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URS

Construction Services

December 12, 2001

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

Subject: **3rd Quarter 2001 Performance Monitoring Report**
Essex/Hope Site — Jamestown, New York
URS Project No. 801419

Dear Mr. Moore:

This letter report is a summary of the 3rd Quarter 2001 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 this quarter approximately 193,700 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.

Also included in this report is a summary and results of the acidification and re-development of Recovery Well RW-2D for the removal of precipitates from the well and immediate formation. This activity was completed at the conclusion of the third quarter.

GROUNDWATER FLOW EVALUATION

Water level measurements were taken on July 9, 2001 and September 30, 2001 during the reporting quarter. Additional water level data included in this report were collected on October 16, 2001 and November 2, 2001 to document the rehabilitation of RW-2D. Water level data is provided in Appendix A of this report. Groundwater contour maps representative of pumping conditions during the reporting period (prior to RW-2D clean-out) are provided as Figures 1 through 4. Contour maps (Figures 5 and 6) represent conditions after completion of the rehabilitation of RW-2D. The following discussions review the flow conditions of the shallow (water table) and Lower Fine Sand (deep) water-bearing zones.

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Shallow Water-Bearing Zone
Water table contour maps representing pumping conditions in the upper water-bearing zone on July 9, 2001 September 25, 2001 and October 16, 2001 are provided as Figures 1, 3 and 5 respectively. Pumping conditions in the shallow zone illustrated by these contour maps are similar to the conditions of the previous quarters of 2001.

Lower Fine Sand Water-Bearing Zone
Deep zone groundwater extraction is conducted from Recovery Well RW-2D in the NPL Area. No groundwater is pumped from RW-1D, which was shut down in June of 1999 with the approval of the NYSDEC. Potentiometric surface contour maps representing pumping conditions on July 9, 2001 and September 25, 2001 is provided as Figures 2 and 4 respectively. These contour maps represent the decline in pumping efficiency from the deep zone due to the progressive accumulation of precipitates surrounding RW-2D during the third quarter. The cone of depression within the deep zone had continued to decrease as compared to the conditions reported for the 1st and 2nd Quarters of 2001. Groundwater extraction rate from RW-2D had decreased from approximately 2.8 gpm during the 1st Quarter to approximately 1.5 gpm during the 2nd Quarter, followed by a steady reduction to 0.5 gpm by the end of the 3rd Quarter. Recovery Well RW-2D was acidified and re-developed the week of October 1, 2001 as described in the section below. After the completion of the re-development effort, the average sustainable pumping rate from RW-2D was 2 to 2.3 gpm. The cone of depression within the deep zone as illustrated by the October 16, 2001 potentiometric surface map (Figure 6) returned to a similar configuration as experienced during the 1st and 2nd Quarters of 2001.

RW-2D REHABILITATION

Recovery Well RW-2D was acidified and re-developed between October 2 through 5, 2001 with the approval of the NYSDEC. The rehabilitation was designed to remove precipitates, previously identified to be iron hydroxide, from the well and surrounding formation. A pumping test was conducted at RW-2D on August 22 and 23, 2001 and compared to the results of a similar pumping test conducted during the pre-design study in 1995. Results of the evaluation indicated that the pumping well RW-2D and the immediate formation were impacted by precipitate growth.

Approximately 50 gallons of 75% phosphoric acid and 20 gallons of NuWell NW-310 acid enhancer was injected into the recovery well in two treatments followed by re-development by potable water jetting and simultaneous airlift pumping. Based upon pH measurements of the surrounding monitoring wells, the groundwater was reduced to a pH of approximately 3 to 4 in a 15-foot radius from the well. The groundwater pump and discharge pipe network was also cleaned out with an acid solution at this time. Approximately 3,200 gallons of groundwater was extracted from RW-2D between October 5 and 8, 2001, containerized and treated with sodium bicarbonate to increase the pH to between 6 and 9 for discharge to the City of Jamestown POTW. Groundwater extracted after October 8, 2001 from RW-2D exhibited pH values within the discharge limits.

Subsequent monitoring of the deep zone extraction system showed iron hydroxide precipitate was re-forming within RW-2D and clogging the pumping equipment approximately one month (early November) after the well clean-out. The pump and discharge piping was cleaned out on November 6, 2001 with a 3% phosphoric acid solution, and a maximum sustainable pumping rate of 2.3 gpm was maintained from RW-2D. These findings indicate that the formation of precipitates will require periodic removal or control to maintain adequate groundwater extraction from RW-2D.

WATER QUALITY RESULTS

Third Quarter 2001 performance monitoring included quarterly sampling of all recovery wells and monthly influent and effluent sampling of the site pre-treatment system. The recovery well samples were taken on September 1, 2001, and the monthly influent/effluent samples were collected on July 30, 2001, August 29, 2001 and September 30, 2001. Antech Ltd. of Export, Pennsylvania analyzed the samples for volatile organic compounds (VOC's) by US EPA Method 8260B. The recovery well analytical results for the 3rd Quarter 2001 are summarized in Table 1. Individual historical recovery well analytical results 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 during the July sampling round included: TCE (3,300 ug/L), vinyl chloride (160 ug/L), cis-1,2-DCE (1,200 ug/L), 1,1-DCE (11 ug/L) and trans-1,2-DCE (11 ug/L) - all other VOC's were non-detect. Since the installation of the Pilot Permeable Reactive Wall (PRW) in the NPL Area, TCE has continued to show increases in concentration. Vinyl choride concentrations were similar to the last sampling round. Cis-1,2-DCE first analyzed for in March 2001 has continued to show an order of magnitude increase each quarter.

Constituents detected at RW-2S included TCE (2,900 ug/L) and cis-1,2-DCE (500 ug/L) – all other VOCs were below detection limits. These concentrations are similar to the values detected during the 2nd quarterly analysis.

NPL Area – Lower Fine Sand Water Bearing Zone
Constituents detected at RW-1D during this sampling round were vinyl chloride (130 ug/L), 1,1-DCE (12 ug/L), cis-1,2-DCE (1,400 ug/L), trans-1,2-DCE (17 ug/L), TCE (73 ug/L), and benzene (3.6 ug/L) - all other VOC's were non-detect. With the exception of TCE that showed a minor increase from 14 ug/l during the previous quarter, all analysis is similar to the 2nd Quarter sampling round.

Compounds detected at RW-2D for the 3rd Quarter included: vinyl chloride (1,300 ug/L), 1,1-DCE (25 ug/L), cis-1,2-DCE (7,900 ug/L), trans-1,2-DCE (32 ug/L), TCE (330 ug/L), and benzene (7.5 ug/L). Vinyl choride concentrations continue to show an increase over time at this well location. The last three quarters where cis-1,2-DCE was analyzed show that this compound has also increased. TCE was similar in concentration as compared to the last quarter and has remained at lower levels since the end of 2000. All other detected VOCs have remained at similar concentrations.

AST/UST Area
Constituents detected at RW-3S during the 3rd Quarter were isopropylbenzene (27 ug/L), benzene (21 ug/L), ethylbenzene (95 ug/L) and total xylenes (99 ug/L). All other VOCs were non-detect. The compounds detected were slightly lower in concentration than detected during the previous quarter. Data for RW-3S is presented in Table 4.

UST Area
Constituents detected during the reporting period at RW-4S (Table 5) included acetone (15 ug/L), 4-methyl-2-pentanone (14 ug/L), isopropylbenzene (180 ug/L), benzene (25 ug/L), toluene (3,600 ug/L), and total xylenes (63,000 ug/L); all other VOC's were non-detect. As previously reported, the detected constituents continue to show a gradual decrease in concentrations over the last year of monitoring. During this sampling round, ethylbenzene was not detected. Previous detections for ethylbenzene were between 9,000 and 11,000 ug/L over the last three quarterly monitoring.

VOCs detected at RW-5S during September were vinyl chloride (14 ug/L), TCE (6.2 ug/L), toluene (370 ug/L), ethylbenzene (91 ug/L) and total xylenes (445 ug/L). Concentrations exhibiting increases since the last sampling include toluene (12 ug/L in July), ethylbenzene (20 ug/L in July) and total xylenes (231 ug/L in July).

Treatment Plant Influent/Effluent
The waste stream influent and effluent concentrations for the 3rd Quarter of 2001 are shown on Table 9. Influent data (Pre-Carb) reflect a composite from all the groundwater extraction wells prior to pre-treatment. 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.

Constituents detected in the influent during the 3rd Quarter included: chloromethane, vinyl chloride, acetone, 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, TCE, isopropylbenzene, benzene, toluene, ethylbenzene and xylenes. TCE continued to show a decreasing trend over the year of 2001 from 2,800 ug/L in January 2001 to a range between 310 and 430 ug/L during the reporting period. Vinyl chloride concentrations ranged between 190 and 750 ug/L over the quarter. Cis-1,2-DCE was detected between 1,200 and 5,600 ug/L during the period. Benzene (3.1 to 6.2 ug/L), toluene (120 to 210 ug/L), ethylbenzene (44 to 450 ug/L) and xylenes (600 to 4,500 ug/L) have remained at similar concentrations over the year of 2001.

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 A. Dodrill
Project Manager

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

TABLES

Table 1
Recovery Well Analytical Results
3rd Quarter Sampling
September 2001

Volatile Compounds (Method 8260A)	Site GW RAOs (ug/L)	RW-1S Sept-1-01 (ug/L)	RW-1D Sept-1-01 (ug/L)	RW-2S Sept-1-01 (ug/L)	RW-2D Sept-1-01 (ug/L)	RW-3S Sept-1-01 (ug/L)	RW-4S Sept-1-01 (ug/L)	RW-5S Sept-1-01 (ug/L)	Trip Blank Sept-1-01 (ug/L)
Chloromethane	-	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl Chloride	5	**160**	**130**	**31**	**1,300**	<2	<2	**14**	<2
Methylene Chloride	-	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	-	<5	<5	<5	<5	<5	**15**	<5	<5
1,1-Dichloroethene	-	**11**	**12**	<5	<5	<5	<5	<5	<5
cis-1,2-Dichloroethene	-	**1,200**	**1,400**	**500**	**7,900**	<5	**7.4**	**180**	<5
trans-1,2-Dichloroethene	5	**11**	**17**	<5	**32**	<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	-	<5	<5	<5	<5	<5	<5	<5	<5
4-Methyl-2-pentanone	-	<5	<5	<5	<5	<5	**14**	<5	<5
Trichloroethene	5	**3,300**	**73**	**2,900**	**330**	<5	<5	**6.2**	<5
Isopropylbenzene	-	<5	<5	<5	<5	**27**	**180**	**6.9**	<5
Benzene	-	<1	**3.6**	<1	**7.5**	**21**	**25**	<1	<1
Tetrachloroethene	-	<5	<5	<5	<5	<5	<5	<5	<5
Toluene	5	<5	<5	<5	<5	<5	**3,600**	**370**	<5
Ethylbenzene	5	<5	<5	<5	<5	**95**	<5	**91**	<5
Total Xylenes	5	<5	<5	<5	<5	**99**	**63,000**	**445**	<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)
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
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
Acetone	-	10	< 58[B]	< 10	< 10	<200	<25	<50	< 10	<5	<5	9	<5	<10	<5	15[B]	<5	<5	<5	<5
1,1-Dichloroethene	-																2.5	<5	<5	<5
cis-1,2-Dichloroethene	-																	44	530	1,200
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
Chloroform	-		< 25	< 5	< 5	<100	<5	<25	< 5	<1	<1	<1	<1	<5	<1	<1	<1	<5	<5	<5
2-Butanone	-		120	< 10	< 10	<200	<5	<50	< 10	<5	<5	<5	<5	<10	<5	9	<5	<5	<5	<5
Trichloroethene	5	3,500	460	< 5	1,900 D	12,000	910	570	1,300	180 D	590	41	37	41	24	150	120	100	1,500	3,300
Isopropylbenzene	-			< 5	< 5	<100	<5	<25	< 5	<1	<1	<1	<1	<5	<1	14	6.1	<5	<5	<5
Benzene	-		< 25	< 5	< 5	<100	<5	<25	< 5	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1*	<1
Toluene	5		< 25	< 5	< 5	<100	<5	<25	< 5	<1	<1	<1	<1	<5	<1	4	1.34	<5	<5	<5
Ethylbenzene	5		< 25	< 5	< 5	<100	<5	<25	< 5	<1	<1	<1	<1	<5	<1	9	2.52	<5	<5	<5
Total Xylenes	5	4	< 25	< 5	< 5	<100	<5	<25	< 5	<1	<1	2	5	<5	<3	78	22	<5	<5	<5

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

Notes:

B = Qualified as non-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)
Vinyl Chloride	5	100/81	< 5	< 250	< 5	<25	<1	<5	6	4	<10	2	<1	<5	<1	180	470 D	120	38	<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
Acetone	-	<10/<10	< 10	< 500	< 10	<50	<5	<10	< 10	<5	<50	<5	<5	<10	<5	65[D]	<5	<5	<5	<5
1,1-Dichloroethene	-																32	<5	<5	<5
cis-1,2-Dichloroethene																		620	400	500
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
Chloroform	-		< 5	< 250	< 5	<25	<1	<5	< 5	<1	<10	<1	<1	<5	<1	<2	<1	<5	<5	<5
2-Butanone	-		< 10	< 500	< 10	<50	<5	<10	< 10	<5	<50	<5	<5	<10	<5	21	<5	<5	<5	<5
1,1,2-Trichloroethane	-																1.05	<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
Isopropylbenzene	-			< 250	< 5	<25	<1	<5	< 5	<1	<10	<1	<1	<5	<1	2	1.54	<5	<5	<5
Benzene	-		< 5	< 250	< 5	<25	<1	<5	< 5	<1	<10	<1	<1	<5	<1	<2	<1	<1	<1	<1
Tetrachloroethene	-																2.93	<5	<5	<5
Toluene	5		< 5	< 250	< 5	<25	<1	<5	< 5	<1	<10	<1	<1	<5	<1	<2	2.01	<5	<5	<5
Ethylbenzene	5		< 5	< 250	< 5	<25	<1	<5	< 5	<1	<10	3	<1	<5	<1	2	1.34	<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

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)
Vinyl Chloride	5	< 1000	< 500	11	<250	<10	<50	< 5	11	<2	<1	<2	<5	<2	2	<2	<2	<2	<2
Methylene Chloride	-	< 1000	< 500	< 5	360	<10	<50	< 5	<1	12[B]	<1	2[B]	<5	57[B]	<1	12	<5	<5	<5
Acetone	-	< 2000	< 1000	14	<500	<50	<100	< 10	<5	15	<5	<10	10	18[B]	<5	<10	<5	<5	<5
trans-1,2-Dichloroethene	5	< 1000	< 500	< 5	<250	<10	<50	< 5	<1	<2	<1	<2	<5	<2	<1	<2	<5	<5	<5
1,1-Dichloroethane	-	<1000	<500	<5	<250	<50	<50	<5	2	<2	<1	<2	<5	<2	<1	<2	<5	<5	<5
Chloroform	-	< 1000	< 500	< 5	<250	<10	<50	< 5	<1	<2	<1	<2	<5	<2	<1	<2	<5	<5	<5
2-Butanone	-	< 2000	< 1000	< 10	<500	<50	<100	< 10	<5	<10	<5	<10	<10	<10	<5	<10	<5	<5	<5
Trichloroethene	5	< 1000	< 500	< 5	<250	<10	<50	< 5	87 D	<2	<1	2	<10	<2	2	2.66	<5	<5	<5
Isopropylbenzene	-		< 500	160	<250	71	110	24	83	3	34	39	13	47	50	24	17	38	27
Benzene	-	< 1000	< 500	21	<250	15	16 J	9	17	<2	7	11	<5	12	18	11	7.7	35	21
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
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
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

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)
Vinyl Chloride	5	< 1000	< 100	< 25	<2500	<100	<500	< 5	<250	<500	<1	<500	<5	<250	<1	<500	<2	<2	<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
Acetone	-	< 3200[B]	< 200	800	<5000	<500	<1000	58	<1300	<2,500	87	<2500	67	1600[B]	44[B]	<2500	27	18	15
trans-1,2-Dichloroethene	5	< 1000	< 100	< 25	<2500	<100	<500	< 5	<250	<500	<1	<500	<5	<250	<1	<500	<5	<5	<5
Chloroform	-	< 1000	< 100	< 25	<2500	<100	<500	< 5	<250	<500	<1	<500	<5	<250	<1	<500	<5	<5	<5
1,2-Dichloroethane	-	<1000	<100	<25	<2500	<100	<500	<5	<250	<500	1	<500	<5	<250	<1	<500	<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
4-Methyl-2-pentanone	-																	14	14
Trichloroethene	5	< 1000	< 100	< 25	<2500	<100	<500	< 5	<250	540	2	<500	<5	<250	2	770	<5	<5	<5
Isopropylbenzene	-		< 100	210	<2500	130	310 J	43	<250	<500	210	<500	130	<250	260 E	<500	150	140	180
Benzene	-	< 1000	< 100	26	<2500	<100	<500	6	<250	<500	25	<500	19	<250	27	<500	20	26	25
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
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
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

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)
Vinyl Chloride	5	< 100	< 100	< 10	<10	<2	<25	< 5	<1	2	<1	<1	<5	<1	<1	<100	<2	<2	14
Methylene Chloride	-	< 130[A]	580	< 10	<10	8	<25	34	1	1[B]	<1	2[B]	<5	4[B]	9	340	<5	<5	<5
Acetone	-	< 200	< 200	< 20	<20	<10	33 J	11	<5	<5	<5	<5	<10	<5	16[D]	<500	<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
Chloroform	-	< 100	< 100	< 10	<10	<2	<25	< 5	<1	<1	<1	<1	<5	<1	<1	<100	<5	<5	<5
2-Butanone	-	< 200	440	< 20	<20	66	69	< 10	<5	<5	<5	<5	<10	<5	<1	<500	<5	<5	<5
1,2-Dichloropropane		<100	<100	<10	<10	<2	<25	<5	<1	<5	1	<1	<5	<1	<1	<100	<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
Isopropylbenzene	-		< 100	< 10	<10	6	8 J	11	7	<1	4	3	<5	5	4	170	<5	<5	6.9
Benzene	-	< 100	< 100	< 10	<10	<2	<25	< 5	<1	<1	<1	<1	<5	<1	<1	<100	<1	<1	<1
Toluene	5	< 100	< 100	17	15	520	890	320	94	7	16	<1	<5	15	7	6,100	<5	12	370
Ethylbenzene	5	620	420	35	<10	57	92	120	74	3	53	22	<5	41	29	16,000	35	20	91
Total Xylenes	5	2,000	2,300	410	86	520	640	570	330	26	660 D	63	12	82	68	73,000 D	186	231	445

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:

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)
Chloromethane	-										4	<2	<1	<5	<1	<1	<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
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
Acetone	-	< 19[B]	< 10	< 10	37	<5	<10	< 10	<5	<5	<10	<10	14[B]	<25	4 J[B]	<5	<5	<5	<5
1,1-Dichloroethene	-	<5	<5	<5	<5	<1	<5	<5	3	4	2	54	85	53	11	41	10	12	12
cis-1,2-Dichloroethene																	1,500	1,700	1,400
trans-1,2-Dichloroethene	5	26	< 5	< 5	<5	2	2 J	< 5	4	4	16	43	110	84	17	52	14	12	17
Chloroform	-	< 5	< 5	< 5	<5	<1	<5	< 5	<1	<1	<2	<2	1	<5	<1	<1	<5	<5	<5
2-Butanone	-	< 10	< 10	< 10	<10	<5	<10	< 10	<5	<5	<10	<10	<5	<25	<5	<5	<5	<5	<5
Trichloroethene	5	< 5	< 5	< 5	<5	<1	3 J	6	<10[B]	19	<2	38	8	25	16	150	<5	14	73
Isopropylbenzene	-		< 5	< 5	<5	<1	<5	< 5	<1	<1	<2	<2	<1	<5	<1	<1	<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
Toluene	5	< 5	< 5	< 5	<5	<1	<5	< 5	<1	<1	<2	<2	<1	<5	<1	<1	<5	<5	<5
Ethylbenzene	5	< 5	< 5	< 5	<5	<1	<5	< 5	<1	<1	<2	<2	<1	<5	<1	<1	<5	<5	<5
Total Xylenes	5	< 5	< 5	< 5	<5	<1	<5	< 5	<1	<1	<2	<2	<3	<15	<3	<1	<5	<5	<5

Polychlorinated Biphenyls (PCBs) (Method 8080)	Site GW RAOs (ug/L)	Jul-97 (ug/L)*	Oct-97 (ug/L)	Dec-97 (ug/L)	Mar-98 (ug/L)*	Jun-98 (ug/L)*	Sept-98 (ug/L)*	Nov-98 (ug/L)*	Feb-99 (ug/L)	May-99 (ug/L)	Aug-99 (ug/L)	Nov-99 (ug/L)	Feb-00 (ug/L)
Aroclor-1016	0 1	< 0.10	N/A	< 0.3	< 0.3	<0.1	<0.1	< 0.1	< 0.1	<0.10	<0.10	<0.10	<0.10
Aroclor-1221	0.1	< 0.20	N/A	< 0.3	< 0.3	<0.1	<0.2	< 0.2	< 0.2	<0.20	<0.20	<0.10	<0.20
Aroclor-1232	0 1	< 0.10	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)
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
Methylene Chloride	-	<10	< 12[B]	340	< 5	<250	<25/<25	80 J	< 5	<1	1[B]	<1	260[B]	<5	410[B]	<1	3.06[B]	<5	<5	<5
Acetone	-	<10	< 90[B]	< 100	< 10	<500	<130/<130	<250	< 10	<5	<5	<5	<100	<10	120[B]	<5	<5	<5	<5	<5
1,1-Dichloroethene	-		<5	<50	<5	<250	<25	>120	<5	5	6	<1	65	6	<10	12	25	17	16	25
cis-1,2-Dichloroethene																		5,200	4,200	7,900
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
Chloroform	-		< 5	< 50	< 5	<250	<25/<25	<120	< 5	<1	<1	<1	<20	<5	<10	<1	<1	<5	<5	<5
2-Butanone	-		130	270	< 10	<500	<25/<25	<250	< 10	<5	<5	<5	<100	<10	<50	16	<5	<5	<5	<5
Trichloroethene	5	5,600	2,200 D	1,900 D	4,500 D	4,900	2,200/2,500	3,200	4,700	4,500 D	4,000	2,800 D	18,000 D	1,900 D	3,100	3,000 D	4,400 D	1,100	270	330
Isopropylbenzene	-			< 50	< 5	<250	<25/<25	<120	< 5	<1	<1	<1	<20	<5	<10	<1	<1	<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
Tetrachloroethene	-		<5	<50	<5	<250	<25	<120	<5	1	1	1	<20	<5	<10	<1	1.04	<5	<5	<5
Toluene	5		< 5	< 50	< 5	<250	<25/<25	<120	< 5	<1	<1	<1	<20	<5	<10	<1	<1	<5	<5	<5
Ethylbenzene	5		< 5	< 50	< 5	<250	<25/<25	<120	< 5	<1	<1	2	<20	7	<10	<1	<1	<5	<5	<5
Total Xylenes	5	<10	< 5	< 50	< 5	<250	<25/<25	<120	< 5	<2[B]	2	13	<20	38	<30	<3	1.49	<5	<5	<5

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
System Influent/Effluent Data
Volatile Organic Compounds

Pre-Carbon Analytical Results	Jan-31-01 (ug/L)	Feb-27-01 (ug/L)	Mar-23-01 (ug/L)	Apr-27-01 (ug/L)	May-24-01 (ug/L)	Jun-29-01 (ug/L)	Jul-30-01 (ug/L)	Aug-29-01 (ug/L)	Sep-30-01 (ug/L)	Oct-01 (ug/L)	Nov-01 (ug/L)	Dec-01 (ug/L)
Chloromethane	6.15	<250	<5	<5	<5	<5	<5	5.2	<5			
Vinyl Chloride	470[D]	260	370	490	350	400	380	750	190			
Methylene Chloride	<1	<250	<5	<5	<5	<5	<5	<5	<5			
Acetone	3.18	<250	<5	<5	6.1	6.6	16	<5	<5			
1,1-Dichloroethene	15	<250	12	11	7.9	9.4	17	12	<5			
cis-1,2-Dichloroethene	NA	NA	3,900	3,400	2,400	3,800	5,600	4,400	1,200			
trans-1,2-Dichloroethene	14	<250	15	14	8.0	9.7	42	24	6.5			
Chloroform	<1	<250	<5	<5	<5	<5	<5	<5	<5			
2-Butanone	4.87	<250	<5	<5	<5	<5	<10	<5	<5			
Trichloroethene	2,800[D]	1,200	1,100	1,300	250	880	430	310	370			
Isopropylbenzene	3.43	<250	5.4	7.7	5.5	<5	<5	7.8	<5			
Benzene	4.31	<250	5.4	5.5	3.8	4.2	6.2	5.2	3.1			
Toluene	92	<250	160	360	150	180	120	210	190			
Ethylbenzene	190	140[J]	330	560	330	340	83	450	44			
Total Xylenes	1,300[D]	1,200	2,920	4,400	2,640	2,940	600	3,800	4,500			
Pre-Carb TOTAL VOCs	4,902.94	2,800	8,817.80	10,548.20	6,151.30	8,569.90	7,294.2	9,974.20	6,501			

Primary Carbon Analytical Results	Jan-31-01 (ug/L)	Feb-27-01 (ug/L)	Mar-23-01 (ug/L)	Apr-27-01 (ug/L)	May-24-01 (ug/L)	Jun-29-01 (ug/L)	Jul-30-01 (ug/L)	Aug-29-01 (ug/L)	Sep-30-01 (ug/L)	Oct-01 (ug/L)	Nov-01 (ug/L)	Dec-01 (ug/L)
Chloromethane	NS	NS	NS	NS	NS	<5	<5	<5	<5			
Vinyl Chloride	NS	NS	NS	NS	NS	400	740	990	920			
Methylene Chloride	NS	NS	NS	NS	NS	<5	<5	<5	<5			
Acetone	NS	NS	NS	NS	NS	<5	<10	<5	<5			
1,1-Dichloroethene	NS	NS	NS	NS	NS	<5	<5	<5	<5			
cis-1,2-Dichloroethene	NS	NS	NS	NS	NS	17	240	640	800			
trans-1,2-Dichloroethene	NS	NS	NS	NS	NS	<5	<5	<5	<5			
Chloroform	NS	NS	NS	NS	NS	<5	<5	<5	<5			
2-Butanone	NS	NS	NS	NS	NS	<5	<10	<5	<5			
Trichloroethene	NS	NS	NS	NS	NS	<5	<5	<5	<5			
Isopropylbenzene	NS	NS	NS	NS	NS	<5	<5	<5	<5			
Benzene	NS	NS	NS	NS	NS	<1	<5	<1	<1			
Toluene	NS	NS	NS	NS	NS	<5	<5	<5	<5			
Ethylbenzene	NS	NS	NS	NS	NS	<5	<5	<5	<5			
Total Xylenes	NS	NS	NS	NS	NS	<5	<5	32.6	25.4			
Primary-Carb TOTAL VOCs	N/A	N/A	N/A	N/A	N/A	417	980	1,662.60	1,745.40			

Post-Carbon Analytical Results	Jan-31-01 (ug/L)	Feb-27-01 (ug/L)	Mar-23-01 (ug/L)	Apr-27-01 (ug/L)	May-24-01 (ug/L)	Jun-29-01 (ug/L)	Jul-30-01 (ug/L)	Aug-29-01 (ug/L)	Sep-30-01 (ug/L)	Oct-01 (ug/L)	Nov-01 (ug/L)	Dec-01 (ug/L)
Chloromethane	<1	<1	<5	<5	<5	<5	<5	<5	<5			
Vinyl Chloride	11	150[D]	280	360	<2	<2	<5	2.3	11			
Methylene Chloride	1.44	<1	<5	<5	<5	<5	<5	<5	<5			
Acetone	<1	<1	<5	5.7	<5	<5	<10	12	<5			
1,1-Dichloroethene	<1	<1	<5	7.9	<5	<5	<5	<5	<5			
cis-1,2-Dichloroethene	NA	NA	1,900	3,000	<5	<5	<5	<5	<5			
trans-1,2-Dichloroethene	<1	<1	5.8	11	<5	<5	<5	<5	<5			
Chloroform	<1	<1	<5	<5	<5	<5	<5	<5	<5			
2-Butanone	1.40	<1	<5	<5	<5	<5	<10	<5	<5			
Trichloroethene	<1	5.84	490	920	<5	<5	<5	<5	<5			
Isopropylbenzene	<1	<1	<5	6.0	<5	<5	<5	<5	<5			
Benzene	<1	<1	2.1	4.3	<1	<1	<5	<1	<1			
Toluene	<1	<1	66	310	<5	<5	<5	<5	<5			
Ethylbenzene	<1	0.599[J]	130	400	<5	<5	<5	<5	<5			
Total Xylenes	<1	4.94	1,290	3,190	<5	<5	<5	<5	<5			
Post-Carb TOTAL VOCs	13.84	161.38	4,163.9	8,214.9	ND	ND	ND	14.3	11			

Notes:
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

NOTE:

RECOVERY WELLS RW-3S, RW-4S AND RW-5S CYCLE BETWEEN CONTACT PROBE SETTINGS. THE WATER LEVELS DEPICTED FOR RW-3S, RW-4S AND RW-5S REPRESENT THE WATER LEVEL ELEVATION CORRESPONDING TO THE LOWER CONTACT PROBE SETTING (PUMP OFF) IN EACH WELL.

HOPES ARCHITECTURAL PRODUCTS

PLANT NORTH

TRUE NORTH

MW-16S (1266.78)

1267

1268

1269

MW-14S (1267.05)

RW-2S (1265.99)

MW-15S (1266.37)

HOPKINS AVENUE

MW-18 (1265.71)

GP5S (1269.08)

CONC. ASPHALT

MW-6 (1269.51)

MW-7 (1269.21)

OLD BUILDING FOUNDATION

1270

1271

MW-11 (1269.25)

GP4S (1269.55)

GP1S (1269.99)

GP3S (1269.74)

MW-19S (1266.55)

PZ-6S (1267.82)

VP-6S (1266.14)

MW-10 (1270.32)

CONC. SILO

CONC. RAMP

RW-1S (1265.41)

WATER TREATMENT BUILDING

GP2S (1271.33)

MW-20 (1271.59)

PZ-5S (1269.94)

MW-12 (1269.49)

FORMER PLANT 5

1272

HW-10 (1271.06)

TW1 (1272.85)

RW-5S (1269.92)

TANK FARM

HW-7 (1271.97)

HW-8 (1271.69)

1270

RW-4S (1269.79)

HW-9 (1271.4)

MW-2

RW-3S (1268.78)

2-STY. FRAME & CONC. BLOCK BLDG.

ANGOVE AVENUE

MW-5 (1272.73)

MW-4 (1271.67)

3-STY. BRICK BUILDING

FORMER ESSEX SPECIALTY PRODUCTS FACILITY

MW-13 (1269.74)

MW-1 (1267.41)

BLACKSTONE AVENUE

1271

1270

1269

1268

1267

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).

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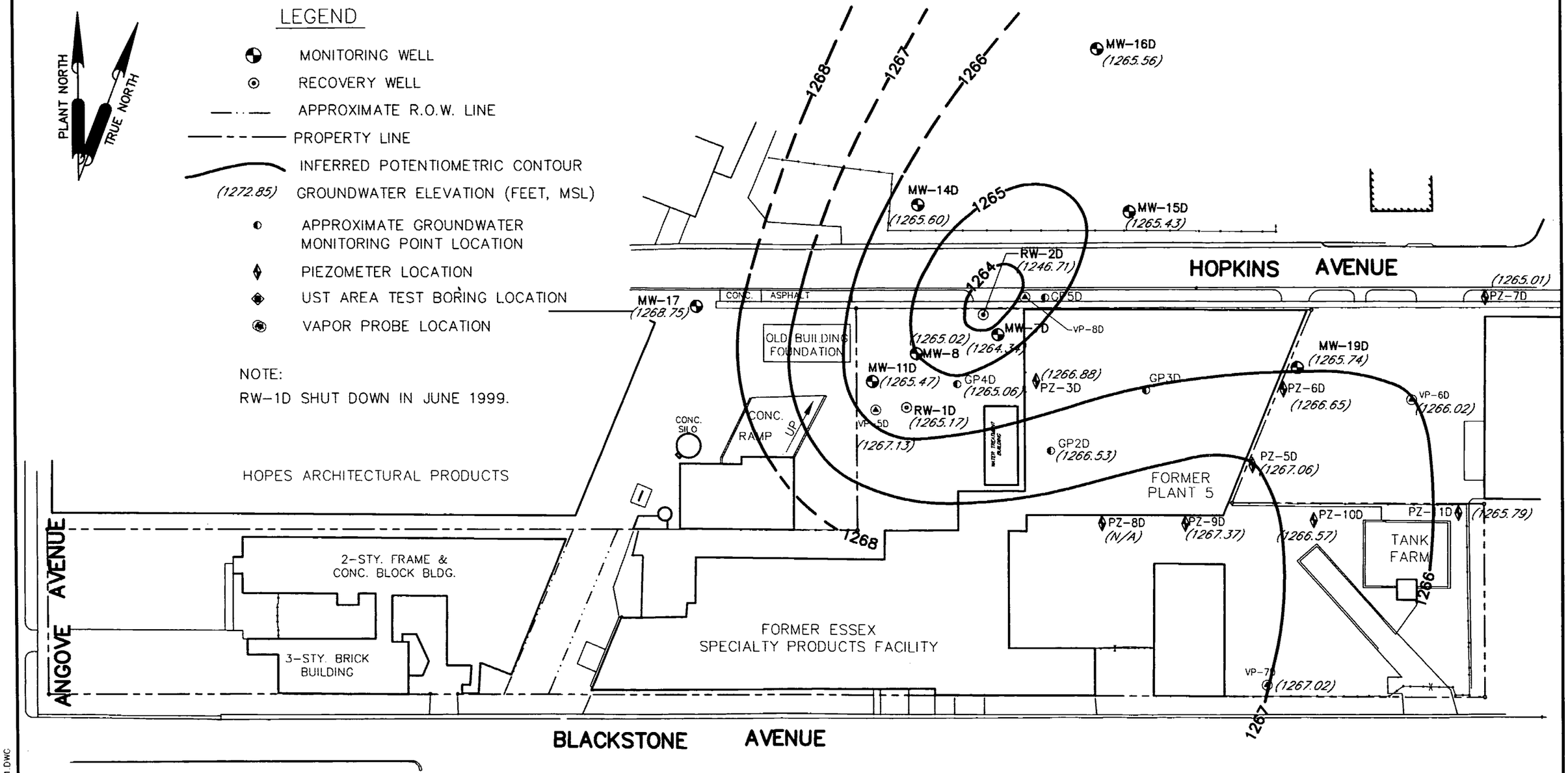
URS

WATER TABLE CONTOUR MAP
JULY 9, 2001

ESSEX/HOPE SITE — JAMESTOWN, NY

CLIENT: ESSEX SPECIALTY PRODUCTS, INC. — JOB NUMBER: 801419.1040

SCALE: AS SHOWN — FIGURE NUMBER 1 — REV 0



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

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URS

POTENTIOMETRIC CONTOUR MAP LOWER FINE SAND WATER BEARING ZONE JULY 9, 2001

ESSEX/HOPE SITE — JAMESTOWN, NY

CLIENT: ESSEX SPECIALTY PRODUCTS, INC.		JOB NUMBER: 801419.1040	
SCALE: AS SHOWN	FIGURE NUMBER 2		REV 0

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

NOTE:

RECOVERY WELLS RW-3S, RW-4S AND RW-5S CYCLE BETWEEN CONTACT PROBE SETTINGS. THE WATER LEVELS DEPICTED FOR RW-3S, RW-4S AND RW-5S REPRESENT THE WATER LEVEL ELEVATION CORRESPONDING TO THE LOWER CONTACT PROBE SETTING (PUMP OFF) IN EACH WELL.

HOPES ARCHITECTURAL PRODUCTS

PLANT NORTH

TRUE NORTH

MW-16S (1266.30)

1266

1267

1268

1269

1270

1272

MW-14S (1267.27)

RW-2S (~1265)

MW-15S (1265.67)

HOPKINS AVENUE

MW-18 (1265.34)

MW-6 (1269.55)

CONC. | ASPHALT

GP5S (1269.19)

OLD BUILDING FOUNDATION

MW-7 (1269.89)

MW-11 (1269.46)

GP4S (1269.77)

GP1S (1269.36)

GP3S (1268.84)

MW-19S (1265.91)

PZ-6S (1267.23)

VP-6S (1265.58)

MW-10 (1270.46)

GP2S (1271.30)

MW-20 (1271.96)

CONC. SILO

CONC. RAMP

UP

RW-1S (1264.87)

MW-12 (1271.96)

WATER TREATMENT BUILDING

FORMER PLANT 5

PZ-5S (1269.53)

HW-10 (1270.94)

TW1 (1274.64)

RW-5S (1269.92)

HW-7 (1271.14)

HW-8 (1271.08)

TANK FARM

MW-2 (1271.52)

RW-3S (1269.20)

RW-4S (1268.56)

HW-9 (1271.4)

2-STY. FRAME & CONC. BLOCK BLDG.

ANGOVE AVENUE

MW-5 (1272.69)

MW-4 (1271.44)

3-STY. BRICK BUILDING

FORMER ESSEX SPECIALTY PRODUCTS FACILITY

MW-13 (1269.73)

MW-1 (1266.99)

BLACKSTONE AVENUE

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).

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URS

WATER TABLE CONTOUR MAP
SEPTEMBER 25, 2001

ESSEX/HOPE SITE — JAMESTOWN, NY

CLIENT: ESSEX SPECIALTY PRODUCTS, INC. — JOB NUMBER: 801419.1010

SCALE: AS SHOWN — FIGURE NUMBER 3 — REV 0

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

NOTES:
1. RW-1D SHUT DOWN IN JUNE 1999.
2. GROUNDWATER CONDITIONS WITH INTERMITTENT PUMPING FROM RW-2D (AVERAGE PUMPING RATE APPROXIMATELY 0.5 GPM).

PLANT NORTH
TRUE NORTH

1267
1266
1265

MW-16D (1265.91)
MW-14D (1266.81)
MW-15D (1266.05)
RW-2D (1262.74)
HOPKINS AVENUE
(1264.69)
PZ-7D
MW-17 (1270.58)
CONC. ASPHALT
GP5D
VP-8D (1266.88)
MW-7D (1266.97)
MW-8 (1265.02)
OLD BUILDING FOUNDATION
MW-19D (1265.96)
MW-11D (1265.79)
GP4D (1266.95)
PZ-3D
GP3D (1266.59)
PZ-6D (1266.25)
VP-6D (1265.50)
RW-1D (1266.97)
VP-5D (1267.97)
CONC. SILO
CONC. RAMP UP
WATER TREATMENT BUILDING
GP2D (1266.95)
FORMER PLANT 5
PZ-5D (1267.50)
PZ-10D (1266.26)
PZ-11D (1265.29)
PZ-8D (1267.11)
PZ-9D (1267.00)
TANK FARM
HOPES ARCHITECTURAL PRODUCTS
2-STY. FRAME & CONC. BLOCK BLDG.
3-STY. BRICK BUILDING
FORMER ESSEX SPECIALTY PRODUCTS FACILITY
VP-7D (1266.71)
ANGOVE AVENUE
BLACKSTONE AVENUE

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).

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URS

POTENTIOMETRIC CONTOUR MAP LOWER FINE SAND WATER BEARING ZONE SEPTEMBER 25, 2001

ESSEX/HOPE SITE — JAMESTOWN, NY

CLIENT: ESSEX SPECIALTY PRODUCTS, INC. — JOB NUMBER: 801419.1010

SCALE: AS SHOWN — FIGURE NUMBER 4 — REV 0

LEGEND

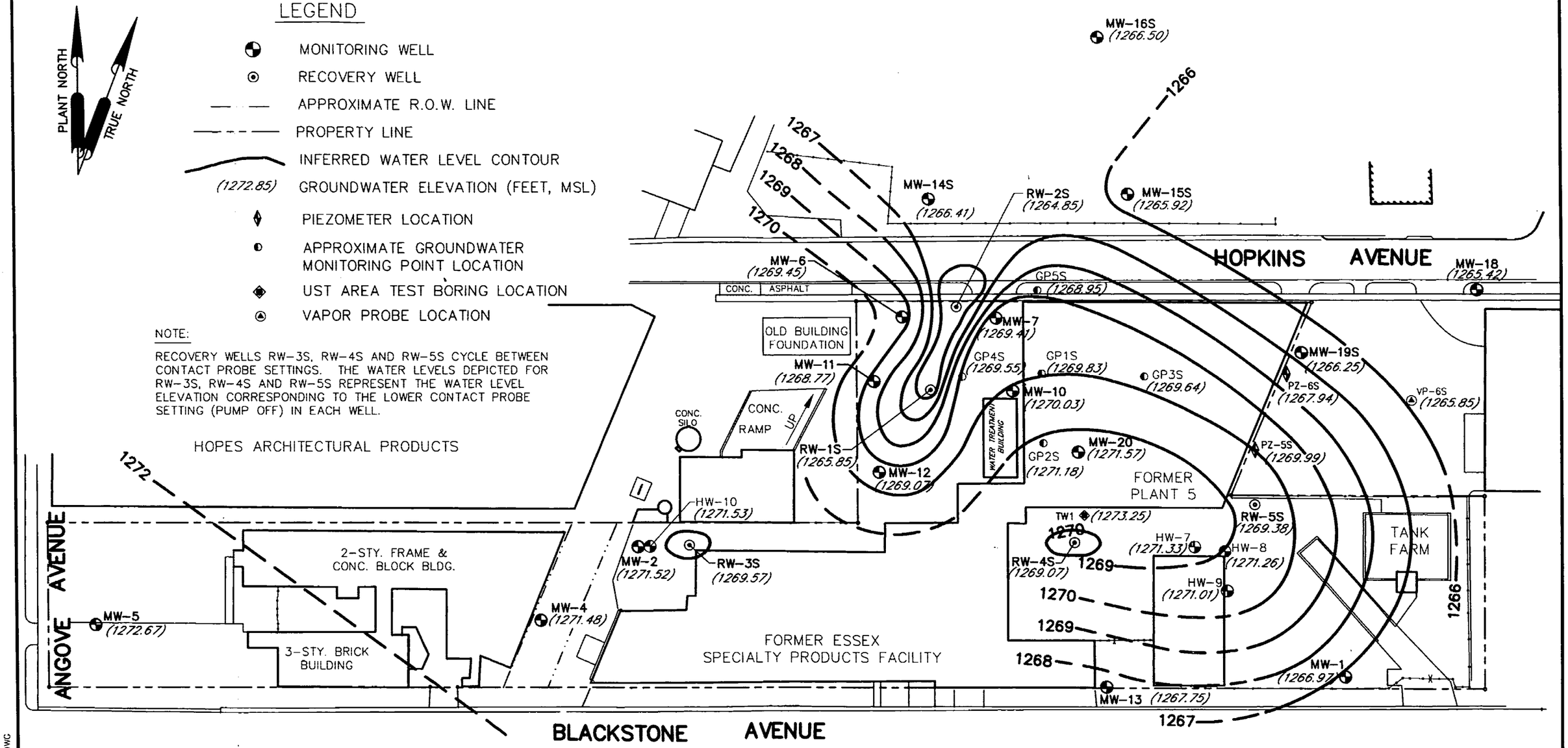
- MONITORING WELL
- RECOVERY WELL
- APPROXIMATE R.O.W. LINE
- PROPERTY LINE
- INFERRED WATER LEVEL CONTOUR
- (1272.85) GROUNDWATER ELEVATION (FEET, MSL)
- PIEZOMETER LOCATION
- APPROXIMATE GROUNDWATER MONITORING POINT LOCATION
- UST AREA TEST BORING LOCATION
- VAPOR PROBE LOCATION

PLANT NORTH / TRUE NORTH

NOTE:

RECOVERY WELLS RW-3S, RW-4S AND RW-5S CYCLE BETWEEN CONTACT PROBE SETTINGS. THE WATER LEVELS DEPICTED FOR RW-3S, RW-4S AND RW-5S REPRESENT THE WATER LEVEL ELEVATION CORRESPONDING TO THE LOWER CONTACT PROBE SETTING (PUMP OFF) IN EACH WELL.

HOPES ARCHITECTURAL PRODUCTS



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).

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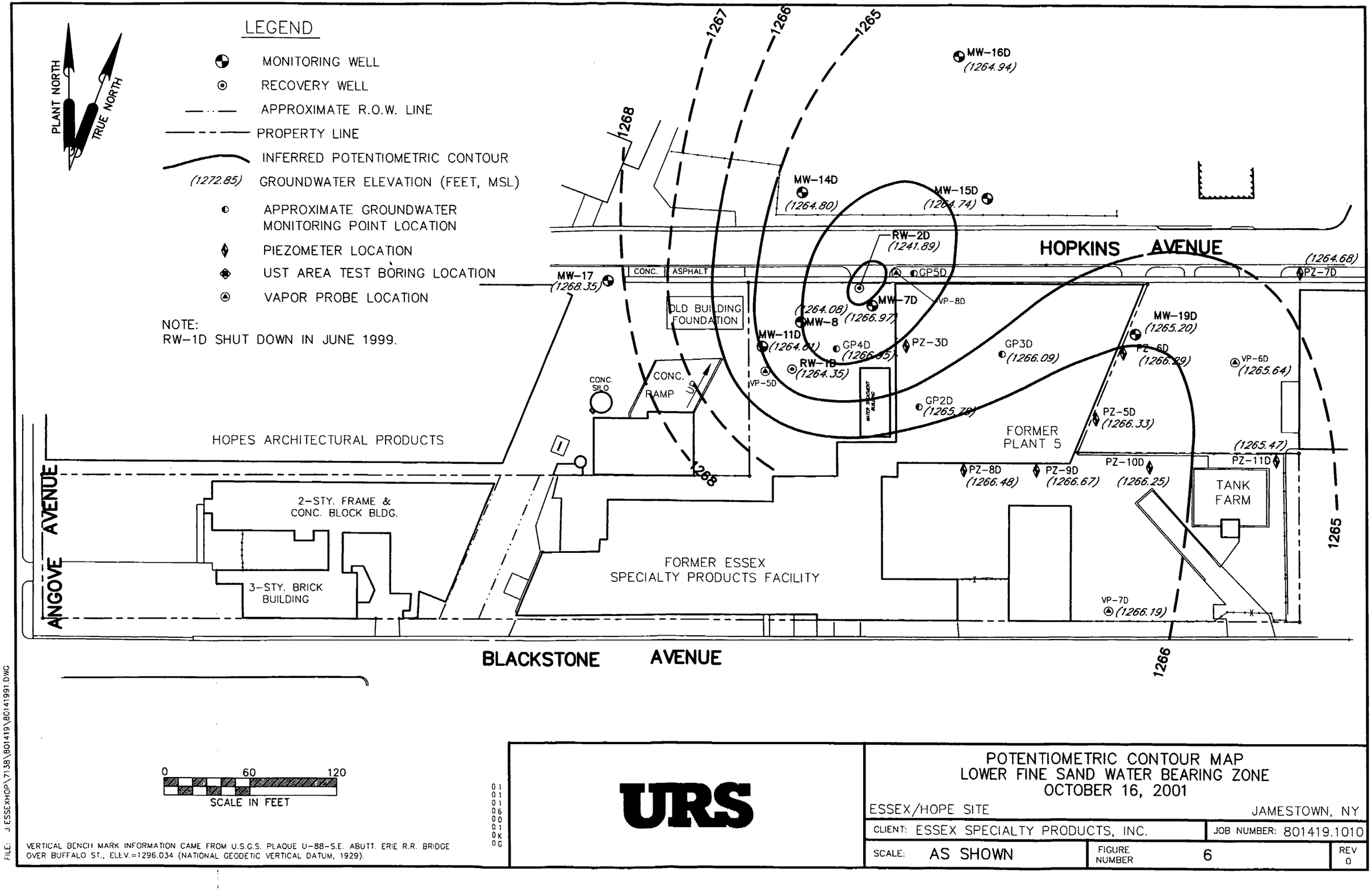
URS

WATER TABLE CONTOUR MAP
OCTOBER 16, 2001

ESSEX/HOPE SITE — JAMESTOWN, NY

CLIENT: ESSEX SPECIALTY PRODUCTS, INC. — JOB NUMBER: 801419.1010

SCALE: AS SHOWN — FIGURE NUMBER 5 — REV 0



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

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URS

POTENTIOMETRIC CONTOUR MAP
LOWER FINE SAND WATER BEARING ZONE
OCTOBER 16, 2001

ESSEX/HOPE SITE — JAMESTOWN, NY

CLIENT: ESSEX SPECIALTY PRODUCTS, INC. — JOB NUMBER: 801419.1010

SCALE: AS SHOWN — FIGURE NUMBER 6 — REV 0

APPENDIX A

WATER LEVEL MEASUREMENT DATA

Groundwater Extraction System Monitoring Data
June through September 2001 Water Levels

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

Well No.	Northing	Easting	Reference Elevation (ft msl)	Screened Zone	June 28, 2001		July 9, 2001		September 25, 2001	
					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	12.77	1267.71	13.07	1267.41	13.49	1266.99
MW-2	9837.1531	9959.6857	1279.87	Shallow WBZ	Dry		Dry		8.35	1271.52
MW-4	9792.3277	9900.7631	1281.02	Shallow WBZ	9.13	1271.89	9.35	1271.67	9.58	1271.44
MW-5	9789.6222	9631.761	1280.82	Shallow WBZ	8.04	1272.78	8.09	1272.73	8.13	1272.69
MW-6*	9977.1197	10118.8762	1277.98	Shallow WBZ	8.41	1269.57	8.47	1269.51	8.43	1269.55
MW-7*	9976.6467	10175.6797	1277.73	Shallow WBZ	8.26	1269.47	8.52	1269.21	7.84	1269.89
MW-10	9932.4702	10185.7078	1277.94	Shallow WBZ	7.29	1270.65	7.62	1270.32	7.48	1270.46
MW-11*	9937.9912	10101.7016	1277.75	Shallow WBZ	8.32	1269.43	8.50	1269.25	8.29	1269.46
MW-12	9883.0874	10104.9278	1278.18	Shallow WBZ	8.09	1270.09	8.69	1269.49	8.01	1270.17
MW-13	9752.0619	10240.2934	1278.12	Shallow WBZ	7.55	1270.57	8.38	1269.74	8.39	1269.73
MW-14S	10048.7753	10135.5198	1280.25	Shallow WBZ	13.02	1267.23	13.20	1267.05	12.98	1267.27
MW-15S	10051.8272	10254.4862	1279.55	Shallow WBZ	12.63	1266.92	13.18	1266.37	13.88	1265.67
MW-16S	10146.7788	10236.8582	1279.32	Shallow WBZ	12.10	1267.22	12.54	1266.78	13.02	1266.3
MW-18	9994	10465	1275.59	Shallow WBZ	9.49	1266.10	9.88	1265.71	10.25	1265.34
MW-19S	9956.1454	10358.207	1276.82	Shallow WBZ	9.85	1266.97	10.27	1266.55	10.91	1265.91
MW-20	9895.0082	10224.2128	1278.64	Shallow WBZ	6.96	1271.68	7.05	1271.59	6.68	1271.96
HW-1	9874.8053	10079.0259	1281.91	Shallow WBZ	NA	NA	NA	NA		
HW-2	9977.6477	10079.7882	1281.13	Shallow WBZ	NA	NA	NA	NA		
HW-3	9866.163	9957.6007	1283.24	Shallow WBZ	NA	NA	NA	NA		
HW-7	9837.3164	10293.8428	1277.55	Shallow WBZ	5.58	1271.97	5.86	1271.69	6.41	1271.14
HW-8	9834.664	10312.0885	1277.81	Shallow WBZ	5.83	1271.98	6.12	1271.69	6.73	1271.08
HW-9	9810.5264	10313.3873	1280.78	Shallow WBZ	9.07	1271.71	9.38	1271.4	9.89	1270.89
HW-10	9837.2976	9966.7406	1279.55	Shallow WBZ	8.36	1271.19	8.49	1271.06	8.61	1270.94
SP-10	9815.1646	9977.9909	1279.03	Shallow WBZ	NA	NA	NA	NA		
SP-11	9839.7566	9977.9072	1279.23	Shallow WBZ	NA	NA	NA	NA		
SP-12	9833.1836	9958.7423	1279.68	Shallow WBZ	NA	NA	NA	NA		
SP-13	9819.5009	9958.5764	1279.87	Shallow WBZ	NA	NA	NA	NA		
SP-14	9807.2232	9967.0477	1279.39	Shallow WBZ	NA	NA	NA	NA		
SP-15	9840.6722	10209.4525	1278.65	Shallow WBZ	NA	NA	NA	NA		
SP-16	9840.3119	10250.4484	1277.84	Shallow WBZ	NA	NA	NA	NA		
SP-17	9845.107	10287.9591	1277.56	Shallow WBZ	NA	NA	NA	NA		
SP-18	9855.8421	10323.265	1277.4	Shallow WBZ	NA	NA	NA	NA		
SDO-1	N/A	N/A	N/A	Shallow WBZ	NA	NA	NA	NA		
RW-1S	9932.8951	10135.8706	1276.06	Shallow WBZ	10.71	1265.35	10.65	1265.41	11.19	1264.87
RW-2S*	9983.3801	10151.6403	1276.59	Shallow WBZ	11.55	1265.04	10.60	1265.99	7.29	1269.3
RW-3S	9838.0594	9990.4502	1278.29	Shallow WBZ	8.47	1269.82	9.51	1268.78	9.09	1269.2
RW-4S	9839.8053	10221.6766	1277.34	Shallow WBZ	7.61	1269.73	7.55	1269.79	8.78	1268.56
RW-5S	9863.2271	10330.2425	1277.43	Shallow WBZ	7.64	1269.79	7.51	1269.92	7.51	1269.92
MW-7D*	9973.2593	10174.8524	1277.8	Lower Fine Sand WBZ	14.12	1263.68	13.46	1264.34	10.83	1266.97
MW-8	9959.6089	10127.6898	1277.97	Lower Fine Sand WBZ	13.33	1264.64	12.95	1265.02	10.72	1267.25
MW-11D	9942.3792	10101.1482	1277.85	Lower Fine Sand WBZ	12.60	1265.25	12.38	1265.47	12.06	1265.79
MW-14D	10049.5051	10129.1897	1280.01	Lower Fine Sand WBZ	14.55	1265.46	14.41	1265.6	13.16	1266.85
MW-15D	10045.5611	10255.205	1279.46	Lower Fine Sand WBZ	14.01	1265.45	14.03	1265.43	13.41	1266.05
MW-16D	10143.9497	10236.6005	1279.05	Lower Fine Sand WBZ	13.42	1265.63	13.49	1265.56	13.14	1265.91
MW-17	9987.6315	9995.5207	1278.7	Lower Fine Sand WBZ	9.86	1268.84	9.95	1268.75	8.12	1270.58
MW-19D	9951.569	10355.9748	1276.21	Lower Fine Sand WBZ	10.25	1265.96	10.47	1265.74	10.25	1265.96
RW-1D	9926.5997	10121.3968	1276.64	Lower Fine Sand WBZ	11.75	1264.89	11.47	1265.17	9.67	1266.97
RW-2D	9983.0619	10167.3168	1276.46	Lower Fine Sand WBZ	31.80	1244.66	29.75	1246.71	13.72	1262.74
MW-7DD*	9970.8547	10176.2698	1277.74	Glacial Till	2.75	1274.99	2.82	1274.92	2.27	1275.47
GP-1S	9954.39*	10203.02*	1278.98	Shallow WBZ	8.58	1270.40	8.99	1269.99	9.62	1269.36
GP-2S	9914.89*	10201.04*	1278.63	Shallow WBZ	7.09	1271.54	7.30	1271.33	7.33	1271.3
GP-2D	9914.91*	10207.84*	1278.7	Lower Fine Sand WBZ	12.20	1266.50	12.17	1266.53	11.75	1266.95
GP-3S	9941.13*	10264.03*	1278.87	Shallow WBZ	8.77	1270.10	9.13	1269.74	10.03	1268.84
GP-3D	9937.38*	10264.53*	1278.77	Lower Fine Sand WBZ	13.00	1265.77	12.95	1265.82	12.18	1266.59
GP-4S	9940.86*	10154.97*	1278.06	Shallow WBZ	8.36	1269.70	8.41	1269.65	8.29	1269.77
GP-4D	9940.85*	10151.57*	1278.08	Lower Fine Sand WBZ	13.47	1264.61	13.02	1265.06	11.13	1266.95
GP-5S	9993.54*	10200.34*	1277.44	Shallow WBZ	8.24	1269.20	8.36	1269.08	8.25	1269.19
GP-5D	9993.55*	10290.21*	1277.37	Lower Fine Sand WBZ					Blocked	
PZ-1S			1277.97	Shallow WBZ	8.42	1269.55	8.52	1269.45	8.28	1269.69
PZ-1D			1277.75	Lower Fine Sand WBZ	11.98	1265.77	11.86	1265.89	10.61	1267.14
PZ-2D			1277.86	Lower Fine Sand WBZ	11.58	1266.28	11.28	1266.58	10.07	1267.79
PZ-3D			1279.02	Lower Fine Sand WBZ	12.09	1266.93	12.14	1266.88	11.74	1267.28
PZ-4D			1278.94	Lower Fine Sand WBZ	12.12	1266.82	12.38	1266.56	11.62	1267.32
PZ-5S			1276.56	Shallow WBZ	6.32	1270.24	6.62	1269.94	7.03	1269.53
PZ-5D			1276.52	Lower Fine Sand WBZ	9.49	1267.03	9.46	1267.06	10.02	1266.5
PZ-6S			1276.77	Shallow WBZ	8.73	1268.04	8.95	1267.82	9.54	1267.23
PZ-6D			1276.57	Lower Fine Sand WBZ	10.00	1266.57	9.92	1266.65	10.32	1266.25
PZ-7D			1275.83	Lower Fine Sand WBZ	10.35	1265.48	10.82	1265.01	11.14	1264.69
PZ-8D			1278.63	Lower Fine Sand WBZ					11.52	1267.11
PZ-9D			1278.04	Lower Fine Sand WBZ	10.60	1267.44	10.67	1267.37	11.04	1267
PZ-10D			1277.58	Lower Fine Sand WBZ	10.79	1266.79	11.01	1266.57	11.32	1266.26
PZ-11D			1276.7	Lower Fine Sand WBZ	10.76	1265.94	10.91	1265.79	11.41	1265.29
TW-01			1279.1	Shallow WBZ	6.14	1272.96	6.25	1272.85	4.46	1274.64
VP-5D			1278.2	Lower Fine Sand WBZ	11.09	1267.11	11.07	1267.13	10.23	1267.97
VP-6S			1276.62	Upper Gravel of LFSWBZ	10.07	1266.55	10.48	1266.14	11.04	1265.58
VP-6D			1276.71	Lower Fine Sand WBZ	10.28	1266.43	10.69	1266.02	11.21	1265.5
VP-7D			1278.87	Lower Fine Sand WBZ	12.21	1266.66	11.85	1267.02	12.16	1266.71
VP-8D			1277.37	Lower Fine Sand WBZ	11.04	1266.33	11.03	1266.34	10.49	1266.88
Comments					1329 Days of System Operation		1340 Days of System Operation		1418 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
October and November 2001 Water Levels

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

Well No.	Northing	Easting	Reference Elevation (ft msl)	Screened Zone	October 16, 2001		November 2, 2001	
					Depth to Water	Groundwater Elevation (ft msl)	Depth to Water	Groundwater Elevation (ft msl)
MW-1	9758.7161	10383.6499	1280.48	Shallow WBZ	13.51	1266.97	13.07	1267.41
MW-2	9837.1531	9959.6857	1279.87	Shallow WBZ	Dry		Dry	
MW-4	9792.3277	9900.7631	1281.02	Shallow WBZ	9.54	1271.48	9.32	1271.7
MW-5	9789.6222	9631.761	1280.82	Shallow WBZ	8.15	1272.67	8.08	1272.74
MW-6*	9977.1197	10118.8762	1277.98	Shallow WBZ	8.53	1269.45	8.19	1269.79
MW-7*	9976.6467	10175.6797	1277.73	Shallow WBZ	8.32	1269.41	7.95	1269.78
MW-10	9932.4702	10185.7078	1277.94	Shallow WBZ	7.91	1270.03	7.25	1270.69
MW-11*	9937.9912	10101.7016	1277.75	Shallow WBZ	8.98	1268.77	8.56	1269.19
MW-12	9883.0874	10104.9278	1278.18	Shallow WBZ	9.11	1269.07	8.6	1269.58
MW-13	9752.0619	10240.2934	1278.12	Shallow WBZ	10.37	1267.75	7.94	1270.18
MW-14S	10048.7753	10135.5198	1280.25	Shallow WBZ	13.84	1266.41	13.17	1267.08
MW-15S	10051.8272	10254.4862	1279.55	Shallow WBZ	13.63	1265.92	12.74	1266.81
MW-16S	10146.7788	10236.8582	1279.32	Shallow WBZ	12.82	1266.50	12.12	1267.2
MW-18	9994	10465	1275.59	Shallow WBZ	10.17	1265.42	9.85	1265.74
MW-19S	9956.1454	10358.207	1276.82	Shallow WBZ	10.57	1266.25	9.95	1266.87
MW-20	9895.0082	10224.2128	1278.64	Shallow WBZ	7.07	1271.57	7.02	1271.62
HW-1	9874.8053	10079.0259	1281.91	Shallow WBZ				
HW-2	9977.6477	10079.7882	1281.13	Shallow WBZ				
HW-3	9866.163	9957.6007	1283.24	Shallow WBZ				
HW-7	9837.3164	10293.8428	1277.55	Shallow WBZ	6.22	1271.33	5.79	1271.76
HW-8	9834.664	10312.0885	1277.81	Shallow WBZ	6.55	1271.26	6.09	1271.72
HW-9	9810.5264	10313.3873	1280.78	Shallow WBZ	9.77	1271.01	9.26	1271.52
HW-10	9837.2976	9966.7406	1279.55	Shallow WBZ	8.02	1271.53	8.34	1271.21
SP-10	9815.1646	9977.9909	1279.03	Shallow WBZ				
SP-11	9839.7566	9977.9072	1279.23	Shallow WBZ				
SP-12	9833.1836	9958.7423	1279.68	Shallow WBZ				
SP-13	9819.5009	9958.5764	1279.87	Shallow WBZ				
SP-14	9807.2232	9967.0477	1279.39	Shallow WBZ				
SP-15	9840.6722	10209.4525	1278.65	Shallow WBZ				
SP-16	9840.3119	10250.4484	1277.84	Shallow WBZ				
SP-17	9845.107	10287.9591	1277.56	Shallow WBZ				
SP-18	9855.8421	10323.265	1277.4	Shallow WBZ				
SDO-1	N/A	N/A	N/A	Shallow WBZ				
RW-1S	9932.8951	10135.8706	1276.06	Shallow WBZ	10.21	1265.85	10.75	1265.31
RW-2S*	9983.3601	10151.6403	1276.59	Shallow WBZ	11.74	1264.85	8.90	1267.69
RW-3S	9838.0594	9990.4502	1278.29	Shallow WBZ	8.72	1269.57	8.74	1269.55
RW-4S	9839.8053	10221.6766	1277.34	Shallow WBZ	8.27	1269.07	4.85	1272.49
RW-5S	9863.2271	10330.2425	1277.43	Shallow WBZ	8.05	1269.38	8.11	1269.32
MW-7D*	9973.2593	10174.8524	1277.8	Lower Fine Sand WBZ	14.34	1263.46	13.3	1264.5
MW-8	9959.6089	10127.6858	1277.97	Lower Fine Sand WBZ	13.88	1264.08	12.91	1265.06
MW-11D	9942.3792	10101.1482	1277.85	Lower Fine Sand WBZ	13.24	1264.61	12.37	1265.48
MW-14D	10049.5051	10129.1897	1280.01	Lower Fine Sand WBZ	15.21	1264.80	14.36	1265.65
MW-15D	10045.5611	10255.205	1279.46	Lower Fine Sand WBZ	14.72	1264.74	13.89	1265.57
MW-16D	10143.9497	10236.6005	1279.05	Lower Fine Sand WBZ	14.11	1264.94	13.32	1265.73
MW-17	9987.6315	9995.5207	1278.7	Lower Fine Sand WBZ	10.35	1268.35	10.2	1268.5
MW-19D	9951.569	10355.9748	1276.21	Lower Fine Sand WBZ	11.01	1265.20	10.3	1265.91
RW-1D	9926.5997	10121.3968	1276.64	Lower Fine Sand WBZ	12.29	1264.35	11.35	1265.29
RW-2D	9983.0619	10167.3168	1276.48	Lower Fine Sand WBZ	34.57	1241.89	30.29	1246.17
MW-7DD*	9970.8547	10176.2698	1277.74	Glacial Till	2.33	1275.41	N/A	
GP-1S	9954.39*	10203.02*	1278.98	Shallow WBZ	9.15	1269.83	8.61	1270.37
GP-2S	9914.89*	10201.04*	1278.63	Shallow WBZ	7.45	1271.18	7.18	1271.45
GP-2D	9914.91*	10207.84*	1278.7	Lower Fine Sand WBZ	12.92	1265.78	12.18	1266.52
GP-3S	9941.13*	10264.03*	1278.87	Shallow WBZ	9.23	1269.64	Blocked	
GP-3D	9937.38*	10264.53*	1278.77	Lower Fine Sand WBZ	13.68	1265.09	12.89	1265.88
GP-4S	9940.86*	10154.97*	1278.06	Shallow WBZ	8.51	1269.55	Blocked	
GP-4D	9940.85*	10151.57*	1278.08	Lower Fine Sand WBZ	13.01	1265.07	Blocked	
GP-5S	9993.54*	10200.34*	1277.44	Shallow WBZ	8.49	1268.95	Blocked	
GP-5D	9993.55*	10290.21*	1277.37	Lower Fine Sand WBZ	Blocked		Blocked	
PZ-1S			1277.97	Shallow WBZ	8.61	1269.36	N/A	
PZ-1D			1277.75	Lower Fine Sand WBZ	12.52	1265.23	N/A	
PZ-2D			1277.86	Lower Fine Sand WBZ	11.83	1266.03	N/A	
PZ-3D			1279.02	Lower Fine Sand WBZ	12.59	1266.43	N/A	
PZ-4D			1278.94	Lower Fine Sand WBZ	12.62	1266.32	N/A	
PZ-5S			1276.56	Shallow WBZ	6.57	1269.99	Poor Reading	
PZ-5D			1276.52	Lower Fine Sand WBZ	10.19	1266.33	10.34	1266.18
PZ-6S			1276.77	Shallow WBZ	8.83	1267.94	8.48	1268.29
PZ-6D			1276.57	Lower Fine Sand WBZ	10.28	1266.29	10.19	1266.38
PZ-7D			1275.83	Lower Fine Sand WBZ	11.15	1264.68	10.45	1265.38
PZ-8D			1278.63	Lower Fine Sand WBZ	12.15	1266.48	11.49	1267.14
PZ-9D			1278.04	Lower Fine Sand WBZ	11.37	1266.67	10.95	1267.09
PZ-10D			1277.58	Lower Fine Sand WBZ	11.33	1266.25	10.84	1266.74
PZ-11D			1276.7	Lower Fine Sand WBZ	11.23	1265.47	10.94	1265.76
TW-01			1279.1	Shallow WBZ	5.85	1273.25	8.19	1270.91
VP-5D			1278.2	Lower Fine Sand WBZ	11.64	1266.56	Blocked	
VP-6S			1276.62	Upper Gravel of LFSWBZ	10.77	1265.85	10.26	1266.36
VP-6D			1276.71	Lower Fine Sand WBZ	11.07	1265.64	10.72	1265.99
VP-7D			1278.87	Lower Fine Sand WBZ	12.68	1266.19	12.98	1265.89
VP-8D			1277.37	Lower Fine Sand WBZ	11.76	1265.61	Blocked	

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.

1457 Days of System Operation;
RW-2D acidified and re-developed between 10/2/01 and 10/4/01. RW-2D re-started on 10/4/01.

1474 Days of System Operation
Note- Pumping rate decreased to 2.1 GPM from RW-2D due to precipitate buildup in the flowmeter and piping. RW-2D Q increased to 2.3 GPM. Readings taken during precipitation event.

B

APPENDIX B

LABORATORY CERTIFICATES OF ANALYSIS

Antech Ltd.
One Triangle Lane
Export, PA 15632
Phone: (724)733-1161
Fax: (724)327-7793

August 14, 2001

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 Antech Ltd. by URS Corporation Construction Services Division. The samples were received on July 31, 2001. Please reference Antech project number 01-3369 when inquiring about this report.

Client Site: Essex-Hope
Client Ref.: 801419.1010

Antech Sample Indentification	Client Sample Identification
0107-1764	Pre-Carb
0107-1765	Primary Carb Effluent
0107-1766	Post Carb Comp
0107-1767	Trip Blank

General Comments:

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

Sincerely,

Carin A. Ferris
Project Coordinator

CAM: 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.: 801419.1010

Lab Project ID: **01-3369**
Lab Sample ID: **0107-1764**
Client Sample ID: Pre-Carb
Sample Matrix: Aqueous

Date Sampled: 07/30/2001
Date Received: 07/31/2001

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Acetone	8260B(1)	16	10	ug/l	REC	08/10/2001	081004-04	15
Benzene	8260B(1)	6.2	5.0	ug/l	REC	08/10/2001	081004-04	<5.0
Bromodichloromethane	8260B(1)	<5.0	5.0	ug/l	REC	08/10/2001	081004-04	<5.0
Bromoform	8260B(1)	<5.0	5.0	ug/l	REC	08/10/2001	081004-04	<5.0
Bromomethane	8260B(1)	<5.0	5.0	ug/l	REC	08/10/2001	081004-04	<5.0
2-Butanone	8260B(1)	<10	10	ug/l	REC	08/10/2001	081004-04	<10
Carbon Disulfide	8260B(1)	<5.0	5.0	ug/l	REC	08/10/2001	081004-04	<5.0
Carbon Tetrachloride	8260B(1)	<5.0	5.0	ug/l	REC	08/10/2001	081004-04	<5.0
Chlorobenzene	8260B(1)	<5.0	5.0	ug/l	REC	08/10/2001	081004-04	<5.0
Chloroethane	8260B(1)	<5.0	5.0	ug/l	REC	08/10/2001	081004-04	<5.0
Chloroform	8260B(1)	<5.0	5.0	ug/l	REC	08/10/2001	081004-04	<5.0
Chloromethane	8260B(1)	<5.0	5.0	ug/l	REC	08/10/2001	081004-04	<5.0
Cumene	8260B(1)	<5.0	5.0	ug/l	REC	08/10/2001	081004-04	<5.0
Dibromochloromethane	8260B(1)	<5.0	5.0	ug/l	REC	08/10/2001	081004-04	<5.0
1,2-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	REC	08/10/2001	081004-04	<5.0
1,3-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	REC	08/10/2001	081004-04	<5.0
1,4-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	REC	08/10/2001	081004-04	<5.0
1,1-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	REC	08/10/2001	081004-04	<5.0
1,2-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	REC	08/10/2001	081004-04	<5.0
1,1-Dichloroethene	8260B(1)	17	5.0	ug/l	REC	08/10/2001	081004-04	<5.0
cis-1,2-Dichloroethene	8260B(1)	5600	250	ug/l	CEL	08/08/2001	080904-07	<5.0
trans-1,2-Dichloroethene	8260B(1)	42	5.0	ug/l	REC	08/10/2001	081004-04	<5.0
1,2-Dichloropropane	8260B(1)	<5.0	5.0	ug/l	REC	08/10/2001	081004-04	<5.0
cis-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	REC	08/10/2001	081004-04	<5.0
trans-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	REC	08/10/2001	081004-04	<5.0
Ethylbenzene	8260B(1)	83	25	ug/l	REC	08/10/2001	081004-04	<5.0
2-Hexanone	8260B(1)	<10	10	ug/l	REC	08/10/2001	081004-04	<10
4-Methyl-2-pentanone	8260B(1)	<10	10	ug/l	REC	08/10/2001	081004-04	<10
Methylene chloride	8260B(1)	<5.0	5.0	ug/l	REC	08/10/2001	081004-04	<5.0
Styrene	8260B(1)	<5.0	5.0	ug/l	REC	08/10/2001	081004-04	<5.0
1,1,2,2-Tetrachloroethane	8260B(1)	<5.0	5.0	ug/l	REC	08/10/2001	081004-04	<5.0
Tetrachloroethene	8260B(1)	<5.0	5.0	ug/l	REC	08/10/2001	081004-04	<5.0
Toluene	8260B(1)	120	5.0	ug/l	REC	08/10/2001	081004-04	<5.0
1,1,1-Trichloroethane	8260B(1)	<5.0	5.0	ug/l	REC	08/10/2001	081004-04	<5.0
1,1,2-Trichloroethane	8260B(1)	<5.0	5.0	ug/l	REC	08/10/2001	081004-04	<5.0
Trichloroethene	8260B(1)	430	25	ug/l	REC	08/10/2001	081004-04	<5.0
Trichlorofluoromethane	8260B(1)	<5.0	5.0	ug/l	REC	08/10/2001	081004-04	<5.0
Vinyl chloride	8260B(1)	380	25	ug/l	REC	08/10/2001	081004-04	<5.0

(Continued)

Lab Sample ID: **0107-1764**
Client Sample ID: Pre-Carb

Volatiles (Cont.)

m,p-Xylene	8260B[1]	430	25	ug/l	REC	08/10/2001	081004-04	<5.0
o-Xylene	8260B[1]	170	25	ug/l	REC	08/10/2001	081004-04	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Acetone is a common laboratory contaminant. Results for this analyte should be considered estimates unless the amount found in the sample is 3 to 5 times higher than that found in the method blank.

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

Client Site: Essex-Hope
Client Ref.: 801419.1010

Lab Project ID: **01-3369**
Lab Sample ID: **0107-1765**
Client Sample ID: Primary Carb Effluent
Sample Matrix: Aqueous

Date Sampled: 07/30/2001
Date Received: 07/31/2001

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Acetone	8260B[1]	<10	10	ug/l	CEL	08/08/2001	080904-07	<10
Benzene	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0
Bromodichloromethane	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0
Bromoform	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0
Bromomethane	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0
2-Butanone	8260B[1]	<10	10	ug/l	CEL	08/08/2001	080904-07	<10
Carbon Disulfide	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0
Carbon Tetrachloride	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0
Chlorobenzene	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0
Chloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0
Chloroform	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0
Chloromethane	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0
Cumene	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0
Dibromochloromethane	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0
1,2-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0
1,3-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0
1,4-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0
1,1-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0
1,2-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0
1,1-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0
cis-1,2-Dichloroethene	8260B[1]	240	25	ug/l	CEL	08/07/2001	080804-07	<5.0
trans-1,2-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0
1,2-Dichloropropane	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0
cis-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0
trans-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0
Ethylbenzene	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0
2-Hexanone	8260B[1]	<10	10	ug/l	CEL	08/08/2001	080904-07	<10
4-Methyl-2-pentanone	8260B[1]	<10	10	ug/l	CEL	08/08/2001	080904-07	<10
Methylene chloride	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0
Styrene	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0
Toluene	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0
Trichloroethene	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0
Vinyl chloride	8260B[1]	740	25	ug/l	CEL	08/07/2001	080804-07	<5.0

(Continued)

Lab Sample ID: **0107-1765**
Client Sample ID: Primary Carb Effluent

Volatiles (Cont.)

m,p-Xylene	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0
o-Xylene	8260B[1]	<5.0	5.0	ug/l	CEL	08/08/2001	080904-07	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments:

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

Client Site: Essex-Hope
Client Ref.: 801419.1010

Lab Project ID: **01-3369**
Lab Sample ID: **0107-1766**
Client Sample ID: Post Carb Comp
Sample Matrix: Aqueous

Date Sampled: 07/30/2001
Date Received: 07/31/2001

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Acetone	8260B[1]	<10	10	ug/l	CEL	08/07/2001	080804-07	<10
Benzene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Bromodichloromethane	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Bromoform	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Bromomethane	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
2-Butanone	8260B[1]	<10	10	ug/l	CEL	08/07/2001	080804-07	<10
Carbon Disulfide	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Carbon Tetrachloride	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Chlorobenzene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Chloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Chloroform	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Chloromethane	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Cumene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Dibromochloromethane	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
1,2-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
1,3-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
1,4-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
1,1-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
1,2-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
1,1-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
cis-1,2-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
trans-1,2-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
1,2-Dichloropropane	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
cis-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
trans-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Ethylbenzene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
2-Hexanone	8260B[1]	<10	10	ug/l	CEL	08/07/2001	080804-07	<10
4-Methyl-2-pentanone	8260B[1]	<10	10	ug/l	CEL	08/07/2001	080804-07	<10
Methylene chloride	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Styrene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Toluene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Trichloroethene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Vinyl chloride	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0

(Continued)

Lab Sample ID: **0107-1766**
Client Sample ID: Post Carb Comp

Volatiles (Cont.)

m,p-Xylene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
o-Xylene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Acetone is a common laboratory contaminant. Results for this analyte should be considered estimates unless the amount found in the sample is 3 to 5 times higher than that found in the method blank.

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

Client Site: Essex-Hope
Client Ref.: 801419.1010

Lab Project ID: **01-3369**
Lab Sample ID: **0107-1767**
Client Sample ID: Trip Blank
Sample Matrix: Aqueous

Date Sampled: 07/30/2001
Date Received: 07/31/2001

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Acetone	8260B[1]	<10	10	ug/l	CEL	08/07/2001	080804-07	<10
Benzene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Bromodichloromethane	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Bromoform	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Bromomethane	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
2-Butanone	8260B[1]	<10	10	ug/l	CEL	08/07/2001	080804-07	<10
Carbon Disulfide	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Carbon Tetrachloride	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Chlorobenzene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Chloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Chloroform	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Chloromethane	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Cumene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Dibromochloromethane	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
1,2-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
1,3-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
1,4-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
1,1-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
1,2-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
1,1-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
cis-1,2-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
trans-1,2-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
1,2-Dichloropropane	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
cis-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
trans-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Ethylbenzene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
2-Hexanone	8260B[1]	<10	10	ug/l	CEL	08/07/2001	080804-07	<10
4-Methyl-2-pentanone	8260B[1]	<10	10	ug/l	CEL	08/07/2001	080804-07	<10
Methylene chloride	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Styrene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Toluene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Trichloroethene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
Vinyl chloride	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0

(Continued)

Lab Sample ID: **0107-1767**
Client Sample ID: Trip Blank

Volatiles (Cont.)

m,p-Xylene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0
o-Xylene	8260B[1]	<5.0	5.0	ug/l	CEL	08/07/2001	080804-07	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Acetone is a common laboratory contaminant. Results for this analyte should be considered estimates unless the amount found in the sample is 3 to 5 times higher than that found in the method blank.

Antech Ltd.
Chain of Custody Record

Ship To:
Antech Ltd.
One Triangle Drive
Export, PA 15632
(724) 733-1161
FAX (724) 327-7793

For Laboratory Use Only
Laboratory Project No.: 01-3369

Project Name: Essex-Hope Project No.: 801419.1010 Sampler: John Ross (Printed Name) John S. Ross (Signature)

Relinquished By (Signature and Printed Name): John S. Ross John Ross Date: 7-30-01 Time: 1730
Received By: (Signature and Printed Name): Fed. Ex. Date: 7-30 Time: 1800
Relinquished By (Signature and Printed Name): Fed Ex Date: Time:
Received at Lab By: (Signature and Printed Name): [illegible] Date: 7/31/01 Time: 9:30

Antech Quote ID No.:
Antech Contact Name: Rich Hixon
Client Purchase Order No.:
Method of Shipment: Fed. Ex
Shipment ID: 826 011 830 703

Sample ID Number	Sample Description: Date	Time	Description		Grab	Composite	Circle Bottle Size: Chemistry (500 ml, 1000 ml)	Nutrient (250 ml, 500 ml)	Total Metals (250 ml, 500 ml)	Dissolved Metals (250 ml, 500 ml)	Cyanide (1000 ml)	Phenols (1000 ml)	TOC (125 ml)	TOX (250 ml)	Sulfide (500 ml)	Oil & Grease (1000 ml)	TPHC (1000 ml)	Bacteriological (125 ml)	VOA (40 ml)	Organics: Pest/PCB/Herb/SVOA (1 or 2 1/2 L)	Radiological (1000 ml)	VOA Septa Jar, Soil (125 ml)	Widemouth Jar, Soil (250 ml, 500 ml, 1000 ml)	VOA Sampling Device Sp	VOA Methanol Vial (5ml / 25 ml)	PCB Wipe Cards (Hexane)	Other (Please Specify)	No. of Containers	For Lab Use Only Laboratory ID
	7-30-01	1530	Pre-Carb	AQ															2									01-1764
		1530	Post-Carb	AQ															2									01-1765
		1530	Primary-Carb Effluent	AQ															2									01-1766
		1600	Post-Carb	AQ															2									
		1630	Post-Carb	AQ															2									
		1700	Post Carb	AQ															2									01-1767
			Trip blanks	AQ															4									

Please Check when Monitoring Samples are Collected:
☐ Residual Chlorine Present
☐ Residual Chlorine Not Present

Please Check when VOA Vials are Collected
☐ Free of Bubbles
☐ Bubbles Present
(Specify in Special Instructions/Comments)

Special Instructions/Comments: Combine 4-Post carb Samples into One for Analysis

Sample Return/Disposal:
☐ Return to Client
☒ Disposal by Antech

Results To:
Client Name: Keith Dodrill
Company: URS Corp
Address: Twin Towers Suite 250 4955 Steubenville Pk Pittsburgh PA

Invoice To:
Client Name:
Company:
Address:

For Laboratory Use Only:
Sample Condition Upon Receipt/Comments: ice melted
Was Temperature Vial Sent With Cooler? YES X NO ____ Cooler Temperature: 14.5

WHITE - Original COC File YELLOW - Return with Report PINK - Project File GOLD - Client Receipt

Antech Ltd.
One Triangle Lane
Export, PA 15632
Phone: (724)733-1161
Fax: (724)327-7793

September 13, 2001

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 Antech Ltd. by URS Corporation Construction Services Division. The samples were received on August 29, 2001. Please reference Antech project number 01-3851 when inquiring about this report.

Client Site: Essex-Hope
Client Ref.: 801419.1010

Antech Sample Indentification	Client Sample Identification
0108-1952	Pre-Carb
0108-1953	Primary Eff
0108-1954	Post Carb Comp
0108-1955	Trip Blank

General Comments: None

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

Sincerely,

Carin A. Ferris
Project Coordinator

CAM: 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.: 801419.1010

Lab Project ID: **01-3851**
Lab Sample ID: **0108-1952**
Client Sample ID: Pre-Carb
Sample Matrix: Aqueous

Date Sampled: 08/28/2001
Date Received: 08/29/2001

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	09/11/2001	091204-04	<5.0
Benzene	8260B[1]	5.2	1.0	ug/l	JEC	09/11/2001	091204-04	<1.0
Bromodichloromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Bromoform	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Bromomethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
2-Butanone	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Carbon Disulfide	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Carbon Tetrachloride	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Chlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Chloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Chloroform	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Chloromethane	8260B[1]	5.2	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Cumene	8260B[1]	7.8	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Dibromochloromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,2-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,3-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,4-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,1-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,2-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,1-Dichloroethene	8260B[1]	12	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
cis-1,2-Dichloroethene	8260B[1]	4400	250	ug/l	REC	09/11/2001	091204-15	<5.0
trans-1,2-Dichloroethene	8260B[1]	24	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,2-Dichloropropane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
cis-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
trans-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Ethylbenzene	8260B[1]	450	50	ug/l	REC	09/11/2001	091204-15	<5.0
2-Hexanone	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
4-Methyl-2-pentanone	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Methylene chloride	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Styrene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Toluene	8260B[1]	210	50	ug/l	REC	09/11/2001	091204-15	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Trichloroethene	8260B[1]	310	50	ug/l	REC	09/11/2001	091204-15	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Vinyl chloride	8260B[1]	750	10	ug/l	REC	09/11/2001	091204-15	<2.0

(Continued)

Volatiles (Cont.)

m,p-Xylene	8260B[1]	2800	50	ug/l	REC	09/11/2001	091204-15	<5.0
o-Xylene	8260B[1]	1000	50	ug/l	REC	09/11/2001	091204-15	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: None

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Client Site: Essex-Hope
Client Ref.: 801419.1010

Lab Project ID: **01-3851**
Lab Sample ID: **0108-1953**
Client Sample ID: Primary Eff
Sample Matrix: Aqueous

Date Sampled: 08/28/2001
Date Received: 08/29/2001

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	09/11/2001	091204-04	<5.0
Benzene	8260B[1]	<1.0	1.0	ug/l	JEC	09/11/2001	091204-04	<1.0
Bromodichloromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Bromoform	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Bromomethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
2-Butanone	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Carbon Disulfide	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Carbon Tetrachloride	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Chlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Chloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Chloroform	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Chloromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Cumene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Dibromochloromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,2-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,3-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,4-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,1-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,2-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,1-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
cis-1,2-Dichloroethene	8260B[1]	640	50	ug/l	REC	09/11/2001	091204-15	<5.0
trans-1,2-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,2-Dichloropropane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
cis-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
trans-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Ethylbenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
2-Hexanone	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
4-Methyl-2-pentanone	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Methylene chloride	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Styrene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Toluene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Trichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Vinyl chloride	8260B[1]	990	10	ug/l	REC	09/11/2001	091204-15	<2.0

(Continued)

Volatiles (Cont.)

m,p-Xylene	8260B[1]	24	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
o-Xylene	8260B[1]	8.6	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: None

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Client Site: Essex-Hope
Client Ref.: 801419.1010

Lab Project ID: **01-3851**
Lab Sample ID: **0108-1954**
Client Sample ID: Post Carb Comp
Sample Matrix: Aqueous

Date Sampled: 08/28/2001
Date Received: 08/29/2001

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Acetone	8260B[1]	12	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Benzene	8260B[1]	<1.0	1.0	ug/l	JEC	09/11/2001	091204-04	<1.0
Bromodichloromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Bromoform	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Bromomethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
2-Butanone	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Carbon Disulfide	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Carbon Tetrachloride	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Chlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Chloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Chloroform	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Chloromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Cumene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Dibromochloromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,2-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,3-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,4-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,1-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,2-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,1-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
cis-1,2-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
trans-1,2-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,2-Dichloropropane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
cis-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
trans-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Ethylbenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
2-Hexanone	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
4-Methyl-2-pentanone	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Methylene chloride	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Styrene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Toluene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Trichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Vinyl chloride	8260B[1]	2.3	2.0	ug/l	JEC	09/11/2001	091204-04	<2.0

(Continued)

Lab Sample ID: **0108-1954**
Client Sample ID: Post Carb Comp

Volatiles (Cont.)

m,p-Xylene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
o-Xylene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: None

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Client Site: Essex-Hope
Client Ref.: 801419.1010

Lab Project ID: **01-3851**
Lab Sample ID: **0108-1955**
Client Sample ID: Trip Blank
Sample Matrix: Aqueous

Date Sampled: 08/28/2001
Date Received: 08/29/2001

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	09/11/2001	091204-04	<5.0
Benzene	8260B[1]	<1.0	1.0	ug/l	JEC	09/11/2001	091204-04	<1.0
Bromodichloromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Bromoform	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Bromomethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
2-Butanone	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Carbon Disulfide	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Carbon Tetrachloride	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Chlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Chloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Chloroform	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Chloromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Cumene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Dibromochloromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,2-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,3-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,4-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,1-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,2-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,1-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
cis-1,2-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
trans-1,2-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,2-Dichloropropane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
cis-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
trans-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Ethylbenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
2-Hexanone	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
4-Methyl-2-pentanone	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Methylene chloride	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Styrene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Toluene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Trichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
Vinyl chloride	8260B[1]	<2.0	2.0	ug/l	JEC	09/11/2001	091204-04	<2.0

(Continued)

Lab Sample ID: **0108-1955**
Client Sample ID: Trip Blank

Volatiles (Cont.)

m,p-Xylene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0
o-Xylene	8260B[1]	<5.0	5.0	ug/l	JEC	09/11/2001	091204-04	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: None

Antech Ltd.
Chain of Custody Record

Ship To:
Antech Ltd.
One Triangle Drive
Export, PA 15632
(724) 733-1161
FAX (724) 327-7793

For Laboratory Use Only
Laboratory Project No.: 01 3851

Project Name: Essex-Hope Project No.: 801419.1020 Sampler: John Ross (Printed Name) John L. Ross (Signature)

Relinquished By: (Signature and Printed Name) John L. Ross Date 8-28-01 Time 1715
Relinquished By: (Signature and Printed Name) FedEx Date Time
Received By: (Signature and Printed Name) Fed Ex Date 8-28-01 Time 1715
Received at Lab By: (Signature and Printed Name) Date 8-29-01 Time 0925

Antech Quote ID No
Antech Contact Name: Rich Hixon
Client Purchase Order No.
Method of Shipment: Fed. Express
Shipment ID: 825 054 900 949

Circle Bottle Size

Sample ID Number	Sample Description: Date	Time	Description	Grab	Composite	Chemistry (500 ml, 1000 ml)	Nutrient (250 ml, 500 ml)	Total Metals (250 ml, 500 ml)	Dissolved Metals (250 ml, 500 ml)	Cyanide (1000 ml)	Phenolics (1000 ml)	TOC (125 ml)	TOX (250 ml)	Sulfide (500 ml)	Oil & Grease (1000 ml)	TPHC (1000 ml)	Bacteriological (125 ml)	VOA (40 ml)	Organics: Pest/PCB/Herb/SVOA (1 or 2 1/2 L)	Radiological (1000 ml)	VOA Septa Jar Seal (125 ml)	Widemouth 8 oz Jar (250 ml, 500 ml, 1000 ml)	VOA Sampling Device Kit	VOA Methanol Vial Set (2.5 ml)	PCB Wipe Can (Hexane)	Other (Please Specify)	No. of Containers	For Lab Use Only Laboratory ID
	8-28-01	1615	Pre-Carb AQ	X														2										01 1952
	"	1515	Primary Effluent AQ	X																								1953
	"	1515	Post-Carb AQ	X																								1954
	"	1545	Post-Carb AQ	X																								
	"	1615	Post-Carb AQ	X																								
	"	1645	Post-Carb AQ	X																								1955
			Trip Blank AQ																									

Please Check when Monitoring Samples are Collected
- ☐ Residual Chlorine Present
- ☐ Residual Chlorine Not Present

Please Check when VOA Vials are Collected
- ☐ Free of Bubbles
- ☐ Bubbles Present

(Specify in Special Instructions/Comments)

Special Instructions/Comments: Combine 4 Post-Carb samples into one for analysis

Sample Return/Disposal:
- ☐ Return to Client
- ☒ Disposal by Antech

Results To:
Client Name: Keith Dodrill
Company: URS Corp.
Address: Twin Tower Suite 250 4955 Steubenville Pk Pittsburgh PA 15205

Invoice To:
Client Name
Company:
Address:

For Laboratory Use Only:
Sample Condition Upon Receipt/Comments.
Was Temperature Vial Sent With Cooler? YES ✓ NO ____ Cooler Temperature: 11.6

WHITE - Original COC File YELLOW - Return with Report PINK - Project File GOLD - Client Receipt

Antech Ltd.
One Triangle Lane
Export, PA 15632
Phone: (724)733-1161
Fax: (724)327-7793

October 15, 2001

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 Antech Ltd. by URS Corporation Construction Services Division. The samples were received on October 2, 2001. Please reference Antech project number 01-4376 when inquiring about this report.

Client Site: Essex, Jamestown, NY
Client Ref.: 801419.1020

Antech Sample Indentification	Client Sample Identification
0110-0065	Pre-Carb
0110-0066	Primary Effluent
0110-0067	Post Carb Comp
0110-0068	Trip Blank

General Comments: The chain-of-custody lists the collection date as 9/31/01. This date does not exist, vials list 9/30/01. The laboratory will use the 9/30/01 date.

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

Sincerely,

Carin A. Ferris
Project Coordinator

CAM: vt

Enclosures

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.: 801419.1020

Lab Project ID: **01-4376**
Lab Sample ID: **0110-0065**
Client Sample ID: Pre-Carb
Sample Matrix: Aqueous

Date Sampled: 09/30/2001
Date Received: 10/02/2001

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	10/10/2001	101104-10	<5.0
Benzene	8260B(1)	3.1	1.0	ug/l	CEL	10/10/2001	101104-10	<1.0
Bromodichloromethane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Bromoform	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Bromomethane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
2-Butanone	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Carbon Disulfide	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Carbon Tetrachloride	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Chlorobenzene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Chloroethane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Chloroform	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Chloromethane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Cumene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Dibromochloromethane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,2-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,3-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,4-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,1-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,2-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,1-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
cis-1,2-Dichloroethene	8260B(1)	1200	250	ug/l	CEL	10/10/2001	101104-10	<5.0
trans-1,2-Dichloroethene	8260B(1)	6.5	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,2-Dichloropropane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
cis-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
trans-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Ethylbenzene	8260B(1)	44	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
2-Hexanone	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
4-Methyl-2-pentanone	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Methylene chloride	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Styrene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,1,2,2-Tetrachloroethane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Tetrachloroethene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Toluene	8260B(1)	190	25	ug/l	CEL	10/10/2001	101104-10	<5.0
1,1,1-Trichloroethane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,1,2-Trichloroethane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Trichloroethene	8260B(1)	370	25	ug/l	CEL	10/10/2001	101104-10	<5.0
Trichlorofluoromethane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Vinyl chloride	8260B(1)	190	5.0	ug/l	CEL	10/10/2001	101104-10	<2.0

(Continued)

Lab Sample ID: **0110-0065**
Client Sample ID: Pre-Carb

Volatiles (Cont.)

m,p-Xylene	8260B[1]	3000	250	ug/l	CEL	10/10/2001	101104-10	<5.0
o-Xylene	8260B[1]	1500	250	ug/l	CEL	10/10/2001	101104-10	<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: None

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.: 801419.1020

Lab Project ID: **01-4376**
Lab Sample ID: **0110-0066**
Client Sample ID: Primary Effluent
Sample Matrix: Aqueous

Date Sampled: 09/30/2001
Date Received: 10/02/2001

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	10/10/2001	101104-10	<5.0
Benzene	8260B(1)	<1.0	1.0	ug/l	CEL	10/10/2001	101104-10	<1.0
Bromodichloromethane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Bromoform	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Bromomethane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
2-Butanone	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Carbon Disulfide	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Carbon Tetrachloride	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Chlorobenzene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Chloroethane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Chloroform	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Chloromethane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Cumene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Dibromochloromethane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,2-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,3-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,4-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,1-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,2-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,1-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
cis-1,2-Dichloroethene	8260B(1)	800	25	ug/l	CEL	10/10/2001	101104-10	<5.0
trans-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,2-Dichloropropane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
cis-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
trans-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Ethylbenzene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
2-Hexanone	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
4-Methyl-2-pentanone	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Methylene chloride	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Styrene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,1,2,2-Tetrachloroethane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Tetrachloroethene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Toluene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,1,1-Trichloroethane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,1,2-Trichloroethane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Trichloroethene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Trichlorofluoromethane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Vinyl chloride	8260B(1)	920	5.0	ug/l	CEL	10/10/2001	101104-10	<2.0

(Continued)

Lab Sample ID: **0110-0066**
Client Sample ID: Primary Effluent

Volatiles (Cont.)

m,p-Xylene	8260B[1]	17	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
o-Xylene	8260B[1]	8.4	5.0	ug/l	CEL	10/10/2001	101104-10	<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: None

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.: 801419.1020

Lab Project ID: **01-4376**
Lab Sample ID: **0110-0067**
Client Sample ID: Post Carb Comp
Sample Matrix: Aqueous

Date Sampled: 09/30/2001
Date Received: 10/02/2001

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	10/10/2001	101104-10	<5.0
Benzene	8260B(1)	<1.0	1.0	ug/l	CEL	10/10/2001	101104-10	<1.0
Bromodichloromethane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Bromoform	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Bromomethane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
2-Butanone	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Carbon Disulfide	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Carbon Tetrachloride	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Chlorobenzene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Chloroethane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Chloroform	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Chloromethane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Cumene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Dibromochloromethane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,2-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,3-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,4-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,1-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,2-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,1-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
cis-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
trans-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,2-Dichloropropane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
cis-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
trans-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Ethylbenzene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
2-Hexanone	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
4-Methyl-2-pentanone	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Methylene chloride	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Styrene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,1,2,2-Tetrachloroethane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Tetrachloroethene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Toluene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,1,1-Trichloroethane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,1,2-Trichloroethane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Trichloroethene	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Trichlorofluoromethane	8260B(1)	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Vinyl chloride	8260B(1)	11	2.0	ug/l	CEL	10/10/2001	101104-10	<2.0

(Continued)

Lab Sample ID: **0110-0067**
Client Sample ID: Post Carb Comp

Volatiles (Cont.)

m,p-Xylene	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
o-Xylene	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<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: None

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.: 801419.1020

Lab Project ID: **01-4376**
Lab Sample ID: **0110-0068**
Client Sample ID: Trip Blank
Sample Matrix: Aqueous

Date Sampled: 09/30/2001
Date Received: 10/02/2001

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	10/10/2001	101104-10	<5.0
Benzene	8260B[1]	<1.0	1.0	ug/l	CEL	10/10/2001	101104-10	<1.0
Bromodichloromethane	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Bromoform	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Bromomethane	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
2-Butanone	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Carbon Disulfide	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Carbon Tetrachloride	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Chlorobenzene	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Chloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Chloroform	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Chloromethane	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Cumene	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Dibromochloromethane	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,2-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,3-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,4-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,1-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,2-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,1-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
cis-1,2-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
trans-1,2-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,2-Dichloropropane	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
cis-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
trans-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Ethylbenzene	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
2-Hexanone	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
4-Methyl-2-pentanone	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Methylene chloride	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Styrene	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Toluene	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Trichloroethene	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
Vinyl chloride	8260B[1]	<2.0	2.0	ug/l	CEL	10/10/2001	101104-10	<2.0

(Continued)

Lab Sample ID: **0110-0068**
Client Sample ID: Trip Blank

Volatiles (Cont.)

m,p-Xylene	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<5.0
o-Xylene	8260B[1]	<5.0	5.0	ug/l	CEL	10/10/2001	101104-10	<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: None

014376

RADIAN INTERNATIONAL
A DAMES & MOORE GROUP COMPANY

Chain of Custody Record

Page 1 of 1

PROJECT: Essex-Hope 801419.1020
SITE: Jamestown N.Y.
COLLECTED BY (Signature): John L. Ross

Data to
Keith Dodrill
URS Corp
Twin Towers Suite 250
Pittsburgh PA 15205

FIELD SAMPLE I.D.	SAMPLE MATRIX	DATE/TIME	NO. OF CONTAINERS	8260 Volatile Organics	REMARKS	SAM ID NO. (for lab use only)
Pre-Carb		9-31-01 0700	2			10-0065
Primary Effluent		9-31-01 0700	2			0066
Post-Carb		9-31-01 0700	2			0067
Post-Carb		9-31-01 0730	2			
Post-Carb		9-31-01 0800	2			
Post-Carb		9-31-01 0830	2			
Trip Blank			3			0068
Temp Blank			1			

REMARKS: Combine 4 Post-Carb Samples Into 1 for Analysis

RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME
Fed Ex #821256316234						FedX			FedX		
									John L. Ross	10-1-01	1800

LAB USE ONLY

RECEIVED FOR LABORATORY BY:	DATE	TIME	AIRBILL NO.	OPENED BY:	DATE	TIME	TEMP°C	SEAL #	CONDITION
	10/2/01	0930	1		10/2/01	0940	6.8		

REMARKS: 821256316234

mls1\freehand\10-98-40382coc.fh7

Antech Ltd.
One Triangle Lane
Export, PA 15632
Phone: (724)733-1161
Fax: (724)327-7793

September 17, 2001

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 Antech Ltd. by URS Corporation Construction Services Division. The samples were received on September 5, 2001. Please reference Antech project number 01-3960 when inquiring about this report.

Client Site: Essex, Jamestown, NY
Client Ref.: 801419.1020

Antech Sample Indentification	Client Sample Identification
0109-0167	RW-1D
0109-0168	RW-1S
0109-0169	RW-2D
0109-0170	RW-2S

Antech Sample Indentification	Client Sample Identification
0109-0171	RW-3S
0109-0172	RW-4S
0109-0173	RW-5S
0109-0174	Trip Blank

General Comments: None

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

Sincerely,

Carin A. Ferris
Project Coordinator

CAM: jld

Enclosures

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.: 801419.1020

Lab Project ID: **01-3960**
Lab Sample ID: **0109-0167**
Client Sample ID: RW-1D
Sample Matrix: Aqueous

Date Sampled: 09/01/2001
Date Received: 09/05/2001

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	09/12/2001	091304-07	<5.0
Benzene	8260B[1]	3.6	1.0	ug/l	JEC	09/12/2001	091304-07	<1.0
Bromodichloromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Bromoform	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Bromomethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
2-Butanone	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Carbon Disulfide	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Carbon Tetrachloride	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Chlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Chloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Chloroform	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Chloromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Cumene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Dibromochloromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,2-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,3-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,4-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,2-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1-Dichloroethene	8260B[1]	12	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
cis-1,2-Dichloroethene	8260B[1]	1400	100	ug/l	JEC	09/12/2001	091304-07	<5.0
trans-1,2-Dichloroethene	8260B[1]	17	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,2-Dichloropropane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
cis-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
trans-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Ethylbenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
2-Hexanone	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
4-Methyl-2-pentanone	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Methylene chloride	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Styrene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Toluene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Trichloroethene	8260B[1]	73	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Vinyl chloride	8260B[1]	130	2.0	ug/l	JEC	09/12/2001	091304-07	<2.0

(Continued)

Volatiles (Cont.)

m,p-Xylene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
o-Xylene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: The pH of sample 0167-A is 3.

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.: 801419.1020

Lab Project ID: **01-3960**
Lab Sample ID: **0109-0168**
Client Sample ID: RW-1S
Sample Matrix: Aqueous

Date Sampled: 09/01/2001
Date Received: 09/05/2001

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	09/12/2001	091304-07	<5.0
Benzene	8260B[1]	<1.0	1.0	ug/l	JEC	09/12/2001	091304-07	<1.0
Bromodichloromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Bromoform	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Bromomethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
2-Butanone	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Carbon Disulfide	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Carbon Tetrachloride	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Chlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Chloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Chloroform	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Chloromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Cumene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Dibromochloromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,2-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,3-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,4-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,2-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1-Dichloroethene	8260B[1]	11	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
cis-1,2-Dichloroethene	8260B[1]	1200	250	ug/l	JEC	09/12/2001	091304-07	<5.0
trans-1,2-Dichloroethene	8260B[1]	11	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,2-Dichloropropane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
cis-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
trans-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Ethylbenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
2-Hexanone	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
4-Methyl-2-pentanone	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Methylene chloride	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Styrene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Toluene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Trichloroethene	8260B[1]	3300	250	ug/l	JEC	09/12/2001	091304-07	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Vinyl chloride	8260B[1]	160	2.0	ug/l	JEC	09/12/2001	091304-07	<2.0

(Continued)

Volatiles (Cont.)

m,p-Xylene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
o-Xylene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: The pH of sample 0168-A is 3.

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.: 801419.1020

Lab Project ID: **01-3960**
Lab Sample ID: **0109-0169**
Client Sample ID: RW-2D
Sample Matrix: Aqueous

Date Sampled: 09/01/2001
Date Received: 09/05/2001

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	09/12/2001	091304-07	<5.0
Benzene	8260B(1)	7.5	1.0	ug/l	JEC	09/12/2001	091304-07	<1.0
Bromodichloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Bromoform	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Bromomethane	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
2-Butanone	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Carbon Disulfide	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Carbon Tetrachloride	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Chlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Chloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Chloroform	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Chloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Cumene	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Dibromochloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,2-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,3-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,4-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,2-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1-Dichloroethene	8260B(1)	25	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
cis-1,2-Dichloroethene	8260B(1)	7900	250	ug/l	JEC	09/12/2001	091304-07	<5.0
trans-1,2-Dichloroethene	8260B(1)	32	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,2-Dichloropropane	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
cis-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
trans-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Ethylbenzene	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
2-Hexanone	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
4-Methyl-2-pentanone	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Methylene chloride	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Styrene	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1,2,2-Tetrachloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Tetrachloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Toluene	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1,1-Trichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1,2-Trichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Trichloroethene	8260B(1)	330	250	ug/l	JEC	09/12/2001	091304-07	<5.0
Trichlorofluoromethane	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Vinyl chloride	8260B(1)	1300	50	ug/l	JEC	09/12/2001	091304-07	<2.0

(Continued)

Lab Sample ID: **0109-0169**
Client Sample ID: RW-2D

Volatiles (Cont.)

m,p-Xylene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
o-Xylene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: None

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Client Site: Essex, Jamestown, NY
Client Ref.: 801419.1020

Lab Project ID: **01-3960**
Lab Sample ID: **0109-0170**
Client Sample ID: RW-2S
Sample Matrix: Aqueous

Date Sampled: 09/01/2001
Date Received: 09/05/2001

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	09/12/2001	091304-07	<5.0
Benzene	8260B[1]	<1.0	1.0	ug/l	JEC	09/12/2001	091304-07	<1.0
Bromodichloromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Bromoform	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Bromomethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
2-Butanone	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Carbon Disulfide	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Carbon Tetrachloride	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Chlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Chloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Chloroform	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Chloromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Cumene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Dibromochloromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,2-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,3-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,4-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,2-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
cis-1,2-Dichloroethene	8260B[1]	500	100	ug/l	JEC	09/12/2001	091304-07	<5.0
trans-1,2-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,2-Dichloropropane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
cis-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
trans-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Ethylbenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
2-Hexanone	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
4-Methyl-2-pentanone	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Methylene chloride	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Styrene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Toluene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Trichloroethene	8260B[1]	2900	100	ug/l	JEC	09/12/2001	091304-07	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Vinyl chloride	8260B[1]	31	2.0	ug/l	JEC	09/12/2001	091304-07	<2.0

(Continued)

Lab Sample ID: **0109-0170**
Client Sample ID: RW-2S

Volatiles (Cont.)

m,p-Xylene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
o-Xylene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: None

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Client Site: Essex, Jamestown, NY
Client Ref.: 801419.1020

Lab Project ID: **01-3960**
Lab Sample ID: **0109-0171**
Client Sample ID: RW-3S
Sample Matrix: Aqueous

Date Sampled: 09/01/2001
Date Received: 09/05/2001

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	09/12/2001	091304-07	<5.0
Benzene	8260B[1]	21	1.0	ug/l	JEC	09/12/2001	091304-07	<1.0
Bromodichloromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Bromoform	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Bromomethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
2-Butanone	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Carbon Disulfide	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Carbon Tetrachloride	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Chlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Chloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Chloroform	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Chloromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Cumene	8260B[1]	27	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Dibromochloromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,2-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,3-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,4-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,2-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
cis-1,2-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
trans-1,2-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,2-Dichloropropane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
cis-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
trans-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Ethylbenzene	8260B[1]	95	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
2-Hexanone	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
4-Methyl-2-pentanone	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Methylene chloride	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Styrene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Toluene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Trichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Vinyl chloride	8260B[1]	<2.0	2.0	ug/l	JEC	09/12/2001	091304-07	<2.0

(Continued)

Lab Sample ID: **0109-0171**
Client Sample ID: RW-3S

Volatiles (Cont.)

m,p-Xylene	8260B[1]	60	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
o-Xylene	8260B[1]	39	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: None

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Client Site: Essex, Jamestown, NY
Client Ref.: 801419.1020

Lab Project ID: **01-3960**
Lab Sample ID: **0109-0172**
Client Sample ID: RW-4S
Sample Matrix: Aqueous

Date Sampled: 09/01/2001
Date Received: 09/05/2001

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Acetone	8260B(1)	15	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Benzene	8260B(1)	25	1.0	ug/l	JEC	09/12/2001	091304-07	<1.0
Bromodichloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Bromoform	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Bromomethane	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
2-Butanone	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Carbon Disulfide	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Carbon Tetrachloride	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Chlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Chloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Chloroform	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Chloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Cumene	8260B(1)	180	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Dibromochloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,2-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,3-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,4-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,2-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
cis-1,2-Dichloroethene	8260B(1)	7.4	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
trans-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,2-Dichloropropane	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
cis-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
trans-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Ethylbenzene	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
2-Hexanone	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
4-Methyl-2-pentanone	8260B(1)	14	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Methylene chloride	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Styrene	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1,2,2-Tetrachloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Tetrachloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Toluene	8260B(1)	3600	1000	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1,1-Trichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1,2-Trichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Trichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Trichlorofluoromethane	8260B(1)	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Vinyl chloride	8260B(1)	<2.0	2.0	ug/l	JEC	09/12/2001	091304-07	<2.0

(Continued)

Lab Sample ID: **0109-0172**
Client Sample ID: RW-4S

Volatiles (Cont.)

m,p-Xylene	8260B[1]	47000	1000	ug/l	JEC	09/12/2001	091304-07	<5.0
o-Xylene	8260B[1]	16000	1000	ug/l	JEC	09/12/2001	091304-07	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: None

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Client Site: Essex, Jamestown, NY
Client Ref.: 801419.1020

Lab Project ID: **01-3960**
Lab Sample ID: **0109-0173**
Client Sample ID: RW-5S
Sample Matrix: Aqueous

Date Sampled: 09/01/2001
Date Received: 09/05/2001

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	09/12/2001	091304-07	<5.0
Benzene	8260B[1]	<1.0	1.0	ug/l	JEC	09/12/2001	091304-07	<1.0
Bromodichloromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Bromoform	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Bromomethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
2-Butanone	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Carbon Disulfide	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Carbon Tetrachloride	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Chlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Chloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Chloroform	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Chloromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Cumene	8260B[1]	6.9	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Dibromochloromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,2-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,3-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,4-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,2-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
cis-1,2-Dichloroethene	8260B[1]	180	50	ug/l	CEL	09/13/2001	091404-01	<5.0
trans-1,2-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,2-Dichloropropane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
cis-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
trans-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Ethylbenzene	8260B[1]	91	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
2-Hexanone	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
4-Methyl-2-pentanone	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Methylene chloride	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Styrene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Toluene	8260B[1]	370	50	ug/l	CEL	09/13/2001	091404-01	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Trichloroethene	8260B[1]	6.2	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Vinyl chloride	8260B[1]	14	2.0	ug/l	JEC	09/12/2001	091304-07	<2.0

(Continued)

Lab Sample ID: **0109-0173**
Client Sample ID: RW-5S

Volatiles (Cont.)

m,p-Xylene	8260B[1]	360	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
o-Xylene	8260B[1]	85	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: None

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

Client Site: Essex, Jamestown, NY
Client Ref.: 801419.1020

Lab Project ID: **01-3960**
Lab Sample ID: **0109-0174**
Client Sample ID: Trip Blank
Sample Matrix: Aqueous

Date Sampled: 09/01/2001
Date Received: 09/05/2001

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	09/12/2001	091304-07	<5.0
Benzene	8260B[1]	<1.0	1.0	ug/l	JEC	09/12/2001	091304-07	<1.0
Bromodichloromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Bromoform	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Bromomethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
2-Butanone	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Carbon Disulfide	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Carbon Tetrachloride	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Chlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Chloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Chloroform	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Chloromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Cumene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Dibromochloromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,2-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,3-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,4-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,2-Dichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
cis-1,2-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
trans-1,2-Dichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,2-Dichloropropane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
cis-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
trans-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Ethylbenzene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
2-Hexanone	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
4-Methyl-2-pentanone	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Methylene chloride	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Styrene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Toluene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Trichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
Vinyl chloride	8260B[1]	<2.0	2.0	ug/l	JEC	09/12/2001	091304-07	<2.0

(Continued)

Lab Sample ID: **0109-0174**
Client Sample ID: Trip Blank

Volatiles (Cont.)

m,p-Xylene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0
o-Xylene	8260B[1]	<5.0	5.0	ug/l	JEC	09/12/2001	091304-07	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: None

Antech Ltd.
Chain of Custody Record

Ship To:
Antech Ltd.
One Triangle Drive
Export, PA 15632
(724) 733 1161
FAX (724) 327-7793

For Laboratory Use Only
Laboratory Project No: 9760

Project Name: Essex - Hope **Project No.:** 801419.1020 **Sampler:** John Ross (Printed Name) (Signature)

Relinquished By: (Signature and Printed Name)	Date	Time	Received By: (Signature and Printed Name)	Date	Time
John S. Ross	9-4-01	1600	Fed. Express		
Relinquished By: (Signature and Printed Name) FEDX	Date	Time	Received at Lab By: (Signature and Printed Name)	Date 9-5-01	Time 1033

Antech Quote ID No:
Antech Contact Name: Rich Hixon
Client Purchase Order No:
Method of Shipment: Fed. Ex.
Shipment ID: 822675103702

Sample ID Number	Sample Description: Date	Time	Description	Grab	Composite	Circle Bottle Size: Chemistry (500 ml, 1000 ml)	Nutrient (250 ml, 500 ml)	Total Metals (250 ml, 500 ml)	Dissolved Metals (250 ml, 500 ml)	Cyanide (1000 ml)	Phenolics (1000 ml)	TOC (125 ml)	TOX (250 ml)	Sulfide (500 ml)	Oil & Grease (1000 ml)	TPHC (1000 ml)	Bacteriological (125 ml)	VOA (40 ml) 9760	Organics: Pest/PCB/Herb/SVOA (1 or 2 1/2 L)	Radiological (1000 ml)	VOA Septa Jar Soil (125 ml)	Widemouth Jar Soil (250 ml, 500 ml, 1000 ml)	VOA Sampling Device: Sp	VOA Methanol Vial Soil (2 ml)	PCB Wipe Cont (Dexsil)	Other (Please Specify)	No. of Containers	For Lab Use Only: Laboratory ID
	9-1-01	0700	RW-1D	X														2										01-0167
	"	0710	RW-1S	X																								0168
		0720	RW-2D	X																								0169
		0730	RW-1S *	X																								0170
		0740	RW-3S	X																								0171
		0750	RW-4S	X																								0172
	↓	0800	RW-5S	X														↓										0173
			Trip Blank															3										0174
			Temp. Blank															1										

Please Check when Monitoring Samples are Collected
☐ Residual Chlorine Present
☐ Residual Chlorine Not Present

Please Check when VOA Vials are Collected:
☒ Free of Bubbles
☐ Bubbles Present
(Specify in Special Instructions/Comments)

Special Instructions/Comments:

Sample Return/Disposal:
☐ Return to Client
☒ Disposal by Antech

Results To:
Client Name: Keith Durkil
Company: URS. Corp
Address: Twin Tower Suite 250 Steubenville Pk
Pittsburgh PA 15205

Invoice To:
Client Name:
Company:
Address:

For Laboratory Use Only: * TD on Bottles in RW2S 05-0170
Sample Condition Upon Receipt/Comments: Using TD of Bottles
Was Temperature Vial Sent With Cooler? YES ✓ NO ____ Cooler Temperature: 6.8

WHITE - Original COC File YELLOW - Return with Report PINK - Project File GOLD - Client Receipt