NA	NA	NA	NA
HW-3	9866.183	9957.6067	1283.24	Shallow WBZ	NA	NA	NA	NA	NA	NA
HW-7	9837.3184	10293.6428	1277.55	Shallow WBZ	5.61	1271.94	5.53	1272.02	NA	NA
HW-8	9834.664	10312.0885	1277.81	Shallow WBZ	6.57	1271.24	5.73	1272.08	NA	NA
HW-9	9810.5264	10313.3873	1280.78	Shallow WBZ	9.26	1271.52	9.02	1271.76	NA	NA
HW-10	9837.2976	9968.7406	1279.55	Shallow WBZ	8.15	1271.40	8.47	1271.08	7.96	1271.59
SP-10	9815.1646	9877.9909	1279.03	Shallow WBZ	NA	NA	NA	NA	NA	NA
SP-11	9839.7586	9877.9072	1279.23	Shallow WBZ	NA	NA	NA	NA	NA	NA
SP-12	9833.1836	9958.7423	1279.68	Shallow WBZ	NA	NA	NA	NA	NA	NA
SP-13	9819.5009	9958.5764	1279.87	Shallow WBZ	NA	NA	NA	NA	NA	NA
SP-14	9807.2232	9967.0477	1279.39	Shallow WBZ	NA	NA	NA	NA	NA	NA
SP-15	9840.6722	10209.4525	1278.65	Shallow WBZ	NA	NA	NA	NA	NA	NA
SP-16	9840.3119	10250.4484	1277.84	Shallow WBZ	NA	NA	NA	NA	NA	NA
SP-17	9845.107	10287.9581	1277.56	Shallow WBZ	NA	NA	NA	NA	NA	NA
SP-18	9855.8421	10323.255	1277.4	Shallow WBZ	NA	NA	NA	NA	NA	NA
SDO-1	N/A	N/A	N/A	Shallow WBZ	NA	NA	NA	NA	NA	NA
RW-1S	9832.8951	10135.8706	1276.06	Shallow WBZ	11.21	1264.85	10.25	1265.81	10.90	1265.16
RW-2S*	9883.3801	10151.6403	1276.59	Shallow WBZ	12.38	1264.21	9.10	1267.49	7.19	1269.4
RW-3S	9838.0584	9890.4502	1278.29	Shallow WBZ	8.56	1269.73	9.29	1269	8.26	1270.03
RW-4S	9839.8053	10221.8768	1277.34	Shallow WBZ	8.39	1268.95	8.37	1268.97	7.89	1269.45
RW-5S	9863.2271	10330.2425	1277.43	Shallow WBZ	7.83	1269.60	7.91	1269.52	7.40	1270.03
MW-7D*	9873.2583	10174.8524	1277.8	Lower Fine Sand WBZ	13.91	1263.89	12.00	1265.8	11.46	1266.34
MW-8	9859.8089	10127.8898	1277.97	Lower Fine Sand WBZ	13.48	1264.49	11.76	1266.18	11.26	1266.71
MW-11D	9842.3782	10101.1482	1277.85	Lower Fine Sand WBZ	13.04	1264.81	11.58	1266.29	11.10	1266.75
MW-14D	10049.5051	10129.1897	1280.01	Lower Fine Sand WBZ	14.78	1265.23	13.42	1266.59	13.16	1266.85
MW-15D	10045.5611	10255.205	1279.48	Lower Fine Sand WBZ	14.26	1265.20	13.13	1266.35	12.88	1266.58
MW-16D	10143.9487	10236.8005	1279.05	Lower Fine Sand WBZ	13.58	1265.47	12.58	1266.46	12.40	1266.65
MW-17	9887.8315	9895.5207	1278.7	Lower Fine Sand WBZ	NA	NA	9.75	1269.95	9.63	1269.07
MW-19D	9951.569	10355.9748	1276.21	Lower Fine Sand WBZ	10.54	1265.67	9.89	1266.32	5.19	1271.02
RW-1D	9828.5987	10121.3968	1276.64	Lower Fine Sand WBZ	11.31	1265.33	10.26	1266.35	9.81	1266.83
RW-2D	9883.0619	10167.3168	1276.48	Lower Fine Sand WBZ	36.42	1240.04	29.40	1247.06	26.63	1249.83
MW-7DD*	9970.8547	10178.2698	1277.74	Glacial Till	2.19	1275.55	2.42	1275.32	2.37	1275.37
GP-1S	9954.39*	10203.02*	1278.98	Shallow WBZ	9.02	1269.96	8.93	1270.05	11.16	1267.82
GP-2S	9914.89*	10201.04*	1278.63	Shallow WBZ	7.33	1271.30	7.53	1271.1	6.21	1272.42
GP-2D	9914.91*	10207.84*	1278.7	Lower Fine Sand WBZ	12.81	1265.89	11.48	1267.22	11.24	1267.46
GP-3S	9941.13*	10264.03*	1278.87	Shallow WBZ	8.81	1270.26	9.18	1269.71	7.70	1271.17
GP-3D	9937.38*	10264.53*	1278.77	Lower Fine Sand WBZ	13.28	1265.49	12.09	1266.68	11.80	1266.97
GP-4S	9940.86*	10154.67*	1278.08	Shallow WBZ	8.26	1269.80	8.03	1270.03	NA	NA
GP-4D	9940.85*	10151.57*	1278.08	Lower Fine Sand WBZ	14.06	1264.02	11.91	1266.17	NA	NA
GP-5S	9993.54*	10200.34*	1277.44	Shallow WBZ	Frozen		8.12	1269.32	7.88	1269.56
GP-5D	9953.55*	10290.21*	1277.37	Lower Fine Sand WBZ	Frozen		Water at Top		NA	NA
PZ-1S			1277.97	Shallow WBZ	8.11	1269.86	8.13	1269.84	NA	NA
PZ-1D			1277.75	Lower Fine Sand WBZ	11.68	1266.07	10.92	1266.83	NA	NA
PZ-2D			1277.88	Lower Fine Sand WBZ	10.94	1266.92	10.44	1267.42	NA	NA
PZ-3D			1279.02	Lower Fine Sand WBZ	12.34	1266.68	11.47	1267.55	11.06	1267.96
PZ-4D			1278.94	Lower Fine Sand WBZ	12.18	1266.76	11.42	1267.52	NA	NA
PZ-5S			1276.56	Shallow WBZ	6.81	1269.75	6.51	1270.05	9.75	1266.81
PZ-5D			1276.52	Lower Fine Sand WBZ	10.31	1266.21	9.28	1267.24	9.16	1267.36
PZ-6S			1276.77	Shallow WBZ	7.08	1269.69	8.71	1268.06	9.71	1267.06
PZ-6D			1276.57	Lower Fine Sand WBZ	10.56	1266.01	9.33	1267.24	9.43	1267.14
PZ-7D			1275.83	Lower Fine Sand WBZ	10.77	1265.06	10.08	1265.75	9.59	1266.24
PZ-8D			1278.63	Lower Fine Sand WBZ	12.03	1266.60	10.91	1267.72	10.82	1267.81
PZ-9D			1278.04	Lower Fine Sand WBZ	11.26	1266.78	10.18	1267.88	10.05	1267.99
PZ-10D			1277.58	Lower Fine Sand WBZ	11.35	1266.23	10.76	1266.82	10.03	1267.55
PZ-11D			1276.7	Lower Fine Sand WBZ	11.09	1265.61	9.88	1266.82	9.91	1266.79
TW-01			1279.1	Shallow WBZ	6.29	1272.81	5.71	1273.39	NA	NA
VP-5D			1278.2	Lower Fine Sand WBZ	12.06	1266.14	10.56	1267.64	10.29	1267.91
VP-6S			1276.62	Upper Gravel of LFSWBZ	10.41	1266.21	10.06	1266.56	7.51	1269.11
VP-6D			1276.71	Lower Fine Sand WBZ	10.89	1265.82	10.23	1266.48	9.59	1267.12
VP-7D			1278.87	Lower Fine Sand WBZ			11.42	1267.45	11.30	1267.57
VP-8D			1277.37	Lower Fine Sand WBZ			10.10	1267.27	9.87	1267.5
Comments					1548 Days of System Operation		1584 Days of System Operation		1620 Days of System Operation	

WBZ - Water Bearing Zone
* = Estimated Coordinate
MW-5 TOC elev. altered from 1280.91 ft msl to 1280.82 ft msl on May 5, 2000
* Wells resurveyed on 10/11/00 due to uplift of concrete from injection work.

Groundwater Extraction System Monitoring Data
May and June 2002 Water Levels

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

Well No.	Northing	Easting	Reference Elevation (ft msl)	Screened Zone	May 7, 2002		May 22, 2002		June 25, 2002	
					Depth to Water	Groundwater Elevation (ft msl)	Depth to Water	Groundwater Elevation (ft msl)	Depth to Water	Groundwater Elevation (ft msl)
MW-1	9758.7181	10383.6499	1280.48	Shallow WBZ	12.88	1267.60	12.38	1268.10	13.67	1266.81
MW-2	9837.1531	9959.6857	1279.87	Shallow WBZ	Dry		Dry	NA	Dry	NA
MW-4	9792.3277	9900.7631	1281.02	Shallow WBZ	9.40	1271.62	9.19	1271.83	10.66	1270.36
MW-5	9789.6222	9631.761	1280.82	Shallow WBZ	8.08	1272.74	8.05	1272.77	8.83	1271.99
MW-6*	9877.1197	10118.8762	1277.98	Shallow WBZ	8.50	1269.48	8.01	1269.97	8.51	1269.47
MW-7*	9876.8467	10175.8797	1277.73	Shallow WBZ	8.29	1269.44	7.62	1270.11	7.98	1269.75
MW-10	9932.4702	10165.7078	1277.94	Shallow WBZ	7.90	1270.04	7.11	1270.83	8.19	1269.75
MW-11*	9937.8912	10101.7016	1277.75	Shallow WBZ	8.46	1269.29	7.94	1269.81	10.81	1266.94
MW-12	9883.0874	10104.9278	1278.18	Shallow WBZ	8.48	1269.70	7.61	1270.57	9.52	1268.66
MW-13	9752.0819	10240.2934	1278.12	Shallow WBZ	7.89	1270.43	6.50	1271.62	8.22	1269.9
MW-14S	10048.7753	10135.5198	1280.25	Shallow WBZ	12.75	1267.50	12.40	1267.85	13.52	1266.73
MW-15S	10051.8272	10254.4862	1279.55	Shallow WBZ	12.84	1266.71	11.67	1267.88	12.97	1266.58
MW-16S	10146.7788	10236.8582	1279.32	Shallow WBZ	12.35	1266.97	11.23	1268.09	12.4	1266.92
MW-18	9994	10485	1275.59	Shallow WBZ	9.64	1265.95	8.51	1267.08	10.17	1265.42
MW-19S	9956.1454	10358.207	1276.82	Shallow WBZ	10.02	1266.80	9.22	1267.60	10.79	1266.03
MW-20	9895.0082	10224.2128	1278.64	Shallow WBZ	7.26	1271.38	7.96	1270.68	8.62	1270.02
HW-1	9874.8053	10079.0259	1281.91	Shallow WBZ	NA	NA	NA	NA	NA	NA
HW-2	9977.6477	10079.7882	1281.13	Shallow WBZ	NA	NA	NA	NA	NA	NA
HW-3	9868.163	9957.6007	1283.24	Shallow WBZ	NA	NA	NA	NA	NA	NA
HW-7	9837.3164	10263.8428	1277.55	Shallow WBZ	5.68	1271.87	5.26	1272.29	6.09	1271.48
HW-8	9834.664	10312.0885	1277.81	Shallow WBZ	5.96	1271.85	4.46	1273.35	5.46	1272.35
HW-9	9810.5264	10313.3873	1280.78	Shallow WBZ	9.15	1271.63	8.81	1271.97	9.31	1271.47
HW-10	9837.2978	9988.7408	1279.55	Shallow WBZ	8.44	1271.11	8.11	1271.44	9.24	1270.31
SP-10	9815.1648	9977.9906	1279.03	Shallow WBZ	NA	NA	NA	NA	NA	NA
SP-11	9839.7568	9977.9072	1279.23	Shallow WBZ	NA	NA	NA	NA	NA	NA
SP-12	9833.1836	9958.7423	1279.68	Shallow WBZ	NA	NA	NA	NA	NA	NA
SP-13	9819.5009	9958.5764	1279.87	Shallow WBZ	NA	NA	NA	NA	NA	NA
SP-14	9807.2232	9967.0477	1279.39	Shallow WBZ	NA	NA	NA	NA	NA	NA
SP-15	9840.6722	10209.4525	1278.65	Shallow WBZ	NA	NA	NA	NA	NA	NA
SP-16	9840.3119	10250.4484	1277.84	Shallow WBZ	NA	NA	NA	NA	NA	NA
SP-17	9845.107	10287.9591	1277.56	Shallow WBZ	NA	NA	NA	NA	NA	NA
SP-18	9855.8421	10323.265	1277.4	Shallow WBZ	NA	NA	NA	NA	NA	NA
SDO-1	N/A	N/A	N/A	Shallow WBZ	NA	NA	NA	NA	NA	NA
RW-1S	9932.8951	10135.8706	1276.06	Shallow WBZ	11.00	1265.06	10.58	1265.48	10.64	1265.42
RW-2S*	9883.3801	10151.6403	1276.59	Shallow WBZ	10.60	1265.99	8.11	1268.48	8.18	1268.41
RW-3S	9838.0594	9990.4502	1278.29	Shallow WBZ	8.72	1269.57	8.62	1269.67	8.7	1269.59
RW-4S	9839.8053	10221.6768	1277.34	Shallow WBZ	8.06	1269.28	8.66	1268.68	8.83	1268.51
RW-5S	9883.2271	10330.2425	1277.43	Shallow WBZ	8.15	1269.28	7.98	1269.45	7.96	1269.47
MW-7D*	9973.2593	10174.8524	1277.8	Lower Fine Sand WBZ	11.20	1266.60	13.06	1264.74	14.29	1263.51
MW-8	9959.6088	10127.6898	1277.97	Lower Fine Sand WBZ	11.11	1266.86	12.53	1265.44	13.17	1264.8
MW-11D	9942.3792	10101.1482	1277.85	Lower Fine Sand WBZ	10.78	1267.07	11.23	1266.62	12.1	1265.75
MW-14D	10049.5051	10129.1897	1280.01	Lower Fine Sand WBZ	13.04	1266.97	13.83	1266.18	15.06	1264.93
MW-15D	10045.5611	10255.205	1279.46	Lower Fine Sand WBZ	12.98	1266.48	13.08	1266.38	14.67	1264.79
MW-16D	10143.9497	10236.6005	1279.05	Lower Fine Sand WBZ	12.60	1266.45	12.41	1266.64	13.98	1265.07
MW-17	9987.6315	9995.5207	1278.7	Lower Fine Sand WBZ	9.47	1269.23	9.57	1269.13	10.29	1268.41
MW-19D	9951.569	10355.9748	1276.21	Lower Fine Sand WBZ	9.88	1266.33	9.28	1266.93	10.11	1266.1
RW-1D	9926.5997	10121.3968	1275.64	Lower Fine Sand WBZ	9.64	1267.00	11.01	1265.63	11.13	1265.51
RW-2D	9983.0618	10187.3168	1276.48	Lower Fine Sand WBZ	22.27	1254.19	31.12	1245.34	31.22	1245.24
MW-7DD*	9970.8547	10176.2598	1277.74	Glacial Till	2.32	1275.42	1.41	1276.33	2.66	1275.06
GP-1S	9954.39*	10203.02*	1278.98	Shallow WBZ	9.15	1269.83	7.46	1271.52	8.08	1270.9
GP-2S	9914.89*	10201.04*	1278.63	Shallow WBZ	7.59	1271.04	7.08	1271.55	7.57	1271.06
GP-2D	9914.91*	10207.84*	1278.7	Lower Fine Sand WBZ	11.30	1267.40	11.63	1267.07	14.22	1264.48
GP-3S	9941.13*	10264.03*	1278.87	Shallow WBZ	9.23	1269.64	8.64	1270.23	9.39	1269.48
GP-3D	9937.38*	10264.53*	1278.77	Lower Fine Sand WBZ	11.84	1266.93	12.35	1266.42	14.09	1264.68
GP-4S	9940.86*	10154.97*	1278.06	Shallow WBZ	8.50	1269.56	8.01	1270.05	8.71	1269.35
GP-4D	9940.85*	10151.57*	1278.08	Lower Fine Sand WBZ	11.20	1266.88	12.57	1265.51	14.88	1263.2
GP-5S	9993.54*	10200.34*	1277.44	Shallow WBZ	8.51	1268.93	8.01	1269.43	8.91	1268.53
GP-5D	9993.55*	10280.21*	1277.37	Lower Fine Sand WBZ	NA	NA	NA	NA	2.26	1275.11
PZ-1S			1277.97	Shallow WBZ	8.18	1269.81	8.17	1269.80	8.88	1269.11
PZ-1D			1277.75	Lower Fine Sand WBZ	10.62	1267.13	10.88	1266.87	11.39	1266.36
PZ-2D			1277.86	Lower Fine Sand WBZ	10.11	1267.75	10.33	1267.53	10.97	1266.89
PZ-3D			1279.02	Lower Fine Sand WBZ	11.28	1267.74	11.37	1267.65	12.44	1266.58
PZ-4D			1278.94	Lower Fine Sand WBZ	11.34	1267.60	11.31	1267.63	12.38	1266.56
PZ-5S			1275.56	Shallow WBZ	6.58	1269.98	6.05	1270.51	9.18	1267.4
PZ-5D			1275.52	Lower Fine Sand WBZ	9.28	1267.24	8.89	1267.63	11.08	1265.48
PZ-6S			1276.77	Shallow WBZ	8.73	1268.04	8.10	1268.67	9.12	1267.65
PZ-6D			1276.57	Lower Fine Sand WBZ	9.18	1267.39	9.23	1267.34	10.82	1265.75
PZ-7D			1275.83	Lower Fine Sand WBZ	10.40	1265.43	10.92	1264.91	11.71	1264.12
PZ-8D			1278.63	Lower Fine Sand WBZ	11.01	1267.62	9.38	1269.25	10.93	1267.7
PZ-9D			1278.04	Lower Fine Sand WBZ	10.25	1267.79	10.02	1268.02	11	1267.04
PZ-10D			1277.58	Lower Fine Sand WBZ	11.25	1266.33	10.30	1267.28	11.55	1266.03
PZ-11D			1276.7	Lower Fine Sand WBZ	10.33	1266.37	9.21	1267.49	10.04	1266.66
TW-01			1279.1	Shallow WBZ	6.03	1273.07	5.71	1273.39	6.31	1272.79
VP-5D			1278.2	Lower Fine Sand WBZ	10.22	1267.98	10.34	1267.86	11.96	1266.24
VP-6S			1276.62	Upper Gravel of LFSWBZ	10.21	1266.41	9.42	1267.20	10.52	1266.1
VP-6D			1278.71	Lower Fine Sand WBZ	10.41	1268.30	9.61	1267.10	10.89	1265.82
VP-7D			1278.87	Lower Fine Sand WBZ	11.60	1267.27	11.23	1267.64	12.85	1266.02
VP-8D			1277.37	Lower Fine Sand WBZ	9.95	1267.42	10.41	1266.96	11.60	1265.77
Comments					1660 Days of System Operation		1675 Days of System Operation		1709 Days of System Operation	

WBZ - Water Bearing Zone
* = Estimated Coordinate
MW-5 TOC elev. altered from 1280.91 ft msl to 1280.82 ft msl on May 5, 2000
* Wells resurveyed on 10/11/00 due to uplift of concrete from injection work.

Groundwater Extraction System Monitoring Data
July through September 2002 Water Levels

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

Well No.	Northing	Easting	Reference Elevation (ft msl)	Screened Zone	July 22, 2002					
					Depth to Water	Groundwater Elevation (ft msl)	Depth to Water	Groundwater Elevation (ft msl)	Depth to Water	Groundwater Elevation (ft msl)
MW-1	9758.7161	10383.6499	1280.48	Shallow WBZ	13.43	1267.05				
MW-2	9837.1531	9959.6857	1279.87	Shallow WBZ	Dry					
MW-4	9792.3277	9900.7631	1281.02	Shallow WBZ	9.46	1271.56				
MW-5	9789.6222	9631.761	1280.82	Shallow WBZ	8.13	1272.69				
MW-6*	9977.1197	10118.8782	1277.98	Shallow WBZ	8.26	1269.72				
MW-7*	9978.6467	10175.6797	1277.73	Shallow WBZ	8.36	1269.37				
MW-10	9932.4702	10185.7078	1277.94	Shallow WBZ	8.04	1269.90				
MW-11*	9937.9912	10101.7016	1277.75	Shallow WBZ	8.76	1268.99				
MW-12	9883.0874	10104.9278	1278.18	Shallow WBZ	10.02	1268.16				
MW-13	9752.0619	10240.2934	1278.12	Shallow WBZ	9.96	1268.16				
MW-14S	10048.7753	10135.5198	1280.25	Shallow WBZ	13.73	1266.52				
MW-15S	10051.8272	10254.4862	1279.55	Shallow WBZ	13.89	1265.66				
MW-16S	10149.7788	10236.6582	1279.32	Shallow WBZ	12.97	1266.35				
MW-18	9994	10485	1275.59	Shallow WBZ	10.13	1265.46				
MW-19S	9959.1454	10358.207	1276.82	Shallow WBZ	10.93	1265.89				
MW-20	9895.0082	10224.2128	1278.64	Shallow WBZ	5.86	1272.78				
HW-1	9874.8053	10079.0259	1281.91	Shallow WBZ	NA	NA				
HW-2	9877.6477	10079.7882	1281.13	Shallow WBZ	NA	NA				
HW-3	9886.183	9957.6007	1283.24	Shallow WBZ	NA	NA				
HW-7	9837.3164	10293.8428	1277.55	Shallow WBZ	6.38	1271.17				
HW-8	9834.684	10312.0885	1277.81	Shallow WBZ	6.65	1271.16				
HW-9	9810.5264	10313.3873	1280.78	Shallow WBZ	9.29	1271.49				
HW-10	9837.2976	9966.7406	1279.55	Shallow WBZ	8.82	1270.73				
SP-10	9815.1646	9977.9909	1279.03	Shallow WBZ	NA	NA				
SP-11	9839.7556	9977.6072	1279.23	Shallow WBZ	NA	NA				
SP-12	9833.1836	9958.7423	1279.68	Shallow WBZ	NA	NA				
SP-13	9819.5009	9958.5764	1279.67	Shallow WBZ	NA	NA				
SP-14	9807.2232	9967.0477	1279.38	Shallow WBZ	NA	NA				
SP-15	9840.6722	10209.4525	1278.65	Shallow WBZ	NA	NA				
SP-16	9840.3119	10250.4484	1277.84	Shallow WBZ	NA	NA				
SP-17	9845.107	10287.9591	1277.58	Shallow WBZ	NA	NA				
SP-18	9855.8421	10323.265	1277.4	Shallow WBZ	NA	NA				
SOO-1	N/A	N/A	N/A	Shallow WBZ	NA	NA				
RW-1S	9932.8951	10135.8706	1276.06	Shallow WBZ	9.26	1266.78				
RW-2S*	9993.3801	10151.6403	1276.59	Shallow WBZ	10.39	1266.20				
RW-3S	9838.0594	9990.4502	1278.29	Shallow WBZ	9.03	1269.26				
RW-4S	9839.8053	10221.6766	1277.34	Shallow WBZ	8.76	1268.58				
RW-5S	9863.2271	10330.2425	1277.43	Shallow WBZ	8.19	1269.24				
MW-7D*	9973.2593	10174.8524	1277.8	Lower Fine Sand WBZ	13.47	1264.33				
MW-8	9959.6089	10127.8898	1277.97	Lower Fine Sand WBZ	12.46	1265.51				
MW-11D	9942.3792	10101.1482	1277.85	Lower Fine Sand WBZ	10.98	1266.89				
MW-14D	10049.5051	10129.1897	1280.01	Lower Fine Sand WBZ	14.71	1265.30				
MW-15D	10045.5611	10255.705	1279.48	Lower Fine Sand WBZ	14.42	1265.04				
MW-16D	10143.8497	10236.6005	1279.05	Lower Fine Sand WBZ	13.89	1265.16				
MW-17	9987.8315	9995.5207	1278.7	Lower Fine Sand WBZ	10.72	1267.98				
MW-19D	9951.569	10355.9748	1276.21	Lower Fine Sand WBZ	11.17	1265.04				
RW-1D	9926.5997	10121.3968	1276.64	Lower Fine Sand WBZ	11.69	1264.95				
RW-2D	9983.0619	10167.3168	1276.46	Lower Fine Sand WBZ	28.69	1247.77				
MW-7DD*	9970.8547	10176.2698	1277.74	Glacial Till	2.06	1275.68				
GP-1S	9954.39*	10203.02*	1278.98	Shallow WBZ	10.07	1268.91				
GP-2S	9814.89*	10201.04*	1278.63	Shallow WBZ	7.06	1271.57				
GP-2D	9914.91*	10207.84*	1278.7	Lower Fine Sand WBZ	12.83	1265.87				
GP-3S	9941.13*	10264.03*	1278.87	Shallow WBZ	10.83	1268.04				
GP-3D	9937.38*	10264.53*	1278.77	Lower Fine Sand WBZ	13.47	1265.30				
GP-4S	9940.85*	10154.97*	1278.06	Shallow WBZ	8.76	1269.30				
GP-4D	9940.85*	10151.57*	1278.08	Lower Fine Sand WBZ	12.29	1265.79				
GP-5S	9993.54*	10200.34*	1277.44	Shallow WBZ	8.61	1268.83				
GP-5D	9993.55*	10200.21*	1277.37	Lower Fine Sand WBZ	NA	NA				
PZ-1S			1277.97	Shallow WBZ	8.62	1269.35				
PZ-1D			1277.75	Lower Fine Sand WBZ	11.88	1265.87				
PZ-2D			1277.86	Lower Fine Sand WBZ	11.39	1266.47				
PZ-3D			1279.02	Lower Fine Sand WBZ	12.21	1266.81				
PZ-4D			1278.94	Lower Fine Sand WBZ	12.51	1266.43				
PZ-5S			1276.59	Shallow WBZ	8.27	1268.29				
PZ-5D			1276.52	Lower Fine Sand WBZ	10.48	1266.04				
PZ-6S			1276.77	Shallow WBZ	10.15	1266.62				
PZ-6D			1276.57	Lower Fine Sand WBZ	9.98	1266.59				
PZ-7D			1275.83	Lower Fine Sand WBZ	11.13	1264.70				
PZ-8D			1278.63	Lower Fine Sand WBZ	12.27	1266.36				
PZ-9D			1278.04	Lower Fine Sand WBZ	11.43	1266.61				
PZ-10D			1277.58	Lower Fine Sand WBZ	11.72	1265.86				
PZ-11D			1276.7	Lower Fine Sand WBZ	11.31	1265.39				
TW-01			1279.1	Shallow WBZ	4.88	1274.24				
VP-5D			1278.2	Lower Fine Sand WBZ	9.96	1268.24				
VP-6S			1276.62	Upper Gravel of LFSWBZ	10.93	1265.69				
VP-6D			1276.71	Lower Fine Sand WBZ	11.20	1265.51				
VP-7D			1278.87	Lower Fine Sand WBZ	12.31	1266.56				
VP-8D			1277.37	Lower Fine Sand WBZ	11.28	1266.09				

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.

1736 Days of System Operation

B

APPENDIX B

LABORATORY CERTIFICATES OF ANALYSIS

Pace Analytical™
www.pacelabs.com

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

July 26, 2002

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 6, 2002. Please reference Pace project number 02-2838 when inquiring about this report.

Client Site: Essex-Hope
Client Ref.: 801419.2030

Pace Sample Indentification	Client Sample Identification
0207-0647	RW-1S
0207-0648	RW-1D
0207-0649	RW-2S
0207-0650	RW-2D

Pace Sample Indentification	Client Sample Identification
0207-0651	RW-3S
0207-0652	RW-4S
0207-0653	RW-5S
0207-0654	Trip Blank

General Comments: Cooler temperature 8.1 ° C upon receipt. Ice was present.

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

Sincerely,

Penelope J Morris

Penelope J. Morris
Project Manager

PJG: jld

Enclosures

REPORT OF LABORATORY ANALYSIS

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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: **02-2838**
Lab Sample ID: **0207-0647**
Client Sample ID: RW-1S
Sample Matrix: Aqueous

Date Sampled: 07/05/2002
Date Received: 07/06/2002

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Acetone	8260B(1)	14	10	ug/l	ALB	07/19/2002	072304-14	<10
Benzene	8260B(1)	<1.0	1.0	ug/l	ALB	07/19/2002	072304-14	<1.0
Bromodichloromethane	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
Bromoform	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
Bromomethane	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
2-Butanone	8260B(1)	<10	10	ug/l	ALB	07/19/2002	072304-14	<10
Carbon Disulfide	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
Carbon Tetrachloride	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
Chlorobenzene	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
Chloroethane	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
Chloroform	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
Chloromethane	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
Cumene	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
Dibromochloromethane	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
1,2-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
1,3-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
1,4-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
1,1-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
1,2-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
1,1-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
cis-1,2-Dichloroethene	8260B(1)	59	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
trans-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
1,2-Dichloropropane	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
cis-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
trans-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
Ethylbenzene	8260B(1)	77	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
2-Hexanone	8260B(1)	<10	10	ug/l	ALB	07/19/2002	072304-14	<10
4-Methyl-2-pentanone	8260B(1)	<10	10	ug/l	ALB	07/19/2002	072304-14	<10
Methylene chloride	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
Styrene	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0

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Lab Sample ID: **0207-0647**
Client Sample ID: RW-1S

Volatiles (Cont.)

1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
Toluene	8260B[1]	38	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
Trichloroethene	8260B[1]	360	50	ug/l	JEC	07/18/2002	072204-01	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
Vinyl chloride	8260B[1]	<2.0	2.0	ug/l	ALB	07/19/2002	072304-14	<2.0
m,p-Xylene	8260B[1]	400	50	ug/l	JEC	07/18/2002	072204-01	<5.0
o-Xylene	8260B[1]	80	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0

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

Sample Comments: Results reported on an as received basis.

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Pittsburgh, PA 15205

Client Site: Essex-Hope
Client Ref.: 801419.2030

Lab Project ID: **02-2838**
Lab Sample ID: **0207-0648**
Client Sample ID: RW-1D
Sample Matrix: Aqueous

Date Sampled: 07/05/2002
Date Received: 07/06/2002

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Acetone	8260B(1)	<10	10	ug/l	JEC	07/18/2002	072204-01	<10
Benzene	8260B(1)	6.6	1.0	ug/l	JEC	07/18/2002	072204-01	<1.0
Bromodichloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Bromoform	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Bromomethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
2-Butanone	8260B(1)	<10	10	ug/l	JEC	07/18/2002	072204-01	<10
Carbon Disulfide	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Carbon Tetrachloride	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Chlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Chloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Chloroform	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Chloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Cumene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Dibromochloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,2-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,3-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,4-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,1-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,2-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,1-Dichloroethene	8260B(1)	15	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
cis-1,2-Dichloroethene	8260B(1)	2300	250	ug/l	JEC	07/18/2002	072204-01	<5.0
trans-1,2-Dichloroethene	8260B(1)	9.4	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,2-Dichloropropane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
cis-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
trans-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Ethylbenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
2-Hexanone	8260B(1)	<10	10	ug/l	JEC	07/18/2002	072204-01	<10
4-Methyl-2-pentanone	8260B(1)	<10	10	ug/l	JEC	07/18/2002	072204-01	<10
Methylene chloride	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Styrene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0

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Lab Sample ID: **0207-0648**
Client Sample ID: RW-1D

Volatiles (Cont.)

1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Toluene	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Trichloroethene	8260B[1]	8.1	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Vinyl chloride	8260B[1]	<100	100	ug/l	JEC	07/18/2002	072204-01	<2.0
m,p-Xylene	8260B[1]	15	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
o-Xylene	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<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. VOA: Vinyl chloride in the analysis of the sample without dilution yielded a concentration that was out of the calibration range (high). A dilution was run and there were no positives for vinyl chloride at or above the detection limit. A second dilution was done to confirm results and again there were no positives for vinyl chloride at or above the detection limit. All of the sample was consumed in the three runs. Vinyl chloride is reported with an elevated detection limit for this sample.

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Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Client Site: Essex-Hope
Client Ref.: 801419.2030

Lab Project ID: 02-2838
Lab Sample ID: 0207-0649
Client Sample ID: RW-2S
Sample Matrix: Aqueous

Date Sampled: 07/05/2002
Date Received: 07/06/2002

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Acetone	8260B(1)	<10	10	ug/l	JEC	07/18/2002	072204-01	<10
Benzene	8260B(1)	<1.0	1.0	ug/l	JEC	07/18/2002	072204-01	<1.0
Bromodichloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Bromoform	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Bromomethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
2-Butanone	8260B(1)	<10	10	ug/l	JEC	07/18/2002	072204-01	<10
Carbon Disulfide	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Carbon Tetrachloride	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Chlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Chloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Chloroform	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Chloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Cumene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Dibromochloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,2-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,3-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,4-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,1-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,2-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,1-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
cis-1,2-Dichloroethene	8260B(1)	6.6	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
trans-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,2-Dichloropropane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
cis-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
trans-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Ethylbenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
2-Hexanone	8260B(1)	<10	10	ug/l	JEC	07/18/2002	072204-01	<10
4-Methyl-2-pentanone	8260B(1)	<10	10	ug/l	JEC	07/18/2002	072204-01	<10
Methylene chloride	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Styrene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0

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Lab Sample ID: **0207-0649**
Client Sample ID: RW-2S

Volatiles (Cont.)

1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Toluene	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Trichloroethene	8260B[1]	200	10	ug/l	ALB	07/19/2002	072304-14	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Vinyl chloride	8260B[1]	<2.0	2.0	ug/l	JEC	07/18/2002	072204-01	<2.0
m,p-Xylene	8260B[1]	6.5	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
o-Xylene	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<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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Client Site: Essex-Hope
Client Ref.: 801419.2030

Lab Project ID: **02-2838**
Lab Sample ID: **0207-0650**
Client Sample ID: RW-2D
Sample Matrix: Aqueous

Date Sampled: 07/05/2002
Date Received: 07/06/2002

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Acetone	8260B(1)	<10	10	ug/l	ALB	07/19/2002	072304-14	<10
Benzene	8260B(1)	9.1	1.0	ug/l	ALB	07/19/2002	072304-14	<1.0
Bromodichloromethane	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
Bromoform	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
Bromomethane	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
2-Butanone	8260B(1)	28	10	ug/l	ALB	07/19/2002	072304-14	<10
Carbon Disulfide	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
Carbon Tetrachloride	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
Chlorobenzene	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
Chloroethane	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
Chloroform	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
Chloromethane	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
Cumene	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
Dibromochloromethane	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
1,2-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
1,3-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
1,4-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
1,1-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
1,2-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
1,1-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
cis-1,2-Dichloroethene	8260B(1)	50	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
trans-1,2-Dichloroethene	8260B(1)	7.8	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
1,2-Dichloropropane	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
cis-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
trans-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
Ethylbenzene	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
2-Hexanone	8260B(1)	<10	10	ug/l	ALB	07/19/2002	072304-14	<10
4-Methyl-2-pentanone	8260B(1)	<10	10	ug/l	ALB	07/19/2002	072304-14	<10
Methylene chloride	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
Styrene	8260B(1)	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0

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Lab Sample ID: **0207-0650**
Client Sample ID: RW-2D

Volatiles (Cont.)

1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
Toluene	8260B[1]	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
Trichloroethene	8260B[1]	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
Vinyl chloride	8260B[1]	55	2.0	ug/l	ALB	07/19/2002	072304-14	<2.0
m,p-Xylene	8260B[1]	12	5.0	ug/l	ALB	07/19/2002	072304-14	<5.0
o-Xylene	8260B[1]	<5.0	5.0	ug/l	ALB	07/19/2002	072304-14	<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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Client Site: Essex-Hope
Client Ref.: 801419.2030

Lab Project ID: **02-2838**
Lab Sample ID: **0207-0651**
Client Sample ID: RW-3S
Sample Matrix: Aqueous

Date Sampled: 07/05/2002
Date Received: 07/06/2002

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Acetone	8260B(1)	<10	10	ug/l	JEC	07/18/2002	072204-01	<10
Benzene	8260B(1)	<1.0	1.0	ug/l	JEC	07/18/2002	072204-01	<1.0
Bromodichloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Bromoform	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Bromomethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
2-Butanone	8260B(1)	<10	10	ug/l	JEC	07/18/2002	072204-01	<10
Carbon Disulfide	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Carbon Tetrachloride	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Chlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Chloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Chloroform	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Chloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Cumene	8260B(1)	15	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Dibromochloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,2-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,3-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,4-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,1-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,2-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,1-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
cis-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
trans-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,2-Dichloropropane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
cis-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
trans-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Ethylbenzene	8260B(1)	97	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
2-Hexanone	8260B(1)	<10	10	ug/l	JEC	07/18/2002	072204-01	<10
4-Methyl-2-pentanone	8260B(1)	<10	10	ug/l	JEC	07/18/2002	072204-01	<10
Methylene chloride	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Styrene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0

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Lab Sample ID: **0207-0651**
Client Sample ID: RW-3S

Volatiles (Cont.)

1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Toluene	8260B[1]	140	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Trichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Vinyl chloride	8260B[1]	<2.0	2.0	ug/l	JEC	07/18/2002	072204-01	<2.0
m,p-Xylene	8260B[1]	32	25	ug/l	ALB	07/19/2002	072304-14	<5.0
o-Xylene	8260B[1]	63	5.0	ug/l	JEC	07/18/2002	072204-01	<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.

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Client Site: Essex-Hope
Client Ref.: 801419.2030

Lab Project ID: 02-2838
Lab Sample ID: 0207-0652
Client Sample ID: RW-4S
Sample Matrix: Aqueous

Date Sampled: 07/05/2002
Date Received: 07/06/2002

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Acetone	8260B(1)	25	10	ug/l	JEC	07/18/2002	072204-01	<10
Benzene	8260B(1)	21	1.0	ug/l	JEC	07/18/2002	072204-01	<1.0
Bromodichloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Bromoform	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Bromomethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
2-Butanone	8260B(1)	<10	10	ug/l	JEC	07/18/2002	072204-01	<10
Carbon Disulfide	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Carbon Tetrachloride	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Chlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Chloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Chloroform	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Chloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Cumene	8260B(1)	190	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Dibromochloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,2-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,3-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,4-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,1-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,2-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,1-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
cis-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
trans-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,2-Dichloropropane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
cis-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
trans-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Ethylbenzene	8260B(1)	14000	2500	ug/l	JEC	07/18/2002	072204-01	<5.0
2-Hexanone	8260B(1)	<10	10	ug/l	JEC	07/18/2002	072204-01	<10
4-Methyl-2-pentanone	8260B(1)	<10	10	ug/l	JEC	07/18/2002	072204-01	<10
Methylene chloride	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Styrene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0

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Volatiles (Cont.)

1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Toluene	8260B[1]	7000	250	ug/l	JEC	07/18/2002	072204-01	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Trichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Vinyl chloride	8260B[1]	<2.0	2.0	ug/l	JEC	07/18/2002	072204-01	<2.0
m,p-Xylene	8260B[1]	77000	2500	ug/l	JEC	07/18/2002	072204-01	<5.0
o-Xylene	8260B[1]	24000	2500	ug/l	JEC	07/18/2002	072204-01	<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.

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Client Site: Essex-Hope
Client Ref.: 801419.2030

Lab Project ID: **02-2838**
Lab Sample ID: **0207-0653**
Client Sample ID: RW-5S
Sample Matrix: Aqueous

Date Sampled: 07/05/2002
Date Received: 07/06/2002

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Acetone	8260B(1)	<10	10	ug/l	JEC	07/18/2002	072204-01	<10
Benzene	8260B(1)	29	1.0	ug/l	JEC	07/18/2002	072204-01	<1.0
Bromodichloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Bromoform	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Bromomethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
2-Butanone	8260B(1)	<10	10	ug/l	JEC	07/18/2002	072204-01	<10
Carbon Disulfide	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Carbon Tetrachloride	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Chlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Chloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Chloroform	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Chloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Cumene	8260B(1)	51	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Dibromochloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,2-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,3-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,4-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,1-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,2-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,1-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
cis-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
trans-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,2-Dichloropropane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
cis-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
trans-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Ethylbenzene	8260B(1)	180	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
2-Hexanone	8260B(1)	<10	10	ug/l	JEC	07/18/2002	072204-01	<10
4-Methyl-2-pentanone	8260B(1)	<10	10	ug/l	JEC	07/18/2002	072204-01	<10
Methylene chloride	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Styrene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0

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Client Sample ID: RW-5S

Volatiles (Cont.)

1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Toluene	8260B[1]	6.6	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Trichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Vinyl chloride	8260B[1]	<2.0	2.0	ug/l	JEC	07/18/2002	072204-01	<2.0
m,p-Xylene	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
o-Xylene	8260B[1]	35	5.0	ug/l	JEC	07/18/2002	072204-01	<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

Client Site: Essex-Hope
Client Ref.: 801419.2030

Lab Project ID: **02-2838**
Lab Sample ID: **0207-0654**
Client Sample ID: Trip Blank
Sample Matrix: Aqueous

Date Sampled: 07/05/2002
Date Received: 07/06/2002

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Acetone	8260B(1)	<10	10	ug/l	JEC	07/18/2002	072204-01	<10
Benzene	8260B(1)	<1.0	1.0	ug/l	JEC	07/18/2002	072204-01	<1.0
Bromodichloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Bromoform	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Bromomethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
2-Butanone	8260B(1)	<10	10	ug/l	JEC	07/18/2002	072204-01	<10
Carbon Disulfide	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Carbon Tetrachloride	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Chlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Chloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Chloroform	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Chloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Cumene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Dibromochloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,2-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,3-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,4-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,1-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,2-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,1-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
cis-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
trans-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,2-Dichloropropane	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
cis-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
trans-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Ethylbenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
2-Hexanone	8260B(1)	<10	10	ug/l	JEC	07/18/2002	072204-01	<10
4-Methyl-2-pentanone	8260B(1)	<10	10	ug/l	JEC	07/18/2002	072204-01	<10
Methylene chloride	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Styrene	8260B(1)	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0

(Continued)

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Lab Sample ID: 0207-0654
Client Sample ID: Trip Blank

Volatiles (Cont.)

1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Toluene	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Trichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
Vinyl chloride	8260B[1]	<2.0	2.0	ug/l	JEC	07/18/2002	072204-01	<2.0
m,p-Xylene	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<5.0
o-Xylene	8260B[1]	<5.0	5.0	ug/l	JEC	07/18/2002	072204-01	<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.

CHAIN-OF-CUSTODY / Analytical Request Document

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

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680528

Page: of

To Be Completed by Pace Analytical and Client

Section A — Required Client Information:

Company: URS Corp.
Address: 4955 Steubenville Pike
Pittsburgh PA 15205
Phone: 412-788-2717 Fax:

Section B — Required Client Information:

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

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.

Section C

Quote Reference:
Project Manager:
Project #: 02-2838
Profile #:

Requested Analysis: 8260

Section D — Required Client Information:

SAMPLE ID

One character per box.
(A–Z, 0–9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
WATER	WT
SOIL	SL
OIL	OL
WIPE	WP
AIR	AR
TISSUE	TS
OTHER	OT

ITEM #	SAMPLE ID	MATRIX CODE	DATE COLLECTED (mm / dd / yy)	TIME COLLECTED (hh:mm a/p)	# Containers	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Remarks / Lab ID
1	RW1S	WT	7-5-02	1240	2				X					0647
2	RW1D			1250					X					0648
3	RW2S			1300					X					0649
4	RW2D			1310					X					0650
5	RW3S			1320					X					0651
6	RW4S			1330					X					0652
7	RW5S			1340					X					0653
8	Trip Blank				3				X					0654
9	Temp Blank				1				X					
10														
11														
12														

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS
Fed Ex	8278-8330-4857	7-5-02	1

ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	John Ross URS	7-5-02	1700	Fed Express		
	Fed-ex			Pamela Griffith / Pace	7/6/02	10:00

SAMPLE CONDITION

Temp in °C	8.1
Received on Ice	Y/N
Sealed Cooler	Y/N
Samples Intact	Y/N

SAMPLE NOTES: 0215

saw Dat 7-6-02

Additional Comments:

8T03

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: John Ross
SIGNATURE of SAMPLER:
DATE Signed: (MM / DD / YY) 7-5-02 1400

SEE REVERSE SIDE FOR INSTRUCTIONS

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May 10, 2002

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

Dear Mr. Dodrill:

Enclosed are analytical results for samples submitted to Pace Analytical by URS Corporation. The samples were received on April 26, 2002. Please reference Pace project number 02-1788 when inquiring about this report.

Client Site: Essex-Hope
Client Ref.: 801419.2030

Pace Sample Indentification	Client Sample Identification
0204-1699	Pre-Carb
0204-1700	Primary Effluent
0204-1701	Post-Carb
0204-1702	Trip Blank

General Comments: Cooler temperature 10.2 ° C upon receipt. Ice was present.

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

Sincerely,

Kathryn L. Stoudnour/jld

for Penelope J. Morris
Project Manager

PJG: jld

Enclosures

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: **02-1788**
Lab Sample ID: **0204-1699**
Client Sample ID: Pre-Carb
Sample Matrix: Aqueous

Date Sampled: 04/25/2002
Date Received: 04/26/2002

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Acetone	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Benzene	8260B[1]	3.6	1.0	ug/l	CEL	05/07/2002	050804-04	<1.0
Bromodichloromethane	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Bromoform	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Bromomethane	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
2-Butanone	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Carbon Disulfide	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Carbon Tetrachloride	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Chlorobenzene	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Chloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Chloroform	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Chloromethane	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Cumene	8260B[1]	5.9	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Dibromochloromethane	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
1,2-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
1,3-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
1,4-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
1,1-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
1,2-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
1,1-Dichloroethene	8260B[1]	10	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
cis-1,2-Dichloroethene	8260B[1]	3000	250	ug/l	CEL	05/07/2002	050804-04	<5.0
trans-1,2-Dichloroethene	8260B[1]	7.2	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
1,2-Dichloropropane	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
cis-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
trans-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Ethylbenzene	8260B[1]	380	250	ug/l	CEL	05/07/2002	050804-04	<5.0
2-Hexanone	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
4-Methyl-2-pentanone	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Methylene chloride	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Styrene	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Toluene	8260B[1]	190	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Trichloroethene	8260B[1]	<250	250	ug/l	CEL	05/07/2002	050804-04	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Vinyl chloride	8260B[1]	520	50	ug/l	CEL	05/07/2002	050804-04	<2.0

(Continued)

Lab Sample ID: **0204-1699**
Client Sample ID: Pre-Carb

Volatiles (Cont.)

m,p-Xylene	8260B[1]	2400	250	ug/l	CEL	05/07/2002	050804-04	<5.0
o-Xylene	8260B[1]	870	250	ug/l	CEL	05/07/2002	050804-04	<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.

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: **02-1788**
Lab Sample ID: **0204-1700**
Client Sample ID: Primary Effluent
Sample Matrix: Aqueous

Date Sampled: 04/25/2002
Date Received: 04/26/2002

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Acetone	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
Benzene	8260B[1]	<1.0	1.0	ug/l	EAA	05/08/2002	050904-01	<1.0
Bromodichloromethane	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
Bromoform	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
Bromomethane	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
2-Butanone	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
Carbon Disulfide	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
Carbon Tetrachloride	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
Chlorobenzene	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
Chloroethane	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
Chloroform	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
Chloromethane	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
Cumene	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
Dibromochloromethane	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
1,2-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
1,3-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
1,4-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
1,1-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
1,2-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
1,1-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
cis-1,2-Dichloroethene	8260B[1]	7.3	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
trans-1,2-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
1,2-Dichloropropane	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
cis-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
trans-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
Ethylbenzene	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
2-Hexanone	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
4-Methyl-2-pentanone	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
Methylene chloride	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
Styrene	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
Toluene	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
Trichloroethene	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
Vinyl chloride	8260B[1]	14	2.0	ug/l	EAA	05/08/2002	050904-01	<2.0

(Continued)

Lab Sample ID: **0204-1700**
Client Sample ID: Primary Effluent

Volatiles (Cont.)

m,p-Xylene	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<5.0
o-Xylene	8260B[1]	<5.0	5.0	ug/l	EAA	05/08/2002	050904-01	<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.

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: **02-1788**
Lab Sample ID: **0204-1701**
Client Sample ID: Post-Carb
Sample Matrix: Aqueous

Date Sampled: 04/25/2002
Date Received: 04/26/2002

0705

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Acetone	8260B(1)	11	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Benzene	8260B(1)	<1.0	1.0	ug/l	CEL	05/07/2002	050804-04	<1.0
Bromodichloromethane	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Bromoform	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Bromomethane	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
2-Butanone	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Carbon Disulfide	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Carbon Tetrachloride	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Chlorobenzene	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Chloroethane	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Chloroform	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Chloromethane	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Cumene	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Dibromochloromethane	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
1,2-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
1,3-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
1,4-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
1,1-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
1,2-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
1,1-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
cis-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
trans-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
1,2-Dichloropropane	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
cis-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
trans-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Ethylbenzene	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
2-Hexanone	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
4-Methyl-2-pentanone	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Methylene chloride	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Styrene	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
1,1,2,2-Tetrachloroethane	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Tetrachloroethene	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Toluene	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
1,1,1-Trichloroethane	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
1,1,2-Trichloroethane	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Trichloroethene	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Trichlorofluoromethane	8260B(1)	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Vinyl chloride	8260B(1)	3.4	2.0	ug/l	CEL	05/07/2002	050804-04	<2.0

(Continued)

Lab Sample ID: **0204-1701**
Client Sample ID: Post-Carb

Volatiles (Cont.)

m,p-Xylene	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
o-Xylene	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<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.

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

Client Site: Essex-Hope
Client Ref.: 801419.2030

Lab Project ID: **02-1788**
Lab Sample ID: **0204-1702**
Client Sample ID: Trip Blank
Sample Matrix: Aqueous

Date Sampled: 04/25/2002
Date Received: 04/26/2002

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Acetone	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Benzene	8260B[1]	<1.0	1.0	ug/l	CEL	05/07/2002	050804-04	<1.0
Bromodichloromethane	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Bromoform	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Bromomethane	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
2-Butanone	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Carbon Disulfide	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Carbon Tetrachloride	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Chlorobenzene	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Chloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Chloroform	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Chloromethane	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Cumene	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Dibromochloromethane	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
1,2-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
1,3-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
1,4-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
1,1-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
1,2-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
1,1-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
cis-1,2-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
trans-1,2-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
1,2-Dichloropropane	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
cis-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
trans-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Ethylbenzene	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
2-Hexanone	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
4-Methyl-2-pentanone	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Methylene chloride	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Styrene	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Toluene	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Trichloroethene	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
Vinyl chloride	8260B[1]	<2.0	2.0	ug/l	CEL	05/07/2002	050804-04	<2.0

(Continued)

Lab Sample ID: **0204-1702**
Client Sample ID: Trip Blank

Volatiles (Cont.)

m,p-Xylene	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<5.0
o-Xylene	8260B[1]	<5.0	5.0	ug/l	CEL	05/07/2002	050804-04	<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.

1909

Sample Comments: Results reported on an as received basis.

RADIAN CORPORATION

021788

Chain of Custody Record

Page 1 of 1

PROJECT 801419.2030

SITE Essex. Hope

COLLECTED BY (Signature) John L. Rose

FIELD SAMPLE I.D.	SAMPLE MATRIX	DATE/TIME	NO. OF CONTAINERS	ANALYSES: 8260 VOCs	REMARKS	SAM ID NO. (for lab use only)
Pre Carb	AQ	11-25-02 1530	2			041655
Primary Effluent		11-25-02 1530	2			1700
Post Carb		11-25-02 1530	2			1701
Post Carb		11-25-02 1600	2			
Post Carb		11-25-02 1630	2			
Post Carb		11-25-02 1700	2			
Trip Blank			3			1702
Temp Blank			1			

REMARKS: Combine 4 Post Carb samples into one for analysis

RELINQUISHED BY: John L Rose — DATE 11-25-02 — TIME 1570

RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME
Fed. Ex											

LAB USE ONLY

RECEIVED FOR LABORATORY BY:	DATE	TIME	AIRBILL NO.	OPENED BY:	DATE	TIME	TEMP°C	SEAL #	CONDITION
[illegible]	4/26/02	1540	827833477	[illegible]			1.2		

REMARKS:

4-88-30337

Pace Analytical™
www.pacelabs.com

Pace Analytical Services, Inc.
One Triangle Lane
Export, PA 15632
Phone: 724.733.1161
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0001

June 14, 2002

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 May 31, 2002. Please reference Pace project number 02-2266 when inquiring about this report.

Client Site: Essex-Hope
Client Ref.: 801419.2030

Pace Sample Indentification	Client Sample Identification
0205-1741	Pre Carb
0205-1742	Post Carb
0205-1743	Primary Effluent
0205-1744	Trip Blank

General Comments: Cooler temperature 6.4 ° C upon receipt. Ice was present. Please composite Post Carb samples prior to analysis.

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

Sincerely,

Penelope J Morris

Penelope J. Morris
Project Manager

PJG: jld

Enclosures

REPORT OF LABORATORY ANALYSIS

Pace Analytical™
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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: **02-2266**
Lab Sample ID: **0205-1741**
Client Sample ID: Pre Carb
Sample Matrix: Aqueous

Date Sampled: 05/30/2002
Date Received: 05/31/2002

3002

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Acetone	8260B(1)	1600	50	ug/l	JEC	06/10/2002	061104-05	<5.0
Benzene	8260B(1)	5.5	1.0	ug/l	JEC	06/10/2002	061104-05	<1.0
Bromodichloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Bromoform	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Bromomethane	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
2-Butanone	8260B(1)	45	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Carbon Disulfide	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Carbon Tetrachloride	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Chlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Chloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Chloroform	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Chloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Cumene	8260B(1)	6.1	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Dibromochloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
1,2-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
1,3-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
1,4-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
1,1-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
1,2-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
1,1-Dichloroethene	8260B(1)	13	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
cis-1,2-Dichloroethene	8260B(1)	3600	250	ug/l	JEC	06/10/2002	061104-05	<5.0
trans-1,2-Dichloroethene	8260B(1)	12	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
1,2-Dichloropropane	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
cis-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
trans-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Ethylbenzene	8260B(1)	380	250	ug/l	JEC	06/10/2002	061104-05	<5.0
2-Hexanone	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
4-Methyl-2-pentanone	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Methylene chloride	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Styrene	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Phone: 724.733.1161
Fax: 724.327.7793

Lab Sample ID: **0205-1741**
Client Sample ID: Pre Carb

Volatiles (Cont.)

1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Toluene	8260B[1]	200	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Trichloroethene	8260B[1]	260	250	ug/l	JEC	06/10/2002	061104-05	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Vinyl chloride	8260B[1]	540	50	ug/l	JEC	06/10/2002	061104-05	<2.0
m,p-Xylene	8260B[1]	2400	250	ug/l	JEC	06/10/2002	061104-05	<5.0
o-Xylene	8260B[1]	790	250	ug/l	JEC	06/10/2002	061104-05	<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

Client Site: Essex-Hope
Client Ref.: 801419.2030

Lab Project ID: **02-2266**
Lab Sample ID: **0205-1742**
Client Sample ID: Post Carb
Sample Matrix: Aqueous

Date Sampled: 05/30/2002
Date Received: 05/31/2002

0604

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Acetone	8260B(1)	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
Benzene	8260B(1)	<1.0	1.0	ug/l	JEC	06/11/2002	061204-01	<1.0
Bromodichloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
Bromoform	8260B(1)	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
Bromomethane	8260B(1)	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
2-Butanone	8260B(1)	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
Carbon Disulfide	8260B(1)	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
Carbon Tetrachloride	8260B(1)	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
Chlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
Chloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
Chloroform	8260B(1)	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
Chloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
Cumene	8260B(1)	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
Dibromochloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
1,2-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
1,3-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
1,4-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
1,1-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
1,2-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
1,1-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
cis-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
trans-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
1,2-Dichloropropane	8260B(1)	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
cis-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
trans-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
Ethylbenzene	8260B(1)	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
2-Hexanone	8260B(1)	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
4-Methyl-2-pentanone	8260B(1)	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
Methylene chloride	8260B(1)	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
Styrene	8260B(1)	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: **0205-1742**
Client Sample ID: Post Carb

Volatiles (Cont.)

1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
Toluene	8260B[1]	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
Trichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
Vinyl chloride	8260B[1]	2.4	2.0	ug/l	JEC	06/11/2002	061204-01	<2.0
m,p-Xylene	8260B[1]	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<5.0
o-Xylene	8260B[1]	<5.0	5.0	ug/l	JEC	06/11/2002	061204-01	<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

Client Site: Essex-Hope
Client Ref.: 801419.2030

Lab Project ID: **02-2266**
Lab Sample ID: **0205-1743**
Client Sample ID: Primary Effluent
Sample Matrix: Aqueous

Date Sampled: 05/30/2002
Date Received: 05/31/2002

0006

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Acetone	8260B(1)	1200	10	ug/l	JEC	06/11/2002	061204-01	<5.0
Benzene	8260B(1)	<1.0	1.0	ug/l	JEC	06/10/2002	061104-05	<1.0
Bromodichloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Bromoform	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Bromomethane	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
2-Butanone	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Carbon Disulfide	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Carbon Tetrachloride	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Chlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Chloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Chloroform	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Chloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Cumene	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Dibromochloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
1,2-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
1,3-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
1,4-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
1,1-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
1,2-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
1,1-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
cis-1,2-Dichloroethene	8260B(1)	19	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
trans-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
1,2-Dichloropropane	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
cis-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
trans-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Ethylbenzene	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
2-Hexanone	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
4-Methyl-2-pentanone	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Methylene chloride	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Styrene	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0

(Continued)

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Fax: 724.327.7793

Lab Sample ID: **0205-1743**
Client Sample ID: Primary Effluent

Volatiles (Cont.)

1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Toluene	8260B[1]	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Trichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Vinyl chloride	8260B[1]	78	2.0	ug/l	JEC	06/10/2002	061104-05	<2.0
m,p-Xylene	8260B[1]	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
o-Xylene	8260B[1]	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<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

Client Site: Essex-Hope
Client Ref.: 801419.2030

Lab Project ID: 02-2266
Lab Sample ID: 0205-1744
Client Sample ID: Trip Blank
Sample Matrix: Aqueous

Date Sampled: 05/30/2002
Date Received: 05/31/2002

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Acetone	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Benzene	8260B(1)	<1.0	1.0	ug/l	JEC	06/10/2002	061104-05	<1.0
Bromodichloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Bromoform	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Bromomethane	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
2-Butanone	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Carbon Disulfide	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Carbon Tetrachloride	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Chlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Chloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Chloroform	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Chloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Cumene	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Dibromochloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
1,2-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
1,3-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
1,4-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
1,1-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
1,2-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
1,1-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
cis-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
trans-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
1,2-Dichloropropane	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
cis-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
trans-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Ethylbenzene	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
2-Hexanone	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
4-Methyl-2-pentanone	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Methylene chloride	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Styrene	8260B(1)	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0

(Continued)

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Lab Sample ID: **0205-1744**
Client Sample ID: Trip Blank

Volatiles (Cont.)

1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Toluene	8260B[1]	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Trichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
Vinyl chloride	8260B[1]	<2.0	2.0	ug/l	JEC	06/10/2002	061104-05	<2.0
m,p-Xylene	8260B[1]	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<5.0
o-Xylene	8260B[1]	<5.0	5.0	ug/l	JEC	06/10/2002	061104-05	<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.

RADIAN CORPORATION

02-2266

Chain of Custody Record

Page 1 of 1

PROJECT: 801419.2030

SITE: Essex - Hope

COLLECTED BY (Signature): John L. Ross

ANALYSES: 8240 VOA; Suspended Solids

Suspended Solids Sample fees to Project # 804041.85

FIELD SAMPLE I.D.	SAMPLE MATRIX	DATE/TIME	NO. OF CONTAINERS	REMARKS	SAM ID NO. (for lab use only)
Pre-Carb	WT	5-30-02 1630	2		05-1741
Post-Carb		5-30-02 1630	2		1742
Primary-Effluent		5-30-02 1630	2		1743
Post-Carb		5-30-02 1700	2		1742
Post-Carb		5-30-02 1730	2		
Post-Carb		5-30-02 1800	2		
Trip-Blank			3		1744
Temp-Blank			1		
Post-Carb		5-30-02 1730	1		

REMARKS: Combine 4 Post-Carb samples into one for analysis

RELINQUISHED BY: J. Ross — DATE: 5-30-02 — TIME: 1815

RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME
Fed Express											

LAB USE ONLY

RECEIVED FOR LABORATORY BY:	DATE	TIME	AIRBILL NO.	OPENED BY:	DATE	TIME	TEMP°C	SEAL #	CONDITION
[illegible]	5/31/02	[illegible]							

REMARKS: Tripblank VOA's have air bubbles.

4-88-30337

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July 16, 2002

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 1, 2002. Please reference Pace project number 02-2725 when inquiring about this report.

Client Site: Essex, Jamestown, NY
Client Ref.: 804041.81

Pace Sample Indentification	Client Sample Identification
0207-0002	Pre-Carb
0207-0003	Primary Effluent
0207-0004	Post Carb Comp
0207-0008	Trip Blank

General Comments: Cooler temperature ambient upon receipt. No ice was present.

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

Sincerely,

Raelyn Carradine for PJM

Penelope J. Morris
Project Manager

PJG: 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, Jamestown, NY
Client Ref.: 804041.81

Lab Project ID: **02-2725**
Lab Sample ID: **0207-0002**
Client Sample ID: Pre-Carb
Sample Matrix: Aqueous

Date Sampled: 06/28/2002
Date Received: 07/01/2002

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Acetone	8260B(1)	<10	10	ug/l	JEC	07/12/2002	071504-04	<10
Benzene	8260B(1)	4.3	1.0	ug/l	JEC	07/12/2002	071504-04	<1.0
Bromodichloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
Bromoform	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
Bromomethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
2-Butanone	8260B(1)	<10	10	ug/l	JEC	07/12/2002	071504-04	<10
Carbon Disulfide	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
Carbon Tetrachloride	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
Chlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
Chloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
Chloroform	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
Chloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
Cumene	8260B(1)	6.8	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
Dibromochloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
1,2-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
1,3-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
1,4-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
1,1-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
1,2-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
1,1-Dichloroethene	8260B(1)	6.8	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
cis-1,2-Dichloroethene	8260B(1)	3200	250	ug/l	JEC	07/11/2002	071204-04	<5.0
trans-1,2-Dichloroethene	8260B(1)	7.3	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
1,2-Dichloropropane	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
cis-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
trans-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
Ethylbenzene	8260B(1)	610	25	ug/l	JEC	07/11/2002	071204-04	<5.0
2-Hexanone	8260B(1)	<10	10	ug/l	JEC	07/12/2002	071504-04	<10
4-Methyl-2-pentanone	8260B(1)	<10	10	ug/l	JEC	07/12/2002	071504-04	<10
Methylene chloride	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
Styrene	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0

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Lab Sample ID: **0207-0002**
Client Sample ID: Pre-Carb

Volatiles (Cont.)

1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
Toluene	8260B[1]	270	25	ug/l	JEC	07/11/2002	071204-04	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
Trichloroethene	8260B[1]	100	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
Vinyl chloride	8260B[1]	510	10	ug/l	JEC	07/11/2002	071204-04	<2.0
m,p-Xylene	8260B[1]	3700	250	ug/l	JEC	07/11/2002	071204-04	<5.0
o-Xylene	8260B[1]	1200	250	ug/l	JEC	07/11/2002	071204-04	<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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4955 Steubenville Pike
Pittsburgh, PA 15205

Client Site: Essex, Jamestown, NY
Client Ref.: 804041.81

Lab Project ID: **02-2725**
Lab Sample ID: **0207-0003**
Client Sample ID: Primary Effluent
Sample Matrix: Aqueous

Date Sampled: 06/28/2002
Date Received: 07/01/2002

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Acetone	8260B(1)	2300	500	ug/l	JEC	07/12/2002	071504-04	<10
Benzene	8260B(1)	<1.0	1.0	ug/l	JEC	07/12/2002	071504-04	<1.0
Bromodichloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
Bromoform	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
Bromomethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
2-Butanone	8260B(1)	37	10	ug/l	JEC	07/12/2002	071504-04	<10
Carbon Disulfide	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
Carbon Tetrachloride	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
Chlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
Chloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
Chloroform	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
Chloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
Cumene	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
Dibromochloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
1,2-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
1,3-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
1,4-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
1,1-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
1,2-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
1,1-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
cis-1,2-Dichloroethene	8260B(1)	370	25	ug/l	JEC	07/11/2002	071204-04	<5.0
trans-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
1,2-Dichloropropane	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
cis-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
trans-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
Ethylbenzene	8260B(1)	6.3	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
2-Hexanone	8260B(1)	<10	10	ug/l	JEC	07/12/2002	071504-04	<10
4-Methyl-2-pentanone	8260B(1)	<10	10	ug/l	JEC	07/12/2002	071504-04	<10
Methylene chloride	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
Styrene	8260B(1)	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0

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Lab Sample ID: **0207-0003**
Client Sample ID: Primary Effluent

Volatiles (Cont.)

1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
Toluene	8260B[1]	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
Trichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
Vinyl chloride	8260B[1]	670	10	ug/l	JEC	07/11/2002	071204-04	<2.0
m,p-Xylene	8260B[1]	38	5.0	ug/l	JEC	07/12/2002	071504-04	<5.0
o-Xylene	8260B[1]	14	5.0	ug/l	JEC	07/12/2002	071504-04	<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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Client Site: Essex, Jamestown, NY
Client Ref.: 804041.81

Lab Project ID: **02-2725**
Lab Sample ID: **0207-0004**
Client Sample ID: Post Carb Comp
Sample Matrix: Aqueous

Date Sampled: 06/28/2002
Date Received: 07/01/2002

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Acetone	8260B(1)	2800	500	ug/l	JEC	07/12/2002	071504-04	<10
Benzene	8260B(1)	<1.0	1.0	ug/l	JEC	07/11/2002	071204-04	<1.0
Bromodichloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
Bromoform	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
Bromomethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
2-Butanone	8260B(1)	<10	10	ug/l	JEC	07/11/2002	071204-04	<10
Carbon Disulfide	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
Carbon Tetrachloride	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
Chlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
Chloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
Chloroform	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
Chloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
Cumene	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
Dibromochloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
1,2-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
1,3-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
1,4-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
1,1-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
1,2-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
1,1-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
cis-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
trans-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
1,2-Dichloropropane	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
cis-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
trans-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
Ethylbenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
2-Hexanone	8260B(1)	<10	10	ug/l	JEC	07/11/2002	071204-04	<10
4-Methyl-2-pentanone	8260B(1)	<10	10	ug/l	JEC	07/11/2002	071204-04	<10
Methylene chloride	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
Styrene	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0

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REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0207-0004
Client Sample ID: Post Carb Comp

Volatiles (Cont.)

1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
Toluene	8260B[1]	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
Trichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
Vinyl chloride	8260B[1]	3.4	2.0	ug/l	JEC	07/11/2002	071204-04	<2.0
m,p-Xylene	8260B[1]	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
o-Xylene	8260B[1]	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<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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Client Site: Essex, Jamestown, NY
Client Ref.: 804041.81

Lab Project ID: **02-2725**
Lab Sample ID: **0207-0008**
Client Sample ID: Trip Blank
Sample Matrix: Aqueous

Date Sampled: 06/28/2002
Date Received: 07/01/2002

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Acetone	8260B(1)	<10	10	ug/l	JEC	07/11/2002	071204-04	<10
Benzene	8260B(1)	<1.0	1.0	ug/l	JEC	07/11/2002	071204-04	<1.0
Bromodichloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
Bromoform	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
Bromomethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
2-Butanone	8260B(1)	<10	10	ug/l	JEC	07/11/2002	071204-04	<10
Carbon Disulfide	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
Carbon Tetrachloride	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
Chlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
Chloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
Chloroform	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
Chloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
Cumene	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
Dibromochloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
1,2-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
1,3-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
1,4-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
1,1-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
1,2-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
1,1-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
cis-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
trans-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
1,2-Dichloropropane	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
cis-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
trans-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
Ethylbenzene	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
2-Hexanone	8260B(1)	<10	10	ug/l	JEC	07/11/2002	071204-04	<10
4-Methyl-2-pentanone	8260B(1)	<10	10	ug/l	JEC	07/11/2002	071204-04	<10
Methylene chloride	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
Styrene	8260B(1)	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0

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Client Sample ID: Trip Blank

Volatiles (Cont.)

1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
Toluene	8260B[1]	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
Trichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
Vinyl chloride	8260B[1]	<2.0	2.0	ug/l	JEC	07/11/2002	071204-04	<2.0
m,p-Xylene	8260B[1]	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<5.0
o-Xylene	8260B[1]	<5.0	5.0	ug/l	JEC	07/11/2002	071204-04	<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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To Be Completed by Pace Analytical and Client

Required Client Information: Section A

Company: URS
Address: 4955 Steubenville Pike
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

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.

Section C

Quote Reference:
Project Manager:
Project #: 02-2725
Profile #:
Requested Analysis: 8260

Section D Required Client Information:

SAMPLE ID

One character per box.
(A–Z, 0–9 / .–)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
WATER	WT
SOIL	SL
OIL	OL
WIPE	WP
AIR	AR
TISSUE	TS
OTHER	OT

ITEM #	SAMPLE ID	MATRIX CODE	DATE COLLECTED (mm / dd / yy)	TIME COLLECTED (hh mm a/p)	# Containers	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Remarks / Lab ID
1	PRE-CARB	WT	6-28-02	1600	2				X					07.0002
2	PRIMARY Effluent			1500	1									0003
3	POST-CARB 1500			1500										0004
4	POST-CARB 1530			1530										0005
5	POST-CARB 1600			1600										0006
6	POST-CARB 1630			1630										0007
7	TEMP BLANK				1									
8	TRIP BLANK				3									0008
9														
10														
11														
12														

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS
Fed Ex	8278-8330-4850	6-28-02	1

ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
1	John Ross - URS	6-28-02	1800	Cathy Wilson - FedEx	7-1-02	10AM
	FedEx					

SAMPLE CONDITION

Temp in °C	cool
Received on Ice	Y/N
Sealed Cooler	Y/N
Samples Intact	Y/N

SAMPLE NOTES

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: John Ross
SIGNATURE of SAMPLER: John S. Ross
DATE Signed: (MM / DD / YY) 6-28-02

Additional Comments:

0100

Combine 4 Post-Carb samples into