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January 8, 2004

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f: 907015

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

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**Subject: 2nd Quarter 2003 Performance Monitoring Report
Essex/Hope Site Jamestown, New York
URS Project No. 801419**

Dear Mr. Moore:

This letter report is a summary of the 2nd Quarter 2003 operation performance for the remedial system at the above-referenced site. This report is submitted in accordance with the June 1997 Performance Monitoring Plan (PMP) prepared by Radian International LLC (now URS Corp). Note that the PMP has been revised and approved by the NYSDEC, and the revised PMP will go into effect during 2004. During the quarter approximately 430,160 gallons of water were treated and discharged to the City of Jamestown POTW. The following sections discuss the data on groundwater quality sampling and groundwater flow. Soil sampling was not conducted during this reporting period.

GROUNDWATER FLOW EVALUATION

Water level measurements were taken on May 22, 2003 during the reporting quarter. Water level data is provided in Appendix A of this report. Groundwater contour maps representative of pumping conditions during the reporting period are provided as Figures 1 and 2. The following discussions review the flow conditions of the Shallow (water table) and Lower Fine Sand (deep) water-bearing zones.

The recovery wells RW-1S, -2S, -3S, 2D, and 1D were redeveloped in April 2003 to increase pumping efficiency. The treatment system was restarted on April 13, 2003 following an approximate one-month shut down period for system repairs. For details on the repairs, see the 1st Quarter 2003 Performance Monitoring Report.

Shallow Water-Bearing Zone (SWBZ)

A water table contour map representing pumping conditions in the Shallow Water-Bearing Zone on May 22, 2003 is provided as Figure 1. Water table drawdown conditions at the site remained consistent with the data recorded in the 1st quarter 2003. A general trend in the SWBZ showed tighter contour intervals indicating a slightly steeper cone of depression; the potentiometric contour map showed a more elliptical pattern with decreased contour spacing, as compared to the 2002 annual data. Shallow groundwater was extracted at an average rate of 1.78 gallons per minute (gpm) from the NPL Area, 0.10 gpm from the AST/UST Area.

Recovery wells RW-4S and RW-5S are inoperable as of November 2, 2002 because of demolition of the electrical and groundwater discharge lines during the UST Area tank removal. Remedial investigations are ongoing in the UST Area and supplemental remedial activities will be evaluated after review of the data.

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Lower Fine Sand Water-Bearing Zone

Deep zone groundwater extraction is conducted from Recovery Well RW-2D in the NPL Area. No groundwater is pumped from RW-1D, which was shut down in June of 1999 with the approval of the NYSDEC. Potentiometric surface contour maps representing pumping conditions on May 22, 2003 are provided as Figure 2. The cone of depression around RW-2D is similar to the 1st Quarter 2003 data with the potentiometric surface elevations approximately 1-ft lower in elevation. Groundwater was extracted from the deep zone at an average rate of 2.59 gpm over the reporting period.

WATER QUALITY RESULTS

Second Quarter 2003 performance monitoring included quarterly sampling of all recovery wells and monthly influent and effluent sampling of the treatment system. The recovery well samples were taken on May 17, 2003. The monthly influent/effluent samples were collected on April 30, 2003, May 31, 2003 and June 29, 2003; their monthly pumping rates are 113,890 gal, 189,370 gal, and 126,900 gal, respectively. Pace Analytical of Export, Pennsylvania analyzed the samples for volatile organic compounds (VOC's) by US EPA Method 8260B. The recovery well analytical results are summarized in Table 1. Historical analytical results for individual recovery wells are summarized in Tables 2 through 6. Tables 7-10 summarize the monthly influent and effluent sample results. Copies of the laboratory data packages for the quarterly samples and the monthly treatment plant influent and effluent samples are found in Appendix B. The following sections discuss the analytical data for each remedial area.

NPL Area – Shallow Zone

VOC's detected in RW-1S (Table 2) during the May sampling round included: TCE (1,400 ug/L), vinyl chloride (26 ug/L), and cis-1,2-DCE (190 ug/L) - all other VOC's were non-detect. TCE decreased from 4,000 ug/l in the 1st quarter while vinyl chloride and cis 1,2-DCE dropped by an order of magnitude from the 1st quarter concentrations of 120 ug/l and 1,000 ug/l, respectively.

VOC's detected at RW-2S (Table 3) included TCE (69 ug/L) and cis-1,2-DCE (32 ug/L) – all other VOCs were below detection limits. These compounds have dropped by an order of magnitude from the 1st quarter concentrations of 340 ug/l and 120 ug/l. Both constituents continue to show a general decreasing trend over the past 2 years. Note that these compounds initially increased after the zero-valent iron injection activities in the NPL Area in August 2000. The increased concentrations were attributed to subsurface disturbance from the injection activities and chemical reactions.

NPL Area – Lower Fine Sand Water Bearing Zone

VOC's detected at RW-1D (Table 5) during the 2nd Quarter included 1,1-DCE (19 ug/L), cis-1,2-DCE (2,200 ug/L), trans-1,2-DCE (22 ug/L), TCE (46 ug/L), and benzene (7.6 ug/L) - all other VOC's were non-detect. All detections remained relatively similar to previous concentration data. Vinyl chloride, previously detected at 11 ug/l in the 1st quarter dropped below detection limits in this event.

Compounds detected at RW-2D (Table 6) included: vinyl chloride (960 ug/L), 1,1-DCE (23 ug/L), cis-1,2-DCE (5,000 ug/L), trans-1,2-DCE (21 ug/L), TCE (840 ug/L), and benzene (11 ug/L). While TCE nearly doubled in concentration from the 1st quarter detection of 490 ug/l, all other constituents remained relatively constant.

AST/UST Area

VOC's detected at RW-3S (Table 4) during the 1st Quarter were isopropylbenzene (6.8 ug/L), benzene (10 ug/L), ethylbenzene (42 ug/L) and total xylenes (125 ug/L). All other VOCs were non-detect. All detected constituents showed a considerable decrease from the 1st quarter concentrations.

Treatment Plant Influent/Effluent

The waste stream influent and effluent concentrations for the 2nd Quarter of 2003 are shown on Tables 7-10. Influent data (Pre-Carb) reflect a composite from all the groundwater extraction wells prior to pre-treatment. Primary Carbon data represents the effluent from the first carbon treatment vessel prior to the second treatment vessel. Effluent data (Post-Carb) represents pre-treated water prior to discharge to the City of Jamestown Publicly Owned Treatment Works (POTW). System influent data as related to extracted groundwater conditions for the quarter are discussed below.

VOC's detected in the influent during June 2003 included: vinyl chloride (560 ug/L), 1,1-DCE (9.7 ug/L), cis-1,2-DCE (3,300 ug/L), trans-1,2-DCE (13 ug/L), TCE (380 ug/L), and benzene (6.1 ug/L). Influent concentration ranges were similar to those recorded during the 1st Quarter of 2003.

VOC's detected in the primary carbon vessel effluent during June 2003 included vinyl chloride (910 ug/L) and cis-1,2-DCE (180 ug/L); all other constituents were non detect. Total VOCs detected on June 29, 2003 were the lowest for the year at 1,090 ug/l.

VOC's detected in the secondary carbon vessel effluent during June 2003 showed vinyl chloride (650 ug/L) and cis-1,2-DCE (9.1 ug/l); all other VOC's were non detect. Approximately 659 ug/L total VOCs was detected in the system effluent sample collected on June 29, 2003.

VOC's detected in the treatment system effluent during June 2003 included cis-1,2-DCE (17 ug/L); all other VOC's were non detect.

CLOSING

This letter report has been prepared to satisfy the reporting requirements stipulated in the Performance Monitoring Plan and to evaluate remediation effectiveness on a quarterly basis. If you have any questions or desire additional information, please do not hesitate to call me at (412)788-2717 Extension 1266.

Sincerely yours,



Mark J. Dowiak
Project Manager

cc: Tim King – The Dow Chemical Company
Keith Dodrill - URS
John Ross - URS
Dr. Anders G. Carlson – NY State Dept. of Health
Cameron O'Connor – NY State Dept. of Health
Andrew English – Chief, Bur. of Western Remedial Action
Glen R. Bailey – Dept. of Environmental Enforcement
Randall Peterson – Jamestown Board of Public Utilities
Carlo J. Montisano – Custom Production MFG., Inc

Table 1
2nd Quarter Sampling
May 17, 2003
Recovery Well Analytical Results

Volatile Compounds (Method 8260A)	Site GW RAOs (ug/L)	RW-1S (ug/L)	RW-1D (ug/L)	RW-2S (ug/L)	RW-2D (ug/L)	RW-3S (ug/L)	Trip Blank (ug/L)
Acetone	-	<10	<10	<10	<10	<10	28
Benzene	-	<1	7.6	<1	11	10	<1
2-Butanone	-	<10	<10	<10	<10	<10	<10
Chloroform	-	<5	<5	<5	<5	<5	<5
Isopropylbenzene (Cumene)	-	<5	<5	<5	<5	6.8	<5
1,1-Dichloroethane	-	<5	<5	<5	<5	<5	<5
1,1-Dichloroethene	-	<5	19	<5	23	<5	<5
cis-1,2-Dichloroethene	-	190	2,200	32	5,000	<5	<5
trans-1,2-Dichloroethene	5	<5	22	<5	21	<5	<5
Ethylbenzene	5	<5	<5	<5	<5	42	<5
4-Methyl-2-pentanone	-	<10	<10	<10	<10	<10	<10
Methylene Chloride	-	<5	<5	<5	<5	<5	<5
Tetrachloroethene	-	<5	<5	<5	<5	<5	<5
Toluene	5	<5	<5	<5	<5	<5	<5
Trichloroethene	5	1,400	46	69	840	<5	<5
Vinyl Chloride	5	26	<2	<2	960	<2	<2
Total Xylenes	5	<5	<5	<5	<5	125	<5

Table 2
RW-1S
Quarterly Sample Results

Volatile Compounds (Method 8260B)	Site GW RAOs (ug/L)	Aug-95 (ug/L)**	Jul-97 (ug/L)*	Oct-97 (ug/L)	Dec-97 (ug/L)	Mar-98 (ug/L)*	Jun-98 (ug/L)*	Sept-98 (ug/L)*	Nov-98 (ug/L)*	Feb-99 (ug/L)	May-99 (ug/L)	Aug-99 (ug/L)	Nov-99 (ug/L)	Feb-00 (ug/L)	Apr-00 (ug/L)	Aug-00 (ug/L)	Nov-00 (ug/L)	Mar-01 (ug/L)	Jul-02-01 (ug/L)	Sept-01 (ug/L)	Jan-06-02 (ug/L)	Mar-02 (ug/L)	Jul-05-02 (ug/L)	Sept-02 (ug/L)	Dec-02 (ug/L)	Feb-03 (ug/L)	May-03 (ug/L)
Acetone	-	10	< 58 ^u	< 10 ^u	< 10	<200	<25	<50	< 10	<5	<5	9	<5	<10	<5	15 ^B	<5	<5	<5	<5	50	<5	14	<10	<10	<10	<10
Benzene	-	NA	< 25	< 5	< 5	<100	<5	<25	< 5	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1
2-Butanone	-	NA	120	< 10	< 10	<200	<5	<50	< 10	<5	<5	<5	<5	<10	<5	9	<5	<5	<5	<5	<10	<5	<10	<10	<10	<10	<10
Chloroform	-	NA	< 25	< 5	< 5	<100	<5	<25	< 5	<1	<1	<1	<1	<5	<1	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Isopropylbenzene	-	NA	NA	< 5	< 5	<100	<5	<25	< 5	<1	<1	<1	<1	<5	<1	14	6.1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethene	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5	<5	<5	<5	5.4	5.4	<5	8.4	<5	9.5	<5
cis-1,2-Dichloroethene	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	44	530	1,200	780	760	59	1,100	66	1,000	190
trans-1,2-Dichloroethene	5	1,700	160	< 5	< 5	<100	<5	<25	9	2	2	<1	<1	<5	<1	77	7.2	<5	<5	11	<5	12	<5	5.2	<5	7.0	<5
Ethylbenzene	5	NA	< 25	< 5	< 5	<100	<5	<25	< 5	<1	<1	<1	<1	<5	<1	9	2.52	<5	<5	<5	<5	<5	77	<5	<5	<5	<5
Methylene Chloride	-	<17	< 35 ^u	11	< 5	<100	18	10 J	< 5	<1	1 ^B	2	2 ^B	<5	4 ^B	8	6.01 ^B	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	5	3,500	460	< 5	1,900 D	12,000	910	570	1,300	180 D	590	41	37	41	24	150	120	100	1,500	3,300	1,800	2,300	360	2,400	210	4,000	1,400
Toluene	5	NA	< 25	< 5	< 5	<100	<5	<25	< 5	<1	<1	<1	<1	<5	<1	4	1.34	<5	<5	<5	<5	<5	38	<5	<5	<5	<5
Vinyl Chloride	5	240	< 25	< 5	32	110	<5	11 J	20	6	3	1	<1	<5	<1	470 D	320 D	28	150	160	180	87	<2	26	12	120	26
Total Xylenes	5	4	< 25	< 5	< 5	<100	<5	<25	< 5	<1	<1	2	5	<5	<3	78	22	<5	<5	<5	<5	<5	480	<5	<5	<5	<5

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

Notes:
B = Qualified as non-detect due to blank contamination
D,* = Analyzed with dilution. See laboratory reports for dilution factors.
** Sample results reported represent the highest values obtained from the 5.5 hr and 29 hr samples.
E = Concentration exceeded calibration range of instrument.
J = Estimated Concentration
NA = Not Analyzed

Table 3
RW-2S
Quarterly Sample Results

Volatile Compounds (Method 8260B)	Site GW RAOs (ug/L)	Aug-95 (ug/L)**	Jul-97 (ug/L)*	Oct-97 (ug/L)	Dec-97 (ug/L)	Mar-98 (ug/L)*	Jun-98 (ug/L)*	Sept-98 (ug/L)*	Nov-98 (ug/L)*	Feb-99 (ug/L)	May-99 (ug/L)	Aug-99 (ug/L)	Nov-99 (ug/L)	Feb-00 (ug/L)	Apr-00 (ug/L)	Aug-00 (ug/L)	Nov-00 (ug/L)	Mar-01 (ug/L)	Jul-02-01 (ug/L)	Sept-01 (ug/L)	Jan-06-02 (ug/L)	Mar-02 (ug/L)	Jul-05-02 (ug/L)	Sept-02 (ug/L)	Dec-02 (ug/L)	Feb-03 (ug/L)	May-03 (ug/L)
Acetone	-	<10/<10	< 10	< 500	< 10	<50	<5	<10	< 10	<5	<50	<5	<5	<10	<5	65 ^B	<5	<5	<5	<5	<10	<5	<10	<10	<10	<10	<10
Benzene	-	NA	< 5	< 250	< 5	<25	<1	<5	< 5	<1	<10	<1	<1	<5	<1	<2	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1
2-Butanone	-	NA	< 10	< 500	< 10	<50	<5	<10	< 10	<5	<50	<5	<5	<10	<5	21	<5	<5	<5	<5	<10	<5	<10	<10	<10	<10	<10
Chloroform	-	NA	< 5	< 250	< 5	<25	<1	<5	< 5	<1	<10	<1	<1	<5	<1	<2	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Isopropylbenzene	-	NA	NA	< 250	< 5	<25	<1	<5	< 5	<1	<10	<1	<1	<5	<1	2	1.54	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethene	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	32	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
cis-1,2-Dichloroethene		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	620	400	500	110	99	6.6	210	8.9	120	32
trans-1,2-Dichloroethene	5	2,200/2,600	130	< 250	< 5	<25	<1	17	< 5	<1	<10	<1	<1	<5	<1	92	56	6.7	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	5	NA	< 5	< 250	< 5	<25	<1	<5	< 5	<1	<10	3	<1	<5	<1	2	1.34	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methylene Chloride	-	<10/<10	< 13 ^B	880	< 5	30	<1	2 J	< 5	<1	36 ^B	<1	5 ^B	<5	4 ^B	48 ^B	4.23 ^B	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Tetrachloroethene	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.93	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Toluene	5	NA	< 5	< 250	< 5	<25	<1	<5	< 5	<1	<10	<1	<1	<5	<1	<2	2.01	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,2-Trichloroethane	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.05	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	5	7,700/10,000	410 D	3,700	750 D	380	120	970 E	1,100	1,900 D	2,700	1,500 D	17	46	490 D	43	6,400 D	1,500	2,200	2,900	22	7.7	200	630	7.2	340	69
Vinyl Chloride	5	100/81	< 5	< 250	< 5	<25	<1	<5	6	4	<10	2	<1	<5	<1	180	470 D	120	38	<2	15	5.6	<2	7.4	<2	6.4	<2
Total Xylenes	5	<10/10	< 5	< 250	< 5	<25	<1	<5	< 5	<1	<10	20	2	<5	<3	17	13	<5	<5	<5	<5	<5	6.5	<5	<5	<5	<5

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

Notes:

B = Qualified as non-detect due to blank contamination

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

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

E = Concentration exceeded calibration range of instrument.

J = Estimated Concentration

NA = Not Analyzed

Table 4
RW-3S
Quarterly Sample Results

Volatile Compounds (Method 8260B)	Site GW RAOs (ug/L)	Jul-97 (ug/L)*	Oct-97 (ug/L)	Dec-97 (ug/L)	Mar-98 (ug/L)*	Jun-98 (ug/L)*	Sept-98 (ug/L)*	Nov-98 (ug/L)*	Feb-99 (ug/L)	May-99 (ug/L)	Aug-99 (ug/L)	Nov-99 (ug/L)	Feb-00 (ug/L)	Apr-00 (ug/L)	Aug-00 (ug/L)	Nov-00 (ug/L)	Mar-01 (ug/L)	Jul-02-01 (ug/L)	Sept-01 (ug/L)	Jan-06-02 (ug/L)	Mar-02 (ug/L)	Jul-05-02 (ug/L)	Sept-02 (ug/L)	Dec-02 (ug/L)	Feb-03 (ug/L)	May-03 (ug/L)
Acetone	-	< 2000	< 1000	14	<500	<50	<100	< 10	<5	15	<5	<10	10	18 ^B	<5	<10	<5	<5	<5	<10	<5	<10	<10	<10	<10	<10
Benzene	-	< 1000	< 500	21	<250	15	16 J	9	17	<2	7	11	<5	12	18	11	7.7	35	21	52	1.3	<1	1.6	16	40	10
2-Butanone	-	< 2000	< 1000	< 10	<500	<50	<100	< 10	<5	<10	<5	<10	<10	<10	<5	<10	<5	<5	<5	<10	<5	<10	<10	<10	<10	<10
Chloroform	-	< 1000	< 500	< 5	<250	<10	<50	< 5	<1	<2	<1	<2	<5	<2	<1	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Isopropylbenzene	-	NA	< 500	160	<250	71	110	24	83	3	34	39	13	47	50	24	17	38	27	56	<5	15	<5	13	25	6.8
1,1-Dichloroethane	-	<1000	<500	<5	<250	<50	<50	<5	2	<2	<1	<2	<5	<2	<1	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
cis-1,2-Dichloroethene	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	<5	<5	<5	6.3	<5	<5	<5	<5	<5
trans-1,2-Dichloroethene	5	< 1000	< 500	< 5	<250	<10	<50	< 5	<1	<2	<1	<2	<5	<2	<1	<2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	5	1,800	740	1,100 D	940	510	600	780	490 D	12	140	190	81	180	210 D	120	96	190	95	310	11	97	9.1	<5	150	42
Methylene Chloride	-	< 1000	< 500	< 5	360	<10	<50	< 5	<1	12 ^B	<1	2 ^B	<5	57 ^B	<1	12	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Toluene	5	7,700	4,800	3,700 D	1,700	430	180	< 250	83	3	15	8	6	6	2	<2	<5	<5	<5	<5	<5	140	<5	<5	<5	<5
Trichloroethene	5	< 1000	< 500	< 5	<250	<10	<50	< 5	87 D	<2	<1	2	<10	<2	2	2.66	<5	<5	<5	<5	<5	<5	<5	8.2	<5	<5
Vinyl Chloride	5	< 1000	< 500	11	<250	<10	<50	< 5	11	<2	<1	<2	<5	<2	2	<2	<2	<2	<2	<5	17	<2	<2	<2	<2	<2
Total Xylenes	5	22,000	11,000	13,000 D	13,000	5,100	4,200 E	20,000	3,100 D	370	700 D	640	370 D	440	150	93	184	279	99	590	55	95	63.4	<5	152	125

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

Notes:

- B = Qualified as non-detect due to blank contamination
- D,* = Analyzed with dilution. See laboratory reports for dilution factors.
- E = Concentration exceeded calibration range of instrument.
- J = Estimated Concentration
- NA = Not Analyzed

Table 5
RW-1D
Quarterly Sample Results

Volatile Compounds (Method 8260B)	Site GW RAOs (ug/L)	Jul-97 (ug/L)*	Oct-97 (ug/L)	Dec-97 (ug/L)	Mar-98 (ug/L)*	Jun-98 (ug/L)*	Sept-98 (ug/L)*	Nov-98 (ug/L)*	Feb-99 (ug/L)	May-99 (ug/L)	Aug-99 (ug/L)	Nov-99 (ug/L)	Apr-8-00 (ug/L)	Apr-30-00 (ug/L)	Aug-00 (ug/L)	Nov-00 (ug/L)	Apr-05-01 (ug/L)	Jul-02-01 (ug/L)	Sept-01 (ug/L)	Jan-06-02 (ug/L)	Mar-02 (ug/L)	Jul-05-02 (ug/L)	Sept-02 (ug/L)	Dec-02 (ug/L)	Feb-03 (ug/L)	May-03 (ug/L)
Acetone	-	< 19 ^B	< 10	< 10	37	<5	<10	< 10	<5	<5	<10	<10	14 ^B	<25	4 J ^B	<5	<5	<5	<5	12	<5	<10	<10	<10	<10	<10
Benzene	-	< 5	< 5	< 5	<5	<1	<5	< 5	2	2	<2	6	23	17	4	14	3.7	6.0	3.6	<5	9.7	6.6	3.6	5.6	4.8	7.6
2-Butanone	-	< 10	< 10	< 10	<10	<5	<10	< 10	<5	<5	<10	<10	<5	<25	<5	<5	<5	<5	<5	<10	<5	<10	<10	<10	<10	<10
Chloroform	-	< 5	< 5	< 5	<5	<1	<5	< 5	<1	<1	<2	<2	1	<5	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloromethane	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	4	<2	<1	<5	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Isopropylbenzene	-	NA	< 5	< 5	<5	<1	<5	< 5	<1	<1	<2	<2	<1	<5	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethene	-	<5	<5	<5	<5	<1	<5	<5	3	4	2	54	85	53	11	41	10	12	12	<5	25	15	11	11	14	19
cis-1,2-Dichloroethene		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,500	1,700	1,400	180	3,000	2,300	1,400	1,300	1,700	2,200
trans-1,2-Dichloroethene	5	26	< 5	< 5	<5	2	2 J	< 5	4	4	16	43	110	84	17	52	14	12	17	<5	41	9.4	6.8	13	15	22
Ethylbenzene	5	< 5	< 5	< 5	<5	<1	<5	< 5	<1	<1	<2	<2	<1	<5	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methylene Chloride	-	< 8 ^B	14	< 5	<5	3	2 J	< 5	<1	1 ^B	3	24 ^B	11 ^B	27 ^B	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Toluene	5	< 5	< 5	< 5	<5	<1	<5	< 5	<1	<1	<2	<2	<1	<5	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	5	< 5	< 5	< 5	<5	<1	3 J	6	<10 ^B	19	<2	38	8	25	16	150	<5	14	73	<5	62	8.1	39	14	34	46
Vinyl Chloride	5	23	29	93	200	200	130	130	140 D	210	120	830 D	450 D	530	25	910 D	<2	110	130	360	52	<100	26	<2	11	<2
Total Xylenes	5	< 5	< 5	< 5	<5	<1	<5	< 5	<1	<1	<2	<2	<3	<15	<3	<1	<5	<5	<5	<5	<5	15	<5	<5	<5	<5

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

Notes:

B = Qualified as non-detect due to blank contamination

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

J = Estimated Concentration

NA = Not Analyzed

Table 6
RW-2D
Quarterly Sample Results

Volatile Compounds (Method 8260B)	Site GW RAOs (ug/L)	Aug-95 (ug/L)**	Jul-97 (ug/L)*	Oct-97 (ug/L)	Dec-97 (ug/L)	Mar-98 (ug/L)*	Jun-98 (ug/L)*	Sept-98 (ug/L)*	Nov-98 (ug/L)*	Feb-99 (ug/L)	May-99 (ug/L)	Aug-99 (ug/L)	Nov-99 (ug/L)	Feb-00 (ug/L)	Apr-00 (ug/L)	Aug-00 (ug/L)	Nov-00 (ug/L)	Mar-01 (ug/L)	Jul-02-01 (ug/L)	Sept-01 (ug/L)	Jan-06-02 (ug/L)	Mar-02 (ug/L)	Jul-05-02 (ug/L)	Sept-02 (ug/L)	Dec-02 (ug/L)	Feb-03 (ug/L)	May-03 (ug/L)
Acetone	-	<10	< 90 ^B	< 100	< 10	<500	<130/<130	<250	< 10	<5	<5	<5	<100	<10	120 ^B	<5	<5	<5	<5	<5	<10	<10	<10	<10	<10	<10	<10
Benzene	-	NA	< 5	< 50	< 5	<250	<25/<25	<120	< 5	<1	<1	2	<20	<5	<10	3	4.7	6.5	7.2	7.5	9.2	9.9	9.1	9.5	9.7	9.7	11
2-Butanone	-	NA	130	270	< 10	<500	<25/<25	<250	< 10	<5	<5	<5	<100	<10	<50	16	<5	<5	<5	<5	<10	<5	28	<10	<10	<10	<10
Chloroform	-	NA	< 5	< 50	< 5	<250	<25/<25	<120	< 5	<1	<1	<1	<20	<5	<10	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Isopropylbenzene	-	NA	NA	< 50	< 5	<250	<25/<25	<120	< 5	<1	<1	<1	<20	<5	<10	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethene	-	NA	<5	<50	<5	<250	<25	>120	<5	5	6	<1	65	6	<10	12	25	17	16	25	25	33	<5	32	22	26	23
cis-1,2-Dichloroethene		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5,200	4,200	7,900	7,800	12,000	50	7,900	4,300	6,000	5,000
trans-1,2-Dichloroethene	5	200	320 D	< 50	< 5	<250	<25/<25	<120	< 5	5	5	5	94	7	<10	11	19	27	27	32	41	29	7.8	26	18	26	21
Ethylbenzene	5	NA	< 5	< 50	< 5	<250	<25/<25	<120	< 5	<1	<1	2	<20	7	<10	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methylene Chloride	-	<10	< 12 ^B	340	< 5	<250	<25/<25	80 J	< 5	<1	1 ^B	<1	260 ^B	<5	410 ^B	<1	3.06 ^B	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Tetrachloroethene	-	NA	<5	<50	<5	<250	<25	<120	<5	1	1	1	<20	<5	<10	<1	1.04	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Toluene	5	NA	< 5	< 50	< 5	<250	<25/<25	<120	< 5	<1	<1	<1	<20	<5	<10	<1	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	5	5,600	2,200 D	1,900 D	4,500 D	4,900	2,200/2,500	3,200	4,700	4,500 D	4,000	2,800 D	18,000 D	1,900 D	3,100	3,000 D	4,400 D	1,100	270	330	310	150	<5	210	110	490	840
Vinyl Chloride	5	32	32	< 50	71	<250	83/<25	110 J	150	190	280	190 D	<20	210	150	160 D	120 D	530	610	1,300	1,100	1,700	55	1,300	1,600	1,100	960
Total Xylenes	5	<10	< 5	< 50	< 5	<250	<25/<25	<120	< 5	<2 ^B	2	13	<20	38	<30	<3	1.49	<5	<5	<5	8.9	<5	12	<5	<5	<5	<5

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

Notes:

B = Qualified as non-detect due to blank contamination

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

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

J = Estimated Concentration

NA = Not analyzed

Table 7

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

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

Notes:

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

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

Third Carbon Placed online on November 29, 2002

Primary Carbon unit taken offline on June 12, 2003

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

Pre-Carbon sample results represent system influent.

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

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

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

B = Qualified as non-detect due to blank contamination

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

J = Estimated Concentration

ND = Non detect

NS = Not Sampled

NA= Not Analyzed

Table 8

**Primary Carbon Effluent
POTW Monthly Monitoring Summary**

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

Notes:

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

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

Third Carbon Placed online on November 29, 2002

Primary Carbon unit taken offline on June 12, 2003

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

Pre-Carbon sample results represent system influent.

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

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

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

B = Qualified as non-detected due to blank contamination

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

J = Estimated Concentration

ND = Non detect

NS = Not Sampled

NA= Not Analyzed

Table 9

**Secondary Carbon Effluent
POTW Monthly Monitoring Summary**

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

Notes:

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

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

Third Carbon Placed online on November 29, 2002

Primary Carbon unit taken offline on June 12, 2003

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

Pre-Carbon sample results represent system influent.

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

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

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

B = Qualified as non-detect due to blank contamination

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

J = Estimated Concentration

ND = Non detect

NS = Not Sampled

NA= Not Analyzed

Table 10

**Third Carbon Effluent
POTW Monthly Monitoring Summary**

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

Notes:

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

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

Third Carbon Placed online on November 29, 2002

Primary Carbon unit taken offline on June 12, 2003

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

Pre-Carbon sample results represent system influent.

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

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

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

B = Qualified as non-detect due to blank contamination

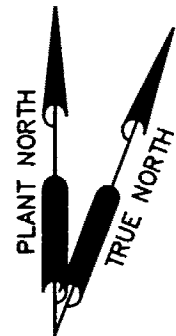
D = Analyzed with dilution, see laboratory reports for dilution factor

J = Estimated Concentration

ND = Non detect

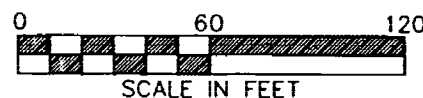
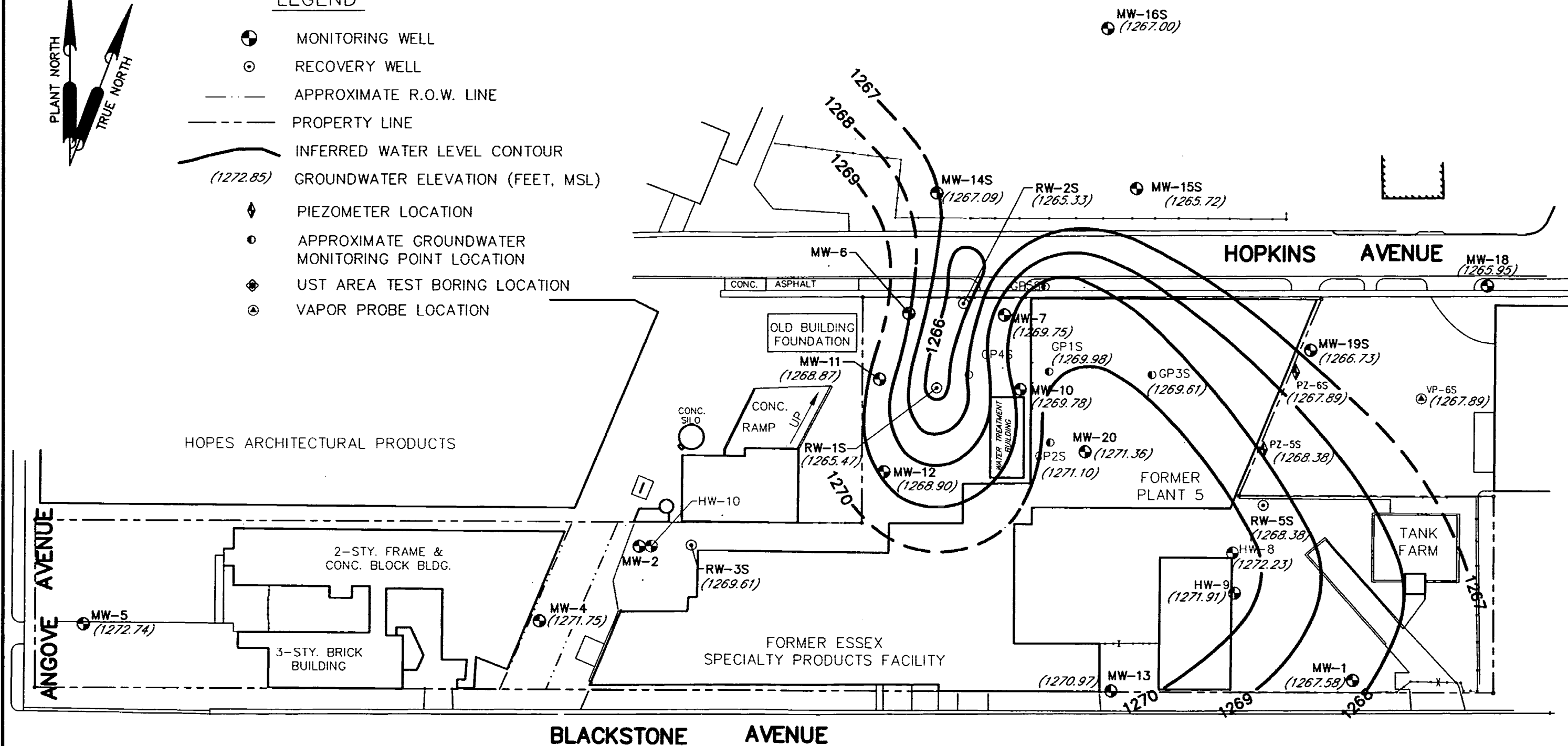
NS = Not Sampled

NA= Not Analyzed



LEGEND

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



URS

WATER TABLE CONTOUR MAP MAY 22, 2003

ESSEX/HOPE SITE

JAMESTOWN, NY

CLIENT: ESSEX SPECIALTY PRODUCTS, INC.

JOB NUMBER: 801419.2040

SCALE: AS SHOWN

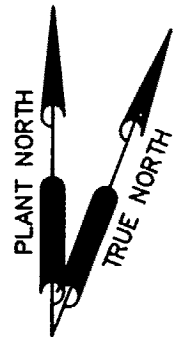
FIGURE
NUMBER

1

REV

0

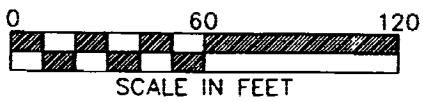
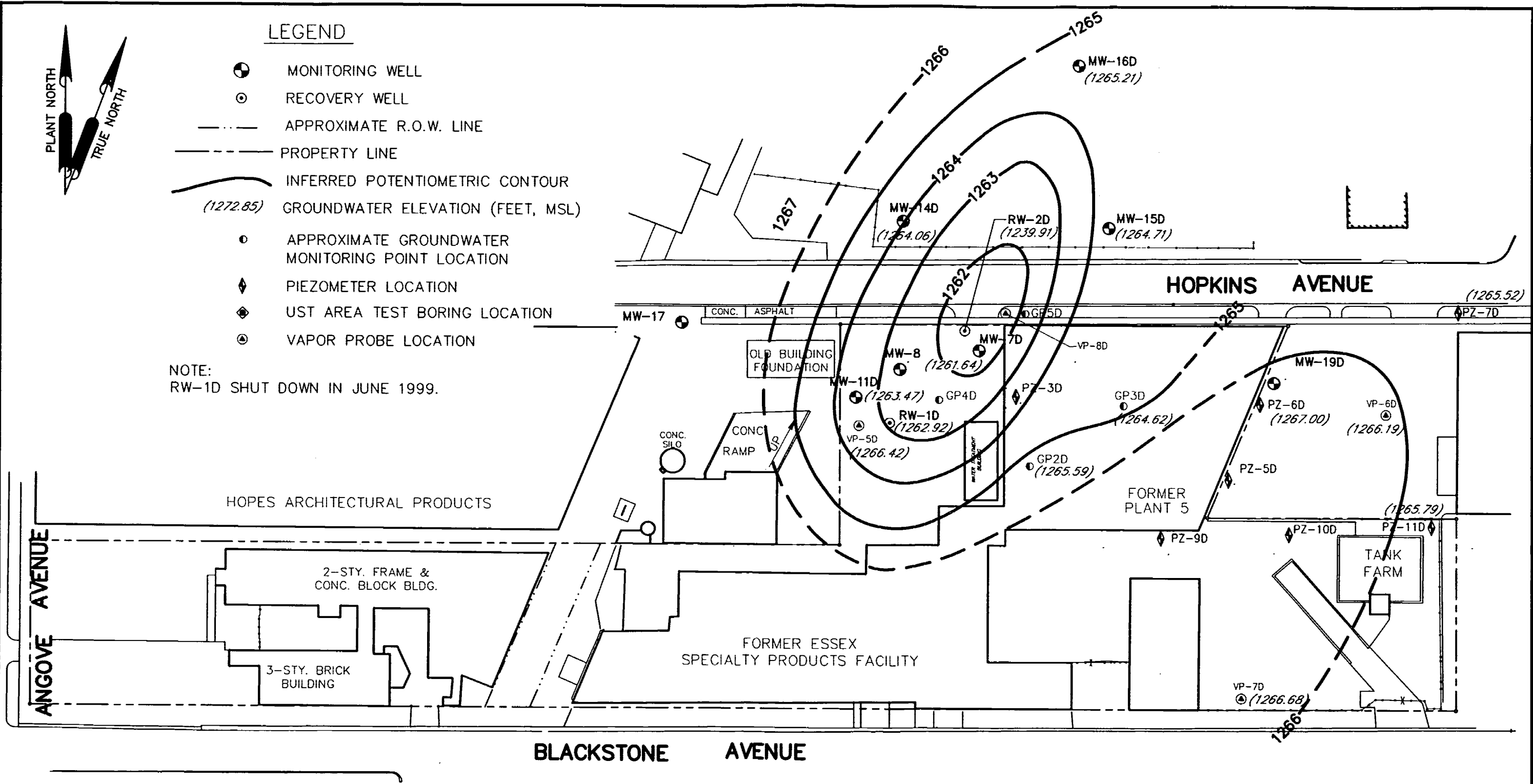
VERTICAL BENCH MARK INFORMATION CAME FROM U.S.G.S. PLAQUE U-88-S.E. ABUTT. ERIE R.R. BRIDGE
OVER BUFFALO ST., ELEV.=1296.034 (NATIONAL GEODETIC VERTICAL DATUM, 1929).



LEGEND

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

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



URS

POTENTIOMETRIC CONTOUR MAP LOWER FINE SAND WATER BEARING ZONE MAY 22, 2003			JAMESTOWN, NY	
ESSEX/HOPE SITE		CLIENT: ESSEX SPECIALTY PRODUCTS, INC.		JOB NUMBER: 801419.2040
SCALE: AS SHOWN	FIGURE NUMBER: 2	REV 0		

FILE: J:\ESSEX\HOP\7138\801419\052203-D.DWG

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 GLODETC VERTICAL DATUM, 1929).

APPENDIX A

WATER LEVEL MEASUREMENT DATA

Groundwater Extraction System Monitoring Data
2003 Water Levels
February through May 2003
Essex/Hope Site Remedial Action
Jamestown, New York
URS Project No. 801419

Well No.	Northing	Easting	Reference Elevation (ft msl)	Screened Zone	February 6, 2003		March 17, 2003		May 22, 2003	
					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 79	1267 69	12 02	1268 46	12 90	1267 58
MW-2	9837 1531	9959 6857	1279 87	Shallow WBZ	8 44	1271 43	NA	NA	NA	NA
MW-4	9762 3277	9900 7831	1281 02	Shallow WBZ	NA	NA	8 75	1272 27	9 27	1271 75
MW-5	9789 6222	9631 761	1280 82	Shallow WBZ	8 04	1272 78	7 97	1272 85	8 08	1272 74
MW-8*	9977 1197	10118 8762	1277 88	Shallow WBZ	8 15	1269 83	8 06	1269 92	NA	NA
MW-7*	9976 8467	10175 6797	1277 73	Shallow WBZ	8 51	1269 22	7 74	1269 99	7 88	1269 75
MW-10	9932 4702	10185 7078	1277 94	Shallow WBZ	NA	NA	7 30	1270 84	8 16	1269 78
MW-11*	9937 9912	10101 7016	1277 75	Shallow WBZ	NA	NA	7 15	1270 60	8 88	1268 87
MW-12	9883 0874	10104 9278	1278 18	Shallow WBZ	7 86	1270 30	6 73	1271 45	9 28	1268 9
MW-13	9752 0619	10240 2934	1278 12	Shallow WBZ	8 59	1269 53	5 78	1272 36	7 15	1270 97
MW-14S	10048 7753	10135 5198	1280 25	Shallow WBZ	13 49	1268 76	12 84	1267 41	13 16	1267 09
MW-15S	10051 8272	10254 4862	1279 55	Shallow WBZ	12 41	1267 14	11 35	1268 20	13 83	1265 72
MW-16S	10146 7788	10236 8582	1279 32	Shallow WBZ	12 04	1267 28	11 14	1268 18	12 32	1267
MW-18	9994	10465	1275 59	Shallow WBZ	9 71	1265 88	8 40	1267 19	9 64	1265 95
MW-19S	9958 1454	10358 207	1276 82	Shallow WBZ	10 09	1268 73	8 95	1267 87	10 09	1266 73
MW-20	9865 0682	10224 2128	1276 64	Shallow WBZ	6 63	1272 01	6 91	1271 73	7 28	1271 36
HW-1	9874 8053	10070 0259	1281 91	Shallow WBZ	NA	NA	NA	NA	NA	NA
HW-2	9977 6477	10079 7882	1281 13	Shallow WBZ	NA	NA	NA	NA	NA	NA
HW-3	9886 163	9957 6007	1283 24	Shallow WBZ	NA	NA	NA	NA	NA	NA
HW-7	9837 3164	10293 8428	1277 55	Shallow WBZ	Destroyed	NA	Destroyed	NA	Destroyed	NA
HW-8	9834 664	10312 0885	1277 81	Shallow WBZ	NA	NA	NA	NA	5 58	1272 23
HW-9	9810 5264	10313 3873	1280 78	Shallow WBZ	8 37	1272 41	7 65	1273 13	8 87	1271 01
HW-10	9837 2878	9966 7406	1279 55	Shallow WBZ	NA	NA	7 72	1271 83	8 55	1271 00
SP-10	9815 1848	9977 9909	1279 03	Shallow WBZ	NA	NA	NA	NA	NA	NA
SP-11	9839 7568	9977 9072	1279 23	Shallow WBZ	NA	NA	NA	NA	NA	NA
SP-12	9833 1838	9958 7423	1279 68	Shallow WBZ	NA	NA	NA	NA	NA	NA
SP-13	9819 5009	9958 5764	1279 87	Shallow WBZ	NA	NA	NA	NA	NA	NA
SP-14	9807 2232	9967 0477	1279 39	Shallow WBZ	NA	NA	NA	NA	NA	NA
SP-15	9840 6722	10209 4525	1278 65	Shallow WBZ	NA	NA	NA	NA	NA	NA
SP-16	9840 3119	10250 4484	1277 84	Shallow WBZ	NA	NA	NA	NA	NA	NA
SP-17	9845 107	10287 9581	1277 56	Shallow WBZ	NA	NA	NA	NA	NA	NA
SP-18	9855 8421	10323 265	1277 4	Shallow WBZ	NA	NA	NA	NA	NA	NA
SDO-1	N/A	N/A	N/A	Shallow WBZ	NA	NA	NA	NA	NA	NA
RW-1S	9932 8951	10135 8706	1276 06	Shallow WBZ	10 21	1265 85	10 40	1265 66	10 59	1265 47
RW-2S*	9883 3801	10151 6403	1276 59	Shallow WBZ	6 75	1269 84	11 60	1264 99	11 26	1265 33
RW-3S	9838 0594	9990 4502	1278 29	Shallow WBZ	8 37	1269 92	8 90	1269 39	8 68	1269 81
RW-4S	9839 8353	10221 6766	1277 34	Shallow WBZ	Destroyed	NA	Destroyed	NA	NA	NA
RW-5S	9863 2271	10330 2425	1277 43	Shallow WBZ	4 86	1272 44	4 34	1273 09	NA	1277 43
MW-7D*	9973 2593	10174 8524	1277 8	Lower Fine Sand WBZ	15 25	1262 55	14 31	1263 49	16 16	1261 64
MW-8	9959 6089	10127 6898	1277 97	Lower Fine Sand WBZ	13 00	1264 97	NA	NA	11 12	1266 85
MW-11D	9942 3782	10101 1482	1277 85	Lower Fine Sand WBZ	No Access	NA	12 93	1264 92	14 38	1263 47
MW-14D	10049 5051	10129 1897	1280 01	Lower Fine Sand WBZ	15 64	1264 37	14 74	1265 27	15 95	1264 06
MW-15D	10045 5611	10255 205	1279 46	Lower Fine Sand WBZ	14 70	1264 76	13 86	1265 80	14 75	1264 71
MW-16D	10143 9497	10236 6005	1279 05	Lower Fine Sand WBZ	13 88	1265 17	13 21	1265 84	13 84	1265 21
MW-17	9987 8315	9995 5207	1278 7	Lower Fine Sand WBZ	10 80	1267 90	10 84	1267 88	NA	NA
MW-19D	9951 589	10355 9748	1276 21	Lower Fine Sand WBZ	10 50	1265 71	10 34	1265 87	NA	NA
RW-1D	9926 5897	10121 3968	1276 64	Lower Fine Sand WBZ	11 50	1265 14	11 89	1264 75	13 72	1262 92
RW-2D	9983 0819	10187 3168	1276 46	Lower Fine Sand WBZ	12 71	1263 75	28 15	1248 31	36 55	1239 91
MW-7DD*	9970 8547	10176 2698	1277 74	Glacial Till	NA	NA	NA	NA	2 16	1275 58
GP-1S	9954 39*	10203 02*	1278 98	Shallow WBZ	NA	NA	NA	NA	9 00	1269 98
GP-2S	9914 89*	10201 04*	1278 63	Shallow WBZ	6 70	1271 93	7 20	1271 43	7 53	1271 1
GP-2D	9914 91*	10207 84*	1278 7	Lower Fine Sand WBZ	13 02	1265 68	12 05	1266 65	13 11	1265 59
GP-3S	9941 13*	10264 03*	1278 87	Shallow WBZ	8 45	1270 42	8 48	1270 39	9 26	1269 81
GP-3D	9937 38*	10264 53*	1278 77	Lower Fine Sand WBZ	14 00	1264 77	13 00	1265 77	14 15	1264 62
GP-4S	9940 86*	10154 97*	1278 06	Shallow WBZ	NA	NA	NA	NA	NA	NA
GP-4D	9940 85*	10151 57*	1278 08	Lower Fine Sand WBZ	NA	NA	NA	NA	NA	NA
GP-5S	9993 54*	10200 34*	1277 44	Shallow WBZ	NA	NA	NA	NA	NA	NA
GP-5D	9993 55*	10290 21*	1277 37	Lower Fine Sand WBZ	NA	NA	NA	NA	NA	NA
PZ-1S			1277 97	Shallow WBZ	NA	NA	NA	NA	NA	NA
PZ-1D			1277 75	Lower Fine Sand WBZ	NA	NA	NA	NA	NA	NA
PZ-2D			1277 86	Lower Fine Sand WBZ	NA	NA	NA	NA	NA	NA
PZ-3D			1279 02	Lower Fine Sand WBZ	NA	NA	NA	NA	NA	NA
PZ-4D			1278 94	Lower Fine Sand WBZ	NA	NA	NA	NA	NA	NA
PZ-5S			1278 56	Shallow WBZ	5 74	1270 82	4 69	1271 57	8 18	1268 38
PZ-5D			1278 52	Lower Fine Sand WBZ	10 49	1266 03	9 12	1267 40	NA	NA
PZ-6S			1276 77	Shallow WBZ	8 40	1268 37	7 80	1268 97		1276 77
PZ-6D			1278 57	Lower Fine Sand WBZ	10 13	1266 44	13 2	1263 37	9 57	1267 00
PZ-7D			1275 83	Lower Fine Sand WBZ	10 48	1265 35	9 74	1266 09	10 31	1265 52
PZ-8D			1278 63	Lower Fine Sand WBZ	Destroyed	NA	Destroyed	NA	Destroyed	NA
PZ-9D			1278 04	Lower Fine Sand WBZ	No Access	NA	NA	NA	NA	NA
PZ-10D			1277 58	Lower Fine Sand WBZ	No Access	NA	NA	NA	NA	NA
PZ-11D			1276 7	Lower Fine Sand WBZ	10 60	1266 10	10 60	1266 10	10 81	1265 79
IW-01			1279 1	Shallow WBZ	Destroyed	NA	NA	NA	NA	NA
VP-5D			1278 2	Lower Fine Sand WBZ	No Access	NA	11 22	1268 68	11 78	1266 42
VP-6S			1276 62	Upper Gravel of LFSWBZ	No Access	NA	9 16	1267 46	10 26	1266 36
VP-6D			1278 71	Lower Fine Sand WBZ	No Access	NA	9 59	1267 12	10 52	1266 19
VP-7D			1278 87	Lower Fine Sand WBZ	12 54	1266 33	11 41	1267 46	12 19	1266 68
VP-8D			1277 37	Lower Fine Sand WBZ	10 45	1268 92	10 55	1268 82	NA	NA
Comments					1928 Days of System Operation		1967 Days of System Operation		2033 Days of System Operation	
WBZ - Water Sealing Zone										
* = Estimated Coordinate										
MW-5 TOC elev. altered from 1280 91 ft msl to 1280 82 ft msl on May 5, 2000										
* Wells resurveyed on 10/11/00 due to uplift of concrete from injection work.										
RW-4S and RW-5S taken offline in October 2002 for UST Removal.										
Wells RW-4S, TW-01, PZ-8D and HW-7 destroyed during UST removal operation										

APPENDIX B

LABORATORY CERTIFICATES OF ANALYSIS

May 29, 2003

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

Dear Mr. Dodrill:

Enclosed are analytical results for samples submitted to Pace Analytical by URS Corporation. The samples were received on May 20, 2003. Please reference Pace project number 03-1878 when inquiring about this report.

Client Site: Essex-Hope
Client Ref.: 801419.2030

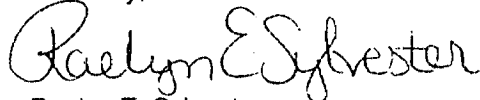
Pace Sample Identification	Client Sample Identification
0305-1455	RW1D
0305-1456	RW1S
0305-1457	RW2S

Pace Sample Identification	Client Sample Identification
0305-1458	RW2D
0305-1459	RW3S
0305-1460	Trip Blank

General Comments: Cooler temperature 2 ° C upon receipt. Ice was present.

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

Sincerely,



Raelyn E. Sylvester
Project Manager

REC: jld

Enclosures

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.



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

Lab Project ID: 03-1878
Lab Sample ID: 0305-1455
Client Sample ID: RW1D
Sample Matrix: Aqueous

Date Sampled: 05/17/2003
Date Received: 05/20/2003

Client Site: Essex-Hope
Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	MAK	05/21/2003	0021402-1	<10
Benzene	8260B ⁽¹⁾	7.6	1.0	ug/l	MAK	05/21/2003	0021402-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	05/21/2003	0021402-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	19	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	2200	20	ug/l	MAK	05/22/2003	0021454-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	22	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	05/21/2003	0021402-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	05/21/2003	0021402-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0

(Continued)

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Lab Sample ID: 0305-1455
Client Sample ID: RW1D

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Trichloroethene	8260B ⁽¹⁾	46	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	<2.0	2.0	ug/l	MAK	05/21/2003	0021402-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0

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

Sample Comments: Results reported on an as received basis.

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Lab Project ID: 03-1878
Lab Sample ID: 0305-1456
Client Sample ID: RW1S
Sample Matrix: Aqueous

Date Sampled: 05/17/2003
Date Received: 05/20/2003

Client Site: Essex-Hope
Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	MAK	05/21/2003	0021402-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	MAK	05/21/2003	0021402-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	05/21/2003	0021402-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	190	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	05/21/2003	0021402-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	05/21/2003	0021402-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0

(Continued)

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Lab Sample ID: 0305-1456
Client Sample ID: RW1S

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Trichloroethene	8260B ⁽¹⁾	1400	10	ug/l	MAK	05/22/2003	0021454-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	26	2.0	ug/l	MAK	05/21/2003	0021402-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0

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

Sample Comments: Results reported on an as received basis.

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Lab Project ID: 03-1878
Lab Sample ID: 0305-1457
Client Sample ID: RW2S
Sample Matrix: Aqueous

Date Sampled: 05/17/2003
Date Received: 05/20/2003

Client Site: Essex-Hope
Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	MAK	05/21/2003	0021402-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	MAK	05/21/2003	0021402-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	05/21/2003	0021402-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	32	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	05/21/2003	0021402-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	05/21/2003	0021402-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0

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Lab Sample ID: 0305-1457
Client Sample ID: RW2S

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Trichloroethene	8260B ⁽¹⁾	69	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	<2.0	2.0	ug/l	MAK	05/21/2003	0021402-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0

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

Sample Comments: Results reported on an as received basis.

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Lab Project ID: 03-1878
Lab Sample ID: 0305-1458
Client Sample ID: RW2D
Sample Matrix: Aqueous

Date Sampled: 05/17/2003
Date Received: 05/20/2003

Client Site: Essex-Hope
Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	MAK	05/21/2003	0021402-1	<10
Benzene	8260B ⁽¹⁾	11	1.0	ug/l	MAK	05/21/2003	0021402-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	05/21/2003	0021402-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	23	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	5000	50	ug/l	MAK	05/21/2003	0021402-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	21	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	05/21/2003	0021402-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	05/21/2003	0021402-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0

(Continued)

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Lab Sample ID: 0305-1458
Client Sample ID: RW2D

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Trichloroethene	8260B ⁽¹⁾	840	50	ug/l	MAK	05/21/2003	0021402-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	960	100	ug/l	MAK	05/21/2003	0021402-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/21/2003	0021402-1	<5.0

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

Sample Comments: Results reported on an as received basis.

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Lab Project ID: 03-1878
Lab Sample ID: 0305-1459
Client Sample ID: RW3S
Sample Matrix: Aqueous

Date Sampled: 05/17/2003
Date Received: 05/20/2003

Client Site: Essex-Hope
Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	MAK	05/22/2003	0021429-1	<10
Benzene	8260B ⁽¹⁾	10	1.0	ug/l	MAK	05/22/2003	0021429-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	05/22/2003	0021429-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
Cumene	8260B ⁽¹⁾	6.8	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	42	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	05/22/2003	0021429-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	05/22/2003	0021429-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0305-1459
Client Sample ID: RW3S

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
Trichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	<2.0	2.0	ug/l	MAK	05/22/2003	0021429-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	110	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
o-Xylene	8260B ⁽¹⁾	15	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0

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

Sample Comments: Results reported on an as received basis.

REPORT OF LABORATORY ANALYSIS

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

Lab Project ID: 03-1878
Lab Sample ID: 0305-1460
Client Sample ID: Trip Blank
Sample Matrix: Aqueous

Date Sampled: 05/17/2003
Date Received: 05/20/2003

Client Site: Essex-Hope
Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	28	10	ug/l	MAK	05/22/2003	0021429-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	MAK	05/22/2003	0021429-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	05/22/2003	0021429-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	05/22/2003	0021429-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	05/22/2003	0021429-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0305-1460
Client Sample ID: Trip Blank

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
Trichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	<2.0	2.0	ug/l	MAK	05/22/2003	0021429-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	05/22/2003	0021429-1	<5.0

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

Sample Comments: Results reported on an as received basis.

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CHAIN-OF-CUSTODY / Analytical Request Document

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

728767

Required Client Information: Section A

Company: URS Corp

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

Phone: 412-768-2717 Fax: _____

Required Client Information: Section B

Report To: Keith Dadrill

Copy To: _____

Invoice To: _____

P.O.: _____

Project Name: _____

Project Number: _____

Page: 1 of 1

To Be Completed by Pace Analytical and Client Section C

Quote Reference: _____

Project Manager: _____

Project #: 03-1878

Profile #: _____

Requested Analysis: _____

ITEM #	Section D Required Client Information:										Valid Matrix Codes MATRIX WATER SOIL OIL WIPE AIR TISSUE OTHER	CODE WT SL OL WP AR TS OT	MATRIX CODE	Valid Date Codes DATE COLLECTED mm / dd / yy	TIME COLLECTED hh:mm a/p	# Containers	Preservatives							Remarks / Lab ID											
	SAMPLE ID One character per box. (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE																Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol		Other										
1	R	W	1	D								WT	5-17-03	0900	3				X															05-1455	
2	R	W	1	S								WT	5-17-03	0920	3				X															1456	
3	R	W	2	S								WT	5-17-03	0940	3				X															1457	
4	R	W	2	D								WT	5-17-03	1000	3				X															1458	
5	R	W	3	S								WT	5-17-03	1020	3				X															1459	
6	T	R	1	P	B	L	A	N	K			WT			3				X															1460	
7																																			
8																																			
9																																			
10																																			
11																																			
12																																			

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
FED. Express	837739696976	5-19-03	1		John S. Ross URS	5-19-03	1600	FED. EXPRESS	5-19-03	1600

SAMPLE CONDITION

Temp in °C: 2

Received on Ice: Y/N

Sealed Cooler: Y/N

Samples Intact: Y/N

SAMPLE NOTES

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: John S. Ross

SIGNATURE of SAMPLER: John S. Ross

DATE Signed: (MM / DD / YY) 5-17-03

Additional Comments:

May 12, 2003

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

Dear Mr. Dodrill:

Enclosed are analytical results for samples submitted to Pace Analytical by URS Corporation. The samples were received on May 2, 2003. Please reference Pace project number 03-1661 when inquiring about this report.

Client Site: Essex-Hope
Client Ref.: 801419.2030

Pace Sample Identification	Client Sample Identification
0305-0502	Pre-Carb
0305-0503	Primary Effluent
0305-0504	Secondary Effluent
0305-0505	Post-Carb
0305-0509	Trip Blank

General Comments: Cooler temperature 11 ° C upon receipt. Ice was present.

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

Sincerely,



Raelyn E. Sylvester
Project Manager

REC: jld

Enclosures

REPORT OF LABORATORY ANALYSIS

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

Lab Project ID: 03-1661
Lab Sample ID: 0305-0502
Client Sample ID: Pre-Carb
Sample Matrix: Aqueous

Date Sampled: 04/30/2003
Date Received: 05/02/2003

Client Site: Essex-Hope
Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<500	500	ug/l	CMS	05/05/2003	0021020-1	<10
Benzene	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
Bromoform	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
Bromomethane	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
2-Butanone	8260B ⁽¹⁾	<500	500	ug/l	CMS	05/05/2003	0021020-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
Chloroethane	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
Chloroform	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
Chloromethane	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
Cumene	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	3400	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<500	500	ug/l	CMS	05/05/2003	0021020-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<500	500	ug/l	CMS	05/05/2003	0021020-1	<10
Methylene chloride	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0305-0502
Client Sample ID: Pre-Carb

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
Toluene	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
Trichloroethene	8260B ⁽¹⁾	560	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	500	100	ug/l	CMS	05/05/2003	0021020-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<100	100	ug/l	CMS	05/05/2003	0021020-1	<5.0
o-Xylene	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0

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

Sample Comments: Results reported on an as received basis. Detection limits have been elevated due to sample matrix.

REPORT OF LABORATORY ANALYSIS

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

Lab Project ID: 03-1661
Lab Sample ID: 0305-0503
Client Sample ID: Primary Effluent
Sample Matrix: Aqueous

Date Sampled: 04/30/2003
Date Received: 05/02/2003

Client Site: Essex-Hope
Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<500	500	ug/l	CMS	05/05/2003	0021020-1	<10
Benzene	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
Bromoform	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
Bromomethane	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
2-Butanone	8260B ⁽¹⁾	<500	500	ug/l	CMS	05/05/2003	0021020-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
Chloroethane	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
Chloroform	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
Chloromethane	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
Cumene	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	3100	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<500	500	ug/l	CMS	05/05/2003	0021020-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<500	500	ug/l	CMS	05/05/2003	0021020-1	<10
Methylene chloride	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0

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Lab Sample ID: 0305-0503
Client Sample ID: Primary Effluent

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
Toluene	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
Trichloroethene	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	530	100	ug/l	CMS	05/05/2003	0021020-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<100	100	ug/l	CMS	05/05/2003	0021020-1	<5.0
o-Xylene	8260B ⁽¹⁾	<50	50	ug/l	CMS	05/05/2003	0021020-1	<5.0

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

Sample Comments: Results reported on an as received basis. Detection limits have been elevated due to sample matrix.

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Lab Project ID: 03-1661
Lab Sample ID: 0305-0504
Client Sample ID: Secondary Effluent
Sample Matrix: Aqueous

Date Sampled: 04/30/2003
Date Received: 05/02/2003

Client Site: Essex-Hope
Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<100	100	ug/l	CMS	05/05/2003	0021020-1	<10
Benzene	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<5.0
Bromoform	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<5.0
Bromomethane	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<5.0
2-Butanone	8260B ⁽¹⁾	<100	100	ug/l	CMS	05/05/2003	0021020-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<5.0
Chloroethane	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<5.0
Chloroform	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<5.0
Chloromethane	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<5.0
Cumene	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<100	100	ug/l	CMS	05/05/2003	0021020-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<100	100	ug/l	CMS	05/05/2003	0021020-1	<10
Methylene chloride	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<5.0

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Lab Sample ID: 0305-0504
Client Sample ID: Secondary Effluent

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<5.0
Toluene	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<5.0
Trichloroethene	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	740	20	ug/l	CMS	05/05/2003	0021020-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<20	20	ug/l	CMS	05/05/2003	0021020-1	<5.0
o-Xylene	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<5.0

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

Sample Comments: Results reported on an as received basis. Detection limits have been elevated due to sample matrix.

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Lab Project ID: 03-1661
Lab Sample ID: 0305-0505
Client Sample ID: Post-Carb
Sample Matrix: Aqueous

Date Sampled: 04/30/2003
Date Received: 05/02/2003

Client Site: Essex-Hope
Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	CMS	05/05/2003	0021020-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	6.5	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0

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Lab Sample ID: 0305-0505
Client Sample ID: Post-Carb

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
Trichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	77	2.0	ug/l	CMS	05/05/2003	0021020-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0

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

Sample Comments: Results reported on an as received basis. Sample 0305-0505 was composited from 4 samples prior to analysis.

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Lab Project ID: 03-1661
Lab Sample ID: 0305-0509
Client Sample ID: Trip Blank
Sample Matrix: Aqueous

Date Sampled: 04/30/2003
Date Received: 05/02/2003

Client Site: Essex-Hope
Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	CMS	05/05/2003	0021020-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	CMS	05/05/2003	0021020-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0

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Lab Sample ID: 0305-0509
Client Sample ID: Trip Blank

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
Trichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	<2.0	2.0	ug/l	CMS	05/05/2003	0021020-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	05/05/2003	0021020-1	<5.0

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

Sample Comments: Results reported on an as received basis.

REPORT OF LABORATORY ANALYSIS

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CHAIN-OF-CUSTODY / Analytical Request Document

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

730996

Required Client Information: Section A

Company: **URS**

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

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

Required Client Information: Section B

Report To: **Keith Dodrill**

Copy To: _____

Invoice To: _____

P.O.: _____

Project Name: **Essex-Hope**

Project Number: **801419.2030**

Page: _____ of _____

Client Information (Check quote/contract):

Requested Due Date: _____ TAT: _____

* Turn around times less than 14 days subject to laboratory and contractual obligations and may result in a Rush Turnaround Surcharge.

Turn Around Time (TAT) in calendar days.

To Be Completed by Pace Analytical and Client Section C

Quote Reference: _____

Project Manager: _____

Project #: **03 1661**

Profile #: _____

Requested Analysis: _____

ITEM #	Section D Required Client Information:											Valid Matrix Codes MATRIX CODE WATER WT SOIL SL OIL OL WIPE WP AIR AR TISSUE TS OTHER QT	DATE COLLECTED mm / dd / yy	TIME COLLECTED hh:mm a/p	# Containers	Preservatives							Remarks / Lab ID							
	SAMPLE ID One character per box. (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE															Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol		Other						
1	P	R	E	-	C	A	R	B					WT	4-30-03	1530	2			X											05-0502
2	P	R	I	M	A	R	Y	E	F	F					1530	2			X											05
3	S	E	C	O	N	D	A	R	Y	E	F			1600	2			X												04
4	P	O	S	T	C	A	R	B						1600	2			X												05
5	P	O	S	T	C	A	R	B						1630	2			X												05
6	P	O	S	T	C	A	R	B						1700	2			X												04
7	P	O	S	T	C	A	R	B						1730	2			X												04
8	T	R	I	P	B	L	A	N	K						3															09
9																														
10																														
11																														
12																														

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Federal Express	837666729667	5-1-03	1		John S. Ross URS	5-1-03	1830	FED Express	5-20-03	10%

SAMPLE CONDITION

Temp in °C: **11**

Received on Ice: **Y/N**

Sealed Cooler: **Y/N**

Samples Intact: **Y/N**

SAMPLE NOTES: **Combine 4 Post-Carb Samples into 1 for Analysis**

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: **John S. Ross**

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

DATE Signed: (MM / DD / YY) **4-30-03**

June 6, 2003

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

Dear Mr. Dodrill:

Enclosed are analytical results for samples submitted to Pace Analytical by URS Corporation. The samples were received on June 3, 2003. Please reference Pace project number 03-2124 when inquiring about this report.

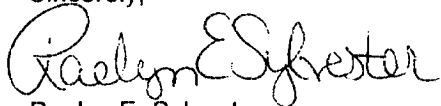
Client Site: Essex-Hope
Client Ref.: 801419.2030

Pace Sample Identification	Client Sample Identification
0306-0453	Pre-Carb
0306-0454	Primary Effluent
0306-0455	Secondary Effluent
0306-0456	Post-Carb
0306-0457	Trip Blank

General Comments: Cooler temperature 2 ° C upon receipt. Ice was present.

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

Sincerely,



Raelyn E. Sylvester
Project Manager

REC: jld

Enclosures

REPORT OF LABORATORY ANALYSIS

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

Lab Project ID: 03-2124
Lab Sample ID: 0306-0453
Client Sample ID: Pre-Carb
Sample Matrix: Aqueous

Date Sampled: 05/31/2003
Date Received: 06/03/2003

Client Site: Essex-Hope
Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	CMS	06/04/2003	0021741-1	<10
Benzene	8260B ⁽¹⁾	5.5	1.0	ug/l	CMS	06/04/2003	0021741-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	CMS	06/04/2003	0021741-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	12	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	2900	50	ug/l	CMS	06/04/2003	0021741-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	13	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	CMS	06/04/2003	0021741-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	CMS	06/04/2003	0021741-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: **0306-0453**
Client Sample ID: **Pre-Carb**

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Trichloroethene	8260B ⁽¹⁾	470	50	ug/l	CMS	06/04/2003	0021741-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	410	100	ug/l	CMS	06/04/2003	0021741-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0

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

Sample Comments: Results reported on an as received basis.

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

Lab Project ID: 03-2124
Lab Sample ID: 0306-0454
Client Sample ID: Primary Effluent
Sample Matrix: Aqueous

Date Sampled: 05/31/2003

Date Received: 06/03/2003

Client Site: Essex-Hope

Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	CMS	06/04/2003	0021745-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	CMS	06/04/2003	0021745-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021745-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021745-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021745-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	CMS	06/04/2003	0021745-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021745-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021745-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021745-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021745-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021745-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021745-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021745-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021745-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021745-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021745-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021745-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021745-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021745-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	7.4	5.0	ug/l	CMS	06/04/2003	0021745-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	3200	50	ug/l	CMS	06/04/2003	0021741-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	14	5.0	ug/l	CMS	06/04/2003	0021745-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021745-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021745-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021745-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021745-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	CMS	06/04/2003	0021745-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	CMS	06/04/2003	0021745-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021745-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0306-0454
Client Sample ID: Primary Effluent

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021745-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021745-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021745-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021745-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021745-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021745-1	<5.0
Trichloroethene	8260B ⁽¹⁾	15	5.0	ug/l	CMS	06/04/2003	0021745-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021745-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	430	100	ug/l	CMS	06/04/2003	0021741-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021745-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021745-1	<5.0

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

Sample Comments: Results reported on an as received basis.

REPORT OF LABORATORY ANALYSIS

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

Client Site: Essex-Hope
Client Ref.: 801419.2030

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

Lab Project ID: 03-2124
Lab Sample ID: 0306-0455
Client Sample ID: Secondary Effluent
Sample Matrix: Aqueous

Date Sampled: 05/31/2003
Date Received: 06/03/2003

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	CMS	06/04/2003	0021741-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	CMS	06/04/2003	0021741-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	CMS	06/04/2003	0021741-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	18	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	CMS	06/04/2003	0021741-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	CMS	06/04/2003	0021741-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0306-0455
Client Sample ID: Secondary Effluent

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Trichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	590	20	ug/l	CMS	06/04/2003	0021741-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0

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

Sample Comments: Results reported on an as received basis.

REPORT OF LABORATORY ANALYSIS

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

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

Lab Project ID: 03-2124
Lab Sample ID: 0306-0456
Client Sample ID: Post-Carb
Sample Matrix: Aqueous

Date Sampled: 05/31/2003
Date Received: 06/03/2003

Client Site: Essex-Hope
Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	10	10	ug/l	CMS	06/04/2003	0021741-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	CMS	06/04/2003	0021741-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	CMS	06/04/2003	0021741-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	5.7	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	CMS	06/04/2003	0021741-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	CMS	06/04/2003	0021741-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0306-0456
Client Sample ID: Post-Carb

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Trichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	360	2.0	ug/l	CMS	06/04/2003	0021741-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0

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

Sample Comments: Results reported on an as received basis. Sample 0306-0456 was composited from 4 samples prior to analysis.

REPORT OF LABORATORY ANALYSIS

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

Client Site: Essex-Hope
Client Ref.: 801419.2030

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

Lab Project ID: 03-2124
Lab Sample ID: 0306-0457
Client Sample ID: Trip Blank
Sample Matrix: Aqueous

Date Sampled: 05/31/2003
Date Received: 06/03/2003

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	58	10	ug/l	CMS	06/04/2003	0021741-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	CMS	06/04/2003	0021741-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	CMS	06/04/2003	0021741-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	CMS	06/04/2003	0021741-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	CMS	06/04/2003	0021741-1	<10
Methylene chloride	8260B ⁽¹⁾	14	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0306-0457
Client Sample ID: Trip Blank

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Trichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	<2.0	2.0	ug/l	CMS	06/04/2003	0021741-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	CMS	06/04/2003	0021741-1	<5.0

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

Sample Comments: Results reported on an as received basis. 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.

REPORT OF LABORATORY ANALYSIS

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CHAIN-OF-CUSTODY / Analytical Request Document

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

730642

Required Client Information: Section A

Company: **URS Corp**

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

Phone: **412-788-2717** Fax: **412-788-1316**

Required Client Information: Section B

Report To: **Keith Dodrill**

Copy To: _____

Invoice To: _____

PO: _____

Project Name: **Essex-Hope**

Project Number: **801419.2030**

Page: 1 of 1

To Be Completed by Pace Analytical and Client Section C

Quote Reference: _____

Project Manager: _____

Project #: **03-2124**

Profile #: _____

Requested Analysis: _____

Section D										Required Client Information:										Valid Matrix Codes		Preservatives																				Remarks / Lab ID																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
SAMPLE ID										MATRIX CODE										DATE COLLECTED	TIME COLLECTED	# Containers	Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
ITEM #	One character per box. (A-Z, 0-9 / , -)										Sample IDs MUST BE UNIQUE										MATRIX CODE	DATE COLLECTED	TIME COLLECTED	# Containers	Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
FED-Express	837738696998	6-7-03	1		John S. Ross - URS	1530	6-7-03	FED Express	6-3-03	11:30

SAMPLE CONDITION

Temp in °C: **2**

Received on Ice: **Y/N**

Sealed Cooler: **Y/N**

Samples Intact: **Y/N**

SAMPLE NOTES

Combine 4 Post-Carb Samples into (1) one for Analysis.

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: **John S. Ross**

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

DATE Signed: (MM / DD / YY) **5-31-03**

Additional Comments:

July 15, 2003

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

Dear Mr. Dodrill:

Enclosed are analytical results for samples submitted to Pace Analytical by URS Corporation. The samples were received on July 1, 2003. Please reference Pace project number 03-2566 when inquiring about this report.

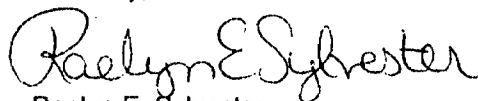
Client Site: Essex-Hope
Client Ref.: 801419.2030

Pace Sample Identification	Client Sample Identification
0307-0465	Pre-Carb
0307-0466	Primary Effluent
0307-0467	Post-Carb
0307-0468	Field Blank

General Comments: Cooler temperature 5 ° C upon receipt. Ice was present. Sample 0307-0467 was composited from 4 samples prior to analysis.

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

Sincerely,



Raelyn E. Sylvester
Project Manager

REC: jld

Enclosures

REPORT OF LABORATORY ANALYSIS

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

Lab Project ID: 03-2566
Lab Sample ID: 0307-0465
Client Sample ID: Pre-Carb
Sample Matrix: Aqueous

Date Sampled: 06/29/2003
Date Received: 07/01/2003

Client Site: Essex-Hope
Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	MAK	07/09/2003	0022516-1	<10
Benzene	8260B ⁽¹⁾	6.1	1.0	ug/l	MAK	07/09/2003	0022516-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	07/09/2003	0022516-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	9.7	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	3300	50	ug/l	MAK	07/09/2003	0022516-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	13	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	07/09/2003	0022516-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	07/09/2003	0022516-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0307-0465
Client Sample ID: Pre-Carb

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Trichloroethene	8260B ⁽¹⁾	380	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	560	100	ug/l	MAK	07/09/2003	0022516-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0

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

Sample Comments: Results reported on an as received basis.

REPORT OF LABORATORY ANALYSIS

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

Client Site: Essex-Hope
Client Ref.: 801419.2030

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

Lab Project ID: 03-2566
Lab Sample ID: 0307-0466
Client Sample ID: Primary Effluent
Sample Matrix: Aqueous

Date Sampled: 06/29/2003
Date Received: 07/01/2003

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	MAK	07/09/2003	0022516-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	MAK	07/09/2003	0022516-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	07/09/2003	0022516-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	180	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	07/09/2003	0022516-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	07/09/2003	0022516-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0

(Continued)

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Lab Sample ID: 0307-0466
Client Sample ID: Primary Effluent

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Trichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	910	100	ug/l	MAK	07/09/2003	0022516-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0

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

Sample Comments: Results reported on an as received basis.

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

Lab Project ID: 03-2566
Lab Sample ID: 0307-0467
Client Sample ID: Post-Carb
Sample Matrix: Aqueous

Date Sampled: 06/29/2003
Date Received: 07/01/2003

Client Site: Essex-Hope
Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	MAK	07/09/2003	0022516-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	MAK	07/09/2003	0022516-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	07/09/2003	0022516-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	9.1	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	07/09/2003	0022516-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	07/09/2003	0022516-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0

(Continued)

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Lab Sample ID: 0307-0467
Client Sample ID: Post-Carb

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Trichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	650	10	ug/l	CMS	07/10/2003	0022555-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0

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

Sample Comments: Results reported on an as received basis.

REPORT OF LABORATORY ANALYSIS

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Pittsburgh, PA 15205

Lab Project ID: 03-2566
Lab Sample ID: 0307-0468
Client Sample ID: Field Blank
Sample Matrix: Aqueous

Date Sampled: 06/29/2003
Date Received: 07/01/2003

Client Site: Essex-Hope
Client Ref.: 801419.2030

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B ⁽¹⁾	<10	10	ug/l	MAK	07/09/2003	0022516-1	<10
Benzene	8260B ⁽¹⁾	<1.0	1.0	ug/l	MAK	07/09/2003	0022516-1	<1.0
Bromodichloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Bromoform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Bromomethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
2-Butanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	07/09/2003	0022516-1	<10
Carbon Disulfide	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Carbon Tetrachloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Chlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Chloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Chloroform	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Chloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Cumene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Dibromochloromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,2-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,3-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,4-Dichlorobenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,1-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,2-Dichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,1-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
cis-1,2-Dichloroethene	8260B ⁽¹⁾	17	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
trans-1,2-Dichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,2-Dichloropropane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
cis-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
trans-1,3-Dichloropropene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Ethylbenzene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
2-Hexanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	07/09/2003	0022516-1	<10
4-Methyl-2-pentanone	8260B ⁽¹⁾	<10	10	ug/l	MAK	07/09/2003	0022516-1	<10
Methylene chloride	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0

(Continued)

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Lab Sample ID: 0307-0468
Client Sample ID: Field Blank

Volatiles (Cont.)

Styrene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,1,2,2-Tetrachloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Tetrachloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Toluene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,1,1-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
1,1,2-Trichloroethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Trichloroethene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Trichlorofluoromethane	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
Vinyl chloride	8260B ⁽¹⁾	<2.0	2.0	ug/l	MAK	07/09/2003	0022516-1	<2.0
m,p-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0
o-Xylene	8260B ⁽¹⁾	<5.0	5.0	ug/l	MAK	07/09/2003	0022516-1	<5.0

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

Sample Comments: Results reported on an as received basis.

REPORT OF LABORATORY ANALYSIS

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766249

Required Client Information: Section A

Company: **URS Corp.**
 Address: **4955 Steubenville Pike**
Twin Towers Suite 250
Pittsburgh, PA. 15205
 Phone: **412-788-2717** Fax: _____

Required Client Information: Section B

Report To: **Keith Dodrill**
 Copy To: _____
 Invoice To: _____
 P.O.: _____
 Project Name: **Essex Hope**
 Project Number: **861419.2030**

Page: 1 of 1

Client Information (Check quote/contract):

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

To Be Completed by Pace Analytical and Client Section C

Quote Reference: _____
 Project Manager: _____
 Project #: **23-2566**
 Profile #: _____
 Requested Analysis: _____

ITEM #	Section D										Required Client Information:										Valid Matrix Codes		MATRIX CODE	DATE COLLECTED mm / dd / yy	TIME COLLECTED hh:mm a/p	# Containers	Preservatives							REMARKS / Lab ID																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
	SAMPLE ID One character per box. (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE										MATRIX		CODE		Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
FED-EX	837738696987	6-30-03	1		John S. Ross - URS	6-30-03	1600	FED-EX		

SAMPLE CONDITION: Temp in °C **5**
 Received on Ice **Y/N**
 Sealed Cooler **Y/N**
 Samples Intact **Y/N**

SAMPLE NOTES: **Combine 4 Post-Carb Samples into 1 for Analysis**

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: **John S. Ross**
 SIGNATURE of SAMPLER: **John S. Ross**
 DATE Signed: (MM / DD / YY) **6-29-03**