URS

March 24, 2009

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NYSDEC Region 1

Limited Subsurface Investigation Results – Phase I (December 15-19, 2008)
Powers Chemco Site No. 1-30-028
North Lot of the Konica Minolta Graphic Imaging (KMGI)
Glen Cove, New York

Dear Ms. Shearer and Mr. Desai,

URS completed Phase I of the Limited Subsurface Investigation at the above-referenced facility (***Figure 1***) from December 15 to December 19, 2008. The Phase I study included the collection and analysis of groundwater samples from existing monitoring wells, a contaminant delineation study using a Membrane Interface Probing (MIP), and the collection and analysis of confirmatory subsurface groundwater and soil samples.

The purpose of the investigation was to delineate the areas of impacts and to further characterize the source area. The approach used leveraged semi-quantitiative but continuous and voluminous MIP data by correlating it with discrete fixed-laboratory analytical sample results (***Figures 2*** through ***5***). This real-time approach affords a more robust, informative, and ground-truthed data set for remedial decision making.

The site is regulated under the New York State Department of Environmental Conservation (NYSDEC) Superfund program.

<u>**Field Activities**</u>

Community Air Monitoring Plan. In accordance with the NYSDEC approved Work Plan, Community Air Monitoring Plan (CAMP) monitoring was performed during these environmental sampling activities. This monitoring was performed to provide a measure of protection for the downwind community from potential airborne contaminant releases as a direct result of investigative activities.

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Gauging. Groundwater levels were measured in five piezometers (PZ-01, PZ-03, PZ-04, PZ-05, and PZ-06) and five monitoring wells (MW-01, MW-04, MW-05, MW-08, and MW-12). Please note that monitoring well MW-03R was dry, well MW-06 only had 3 inches of water in it, and piezometer PZ-02 appears to have been destroyed.

Groundwater well sampling. Groundwater samples were collected from five existing wells (MW-01, MW-04, MW-05, MW-08, and MW-12) using low-flow procedures and submitted for fixed-laboratory analysis. These samples were analyzed for volatile organic compounds (VOCs) by United States Environmental Protection Agency (U.S. EPA) SW846 Method 8260B. In addition, field data such as pH, temperature, conductivity, dissolved oxygen, turbidity, and oxidation reduction potential were collected during sampling efforts (***Attachment A***).

Geophysical Survey. Prior to invasive investigation activities, on December 15, 2008, a geophysicist from Enviroprobe Service Inc (Enviroprobe) completed a grid subsurface geophysical survey of approximate 0.3 acres at the subject property to designate subsurface features and detect anomolies. Enviroprobe marked electric, water, and other unknown utilities as well as anomalies on the North Lot utilizing a ground penetrating radar (GPR) unit, radio detection cable/pipe locators, and a Fisher TW-6 metallic locator.

MIP borings. Seven MIP borings (VP-01, VP-03, VP-04, VP-05, VP-07, VP-08, and VP-09) were advanced using direct-push equipment. Prior to advancing the MIP rods, each boring was hand augered to 5 feet below ground surface (bgs). MIP boring locations are shown on ***Figure 1***. VP-02 and VP-06 were considered as potential MIP boring locations but weren't advanced because they are considered to be outside of the impacted area. In consultation with NYSDEC, it was determined that these locations were lower priority than the other seven MIP boring locations and would only be advanced if time allowed, which it did not.

Vertical profile borings. Four vertical profile borings were advanced in the vicinity of VP-01, VP-03, VP-08, and VP-09 to collect confirmatory samples which were submitted for fixed-laboratory analysis.

- Soil was collected continuously at each vertical profile boring location using disposable acetate liners and was logged from the ground surface to total depth of the borehole. The boreholes were advanced until refusal. Soil samples were collected from the vicinity of the capillary fringe at each of the four vertical profile borings. These samples were analyzed for VOCs by U.S. EPA SW846 Method 8260B.

- Groundwater samples were collected with a discrete groundwater sampler fitted to the direct-push drill rig. Confirmatory groundwater samples were collected from the intervals with the greatest MIP responses, which started at the top of the water table at each boring location, within the impacted zone, and in the least impacted areas towards the bottom of the borehole. Groundwater samples were analyzed for VOCs by U.S. EPA Method 8260B.

Results

Groundwater Monitoring Well Sample Results

Groundwater samples were collected using low-flow procedures from existing monitoring wells MW-01, MW-04, MW-05, MW-08, and MW-12. These results are included in ***Table 1***. In accordance with the Work Plan, quality assurance/quality control (QA/QC) samples collected and analyzed included a trip blank, a field blank, and a blind duplicate sample collected from well MW-01. Acetone and 2-butanone were detected in the field blank; however, these common laboratory contaminants were not detected in any other groundwater samples. With one exception there were no constituent concentrations reported above laboratory reporting limits from these wells; a trace of toluene was detected in the groundwater sample collected from monitoring well MW-01 at a concentration 0.65 micrograms per liter (μg/L), below the reporting limit of 1 μg/L. A data usability summary report (DUSR) is included as ***Attachment B***.

Geophysical Survey Results

An area of approximately 0.3 acres was surveyed on a grid using a cart-mounted GPR, a metallic locator, and a radio detection unit. Detected subsurface features were marked onsite with spray paint using corresponding colors (red – electric; blue – water, green – sewer; yellow – gas; pink – unknown).

In addition, an area of at least 10 feet by 10 feet was cleared around each proposed drilling location using the aforementioned equipment. Anomalies were marked onsite with pink spray paint.

MIP and Vertical Profile Borings Results

The electron capture detector (ECD), photoionization detector (PID), and flame ionization detector (FID) of the MIP generally indicate impacts between 8 to 20 feet bgs. The MIP logs are included as ***Attachment C***.

The PID is considered to be the best of these instruments for detecting aromatic hydrocarbons (benzene, ethylbenzene, toluene, and total xylenes [BTEX]), which appear to be the principal constituents of concern within the study area.

- **VP-01.** Elevated PID responses appear to begin between approximately 7 to 8 feet bgs, which corresponds to the depth to groundwater logged at this location (7.5 feet bgs). The PID response ranged from approximately 5.0×10^6 to 4.5×10^7. According to the PID response, impacts appear to span between approximately 7 and 20 feet bgs, with the predominant impacts between approximately 9 and 15 feet bgs. The ECD, PID, and FID responses correlate well with each other, with the exception of the FID response between 25 and 30 feet bgs. The FID response could be attributable to methane.

- **VP-03.** Elevated PID responses appear to begin between approximately 7 to 8 feet bgs. The PID response ranged from approximately 5.0×10^5 to 3.0×10^6. According to the PID response, impacts appear to span between approximately 8 and 15 feet bgs, with the predominant impacts between approximately 8 and 11 feet bgs. The ECD, PID, and FID responses correlate well with each other, with the exception the FID response between 15 and 20 feet bgs. The FID response could be attributable to methane.

- **VP-04.** The PID response was relatively low in a narrow range from approximately 4.0×10^4 to 5.0×10^4. The ECD, PID, and FID responses correlate fairly well with each other.

- **VP-05.** The PID response was relatively low in a narrow range from approximately 3.0×10^4 to 4.0×10^4. The ECD, PID, and FID responses correlate fairly well with each other, with the exception of an FID spike at approximately 19 feet bgs. The FID response could be attributable to methane.

- **VP-07.** The PID response was relatively low in a narrow range from approximately 2.5 x 10^4 to 4.5 x 10^4. The ECD, PID, and FID responses correlate fairly well with each other, with the exception of FID spikes between approximately 5 to 10 feet bgs, 18 feet bgs, and 24 feet bgs. The FID response could be attributable to methane.

- **VP-08.** Elevated PID responses appear to begin between approximately 11 to 12 feet bgs, which corresponds to the depth to groundwater logged at this location (12 feet bgs). The PID response ranged between approximately 5.0 x 10^6 and 2.5 x 10^7. According to the PID response, impacts appear to span between approximately 11 and 20 feet bgs, with predominant impacts between 12 and 15 feet bgs. The ECD and PID responses correlate fairly well, especially between the approximately 10 to 20 feet bgs; however, elevated FID measurements were recorded from approximately 3 to 10 feet bgs and 22 to 25 feet bgs. The FID response could be attributable to methane.

- **VP-09.** Elevated PID responses appear to begin between approximately 9 to 11 feet bgs, which corresponds to the depth to groundwater logged at this location (10.5 feet bgs). The PID response ranged from approximately 5.0 x 10^6 to 2.5 x 10^7. According to the PID response, impacts appear to span between approximately 11 and 20 feet bgs, with predominant impacts between approximately 11 and 14 feet bgs. The ECD, PID, and FID responses correlate well with each other, with the exception of elevated FID responses between approximately 5 to 10 feet bgs. The FID response could be attributable to methane.

The ECD, PID, and FID responses from 0 to 5 feet bgs at each boring location are not representative because this interval was hand cleared prior to advancing the MIP probe. The MIP responses at locations VP-03 (total depth 25.45 feet bgs), VP-04 (total depth 21.95 feet bgs), VP-05 (total depth 34.35 feet bgs), and VP-07 (total depth 25.95 feet bgs), were relatively low compared to the responses at locations VP-01, VP-08, and VP-09. Therefore, confirmation samples for fixed-laboratory analysis were collected at locations VP-01, VP-08, and VP-09. Confirmation samples were also collected at location VP-03 to verify and correlate the relatively low MIP response at that location. Analytical groundwater results from the vertical profile borings are plotted relative to the PID responses at those same locations in ***Figures 2*** through ***5***. The PID responses at each MIP boring location are plotted relative to each other in ***Figure 6***.

The MIP and fixed-laboratory analytical results (***Figures 2*** through ***5***) indicate the greatest impacts at boring locations VP-01, VP-08, and VP-09, which are in the vicinity of historic impacted boring locations PZ-06, TMP-05, and TMP-03, respectively. PID responses indicate that VP-01 may be more impacted thanVP-08 and VP-09. This relationship was supported by the fixed-laboratory analytical results.

Vertical profile borings (VP) details and laboratory results are discussed below; the following table presents a summary of the concentration of total BTEX reported in soil and groundwater samples collected from the VP locations.

Summary of Total BTEX in Soil and Groundwater Collected from Vertical Profile Borings

	Depth of Sample Interval (feet bgs)	VP-01	VP-03	VP-08	VP-09
Soil (µg/kg)	7-7.5	75	--	--	--
	10-10.5	--	--	--	2,917
	11-11.5	--	--	2,167,430	--
	12-12.5	--	23,238	--	--
Groundwater (µg/L)	8-10	534,632	--	--	--
	10-14	--	--	--	493,532
	12-14	489,518	--	--	--
	12-16	--	--	369,900	--
	14-18	--	113.1	--	211,607
	16-18	318,300	--	--	--
	16-20	--	--	339,400	--
	20-24	28,710	--	202,034	238,006

Note that soil wet weight data was unavailable so dry weight results for the four soil samples were not corrected for percent moisture content and are therefore qualified as estimated with "J" flags. This results in a conservative estimation of the concentrations present.

Groundwater and soil sample results collected from the VP locations are included in ***Table 2*** and ***Table 3***, respectively.

- **VP-01.** VP-01 was advanced until refusal at 43.35 feet bgs. Depth to groundwater in the boring was logged at 7.5 feet bgs. Four discrete interval groundwater samples were collected at 8-10, 12-14, 16-18, and 20-24 feet bgs. One soil sample was collected immediately above the groundwater table at 7-7.5 feet bgs. The boring was continuously logged from 0-24 feet bgs. Boring logs will be submitted with the report that includes the next phase of investigation.

  The total BTEX concentration in the soil sample collected between 7 and 7.5 feet bgs from this location was 75 micrograms per kilogram (µg/kg).

  The total BTEX concentrations in the groundwater samples collected from 8-10, 12-14, 16-18, and 20-24 feet bgs at this location were 534,632 µg/L, 489,518 µg/L, 318,300 µg/L, and 28,710 µg/L, respectively.

  The total BTEX concentration (75 µg/kg) in the soil sample collected between 7 and 7.5 feet bgs at CVP-01 does not correlate well with the closest corresponding groundwater sample collected from 8 to 10 feet bgs, which had a total BTEX concentration of 534,632 µg/L.

- **VP-03.** VP-03 was advanced until refusal at 25.45 feet bgs. Depth to groundwater in the boring was logged at 15.5 feet bgs. Perched water was noted on top of fine grained interbedded lenses. A groundwater sample was collected at 14-18 feet bgs. This screen interval had to be left open overnight to obtain the sample. Soils encountered in this boring were finer grained than soils encountered at the other three vertical profile borings. A soil sample was collected at 12-12.5 feet bgs. The boring was continuously logged from 0-16 feet bgs.

A purple liquid, which may be related to former ribbon and carbon-related disposal activities, was noted at 11 feet bgs. The soil at 11 feet bgs was logged as medium sand with gravel and was immediately above a clay lens.

The total BTEX concentration in the soil sample collected between 12 and 12.5 feet bgs from this location was 23,238 µg/kg.

The total BTEX concentration in the groundwater sample collected from 14-18 feet bgs was 113.1 µg/L.

The total BTEX concentration (23,238 µg/kg) in the soil sample collected between 12 and 12.5 feet bgs at CVP-03 does not correlate well with the closest corresponding groundwater sample collected from 14 to 18 feet bgs, which had a total BTEX concentration of 113.1 µg/L.

- **VP-08.** VP-08 was advanced until refusal at 33.15 feet bgs. Depth to groundwater in the boring was logged at 12 feet bgs. Groundwater samples were collected at 12-16, 16-20, and 20-24 feet bgs. A soil sample was collected at 11-11.5 feet bgs. The boring was continuously logged from 0-12 feet bgs.

  A purple liquid, which may be related to former ribbon and carbon-related disposal activities, was noted at 11 feet bgs. The soil at 11 feet bgs was logged as fine sand with silt and clay.

  The total BTEX concentration in the soil sample collected between 11 and 11.5 feet bgs from this location was 2,167,430 µg/kg.

  The total BTEX concentrations in the groundwater samples collected at 12-16, 16-20, and 20-24 feet bgs at this location were 369,900 µg/L, 339,400 µg/L, and 202,034 µg/L, respectively.

  The total BTEX concentration (2,167,430 µg/kg) in the soil sample collected between 11 and 11.5 feet bgs at CVP-08 is somewhat consistent with the closest corresponding groundwater sample collected from 12 to 16 feet bgs, which had a total BTEX concentration of 369,900 µg/L.

- **VP-09.** VP-09 was advanced until refusal at 24.75 feet bgs. Depth to groundwater in the boring was logged at 10.5 feet bgs. Groundwater samples were collected at 10-14, 14-18, and 20-24 feet bgs. A soil sample was collected at 10-10.5 feet bgs. The boring was continuously logged from 0-12 feet bgs.

  Blebs of sheen/dark colored free product were noted in the 10-14 feet bgs groundwater sample.

  The total BTEX concentration in the soil sample collected between 10 and 10.5 feet bgs from this location was 2,917 µg/kg.

  The total BTEX concentrations in the groundwater samples collected at 10-14, 14-18, and 20-24 feet bgs at this location were 493,532 µg/L, 211,607 µg/L, and 238,006 µg/L, respectively.

  The total BTEX concentration (2,917 µg/kg) in the soil sample collected between 10 and 10.5 feet bgs at CVP-09 is somewhat consistent with the closest corresponding groundwater sample collected from 10 to 14 feet bgs, which had a total BTEX concentration of 493,532 µg/L.

CAMP Monitoring

As written in the CAMP work plan, an exceedance for volatile organic vapor (VOV) levels is defined as the downwind VOV concentration being 5 parts per million greater than background (upwind perimeter) for a 15-minute period; and an exceedance for particulate matter is defined as the downwind particulate matter reading being 100 micrograms per cubic meter ($\mu g/m^3$) greater than background (upwind perimeter) for a 15-minute period.

During the sampling activities continuous monitoring was performed for dust particulate and VOV at the upwind and downwind perimeters of the investigation area. Log books of field activities including the CAMP monitoring were maintained daily and are available for review upon request.

There were no exceedances in upwind, downwind or exclusion area dust particulate or VOV during CAMP monitoring. The results of CAMP monitoring activities were submitted to the NYSDEC and New York State Department of Health Bureau of Environmental Exposure Investigation on January 8, 2009.

Laboratory Data QA/QC

The majority of the groundwater and soil samples had elevated concentrations of toluene, ethylbenzene and total xylenes. The laboratory initially analyzed the water samples [CVP-01-W (8-10'), CVP-01-W (12-14'), CVP-01-W (16-18'), CVP-01-W (20-24'), CVP-08-W (12-16'), CVP-08-W (16-20'), CVP-08-W (20-24'), CVP-09-W (10-14'), CVP-09-W (14-18'), CVP-09-W (20-24')] at a 10 times dilution. The reporting limits for the non-detect compounds in these samples represent the lowest achievable at the diluted level.

Only the medium level sample (i.e., methanol preserved) was analyzed for soil sample CVP-08-S (11-11.5'). The reporting limits for the non-detect compounds in this sample represent the lowest achievable at the medium level.

Each soil and groundwater sample, with the exception of CVP-01-S (7-7.5'), required secondary dilution analysis in order to bring 2-butanone, toluene, ethylbenzene and/or total xylenes within the calibration range. Because of the extent of dilution necessary to bring toluene within the calibration range, the other compounds requiring dilution were in effect 'diluted out' (i.e., were non-detect in the dilution analysis) during the secondary dilution analysis. If necessary, the results from the initial analysis of the 'diluted out' compounds were reported and qualified 'J' for the calibration exceedance, (as listed in Table 1 of ***Attachment B***).

Several groundwater samples requiring secondary dilution for toluene, ethylbenzene, and/or total xylene were analyzed sequentially. Ethylbenzene and/or total xylene were 'diluted out' in the dilution analyses. Ethylbenzene and/or total xylene are believed to be present, although the results are potentially impacted by instrument carryover because the concentration in a preceding sample exceeded the calibration range and the laboratory did follow with an instrument blank. The results for ethylbenzene and/or total xylene in the water samples listed in Table 1 of ***Attachment B*** were reported from the initial analyses and qualified 'J' because of potential instrument carryover.

Each sample analyses were found to be compliant with the method criteria, except where previously noted. Those results qualified 'J' or 'UJ' are considered conditionally usable. Those qualified 'U' are considered non-detect. All other sample results are usable as reported.

Conclusions

Groundwater results from existing wells MW-01, MW-04, MW-05, MW-08, and MW-12 indicate that the extent of groundwater impacts do not currently extend out to these monitoring wells. This concentric "ring" of wells is outside the source area, which is the focus of this investigation. However, the area in vicinity of vertical profile borings VP-01, VP-08, and VP-09 on the northern portion of the site is impacted above applicable standards, which is generally consistent with Environmental Resources Management's (ERM) 2006 delineation of the plume footprint (***Attachment D***).

According to Enviroprobe's geophysical survey report, there were no indications of unusual subsurface features. While there were a few minor anomalies and the GPR penetration depth was estimated at 5 fee bgs over the majority of the survey area, there were no indications of substantial unknown features, metallic or otherwise, that would indicate the presence of buried drums or underground storage tanks.

The analytical groundwater results presented above exceed the NYSDEC Technical and Operational Guidance Series (TOGS) ambient water quality standards and guidance values. Toluene was the principal constituent detected in groundwater and soil samples.

Location VP-01 demonstrated the highest BTEX levels in the area sampled and may represent the most impacted portion of the BTEX plume. BTEX concentrations at location VP-01 decreased significantly with depth (***Figure 2***) and this location appears to have been delineated in the vertical direction. The highest concentrations were reported near the top of the water table, from approximately 9 and 15 feet bgs.

VP-08 and VP-09 both demonstrated lower total BTEX concentrations than VP-01 near the top of the water table and appear to be outside the most impacted portion of the BTEX plume. However, samples collected from VP-08 and VP-09 had total BTEX concentrations of 202,034 ug/L and 238,006 ug/L, respectively, in the deepest sample collected from each boring (20 to 24 feet bgs). Therefore, locations VP-08 and VP-09 have not been fully delineated in the vertical direction.

The low PID and FID responses at depth at VP-08 and VP-09 appeared to indicate that vertical delineation had been achieved; therefore, fixed-laboratory analytical samples were collected. However, laboratory results indicate that this was not entirely true. Elevated groundwater concentrations were detected where the MIP readings were negligible.

One of three scenarios may explain the phenomena noted at VP-08 and VP-09, that is, relatively low MIP responses but elevated fix-laboratory results:

1. **The MIP probe and/or associated instruments were not working properly.**

   After extensive discussions with the MIP subcontractor, QA/QC on their instruments, and a systematic evaluation of the results and probing techniques, this is considered an unlikely scenario.

2. **Cross-contamination in the laboratory.**

   The QA/QC performed to prepare the DUSR indicates that there may have been some low level cross-contamination in the laboratory but nothing that would approach the levels that would explain the concentrations observed. While some of the results were qualified, all sample results were ultimately considered usable and not grossly cross contaminated.

3. **Cross-contamination related to the sampling protocol.**

   Despite adhering to proper sampling and decontamination procedures, URS concluded that cross contamination may have occurred at locations VP-08 and VP-09 and the most appropriate way to collect future samples, in an effort to reduce the potential for cross contamination, is to drill or push a separate borehole for each sample collected.

Recommendations

The next phase of the Subsurface Investigation (Phase 2) will include additional focused vertical and horizontal delineation, to fill the remaining data gaps and further characterize the source area so that remediation efforts can be focused on the critical portion of the plume footprint. Phase 2 will help to refine the understanding of horizontal and vertical potentiometric and chemical gradients and further characterize the source area. A Phase 2 Subsurface Investigation Work Plan, which compliments the work completed in Phase 1, will be submitted for NYSDEC review and approval prior to initiating Phase 2 activities at the Powers Chemco site.

Please contact the undersigned at 301.258.5834 if you have any questions with regard to this report.

Sincerely,

URS CORPORATION

Michael Welch
Project Manager

cc: Mr. Cory Kirkbride, KMGI

Attachments:
Table 1 – Groundwater Results from Monitoring Wells
Table 2 – Vertical Profile Borings - Groundwater Results
Table 3 – Vertical Profile Borings - Soil Results

Figure 1 – MIP Boring and Vertical Profile Boring Locations
Figure 2 – VP-01 Comparison of MIP PID Response vs. Groundwater Analytical Results
Figure 3 – VP-03 Comparison of MIP PID Response vs. Groundwater Analytical Results
Figure 4 – VP-08 Comparison of MIP PID Response vs. Groundwater Analytical Results
Figure 5 – VP-09 Comparison of MIP PID Response vs. Groundwater Analytical Results
Figure 6 – PID Responses from each MIP boring locations

Attachment A – Field Data – Purge Parameters
Attachment B – Data Usability Summary Report
Attachment C – MIP Logs
Attachment D – ERM figure titled "Maximum Total VOC Concentrations In Groundwater Since The Shutdown Of The Remedial System"

TABLE 1
Groundwater Results from Monitoring Wells
Limited Subsurface Investigation and Groundwater Study
Konica Minolta Graphic Imaging U.S.A., Inc.
Powers Chemco Site, North Lot
71 Charles Street
Glen Cove, NY

	MW-01	MW-01 (Duplicate)	MW-04	MW-05	MW-08	MW-12	Trip Blank	Field Blank
1,1,1-Trichloroethane	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
1,1,2,2-Tetrachloroethane	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
1,1,2-Trichloroethane	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
1,1-Dichloroethane	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
1,1-Dichloroethene	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
1,2-Dibromoethane	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
1,2-Dichlorobenzene	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
1,2-Dichloroethane	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
1,2-Dichloropropane	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
1,3-Dichlorobenzene	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
1,4-Dichlorobenzene	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
2-Butanone	<5 (ND)	<5 (ND)	<5 (ND)	<5 (ND)	<5 (ND)	<5 (ND)	<5 (ND)	3.4 J
2-Hexanone	<5 (ND)	<5 (ND)	<5 (ND)	<5 (ND)	<5 (ND)	<5 (ND)	<5 (ND)	<5 (ND)
4-Methyl-2-pentanone	<5 (ND)	<5 (ND)	<5 (ND)	<5 (ND)	<5 (ND)	<5 (ND)	<5 (ND)	<5 (ND)
Acetone	<5 (ND)	<5 (ND)	<5 (ND)	<5 (ND)	<5 (ND)	<5 (ND)	<5 (ND)	2.9 J
Benzene	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
Bromochloromethane	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
Bromodichloromethane	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
Bromoform	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
Bromomethane	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
Carbon Disulfide	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
Carbon Tetrachloride	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
Chlorobenzene	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
Chloroethane	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
Chloroform	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
Chloromethane	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
cis-1,2-Dichloroethene	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
cis-1,3-Dichloropropene	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
Dibromochloromethane	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
Ethylbenzene	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
Methylene chloride	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
Styrene	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
Tetrachloroethene	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
Toluene	0.65 J	0.63 J	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
Total Xylenes	<3 (ND)	<3 (ND)	<3 (ND)	<3 (ND)	<3 (ND)	<3 (ND)	<3 (ND)	<3 (ND)
trans-1,2-Dichloroethene	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
trans-1,3-Dichloropropene	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
Trichloroethene	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
Trichlorofluoromethane	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)
Vinyl chloride	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)

J - The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
ND - non-detect

TABLE 2
Vertical Profile Borings - Groundwater Results
Limited Subsurface Investigation and Groundwater Study
Konica Minolta Graphic Imaging U.S.A., Inc.
Powers Chemco Site, North Lot
71 Charles St
Glen Cove, NY

	CVP-01-W(8-10)	CVP-01-W(12-14)	CVP-01-W(16-18)	CVP-01-W(20-24)	CVP-03-W(14-18)	CVP-08-W(12-16)	CVP-08-W(16-20)	CVP-08-W(20-24)	CVP-09-W(10-14)	CVP-09-W(14-18)	CVP-09-W(20-24)
1,1,1-Trichloroethane	800 J	720	110	40	<1 (ND)	620	470	48	890 J	170	180
1,1,2,2-Tetrachloroethane	<10 (ND) UJ	<10 (ND)	<10 (ND)	<10 (ND)	<1 (ND)	<10 (ND)	<10 (ND)	<10 (ND)	<10 (ND) UJ	<10 (ND)	<10 (ND)
1,1,2-Trichloroethane	<10 (ND) UJ	<10 (ND)	<10 (ND)	<10 (ND)	<1 (ND)	<10 (ND)	<10 (ND)	<10 (ND)	<10 (ND) UJ	<10 (ND)	<10 (ND)
1,1-Dichloroethane	35 J	23	8.8 J	<10 (ND)	<1 (ND)	160	150	9.3 J	16 J	<10 (ND)	<10 (ND)
1,1-Dichloroethene	8 J	9.1 J	<10 (ND)	<10 (ND)	<1 (ND)	21	15	<10 (ND)	9.1 J	3.2 J	<10 (ND)
1,2-Dibromoethane	<10 (ND) UJ	<10 (ND)	<10 (ND)	<10 (ND)	<1 (ND)	<10 (ND)	<10 (ND)	<10 (ND)	<10 (ND) UJ	<10 (ND)	<10 (ND)
1,2-Dichlorobenzene	<10 (ND) UJ	<10 (ND)	<10 (ND)	<10 (ND)	<1 (ND)	<10 (ND)	<10 (ND)	<10 (ND)	<10 (ND) UJ	<10 (ND)	<10 (ND)
1,2-Dichloroethane	<10 (ND) UJ	<10 (ND)	<10 (ND)	<10 (ND)	<1 (ND)	<10 (ND)	<10 (ND)	<10 (ND)	<10 (ND) UJ	<10 (ND)	<10 (ND)
1,2-Dichloropropane	<10 (ND) UJ	<10 (ND)	<10 (ND)	<10 (ND)	<1 (ND)	<10 (ND)	<10 (ND)	<10 (ND)	<10 (ND) UJ	<10 (ND)	<10 (ND)
1,3-Dichlorobenzene	<10 (ND) UJ	<10 (ND)	<10 (ND)	<10 (ND)	<1 (ND)	<10 (ND)	<10 (ND)	<10 (ND)	<10 (ND) UJ	<10 (ND)	<10 (ND)
1,4-Dichlorobenzene	<10 (ND) UJ	<10 (ND)	<10 (ND)	<10 (ND)	<1 (ND)	<10 (ND)	<10 (ND)	<10 (ND)	<10 (ND) UJ	<10 (ND)	<10 (ND)
2-Butanone	<50 (ND) UJ	<50 (ND)	<50 (ND)	<50 (ND)	<5 (ND)	9,200 J	13,000 J	380	<50 (ND) UJ	<50 (ND)	<50 (ND)
2-Hexanone	<50 (ND) UJ	<50 (ND)	<50 (ND)	<50 (ND)	<5 (ND)	<50 (ND)	<50 (ND)	<50 (ND)	<50 (ND) UJ	<50 (ND)	<50 (ND)
4-Methyl-2-pentanone	<50 (ND) UJ	<50 (ND)	<50 (ND)	<50 (ND)	<5 (ND)	110	160	<50 (ND)	<50 (ND) UJ	<50 (ND)	<50 (ND)
Acetone	<70 ND UJ	<64 (ND)	<50 (ND)	<50 (ND)	86	<180 (ND)	<270 (ND)	<50 (ND)	<50 (ND) UJ	<50 (ND)	<50 (ND)
Benzene	32 J	18	<10 (ND)	<10 (ND)	6.4	100	100	14	32 J	6.5 J	6 J
Bromochloromethane	<10 (ND) UJ	<10 (ND)	<10 (ND)	<10 (ND)	<1 (ND)	<10 (ND)	<10 (ND)	<10 (ND)	<10 (ND) UJ	<10 (ND)	<10 (ND)
Bromodichloromethane	<10 (ND) UJ	<10 (ND)	<10 (ND)	<10 (ND)	<1 (ND)	<10 (ND)	<10 (ND)	<10 (ND)	<10 (ND) UJ	<10 (ND)	<10 (ND)
Bromoform	<10 (ND) UJ	<10 (ND)	<10 (ND)	<10 (ND)	<1 (ND) UJ	<10 (ND)	<10 (ND)	<10 (ND)	<10 (ND) UJ	<10 (ND)	<10 (ND)
Bromomethane	<10 (ND) UJ	<10 (ND)	<10 (ND)	<10 (ND)	<1 (ND) UJ	<10 (ND)	<10 (ND)	<10 (ND)	<10 (ND) UJ	<10 (ND)	<10 (ND)
Carbon Disulfide	<10 (ND) UJ	<10 (ND) UJ	<10 (ND) UJ	<10 (ND) UJ	<1 (ND)	<10 (ND) UJ	3.2 J	<10 (ND) UJ	<10 (ND) UJ	<10 (ND) UJ	3.1 J
Carbon Tetrachloride	<10 (ND) UJ	<10 (ND)	<10 (ND)	<10 (ND)	<1 (ND)	<10 (ND)	<10 (ND)	<10 (ND)	<10 (ND) UJ	<10 (ND)	<10 (ND)
Chlorobenzene	<10 (ND) UJ	<10 (ND)	<10 (ND)	<10 (ND)	<1 (ND)	<10 (ND)	<10 (ND)	<10 (ND)	<10 (ND) UJ	<10 (ND)	<10 (ND)
Chloroethane	15 J	7.7 J	<10 (ND)	<10 (ND)	32 J	7.5 J	6.4 J	3.4 J	<10 (ND) UJ	<10 (ND)	<10 (ND)
Chloroform	<10 (ND) UJ	<10 (ND)	<10 (ND)	<10 (ND)	<1 (ND)	<10 (ND)	<10 (ND)	<10 (ND)	<10 (ND) UJ	<10 (ND)	<10 (ND)
Chloromethane	<10 (ND) UJ	<10 (ND)	<10 (ND)	<10 (ND)	<1 (ND)	<10 (ND)	<10 (ND)	<10 (ND)	<10 (ND) UJ	<10 (ND)	<10 (ND)
cis-1,2-Dichloroethene	14 J	26	8.4 J	<10 (ND)	<1 (ND)	9 J	6.3 J	<10 (ND)	7.1 J	4 J	<10 (ND)
cis-1,3-Dichloropropene	<10 (ND) UJ	<10 (ND)	<10 (ND)	<10 (ND)	<1 (ND)	<10 (ND)	<10 (ND)	<10 (ND)	<10 (ND) UJ	<10 (ND)	<10 (ND)
Dibromochloromethane	<10 (ND) UJ	<10 (ND)	<10 (ND)	<10 (ND)	<1 (ND)	<10 (ND)	<10 (ND)	<10 (ND)	<10 (ND) UJ	<10 (ND)	<10 (ND)
Ethylbenzene	2,600 J	1,600 J	1,400 J	410 J	5.7	1,700 J	1,600 J	220 J	2,500 J	1,700 J	1,400 J
Methylene chloride	<10 (ND) UJ	<10 (ND)	<10 (ND)	<10 (ND)	<1 (ND) UJ	<10 (ND)	<10 (ND)	<10 (ND)	<10 (ND) UJ	<10 (ND)	<10 (ND)
Styrene	<10 (ND) UJ	<10 (ND)	<10 (ND)	<10 (ND)	<1 (ND)	<10 (ND)	<10 (ND)	<10 (ND)	<10 (ND) UJ	<10 (ND)	<10 (ND)
Tetrachloroethene	6.6 J	<10 (ND)	<10 (ND)	<10 (ND)	<1 (ND)	<10 (ND)	<10 (ND)	<10 (ND)	<10 (ND) UJ	<10 (ND)	<10 (ND)
Toluene	520,000 D	480,000 D	310,000 D	26,000 D	72 D	360,000 D	330,000 D	200,000 D	480,000 D	200,000 D	230,000 D
Total Xylenes	12,000 J	7,900 J	6,900 J	2,300 J	29	8,100 J	7,700 J	1,800 J	11,000 J	9,900 DJ	6,600 J
trans-1,2-Dichloroethene	<10 (ND) UJ	<10 (ND)	<10 (ND)	<10 (ND)	<1 (ND)	<10 (ND)	<10 (ND)	<10 (ND)	<10 (ND) UJ	<10 (ND)	<10 (ND)
trans-1,3-Dichloropropene	<10 (ND) UJ	<10 (ND)	<10 (ND)	<10 (ND)	<1 (ND)	<10 (ND)	<10 (ND)	<10 (ND)	<10 (ND) UJ	<10 (ND)	<10 (ND)
Trichloroethene	4.9 J	3.8 J	<10 (ND)	<10 (ND)	<1 (ND)	4.4 J	3.8 J	<10 (ND)	3.6 J	<10 (ND)	<10 (ND)
Trichlorofluoromethane	<10 (ND) UJ	<10 (ND)	<10 (ND)	<10 (ND)	<1 (ND)	<10 (ND)	<10 (ND)	<10 (ND)	<10 (ND) UJ	<10 (ND)	<10 (ND)
Vinyl chloride	<10 (ND) UJ	<10 (ND)	<10 (ND)	<10 (ND)	<1 (ND)	<10 (ND)	<10 (ND)	<10 (ND)	<10 (ND) UJ	<10 (ND)	<10 (ND)
Total BTEX	534,632	489,518	318,300	28,710	113.1	369,900	339,400	202,034	493,532	211,607	238,006

BTEX - benzene, ethylbenzene, toluene, and total xylenes
J - The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
D - The sample result was reported from a secondary dilution analysis
ND - non-detect
UJ - Non-detect. The reporting limit is an approximate value.

TABLE 3
Vertical Profile Borings - Soil Results
Limited Subsurface Investigation and Groundwater Study
Konica Minolta Graphic Imaging U.S.A., Inc.
Powers Chemco Site, North Lot
71 Charles Street
Glen Cove, NY
Page 1 of 1

	CVP-01-S(7-7.5)		CVP-03-S(12-12.5)		CVP-08-S (11-11.5)		CVP-09-S (10-10.5)	
1,1,1-Trichloroethane	<4 (ND)	UJ	<4 (ND)	UJ	<83 (ND)	UJ	<4 (ND)	UJ
1,1,2,2-Tetrachloroethane	<4 (ND)	UJ	<4 (ND)	UJ	<83 (ND)	UJ	<4 (ND)	UJ
1,1,2-Trichloroethane	<4 (ND)	UJ	<4 (ND)	UJ	<83 (ND)	UJ	<4 (ND)	UJ
1,1-Dichloroethane	<4 (ND)	UJ	<4 (ND)	UJ	230	J	<4 (ND)	UJ
1,1-Dichloroethene	<4 (ND)	UJ	<4 (ND)	UJ	<83 (ND)	UJ	<4 (ND)	UJ
1,2-Dibromoethane	<4 (ND)	UJ	<4 (ND)	UJ	<83 (ND)	UJ	<4 (ND)	UJ
1,2-Dichlorobenzene	<4 (ND)	UJ	<4 (ND)	UJ	<83 (ND)	UJ	<4 (ND)	UJ
1,2-Dichloroethane	<4 (ND)	UJ	<4 (ND)	UJ	<83 (ND)	UJ	<4 (ND)	UJ
1,2-Dichloropropane	<4 (ND)	UJ	<4 (ND)	UJ	<83 (ND)	UJ	<4 (ND)	UJ
1,3-Dichlorobenzene	<4 (ND)	UJ	<4 (ND)	UJ	<83 (ND)	UJ	<4 (ND)	UJ
1,4-Dichlorobenzene	<4 (ND)	UJ	<4 (ND)	UJ	<83 (ND)	UJ	<4 (ND)	UJ
2-Butanone	8	J	6	J	<420 (ND)	UJ	21	J
2-Hexanone	<22 (ND)	UJ	<19 (ND)	UJ	<420 (ND)	UJ	<20 (ND)	UJ
4-Methyl-2-pentanone	<22 (ND)	UJ	<19 (ND)	UJ	<420 (ND)	UJ	<20 (ND)	UJ
Acetone	<68 (ND)	UJ	20	J	<420 (ND)	UJ	9	J
Benzene	<4 (ND)	UJ	38	J	430	J	<4 (ND)	UJ
Bromochloromethane	<4 (ND)	UJ	<4 (ND)	UJ	<83 (ND)	UJ	<4 (ND)	UJ
Bromodichloromethane	<4 (ND)	UJ	<4 (ND)	UJ	<83 (ND)	UJ	<4 (ND)	UJ
Bromoform	<4 (ND)	UJ	<4 (ND)	UJ	<83 (ND)	UJ	<4 (ND)	UJ
Bromomethane	<9 (ND)	UJ	<8 (ND)	UJ	<170 (ND)	UJ	<8 (ND)	UJ
Carbon Disulfide	<4 (ND)	UJ	<4 (ND)	UJ	<83 (ND)	UJ	<4 (ND)	UJ
Carbon Tetrachloride	<4 (ND)	UJ	<4 (ND)	UJ	<83 (ND)	UJ	<4 (ND)	UJ
Chlorobenzene	<4 (ND)	UJ	<4 (ND)	UJ	<83 (ND)	UJ	<4 (ND)	UJ
Chloroethane	<9 (ND)	UJ	2	J	<170 (ND)	UJ	<8 (ND)	UJ
Chloroform	<4 (ND)	UJ	<4 (ND)	UJ	<83 (ND)	UJ	1	J
Chloromethane	<9 (ND)	UJ	<8 (ND)	UJ	<170 (ND)	UJ	<8 (ND)	UJ
cis-1,2-Dichloroethene	<4 (ND)	UJ	12	J	<83 (ND)	UJ	<4 (ND)	UJ
cis-1,3-Dichloropropene	<4 (ND)	UJ	<4 (ND)	UJ	<83 (ND)	UJ	<4 (ND)	UJ
Dibromochloromethane	<4 (ND)	UJ	<4 (ND)	UJ	<83 (ND)	UJ	<4 (ND)	UJ
Ethylbenzene	2	J	2,600	D	37,000	D	37	J
Methylene chloride	<5 (ND)	UJ	<19 (ND)	UJ	<83 (ND)	UJ	<4 (ND)	UJ
Styrene	<4 (ND)	UJ	<4 (ND)	UJ	<83 (ND)	UJ	<4 (ND)	UJ
Tetrachloroethene	<4 (ND)	UJ	34	J	120	J	<4 (ND)	UJ
Toluene	28	J	13,000	D	1,900,000	D	2,600	D
Total Xylenes	45	J	7,600	D	230,000	D	280	J
trans-1,2-Dichloroethene	<4 (ND)	UJ	<4 (ND)	UJ	<83 (ND)	UJ	<4 (ND)	UJ
trans-1,3-Dichloropropene	<4 (ND)	UJ	<4 (ND)	UJ	<83 (ND)	UJ	<4 (ND)	UJ
Trichloroethene	<4 (ND)	UJ	<4 (ND)	UJ	71	J	<4 (ND)	UJ
Trichlorofluoromethane	<4 (ND)	UJ	<4 (ND)	UJ	<83 (ND)	UJ	<4 (ND)	UJ
Vinyl chloride	<9 (ND)	UJ	<8 (ND)	UJ	<170 (ND)	UJ	<8 (ND)	UJ
Total BTEX	75		23,238		2,167,430		2,917	

Soil wet weight data was unavailable so dry weight results not corrected for moisture content are included in this table

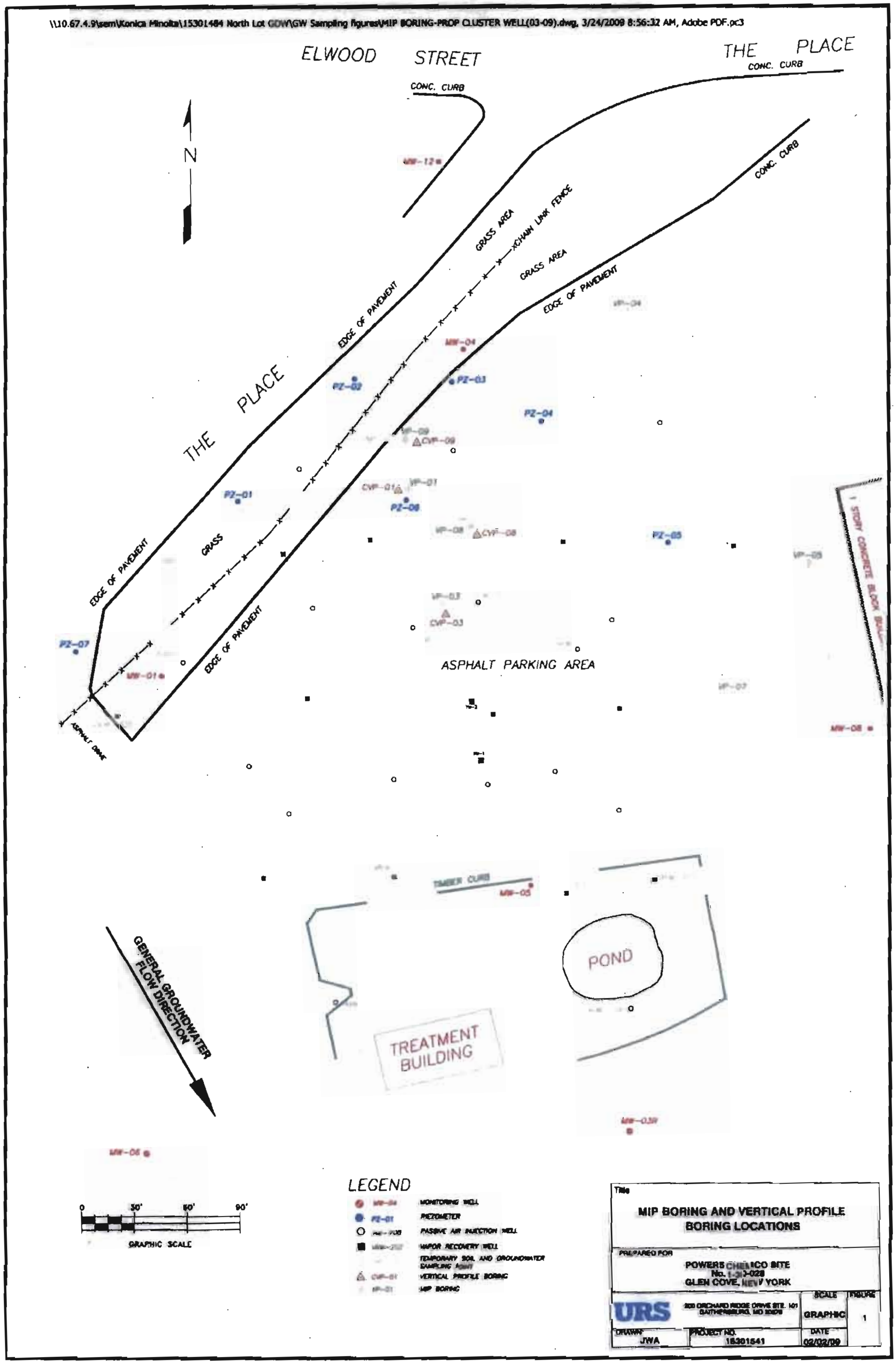
BTEX - benzene, ethylbenzene, toluene, and total xylenes

J - The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

D - The sample result was reported from a secondary dilution analysis.

ND - non-detect

UJ - Non detect. The reporting limit is an approximate value.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ELWOOD STREET
THE PLACE
CONC. CURB
N
GRASS AREA
CHAIN LINK FENCE
EDGE OF PAVEMENT
GRASS
ASPHALT PARKING AREA
TIMBER CURB
POND
TREATMENT BUILDING
GENERAL GROUNDWATER FLOW DIRECTION
1 STORY CONCRETE BLOCK BLDG.
PZ-01
PZ-02
PZ-03
PZ-04
PZ-05
PZ-06
PZ-07
MW-04
MW-05
CVP-09
CVP-01
VP-01
CVP-08
VP-08
VP-03
CVP-03
0 30' 60' 90'
GRAPHIC SCALE
LEGEND
MONITORING WELL
PIEZOMETER
PASSIVE AIR INJECTION WELL
VAPOR RECOVERY WELL
TEMPORARY SOIL AND GROUNDWATER SAMPLING POINT
VERTICAL PROFILE BORING
MIP BORING
Title
MIP BORING AND VERTICAL PROFILE BORING LOCATIONS
PREPARED FOR
POWERS CHEMCO SITE
GLEN COVE, NEW YORK
SCALE
GRAPHIC
FIGURE
1
DRAWN
JWA
PROJECT NO.
15301541
DATE
02/02/09

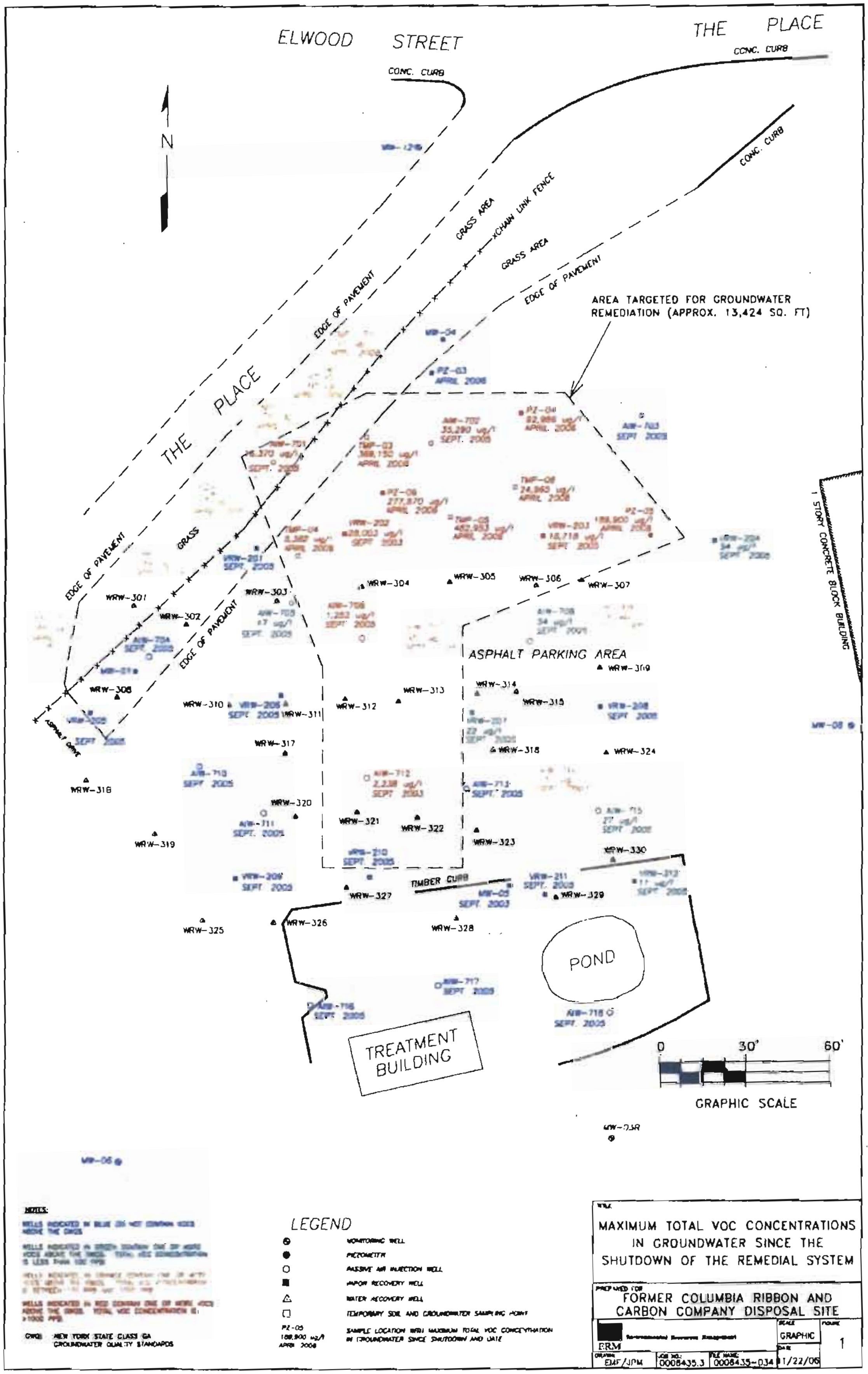
ELWOOD STREET
THE PLACE
CONC. CURB
N
GRASS AREA
CHAIN LINK FENCE
EDGE OF PAVEMENT
AREA TARGETED FOR GROUNDWATER REMEDIATION (APPROX. 13,424 SQ. FT)
THE PLACE
GRASS
1 STORY CONCRETE BLOCK BUILDING
ASPHALT PARKING AREA
WRW-301
WRW-302
WRW-303
WRW-304
WRW-305
WRW-306
WRW-307
WRW-308
WRW-309
WRW-310
WRW-311
WRW-312
WRW-313
WRW-314
WRW-315
WRW-316
WRW-317
WRW-318
WRW-319
WRW-320
WRW-321
WRW-322
WRW-323
WRW-324
WRW-325
WRW-326
WRW-327
WRW-328
WRW-329
WRW-330
TIMBER CURB
POND
TREATMENT BUILDING
0
30'
60'
GRAPHIC SCALE
LEGEND
MAXIMUM TOTAL VOC CONCENTRATIONS IN GROUNDWATER SINCE THE SHUTDOWN OF THE REMEDIAL SYSTEM
FORMER COLUMBIA RIBBON AND CARBON COMPANY DISPOSAL SITE
ERM
GRAPHIC
1
EMF/JPM
0008435.3
0008435-034
1/22/06

Table 1: Soil Gas Survey
KonicaMinolta Graphic Imaging Inc., Glen Cove, New York

CONSTITUENT (ppbv)	AA-01 0501193-04 01/13/2005 / 16:45 ppbv	AA-01 ug/m³	AA-02 0501211-02 01/17/2005 / 13:23 ppbv	AA-02 ug/m³	SG-02 0501211-01 01/17/2005 / 13:18 ppbv	SG-02 ug/m³
1,1,1-Trichloroethane	1 U	5.46 U	1 U	5.46 U	1.16	6.33
1,1-Dichloroethane	1 U	4.05 U	1 U	4.05 U	1 U	4.05 U
1,1-Dichloroethene	1 U	3.96 U	1 U	3.96 U	1 U	3.96 U
1,2,4-Trimethylbenzene	1 U	4.92 U	1 U	4.92 U	0.702 J	3.45 J
1,2-Dichloroethane	1 U	4.05 U	1 U	4.05 U	1 U	4.05 U
1,3,5-Trimethylbenzene	1 U	4.92 U	1 U	4.92 U	1 U	4.92 U
1,3-Butadiene	0.485 J	1.07 J	0.323 J	0.71 J	0.21 J	0.46 J
2,2,4-Trimethylpentane	1 U	4.67 U	1 U	4.67 U	1 U	4.67 U
2-Butanone	0.704 J	2.08 J	0.229 J	0.68 J	0.754 J	2.22 J
2-Hexanone	1 U	4.10 U	1 U	4.10 U	1 U	4.10 U
2-Propanol	1 U	2.46 U	1 U	2.46 U	1 U	2.46 U
Acetone	4.95	11.76	1.28	3.04	7.91	18.79
Benzene	0.456 J	1.46 J	0.432 J	1.38 J	0.438 J	1.40 J
Bromomethane	1 U	3.88 U	1 U	3.88 U	1 U	3.88 U
Carbon disulfide	1 U	3.11 U	1 U	3.11 U	1 U	3.11 U
Carbon tetrachloride	1 U	6.29 U	1 U	6.29 U	1 U	6.29 U
Chlorobenzene	1 U	4.61 U	1 U	4.61 U	1 U	4.61 U
Chloroethane	1 U	2.64 U	1 U	2.64 U	1 U	2.64 U
Chloroform	1 U	4.88 U	1 U	4.88 U	1 U	4.88 U
Chloromethane	0.577 J	1.19 J	0.513 J	1.06 J	1 U	2.07 U
cis-1,2-Dichloroethene	1 U	3.96 U	1 U	3.96 U	1 U	3.96 U
Cyclohexane	0.228 J	0.78 J	1 U	3.44 U	5.23	18.00
Dichlorodifluoromethane	0.747 J	3.69 J	0.495 J	2.45 J	0.505 J	2.50 J
Ethanol	1 UJ	1.88 UJ	8.86 J	16.69 J	48.8 J	91.95 J
Ethyl acetate	1 U	3.60 U	1 U	3.60 U	0.684 J	2.46 J
Ethylbenzene	0.288 J	1.25 J	1 U	4.34 U	0.757 J	3.29 J
m,p-Xylene	1.02 J	4.43 J	2 U	8.69 U	3.63	15.77
Methyl tert-butyl ether	1 U	3.61 U	1 U	3.61 U	1 U	3.61 U
Methylene chloride	1.61 U	5.59 U	0.229 J	0.80 J	1 U	3.47 U
n-Heptane	0.213 J	0.87 J	1 U	4.10 U	2.52	10.33
n-Hexane	28	98.68	0.225 J	0.79 J	0.466 J	1.64 J
o-Xylene	0.32 J	1.39 J	1 U	4.34 U	0.69 J	3.00 J
Propene	1.79	3.08	0.957 J	1.65 J	1.07	1.84
tert-Butyl alcohol	1.07	3.24	1 U	3.03	1.9	5.76
Tetrachloroethene	1 U	6.78 U	1 U	6.78 U	1.31	8.88
Toluene	21.1	79.52	0.553 J	2.08 J	7.01	26.42
trans-1,2-Dichloroethene	1 U	3.96 U	1 U	3.96 U	1 U	3.96 U
trans-1,3-Dichloropropene	1 U	4.54 U	1 U	4.54 U	1 U	4.54 U
Trichloroethene	1 U	5.37 U	1 U	5.37 U	1 U	5.37 U
Vinyl chloride	1 U	2.56 U	1 U	2.56 U	1 U	2.56 U
Xylene (total)	1.35 J	5.86 J	3 U	13.03 U	4.32	18.76
Sum of Constituents	63.30	220.36	14.10		90.91	258.27

CONSTITUENT (ppbv)	SG-04 0501193-03 01/13/2005 / 14:51 ppbv	SG-04 ug/m³	SG-05 0501211-03 01/17/2005 / 13:31 ppbv	SG-05 ug/m³	SG-06 0501193-01 01/13/2005 / 11:51 ppbv	SG-06 ug/m³	SG-07 0501193-02 01/13/2005 / 15:55 ppbv	SG-07 ug/m³
1,1,1-Trichloroethane	0.23 J	1.25 J	1 U	5.46 U	1 U	5.46 U	1 U	5.46 U
1,1-Dichloroethane	2.77	11.21	1 U	4.05 U	1.81	7.15	6.87 J	27.81 J
1,1-Dichloroethene	1 U	3.96 U	1 U	3.96 U	0.584 J	2.32 J	1.23 J	4.88 J
1,2,4-Trimethylbenzene	0.904 J	4.41 J	0.512 J	2.52 J	21	103.24	2.09 J	10.27 J
1,2-Dichloroethane	1 U	4.05 U	1 U	4.05 U	1.67	6.76	1 U	4.05 U
1,3,5-Trimethylbenzene	1 U	4.92 U	1 U	4.92 U	20.6	101.27	0.678 J	3.33 J
1,3-Butadiene	1 U	2.21 U	1 U	2.21 U	1 U	2.21 U	1 U	2.21 U
2,2,4-Trimethylpentane	2.34	10.93	1 U	4.67 U	1 U	4.67 U	1 U	4.67 U
2-Butanone	0.538 J	1.59 J	1.42	4.19	2.81	8.29	7.45 J	21.97 J
2-Hexanone	1 U	4.10 U	0.264 J	1.08 J	1 U	4.10 U	1 U	4.10 U
2-Propanol	0.641 J	1.58 J	1 U	2.46 U	1.29	3.17	8.52 J	20.94 J
Acetone	3.38	8.03	6.24	14.82	9.33	22.16	36.9 J	87.65 J
Benzene	6.39	20.41	0.265 J	0.85 J	6.61	21.21	19.3 J	61.65 J
Bromomethane	1 U	3.88 U	1 U	3.88 U	0.562 J	2.18 J	1 U	3.88 U
Carbon disulfide	0.358 J	1.11 J	0.399 J	1.24 J	1 U	3.11 U	2.46 J	7.66 J
Carbon tetrachloride	1 U	6.29 U	1 U	6.29 U	1 U	6.29 U	1 U	6.29 U
Chlorobenzene	1 U	4.61 U	1 U	4.61 U	0.344 J	1.58 J	0.578 J	2.66 J
Chloroethane	0.908 J	2.40 J	1 U	2.64 U	15.2	40.11	1 U	2.64 U
Chloroform	0.235 J	1.15 J	1 U	4.88 U	1 U	4.88 U	13.8 J	67.39 J
Chloromethane	1 U	2.07 U	1 U	2.07 U	0.717 J	1.48 J	1 U	2.07 U
cis-1,2-Dichloroethene	4.43	17.56	1 U	3.96 U	29.4	116.57	42 J	166.52 J
Cyclohexane	5.66	19.48	1.88	6.47	4.82	16.59	14.7 J	50.60 J
Dichlorodifluoromethane	0.226 J	1.12 J	0.388 J	1.92 J	0.438 J	2.17 J	1 U	4.94 U
Ethanol	6.85 J	12.91 J	5.08 J	9.57 J	14.7 J	27.70 J	879 J	1656.26 J
Ethyl acetate	1 U	3.60 U	0.4 J	1.44 J	1 U	3.60 U	1 U	3.60 U
Ethylbenzene	1	4.34	0.461 J	2.00 J	53.2	231.08	2.8 J	12.16 J
m,p-Xylene	3.83	16.64	2.19	9.51	268	1164.07	15.4 J	66.89 J
Methyl tert-butyl ether	0.117 J	0.42 J	1 U	3.61 U	0.172 J	0.62 J	35.2 J	126.91 J
Methylene chloride	1 U	3.47 U	1 U	3.47 U	1 U	3.47 U	1 U	3.47 U
n-Heptane	2.47	10.12	1.13	4.63	10.7	43.85	17.8 J	72.95 J
n-Hexane	2.7	9.52	0.222 J	0.78 J	1.75	6.17	30.9 J	108.90 J
o-Xylene	0.812 J	3.53 J	0.42 J	1.82 J	68.2	296.23	5.77 J	25.06 J
Propene	43	74.01	0.822 J	1.41 J	33.9	58.35	172 J	296.03 J
tert-Butyl alcohol	0.482 J	1.46	0.763 J	2.31	0.409 J	1.21	1 U	3.03
Tetrachloroethene	1.64	11.12	2.51	17.02	0.928 J	6.29 J	0.78 J	5.29 J
Toluene	15.6	58.79	3.62	13.64	909	3425.57	34 J	128.13 J
trans-1,2-Dichloroethene	0.551 J	2.18 J	1 U	3.96 U	0.572 J	2.27 J	1.89 J	7.49 J
trans-1,3-Dichloropropene	1 U	4.54 U	1 U	4.54 U	1 U	4.54 U	1 U	4.54 U
Trichloroethene	0.691 J	3.71 J	1 U	5.37 U	2.17	11.66	1.83 J	9.83 J
Vinyl chloride	1 U	2.56 U	1 U	2.56 U	47.4	[illegible]	41.2 J	105.32 J
Xylene (total)	4.64	20.15	2.61 J	11.34 J	337	1463.78	21.2 J	92.08 J
Sum of Constituents	113.39	331.17	31.60	108.58	1865.35	7316.59	1116.35	3246.66

Notes:
U - not detected at specified level
J - estimated value
SG - soil gas
AA - ambient air