

**Former Standard Shade Roller Site
Brownfield Cleanup Project
NYSDEC Site No. C645049**

City of Ogdensburg, New York

Remedial Investigation Work Plan

**May 2012
(Revised October 2012)**

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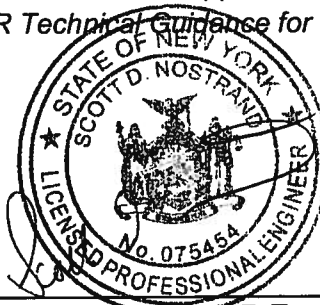
Prepared For:

City of Ogdensburg
330 Ford Street
Ogdensburg, New York 13669

Prepared By:

Barton & Loguidice, P.C.
Engineers • Environmental Scientists • Planners • Landscape Architects
290 Elwood Davis Road
Box 3107
Syracuse, New York 13220

I, the undersigned engineer, certify that I am currently a NYS registered professional engineer. This Remedial Investigation Work Plan was prepared in accordance with all applicable statutes and regulations, and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).



Scott D. Nostrand, P.E.

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1.0 Introduction and Purpose

1.1 Site History and Description

The former Standard Shade Roller property, which consists of 7.10 acres, is located at 541 Covington Street in the City of Ogdensburg, St. Lawrence County, New York (refer to Figure 1). The subject property is bordered on the northwest by the St. Lawrence River, and access to the site is gained via Adams Avenue which intersects with Main Street (aka NYS Route 68) in the north-western corner of the City. The subject property is currently owned by the City of Ogdensburg, as recorded in the St. Lawrence County Clerk's Office as Instrument I.D. No. 2007-14552; Tax Parcel Map I.D. No. 48.077-1-2.1.

The subject property has supported a variety of industrial uses since the turn of the century. Previous site uses included boat manufacturing, match manufacturing, brewing, shade roller manufacturing, and milling. During its final period of active operation (which ended in 1997), the subject property was occupied by the Joanna Window Décor Division of the Crown Home Furnishings Company. Joanna Window Décor manufactured window shade hardware, and part of this process included the plating of metals. The zinc-cyanide electroplating process, which occurred in the main building of the facility, was initiated in 1945 and continued until 1987. From 1987 through 1992, the electroplating process was cyanide-free, and then in 1992 the electroplating process was terminated at the facility. It is reported that during the 1960's and 1970's the wastes derived from the cyanide plating process were treated on site with the use of peroxides and buffers, and the treated wastewater was discharged into the facility's combined stormwater sanitary sewer system. The residual solid waste (i.e., sludge) was reportedly disposed of at the City of Ogdensburg Landfill. However, it is unknown how the process-derived cyanide wastes were handled or disposed of during the 1940s and 1950s.

According to information obtained by OP-TECH Environmental Services Inc. (OP-TECH) during the performance of a Targeted Site Assessment (TSA) of the subject property in 2010, which was funded by the New York State Department of Environmental Conservation (NYSDEC), there are several catch basins and drain access manholes located on site. In addition, two (2) drain pipes which appear to originate from the former industrial property are visible (i.e. daylight) along the shoreline of the St. Lawrence River. Based on a records search, OP-TECH determined that one (1) of the drain pipes was previously registered with the NYSDEC as a State Pollution Discharge Elimination System (SPDES) discharge point. However, OP-TECH was unable to determine if the other discharge pipe actively conveys stormwater runoff and/or water collected from on-site building drains to the St. Lawrence River. B&L will attempt to locate the discharge location of the two (2) aforementioned drain pipes that daylight along the shoreline of the St. Lawrence River. If possible, a sediment sample will be collected at the discharge location of each drain pipe, and the samples submitted for laboratory analysis as described further below in Section 4.4.

Up until very recently, the vacant site contained ten (10) abandoned and slowly deteriorating buildings, the locations of which are depicted on the enclosed Site Plan (Figure 2). As noted on Figure 2, the buildings were used for a variety of purposes during the shade manufacturing operations which ceased in 1997. Based on information presented in a July 2008 *Phase IA Literature Review and Archeological Sensitivity Assessment* Report prepared by Hartgen Archeological Associates, Inc. (Hartgen) for the City of Ogdensburg, the buildings previously contained equipment maintenance shops, boiler rooms, metal plating areas, metals machining areas, and materials warehouse areas. However, according to the Hartgen Phase IA report, the location and configuration of the originally constructed buildings was altered during the course of site development which occurred over a period of approximately 100 years. Furthermore, based on a review of historical aerial photographs and Sanborn Fire Insurance Maps, Hartgen determined that the subject property has nearly doubled in size since the

onset of its initial development. Specifically, with the use of fill material of unknown origin, the original shoreline of the St. Lawrence River has been extended a distance of 40 to over 100 feet in a northwesterly direction. For example, Shed Nos. 1, 2A, 2B, 2C, and No.3, as well as the Garage, were all constructed on fill material.

With the cessation of shade manufacturing operations in 1997, the on-site buildings were left abandoned and no longer maintained. Deterioration of the buildings continued over the next ten (10) year period, and when the City of Ogdensburg took ownership of the property in 2007, there was evidence of significant wind and water damage to several of the buildings. Due to the deteriorated condition of the on-site structures, the City decided that in order for future development of the property to occur, the buildings would need to be demolished. Therefore, in 2007 the City applied to the Empire State Development Corporation (ESDC) for a Restore New York Communities Initiative Program Grant for the purpose of performing asbestos abatement and building demolition activities. The City was subsequently awarded \$700,000 in Restore NY funding, and in 2010 the City retained the services of Barton & Loguidice, P.C. (B&L) to oversee and manage the performance of asbestos abatement and building demolition activities. The asbestos abatement and building demolition work is currently ongoing, and is anticipated to be complete by March 2012.

Since 1991, there have been a total of twelve (12) environmental assessments and/or subsurface investigations conducted at the former Standard Shade Roller site. Based on the findings of these site assessments and subsurface investigations, which are summarized below in Section 1.2 (Previous Environmental Investigations), it is apparent that the subsurface soil and groundwater quality in several areas of the parcel has been detrimentally impacted by metals contamination, presumably due to the prior plating operations at the plant. In addition, elevated concentrations of volatile and semi-volatile organic compounds have been detected in subsurface soil and

groundwater samples collected at the site. The lateral and vertical extent of subsurface soils with metals concentrations that exceed the applicable NYSDEC Part 375 Restricted-Residential Use soil cleanup objectives have been defined for most areas of the site, with the exception of the soils beneath the main building. Specifically, the subsurface soils with the highest detected metals concentrations are located underneath the concrete floor in the main building, and in the alley area north of the main building near the former plating operation.

In addition to the above, based on the findings of the recently completed TSA performed at the site by OP-TECH, elevated concentrations of polycyclic aromatic hydrocarbons (PAHs) were detected in the vicinity of the former Maintenance Garage located at the eastern end of the site, in addition to widespread metals contamination (Cadmium, Chromium, Copper, Lead, Silver, Arsenic, Total Mercury, and Total Cyanide) being present in the subsurface soils.

Based on the subsurface investigations completed to date, groundwater contamination is present in the extreme northeastern corner of the property where a 550 gallon underground storage tank (UST) previously existed (refer to Sheet 1, Sample Location Plan), and in the extreme southwestern corner of the site between Shed Nos. 1 and 2A and the St. Lawrence River. While the groundwater contamination in the vicinity of the former UST is petroleum-derived, the groundwater contamination encountered in the southwestern portion of the site consists of PAHs and dioxins/furans that are most likely related to the prior manufacturing operations at either the former Standard Shade Roller site or the adjacent former Diamond International Paper Mill site.

In September of 2010, the City of Ogdensburg was awarded a \$200,000 Brownfields Cleanup Grant from the U.S. Environmental Protection Agency (EPA) to be used at the former Standard Shade Roller site. As described in the EPA-approved grant proposal, a significant amount of the EPA money is to be used for the remediation of the previously noted metals contaminated soils that exist underneath the concrete floor in the main building, and in the alley area

north of the main building near the former plating operation. In addition, a portion of the EPA Brownfields Cleanup Grant funds will be used to characterize and dispose of potentially hazardous wastes/materials that were discovered by B&L to exist inside the main building and other on-site structures. Specifically, a hazardous waste survey of the subject property was performed by B&L staff in February 2009 for the purpose of identifying the existence of potentially hazardous materials/wastes, used oils, paints, and unidentified containers within the main building and other on-site structures. Based on the results of the hazardous waste survey, B&L observed numerous waste materials including empty, partially full, and full containers (1-,5-, and 55-gallon in size) of various identified and unidentified substances, some of which will require disposal as hazardous waste. Therefore, B&L has recommended that the City contract with a Hazardous Waste Management contractor to fully characterize, containerize, abate, and dispose of the identified substances.

Based on our review of EPA guidelines regarding the cleanup of Brownfields sites with the use of EPA funds, the EPA strongly recommends that EPA Brownfields Cleanup Grant recipients voluntarily enroll their site in the state's Voluntary Cleanup Program (VCP), such as the Environmental Restoration Program (ERP) or the Brownfield Cleanup Program (BCP), prior to the commencement of cleanup activities. Based on our discussions with New York State Department of Environmental Conservation (NYSDEC) staff regarding this issue, the NYSDEC has indicated that enrollment in the ERP is not a viable alternative at this time, and therefore the Department has suggested that the City enter the site into the BCP.

As previously noted, the presence of subsurface soil and groundwater contamination at the former Standard Shade Roller site is well documented, and therefore it is anticipated that future remedial activities may be necessary in order to clean up the site to Part 375 Restricted-Residential Use standards. However, prior to the design and implementation of a site-specific remediation plan, it is our

opinion that there are several subsurface soil and groundwater quality data gaps that must be addressed. Specifically, based upon our review of the soil and groundwater quality data compiled to date, the lateral and vertical extent of subsurface soil and groundwater contamination in certain areas of the site has not been adequately delineated for the purpose of conducting a remedial alternatives analysis. In addition, it is possible that one or more contaminant source areas still exists on site that has yet to be identified and properly evaluated.

Given the above, the purpose of the BCP project described herein is to: 1) identify, and if possible, eliminate accessible contaminant source areas with the use of an interim remedial measure (IRM); and 2) fully delineate the lateral and vertical extent of subsurface soil and groundwater contamination at the subject property for the purpose of completing a remedial alternatives analysis.

This document describes the constituents of concern at the former Standard Shade Roller site, and identifies locations for additional sampling (Sections 1 through 3), as well as types of samples and sampling procedures and protocols to complete a remedial investigation in accordance with the BCP (Sampling and Analysis Plan – Appendix A). A Health and Safety Plan (Appendix B) and Citizen Participation Plan (Appendix C) are also included.

1.2 Previous Remedial Investigations

As previously noted, there is a long history of environmental investigations at the site. Previous environmental studies of the subject property include the following:

- “Environmental Assessment, Joanna A CHF Company, Ogdensburg, New York” BCM Engineers, Inc., September 1991;

- “Underground Site Assessment for Joanna Industries, A CHF Company, CC Industries, Ogdensburg, New York”, BCM Engineers, Inc., October 1991;
- “Environmental Assessment Survey for Crown Home Furnishings, Joanna, Ogdensburg, New York”, CC Industries, Asset Management Department, December, 1992;
- “Report on Groundwater Sampling Prepared for Joanna Window Décor, Ogdensburg, New York”, BCM Engineers, Inc., May 1994;
- “Phase I Environmental Assessment, Joanna Window Décor Division, CHF Industries, Inc., 541 Covington Street, Ogdensburg, St. Lawrence County, New York”, Versar, Inc., July 1994;
- “Phase II Environmental Site Assessment, Joanna/Crown Home Furnishings Facility, Ogdensburg, New York”, Blasland, Bouck & Lee, November, 1995;
- “Phase III Environmental Site Assessment, Joanna/Crown Home Furnishings Facility, Ogdensburg, New York”, Blasland, Bouck & Lee, Inc., October 1996;
- “Test Pit Excavation/Soil Sampling Results, Joanna/Crown Home Furnishings Facility, Ogdensburg, New York”, Blasland, Bouck & Lee, Inc., February 1997;
- “Supplemental Environmental Site Assessment Background Soils/Boring Program/Well Closure, Joanna/Crown Home Furnishings Facility, Ogdensburg, New York”, Blasland, Bouck & Lee, Inc., June 1997.
- “Hazardous Waste Survey, Former Shade Roller Complex, Ogdensburg, New York”, Barton & Loguidice, P.C., February 2009;

- “Site Investigation/Remedial Alternatives Report, Former Diamond International Paper Mill, Ogdensburg, New York”, Barton & Loguidice, P.C., March 2010;
- “2010 Targeted Site Assessment Report (Issued as an Incomplete Draft), Former Standard Shade Roller Manufacturing Site, 541 Covington Street, Ogdensburg, New York”, OP-TECH Environmental Services, Inc., October 2010.

A brief summary of the pertinent information that appears in each of the above listed reports (with the exception of the December 1992 Environmental Assessment Survey prepared by CC Industries) is presented below, and a copy of select reports are included as appendices. In addition, the enclosed Sheet 1 depicts the location and approximate areal extent of four (4) identified Areas of Concern (AOC) based on the findings of these prior investigations.

- 1) Environmental Assessment, BCM Engineers, September 1991:
The September 1991 Environmental Assessment performed by BCM Engineers consisted primarily of a visual inspection of the facility to identify potential environmental issues at the site. This assessment included an asbestos survey of the various on-site structures to identify asbestos-containing materials (ACM's), of which several were identified. In addition, seven (7) suspected PCB wet switches and five (5) one-gallon transformer oil containers were also reportedly observed by BCM Engineers personnel during the performance of the environmental assessment. (According to information presented in the November 1995 BBL report, the above referenced wet switches and transformer oil containers were subsequently tested by Clean Harbors and found to not contain PCBs).

The September 1991 report also provides information regarding two (2) underground storage tanks (an 8,000-gallon fuel oil UST and a 500-gallon gasoline UST) that had previously been removed from the site. Specifically, the 8,000-gallon No. 4 fuel oil UST was removed from the west side of the site in 1988, while the 500-gallon gasoline UST located on the east side of the former Shipping – Receiving building was removed in 1991. As described in greater detail in the next paragraph, it was reported that some contamination was observed at the gasoline tank location, and that a total of four (4) monitoring wells had been installed.

- 2) Underground Site Assessment, BCM Engineers, October 1991 (Appendix D): The October 1991 Underground Site Assessment report prepared by BCM Engineers discussed the removal of a 500-gallon gasoline UST from the site on June 17, 1991, and the collection of two (2) soil samples from the bottom of the tank pit area for laboratory analysis. Due to the observation of two (2) small holes in the UST and elevated photo-ionizer detector (PID) field screening readings of the excavated soil, four (4) monitoring wells (designated as MW-1 through MW-4) were subsequently installed in the vicinity of the former UST that had been previously located on the east side of the former Shipping – Receiving building, and representative water quality samples were collected from each monitoring well for laboratory analysis. While the analyzed soil samples exhibited non-detectable concentrations of Benzene, Toluene, Ethylbenzene, and Xylene (BTEX) compounds, total Xylene was found to be present at a concentration of 1.7 milligrams per liter (mg/l) in the groundwater sample collected from MW-3.

- 3) Report on Groundwater Sampling, BCM Engineers, May 1994 (Appendix E): In response to NYSDEC comments regarding the above referenced October 1991 study, a second round of groundwater sampling and analysis was conducted by BCM Engineers in April 1994. The May 1994 BCM Engineers report indicates that the groundwater in monitoring well MW-3 was observed to “have a slight sheen and gasoline-like odor.” Based on the results of the laboratory analysis, BTEX compounds were detected in the groundwater samples collected from the two (2) downgradient monitoring wells, MW-1 and MW-3. As stated in the BCM Engineers report:

“The current NYSDEC standards for groundwater are exceeded for toluene and o-xylene in sample MW-1, and for benzene, ethylbenzene, o-xylene and m,p-xylene in sample MW-3.”

Examination of the groundwater contour map contained in the May 1994 BCM Engineers report indicates that monitoring well MW-1 is situated directly downgradient of the former UST location, while MW-3 is located cross-gradient of, and much closer to, the former UST location.

- 4) Phase I Environmental Assessment, Versar, Inc., July 1994: A Phase I Environmental Assessment was conducted by Versar, Inc. in July 1994. The Versar report provides a summary of observed site conditions and a review of facility records. A visual screening and preliminary sampling of potential ACM's was also performed as part of this assessment. This assessment stated that “friable, asbestos-containing pipe was observed throughout all floors of the main building, presenting an imminent health risk to employees” (BBL, 1995). Of perhaps greater significance is the finding by Versar, Inc. that “metal plating and degreasing operations which

were conducted at the plant for many years prior to 1992, used hazardous materials and generated hazardous waste that potentially could result in on-site contamination, as well as pose an off-site disposal liability” (BBL, 1995).

- 5) Phase II Environmental Site Assessment, Blasland, Bouck & Lee, Inc., November 1995 (Appendix F): BBL was retained by the Newell Company in 1995 to perform a Phase II Environmental Site Assessment of the facility. This assessment included a review of studies performed to date at the facility, in addition to the performance of a site-wide subsurface investigation. As described in detail in the BBL report, a total of eight (8) soil borings (designated as SB-1 through SB-6, and SB-8 and SB-9), six (6) monitoring wells (designated as MW-5 through MW-10), and one test pit (TP-1) were installed at the site. A single representative soil sample was collected by BBL from each of the eight (8) completed soil borings, six (6) monitoring wells, and test pit and submitted for laboratory analysis. In addition, groundwater quality samples were collected from the six (6) newly installed monitoring wells, including previously existing downgradient monitoring wells MW-1 and MW-3, and also submitted for laboratory analysis.

The results of the soil and groundwater laboratory analysis presented in the BBL report are summarized as follows:

- Several polynuclear aromatic hydrocarbons (PAH's) were detected in soil borings SB-1 and SB-6, and monitoring well soil samples MW-8, MW-9, and MW-10, at concentrations above the recommended soil cleanup objectives contained in NYSDEC's TAGM 4046.

- Several metals, including arsenic, chromium, and cadmium, were detected in soil samples collected from monitoring well soil borings MW-7 through MW-10 (located along the downgradient side of the site) at concentrations above the Department's recommended soil cleanup objectives.
- Although the soil and groundwater quality samples obtained from monitoring well MW-9 did not exhibit elevated concentrations for any of the analyzed parameters, "the samples exhibited a petroleum odor, a visible sheen, and the soil sample had a TPH concentration of 2,200 ppm."
- The results of the groundwater quality analysis identified several SVOCs and metals parameters at concentrations above the applicable NYSDEC standards/guidance values. Specifically, the SVOC exceedances were detected in the groundwater sample collected from monitoring well MW-8, while a total of seven (7) different inorganics were detected in monitoring wells across the site at concentrations exceeding NYSDEC standards/guidance values. The metals parameters that were found to be in exceedance of NYSDEC standards/ guidance values included lead, cadmium, chromium, zinc, and mercury.

Based on the above, the Phase II Environmental Site Assessment recommended that additional subsurface investigation work be performed at the subject parcel in order to better identify potential source areas for the observed subsurface contamination.

- 6) Phase III Environmental Site Assessment, Blasland, Bouck & Lee, Inc., October 1996 (Appendix G): A Phase III investigation conducted by BBL in the summer of 1996 involved the installation of four (4) additional soil borings (designated as SB-16 through

SB-19) in the vicinity of the former plating bath area, followed by the laboratory analysis of a single soil sample from each boring for the presence of inorganic parameters, SVOC's, cyanide, and total petroleum hydrocarbons (TPH). This work was done to determine if these plating baths were the source of metal contamination at the site. In addition, all of the on-site monitoring wells (with the exception of MW-2 which could not be located) were re-sampled and the groundwater samples submitted for laboratory analysis. The results of the analytical testing program are summarized in Table 2 (Subsurface Soil Sample Analytical Results) and Table 3 (Groundwater Sample Analytical Results) of the October 1996 BBL report.

Based on the results of the analytical testing program, BBL concluded the following in their report:

- Several PAH's were detected in all four (4) of the analyzed soil samples at concentrations above the NYSDEC TAGM 4046 cleanup objectives.
- Elevated concentrations of Total Petroleum Hydrocarbon (TPH) were detected in the surface soil samples (i.e. 0 to 2 foot depth) collected at soil boring location SB-18 (5,640 ppm) and soil boring location SB-19 (7,830 ppm).
- The analyzed soil samples exhibited various metals parameters, including selenium, zinc, lead, and barium, with concentrations in exceedance of the NYSDEC TAGM 4046 soil cleanup objectives.
- The groundwater samples collected from monitoring wells MW-7 through MW-9 displayed zinc concentrations in

exceedance of the applicable NYSDEC standard/guidance value of 0.3 ppm.

- The fact that various metals parameters (chromium, lead, cadmium, and zinc) in the downgradient monitoring wells were detected at concentrations in exceedance of the NYSDEC standards/guidance values “suggest that the groundwater quality at the site has been impacted by the electroplating operations that have previously taken place at the site” (BBL, 1996).

- 7) Test Pit Excavation/Soil Sampling Results, Blasland, Bouck & Lee, February 1997: During the period of December 4-6, 1996, BBL advanced a total of four (4) test pits (designated as TP-1 through TP-4) in the alley area between the main building and shed numbers 2A, 2B, and 3. In conjunction with the test pit excavation activities, a total of 12 grab soil samples (3 soil samples from each test pit) were collected and submitted for the laboratory analysis of RCRA Metals plus Zinc, TPH, Cyanide, and SVOCs. The purpose of the investigation was to “assess the potential link between residual soil contamination (if any) in the subsurface beneath the alley in the vicinity of the former plating operation and concentration of inorganics in groundwater previously detected in monitoring wells at the site, and to determine if preferential subsurface flow paths or sumps exist in the road bed or under drainage systems beneath the alley” (BBL, 1997).

Based on their evaluation of the subsurface conditions encountered during the test pitting activities and the results of the soils testing program, BBL concluded the following in their report:

“Several questions were raised as a result of the data collected during this phase of the investigation.

Unfortunately, the highest soil concentrations were detected in soils collected from the test pit furthest from the former plating area. This raises questions regarding current or previous sewer paths, sewer integrity, and the potential for additional preferential flow paths beneath other possible former discharges to the river by way of flow between the woodworking shop and shed No. 2B” (BBL, 1997).

Given the above noted uncertainties regarding the subsurface conditions at the site, BBL performed a supplemental Phase IV field investigation on March 31 – April 2, 1997 as summarized below.

8) Supplemental Environmental Site Assessment, Blasland, Bouck & Lee, June 1997 (Appendix H): A supplemental investigation was performed by BBL in 1997. The purpose of this subsurface investigation was as follows:

- Determine site background concentrations of metals parameters in the soil;
- Further assess the lateral and vertical extent of metals contamination in the subsurface soils in the alley area north of the main building;
- Investigate the possibility that dissolved metals constituents may have migrated beneath the concrete floor of the main building due to past plating operations, spills, or leaks; and
- Analyze the water quality of the water supply production well located in the main building prior to the permanent closure of the well.

The subsurface investigation consisted of the collection and laboratory analysis of: five (5) background subsurface soil samples (designated as BSS-1 through BSS-5), three (3) soil samples from beneath the concrete floor of the main building (designated as FC-1

through FC-3), 14 subsurface soil samples from a total of eight (8) soil borings (designated as SB-20 through SB-26), and one (1) groundwater sample from the on-site water supply production well. The locations of the above referenced sampling points, including the detected inorganic concentrations for each of the analyzed soil and groundwater samples, are depicted on Figures 1 and 2, respectively, of the June 1997 BBL report.

Based on the results of the June 1997 Supplemental Investigation, as well as the prior two (2) studies conducted by BBL at the site, the following conclusions were reached by BBL regarding the environmental conditions at the subject parcel:

- The lateral and vertical extent of subsurface soils with metals concentrations that exceed the applicable NYSDEC target cleanup objectives have been defined for most areas of the site, with the exception of the soils beneath the main building.
- The subsurface soils with the highest detected metals concentrations are located underneath the concrete floor in the main building, and in the alley area north of the main building near the former plating operation.
- Cyanide was detected in all three (3) indoor subsurface soil samples at concentrations in exceedance of the applicable NYSDEC target cleanup objective of 1.0 ppm. Furthermore, the cyanide concentration detected at indoor soil sample FC-1 (109 ppm) was the highest detected cyanide concentration for all of the soil samples analyzed during the three (3) phases of site investigation.

- With respect to the on-site groundwater quality, the following metals parameters have consistently been detected at concentrations in exceedance of the applicable NYSDEC Ambient Water Quality Standards: lead, zinc, cadmium, chromium, and barium. According to the BBL report, these are the same inorganic constituents that were detected most frequently and at the highest concentrations in the analyzed soil samples.
- The presence of lead, zinc, cadmium, and chromium in the analyzed groundwater quality samples “appears to be directly related to the presence of these inorganics contained in the on-site soils leaching to groundwater” (BBL, 1997).
- Both zinc and cyanide were used in the electroplating process, and it is BBL’s belief that “the former plating operations at the site have had an adverse impact on the subsurface soil quality beneath the concrete floor in the main building where the plating baths were located, and in the alley north of the main building that housed the plating operations” (BBL, 1997).
- According to BBL, the sewer that connects the former plating-related pre-treatment system to the sewer in the alley may serve as a potential preferential pathway for subsurface contaminant migration, in addition to the presence of other site utility lines leading from the main building to the alley.
- “However, the presence of elevated inorganic concentrations detected in soils at less than 2-feet below the concrete floor and in the alley, suggests that the release of inorganics detected in soils is a result of past handling practices of plating fluids, accidental spills, leaks in the baths and/or process sewer systems with horizontal distribution of the

inorganic constituents along the preferential flow paths noted with vertical distribution augmented by the seasonal fluctuating water table” (BBL, 1997).

- 9) Hazardous Waste Survey, Former Shade Roller Complex, Barton & Loguidice, P.C., February 2009 (Appendix I): Barton & Loguidice, P.C. conducted a building survey for hazardous materials within the eleven buildings comprising the former Shade Roller Complex. The survey included an assessment and inventory of the following buildings: Garage, Office Building, Main Building, Boiler Room, Kiln Building, Shed 1-A, Shed 1, Shed 2-A, Shed 2-B, Shed 3, and the Paint Shop.

The purpose of the Survey was to identify the existence of potentially hazardous materials/wastes, used oils, paints and unidentified containers within the eleven surveyed buildings. In addition, the presence of factory machinery containing PCB and used oils was noted, and the presence of oil/waste/metal plating spills that may have contaminated building surfaces that could be impacted during demolition. Each building was reviewed for the presence of suspect hazardous materials and/or wastes, requiring handling prior to demolition. These materials were categorized and inventoried in preparation for removal under a hazardous materials removal contract. Several materials were sampled and analyzed for hazardous waste characteristics to identify disposal methods.

Throughout the structure, B&L identified numerous waste materials, including empty, partially full and full containers (1,5, 55 gallons in size) of various identified and unidentified substances. Some of these materials will require disposal as hazardous waste. One area of the building contains a spill of a wax based material.

Deteriorated lead based paint was observed on the walls, and as

debris on the building floors. Oil filled equipment and boilers remain in the structure. Asbestos containing materials are present in the buildings.

- 10) Site Investigation/Remedial Alternatives Report, Former Diamond International Paper Mill Site, Barton & Loguidice, P.C., March 2010: During the period of 2005 through 2007, B&L performed an extensive subsurface investigation on the adjacent former Diamond International Paper Mill site, which is also owned by the City of Ogdensburg. With the use of Environmental Restoration Program (ERP) funding, B&L was directed by the NYSDEC to advance a total of three (3) soil borings/monitoring wells (designated as S-1 through S-3) in the southwest corner of the former Standard Shade Roller site for the purpose of determining if subsurface soil and groundwater contamination had migrated from the former Diamond International Paper Mill site onto the former Standard Shade Roller site.

Based on the results of the “off-site” investigation activities performed by B&L at the former Standard Shade Roller site, the following contaminants were detected at elevated concentrations in one (1) or more of the analyzed subsurface soil samples:

SVOCs: One isolated area of subsurface SVOC contamination (the benzo-, -pyrenes, and chrysene) was identified in the extreme southwestern portion of the former Standard Shade Roller Site (subsurface sample location S-3). The SVOCs detected in concentrations greater than the NYSDEC SCOs for Restricted-Residential Use are polycyclic aromatic hydrocarbons (PAHs), which are commonly associated with the incomplete combustion of fossil fuels.

Metals: Cadmium, copper, and lead were detected at concentrations in exceedance of the established Soil Cleanup Objective (SCO) value in the subsurface soil sample location S-3, and lead was detected at concentrations above the SCO in subsurface sample location S-1.

Based on the results of the “off-site” investigation activities performed by B&L at the former Standard Shade Roller site, the following contaminants were detected in one (1) or more of the analyzed groundwater samples:

VOCs: VOCs exceeding groundwater standards were observed at two (2) of the three (3) monitoring well locations (S-2 and S-3). The VOC compounds detected in these two (2) monitoring wells are generally attributed to paint strippers and solvents, and therefore the presence of these VOC compounds is believed to be due to historic site operations at the former Standard Shade Roller manufacturing facility and not the former Diamond International Paper Mill Site.

SVOCs: SVOC parameters with concentrations in exceedance of their respective groundwater standards were detected in monitoring well S-3 in the 2005-2006 sampling event only. Bis(2-Ethylhexyl)phthalate was detected above groundwater standards in the duplicate sample from S-1, but its presence is not considered quantitatively representative of groundwater quality.

Metals: The dissolved metals concentrations detected above groundwater standards in the three (3) monitoring wells consisted of the following: antimony, iron, lead, magnesium, manganese, and sodium. A combination of these parameters exceeded the groundwater standards at each of the monitoring well locations.

Dioxins/Furans: Monitoring wells S-1 and S-2 exhibited dissolved concentrations of dioxins/furans in exceedance of the respective groundwater standard.

- 11) 2010 Targeted Site Assessment Report (Issued as an Incomplete Draft), OP-TECH Environmental Services, Inc., October 2010: At the request of Mr. Peter Ouderkirk, P.E. of the NYSDEC Region 6 Office, OP-TECH Environmental Services, Inc. (OP-TECH) performed a Targeted Site Assessment (TSA) at the former Standard Shade Roller site during the period of August 5 – September 21, 2010. According to the Draft OP-TECH report, “the investigation was conducted with borings positioned in an approximate grid pattern over the site, expanding until the impact was diminished or not evident in perimeter borings, or where further investigation was restricted by refusal of Macro-Core sampler advancement”. The Draft OP-TECH report states that a total of 122 soil borings were advanced at the site with the use of a direct push Geoprobe drill rig. The borings were designated by OP-TECH as follows: B-1 through B-112, B-32a to B-32d, B-60a to B-60d, and MH-1 to MH-4.

Based upon our review of the 2010 TSA Sampling Map included with the Draft Report, it appears that soil borings MH-1 and MH-2 may have been advanced into the layer of sediments that have accumulated at the base of two (2) on-site dry wells. These two (2) dry wells are located in the vicinity of the former Maintenance garage and are labeled as MH-1 and MH-2, respectively, on the aforementioned sample location map. It is unclear where (or at what depth) soil samples MH-3 and MH-4 were collected, as their locations are not indicated on the 2010 TSA Sampling Map. However, the sampling map does depict the presence of several

manholes in the alley way between the Main Mill building and Shed Nos. 2A, 2B, and 2C, so it is possible that soil samples MH-3 and MH-4 were collected in this particular vicinity of the site.

In addition to the collection of soil samples from the bottom of dry well structures, OP-TECH also collected a total of four (4) sediment samples from inside the various building structures, which are designated on the 2010 TSA Sampling Map as SS-1 through SS-4. However, no other information is provided by OP-TECH in the Draft report regarding the type of manmade structure (i.e. floor drain, sump, etc.) that the sediment samples were collected from. OP-TECH also reportedly collected a surface water sample (designated as SW-1) from the basement of the Kiln Building, the location of which is depicted on the 2010 TSA Sampling Map. Again, there is no information presented in the Draft report regarding the type of structure from which the apparent surface water sample was collected.

Although not depicted on the “2010 TSA Sampling Map”, subsurface soil samples were also collected by OP-TECH from a series of nine (9) soil borings which are referred to as FC-104 through FC-112 on the chain of custody (COC) forms submitted to Upstate Laboratories, Inc. As noted above in the narrative summary of prior site investigations (refer to summary no. 8), the ‘FC’ designation was previously used by BBL in their June 1997 Supplemental Investigation report to identify three (3) soil borings that were advanced through the concrete floor of the Main Building (designated as FC-1 through FC-3). B&L therefore assumes that OP-TECH decided to utilize this same designation for soil borings FC-104 through FC-112 which were reportedly drilled on August 31, 2010 (based on the date indicated on the COC form), and that

these soil borings were likely located within the footprint of the Main Building. This assumption is based on the fact that the soils underneath the floor in the Main Building (specifically in the vicinity of the former plating area) had previously been identified by BBL as an area of concern due to their elevated metals concentrations. Our assumption regarding the indoor location of soil borings FC-104 through FC-112 is further supported by the fact that each of the soil samples collected from these nine (9) FC-designated soil borings was submitted exclusively for the analyses of metals analysis, with the exception of subsurface soil samples FC-105, FC-106, and FC-109 which were also analyzed for PCBs.

Although the Draft report contains a “2010 TSA Sampling Map” that depicts the location of the aforementioned Geoprobe soil borings, it is important to note that the Draft report does not include soil boring logs. In addition, there is no information presented in the Draft report regarding field observations made by OP-TECH personnel of staining, odors, or elevated photo-ionization detector (PID) readings encountered at the individual boring locations. The lack of this pertinent information makes it very difficult, if not impossible, for B&L to interpret the subsurface conditions at each of the boring locations.

According to the OP-TECH Report, “soil samples were collected for laboratory analyses from select borings at specific depths” and analyzed by Upstate Laboratories, Inc. for one (1) or more of the following parameters: VOCs by EPA Method 8260 Target Compound List (TCL) plus STARS list; SVOCs by EPA Method 8270 TCL Base/ Neutrals (B/N); RCRA metals (plus plating metals Zn, Cu, and Ni) via EPA Methods 6010B and 7471; polychlorinated biphenols (PCBs) by EPA Method 8080; pesticides and herbicides

via EPA Method 8081A; and total petroleum hydrocarbons (TPH) via NYSDOH Method 310-13.

In association with the advancement of Geoprobe soil borings, OP-TECH also reportedly installed a total of six (6) temporary monitoring wells at the site. However, based on our review of the Groundwater Sampling Map included with the Draft report, we are only able to identify a total of five (5) OP-TECH monitoring wells, which are designated as OP-1 through OP-5 on the map.

Following the completion of well development activities, OP-TECH collected representative groundwater quality samples from the six (6) newly installed wells, in addition to six (6) previously existing monitoring wells that had been installed by others (as described above). The representative groundwater quality samples were submitted to Upstate Laboratories, Inc. for some or all of the same parameters as listed above for the soil samples.

The previously existing wells at the former Standard Shade Roller site are designated as BL-1, BL-2, MW-3, MW-7, MW-8, and MW-9 on the Groundwater Sampling Map included in the Draft 2010 TSA report. It is important to note that OP-TECH collected groundwater samples from two (2) of the three (3) monitoring wells (S-1 and S-3) which were previously installed by B&L at the site in 1996. OP-TECH chose to re-name these two (2) wells as BL-1 and BL-2, respectively, in their Draft report. As previously noted, these two (2) monitoring wells are located in the southwest corner of the site in the area between Shed No. 1 and the St. Lawrence River. It is important to note that similar for the lack of boring logs, the Draft report issued by OP-TECH does not contain any monitoring well construction diagrams and/or depth to water table readings. Furthermore, the Draft report does not include the results of field

parameter readings that were reportedly collected by OP-TECH personnel prior to the collection of groundwater samples at each of the monitoring well locations.

The incomplete draft report submitted by OP-TECH did include the analytical laboratory reports prepared by Upstate Laboratories, Inc. for the submitted soil and groundwater samples, and therefore B&L was able to prepare analytical data summary tables that compared the detected concentrations to the Part 375 Residential Use SCOs presented in Table 375-6.8(b). Based upon our review of the enclosed data summary tables (Appendix J), the soil and groundwater samples that exhibited parameter concentrations in exceedance of their respective Part 375 Residential Use SCOs are as follows:

- VOCs were detected in soil boring B-60 (Trichloroethene) and surface soil sample SS-2 (1,4-Dichlorobenzene) at concentrations slightly in exceedance of their applicable Part 375 Residential Use SCOs.
- Several PAH's, including Napthalene, were detected in soil boring B-6 at concentrations in exceedance of their applicable Part 375 Residential Use SCOs.
- Several metals, including arsenic, barium, cadmium, chromium, copper, lead, silver, total mercury, and total cyanide, were detected in soil samples collected from soil borings B-8, B-10, B-29, B-32, B-44, B-51, B-55, B-56, B-58, B-59, B-60, B-66, B-70, B-89, and B-97; from the two (2) soil borings advanced beneath the concrete floor in the main building (designated as FC-108 and FC-109, respectively); sediment samples SS-1 through SS-4; and manhole samples MH-2 through MH-4; at concentrations above the

Department's Part 375 soil cleanup objectives for Residential Use.

- Detectable concentrations of total petroleum hydrocarbons (TPH) were reported for the soil samples collected from soil borings B-31, B-32, and B-71.
- The results of the groundwater quality analysis identified several VOC parameters at concentrations above their respective NYSDEC Part 703.5 groundwater quality standards. Specifically, VOC exceedances were detected in the groundwater samples collected from monitoring wells OP-1, MW-3, and BL-2. The specific VOC parameters that were found to be in exceedance of NYSDEC Part 703.5 groundwater quality standards consisted of the following: 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, cis- 1,2-Dichloroethene, Ethylbenzene, m&p-Xylene, o-Xylene, Trichloroethene, and Vinyl chloride.
- Bis(2-Ethylhexyl)phthalate was detected at concentrations above its established NYSDEC Part 703.5 groundwater quality standard in the groundwater samples collected from monitoring wells BL-1, BL-2, MW-7, MW-8, OP-2, and OP-3, but its presence is not considered quantitatively representative of groundwater quality.

1.3 Contaminants of Concern

The historic industrial operations at the site are potential sources for remaining contamination. As previously noted, prior site uses include boat manufacturing, match manufacturing, brewing, shade roller manufacturing, and milling. Based on our review of the analytical soil and groundwater quality data generated during prior site investigations, the contaminants of concern consist of:

VOCs, SVOCs, PCBs, and Metals. Although detectable concentrations of dioxins/furans were previously detected in groundwater samples collected from on-site monitoring wells S-1 and S-2, it is our opinion that the source of the dioxins/ furans is from the adjacent former Diamond International Site and therefore not attributable to historical manufacturing operations which occurred at the subject property. As discussed above in Section 1.2 (Previous Remedial Investigations), impacted soils and groundwater have been identified in numerous areas of the site; however, the overall extent of the contamination at the subject property is unknown.

1.4 Contemplated Use of the Site

The property has not been developed or used for any purpose since the City acquired ownership in 2007. However, following the successful completion of asbestos abatement, building demolition, and subsurface soil remediation activities, the City intends to sell the property to a developer for redevelopment as a mixed use, LEED certified project.

2.0 Preliminary Exposure Assessment

The land use surrounding the property is mixed commercial and residential development. The topography slopes from south to north towards the St. Lawrence River. The site is serviced by a public water supply, which minimizes the exposure risk associated with potential groundwater contamination. The Remedial Investigation will include a further evaluation of groundwater and contaminant pathways, including an analysis of hydrogeologic conditions present at the site. An environmental risk evaluation will be performed based upon the results and findings of the Remedial Investigation.

2.1 Relevant Guidance and Regulatory Criteria

Relevant Guidance and Regulatory Criteria (RGRC) to be utilized for this project include, but are not limited to:

- NYSDEC DER-10 / Technical Guidance for Site Investigation and Remediation, May 2010 (DER-10);
- 6 NYCRR Part 375 Environmental Remediation Programs;
- NYSDEC T.O.G.S. 1.1.1 – Ambient Water Quality Standards & Guidance Values and Groundwater Effluent Limitations;
- 6 NYCRR Part 703 – Water Quality Standards;
- 10 NYCRR Part 5 of the State Sanitary Code – Drinking Water Supplies; and
- NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York.

3.0 Objectives, Scope, and Rationale

3.1 Project Objectives

At the recommendation of the NYSDEC, and in order to comply with the state regulatory oversight provisions of the City's cooperative agreement with the EPA, the City of Ogdensburg has entered the former Standard Shade Roller site into the BCP. As previously discussed, the objective of the Remedial Investigation (RI) described herein is to conduct a supplemental subsurface soil and groundwater investigation in select areas of the site for the purpose of addressing previously identified data gaps, and to identify and eliminate, to the greatest extent possible, contaminant source areas with the use of IRMs. The anticipated scope of the project would focus on the following:

- If possible, obtain copies of soil boring logs, monitoring well construction diagrams, PID readings, groundwater sampling field parameter measurements, and an updated sample location map from OP-TECH as it pertains to the 2010 TSA. Based upon our detailed review of this currently missing information, B&L will revise and/or reconfigure as appropriate the proposed location of future soil borings and monitoring wells to be performed in previously identified areas of concern (as described herein);
- Determine whether USTs and/or other buried structures remain at the site and identify their number, location, orientation, and associated piping;
- Remove and dispose of any discovered USTs and/or buried structures and their piping, including any encountered contaminated soil;
- Backfill the tank and/or buried structures excavation area(s) with clean materials;

- Identify floor drains, sump pits, dry wells, and drain pipes that receive floor drain discharge. For instance, it is believed that there are two (2) drywells (designated by OP-TECH as MH-1 and MH-2 on the 2010 TSA Sampling Map) that receive discharge from floor drains located in the Maintenance Garage;
- Evacuate and properly dispose of the contents (i.e. sediments and liquid) of identified floor drains, sump pits, dry wells, and drain pipes;
- Remove and dispose of, or properly seal off, identified floor drains, sump pits, dry wells, and drain pipes and their associated piping;
- If necessary, excavate and dispose of contaminated soils encountered within the immediate vicinity of the identified sump pits and dry well structures;
- Backfill the sump pit and dry well excavation area(s) with clean materials;
- Determine the extent of soil and groundwater contamination beneath each of the on-site site buildings through subsurface borings and sampling;
- Conduct a groundwater investigation in the following areas of the site to determine the lateral and vertical extent of impacts: 1) at the northern end of the site the vicinity of the former Maintenance Garage where elevated concentrations of PAHs were detected; 2) in the extreme northeastern corner of the property where a 550 gallon UST previously existed and petroleum-derived groundwater contamination is present; and 3) and in the extreme southwestern corner of the site between Shed Nos. 1 and 2A and the St. Lawrence River where PAHs and dioxins/furans were previously detected;

- Thoroughly define the presence and extent of surface soil, subsurface soil, sediment, and groundwater contamination on-site (and potentially off-site);
- Characterize the site hydrogeologic conditions, including identification of depth to groundwater and flow direction, and the possible presence of preferential groundwater flow pathways;
- Evaluate conditions within wetlands, floodplains and sensitive environments (if any are present) within or adjacent to the site; and
- Assess potential impacts to the environment, wildlife, and human health.
- Evaluate the presence and extent of soil gas contamination on the site where warranted. Due to the lack of immediate receptors and uncertainty regarding the presence of VOCs in the subsurface soils or groundwater, the need for a soil vapor survey will be determined in consultation with the NYSDEC and NYSDOH following the receipt of analytical results for the sampled media.

3.2 Technical Approach

The following discussion presents the technical approach proposed to complete the project objectives outlined above. The technical approach has been structured to achieve these objectives in a progressive, deliberate, and cost-effective manner. At the completion of each project task, the existing data will be reviewed to determine if the limits of the suspected contamination have been adequately characterized, or if a subsequent task is required. It is possible that not all of the tasks described below will be required. Each of the specific components of the proposed technical approach is briefly discussed in the text below.

The initial project task will be to hopefully obtain currently unavailable site-specific data from OP-TECH for the purpose of revising, if necessary, the

subsequent tasks for this project. In lieu of a geophysical survey, test pits will be excavated at the suspected locations of USTs, dry wells, and/or other buried structures on the property. The encountered structures will either be removed from the subsurface, or properly abandoned and closed in place, in the form of an IRM. The subsurface investigation includes the installation of soil borings, soil vapor points (if deemed necessary and appropriate), and overburden monitoring wells. Sampling and analysis of surface soil, sediments, subsurface soil, soil vapor, and groundwater will be conducted as part of the site investigation.

Upon completion of remedial investigation activities, the data will be reviewed to determine the nature and extent of contamination on the site, and to develop a qualitative assessment of ecological and human health risks posed by the site. These results will be used to evaluate the need for subsequent remedial activities, and to perform an analysis of alternatives. The Remedial Investigation efforts and Remedial Alternatives Analysis will be presented in a Remedial Investigation/Alternatives Analysis Report (RI/AAR).

4.0 Remedial Investigation Tasks

4.1 Task 1 - Review of 2010 Targeted Site Assessment Data

If possible, B&L will obtain copies of soil boring logs, monitoring well construction diagrams, PID readings, groundwater sampling field parameter measurements, and an updated sample location map from OP-TECH as it pertains to the 2010 TSA. Based upon our detailed review of this currently missing information, B&L will revise and/or reconfigure as appropriate the proposed location of future soil borings and monitoring wells to be performed in previously identified areas of concern. It may be necessary, based on our review of the currently unavailable site-specific information mentioned above, to revise aspects of the scope of work. Any necessary revisions will be proposed in writing and performed with NYSDEC's approval.

4.2 Task 2 - Preparation of Site Map

Any existing site mapping will be reviewed and digitized to create a preliminary plan for the property. Specifically, the 2010 TSA contains a recent topographic survey of the subject property that was performed by Jacobs Land Surveying of Ogdensburg, New York. B&L has obtained an electronic copy of this topographic base mapping from Jacobs Land Surveying for our use in this remedial investigation. Where necessary, the topographic base map prepared by Jacobs Land Surveying will be supplemented with information as deemed necessary and appropriate, including a metes and bounds description of the site. This will include surveying and locating any previously unknown site features discovered by B&L, such as manholes, subsurface utilities, existing monitoring well locations, and other distinguishing features present at the site. Based on our review of the current topographic base map, Jacobs Land Surveying previously established two benchmarks on site from which the elevations of both existing and newly installed monitoring wells can be referenced. Following the completion of the site investigation described herein, an updated property survey

consistent with ALTA/ACSM standards and EPA survey requirements will be performed.

The existing topographic base mapping will be used to develop a base Site Plan for the presentation of site data collected during the investigation (i.e., groundwater elevation contours, subsurface anomaly locations, extent of contaminated soil removal, and extent of groundwater contamination). The Site Plan will also be used to present the various remediation alternatives identified during preparation of the Site Investigation/Remedial Alternatives Report. Site elevation data will be used to develop cross-sections through the site showing the configuration of subsurface geologic conditions, elevation of the water table, and vertical extent of soil and/or groundwater contamination.

4.3 Task 3 - Community Relations

A Citizen Participation Plan (CPP) is included as part of this Work Plan (Appendix C). The CPP was prepared to assist the City of Ogdensburg with providing information about the project to the public. The elements of the CPP are as follows:

- Introduction to the Brownfield Cleanup Program
- Basic site information
- Project description
- Identification of affected/interested public (contact list)
- Identification of regulatory contacts
- Identification of document repositories
- Specific citizen participation activities
- Identification of adjacent property owners

The CPP will establish responsibilities for project activities and provide the names and addresses of authorized representatives for response to public inquiries.

4.4 Task 4 – Sludge/Sediment Sampling

A sludge/sediment investigation will be conducted to determine the character of residual sludge/sediments present in potential source areas at the site. Sludge/sediment samples will be collected from potential source areas including floor drains, sumps, and trenches, along with any exterior features receiving floor drain discharge, such as the previously referenced dry wells and the two (2) drain pipes that reportedly daylight along the shoreline of the St. Lawrence River. The collection of sediment samples will be performed in accordance with the Sampling and Analysis Plan (SAP) included in Appendix A. Based upon our current knowledge of site conditions, we estimate that up to five (5) sludge/sediment samples will be collected for laboratory analysis. The proposed location of the sludge/sediment samples is shown on Sheet 2, Sample Location Plan.

Sediment sample(s) will be analyzed for the presence of volatile organic compounds (VOCs) and chlorinated solvents using EPA Method 8260 Target Compound List (TCL) plus MTBE, semi-volatile organic compounds (SVOCs) by EPA Method 8270 TCL Base/Neutrals (B/N), polychlorinated biphenols (PCBs) by EPA Method 8082, and Target Analyte List (TAL) metals (including Cyanide) using EPA Methods 6010B, 7471A (Mercury), and 9010B (Cyanide), respectively. All laboratory samples submitted for this project will be analyzed at a NYSDOH ELAP program approved laboratory in accordance with the NYSDEC Category B ASP deliverables protocols.

The results of the sludge/sediment sampling will be evaluated and used to develop the scope of the IRM activities discussed below in Task 7.

4.4.1 Task 4a – Reclaimed Concrete Material Sampling

As indicated on enclosed Sheet 2 (Sample Location Plan), three (3) stockpiles of reclaimed concrete material (RCM) exist at the former Standard Shade Roller Site. These stockpiles were generated as a result of recently completed building demolition activities. In addition to the three (3) stockpile areas, RCM has also been placed as a layer of fill material within the footprint of the former Kiln building (in the vicinity of stockpile No. 3). Specifically, the RCM consists of concrete, concrete block, and brick from the demolition of the former main mill building. It was the City's original intent to utilize the RCM as on-site fill material in the performance of site grading activities. However, prior to the placement of the RCM, analytical testing of representative RCM samples was required for the presence of VOCs, SVOCs, PCBs, and Metals in accordance with the provisions of DER-10. Results of the analytical testing revealed detections of PCBs and Metals in excess of the applicable Part 375 Restricted Residential Use SCOs. As a result of the PCB and Metals parameter exceedances, additional screening of the stockpiles will be necessary in order to characterize the extent of contamination in the RCM. As such, it is anticipated that up to 14 RCM samples will be collected for laboratory analysis. The proposed RCM sample locations are shown on the enclosed Sheet 2, Sample Location Plan.

Submitted RCM sample(s) will be analyzed for the presence of volatile organic compounds (VOCs) and chlorinated solvents using EPA Method 8260 Target Compound List (TCL) plus MTBE, semi-volatile organic compounds (SVOCs) by EPA Method 8270 TCL Base/Neutrals (B/N), polychlorinated biphenols (PCBs) by EPA Method 8082, and Target Analyte List (TAL) metals (including Cyanide) using EPA Methods 6010B, 7471A (Mercury), and 9010B (Cyanide), respectively. All laboratory samples will be analyzed at a NYSDOH ELAP program approved

laboratory in accordance with the NYSDEC Category B ASP deliverables protocols.

Based on the results of the above noted RCM sampling and testing program, a final determination will be made as to the acceptable use of the RCM as on-site backfill material, or the need for the material to be properly disposed of off-site due to unacceptable levels of contaminants.

4.5 Task 5 – Supplemental Subsurface Investigation

The objective of the supplemental subsurface investigation is to address identified data gaps based on our review of the information compiled during prior site investigations, and to ensure compliance with the requirements of the BCP.

Based on our current knowledge of site conditions, we estimate that up to 30 soil borings will be performed on the 7.1 acre site, and up to seven (7) soil borings on the adjacent Basta property (for a total of 37 soil borings) with the use of a direct push drill rig. The proposed location of the soil borings is shown on Sheet 2. However, the actual number and location of soil borings to be drilled at the site will be dictated in part by the results of the above described sludge/sediment sampling activities, and will also take into account previously identified data gaps from prior site investigations.

The soil borings will be installed to ground water, or to the presence of contamination or refusal. Each boring location will be sampled continuously throughout the depth of the boring. Samples will be examined by the on-site representative and will be logged as described in the Sampling and Analysis Plan in Appendix A. The soil samples will also be examined for moisture content to determine the depth at which saturated samples are obtained, indicating the vertical position of the water table/first water-bearing unit.

Each exploratory soil boring will continue until the B&L field representative determines the vertical position of the water table/first water-bearing unit, and authorizes termination of the borehole, or the boring extends beyond the contaminated zone to groundwater. Any drilling method utilized must not introduce contaminants into the borehole during any phase of the borehole advancement or during monitoring well installation. All drilling equipment, tools and machines will be decontaminated upon initially arriving on-site and between each drilling location.

Using a photoionization detector (PID), each soil sample taken during the drilling program will be screened for total volatile organic vapors. Upon sample retrieval, the B&L field representative will screen the sample directly with a PID. The process will involve placing the soil sample in a sealable bag, then inserting the PID probe in the bag. Two measurements will be recorded to identify: 1) the peak concentration, and 2) the sustained vapor concentration. Both measurements will be recorded in parts per million (ppm) from the direct readout on the instrument. All measurements will be recorded in the field log along with the ambient temperature for future reference regarding determination of well screen intervals, analytical soil sample selection, and definition of the vertical extent of groundwater and soil contamination.

Based on field observations, up to 37 surface soil samples and 37 subsurface soil samples (for a total of 74 soil samples) will be selected for the laboratory analysis of VOCs and chlorinated solvents using EPA Method 8260 TCL plus MTBE, SVOCs by EPA Method 8270 TCL B/N, PCBs by EPA Method 8082, and TAL metals (including Cyanide) using EPA Methods 6010B, 7471A (Mercury), and 9010B (Cyanide), respectively.

4.6 Task 6 – Groundwater Investigation

As noted in Section 1.2 (Previous Remedial Investigations), OP-TECH reportedly collected water quality samples from the six (6) temporary groundwater monitoring wells they installed at the site (designated as OP-1 through OP-6) in the summer of 2010, and they also collected groundwater samples from six (6) previously existing monitoring wells, for a total of 12 groundwater samples. However, the current condition and integrity of the on-site monitoring wells for groundwater sampling purposes is not known at this time. Therefore, B&L will inspect the existing wells to ascertain their condition and usability. In the event that any of the existing on-site wells are found to be unuseable, B&L will properly abandon these wells, while the other monitoring wells will be redeveloped and utilized for this project.

For the purpose of augmenting the existing monitoring well network, and in order to provide groundwater quality information for previously uninvestigated areas of the site (including the adjacent Basta property), a total of seven (7) new overburden groundwater monitoring wells are proposed for this project. However, this number may be revised based on information developed in the previous tasks. Specifically, the actual number and location of new monitoring wells to be installed both on-site and off-site will be determined following our inspection of the existing monitoring well network (as described above), and will also take into account our field observations (e.g. PID readings, etc.) during the advancement of the soil borings.

One (1) round of water quality samples will be obtained from the six (6) existing monitoring wells and the seven (7) newly proposed groundwater monitoring wells (for a total of 13 groundwater quality samples) and submitted for the laboratory analysis of VOCs and chlorinated solvents using EPA Method 8260 TCL plus MTBE, SVOCs by EPA Method 8270 TCL B/N, PCBs by EPA Method 8082, and TAL metals (including Cyanide) using EPA Methods 6010B and 9010B (Cyanide) to provide information on the current groundwater

conditions at the site. These parameters may be reduced depending upon the laboratory test results of the analyzed soil samples. At this time no bedrock groundwater monitoring wells are proposed. The need for bedrock groundwater monitoring wells will be assessed based upon our review of the site investigation data.

Monitoring well construction and installation will be supervised by a B&L field representative. Construction will follow the general specifications as shown in the SAP (Appendix A). The drilling contractor will have available on-site, prior to commencement of the drilling program, 2-inch diameter PVC threaded riser pipe and continuous slot well screens, including all fittings, bottom plugs, centralizers, caps, etc. In addition, the drilling contractor must have available all backfill materials necessary for well construction, including graded siliceous sand of various sizes for sand pack construction. The size of the sand used for the sand-pack materials will be appropriate for the grain size of the formation materials within the screen interval. Also, an approved concrete aggregate mixture must be used during the construction of the surface seal. The specific types of monitoring well backfill materials are discussed in the SAP (Appendix A).

During the construction and installation of the monitoring wells, the B&L field representative's responsibilities will include, but not be limited to:

- Construction observation of the entire well assembly;
- Installation observation of the sand pack, fine sand pack, pelletized or granular bentonite seal and grout backfill placements;
- Performing measurements to certify that the placement of the well construction materials was in accordance with the specifications;
- Observation of the protective monitoring well cover installation and the concrete surface seal construction;

- Observation and monitoring of well development (where development is performed by drilling contractor);
- Labeling and marking water level monitoring reference point on the protective cover and riser pipe respectively; and
- Consultation with the on-site NYSDEC representative.

In-situ variable head hydraulic conductivity testing (slug or bail testing) will be performed at each newly completed monitoring well after sufficient development has been performed. The existing temporary monitoring wells will not be tested for hydraulic conductivity. The slug and/or bail testing will provide in-place permeability data of the screened geologic units. Slug and bail testing involves the removal of a bail of water or the displacement of water within the well by the insertion of a slug. Upon creating an elevated or depressed head, the water level within the monitoring well is measured electronically with a data logger and recorded over the time it takes to achieve 90% recovery (relative to the initial static water level). It is assumed that the rate of inflow to the monitoring well screen, after inducing a hydraulic head differential, is proportional to the hydraulic conductivity (k) and the unrecovered head distance.

Water levels will be recorded on two (2) events approximately two (2) months apart at each of the existing and new monitoring wells to determine the depth of groundwater and the configuration of the groundwater surface. Water level data will be used to develop groundwater contour maps and to identify the horizontal hydraulic gradient of the water table. Water level data will also be compared between each measurement to evaluate seasonal fluctuations.

Upon completion of the monitoring well installation program, each of the existing and new monitoring wells will be sampled once for laboratory analysis. Monitoring wells will be purged prior to sampling in order to collect a representative sample of the formation groundwater. Each well will be sampled using the following general methodology:

- Measure and record the static water level in each well, and calculate the volume of water in the well;
- Purge at least three (3) times the volume of water in each well. For wells exhibiting extremely slow recovery rates, it may only be possible to remove the initial well volume before it is dry. Rapidly recovering wells can be purged using peristaltic or bladder pumps to purge the required well volumes;
- Collect groundwater samples using disposable bailers; and
- Ship or deliver samples to a EPA Contract Laboratory Program (CLP) certified laboratory using the appropriate chain-of-custody documentation. Analyses for VOCs, SVOCs, PCBs, and TAL metals (including Cyanide), will be performed on these samples.

All final investigation data utilized for cleanup goal/no further action decisions will be reported with a CLP Category B deliverables package. The data packages will be subjected to independent data validation following ASP/CLP procedures.

4.7 Task 7 - IRM Activities: UST, Dry Well, and Source Removal

Interim Remedial Measures (IRMs) are planned in order to remove the existing sources of contaminants from the site. These source materials include: floor drains within the various on-site building slabs, drain pipes and dry wells receiving discharges from the floor drains, USTs (if any), and associated contaminated sludge and soil. Prior to the start of the IRMs, plans and specifications will be developed and submitted to the NYSDEC and NYSDOH for review and approval. These contract documents will constitute a public works project for the site. At the completion of construction, an IRM certification report will be prepared and submitted to NYSDEC.

The investigation and sampling of excavations associated with source removal will follow the guidelines provided in DER-10. Soil samples collected will be sent for laboratory analysis for the chemicals of concern dependent upon the source). It is assumed that a minimum of five (5) discrete soil samples will be collected from each source excavation to assess soil contamination in accordance with DER-10. Below grade piping will be sampled at the rate of one (1) sample for the first 15 linear feet of piping, and additional sampling as described in DER-10 Section 3.9(a)(5). Test pit sampling will be conducted at a rate of one (1) soil sample per test pit as described in DER-10.

The cleanup goals for the project are to meet NYSDEC mandated Soil Cleanup Objectives for Restricted-Residential Use, as defined in Section 375-6.4(b) of the 6 NYCRR Part 375 Regulations effective December 14, 2006.

4.8 Task 8 - Soil Vapor Survey (Contingency Item)

As previously stated, the subject property is situated in a fairly remote and isolated area of Ogdensburg and in very close proximity to the southern shoreline of the St. Lawrence River. The bordering parcels to the east, west, and south are either currently vacant and/or used for the storage of landscaping materials. In fact, the nearest residents are located along Main Street (aka NYS Route 68) approximately 375 feet from the eastern property boundary and at a considerably higher topographic elevation than the subject property. Given the above, it does not appear at this time that the performance of a soil vapor survey is necessary and/or warranted. Therefore, B&L proposes that the need for a soil vapor survey be determined at a later date in consultation with NYSDEC and NYSDOH staff following receipt of the soil and groundwater quality analytical laboratory test results.

4.9 Task 9 - Ecological Assessment

A limited wetland, floodplain and sensitive environment survey will be performed within areas immediately adjacent to the site to identify the presence and boundary of State and Federally regulated features. Based on the existing information from previous investigations, it appears that a Fish and Wildlife Impact Analysis (FWIA) is not warranted. However, should the data developed from this investigation document a completed pathway, then an FWIA would be performed at that time.

4.10 Task 10 - Public Health and Wildlife Risk Evaluation

Data generated from the analysis of sludge/sediment, soil, and groundwater samples will be evaluated, along with observations of environmental impacts, public/private water supply sources and routes of contaminant exposure, to determine the relative existing risk that the site poses to human health and wildlife.

It does not appear necessary at this time to perform a full-scale Baseline Human Health and Wildlife Risk Assessment, including the development of toxicological profiles and hazard indices for chemicals, which may be present at the site. However, in the event that significantly elevated contaminant concentrations are detected and adverse impacts to the local vegetative and/or wildlife communities are identified, it may be necessary to bring this level of assessment to the project.

4.11 Task 11 – Data Validation

Laboratory samples collected for closure verification will be sent for data validation as described in the QA/QC portion of this report. It is not the intent of this task to submit all Site-generated data for validation, but only those samples

which are located in areas at the edges of contaminant plumes, and used for site closure or remedial decisions.

4.12 Task 12 – Remedial Investigation/Alternatives Analysis Report

The Remedial Investigation/Alternatives Analysis Report (RI/AAR) will be prepared in accordance with the “Draft Brownfield Cleanup Program Guide”. The RI/AAR will assemble information relative to the presence and extent of surficial and subsurface contaminants, and will generally characterize the site environmental conditions. The report will be organized into sections providing background information on the project, specific data collection methodologies used during the site investigation, the findings of these activities and the relation of identified site contamination with observed hydrogeologic features, and the potential risks to human health and the environment. The report will also include various appendices to present boring logs, soil screening results, sample data, hydraulic conductivity test results, Data Usability Summary Report (DUSR), and laboratory data.

Based on the findings of the Remedial Investigation, a list of remaining areas/media of concern will be established indicating the types of hazards and environmental problems associated with each media of concern. Using this list, potential remedial responses will be evaluated for each area/media of concern. Each response will be evaluated according to the extent that it will effectively remediate the problem area and its technical feasibility, benefit, and cost. Following this evaluation, a list of potential remedial alternatives will be developed using combinations of the remedial responses referred to above to address each specific area/media of concern. The resulting list of Remedial Alternatives will be evaluated for overall construction feasibility, operational and maintenance requirements and cost. Finally, a preferred remedial alternative which appears to satisfy the cost-effective remediation goals for the site will be selected.

4.13 Task 13 - Project Administration and Schedule

This task includes a variety of miscellaneous tasks associated with the administration and day to day management of a BCP project. Included in this task are subcontractor coordination, assembly, and participation in public meetings.

B&L is the prime engineering contractor for the City of Ogdensburg Former Standard Shade Roller Site Brownfield Cleanup Project. B&L will report directly to the City of Ogdensburg for all services required on the project. With approval from the City, B&L will serve as direct liaison with the NYSDEC throughout the duration of the project.

The B&L Project Officer and Program Manager will be Scott D. Nostrand, P.E. Mr. Nostrand has the authority to commit resources and resolve potential project scheduling conflicts. Mr. Nostrand will have primary responsibility for oversight planning and implementation of the Brownfield Cleanup Program.

The Project Manager will be Stephen B. Le Fevre, P.G. The Project Manager will be in charge of all field activities related to the Remedial Investigation program and will be responsible for scheduling and implementing the field activities. Mr. Le Fevre will have primary contact with project subcontractors designated to perform drilling, surveying, and laboratory analysis as needed, and will serve as the primary contact for all project-related communications with the City and NYSDEC. He will also serve as the Quality Assurance Officer for this project, whose responsibilities include: performing periodic field audits during the investigation (particularly sampling activities), interfacing with the analytical laboratory to make requests, or resolve problems, in order to assure that the predetermined project objectives for data quality have been met, and evaluating the data packages and interface with the laboratory and the data validator.

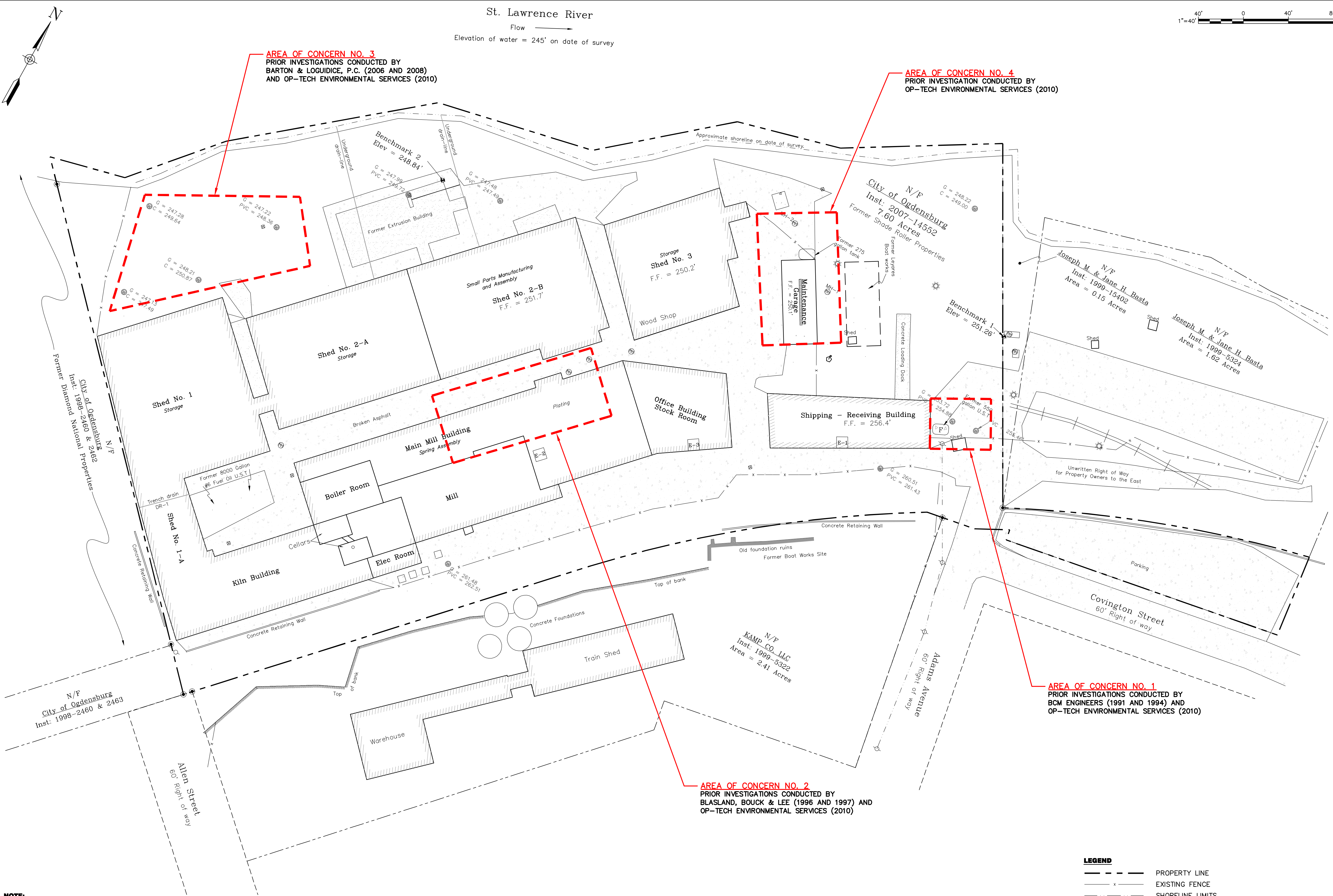
The project schedule for the former Standard Shade Roller Site BCP is presented in Figure 3. The estimated duration of the project is one (1) year and is based on preliminary assumptions concerning initiation and duration of field investigations, receipt of laboratory results, and NYSDEC review and comment periods.

Sheet 1

Areas of Concern Map

NOTE:

BASEMAP PROVIDED IN DIGITAL FORMAT BY JACOBS LAND SURVEYING
PREPARED FOR FORMER SHADE ROLLER SITE OFF COVINGTON STREET,
DATED AUGUST 10, 2010.



LEGEND

- PROPERTY LINE
- x- EXISTING FENCE
- - - SHORELINE LIMITS
- ⊕ EXISTING MONITORING WELLS
- ⊙ EXISTING MANHOLE

NO ALTERATION PERMITTED
HEREON EXCEPT AS PROVIDED
UNDER SECTION 7209
SUBDIVISION 2 OF THE NEW
YORK STATE EDUCATION LAW.

COMPLETED CONSTRUCTION

Significant Construction
Changes Are Shown

By _____ Date _____
Ck'd _____ Date _____

REVISIONS

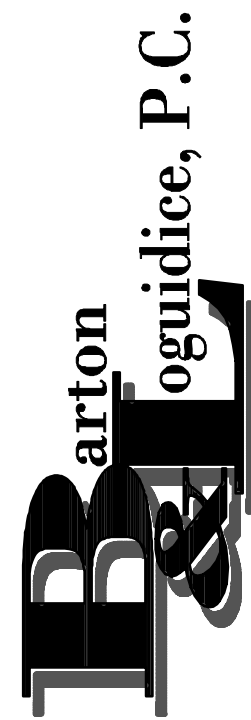
NO.	DESCRIPTION	DATE

CITY OF OGDENSBURG
FORMER STANDARD SHADE ROLLER

AREAS OF CONCERN

ST. LAWRENCE COUNTY, NEW YORK

CITY OF OGDENSBURG



Date
APRIL, 2012

Scale
1" = 40'

Sheet Number

1

File Number

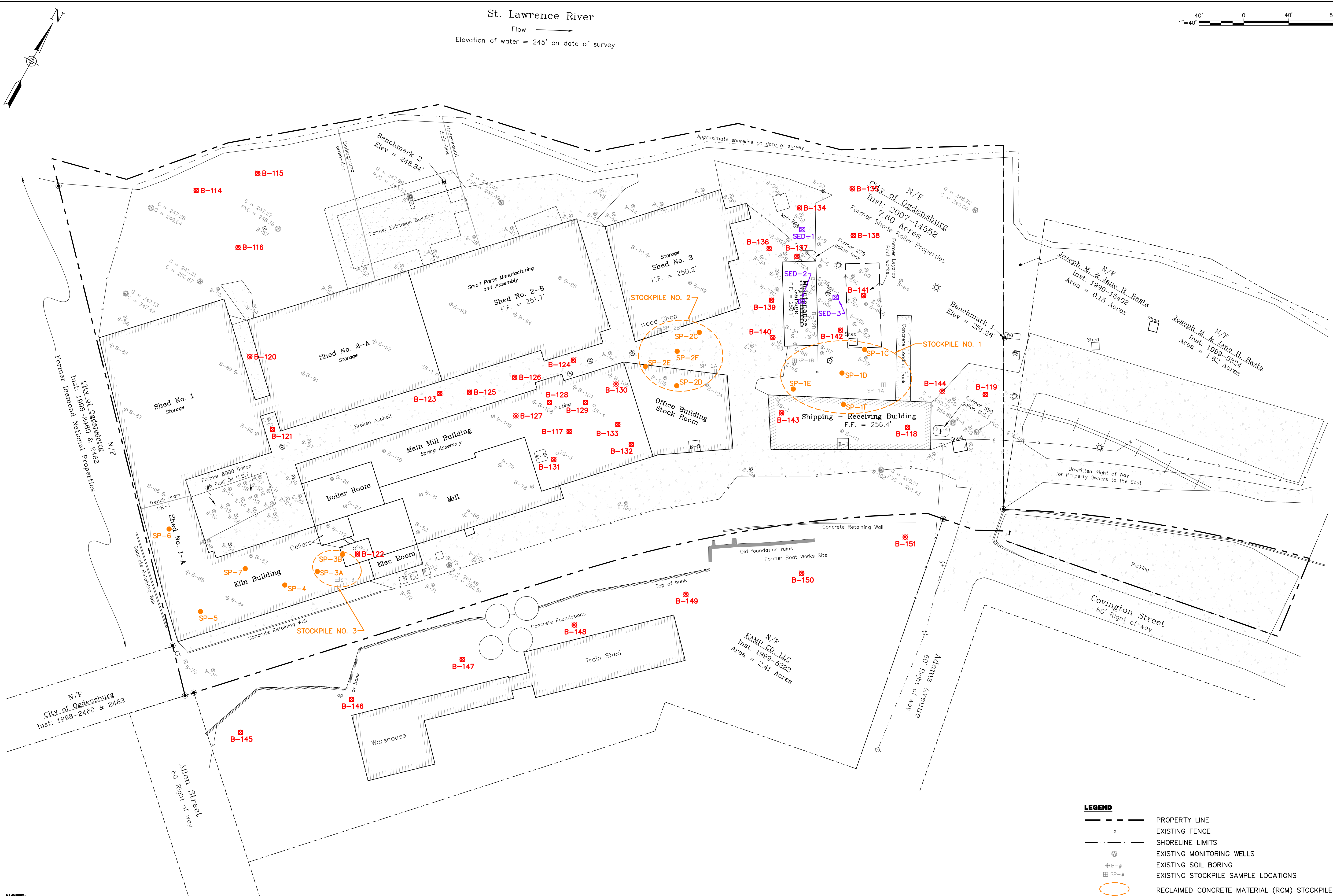
692.005.005

Sheet 2

Sample Location Plan

NOTE:

BASEMAP PROVIDED IN DIGITAL FORMAT BY JACOBS LAND SURVEYING
PREPARED FOR FORMER SHADE ROLLER SITE OFF COVINGTON STREET,
DATED AUGUST 10, 2010.



LEGEND

- PROPERTY LINE
- EXISTING FENCE
- SHORELINE LIMITS
- EXISTING MONITORING WELLS
- EXISTING SOIL BORING
- EXISTING STOCKPILE SAMPLE LOCATIONS
- RECLAIMED CONCRETE MATERIAL (RCM) STOCKPILE
- PROPOSED SOIL BORING
- PROPOSED SEDIMENT SAMPLE
- PROPOSED STOCKPILE SAMPLE LOCATIONS

NO ALTERATION PERMITTED
HEREON EXCEPT AS PROVIDED
UNDER SECTION 7209
SUBDIVISION 2 OF THE NEW
YORK STATE EDUCATION LAW.

COMPLETED CONSTRUCTION

Significant Construction
Changes Are Shown

By _____ Date _____
Ck'd _____ Date _____

REVISIONS

CITY OF OGDENSBURG
FORMER STANDARD SHADE ROLLER

SAMPLE LOCATION PLAN

CITY OF OGDENSBURG
ST. LAWRENCE COUNTY, NEW YORK

Barton
Loguidice, P.C.

Date
SEPTEMBER, 2012

Scale
1" = 40'

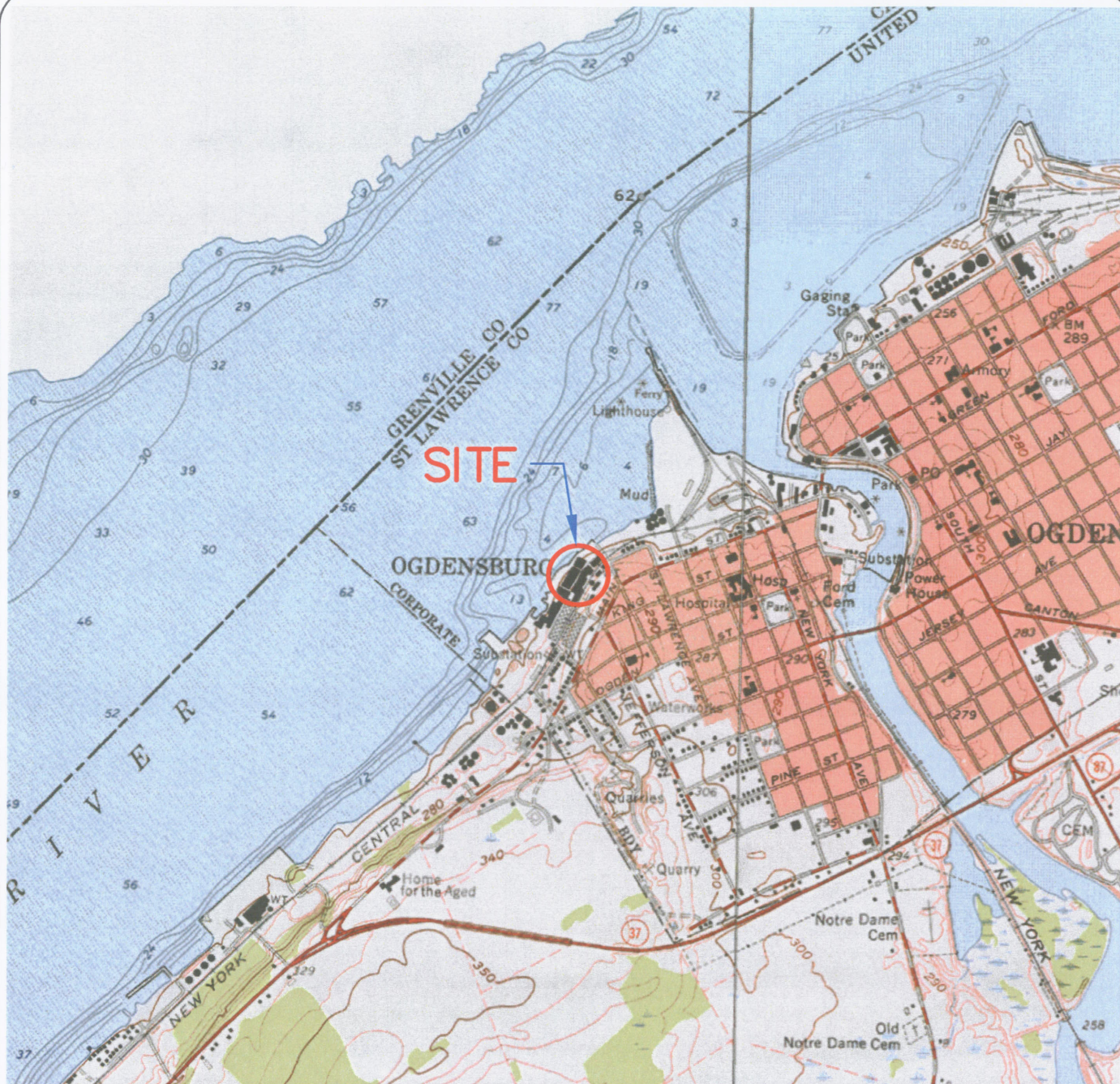
Sheet Number
2

File Number
692.005.005

Figure 1
Project Location Map

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PLOT
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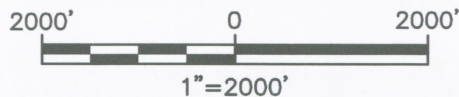
1/1/08-ALB-JHSr, 2/5/08-JHSr
S:\PROJECTS\600\692_003\6 CADD\ACAD\692003_F01a.DWG



SOURCE: OGDENSBURG EAST AND WEST, NEW YORK U.S.G.S. QUADRANGLE MAP, DATE 1983.



QUADRANGLE LOCATION



**Barton
& Loguidice, P.C.**

Engineers • Environmental Scientists • Planners • Landscape Architects

FORMER
STANDARD SHADE ROLLER SITE
BROWNFIELD PROJECT
SITE LOCATION MAP

CITY OF OGDENSBURG

ST. LAWRENCE COUNTY, N.Y.

Figure

1

Project No.

692.003

Figure 2
Historical Site Plan

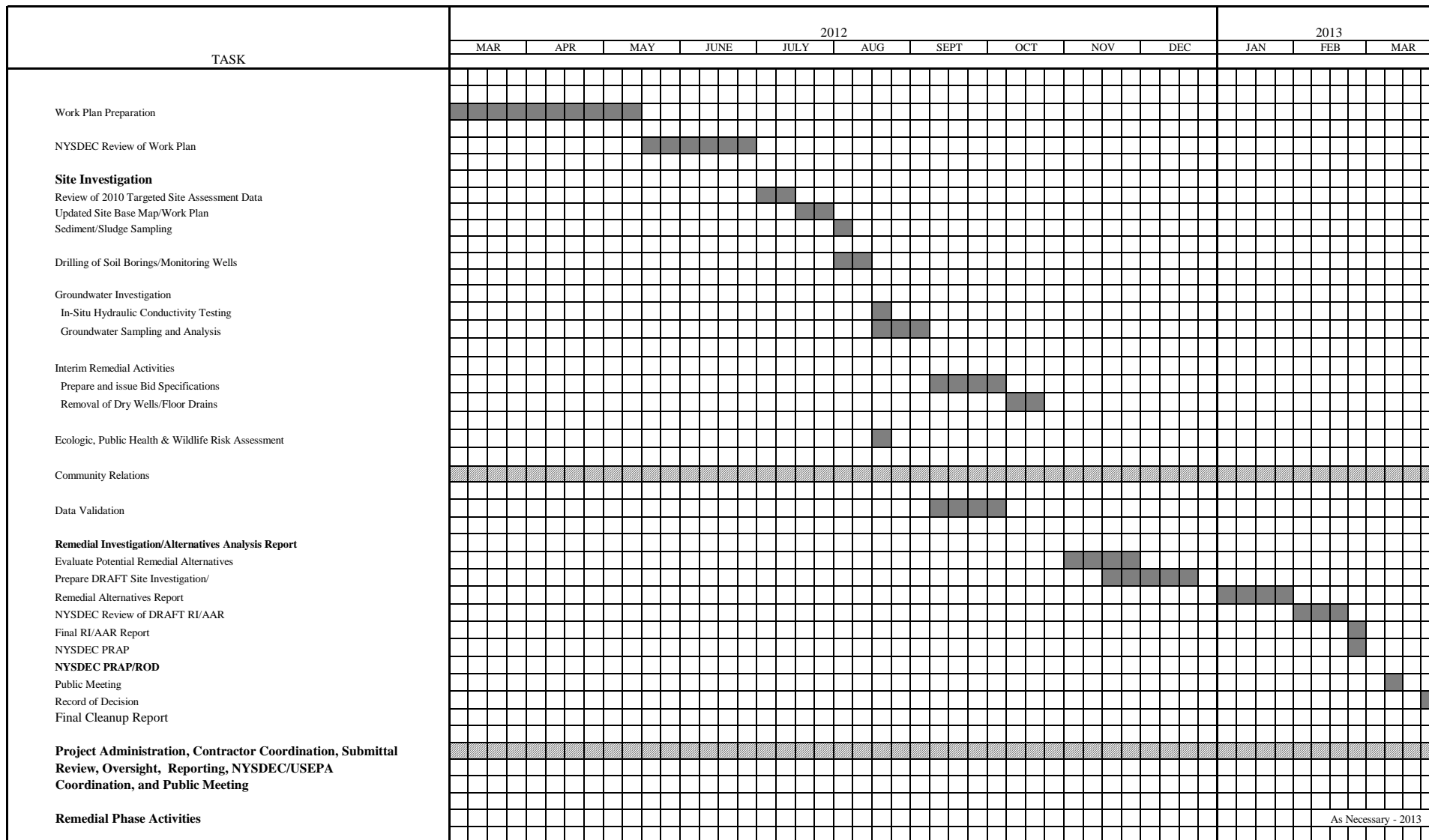
2008 AERIAL PHOTOGRAPH



Figure 3

Project Schedule

FIGURE 3
PROJECT SCHEDULE
Brownfield Cleanup Program
Former Standard Shade Roller Site
April 2012



Appendix A

Sampling and Analysis Plan

**Former Standard Shade Roller Site
Brownfield Cleanup Project
NYSDEC Site No. E645049**

**City of Ogdensburg
St. Lawrence County, New York**

**Appendix A
Sampling and Monitoring Plan**

March 2012

Former Standard Shade Roller Site
Brownfield Cleanup Project
NYSDEC Site No. E645049

City of Ogdensburg
St. Lawrence County, New York

Appendix A
Sampling and Analysis Plan

March 2012

Prepared for:

City of Ogdensburg
Department of Planning and Development
Ogdensburg City Hall
330 Ford Street – Room 11
Ogdensburg, New York 13669

Prepared By:

Barton & Loguidice, P.C.
Engineers, Environmental Scientists, Planners, Landscape Architects
290 Elwood Davis Road
Box 3107
Syracuse, New York 13220

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1.0 Introduction

This document presents the Sampling and Analysis Plan (SAP) for the Brownfield Cleanup Program (BCP) Remedial Investigation to be conducted at the Former Standard Shade Roller site, which is located at 541 Covington Street in the City of Ogdensburg, St. Lawrence County, New York. The subject property is currently owned by the City of Ogdensburg, as recorded in the St. Lawrence County Clerk's Office as Instrument I.D. No. 2007-14552; Tax Parcel Map I.D. No. 48.077-1-2.

The subject property has supported a variety of industrial uses since the turn of the century. Previous site uses included boat manufacturing, match manufacturing, brewing, shade roller manufacturing, and milling. During its final period of active operation (which ended in 1997), the subject property was occupied by the Joanna Window Décor Division of the Crown Home Furnishings Company. Joanna Window Décor manufactured window shade hardware, and part of this process included the plating of metals. The zinc-cyanide electroplating process, which occurred in the main building of the facility, was initiated in 1945 and continued until 1987. From 1987 through 1992, the electroplating process was cyanide-free, and then in 1992 the electroplating process was terminated at the facility.

The SAP defines the procedures to be followed during the field investigation activities. The SAP contains five sections including this Introduction (section 1). Section 2 outlines the sampling objectives of the Site Investigation; section 3 provides a description of the field investigation and sampling program, including sample designation, sample handling, and analytical requirements; section 4 details the field investigation procedures; and section 5 outlines the field sampling and sample quality assurance/quality control (QA/QC) mechanisms.

2.0 Sampling Objectives

2.1 Chemical Characterization

Based on our knowledge of historical uses of the site, potential chemicals of concern include volatile organic compounds (VOCs) and chlorinated solvents, semi-volatile organic compounds (SVOCs), polychlorinated biphenols (PCBs), and Target Analyte List (TAL) metals (including Cyanide). The subsurface investigation includes the collection of sediment and surface soil samples, installation of soil borings, soil gas survey probes, and overburden monitoring wells to determine the nature and extent of contamination (if present). Surface and subsurface soil, sludge/sediment, soil gas, and groundwater media will be sampled and analyzed as part of the site investigation.

2.2 Data Quality Objectives

Data quality objectives (DQOs) are based on the concept that different data uses may require different levels of data quality. Data quality can be defined as the degree of uncertainty in the data with respect to precision, accuracy and completeness. The five levels of data quality are:

- Field Screening – This provides the lowest level of data quality but has the most rapid turnaround on results. It is often used for monitoring of health and safety conditions, preliminary comparison to Applicable or Relevant and Appropriate Requirements (ARARs), initial site characterization and location of areas designated for higher levels of sampling and analyses, and for screening of bench-scale remediation tests. These data are typically generated on-site using real-time measuring devices and include total organic vapor concentrations from PID readings, Draeger tube measurements, pH,

specific conductance, dissolved oxygen, airborne particulates and any other data obtained using direct-reading instruments.

- Field Analyses – This level provides rapid results in the field and is generally of better quality than Field Screening data. Analyses include mobile lab-generated data and computer-generated modeling of site data (i.e., geophysical data, hydraulic conductivity data).
- Laboratory Screening (Non ASP/CLP) – These methods provide an intermediate level of data quality and are used for site characterization. Engineering analyses may include higher levels of mobile lab-generated data or laboratory-generated data using rapid turnaround methods. These types of methods provide useful site characterization data, but are generally considered for screening purposes since the results are generated without the benefit of full quality control documentation.
- Laboratory Confirmational (ASP/CLP) – This provides the highest level of data quality and is appropriate for use in risk assessments, engineering design, and cost evaluations. This level requires the analytical laboratory to be NYSDOH ELAP-certified for ASP/CLP categories and to provide internal quality control documentation derived from such reporting protocols. Some projects requiring the full ASP/CLP laboratory reporting will also be subject to independent third-party data validation or internal Data Usability Summary Reporting (DUSR) at the discretion of the Project Manager.

For this project, Field Screening and Field Analysis data will be generated in the field by B&L personnel (both periodically and on an as-needed basis) to document health and safety monitoring, field characterization of sampling media,

demonstration of the adequacy of monitoring well development efforts, and to provide the rationale for construction of groundwater monitoring wells and termination of contaminated soil excavation activities. All samples collected by B&L will be analyzed by a NYSDOH ELAP laboratory certified for the ASP/CLP categories in order to generate Laboratory Confirmational data.

Only laboratory sample data to be used for closure or IRM decisions, at the discretion of the B&L Project Manager and NYSDEC Project Representative, will be subject to independent third-party data validation. Examples of data requiring validation include:

- Tank Closure Samples
- Petroleum-Contaminated Soil Plume Clearance Samples
- Petroleum-Contaminated Groundwater Plume Clearance Samples

3.0 Field Investigation

3.1 Field Investigation and Sampling Program

The objective of this task is to conduct a supplemental subsurface soil and groundwater investigation in select areas of the site for the purpose of addressing previously identified data gaps, and to identify and eliminate, to the greatest extent possible, contaminant source areas with the use of interim remedial measures (IRMs). The supplemental field investigation is designed to provide data of adequate technical content to support the development and evaluation of remedial alternatives as part of the Site Investigation/Remedial Alternatives Report (SI/RAR). The objectives of the field investigation are to:

- Further characterize the nature and extent of residual surface and subsurface soil contamination;
- Characterize groundwater flow conditions and further delineate the nature and extent of groundwater contamination;
- Evaluate the presence and extent of soil gas contamination if warranted;
- Collect data to evaluate the potential risks that the site may pose to human health and the environment; and
- Collect data to adequately evaluate potential remedial alternatives.

The field investigation at the site will include the following:

1. Site survey and preparation of site map;
2. Community relations;
3. IRMs;
4. Supplemental subsurface investigation;

5. Groundwater investigation;
6. Soil vapor survey (if warranted);
7. Ecological assessment;
8. Public health and wildlife risk evaluation; and
9. Data validation.

The objectives and methodologies of these field activities are described in greater detail in the Remedial Investigation Work Plan and within subsequent sections of this appendix.

3.2 Sample Designation

Sampling media will be identified by a letter code as follows: SED (sediment), SW (surface water), SS (surface soil), SB (soil boring), MW (monitoring well), and SV (soil vapor). A two-digit number, beginning with 01 and increasing sequentially, will also identify each sample location. In addition, the depth at which a subsurface soil sample is collected at a specific soil boring location will also be indicated on the sample designation. For example, a subsurface soil sample collected at a depth of 4 to 6 feet from soil boring SB-01 will be designated as “SB-01 at 4 to 6 ft”.

3.3 Sample Handling

3.3.1 *Sample Container Requirements and Holding Times*

Specific sample containers are required for each of the media types to be sampled, as well as the proposed analyses to be performed. Samples should be received by the laboratory within 48 hours of sample collection. In addition, there are specific holding time requirements for the type of analyses requested for each sample. These requirements are described below and are summarized on Table 1:

Sediment and Soils

EPA Method 8260 (full list) & MTBE [VOCs] analysis requires samples to be collected in a 4 oz. glass container with a Teflon[®]-lined cap. The container must be completely filled with material to create a "zero head space" condition. Alternatively, samples can be collected in three (3) En Core[™] vials (or similar tube or plunger type sampler) and one (1) unpreserved 60 ml jar per sample location. The holding time for the En Core[™] or similar type samples is 48 hours from time of collection to preservation. These samples require storage at <4°C.

EPA Method 8270 [SVOCs] analysis requires samples to be collected in an 8 oz. glass container with a Teflon[®]-lined cap. The holding time is limited to 5 days from Validated Time of Sample Receipt (VTSR) for extraction and 40 days for analysis. These samples require storage at <4°C.

EPA Method 6010B [Target Analyte List Metals] analysis requires samples to be collected in an 8 oz. glass container with a Teflon[®]-lined cap. The holding time is limited to 5 days from VTSR for extraction and 40 days for analysis. These samples do not require preservatives. These samples require storage at <4°C.

EPA Method 7471A [Mercury] analysis requires samples to be collected in a 4 oz. glass container with a Teflon[®]-lined cap. The holding time is limited to 5 days from VTSR for extraction and 28 days for analysis. These samples do not require preservatives. These samples require storage at <4°C.

EPA Method 9010B [Cyanide] analysis requires samples to be collected in a 4 oz. glass container with a Teflon[®]-lined cap. The holding time is limited to 5 days from VTSR for extraction and 14 days for analysis. These samples do not require preservatives. These samples require storage at <4°C.

EPA Method 8082 [PCBs] analysis requires samples to be collected in an 8 oz. glass container with a Teflon[®]-lined cap. The holding time is limited to 14 days from VTSR for extraction and 40 days for analysis. These samples require storage at <4°C.

Groundwater/Aqueous

EPA Method 8260 (full list) & MTBE [VOCs] analysis requires samples to be collected in two 40-ml., glass vials with a Teflon[®]-lined septum cap. The container must be completely filled with the sample to create a "zero head space" condition. The holding time is limited to 10 days from VTSR for analysis. These samples require hydrochloric acid (HCL) as a preservative and storage at <4°C.

EPA Method 8270 [SVOCs] analysis requires samples to be collected in a 1-liter amber glass container with a Teflon[®]-lined cap. The holding time is limited to 5 days from VTSR for extraction and 40 days for analysis. These samples require storage at <4°C.

EPA Method 6010B [Target Analyte List Metals] analysis requires samples to be collected in a 500-ml. plastic container. The holding time is limited to 6-months from VTSR. These samples require nitric acid (HNO₃) as a preservative and storage at <4°C.

EPA Method 9010B [Cyanide] analysis requires samples to be collected in a 250-ml. plastic container. The holding time is limited to 14 days from VTSR. These samples require sodium hydroxide (NaOH) as a preservative and storage at <4°C.

EPA Method 8082 [PCBs] analysis requires samples to be collected in a 1-liter amber glass container with a Teflon[®]-lined cap. The holding time is limited to 7 days from VTSR for extraction and 40 days for analysis. These samples require storage at <4°C.

Soil Vapor

EPA Method TO-15 analysis requires air samples to be collected in stainless steel SUMMA canisters with a minimum 400-cubic centimeter capacity. An EPA Method TO-15 detection limit of 1 ppb (parts per billion) (volume of air) will be required for the laboratory analysis. The holding time is limited to 14 days and there are no preservation requirements for this analysis.

3.3.2 Sample Packaging and Shipping

Samples will be packaged and shipped in accordance with the procedures outlined in section 5.1 of this appendix. Samples will be delivered to the laboratory within 24 hours of sample collection.

Table 1 - Sample Collection Container Summary Chart

Matrix	Bottle	Preservative	Analytical Method ¹	Holding Time ²	Extraction/Preparation Method
Soil & Sediments ³	Three (3) En Core™ or similar tube or plunger type samplers and one (1) un-preserved 60 ml jar.	< 4°C	8260 & MTBE	48 hours for extraction	5021/5032/5035
	4 oz. Glass w/Teflon®-lined cap	< 4°C	8270	14 days for extraction 40 days for analysis	3540/3541/3550C cleanup (3600C)
	8 oz. Glass w/Teflon®-lined cap	< 4°C	6010B	6 months	
	4 oz. Glass w/Teflon®-lined cap	< 4°C	7471A	28 days	
	4 oz. Glass w/Teflon®-lined cap	< 4°C	9010B	14 days	
	4 oz. Glass w/Teflon®-lined cap	< 4°C	8082	14 days for extraction 40 days for analysis	3540/3541/3545/3546/3562 cleanup (3665)
Groundwater/Aqueous ³	2-40 ml. Glass Vials with Teflon®-lined septum	< 4°C, HCl	8260 & MTBE	10 days	5030/5032
	1-liter amber glass with Teflon®-lined cap	< 4°C	8270	7 days for extraction 40 days for analysis	3510/3520 cleanup (3660C)
	500-ml. plastic	< 4°C, HNO ₃	6010B	6 months, Hg 28 days	
	250-ml. plastic	< 4°C, NaOH	9010B	14 days	
	1-liter amber glass with Teflon®-lined cap	< 4°C	8082	7 days for extraction 40 days for analysis	3510/3520/3535 cleanup (3665)
Soil Vapor	Summa Canister (400-cc minimum)	None	TO-15	14 days	

1 - USEPA SW-846 Methods

2 - All holding times from Validated Time of Sample Receipt (VTSR)

3 - Non-aqueous and aqueous samples requiring off-site disposal will also be subject to TCLP analysis

3.3.3 Quality Assurance/Quality Control Samples

The proposed analytical program includes the collection and analysis of quality assurance/quality control (QA/QC) samples. Blind duplicate soil and groundwater samples will be collected at a frequency of one for every twenty samples from each matrix to demonstrate the reproducibility of sampling techniques and laboratory analysis. Field blanks will also be taken during the sampling of surface water, sediments and soils when dedicated sampling equipment is not used. A field blank will be prepared on-site each day that surface water, sediment, and soil samples are collected with non-dedicated or non-disposable sampling equipment. Field blanks will not be required for groundwater since single-use, disposable bailers will be used to collect these samples. A trip blank will accompany each daily sample group of aqueous samples delivered to the laboratory. The trip blank will consist of a pair of laboratory-prepared vials for VOCs (i.e., EPA 8260 and MTBE) analysis only.

Matrix spike/matrix spike duplicate (MS/MSD) samples will be collected at a frequency of one for every twenty samples for each sample matrix during the site investigation. The purpose of these samples is to evaluate the effect of the sample matrix on the analytical results.

4.0 Field Investigation Procedures

4.1 Preparation for Field Entry

Prior to the initiation of field activities, the following tasks will be performed:

- Kick-off meeting with involved personnel to review the scope of work to be performed and the Sampling and Analysis Plan;
- Review of the Health and Safety Plan by all on-site personnel;
- Operational checkout and pre-calibration of the equipment to be taken into the field;
- Location, flagging, and labeling of the proposed soil probes and sampling locations;
- Review overhead utilities for drill rig operational clearance and identify and obtain clearance for underground utilities associated with local utility companies and the site;
- Arrange access for drill rig at proposed drilling locations;
- Designate a decontamination area at each site and identify water and power sources; and
- Mobilization of equipment and personnel to site.

4.2 Decontamination Procedures

4.2.1 *Decontamination of Sampling Equipment*

All reusable sampling equipment (scoops, beakers, trowels, etc.) will be decontaminated prior to field entry and following each use. The decontamination procedures are outlined below:

1. Detergent/tap water wash;
2. Tap water rinse;
3. 10% nitric acid (ultra pure) rinse (if sampling for metals);
4. Deionized/distilled water rinse;
5. Acetone or methanol/hexane rinse (pesticide grade or better)
6. Dionized/distilled water rinse;
7. Air dry

Following this decontamination procedure, equipment will be wrapped in aluminum foil for future on-site use. Whenever possible, pre-cleaned equipment will be used; however, if the need arises, equipment will be cleaned in the field according to the general procedures described above.

4.2.2 *Decontamination of Drilling Equipment and Reusable Tools*

All drilling and excavation equipment and reusable tools will be properly decontaminated prior to site use. The purpose of this activity is to ensure that the equipment utilized at the site is contaminant-free; as such, the potential introduction of contaminants into a test boring or monitoring well, or cross-contamination between borings or wells, will be minimized.

A decontamination area will be constructed onsite to facilitate steam-cleaning of the drilling rig and equipment and miscellaneous decontamination procedures (e.g., prior to sampling, during collection of field blank samples). The decontamination area must be constructed on a gently sloping surface to aid in the collection of wash water used in the decontamination process. Polyethylene sheeting will be placed on the ground (overlapped, if necessary, in the downslope direction to avoid loss of water between sheets) and bermed on three sides with timbers. The polyethylene will be draped over the timbers to provide lateral containment of the wash water. The height of the berms will be sufficient to contain twice the volume of water to be generated during decontamination events. The depth of water in the containment area will be monitored to ensure that the level remains below the midway mark of the downslope berm. The decontamination water will be placed in storage drums for subsequent disposal before the close of each workday.

A staging area will be designated onsite for the storage of well construction materials and clean drilling equipment and tools. Materials and decontaminated equipment will be placed on clean surfaces or stored on pallets, sawhorses, or plastic sheeting in the staging area.

Equipment Condition

1. Drilling and excavation equipment entering the site will be inspected for hydraulic fluid and oil leaks and for general cleanliness. Leaking hoses, tanks, hydraulic lines, etc., must be replaced or repaired prior to entering the site.
2. Well casing, screens, and other construction materials must be new. Used materials will not be permitted for use during well construction.

3. Observations regarding the condition of equipment and materials entering or leaving the site will be recorded daily in a field book by the Site Manager or Supervising Engineer/Geologist.

Equipment Cleaning and Handling

Initial Cleaning

1. Following initial inspection, the drilling equipment and associated tools will be steam-cleaned at the decontamination area. Typical tools and equipment to be cleaned include:
 - Drilling rods, bits
 - Augers (including clips, pins and associated hardware)
 - Samplers (i.e., split-spoon, Denison, etc.)
 - Casing materials
 - Wrenches, hammers and miscellaneous hand tools
 - Mud tub/pan
 - Hoses, tanks
 - Cable clamps and other holding devices in direct contact with the drilling rods
 - Drill rig and undercarriage, wheel wells, chassis, and other items that may come in contact with the work area
2. During the cleaning operation, equipment will be handled only with clean gloves. A new set of gloves will be utilized between successive cleanings for each location.
3. Cleaned materials will be protected from contamination during transport to the staging area by such means as the Supervising Engineer/Geologist or Site Manager deems necessary.
4. The Site Manager will document equipment decontamination.

On-Site Cleaning Between Borings

1. Following each boring or well installation, the drilling equipment (listed above under "initial cleaning") will be steam-cleaned before moving to the next location.

4.3 Drilling Program

4.3.1 *Geoprobe® Borings*

Should the use of direct-push drilling methods (Geoprobe® or similar) be selected, the following drilling procedures will be utilized to complete Geoprobe® borings:

1. The boreholes will be advanced using direct-push methods until the required depth is encountered.
2. Boring will proceed in a manner to permit continuous sampling through the overburden materials until the required depth has been achieved.
3. Pertinent boring and sampling information will be recorded in a bound field log book by the B&L Supervising Engineer/Geologist.

4.3.2 *Rotary Drill Borings*

The following drilling procedures will be utilized to complete the rotary drill borings:

1. The borings will be advanced using rotary drill methods until the required depth is encountered.

2. Drilling will proceed in a manner to permit continuous sampling with split spoons through the overburden materials until the required depth has been achieved.
3. Pertinent drilling and sampling information will be recorded in a bound field log book by the B&L Supervising Engineer/Geologist.

4.3.3 Soil Sampling and Screening

The following procedures will be performed during the drilling program to collect, characterize, and screen soil samples:

1. At each exploratory boring location, soil samples will be collected at continuous intervals through the overburden materials, and each boring will be advanced until the full vertical extent of subsurface contamination has been encountered or until refusal. Before each sample is taken, the B&L Supervising Engineer/Geologist will confirm the sample depth.
2. Soils will be classified in accordance with the Modified Burmister Classification System. Field classification will include color, grain-size, lithology, relative density, moisture content, soil texture and structure, relative permeability, and common term of geologic unit.
3. PID readings will be recorded from each split-spoon as the samples are opened. The PID instrument measures airborne vapors that are detectable by photoionization. The PID will be equipped with a 10.6 electron volt (eV) ionization source, which will ionize organic compounds having an

ionization potential below 10.6 eV. The ionized compounds are brought to an excited state from which their relative concentration in ppm (parts per million) can be read. The types of organic compounds most likely to be encountered at the site have ionization potentials below that of the 10.6 eV ionization source. The PID instrument is not designed to identify individual compounds, but is meant to quantify the concentration of total ionizable compounds present in an airborne state. The PID will be calibrated each day in order to maintain a degree of accuracy and to record the daily drifting of the instrument between calibrations. Daily calibration records will be maintained by the Supervising Engineer/Geologist in accordance with the procedures described in section 5.3.

4. If PID vapor concentrations are observed to be greater than 10 ppm, samples will be collected and may be submitted for laboratory analysis at the discretion of the B&L Project Manager and NYSDEC Project Representative, based on other site findings.
5. Samples for volatile organic compound analysis will be transferred directly, and as soon as possible, into appropriately sized soil sample containers. The following procedure for the homogenization of soil samples that will be submitted for the analysis of SVOCs, Dioxins/Furans, and metals:
 - Remove rocks, twigs, leaves and other debris from sampling device (if they are not considered part of the samples);

- Place sample in a stainless steel bowl and thoroughly mix using a stainless steel spoon;
 - Scrape the sample from the sides, corners and bottom of bowl, roll to the middle of bowl and mix;
 - The sample should then be quartered and each quarter mixed separately; then rolled to the center of the bowl and then the entire sample mixed again.
6. Record keeping and chain-of-custody procedures will be followed as detailed in section 5.1 of this appendix.
 7. Soil samples not set aside for laboratory analysis will be placed in eight-ounce, wide-mouth, moisture-tight glass jars. The opening of the jar will be sealed with a foil liner and then a screw-on cap.
 8. Sample jars will be labeled with the following information: project name, project number, location identification, sample depth interval, blow counts, and date. This information will also be recorded in the bound field log book.
 9. The organic vapor levels in the headspace above the soil sample in each jar will be screened using a PID (samples placed in jars should allow for a minimum 1-inch headspace for screening) once the samples have had an opportunity to release vapors from contaminants present in the soil matrix. Specifically, the samples will be allowed to equilibrate for a period of one hour at the temperature that exists inside the field vehicle. The jar's cap will be gently removed, and the tip of the PID will be inserted through the foil liner, taking care not to drive the tip into the soil. The B&L Supervising Engineer/Geologist will record peak and equilibrated PID

readings in the bound field log book. Upon completion of the PID screening, the soil will be emptied from the jars and properly disposed of.

10. Soil samplers will be decontaminated between sample intervals using the procedures outlined below:

- Detergent wash with Alconox
- Deionized water rinse
- Air dry
- Final deionized water rinse
- Air dry

4.3.4 Installation of Monitoring Wells

It is not anticipated that bedrock monitoring wells will be required at the site. Overburden monitoring well installation procedures are outlined below:

1. A minimum 8-inch diameter borehole will be advanced using 4-inch (inside diameter) hollow-stem augers with split-spoon sampling.
2. A 6-inch thick layer of uniformly graded, clean, inert sand pack will be placed at the bottom of the borehole for seating of the well. The gravity or free fall method will be utilized for placement of the bottom sand layer in monitoring wells less than 20 feet deep, while the tremie pipe installation method will be used on wells greater than 20 feet in depth.
3. Following placement of the 6-inch thick sand layer at the bottom of the borehole, the well screen and riser section will be installed. The monitoring well will be constructed of 2-

inch diameter Schedule 40 PVC riser with maximum 20 foot length of continuous slot PVC well screen.

4. The well screens will be placed in accordance with Section 5.5 of the Work Plan.
5. A clean, coarse sand pack will be placed in the annular space between the well screen and the borehole to a minimum height of 1 foot above the top of the screen section.
6. A 6-inch thick layer of fine sand filter will be placed above the coarse sand pack. The fine sand filter layer will exhibit 100 percent by weight passing the No. 30 sieve, and less than 2 percent by weight passing the N. 200 sieve.
7. A 3-foot minimum bentonite seal will be placed above the fine sand filter.
8. An additional 6-inch layer of fine sand filter will be placed above the bentonite seal. The fine sand filter layer will exhibit 100 percent by weight passing the No. 30 sieve, and less than 2 percent by weight passing the N. 200 sieve.
9. The remaining annular space will be filled to within 2 to 3 feet of ground surface with cement-bentonite grout using the tremie installation method and will be allowed to set for a minimum of 12 hours.
10. A concrete surface seal, no less than 18 inches in diameter and approximately 2 to 3 feet below ground surface, will be constructed around the PVC riser. The surface seal will be mounded around the outside of the protective steel casing (see No. 11 below) to help prevent surface runoff from ponding and entering around the casing.

11. A 6-inch diameter locking steel protective casing will be installed over the stick-up portion of the PVC well riser and set into the concrete surface seal. Flush-mounted manholes will be used for wells installed within parking lots or other traffic areas.
12. The steel protective casing (or well manholes) will be clearly and permanently marked with the well identification number.
13. Protective pipe bollards shall be installed adjacent to any stick-up well located in an area that supports vehicular traffic, with the exception of high traffic areas such as streets, parking lots, and service stations where an above-ground well completion may severely disrupt traffic patterns. These bollards shall consist of 3-inch diameter carbon steel pipe placed in a concrete base and installed to a depth below the frost line, or a depth of 2 feet below ground surface, whichever is deeper. The number and location of these bollards will be determined in the field on a case-by-case basis by the B&L Supervising Engineer/ Geologist.

4.3.5 Sand Pack, Bentonite Seal and Cement Grout

Sand Pack

1. The sand pack will consist of uniformly graded, clean, inert sand of suitable grain size to minimize the amount of fine materials from entering the well. The fine sand filter layer above the sand pack will exhibit 100 percent by weight passing the No. 30 sieve, and less than 2 percent by weight passing the No. 200 sieve.

2. Samples of the coarse sand pack and fine sand filter materials will be provided to B&L in 8 oz. wide-mouth glass jars. Samples will be retained for a period of one year.

Bentonite Seal

1. Pure Wyoming sodium bentonite pellets or chips will be used for the bentonite seal. The size of the pellets or chips will be less than one-half the width of the annular space. An alternative method could be the use of a granular bentonite slurry, which would be installed by pressure grouting with tremie rods.
2. After the seal is installed, there will be a minimum 30-minute waiting period to allow for proper hydration of the bentonite materials before placement of the grout.

Cement-Bentonite Grout

1. Cement will be Portland cement Type I, in conformance with ASTM C150.
2. Bentonite will be a powdered Wyoming sodium bentonite.
3. Proportions of the cement-bentonite grout mix will be approximately 94 pounds cement: 3-5 pounds bentonite: 7 gallons water.
4. The grout mix will be installed by pressure grouting through tremie rods.
5. The grouting will be complete when the grout mixture returns to the ground surface.

4.3.6 Boring Logs and Record Keeping

During the drilling of each borehole and installation of each monitoring well, an accurate log will be kept that includes the following information:

1. Date and time of construction, driller's and helper's name, and B&L Supervising Engineer/Geologist.
2. Drilling method used.
3. The reference point for all depth measurements (e.g., ground surface).
4. The depth to changes in the geologic formation(s).
5. The depth to the first water-bearing zone.
6. The thickness of each stratum.
7. The description of the material comprising each stratum, including:
 - Depth and sample number;
 - Grain-size, as defined by the Modified Burmister System;
 - Color;
 - Degree of weathering, cementation and density; and
 - Other physical characteristics.
8. The depth interval from which each formation sample was taken.
9. The depth at which borehole diameters (drill bit sizes) change, if applicable.

10. The depth to the static water level and changes in this level with borehole depth.
11. Total depth of completed boring (and well if not the same).
12. The depth and description of the well casing materials, screen and riser lengths, sand pack(s), bentonite seal, grout, and concrete surface seal.
13. The depth or location of any lost drilling materials or tools.
14. The amount of cement, bentonite, and sand (number of bags) used for the installation of the well seals and sand pack.
15. Screen materials and design.
16. Casing and screen joint type.
17. Screen slot size and length.
18. Type of protective well casing and cap.
19. PID readings.

Figure A-1 presents a sample boring log to be used during the drilling program.

A daily summary will be recorded in the bound field log book, giving a complete description of the formations encountered, number of feet drilled, number of hours on the job, standby or shutdown time, the water level in the boring/well at the beginning and end of each shift, water level at changes in formations, and other pertinent data.

4.4 Well Development

The purpose of well development is to remove fine materials from the area of the screen and prepare the monitoring well for future groundwater level measurement and sampling activities. This is achieved through various development methods until consistent water quality conditions are observed and recorded. These include stabilized (or nearly so) temperature, pH, specific conductance, and turbidity measurements. Well development will be performed using the following outlined field procedures.

4.4.1 *Well Development Procedures*

1. Inspect locking casing and surface concrete seal for integrity.
2. Open the well.
3. Measure the static water level from the top of the well casing and the total well depth; calculate the volume of water in the well from the formula:

$$V = \pi R^2 H$$

Where: V = volume (ft³)
 R = inside well radius (ft)
 H = length of water column (ft)
 $\pi = \sim 3.14$

4. Lower a pre-cleaned or disposable bailer connected to a new solid braid nylon rope to the bottom of the well.
5. Bail the well until there is no evident solid sediment on the well bottom.
6. If necessary, a surge block will be used to destroy bridging and cause agitation in the well screen interval. The surge

block will be used alternatively with the bailer and/or a well pumping system so that the material that has been agitated and loosened by the surging action is removed.

7. Continue bailing or install a well pumping system to complete well development. Pumps should be equipped with a backflow prevention valve.
8. If a pumping system is used, activate the pump; record the time and flow rate.
9. At 15-minute intervals during development, record temperature, pH, specific conductance and turbidity using calibrated instruments.
10. The pump will be periodically raised and lowered throughout the water column to ensure the screened interval is completely developed.
11. If low yield and slow recovery do not permit continuous pumping, the well will be periodically pumped or bailed.
12. Development will be considered complete when the following conditions have been achieved for three successive measurement intervals:
 - Temperature and specific conductance are within 10 percent of the previous readings.
 - pH is within 0.3 units.
 - Turbidity has reached 50 NTUs or lower. In the event that 50 NTUs cannot be achieved because of the nature of the formation, the NYSDEC will be notified and alternative criteria will be mutually agreed upon (e.g., purging to continue until NTU readings have stabilized to within ± 10 percent of previous readings).

13. When the preceding conditions have been met, remove the pump, measure the water level, and secure and lock the well.
14. Record pertinent information in the field log.

4.5 In-Situ Hydraulic Conductivity Testing

In-situ variable hydraulic conductivity testing will be performed within each completed monitoring well after sufficient development work has been accomplished. Also known as the slug or bail test, this method involves either the removal of a bail of water or the displacement of water within the well by the insertion of a slug. Upon creating an elevated or depressed head, the water level in the well is measured and recorded periodically over the recovery time.

The underlying assumption in the analysis of these tests is that the rate of inflow to the well, after inducing a hydraulic head difference, is a function of the hydraulic conductivity (k) and the unrecovered head distance. The analytical method, typically relying on graphical solution techniques (time vs. head or head ratio), rearranges the flow equation to solve for parameter k . For unconfined groundwater conditions, the Hvorslev and Bouwer-Rice methods will be used. Details of these methods are given in the publications by Hvorslev (1951), Cedergren (1977), and by Bouwer & Rice (1976) and Bouwer (1989), respectively. For confined groundwater conditions, if any are encountered, the Cooper-Bredehoeft-Papadopoulos method will be used (Cooper et al., 1967; Papadopoulos et al., 1973).

The following equation will be used to calculate the in-situ hydraulic conductivity of the saturated materials at the screened interval of the well (Cedergren, 1977).

$$K = \frac{r^2}{2L(t_2 - t_1)} \ln(L/R) \times \ln(h_1/h_2)$$

Where:

- r = screen radius
- R = gravel pack radius
- L = screen length
- t₁ = time interval corresponding to h₁
- t₂ = time interval corresponding to h₂
- h₁ = head ratio at time t₁
- h₂ = head ratio at time t₂
- K = hydraulic conductivity in cm/sec

It is important to observe whether the static water level, recorded prior to the start of the variable head test, occurs within the screened interval of the well. If so, the use of the slug test (falling head) is inappropriate due to drainage into the vadose zone above the water table. A bail test (rising head) is preferred in such circumstances.

Depending on the rate of recovery, the water levels are recorded during the test either with an electronic probe and/or tape equipped with a sounding "popper", or with an immersed pressure transducer connected to an automatic data logger. The latter is appropriate for rapid recovery conditions, since considerable data are recorded during the first few seconds and minutes of the test, with greater accuracy than is possible using the manual observation method.

4.6 Groundwater Sampling

4.6.1 *Monitoring Well Sampling Procedure*

The primary objectives of field personnel in the performance of groundwater sampling activities are as follows: collect and preserve representative samples, adhere to proper chain-of-custody procedures,

and arrange for the prompt shipment of the procured samples to the certified laboratory for analysis within the specified holding times.

Upgradient monitoring wells will be sampled before downgradient wells in the following manner:

1. Monitoring wells will be purged prior to sampling using disposable bailers or properly decontaminated pumping equipment. A minimum of three well volumes will be purged where possible. For wells that bail dry, purging will consist of complete evacuation. Specific conductance, pH, Eh, temperature, and turbidity will be monitored during purging to assess the stability of these water quality indicators. Stable conditions were previously defined in section 4.4.1 on Well Development.
2. Following adequate recovery (within 80 percent of static levels), obtain sample with a disposable bailer suspended on new, solid-braid nylon rope. Transfer sample directly from the bailer to the appropriately labeled, parameter-specific sample container (sample ID number and preservative), and place in coolers with ice or ice packs. Fill sample bottles in the following order: VOCs, SVOCs, PCBs, and TAL metals.
3. Calibrate field chemistry equipment every day. Maintain required documentation of calibration efforts in accordance with section 5.3.
4. Follow record keeping and chain-of-custody procedures as detailed in section 5.1.
5. Replace well caps and lock protective well cover.

6. At the end of the sampling day, the coolers will be taped shut with the sample custodian's initials placed on the tape at the points of entry. Samples may be delivered to the laboratory by field personnel, or picked up by the analytical laboratory courier. Alternatively, an express carrier may be used to deliver the samples to the laboratory in accordance with applicable State and/or Federal hazardous shipping requirements.

4.7 Surface Soil and Sediment Sampling

Surface soil samples will be collected from the site and from background locations (potentially off-site). A decontaminated stainless steel scoop will be used to extract the surface soil/sediment in the following manner:

1. Scoop sediments and surface soils from a depth of 0 to 2 inches of material within the pipe, drain, or from the soil surface, as outlined in DER-10.
2. Place the sample into the appropriately labeled, parameter-specific sample container (sample ID number and preservative) and store in coolers with ice or ice packs as soon as possible.
3. Follow record keeping and chain-of-custody procedures as detailed in section 5.1 of this appendix.
4. Thoroughly decontaminate sampling scoop between samples using the procedures outlined in section 4.2.1 of this appendix.
5. At the end of the sampling day, the coolers will be taped shut with the sample custodian's initials placed on the tape at the points of entry. Samples may be delivered to the laboratory by field personnel, or picked up by the analytical laboratory courier.

Alternatively, an express carrier may be used to deliver the samples to the laboratory in accordance with applicable State and/or Federal hazardous shipping requirements.

4.8 Water Level Monitoring

In order to determine horizontal hydraulic gradient(s) within the uppermost water-bearing zone and potential routes of contaminant migration, water level measurements will be taken at each newly installed well using the following procedures:

1. After noting the general conditions of the well (surface seal, lock, etc.) the bottom of the well will be sounded by lowering a decontaminated weighted probe into the well.
2. Well bottom conditions will be noted (silt, blockages, etc.). The distance from the base of the screen to the top of the casing will be recorded to the nearest 1/100th of a foot.
3. The static water level will be measured and noted by sounding with an electronic tape or "popper" to the nearest 1/100th of a foot.
4. The water level readings will always be taken from a marked point on the well casing.
5. Other measurements to be taken are:
 - Stickup of well casing from ground surface or surface seal
 - Depth to bottom of well from the top of the riser
6. The date and time will be recorded for these measurements. Also, pertinent weather conditions will be noted (i.e., significant recent precipitation or drought conditions).

7. Upon completion, the wells will be secured and downhole equipment will be decontaminated with Alconox and deionized water.
8. As practicable, water levels should be collected on the same day.

4.9 Soil Vapor Sampling

Outdoor soil vapor sampling installations will consist of temporary probes. A surface seal will be installed to prevent the infiltration of outdoor air into the sampling probe, and a tracer gas (helium, sulfur hexafluoride, or butane) will be used to ensure the integrity of the surface seal. Soil vapor samples will be collected in the following manner:

1. One to three implant volumes (i.e., the combined volume of the sample probe and tube) must be purged prior to collection of the sample;
2. Flow rates for purging and collection shall not exceed 0.2 liters per minute to minimize outdoor air infiltration during sampling;
3. Summa[®] sampling canisters will be used and must be certified clean by the laboratory,
4. The size of the sampling container must be sufficient to achieve the minimum reporting limits, and
5. A tracer gas will be used to verify that infiltration of outdoor air does not occur during sampling.

The following local conditions must be documented during sampling as they may influence the interpretation of the results:

1. Use of volatile chemicals in normal operations by nearby commercial or industrial facilities;
2. Direction and estimated distance of neighboring commercial or industrial facilities;
3. Location of outdoor air sampling or monitoring sites;
4. Weather condition information, including precipitation, temperature, wind speed, wind direction, and barometric pressure at the time of sampling, as well as temperature and precipitation within the past 24 to 48 hours, will be obtained, if possible, from a local weather station; and
5. Odors, readings from field instruments, and other pertinent information.

Sample log sheets shall contain the following information:

1. Sample identification.
2. Date and time of sample collection.
3. Sampling depth.
4. Identity of sampling personnel.
5. Sampling methods and devices.
6. Soil vapor purge volumes.
7. Volume of soil vapor extracted.
8. If canisters are used, vacuum of canisters before and after samples collected.
9. Apparent moisture content (dry, moist, saturated) of the sampling zone.

10. Chain-of-custody protocols.

4.10 Sub-Slab Soil Vapor Sampling

Indoor sub-slab soil vapor sampling installations will consist of permanent probes with brass or stainless steel tubing and fittings. A surface seal will be installed to prevent the infiltration of ambient air into the sampling probe, and a tracer gas (helium, sulfur hexafluoride, or butane) will be used to ensure the integrity of the surface seal. If the sampling is completed during colder months, if practicable, indoor heating systems should be in operation for at least 24 hours prior to, and during sampling, in order to maintain indoor air temperatures of 65 to 75 degrees Fahrenheit. Porous, inert backfill material such as washed No. 1 crushed stone should be added to cover about one inch of the probe tip. The implant must be sealed to the surface with non-VOC-containing cement. Soil vapor samples will be collected in the following manner:

1. One to three implant volumes (i.e., the combined volume of the sample probe and tube) must be purged prior to collection of the sample;
2. Flow rates for purging and collection shall not exceed 0.2 liters per minute to minimize outdoor air infiltration during sampling;
3. Summa[®] sampling canisters will be used and must be certified clean by the laboratory;
4. The size of the sampling container must be sufficient to achieve the minimum reporting limits;
5. A tracer gas will be used to verify that infiltration of ambient air does not occur during sampling.

The following conditions should be documented during sampling to aid in the interpretation of the results:

1. Historic and current storage and use of volatile chemicals within the building, both in industrial processes and in building maintenance;
2. Use of heating or air conditioning systems during sampling;
3. Floor plan sketch of building, showing the floor layout with sampling locations, chemical storage areas, garages, doorways, stairways, locations of basement sumps or subsurface drains, and utility perforations through the building foundations, HVAC system air supply and return registers, compass orientation, footings, and other pertinent information;
4. Outdoor plot sketch showing the building site, area streets, outdoor air sampling or monitoring locations, compass orientation, and paved areas;
5. Weather conditions (precipitation, indoor temperature, outdoor temperature) and ventilation conditions (e.g. heating system active, windows closed);
6. Pertinent observations such as spills, floor stains, odors, readings from field instruments.

Sample log sheets shall contain the following information:

1. Sample identification.
2. Date and time of sample collection.
3. Sampling depth.
4. Identity of sampling personnel.
5. Sampling methods and devices.

6. Soil vapor purge volumes.
7. Volume of soil vapor extracted.
8. If canisters used, vacuum of canisters before and after samples collected.
9. Apparent moisture content (dry, moist, saturated) of the sampling zone.
10. Chain-of-custody protocols.

5.0 Quality Assurance/Quality Control

5.1 Record Keeping and Chain-of-Custody Documentation

The B&L sampler's field records will contain sufficient information such that someone else can reconstruct the sampling situation without reliance on the sampler's memory. The field sampling data sheet is presented as figure A-2. Entries in the field records will include, at a minimum, the following:

- Site name and location
- Project number
- Names and affiliations of Project Manager and sampling personnel involved
- Sampling point name and description
- Type of sample container(s) used
- Preservative(s) used
- Well purging procedures and equipment
- Well-specific data, including water level, depth, and volume purged
- Sample collection procedure and equipment
- Date and time of collection
- Sample identification number(s)
- Laboratory's sample identification number(s)
- References such as maps or photographs of the sampling site, if available
- Field observations
- Pertinent weather factors such as temperature, wind direction, and precipitation
- Field measurements taken, including pH, Eh, temperature, turbidity, and dissolved oxygen

Chain-of-custody records for the samples will be maintained. A sample will be considered to be "in custody" of an individual if said sample is either in direct view of or otherwise directly controlled by that individual. Storage of samples during custody will be accomplished according to established preservation techniques, in appropriately sealed and numbered containers. Chain-of-custody will be accomplished when the samples are directly transferred from one individual to the next, with the first individual witnessing the signature of the recipient on the chain-of-custody record.

The chain-of-custody records will contain the following information:

- Respective sample numbers of the laboratory and B&L, if available
- Signature of the collector
- Date and time of collection
- Sample type (e.g., groundwater, sediment)
- Identification of well or sampling point
- Number of containers
- Parameter requested for analysis
- Signature of person(s) involved in the chain of possession
- Description of sample bottles and their condition
- Problems associated with sample collection (e.g., breakage, preservatives missing), if any

A sample chain-of-custody form is presented as figure A-3.

Samples will be placed in a cooler on ice. If samples are to be hand delivered, no further measures are required. If samples are to be shipped via common carrier (e.g., FedEx), bottle lids and labels are to be covered with clear tape, with each sample bottle placed in a sealable plastic bag and individually wrapped in bubble wrap. Ice is to be double-bagged. The cooler drain and

seams will be sealed with duct tape. The cooler will be sealed with strapping tape and custody seals shall be placed on the front and back of the cooler lid.

5.2 Field Sample QA/QC Procedures

5.2.1 Field and Trip Blanks

To monitor the integrity of field sampling and equipment cleaning techniques, the following field quality assurance/quality control (QA/QC) procedures will be implemented.

A field blank will be prepared onsite each day that surface water, sediment, and soil samples are collected with non-dedicated or non-disposable sampling equipment. Field blanks will not be required for groundwater since single-use, disposable bailers will be used to collect these samples. If more than one matrix is being sampled in a given day, field blanks will be prepared for each matrix. A trip blank for water samples to be analyzed for VOCs will accompany sample containers through all phases of the sampling event to ensure proper bottle preparation and laboratory integrity. Trip blank and field blank samples will receive identical handling procedures as onsite samples.

Field and trip blanks are used as control or external QA/QC samples to detect contamination that may be introduced in the field (either atmospheric or from sampling equipment), in transit to or from the sampling site, or in the bottle preparation, sample login, or sample storage stages within the laboratory. The blanks will also show contamination that may occur during the analytical process.

Trip blanks are samples of analyte-free water, prepared at the same location and time as the preparation of bottles that are to be used

for sampling. They remain with the sample bottles while in transit to the site, during sampling, and during the return trip to the laboratory. At no time during these procedures are they to be opened. Upon return to the laboratory, they are analyzed as if they were another sample, receiving the same QA/QC procedures as ordinary field samples. If these samples are accidentally opened, it will be noted on the chain-of-custody.

Field blanks are prepared in the field (at the sampling site) using empty bottles and analyte-free water supplied separately (prepared at the same time and place as the bottles used in the sampling). The preferred procedure for collection of field blanks for non-dedicated sampling equipment is to first decontaminate the sampling device (e.g., scoop, beaker), and then pour the analyte-free water over the device and collect the runoff into the empty bottles supplied with the sample bottles.

Field and trip blanks are not part of the laboratory QA/QC procedures. The latter, used to detect contamination during analytical steps, are only included as part of the laboratory service to assess the validity of the laboratory analytical procedures. Field and trip blanks are required as part of QA/QC procedures for the overall sampling and analytical program.

Duplicate samples will be collected at a frequency of one for every twenty samples from each matrix. If less than twenty samples are collected from any matrix, then at least one duplicate will be collected from that matrix. Duplicate samples are analyzed to check the sample collection and handling process relative to the uniformity of the samples.

Matrix spike/matrix spike duplicate (MS/MSD) samples will be collected at a frequency of one for every twenty samples for each sample

matrix. If less than twenty samples are collected from any matrix, then at least one MS/MSD will be collected from that matrix. The purpose of these samples is to evaluate the effect of the sample matrix on the analytical results.

5.3 Field Instrument Calibration

The onsite B&L personnel are responsible for assuring that a master calibration/maintenance log will be maintained for each measuring device. Each log will include at least the following information where applicable:

- Name of device and/or instrument calibrated
- Device/instrument serial and/or ID number
- Frequency of calibration
- Date of calibration
- Results of calibration
- Name of person performing the calibration
- Identification of the calibration gas for PID
- Buffer solutions (pH meter)

5.4 Sample Analysis QA/QC Procedures

5.4.1 *Overview*

The purpose of the laboratory QA/QC program is to establish and maintain laboratory practices that will ensure the scientific reliability and comparability of the data generated in support of the project.

Quality assurance (QA) is the system for ensuring that all information, data, and resulting decisions compiled under an investigation

are technically sound, statistically valid, and properly documented. Quality control (QC) is the mechanism through which quality assurance achieves its goals. Quality control programs define the frequency and methods of checks, audits, and reviews necessary to identify problems and dictate corrective action, thus high quality data.

The laboratory QA/QC program will outline the purpose, policies, organizations, and operations established to support the chemical analyses.

The laboratory QA/QC procedures will be submitted as part of the laboratory selection process. The QA/QC document submitted by the laboratory will be appended to this document as Attachment A. The laboratory selected will be certified under the NYSDOH ELAP program.

5.4.2 Laboratory Selection Criteria

A laboratory will be selected that is qualified to perform the work required for the site. Examples of selection criteria are as follows:

1. Capabilities (facilities, personnel, instrumentation)
 - a. Prior experience
 - b. Certification
 - c. References (recommendations by other users of the laboratory)
2. Services
 - a. Turnaround time
 - b. Completeness of reports
 - c. Compliance with holding times

3. QA/QC Programs – All laboratories must have a detailed written QA/QC program meeting the minimum requirements of the NYS Department of Environmental Conservation and the NYS Department of Health, and must be NYSDOH ELAP ASP/CLP certified for all analyses being performed.
4. Approvals – All laboratories used will be approved by Barton & Loguidice, P.C., prior to the analysis of samples. The selected analytical laboratory will be committed to providing analytical services for groundwater, soil, sediment, and surface water that are commensurate with the required protocols and current state-of-the-art analytical procedures, laboratory practices and instrumentation.

5.4.3 Data Validator Selection Criteria

A third-party independent data validator will be selected based on the required qualifications presented in Attachment A, and must meet NYSDEC and NYSDOH requirements for performing data validation.

Attachment A
Data Validation Scope of Work

Data Validation Scope of Work – NYSDEC RI/FS Program

Data validation is the systematic process by which data quality is determined with respect to data quality criteria that are defined in project and laboratory quality control programs and in the referenced analytical methods. The data validation process consists of an assessment of the acceptability or validity of project data with respect to stated project goals and requirements for data usability. Ideally, data validation establishes the data quality in terms of project data quality objectives. Data validation consists of data editing, screening, checking, auditing, certification, review and interpretation. The purpose of data validation is to define and document analytical data quality and determine if the data quality is sufficient for the intended use(s) of the data. In accordance with NYSDEC requirements, all project data must be of known and acceptable quality. Data validation is performed to establish the data quality for all data which are to be considered when making project closure or IRM decisions. Laboratories will be required to submit results that are supported by sufficient back-up data and QA/QC results to enable the reviewer to conclusively determine the quality of the data.

Qualifications of a Data Validator

In order to ensure an acceptable level of performance, the following qualifications and requirements are established for all consultants or contractors functioning as data validators. These qualifications and requirements shall apply whether the consultant/contractor is: a) retained directly through contracts executed by the State; b) retained as a subcontractor to a consultant functioning under contracts executed by the State; or c) retained by a responsible party functioning under the guidance and direction of an order on consent. The consultant/contractor functioning as a data validator shall be independent of the laboratory generating the data.

The consultant/contractor functioning as a data validator shall provide evidence that all staff members involved in the data validation process have: a) a bachelor's degree in chemistry or natural sciences with a minimum of 20 hours in chemistry; and b) one (1) year experience in the implementation and application of the protocols used in generating the data for which they are responsible. The successful completion of the EPA Data Validation Training course may be substituted for the analytical experience requirement. In addition, these same staff members must have a minimum of one (1) year experience evaluating CLP data packages for contract protocol compliance.

Specific Tasks to be Completed by the Data Validator

Evaluated Completeness of Laboratory Data Package

The data validator shall review the data package to determine completeness. A complete data package will consist of the following components:

- All sample chain-of-custody forms;
- The case narrative(s) including all sample analysis summary forms¹;
- Quality Assurance/Quality Control summaries including all supporting documentation;
- All relevant calibration data including all supporting documentation;
- Instrument and method performance data;
- Documentation showing the laboratory's ability to attain the contract-specified method detection limits for all target analytes in all required matrices;
- All data report forms including examples of the calculations used in determining final concentrations; and
- All raw data used in the identification and quantification of the contract-specified target compounds.

All deficiencies in the requirement for completeness shall be reported to the consultant immediately. The laboratory shall be contacted by the consultant's Quality Assurance Officer and shall be given ten calendar days to produce the documentation necessary to remove the deficiencies.

Compliance of Data Packages with Work Plan

The validator shall review the submitted data package to determine compliance with those portions of the Work Plan that pertain to the generation of laboratory data. Compliance is defined by the following criteria:

- The data package is complete as defined above;
- The data has been generated and reported in a manner consistent with the requirements of the Quality Assurance Program Plan and the laboratory subcontract;
- All protocol-required QA/QC criteria have been met;
- All instrument tune and calibration requirements have been met for the timeframe during which the analyses were completed;
- All protocol-required initial and continuing calibration data is present and documented;

¹ These forms appear as an addendum to the NYSDEC CLP forms package and will be required for all data submissions regardless of the protocol requested.

- All data reporting forms are complete for all samples submitted. This will include all requisite flags, all sample dilution/concentration factors, and all pre-measurement sample cleanup procedures; and
- All problems encountered during the analytical process have been reported in the case narrative along with any and all actions taken by the laboratory to correct these problems.

The data validation task requires that the validator conduct a detailed comparison of the reported data with raw data submitted as part of the supporting documentation package. It is the responsibility of the validator to determine that the reported data can be completely substantiated by applying protocol-defined procedures for the identification and quantification of the individual analytes. To assist the validator in this determination, the following documents are recommended; however, the EPA Functional Guidelines will be used for format only. The specific requirements noted in the project Work Plan, such as holding times or special analytical project needs, are prerequisite to those noted in the Functional Guidelines.

- The particular protocol(s) under which the data was generated (e.g., NYSDEC Contract Laboratory Protocol; EPA SW-846; EPA Series 500 Protocols).
- Data validation guidance documents such as:
- “Functional Guidelines for Evaluation of Inorganic Data” (published by EPA Region 2);
- “Functional Guidelines for Evaluation of Organic Analyses”, Technical Directive Document No. HQ-8410-01 (published by EPA); and
- “Functional Guidelines for Evaluating Pesticides/PCB’s Analyses” Technical Directive Document No. HQ-8410-01 (published by EPA).

NOTE: These documents undergo periodic revision. It is assumed that the selected data validator will have access to the most current applicable documents and guidelines.

Reporting

The data validator will be required to submit a data validation package that meets or exceeds all of the requirements of the New York State Department of Environmental Conservation Division of Environmental Remediation QA Guideline “Guidance for the Development of Data Usability Summary Reports”, and reports the results of the data review process. This report shall be submitted to the Project Manager or his designee and shall include the following:

- A general assessment of the data package as determined by the degree to which the package is complete and complies with the protocols set forth in the Work Plan;
- A detailed description of any and all deviations from the required protocols. These descriptions must include references to the portions of the protocols involved in the alleged deviations;
- Any and all failures in the validator's attempt to reconcile the reported data with the raw data from which it was derived. Specific references must be included. Telephone logs should be included in the validation report;
- Detailed assessment by the validator of the degree to which the data has been compromised by any deviations from protocol, QA/QC breakdowns, lack of analytical control, etc., that occurred during the analytical process;
- The report shall include, as an attachment, a copy of the laboratory's case narrative, including the NYSDEC-required sample and analysis summary sheets;
- The report shall include an overall appraisal of the data package; and
- The validation report shall include a chart presented in a spreadsheet format consisting of site name, sample numbers, data submitted to laboratory, year of CLP or analytical protocol used, matrix, fractions analyzed (e.g., volatiles, semi-volatiles, PCB, metals, CN). Space should be provided for a reference to the NYSDEC CLP when non-compliance is involved and a column for an explanation of such violation.

Figures

Figure A-1
Sample Boring Log


 <p style="font-size: small; margin-top: 5px;">Engineers • Environmental Scientists • Planners • Landscape Architects</p>					<h2 style="margin: 0;">SUBSURFACE INVESTIGATION LOG</h2>					<div style="margin-bottom: 10px;">BORING NO. _____</div> <div>B&L Project No. _____</div>				
Project:														
Client:														
Project Location:														
Drill Rig:								Location Description:						
Casing														
Soil Sampler:								Start Date: _____ Finish Date: _____						
Sample Hammer Wt. _____ -- inches								Contractor:						
Rock Sampler:								Driller:						
Other:								B&L:						
Depth	Sample Type	Recovery (ft)	PID (ppm)		Visual Staining	Odor	Moisture Content	Material Description: Soil Classification	Drilling Details/ Well Completion					
			Initial	Headspace										
								Ground Surface						
0														
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
End of Boring at:														
Notes:														

Figure A-2
Field Sampling Data Sheet

FIELD SAMPLING DATA SHEET

SITE: _____

SAMPLE LOCATION: _____

CLIENT: _____

JOB #: _____

Weather Conditions: _____

Temp: _____

SAMPLE TYPE: Groundwater ☐ Surface Water ☐ Other (specify): _____
Sediment ☐ Leachate ☐ _____

WATER LEVEL DATA

Static Water Level (feet)*:	
Measured Well Depth (feet)*:	
Well Casing Diameter (inches):	
Volume in Well Casing (gallons):	

*depth from measuring point

Measuring Point: Top of Riser ☒

Other (specify): _____

Measured by _____

Time: _____ Date: _____

PURGING METHOD

Equipment: Bailer ☐ Submersible Pump ☐ Air Lift System ☐
Bladder Pump ☐ Foot Valve ☐ Peristaltic Pump ☐
Dedicated ☐ Non-dedicated ☐

Volume of Water Purged (gallons): _____

Did well purge dry? No ☐ Yes ☐

Did well recover? No ☐ Recovery time: _____

SAMPLING METHOD

Equipment: Bailer ☐ Submersible Pump ☐ Air Lift System ☐
Bladder Pump ☐ Foot Valve ☐ Peristaltic Pump ☐
Dedicated ☐ Non-dedicated ☐

Sampled by: _____ Time: _____ Date: _____

SAMPLING DATA

Sample Appearance

Color: _____ Sediment: _____

Odor: _____

Field Measured Parameters

pH (Standard Units)		Sp. Conductivity (umhos/cm)	
Temperature (F)		Eh-Redox Potential (mV)	
Turbidity (NTUs)		Dissolved Oxygen (mg/L)	

Samples Collected (Number/Type): _____

Samples Delivered to: _____ *Time:* _____ *Date:* _____

COMMENTS: _____

Figure A-3
Chain-of-Custody Form



CHAIN OF CUSTODY RECORD

[illegible]

Appendix B

Health and Safety Plan

**Former Standard Shade Roller Site
Brownfield Cleanup Project
NYSDEC Site No. E645049**

**City of Ogdensburg
St. Lawrence County, New York**

Appendix B Health and Safety Plan

March 2012

**Former Standard Shade Roller Site
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March 2012

Former Standard Shade Roller Site
Brownfield Cleanup Project
NYSDEC Site No. E645049

City of Ogdensburg
St. Lawrence County, New York

Appendix B
Health and Safety Plan

March 2012

Prepared for:

City of Ogdensburg
Department of Planning and Development
Ogdensburg City Hall
330 Ford Street – Room 11
Ogdensburg, New York 13669

Prepared by:

Barton & Loguidice, P.C.
Engineers, Environmental Scientists, Planners, Landscape Architects
290 Elwood Davis Road
P. O. Box 3107
Syracuse, New York 13220

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Attachments

Attachment 1 – Hospital Route

1.0 General Information

1.1 Introduction

This Health and Safety Plan (HASP) addresses those activities associated with the performance of Brownfield Cleanup Program (BCP) Remedial Investigation at the former Standard Shade Roller site in the City of Ogdensburg, New York. This plan was prepared in accordance with 29 CFR 1910.120, *Hazardous Waste Operations and Emergency Response*.

The purpose of this Health and Safety Plan for the City of Ogdensburg BCP Remedial Investigation Project is to provide specific guidelines and establish procedures for the protection of personnel during the performance of site investigation activities. The Plan is based on the site information available at this time and anticipated conditions to be encountered during the different phases of work. This Plan is subject to modification as data are collected and evaluated.

All personnel conducting activities on-site must comply with all applicable Federal and State rules and regulations regarding safe work practices. Personnel conducting field activities must also be familiar with the procedures, requirements, and provisions of this Plan. In the event of conflicting Plans and requirements, personnel must implement those safety practices that afford the highest level of protection.

This HASP is not intended to be used by any subcontractors, but it may be used as the basis for contractors to prepare their own plans. This HASP may not address the specific health and safety needs or requirements of subcontractors and should be viewed as the minimum requirement.

2.0 Project Information

2.1 Site Description

The Former Standard Shade Roller site, which consists of 7.76 acres, is located 541 Covington Street in the City of Ogdensburg, St. Lawrence County, New York. The subject property is currently owned by the City of Ogdensburg, as recorded in the St. Lawrence County Clerk's Office as Instrument I.D. No. 2007-14552; Tax Parcel Map I.D. No. 48.077-1-2.

Section 2 of the Site Investigation Work Plan provides the site description and site history.

2.2 Comprehensive Work Plan

The Comprehensive Work Plan for the site is outlined in the Remedial Investigation Work Plan prepared by Barton & Loguidice, P.C. (B&L).

2.3 Scope of Work

The objective of the Remedial Investigation is to conduct a supplemental subsurface soil and groundwater investigation in select areas of the site for the purpose of addressing previously identified data gaps, and to identify and eliminate, to the greatest extent possible, contaminant source areas with the use of interim remedial measures (IRMs). The supplemental field investigation is designed to provide data of adequate technical content to support the development and evaluation of remedial alternatives as part of the Site Investigation/Remedial Alternatives Report (SI/RAR). The objectives of the field investigation are to:

- Further characterize the nature and extent of residual surface and subsurface soil contamination;
- Characterize groundwater flow conditions and further delineate the nature and extent of groundwater contamination;
- Evaluate the presence and extent of soil gas contamination if warranted;
- Collect data to evaluate the potential risks that the site may pose to human health and the environment; and
- Collect data to adequately evaluate potential remedial alternatives.

2.4 Organization Structure

Barton & Loguidice, P.C.:

Program Manager – Scott D. Nostrand, P.E.

Project Manager – Stephen B. Le Fevre, P.G.

Field Personnel – Bryce Dingman, Joshua Haugh, Leandra Baker

City of Ogdensburg:

Project Contact: – Andrea Smith, Interim Director of the Department of Planning & Development

The Project Manager is responsible for the day-to-day activities of the project and for coordinating between office and field personnel. The Project Manager will oversee the Site Investigation activities. The Project Manager will also serve as the Site Safety and Health Coordinator (SSHC). The SSHC will establish operating standards and coordinate overall project safety and health activities for the site. The SSHC will review project plans and revisions to determine that safety and health procedures are maintained throughout the project. Specifically, the responsibilities of the SSHC include:

- a. Aiding the selection of protective clothing and equipment.
- b. Periodically inspecting protective clothing and equipment.
- c. Maintaining proper storage of protective clothing and equipment.
- d. Monitoring the workers for signs of heat stress, cold stress, and fatigue.
- e. Monitoring on-site hazards and conditions.
- f. Conducting periodic surveillance to evaluate effectiveness of Site-specific Health and Safety Plan.
- g. Having knowledge of emergency procedures, evacuation routes, and the telephone numbers of the ambulance, local hospital, poison control center, fire department, and police department.
- h. Posting the directions to the hospital and the telephone numbers of the ambulance, local hospital, poison control center, fire department, and police department.
- i. Notifying, when necessary, local public emergency officials.
- j. Coordinating emergency medical care.

Field personnel will assist with responsibilities of the SSHC when the Project Manager is not on-site. The Project Manager will be responsible for ensuring that the field personnel are familiar with the contents of this plan and the roles of the SSHC.

3.0 Health and Safety Risk Analysis

Table B-1 breaks down the hazard types that may be encountered for the site activities.

Table B-1 Site Investigation Activity Hazard Evaluation						
Activity	Hazard Type					
	Mechanical	Electrical	Chemical	Physical	Biological	Temperature
Initial Site Inspection	Accidental injury from sampling equipment	Exposed cords and broken lights	Accidental inhalation, ingestion, skin absorption or eye contact with contaminants	Cuts from broken glass, slips, trips, and fall hazards.	Bees and wasps. Poisonous plants	Heat Stress Frost Bite
Boring/Well Installation, Testing and Monitoring	Accidental injury from drilling rig or soil boring equipment	Buried power lines	Accidental inhalation, ingestions, skin absorption or eye contact with contaminants	Strains from carrying heavy objects, slips, trips and fall hazards. Excessive noise.	Bees and wasps. Poisonous plants	Heat Stress Frost Bite
Surface Soil/ Sediment Sampling	None Anticipated	None Anticipated	Accidental inhalation ingestion, skin absorption or eye contact with contaminants	Trip and fall hazards.	Bees and wasps. Poisonous plants	Heat Stress Frost Bite
Soil Vapor Sampling	Accidental injury from soil boring equipment	Buried power lines	Accidental inhalation, ingestions, skin absorption or eye contact with contaminants	Strains from carrying heavy objects, slips, trips and fall hazards. Excessive noise.	Bees and wasps. Poisonous plants	Heat Stress Frost Bite
Well Sampling	None Anticipated	Generators and power cords	Accidental inhalation, ingestion, skin absorption or eye contact with contaminants	Strains from lifting. Fall hazards.	Bees and wasps. Poisonous plants	Heat Stress Frost Bite

3.1 Chemical Hazards

The contaminants that have been detected at the site are listed in Table B-2 (on the following page).

3.2 Physical Hazards

Physical hazards associated with the site are:

1. *Slip, Trip, and Fall During All Activities (Uneven Terrain)* – Hazardous waste sites contain numerous potential safety hazards such as: holes, ditches, drums, boards, nails, broken glass, slippery surfaces, steep grades, and uneven terrains. The work itself may be a potential safety hazard. Site personnel should constantly look out for potential safety hazards and should immediately inform the SSHC of any new hazards.
2. *Moving Parts of Heavy Equipment* – Heavy equipment poses dangers though moving parts. Where feasible, access to moving parts will be guarded and equipment will be equipped with backup alarms.
3. *Noise from Heavy Equipment* – Work around large equipment often creates excess noise. Engineering controls and personal protective equipment will be used to protect employees' hearing.
4. *Electrical Hazards* – As in all site work, overhead power lines, electrical wires and cables, site electrical equipment, and lightning also pose a potential hazard to site workers. Site personnel should constantly look out for potential safety hazards and should immediately inform the SSHC of any new hazards.
5. *Biological Hazards (insects, poison ivy, etc.)* – Other biological hazards that may be present at hazardous waste sites include poisonous plants, insects, and animals. PPE can reduce the potential for exposure. The SSHC can assist in determining the correct PPE for the hazard present.

Table B-2
Assessment of Chemicals of Potential Concern

Chemical Name	PEL/TLV	Other Pertinent Limits (Specify)	Warning Properties – Odor Threshold	Potential Exposure Pathways	Acute Health Effects	Chronic Health Effects
Decontamination Materials:						
Isopropyl Alcohol (for decontamination, if necessary)	400 ppm/400 ppm	STEL = 500 ppm IDLH = 2000 ppm	Colorless liquid with the odor of rubbing alcohol	Inhalation. Absorption, Ingestion, Contact	Eye, skin & respiratory irritation; headache, drowsiness, dizziness, dry cracking skin	Dermatitis
Methanol (for decontamination, if necessary)	200 ppm/200 ppm	IDLH = 6000	Colorless liquid with a pungent odor – 141 ppm	Inhalation. Absorption, Ingestion, Contact	Irritation of eyes, skin, respiratory system, headache, drowsiness, dizziness, vertigo, light-headedness, nausea, vomiting, visual disturbances	Optic nerve damage, dermatitis, damage to respiratory system and GI tract
VOCs:						
Benzene	1 ppm/ 0.5 ppm	STEL=5 ppm IDLH=500 ppm	Colorless to light yellow liquid with an aromatic odor – 8.65 ppm	Inhalation. Absorption, Ingestion, Contact	Eye, skin, nose & respiratory irritation; nausea, headache, staggered gait, fatigue, anorexia, weakness, exhaustion	Carcinogen, dermatitis, bone marrow depression, damage to the eyes, respiratory system. CNS
Ethylbenzene	100 ppm/100 ppm	STEL = 125 ppm IDLH = 800 ppm	Colorless liquid with an aromatic odor	Inhalation. Absorption, Ingestion, Contact	Eye, skin & respiratory irritation; CNS effects; headache	Dermatitis; CNS effects;
Toluene	200 ppm/ 50 ppm	C=300 ppm STEL=150 ppm IDLH=500 ppm	Colorless liquid with a sweet, pungent, benzene-like odor	Inhalation. Absorption, Ingestion, Contact	Eye, skin & respiratory irritation; confusion, dizziness, headache	CNS effects; liver, kidney damage; dermatitis
Total Xylenes	100 ppm/100 ppm	STEL = 150 ppm IDLH = 900 ppm	Colorless liquid with an aromatic odor	Inhalation. Absorption, Ingestion, Contact	Eye, skin & respiratory irritation; dizziness, drowsiness, nausea, vomiting, headache, abdominal pain	Dermatitis; CNS effects; liver/kidney damage; blood

Table B-2
Assessment of Chemicals of Potential Concern

Chemical Name	PEL/TLV	Other Pertinent Limits (Specify)	Warning Properties – Odor Threshold	Potential Exposure Pathways	Acute Health Effects	Chronic Health Effects
SVOCs						
4-Methyl phenol (p-cresol)	5 ppm/5 ppm	IDLH=250 ppm	Crystalline solid with a sweet, tarry odor (Note: liquid above 95 degree F	Inhalation Absorption Ingestion Contact	Eye, skin, mucous membrane irritation.; CNS effects: confusion, depression, respiratory failure; dyspnea, irregular rapid respiration, weak pulse; eye and skin burns; dermatitis.	Lung, liver, kidney, pancreas damage,
Naphthalene (and 2-methyl naphthalene)	10 ppm/10 ppm	IDLH=250 ppm	Colorless to brown solid with an odor of mothballs.	Inhalation Absorption Ingestion Contact	Eye irritation; headache, confusion, excitement, malaise; nausea, vomiting, abdominal pain; irritated bladder; profuse sweating; jaundice, hematuria, hemoglobinuria, renal shutdown; dermatitis; optical neuritis, corneal damage.	Target organs: eyes, skin, blood, liver, kidneys, CNS.
PCBs	PEL=1 mg/m ³ (42%) PEL=0.5 mg/m ³ (54%) TLV=0.5 mg/m ³	IDLH=5 mg/m ³	Mild hydrocarbon odor	Inhalation Absorption Ingestion Contact	Eye irritation, acne, jaundice, dark urine	Carcinogen; liver damage; reproductive effects.
Polyaromatic Hydrocarbons (PAHs): 1.2 Benzo(a)anthracene 1.3 Benzo(b)Fluoranthene 1.4 Benzo(k)Fluoranthene 1.5 Benzo(a)pyrene 1.6 Chrysene 1.7 Dibenzo(ah)anthracene 1.8 Fluranthene 1.9 Indeno(1,2,3-cd)pyrene 1.10 Phenanthrene 1.11 Pyrene	PAHs TLV = 0.2 mg/m ³	PAHs IDLH = 80 mg/m ³	NA	Inhalation Absorption Ingestion Contact	Skin, respiratory irritants	Bladder and kidney are target organs

Table B-2
Assessment of Chemicals of Potential Concern

Chemical Name	PEL/TLV	Other Pertinent Limits (Specify)	Warning Properties – Odor Threshold	Potential Exposure Pathways	Acute Health Effects	Chronic Health Effects
Metals:						
Arsenic	0.002 mg/m ³	IDLH= 5 mg/m ³	Silver-gray or tin-white, brittle, odorless solid	Inhalation. Absorption, Ingestion, Contact	Ulceration of nasal septum, dermatitis, gastrointestinal disturbances, peripheral neuropathy, respiratory irritation, hyper-pigmentation of skin, potential occupational carcinogen	Liver, kidneys, skin, lungs, and lymphatic system are target organs. Lung and lymphatic cancer
Lead	0.05 mg/m ³ / 0.05 mg/m ³	IDLH=100 mg/m ³	A heavy, gray ductile, soft solid	Inhalation. Absorption, Ingestion, Contact	Weakness, lassitude, insomnia, facial pallor	Encephalopathy, kidney disease, hypotension
Mercury	0.05 mg/m ³ / 0.1 mg/m ³	IDLH= 10 mg/m ³	Silver-white, heavy, odorless liquid	Inhalation. Absorption, Ingestion, Contact	Eyes, skin irritants, cough, chest pain, breathing difficulty, bronchitis, pneumonitis, tremor, insomnia, irritability, indecision, headache, fatigue, weakness, gastrointestinal disturbance, anorexia, weight loss	Eyes, skin, respiratory system, central nervous system, and kidneys are target organs.
Silver	0.01 mg/m ³	IDLH= 10 mg/m ³	Metal: white, lustrous solid	Inhalation. Ingestion, Contact	Blue-gray eyes, nasal septum, throat, skin, irritation, skin ulceration, gastrointestinal disturbance	Nasal septum, skin, and eyes are target organs
PEL = OSHA Permissible Exposure Limit; represents the maximum allowable 8-hour time-weighted average (TWA) exposure concentration. TLV = ACGIH Threshold Limit Value; represents the maximum recommended 8-hour TWA exposure concentration. STEL = OSHA Short-term Exposure Limit; represents the maximum allowable 15-minute TWA exposure concentration. C = OSHA Ceiling Limit; represents the maximum exposure concentration above which an employee shall not be exposed during any period without respiratory protection. IDLH = Immediately Dangerous to Life and Health; represents the exposure likely to cause death or immediate delayed permanent adverse health effects or prevent escape from such an environment						

3.3 Heat and Cold Stress

Workers will be routinely observed by the SSHC for symptoms of heat stress or cold exposure, as dictated by the weather conditions and work being conducted. Heat stress and cold exposure can be avoided by periodic, regular rest breaks.

Heat stress may be a potential hazard for personnel wearing PPE, particularly working in hot and humid conditions. Workers should take regular rest breaks within a shaded area, removing their PPE, and drink electrolyte replacing liquids and/or water. The SSHC is responsible for scheduling the amount of time each individual can work under the existing site conditions, and how often and how long they will break. Workers will be required to take their breaks in the clean zone after going through the decontamination area, or they may undergo partial decontamination and rest in a clean area within the decontamination area.

Personnel working in cold conditions will be required to wear warm, dry clothing. Workers must be aware of their extremities during cold conditions, particularly their face and ears, fingers, and toes, in order to avoid frostbite. At any point, should a worker feel numbness or tingling sensation in their extremities, they should return to the clean zone and to a warm area.

3.4 Confined Space Entry

It is not anticipated that B&L employees will enter confined spaces. If B&L employees do enter confined spaces, then the employees will conduct all permit required confined space entry in compliance with a permit space program meeting the requirements of the Occupational Safety and Health Administration (OSHA) regulation 1910.146.

The Contractor may be required to enter confined spaces for tank cleaning purposes. Coordination with the Project Manager shall be made prior to any entry of a permit required confined space. The Contractor must conduct all permit required confined space entry in compliance with a permit space program meeting the requirements of the Occupational Safety and Health Administration (OSHA) regulation 1910.146.

Excavations do pose a potential confined space entry area. When an excavation becomes a confined space entry area (greater than 4 feet deep), then permit-required confined space entry procedures will be followed should the excavation need to be entered. In addition, air monitoring for oxygen deficiency, LEL, and organic vapors will be performed should the excavation be greater than 4 feet deep. Attempts will be made to collect samples from the excavation without entering the excavation (i.e., from excavator bucket, sampling rods, etc.).

4.0 Medical Surveillance Program

4.1 General

OSHA in 29 CFR 1910.120, the Hazardous Waste Operations regulations and in 1910.134, the Respiratory Protection regulations, requires medical examinations. The examination may include the OSHA required Medical Questionnaire, Respirator Suitability Form, a Medical Examination, Audiology Test, Pulmonary Function Test, and testing for complete blood count and chemistry profile.

These medical examinations and procedures are performed by or under the supervision of a licensed physician. The medical monitoring is provided to workers free of cost, without loss of pay and at a reasonable time and place. In addition, the need to implement a more comprehensive medical surveillance program will be re-evaluated after any apparent over-exposure incident.

Employees who wear, or may wear, respiratory protection will be provided respirators as regulated by 29 CFR 1910.134 before performing designated duties. Prior to issuance of a respirator, a medical professional must have medically certified the individual's ability to wear respiratory protection. Where the medical requirements of 29 CFR 1910.120 overlap those of 29 CFR 1910.134, the more stringent of the two will be enforced. It is not anticipated the respirator use will be required at the site.

Although the Site is not classified as a hazardous waste site, employees who work during field activities may be subject to the medical surveillance program.

4.2 Frequency

1. *Baseline Examinations* – Individuals who are assigned temporarily or permanently to fieldwork at hazardous waste sites or the use of a respirator will receive a baseline examination prior to job assignment.
2. *Periodic Examinations* – Individuals who are assigned temporarily or permanently to fieldwork at hazardous waste sites or the use of a respirator will receive periodic examinations as required.
3. *Termination Examinations* – Field employees permanently leaving the company whom were in the medical surveillance program will receive an exit examination.
4. *Possible Exposure Examinations* – As soon as possible upon notification by an employee that the employee has developed signs or symptoms indicating possible overexposure to hazardous substances or health hazards, or that employee has been injured or exposed above the permissible exposure limits in an emergency situation, that employee will be required to receive medical attention.

4.3 Examination Results

A letter must be received from the attending physician stating the parameters of the examination and whether or not the individual is able to work with or without restriction. This letter will be filed in the employee's file and a copy distributed to the employee. The examining physician makes a report to B&L of any medical condition that would place B&L employees at increased risk when wearing a respirator or other personal protective equipment. B&L maintains the medical records of personnel, as regulated by 29 CFR 1910.120 and 29 CFR 1910.1020, where applicable.

5.0 Training Program

5.1 Hazardous Waste Operations Health and Safety Training

Employees who are assigned to perform duties on hazardous waste sites will receive the OSHA initial 40-hour health and safety training prior to on-site activities, in accordance with 29 CFR 1910.120 (e). In addition, such personnel provide documentation of having received three days of supervised field experience applicable to this site, or receive three days of supervised field experience at this site. Applicable employees will receive yearly 8-hour refresher courses. On-site managers and supervisors who are directly responsible for or who supervise workers engaged in hazardous waste operations receive, in addition to the appropriate level of worker HAZWOPER training described above, eight additional hours of specialized supervisory training, in compliance with 29 CFR 1910.120(e)(4).

Although the Site is not classified as a hazardous waste site, employees who work during field activities may be required to attend HAZWOPER initial and refresher training.

5.2 Additional Training

As site activities change, supplemental training will be provided to employees to address changes in identified hazards, risks, operations procedures, emergency response, site control, and personal protective equipment. Specialty training will be provided as determined by task and responsibility.

Site specific training will be provided to each employee and will be reviewed at safety briefings. Specialized training will be provided as dictated by the nature of site activities. Specialized training will be provided for activities such as the handling of unidentified substances. Employees involved in these types of

activities will be given off-site instruction regarding the potential hazards involved with such activities and the appropriate health and safety procedures to be followed. Off-site instruction is meant to include any areas where employees will not be exposed to site hazards.

5.3 Other Required Training

Other training that may be required by workers that is in addition to required training described above is detailed below:

- Hazard communication, in accordance with 29 CFR 1910.1200
- Respirator use, in accordance with 29 CFR 1910.134
- Hearing conservation, in accordance with 29 CFR 1910.95
- Working safely around heavy equipment
- Heat and cold stress prevention
- Confined space entry, in accordance with 289 CFR 1910.146

5.4 Pre-Entry Briefing

A site-specific briefing is provided to all individuals, including site visitors, who enter this site beyond the site entry point. For visitors, the site-specific briefing provides information about site hazards, the site lay-out including work zones and places of refuge, the emergency alarm system and emergency evacuation procedures, and other pertinent safety and health requirements as appropriate.

The SSHC will brief personnel as to the potential hazards likely to be encountered. Topics will include:

- Availability of this HASP.

- General site hazards and specific hazards in the work areas including those attributable to the chemicals present.
- Selection, use, testing and care of the body, eye, hand and foot protection being worn, with the limitations of each.
- Decontamination procedures for personnel, their personal protective equipment and other equipment used on the site.
- Emergency response procedures and requirements.
- Emergency alarm systems and other forms of notification, and evacuation routes to be followed.
- Methods to obtain emergency assistance and medical attention.

5.5 Training Records

This site maintains written certification of the successful completion of applicable training requirements for each worker. Training records are maintained up-to-date and are retained onsite. Written certificates have been given to each person so certified. Additionally, an employee sign off sheet indicating that each worker has reviewed a copy of this HASP and understands its contents is stored at the same location.

6.0 Health and Safety Field Implementation

6.1 Personal Protective Equipment Requirements

Level D protection will be worn for initial entry on-site. Modified Level D protection will be used for sampling and decontamination activities. All personnel will upgrade the level of personal protection to Level C based upon sustained (five (5) minutes or more) air monitoring action levels. The requirements for personal protective equipment are outlined in Table B-3.

Table B-3 Personal Protective Equipment (PPE) Requirements								
Job Tasks	Level of Protection	PPE						
		Suit	Gloves	Feet	Head	Eye	Ear	Respirator
All on-site	D	Std.	Work	Steel	HH	Glasses/ Goggles	Plugs/ Muffs	N/A
Sampling	Modified D	Std.	Neoprene or Nitrile	Steel + Booties	HH	Glasses/ Goggles	Plugs/ Muffs	N/A
Decon	Modified D	Std.	Butyl or Viton	Steel + Booties	HH	Goggles	Plugs/ Muffs	N/A
All on-site (Upgrade)	C	PE Tyvek	Neoprene or Nitrile	Steel + Booties	HH	N/A	Plugs/ Muffs	Full APR w/OV& N100
Personal Protective Equipment SUIT: Std = Standard Work Clothes PE Tyvek = Polyethylene-coated Tyvek FEET: Steel = Steel-toe Boots Booties = PVC or Latex Booties HEAD: HH = Hard Hat EYE: Glasses = Safety Glasses w/side shields Goggles = Safety Goggles				Personal Protective Equipment EAR: Plugs = Ear Plugs Muffs = Ear Muffs RESPIRATOR: APR = Air-purifying respirator Full APR = Full-face APR OV = Organic vapor cartridge N100 = N100 particulate filters				

6.2 Air Monitoring Procedures

The Project Manager or designee will conduct air monitoring in accordance with the New York State Department of Health (NYSDOH) Community Air Monitoring Plan. Direct reading instruments will be calibrated in accordance with manufacturer's requirements and the results of the calibration will be documented.

This Community Air Monitoring Plan (CAMP) sets forth the procedures for performing real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area with respect to specific activities to be completed as part of the remedial investigation. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses, and on-site or nearby workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

Continuous monitoring will be required for all subsurface intrusive activities performed during the remedial investigation and during the demolition of contaminated or potentially contaminated structures. Subsurface intrusive activities include, but are not limited to, soil excavation and handling, and test pitting or trenching.

Periodic monitoring for VOCs will also be required during non-intrusive activities such as the collection of surface soil and sediment samples or the collection of groundwater samples from existing monitoring wells. "Periodic"

monitoring during surface soil, sediment, and groundwater sample collection activities will consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well bailing/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities.

VOCs will be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis. Upwind concentrations will be measured at the start of each workday and periodically thereafter to establish background conditions.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds five (5) parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below five (5) ppm over background, work activities can resume with continued monitoring.
- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shut down.

All 15-minute readings will be recorded and available for EPA personnel to review. Instantaneous readings used for decision making purposes, if any, will also be recorded.

Particulate concentrations will also be monitored continuously at the upwind and downwind perimeters of the exclusion zone or work area. The particulate monitoring will be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment will be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration will be visually assessed during all work activities.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques will be employed. Work may continue with dust suppression techniques if downwind PM-10 particulate levels do not exceed $150 \text{ mcg}/\text{m}^3$ above the upwind level and if no visible dust is migrating from the work area.
- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than $150 \text{ mcg}/\text{m}^3$ above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume if dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within $150 \text{ mcg}/\text{m}^3$ of the upwind level and in preventing visible dust migration.

All readings will be recorded and available for NYSDEC and NYSDOH personnel to review.

Table B-4 Monitoring Protocols and Contaminant Action Levels				
Contaminant/ Atmospheric Condition	Monitoring Equipment	Monitoring Protocol	Breathing Zone* Action Level Concentrations	
			Monitored Level For Mandatory Respirator Use**	Monitored Level For Mandatory Work Stoppages***
VOCs	Photoionization detector (PID) with an 11.7 eV lamp	Initially readings will be recorded every 15 minutes. If no sustained readings are obtained in the breathing zone, readings will be recorded every 30 minutes.	5 ppm above background	25 ppm above background
Particulates	MiniRam or Dusttrak or Equivalent	Three times daily when work is being conducted that can generate dust, e.g. monitoring well installation, test pits		150 ug/m ³ at fence line (institute engineering controls to control dust) per NYSDEC TAGM 4031
<p>*Monitoring performed in the breathing zone for sustained readings of 5 minutes or more. Monitor source first; if the source is near or above the action level concentration, monitor in the breathing zone.</p> <p>**Monitored levels will require the use of approved respiratory protection specified in Table B-3.</p> <p>***Consult the Project Manager.</p>				

6.3 Decontamination Procedures

Depending on the specific job task, decontamination may include personnel themselves, tools, and/or heavy equipment. The specified levels of protection for a task (A, B, C, or D) does not itself define the extent of personal protection or equipment decontamination. For instance, Level C without dermal hazards will require less decontamination than Level C with dermal hazards. Heavy equipment will always require decontamination to prevent cross-contamination. The following sections summarize general decontamination protocols.

6.3.1 Heavy Equipment

Heavy equipment will be decontaminated prior to personnel decontamination. Heavy equipment will have their drilling rods, augers and/or buckets steam cleaned after use, preferably at locations near the individual drilling/excavation operations. Containment systems will be set-up for collection of decontamination fluids and materials. Berms and wind barriers will be set up, if appropriate.

Vehicles that become contaminated with suspect soil will be cleaned prior to leaving the site. The wheel wells, tires, sides of vehicles, etc. will be high-pressure washed at a location to be determined by the SSHC.

6.3.2 Personnel

In general, decontamination involves scrubbing with a non-phosphate soap/water solution followed by clean water rinses. Disposable items will be disposed of in a dry container.

Reusable protection will be washed with soap and clean potable water and air-dried prior to storage. Dirt, oil, grease or other foreign materials that are visible will be removed from surfaces. Scrubbing with a brush may be required to remove materials that adhere to the surfaces. Certain parts of contaminated respirators, such as harness assemblies and leather or cloth components, are difficult to decontaminate. If grossly contaminated, they may be discarded. Rubber components can be soaked in soap and water and scrubbed with a brush.

The following decontamination protocol will be used, as appropriate to the level of PPE being used:

- Drop hand tools and equipment in the designated decontamination area.
- Either wash outer rubber boots or dispose of booties.
- Rinse outer boots.
- Wash and rinse outer gloves.
- Remove outer boots and gloves, dispose gloves if necessary.
- Replace cartridges if required.
- Remove and dispose Tyvek coverall.
- Remove respirator, dispose cartridges as required.
- Personnel should wash their respirator at the end of each workday.

6.3.3 Decontamination Wastes

Decontamination wash and rinse waters will be collected and disposed of according to the applicable regulatory guidelines.

- Spent decontamination solutions may be required to be drummed and disposed of as hazardous waste and/or solvent solutions may be required to be segregated from water rinses.
- Decontamination shall be performed in a manner that minimizes the amount of waste generated.

7.0 Site Operating Procedures

The following is a list of the general guidelines required for the Remedial Investigation of the former Standard Shade Roller site in the City of Ogdensburg. These guidelines follow the established guidelines of the Barton & Loguidice, P.C. Corporate Health and Safety Program:

All field investigation activities must be coordinated through the Project Manager.

At least two persons must be present who are in constant communication with each other during any activity conducted on-site in which a potential exists for exposure to hazardous materials, accident or injury. At least two persons must also be present during all demolition or excavation activities.

Samples obtained from areas known or suspected to contain contaminated substances or materials must be handled with appropriate personal protection equipment.

All equipment used to conduct the Site Investigation must be properly decontaminated and maintained in good working order. Equipment must be inspected for signs of defects and/or contamination before and after each use.

Eating, drinking, chewing gum, and smoking are prohibited within the Site Activity Zone and the Decontamination Zone.

The discovery of any condition that would suggest the existence of a situation more hazardous than anticipated will result in the evacuation of the activity zone until a complete evaluation of the hazard can be performed.

7.1 Daily Operating Procedures

The following are the daily operating procedures that are to be followed by all on-site personnel:

- Hold Tailgate Safety Meetings prior to work start and as needed thereafter (suggest daily; however, minimum of weekly).
- Use monitoring instruments and follow designated protocol and contaminant action levels.
- Use PPE as specified.
- Use hearing protection if noise levels exceed 85 dBA and around heavy equipment.
- Remain upwind of operations and airborne contaminants, if possible.
- Establish a work/rest regimen when ambient temperatures and protective clothing create potential thermal hazards.
- Eating, drinking, applying cosmetics and smoking is prohibited in work areas.
- Refer to the SSHC for specific safety concerns for each individual site task.
- On-site personnel are encouraged to be alert of their own physical condition, as well as their co-workers.
- **All accidents, no matter how minor**, must be immediately reported to the SSHC.

7.2 Site Control

The purpose of site control is to minimize the exposure of site workers to potential contamination, protect the public from the site's hazards, and prevent vandalism. The degree of site control necessary depends on site characteristics and the surrounding community. At this time, there are no access restrictions to the site. During the field activities, B&L and the City are requesting that personnel, subcontractors, and visitors report to the on-site B&L supervisor prior to entering the work area.

Since there are no access restrictions to the Site, particular attention will be placed on the condition of the site regarding four main work zone areas:

Activity Zone

This zone applies to the immediate work area and includes all materials, equipment, vehicles and personnel involved in the site activity. For example, during the installation of a monitoring well, the activity zone will encompass the borehole, drilling rig, monitoring well construction materials and equipment, sampling equipment, decontamination supplies, and drilling/well inspection personnel. Site control measures will include flagging the perimeter of the activity zone to clearly mark the limits of work and to warn passers-by and visitors of the site activity. In addition, the Site Supervisor will maintain communication with City personnel as the location of this zone (and the type of work being performed) changes throughout the project.

The required level of PPE in the activity zone can vary according to job assignment. This will allow a flexible, effective, and less costly operation, while still maintaining a high degree of safety.

This area will be limited to authorized personnel from B&L, regulatory agencies, and contractors/subcontractors to the City. Personnel entering this area will be required to comply with their own HASP that must be at least as stringent as this HASP.

Material and Equipment Storage Zone

This zone exhibits the least amount of activity, and as a result, will require the least security. An appropriate area will be designated on-site for the storage of all equipment and supplies to be used throughout the site investigation. The area is to be kept clean and orderly at all times and free from loose equipment, tools, materials or supplies which may compromise the safety of site workers, City personnel or the public. Construction materials and equipment will be covered with plastic at the end of each workday. Any spills or breakages occurring in this area will be immediately attended to before the Site work continues.

Decontamination Zone

In order to prevent incidental contact with contaminants on investigation equipment or in the wash water, all activities within the decontamination area will be completed before subsequent site work or any other activity begins. This includes:

- Complete removal of contaminants on all equipment used during the preceding phase of the investigation;
- Placement of the waste wash water and sediment in sealed drums;
- Storage of the drums in a secure and out-of-the-way place for future disposal;

- Proper labeling of drum contents;
- Cleanup (if necessary) of area outside of decontamination area; and
- Storage of all decontamination equipment, site investigation equipment and materials in the Materials and Equipment Storage Zone.

Support Zone

The support zone is the location of the administrative and other support functions needed to keep the operations in the activity and decontamination zone running smoothly. Any function that need not or cannot be performed in a hazardous atmosphere is performed here. Personnel may wear normal work clothes within this zone. Any potentially contaminated clothing, equipment, and samples must remain in the decontamination zone until decontaminated. All emergency telephone numbers, change for the telephone (if necessary), evacuation route maps, and vehicle keys should be kept in the support zone.

The SSHC will establish decontamination system and decontamination procedures appropriate to the site and the work that will prevent potentially hazardous materials from leaving the site. All personnel exiting the activity zone will be decontaminated prior to entering the support zone. The decontamination procedures will be reviewed at each daily safety briefing.

Personal hygiene facilities meeting at least the minimum requirements of 29 CFR Part 1910.120 will be provided nearby.

Upon completion of the day's activities, heavy machinery and equipment will be stored securely within the site, or at a location selected by the SSHC.

7.3 Buddy System

Most activities in a contaminated or otherwise hazardous area should be conducted with a partner who is able to:

- Provide his or her partner with assistance.
- Observe his or her partner for signs of chemical or heat exposure.
- Periodically check the integrity of his or her partner's protective clothing.
- Notify the SSHC if emergency help is needed.

7.4 Engineering Controls

Engineering controls and work practices are primarily for limiting exposure through application of engineered barriers. They will be applied to this project when and where they are practicable. The following engineering controls may be applied on this project: water spray, covering of materials, site preparation to facilitate operations and remove obvious physical hazards, and warning alarms/devices.

8.0 Emergency Response Procedures

8.1 Pre-Emergency Planning

Planning for emergencies is a crucial part of emergency response. The SSHC is responsible for training all employees in potential site hazards and the emergency response procedures.

8.2 Personnel Roles

The SSHC is responsible for responding to, or coordinating the response of, off-site personnel to emergencies. In the event of an emergency, the SSHC will direct all notification, response and follow-up actions. Contacts with outside response personnel (hospital, fire department, etc.) will be done at the direction of the SSHC.

Prior to the start of work on the site, the SSHC will:

1. Notify emergency contacts, and/or health care facilities of the potentially hazardous activities and potential wastes that may develop as a result of the activities performed on-site;
2. Confirm that the following safety equipment is available: eyewash and safety shower station, first aid supplies, air horn, and fire extinguishers;
3. Have a working knowledge of the safety equipment available; and
4. Confirm a map detailing the most direct route to the hospital is prominently posted with the emergency telephone numbers.

Employees who will respond to emergencies involving hazardous materials will be trained in how to respond to such emergencies.

The SSHC will check daily to see that the following safety equipment is available at the site: eyewash station, first aid supplies, and fire extinguisher.

The SSHC will be responsible for directing notification, response and follow-up actions and for contacting outside response personnel (ambulance, fire department or others) prior to and during an emergency. Upon notification of an exposure incident, the SSHC will call the Hospital and fire and police emergency response personnel for recommended medical diagnosis, treatment, if necessary, and transportation to the hospital.

The SSHC must conduct an investigation of the incident as soon as possible. The SSHC will determine whether and at what levels exposure actually occurred, the cause of such exposure, and the means to prevent similar incidents from occurring. The resulting report must be accurate, objective, complete and signed and dated.

8.3 Safe Distances and Places of Refuge

In case of an emergency, the parking area will serve as the immediate place of refuge. Personnel in the exclusion zone should evacuate through the decontamination zone to the refuge location, both for their own personal safety and to prevent hampering response/rescue efforts. Following an evacuation, the SSHC will account for on-site personnel. If evacuation from the work site is necessary, the project vehicles will be used to transport on-site personnel to a place of refuge.

8.4 Emergency Communications

There will be a cellular telephone located in the Project Manager's vehicle for emergency use. There will be air horns, walkie-talkies, and/or other audible emergency signals located within the exclusion zone and decontamination area to

signal others of an emergency. The SSHC should brief all personnel of audible emergency signals being used during the site activities prior to starting the work. Site personnel to inform others of emergencies will use the following hand signals:

- Hand gripping throat - out of air, cannot breathe.
- Grip partner's wrist or both hands around waist - leave area immediately.
- Hands on top of head - need assistance.
- Thumbs up - everything's OK, or I understand.
- Thumbs down – No.

8.5 Emergency Procedures

The nature of work at a contaminated or potentially contaminated work site makes emergencies a continual possibility. Although emergencies are unlikely and occur infrequently, a contingency plan is required to assure timely and appropriate response actions. The contingency plan is reviewed at tailgate safety meetings.

8.5.1 *Incident Procedures*

If an emergency incident occurs, the following actions will be taken:

1. Size-up the situation based upon available information.
2. Notify the SSHC.
3. Only respond to an emergency if personnel are sufficiently trained and properly equipped.
4. As appropriate, evacuate site personnel and notify emergency response agencies, e.g., police, fire, etc.

5. As necessary, request assistance from outside sources and/or allocate personnel and equipment resources for the response.
6. Consult the posted emergency telephone list and contact key project personnel.
7. Prepare an incident report.

All site personnel should be aware of the location of firefighting equipment. Personnel shall only extinguish minor fires. Large fires will require contacting the local fire department and allowing them to handle the fire. The local fire department will be contacted prior to initiating site activities to inform them of the potential hazardous materials that could be encountered in an emergency.

8.5.2 Medical Emergencies

In the event of an accident or injury, workers will immediately implement emergency decontamination and isolation measures to assist those who have been injured or exposed and to protect others from the hazards. Upon notification of an exposure incident, the SSHC will contact the emergency response personnel who can provide medical diagnosis and treatment. If necessary, immediate medical care will be provided by trained personnel competent in first aid procedures. Trained personnel competent in such matters will only provide other on-site medical and/or first aid response to an injury or illness.

If an individual is transported to a hospital or doctor, a copy of this HASP will accompany the individual.

The SSHC will be notified when an accident or incident occurs and will respond according to the seriousness of the incident. The SSHC will investigate facility/site conditions to determine whether and at what levels exposure actually occurred, the cause of such exposure and the means to be taken to prevent the incident from recurring.

The SSHC and the exposed individual will complete an exposure-incident investigation. The SSHC will prepare a signed and dated report documenting the investigation. The SSHC and the exposed individual will also complete an exposure-incident reporting form. The form will be filed with the employee's medical and safety records to serve as documentation of the incident and the actions taken.

Emergency first aid may include taking care of minor scrapes to performing CPR. All site personnel should be familiar with the location of the site first aid kits. The site safety officer should be trained in first aid and CPR. Contacting hospital and/or emergency agencies shall be made on a case by case basis depending on the severity of the injury. If an off-site emergency agency is contacted, all the details relating to the injury should be relayed to that agency. All site injuries should be documented. The following actions should be taken if someone requires first aid:

1. Survey the scene to determine if it is safe to reach the injured person.
2. Ask the injured person what happened. If the person is unconscious, look for signs as to what may have occurred.
3. See if there are others injured.
4. Reassure the victim. Contact others for help; tell them to call the appropriate emergency agency.

5. If it is safe to move the victim, return them back to the field office.

Only trained personnel should perform CPR or rescue breathing on an unconscious victim.

Personnel who experience heat stress or frost bite should be attended to in the following manner.

Heat Stress

Symptoms include cool, pale and moist skin, heavy sweating, headache, and nausea. This person should be removed from the hot environment immediately, and allowed to lie on their back. Apply cold packs or make sure they are in an air-conditioned room. Give them plenty of water and/or electrolyte replacing fluids. Should a victim experience heat stroke (high body temperature, red skin) the body must be cooled down quickly and receive medical attention immediately. Persons experiencing heat stress or heat stroke should be attended to until the situation has been remedied.

Frostbite

Symptoms include slightly flushed skin that becomes white, pain at extremities in early stages. Get a victim experiencing frostbite to a warm area and put the frostbitten parts in warm (100-105 F) water. Loosely bandage injured parts after soaking. Under conditions of cold temperatures and high winds, there is the potential for workers experiencing hypothermia. Signs of hypothermia include: shivering, dizziness, numbness, confusion, or drowsiness. Warm up this person's body with dry clothes and a blanket, if

available. Call the appropriate emergency agency or take this person to the hospital.

8.6 Emergency Routes

Should an emergency signal be sounded, on-site personnel should immediately stop what they are doing, and return to the decontamination area. Personnel in the decontamination area and the support zone should evaluate the emergency and contact the appropriate off site emergency personnel. Once on site personnel return to the decontamination area, there will be someone there to direct them as to what to do. It is imperative that the SSHC or designated alternate account for all site personnel. The SSHC should direct all personnel to the nearest safe refuge.

The hospital route is included as attachment 1.

If the emergency event threatens the surrounding community, it is important that the local police and fire departments be contacted immediately regarding the potential danger.

8.7 Spill Control

A major spill is not anticipated at the site. Should a spill of any type occur, the employee should report it immediately to the SSHC, who will make arrangements for the proper clean up of the spill. These arrangements will include diking and ditching, as necessary, as well as the use of absorbents such as vermiculite or speedy dry. The emergency response personnel will be contacted immediately by SSHC in the event that on-site materials can not immediately contain the spill.

8.8 Personal Protective and Emergency Equipment

There will be suitable equipment on site for small emergency events such as additional PPE, fire extinguishers, first aid kits, and eye wash stations. In the event of a major emergency event, off site personnel will be contacted immediately.

8.9 Decontamination Procedures

The extent of emergency decontamination depends on the severity of the injury or illness and the nature of the contamination. Minimum decontamination will consist of detergent washing, rinsing, and removal of contaminated outer clothing and equipment. If time does not permit the completion of all of these actions, it is acceptable to remove the contaminated clothing without washing it. If the situation is such that the contaminated clothing cannot be removed, the person should be given required first aid treatment, and then wrapped in plastic or a blanket prior to transport to medical care. If heat stress is a factor in the victim's illness/injury, the outer protective garment will be removed immediately.

8.10 Evacuation Routes

Unless otherwise directed, evacuation will be made through the decon area to the parking area for a head count.

8.11 Response Critique

Should an incident on-site occur, the SSHC will analyze the response efforts in order to continually improve on-site conditions and procedures. The SSHC must complete follow-up activities before on-site work is resumed following an emergency. Used emergency equipment must be recharged, refilled or replaced. Government agencies must be notified as required in their regulations.

Attachment 1
Hospital Route

Attachment 1

Hospital Route

From: Former Standard Shade Roller Site, City of Ogdensburg

To: Claxton-Hepburn Medical Center (214 King Street)

- | | | |
|----|---|-----------|
| 1. | Go Northeast on Covington Street towards NY-68E | 500 Feet |
| 2. | Turn Left onto NY-68E | 360 Feet |
| 3. | Turn Right onto Albany Avenue | 0.1 Miles |
| 4. | Turn Left onto King Street, to Claxton-Hepburn Medical Center | 0.1 Miles |

(This should be posted in several conspicuous locations at the site.)

EMERGENCY CONTACTS
(To be posted)

Contact	Person or Agency	Phone Number
City Representative	Andrea Smith, Interim Director of Planning & Development	(315) 393-7150
Law Enforcement	(C) Ogdensburg Police, NYS Troopers	911 (315) 393-1555 {Non-emergency}
Fire Department	(C) Ogdensburg FD	911 (315) 393-2321 {Non-emergency}
Confined Space Rescue (Fire Department)	(C) Ogdensburg FD	911 (315) 393-2321 {Non-emergency}
Ambulance	Ogdensburg Voluntary Rescue Squad	911 (315) 393-0837 {Non-emergency}
Hospital - Emergency	Claxton-Hepburn Medical Center	(315) 393-3887
B&L Project Manager	Stephen Le Fevre, P.G.	(518) 218-1801 (518) 369-9290 (cell)
B&L Site Manager/Site Safety Officer	Bryce Dingman	(518) 300-0770
B&L Officer-in-Charge	Scott D. Nostrand, P.E.	(315) 457-5200

Appendix C

Citizen Participation Plan

**Former Standard Shade Roller Site
Brownfield Cleanup Project
NYSDEC Site No. C645049**

**City of Ogdensburg
St. Lawrence County, New York**

Appendix C Citizen Participation Plan

**March 2012
(Revised October 2012)**

Former Standard Shade Roller Site
Brownfield Cleanup Project
NYSDEC Site No. C645049

City of Ogdensburg
St. Lawrence County, New York

Appendix C
Citizen Participation Plan

March 2012
(Revised October 2012)

Prepared For:

City of Ogdensburg
Department of Planning and Development
Ogdensburg City Hall
330 Ford Street – Room 11
Ogdensburg, New York 13669

Prepared By:

Barton & Loguidice, P.C.
Engineers • Environmental Scientists • Planners • Landscape Architects
290 Elwood Davis Road
Box 3107
Syracuse, New York 13220



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1.0 Introduction

The City of Ogdensburg has entered into the New York State Department of Environmental Conservation's (NYSDEC's) Brownfield Cleanup Program (BCP) to address residual contamination present at the former Standard Shade Roller site, which is located at 541 Covington Street in the City of Ogdensburg, St. Lawrence County, New York. The subject property is currently owned by the City of Ogdensburg, as recorded in the St. Lawrence County Clerk's Office as Instrument I.D. No. 2007-14552; Tax Parcel Map I.D. No. 48.077-1-2. A site location map is included as Figure 1 and a site plan as Figure 2.

The subject property has supported a variety of industrial uses since the turn of the century. Previous site uses included boat manufacturing, match manufacturing, brewing, shade roller manufacturing, and milling. During its final period of active operation (which ended in 1997), the subject property was occupied by the Joanna Window Décor Division of the Crown Home Furnishings Company. Joanna Window Décor manufactured window shade hardware, and part of this process included the plating of metals. The zinc-cyanide electroplating process, which occurred in the main building of the facility, was initiated in 1945 and continued until 1987. From 1987 through 1992, the electroplating process was cyanide-free, and then in 1992 the electroplating process was terminated at the facility.

Since 1991, there have been a total of twelve (12) environmental assessments and/or subsurface investigations conducted at the former Standard Shade Roller site. Examination of the collected soil and groundwater quality data reveals that several areas of the site have been detrimentally impacted by metals contamination, presumably due to the prior plating operations at the plant. In addition, elevated concentrations of volatile and semi-volatile organic compounds have been detected in subsurface soil and groundwater samples collected at the site.

The City of Ogdensburg has entered the former Standard Shade Roller site into the BCP in order to conduct a supplemental subsurface soil and groundwater

investigation in select areas of the site for the purpose of addressing previously identified data gaps, and to identify and eliminate, to the greatest extent possible, contaminant source areas with the use of interim remedial measures (IRMs). The supplemental field investigation is designed to provide data of adequate technical content to support the development and evaluation of remedial alternatives as part of the Site Investigation/Remedial Alternatives Report (SI/RAR). The objectives of the field investigation are to:

- Further characterize the nature and extent of residual surface and subsurface soil contamination;
- Characterize groundwater flow conditions and further delineate the nature and extent of groundwater contamination;
- Evaluate the presence and extent of soil gas contamination if warranted;
- Collect data to evaluate the potential risks that the site may pose to human health and the environment; and
- Collect data to adequately evaluate potential remedial alternatives.

Additional site information is provided in Section 3.0 of this Plan, along with the Remedial Investigation Work Plan that is available for review at the document repositories outlined in Section 9.0.

The objective of this Citizen Participation Plan (CPP) is to maintain an open dialogue between the City of Ogdensburg and adjacent residents regarding activities associated with the Site Investigation and possible impacts that these activities may have on the local community. This Plan will consist of a continuing exchange of information, ideas, concerns or preferences so that adequate public involvement is maintained throughout the duration of the project, and citizens can participate more fully in the decision making process. Extensive public involvement is also required by the NYSDEC during both the investigation and cleanup stages of brownfield sites. The plan also addresses:

- Information about the site's history, planned site investigations and/or cleanup activities;
- A description of planned citizen participation activities including tentative schedules; and
- A list of project contacts who are knowledgeable with the project.

This CPP will provide the community with an overview of public involvement activities scheduled throughout the project and help municipal officers monitor public involvement activities. The CPP has been assembled by the City of Ogdensburg in consultation with NYSDEC. The plan is continually updated to include any changes in new fact sheets, additions to contact lists and changes in citizen involvement activities.

2.0 What is a Brownfield?

A Brownfield is any real property where redevelopment or re-use may be complicated by the presence or potential presence of a hazardous waste, petroleum, pollutant, or contaminant. The typical brownfield is usually a former industrial or commercial property that may have soil or groundwater contamination as a result of improper activities or accidental chemical spills. These problems not only pose environmental concerns, but may also cause legal and financial burdens on local communities.

In 2003, the Brownfield Cleanup Program was created. This program provides liability limitations and tax credits to the private sector if the site investigation and clean-up are completed under NYSDEC oversight. The applicant must be a participant or volunteer of the site per ECL §27-1405.

The Brownfields Program is administered by the NYSDEC with assistance from the New York State Department of Health (NYSDOH).

3.0 Site Information

Up until very recently, the vacant site contained ten (10) abandoned and slowly deteriorating buildings, the locations of which are depicted on the enclosed Site Plan (Figure 2). As noted on Figure 2, the buildings were used for a variety of purposes during the shade manufacturing operations which ceased in 1997. Based on information presented in a July 2008 *Phase IA Literature Review and Archeological Sensitivity Assessment* Report prepared by Hartgen Archeological Associates, Inc. (Hartgen) for the City of Ogdensburg, the buildings previously contained equipment maintenance shops, boiler rooms, metal plating areas, metals machining areas, and materials warehouse areas. However, according to the Hartgen Phase IA report, the location and configuration of the originally constructed buildings was altered during the course of site development which occurred over a period of approximately 100 years. Furthermore, based on a review of historical aerial photographs and Sanborn Fire Insurance Maps, Hartgen determined that the subject property has nearly doubled in size since the onset of its initial development. Specifically, with the use of fill material of unknown origin, the original shoreline of the St. Lawrence River has been extended a distance of 40 to over 100 feet in a northwesterly direction. For example, Shed Nos. 1, 2A, 2B, 2C, and No.3, as well as the Garage, were all constructed on fill material.

With the cessation of shade manufacturing operations in 1997, the on-site buildings were left abandoned and no longer maintained. Consequently, when the City of Ogdensburg took ownership of the property in 1997, there was evidence of wind and water damage to several of the buildings. Deterioration of the buildings continued over the next ten (10) year period, and the City ultimately decided that in order for future development of the property to occur, the buildings would need to be demolished. Therefore, in 2007 the City applied to the Empire State Development Corporation (ESDC) for a Restore New York Communities Initiative Program Grant for the purpose of performing asbestos abatement and building demolition activities. The City was subsequently awarded \$700,000 in Restore NY funding, and in 2010 the City retained the services of Barton & Loguidice, P.C. (B&L) to oversee and manage the performance

of asbestos abatement and building demolition activities. The asbestos abatement and building demolition work is currently ongoing, and is anticipated to be completed by March 2012.

In September of 2010, the City of Ogdensburg was awarded a \$200,000 Brownfields Cleanup Grant from the U.S. Environmental Protection Agency (EPA) to be used at the former Standard Shade Roller site. A significant amount of the EPA money is to be used for the remediation of metals contaminated soils that exist underneath the concrete floor in the main building, and in the alley area north of the main building near the former plating operation. In addition, a portion of the EPA Brownfields Cleanup Grant funds will be used to characterize and dispose of potentially hazardous wastes/materials that were discovered by B&L to exist inside the main building and other on-site structures.

As previously noted, the presence of subsurface soil and groundwater contamination at the former Standard Shade Roller site is well documented, and therefore it is anticipated that future remedial activities may be necessary in order to clean up the site to NYSDEC Part 375 Restricted-Residential Use standards. However, prior to the design and implementation of a site-specific remediation plan, there are several subsurface soil and groundwater quality data gaps that must be addressed. Specifically, the lateral and vertical extent of subsurface soil and groundwater contamination in certain areas of the site has not been adequately delineated for the purpose of conducting a remedial alternatives analysis. In addition, it is possible that one or more contaminant source areas still exists on site that has yet to be identified and properly evaluated.

Given the above, the purpose of this BCP project is to: 1) identify, and if possible, eliminate accessible contaminant source areas with the use of an interim remedial measure (IRM); and 2) fully delineate the lateral and vertical extent of subsurface soil and groundwater contamination at the subject property for the purpose of completing a remedial alternatives analysis.

4.0 Upcoming Site Investigation Activities

The City of Ogdensburg has entered into an agreement with the NYSDEC to pursue an investigation of contamination at the site. This program designates the preparation of a Remedial Investigation Report (RI Report). The City of Ogdensburg has retained Barton & Loguidice, P.C. (B&L) to perform the remedial investigation on the property. B&L is an environmental engineering/consulting firm based in Syracuse, New York. As part of the remedial investigation, B&L will perform the following tasks:

1. Site survey and preparation of site map;
2. Community relations;
3. IRMs;
4. Supplemental subsurface investigation;
5. Groundwater investigation;
6. Soil vapor survey (if warranted);
7. Ecological assessment;
8. Public health and wildlife risk evaluation; and
9. Data validation.

The objectives and methodologies of these field activities are described in greater detail in the Remedial Investigation Work Plan and within subsequent sections of this appendix.

The investigation is tentatively scheduled to begin in the summer of 2012 and should take about one (1) year to complete. After the investigation is completed, the City of Ogdensburg will submit a Draft Remedial Investigation Report (RI Report) to NYSDEC and NYSDOH for review. This report will include the results of the remedial investigation, and also evaluate alternatives for addressing contamination at the Site. After NYSDEC and NYSDOH review the RI Report, it will be determined if cleanup actions are necessary.

After the RI Report is approved, and if cleanup is required, the City of Ogdensburg will prepare a Remedial Work Plan.

5.0 Specific Citizen Participation Activities

The City of Ogdensburg, in conjunction with the NYSDEC, will ensure that the public is informed about the progress of the remedial investigation and any remedial action. To increase citizen participation in the brownfield project, the City of Ogdensburg and the NYSDEC will offer several opportunities for citizen involvement during both the investigation and the cleanup, if deemed necessary.

If cleanup is required, a fact sheet regarding the proposed Remedial Work Plan (RWP) will be mailed and the RWP will be made available to the public. The public will then have 45 days to review and comment on the RWP. If requested by the affected community, NYSDEC will also present the plan at a public meeting. After the 45-day comment period has elapsed, NYSDEC will approve or disapprove the RWP. If the RWP is approved, the City of Ogdensburg will mail a fact sheet summarizing the upcoming remedial action. See the following table for a tentative schedule of citizen participation activities:

Table 1 Citizen Participation Activities			
The City of Ogdensburg Will:	At this Point in the Remedial Program	Activity Tentatively Is Scheduled to be Completed:	The Activity was Completed:
Set up Document Repositories, where citizens can review site-related documents, at a public location near the site. Place relevant documents, such as the investigation work plan, at the document repositories	Before the start of the investigation	April 2012	TBA
Create a list of people ("Contact List") interested in the site, including residents, government representatives, media, and any interested civic, environmental or business groups.	Before the start of the investigation	April 2012	TBA
Create a Citizen Participation Plan and place it in the document repositories.	Before the start of the investigation	April 2012	TBA
<ul style="list-style-type: none"> Place draft Remedial Investigation (RI) Work Plan in document repository. Mail fact sheet to site contact list about the proposed RI Work Plan and 45-day public comment period. Conduct 45-day public comment period on the draft RI Work Plan. Place approved RI Work Plan in document repository. 	After RI Work Plan is submitted to NYSDEC	May 2012	August 2012

Table 1 Citizen Participation Activities			
The City of Ogdensburg Will:	At this Point in the Remedial Program	Activity Tentatively Is Scheduled to be Completed:	The Activity was Completed:
<ul style="list-style-type: none"> Mail fact sheet to site contact list that describes RI results. Place approved RI Report in document repository. 	Following completion of the remedial investigation.	Spring 2013	TBA
<ul style="list-style-type: none"> Place proposed Remedial Work Plan (RWP) in document repository. Mail fact sheet to site contact list that describes proposed RWP and announces 45-day comment period. Public meeting by NYSDEC if requested by the affected community. 	If cleanup is required: after the RWP is submitted to NYSDEC	Summer 2013	TBA
Before the start of remedial action, mail fact sheet to site contact list summarizing upcoming remedial action.	After approval of RWP	Fall 2013	TBA
<ul style="list-style-type: none"> Mail fact sheet to site contact announcing that remedial action has been completed. Mail fact sheet to site contact list announcing issuance of the Certificate of Completion (COC). 	After remedial action is completed and NYSDEC has approved the Final Engineering Report (These two fact sheets may be combined if there is no delay in COC issuance)	Spring 2014	TBA

The following presents a summary of specific Citizen Participation activities that will be performed as part of this project:

1. A fact sheet will be mailed to the site contact list about the draft RI Work Plan and announcing a 45-day public comment period on the draft RI Work Plan. A copy of the approved Remedial Investigation Work Plan will be placed in the local and regional document repositories.
2. A fact sheet will be mailed to the site contact list describing the results of the RI.
3. If cleanup is required, a copy of the draft Remedial Work Plan (RWP) will be placed in the project's document repositories. A fact sheet will be mailed to the site contact list about the proposed RWP and announcing a 45-day public comment period.

4. After the RWP is approved, a fact sheet will be mailed to the site contact list summarizing the upcoming remedial action.

At the time the Final Engineering Report is approved by NYSDEC, a fact sheet will be mailed to the site contact list announcing that the remedial action has been completed. Also, a fact sheet will be mailed to the site contact list announcing the issuance of a Certificate of Completion.

6.0 Technical Assistance for Community Members

If requested, the City of Ogdensburg will provide additional technical assistance to community members. This assistance could include: meetings between technical staff and interested community members to discuss technical information about the project, a public availability session in which project staff would answer questions on a one-on-one basis, or other appropriate activities. If you wish to request such assistance, please contact Ms. Andrea Smith of the City of Ogdensburg at 315-393-7150.

7.0 Site Issues and Communication Needs

This section of the plan is designed to help the City of Ogdensburg identify and document Site related issues important to the community near the Site, as well as identify the information needs of the community and the NYSDEC. This information will help the Applicant to effectively implement the Citizen Participation Plan requirements and guide any additional citizen participation activities that may be needed.

1. Major Issues to the Community –The City of Ogdensburg has attempted to identify major issues of interest to the community surrounding the Site. The City of Ogdensburg is aware of the following general community concerns:
 - Residents are concerned about property values being affected by the site.
2. Information Needed from the Community – Below is a list of information that the City of Ogdensburg needs from the community to assist with the site investigation and, if necessary, determination of appropriate cleanup measures:
 - Primary and secondary concerns with remedial investigation results, if any. The public will have an opportunity to comment during the 30-day public comment period on the Remedial Investigation Work Plan.
3. Information to be Communicated to the Community – Below is a list of information that the City of Ogdensburg wants to communicate to the community through the citizen participation program:
 - To inform neighbors of the site about why the investigation is being conducted.

- To inform the site contact list how to get information and how to get involved with the project.
- Inform citizens that their concerns are valuable and necessary.

8.0 Document Repositories

For the duration of the Brownfields Cleanup Program (BCP) at the Former Standard Shade Roller site, documents pertaining to the activities undertaken at the project site will be placed in the following local and regional repositories for public review:

Local Repositories

1. City of Ogdensburg
City Clerk's Office
City Hall - 330 Ford Street
Ogdensburg, NY 13669
(315) 393-3540
2. Ogdensburg Public Library
312 Washington Street
Ogdensburg, NY, 13669
(315) 393-4325

Regional Repositories

1. New York State Department of Environmental Conservation
Region 6
State Office Building
317 Washington Street
Watertown, New York 13601
Contact: Peter Ouderkirk
Phone: 315-785-2513
2. Barton & Loguidice, P.C.
290 Elwood Davis Road
P.O. Box 3107
Syracuse, New York 13220
Contact: Scott Nostrand
Phone: 315-457-5200

9.0 Contact List

For this project, the contact list will consist of immediately adjacent property owners, local government officials, NYSDEC, NYSDOH, various St. Lawrence County media and other interested environmental groups. These are included below:

Neighboring Property Owners

1. Joseph M. Basta
619 Main Street
Ogdensburg, NY 13669
2. City of Ogdensburg
330 Ford Street
Ogdensburg, NY 13669
3. Alexander Rule
540 Covington Street
Ogdensburg, NY 13669
4. James Carter
536 Covington Street
Ogdensburg, NY 13669
5. Michelle L. Horton
532 Covington Street
Ogdensburg, NY 13669
6. Leslie R. MacMartin
530 Covington Street
Ogdensburg, NY 13669
7. Brent M. Binion
526 Covington Street
Ogdensburg, NY 13669
8. Christopher G. MacMartin
523 Covington Street
Ogdensburg, NY 13669
9. Lillianne Brassard
520 Covington Street
Ogdensburg, NY 13669

10. Elaine D. Brenno
514 Covington Street
Ogdensburg, NY 13669
11. Thomas Wing
513 Covington Street
Ogdensburg, NY 13669
12. Justin & Marsha B. Morrow
511 Covington Street
Ogdensburg, NY 13669
13. Jody Montroy
510 Covington Street
Ogdensburg, NY 13669
14. Debra L. Denny
509 Covington Street
Ogdensburg, NY 13669
15. Charles Pearson
508 Covington Street
Ogdensburg, NY 13669
16. Stephen J. Phelps
507 Covington Street
Ogdensburg, NY 13669
17. Rita K. Schmidt
505 Covington Street
Ogdensburg, NY 13669

NYSDOH Contacts

1. Wendy S. Kuehner, P.E.
Public Health Engineer 2
Bureau of Environmental Exposure Investigation
New York State Department of Health
Empire State Plaza
Corning Tower, Room 1787
Albany, NY 12237
(518) 402-7860

NYSDEC Contacts

1. Judy Drabicki
Regional Director
NYSDEC
Region 6 Headquarters
317 Washington Street
Watertown, New York 13601
2. Stephen Litwhiler
Regional Citizen Participation Specialist
NYSDEC
Region 6 Headquarters
317 Washington Street
Watertown, New York 13601
3. Pete Taylor
Regional DER Program Supervisor
NYSDEC
Region 6 Headquarters
317 Washington Street
Watertown, New York 13601
4. Peter S. Ouderkirk, P.E.
Project Manager/Engineer
NYSDEC - Region 6
Dulles State Office Building
317 Washington Street
Watertown, New York 13601-3787

Local Government Officials

1. William D. Nelson, Mayor
City of Ogdensburg
City Hall – 330 Ford Street
Ogdensburg, NY 13669
2. Andrea Smith, Interim Director
Department of Planning and Development
330 Ford Street – Room 11
Ogdensburg, NY 13669

3. Gregory M. Paquin, Chair
St. Lawrence County Board of Legislatures
Court House
48 Court Street
Canton, NY 13617-1194
4. Karen St. Hilaire, County Administrator
St. Lawrence County Board of Legislatures
Court House
48 Court Street
Canton, NY 13617-1194
5. Keith J. Zimmerman
St. Lawrence County Planning Board
48 Court Street
Canton, NY 13617
6. St. Lawrence County Office of Economic Development
80 State Highway 310
Canton, NY 13617

Local Newspapers

1. Ogdensburg Journal
308 Isabella Street
Ogdensburg, NY 13669
2. Watertown Daily Times
308 Isabella Street
Ogdensburg, NY 13669

Public Water Supplier

1. Kit W. Smith
Director of Public Works
City of Ogdensburg
901 Champlain Street
Ogdensburg, NY 13669

Local Media

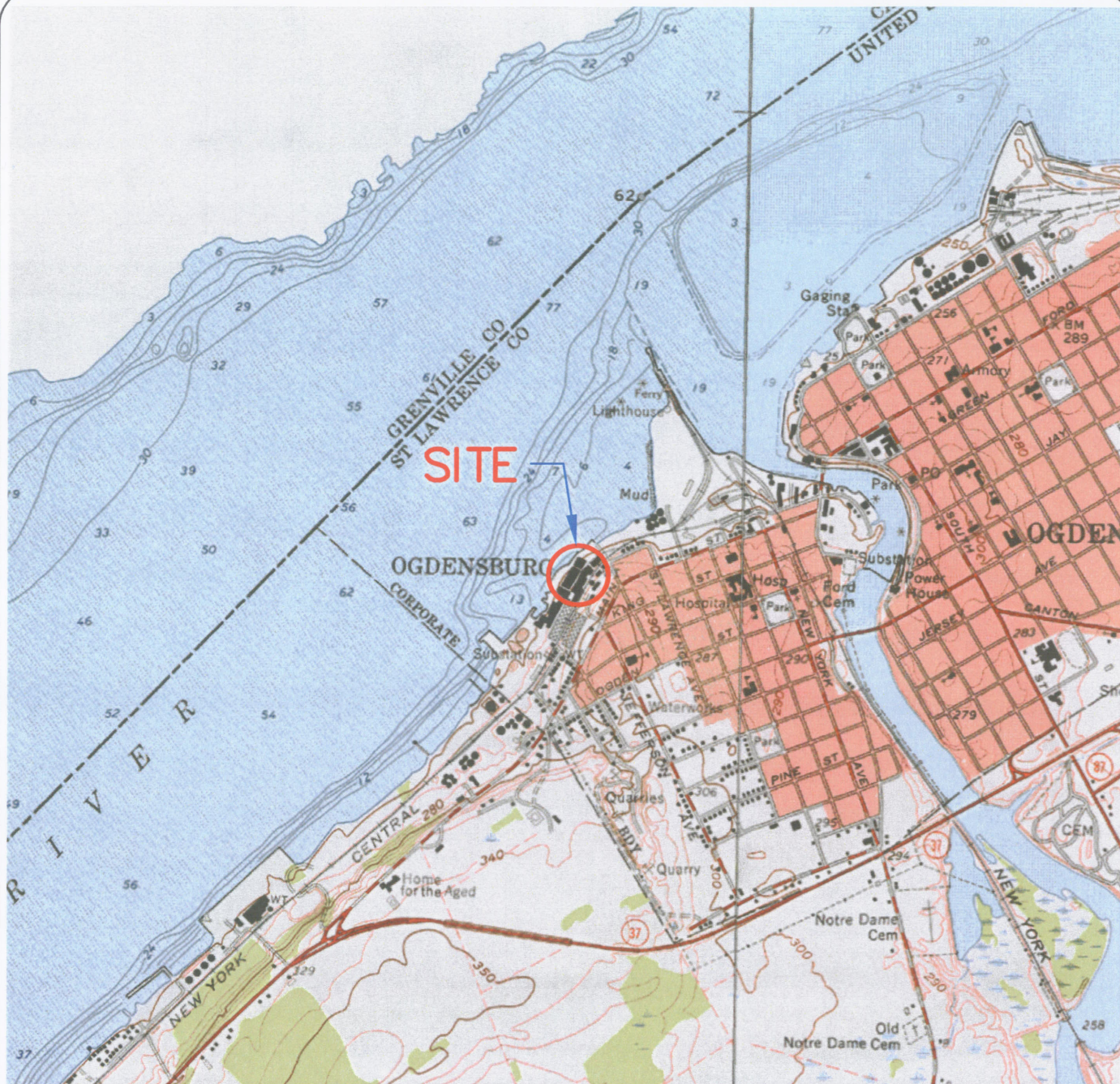
1. WWNY TV News
19 Hodskin Street
Canton, NY 13617

2. Community Broadcasters
Attn: Bryan Mallette
199 Wealtha Avenue
Watertown, NY 13601

Figure 1
Project Location Map

NONE
PLOT
BANDMONOCHROME.CTB

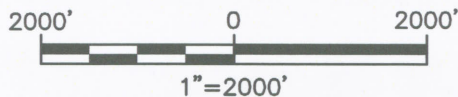
1/1/08-ALB-JHSr, 2/5/08-JHSr
S:\PROJECTS\600\692_003\6 CADD\ACAD\692003_F01a.DWG



SOURCE: OGDENSBURG EAST AND WEST, NEW YORK U.S.G.S. QUADRANGLE MAP, DATE 1983.



QUADRANGLE LOCATION



Engineers • Environmental Scientists • Planners • Landscape Architects

FORMER
STANDARD SHADE ROLLER SITE
BROWNFIELD PROJECT
SITE LOCATION MAP

CITY OF OGDENSBURG

ST. LAWRENCE COUNTY, N.Y.

Figure

1

Project No.

692.003

Figure 2
Site Plan

2008 AERIAL PHOTOGRAPH



Appendix D

Underground Site Assessment Report, BCM Engineers, October 1991



UNDERGROUND SITE ASSESSMENT
FOR
JOANNA INDUSTRIES, A CHF COMPANY

CC INDUSTRIES
OGDENSBURG, NEW YORK

BCM PROJECT NO. 05-4278-14

OCTOBER 1991

Prepared By:

A handwritten signature of Paul S. Hawkins, written in dark ink, positioned above a horizontal line.

Paul S. Hawkins
Project Manager

Reviewed and Approved By:

A handwritten signature of Duane A. Miller, written in dark ink, positioned above a horizontal line.

Duane A Miller
Section Manager

A handwritten signature of J. W. Roberson, written in dark ink, positioned above a horizontal line.

J. W. Roberson, P.E.
Senior Vice President

•BCM Engineers Inc.
108 St. Anthony Street
Mobile, Alabama 36602

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1.0 INTRODUCTION

CC Industries (CCI) requested that BCM Engineers Inc. (BCM) perform an underground storage tank (UST) removal and site assessment at their property located in Ogdensburg, New York (see Figure 1). This project was authorized by Mr. Robert H. Siepka on May 15, 1991 and was completed in accordance with BCM Proposal No. 64-8083-50 dated April 23, 1991. The following report describes BCM field activities and presents analytical results, findings and conclusions.

2.0 BACKGROUND

CCI retained BCM to prepare a UST Management Plan in 1989. Phase I of the UST Management Plan identified all UST's owned and operated by CCI and its subsidiaries. This plan included a UST inventory, document review, visual inspection and record keeping program, regulatory compliance, state trust fund review and a final report.

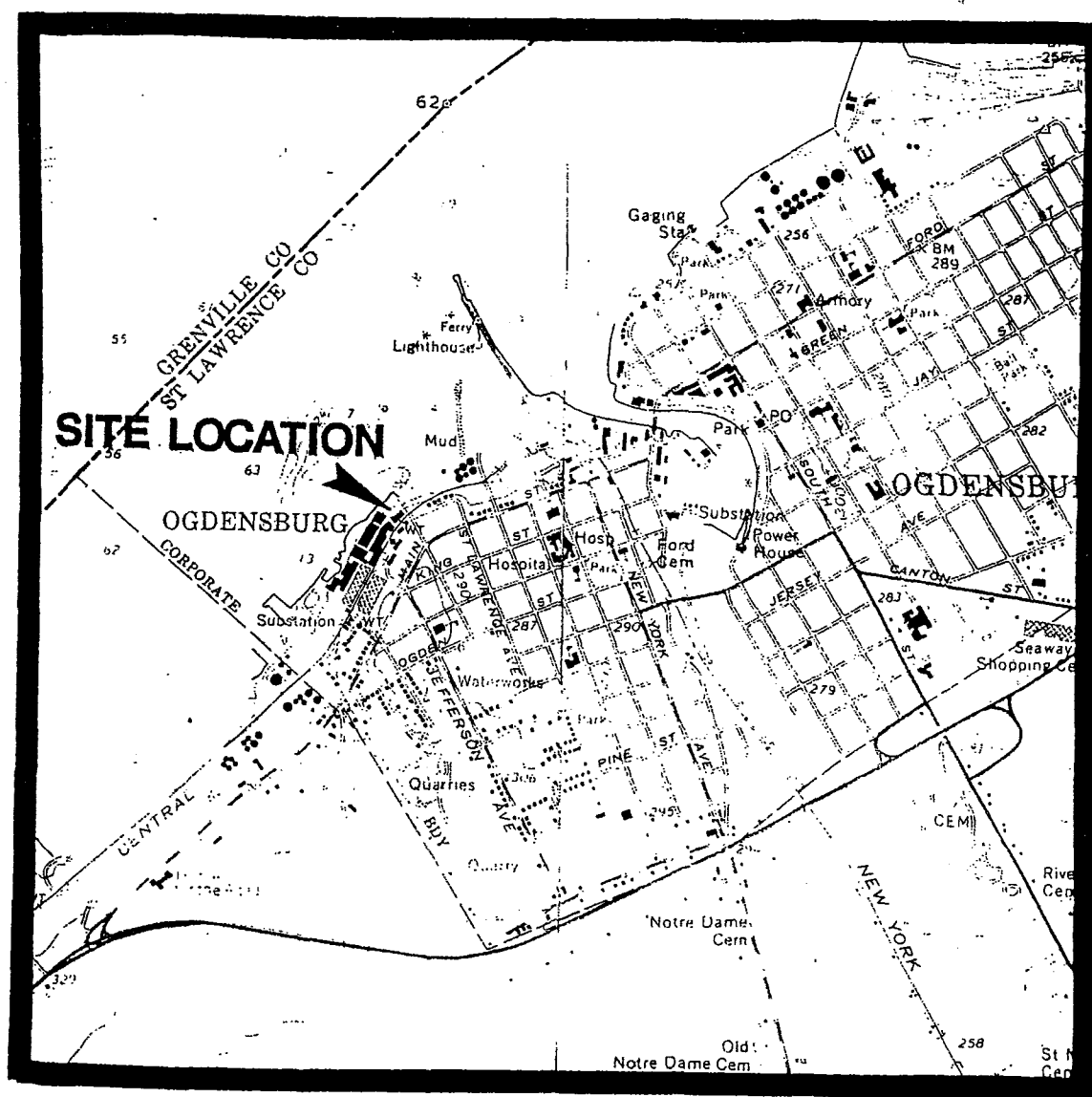
Phase II of the UST Management Plan was completed in August of 1990 and included financial responsibility, regulatory compliance, upgrading options, and recommendations. CCI implemented this plan in 1991 which included, among other items, the removal of one 500-gallon gasoline UST located at Joanna, Division of Crown Home Furnishings Industries, in Ogdensburg, NY (location shown in Figure 1, 2, and 3 and in photograph 1 and 2 in Appendix A).

In May of 1991, BCM compiled a list of qualified contractors to remove the 500-gallon gasoline UST at the Joanna site and sent specifications and bid packages to these contractors. Fourth Coast Pollution Control (FCPC) in Waddington, NY was chosen to remove the UST based on the bids received and their qualifications.

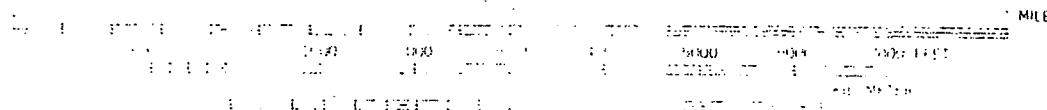
The 500-gallon gasoline UST was removed from the Joanna site on June 17, 1991. Representatives present during the excavation included Paul Hawkins (BCM), Richard Mayette (FCPC), and Thomas Voss of the New York State Department of Environmental Conservation (NYSDEC). Two small holes were noted in the UST after it was removed from the ground (see photograph 3 in Appendix A). Mr. Voss (NYSDEC) screened the soil with a PID in the tank pit area and found elevated readings. Mr. Voss recommended the installation of permanent monitoring wells to determine if the groundwater was contaminated from the release. On June 18-20, 1991, three permanent monitoring wells were installed, developed, and sampled (location shown in Figure 3, and in photographs 5, 6, 7, and 8 in Appendix A).

Figure 1.

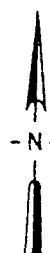
Site Location Map



SCALE 1:1000



CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929
DEPTH CURVES AND SOUNDINGS IN FEET—DATUM IS LOW WATER 742.8 FEET



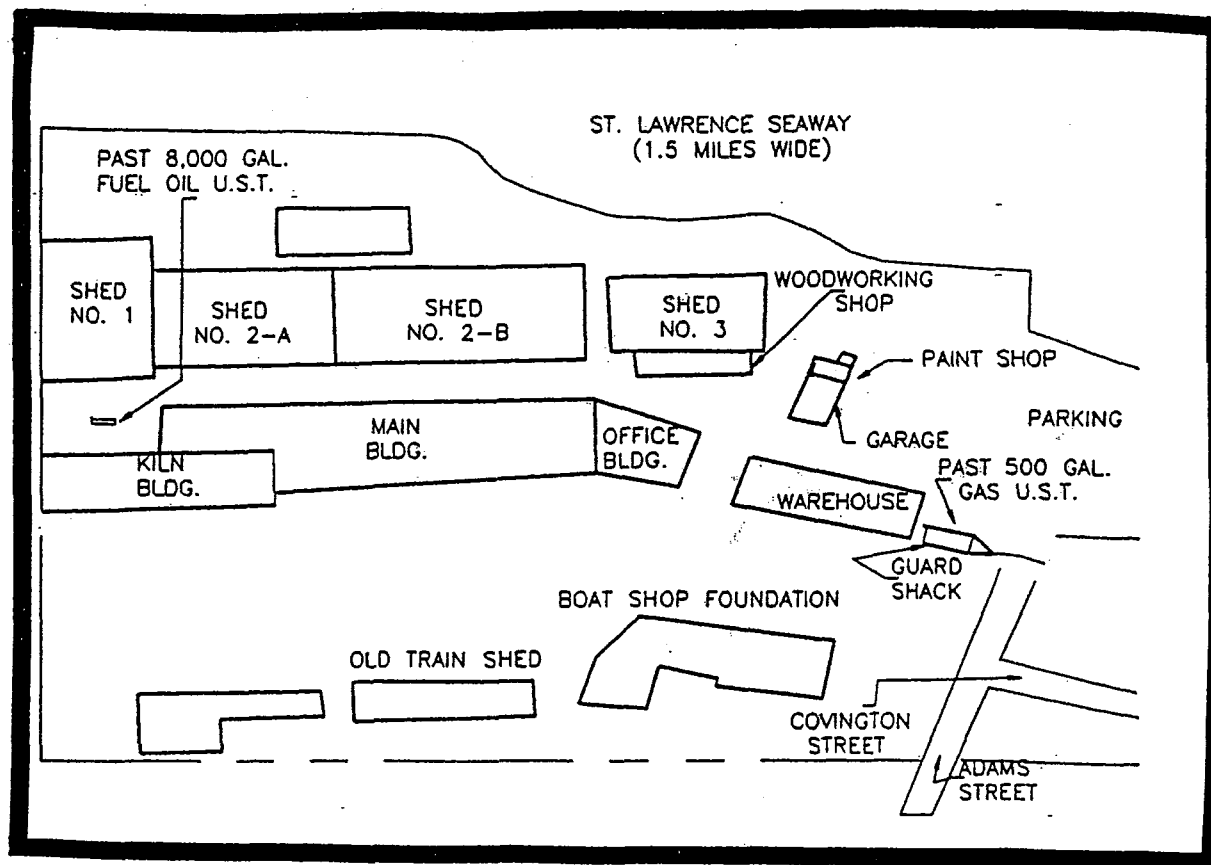
OGDENSBURG WEST, N. Y.

N4437 5—W7530 1 5

1963

Figure 2

JOANNA SITE LAYOUT

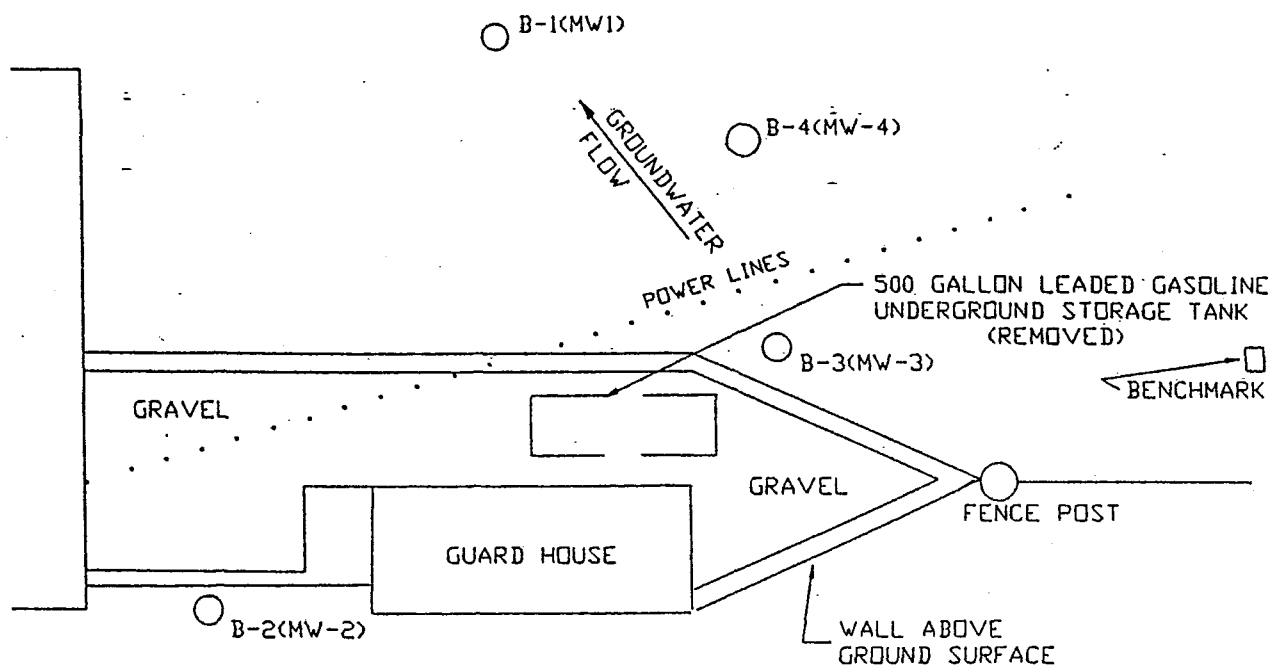


Not To Scale



FIGURE 3

Underground Storage Tank Site Plan
Joanna Company
Ogdensburg, New York



Not To Scale



Analytical laboratory results of Monitoring Well No. 3 revealed total dissolved xylenes in the groundwater at 1.4 parts per million (ppm) which exceed New York State Groundwater Standards. The other two monitoring wells showed no detectable contamination.

The NYSDEC requested in a letter dated July 24, 1991, that a hydrogeologic investigation be performed on the site to delineate the extent of contamination. BCM prepared a work plan in August 1991 and submitted it to the NYSDEC for approval. The plan was approved and the Hydrogeologic Investigation began on September 9, 1991. One additional monitoring well was installed, developed, and sampled. The location of Monitoring Well No. 4 was approved by Mr. Thomas Voss (NYSDEC).

3.0 SCOPE OF WORK

BCM activities completed during the UST removal and subsequent hydrogeologic investigation included:

- A. Supervising the removal of one 500-gallon gasoline UST at the Joanna site in Ogdensburg, NY, according to BCM specifications.
- B. Conducting a UST site assessment in accordance with NYSDEC regulations and requirements, and BCM standards.
- C. Performing initial subsurface screening for hydrocarbons of the tank excavation area using an Organic Vapor Analyzer (OVA).
- D. Emplacing four subsurface borings and installing four 2-inch diameter groundwater monitoring wells to an average depth of 20 feet below land surface (BLS).
- /E. Obtaining selected samples for laboratory analysis in accordance with NYSDEC guidelines and BCM standards.
- F. Determining groundwater depth and flow direction.
- /G. Preparing a written report of the activities performed including laboratory results.

4.0 SITE CHARACTERIZATION

4.1 Site Location and Setting

The Joanna site is located in St. Lawrence County at the north end of Adams Street and the west end of Covington Street on the St. Lawrence River in Ogdensburg, New York (as shown in Figure 1). The area around the site is characterized by single family residences and small shops to the south. Past industrial areas are located to the east and west along the St. Lawrence River.

4.2 Site Description

Site features are illustrated on Figures 2 and 3, and include buildings, approximate property lines, street names, overhead utility lines, and other relevant physical features.

The Joanna site is a window shade manufacturing plant and includes twelve (12) buildings of various ages (see Figure 2). The site is directly on the south bank of the St. Lawrence River and the ground surface slopes northward toward the river.

4.3 Site History

This site has been occupied as far back as 1898 according to fire insurance maps. The Spalding Boat Company and the Adirondack Match Company were the earliest occupants. In 1904, the fire insurance map shows Leyare's Boat Works and the Cornwell and Porter Brewery. The 1909 map shows the occupants to be the Leyare's Boat Works and the Flos Shade Roller Company. The 1918 and 1925 maps show the occupants to be Leyare's Boat Works and the Standard Shade Roller Company. The 1949 map shows the occupants to be the Standard Roller Company and Becker Moore Wood Floor Mills.

5.0 HYDROGEOLOGIC INVESTIGATION

5.1 Purpose

To detect the presence of petroleum hydrocarbon constituents in the subsurface, four subsurface borings were emplaced around the removed 500-gallon UST pit area, as shown in Figure 3. These subsurface borings were conducted to (1) determine if petroleum hydrocarbon constituents were released, (2) determine the vertical and



horizontal extent of hydrocarbon constituents within the uppermost water bearing unit, (3) to better define the hydrogeologic characteristics, and (4) provide control and calibration for subsequent field work.

5.2 Subsurface Boring Emplacement and Subsurface Sample Acquisition

The subsurface conditions described herein are generally based on data evaluated during the emplacement of subsurface borings. Whenever available, other information sources (e.g., geotechnical reports, geological literature, etc.) were reviewed and utilized during the development and implementation of these investigations.

Subsurface conditions can vary widely. The conditions described herein reflect only the subsurface and groundwater penetrated by the boring, and soils and groundwater in its immediate vicinity. The nature of shallow soils, depth to groundwater and lithologic units change over relatively short distances, both vertically and horizontally. This data should be interpreted as an indicator of subsurface conditions and not as a definitive assessment of hydrocarbon compounds throughout the area.

Four subsurface borings (B-1 through B-4) and four monitoring wells (MW-1 through MW-4) were emplaced on the site, as shown in Figure 3. BCM utilized the contract services of Fourth Coast Pollution Control (FCPC) of Waddington, NY for the emplacement of all subsurface borings and wells. The subsurface borings were installed to a depth of between 12 and 18 feet BLS using a truck-mounted rotary drill rig with a 4.25 ID continuous-flight, hollow-stem earth auger and an air/rotary solid-stem drill. Boring logs are shown in Appendix B.

Figure 3 depicts the approximate location of each subsurface boring. Boring B-1 (MW-1) is located approximately 19' east of the corner of the warehouse by the loading dock and 6.5' north of that corner. Boring B-2 (MW-2) is located approximately 10.5' east of the southeast corner of the warehouse and 3.83' south of the curb. Boring B-3 (MW-3) is located approximately 5' north of the concrete retaining wall. Boring B-4 (MW-4) is located approximately 28.5' north of the fence gate and 40.67' east of the corner of the warehouse by the loading dock.



5.3 Soil Vapor Headspace Analysis

A sample of the subsurface auger cuttings were placed in a clean mason jar. The retaining top was fastened over clean aluminum foil and the samples were stored at ambient temperatures (65°F to 75°F) during fieldwork. A Foxboro Century Model 108 OVA was used for all soil vapor headspace analysis. Each sample was then vigorously shaken for 30 seconds and the OVA tip was inserted through the aluminum foil into the jar headspace. The subsample exhibiting the highest OVA-readings in each boring were labeled and stored on ice subsequent to shipment for laboratory analysis.

6.0 GEOLOGY

6.1 Regional Geology

The Joanna site is on the northwestern fringe of the Precambrian Adirondack Province in flat-lying Paleozoic beds of Ordovician age (500 to 435 million years ago), just to the northeast of the Frontenac axis which is the link between Precambrian Grenville formations of the Adirondack massif (pre 1100 to 570 million years ago) and the Grenville rocks of the Canadian Shield. Regional dips are toward the northeast at very low angles.

6.2 Local Geology

Locally, the Ordovician age Beckmantown (or Ogdensburg) Dolostone is very flat-lying with dips of only a few degrees to the north. The geologically thin veneer of sedimentary Paleozoic rocks consist of the Beckmantown, below that the Theresa formation, then Potsdam Sandstone and finally the basement of the much older, complexly folded Precambrian gneisses. Ten to fifteen miles to the south these thin Ordovician beds have been eroded away at the northern edge of the Adirondack uplift. All surface drainage is to the north via northerly flowing rivers into the St. Lawrence River which in turn flows northeast.

6.3 Site Geology

The site is on the south bank of the St. Lawrence River, just west of the mouth of the Oswegatchie River which flows in from the south. The site area itself is industrial with numerous residences just uphill and adjacent to the plant.

All surface drainage in the area is downhill to the north, directly into the St. Lawrence River.

Surficial geology consists entirely of cover, both as fill for the water's edge industries and as landscaping for the numerous residences in the neighborhood. There are no surface rock outcrops within several hundred yards of the site.

The Joanna Industries plant sits on construction type hard fill which in turn rests on Beekmantown Dolostone, a dark tan, sandy, medium to fine grained, siliceous dolostone of Lower Ordovician age. Because there is no outcrop in the area, bedrock geology was determined by analysis of samples of the monitoring well drill cuttings and by observation of local geology maps.

7.0 MONITORING WELL DESIGN AND INSTALLATION

The monitoring wells were installed during the subsurface hydrogeologic investigation to (1) collect groundwater samples, (2) triangulate groundwater flow direction, and (3) identify possible hydrocarbon compounds. Locations of the monitoring wells installed are illustrated in Figure 3 and in photographs 5, 6, 7, and 8 in Appendix A.

7.1 Method

Four permanent monitoring wells were installed at the site. All wells were constructed of two-inch diameter, threaded, schedule 40 PVC well casing conforming to ASTM-D2665. The well casing is attached to two-inch diameter, threaded, schedule 40 PVC slotted well screen (slot size of 0.010 inch) conforming to ASTM-D1785. On the bottom of the well screen is a two-inch diameter, threaded, schedule 40 PVC, cone shaped sediment trap.

Monitoring Well No. 1 (MW-1) was completed to a total depth of 12 feet BLS. The static water level in the open boring was at 7.91 feet BLS on 9-12-91. MW-1 is screened from 12 feet to 2 feet BLS. Well casing is used from 2 feet to 0.5 feet BLS.

Monitoring Well No. 2 (MW-2) is completed to a total depth of 15 feet BLS. The static water level was at 14.13 feet BLS on 9-12-91. MW-2 is screened from 15 feet to 4 feet BLS. PVC well casing is used from 4 feet to 0.32 feet BLS. Monitoring Well No. 3 (MW-3) is completed to a total depth of 17 feet BLS. The static water level was at 10.32 feet BLS on 9-12-91. MW-3 is screened from 17 feet to 7 feet BLS. PVC casing is used from 7 feet to 0.2 feet BLS. Monitoring Well No. 4 (MW-4) is completed to a total depth of 17 feet. The static water level was at 8.80 feet BLS on 9-12-91. MW-4 is screened from 17 feet to 7 feet BLS. PVC well casing is used from 7 feet 0.2 feet BLS.

To complete the wells, rounded 10/20 silica sand was used to fill the annulus surrounding each well from the bottom of the well to at least one-half foot above the screened interval. A one-foot layer of bentonite pellets was poured above the sand and saturated with water to provide a seal. Each well was grouted with a 5% bentonite cement grout. Locking caps were provided and each well was finished with a leak resistant marked manhole cover. (Refer to Appendix C for monitoring well construction details.)

7.2 Groundwater Sample Acquisition and Water Table Elevation Survey

Groundwater samples were obtained from the monitoring wells installed during the Hydrogeologic Investigation for subsequent laboratory analysis. Site groundwater depth and flow direction were characterized through a water table elevation survey. The survey was conducted during the Hydrogeologic Investigation to identify groundwater depth and flow direction. Results of the elevation survey were evaluated to determine potential areas of contamination, impact and contamination migration potential. Results of the elevation survey are shown in tabular form in Table 1.

7.3 Method

An on-site sample scheme was initially developed to define the groundwater sampling order, which was dependent on the levels of petroleum hydrocarbon constituents expected in each well.

Normally, monitoring wells that are suspected to have minor impact are sampled first, while monitoring wells suspected to have high concentrations are sampled last. This method was followed to ensure integrity of the samples gathered. Samples were acquired using one disposable bailer per well. The bailer was discarded after each sample acquisition to prevent any cross contamination.



TABLE 1

ELEVATION SURVEY RESULTS

PROJECT: CC INDUSTRIES, JOANNA UST REMOVAL

SITE: OGDENSBURG, NEW YORK

DATE: 9/12/91

SITE POINT	{1} REFERENCE POINT (ft.)	ELEVATION at top of CASING (ft.)	{2} DEPTH to G.W. (ft.)	WATER TABLE ELEVATION (ft.)
{3} B.M. #1	100.00			
MW#1	97.72	97.54	7.91	89.63
MW#2	104.42	104.10	14.13	89.97
MW#3	100.52	100.32	10.32	90.00
MW#4	98.99	98.77	8.80	89.97

{1} REFERENCE POINT IS ELEVATION OF GROUND AT EACH SITE POINT.

{2} MEASUREMENT TAKEN FROM TOP OF CASING.

{3} BENCH MARK #1 IS ASSIGNED A REFERENCE ELEVATION OF 100.00 FEET AND IS LOCATED ON CONCRETE CURB JUST BELOW "EMPLOYEE PARKING" SIGN JUST INSIDE GATE AS SHOWN IN FIGURE 3.

All wells were fully developed by bailing the well volume and allowing the well to recharge at least five times. This was performed to ensure that groundwater samples would be representative of subsurface conditions.

Elevations were initially determined for the top of each monitoring well casing and the ground level immediately adjacent to each well using a David White® Model LPG-20 level and a surveying level rod. An arbitrary bench mark or reference point of 100 feet was established on the concrete curb immediately below an "Employee-Parking" sign. A height of instrument was obtained by adding the rod reading to the bench mark elevation. The top of casing and ground elevation at each well was determined by subtracting the height of instrument from the rod reading. A mark was established on the well casing using a permanent marker to ensure the proper point for subsequent measurements. Groundwater depth was then measured from the mark on each well casing using a water level indicator probe to measure the water level. This information was used to calculate the water table elevation for each well as follows:

$$WTE = ETC - DTW$$

Where:

WTE = Water Table Elevation

ETC = Elevation to top of well casing

DTW = Depth to water

Refer to Table 1 for Water Table Elevation Survey Data.

After all wells were developed, a groundwater sample was obtained and placed in three 20 ml glass VOA vials and stored in an ice bath for shipment to the laboratory. All vials were labeled during the sample acquisition and the chain-of-custody procedure was followed.

8.0 LABORATORY ANALYSIS

8.1 Laboratory Procedures and Methods

Groundwater and soil samples that were collected in the Hydrogeologic Investigation were analyzed by Analytical Chemical Testing Laboratory using established EPA Protocol Methods 8020, 503, and 8240 as described in 40 CFR Part 136, Standard Methods for the Examination of Water and Wastewater, 16th Edition and EPA SW846.

8.2 Analytical Results

Table 2 presents a summary of the laboratory analytical results. Two soil samples were taken from the bottom of the tank pit area for laboratory analysis. Groundwater samples were taken from each monitoring well installed on site.

The laboratory analytical results of the soil sampled from the tank pit area exhibited Total Petroleum Hydrocarbons (TPH) concentrations of 4 ppm in the first sample. Benzene, toluene, ethyl benzene and total xylenes (BTEX) analytical results for the same sample exhibited below detection limits (BDL). The second laboratory soil sample collected from the tank pit area was BDL for both TPH and BTEX. The laboratory analytical results of the groundwater sampled from the monitoring wells exhibited concentrations of BTEX ranging from 1.8 ppm to BDL. Monitoring Well No. 3 (MW-3) exhibited total xylenes concentration of 1.4 ppm on 6-20-91 and 1.8 ppm for total xylenes concentration on 9-12-91. All other monitoring well groundwater laboratory analytical samples were BDL for all parameters. (Refer to Appendix D for analytical results.)

9.0 CONCLUSIONS

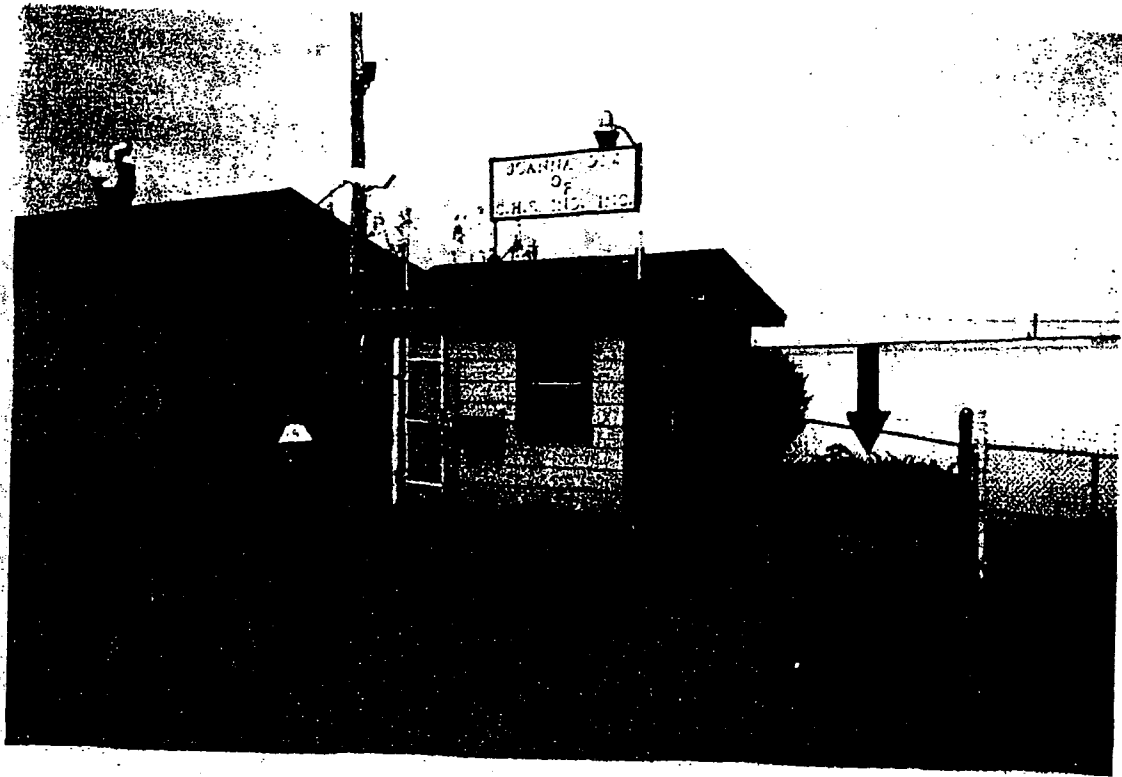
The analytical laboratory results of the groundwater sampled in the monitoring wells at the Joanna site indicate no appreciable contamination with the exception of Monitoring Well No. 3 (MW-3) which is located closest to the tank pit area. Analytical laboratory results of this monitoring well sampled on two separate occasions indicate xylene concentrations above New York State Groundwater Standards. The other hydrocarbons constituents are not exhibited, thus, it is assumed the gasoline which apparently leaked from the tank has decayed and broken down over an extended period of time leaving only the xylene constituents in the groundwater. This also seems to be localized to the small area in and around MW-3.

Table 2
Analytical Laboratory Results

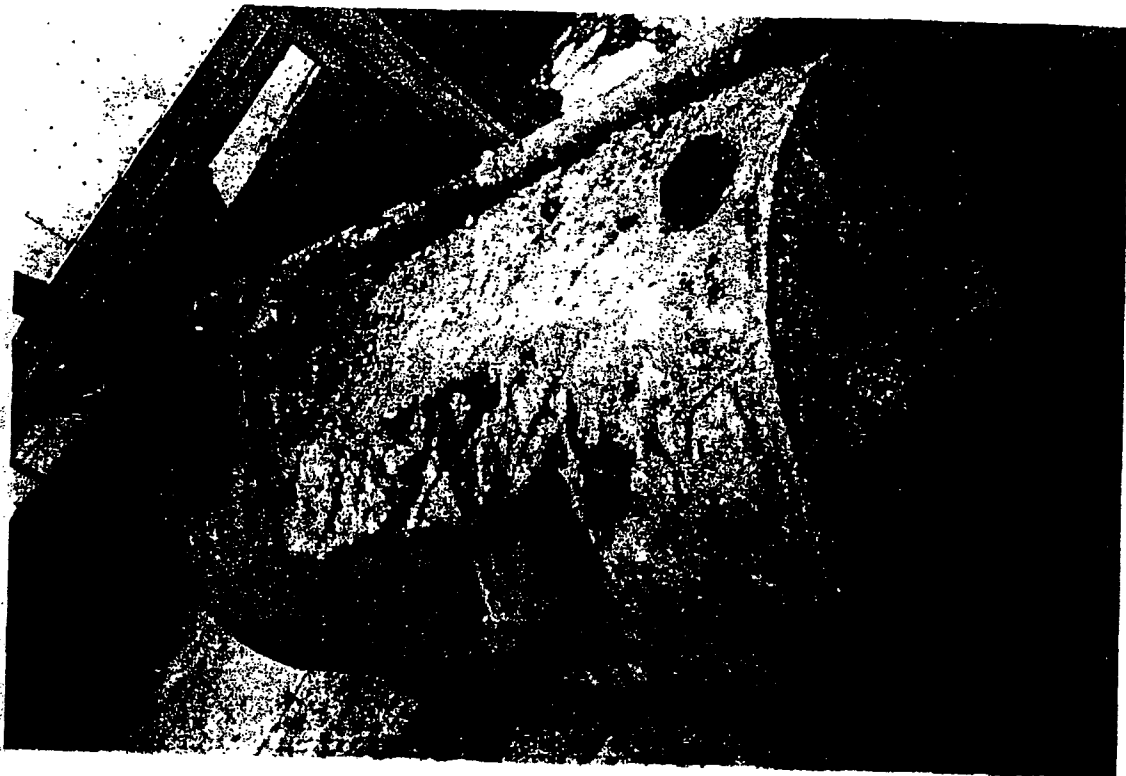
<u>Matrix</u>	<u>Sample</u>	<u>Boring</u>	<u>Monitoring Well</u>	<u>Benzene</u>	<u>Ethyl Benzene</u>	<u>Toluene</u>	<u>Total Xylenes</u>
Water	MW-1	B-1	MW-1	BDL	BDL	BDL	BDL
Water	MW-2	B-2	MW-2	BDL	BDL	BDL	BDL
Water	MW-3	B-3	MW-3	BDL	0.093 ppm	0.034 ppm	1.4 ppm
Water	MW-3	B-3	MW-3	BDL	BDL	BDL	1.7 ppm
Water	MW-4	B-4	MW-4	BDL	BDL	BDL	BDL
Soil	Bottom of excavation		TPH - 4 ppm	BDL	BDL	BDL	BDL
Soil	Bottom of excavation		TPH - BDL	BDL	BDL	BDL	BDL

BCM

APPENDIX A
PHOTOGRAPHS



PHOTOGRAPH NO. 1 - UST LOCATION



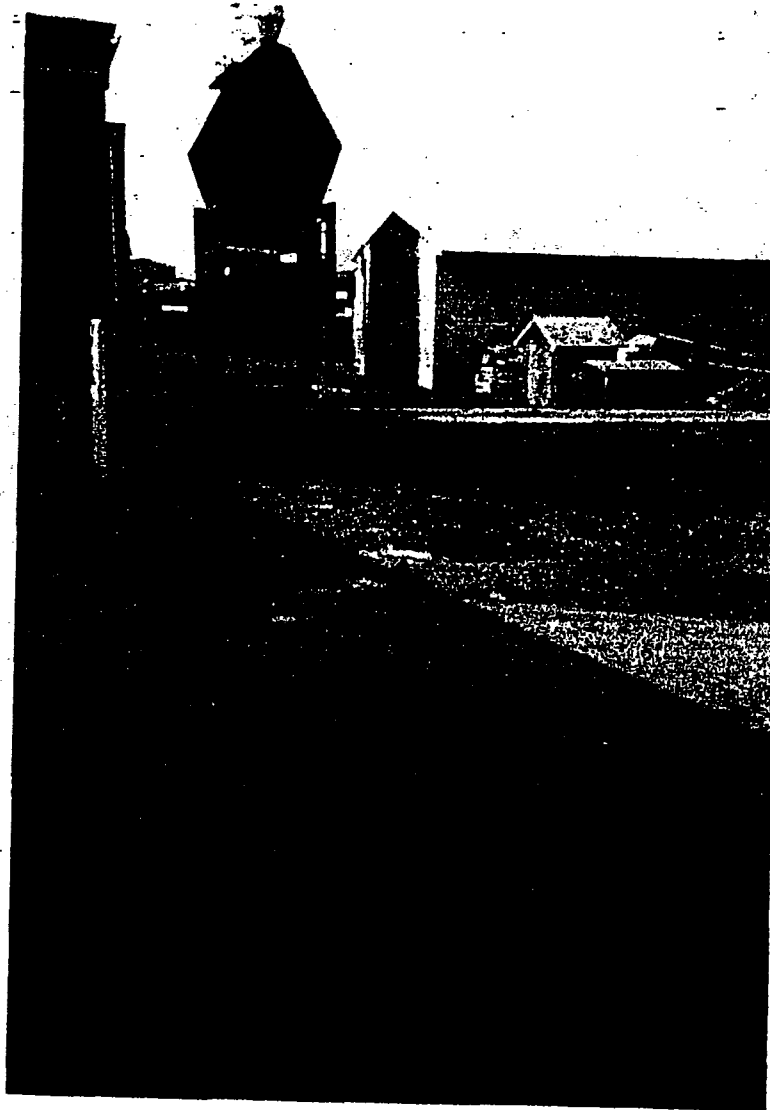
PHOTOGRAPH NO. 2 - REMOVED 500-GALLON UST



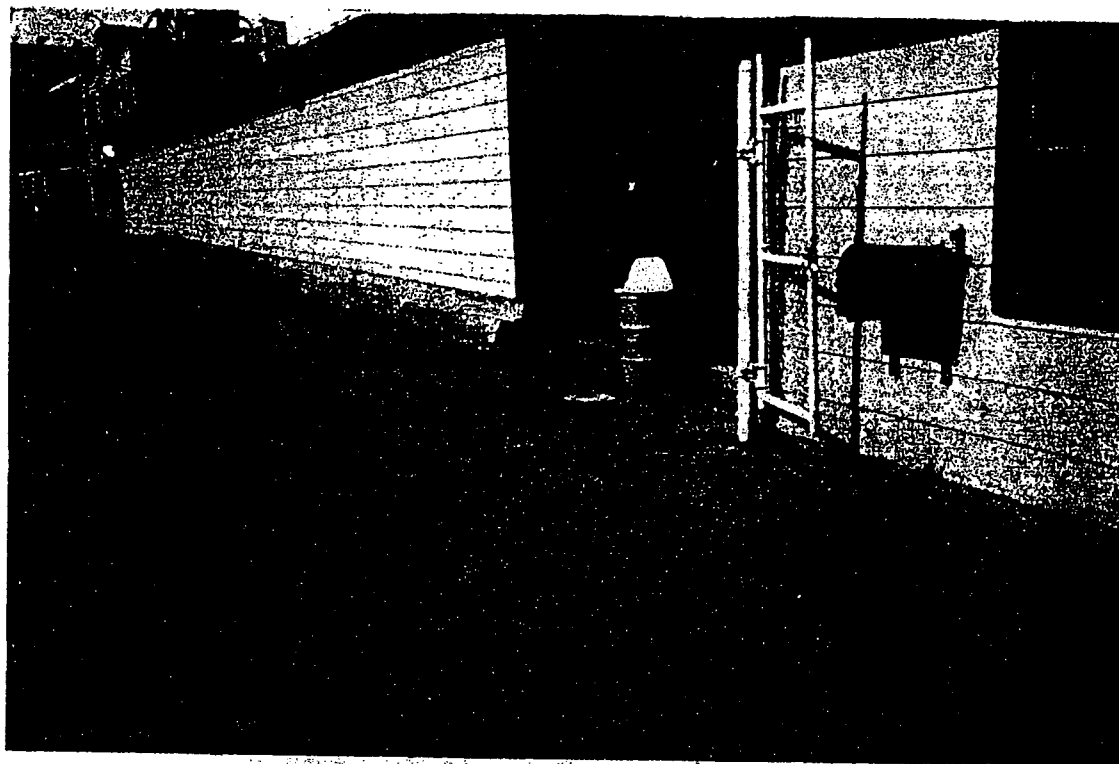
PHOTOGRAPH NO. 3 - APPARENT LEAKS IN UST



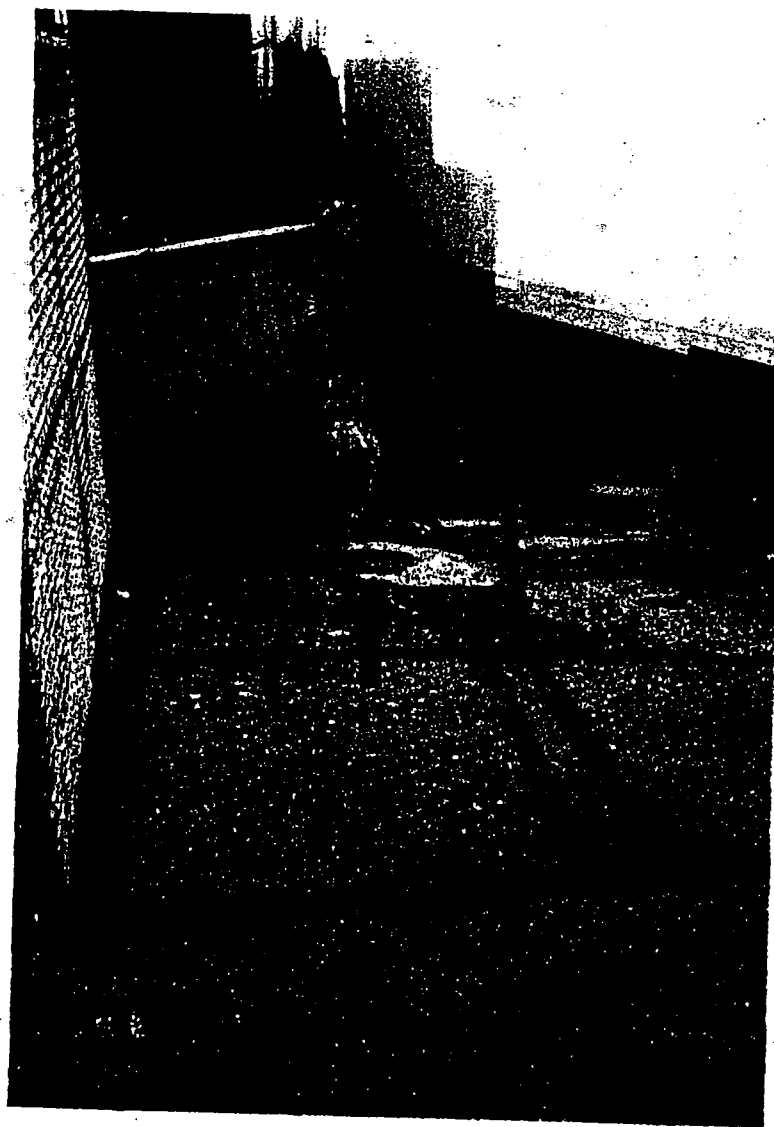
PHOTOGRAPH NO. 4 - WAREHOUSE, LOADING DOCKS AND UST AREA



PHOTOGRAPH NO. 5 - LOCATION OF MONITORING WELL NO. 1
(MW-1)



PHOTOGRAPH NO. 6 - LOCATION OF MONITORING WELL NO. 2
(MW-2)



PHOTOGRAPH NO. 7 - LOCATION OF MONITORING WELL NO. 3
(MW-3)



PHOTOGRAPH NO. 8 - LOCATION OF MONITORING WELL NO. 4
(MW-4)



APPENDIX B
ANALYTICAL RESULTS



ANALYTICAL CHEMICAL TESTING LABORATORY, INC.

Consulting Chemists & Scientists

July 18, 1991

REPORT TO: BCM Engineers
Post Office Box 1784
Mobile, AL 36633

REPORT OF: Chemical Analysis-Soil Samples
TPH & BTEX

JOB NUMBER: 91-505

ATTENTION: Mr. Paul Hawkins

Analytical Chemical Testing Laboratory, Inc. has completed the analysis of samples submitted by Paul Hawkins of BCM Engineers. The samples were analyzed, as directed, for specific parameters and results of our testing are as follows:

BCM Project #: 05-4278-14 Project Name: Joanna Industries

Received: 07/05/91 by R. Naman, A.C.T. Laboratory

Analyzed: 07/05/91 - 07/11/91 by PMN & DB

SAMPLE/DATE/INFO	TESTS	RESULTS	DET. LIMITS
-----	-----	-----	-----
ACT ID# 91-505-07/05-1	Total Petroleum	4 mg/Kg	1.0 mg/Kg
BCM ID# FC330	Hydrocarbons		
Sample Date: 06/27/91			
Bottom of Excavation			
	Benzene	BDL	1.0 mg/Kg
	Toluene	BDL	1.0 mg/Kg
	Ethylbenzene	BDL	1.0 mg/Kg
	Xylenes, Total	BDL	1.0 mg/Kg

mg/Kg = milligrams per Kilogram = parts per million

BDL = Below Detection Limits

BCM Engineers
July 18, 1991
Page 2

SAMPLE/DATE/INFO -----	TESTS -----	RESULTS -----	DET. LIMITS -----
ACT ID# 91-505-07/05-2 BCM ID# FC331 Sample Date: 06/27/91 Bottom of Excavation	Total Petroleum Hydrocarbons	BDL	1.0 mg/Kg
	Benzene	BDL	1.0 mg/Kg
	Toluene	BDL	1.0 mg/Kg
	Ethylbenzene	BDL	1.0 mg/Kg
	Xylenes, Total	BDL	1.0 mg/Kg

mg/Kg = milligrams per Kilogram = parts per million

BDL = Below Detection Limits

METHOD:

Standard Methods for the Examination of Water & Wastewater
16th Edition, 503-TPH.

E.P.A. 8020-BTEX.

We appreciate this opportunity to be of service. If there are any questions concerning this report, please feel free to call.

Very truly yours,

ANALYTICAL CHEMICAL TESTING LAB, INC.



Robert M. Naman
Analytical Chemist
President
Member, Amer. Institute of Chemists
Reg. 15488

RMN/bm



DIVISION
N. P. C.

Fourth Coast
Pollution Control

91-505-0705-1 & 2

DIVISION
N. P. C.

Fourth Coast
Pollution Control

CHAIN OF CUSTODY RECORD

PROJECT NO. 05-4278-14		PROJECT NAME JANNA INDUSTRIES, N.Y.		NO. OF CONTAINERS	
STA. NO.	DATE	TIME	STATION LOCATION		
1	6-27-91		BOTTOM OF EXCAVATION	1	
2	"		"	1	

Enclosed please find 2 (two) samples taken from the bottom of the excavation of Janna Industries as per PAUL HAWKINS	COMPOSITE GRAB SAMPLES FROM BOTTOM OF EXCAVATION
	SAMPLES MAILED TO DOB NAMMA
	ACT LABS
	3766 MORFAT RD
	MOBILE
	ACABAMA 36618
	7/1/91

Sampled by: (Signature) <i>[Signature]</i>	Date/Time 6/28 11:00 AM	Received by: (Signature) C.W. Stewart	Date/Time 7/1 11:00 AM	Relinquished by: (Signature) C.W. Stewart	Date/Time 7/1 11:00 AM	Received by: (Signature) <i>[Signature]</i>	Date/Time 7/1 11:00 AM	Relinquished by: (Signature) <i>[Signature]</i>	Date/Time 7/1 11:00 AM	Received by: (Signature) <i>[Signature]</i>	Date/Time 7/1 11:00 AM
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Remarks ACCOUNT # 0366-0098-5 08 ACT LABORATORIES 1 3766 MORFAT ROAD MOBILE AL 36610							

SUBSURFACE INVESTIGATION
C. MACDONALD GROUT
SR. GEOLOGIST

315-388-5909 OFFICE
315-287-3277 HOME
315-265-3100 24 HR.

P.O. BOX 278
WADDINGTON, NEW YORK 13894



ANALYTICAL CHEMICAL TESTING LABORATORY, INC.

Consulting Chemists & Scientists

June 25, 1991

REPORT TO: BCM Engineers
Post Office Box 1784
Mobile, AL 36633

REPORT OF: Chemical Analysis-Water Samples
BTEX

JOB NUMBER: 91-505

ATTENTION: Mr. Paul Hawkins

Analytical Chemical Testing Laboratory, Inc. has completed the analysis of samples submitted by Paul Hawkins of BCM Engineers. The samples were analyzed for, as directed, for specific parameters and results of our testing are as follows:

BCM Engineers Job #: 05-4278-14

SAMPLE/DATE/INFO	TESTS	RESULTS	DET. LIMITS
-----	-----	-----	-----
ACT ID# 91-505-06/19-1	Benzene	BDL	5.0 ug/L
BCM ID# MW-1	Toluene	BDL	5.0 ug/L
DATE: 06/18/91	Ethylbenzene	BDL	5.0 ug/L
	Xylenes, Total	BDL	5.0 ug/L

ug/L = micrograms per Liter = Parts per Billion

BDL = Below Detection Limits

BCM Engineers
June 25, 1991
Page 2

SAMPLE/DATE/INFO	TESTS	RESULTS	DET. LIMITS
ACT ID# 91-505-06/21-2	Benzene	BDL	5.0 ug/L
BCM ID# MW-3	Toluene	34 ug/L	5.0 ug/L
DATE: 06/20/91	Ethylbenzene	93 ug/L	5.0 ug/L
	Xylenes, Total	1,426 ug/L	5.0 ug/L
ACT ID# 91-505-06/21-3	Benzene	BDL	5.0 ug/L
BCM ID# MW-2	Toluene	BDL	5.0 ug/L
DATE: 06/20/91	Ethylbenzene	BDL	5.0 ug/L
	Xylenes, Total	BDL	5.0 ug/L

ug/L = micrograms per Liter = Parts per Billion

BDL = Below Detection Limits

METHOD:

E.P.A. 8020

We appreciate this opportunity to be of service. If there are any questions concerning this report, please feel free to call.

Very truly yours,

ANALYTICAL CHEMICAL TESTING LAB, INC.



Robert M. Naman
Analytical Chemist
President
Member, Amer. Institute of Chemists
Reg. 15488

RMN/bm



Page 1 of 1

CLIENT

BCM ENG
P. Hawkins

DATE _____

6-18-91


ORDER#

JOB #

05-4278-14

SAMPLE ID	DATE/TIME SAMPLED/TYPE	TESTS TO BE PERFORMED	PRESERVATIVE REMARKS
MW 1	6-18-91 AM	BTEX	ICE

RELEASED BY



COMPANY

BCM

RECEIVED BY

P. Naran 6/19/21

COMPANY

Ag

CHAIN OF CUSTODY RECORD

[illegible]



ANALYTICAL CHEMICAL TESTING LABORATORY, INC.

Consulting Chemists & Scientists

September 18, 1991

REPORT TO: BCM Engineers
Post Office Box 1784
Mobile, Alabama 36633

REPORT OF: Chemical Analysis-Water Samples

JOB NUMBER: 91-505

ATTENTION: Mr. Paul Hawkins

Analytical Chemical Testing Laboratory, Inc. has completed the analysis of water samples submitted by Paul Hawkins of BCM Engineers. The samples were analyzed, as directed, for specific parameters, and the following is a report of our findings:

BCM Project #: 05-4278-14

Project Name: Joanna Industries

Received: 09/13/91 by R. Naman

Analyzed: 09/13/91-09/17/91 by MGB & PL

BENZENE, TOLUENE, ETHYLBENZENE, XYLENES-WATER:

SAMPLE/DATE/INFO	TESTS	RESULTS	DET. LIMITS
ACT ID# 91-505-09/13-1	Benzene	BDL	0.050 mg/L
BCM ID# MW-3	Toluene	BDL	0.050 mg/L
Sampled: 09/12/91	Ethylbenzene	BDL	0.050 mg/L
0930 hrs. by P. Hawkins	Xylenes, Total	1.7 mg/L	0.050 mg/L

mg/L = milligrams per Liter = parts per million

BDL = Below Detection Limits

BCM Engineers
September 18, 1991
Page 2

SAMPLE/DATE/INFO	TESTS	RESULTS	DET. LIMITS
ACT ID# 91-505-09/13-2	Benzene	BDL	0.005 mg/L
BCM ID# MW-4	Toluene	BDL	0.005 mg/L
Sampled: 09/12/91	Ethylbenzene	BDL	0.005 mg/L
0930 hrs. by P. Hawkins	Xylenes, Total	BDL	0.005 mg/L

mg/L = milligrams per Liter = parts per million

BDL = Below Detection Limits

METHODS:

E.P.A. 8240-BTEX.

We appreciate this opportunity to be of service. If there are any questions concerning this report, please feel free to call.

Very truly yours,

ANALYTICAL CHEMICAL TESTING LAB, INC.



Robert M. Naman
Analytical Chemist
President

RMN/bm





Consulting Chemists & Scientists

SAMPLE CUSTODY FORM

Page 1 of 1

CLIENT BCM ENGINEERS
PAUL HARKINS
Mobile

DATE 9-12-91

ORDER# 91-575

JOB # 05-4278-44

RELEASED BY [Signature] COMPANY MCN ENGINEERS
RECEIVED BY Beck E. Mehner COMPANY ACT Laboratory, Inc

BCM

APPENDIX C
DRILLING/BORING LOGS

BCM Engineers

Drilling/Boring Log

Project CC Industries, Joanna U.S.T. Removal Well/Boring No.: B-1 (MW-1) Sheet 1 of 4
 Project No.: 05-4278-14 Date(s): 6-11-91 Logged By: Driller
 Well/Boring Location: 19' East of Loading Dock, 6.5' North of Corner of Warehouse.
 Drilling Method: 4.5" Hollowstem Auger Drilling Contractor: 4th Coast Pollution Control
 Depth to Groundwater: 8.5' B.G.S. Date: 6-11-91 Reference:
 Elevations - Ground Surface: 97.72' Inner Casing: 97.54' Outer Casing: 97.72'
 Water Table: 7.91' B.G.S. Date: 9-12-91 Reference:
 Remarks: B.G.S. = Below Ground Surface

Depth, Sample PL (ft)	Sample No.	Lithologic Description	Graphical Logs		Organic Vapor Headspace Analysis (ppm)	Elevation
			Strata	Well Construction		
1		Brown to Black Fill; Cinders, Brick, Stone and Cobbles.			6 Bkgd. 5	
2						
3						
4						
5		Moist, Brown and Gray Sandy, Silty Clay			5 Bkgd. 5	
6						
7						
8						
9		Groundwater Encountered @ 8.5' B.G.S.				
10						
11						
12						
13		Auger Refusal Boring Terminated at a Depth of 12' B.G.S.				
14						
15						
16						
17						

Project: CC Industries, Joanna U.S.T. Removal Well/Boring No.: B-2 (MW-2)
 Project No.: 05-4278-14 Date(s): 6-12-91 Logged By: Driller
 Well/Boring Location: 10.5' East of South Corner of Warehouse, 3.75' South of Curb.
 Drilling Method: Air/Rotary Drilling Contractor: 4th Coast Pollution Control
 Depth to Groundwater: 4' B.G.S. Date: 6-12-91 Reference:
 Elevations - Ground Surface: 104.42' Inner Casing: 104.10' Outer Casing: 104.42'
 Water Table: 14.13' B.G.S. Date: 9-12-91 Reference:
 Remarks: B.G.S. = Below Ground Surface

Depth, Sample PL (ft)	Sample No.	Lithologic Description	Graphical Logs		Organic Vapor Headspace Analysis (ppm)	Deviation
			Slide	Well Construction		
1		Black Fill.				
2						
3						
4		Perched Water Encountered				
5		Moist, Tan Sandy Beekmantown				
6		Dolostone.			7 Bkgd. 8	
7						
8					8 Bkgd. 7	
9						
10					8 Bkgd. 8	
11						
12					7 Bkgd. 7	
13						
14					7 Bkgd. 7	
15		Boring Terminated at a Depth of 15' B.G.S.				

BCM Engineers

Drilling/Boring Log

Project: CC Industries, Joanna U.S.T. Removal Well/Boring No.: B-3 (MW-3) Shoot: 3 of 4
 Project No.: 05-4278-14 Date(s): 6-12-91 Logged By: Driller
 Well/Boring Location: 7.5' north of fence gate, 5' northeast of concrete retaining wall
 Drilling Method: Air/Rotary Drill Drilling Contractor: 4th Coast Pollution Control
 Depth to Groundwater: 10.00 Date: 6-12-91 Reference:
 Elevations - Ground Surface: 100.52 Inner Casing: 100.32 Outer Casing: 100.52
 Water Table: 90.00 Date: 9-12-91 Reference:
 Remarks: B.G.S. = Below Ground Surface

Depth, Sample Pt. (ft)	Sample No.	Bore	Lithologic Description	Graphical Logs		Organic Vapor Headspace Analysis (ppm)	Elevation
				Strata	Well Construction		
1			Black cinders and concrete				
2							
3						5 Bkgd. 5	
4			Perched water encountered				
5							
6			Tan, Sandy Beekmantown Dolostone			6 Bkgd. 5	
7							
8							
9							
10						7 Bkgd. 6	
11							
12							
13						6 Bkgd. 5	
14						7 Bkgd. 7	
15						6 Bkgd. 5	
16							
17							
18			Boring terminated at a depth of 18' B.G.S.			6 Bkgd. 6	

Project: CC Industries, Joanna U.S.T. Removal Well/Boring No.: B-4 (MW-4) Sheet: 4 of 4
 Project No.: 05-4278-14 Date(s): 9-10-91 Logged By: Driller
 Well/Boring Location: 28.5' north of fence post, 40.75' east of loading dock
 Drilling Method: Air/Rotary Drill Drilling Contractor: 4th Coast Pollution Control
 Depth to Groundwater: 8.80 Date: 9-12-91 Reference:
 Elevations - Ground Surface: 98.99 Inner Casing: 98.77 Outer Casing: 98.99
 Water Table: 89.97 Date: 9-12-91 Reference:
 Remarks: B.G.S. = Below Ground Surface

Depth, Sample Pt (ft)	Sample No.	Blows	Lithologic Description	Graphical Logs		Organic Vapor Headspace Analysis (ppm)	Elevation
				Strata	Well Construction		
1			Asphalt and crushed stone				
2			Tan, Sandy Beekmantown Dolostone			6 Bkgd. 5	
3			Small to med. cobbles & gravel				
4			Tan, Sandy Beekmantown Dolostone				
5							
6							
7						5 Bkgd. 5	
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18			Boring terminated at a depth of 17.5' B.G.S.				

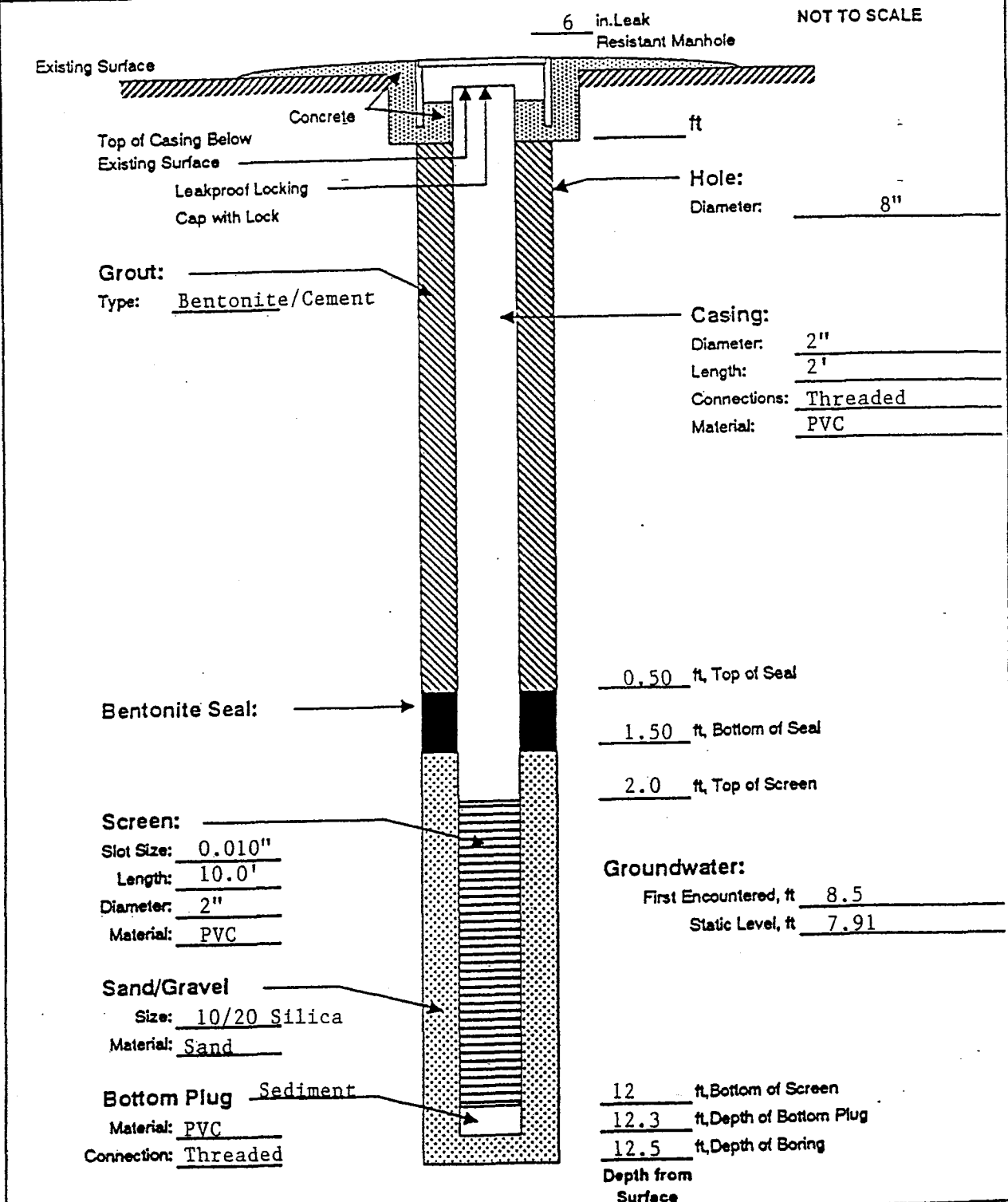


APPENDIX D
MONITORING WELL SCHEMATIC

BCM Engineers

Monitoring Well Schematic

Project: CC Industries, Joanna U.S.T. Removal Well/Boring No.: MW-1
 Project No.: 05-4278-14 Drilling Supervisor: Paul Hawkins
 Boring Location: Same as Boring B-1 Date(s): 6-11-91
 Drilling Method: 4.5" Hollowstem Auger Drilling Contractor: 4th Coast Pollution Con.



Comments:

Monitoring Well Schematic

Monitoring Well Schematic

Project: CC Industries, Joanna U.S.T. Removal

Well/Boring No.: MW-2 (B-2)

Project No.: 05-4278-14

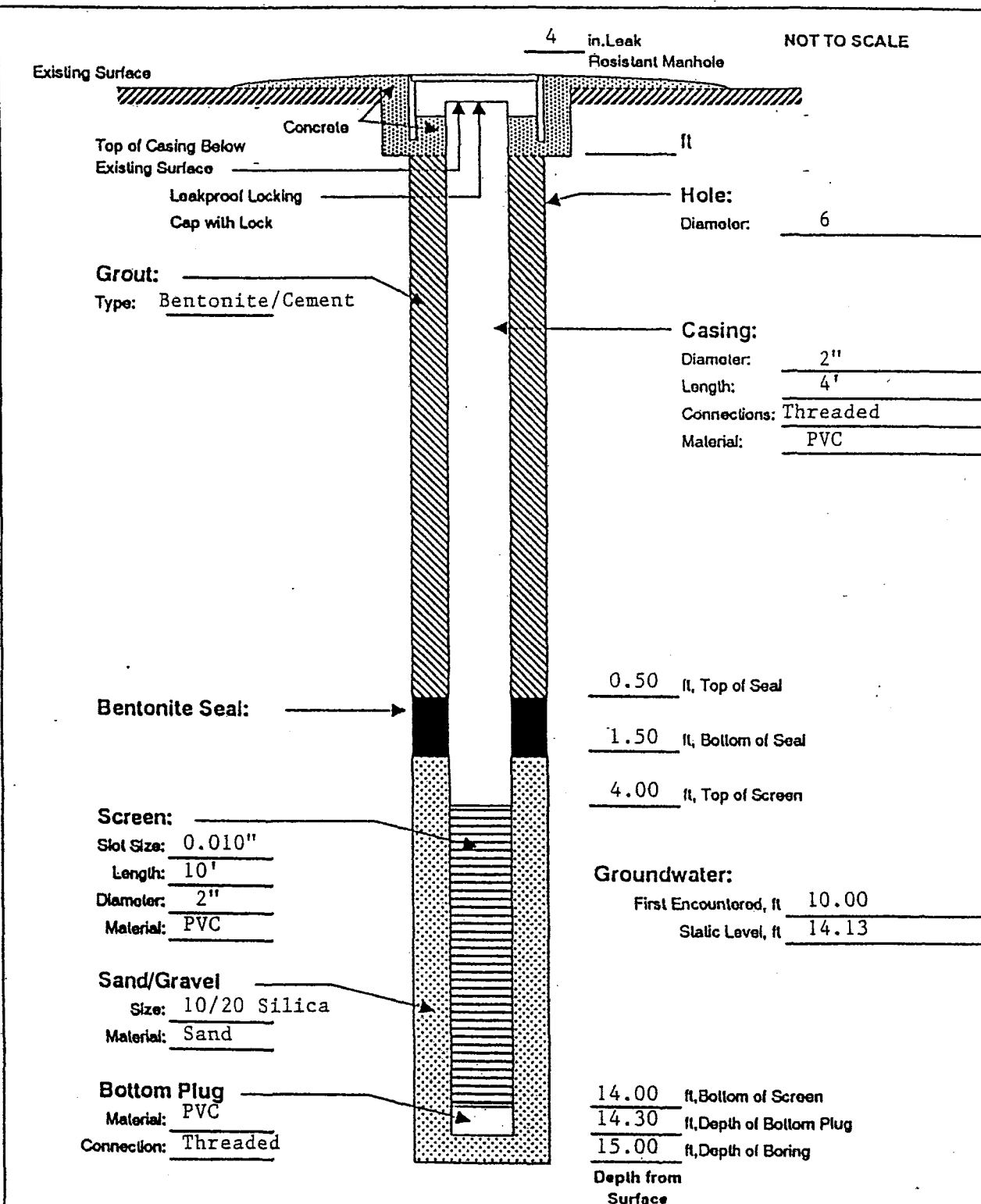
Drilling Supervisor: Paul Hawkins

Boring Location: Same as Boring #2 (B-2)

Date(s): 6-12-91

Drilling Method: Air/Rotary Drill

Drilling Contractor: 4th Coast Pollution Con.



BCM Engineers

Monitoring Well Schematic

Project: CC Industries, Joanna U.S.T. Removal

Well/Boring No.: MW-3 (B-3)

Project No.: 05-4278-14

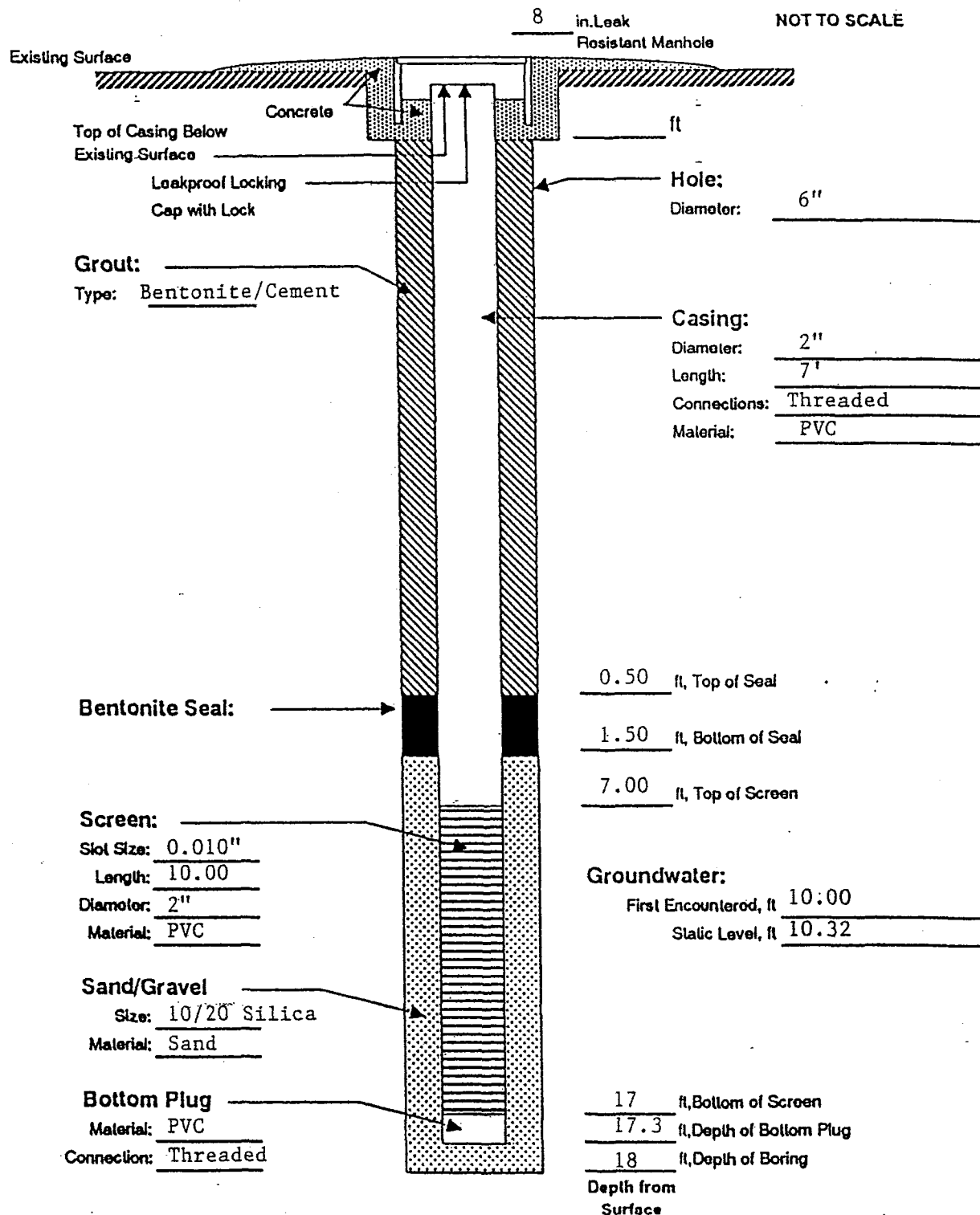
Drilling Supervisor: Paul Hawkins

Boring Location: Same as Boring 3 (B-3)

Date(s): 6-12-91

Drilling Method: Air/Rotary Drill

Drilling Contractor: 4th Coast Pollution Con.

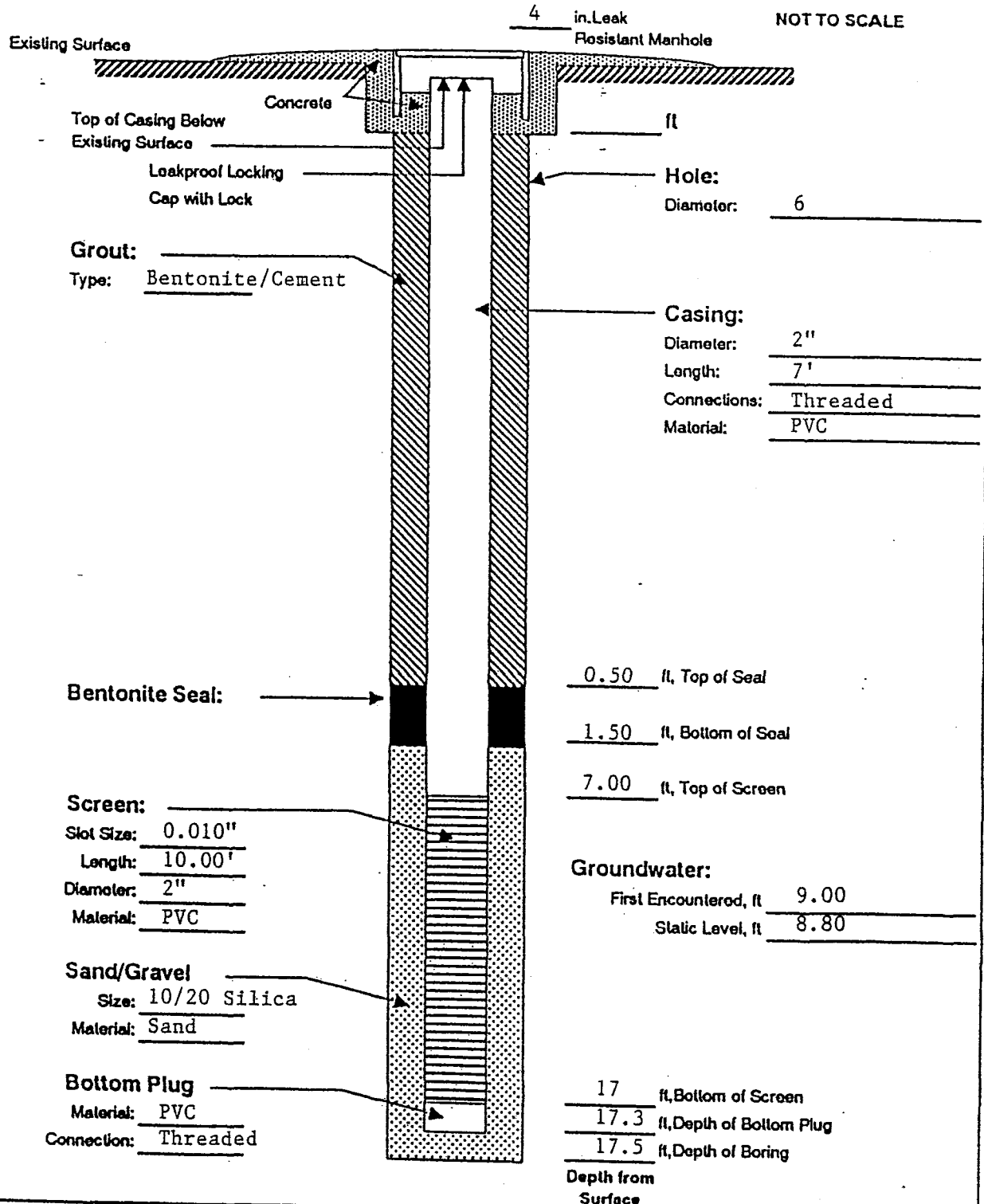


Comments:

BCM Engineers

Monitoring Well Schematic

Project: CC Industries, Joanna U.S.T. Removal Well/Boring No.: MW-4 (B-4)
 Project No.: 05-4278-14 Drilling Supervisor: Paul Hawkins
 Boring Location: Same as Boring B-4 Date(s): 9-10-91
 Drilling Method: Air/Rotary Drill Drilling Contractor: 4th Coast Pollution Con.



Comments:

Appendix E

Report on Groundwater Sampling, BCM Engineers, May 1994


**REPORT ON
GROUNDWATER SAMPLING**

**PREPARED FOR
JOANNA WINDOW DECOR
OGDENSBURG, NEW YORK**

BCM NO. 00-0000-9408

MAY 1994

PREPARED BY


**JOHN M. SCRABIS
PROJECT ENGINEER**

REVIEWED BY


**PAT PONTORIERO, P.G.
SECTION MANAGER**

APPROVED BY



**KENNETH W. LOVELL, P.E.
SENIOR VICE PRESIDENT**





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1.0 INTRODUCTION

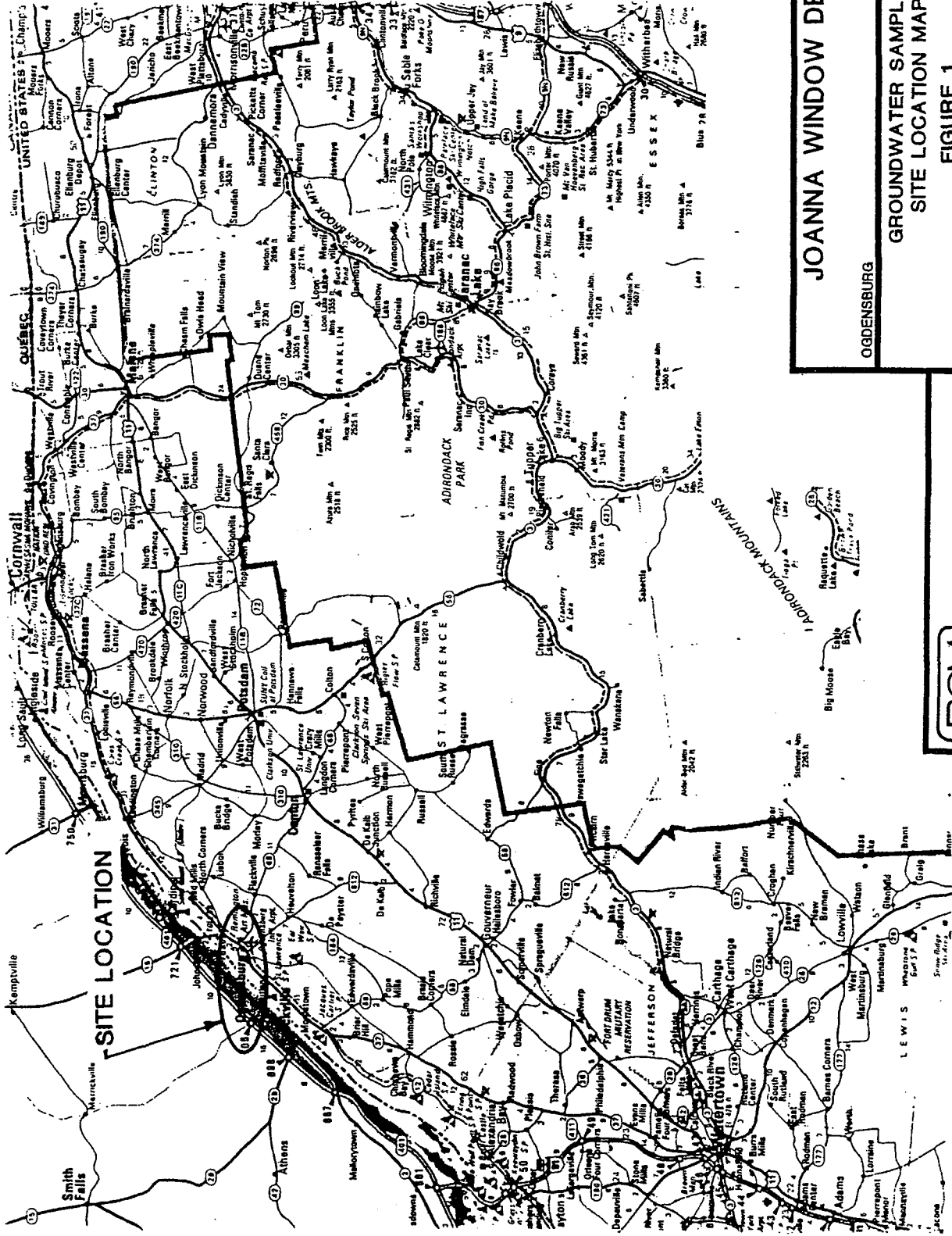
BCM Engineers Inc. (BCM) was retained by Joanna Window Decor (then called CC Industries) to perform Underground Storage Tank (UST) removal and assessment activities at the Ogdensburg, New York facility in 1991. A site location map is provided as Figure 1. This work was documented in a BCM report titled "Underground Site Assessment" dated October 1991. Specific tasks performed included the removal of a 500-gallon gasoline UST, the installation of four groundwater monitoring wells (designated MW-1 through MW-4) in the vicinity of the former UST, and the collection and laboratory analysis of groundwater samples from each monitoring well. A site plan showing the approximate locations of MW-1 through MW-4 is provided as Figure 2. Analytical results revealed a maximum total dissolved xylene concentration of 1.7 parts per million (ppm) in the groundwater sample collected from well MW-3, which was the downgradient well closest to the former UST. This result exceeded the existing state groundwater standards. No contaminants were present above laboratory detection limits in the remaining well samples.

The 1991 report was submitted to the New York State Department of Environmental Conservation (NYSDEC) for review. CC Industries subsequently received a letter from Thomas G. Voss of the NYSDEC Division of Construction Management dated January 6, 1992. The letter confirmed receipt of the BCM report. The letter also provided comments regarding the report, which are summarized as follows:

1. The report lacked a discussion of the local hydrogeology.
2. The laboratory analysis was not performed by a New York State Department of Health (NYSDOH) ELAP-certified laboratory.
3. Another round of sampling should be performed on the existing monitoring wells.

CC Industries then requested BCM to address the NYSDEC comments. BCM agreed to perform an additional monitoring well sampling episode at the site and to utilize an analytical laboratory certified in New York State to perform the required laboratory analysis. This report documents the additional well sampling episode performed at the subject site and includes a review of laboratory analytical results.

PLOT SCALE 1"=64



JOANNA WINDOW DECOR

OGDENSBURG NEW YORK

GROUNDWATER SAMPLING
SITE LOCATION MAP

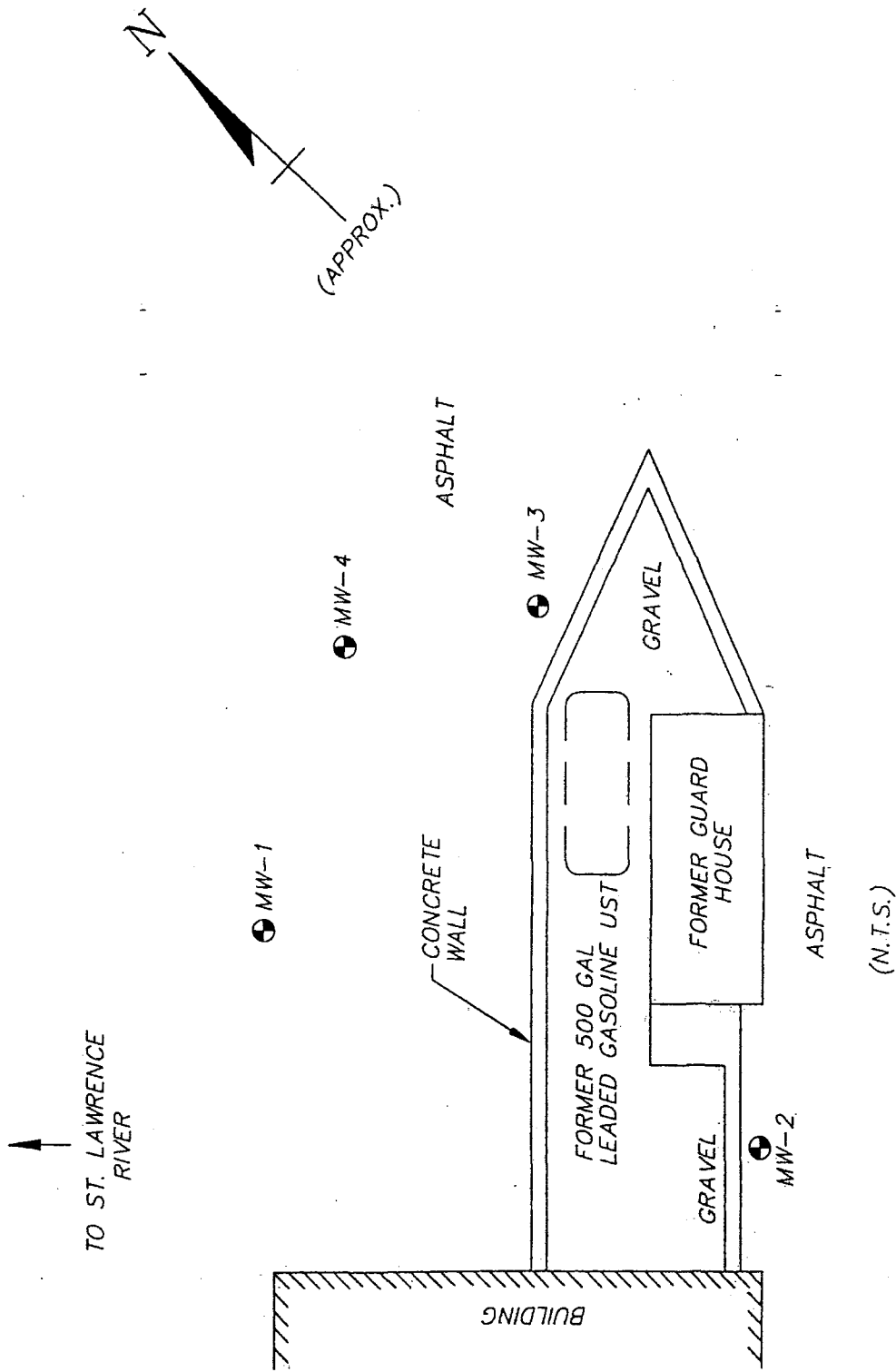
FIGURE 1

BCM BCM Engineers Inc.

5777 Baum Boulevard
One Plymouth Meeting Plymouth Meeting PA 19462

Drawn By: KPM
Date: JUNE 1994
Project No.: 00-0000-9408
File No.:
Scale: NONE
Drawing Name: GRSAMP1

PLOT SCALE: 1"=64'



KEY:

● MONITORING WELL LOCATION

JOANNA WINDOW DECOR

OGDENSBURG NEW YORK

GROUNDWATER SAMPLING
SITE PLAN
FIGURE 2

BCM BCM Engineers Inc.

6777 Baum Boulevard
Pittsburgh, PA 15208
One Plymouth Meeting Plymouth Meeting PA 19462

Drawn By: KPM
Date: JUNE 1994
Drawing Name: GRSAMP
Project No.: 00-0000-9406
File No.:
Scale: NONE

2.0 SCOPE OF WORK

BCM's scope of work included the following tasks:

- The collection of representative groundwater samples from monitoring wells MW-1 through MW-4;
- The analysis of each groundwater sample for benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 602 at a New York State certified laboratory; and
- Preparation of a report which summarizes the field activities performed, includes a discussion of the apparent groundwater flow direction in the overburden, and presents the results of the laboratory analyses.



3.0 FIELD METHODS

Groundwater samples were collected from wells MW-1, MW-2, MW-3, and MW-4 on April 29, 1994 by John Scrabis of BCM's Pittsburgh, Pennsylvania office. Prior to sample collection, an interface probe was used to measure groundwater levels in each well and to screen for floating product at the water surface. The water level data was used to calculate the volume of standing water (casing volume) in each well. Each well was then purged by removing at least three casing volumes of water, or until dry, using a disposable PVC bailer. To avoid cross-contamination, a new bailer was used for each well.

After purging, the disposable bailers were used to collect the groundwater samples. Upon collection, all samples were placed in a cooler chilled to 4°C and shipped with chain-of-custody documentation to BCM's Norristown, Pennsylvania laboratory (New York State Department of Health Lab I.D. No. 11136). A copy of the laboratory's NYSDOH certifications is provided in Appendix A.

4.0 FIELD RESULTS

The groundwater levels recorded for each well during the sampling episode are provided in Table 4.1. A groundwater contour map based on the measured groundwater elevations for the 1994 sampling episode is provided as Figure 3. During sampling, no evidence of contamination was observed in wells MW-1, MW-2, and MW-4. Groundwater extracted from well MW-3 had a slight sheen and a gasoline-like odor. The interface probe did not indicate any floating product.

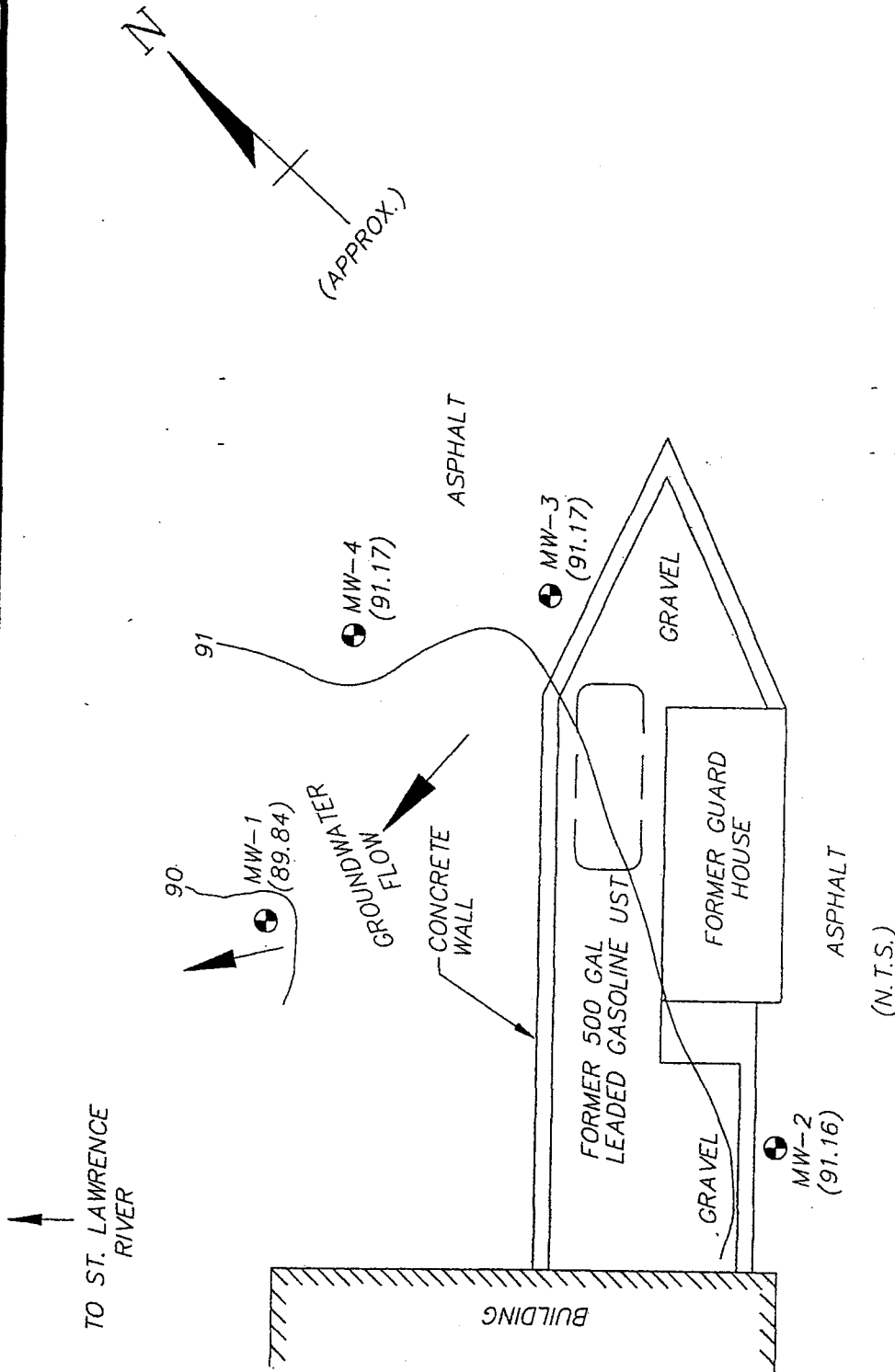
The groundwater contour map (Figure 3) indicates that gradient is to the west toward the St. Lawrence River. This coincides with the groundwater flow direction identified during the 1991 sampling episode.

TABLE 4.1
GROUNDWATER ELEVATIONS

JOANNA WINDOW DECOR
OGDENSBURG, NEW YORK
BCM NO. 00-0000-9408

<u>Well No.</u>	<u>T.O.C. Elevation *</u>	(April 1994)		(September 1991)	
		<u>Depth to G.W. (ft.)</u>	<u>Water Table Elevation</u>	<u>Depth to G.W. (ft.)</u>	<u>Water Table Elevation</u>
MW-1	97.54	7.70	89.84	7.91	89.63
MW-2	104.10	12.94	91.16	14.13	89.97
MW-3	100.32	9.15	91.17	10.32	90.00
MW-4	98.77	7.60	91.17	8.80	89.97

* Top-of-casing elevation.



KEY:

● MONITORING WELL LOCATION

(91.17) WATER TABLE ELEVATION (1994 SAMPLING EPISODE)

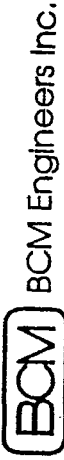
— GROUNDWATER CONTOUR (1994 SAMPLING EPISODE)

JOANNA WINDOW DECOR

OGDENSBURG NEW YORK

**GROUNDWATER SAMPLING
GROUNDWATER CONTOUR MAP
FIGURE 3**

Drawn By: KPM
Date: JUNE 1994
Project No.: 00-0000-9408
File No.:
Drawing Name: GRSAMP1
Scale: NONE



BCM Engineers Inc.

5777 Baum Boulevard
Pittsburgh, PA 15208
One Plymouth Meeting
Plymouth Meeting PA 19462



5.0 DISCUSSION OF RESULTS

Table 5.1 summarizes the analytical results for the April 1994 sampling episode and compares them to previous groundwater analytical results for the site and the current NYSDEC groundwater standards. Complete laboratory analytical reports are provided in Appendix B.

The analytical results of the April 1994 sampling episode indicate that BTEX parameters were below laboratory detection limits in sample MW-2 (the background well) and sample MW-4. BTEX parameters were detected in well MW-1, which is directly downgradient from the former UST location, and well MW-3, which is the well closest to the former UST location. The current NYSDEC standards for groundwater are exceeded for toluene and o-xylene in sample MW-1 and for benzene, ethylbenzene, o-xylene and m,p-xylene in sample MW-3. However, the total xylene concentration in well MW-3 has reduced significantly when compared to the results of the 1991 sampling episodes.

TABLE 5.1
SUMMARY OF ANALYTICAL RESULTS
APRIL 1994 SAMPLING EPISODE
BCM PROJECT NO. 00-0000-9408

<u>Parameter</u>	<u>Units</u>	<u>MW-1</u>		<u>MW-2</u>		<u>MW-3</u>		<u>MW-4</u>		<u>NYSDEC Standards</u>
		<u>6/20/91</u>	<u>4/29/94</u>	<u>6/20/91</u>	<u>4/29/94</u>	<u>6/20/91</u>	<u>9/12/91</u>	<u>9/12/91</u>	<u>4/24/94</u>	
Benzene	ug/l	BDL	<1	BDL	<1	BDL	BDL	BDL	<1	0.7
Ethylbenzene	ug/l	BDL	<1	BDL	<1	93	BDL	BDL	<1	5
Toluene	ug/l	BDL	1.7	BDL	<1	34	BDL	BDL	<1	5
o-Xylene	ug/l	NQ	31	NQ	<1	NQ	NQ	NQ	<1	5
m,p-Xylene	ug/l	NQ	3.0	NQ	<1	NQ	NQ	NQ	<1	5
Total Xylenes	ug/l	BDL	34	BDL	<1	1,400	1,700	BDL	<1	5

Notes:

*NYSDEC groundwater quality standards or Guidance Values, or the NYDOH drinking water quality standards or Guidance Values, whichever is more stringent. (Reference: STARS Memo #1, Petroleum-Contaminated Soil Guidance Policy, NYSDEC Division of Construction Management, Bureau of Spill Prevention and Response, August 1992)

BDL = Below Detection Limit

NQ = Not Quantified

APPENDIX A
NYSDOH
LABORATORY CERTIFICATIONS



STATE OF NEW YORK DEPARTMENT OF HEALTH

The Governor Nelson A. Rockefeller Empire State Plaza P.O. Box 509 Albany, New York 12201-0509

Mark R. Chassin, M.D., M.P.P., M.P.H.
Commissioner

Paula Wilson
Executive Deputy Commissioner

OFFICE OF PUBLIC HEALTH
Lloyd F. Novick, M.D., M.P.H.

Director
Diana Jones Riller
Executive Deputy Director

WADSWORTH CENTER FOR
LABORATORIES AND RESEARCH
Lawrence S. Sturman, M.D., Ph.D.
Director

Dear Laboratory Director:

Please note that although your ELAP Certificate of Approval expires on 12:01 AM April 1, 1994, it is still valid until June 30, 1994 pending receipt of your 1994-95 Certificate(s), as per ELAP Certification Manual, No. 140, Page 7 of 25, dated 4/1/86, Part 55-2.4e NYCRR. "All environmental laboratory approval will, during the pendency of inspections or extension or grace period permitted by this subpart, remain in force beyond the normal expiration dates of certificates unless such approval is specifically revoked or suspended in writing."

Notification regarding the issuance of 1994-95 ELAP Certificate(s) of Approval is pending receipt of all non-governmental laboratories' Total Adjusted Volumes and Approval of the 1994-95 ELAP Budget by the New York State Legislature.

Further verification of your laboratory's approved ELAP status is available by calling the Program Office at (518) 474-8519.

Sincerely,

Linda L. Madlin
Administrative Assistant
Environmental Laboratory
Approval Program

LLM:saw

NEW YORK STATE DEPARTMENT OF HEALTH

MARK R. CHASSIN, M.D., M.P.P., M.P.H. COMMISSIONER



Expires 12:01 AM April 1, 1993
ISSUED April 1, 1993
REVISED February 18, 1994

INTERIM CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

Lab ID No.: 11136

Director: DR. ROCCO ALESSANDRO

Lab Name: BCM LABORATORIES

Address: 1850 GRAVERS ROAD

NORRISTOWN PA 19401

is hereby APPROVED as an Environmental Laboratory for the category

ENVIRONMENTAL ANALYSES/ POTABLE WATER

All approved subcategories and/or analytes are listed below:

D.W. Organohalide Pesticides:

Alachlor
Aldrin
Atrazine
Chlordane Total
Endrin
Heptachlor
Heptachlor epoxide
Lindane
Metribuzin
Methoxychlor
Simazine
Toxaphene

D.W. Miscellaneous:

Di (2-ethylhexyl) adipate
Bis(2-ethylhexyl) phthalate
Benzo(a)pyrene
Butachlor
Hexachlorobenzene
Hexachlorocyclopentadiene
PCB, Total (as decachlorobiphenyl)
Propachlor

D.W. Chlorinated Acids (ALL)

Drinking Water Metals I (ALL)
Microextractables (ALL)
Volatile Aromatics (ALL)

Drinking Water Trihalomethane (ALL)

Drinking Water Metals II (ALL)
Drinking Water Non-Metals (ALL)
Volatile Halocarbons (ALL)

Serial No.: 023038

Wadsworth Center for Laboratories and Research

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Must be conspicuously posted. Valid certificate has a red serial number.

DOH-3317 (12/92)

NEW YORK STATE DEPARTMENT OF HEALTH

MARK R. CHASSIN, M.D., M.P.P., M.P.H. COMMISSIONER



Expires 12:01 AM April 1, 1993
ISSUED April 1, 1993
REVISED May 27, 1993

INTERIM CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

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Lab ID No.: 11136

Director: DR. ROCCO ALESSANDRO
Lab Name: BCM LABORATORIES
Address: 1850 GRAVERS ROAD
NORRISTOWN PA 19401

is hereby APPROVED as an Environmental Laboratory for the category

ENVIRONMENTAL ANALYSES NON POTABLE WATER

All approved subcategories and/or analytes are listed below:

Chlor. Hydrocarbon Pesticides :	Wastewater Metals III :	Nutrient :	1 Acrolein and Acrylonitrile (ALL)
2,4'-DDU	Gold, Total	Ammonia (as N)	2 Benzimidazoles (ALL)
Aldrin	Cobalt, Total	Nitrite (as N)	4 Chlorophenoxy Acid Pesticides (ALL)
Captan	Niobdenum, Total	Nitrate (as N)	14 Chlorinated Hydrocarbons (ALL)
Chlordane Total	Palladium, Total	Orthophosphate (as P)	3 Dermal (ALL)
Endrin	Platinum, Total	Phosphorus, Total	5 Haloethers (ALL)
Ethionex 1	Titanium, Total	13 Wastewater Metals I (ALL)	9 Wastewater Metals II (ALL)
Heptachlor	Thallium, Total	7 Mineral (ALL)	14 Wastewater Miscellaneous (ALL)
Heptachlor epoxide	1 Nitroaromatics and Isophorone (ALL)	3 Nitroamines (ALL)	8 Organophosphate Pesticides (ALL)
Lindane	16 Polynuclear Aromatics (ALL)	2 Polychlorinated Biphenyls (ALL)	4 Phthalate Esters (ALL)
Methoxychlor	2 Priority Pollutant Phenols (ALL)	8 Purgeable Aromatics (ALL)	15 Purgeable Halocarbons (ALL)
Toxaphene	Residue (ALL)	3 TCLP Additional Compounds (ALL)	7 Volatile Chlorinated Organics (ALL)

107

107

107

107

Serial No.: 020805

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DOH-3317 (12/92)

NEW YORK STATE DEPARTMENT OF HEALTH

MARK R. CHASSIN, M.D., M.P.P., M.P.H. COMMISSIONER



Expires 12:01 AM April 1, 1993
ISSUED April 1, 1993
REVISED May 27, 1993

INTERIM CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

Lab ID No.: 11136

Director: DR. ROCCO ALESSANDRO

Lab Name: BCM LABORATORIES

Address : 1850 GRAVERS ROAD
NORRISTOWN PA 19401

is hereby APPROVED as an Environmental Laboratory for the category

ENVIRONMENTAL ANALYSES/AIR AND EMISSIONS

All approved subcategories and/or analytes are listed below:

Miscellaneous Air :
Asbestos
Fibers

Serial No.: 020807

Wadsworth Center for Laboratories and Research

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DOH-3317 (12/92)

NEW YORK STATE DEPARTMENT OF HEALTH

MARK R. CHASSIN, M.D., M.P.P., M.P.H. COMMISSIONER



Expires 12:01 AM April 1, 1993
ISSUED April 1, 1993
REVISED May 27, 1993

INTERIM CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

Lab ID No.: 11136

Director: DR. ROCCO ALESSANDRO
Lab Name: BCM LABORATORIES
Address : 1850 GRAVERS ROAD
NORRISTOWN PA 19401

is hereby APPROVED as an Environmental Laboratory for the category

ENVIRONMENTAL ANALYSES/SOLID AND HAZARDOUS WASTE

All approved subcategories and/or analytes are listed below:

Miscellaneous :	Characteristic Testing :	2 Acrolein and Acrylonitrile (ALL)	4 Chlorophenoxy Acid Pesticides (ALL)
Asbestos in Friable Material	Ignitability	17 Chlorinated Hydrocarbons (ALL)	✓ Halocarbon (ALL)
Cyanide, Total	PCP	1 Metals I (ALL)	5 Metals II (ALL)
Hydrogen Ion (pH)	E.P. Toxicity	4 Nitroaromatics Isophorone (ALL)	6 Organophosphate Pesticides (ALL)
Sulfide (as S)	15 Polynuclear Arom. Hydrocarbon (ALL)	7 Polychlorinated Biphenyls (ALL)	7 Phthalate Esters (ALL)
Priority Pollutant Phenols (ALL)	6 Purgeable Aromatics (ALL)	23 Purgeable Halocarbons (ALL)	1 Volatile Chlorinated Organics (ALL)
15	26	21	26

128

Serial No.: 020808

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APPENDIX B
LABORATORY REPORTS



BCM Laboratory Division

1850 Gravers Road
Norristown, PA 19401
(610) 275-0281

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MAY 11 1994

FINAL REPORT

This is a final report.

The results have been checked and authorized for release.

BCM Engineering
Pittsburgh

PAGE : 1

CLIENT

BCM ENGINEERS
ATTN: PAT PONTORIERO
5777 BAUM BLVD
PITTSBURGH, PA 15206

Date : May 06 94
BCM # : 00-0000-9408
P.O.# :
Order# : H0062

BCM Sample #: 410141
Location : NW1
Client ID :

Date Sampled : 04/29/94
Date Received : 05/02/94
Sampler :

Test Description	Results	Units	Test Method
Benzene/Toluene/Ethylbenzene/Xylene by F. SHOYKHET on 05/03/94 pH (by Indicator Strip)	6		EPA # 602
Benzene	< 1	ug/l	
Ethylbenzene	< 1	ug/l	
Toluene	1.7	ug/l	
o-Xylene	31	ug/l	
Total Xylenes	34	ug/l	
m,p-Xylene	3.0	ug/l	



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PAGE : 2

CLIENT

BCM ENGINEERS
ATTN: PAT PONTORIERO
5777 BRAUN BLVD
PITTSBURGH, PA 15206

Date : May 06 94
BCM # : 00-0000-9408
P.O.# :
Order# : N0062

BCM Sample #: 410142
Location : NW2
Client ID :

Date Sampled : 04/29/94
Date Received : 05/02/94
Sampler :

Test Description	Results	Units	Test Method
Benzene/Toluene/Ethylbenzene/Xylene by F. SHOYKHET on 05/03/94			EPA # 602
pH (by Indicator Strip)	6		
Benzene	< 1	ug/l	
Ethylbenzene	< 1	ug/l	
Toluene	< 1	ug/l	
m-Xylene	< 1	ug/l	
o,p-Xylene	< 1	ug/l	
Total Xylenes	< 1	ug/l	



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PAGE : 3

CLIENT

BCM ENGINEERS
ATTN: PAT PONTORIERO
5777 BAUM BLVD
PITTSBURGH, PA 15206

Date : May 06 94
BCM # : 00-0000-9408
P.O.# :
Order# : M0062

BCM Sample #: 410143
Location : MW3
Client ID :

Date Sampled : 04/29/94
Date Received : 05/02/94
Sampler :

Test Description	Results	Units	Test Method
Benzene/Toluene/Ethylbenzene/Xylene by F. SHOYKHET on 05/03/94			EPA # 602
pH (by Indicator Strip)	6		
Benzene	2.8	ug/l	
Ethylbenzene	7.4	ug/l	
Toluene	1.2	ug/l	
o-Xylene	12	ug/l	
Total Xylenes	48	ug/l	
m,p-Xylene	36	ug/l	



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BCM ENGINEERS
ATTN: PAT PONTORIERO
5777 BAUM BLVD
PITTSBURGH, PA 15206

Date : May 06 94
BCM # : 00-0000-9408
P.O.# :
Order# : M0062

BCM Sample #: 410144
Location : NW4
Client ID :

Date Sampled : 04/29/94
Date Received : 05/02/94
Sampler :

Test Description	Results	Units	Test Method
Benzene/Toluene/Ethylbenzene/Xylene by F. SHOYKHET on 05/03/94			EPA # 602
pH (by Indicator Strip)	6		
Benzene	< 1	ug/l	
Ethylbenzene	< 1	ug/l	
Toluene	< 1	ug/l	
m-Xylene	< 1	ug/l	
o,p-Xylene	< 1	ug/l	
Total Xylenes	< 1	ug/l	



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PAGE : 5

CLIENT

BCM ENGINEERS
ATTN: PAT PONTORIERO
5777 BAUM BLVD
PITTSBURGH, PA 15206

Date : May 06 94
BCM # : 00-0000-9408
P.O.# :
Order# : H0062

BCM Sample #: 410144
Location : NW4
Client ID :

Date Sampled : 04/29/94
Date Received : 05/02/94
Sampler :

Test Description

Results Units Test Method

End of Report

Certified by :

BCM Laboratory Director

Lab Certifications:

PA - 46-007
VA - 00023
NYDOH - 11136

NJ - 77175
SC - 89005

NULAP - 1374
WV

AL - 40300
DE
RA

ND - 136
RI

Appendix F

Phase II ESA Report, Blasland, Bouck & Lee, Inc., November 1995



November 9, 1995.

Dr. Peter J. Schultz
Newell Company
4000 Auburn Street
Rockford, Illinois 61126-7018

Re: Environmental Site Assessment
Joanna/Crown Home Furnishings
Ogdensburg, New York

File: 0078-078.30 #1

Transmitted Via: *Federal Express*
Pages Sent: *1 (Plus attachments)*

Dear Dr. Schultz:

Please find enclosed, for your review, a draft copy of the "Phase II Environmental Site Assessment, Joanna/Crown Home Furnishings Facility, Ogdensburg, New York, November 1995", prepared by Blasland, Bouck & Lee, Inc.

Please contact me at (412) 635-9633 to discuss any comments you may have.

Very truly yours,

BLASLAND, BOUCK & LEE, INC.

Jack D. Frost
T.P.H.

Jack D. Frost
Principal Scientist

DSM/tah
u:66951391.b

cc: Thomas P. Hasek, Blasland, Bouck & Lee, Inc.



***Phase II Environmental Site Assessment
Joanna/Crown Home Furnishings Facility
Ogdensburg, New York***

Newell Company
Rockford, Illinois

November 1995

BLASLAND, BOUCK & LEE
ENGINEERS & SCIENTISTS

30 Corporate Woods
Suite 160
Rochester, New York 14623
(716) 292-6740

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1.0 Introduction



1.1 Overview

Newell Company (Newell) retained Blasland, Bouck & Lee, Inc. (BBL) to perform a Phase II Environmental Site Assessment (ESA) at the Joanna/CHF Industries' Site (site) located at 541 Covington Street, Ogdensburg, St. Lawrence County, New York (Figure 1). Newell is the current owner of the property and Crown Home Furnishings Company (CHF) is the current operator of the facility. The purpose of the ESA was to identify existing and potential environmental liabilities, if any, associated with the historical use of the site and current facility operations.

BBL conducted the field program of the ESA on July 20, September 13, 14, 15, 18 and 19, 1995, as outlined in our scope of work letters dated June 12 and August 23, 1995. BBL's scope of work included:

- A detailed review of previously prepared site assessment reports;
- A facility inspection to confirm the findings reported in the previously-prepared site assessment reports;
- Interviews with Joanna/CHF personnel regarding historical operational activities at the site, to ensure that a Baseline Environmental Assessment is prepared appropriately;
- The installation, development, and ground-water sampling of six monitoring wells to assess current ground-water conditions on the site;
- The installation of eight soil borings to assess subsurface soil quality conditions at suspected source areas; and
- The sampling and analysis of the liquid in the sump (adjacent to an elevator shaft) and of the existing ground-water well (formerly a production well) at the east side of the site.

1.2 Report Organization

This report discusses past and current uses of the site, the field program results, and the findings of the ESA. Specifically, the site history and a property description are presented in Section 2.0. A Baseline Environmental Assessment, including a summary of previous site assessment reports and the BBL facility inspection of the site, is presented in Section 3.0. The subsurface investigation is discussed in Section 4.0. Conclusions and recommendations for further action are presented in Section 5.0.

2.0 Site Overview



2.1 Site Description

The site, which is zoned for industrial/institutional use, occupies approximately 12 acres, with eight primary buildings of varying ages. The site has an approximate elevation of 250 feet above mean sea level and slopes north to the St. Lawrence River. There is a sudden break in slope running east to west across the site roughly in the middle of the site, where the surface topography slopes sharply from south to north. The surface topography flattens out near the St. Lawrence river, in the area filled with material from unknown sources. Total topographic relief from south to north across the site is approximately 40 feet. The site appears well-drained, with undeveloped areas covered with grass or gravel, and most drives and parking areas covered with asphalt (some are soil or crushed stone). The site is bounded by the St. Lawrence River to the north, a closed paper plant (Diamond International Plant) to the west, and residential properties to the south and east.

The eight buildings on the site provide approximately 260,000 square feet of usable floor space. They have concrete or stone foundations and exterior walls constructed of stone, brick, wood, masonite, or metal. The main building (Figure 2), which has a partial basement and two aboveground floors, was constructed in 1898 by the Spalding Boat Company. The other seven buildings were constructed around 1940.

Utilities provided to the site include electricity, natural gas, and public water and sewer service. Electricity is supplied to the site by Niagara Mohawk Power Corporation (NMPC) via on pad-mounted transformer located south of the main building. The buildings are heated by a natural gas-fired steam boiler and wood furnace, and are cooled by an air-cooled chiller system. Natural gas is provided to the property by St. Lawrence Gas. Water and sanitary sewer are provided by the City of Ogdensburg. Wastewater is treated by the City of Ogdensburg Water Filtration Plant (Versar, 1994).

The facility currently produces window shades, including the manufacturing of dowels, window clippings, and spring attachments.

2.2 Site History

Sanbourne Fire Insurance Maps reviewed during a previous Phase I assessment (BCM, September 1991) indicate that the site was first developed by the Spalding Boat Company and the Adirondak Match Company in 1898. In 1904, the site was occupied by Leyare's Boat Works and the Cornell & Porter Brewery. A 1909 Sanbourne map shows the site occupied by the Leyare's Boat Works and the Standard Shade Roller Company. In 1949, the Standard Shade Roller Company and Becker Moore, Inc. (Wood Flour Mill) occupied the site. The title was transferred to Joanna Western Mills Company (the present owner) in 1963.

Aerial photographs reviewed during a previous Phase I assessment (Versar, 1994) indicated that site conditions in 1962 were similar to present day conditions. There were no changes to the site or surrounding area noted in subsequent aerial photographs (1977 and 1984). No signs of dumping or significant staining on the site were evident in any of the aerial photographs reviewed (Versar, 1994).

Interviews with CHF/Joanna employees revealed that the site's coal-fired boiler was replaced by a natural gas-fired boiler in 1970 and the remaining coal, which had been stockpiled immediately adjacent to shed No. 1-A, was buried in the old boat shop foundation (Photograph 8), sometime in the 1980's.

3.0 Baseline Environmental Assessment



3.1 Review of Previous Site Assessment Reports

In the past, several site assessments of various scopes of work have been performed at the site. The purpose of this section is to summarize the findings and conclusions of each of these assessments. The following site assessment reports were provided by Newell Company and reviewed by BBL as part of this ESA:

- "Environmental Assessment, Joanna A CHF Company, Ogdensburg, New York", BCM Engineers, Inc., September 1991;
- "Underground Site Assessment for Joanna Industries, A CHF Company, CC Industries, Ogdensburg, New York" (BCM No. 05-4278-14), BCM Engineers, Inc., October 1991;
- "Environmental Assessment Survey for Crown Home Furnishings, Joanna, Ogdensburg, New York", CC Industries, Asset Management Department, December 1992;
- "Report on Groundwater Sampling Prepared for Joanna Window Decor, Ogdensburg, New York" (BCM No. 00-000-9408), BCM Engineers, Inc., May 1994; and
- "Phase I Environmental Assessment, Joanna Window Decor Division, CHF Industries, Inc., 541 Covington Street, Ogdensburg, St. Lawrence County, New York", Versar, Inc., July 1994.

Summary of Previously Performed Environmental Assessments

BCM Engineers, September 1991

This environmental assessment focused on potential environmental liabilities at the site due to asbestos, polychlorinated biphenyls (PCBs), radon gas, air quality, underground storage tanks (USTs), aboveground storage tanks (ASTs), on-site chemicals, and off-site facilities within a one mile radius that could potentially impact the site. The assessment utilized the following resources and techniques to characterize the site:

- Review of environmental databases and Sanbourne Fire Insurance Maps;
- Review of Joanna/CHF documentation;
- Interviews with site employees and Ogdensburg police, fire, sewer, and, engineering officials;
- Bulk sampling and analysis to identify asbestos-containing materials;
- A ground intrusive visual survey of soils near the former locations of USTs; and
- Site inspections.



The asbestos survey included the analysis of 65 samples of suspected asbestos-containing materials. The samples were obtained from floor tiles, linoleum floor mastic, plaster, pipe insulation, pipe joints, ceiling panels, fire proofing, and transit. The scope of work for this assessment did not include destructive sampling of other materials, such as roofing, window seals, and fire brick. Laboratory analysis by polarized light microscopy revealed the presence of asbestos minerals in transit panels, floor tiles, floor mastic, pipe insulation, and pipe joints. Furthermore, the survey concluded that there were several locations throughout the plant where the asbestos-containing pipe insulation was extremely damaged or removed from pipes and stored on site. BCM recommended that all damaged and stored asbestos-containing pipe insulation be removed by an abatement contractor.

One outdoor power transformer, which was owned and maintained by NMPC, was noted at the site. An NMPC representative verified the unit's ownership and stated that the dielectric fluid had not been tested for the presence of PCBs. Also, seven wet switches located in the main electrical room, each with a 5-gallon dielectric fluid capacity, had not been tested for PCBs. In addition, five one-gallon containers labeled "transformer oil" were being stored in the electric room. No information was reported regarding the age or PCB classification of this oil.

Based on a statewide radon gas survey conducted by the New York State Department of Health and the United States Environmental Protection Agency, and "the nature of the facility", BCM concluded that radon was not a significant concern and that a radon gas screening survey was not warranted.

Two steam boilers located at the lower west end of the main building were noted during the assessment. The boilers were fired by either natural gas, wood, wastepaper, or a combination of the three. The boilers were NYSDEC-permitted air pollution emission sources. Exhaust vents located over the tube degreaser and electroplating vats were also noted in the report. An expired NYSDEC permit to operate an emission source was discovered for the tube degreaser vent, but no current or expired permit was located for the electroplating vats vent.



At the time of BCM's 1991 environmental assessment, there were no USTs on site. According to employee interviews, an 8,000-gallon, No. 4 fuel oil UST was removed from the west side of the site in 1988 and soil sampling at the time of the removal did not indicate petroleum contamination. In 1990, a 500-gallon gasoline tank was removed (Figure 1). At the time of this removal, the NYSDEC and CHF/Joanna personnel noted the presence of significant contamination in the area around and under the tank. Therefore, Joanna/CHF agreed to install four groundwater monitoring wells in the vicinity of the removal area. Ground water collected from these wells was sampled and analyzed; twice the analytical results of each round indicated the presence of contamination resulting from the release of gasoline.

One 275-gallon, diesel AST, used for refueling maintenance equipment, was on site to the north of the paint shop at the time of the assessment. There was no visual evidence of leakage or spillage observed around this tank.

Observations made during the assessment indicated the presence of many chemicals stored at the facility. The greatest volume of chemicals used on site were associated with the zinc plating operation and the tube degreaser operation. A drum labeled "cyanobrik" was observed in a storage area located adjacent to the boiler room in the main building. Interviews with employees indicated that this material had not been used for at least five years. It should be noted that the zinc plating operation was terminated in 1992 and the drum labeled cyanobrik was disposed of subsequent to this environmental assessment.

The Environmental Assessment report prepared by BCM Engineers in September 1991 presented the following conclusions:

- Several asbestos-containing materials were identified during the asbestos survey;
- The presence of seven suspected PCB wet switches and five one-gallon transformer oil containers was identified;
- Employee interviews revealed that fill from an unknown source, which potentially contained bricks, lumber, wire, automobile bodies, rock, and tree bark, was used to extend the property into the St. Lawrence River;



- The former Diamond International Plant, located adjacent to the site, was identified as potentially having used hazardous materials in the past;
- Inventory and housekeeping of chemicals stored on site was incomplete; and
- BCM report, prepared in October, 1991, was referenced, citing slightly elevated concentrations of xylene in a ground-water sample collected from a monitoring well (MW-3) located adjacent to the former location of the 500-gallon gasoline UST.

BCM Engineers, October 1991, Underground Site Assessment

The Underground Site Assessment report summarizes the field activities and sampling results associated with the removal of the 500-gallon gasoline UST. The scope of work included:

- Removal of one 500-gallon gasoline UST;;
- Performing initial subsurface screening for hydrocarbons of the tank excavation area using an Organic Vapor Analyzer (OVA);
- Installing four 2-inch diameter ground-water monitoring wells to an average depth of 20 feet below ground surface (BGS);
- Obtaining ground-water samples from each of the four monitoring wells for laboratory analysis of benzene, toluene, ethylbenzene, and xylene (BTEX) compounds and obtaining two soil samples from the tank removal excavation for total petroleum hydrocarbon (TPH) and BTEX analysis; and
- Determining ground-water depth and flow direction.

The laboratory analytical results of the two soil samples obtained from the bottom of the tank removal excavation were below the detection limit (BDL) for BTEX compounds. TPH was detected at four parts per million (ppm) in one soil sample and was not detected in the other sample. Laboratory analysis of the ground water samples collected from the four wells detected concentrations of BTEX ranging from non-detect up to 1.8 ppm in monitoring MW-3, which is located closest to the excavation.



CC Industries, Asset Management Department, December 1992, Environmental Assessment Survey

The Environmental Assessment Survey was an environmental liabilities/property acquisition questionnaire completed by CCI Industries during December 1992. Findings from the survey were similar to the conclusions drawn by BCM during the September 1991 environmental assessment described above. The survey did reveal that zinc plating operations were discontinued in June 1992. The chemicals used most frequently at the plant at the time of this survey were cleaning solvents and paints.

BCM Engineers, May 1994, Report on Ground-Water Sampling

In response to NYSDEC comments regarding the BCM Engineers October 1991 "Underground Site Assessment Report," CC Industries requested BCM to perform additional monitoring well sampling. The NYSDEC's comments on the October 1991 report are summarized as follows:

- The report lacked a discussion of the local hydrogeology;
- The laboratory analysis was not performed by a NYSDOH-certified laboratory; and
- Another round of sampling should be performed on the existing monitoring wells.

The analytical results of a April 1994 sampling round indicate that BTEX parameters were BDL (less than one ppb) in the ground-water samples collected from monitoring wells MW-2 (the background well) and MW-4. BTEX parameters were detected in water samples from well MW-1, which is downgradient from the former UST location, and from well MW-3, which is the well closest to the former UST location. The o-xylene and total xylenes concentrations for the ground-water sample collected from MW-1 were above NYSDEC drinking water quality standards. The ethylbenzene, o-xylene, m,p-xylene, and total xylenes concentrations for the MW-3 ground-water sample were lower than the concentrations detected during the June 1991 sampling round, but still above NYSDEC drinking water quality standards. The report also stated that ground water beneath the site flows to the north-northwest, to the St. Lawrence River.



Versar, July 1994, Phase I Environmental Assessment

In July 1994, Versar, Inc. was retained by CC Industries, Inc. to conduct a Phase I Environmental Assessment for the purpose of providing information to assist CC Industries' counsel in rendering legal advice. The scope of work for the project included:

- A visual inspection of the property;
- Visual screening and preliminary sampling of suspected asbestos-containing materials;
- A review of federal, state, and local regulatory agency records;
- A review of historical aerial photographs, chain of title, and other relevant documentation to evaluate the potential for environmental contamination during prior land use;
- A review of surrounding land use including a review of regulatory databases to assess the potential for environmental contamination; and
- An assessment of chemical handling, storage, and disposal, as well as releases (if any) to air, land or water to determine environmental compliance.

The report states that friable, asbestos-containing pipe insulation was observed throughout all floors of the main building, presenting an imminent health risk to employees. In addition, the assessment report concluded the following permitting deficiencies:

- The facility constructed and operates a dust collector without the appropriate NYSDEC operating permits; and
- The facility had not applied for a renewal of its State Pollutant Discharge Elimination Systems (SPDES) permit.

Finally, the report states that metal plating and degreasing operations which were conducted in the plant for many years prior to 1992, used hazardous materials and generated hazardous waste that potentially could result in on-site contamination, as well as pose an off-site disposal liability.



3.2 Facility Inspection

On July 20, 1995, Peter Schultz (Newell), Jack Frost (BBL), and Derek Meuse (BBL), and Daryl Embling (Joanna/CHF) conducted a site walk-through. The purpose of the walk-through was to verify the information provided in the various environmental assessments described in Section 3.1 and to determine whether Joanna/CHF had adequately resolved the environmental issues noted during the previous assessments, as well as to help define an appropriate scope of work for future investigations. Site photographs taken during the BBL facility inspection are displayed in Appendix A. The purpose of these photographs is to illustrate general site conditions, depict approximate locations of several boreholes and monitoring wells, and document specific site conditions.

Based upon the inspection, the site descriptions and site use histories obtained from employee interviews described in the BCM Engineers and Versar reports appear to be accurate. Employee interviews during BBL's facility inspection confirmed the use of extensive fill from an unknown source to extend the property north into the St. Lawrence River, as BCM Engineers had stated in its September 1991 assessment report.

As the Versar (July 1994) report concluded, electroplating activities ceased at the facility in 1992. During BBL's facility inspection, employees stated that at the time electroplating operations were terminated, all waste associated with the electroplating operations, including off-site hazardous materials were disposed of as either hazardous waste or non-hazardous waste by Clean Harbors of Braintree, Inc. BBL reviewed invoices, hazardous waste manifests, and bills of lading which verified this process. Employee interviews also revealed that zinc-cyanide electroplating occurred in the main building from approximately 1945 to 1987. From 1987 through 1992, electroplating was performed using cyanide-free processes. During the 1960's and 1970's, the cyanide plating waste were treated on site (using peroxides and buffers) and the treated waste was discharged through the facility's combined storm/sanitary sewer. The waste cyanide sludge was disposed of as solid waste at the City of Ogdensburg landfill. The employees interviewed by BBL believed that electroplating process occurred during the 1940's and 1950's but were not sure if the wastes were treated or where any resulting cyanide wastes (raw cyanide waste or treated cyanide sludge)

would have been disposed. To the best of the interviewed employees knowledge, the waste was not used as fill material at the north side of the site.

BBL's facility inspection revealed that several environmental issues noted during previous assessments/investigations had been adequately addressed, including:

- The seven suspect PCB wet switches and 5 one-gallon transformer oil containers identified in the BCM Engineers September 1991 report had been tested and found not to contain PCBs (Clean Harbor report dated December 13, 1991); and
- The incomplete inventory and poor housekeeping of chemicals stored on site, which was identified by the BCM Engineers September 1991 report, appeared to no longer be an issue at the site. Since the 1991 assessment, all electroplating operations have been terminated and all associated electroplating operations chemicals, including off-spec hazardous materials, appeared to be disposed of appropriately. The empty plating baths were found to be in storage in the train shed building. Also, material safety data sheets (MSDSs) were on file for chemicals in use or awaiting disposal.

The facility inspection revealed several areas of potential environmental concern, including:

- Suspected asbestos-containing pipe and pipe joint insulation in the following locations:
 - The tumbling room and the break room in the main building basement;
 - The production room and the stock room on the main building first floor;
 - The storage room on the main building second floor; and
 - The warehouse break room.
- Joanna/CHF could not furnish a copy of the analytical results for soil samples collected during the removal of the 8,000-gallon No. 4 fuel oil tank;
- The facility appears to be operating a dust collector without an NYSDEC permit to construct or certificate to operate a process, exhaust or ventilation system;
- The facility could not supply an industrial users permit or associated monitoring reports to verify waste water discharges to the Ogdensburg Publicly Owned Treatment Works (POTW);



- Two 55-gallon drums of an unknown waste were found in the maintenance garage at the time of the BBL inspection; and
- Sodium silicate solution from an open-topped vessel in the kiln building (photograph No. 7), and/or other sodium silicate sources, apparently leaked into the kiln room basement along the basement's south wall (photograph No. 6);

It should be noted that the Joanna/CHF plant manager was not available during the BBL facility inspection and could not be reached during numerous attempts via the telephone. Therefore, much of the information obtained was from his assistant (Daryl Embling) or maintenance site personnel, who has only been at the site for one to two years.

Finally, monitoring well (MW-2), which is supposedly located near the former location of the 500-gallon gasoline UST (Figure 2), could not be located during the facility inspection because the area of the monitoring wells has been paved.

4.0 Subsurface Conditions



4.1 Investigation Activities

To assess subsurface soil and ground-water conditions, six ground-water monitoring wells and eight soil borings were installed, at the locations indicated on Figure 1. The soil borings and monitoring wells were drilled/installed on September 13 through 19, 1995. The eight soil borings were advanced to characterize subsurface conditions in the areas that indicate past releases, areas of disturbed soils, USTs and ASTs, and other identifiable areas of possible environmental impairment.

The soil borings were advanced at the following locations:

- Soil boring SB-1 was advanced to 10 feet BGS, at the location of a suspected former UST;
- SB-2 to 5.8 feet BGS, at the train shed near two fuel oil ASTs;
- SB-3 to 4 feet BGS, at the location of the transformer pad;
- SB-4 and SB-5 to 10 feet BGS, at the location of the former 8,000-gallon fuel oil UST;
- SB-6 to 10 feet BGS, at the location of the diesel AST;
- Soil boring SB-8 to 10 feet BGS, at the location of the boat shop foundation, where a coal pile was reportedly buried; and
- Soil boring SB-9 to 10 feet BGS, at a location adjacent to the transformer pad, where an older transformer pad reportedly existed.

The monitoring wells were installed at the following locations:

- Monitoring well MW-5 was installed to 28.81 feet BGS, at the presumed upgradient location, to assess background site-wide ground-water quality conditions;
- MW-6 and MW-7 was installed to 16.10 feet and 13.65 feet BGS respectively, along the western property line to assess for ground-water impacts potentially resulting from activities at the former Diamond International plant;
- MW-8 and MW-9 were installed to 12.00 feet and 12.55 feet BGS, respectively, at the anticipated downgradient locations on the site to assess soil and groundwater conditions in the areas filled with materials from unknown sources along the St. Lawrence River; and

- MW-10 was installed to 8.62 feet BGS, assess subsurface conditions along the eastern property line.

Overburden soil descriptions are presented in the subsurface logs compiled in Appendix B.

In addition, a test pit was installed to a depth of 11.5 feet at the location of the boat shop foundation, where a coal pile was reportedly buried, and ground-water sampling of the existing wells was conducted to assess for petroleum impacts in the area of the former 500-gallon gasoline tank.

4.1.1 Soil Boring and Monitoring Well Installation

Each borehole drilled for monitoring well installation purposes and each soil boring was advanced into the overburden soil using decontaminated 4-1/2-inch and 3-1/2-inch inside diameter (I.D.) hollow-stem augers, respectively. The total depth of each monitoring well location was determined by the depth to water and well screens were placed to allow monitoring of ground-water quality conditions at the top of the saturated zone. The overburden soil at each drilling location was sampled continuously at 2-foot intervals using 2-inch outer diameter split-spoon sampling methods. Following their completion, all soil borings were backfilled with the soil cuttings produced during the advancement of the borings. Soil cuttings produced during the monitoring well drilling activities were staged in 55-gallon steel drums adjacent to the boring for proper handling by the site owner.

Upon retrieval, each split-spoon was opened and screened with the photoionization detection (PID) for the presence of TVO vapors. The soil sample from each borehole exhibiting the highest TVO vapor concentration as detected by the PID, visual evidence of contamination, and/or petroleum odors, was submitted to General Testing Corporation (GTC) for laboratory analysis. The soil samples collected from the various fuel oil storage tank locations (SB-1, SB-2, SB-4, SB-5, and SB-6) were analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs) by USEPA Methods 8021 and 8270, respectively. Soil sample SB-3, collected from the location of the transformer pad, was analyzed for TCL PCBs by USEPA Method 8080.



The soil samples collected from the boreholes of the ground-water monitoring wells were analyzed for TCL VOCs by USEPA Method 8260, RCRA metals by USEPA Method 6010/7000 Series, cyanides by USEPA Method 9012 and total petroleum hydrocarbons by USEPA Method 418.1. If elevated concentrations of total petroleum hydrocarbons (TPH) were detected in a soil sample, the sample was also analyzed for TCL SVOCs by USEPA Method 8270. In addition, soil samples obtained from monitoring well locations MW-5 and MW-6 were analyzed for total organic carbon (TOC) by USEPA Method 9060.

Each monitoring well was constructed of a 10-foot length of 2-inch I.D., Schedule 40 polyvinyl chloride (PVC), 0.010-inch slot well screen and 2-inch I.D. Schedule 40 PVC riser. A grade 0 quartz sandpack was placed around the well screen from the bottom of the borehole to six inches above the top of the well screen. A hydrated bentonite seal was placed to a minimum of one-foot above the sandpack and the remaining annulus was filled with a cement/bentonite grout to within approximately one-foot of the ground surface. The well casing was secured with a locking pressure-fit cap, and a flush-mounted curb box was installed in an 18-inch diameter concrete surface pad. Overburden soil descriptions and monitoring well construction details are presented in the subsurface logs in Appendix B.

4.1.2 Well Development and Ground-Water Sampling

On September 18 and 19, 1995, the six overburden monitoring wells were developed to enhance the hydraulic connection between the well screen and the surrounding formation and to remove fine sediment from the well screen and sandpack. Development of the monitoring wells involved the surging and bailing of the wells using a disposable, 2-inch-diameter, bottom-loading polyethylene bailer with polypropylene rope. During surging, the bailer was repeatedly raised and lowered through the screened interval of the well to liberate sediment from the well screen. Each monitoring well was then bailed to draw formation water into the well. Development activities continued until pH, temperature, specific conductivity, and turbidity stabilized. Ten to 20 well volumes were removed from each monitoring well during development activities.

To evaluate ground-water quality conditions at the site, BBL collected ground-water samples from each monitoring well on September 18 and 19, 1995. Prior to sampling, BBL measured the static water level in each well using a decontaminated electronic water-surface indicator to facilitate determination of the volume of water in each well.

Each monitoring well was then purged of three well volumes using a disposable, polyethylene bailer with polypropylene rope. After purging each well, BBL obtained ground-water samples and placed them into laboratory-provided glassware. The ground-water samples were placed into a cooler with ice as the preservative for delivery to GTC for laboratory analysis. The groundwater samples collected were analyzed for TCL VOCs by USEPA Method 8260, RCRA metals by USEPA Method 6010/7000 Series, cyanide by USEPA Methods 335.2/335.3 and (TPH) using USEPA Method 4181. If elevated concentrations of TPHs were detected in a sample, the samples were analyzed for TCL SVOCs using USEPA Method 8270.

In addition to measuring the static water levels in the monitoring wells, BBL obtained a surface water elevation for the St. Lawrence River located immediately adjacent to the north of the site. The surface water elevation was utilized for comparison of ground-water elevations measured in the monitoring wells, to establish the ground-water flow direction.

4.2 Site Hydrogeology

4.2.1 Regional Geology

The Joanna/CMF Industries is located in the St. Lawrence Valley of northern New York State. In St. Lawrence County, this area is characterized by low surface relief, unconsolidated overburden derived from glacial deposition, and bedrock dipping gently to the south at approximately 50 feet per mile. The bedrock consists of a dark tan, sandy, medium to fine grained, siliceous dolostone of Lower Ordovician age (Beekmantown Dolostone).



Tables 4-2 and 4-3, the comparison of the analytical results for the soil samples and NYSDEC soil cleanup objectives indicates that the following constituents were above the soil cleanup objectives:

- Acetone detected in MW-7;
- Six SVOCs detected in SB-1, SB-6, MW-8, MW-9, and MW-10;
 - Benzo (a) anthracene;
 - Benzo (a) pyrene;
 - Benzo (b) flouranthene;
 - Benzo (k) flouranthene;
 - Chrysene; and
 - Indeno (1,2,3-cd) pyrene
- Three inorganics (arsenic, cadmium, and chromium) detected in MW-7, MW-8, MW-9, and MW-10 (which are located at the north and east sides of the site); and
- Chromium detected in SB-8 and TP-1 (which are located at the body shop foundation).

In addition, the following were not detected above the soil cleanup objectives:

- PCBs were not detected in soil samples collected from SB-9 or SB-3, which is located near the site's present and former electrical transformers;
- Neither VOCs nor SVOCs were detected in soil samples collected from SB-4 or SB-5, which are located near the former location of the former 8,000-gallon No. 4 fuel oil UST;
- Neither VOCs nor SVOCs were detected in soil samples collected from SB-2, which is located near the location of two 275-gallon fuel oil ASTs;

While analysis of the soil and ground-water samples obtained from MW-9 did not detect elevated levels of SVOCs, VOCs, and inorganics, the samples exhibited a petroleum odor, a visible sheen, and the soil sample had a TPH concentration of 2,200 ppm. The laboratory report for the soil sample noted that the sample extract for the SVOC analysis was analyzed at a 1/10 dilution due to matrix interferences from non-target analytes, indicating the presence of chemicals that are not included on the TCL analytical suite.



A copy of the laboratory report is provided in Appendix C.

4.3.2 Ground-Water Sample Analytical Results

As previously stated, one ground-water sample was collected from each well and submitted to GTC for analysis. Table 4-1 indicates the analytical parameters measured for the ground-water samples collected from the monitoring wells. A summary of the analytical results, including comparison with NYSDEC ambient water quality standards and guidance values (6NYCRR Part 703), is presented in Table 4-4.

As indicated on Table 4-4, the following SVOCs were detected above the NYSDEC ground-water standards/guidance values in the sample collected from MW-8:

- Benzo (a) anthracene
- Benzo (a) pyrene
- Benzo (b) flouranthene
- Chrysene
- Phenanthrene
- Pyrene

No other SVOCs were detected in the ground-water samples. No VOCs were detected above NYSDEC standards/guidance values. Seven inorganics were detected in ground-water samples collected from monitoring wells across the site at concentrations exceeding NYSDEC standards/guidance values.

A copy of the laboratory report is provided in Appendix C.

5.0 Conclusions and Recommendations



5.1 Review of Previous Assessments and BBL Facility Inspection

The review of previous environmental site assessment reports, employee interviews, and BBL's facility inspection revealed several areas of possible environmental concern. These identified areas included:

Asbestos-Containing Materials (ACM)

- Suspected asbestos-containing pipe joint insulation were observed in the following locations:
- The tumbling room and the break room in the basement of the main building;
- The production room and the stock room on the first floor of the main building;
- The storage room on the second floor of the main building; and
- The warehouse break room.

Since the asbestos surveys performed in conjunction with the two previous site assessments (BCM, September 1991 and Versar, July 1994) concur with BBL's observations during the facility inspection, it is probable that the pipe and pipe joint insulation observed in the main building contains ACM. The current condition of the insulation appears to be unencapsulated and friable, and is accessible to site personnel, which would present an imminent health risk. Therefore, it is recommended that all damaged or stored pipe insulation be identified and appropriately removed, handled, and disposed of by a qualified asbestos contractor.

Underground Storage Tank

Joanna/CHF could not furnish a copy of the analytical results of the soil sampling conducted during the previously conducted removal of the 8,000-gallon No. 4 fuel oil UST. The BBL soil samples collected from soil borings SB-4 and SB-5, which were drilled near the location of the former 8,000-gallon No. 4 fuel oil UST, did not exhibit VOC or SVOC concentrations above the detectable limit. Therefore, based on the data from SB-4 and SB-5, it would appear that the absence of verification soil analytical data relative to the time of tank removal is not of concern.

Elevated xylene concentrations were previously detected in ground-water samples from monitoring wells located near the former 500-gallon gasoline UST prior to this ESA. During this ESA, ground-water samples were collected from monitoring wells MW-1 and MW-3, which were drilled near the location of the former 500-gallon gasoline UST. The analytical results for the ground-water samples obtained from these monitoring wells did not indicate the presence of xylene above detectable concentrations. Accordingly, the low concentrations of xylene found in the ground-water samples obtained in this area during previous investigations were not observed.

Air Permits

The facility has constructed and is operating a dust collection system apparently without a permit to construct or a certificate to operate a process, exhaust, or ventilation system (emission point permit), as required by proposed regulation 6 NYCRR Part 201. The emission source process is the manufacture of wood products that generates particulate matter. Based on the potential for this source to emit particulate matter to the atmosphere, an emission point permit may be required. However, as a woodworking operation with an emissions control device, the process may be exempted from emission point permit requirements by proposed rule 6 NYCRR Part 201.11. Additional analysis of the process creating the potential air emissions would be necessary to determine if an emissions point permit is required. In the mean time, it is recommended that the dust collection system be inspected regularly and kept in good working order.

Wastewater Permits

The facility could not supply an industrial users permit or associated monitoring reports to verify discharges to the Ogdensburg Publicly Owned Treatment Works (POTW). Consequently, it is suggested that the site's discharge criteria and monitoring requirements be verified with the POTW.



Waste Storage

Because the contents of the two 55-gallon drums of waste discovered in the maintenance garage are unknown and could pose a threat to human health or the environment, they should be properly characterized and disposed. Should this waste be characterized as hazardous waste under RCRA, various storage and administrative recordkeeping must also be implemented (i.e., accumulation start date displayed on the drums, volume limitation, etc.).

Site Grading/Filling

The historical use of extensive fill from an unknown source to extend the property into the St. Lawrence River is discussed below, in light of the analytical information obtained during this ESA.

5.2 Subsurface Investigation

The site soil and ground-water quality indicate the following:

- At the boat shop foundation, five SVOCs and chromium have been detected at concentrations exceeding NYSDEC soil cleanup objectives;
- SVOCs have been detected at concentrations exceeding NYSDEC soil clean-up objectives at SB-6, MW-8, MW-9, and MW-10, located on the north side of the site, in the area comprised of fill material from unknown sources. Note, however, that due to matrix interferences in the soil samples collected from monitoring well MW-7, the detection limits for SVOCs were above the listed clean-up objectives;
- Inorganics have been detected at concentrations exceeding NYSDEC soil clean-up objectives at the MW-7, MW-8, MW-9, and MW-10 borings, which is located on the north side of the site, in the area comprised of fill material from unknown sources;
- VOCs have not been detected at concentrations exceeding NYSDEC ground-water standards/guidance values in any of the ground-water samples obtained during this ESA;
- SVOCs have been detected at concentrations exceeding NYSDEC ground-water standards/guidance values in only one monitoring well, MW-8, which is not suggestive of a significant impact by SVOCs to groundwater;

- Seven inorganics have been detected at concentrations exceeding NYSDEC ground-water standards/guidance values, which apparently represent the most significant impact to ground-water quality conditions by past site operations;
- While analysis of the soil and ground-water samples obtained from MW-9 did not detect elevated levels of SVOCs, VOCs, and inorganics, the samples exhibited a petroleum odor, a visible sheen, and the soil sample had a TPH concentration of 2,200 ppm. The laboratory report for the soil sample noted that the sample extract for the SVOC analysis was analyzed at a 1/10 dilution due to matrix interferences from non-target analytes, indicating the presence of chemicals that are not included on the TCL analytical suite.

The presence of inorganic compounds (i.e., arsenic, barium, cadmium, chromium, and lead) at concentrations exceeding the NYSDEC standards/guidance values in ground-water samples collected from monitoring wells across the site could represent a significant environmental concern. The highest concentrations of inorganic compounds were detected in the soil and groundwater samples from the monitoring wells advanced into the fill (from unknown sources) at the north end of the site. These elevated concentrations may be due to:

- On-site migration of ground water from the adjacent former Diamond International Plant, other industrial facilities in the area, or from the St. Lawrence River;
- Migration of ground water from areas around the former plating operations to the north end of the site;
- Leaching of the fill material; and/or
- Background ground-water quality conditions.

Off-site migration of contaminated ground water from the former Diamond International Paper Plant appears to be unlikely because of the relatively low concentrations of inorganic compounds in the ground-water sample obtained from monitoring well MW-6, located at the west end of the site, between the former Diamond International Plant and the site.

It is also improbable that the St. Lawrence River is the source of elevated inorganic concentrations in ground-water at the north end of the site, because ground water tends to flow from south to north toward the river.

Background ground-water conditions and/or off-site migration of contaminated ground water from facilities south of the site is viable considering the ground-water flow is from south to north. However, the ground-water sample obtained from monitoring well MW-5 had concentrations of inorganics below detectable limits for all compounds, except chromium and barium. The chromium concentration of this sample exceeded NYSDEC ground-water standards by only 0.003 mg/kg and was significantly lower than the chromium concentrations detected in samples obtained from the monitoring wells at the north end of the site. Although the barium concentration in the MW-5 ground-water sample was much lower than the barium concentrations detected in the monitoring wells at the north end of the site, it was still over 250 times greater than the NYSDEC standard value. Therefore, it is likely that ground water with elevated barium levels is flowing onto the site from its south border. The elevated barium levels may be either due to naturally elevated barium concentrations or barium contamination from other site(s). Since the barium concentrations in ground-water samples obtained from the monitoring wells at the north end of the site are approximately 20 times greater than in the upgradient monitoring well (MW-5) sample, it is also possible that an on-site source of barium exists.

The following additional activities should be implemented to assess the source of the impacted ground water and to evaluate sources of potential on-site soil contamination (i.e., fill material or other areas contaminated by previous plant operations):

- Conduct research regarding background ground water inorganic concentrations in the area, including a Freedom of Information Law (FOIL) request to review the NYSDEC's records regarding the Diamond International Plant;



- Perform another round of ground-water sampling and analysis to verify the results of the first round, and collect another round of groundwater level measurements to confirm the ground-water flow direction. The analyses of ground-water samples should be the same as during the first round; and
- Advance approximately six boreholes to depths of eight feet into overburden near the former plating operations and collect soil samples for laboratory analyses to determine whether the overburden in this area is a potential source of inorganic contamination.

TABLES

TABLE 4-1

NEWELL COMPANY
ENVIRONMENTAL SITE SUMMARY

SAMPLE COLLECTION AND ANALYSIS SUMMARY

LOCATION(S)	NUMBER OF SAMPLES	SAMPLE TYPE	ANALYSIS	USEPA METHOD
SB-1, SB-2, SB-4, SB-5 & SB-6 (FUEL OIL STORAGE)	5	SOIL	STAR TABLE 2 VOCs/SVOCs (2)	8021/8270
SB-3, SB-9 (TRANSFORMER PADS)	2	SOIL	TCL PCBs	8080
SB-8, TP-1 (PLATING BATH & BOAT SHOP)	3	SOIL	TCL VOCs RCRA METALS CYANIDES	8260 6010/7000 SERIES 9012
MW-5 & MW-6	2	SOIL	TCL VOCs RCRA METALS CYANIDES TPH TOC TCL SVOCs (1)	8260 6010/7000 SERIES 9012 418.1 9060 8270 (1)
MW-7, MW-8 MW-9, & MW-10	4	SOIL	TCL VOCs RCRA METALS CYANIDES TPH TCL SVOCs (1)	8260 6010/7000 SERIES 9012 418.1 8270 (1)
MW-1, MW-3 MW-5, MW-6 MW-7, MW-8 MW-9, & MW-10	8	WATER	TCL VOCs RCRA METALS CYANIDES TPH TCL SVOCs (1)	8260 6010/7000 SERIES 335.2/335.3 418.1 8270 (1)
SUMP GW WELL (FORMER PRODUCTION WELL)	2	GRAB	TCL VOCs RCRA METALS CYANIDES TCL PCBs TPH TCL SVOCs (1)	8260 6010/7000 SERIES 9012/335.2/335.3 8080 418.1 8270 (1)

Notes:

- (1) = TCL SVOCs analyses were conducted on soil samples from MW-7, MW-8 and MW-9 based upon TPH analysis results.
- (2) = New York State Department of Environmental Conservation Spill Technology and Remediation Series (MEMO #1).

TABLE 4-2

NEWELL COMPANY
ENVIRONMENTAL SITE ASSESSMENT
SOIL BORINGS
SUBSURFACE SOIL SAMPLE ANALYTICAL RESULTS

Sample I.D.	NYSDEC TAGM 4046 Soil Cleanup Objectives (1)	SB-1 9/15/95 (4'-6')	SB-2 9/15/95 (3'-5')	SB-3 9/18/95 (2'-4')	SB-4 9/14/95 (6'-8')	SB-5 9/14/95 (4'-6')	SB-6 9/14/95 (2'-4')	SB-8 9/15/95 (6'-8')	SB-9 9/18/95 (4'-6')	TP-1 9/19/95 grab
VOLATILES		ND	ND	-	ND	ND	ND	ND	-	ND
SEMIVOLATILES										
Anthracene	50.0	ND	ND	-	ND	ND	.560	-	-	-
Benzo (a) anthracene	0.224 or MDL	750	ND	-	ND	ND	1.50	-	-	-
Benzo (a) fluoranthene	0.224 or MDL	1.20	ND	-	ND	ND	2.10	-	-	-
Benzo (a) pyrene	0.061 or MDL	900	ND	-	ND	ND	1.60	-	-	-
Benzo (g,h,i) perylene	50.0	.390	ND	-	ND	ND	.630	-	-	-
Benzo (k) fluoranthene	0.224 or MDL	540	ND	-	ND	ND	810	-	-	-
Chrysene	0.4	900	ND	-	ND	ND	1.70	-	-	-
Fluoranthene	50.0	1.70	ND	-	ND	ND	3.00	-	-	-
Indeno (1,2,3-cd) pyrene	3.2	.420	ND	-	ND	ND	.630	-	-	-
Naphthalene	13.0	ND	ND	-	ND	ND	.290	-	-	-
Phenanthrene	50.0	1.20	ND	-	ND	ND	2.30	-	-	-
Pyrene	50.0	1.40	ND	-	ND	ND	2.60	-	-	-
INORGANICS										
Arsenic	7.5 or SB	-	-	-	-	-	-	4.11	-	4.07
Barium	300 or SB	-	-	-	-	-	-	62.0	-	66.1
Cadmium	1 or Sb	-	-	-	-	-	-	ND	-	ND
Chromium	10 or Sb	-	-	-	-	-	-	14.5	-	13.0
Lead	SB	-	-	-	-	-	-	34.3	-	35.8
Mercury	0.1	-	-	-	-	-	-	0.184	-	ND
Selenium	2 or SB	-	-	-	-	-	-	ND	-	ND
Silver	SB	-	-	-	-	-	-	ND	-	ND
Total Cyanide	NS	-	-	-	-	-	-	ND	-	ND
Total TPH	NS	-	-	-	-	-	-	-	-	-
PCBs	10	-	-	ND	-	-	-	-	ND	-

Notes:

Only compounds with detectable concentrations listed in table.
Results are reported in milligrams per kilograms (mg/kg).

- = not analyzed.

ND = non detect; for detection limits see laboratory analytical results in Appendix C.
NA = sample was not analyzed due to the low total concentration of TPH.

NS = no standard.

S = reported value determined by Method of Standard Additions. (MSA)

(1) = NYSDEC TAGM 4046; Determination of Soil Cleanup Levels (HWR-94-4046) expressed cleanup objectives in mg/kg.

SB = soil background.

MDL = method detection limits.

TABLE 4-3

NEWELL COMPANY
ENVIRONMENTAL SITE ASSESSMENT
MONITORING WELLS
SUBSURFACE SOIL SAMPLE ANALYTICAL RESULTS

Sample I.D.	NYSDEC TAGM 4046 Soil Cleanup Objectives (1)	MW-5 9/19/95 (8'-10')	MW-6 9/19/95 (9'-11')	MW-7 9/18/95 (4'-6')	MW-8 9/18/95 (2'-4')	MW-9 9/14/95 (6'-8')	MW-10 9/13/95 (2'-4')
VOLATILES							
Acetone	0.2	.012	.017	1.30	.077	.054	ND
2-butanone (mek)	0.3	ND	ND	.250	ND	ND	ND
Carbon disulfide	2.7	ND	ND	.050	ND	ND	ND
Trichloroethene	0.7	ND	ND	ND	ND	ND	ND
SEMIVOLATILES							
Anthracene	50.0	NA	NA	ND	6.8	ND	ND
Benzo (a) anthracene	0.224 or MDL	NA	NA	ND	11	700	.510
Benzo (a) pyrene	0.061 or MDL	NA	NA	ND	12	300	550
Benzo (b) fluoranthene	0.224 or MDL	NA	NA	ND	15	1.50	.740
Benzo (g,h,i) perylene	50.0	NA	NA	ND	4.7	.840	ND
Benzo (k) fluoranthene	0.224 or MDL	NA	NA	ND	5.2	1.70	ND
Chrysene	0.4	NA	NA	ND	12	960	600
Di-n-butylphthalate	8.1	NA	NA	ND	ND	ND	.400
Fluoranthene	50.0	NA	NA	ND	2.7	.970	1.20
Indeno (1,2,3-cd) pyrene	3.2	NA	NA	ND	4.7	.700	ND
Phenanthrene	50.0	NA	NA	ND	25	1.70	.680
Pyrene	50.0	NA	NA	ND	20	1.40	.950
INORGANICS							
Arsenic	7.5 or SB	2.11	1.25	6.97	7.99	9.95	8.50
Barium	300 or SB	47.7	36.7	44.8	87.7	63.5	45.4
Cadmium	1 or SB	ND	ND	3.65	2.87	3.24	0.725
Chromium	10 or SB	9.45	8.58	12.5	10.5	15.4	7.45
Lead	SB	ND	ND	104	61.7	80.2	32.8
Mercury	0.1	ND	ND	0.726	ND	1.05	ND
Selenium	2 or SB	ND	ND	ND	ND	ND	ND
Silver	SB	ND	5.15	ND	ND	ND	ND
Total Cyanide	NS	ND	ND	ND	ND	ND	ND
Total TPH	NS	ND	ND	1340	1780	2220	44.7
PCBs	10	-	-	ND	-	-	-

Notes:

Only compounds with detectable concentrations listed in table.

Results are reported in milligrams per kilograms (mg/kg).

- = not analyzed.

ND = Not Detected. Semivolatile detection limits range as follows: MW-7: 0.75-3.5, MW-8: 4.1-16, MW-9: 0.42-1.7, and MW-10: 0.37-1.5. See appendix C for specific detection limits.

NA = sample was not analyzed due to the low total concentration of TPH.

NS = no standard

S = reported value determined by Method of Standard Additions. (MSA)

(1) = NYSDEC TAGM 4046: Determination of Soil Cleanup Levels (HWR-94-4046) expressed cleanup objectives in mg/kg, except for metals which are reported in mg/kg.

SB = site background

MDL = method detection limit.

TABLE 4-4

NEWELL COMPANY
ENVIRONMENTAL SITE ASSESSMENT

GROUNDWATER SUMMARY ANALYTICAL RESULTS

Sample I.D. Sample Date	NYSDEC 6 NYCRR Part 703 Standards / Guidance Values	MW-1 9/18/95	MW-3 9/18/95	MW-5 9/19/95	MW-6 9/19/95	MW-7 9/19/95	MW-8 9/19/95	MW-9 9/18/95	MW-10 9/18/95	Sump-1 9/19/95	GW Well 9/18/95	Trip Blank 9/18/95
VOLATILES												
Acetone	.050	ND	ND	.024	.014	.014	.012	.023	.046	.016	ND	ND
Trichloroethene	.005	ND	.007	ND	ND	ND	ND	ND	ND	ND	ND	ND
SEMIVOLATILES												
Acenaphthene	.020	NA	NA	NA	NA	NA	.006	ND	NA	ND	NA	ND
Anthracene	.050	NA	NA	NA	NA	NA	.005	ND	NA	ND	NA	ND
Benzo (a) anthracene	.000002	NA	NA	NA	NA	NA	.009	ND	NA	ND	NA	ND
Benzo (a) pyrene	.000002	NA	NA	NA	NA	NA	.010	ND	NA	ND	NA	ND
Benzo (b) fluoranthene	.000002	NA	NA	NA	NA	NA	.010	ND	NA	ND	NA	ND
Benzo (ghi) perylene	NS	NA	NA	NA	NA	NA	.006	ND	NA	ND	NA	ND
Benzo (k) fluoranthene	.000002	NA	NA	NA	NA	NA	.007	ND	NA	ND	NA	ND
Carbazole	NS	NA	NA	NA	NA	NA	.008	ND	NA	ND	NA	ND
Chrysene	.000002	NA	NA	NA	NA	NA	.009	ND	NA	ND	NA	ND
Fluoranthene	.050	NA	NA	NA	NA	NA	.020	ND	NA	ND	NA	ND
Naphthalene	.010	NA	NA	NA	NA	NA	.077	ND	NA	ND	NA	ND
Phenanthrene	.050	NA	NA	NA	NA	NA	.021	ND	NA	ND	NA	ND
Pyrene	.050	NA	NA	NA	NA	NA	.016	ND	NA	ND	NA	ND
INORGANICS												
Arsenic	.025	ND	ND	ND	ND	.0050	.0027	0.015	0.006	ND	ND	-
Barium	.001	.0340	1.04	.0272	.0540	.0691	3.14	5.38	2.35	.0022	0.179	-
Cadmium	.010	ND	0.010	ND	ND	0.019	0.190	0.163	0.016	ND	ND	-
Chromium	.050	.0060	0.280	.0053	0.125	0.354	0.400	0.726	0.606	ND	ND	-
Lead	.050	.0112	0.225	ND	ND	25.7	2.35	7.10	1.74	0.093	ND	-
Mercury	.002	ND	ND	ND	ND	.0019	.002	0.005	0.002	0.0003	ND	-
Selenium	.010	ND	ND	ND	ND	ND	ND	ND	0.029S	ND	ND	-
Silver	.050	ND	ND	ND	ND	ND	ND	0.0116	ND	ND	ND	-
Total Cyanide	.100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
Total TPH	NS	ND	1.67	1.32	1.34	ND	5.95	6.39	ND	155	ND	-
PCBs	.009	-	-	-	-	-	-	-	-	ND	ND	-

Notes:

Only compounds with detectable concentration listed in table.

Results are reported in milligrams per liter (mg/L).

- = not analyzed.

ND = non detect; for detection limits see laboratory results in Appendix C.

NA = sample was not analyzed due to the low total concentration of TPH.

NS = no standard

S = reported value determined by Method of Standard Additions. (MSA)

(1) = NYSDEC and 6 NYCRR Parts 700-705: Ambient Water Quality Standards and Guidance Values.

GW Well is the former Production Well.

FIGURES



BLASLAND, BOUCK & LEE, INC.
engineers & scientists

November 9, 1995

Dr. Peter J. Schultz
Newell Company
4000 Auburn Street
Rockford, Illinois 61126-7018

Re: Environmental Site Assessment
Joanna/Crown Home Furnishings
Ogdensburg, New York

File: 0078-078.30 #1

Transmitted Via: Federal Express
Pages Sent: 1 (Plus attachments)

Dear Dr. Schultz:

Please find enclosed, for your review, a draft copy of the "Phase II Environmental Site Assessment, Joanna/Crown Home Furnishings Facility, Ogdensburg, New York, November 1995", prepared by Blasland, Bouck & Lee, Inc.

Please contact me at (412) 635-9633 to discuss any comments you may have.

Very truly yours,

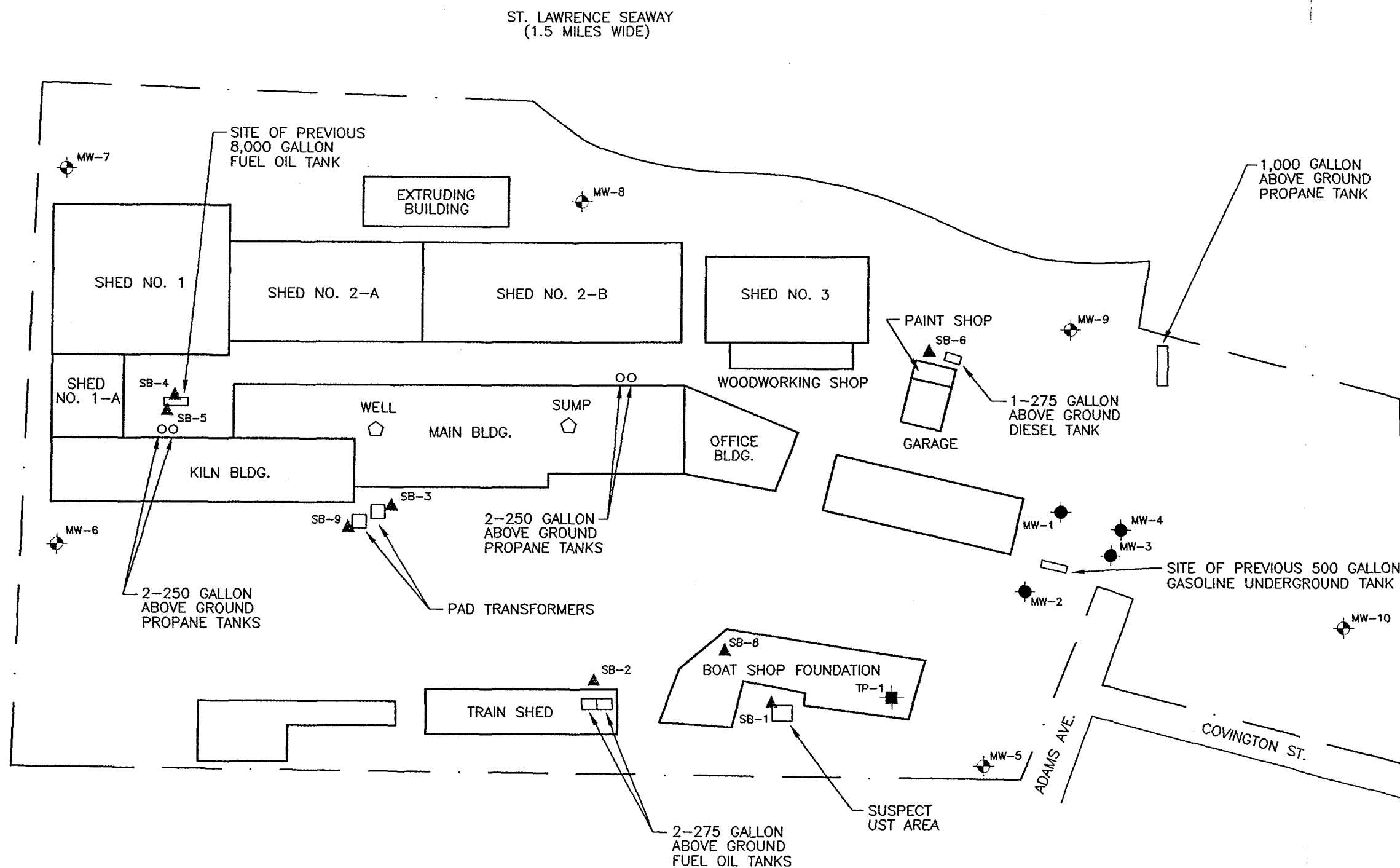
BLASLAND, BOUCK & LEE, INC.

Jack D. Frost
T.P.H.

Jack D. Frost
Principal Scientist

DSM/tah
u:66951391.b

cc: Thomas P. Hasek, Blasland, Bouck & Lee, Inc.



LEGEND

- MW-4 EXISTING MONITORING WELL
- MW-5 MONITORING WELL INSTALLED BY BBL IN 9/95
- SB-4 SOIL BORING
- TP-1 TEST PIT
- GRAB SAMPLE

NOTES:

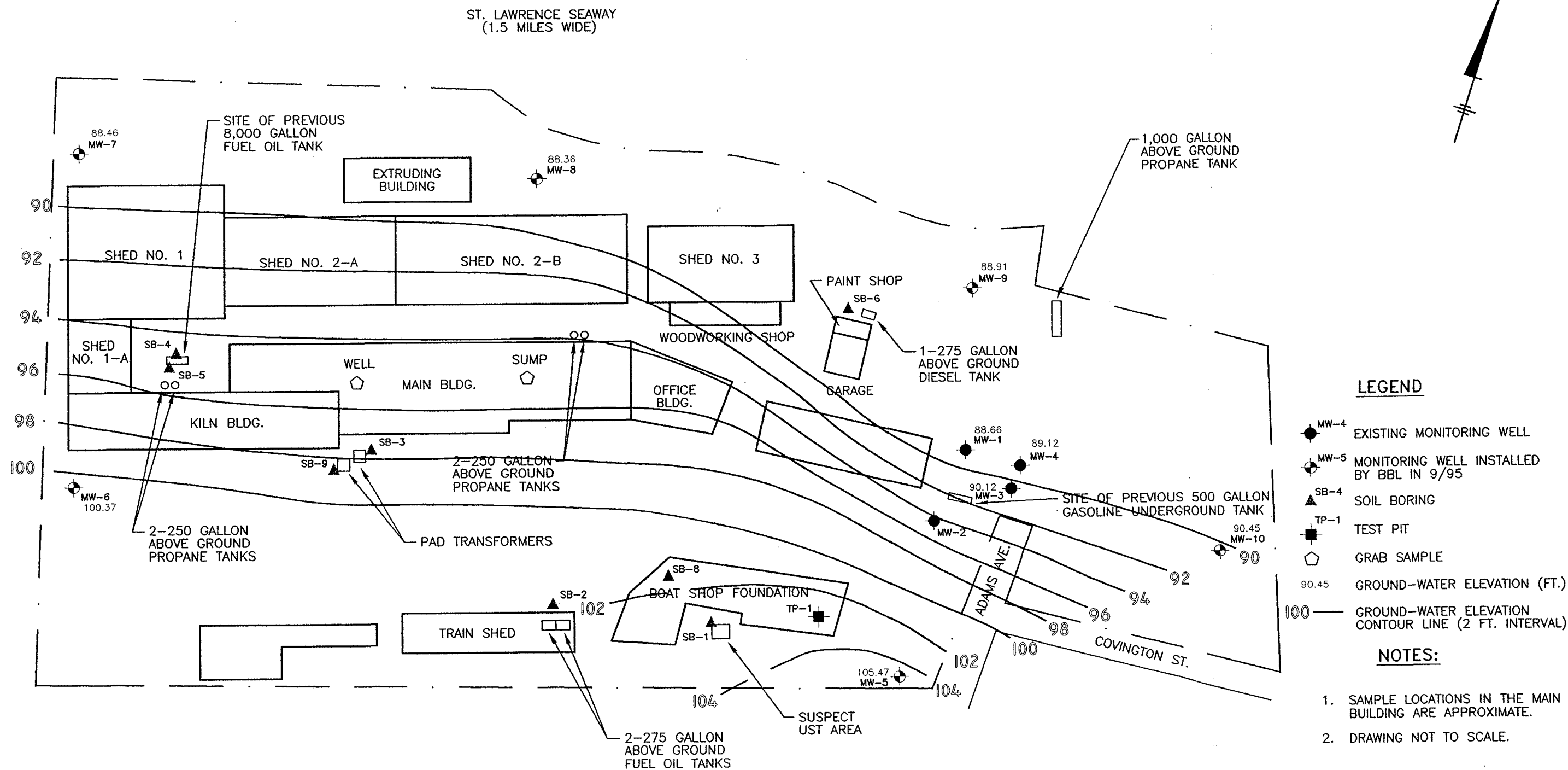
- SAMPLE LOCATIONS IN THE MAIN BUILDING ARE APPROXIMATE.
- DRAWING NOT TO SCALE.

BLASLAND, BOUCK & LEE, INC.
ENGINEERS & SCIENTISTS

JOANNA/CHF INDUSTRIES SITE
OGDENSBURG, NEW YORK
NEWELL COMPANY
ENVIRONMENTAL SITE ASSESSMENT

SITE PLAN

FIGURE
1



APPENDIX A




Photograph 11: East end of train shed.




Photograph 12: Northeast corner of train shed, location of SB-2.

APPENDIX B

Date Start/Finish: 9-15-95 / 9-15-95 Drilling Company: ATLANTIC TESTING Driller's Name: CHRIS WHEELER Drilling Method: HOLLOW STEM AUGERS Auger Size: 3.25" - 1/2" Rig Type: CMG - 55 Spoon Size: 2" - 1/2"	PVC Casing Elev.: Borehole Depth: 10.0 FT. Ground Surface Elev.: Geologist: MICHAEL R. ARANAKAS	Well No. SB-1 Site: JOANNA Client: NEWELL
---	--	---

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm) Headspace	Geotechnical Test	Geologic Column	Stratigraphic Description	Well Construction
gs elevation ft.										GROUND SURFACE	
		1	2-4 5-4	9	1.0	0.0				BROWN TO DARK BROWN, FINE SAND, TRACE FINE TO MEDIUM GRAVEL, ROOTLETS, MEDIUM DENSE, DAMP.	 SOIL BORING GROUTED TO SURFACE. T.D. = 10.0'
		2	4-3 2-3	5	1.4	0.0				SAND, EXCEPT LITTLE CLAY, TRACE SILT, LOOSE, DAMP.	
5		3	4-3 4-5	7	1.5	0.0				TAN, FINE SAND, LITTLE SILT AND CLAY, TRACE FINE GRAVEL, TRACE BLACK CINDERS AND ASH, LOOSE, MOIST.	
		4	17-26 39-1/5	63	1.6	0.0				TAN, FINE TO MEDIUM SAND, SOME SILT AND CLAY, LITTLE FINE TO MEDIUM GRAVEL, VERY DENSE, MOIST.	
		5	56-64 49-1/8	113	1.0	0.0				TAN TO BROWN, FINE SAND, AND SILT, TRACE GRAVEL AND CLAY, VERY DENSE, MOIST.	
10										- FILL -	
										BORING TERMINATED AT 10.0 FT. BGS.	
15											

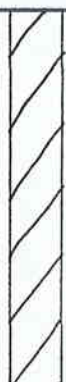



BLASLAND, BOUCH & LEE
ENGINEERS & SCIENTISTS

Remarks:

Water Levels		
Date / Time	Elevation	Depth
		▼
		▽
		▽

Date Start/Finish: 9-15-95 / 9-15-95 Drilling Company: ATLANTIC TESTING Driller's Name: CHRIS WHEELER Drilling Method: HOLLOW STEM AUGERS Auger Size: 3.25-IN. Rig Type: CMG-SS Spoon Size: 2-IN.	PVC Casing Elev.: Borehole Depth: 5.8 ft. Ground Surface Elev.:	Well No. SB-2 Site: JOANNA Client: NEWELL
Geologist: MICHAEL R. ALLACKAS		

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm) Headspace	Geotechnical Test	Geologic Column	Stratigraphic Description	Well Construction
gs elevation ft.											
										GROUND SURFACE	
		1		6-50 15	-	.5	0.0			DARK BROWN, FINE TO MEDIUM SAND, LITTLE SILT, TRACE FINE GRAVEL TRACE CLAY, DAMP. AUGURED FROM 1.0' to 2.5' BGS - CONCRETE PAD.	 SOIL BORING GROUTS TO SURFACE. T.D. = 5.8'
		2		4-8 5-8	13	1.2	0.0			DARK BROWN, MEDIUM TO COARSE SAND, LITTLE SILT, TRACE CLAY, - SOME COBBLES.	
5		3		5-9 100/1	-	.6	0.0			SAME. AUGER REFUSAL AT 5.8' BGS.	
										BORING TERMINATION AT 5.8 FT. BGS.	
10											
15											



BLASLAND, BOUCK & LEE
ENGINEERS & SCIENTISTS

Remarks:

Water Levels		
Date / Time	Elevation	Depth
		7
		7
		7

[illegible]

Date Start/Finish: 9-14-95 / 9-14-95 Drilling Company: ATLANTIC TESTING Driller's Name: CHRIS WHEELER Drilling Method: HOLLAN STON AUGER Auger Size: 3.25-IN. Rig Type: CMG - 55 Spoon Size: 2-IN.	PVC Casing Elev.: Borehole Depth: 10.0 FT Ground Surface Elev.: Geologist:	Well No. SB-4 Site: JOANNA Client: NEWGU
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DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm) Headspace	Geotechnical Test	Geologic Column	Stratigraphic Description	Well Construction
gs elevation ft										GROUND SURFACE	
		1	5-7 6-5	13	1.5	0.0				BROWN, FINE SANDS AND SILT, TRACE FINE GRAVEL, MEDIUM DENSE, DRY.	
		2	4-7 4-4	11	1.0	0.0				NO RECOVERY (ROCK LODGE IN TIP OF SPLIT SPOON).	
5		3	3-2 3-3	5	0	0.0				TAN, FINE TO MEDIUM SAND 6"-9" ROCK FRAGMENTS 9"-12" TAN COARSE SAND, TRACE FINE GRAVEL, VERY DENSE DRY.	
		4	7-27 21-23	48	1.0	0.4				GRAY, ROCK FRAGMENTS, TRACE GRAVEL, SAND, SILT, CLAY, VERY DENSE, WET	
		5	21-29 31-36	60	1.0	0.0				BORING TERMINATED AT 10.0 FT BGS.	
10											
15											


BLASLAND, BOUCK & LEE
 ENGINEERS & SCIENTISTS


Remarks:

Water Levels

Date / Time	Elevation	Depth


Date Start/Finish: 9-14-95 / 9-14-95 Drilling Company: ATLANTIC TESTING Driller's Name: CHRIS WHEELER Drilling Method: HOLLOW STEM AUGERS Auger Size: 3.25-IN. Rig Type: CMG - 55 Spoon Size: 2-IN.	PVC Casing Elev.: Borehole Depth: 10.0 Ft. Ground Surface Elev.:	Well No. SB-5 Site: JOANNA Client: NEWELL
Geologist: MICHAEL R. ARLOWSKY		

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm)	Headspace	Geotechnical Test	Geologic Column	Stratigraphic Description	Well Construction
gs elevation ft.											GROUND SURFACE	
		1		4-5 4-5	9	1.0	0.0				TAN to BLACK, FINE SAND AND SILT, LITTLE MEDIUM to COARSE GRAVEL, TRACE CLAY, MEDIUM DENSE, DAMP.	 SOIL BORING GROWTHS TO SURFACE. T.D. = 10.0'
		2		5-7 9-11	16	1.0	0.0				TAN, FINE to MEDIUM SAND, LITTLE SILT AND MEDIUM GRAVEL, TRACE CLAY AND ROCK FRAGMENTS, DENSE, DRY.	
5		3		24-17 11-19	28	1.5	0.6				TAN, SILT, SOME CLAY, TRACE VERY FINE SAND, TRACE GRAVEL, DENSE, DAMP.	
		4		31-33 39-41	72	1.0	0.0				SAND, EXCEPT VERY DENSE.	
		5		51-102 16	-	.8	0.0				TAN, MEDIUM to COARSE SAND, TRACE SILT AND CLAY, VERY DENSE, DAMP.	
10											- FILL -	
											BORING TERMINATED AT 10.0 FT. BGS.	
15												


 BLASLAND, BOUCK & LEE ENGINEERS & SCIENTISTS	Remarks:	Water Levels		
		Date / Time	Elevation	Depth
				?
				?


Date Start/Finish: 9-14-95 / 9-14-95 Drilling Company: ATLANTIC TESTING Driller's Name: CHRIS WHEELER Drilling Method: HOLLOW STEM AUGERS Auger Size: 3.25 - IN. Rig Type: CM6 - SS Spoon Size: 2 - IN	PVC Casing Elev.: Borehole Depth: 10.0 FT. Ground Surface Elev.:	Well No. SB-6 Site: JOANNA Client: NEWELL
Geologist: MICHAEL R. ADAMS		

DEPTH	ELEVATION	Sample Run Number	Sample/Int./Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm)	Headspace	Geotechnical Test	Geologic Column	Stratigraphic Description	Well Construction
gs elevation ft.												
											GROUND SURFACE	
		1	63-15 13-20	28	1.7	0.0					ASPHALT / CRUSHED STONES DARK GRAY TO BLACK, SAND & GRAVEL, LITTLE BLACK CINDERS AND ASH, TRACE SILT AND CLAY. MOIST	
		2	15-11 7-4		1.5	0.0						
5		3	5-4 3-3		1.2	0.0					WIDE DEBRIS	
		4	1-2 2-15		1.0	0.0						
		5	1-1 1-2			0.0						
10											- FILL -	
											BORING TERMINATES AT 10.0 FT BGS	
15												

 BLASLAND, BOUCK & LEE ENGINEERS & SCIENTISTS	Remarks:	Water Levels		
		Date / Time	Elevation	Depth

Date Start/Finish: 9-15-95 / 9-15-95 Drilling Company: ATLANTIC TESTING Driller's Name: CHRIS WHEELER Drilling Method: HOLLOW STEM AUGERS Auger Size: 4.25" - 1N. Rig Type: CMG - SS Spoon Size: 2" - 1N.	PVC Casing Elev.: Borehole Depth: 10.0 FT. Ground Surface Elev.: Geologist: MICHAEL R. ALLARAS	Well No. SB-8 Site: JOANNA Client: NEWELL
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DEPTH	ELEVATION	Sample Run Number	Sample Int./Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm)	Headspace	Geotechnical Test	Geologic Column	Stratigraphic Description	Well Construction
gs elevation ft.											GROUND SURFACE	
		1	1-2 2-1	4	.6	0.0					DARK BROWN, FINE TO MEDIUM SAND, TRACE FINE GRAVEL, TRACE BLACK COAL, LOOSE, DAMP.	 <p>SOIL BORING GROUTED TO SURFACE.</p> <p>T.D. = 10.0'</p>
		2	2-1 2-3	3	1.0	0.0				DARK BROWN TO BLACK, MEDIUM TO COARSE SAND, TRACE BLACK COAL, TRACE ROCK FRAGMENTS, VERY LOOSE, DAMP.		
5		3	4-5 10-7	15	1.0	0.4				SAME.		
		4	5-4 3-3	7	1.0	0.0				DARK BROWN, MEDIUM TO COARSE SAND, LITTLE SILT, TRACE BLACK COAL, LOOSE, DAMP.		
		5	3-4 7-12	11	1.0	0.0				- FILL - TAN, TO BROWN, FINE SAND AND SILT, TRACE FINE GRAVEL, TRACE BLACK COAL, MEDIUM DENSE, MOIST. - FILL -		
10											BORING TERMINATED AT 10.0 FT. BGS.	
15												




BLASLAND, BOUCK & LEE
ENGINEERS & SCIENTISTS

Remarks:

Water Levels

Date / Time	Elevation	Depth

Date Start/Finish: 9-18-95 / 9-18-95 Drilling Company: ATLANTIC TESTING Driller's Name: CHRIS WHEELER Drilling Method: HOLLOW STEM AUGERS Auger Size: 3.25 - IN. Rig Type: CMG - 55 Spoon Size: 2 - IN.	PVC Casing Elev.: Borehole Depth: 10.0 FT Ground Surface Elev.: Geologist: MICHAEL R. ARLAUCKAS	Well No. SB-9 Site: JOANNA Client: NEWELL
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DEPTH	ELEVATION	Sample Run Number	Sample/Int./Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm) Headspace	Geotechnical Test	Geologic Column	Stratigraphic Description	Well Construction
gs elevation ft.										GROUND SURFACE	
		1	4-4 4-4	8	1.0	0.0				BROWN TO BLACK, FINE TO MEDIUM SANDS, LITTLE BLACK CINDELS, ASH AND COAL, TRACE SILT, ROOTLETS, LOOSE, DRY.	
		2	6-4 2-4	6	.6	0.0				BROWN TO BLACK, FINE TO MEDIUM SAND, LITTLE SILT, TRACE FINE GRAVEL AND BLACK CINDELS, ASH AND COAL, LOOSE DRY.	
5		3	10-16 100% 1	-	1.0	0.0				SAME.	
		4	7-9 8-18	17	1.5	0.0				- FILL - BROWN, FINE SAND AND SILT, LITTLE CLAY, TRACE FINE GRAVEL, DENSE, DAMP.	
10		5	25-42 54-100% 15	46	1.5	0.0				SAME, EXCEPT VERY DENSE.	
15										BORING TERMINATED AT 10.0 FT BGS.	


 BLASLAND, BOUCK & LEE
 ENGINEERS & SCIENTISTS


Remarks:

Water Levels

Date / Time	Elevation	Depth
		▽
		▽
		▽

Date Start/Finish: 9-15-95 / 9-15-95 Drilling Company: ATLANTIC TESTING Driller's Name: MICHAEL HAWKINS Drilling Method: Auger Size: - Rig Type: BACKHOG Spoon Size: -	PVC Casing Elev.: Borehole Depth: 11.5 ft. Ground Surface Elev.: Geologist: MICHAEL R. AMARAKOS	Well No. TP-1 Site: JOANNA Client: NEWELL
--	--	---

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm)	Headspace	Geotechnical Test	Geologic Column	Stratigraphic Description	Well Construction
gs elevation ft.											GROUND SURFACE	
5											TOP Soil. BULKY CINDERAS, ASPH AND COAL. C/D DEBRIS, WOOD, BRICKS, 3"-6" COBBLES. TAN to BROWN, FINE to COARSE SAND, some FINE GRAVEL, LITTLE SILT AND CLAY TRASH WOOD, BRICK, GLASS	
10											- FILL - COBBLE LAYER TAN, SAND AND SILT, THICK FINE GRAVEL, VERY DENSE	
15											BORING TERMINATES AT 11.5 FT BGS.	



BLASLAND, BOUCK & LEE
ENGINEERS & SCIENTISTS


Remarks:

TEST PIT WAS BACKFILLED
WITH NATURAL MATERIAL

Water Levels

Date / Time	Elevation	Depth
		▽
		▽
		▽

Date Start/Finish: 9-19-95 / 9-19-95 Drilling Company: ATLANTIC TESTING Driller's Name: MICHAEL HAWKINS Drilling Method: HOLLOW STEM AUGERS Auger Size: 4.25-IN. Rig Type: CMS-75 Spoon Size: 2-IN.	PVC Casing Elev.: Borehole Depth: 28.2 ft Ground Surface Elev.: Geologist: MICHAEL R. BELAUCKAS	Well No. MW-5 Site: JOANNA Client: NUSELL
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DEPTH	ELEVATION	Sample Run Number	Sample/Int./Type	Blows/6 in.	N	Recovery (ft.)	PTD (ppm) Headspace	Geotechnical Test	Geologic Column	Stratigraphic Description	Well Construction												
gs elevation										GROUND SURFACE	FLUSH MOUNT CURB BOX												
		1	6-6 5-5	11	1.0	0.0				TAN to BROWN, MEDIUM to COARSE SAND, TRACES SILT, TRACE FINE GRAVEL AND CLAY, MEDIUM DENSE, MOIST.	CONCRETE SURFACE SEAL 0 to 1.0' BGS.												
		2	5-4 9-18	13	1.0	0.0				TAN, FINE SAND AND SILT, TRACE FINE GRAVEL, MEDIUM DENSE, MOIST.													
5		3	11-25 20-30	45	2.0	0.0				SAME, EXCEPT VERY DENSE.	2" Ø SCH 40 PVC RISER 0 to 18.2.												
		4	18-26 26-25	52	2.0	0.0				SAME.													
		5	18-28 18-21	56	2.0	0.0				SAME.	CEMENT/BENTONITE GROUT 1.0' to 14.0' BGS.												
10		6	11-20 24-31	44	2.0	0.0				SAME.													
		7	26-100 1	-	.8	0.0				12.0' to 13.0' SAME. AUGER REFUSAL AT 13.0'	BENTONITE SEAL 14.0' to 16.0' BGS.												
15																							
 BLASLAND, BOUCK & LEE ENGINEERS & SCIENTISTS										Remarks: AUGER REFUSAL AT 13.0'. AUGURED FROM 13.0' to 14.0'.	Water Levels <table border="1"> <tr> <th>Date / Time</th> <th>Elevation</th> <th>Depth</th> </tr> <tr> <td></td> <td></td> <td>▼</td> </tr> <tr> <td></td> <td></td> <td>▼</td> </tr> <tr> <td></td> <td></td> <td>▼</td> </tr> </table>	Date / Time	Elevation	Depth			▼			▼			▼
Date / Time	Elevation	Depth																					
		▼																					
		▼																					
		▼																					


Client: NSWEL

Well No. MW-5

Site: BANNA

Total Depth = 28.2 Ft.

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm) Headspace	Geotechnical Test	Geologic Column	Stratigraphic Description	Well Construction
		8		23-57 100/1	-	1.2	0.0			SAME, EXCEPT MOIST	
				40-47 100/1	-	1.0	0.0			16.5' to 17.0' SAME.	
										AUGERED FROM 17.0' to 20.0' - DUE TO COBBLES.	
20		9		48 - 100/1	-	1.0	0.0			SAME, EXCEPT MOIST/WET.	
		10		21-21 26-32	47	2.0	0.0			SAME, EXCEPT WET.	
		11		22-27 47-57	74	2.0	0.0			SAME.	
25		12		28-35 41-43	76	2.0	0.0			SAME.	
										BORING TERMINATES AT 28.2 FT. BAGS.	T.D. = 28.2'
30											
35											



BLASLAND, BOUCK & LEE
ENGINEERS & SCIENTISTS

Remarks:

AUGERED FROM 17.0' to 20.0'
DUE TO COBBLES.

Water Levels		
Date / Time	Elevation	Depth
		↓
		↓
		↓

Date Start/Finish: 9-19-95 / 9-19-95 Drilling Company: ATLANTIC TESTING Driller's Name: MICHAEL HAWKINS Drilling Method: HOLLOW STEM AUGERING Auger Size: 4.25-IN. Rig Type: CMG-75 Spoon Size: 2-IN.	PVC Casing Elev.: Borehole Depth: 16.10 ft. Ground Surface Elev.: Geologist: MICHAEL R. HAWKINS	Well No. MW-6 Site: JOANNA Client: NEWELL
---	--	---

DEPTH	ELEVATION	Sample Run Number	Sample Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm)	Headspace	Geotechnical Test	Geologic Column	Stratigraphic Description	Well Construction
gs elevation											GROUND SURFACE	FLUSH MOUNT CURB BOX
		1		2-4 5-6	9	1.1	0.0				DARK BROWN, FINE TO MEDIUM SAND, LITTLE SILT, TRACE CLAY, ROOTLETS, MEDIUM DENSE, DAMP.	CONCRETE SURFACE SEAL 0 to 1.0' BGS.
		2		3-4 6-19	10	1.0	0.0				TAN, FINE SAND AND SILT, TRACE FINE GRAY CLAY AND SILT, MEDIUM DENSE, DAMP.	CONCRETE/BENTONITE GROUT 1.0 to 2.0' BGS.
5		3		21-100 1	-	.8	0.0				SAME. AUGURED FROM 5.0' to 7.0' DUE TO COBBLES.	2" Ø SCH 40 PVC RISER 0 to 6.10' BGS.
		4		23-30 51-69	81	2.0	0.0				- 7.5' BROWN, FINE SAND AND SILT, TRACE FINE GRAY CLAY, VERY DENSE DRY. 7.5' - 8.0' SAME, EXCEPT GRAY.	QUARTZ SANDPAC 4.0 to 16.1' BGS.
10		5		42-40 57-53	91	2.0	0.0				SAME, MOIST	2" Ø SCH 40 PVC 0.010 SLOT SCREEN 6.1' to 16.1' BGS.
		6		29-31 50-89	81	1.5	0.0				SAME, WET	
15		7		55-60 91-100 1.5	151	1.5	0.0				SAME	


 BLASLAND, BOUCK & LEE
 ENGINEERS & SCIENTISTS

Remarks:

Water Levels


Date / Time	Elevation	Depth
		↓
		↓
		↓


Client: NEWELL

Well No. MW-6

Site: JOANNA

Total Depth = 16.1'

DEPTH	ELEVATION	Sample Run Number	Sample/Int./Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm) Headspace	Geotechnical Test	Geologic Column	Stratigraphic Description	Well Construction
		8		80-70 100%	1	.5	0.0			SAND.	 T.D. = 16.1'
										DRILLING TERMINATED AT 16.3 FT BGS.	
20											
25											
30											
35											



BLASLAND, BOUCK & LEE
ENGINEERS & SCIENTISTS

Remarks:

AVERAGE REFUSAL AT 16.3'
BGS.

Water Levels

Date / Time	Elevation	Depth
		▽
		▽
		▽

Date Start/Finish: 9-18-95 / 9-18-95 Drilling Company: ATLANTIC TESTING Driller's Name: CHRIS WHEELER Drilling Method: HOLLOW STEM AUGER Auger Size: 4.25-IN. Rig Type: CMF-SS Spoon Size: 2-IN.	PVC Casing Elev.: Borehole Depth: 13.65 FT. Ground Surface Elev.:	Well No. MW-7 Site: JOANNA Client: NEWELL
Geologist: MICHAEL R. BRADY		

DEPTH	ELEVATION	Sample Run Number	Sample/Int./Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm)	Headspace	Geotechnical Test	Geologic Column	Stratigraphic Description	Well Construction
gs elevation ft.											GROUND SURFACE	FLUSH MOUNT CURB BOX
		1	7-9 8-4	7	.6	0.0					BROWN to BLACK, FINE TO MEDIUM SAND, TRACE FINE GRAVEL, SILT, AND BLACK CINDERS, ASH, DENSE, DAMP.	CONCRETE SURFACE SEAL 0 TO 1.0' BGS.
		2	5-4 2-2	6	1.2	1.4					SAME, EXCEPT LOOSE.	BENTONITE SEAL 1.0' TO 2.0' BGS.
5		3	1-2 2-1	4	1.6	50.0					BROWN to BLACK, WOOD FIBERS, TRACE FINE SAND, SILT, LOOSE, MOIST.	2" Ø SCH 40 PVC RISER 0 TO 3.65' BGS.
		4	1-2 2-3	4	2.0	10.4					-7.0' SAME. 7.0' - BLACK SAND AND GRAVEL, TRACE WOOD, BLACK CINDERS AND ASH, LOOSE, WET.	QUARTZ SANDPACK 3.65' TO 13.65' BGS.
		5	1-2 2-10	4	2.0	0.0					SAME.	2" Ø SCH 40 PVC 0.010 SLOT SCREENS 3.65' TO 13.65' BGS.
10		6	5-3 4-7	7	1.5	0.0					BLACK, SAND AND GRAVEL, TRACE WOOD, BLACK CINDERS AND ASH, LOOSE, WET.	
		7	8-4 8-3	17	1.0	0.0					SAME.	
15											BORING TERMINATED AT 14.0 FT BGS.	T.D. = 13.65'

B/L
BLASLAND, BOUCK & LEE
ENGINEERS & SCIENTISTS

Remarks:

Water Levels

Date / Time	Elevation	Depth
		▼
		▼
		▼

Date Start/Finish: 9-18-95 / 9-18-95 Drilling Company: ATLANTIC TESTING Driller's Name: CHRIS WHEELER Drilling Method: HOLLOW STEM AUGERS Auger Size: 4.25-IN. Rig Type: CMG - 55 Spoon Size: 2-IN.	PVC Casing Elev.: Borehole Depth: 12.0 FT Ground Surface Elev.:	Well No: MW-8 Site: JOBNA Client: NEWELL
Geologist: MICHAEL R. ARANCKAS		

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm)	Headspace	Geotechnical Test	Geologic Column	Stratigraphic Description	Well Construction
gs elevation ft.												
											GROUND SURFACE	FLUSH MOUNT CURB BOX
		1	30-10 20-13	30	1.0	0.0					ASPHALT BROWN, FINE SAND AND SILT, LITTLE FINE TO MEDIUM GRAVEL, TRACE ORGANIC MATERIAL, VERY DENSE, DAMP.	CONCRETE SURFACE SEAL 0 to 1.0' BGS.
		2	15-10 16-9	26	-	-					NO RECOVERY.	BENTONITE SEAL 1.0' to 1.5' BGS.
5		3	3-2 3-4	5	.8	0.0					BROWN, FINE TO MEDIUM SAND, LITTLE FINE GRAVEL, TRACE SILT, CLAY, LOOSE, WET	2" Ø SCH 40 PVC RISER 0 to 2.0' BGS.
		4	2-1 1-2	2	2.0	0.0					GRAY-BROWN, FINE SAND AND SILT, LITTLE FINE GRAVEL, TRACE CLAY AND WOOD, LOOSE WET.	QUARTZ SANDPACK 1.5' to 12.0' BGS.
		5	1-9 31-2	40	2.0	-					SAME.	2" Ø SCH 40 PK 0.010 SLOT SCREEN 2.0' to 12.0' BGS.
10		6	33-5 1-2	6	1.5	-					SAME.	
											BORING TERMINATES AT 12.0 FT BGS.	TID. = 12.0'
15												


 BLASLAND, BOUCK & LEE
 ENGINEERS & SCIENTISTS

Remarks:

Water Levels

Date / Time	Elevation	Depth
		▽
		▽
		▽

Date Start/Finish: 9-14-95 / 9-14-95 Drilling Company: ATLANTIC TESTING Driller's Name: CHRIS WHEELER Drilling Method: HOLLOW STEM AUGER Auger Size: 4.25-IN. Rig Type: CME-SS Spoon Size: 2-IN.	PVC Casing Elev.: Borehole Depth: 12.55 FT Ground Surface Elev.: Geologist: MICHAEL R. ARANAKAS	Well No. MW-9 Site: JOANNA Client: NEWELL
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DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm)	Headspace	Geotechnical Test	Geologic Column	Stratigraphic Description	Well Construction
gs elevation											GROUND SURFACE	FLUSH MOUNT CURB BOX
		1	7-8 9-9	17	1.3	0.0					DARK BROWN, COARSE SAND, LITTLE COARSE GRAVEL, TRACE CLAY AND SILT, DENSE, MOIST.	CONCRETE SURFACE SEAL 0 TO 1.0' BGS.
		2	14-13 8-6	21	1.1	0.0					SAME, EXCEPT TRACE BLACK UNDISC. ASH, DENSE, MOIST.	BEANTONITE SEAL 1.0' TO 2.0' BGS.
5		3	6-3 4-6	7	1.0	0.0					SAME, EXCEPT LOOSE, WGT	2" SCH 40 PVC RISER 0 TO 2.55' BGS.
		4	2-1 2-1	3	1.0	0.0					BLACK, COARSE SAND, LITTLE FINE GRAVEL, TRACE SILT AND CLAY, LOOSE, WGT. PETROLEUM ODOR	QUARTZ SANDPACK 2.0' TO 12.55' BGS.
		5	1-1 1-2	2	.8	0.0					SAME, EXCEPT TRACE WOOD DEBRIS, LOOSE, WGT	2" SCH 40 AC 0.010 SLOT SCREEN 2.55' TO 12.55' BGS.
10		6	9-50 1	-	1.0	0.0					BLACK, FINE TO MEDIUM SAND, TRACE SILT AND CLAY.	
		7	7-3 3-4	6	2.0	0.0					12.0' - 13.0' SAME. 13.0' - GRAY FINE SAND AND SILT, TRACE FINE GRAVEL.	
15											BORING TERMINATION AT 14.0 FT BGS.	T.D. = 12.55'


 BLASLAND, BOUCK & LEE
 ENGINEERS & SCIENTISTS

Remarks:


BORING BACKFILLED TO THIS
 DEPTH OF 13.0 FT BGS.

Water Levels

Date / Time	Elevation	Depth
		±
		▽
		▽

Date Start/Finish: 9-13-95 / 9-13-95 Drilling Company: ATLANTIC TESTING Driller's Name: CHRIS WHEELER Drilling Method: HOLLOW STEM AUGERS Auger Size: 4.25-IN Rig Type: CME - 55 Spoon Size: 2-IN	PVC Casing Elev.: Borehole Depth: 18.62 FT Ground Surface Elev.:	Well No. MW-10 Site: JOANNA Client: NEWELL
Geologist: MICHAEL R. ALAKHAS		

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	PID (ppm)	Headspace	Geotechnical Test	Geologic Column	Stratigraphic Description	Well Construction
gs elevation ft.												FLUSH MOUNT CORP BOX
											GROUND SURFACE	
		1	2-5 4-5	9	1.8	0.0					BROWN TO DARK BROWN, VERY FINE SANDS AND SILT, LITTLE COARSE GRAVEL, TRACE BLACK ASH / CINDERS, ROOTLETS, MEDIUM LOOSE, MOIST.	2" x 4" CONCRETE SURFACE SEAL 0 TO 1.0' BGS. CEMENT/BENTONITE GROUT 1.0' TO 2.0' BGS. BENTONITE SEAL 2.0' TO 2.5' BGS.
		2	2-4 1-6	5	1.0	0.0					SAME, EXCEPT WOODS.	2" x 4" SCH 40 PVC RISER 0 TO 3.62' BGS.
5		3	5-2 9-15	11	2.0	0.0					- FILL - DARK GRAY, MEDIUM TO COARSE SAND, LITTLE SILT, TRACE CLAY, TAN MOTTLING, MEDIUM DENSE, WET.	QUARTZ SANDPACK 2.5' TO 3.62' BGS.
		4	1-4 8-10	12	1.5	0.0					SAME, EXCEPT COLOR CHANGES DARK GRAY TO TAN.	2" x 4" SCH 40 PVC 0.010 SLOT SCREEN 3.62' TO 3.62' BGS.
		5	3-7 11-18	18	1.0	0.0					TAN, MEDIUM TO COARSE SAND, LITTLE SILT, TRACE FINE GRAVEL, TRACE CLAY, DENSE, WET.	
10												
15												



BLASLAND, BOUCK & LEE
ENGINEERS & SCIENTISTS

Remarks:

Water Levels

Date / Time	Elevation	Depth
		↑
		↓
		↓

APPENDIX C



VOLATILE ORGANICS
METHOD 8021 TANK LIST
Reported: 10/05/95

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL CO
Client Sample ID : SB-1

Date Sampled : 09/14/95 GTC Order # : 39764 Sample Matrix:SOIL/SEDIMENT
Date Received: 09/15/95 Submission #: 9509000179 Percent Solid: 85.2

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/21/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
BENZENE	1.0	1.2 U	UG/KG
SEC-BUTYLBENZENE	1.0	1.2 U	UG/KG
TERT-BUTYLBENZENE	1.0	1.2 U	UG/KG
N-BUTYLBENZENE	1.0	1.2 U	UG/KG
METHYL-TERT-BUTYLETHER	1.0	1.2 U	UG/KG
ETHYLBENZENE	1.0	1.2 U	UG/KG
ISOPROPYLBENZENE	1.0	1.2 U	UG/KG
P-ISOPROPYLTOLUENE	1.0	1.2 U	UG/KG
NAPHTHALENE	1.0	1.2 U	UG/KG
N-PROPYLBENZENE	1.0	1.2 U	UG/KG
TOLUENE	1.0	1.2 U	UG/KG
1,2,4-TRIMETHYLBENZENE	1.0	1.2 U	UG/KG
1,3,5-TRIMETHYLBENZENE	1.0	1.2 U	UG/KG
O-XYLENE	2.0	2.3 U	UG/KG
M+P-XYLENE	2.0	2.3 U	UG/KG
SURROGATE RECOVERIES	QC LIMITS		
CHLOROFLUOROBENZENE	(60 - 140 %)	54 *	%

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL CO
Client Sample ID : SB-1

Date Sampled : 09/14/95 GTC Order # : 39764 Sample Matrix: SOIL/SEDIMENT
Date Received: 09/15/95 Submission #: 9509000179 Percent Solid: 85.2

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/19/95			
DATE ANALYZED : 09/21/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
ACENAPHTHENE	330	390 U	UG/KG
ANTHRACENE	330	390 U	UG/KG
BENZO(A)ANTHRACENE	330	750	UG/KG
BENZO(A)PYRENE	330	900	UG/KG
BENZO(B)FLUORANTHENE	330	1200	UG/KG
BENZO(G,H,I)PERYLENE	330	390	UG/KG
BENZO(K)FLUORANTHENE	330	540	UG/KG
INDENO(1,2,3-CD)PYRENE	330	420	UG/KG
CHRYSENE	330	900	UG/KG
DIBENZO(A,H)ANTHRACENE	330	390 U	UG/KG
FLUORANTHENE	330	1700	UG/KG
FLUORENE	330	390 U	UG/KG
NAPHTHALENE	200	230 U	UG/KG
PHENANTHRENE	330	1200	UG/KG
PYRENE	330	1400	UG/KG

SURROGATE RECOVERIES

QC LIMITS

TERPHENYL-d14	(18 - 137 %)	72	%
NITROBENZENE-d5	(23 - 120 %)	90	%
2-FLUOROBIPHENYL	(30 - 115 %)	77	%



VOLATILE ORGANICS
METHOD 8021 TANK LIST
Reported: 10/05/95

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL CO
Client Sample ID : SB-2

Date Sampled : 09/14/95 GTC Order # : 39770 Sample Matrix: SOIL/SEDIMENT
Date Received: 09/15/95 Submission #: 9509000179 Percent Solid: 91.9

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/21/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
BENZENE	1.0	1.1 U	UG/KG
SEC-BUTYLBENZENE	1.0	1.1 U	UG/KG
TERT-BUTYLBENZENE	1.0	1.1 U	UG/KG
N-BUTYLBENZENE	1.0	1.1 U	UG/KG
METHYL-TERT-BUTYLETHER	1.0	1.1 U	UG/KG
ETHYLBENZENE	1.0	1.1 U	UG/KG
ISOPROPYLBENZENE	1.0	1.1 U	UG/KG
P-ISOPROPYLTOLUENE	1.0	1.1 U	UG/KG
NAPHTHALENE	1.0	1.1 U	UG/KG
N-PROPYLBENZENE	1.0	1.1 U	UG/KG
TOLUENE	1.0	1.1 U	UG/KG
1,2,4-TRIMETHYLBENZENE	1.0	1.1 U	UG/KG
1,3,5-TRIMETHYLBENZENE	1.0	1.1 U	UG/KG
O-XYLENE	2.0	2.2 U	UG/KG
M+P-XYLENE	2.0	2.2 U	UG/KG

<u>SURROGATE RECOVERIES</u>	<u>QC LIMITS</u>		
CHLOROFLUOROBENZENE	(60 - 140 %)	52 *	%

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL CO
Client Sample ID : SB-2

Date Sampled : 09/14/95 GTC Order # : 39770 Sample Matrix: SOIL/SEDIMENT
Date Received: 09/15/95 Submission #: 9509000179 Percent Solid: 91.9

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/19/95			
DATE ANALYZED : 09/22/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
ACENAPHTHENE	330	360 U	UG/KG
ANTHRACENE	330	360 U	UG/KG
BENZO (A) ANTHRACENE	330	360 U	UG/KG
BENZO (A) PYRENE	330	360 U	UG/KG
BENZO (B) FLUORANTHENE	330	360 U	UG/KG
BENZO (G, H, I) PERYLENE	330	360 U	UG/KG
BENZO (K) FLUORANTHENE	330	360 U	UG/KG
INDENO (1, 2, 3-CD) PYRENE	330	360 U	UG/KG
CHRYSENE	330	360 U	UG/KG
DIBENZO (A, H) ANTHRACENE	330	360 U	UG/KG
FLUORANTHENE	330	360 U	UG/KG
FLUORENE	330	360 U	UG/KG
NAPHTHALENE	200	220 U	UG/KG
PHENANTHRENE	330	360 U	UG/KG
PYRENE	330	360 U	UG/KG

SURROGATE RECOVERIES

QC LIMITS

TERPHENYL-d14	(18 - 137 %)	74	%
NITROBENZENE-d5	(23 - 120 %)	90	%
2-FLUOROBIPHENYL	(30 - 115 %)	77	%



EXTRACTABLE ORGANICS
METHOD 8080 PCB'S
Reported: 10/18/95

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL COMPANY-SOILS
Client Sample ID : SB-3

Date Sampled : 09/18/95 GTC Order # : 40212 Sample Matrix:SOIL/SEDIMENT
Date Received: 09/20/95 Submission #: 9509000222 Percent Solid: 91.9

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/21/95			
DATE ANALYZED : 09/25/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
PCB 1016	17	18 U	UG/KG
PCB 1221	17	18 U	UG/KG
PCB 1232	17	18 U	UG/KG
PCB 1242	17	18 U	UG/KG
PCB 1248	17	18 U	UG/KG
PCB 1254	17	18 U	UG/KG
PCB 1260	17	18 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
TETRACHLORO-META-XYLENE	(60 - 150 %)	103	%



VOLATILE ORGANICS
METHOD 8021 TANK LIST
Reported: 10/05/95

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL CO
Client Sample ID : SB-4

Date Sampled : 09/14/95 GTC Order # : 39761 Sample Matrix: SOIL/SEDIMENT
Date Received: 09/15/95 Submission #: 9509000179 Percent Solid: 93.1

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/20/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
BENZENE	1.0	1.1 U	UG/KG
SEC-BUTYLBENZENE	1.0	1.1 U	UG/KG
TERT-BUTYLBENZENE	1.0	1.1 U	UG/KG
N-BUTYLBENZENE	1.0	1.1 U	UG/KG
METHYL-TERT-BUTYLETHER	1.0	1.1 U	UG/KG
ETHYLBENZENE	1.0	1.1 U	UG/KG
ISOPROPYLBENZENE	1.0	1.1 U	UG/KG
P-ISOPROPYLTOLUENE	1.0	1.1 U	UG/KG
NAPHTHALENE	1.0	1.1 U	UG/KG
N-PROPYLBENZENE	1.0	1.1 U	UG/KG
TOLUENE	1.0	1.1 U	UG/KG
1,2,4-TRIMETHYLBENZENE	1.0	1.1 U	UG/KG
1,3,5-TRIMETHYLBENZENE	1.0	1.1 U	UG/KG
O-XYLENE	2.0	2.1 U	UG/KG
M+P-XYLENE	2.0	2.1 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
CHLOROFLUOROBENZENE	(60 - 140 %)	83	%



Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL CO
Client Sample ID : SB-4

EXTRACTABLE ORGANICS
METHOD 8270 TANK LIST
Reported: 10/05/95

Date Sampled : 09/14/95 GTC Order # : 39761 Sample Matrix: SOIL/SEDIMENT
Date Received: 09/15/95 Submission #: 9509000179 Percent Solid: 93.1

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/19/95			
DATE ANALYZED : 09/21/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
ACENAPHTHENE	330	350 U	UG/KG
ANTHRACENE	330	350 U	UG/KG
BENZO(A)ANTHRACENE	330	350 U	UG/KG
BENZO(A)PYRENE	330	350 U	UG/KG
BENZO(B)FLUORANTHENE	330	350 U	UG/KG
BENZO(G,H,I)PERYLENE	330	350 U	UG/KG
BENZO(K)FLUORANTHENE	330	350 U	UG/KG
INDENO(1,2,3-CD)PYRENE	330	350 U	UG/KG
CHRYSENE	330	350 U	UG/KG
DIBENZO(A,H)ANTHRACENE	330	350 U	UG/KG
FLUORANTHENE	330	350 U	UG/KG
FLUORENE	330	350 U	UG/KG
NAPHTHALENE	200	210 U	UG/KG
PHENANTHRENE	330	350 U	UG/KG
PYRENE	330	350 U	UG/KG

SURROGATE RECOVERIES

QC LIMITS

TERPHENYL-d14	(18 - 137 %)	73	%
NITROBENZENE-d5	(23 - 120 %)	80	%
2-FLUOROBIPHENYL	(30 - 115 %)	72	%

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL CO
Client Sample ID : SB-5

Date Sampled : 09/14/95 GTC Order # : 39763 Sample Matrix:SOIL/SEDIMENT
Date Received: 09/15/95 Submission #: 9509000179 Percent Solid: 93.6

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/21/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
BENZENE	1.0	1.1 U	UG/KG
SEC-BUTYLBENZENE	1.0	1.1 U	UG/KG
TERT-BUTYLBENZENE	1.0	1.1 U	UG/KG
N-BUTYLBENZENE	1.0	1.1 U	UG/KG
METHYL-TERT-BUTYLETHER	1.0	1.1 U	UG/KG
ETHYLBENZENE	1.0	1.1 U	UG/KG
ISOPROPYLBENZENE	1.0	1.1 U	UG/KG
P-ISOPROPYLTOLUENE	1.0	1.1 U	UG/KG
NAPHTHALENE	1.0	1.1 U	UG/KG
N-PROPYLBENZENE	1.0	1.1 U	UG/KG
TOLUENE	1.0	1.1 U	UG/KG
1,2,4-TRIMETHYLBENZENE	1.0	1.1 U	UG/KG
1,3,5-TRIMETHYLBENZENE	1.0	1.1 U	UG/KG
O-XYLENE	2.0	2.1 U	UG/KG
M+P-XYLENE	2.0	2.1 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
CHLOROFLUOROBENZENE	(60 - 140 %)	102	%



Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL CO
Client Sample ID : SB-5

EXTRACTABLE ORGANICS
METHOD 8270 TANK LIST
Reported: 10/05/95

Date Sampled : 09/14/95 GTC Order # : 39763 Sample Matrix: SOIL/SEDIMENT
Date Received: 09/15/95 Submission #: 9509000179 Percent Solid: 93.6

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/19/95			
DATE ANALYZED : 09/21/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
ACENAPHTHENE	330	350 U	UG/KG
ANTHRACENE	330	350 U	UG/KG
BENZO (A) ANTHRACENE	330	350 U	UG/KG
BENZO (A) PYRENE	330	350 U	UG/KG
BENZO (B) FLUORANTHENE	330	350 U	UG/KG
BENZO (G, H, I) PERYLENE	330	350 U	UG/KG
BENZO (K) FLUORANTHENE	330	350 U	UG/KG
INDENO (1, 2, 3-CD) PYRENE	330	350 U	UG/KG
CHRYSENE	330	350 U	UG/KG
DIBENZO (A, H) ANTHRACENE	330	350 U	UG/KG
FLUORANTHENE	330	350 U	UG/KG
FLUORENE	330	350 U	UG/KG
NAPHTHALENE	200	210 U	UG/KG
PHENANTHRENE	330	350 U	UG/KG
PYRENE	330	350 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
TERPHENYL-d14	(18 - 137 %)	69	%
NITROBENZENE-d5	(23 - 120 %)	58	%
2-FLUOROBIPHENYL	(30 - 115 %)	62	%



Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL CO
Client Sample ID : SB-6

VOLATILE ORGANICS
METHOD 8021 TANK LIST
Reported: 10/05/95

Date Sampled : 09/14/95 GTC Order # : 39759 Sample Matrix: SOIL/SEDIMENT
Date Received: 09/15/95 Submission #: 9509000179 Percent Solid: 80.3

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/21/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
BENZENE	1.0	1.2 U	UG/KG
SEC-BUTYLBENZENE	1.0	1.2 U	UG/KG
TERT-BUTYLBENZENE	1.0	1.2 U	UG/KG
N-BUTYLBENZENE	1.0	1.2 U	UG/KG
METHYL-TERT-BUTYLETHER	1.0	1.2 U	UG/KG
ETHYLBENZENE	1.0	1.2 U	UG/KG
ISOPROPYLBENZENE	1.0	1.2 U	UG/KG
P-ISOPROPYLTOLUENE	1.0	1.2 U	UG/KG
NAPHTHALENE	1.0	1.2 U	UG/KG
N-PROPYLBENZENE	1.0	1.2 U	UG/KG
TOLUENE	1.0	1.2 U	UG/KG
1,2,4-TRIMETHYLBENZENE	1.0	1.2 U	UG/KG
1,3,5-TRIMETHYLBENZENE	1.0	1.2 U	UG/KG
O-XYLENE	2.0	2.5 U	UG/KG
M+P-XYLENE	2.0	2.5 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
CHLOROFLUOROBENZENE	(60 - 140 %)	34 *	%



Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL CO
Client Sample ID : SB-6

EXTRACTABLE ORGANICS
METHOD 8270 TANK LIST
Reported: 10/05/95

Date Sampled : 09/14/95 GTC Order # : 39759 Sample Matrix: SOIL/SEDIMENT
Date Received: 09/15/95 Submission #: 9509000179 Percent Solid: 80.3

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/19/95			
DATE ANALYZED : 09/21/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
ACENAPHTHENE	330	410 U	UG/KG
ANTHRACENE	330	560	UG/KG
BENZO(A)ANTHRACENE	330	1600	UG/KG
BENZO(A)PYRENE	330	1600	UG/KG
BENZO(B)FLUORANTHENE	330	2100	UG/KG
BENZO(G,H,I)PERYLENE	330	630	UG/KG
BENZO(K)FLUORANTHENE	330	810	UG/KG
INDENO(1,2,3-CD)PYRENE	330	630	UG/KG
CHRYSENE	330	1700	UG/KG
DIBENZO(A,H)ANTHRACENE	330	410 U	UG/KG
FLUORANTHENE	330	3000	UG/KG
FLUORENE	330	410 U	UG/KG
NAPHTHALENE	200	290	UG/KG
PHENANTHRENE	330	2300	UG/KG
PYRENE	330	2600	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
TERPHENYL-d14	(18 - 137 %)	80	%
NITROBENZENE-d5	(23 - 120 %)	91	%
2-FLUOROBIPHENYL	(30 - 115 %)	78	%



Reported: 10/05/95

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL CO
Client Sample ID : SB-8

Date Sampled : 09/14/95
Date Received: 09/15/95

GTC Order # : 39769
Submission #: 9509000179

Sample Matrix: SOIL/SEDIMENT

ANALYTE	PQL	RESULT	DRY WT. UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS					
ARSENIC	0.500	4.11	UG/G	09/20/95	1.0
BARIUM	2.00	62.0	UG/G	09/20/95	1.0
CADMIUM	0.500	0.611 U	UG/G	09/20/95	1.0
CHROMIUM	1.00	14.5	UG/G	09/20/95	1.0
LEAD	5.00	34.3	UG/G	09/20/95	1.0
MERCURY	0.100	0.184	UG/G	09/20/95	1.0
SELENIUM	0.500	0.611 U	UG/G	09/20/95	1.0
SILVER	1.00	1.22 U	UG/G	09/20/95	1.0
WET CHEMISTRY					
TOTAL CYANIDE	1.00	1.22 U	UG/G	09/27/95	1.0
PERCENT SOLIDS	1.0	81.9	%	09/20/95	1.0

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL CO
Client Sample ID : SB-8

Date Sampled : 09/14/95 GTC Order # : 39769 Sample Matrix: SOIL/SEDIMENT
Date Received: 09/15/95 Submission #: 9509000179 Percent Solid: 81.9

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/20/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
ACETONE	10	12 U	UG/KG
BENZENE	5.0	6.1 U	UG/KG
BROMODICHLOROMETHANE	5.0	6.1 U	UG/KG
BROMOFORM	5.0	6.1 U	UG/KG
BROMOMETHANE	5.0	6.1 U	UG/KG
2-BUTANONE (MEK)	10	12 U	UG/KG
CARBON DISULFIDE	10	12 U	UG/KG
CARBON TETRACHLORIDE	5.0	6.1 U	UG/KG
CHLOROBENZENE	5.0	6.1 U	UG/KG
CHLOROETHANE	5.0	6.1 U	UG/KG
CHLOROFORM	5.0	6.1 U	UG/KG
CHLOROMETHANE	5.0	6.1 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	6.1 U	UG/KG
1,1-DICHLOROETHANE	5.0	6.1 U	UG/KG
1,2-DICHLOROETHANE	5.0	6.1 U	UG/KG
1,1-DICHLOROETHENE	5.0	6.1 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	6.1 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	6.1 U	UG/KG
1,2-DICHLOROPROPANE	5.0	6.1 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	6.1 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	6.1 U	UG/KG
ETHYLBENZENE	5.0	6.1 U	UG/KG
2-HEXANONE	10	12 U	UG/KG
METHYLENE CHLORIDE	5.0	6.1 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	12 U	UG/KG
STYRENE	5.0	6.1 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	6.1 U	UG/KG
TETRACHLOROETHENE	5.0	6.1 U	UG/KG
TOLUENE	5.0	6.1 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	6.1 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	6.1 U	UG/KG
TRICHLOROETHENE	5.0	6.1 U	UG/KG
VINYL CHLORIDE	5.0	6.1 U	UG/KG
O-XYLENE	5.0	6.1 U	UG/KG
M+P-XYLENE	5.0	6.1 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(74 - 121 %)	69	%
TOLUENE-D8	(81 - 117 %)	101	%
DIBROMOFLUOROMETHANE	(80 - 120 %)	110	%



EXTRACTABLE ORGANICS
METHOD 8080 PCB'S
Reported: 10/18/95

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL COMPANY-SOILS
Client Sample ID : SB-9

Date Sampled : 09/18/95 GTC Order # : 40213 Sample Matrix:SOIL/SEDIMENT
Date Received: 09/20/95 Submission #: 9509000222 Percent Solid: 87.9

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/21/95			
DATE ANALYZED : 09/25/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
PCB 1016	17	19 U	UG/KG
PCB 1221	17	19 U	UG/KG
PCB 1232	17	19 U	UG/KG
PCB 1242	17	19 U	UG/KG
PCB 1248	17	19 U	UG/KG
PCB 1254	17	19 U	UG/KG
PCB 1260	17	19 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
TETRACHLORO-META-XYLENE	(60 - 150 %)	95	%



Reported: 10/18/95

Blasland, Bouck & Lee, Inc.

Project Reference: NEWELL COMPANY-SOILS

Client Sample ID : TP-1

Date Sampled : 09/19/95

GTC Order # : 40206

Sample Matrix: SOIL/SEDIMENT

Date Received: 09/20/95

Submission #: 9509000222

ANALYTE	PQL	RESULT	DRY WT. UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS					
ARSENIC	0.500	4.07	UG/G	10/06/95	1.0
BARIUM	2.00	66.1	UG/G	09/28/95	1.0
CADMIUM	0.500	0.530 U	UG/G	09/28/95	1.0
CHROMIUM	1.00	13.0	UG/G	09/28/95	1.0
LEAD	5.00	35.8	UG/G	09/28/95	1.0
MERCURY	0.100	0.106 U	UG/G	09/29/95	1.0
SELENIUM	2.00	2.12 U	UG/G	10/16/95	1.0
SILVER	1.00	1.06 U	UG/G	09/28/95	1.0
WET CHEMISTRY					
TOTAL CYANIDE	1.00	1.06 U	UG/G	09/27/95	1.0
PERCENT SOLIDS	1.0	94.3	%	09/21/95	1.0

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL COMPANY-SOILS
Client Sample ID : TP-1

Date Sampled : 09/19/95 GTC Order # : 40206 Sample Matrix: SOIL/SEDIMENT
Date Received: 09/20/95 Submission #: 9509000222 Percent Solid: 94.3

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/20/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
ACETONE	10	11 U	UG/KG
BENZENE	5.0	5.3 U	UG/KG
BROMODICHLOROMETHANE	5.0	5.3 U	UG/KG
BROMOFORM	5.0	5.3 U	UG/KG
BROMOMETHANE	5.0	5.3 U	UG/KG
2-BUTANONE (MEK)	10	11 U	UG/KG
CARBON DISULFIDE	10	11 U	UG/KG
CARBON TETRACHLORIDE	5.0	5.3 U	UG/KG
CHLOROBENZENE	5.0	5.3 U	UG/KG
CHLOROETHANE	5.0	5.3 U	UG/KG
CHLOROFORM	5.0	5.3 U	UG/KG
CHLOROMETHANE	5.0	5.3 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	5.3 U	UG/KG
1,1-DICHLOROETHANE	5.0	5.3 U	UG/KG
1,2-DICHLOROETHANE	5.0	5.3 U	UG/KG
1,1-DICHLOROETHENE	5.0	5.3 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	5.3 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	5.3 U	UG/KG
1,2-DICHLOROPROPANE	5.0	5.3 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	5.3 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	5.3 U	UG/KG
ETHYLBENZENE	5.0	5.3 U	UG/KG
2-HEXANONE	10	11 U	UG/KG
METHYLENE CHLORIDE	5.0	5.3 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	11 U	UG/KG
STYRENE	5.0	5.3 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	5.3 U	UG/KG
TETRACHLOROETHENE	5.0	5.3 U	UG/KG
TOLUENE	5.0	5.3 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	5.3 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	5.3 U	UG/KG
TRICHLOROETHENE	5.0	5.3 U	UG/KG
VINYL CHLORIDE	5.0	5.3 U	UG/KG
O-XYLENE	5.0	5.3 U	UG/KG
M+P-XYLENE	5.0	5.3 U	UG/KG

SURROGATE RECOVERIES

QC LIMITS

4-BROMOFLUOROBENZENE	(74 - 121 %)	84	%
TOLUENE-D8	(81 - 117 %)	98	%
DIBROMOFLUOROMETHANE	(80 - 120 %)	116	%

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : GTC Order # : 40357 Sample Matrix:SOIL/SEDIMENT
Date Received: Submission #: Percent Solid: 100.0

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/20/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
BENZENE	1.0	1.0 U	UG/KG
SEC-BUTYLBENZENE	1.0	1.0 U	UG/KG
TERT-BUTYLBENZENE	1.0	1.0 U	UG/KG
N-BUTYLBENZENE	1.0	1.0 U	UG/KG
METHYL-TERT-BUTYLETHER	1.0	1.0 U	UG/KG
ETHYLBENZENE	1.0	1.0 U	UG/KG
ISOPROPYLBENZENE	1.0	1.0 U	UG/KG
P-ISOPROPYLTOLUENE	1.0	1.0 U	UG/KG
NAPHTHALENE	1.0	1.0 U	UG/KG
N-PROPYLBENZENE	1.0	1.0 U	UG/KG
TOLUENE	1.0	1.0 U	UG/KG
1,2,4-TRIMETHYLBENZENE	1.0	1.0 U	UG/KG
1,3,5-TRIMETHYLBENZENE	1.0	1.0 U	UG/KG
O-XYLENE	2.0	2.0 U	UG/KG
M+P-XYLENE	2.0	2.0 U	UG/KG
SURROGATE RECOVERIES	QC LIMITS		
CHLOROFLUOROBENZENE	(60 - 140 %)	87	%

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : GTC Order # : 40671 Sample Matrix: SOIL/SEDIMENT
Date Received: Submission #: Percent Solid: 100.0

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/21/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
BENZENE	1.0	1.0 U	UG/KG
SEC-BUTYLBENZENE	1.0	1.0 U	UG/KG
TERT-BUTYLBENZENE	1.0	1.0 U	UG/KG
N-BUTYLBENZENE	1.0	1.0 U	UG/KG
METHYL-TERT-BUTYLETHER	1.0	1.0 U	UG/KG
ETHYLBENZENE	1.0	1.0 U	UG/KG
ISOPROPYLBENZENE	1.0	1.0 U	UG/KG
P-ISOPROPYLTOLUENE	1.0	1.0 U	UG/KG
NAPHTHALENE	1.0	1.0 U	UG/KG
N-PROPYLBENZENE	1.0	1.0 U	UG/KG
TOLUENE	1.0	1.0 U	UG/KG
1,2,4-TRIMETHYLBENZENE	1.0	1.0 U	UG/KG
1,3,5-TRIMETHYLBENZENE	1.0	1.0 U	UG/KG
O-XYLENE	2.0	2.0 U	UG/KG
M+P-XYLENE	2.0	2.0 U	UG/KG
SURROGATE RECOVERIES	QC LIMITS		
CHLOROFLUOROBENZENE	(60 - 140 %)	88	%

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : GTC Order # : 42009 Sample Matrix: SOIL/SEDIMENT
Date Received: Submission #: Percent Solid: 100.0

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/20/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
ACETONE	10	10 U	UG/KG
BENZENE	5.0	5.0 U	UG/KG
BROMODICHLOROMETHANE	5.0	5.0 U	UG/KG
BROMOFORM	5.0	5.0 U	UG/KG
BROMOMETHANE	5.0	5.0 U	UG/KG
2-BUTANONE (MEK)	10	10 U	UG/KG
CARBON DISULFIDE	10	10 U	UG/KG
CARBON TETRACHLORIDE	5.0	5.0 U	UG/KG
CHLOROBENZENE	5.0	5.0 U	UG/KG
CHLOROETHANE	5.0	5.0 U	UG/KG
CHLOROFORM	5.0	5.0 U	UG/KG
CHLOROMETHANE	5.0	5.0 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/KG
1,1-DICHLOROETHANE	5.0	5.0 U	UG/KG
1,2-DICHLOROETHANE	5.0	5.0 U	UG/KG
1,1-DICHLOROETHENE	5.0	5.0 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/KG
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/KG
ETHYLBENZENE	5.0	5.0 U	UG/KG
2-HEXANONE	10	10 U	UG/KG
METHYLENE CHLORIDE	5.0	5.0 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/KG
STYRENE	5.0	5.0 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/KG
TETRACHLOROETHENE	5.0	5.0 U	UG/KG
TOLUENE	5.0	5.0 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/KG
TRICHLOROETHENE	5.0	5.0 U	UG/KG
VINYL CHLORIDE	5.0	5.0 U	UG/KG
O-XYLENE	5.0	5.0 U	UG/KG
M+P-XYLENE	5.0	5.0 U	UG/KG

SURROGATE RECOVERIES

QC LIMITS

4-BROMOFLUOROBENZENE	(74 - 121 %)	96	%
TOLUENE-D8	(81 - 117 %)	100	%
DIBROMOFLUOROMETHANE	(80 - 120 %)	106	%

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : GTC Order # : 40501 Sample Matrix: SOIL/SEDIMENT
Date Received: Submission #: Percent Solid: 100.0

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/19/95			
DATE ANALYZED : 09/21/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
ACENAPHTHENE	330	330 U	UG/KG
ANTHRACENE	330	330 U	UG/KG
BENZO (A) ANTHRACENE	330	330 U	UG/KG
BENZO (A) PYRENE	330	330 U	UG/KG
BENZO (B) FLUORANTHENE	330	330 U	UG/KG
BENZO (G, H, I) PERYLENE	330	330 U	UG/KG
BENZO (K) FLUORANTHENE	330	330 U	UG/KG
INDENO (1, 2, 3-CD) PYRENE	330	330 U	UG/KG
CHRYSENE	330	330 U	UG/KG
DIBENZO (A, H) ANTHRACENE	330	330 U	UG/KG
FLUORANTHENE	330	330 U	UG/KG
FLUORENE	330	330 U	UG/KG
NAPHTHALENE	200	200 U	UG/KG
PHENANTHRENE	330	330 U	UG/KG
PYRENE	330	330 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
TERPHENYL-d14	(18 - 137 %)	94	%
NITROBENZENE-d5	(23 - 120 %)	100	%
2-FLUOROBIPHENYL	(30 - 115 %)	105	%

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : GTC Order # : 40505 Sample Matrix: SOIL/SEDIMENT
Date Received: Submission #: Percent Solid: 100.0

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/19/95			
DATE ANALYZED : 09/21/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
ACENAPHTHENE	330	330 U	UG/KG
ACENAPHTHYLENE	330	330 U	UG/KG
ANTHRACENE	330	330 U	UG/KG
BENZO (A) ANTHRACENE	330	330 U	UG/KG
BENZO (A) PYRENE	330	330 U	UG/KG
BENZO (B) FLUORANTHENE	330	330 U	UG/KG
BENZO (G, H, I) PERYLENE	330	330 U	UG/KG
BENZO (K) FLUORANTHENE	330	330 U	UG/KG
BENZYL ALCOHOL	330	330 U	UG/KG
BUTYL BENZYL PHTHALATE	330	330 U	UG/KG
DI-N-BUTYLPHTHALATE	330	560	UG/KG
CARBAZOLE	330	330 U	UG/KG
INDENO (1, 2, 3-CD) PYRENE	330	330 U	UG/KG
4-CHLOROANILINE	330	330 U	UG/KG
BIS (-2-CHLOROETHOXY) METHANE	330	330 U	UG/KG
BIS (2-CHLOROETHYL) ETHER	330	330 U	UG/KG
2-CHLORONAPHTHALENE	330	330 U	UG/KG
2-CHLOROPHENOL	670	670 U	UG/KG
2, 2'-OXYBIS (1-CHLOROPROPANE)	330	330 U	UG/KG
CHRYSENE	330	330 U	UG/KG
DIBENZO (A, H) ANTHRACENE	330	330 U	UG/KG
DIBENZOFURAN	330	330 U	UG/KG
1, 3-DICHLOROBENZENE	330	330 U	UG/KG
1, 2-DICHLOROBENZENE	330	330 U	UG/KG
1, 4-DICHLOROBENZENE	330	330 U	UG/KG
3, 3'-DICHLOROBENZIDINE	330	330 U	UG/KG
2, 4-DICHLOROPHENOL	670	670 U	UG/KG
DIETHYLPHTHALATE	330	330 U	UG/KG
DIMETHYL PHTHALATE	330	330 U	UG/KG
2, 4-DIMETHYLPHENOL	670	670 U	UG/KG
2, 4-DINITROPHENOL	1300	1300 U	UG/KG
2, 4-DINITROTOLUENE	330	330 U	UG/KG
2, 6-DINITROTOLUENE	330	330 U	UG/KG
BIS (2-ETHYLHEXYL) PHTHALATE	330	330 U	UG/KG
FLUORANTHENE	330	330 U	UG/KG
FLUORENE	330	330 U	UG/KG
HEXACHLOROBENZENE	330	330 U	UG/KG
HEXACHLOROBUTADIENE	330	330 U	UG/KG
HEXACHLOROCYCLOPENTADIENE	330	330 U	UG/KG
HEXACHLOROETHANE	330	330 U	UG/KG
ISOPHORONE	330	330 U	UG/KG
2-METHYLNAPHTHALENE	670	670 U	UG/KG
4, 6-DINITRO-2-METHYLPHENOL	1300	1300 U	UG/KG

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : GTC Order # : 40505 Sample Matrix: SOIL/SEDIMENT
Date Received: Submission #: Percent Solid: 100.0

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/19/95			
DATE ANALYZED : 09/21/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
4-CHLORO-3-METHYLPHENOL	670	670 U	UG/KG
2-METHYLPHENOL	670	670 U	UG/KG
4-METHYLPHENOL	670	670 U	UG/KG
NAPHTHALENE	330	330 U	UG/KG
2-NITROANILINE	330	330 U	UG/KG
3-NITROANILINE	330	330 U	UG/KG
4-NITROANILINE	330	330 U	UG/KG
NITROBENZENE	330	330 U	UG/KG
2-NITROPHENOL	670	670 U	UG/KG
4-NITROPHENOL	1300	1300 U	UG/KG
N-NITROSODIMETHYLAMINE	330	330 U	UG/KG
N-NITROSODIPHENYLAMINE	330	330 U	UG/KG
DI-N-OCTYL PHTHALATE	330	330 U	UG/KG
PENTACHLOROPHENOL	1300	1300 U	UG/KG
PHENANTHRENE	330	330 U	UG/KG
PHENOL	670	670 U	UG/KG
4-BROMOPHENYL-PHENYLETHER	330	330 U	UG/KG
4-CHLOROPHENYL-PHENYLETHER	330	330 U	UG/KG
N-NITROSO-DI-N-PROPYLAMINE	330	330 U	UG/KG
PYRENE	330	330 U	UG/KG
1,2,4-TRICHLOROBENZENE	330	330 U	UG/KG
2,4,6-TRICHLOROPHENOL	670	670 U	UG/KG
2,4,5-TRICHLOROPHENOL	670	670 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
TERPHENYL-d14	(18 - 137 %)	89	%
NITROBENZENE-d5	(23 - 120 %)	72	%
PHENOL-d6	(24 - 113 %)	65	%
2-FLUOROBIPHENYL	(30 - 115 %)	85	%
2-FLUOROPHENOL	(25 - 121 %)	66	%
2,4,6-TRIBROMOPHENOL	(19 - 122 %)	81	%

GENERAL TESTING CORPORATION / CHAIN-OF-CUSTODY RECORD

710 Exchange Street 85 Trinity Place 435 Lawrence Bell Drive GTC Job. No. 2/2 9-179
 Rochester, NY 14608 Hackensack, NJ 07601 Amherst, NY 14221-7077 Client Project No. _____

Sample Origination & Shipping Information

Collection Site NEWELL COMPANY
 Address 06 DOWSBURG NY
 Collector MICHAEL R. ARLAUCKAS Michael R. Arlauckas
 Street City State Zip
 Print Signature

Bottles Prepared by MRA DOWSBURG, BENCH 1 LBS Rec'd by _____
 Bottles Shipped to Client via _____ Seal/Shipping # _____
 Samples Shipped via 4°C on ice / cozon Seal/Shipping # _____

Sample(s) Relinquished by:	Received by:	Date/Time
1. Sign <u>Michael R. Arlauckas</u> for <u>Plasland, Bench, 1 LBS</u>	1. Sign <u>Tom Hastings</u> for <u>GTC</u>	<u>9/15/95</u> <u>17:00</u>
2. Sign _____ for _____	2. Sign _____ for _____	<u>/ /</u> :
3. Sign _____ for _____	3. Sign _____ for _____	<u>/ /</u> :

Sample(s) Received in Laboratory by M. Arlauckas 9/15/95 @ 17:00

Client I.D. #	Sample Location	*	Analyte or Analyte Group(s) Required (see below for additional)	Sample Prep				Bottle Set(s) (see below)
				Preserved	Filtered	Y	N	
1	SB-1 (4'-6') 39764 9/15/95 :0910	S	STARS TABLE 2 VOCs/SUOCs 8021/8270		X		X	2- 4g. GLASS
2	SB-8 (6'-8') 39769 9/15/95 :0955	S	TCL VOCs 8260 RCRA METALS 6010/7020 CYANIDES 9012		X		X	1 - 20g GLASS 1 - 8g. GLASS
3	SB-2 (2.5'-5.0') 39770 9/15/95 :1150	S	STARS TABLE 2 VOCs/SUOCs 8021/8270		X		X	2- 4g GLASS
4	/ / :							
5	/ / :							

Use Bottle No. for indicating type bottles used in each bottle set and fill in box with # of bottles used for each type.

Bottle No.	1	2	3	4	5	6	7	8	9	10	11
Bottle Type	40 ml Vial	Pint Glass	Qt. Glass	4 oz. Plastic	8 oz. Plastic	16 oz. Plastic	Qt. Pl.	Gal. Pl.	Steril. Pl.		
# of each											

Additional Analytes _____

Shaded area for Lab use only; bottom copy for client; maximum of 5 samples per page.

* Source Codes: Monitoring Well (W), Soil (S), Treatment Plant (T), Drinking Water (D), Leachate (L), Hazardous Waste (H), River or Stream (R), Pond (P), Industrial Discharge (I), _____(X), _____(Y).

GENERAL TESTING CORPORATION / CHAIN-OF-CUSTODY RECORD

710 Exchange Street 85 Trinity Place 435 Lawrence Bell Drive GTC Job. No. 9-179
 Rochester, NY 14608 Hackensack, NJ 07601 Amherst, NY 14221-7077 Client Project No. 121/2

Sample Origination & Shipping Information

Collection Site NEWELL COMPANY
 Address OGDENSBURG NY
 Collector MICHAEL R ARLAUCKAS Michael R Arlauckas
 Street City State Zip
 Print Signature

Bottles Prepared by MRA (BUSLAND, BACK & LEE) Rec'd by _____
 Bottles Shipped to Client via FEDEX Seal/Shipping # _____
 Samples Shipped via 4°C ON ICE / COOLER Seal/Shipping # _____

Sample(s) Relinquished by:	Received by:	Date/Time
1. Sign <u>Michael R Arlauckas</u>	1. Sign <u>Tom Hastings</u>	9/15/95
for <u>BUSLAND, BACK & LEE</u>	for <u>GTC</u>	17:00
2. Sign _____	2. Sign _____	1/1
for _____	for _____	:
3. Sign _____	3. Sign _____	1/1
for _____	for _____	:

Sample(s) Received in Laboratory by JM/Gad 9/15/95 @ 17:00

Client I.D. #	Sample Location	*	Analyte or Analyte Group(s) Required (see below for additional)	Sample Prep				Bottle Set(s) (see below)
				Preserved	Filtered	Y	N	
1	MW-10	S	TCL VOCs 8260 RCRA METALS 6010/7000		X		X	1-4oz GLASS
	39699		CYANIDES 9012 TPH 418.1 TCL SVOCs 8270					2-8oz GLASS
2	SB-6	S	STARS TABLE 2 VOCs/SVOCs		X		X	2-4oz GLASS
	39759		8021/8270					
3	MW-9	S	TCL VOCs 8260 RCRA METALS 6010/7000	X			X	1-4oz GLASS
	39702		CYANIDES 9012 TPH 418.1 TCL SVOCs 8270					2-8oz GLASS
4	SB-4	S	STARS TABLE 2 VOCs/SVOCs		X		X	2-4oz GLASS
	39761		8021/8270					
5	SB-5	S	STARS TABLE 2 VOCs/SVOCs		X		X	2-4oz GLASS
	39763		8021/8270					

Use Bottle No. for indicating type bottles used in each bottle set and fill in box with # of bottles used for each type.

Bottle No.	1	2	3	4	5	6	7	8	9	10	11
Bottle Type	40 ml Vial	Pint Glass	Qt. Glass	4 oz. Plastic	8 oz. Plastic	16 oz. Plastic	Qt. Pl.	Gal. Pl.	Steril. Pl.		
# of each											

Additional Analytes RUN TCL SVOCs ON MW-9 - MW-10 & SB-6
RUN TPH WITH QUICK TURN AROUND TIME

Shaded area for Lab use only; bottom copy for client; maximum of 5 samples per page.

* Source Codes: Monitoring Well (W), Soil (S), Treatment Plant (T), Drinking Water (D), Leachate (L), Hazardous Waste (H), River or Stream (R), Pond (P), Industrial Discharge (I), _____(X), _____(Y).



Reported: 10/18/95

Blasland, Bouck & Lee, Inc.

Project Reference: NEWELL COMPANY-SOILS

Client Sample ID : MW-5

Date Sampled : 09/19/95

GTC Order # : 40214

Sample Matrix: SOIL/SEDIMENT

Date Received: 09/20/95

Submission #: 9509000222

ANALYTE	PQL	RESULT	DRY WT. UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS					
ARSENIC	0.500	2.11	UG/G	10/06/95	1.0
BARIUM	2.00	47.7	UG/G	09/28/95	1.0
CADMIUM	0.500	0.542 U	UG/G	09/28/95	1.0
CHROMIUM	1.00	9.45	UG/G	09/28/95	1.0
LEAD	5.00	5.42 U	UG/G	09/28/95	1.0
MERCURY	0.100	0.108 U	UG/G	09/29/95	1.0
SELENIUM	2.00	2.17 U	UG/G	10/16/95	1.0
SILVER	1.00	1.08 U	UG/G	09/28/95	1.0
WET CHEMISTRY					
TOTAL CYANIDE	1.00	1.08 U	UG/G	09/29/95	1.0
TOTAL PETROLEUM HYDROCARBONS	33.0	33.0 U	UG/G	09/21/95	NA
PERCENT SOLIDS	1.0	92.2	%	09/21/95	1.0
TOC	0.50	0.542 U	%	09/28/95	1.0

GENERAL TESTING CORPORATION

VOLATILE ORGANICS
METHOD 8260 TCL
Reported: 10/06/95Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL COMPANY-SOILS
Client Sample ID : MW-5Date Sampled : 09/19/95 GTC Order # : 40214 Sample Matrix: SOIL/SEDIMENT
Date Received: 09/20/95 Submission #: 9509000222 Percent Solid: 92.2

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/21/95			Dry Weight
ANALYTICAL DILUTION: 1			
ACETONE	10	12	UG/KG
BENZENE	5.0	5.4 U	UG/KG
BROMODICHLOROMETHANE	5.0	5.4 U	UG/KG
BROMOFORM	5.0	5.4 U	UG/KG
BROMOMETHANE	5.0	5.4 U	UG/KG
2-BUTANONE (MEK)	10	11 U	UG/KG
CARBON DISULFIDE	10	11 U	UG/KG
CARBON TETRACHLORIDE	5.0	5.4 U	UG/KG
CHLOROBENZENE	5.0	5.4 U	UG/KG
CHLOROETHANE	5.0	5.4 U	UG/KG
CHLOROFORM	5.0	5.4 U	UG/KG
CHLOROMETHANE	5.0	5.4 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	5.4 U	UG/KG
1,1-DICHLOROETHANE	5.0	5.4 U	UG/KG
1,2-DICHLOROETHANE	5.0	5.4 U	UG/KG
1,1-DICHLOROETHENE	5.0	5.4 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	5.4 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	5.4 U	UG/KG
1,2-DICHLOROPROPANE	5.0	5.4 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	5.4 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	5.4 U	UG/KG
ETHYLBENZENE	5.0	5.4 U	UG/KG
2-HEXANONE	10	11 U	UG/KG
METHYLENE CHLORIDE	5.0	5.4 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	11 U	UG/KG
STYRENE	5.0	5.4 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	5.4 U	UG/KG
TETRACHLOROETHENE	5.0	5.4 U	UG/KG
TOLUENE	5.0	5.4 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	5.4 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	5.4 U	UG/KG
TRICHLOROETHENE	5.0	5.4 U	UG/KG
VINYL CHLORIDE	5.0	5.4 U	UG/KG
O-XYLENE	5.0	5.4 U	UG/KG
M+P-XYLENE	5.0	5.4 U	UG/KG

SURROGATE RECOVERIES

QC LIMITS

4-BROMOFLUOROBENZENE	(74 - 121 %)	110	%
TOLUENE-D8	(81 - 117 %)	110	%
DIBROMOFLUOROMETHANE	(80 - 120 %)	98	%



Reported: 10/18/95

Blasland, Bouck & Lee, Inc.

Project Reference: NEWELL COMPANY-SOILS

Client Sample ID : MW-6

Date Sampled : 09/19/95

GTC Order # : 40207

Sample Matrix: SOIL/SEDIMENT

Date Received: 09/20/95

Submission #: 9509000222

ANALYTE	PQL	RESULT	DRY WT. UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS					
ARSENIC	0.500	1.25	UG/G	10/06/95	1.0
BARIUM	2.00	36.7	UG/G	09/28/95	1.0
CADMIUM	0.500	0.542 U	UG/G	09/28/95	1.0
CHROMIUM	1.00	8.58	UG/G	09/28/95	1.0
LEAD	5.00	5.42 U	UG/G	09/28/95	1.0
MERCURY	0.100	0.108 U	UG/G	09/29/95	1.0
SELENIUM	2.00	2.17 U	UG/G	10/16/95	1.0
SILVER	1.00	5.15	UG/G	09/28/95	1.0
WET CHEMISTRY					
TOTAL CYANIDE	1.00	1.08 U	UG/G	09/29/95	1.0
TOTAL PETROLEUM HYDROCARBONS	33.0	33.0 U	UG/G	09/21/95	NA
PERCENT SOLIDS	1.0	92.2	%	09/21/95	1.0
TOC	0.50	0.542 U	%	09/28/95	1.0



VOLATILE ORGANICS
METHOD 8260 TCL
Reported: 10/18/95

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL COMPANY-SOILS
Client Sample ID : MW-6

Date Sampled : 09/19/95 GTC Order # : 40207 Sample Matrix:SOIL/SEDIMENT
Date Received: 09/20/95 Submission #: 9509000222 Percent Solid: 92.2

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/20/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
ACETONE	10	17	UG/KG
BENZENE	5.0	5.4 U	UG/KG
BROMODICHLOROMETHANE	5.0	5.4 U	UG/KG
BROMOFORM	5.0	5.4 U	UG/KG
BROMOMETHANE	5.0	5.4 U	UG/KG
2-BUTANONE (MEK)	10	11 U	UG/KG
CARBON DISULFIDE	10	11 U	UG/KG
CARBON TETRACHLORIDE	5.0	5.4 U	UG/KG
CHLOROBENZENE	5.0	5.4 U	UG/KG
CHLOROETHANE	5.0	5.4 U	UG/KG
CHLOROFORM	5.0	5.4 U	UG/KG
CHLOROMETHANE	5.0	5.4 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	5.4 U	UG/KG
1,1-DICHLOROETHANE	5.0	5.4 U	UG/KG
1,2-DICHLOROETHANE	5.0	5.4 U	UG/KG
1,1-DICHLOROETHENE	5.0	5.4 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	5.4 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	5.4 U	UG/KG
1,2-DICHLOROPROPANE	5.0	5.4 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	5.4 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	5.4 U	UG/KG
ETHYLBENZENE	5.0	5.4 U	UG/KG
2-HEXANONE	10	11 U	UG/KG
METHYLENE CHLORIDE	5.0	5.4 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	11 U	UG/KG
STYRENE	5.0	5.4 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	5.4 U	UG/KG
TETRACHLOROETHENE	5.0	5.4 U	UG/KG
TOLUENE	5.0	5.4 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	5.4 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	5.4 U	UG/KG
TRICHLOROETHENE	5.0	5.4 U	UG/KG
VINYL CHLORIDE	5.0	5.4 U	UG/KG
O-XYLENE	5.0	5.4 U	UG/KG
M+P-XYLENE	5.0	5.4 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(74 - 121 %)	83	%
TOLUENE-D8	(81 - 117 %)	97	%
DIBROMOFLUOROMETHANE	(80 - 120 %)	116	%



Reported: 10/18/95

Blasland, Bouck & Lee, Inc.

Project Reference: NEWELL COMPANY-SOILS

Client Sample ID : MW-7

Date Sampled : 09/18/95

GTC Order # : 40215

Sample Matrix: SOIL/SEDIMENT

Date Received: 09/20/95

Submission #: 9509000222

ANALYTE	PQL	RESULT	DRY WT. UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS					
ARSENIC	0.500	6.97	UG/G	10/06/95	1.0
BARIUM	2.00	44.8	UG/G	09/28/95	1.0
CADMIUM	0.500	3.65	UG/G	09/28/95	1.0
CHROMIUM	1.00	12.5	UG/G	09/28/95	1.0
LEAD	5.00	104	UG/G	09/28/95	1.0
MERCURY	0.100	0.726	UG/G	10/11/95	1.0
SELENIUM	2.00	4.54 U	UG/G	10/16/95	1.0
SILVER	1.00	2.27 U	UG/G	09/28/95	1.0
WET CHEMISTRY					
TOTAL CYANIDE	1.00	2.27 U	UG/G	09/29/95	1.0
TOTAL PETROLEUM HYDROCARBONS	33.0	591	UG/G	09/21/95	NA
PERCENT SOLIDS	1.0	44.1	%	09/21/95	1.0

GENERAL TESTING CORPORATION

VOLATILE ORGANICS
METHOD 8260 TCL
Reported: 10/06/95

Blasland, Bouck & Lee, Inc.

Project Reference: NEWELL COMPANY-SOILS

Client Sample ID : MW-7

Date Sampled : 09/18/95 GTC Order # : 40215 Sample Matrix: SOIL/SEDIMENT
Date Received: 09/20/95 Submission #: 9509000222 Percent Solid: 44.1

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/21/95			Dry Weight
ANALYTICAL DILUTION: 5			
ACETONE	10	1300	UG/KG
BENZENE	5.0	11 U	UG/KG
BROMODICHLOROMETHANE	5.0	11 U	UG/KG
BROMOFORM	5.0	11 U	UG/KG
BROMOMETHANE	5.0	11 U	UG/KG
2-BUTANONE (MEK)	10	250	UG/KG
CARBON DISULFIDE	10	50	UG/KG
CARBON TETRACHLORIDE	5.0	11 U	UG/KG
CHLOROBENZENE	5.0	11 U	UG/KG
CHLOROETHANE	5.0	11 U	UG/KG
CHLOROFORM	5.0	11 U	UG/KG
CHLOROMETHANE	5.0	11 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	11 U	UG/KG
1,1-DICHLOROETHANE	5.0	11 U	UG/KG
1,2-DICHLOROETHANE	5.0	11 U	UG/KG
1,1-DICHLOROETHENE	5.0	11 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	11 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	11 U	UG/KG
1,2-DICHLOROPROPANE	5.0	11 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	11 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	11 U	UG/KG
ETHYLBENZENE	5.0	11 U	UG/KG
2-HEXANONE	10	23 U	UG/KG
METHYLENE CHLORIDE	5.0	11 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	23 U	UG/KG
STYRENE	5.0	11 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	11 U	UG/KG
TETRACHLOROETHENE	5.0	11 U	UG/KG
TOLUENE	5.0	11 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	11 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	11 U	UG/KG
TRICHLOROETHENE	5.0	11 U	UG/KG
VINYL CHLORIDE	5.0	11 U	UG/KG
O-XYLENE	5.0	11 U	UG/KG
M+P-XYLENE	5.0	11 U	UG/KG

SURROGATE RECOVERIES

QC LIMITS

4-BROMOFLUOROBENZENE	(74 - 121 %)	53	%
TOLUENE-D8	(81 - 117 %)	101	%
DIBROMOFLUOROMETHANE	(80 - 120 %)	108	%

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL COMPANY-SOILS
Client Sample ID : MW-7

Date Sampled : 09/18/95 GTC Order # : 40215 Sample Matrix: SOIL/SEDIMENT
Date Received: 09/20/95 Submission #: 9509000222 Percent Solid: 44.1

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/22/95			
DATE ANALYZED : 09/22/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
ACENAPHTHENE	330	100 J	UG/KG
ACENAPHTHYLENE	330	750 U	UG/KG
ANTHRACENE	330	160 J	UG/KG
BENZO (A) ANTHRACENE	330	290 J	UG/KG
BENZO (A) PYRENE	330	310 J	UG/KG
BENZO (B) FLUORANTHENE	330	750 U	UG/KG
BENZO (G, H, I) PERYLENE	330	750 U	UG/KG
BENZO (K) FLUORANTHENE	330	750 U	UG/KG
BENZYL ALCOHOL	330	750 U	UG/KG
BUTYL BENZYL PHTHALATE	330	750 U	UG/KG
DI-N-BUTYLPHTHALATE	330	420 J	UG/KG
CARBAZOLE	330	750 U	UG/KG
INDENO (1, 2, 3-CD) PYRENE	330	88 J	UG/KG
4-CHLOROANILINE	330	750 U	UG/KG
BIS (-2-CHLOROETHOXY) METHANE	330	750 U	UG/KG
BIS (2-CHLOROETHYL) ETHER	330	750 U	UG/KG
2-CHLORONAPHTHALENE	330	750 U	UG/KG
2-CHLOROPHENOL	670	1500 U	UG/KG
2, 2'-OXYBIS (1-CHLOROPROPANE)	330	750 U	UG/KG
CHRYSENE	330	280 J	UG/KG
DIBENZO (A, H) ANTHRACENE	330	750 U	UG/KG
DIBENZOFURAN	330	750 U	UG/KG
1, 3-DICHLOROBENZENE	330	750 U	UG/KG
1, 2-DICHLOROBENZENE	330	750 U	UG/KG
1, 4-DICHLOROBENZENE	330	750 U	UG/KG
3, 3'-DICHLOROBENZIDINE	330	750 U	UG/KG
2, 4-DICHLOROPHENOL	670	1500 U	UG/KG
DIETHYLPHTHALATE	330	750 U	UG/KG
DIMETHYL PHTHALATE	330	750 U	UG/KG
2, 4-DIMETHYLPHENOL	670	1500 U	UG/KG
2, 4-DINITROPHENOL	1300	2900 U	UG/KG
2, 4-DINITROTOLUENE	330	750 U	UG/KG
2, 6-DINITROTOLUENE	330	750 U	UG/KG
BIS (2-ETHYLHEXYL) PHTHALATE	330	290 J	UG/KG
FLUORANTHENE	330	740 J	UG/KG
FLUORENE	330	130 J	UG/KG
HEXACHLOROBENZENE	330	750 U	UG/KG
HEXACHLOROBUTADIENE	330	750 U	UG/KG
HEXACHLOROCYCLOPENTADIENE	330	750 U	UG/KG
HEXACHLOROETHANE	330	750 U	UG/KG
ISOPHORONE	330	750 U	UG/KG
2-METHYLNAPHTHALENE	670	1500 U	UG/KG



Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL COMPANY-SOILS
Client Sample ID : MW-7

EXTRACTABLE ORGANICS
METHOD 8270 SEMIVOLATILES
Reported: 10/27/95

Date Sampled : 09/18/95 GTC Order # : 40215 Sample Matrix:SOIL/SEDIMENT
Date Received: 09/20/95 Submission #: 9509000222 Percent Solid: 44.1

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/22/95			
DATE ANALYZED : 09/22/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
4,6-DINITRO-2-METHYLPHENOL	1300	2900 U	UG/KG
4-CHLORO-3-METHYLPHENOL	670	1500 U	UG/KG
2-METHYLPHENOL	670	1500 U	UG/KG
4-METHYLPHENOL	670	1500 U	UG/KG
NAPHTHALENE	330	750 U	UG/KG
2-NITROANILINE	330	750 U	UG/KG
3-NITROANILINE	330	750 U	UG/KG
4-NITROANILINE	330	750 U	UG/KG
NITROBENZENE	330	750 U	UG/KG
2-NITROPHENOL	670	1500 U	UG/KG
4-NITROPHENOL	1300	2900 U	UG/KG
N-NITROSODIMETHYLAMINE	330	750 U	UG/KG
N-NITROSODIPHENYLAMINE	330	750 U	UG/KG
DI-N-OCTYL PHTHALATE	330	750 U	UG/KG
PENTACHLOROPHENOL	1300	2900 U	UG/KG
PHENANTHRENE	330	730 J	UG/KG
PHENOL	670	1500 U	UG/KG
4-BROMOPHENYL-PHENYLETHER	330	750 U	UG/KG
4-CHLOROPHENYL-PHENYLETHER	330	750 U	UG/KG
N-NITROSO-DI-N-PROPYLAMINE	330	750 U	UG/KG
PYRENE	330	680 J	UG/KG
1,2,4-TRICHLOROBENZENE	330	750 U	UG/KG
2,4,6-TRICHLOROPHENOL	670	1500 U	UG/KG
2,4,5-TRICHLOROPHENOL	670	1500 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
TERPHENYL-d14	(18 - 137 %)	55	%
NITROBENZENE-d5	(23 - 120 %)	49	%
PHENOL-d6	(24 - 113 %)	55	%
2-FLUOROBIPHENYL	(30 - 115 %)	58	%
2-FLUOROPHENOL	(25 - 121 %)	51	%
2,4,6-TRIBROMOPHENOL	(19 - 122 %)	53	%



Reported: 10/18/95

Blasland, Bouck & Lee, Inc.

Project Reference: NEWELL COMPANY-SOILS

Client Sample ID : MW-8

Date Sampled : 09/18/95

GTC Order # : 40209

Sample Matrix: SOIL/SEDIMENT

Date Received: 09/20/95

Submission #: 9509000222

ANALYTE	PQL	RESULT	DRY WT. UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS					
ARSENIC	0.500	7.99	UG/G	10/06/95	2.0
BARIUM	2.00	87.7	UG/G	09/28/95	1.0
CADMIUM	0.00500	2.87	UG/G	09/28/95	1.0
CHROMIUM	1.00	10.5	UG/G	09/28/95	1.0
LEAD	5.00	61.7	UG/G	09/28/95	1.0
MERCURY	0.100	0.123 U	UG/G	09/29/95	1.0
SELENIUM	2.00	2.46 U	UG/G	10/16/95	1.0
SILVER	1.00	1.23 U	UG/G	09/28/95	1.0
WET CHEMISTRY					
TOTAL CYANIDE	1.00	1.23 U	UG/G	09/29/95	1.0
TOTAL PETROLEUM HYDROCARBONS	33.0	1450	UG/G	09/21/95	NA
PERCENT SOLIDS	1.0	81.3	%	09/21/95	1.0



VOLATILE ORGANICS
METHOD 8260 TCL
Reported: 10/20/95

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL COMPANY-SOILS
Client Sample ID : MW-8

Date Sampled : 09/18/95 GTC Order # : 40209 Sample Matrix:SOIL/SEDIMENT
Date Received: 09/20/95 Submission #: 9509000222 Percent Solid: 81.3

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/21/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
ACETONE	10	77	UG/KG
BENZENE	5.0	6.2 U	UG/KG
BROMODICHLOROMETHANE	5.0	6.2 U	UG/KG
BROMOFORM	5.0	6.2 U	UG/KG
BROMOMETHANE	5.0	6.2 U	UG/KG
2-BUTANONE (MEK)	10	12 U	UG/KG
CARBON DISULFIDE	10	12 U	UG/KG
CARBON TETRACHLORIDE	5.0	6.2 U	UG/KG
CHLOROBENZENE	5.0	6.2 U	UG/KG
CHLOROETHANE	5.0	6.2 U	UG/KG
CHLOROFORM	5.0	6.2 U	UG/KG
CHLOROMETHANE	5.0	6.2 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	6.2 U	UG/KG
1,1-DICHLOROETHANE	5.0	6.2 U	UG/KG
1,2-DICHLOROETHANE	5.0	6.2 U	UG/KG
1,1-DICHLOROETHENE	5.0	6.2 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	6.2 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	6.2 U	UG/KG
1,2-DICHLOROPROPANE	5.0	6.2 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	6.2 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	6.2 U	UG/KG
ETHYLBENZENE	5.0	6.2 U	UG/KG
2-HEXANONE	10	12 U	UG/KG
METHYLENE CHLORIDE	5.0	6.2 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	12 U	UG/KG
STYRENE	5.0	6.2 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	6.2 U	UG/KG
TETRACHLOROETHENE	5.0	6.2 U	UG/KG
TOLUENE	5.0	6.2 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	6.2 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	6.2 U	UG/KG
TRICHLOROETHENE	5.0	6.2 U	UG/KG
VINYL CHLORIDE	5.0	6.2 U	UG/KG
O-XYLENE	5.0	6.2 U	UG/KG
M+P-XYLENE	5.0	6.2 U	UG/KG

SURROGATE RECOVERIES

QC LIMITS

4-BROMOFLUOROBENZENE	(74 - 121 %)	73 *	%
TOLUENE-D8	(81 - 117 %)	101	%
DIBROMOFLUOROMETHANE	(80 - 120 %)	111	%

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL COMPANY-SOILS
Client Sample ID : MW-8

Date Sampled : 09/18/95 GTC Order # : 40209 Sample Matrix:SOIL/SEDIMENT
Date Received: 09/20/95 Submission #: 9509000222 Percent Solid: 81.3

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/22/95			
DATE ANALYZED : 09/22/95			Dry Weight
ANALYTICAL DILUTION: 10.0			
ACENAPHTHENE	330	4100 U	UG/KG
ACENAPHTHYLENE	330	4100 U	UG/KG
ANTHRACENE	330	6800	UG/KG
BENZO(A)ANTHRACENE	330	11000	UG/KG
BENZO(A)PYRENE	330	12000	UG/KG
BENZO(B)FLUORANTHENE	330	15000	UG/KG
BENZO(G,H,I)PERYLENE	330	4700	UG/KG
BENZO(K)FLUORANTHENE	330	5200	UG/KG
BENZYL ALCOHOL	330	4100 U	UG/KG
BUTYL BENZYL PHTHALATE	330	4100 U	UG/KG
DI-N-BUTYLPHTHALATE	330	370 J	UG/KG
CARBAZOLE	330	4100 U	UG/KG
INDENO(1,2,3-CD)PYRENE	330	4700	UG/KG
4-CHLOROANILINE	330	4100 U	UG/KG
BIS(-2-CHLOROETHOXY)METHANE	330	4100 U	UG/KG
BIS(2-CHLOROETHYL)ETHER	330	4100 U	UG/KG
2-CHLORONAPHTHALENE	330	4100 U	UG/KG
2-CHLOROPHENOL	670	8200 U	UG/KG
2,2'-OXYBIS(1-CHLOROPROPANE)	330	4100 U	UG/KG
CHRYSENE	330	12000	UG/KG
DIBENZO(A,H)ANTHRACENE	330	4100 U	UG/KG
DIBENZOFURAN	330	4100 U	UG/KG
1,3-DICHLOROBENZENE	330	4100 U	UG/KG
1,2-DICHLOROBENZENE	330	4100 U	UG/KG
1,4-DICHLOROBENZENE	330	4100 U	UG/KG
3,3'-DICHLOROBENZIDINE	330	4100 U	UG/KG
2,4-DICHLOROPHENOL	670	8200 U	UG/KG
DIETHYLPHTHALATE	330	4100 U	UG/KG
DIMETHYL PHTHALATE	330	4100 U	UG/KG
2,4-DIMETHYLPHENOL	670	8200 U	UG/KG
2,4-DINITROPHENOL	1300	16000 U	UG/KG
2,4-DINITROTOLUENE	330	4100 U	UG/KG
2,6-DINITROTOLUENE	330	4100 U	UG/KG
BIS(2-ETHYLHEXYL)PHTHALATE	330	4100 U	UG/KG
FLUORANTHENE	330	27000	UG/KG
FLUORENE	330	4800	UG/KG
HEXACHLOROBENZENE	330	4100 U	UG/KG
HEXACHLOROBUTADIENE	330	4100 U	UG/KG
HEXACHLOROCYCLOPENTADIENE	330	4100 U	UG/KG
HEXACHLOROETHANE	330	4100 U	UG/KG
ISOPHORONE	330	4100 U	UG/KG
2-METHYLNAPHTHALENE	670	8200 U	UG/KG



EXTRACTABLE ORGANICS
METHOD 8270 SEMIVOLATILES
Reported: 10/27/95

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL COMPANY-SOILS
Client Sample ID : MW-8

Date Sampled : 09/18/95 GTC Order # : 40209 Sample Matrix: SOIL/SEDIMENT
Date Received: 09/20/95 Submission #: 9509000222 Percent Solid: 81.3

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/22/95			
DATE ANALYZED : 09/22/95			Dry Weight
ANALYTICAL DILUTION: 10.0			
4,6-DINITRO-2-METHYLPHENOL	1300	16000 U	UG/KG
4-CHLORO-3-METHYLPHENOL	670	8200 U	UG/KG
2-METHYLPHENOL	670	8200 U	UG/KG
4-METHYLPHENOL	670	8200 U	UG/KG
NAPHTHALENE	330	4100 U	UG/KG
2-NITROANILINE	330	4100 U	UG/KG
3-NITROANILINE	330	4100 U	UG/KG
4-NITROANILINE	330	4100 U	UG/KG
NITROBENZENE	330	4100 U	UG/KG
2-NITROPHENOL	670	8200 U	UG/KG
4-NITROPHENOL	1300	16000 U	UG/KG
N-NITROSODIMETHYLAMINE	330	4100 U	UG/KG
N-NITROSODIPHENYLAMINE	330	4100 U	UG/KG
DI-N-OCTYL PHTHALATE	330	180 J	UG/KG
PENTACHLOROPHENOL	1300	16000 U	UG/KG
PHENANTHRENE	330	25000	UG/KG
PHENOL	670	8200 U	UG/KG
4-BROMOPHENYL-PHENYLEETHER	330	4100 U	UG/KG
4-CHLOROPHENYL-PHENYLEETHER	330	4100 U	UG/KG
N-NITROSO-DI-N-PROPYLAMINE	330	4100 U	UG/KG
PYRENE	330	20000	UG/KG
1,2,4-TRICHLOROBENZENE	330	4100 U	UG/KG
2,4,6-TRICHLOROPHENOL	670	8200 U	UG/KG
2,4,5-TRICHLOROPHENOL	670	8200 U	UG/KG

SURROGATE RECOVERIES

QC LIMITS

TERPHENYL-d14	(18 - 137 %)	128	%
NITROBENZENE-d5	(23 - 120 %)	81	%
PHENOL-d6	(24 - 113 %)	93	%
2-FLUOROBIPHENYL	(30 - 115 %)	127 *	%
2-FLUOROPHENOL	(25 - 121 %)	95	%
2,4,6-TRIBROMOPHENOL	(19 - 122 %)	101	%



Reported: 10/05/95

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL CO
Client Sample ID : MW-9

Date Sampled : 09/14/95 GTC Order # : 39702 Sample Matrix: SOIL/SEDIMENT
Date Received: 09/15/95 Submission #: 9509000179

ANALYTE	PQL	RESULT	DRY WT. UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS					
ARSENIC	0.500	9.95	UG/G	09/20/95	1.0
BARIUM	2.00	63.5	UG/G	09/20/95	1.0
CADMIUM	0.500	3.24	UG/G	09/20/95	1.0
CHROMIUM	1.00	15.4	UG/G	09/20/95	1.0
LEAD	5.00	80.2	UG/G	09/20/95	1.0
MERCURY	0.100	1.05	UG/G	09/20/95	1.0
SELENIUM	0.500	0.642 U	UG/G	09/20/95	1.0
SILVER	1.00	1.28 U	UG/G	09/20/95	1.0
WET CHEMISTRY					
TOTAL CYANIDE	1.00	1.28 U	UG/G	09/27/95	1.0
TOTAL PETROLEUM HYDROCARBONS	33.0	2220	UG/G	09/19/95	NA
PERCENT SOLIDS	1.0	77.9	%	09/19/95	1.0



VOLATILE ORGANICS
METHOD 8260 TCL
Reported: 10/05/95

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL CO
Client Sample ID : MW-9

Date Sampled : 09/14/95 GTC Order # : 39702 Sample Matrix: SOIL/SEDIMENT
Date Received: 09/15/95 Submission #: 9509000179 Percent Solid: 77.9

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/20/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
ACETONE	10	54	UG/KG
BENZENE	5.0	6.4 U	UG/KG
BROMODICHLOROMETHANE	5.0	6.4 U	UG/KG
BROMOFORM	5.0	6.4 U	UG/KG
BROMOMETHANE	5.0	6.4 U	UG/KG
2-BUTANONE (MEK)	10	13 U	UG/KG
CARBON DISULFIDE	10	13 U	UG/KG
CARBON TETRACHLORIDE	5.0	6.4 U	UG/KG
CHLOROBENZENE	5.0	6.4 U	UG/KG
CHLOROETHANE	5.0	6.4 U	UG/KG
CHLOROFORM	5.0	6.4 U	UG/KG
CHLOROMETHANE	5.0	6.4 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	6.4 U	UG/KG
1,1-DICHLOROETHANE	5.0	6.4 U	UG/KG
1,2-DICHLOROETHANE	5.0	6.4 U	UG/KG
1,1-DICHLOROETHENE	5.0	6.4 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	6.4 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	6.4 U	UG/KG
1,2-DICHLOROPROPANE	5.0	6.4 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	6.4 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	6.4 U	UG/KG
ETHYLBENZENE	5.0	6.4 U	UG/KG
2-HEXANONE	10	13 U	UG/KG
METHYLENE CHLORIDE	5.0	6.4 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	13 U	UG/KG
STYRENE	5.0	6.4 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	6.4 U	UG/KG
TETRACHLOROETHENE	5.0	6.4 U	UG/KG
TOLUENE	5.0	6.4 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	6.4 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	6.4 U	UG/KG
TRICHLOROETHENE	5.0	6.4 U	UG/KG
VINYL CHLORIDE	5.0	6.4 U	UG/KG
O-XYLENE	5.0	6.4 U	UG/KG
M+P-XYLENE	5.0	6.4 U	UG/KG

SURROGATE RECOVERIES

QC LIMITS

4-BROMOFLUOROBENZENE	(74 - 121 %)	66	%
TOLUENE-D8	(81 - 117 %)	87	%
DIBROMOFLUOROMETHANE	(80 - 120 %)	115	%

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL CO
Client Sample ID : MW-9

Date Sampled : 09/14/95 GTC Order # : 39702 Sample Matrix: SOIL/SEDIMENT
Date Received: 09/15/95 Submission #: 9509000179 Percent Solid: 77.9

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/19/95			
DATE ANALYZED : 09/22/95			Dry Weight
ANALYTICAL DILUTION: 10.0			
ACENAPHTHENE	330	4200 U	UG/KG
ACENAPHTHYLENE	330	420 U	UG/KG
ANTHRACENE	330	420 U	UG/KG
BENZO (A) ANTHRACENE	330	700	UG/KG
BENZO (A) PYRENE	330	820	UG/KG
BENZO (B) FLUORANTHENE	330	1500	UG/KG
BENZO (G, H, I) PERYLENE	330	840	UG/KG
BENZO (K) FLUORANTHENE	330	1700	UG/KG
BENZYL ALCOHOL	330	420 U	UG/KG
BUTYL BENZYL PHTHALATE	330	420 U	UG/KG
DI-N-BUTYLPHTHALATE	330	420 U	UG/KG
CARBAZOLE	330	420 U	UG/KG
INDENO (1, 2, 3-CD) PYRENE	330	700	UG/KG
4-CHLOROANILINE	330	420 U	UG/KG
BIS (-2-CHLOROETHOXY) METHANE	330	420 U	UG/KG
BIS (2-CHLOROETHYL) ETHER	330	420 U	UG/KG
2-CHLORONAPHTHALENE	330	420 U	UG/KG
2-CHLOROPHENOL	670	860 U	UG/KG
2, 2'-OXYBIS (1-CHLOROPROPANE)	330	420 U	UG/KG
CHRYSENE	330	960	UG/KG
DIBENZO (A, H) ANTHRACENE	330	420 U	UG/KG
DIBENZOFURAN	330	420 U	UG/KG
1, 3-DICHLOROBENZENE	330	420 U	UG/KG
1, 2-DICHLOROBENZENE	330	420 U	UG/KG
1, 4-DICHLOROBENZENE	330	420 U	UG/KG
3, 3'-DICHLOROBENZIDINE	330	420 U	UG/KG
2, 4-DICHLOROPHENOL	670	860 U	UG/KG
DIETHYLPHTHALATE	330	420 U	UG/KG
DIMETHYL PHTHALATE	330	420 U	UG/KG
2, 4-DIMETHYLPHENOL	670	860 U	UG/KG
2, 4-DINITROPHENOL	1300	1700 U	UG/KG
2, 4-DINITROTOLUENE	330	420 U	UG/KG
2, 6-DINITROTOLUENE	330	420 U	UG/KG
BIS (2-ETHYLHEXYL) PHTHALATE	330	420 U	UG/KG
FLUORANTHENE	330	970	UG/KG
FLUORENE	330	420 U	UG/KG
HEXACHLOROBENZENE	330	420 U	UG/KG
HEXACHLOROBUTADIENE	330	420 U	UG/KG
HEXACHLOROCYCLOPENTADIENE	330	420 U	UG/KG
HEXACHLOROETHANE	330	420 U	UG/KG
ISOPHORONE	330	420 U	UG/KG
2-METHYLNAPHTHALENE	670	860 U	UG/KG



Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL CO
Client Sample ID : MW-9

EXTRACTABLE ORGANICS
METHOD 8270 SEMIVOLATILES
Reported: 10/05/95

Date Sampled : 09/14/95 GTC Order # : 39702 Sample Matrix: SOIL/SEDIMENT
Date Received: 09/15/95 Submission #: 9509000179 Percent Solid: 77.9

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/19/95			
DATE ANALYZED : 09/21/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
4,6-DINITRO-2-METHYLPHENOL	1300	1700 U	UG/KG
4-CHLORO-3-METHYLPHENOL	670	860 U	UG/KG
2-METHYLPHENOL	670	860 U	UG/KG
4-METHYLPHENOL	670	860 U	UG/KG
NAPHTHALENE	330	420 U	UG/KG
2-NITROANILINE	330	420 U	UG/KG
3-NITROANILINE	330	4200 U	UG/KG
4-NITROANILINE	330	420 U	UG/KG
NITROBENZENE	330	420 U	UG/KG
2-NITROPHENOL	670	860 U	UG/KG
4-NITROPHENOL	1300	1700 U	UG/KG
N-NITROSODIMETHYLAMINE	330	420 U	UG/KG
N-NITROSODIPHENYLAMINE	330	420 U	UG/KG
DI-N-OCTYL PHTHALATE	330	420 U	UG/KG
PENTACHLOROPHENOL	1300	1700 U	UG/KG
PHENANTHRENE	330	1700	UG/KG
PHENOL	670	860 U	UG/KG
4-BROMOPHENYL-PHENYLETHER	330	420 U	UG/KG
4-CHLOROPHENYL-PHENYLETHER	330	420 U	UG/KG
N-NITROSO-DI-N-PROPYLAMINE	330	420 U	UG/KG
PYRENE	330	1400	UG/KG
1,2,4-TRICHLOROBENZENE	330	420 U	UG/KG
2,4,6-TRICHLOROPHENOL	670	860 U	UG/KG
2,4,5-TRICHLOROPHENOL	670	860 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
TERPHENYL-d14	(18 - 137 %)	82	%
NITROBENZENE-d5	(23 - 120 %)	88	%
PHENOL-d6	(24 - 113 %)	77	%
2-FLUOROBIPHENYL	(30 - 115 %)	83	%
2-FLUOROPHENOL	(25 - 121 %)	68	%
2,4,6-TRIBROMOPHENOL	(19 - 122 %)	83	%



Reported: 10/05/95

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL CO
Client Sample ID : MW-10

Date Sampled : 09/13/95
Date Received: 09/15/95

GTC Order # : 39699
Submission #: 9509000179

Sample Matrix: SOIL/SEDIMENT

ANALYTE	PQL	RESULT	DRY WT. UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS					
ARSENIC	0.500	8.50	UG/G	09/20/95	1.0
BARIUM	2.00	45.4	UG/G	09/20/95	1.0
CADMIUM	0.500	0.725	UG/G	09/20/95	1.0
CHROMIUM	1.00	7.45	UG/G	09/20/95	1.0
LEAD	5.00	32.8	UG/G	09/20/95	1.0
MERCURY	0.100	0.112 U	UG/G	09/20/95	1.0
SELENIUM	0.500	0.561 U	UG/G	09/20/95	1.0
SILVER	1.00	1.12 U	UG/G	09/20/95	1.0
WET CHEMISTRY					
TOTAL CYANIDE	1.00	1.12 U	UG/G	09/27/95	1.0
TOTAL PETROLEUM HYDROCARBONS	33.0	44.7	UG/G	09/19/95	NA
PERCENT SOLIDS	1.0	89.2	%	09/19/95	1.0

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL CO
Client Sample ID : MW-10

Date Sampled : 09/13/95 GTC Order # : 39699 Sample Matrix: SOIL/SEDIMENT
Date Received: 09/15/95 Submission #: 9509000179 Percent Solid: 89.2

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/20/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
ACETONE	10	11 U	UG/KG
BENZENE	5.0	5.6 U	UG/KG
BROMODICHLOROMETHANE	5.0	5.6 U	UG/KG
BROMOFORM	5.0	5.6 U	UG/KG
BROMOMETHANE	5.0	5.6 U	UG/KG
2-BUTANONE (MEK)	10	11 U	UG/KG
CARBON DISULFIDE	10	11 U	UG/KG
CARBON TETRACHLORIDE	5.0	5.6 U	UG/KG
CHLOROBENZENE	5.0	5.6 U	UG/KG
CHLOROETHANE	5.0	5.6 U	UG/KG
CHLOROFORM	5.0	5.6 U	UG/KG
CHLOROMETHANE	5.0	5.6 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	5.6 U	UG/KG
1,1-DICHLOROETHANE	5.0	5.6 U	UG/KG
1,2-DICHLOROETHANE	5.0	5.6 U	UG/KG
1,1-DICHLOROETHENE	5.0	5.6 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	5.6 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	5.6 U	UG/KG
1,2-DICHLOROPROPANE	5.0	5.6 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	5.6 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	5.6 U	UG/KG
ETHYLBENZENE	5.0	5.6 U	UG/KG
2-HEXANONE	10	11 U	UG/KG
METHYLENE CHLORIDE	5.0	5.6 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	11 U	UG/KG
STYRENE	5.0	5.6 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	5.6 U	UG/KG
TETRACHLOROETHENE	5.0	5.6 U	UG/KG
TOLUENE	5.0	5.6 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	5.6 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	5.6 U	UG/KG
TRICHLOROETHENE	5.0	5.6 U	UG/KG
VINYL CHLORIDE	5.0	5.6 U	UG/KG
O-XYLENE	5.0	5.6 U	UG/KG
M+P-XYLENE	5.0	5.6 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(74 - 121 %)	70	%
TOLUENE-D8	(81 - 117 %)	97	%
DIBROMOFLUOROMETHANE	(80 - 120 %)	110	%



EXTRACTABLE ORGANICS
METHOD 8270 SEMIVOLATILES
Reported: 10/27/95

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL CO
Client Sample ID : MW-10

Date Sampled : 09/13/95 GTC Order # : 39699 Sample Matrix: SOIL/SEDIMENT
Date Received: 09/15/95 Submission #: 9509000179 Percent Solid: 89.2

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/19/95			
DATE ANALYZED : 09/21/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
ACENAPHTHENE	330	370 U	UG/KG
ACENAPHTHYLENE	330	370 U	UG/KG
ANTHRACENE	330	370 U	UG/KG
BENZO (A) ANTHRACENE	330	510	UG/KG
BENZO (A) PYRENE	330	550	UG/KG
BENZO (B) FLUORANTHENE	330	740	UG/KG
BENZO (G, H, I) PERYLENE	330	370 U	UG/KG
BENZO (K) FLUORANTHENE	330	370 U	UG/KG
BENZYL ALCOHOL	330	370 U	UG/KG
BUTYL BENZYL PHTHALATE	330	370 U	UG/KG
DI-N-BUTYL PHTHALATE	330	400	UG/KG
CARBAZOLE	330	370 U	UG/KG
INDENO (1, 2, 3-CD) PYRENE	330	370 U	UG/KG
4-CHLOROANILINE	330	370 U	UG/KG
BIS (-2-CHLOROETHOXY) METHANE	330	370 U	UG/KG
BIS (2-CHLOROETHYL) ETHER	330	370 U	UG/KG
2-CHLORONAPHTHALENE	330	370 U	UG/KG
2-CHLOROPHENOL	670	750 U	UG/KG
2, 2'-OXYBIS (1-CHLOROPROPANE)	330	370 U	UG/KG
CHRYSENE	330	600	UG/KG
DIBENZO (A, H) ANTHRACENE	330	370 U	UG/KG
DIBENZOFURAN	330	370 U	UG/KG
1, 3-DICHLOROBENZENE	330	370 U	UG/KG
1, 2-DICHLOROBENZENE	330	370 U	UG/KG
1, 4-DICHLOROBENZENE	330	370 U	UG/KG
3, 3'-DICHLOROBENZIDINE	330	370 U	UG/KG
2, 4-DICHLOROPHENOL	670	750 U	UG/KG
DIETHYL PHTHALATE	330	370 U	UG/KG
DIMETHYL PHTHALATE	330	370 U	UG/KG
2, 4-DIMETHYLPHENOL	670	750 U	UG/KG
2, 4-DINITROPHENOL	1300	1500 U	UG/KG
2, 4-DINITROTOLUENE	330	370 U	UG/KG
2, 6-DINITROTOLUENE	330	370 U	UG/KG
BIS (2-ETHYLHEXYL) PHTHALATE	330	370 U	UG/KG
FLUORANTHENE	330	1200	UG/KG
FLUORENE	330	370 U	UG/KG
HEXACHLOROBENZENE	330	370 U	UG/KG
HEXACHLOROBUTADIENE	330	370 U	UG/KG
HEXACHLOROCYCLOPENTADIENE	330	370 U	UG/KG
HEXACHLOROETHANE	330	370 U	UG/KG
ISOPHORONE	330	370 U	UG/KG
2-METHYLNAPHTHALENE	670	750 U	UG/KG



EXTRACTABLE ORGANICS
METHOD 8270 SEMIVOLATILES
Reported: 10/27/95

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL CO
Client Sample ID : MW-10

Date Sampled : 09/13/95 GTC Order # : 39699 Sample Matrix: SOIL/SEDIMENT
Date Received: 09/15/95 Submission #: 9509000179 Percent Solid: 89.2

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/19/95			
DATE ANALYZED : 09/21/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
4,6-DINITRO-2-METHYLPHENOL	1300	1500 U	UG/KG
4-CHLORO-3-METHYLPHENOL	670	750 U	UG/KG
2-METHYLPHENOL	670	750 U	UG/KG
4-METHYLPHENOL	670	750 U	UG/KG
NAPHTHALENE	330	370 U	UG/KG
2-NITROANILINE	330	370 U	UG/KG
3-NITROANILINE	330	370 U	UG/KG
4-NITROANILINE	330	370 U	UG/KG
NITROBENZENE	330	370 U	UG/KG
2-NITROPHENOL	670	750 U	UG/KG
4-NITROPHENOL	1300	1500 U	UG/KG
N-NITROSODIMETHYLAMINE	330	370 U	UG/KG
N-NITROSODIPHENYLAMINE	330	370 U	UG/KG
DI-N-OCTYL PHTHALATE	330	370 U	UG/KG
PENTACHLOROPHENOL	1300	1500 U	UG/KG
PHENANTHRENE	330	680	UG/KG
PHENOL	670	750 U	UG/KG
4-BROMOPHENYL-PHENYLEETHER	330	370 U	UG/KG
4-CHLOROPHENYL-PHENYLEETHER	330	370 U	UG/KG
N-NITROSO-DI-N-PROPYLAMINE	330	370 U	UG/KG
PYRENE	330	950	UG/KG
1,2,4-TRICHLOROBENZENE	330	370 U	UG/KG
2,4,6-TRICHLOROPHENOL	670	750 U	UG/KG
2,4,5-TRICHLOROPHENOL	670	750 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
TERPHENYL-d14	(18 - 137 %)	74	%
NITROBENZENE-d5	(23 - 120 %)	79	%
PHENOL-d6	(24 - 113 %)	77	%
2-FLUOROBIPHENYL	(30 - 115 %)	77	%
2-FLUOROPHENOL	(25 - 121 %)	70	%
2,4,6-TRIBROMOPHENOL	(19 - 122 %)	78	%

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : GTC Order # : 44110 Sample Matrix: SOIL/SEDIMENT
Date Received: Submission #: Percent Solid: 100.0

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/20/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
ACETONE	10	10 U	UG/KG
BENZENE	5.0	5.0 U	UG/KG
BROMODICHLOROMETHANE	5.0	5.0 U	UG/KG
BROMOFORM	5.0	5.0 U	UG/KG
BROMOMETHANE	5.0	5.0 U	UG/KG
2-BUTANONE (MEK)	10	10 U	UG/KG
CARBON DISULFIDE	10	10 U	UG/KG
CARBON TETRACHLORIDE	5.0	5.0 U	UG/KG
CHLOROBENZENE	5.0	5.0 U	UG/KG
CHLOROETHANE	5.0	5.0 U	UG/KG
CHLOROFORM	5.0	5.0 U	UG/KG
CHLOROMETHANE	5.0	5.0 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/KG
1,1-DICHLOROETHANE	5.0	5.0 U	UG/KG
1,2-DICHLOROETHANE	5.0	5.0 U	UG/KG
1,1-DICHLOROETHENE	5.0	5.0 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/KG
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/KG
ETHYLBENZENE	5.0	5.0 U	UG/KG
2-HEXANONE	10	10 U	UG/KG
METHYLENE CHLORIDE	5.0	5.0 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/KG
STYRENE	5.0	5.0 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/KG
TETRACHLOROETHENE	5.0	5.0 U	UG/KG
TOLUENE	5.0	5.0 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/KG
TRICHLOROETHENE	5.0	5.0 U	UG/KG
VINYL CHLORIDE	5.0	5.0 U	UG/KG
O-XYLENE	5.0	5.0 U	UG/KG
M+P-XYLENE	5.0	5.0 U	UG/KG

SURROGATE RECOVERIES

QC LIMITS

4-BROMOFLUOROBENZENE	(74 - 121 %)	97	%
TOLUENE-D8	(81 - 117 %)	98	%
DIBROMOFLUOROMETHANE	(80 - 120 %)	112	%

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : GTC Order # : 44111 Sample Matrix: SOIL/SEDIMENT
Date Received: Submission #: Percent Solid: 100.0

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/21/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
ACETONE	10	10 U	UG/KG
BENZENE	5.0	5.0 U	UG/KG
BROMODICHLOROMETHANE	5.0	5.0 U	UG/KG
BROMOFORM	5.0	5.0 U	UG/KG
BROMOMETHANE	5.0	5.0 U	UG/KG
2-BUTANONE (MEK)	10	10 U	UG/KG
CARBON DISULFIDE	10	10 U	UG/KG
CARBON TETRACHLORIDE	5.0	5.0 U	UG/KG
CHLOROBENZENE	5.0	5.0 U	UG/KG
CHLOROETHANE	5.0	5.0 U	UG/KG
CHLOROFORM	5.0	5.0 U	UG/KG
CHLOROMETHANE	5.0	5.0 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/KG
1,1-DICHLOROETHANE	5.0	5.0 U	UG/KG
1,2-DICHLOROETHANE	5.0	5.0 U	UG/KG
1,1-DICHLOROETHENE	5.0	5.0 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/KG
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/KG
ETHYLBENZENE	5.0	5.0 U	UG/KG
2-HEXANONE	10	10 U	UG/KG
METHYLENE CHLORIDE	5.0	5.0 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/KG
STYRENE	5.0	5.0 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/KG
TETRACHLOROETHENE	5.0	5.0 U	UG/KG
TOLUENE	5.0	5.0 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/KG
TRICHLOROETHENE	5.0	5.0 U	UG/KG
VINYL CHLORIDE	5.0	5.0 U	UG/KG
O-XYLENE	5.0	5.0 U	UG/KG
M+P-XYLENE	5.0	5.0 U	UG/KG

SURROGATE RECOVERIES

QC LIMITS

4-BROMOFLUOROBENZENE	(74 - 121 %)	96	%
TOLUENE-D8	(81 - 117 %)	100	%
DIBROMOFLUOROMETHANE	(80 - 120 %)	98	%

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : GTC Order # : 40779 Sample Matrix: SOIL/SEDIMENT
Date Received: Submission #: Percent Solid: 100.0

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/22/95			
DATE ANALYZED : 09/22/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
ACENAPHTHENE	330	330 U	UG/KG
ACENAPHTHYLENE	330	330 U	UG/KG
ANTHRACENE	330	330 U	UG/KG
BENZO (A) ANTHRACENE	330	330 U	UG/KG
BENZO (A) PYRENE	330	330 U	UG/KG
BENZO (B) FLUORANTHENE	330	330 U	UG/KG
BENZO (G, H, I) PERYLENE	330	330 U	UG/KG
BENZO (K) FLUORANTHENE	330	330 U	UG/KG
BENZYL ALCOHOL	330	330 U	UG/KG
BUTYL BENZYL PHTHALATE	330	330 U	UG/KG
DI-N-BUTYLPHTHALATE	330	330 U	UG/KG
CARBAZOLE	330	330 U	UG/KG
INDENO (1, 2, 3-CD) PYRENE	330	330 U	UG/KG
4-CHLOROANILINE	330	330 U	UG/KG
BIS (-2-CHLOROETHOXY) METHANE	330	330 U	UG/KG
BIS (2-CHLOROETHYL) ETHER	330	330 U	UG/KG
2-CHLORONAPHTHALENE	330	330 U	UG/KG
2-CHLOROPHENOL	670	670 U	UG/KG
2, 2'-OXYBIS (1-CHLOROPROPANE)	330	330 U	UG/KG
CHRYSENE	330	330 U	UG/KG
DIBENZO (A, H) ANTHRACENE	330	330 U	UG/KG
DIBENZOFURAN	330	330 U	UG/KG
1, 3-DICHLOROBENZENE	330	330 U	UG/KG
1, 2-DICHLOROBENZENE	330	330 U	UG/KG
1, 4-DICHLOROBENZENE	330	330 U	UG/KG
3, 3'-DICHLOROBENZIDINE	330	330 U	UG/KG
2, 4-DICHLOROPHENOL	670	670 U	UG/KG
DIETHYLPHTHALATE	330	330 U	UG/KG
DIMETHYL PHTHALATE	330	330 U	UG/KG
2, 4-DIMETHYLPHENOL	670	670 U	UG/KG
2, 4-DINITROPHENOL	1300	1300 U	UG/KG
2, 4-DINITROTOLUENE	330	330 U	UG/KG
2, 6-DINITROTOLUENE	330	330 U	UG/KG
BIS (2-ETHYLHEXYL) PHTHALATE	330	330 U	UG/KG
FLUORANTHENE	330	330 U	UG/KG
FLUORENE	330	330 U	UG/KG
HEXACHLOROBENZENE	330	330 U	UG/KG
HEXACHLOROBUTADIENE	330	330 U	UG/KG
HEXACHLOROCYCLOPENTADIENE	330	330 U	UG/KG
HEXACHLOROETHANE	330	330 U	UG/KG
ISOPHORONE	330	330 U	UG/KG
2-METHYLNAPHTHALENE	670	670 U	UG/KG
4, 6-DINITRO-2-METHYLPHENOL	1300	1300 U	UG/KG

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : GTC Order # : 40779 Sample Matrix: SOIL/SEDIMENT
Date Received: Submission #: Percent Solid: 100.0

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/22/95			
DATE ANALYZED : 09/22/95			
ANALYTICAL DILUTION: 1.0			Dry Weight
4-CHLORO-3-METHYLPHENOL	670	670 U	UG/KG
2-METHYLPHENOL	670	670 U	UG/KG
4-METHYLPHENOL	670	670 U	UG/KG
NAPHTHALENE	330	330 U	UG/KG
2-NITROANILINE	330	330 U	UG/KG
3-NITROANILINE	330	330 U	UG/KG
4-NITROANILINE	330	330 U	UG/KG
NITROBENZENE	330	330 U	UG/KG
2-NITROPHENOL	670	670 U	UG/KG
4-NITROPHENOL	1300	1300 U	UG/KG
N-NITROSODIMETHYLAMINE	330	330 U	UG/KG
N-NITROSODIPHENYLAMINE	330	330 U	UG/KG
DI-N-OCTYL PHTHALATE	330	330 U	UG/KG
PENTACHLOROPHENOL	1300	1300 U	UG/KG
PHENANTHRENE	330	330 U	UG/KG
PHENOL	670	670 U	UG/KG
4-BROMOPHENYL-PHENYLETHER	330	330 U	UG/KG
4-CHLOROPHENYL-PHENYLETHER	330	330 U	UG/KG
N-NITROSO-DI-N-PROPYLAMINE	330	330 U	UG/KG
PYRENE	330	330 U	UG/KG
1,2,4-TRICHLOROBENZENE	330	330 U	UG/KG
2,4,6-TRICHLOROPHENOL	670	670 U	UG/KG
2,4,5-TRICHLOROPHENOL	670	670 U	UG/KG

SURROGATE RECOVERIES

QC LIMITS

TERPHENYL-d14	(18 - 137 %)	67	%
NITROBENZENE-d5	(23 - 120 %)	85	%
PHENOL-d6	(24 - 113 %)	77	%
2-FLUOROBIPHENYL	(30 - 115 %)	80	%
2-FLUOROPHENOL	(25 - 121 %)	75	%
2,4,6-TRIBROMOPHENOL	(19 - 122 %)	71	%

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : GTC Order # : 41075 Sample Matrix: SOIL/SEDIMENT
Date Received: Submission #: Percent Solid: 100.0

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/21/95			
DATE ANALYZED : 09/25/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
PCB 1016	17	17 U	UG/KG
PCB 1221	17	17 U	UG/KG
PCB 1232	17	17 U	UG/KG
PCB 1242	17	17 U	UG/KG
PCB 1248	17	17 U	UG/KG
PCB 1254	17	17 U	UG/KG
PCB 1260	17	17 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
TETRACHLORO-META-XYLENE	(60 - 150 %)	113	%

GENERAL TESTING CORPORATION / CHAIN-OF-CUSTODY RECORD

710 Exchange Street 85 Trinity Place 435 Lawrence Bell Drive GTC Job. No. 2/4
 Rochester, NY 14608 Hackensack, NJ 07601 Amherst, NY 14221-7077 Client Project No. 9-222

Sample Origination & Shipping Information

Collection Site NEWELL
 Address OSBORNESBURG NY
 Street City State Zip
 Collector MICHAEL R. ALABUCH Michael R. Alabuch
 Print Signature

Bottles Prepared by MRA (BBEL) Rec'd by _____
 Bottles Shipped to Client via _____ Seal/Shipping # _____
 Samples Shipped via _____ Seal/Shipping # _____

Sample(s) Relinquished by:	Received by:	Date/Time
1. Sign <u>Michael R. Alabuch</u>	1. Sign <u>[Signature]</u>	<u>9/20/95</u>
for <u>ROSLAND, PAUL LEE</u>	for <u>CTL</u>	<u>10:00</u>
2. Sign _____	2. Sign _____	<u>/ /</u>
for _____	for _____	<u>:</u>
3. Sign _____	3. Sign _____	<u>/ /</u>
for _____	for _____	<u>:</u>

Sample(s) Received in Laboratory by JH Gardner 9/20/95 @ 10:00

Client I.D. #	Sample Location	* Analyte or Analyte Group(s) Required (see below for additional)	Sample Preserved Y N	Prep Filtered Y N	Bottle Set(s) (see below)
1	MW-3 9/18/95:1800	W TCL VOCs 8260 KCS METALS 6010/7000 CYANIDE 335/1335.3 TPH 418.1 TCL SVOCs 8270	X	X	2- 40 mL VIALS 2- QT PLASTIC 3- 1 LT AMBER GLASS
2	MW-9 9/18/95:1830	W SAME	X	X	"
3	MW-8 9/19/95:0700	W SAME	X	X	"
4	MW-7 9/19/95:0810	W SAME	X	X	"
5	TP-1 9/19/95:1000	S TCL VOCs 8260 KCS METALS 6010/7000 CYANIDE 9012	X	X	1- 4oz. GLASS 1- 8oz. GLASS

Use Bottle No. for indicating type bottles used in each bottle set and fill in box with # of bottles used for each type.

Bottle No.	1	2	3	4	5	6	7	8	9	10	11
Bottle Type	40 ml Vial	Pint Glass	Qt. Glass	4 oz. Plastic	8 oz. Plastic	16 oz. Plastic	Qt. Pl.	Gal. Pl.	Steril. Pl.		
# of each											

Additional Analytes ANALYZE TPH BEFORE ANALYZING SVOCs 8270,
(SAME SVOCs 8270)

Shaded area for Lab use only; bottom copy for client; maximum of 5 samples per page.

* Source Codes: Monitoring Well (W), Soil (S), Treatment Plant (T), Drinking Water (D), Leachate (L), Hazardous Waste (H), River or Stream (R), Pond (P), Industrial Discharge (I), _____(X), _____(Y).

GENERAL TESTING CORPORATION / CHAIN-OF-CUSTODY RECORD

710 Exchange Street 85 Trinity Place 435 Lawrence Bell Drive GTC Job. No. 9-222 1/4
 Rochester, NY 14608 Hackensack, NJ 07601 Amherst, NY 14221-7077 Client Project No. _____

Sample Origination & Shipping Information

Collection Site NEWELL
 Address OSBORN BURG NY

Collector MICHAEL R. ANLAUCKAS Michael R. Anlauckas
 Print BLASLAND, BACK & LEE Signature

Bottles Prepared by MRS (RBL) Rec'd by _____
 Bottles Shipped to Client via _____ Seal/Shipping # _____
 Samples Shipped via _____ Seal/Shipping # _____

Sample(s) Relinquished by:	Received by:	Date/Time
1. Sign <u>Michael R. Anlauckas</u>	1. Sign <u>[Signature]</u>	<u>9/20/95</u>
for <u>BLASLAND, BACK & LEE</u>	for <u>GTC</u>	<u>10:00</u>
2. Sign _____	2. Sign _____	<u>/ /</u>
for _____	for _____	<u>:</u>
3. Sign _____	3. Sign _____	<u>/ /</u>
for _____	for _____	<u>:</u>

Sample(s) Received in Laboratory by [Signature] 9/20/95 @ 10:00

	Client I.D. #	Sample Location	*	Analyte or Analyte Group(s) Required (see below for additional)	Sample Preserved		Sample Prep Filtered		Bottle Set(s) (see below)	
	Lab #	Date/Time			Y	N	Y	N		
1		NW-6 (9-11')	S	TCL VOCs 8260 RCRA METALS 6010/7020		X		X	2- 4oz GLASS	
	40207	9/19/95 :0930		CYANIDE 335.2/1335.3 TPH 418.1 TCL/9020 TCL SVOCs 8270					2- 8oz GLASS	
2		MW-8 (2-4')	S	TCL VOCs 8260 RCRA METALS 6010/7020		X		X	2- 4oz GLASS	
	40209	9/18/95 :1000		CYANIDE 9012 TPH 418.1 TCL SVOCs 8270					2- 8oz GLASS	
3		SB-3 (2-4')	S	TCL PCBs		X		X	1 4oz. GLASS	
	40212	9/18/95 :1640		8080					+	
4		SB-9 (4-6')	S	TCL PCBs		X		X	1 4oz. GLASS	
	40213	9/18/95 :1640		8080						
5		MW-10	W	TCL VOCs 8260 RCRA METALS 6010/7020 CYANIDE 335.2/1335.3					2- 40mL VIALS 2- QT. PLASTIC	
		9/18/95 :1530		TPH 418.1 TCL SVOCs 8270	X		X		3- 1LT. AMBER GLASS	

Use Bottle No. for indicating type bottles used in each bottle set and fill in box with # of bottles used for each type.

Bottle No.	1	2	3	4	5	6	7	8	9	10	11
Bottle Type	40 ml Vial	Pint Glass	Qt. Glass	4 oz. Plastic	8 oz. Plastic	16 oz. Plastic	Qt. Pl.	Gal. Pl.	Steril. Pl.		
# of each											

Additional Analytes * DO TPH ANALYSIS BEFORE DOING TCL SVOCs
8270 ; HOLD TCL SVOCs 8270

Shaded area for Lab use only; bottom copy for client; maximum of 5 samples per page.

* Source Codes: Monitoring Well (W), Soil (S), Treatment Plant (T), Drinking Water (D), Leachate (L), Hazardous Waste (H), River or Stream (R), Pond (P), Industrial Discharge (I), _____ (X), _____ (Y).

GENERAL TESTING CORPORATION / CHAIN-OF-CUSTODY RECORD

710 Exchange Street 85 Trinity Place 435 Lawrence Bell Drive GTC Job. No. 9-2224
 Rochester, NY 14608 Hackensack, NJ 07601 Amherst, NY 14221-7077 Client Project No. _____

Sample Origination & Shipping Information

Collection Site NEWBURN
 Address ADAMS BURN NY State
 Collector MICHAEL R. ADAMS Print Michael R. Adams Signature
 Bottles Prepared by MRS (BBFL) Rec'd by _____
 Bottles Shipped to Client via _____ Seal/Shipping # _____
 Samples Shipped via _____ Seal/Shipping # _____

Sample(s) Relinquished by:	Received by:	Date/Time
1. Sign <u>Michael R. Adams</u> for <u>BURNS, BARK & LEE</u>	1. Sign <u>[Signature]</u> for <u>GTC</u>	9/20/95 10:00
2. Sign _____ for _____	2. Sign _____ for _____	1 / 1
3. Sign _____ for _____	3. Sign _____ for _____	1 / 1

Sample(s) Received in Laboratory by AA/29 Gardner 9/20/95 @ 10:00

Client I.D. #	Sample Location	*	Analyte or Group(s) Required (see below for additional)	Sample Preserved	Sample Filtered	Bottle Set(s) (see below)
Lab #	Date/Time			Y N	Y N	
1	Sump #1	W	TCL VOCs 8260 PCRA METALS 6010/7000 CYANIDES 9012 TPH 418.1 TCL SVOCs 8270	X	X	2-40mL VIALS 2-QT PLASTIC 4-LT AMBER GLASS
2	GW-45CL	W	"	X	X	"
3	MW-5 (8-10)	S	TCL VOCs 8260 PCRA METALS 6010/7000 CYANIDES 9012 TPH 418.1/9060 TCL SVOCs 8270	X	X	2-403 GLASS 2-803 GLASS
4	MW-7 (4-6)	S	TCL VOCs 8260 PCRA METALS 6010/7000 CYANIDES 9012 TPH 418.1 TCL SVOCs 8270	X	X	1 403 GLASS 1-803 GLASS
5	TRIP BLANK	W	TCL VOCs 8260	X	X	2-40mL VIALS

Use Bottle No. for indicating type bottles used in each bottle set and fill in box with # of bottles used for each type.

Bottle No.	1	2	3	4	5	6	7	8	9	10	11
Bottle Type	40 ml Vial	Pint Glass	Qt. Glass	4 oz. Plastic	8 oz. Plastic	16 oz. Plastic	Qt. Pl.	Gal. Pl.	Steril. Pl.		
# of each											

Additional Analytes ANALYZE TPH BUTANE ANALYZING SVOCs 8270
(SAVE SVOCs 8270)

Shaded area for Lab use only; bottom copy for client; maximum of 5 samples per page.

* Source Codes: Monitoring Well (W), Soil (S), Treatment Plant (T), Drinking Water (D), Leachate (L), Hazardous Waste (H), River or Stream (R), Pond (P), Industrial Discharge (I), _____(X), _____(Y).

General Testing Corporation



A FULL SERVICE ENVIRONMENTAL LABORATORY

October 9, 1995

Mr. Frank Kozak
Blasland, Bouck & Lee, Inc.
30 Corporate Woods, Suite 160
Rochester, NY 14623

RE: NEWELL CO
Submission #: 9509000179

Dear Mr. Kozak

Enclosed are the analytical results of the analyses requested. All data has been reviewed prior to report submission. Should you have any questions please contact me at 454-3760.

Thank you for letting us provide this service.

Sincerely,

GENERAL TESTING CORPORATION

Barry J. Fry
Sr. Project Manager

Enc.

DATE

10/9/95

FILED

This package has been reviewed by General Testing Corporation's QA Department/Laboratory Director prior to report submittal. mpd jdales

GTC LIST OF QUALIFIERS

(The basis of this proposal are the EPA-CLP Qualifiers)

- U - Indicates compound was analyzed for but was not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.
- J - Indicates an estimated value. For further explanation see case narrative / cover letter.
- B - This flag is used when the analyte is found in the associated blank as well as in the sample.
- E - This flag identifies compounds whose concentrations exceed the calibration range.
- A - This flag indicates that a TIC is a suspected aldol-condensation product.
- N - Spiked sample recovery not within control limits.
(Flag the entire batch - Inorganic analysis only)
- * - Duplicate analysis not within control limits.
(Flag the entire batch - Inorganic analysis only)
- Also used to qualify Organics QC data outside limits.
- D - Spike diluted out.
- S - Reported value determined by Method of Standard Additions. (MSA)
- X - As specified in the case narrative.

GTC Lab ID # for State Certifications

NY ID # in Rochester: 10145
NY ID # in Hackensack: 10801
NY ID # in Massachusetts: M-NY032

NJ ID # in Rochester: 73331
NJ ID # in Hackensack: 02317



CASE NARRATIVE

COMPANY: Blasland Bouck Engineers, P.C.
Newell Co.

SUBMISSION #: 9509000179

BBE soil samples were collected on 9/13/95 and 9/14/95 and received at GTC on 9/15/95 in good condition.

INORGANIC ANALYSIS

Soil samples MW-10, MW-9, and SB-2 were analyzed for RCRA metals. All metals except Mercury were analyzed using SW-846 method 6010. Mercury was analyzed using CVAA method 7470. These sample was also analyzed for Total Cyanide by SW-846 method 9012. In addition, samples MW-10 and MW-9 were analyzed for TPH by EPA method 418.1.

No analytical or QC problems were encountered.

VOLATILE ORGANICS

Soil samples MW-10, MW-9, and SB-2 were analyzed for Target Compound List (TCL) of volatile organics using SW-846 method 8260. Samples SB-6, SB-4, SB-5, SB-1, and SB-2 were analyzed for the NYSDEC Petroleum-Contaminated Soil Guidance List (STARS List) of volatile organics by SW-846 method 8021.

The tuning criteria for BFB were all within QC limits.

The initial and continuing calibration criteria were met for all analytes.

All surrogate standard recoveries were within acceptance limits for the TCL analysis. The recovery for Chlorofluorobenzene on samples SB-6, SB-1, and SB-2 were outside of QC limits for the 8021 analysis. These analyses were repeated and the surrogate recoveries were confirmed and the recoveries were flagged with an "***". All other recoveries were within QC limits.

No other analytical or QC problems were encountered.

SEMIVOLATILE ORGANICS

Soil samples MW-10, MW-9, and SB-2 were analyzed for Target Compound List (TCL) of semivolatile organics using SW-846 method 8270. Samples SB-6, SB-4, SB-5, SB-1, and SB-2 were analyzed for the NYSDEC Petroleum-Contaminated Soil Guidance List (STARS List) of semivolatile organics by SW-846 method 8270.

The tuning criteria for DFTPP were all within QC limits.

The initial and continuing calibration criteria were met for all analytes.

The Surrogate Standard recoveries for all samples were within QC limits.

The TCL sample extract for MW-9 was analyzed at 1/10 dilution due to matrix interferences from non-target analytes.

No other analytical or QC problems were encountered.

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : GTC Order # : 40357 Sample Matrix: SOIL/SEDIMENT
Date Received: Submission #: Percent Solid: 100.0

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/20/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
BENZENE	1.0	1.0 U	UG/KG
SEC-BUTYLBENZENE	1.0	1.0 U	UG/KG
TERT-BUTYLBENZENE	1.0	1.0 U	UG/KG
N-BUTYLBENZENE	1.0	1.0 U	UG/KG
METHYL-TERT-BUTYLETHER	1.0	1.0 U	UG/KG
ETHYLBENZENE	1.0	1.0 U	UG/KG
ISOPROPYLBENZENE	1.0	1.0 U	UG/KG
P-ISOPROPYLTOLUENE	1.0	1.0 U	UG/KG
NAPHTHALENE	1.0	1.0 U	UG/KG
N-PROPYLBENZENE	1.0	1.0 U	UG/KG
TOLUENE	1.0	1.0 U	UG/KG
1,2,4-TRIMETHYLBENZENE	1.0	1.0 U	UG/KG
1,3,5-TRIMETHYLBENZENE	1.0	1.0 U	UG/KG
O-XYLENE	2.0	2.0 U	UG/KG
M+P-XYLENE	2.0	2.0 U	UG/KG

SURROGATE RECOVERIES

QC LIMITS

CHLOROFLUOROBENZENE

(60 - 140 %)

87

%

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : GTC Order # : 40671 Sample Matrix: SOIL/SEDIMENT
Date Received: Submission #: Percent Solid: 100.0

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/21/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
BENZENE	1.0	1.0 U	UG/KG
SEC-BUTYLBENZENE	1.0	1.0 U	UG/KG
TERT-BUTYLBENZENE	1.0	1.0 U	UG/KG
N-BUTYLBENZENE	1.0	1.0 U	UG/KG
METHYL-TERT-BUTYLETHER	1.0	1.0 U	UG/KG
ETHYLBENZENE	1.0	1.0 U	UG/KG
ISOPROPYLBENZENE	1.0	1.0 U	UG/KG
P-ISOPROPYLTOLUENE	1.0	1.0 U	UG/KG
NAPHTHALENE	1.0	1.0 U	UG/KG
N-PROPYLBENZENE	1.0	1.0 U	UG/KG
TOLUENE	1.0	1.0 U	UG/KG
1,2,4-TRIMETHYLBENZENE	1.0	1.0 U	UG/KG
1,3,5-TRIMETHYLBENZENE	1.0	1.0 U	UG/KG
O-XYLENE	2.0	2.0 U	UG/KG
M+P-XYLENE	2.0	2.0 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
CHLOROFLUOROBENZENE	(60 - 140 %)	88	%

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : GTC Order # : 42009 Sample Matrix: SOIL/SEDIMENT
Date Received: Submission #: Percent Solid: 100.0

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/20/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
ACETONE	10	10 U	UG/KG
BENZENE	5.0	5.0 U	UG/KG
BROMODICHLOROMETHANE	5.0	5.0 U	UG/KG
BROMOFORM	5.0	5.0 U	UG/KG
BROMOMETHANE	5.0	5.0 U	UG/KG
2-BUTANONE (MEK)	10	10 U	UG/KG
CARBON DISULFIDE	10	10 U	UG/KG
CARBON TETRACHLORIDE	5.0	5.0 U	UG/KG
CHLOROBENZENE	5.0	5.0 U	UG/KG
CHLOROETHANE	5.0	5.0 U	UG/KG
CHLOROFORM	5.0	5.0 U	UG/KG
CHLOROMETHANE	5.0	5.0 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/KG
1,1-DICHLOROETHANE	5.0	5.0 U	UG/KG
1,2-DICHLOROETHANE	5.0	5.0 U	UG/KG
1,1-DICHLOROETHENE	5.0	5.0 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/KG
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/KG
ETHYLBENZENE	5.0	5.0 U	UG/KG
2-HEXANONE	10	10 U	UG/KG
METHYLENE CHLORIDE	5.0	5.0 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/KG
STYRENE	5.0	5.0 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/KG
TETRACHLOROETHENE	5.0	5.0 U	UG/KG
TOLUENE	5.0	5.0 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/KG
TRICHLOROETHENE	5.0	5.0 U	UG/KG
VINYL CHLORIDE	5.0	5.0 U	UG/KG
O-XYLENE	5.0	5.0 U	UG/KG
M+P-XYLENE	5.0	5.0 U	UG/KG

SURROGATE RECOVERIES

QC LIMITS

4-BROMOFLUOROBENZENE	(74 - 121 %)	96	%
TOLUENE-D8	(81 - 117 %)	100	%
DIBROMOFLUOROMETHANE	(80 - 120 %)	106	%

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : GTC Order # : 40501 Sample Matrix: SOIL/SEDIMENT
Date Received: Submission #: Percent Solid: 100.0

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/19/95			
DATE ANALYZED : 09/21/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
ACENAPHTHENE	330	330 U	UG/KG
ANTHRACENE	330	330 U	UG/KG
BENZO (A) ANTHRACENE	330	330 U	UG/KG
BENZO (A) PYRENE	330	330 U	UG/KG
BENZO (B) FLUORANTHENE	330	330 U	UG/KG
BENZO (G, H, I) PERYLENE	330	330 U	UG/KG
BENZO (K) FLUORANTHENE	330	330 U	UG/KG
INDENO (1, 2, 3-CD) PYRENE	330	330 U	UG/KG
CHRYSENE	330	330 U	UG/KG
DIBENZO (A, H) ANTHRACENE	330	330 U	UG/KG
FLUORANTHENE	330	330 U	UG/KG
FLUORENE	330	330 U	UG/KG
NAPHTHALENE	200	200 U	UG/KG
PHENANTHRENE	330	330 U	UG/KG
PYRENE	330	330 U	UG/KG

SURROGATE RECOVERIES

QC LIMITS

TERPHENYL-d14	(18 - 137 %)	94	%
NITROBENZENE-d5	(23 - 120 %)	100	%
2-FLUOROBIPHENYL	(30 - 115 %)	105	%

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : GTC Order # : 40505 Sample Matrix: SOIL/SEDIMENT
Date Received: Submission #: Percent Solid: 100.0

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/19/95			
DATE ANALYZED : 09/21/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
ACENAPHTHENE	330	330 U	UG/KG
ACENAPHTHYLENE	330	330 U	UG/KG
ANTHRACENE	330	330 U	UG/KG
BENZO (A) ANTHRACENE	330	330 U	UG/KG
BENZO (A) PYRENE	330	330 U	UG/KG
BENZO (B) FLUORANTHENE	330	330 U	UG/KG
BENZO (G, H, I) PERYLENE	330	330 U	UG/KG
BENZO (K) FLUORANTHENE	330	330 U	UG/KG
BENZYL ALCOHOL	330	330 U	UG/KG
BUTYL BENZYL PHTHALATE	330	330 U	UG/KG
DI-N-BUTYLPHTHALATE	330	560	UG/KG
CARBAZOLE	330	330 U	UG/KG
INDENO (1, 2, 3-CD) PYRENE	330	330 U	UG/KG
4-CHLOROANILINE	330	330 U	UG/KG
BIS (-2-CHLOROETHOXY) METHANE	330	330 U	UG/KG
BIS (2-CHLOROETHYL) ETHER	330	330 U	UG/KG
2-CHLORONAPHTHALENE	330	330 U	UG/KG
2-CHLOROPHENOL	670	670 U	UG/KG
2, 2'-OXYBIS (1-CHLOROPROPANE)	330	330 U	UG/KG
CHRYSENE	330	330 U	UG/KG
DIBENZO (A, H) ANTHRACENE	330	330 U	UG/KG
DIBENZOFURAN	330	330 U	UG/KG
1, 3-DICHLOROBENZENE	330	330 U	UG/KG
1, 2-DICHLOROBENZENE	330	330 U	UG/KG
1, 4-DICHLOROBENZENE	330	330 U	UG/KG
3, 3'-DICHLOROBENZIDINE	330	330 U	UG/KG
2, 4-DICHLOROPHENOL	670	670 U	UG/KG
DIETHYLPHTHALATE	330	330 U	UG/KG
DIMETHYL PHTHALATE	330	330 U	UG/KG
2, 4-DIMETHYLPHENOL	670	670 U	UG/KG
2, 4-DINITROPHENOL	1300	1300 U	UG/KG
2, 4-DINITROTOLUENE	330	330 U	UG/KG
2, 6-DINITROTOLUENE	330	330 U	UG/KG
BIS (2-ETHYLHEXYL) PHTHALATE	330	330 U	UG/KG
FLUORANTHENE	330	330 U	UG/KG
FLUORENE	330	330 U	UG/KG
HEXACHLOROBENZENE	330	330 U	UG/KG
HEXACHLOROBUTADIENE	330	330 U	UG/KG
HEXACHLOROCYCLOPENTADIENE	330	330 U	UG/KG
HEXACHLOROETHANE	330	330 U	UG/KG
ISOPHORONE	330	330 U	UG/KG
2-METHYLNAPHTHALENE	670	670 U	UG/KG
4, 6-DINITRO-2-METHYLPHENOL	1300	1300 U	UG/KG

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : GTC Order # : 40505 Sample Matrix: SOIL/SEDIMENT
Date Received: Submission #: Percent Solid: 100.0

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/19/95			
DATE ANALYZED : 09/21/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
4-CHLORO-3-METHYLPHENOL	670	670 U	UG/KG
2-METHYLPHENOL	670	670 U	UG/KG
4-METHYLPHENOL	670	670 U	UG/KG
NAPHTHALENE	330	330 U	UG/KG
2-NITROANILINE	330	330 U	UG/KG
3-NITROANILINE	330	330 U	UG/KG
4-NITROANILINE	330	330 U	UG/KG
NITROBENZENE	330	330 U	UG/KG
2-NITROPHENOL	670	670 U	UG/KG
4-NITROPHENOL	1300	1300 U	UG/KG
N-NITROSODIMETHYLAMINE	330	330 U	UG/KG
N-NITROSODIPHENYLAMINE	330	330 U	UG/KG
DI-N-OCTYL PHTHALATE	330	330 U	UG/KG
PENTACHLOROPHENOL	1300	1300 U	UG/KG
PHENANTHRENE	330	330 U	UG/KG
PHENOL	670	670 U	UG/KG
4-BROMOPHENYL-PHENYLETHER	330	330 U	UG/KG
4-CHLOROPHENYL-PHENYLETHER	330	330 U	UG/KG
N-NITROSO-DI-N-PROPYLAMINE	330	330 U	UG/KG
PYRENE	330	330 U	UG/KG
1,2,4-TRICHLOROBENZENE	330	330 U	UG/KG
2,4,6-TRICHLOROPHENOL	670	670 U	UG/KG
2,4,5-TRICHLOROPHENOL	670	670 U	UG/KG

SURROGATE RECOVERIES

QC LIMITS

TERPHENYL-d14	(18 - 137 %)	89	%
NITROBENZENE-d5	(23 - 120 %)	72	%
PHENOL-d6	(24 - 113 %)	65	%
2-FLUOROBIPHENYL	(30 - 115 %)	85	%
2-FLUOROPHENOL	(25 - 121 %)	66	%
2,4,6-TRIBROMOPHENOL	(19 - 122 %)	81	%

GENERAL TESTING CORPORATION / CHAIN-OF-CUSTODY RECORD

710 Exchange Street 85 Trinity Place 435 Lawrence Bell Drive GTC Job. No. 9-179
 Rochester, NY 14608 Hackensack, NJ 07601 Amherst, NY 14221-7077 Client Project No. _____

Sample Origination & Shipping Information

Collection Site NEWELL COMPANY
 Address 05 DENSBURG NY
 Collector MICHAEL R ALAUCKAS Michael R Alauca
 Print Signature

Bottles Prepared by MRA HANSON, BENCH & LBS Rec'd by _____
 Bottles Shipped to Client via _____ Seal/Shipping # _____
 Samples Shipped via 4°C on ice / cozon Seal/Shipping # _____

Sample(s) Relinquished by:	Received by:	Date/Time
1. Sign <u>Michael R Alauca</u>	1. Sign <u>Tom Hastings</u>	<u>9/15/95</u>
for <u>Hanson, Bench, & LBS</u>	for <u>GTC</u>	<u>17:00</u>
2. Sign _____	2. Sign _____	<u>1/1</u>
for _____	for _____	<u>:</u>
3. Sign _____	3. Sign _____	<u>1/1</u>
for _____	for _____	<u>:</u>

Sample(s) Received in Laboratory by G M Yach 9/15/95 @ 17:00

	Client I.D. #	Sample Location	*	Analyte or Analyte Group(s) Required (see below for additional)	Sample Prep				Bottle Set(s) (see below)
	Lab #	Date/Time			Preserved	Filtered	Y	N	
1		SB-1 (4'-6')	S	STARS TABLE 2 VOCs/SUOCs		X		X	2- 4g. GLASS
	39764	9/15/95 :0910		8021/8270					
2		SB-8 (6'-8')	S	TCL VOCs 8260 RCRA METALS		X		X	1- 20g GLASS
	39769	9/15/95 :0955		6010/7020 CYANIDES 9012					1- 8g. GLASS
3		SB-2 (2.5'-5')	S	STARS TABLE 2 VOCs/SUOCs		X		X	2- 4g. GLASS
	39770	9/15/95 :1150		8021/8270					
4		/ / :							
5		/ / :							

Use Bottle No. for indicating type bottles used in each bottle set and fill in box with # of bottles used for each type.

Bottle No.	1	2	3	4	5	6	7	8	9	10	11
Bottle Type	40 ml Vial	Pint Glass	Qt. Glass	4 oz. Plastic	8 oz. Plastic	16 oz. Plastic	Qt. Pl.	Gal. Pl.	Steril. Pl.		
# of each											

Additional Analytes _____

Shaded area for Lab use only; bottom copy for client; maximum of 5 samples per page.

* Source Codes: Monitoring Well (W), Soil (S), Treatment Plant (T), Drinking Water (D), Leachate (L), Hazardous Waste (H), River or Stream (R), Pond (P), Industrial Discharge (I), (X), (Y).

GENERAL TESTING CORPORATION / CHAIN-OF-CUSTODY RECORD

710 Exchange Street 85 Trinity Place 435 Lawrence Bell Drive GTC Job. No. 9-179
 Rochester, NY 14608 Hackensack, NJ 07601 Amherst, NY 14221-7077 Client Project No. 4212

Sample Origination & Shipping Information

Collection Site NEWELL COMPANY
 Address OGDENSBURG NY
 Collector MICHAEL R ANLAUCKAS Michael R Anlauckas
 Print Signature

Bottles Prepared by MRA (BURBANK BACK LGS) Rec'd by _____
 Bottles Shipped to Client via FEDEX Seal/Shipping # _____
 Samples Shipped via 4°C ON ICE / COOLER Seal/Shipping # _____

Sample(s) Relinquished by:	Received by:	Date/Time
1. Sign <u>Michael R Anlauckas</u> for <u>BURBANK BACK LGS</u>	1. Sign <u>Tom Hastings</u> for <u>GTC</u>	9/15/95 17:00
2. Sign _____ for _____	2. Sign _____ for _____	1/1
3. Sign _____ for _____	3. Sign _____ for _____	1/1

Sample(s) Received in Laboratory by JK/Gard 9/15/95 @ 17:00

	Client I.D. #	Sample Location	*	Analyte or Analyte Group(s) Required (see below for additional)	Sample Prep		Bottle Set(s) (see below)
	Lab #	Date/Time			Preserved Y N	Filtered Y N	
1	MW-10	MW-10 (2'-4')	S	TCL VOCs 8260 RCRA METALS 6010/7000	X	X	1-4oz GLASS
	39699	9/13/95 : 1200		CHANGES 9012 TPH 418.1 TCL SVOCs 8270			2-8oz GLASS
2	SB-6	SB-6 (2'-4')	S	STATS TABLE 2 VOCs/SVOCs	X	X	2-4oz GLASS
	39759	9/14/95 : 0820		8021/8270			
3	MW-9	MW-9 (6'-8')	S	TCL VOCs 8260 RCRA METALS 6010/7000	X	X	1-4oz GLASS
	39702	9/14/95 : 1030		CHANGES 9012 TPH 418.1 TCL SVOCs 8270			2-8oz GLASS
4		SB-4 (6'-8')	S	STATS TABLE 2 VOCs/SVOCs	X	X	2-4oz GLASS
	39761	9/14/95 : 1605		8021/8270			
5		SB-5 (4'-6')	S	STATS TABLE 2 VOCs/SVOCs	X	X	2-4oz GLASS
	39763	9/14/95 : 1640		8021/8270			

Use Bottle No. for indicating type bottles used in each bottle set and fill in box with # of bottles used for each type.

Bottle No.	1	2	3	4	5	6	7	8	9	10	11
Bottle Type	40 ml Vial	Pint Glass	Qt. Glass	4 oz. Plastic	8 oz. Plastic	16 oz. Plastic	Qt. Pl.	Gal. Pl.	Steril. Pl.		
# of each											

Additional Analytes RUN TCL SVOCs ON MW-9 - MW-10 & SB-6
RUN TPH WITH QUICK TURN AROUND TIME

Shaded area for Lab use only; bottom copy for client; maximum of 5 samples per page.

* Source Codes: Monitoring Well (W), Soil (S), Treatment Plant (T), Drinking Water (D), Leachate (L), Hazardous Waste (H), River or Stream (R), Pond (P), Industrial Discharge (I). (X), (Y).



VOLATILE ORGANICS
METHOD 8260 TCL
Reported: 10/16/95

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL COMPANY-WATERS
Client Sample ID : MW-1

Date Sampled : 09/19/95 GTC Order # : 40133 Sample Matrix:WATER
Date Received: 09/20/95 Submission #: 9509000214 Analytical Run: 4003

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/25/95			
ANALYTICAL DILUTION: 1.0			
ACETONE	10	10 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(86 - 115)	94	%
TOLUENE-d8	(88 - 110)	102	%
DIBROMOFLUOROMETHANE	(86 - 118)	113	%



Reported: 10/16/95

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL COMPANY-WATERS
Client Sample ID : MW-1

Date Sampled : 09/19/95 GTC Order # : 40133 Sample Matrix: WATER
Date Received: 09/20/95 Submission #: 9509000214

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS					
ARSENIC	0.00500	0.00513	MG/L	10/06/95	1.0
BARIUM	0.0200	0.340	MG/L	10/09/95	1.0
CADMIUM	0.00500	0.00500 U	MG/L	10/09/95	1.0
CHROMIUM	0.0100	0.0602	MG/L	10/09/95	1.0
LEAD	0.0500	0.112	MG/L	10/09/95	1.0
MERCURY	0.000200	0.000542	MG/L	10/09/95	1.0
SELENIUM	0.00500	0.00500 U	MG/L	10/09/95	1.0
SILVER	0.0100	0.0100 U	MG/L	10/09/95	1.0
WET CHEMISTRY					
TOTAL CYANIDE	0.0100	0.0100 U	MG/L	10/02/95	1.0
TOTAL PETROLEUM HYDROCARBONS	0.500	0.575	MG/L	09/21/95	1.0



VOLATILE ORGANICS
METHOD 8260 TCL
Reported: 10/16/95

Blasland, Bouck & Lee, Inc.

Project Reference: NEWELL COMPANY-WATERS

Client Sample ID : MW-3

Date Sampled : 09/19/95 GTC Order # : 40136 Sample Matrix:WATER
Date Received: 09/20/95 Submission #: 9509000214 Analytical Run: 4005

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/26/95			
ANALYTICAL DILUTION: 1.0			
ACETONE	10	10 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	7.6	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(86 - 115)	111	%
TOLUENE-D8	(88 - 110)	107	%
DIBROMOFLUOROMETHANE	(86 - 118)	95	%



Reported: 10/16/95

Blasland, Bouck & Lee, Inc.

Project Reference: NEWELL COMPANY-WATERS

Client Sample ID : MW-3

Date Sampled : 09/19/95

GTC Order # : 40136

Sample Matrix: WATER

Date Received: 09/20/95

Submission #: 9509000214

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS					
ARSENIC	0.00500	0.00500 U	MG/L	10/06/95	1.0
BARIUM	0.0200	1.04	MG/L	10/09/95	1.0
CADMIUM	0.00500	0.0102	MG/L	10/09/95	1.0
CHROMIUM	0.0100	0.280	MG/L	10/09/95	1.0
LEAD	0.0500	0.225	MG/L	10/09/95	1.0
MERCURY	0.000200	0.000215	MG/L	10/09/95	1.0
SELENIUM	0.00500	0.00500 U	MG/L	10/09/95	1.0
SILVER	0.0100	0.0100 U	MG/L	10/09/95	1.0
WET CHEMISTRY					
TOTAL CYANIDE	0.0100	0.0100 U	MG/L	09/29/95	1.0
TOTAL PETROLEUM HYDROCARBONS	0.500	1.67	MG/L	09/21/95	1.0



VOLATILE ORGANICS
METHOD 8260 TCL
Reported: 10/16/95

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL COMPANY-WATERS
Client Sample ID : MW-5

Date Sampled : 09/19/95 GTC Order # : 40135 Sample Matrix:WATER
Date Received: 09/20/95 Submission #: 9509000214 Analytical Run: 4003

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/25/95			
ANALYTICAL DILUTION: 1.0			
ACETONE	10	24	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(86 - 115)	100	%
TOLUENE-D8	(88 - 110)	106	%
DIBROMOFLUOROMETHANE	(86 - 118)	107	%



Reported: 10/16/95

Blasland, Bouck & Lee, Inc.

Project Reference: NEWELL COMPANY-WATERS

Client Sample ID : MW-5

Date Sampled : 09/19/95

GTC Order # : 40135

Sample Matrix: WATER

Date Received: 09/20/95

Submission #: 9509000214

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS					
ARSENIC	0.00500	0.00500 U	MG/L	10/06/95	1.0
BARIUM	0.0200	0.272	MG/L	10/09/95	1.0
CADMIUM	0.00500	0.00500 U	MG/L	10/09/95	1.0
CHROMIUM	0.0100	0.0527	MG/L	10/09/95	1.0
LEAD	0.0500	0.0500 U	MG/L	10/09/95	1.0
MERCURY	0.000200	0.000200 U	MG/L	10/09/95	1.0
SELENIUM	0.00500	0.00500 U	MG/L	10/09/95	1.0
SILVER	0.0100	0.0100 U	MG/L	10/09/95	1.0
WET CHEMISTRY					
TOTAL CYANIDE	0.0100	0.0100 U	MG/L	10/02/95	1.0
TOTAL PETROLEUM HYDROCARBONS	0.500	1.32	MG/L	09/21/95	1.0



VOLATILE ORGANICS
METHOD 8260 TCL
Reported: 10/16/95

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL COMPANY-WATERS
Client Sample ID : MW-6

Date Sampled : 09/19/95 GTC Order # : 40134 Sample Matrix:WATER
Date Received: 09/20/95 Submission #: 9509000214 Analytical Run: 4003

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/25/95			
ANALYTICAL DILUTION: 1.0			
ACETONE	10	14	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES

QC LIMITS

4-BROMOFLUOROBENZENE	(86 - 115)	93	%
TOLUENE-D8	(88 - 110)	100	%
DIBROMOFLUOROMETHANE	(86 - 118)	114	%



Reported: 10/16/95

Blasland, Bouck & Lee, Inc.

Project Reference: NEWELL COMPANY-WATERS

Client Sample ID : MW-6

Date Sampled : 09/19/95

GTC Order # : 40134

Sample Matrix: WATER

Date Received: 09/20/95

Submission #: 9509000214

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS					
ARSENIC	0.00500	0.00756	MG/L	10/06/95	1.0
BARIUM	0.0200	0.540	MG/L	10/09/95	1.0
CADMIUM	0.00500	0.00500 U	MG/L	10/09/95	1.0
CHROMIUM	0.0100	0.125	MG/L	10/09/95	1.0
LEAD	0.0500	0.0500 U	MG/L	10/09/95	1.0
MERCURY	0.000200	0.000200 U	MG/L	10/09/95	1.0
SELENIUM	0.00500	0.00500 U	MG/L	10/09/95	1.0
SILVER	0.0100	0.0100 U	MG/L	10/09/95	1.0
WET CHEMISTRY					
TOTAL CYANIDE	0.0100	0.0100 U	MG/L	10/02/95	1.0
TOTAL PETROLEUM HYDROCARBONS	0.500	1.34	MG/L	09/21/95	1.0



VOLATILE ORGANICS
METHOD 8260 TCL
Reported: 10/16/95

Blasland, Bouck & Lee, Inc.

Project Reference: NEWELL COMPANY-WATERS

Client Sample ID : MW-7

Date Sampled : 09/19/95 GTC Order # : 40139 Sample Matrix:WATER
Date Received: 09/20/95 Submission #: 9509000214 Analytical Run: 4005

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/26/95			
ANALYTICAL DILUTION: 1.0			
ACETONE	10	14	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(86 - 115)	96	%
TOLUENE-D8	(88 - 110)	101	%
DIBROMOFLUOROMETHANE	(86 - 118)	111	%



Reported: 10/16/95

Blasland, Bouck & Lee, Inc.

Project Reference: NEWELL COMPANY-WATERS

Client Sample ID : MW-7

Date Sampled : 09/19/95

GTC Order # : 40139

Sample Matrix: WATER

Date Received: 09/20/95

Submission #: 9509000214

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS					
ARSENIC	0.00500	0.0496	MG/L	10/06/95	1.0
BARIUM	0.0200	0.691	MG/L	10/09/95	1.0
CADMIUM	0.00500	0.0193	MG/L	10/09/95	1.0
CHROMIUM	0.0100	0.354	MG/L	10/09/95	1.0
LEAD	0.0500	25.7	MG/L	10/09/95	1.0
MERCURY	0.000200	0.0186	MG/L	10/09/95	10.0
SELENIUM	0.00500	0.00892 S	MG/L	10/09/95	1.0
SILVER	0.0100	0.0100 U	MG/L	10/09/95	1.0
WET CHEMISTRY					
TOTAL CYANIDE	0.0100	0.0100 U	MG/L	09/29/95	1.0
TOTAL PETROLEUM HYDROCARBONS	0.500	0.538	MG/L	09/21/95	1.0



VOLATILE ORGANICS
METHOD 8260 TCL
Reported: 10/16/95

Blasland, Bouck & Lee, Inc.

Project Reference: NEWELL COMPANY-WATERS

Client Sample ID : MW-8

Date Sampled : 09/19/95 GTC Order # : 40138 Sample Matrix:WATER
Date Received: 09/20/95 Submission #: 9509000214 Analytical Run: 4003

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/26/95			
ANALYTICAL DILUTION: 1.0			
ACETONE	10	12	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES

QC LIMITS

4-BROMOFLUOROBENZENE	(86 - 115)	104	%
TOLUENE-D8	(88 - 110)	107	%
DIBROMOFLUOROMETHANE	(86 - 118)	101	%



EXTRACTABLE ORGANICS
METHOD 8270 SEMIVOLATILES
Reported: 10/16/95

Blasland, Bouck & Lee, Inc.

Project Reference: NEWELL COMPANY-WATERS

Client Sample ID : MW-8

Date Sampled : 09/19/95 GTC Order # : 40138

Sample Matrix:WATER

Date Received: 09/20/95 Submission #: 9509000214 Analytical Run: 3678

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/22/95			
DATE ANALYZED : 09/25/95			
ANALYTICAL DILUTION: 1.0			
ACENAPHTHENE	5.0	6.0	UG/L
ACENAPHTHYLENE	5.0	5.0 U	UG/L
ANTHRACENE	5.0	5.1	UG/L
BENZO (A) ANTHRACENE	5.0	9.2	UG/L
BENZO (A) PYRENE	5.0	9.9	UG/L
BENZO (B) FLUORANTHENE	5.0	10	UG/L
BENZO (G, H, I) PERYLENE	5.0	5.5	UG/L
BENZO (K) FLUORANTHENE	5.0	6.9	UG/L
BENZYL ALCOHOL	5.0	5.0 U	UG/L
BUTYL BENZYL PHTHALATE	5.0	5.0 U	UG/L
DI-N-BUTYLPHTHALATE	5.0	5.0 U	UG/L
CARBAZOLE	5.0	8.0	UG/L
INDENO (1, 2, 3-CD) PYRENE	5.0	5.0 U	UG/L
4-CHLOROANILINE	5.0	5.0 U	UG/L
BIS (-2-CHLOROETHOXY) METHANE	5.0	5.0 U	UG/L
BIS (2-CHLOROETHYL) ETHER	5.0	5.0 U	UG/L
2-CHLORONAPHTHALENE	5.0	5.0 U	UG/L
2-CHLOROPHENOL	10	10 U	UG/L
2, 2'-OXYBIS (1-CHLOROPROPANE)	5.0	5.0 U	UG/L
CHRYSENE	5.0	8.9	UG/L
DIBENZO (A, H) ANTHRACENE	5.0	5.0 U	UG/L
DIBENZOFURAN	5.0	5.0 U	UG/L
1, 3-DICHLOROBENZENE	5.0	5.0 U	UG/L
1, 2-DICHLOROBENZENE	5.0	5.0 U	UG/L
1, 4-DICHLOROBENZENE	5.0	5.0 U	UG/L
3, 3'-DICHLOROBENZIDINE	5.0	5.0 U	UG/L
2, 4-DICHLOROPHENOL	10	10 U	UG/L
DIETHYLPHTHALATE	5.0	5.0 U	UG/L
DIMETHYL PHTHALATE	5.0	5.0 U	UG/L
2, 4-DIMETHYLPHENOL	10	10 U	UG/L
2, 4-DINITROPHENOL	20	20 U	UG/L
2, 4-DINITROTOLUENE	5.0	5.0 U	UG/L
2, 6-DINITROTOLUENE	5.0	5.0 U	UG/L
BIS (2-ETHYLHEXYL) PHTHALATE	5.0	5.0 U	UG/L
FLUORANTHENE	5.0	20	UG/L
FLUORENE	5.0	6.5	UG/L
HEXACHLOROBENZENE	5.0	5.0 U	UG/L
HEXACHLOROBUTADIENE	5.0	5.0 U	UG/L
HEXACHLOROCYCLOPENTADIENE	5.0	5.0 U	UG/L
HEXACHLOROETHANE	5.0	5.0 U	UG/L
ISOPHORONE	5.0	5.0 U	UG/L
2-METHYLNAPHTHALENE	10	10 U	UG/L



EXTRACTABLE ORGANICS
METHOD 8270 SEMIVOLATILES
Reported: 10/16/95

Blasland, Bouck & Lee, Inc.

Project Reference: NEWELL COMPANY-WATERS

Client Sample ID : MW-8

Date Sampled : 09/19/95 GTC Order # : 40138 Sample Matrix:WATER
Date Received: 09/20/95 Submission #: 9509000214 Analytical Run: 3678

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/22/95			
DATE ANALYZED : 09/25/95			
ANALYTICAL DILUTION: 1.0			
4,6-DINITRO-2-METHYLPHENOL	20	20 U	UG/L
4-CHLORO-3-METHYLPHENOL	10	10 U	UG/L
2-METHYLPHENOL	10	10 U	UG/L
4-METHYLPHENOL	10	10 U	UG/L
NAPHTHALENE	5.0	7.7	UG/L
2-NITROANILINE	5.0	5.0 U	UG/L
3-NITROANILINE	5.0	5.0 U	UG/L
4-NITROANILINE	5.0	5.0 U	UG/L
NITROBENZENE	5.0	5.0 U	UG/L
2-NITROPHENOL	10	10 U	UG/L
4-NITROPHENOL	20	20 U	UG/L
N-NITROSODIMETHYLAMINE	5.0	5.0 U	UG/L
N-NITROSODIPHENYLAMINE	5.0	5.0 U	UG/L
DI-N-OCTYL PHTHALATE	5.0	5.0 U	UG/L
PENTACHLOROPHENOL	20	20 U	UG/L
PHENANTHRENE	5.0	21	UG/L
PHENOL	10	10 U	UG/L
4-BROMOPHENYL-PHENYLEETHER	5.0	5.0 U	UG/L
4-CHLOROPHENYL-PHENYLEETHER	5.0	5.0 U	UG/L
N-NITROSO-DI-N-PROPYLAMINE	5.0	5.0 U	UG/L
PYRENE	5.0	16	UG/L
1,2,4-TRICHLOROBENZENE	5.0	5.0 U	UG/L
2,4,6-TRICHLOROPHENOL	10	10 U	UG/L
2,4,5-TRICHLOROPHENOL	10	10 U	UG/L
SURROGATE RECOVERIES	QC LIMITS		
TERPHENYL-d14	(33 - 141)	39	%
NITROBENZENE-d5	(35 - 114)	68	%
PHENOL-d6	(10 - 94)	29	%
2-FLUOROBIPHENYL	(43 - 116)	53	%
2-FLUOROPHENOL	(21 - 110)	39	%
2,4,6-TRIBROMOPHENOL	(10 - 123)	63	%



Reported: 10/16/95

Blasland, Bouck & Lee, Inc.

Project Reference: NEWELL COMPANY-WATERS

Client Sample ID : MW-8

Date Sampled : 09/19/95

GTC Order # : 40138

Sample Matrix: WATER

Date Received: 09/20/95

Submission #: 9509000214

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS					
ARSENIC	0.00500	0.0274	MG/L	10/06/95	1.0
BARIUM	0.0200	3.14	MG/L	10/09/95	1.0
CADMIUM	0.00500	0.190	MG/L	10/09/95	1.0
CHROMIUM	0.0100	0.400	MG/L	10/09/95	1.0
LEAD	0.0500	2.35	MG/L	10/09/95	1.0
MERCURY	0.000200	0.00236	MG/L	10/09/95	1.0
SELENIUM	0.00500	0.0500 U	MG/L	10/10/95	10.0
SILVER	0.0100	0.0100 U	MG/L	10/09/95	1.0
WET CHEMISTRY					
TOTAL CYANIDE	0.0100	0.0270	MG/L	09/29/95	1.0
TOTAL PETROLEUM HYDROCARBONS	0.500	5.95	MG/L	09/21/95	1.0



VOLATILE ORGANICS
METHOD 8260 TCL
Reported: 10/16/95

Blasland, Bouck & Lee, Inc.

Project Reference: NEWELL COMPANY-WATERS

Client Sample ID : MW-9

Date Sampled : 09/19/95 GTC Order # : 40137 Sample Matrix:WATER
Date Received: 09/20/95 Submission #: 9509000214 Analytical Run: 4003

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/26/95			
ANALYTICAL DILUTION: 1.0			
ACETONE	10	23	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES

QC LIMITS

4-BROMOFLUOROBENZENE	(86 - 115)	107	%
TOLUENE-D8	(88 - 110)	107	%
DIBROMOFLUOROMETHANE	(86 - 118)	97	%



EXTRACTABLE ORGANICS
METHOD 8270 SEMIVOLATILES
Reported: 10/16/95

Blasland, Bouck & Lee, Inc.

Project Reference: NEWELL COMPANY-WATERS

Client Sample ID : MW-9

Date Sampled : 09/19/95 GTC Order # : 40137

Sample Matrix:WATER

Date Received: 09/20/95 Submission #: 9509000214 Analytical Run: 3678

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/22/95			
DATE ANALYZED : 09/25/95			
ANALYTICAL DILUTION: 1.0			
ACENAPHTHENE	5.0	5.0 U	UG/L
ACENAPHTHYLENE	5.0	5.0 U	UG/L
ANTHRACENE	5.0	5.0 U	UG/L
BENZO(A)ANTHRACENE	5.0	5.0 U	UG/L
BENZO(A)PYRENE	5.0	5.0 U	UG/L
BENZO(B)FLUORANTHENE	5.0	5.0 U	UG/L
BENZO(G,H,I)PERYLENE	5.0	5.0 U	UG/L
BENZO(K)FLUORANTHENE	5.0	5.0 U	UG/L
BENZYL ALCOHOL	5.0	5.0 U	UG/L
BUTYL BENZYL PHTHALATE	5.0	5.0 U	UG/L
DI-N-BUTYLPHTHALATE	5.0	5.0 U	UG/L
CARBAZOLE	5.0	5.0 U	UG/L
INDENO(1,2,3-CD)PYRENE	5.0	5.0 U	UG/L
4-CHLOROANILINE	5.0	5.0 U	UG/L
BIS(-2-CHLOROETHOXY)METHANE	5.0	5.0 U	UG/L
BIS(2-CHLOROETHYL)ETHER	5.0	5.0 U	UG/L
2-CHLORONAPHTHALENE	5.0	5.0 U	UG/L
2-CHLOROPHENOL	10	10 U	UG/L
2,2'-OXYBIS(1-CHLOROPROPANE)	5.0	5.0 U	UG/L
CHRYSENE	5.0	5.0 U	UG/L
DIBENZO(A,H)ANTHRACENE	5.0	5.0 U	UG/L
DIBENZOFURAN	5.0	5.0 U	UG/L
1,3-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,2-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,4-DICHLOROBENZENE	5.0	5.0 U	UG/L
3,3'-DICHLOROBENZIDINE	5.0	5.0 U	UG/L
2,4-DICHLOROPHENOL	10	10 U	UG/L
DIETHYLPHTHALATE	5.0	5.0 U	UG/L
DIMETHYL PHTHALATE	5.0	5.0 U	UG/L
2,4-DIMETHYLPHENOL	10	10 U	UG/L
2,4-DINITROPHENOL	20	20 U	UG/L
2,4-DINITROTOLUENE	5.0	5.0 U	UG/L
2,6-DINITROTOLUENE	5.0	5.0 U	UG/L
BIS(2-ETHYLHEXYL)PHTHALATE	5.0	5.0 U	UG/L
FLUORANTHENE	5.0	5.0 U	UG/L
FLUORENE	5.0	5.0 U	UG/L
HEXACHLOROBENZENE	5.0	5.0 U	UG/L
HEXACHLOROBUTADIENE	5.0	5.0 U	UG/L
HEXACHLOROCYCLOPENTADIENE	5.0	5.0 U	UG/L
HEXACHLOROETHANE	5.0	5.0 U	UG/L
ISOPHORONE	5.0	5.0 U	UG/L
2-METHYLNAPHTHALENE	10	10 U	UG/L



EXTRACTABLE ORGANICS
METHOD 8270 SEMIVOLATILES
Reported: 10/16/95

Blasland, Bouck & Lee, Inc.

Project Reference: NEWELL COMPANY-WATERS

Client Sample ID : MW-9

Date Sampled : 09/19/95 GTC Order # : 40137

Sample Matrix:WATER

Date Received: 09/20/95 Submission #: 9509000214 Analytical Run: 3678

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/22/95			
DATE ANALYZED : 09/25/95			
ANALYTICAL DILUTION: 1.0			
4,6-DINITRO-2-METHYLPHENOL	20	20 U	UG/L
4-CHLORO-3-METHYLPHENOL	10	10 U	UG/L
2-METHYLPHENOL	10	10 U	UG/L
4-METHYLPHENOL	10	10 U	UG/L
NAPHTHALENE	5.0	5.0 U	UG/L
2-NITROANILINE	5.0	5.0 U	UG/L
3-NITROANILINE	5.0	5.0 U	UG/L
4-NITROANILINE	5.0	5.0 U	UG/L
NITROBENZENE	5.0	5.0 U	UG/L
2-NITROPHENOL	10	10 U	UG/L
4-NITROPHENOL	20	20 U	UG/L
N-NITROSODIMETHYLAMINE	5.0	5.0 U	UG/L
N-NITROSODIPHENYLAMINE	5.0	5.0 U	UG/L
DI-N-OCTYL PHTHALATE	5.0	5.0 U	UG/L
PENTACHLOROPHENOL	20	20 U	UG/L
PHENANTHRENE	5.0	5.0 U	UG/L
PHENOL	10	10 U	UG/L
4-BROMOPHENYL-PHENYLETHER	5.0	5.0 U	UG/L
4-CHLOROPHENYL-PHENYLETHER	5.0	5.0 U	UG/L
N-NITROSO-DI-N-PROPYLAMINE	5.0	5.0 U	UG/L
PYRENE	5.0	5.0 U	UG/L
1,2,4-TRICHLOROBENZENE	5.0	5.0 U	UG/L
2,4,6-TRICHLOROPHENOL	10	10 U	UG/L
2,4,5-TRICHLOROPHENOL	10	10 U	UG/L

SURROGATE RECOVERIES

QC LIMITS

TERPHENYL-d14	(33 - 141)	39	%
NITROBENZENE-d5	(35 - 114)	73	%
PHENOL-d6	(10 - 94)	31	%
2-FLUOROBIPHENYL	(43 - 116)	64	%
2-FLUOROPHENOL	(21 - 110)	43	%
2,4,6-TRIBROMOPHENOL	(10 - 123)	71	%



Reported: 10/16/95

Blasland, Bouck & Lee, Inc.

Project Reference: NEWELL COMPANY-WATERS

Client Sample ID : MW-9

Date Sampled : 09/19/95

GTC Order # : 40137

Sample Matrix: WATER

Date Received: 09/20/95

Submission #: 9509000214

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS					
ARSENIC	0.00500	0.0151	MG/L	10/06/95	1.0
BARIUM	0.0200	5.38	MG/L	10/09/95	1.0
CADMIUM	0.00500	0.163	MG/L	10/09/95	1.0
CHROMIUM	0.0100	0.726	MG/L	10/09/95	1.0
LEAD	0.0500	7.10	MG/L	10/09/95	1.0
MERCURY	0.000200	0.00468	MG/L	10/09/95	1.0
SELENIUM	0.00500	0.0500 U	MG/L	10/10/95	10.0
SILVER	0.0100	0.0116	MG/L	10/09/95	1.0
WET CHEMISTRY					
TOTAL CYANIDE	0.0100	0.0207	MG/L	09/29/95	1.0
TOTAL PETROLEUM HYDROCARBONS	0.500	6.39	MG/L	09/21/95	1.0



VOLATILE ORGANICS
METHOD 8260 TCL
Reported: 10/16/95

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL COMPANY-WATERS
Client Sample ID : MW-10

Date Sampled : 09/19/95 GTC Order # : 40140 Sample Matrix:WATER
Date Received: 09/20/95 Submission #: 9509000214 Analytical Run: 4005

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/26/95			
ANALYTICAL DILUTION: 1.0			
ACETONE	10	46	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(86 - 115)	102	%
TOLUENE-D8	(88 - 110)	102	%
DIBROMOFLUOROMETHANE	(86 - 118)	105	%



Reported: 10/16/95

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL COMPANY-WATERS
Client Sample ID : MW-10

Date Sampled : 09/19/95 GTC Order # : 40140 Sample Matrix: WATER
Date Received: 09/20/95 Submission #: 9509000214

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS					
ARSENIC	0.00500	0.00638	MG/L	10/06/95	1.0
BARIUM	0.0200	2.35	MG/L	10/09/95	1.0
CADMIUM	0.00500	0.0157	MG/L	10/09/95	1.0
CHROMIUM	0.0100	0.606	MG/L	10/09/95	1.0
LEAD	0.0500	1.74	MG/L	10/09/95	1.0
MERCURY	0.000200	0.00146	MG/L	10/09/95	1.0
SELENIUM	0.00500	0.0287 S	MG/L	10/09/95	1.0
SILVER	0.0100	0.0100 U	MG/L	10/09/95	1.0
WET CHEMISTRY					
TOTAL CYANIDE	0.0100	0.0200 U	MG/L	09/29/95	2.0
TOTAL PETROLEUM HYDROCARBONS	0.500	0.500 U	MG/L	09/21/95	1.0



VOLATILE ORGANICS
METHOD 8260 TCL
Reported: 10/16/95

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL COMPANY-WATERS
Client Sample ID : SUMP #1

Date Sampled : 09/19/95 GTC Order # : 40141 Sample Matrix:WATER
Date Received: 09/20/95 Submission #: 9509000214 Analytical Run: 4003

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/25/95			
ANALYTICAL DILUTION: 1.0			
ACETONE	10	16	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(86 - 115)	98	%
TOLUENE-D8	(88 - 110)	105	%
DIBROMOFLUOROMETHANE	(86 - 118)	100	%



EXTRACTABLE ORGANICS
METHOD 8270 SEMIVOLATILES
Reported: 10/16/95

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL COMPANY-WATERS
Client Sample ID : SUMP #1

Date Sampled : 09/19/95 GTC Order # : 40141 Sample Matrix:WATER
Date Received: 09/20/95 Submission #: 9509000214 Analytical Run: 3678

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/22/95			
DATE ANALYZED : 09/25/95			
ANALYTICAL DILUTION: 10.0			
ACENAPHTHENE	5.0	50 U	UG/L
ACENAPHTHYLENE	5.0	50 U	UG/L
ANTHRACENE	5.0	50 U	UG/L
BENZO (A) ANTHRACENE	5.0	50 U	UG/L
BENZO (A) PYRENE	5.0	50 U	UG/L
BENZO (B) FLUORANTHENE	5.0	50 U	UG/L
BENZO (G, H, I) PERYLENE	5.0	50 U	UG/L
BENZO (K) FLUORANTHENE	5.0	50 U	UG/L
BENZYL ALCOHOL	5.0	50 U	UG/L
BUTYL BENZYL PHTHALATE	5.0	50 U	UG/L
DI-N-BUTYLPHTHALATE	5.0	50 U	UG/L
CARBAZOLE	5.0	50 U	UG/L
INDENO (1, 2, 3-CD) PYRENE	5.0	50 U	UG/L
4-CHLOROANILINE	5.0	50 U	UG/L
BIS (-2-CHLOROETHOXY) METHANE	5.0	50 U	UG/L
BIS (2-CHLOROETHYL) ETHER	5.0	50 U	UG/L
2-CHLORONAPHTHALENE	5.0	50 U	UG/L
2-CHLOROPHENOL	10	100 U	UG/L
2, 2'-OXYBIS (1-CHLOROPROPANE)	5.0	50 U	UG/L
CHRYSENE	5.0	50 U	UG/L
DIBENZO (A, H) ANTHRACENE	5.0	50 U	UG/L
DIBENZOFURAN	5.0	50 U	UG/L
1, 3-DICHLOROBENZENE	5.0	50 U	UG/L
1, 2-DICHLOROBENZENE	5.0	50 U	UG/L
1, 4-DICHLOROBENZENE	5.0	50 U	UG/L
3, 3'-DICHLOROBENZIDINE	5.0	50 U	UG/L
2, 4-DICHLOROPHENOL	10	100 U	UG/L
DIETHYLPHTHALATE	5.0	50 U	UG/L
DIMETHYL PHTHALATE	5.0	50 U	UG/L
2, 4-DIMETHYLPHENOL	10	100 U	UG/L
2, 4-DINITROPHENOL	20	200 U	UG/L
2, 4-DINITROTOLUENE	5.0	50 U	UG/L
2, 6-DINITROTOLUENE	5.0	50 U	UG/L
BIS (2-ETHYLHEXYL) PHTHALATE	5.0	50 U	UG/L
FLUORANTHENE	5.0	50 U	UG/L
FLUORENE	5.0	50 U	UG/L
HEXACHLOROBENZENE	5.0	50 U	UG/L
HEXACHLOROBUTADIENE	5.0	50 U	UG/L
HEXACHLOROCYCLOPENTADIENE	5.0	50 U	UG/L
HEXACHLOROETHANE	5.0	50 U	UG/L
ISOPHORONE	5.0	50 U	UG/L
2-METHYLNAPHTHALENE	10	100 U	UG/L



EXTRACTABLE ORGANICS
METHOD 8270 SEMIVOLATILES
Reported: 10/16/95

Blasland, Bouck & Lee, Inc.

Project Reference: NEWELL COMPANY-WATERS

Client Sample ID : SUMP #1

Date Sampled : 09/19/95 GTC Order # : 40141 Sample Matrix: WATER
Date Received: 09/20/95 Submission #: 9509000214 Analytical Run: 3678

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/22/95			
DATE ANALYZED : 09/25/95			
ANALYTICAL DILUTION: 10.0			
4,6-DINITRO-2-METHYLPHENOL	20	200 U	UG/L
4-CHLORO-3-METHYLPHENOL	10	100 U	UG/L
2-METHYLPHENOL	10	100 U	UG/L
4-METHYLPHENOL	10	100 U	UG/L
NAPHTHALENE	5.0	50 U	UG/L
2-NITROANILINE	5.0	50 U	UG/L
3-NITROANILINE	5.0	50 U	UG/L
4-NITROANILINE	5.0	50 U	UG/L
NITROBENZENE	5.0	50 U	UG/L
2-NITROPHENOL	10	100 U	UG/L
4-NITROPHENOL	20	200 U	UG/L
N-NITROSODIMETHYLAMINE	5.0	50 U	UG/L
N-NITROSODIPHENYLAMINE	5.0	50 U	UG/L
DI-N-OCTYL PHTHALATE	5.0	50 U	UG/L
PENTACHLOROPHENOL	20	200 U	UG/L
PHENANTHRENE	5.0	50 U	UG/L
PHENOL	10	100 U	UG/L
4-BROMOPHENYL-PHENYLETHER	5.0	50 U	UG/L
4-CHLOROPHENYL-PHENYLETHER	5.0	50 U	UG/L
N-NITROSO-DI-N-PROPYLAMINE	5.0	50 U	UG/L
PYRENE	5.0	50 U	UG/L
1,2,4-TRICHLOROBENZENE	5.0	50 U	UG/L
2,4,6-TRICHLOROPHENOL	10	100 U	UG/L
2,4,5-TRICHLOROPHENOL	10	100 U	UG/L

SURROGATE RECOVERIES

QC LIMITS

TERPHENYL-d14	(33 - 141)	91	%
NITROBENZENE-d5	(35 - 114)	76	%
PHENOL-d6	(10 - 94)	30	%
2-FLUOROBIPHENYL	(43 - 116)	85	%
2-FLUOROPHENOL	(21 - 110)	45	%
2,4,6-TRIBROMOPHENOL	(10 - 123)	76	%



EXTRACTABLE ORGANICS
METHOD 8080 PCB'S
Reported: 10/16/95

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL COMPANY-WATERS
Client Sample ID : SUMP #1

Date Sampled : 09/19/95 GTC Order # : 40141 Sample Matrix:WATER
Date Received: 09/20/95 Submission #: 9509000214 Analytical Run: 3693

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/21/95			
DATE ANALYZED : 09/25/95			
ANALYTICAL DILUTION: 1.0			
PCB 1016	0.50	0.50 U	UG/L
PCB 1221	0.50	0.50 U	UG/L
PCB 1232	0.50	0.50 U	UG/L
PCB 1242	0.50	0.50 U	UG/L
PCB 1248	0.50	0.50 U	UG/L
PCB 1254	0.50	0.50 U	UG/L
PCB 1260	0.50	0.50 U	UG/L
SURROGATE RECOVERIES		QC LIMITS	
TETRACHLORO-META-XYLENE	(60 - 150)	136	%



Reported: 10/16/95

Blasland, Bouck & Lee, Inc.

Project Reference: NEWELL COMPANY-WATERS

Client Sample ID : SUMP #1

Date Sampled : 09/19/95

GTC Order # : 40141

Sample Matrix: WATER

Date Received: 09/20/95

Submission #: 9509000214

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS					
ARSENIC	0.00500	0.00500 U	MG/L	10/06/95	1.0
BARIUM	0.0200	0.0222	MG/L	10/09/95	1.0
CADMIUM	0.00500	0.00500 U	MG/L	10/09/95	1.0
CHROMIUM	0.0100	0.0100 U	MG/L	10/09/95	1.0
LEAD	0.0500	0.0931	MG/L	10/09/95	1.0
MERCURY	0.000200	0.000326	MG/L	10/09/95	1.0
SELENIUM	0.00500	0.00500 U	MG/L	10/09/95	1.0
SILVER	0.0100	0.0100 U	MG/L	10/09/95	1.0
WET CHEMISTRY					
TOTAL CYANIDE	0.0100	0.0100 U	MG/L	09/29/95	1.0
TOTAL PETROLEUM HYDROCARBONS	0.500	155	MG/L	09/21/95	10.0

GENERAL TESTING CORPORATION

Reported: 10/06/95

Blasland, Bouck & Lee, Inc.

Project Reference: NEWELL COMPANY-WATERS

Client Sample ID : SUMP #1

Date Sampled : 09/19/95

GTC Order # : 40141

Sample Matrix: WATER

Date Received: 09/20/95

Submission #: 9509000214

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
TOTAL CYANIDE	0.0100	0.0100 U	MG/L	09/29/95	1.0
TOTAL PETROLEUM HYDROCARBONS	0.500	155	MG/L	09/21/95	10.0



VOLATILE ORGANICS
METHOD 8260 TCL
Reported: 10/16/95

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL COMPANY-WATERS
Client Sample ID : GW-WELL

Date Sampled : 09/19/95 GTC Order # : 40142 Sample Matrix:WATER
Date Received: 09/20/95 Submission #: 9509000214 Analytical Run: 4005

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/26/95			
ANALYTICAL DILUTION: 1.0			
ACETONE	10	10 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(86 - 115)	104	%
TOLUENE-D8	(88 - 110)	104	%
DIBROMOFLUOROMETHANE	(86 - 118)	107	%



EXTRACTABLE ORGANICS
METHOD 8080 PCB'S
Reported: 10/16/95

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL COMPANY-WATERS
Client Sample ID : GW-WELL

Date Sampled : 09/19/95 GTC Order # : 40142 Sample Matrix: WATER
Date Received: 09/20/95 Submission #: 9509000214 Analytical Run: 3693

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/21/95			
DATE ANALYZED : 09/25/95			
ANALYTICAL DILUTION: 1.0			
PCB 1016	0.50	0.50 U	UG/L
PCB 1221	0.50	0.50 U	UG/L
PCB 1232	0.50	0.50 U	UG/L
PCB 1242	0.50	0.50 U	UG/L
PCB 1248	0.50	0.50 U	UG/L
PCB 1254	0.50	0.50 U	UG/L
PCB 1260	0.50	0.50 U	UG/L

<u>SURROGATE RECOVERIES</u>	<u>QC LIMITS</u>		
TETRACHLORO-META-XYLENE	(60 - 150)	96	%



Reported: 10/16/95

Blasland, Bouck & Lee, Inc.
Project Reference: NEWELL COMPANY-WATERS
Client Sample ID : GW-WELL

Date Sampled : 09/19/95
Date Received: 09/20/95

GTC Order # : 40142
Submission #: 9509000214

Sample Matrix: WATER

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
METALS					
ARSENIC	0.00500	0.00500 U	MG/L	10/06/95	1.0
BARIUM	0.0200	0.179	MG/L	10/09/95	1.0
CADMIUM	0.00500	0.00500 U	MG/L	10/09/95	1.0
CHROMIUM	0.0100	0.0100 U	MG/L	10/09/95	1.0
LEAD	0.0500	0.0500 U	MG/L	10/09/95	1.0
MERCURY	0.000200	0.000200 U	MG/L	10/09/95	1.0
SELENIUM	0.00500	0.00500 U	MG/L	10/09/95	1.0
SILVER	0.0100	0.0100 U	MG/L	10/09/95	1.0
WET CHEMISTRY					
TOTAL CYANIDE	0.0100	0.0167 U	MG/L	09/29/95	1.7
TOTAL PETROLEUM HYDROCARBONS	0.500	0.500 U	MG/L	09/21/95	1.0

General
Testing
Corporation

VOLATILE ORGANICS
METHOD 8260 TCL
Reported: 10/16/95

Blasland, Bouck & Lee, Inc.

Project Reference: NEWELL COMPANY-WATERS

Client Sample ID : TRIP BLANK

Date Sampled : 09/19/95 GTC Order # : 40143 Sample Matrix:WATER
Date Received: 09/20/95 Submission #: 9509000214 Analytical Run: 4003

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/25/95			
ANALYTICAL DILUTION: 1.0			
ACETONE	10	10 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(86 - 115)	89	%
TOLUENE-D8	(88 - 110)	100	%
DIBROMOFLUOROMETHANE	(86 - 118)	114	%

General Testing Corporation



A FULL SERVICE ENVIRONMENTAL LABORATORY

October 16, 1995

Mr. Richard Gahagan
Blasland, Bouck & Lee, Inc.
30 Corporate Woods, Suite 160
Rochester, NY 14623

RE: NEWELL COMPANY-WATERS
Submission #:9509000214

Dear Mr. Gahagan:

Enclosed are the analytical results of the analyses requested. The analytical data was provided to you on 09/21/95 per a Facsimile transmittal. All data has been reviewed prior to report submission.

Should you have any questions please contact me at 454-3760.

Thank you for letting us provide this service.

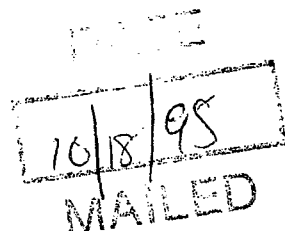
Sincerely,

GENERAL TESTING CORPORATION

Janice Jaeger

Janice Jaeger
Project Manager

Enc.



This package has been reviewed by General Testing Corporation's QA Department/Laboratory Director prior to report submittal. *MP 10/17/95*

710 Exchange Street • Rochester, NY 14608 • Tele:(716)454-3760 • Fax:(716)454-1245
85 Trinity Place • Hackensack, NJ 07601 • Tele:(201)488-5242 • Fax:(201)488-6386
435 Lawrence Bell Drive • Amherst, NY 14421 • Tele:(716)634-0454 • Fax:(716)634-9019

Effective 05/09/95

GTC LIST OF QUALIFIERS

(The basis of this proposal are the EPA-CLP Qualifiers)

- U - Indicates compound was analyzed for but was not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.
- J - Indicates an estimated value. For further explanation see case narrative / cover letter.
- B - This flag is used when the analyte is found in the associated blank as well as in the sample.
- E - This flag identifies compounds whose concentrations exceed the calibration range.
- A - This flag indicates that a TIC is a suspected aldol-condensation product.
- N - Spiked sample recovery not within control limits.
(Flag the entire batch - Inorganic analysis only)
- * - Duplicate analysis not within control limits.
(Flag the entire batch - Inorganic analysis only)
 - Also used to qualify Organics QC data outside limits.
- D - Spike diluted out.
- S - Reported value determined by Method of Standard Additions. (MSA)
- X - As specified in the case narrative.

GTC Lab ID # for State Certifications

NY ID # in Rochester: 10145
NY ID # in Hackensack: 10801
NY ID # in Massachusetts: M-NY032

NJ ID # in Rochester: 73331
NJ ID # in Hackensack: 02317

CASE NARRATIVE

COMPANY: Blasland Bouck Engineers, P.C.

Newell Co.

SUBMISSION #: 9509000214

BBE water samples were collected on 9/19/95 and received at GTC on 9/20/95 in good condition at a cooler temperature of 2.5 C.

INORGANIC ANALYSIS

Ten water samples analyzed for RCRA metals. All metals except Mercury were analyzed using SW-846 method 6010. Mercury was analyzed using CVAA method 7470. These sample was also analyzed for Total Cyanide by SW-846 method 9012 and TPH by EPA method 418.1.

No analytical or QC problems were encountered.

VOLATILE ORGANICS

Ten water samples and a Trip Blank were analyzed for Target Compound List (TCL) of volatile organics using SW-846 method 8260.

The tuning criteria for BFB were all within QC limits.

The initial and continuing calibration criteria were met for all analytes.

All surrogate standard recoveries were within acceptance limits for the TCL analysis.

No analytical or QC problems were encountered.

SEMIVOLATILE ORGANICS

Water samples MW-9, MW-8, and Sump #1 were analyzed for Target Compound List (TCL) of semivolatile organics using SW-846 method 8270. These sample were chosen for analysis due to the levels of TPH encountered by method 418.1.

The tuning criteria for DFTPP were all within QC limits.

The initial and continuing calibration criteria were met for all analytes.

The Surrogate Standard recoveries for all samples were within QC limits.

The TCL sample extract for Sump #1 was analyzed at 1/10 dilution due to matrix interferences from non-target anytes.

No other analytical or QC problems were encountered.

PCB ANALYSIS

Water samples GW-Well and Sump #1 were analyzed for Target Compound List of PCBs by SW-846 method 8080.

All initial and continuing calibration criteria were met.

The surrogate standard recoveries for TCMX were within QC limits.

The Laboratory Blanks were free from contamination.

No analytical or QC problems were encountered.

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : GTC Order # : 43967 Sample Matrix:WATER
Date Received: Submission #: Analytical Run: 4003

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/25/95			
ANALYTICAL DILUTION: 1.0			
ACETONE	10	10 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES

QC LIMITS

4-BROMOFLUOROBENZENE	(86 - 115)	88	%
TOLUENE-D8	(88 - 110)	99	%
DIBROMOFLUOROMETHANE	(86 - 118)	118	%



VOLATILE ORGANICS
METHOD 8260 TCL
Reported: 10/16/95

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : GTC Order # : 43986 Sample Matrix: WATER
Date Received: Submission #: Analytical Run: 4005

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/26/95			
ANALYTICAL DILUTION: 1.0			
ACETONE	10	10 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES

QC LIMITS

4-BROMOFLUOROBENZENE	(86 - 115)	97	%
TOLUENE-D8	(88 - 110)	99	%
DIBROMOFLUOROMETHANE	(86 - 118)	110	%



EXTRACTABLE ORGANICS
METHOD 8270 SEMIVOLATILES
Reported: 10/16/95

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : GTC Order # : 40883 Sample Matrix:WATER
Date Received: Submission #: Analytical Run: 3678

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/22/95			
DATE ANALYZED : 09/25/95			
ANALYTICAL DILUTION: 1.0			
ACENAPHTHENE	5.0	5.0 U	UG/L
ACENAPHTHYLENE	5.0	5.0 U	UG/L
ANTHRACENE	5.0	5.0 U	UG/L
BENZO (A) ANTHRACENE	5.0	5.0 U	UG/L
BENZO (A) PYRENE	5.0	5.0 U	UG/L
BENZO (B) FLUORANTHENE	5.0	5.0 U	UG/L
BENZO (G, H, I) PERYLENE	5.0	5.0 U	UG/L
BENZO (K) FLUORANTHENE	5.0	5.0 U	UG/L
BENZYL ALCOHOL	5.0	5.0 U	UG/L
BUTYL BENZYL PHTHALATE	5.0	5.0 U	UG/L
DI-N-BUTYLPHTHALATE	5.0	5.0 U	UG/L
CARBAZOLE	5.0	5.0 U	UG/L
INDENO (1, 2, 3-CD) PYRENE	5.0	5.0 U	UG/L
4-CHLOROANILINE	5.0	5.0 U	UG/L
BIS (-2-CHLOROETHOXY) METHANE	5.0	5.0 U	UG/L
BIS (2-CHLOROETHYL) ETHER	5.0	5.0 U	UG/L
2-CHLORONAPHTHALENE	5.0	5.0 U	UG/L
2-CHLOROPHENOL	10	10 U	UG/L
2, 2'-OXYBIS (1-CHLOROPROPANE)	5.0	5.0 U	UG/L
CHRYSENE	5.0	5.0 U	UG/L
DIBENZO (A, H) ANTHRACENE	5.0	5.0 U	UG/L
DIBENZOFURAN	5.0	5.0 U	UG/L
1, 3-DICHLOROBENZENE	5.0	5.0 U	UG/L
1, 2-DICHLOROBENZENE	5.0	5.0 U	UG/L
1, 4-DICHLOROBENZENE	5.0	5.0 U	UG/L
3, 3'-DICHLOROBENZIDINE	5.0	5.0 U	UG/L
2, 4-DICHLOROPHENOL	10	10 U	UG/L
DIETHYLPHTHALATE	5.0	5.0 U	UG/L
DIMETHYL PHTHALATE	5.0	5.0 U	UG/L
2, 4-DIMETHYLPHENOL	10	10 U	UG/L
2, 4-DINITROPHENOL	20	20 U	UG/L
2, 4-DINITROTOLUENE	5.0	5.0 U	UG/L
2, 6-DINITROTOLUENE	5.0	5.0 U	UG/L
BIS (2-ETHYLHEXYL) PHTHALATE	5.0	5.0 U	UG/L
FLUORANTHENE	5.0	5.0 U	UG/L
FLUORENE	5.0	5.0 U	UG/L
HEXACHLOROBENZENE	5.0	5.0 U	UG/L
HEXACHLOROBUTADIENE	5.0	5.0 U	UG/L
HEXACHLOROCYCLOPENTADIENE	5.0	5.0 U	UG/L
HEXACHLOROETHANE	5.0	5.0 U	UG/L
ISOPHORONE	5.0	5.0 U	UG/L
2-METHYLNAPHTHALENE	10	10 U	UG/L
4, 6-DINITRO-2-METHYLPHENOL	20	20 U	UG/L



EXTRACTABLE ORGANICS
METHOD 8270 SEMIVOLATILES
Reported: 10/16/95

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : GTC Order # : 40883 Sample Matrix:WATER
Date Received: Submission #: Analytical Run: 3678

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/22/95			
DATE ANALYZED : 09/25/95			
ANALYTICAL DILUTION: 1.0			
4-CHLORO-3-METHYLPHENOL	10	10 U	UG/L
2-METHYLPHENOL	10	10 U	UG/L
4-METHYLPHENOL	10	10 U	UG/L
NAPHTHALENE	5.0	5.0 U	UG/L
2-NITROANILINE	5.0	5.0 U	UG/L
3-NITROANILINE	5.0	5.0 U	UG/L
4-NITROANILINE	5.0	5.0 U	UG/L
NITROBENZENE	5.0	5.0 U	UG/L
2-NITROPHENOL	10	10 U	UG/L
4-NITROPHENOL	20	20 U	UG/L
N-NITROSODIMETHYLAMINE	5.0	5.0 U	UG/L
N-NITROSODIPHENYLAMINE	5.0	5.0 U	UG/L
DI-N-OCTYL PHTHALATE	5.0	5.0 U	UG/L
PENTACHLOROPHENOL	20	20 U	UG/L
PHENANTHRENE	5.0	5.0 U	UG/L
PHENOL	10	10 U	UG/L
4-BROMOPHENYL-PHENYLEETHER	5.0	5.0 U	UG/L
4-CHLOROPHENYL-PHENYLEETHER	5.0	5.0 U	UG/L
N-NITROSO-DI-N-PROPYLAMINE	5.0	5.0 U	UG/L
PYRENE	5.0	5.0 U	UG/L
1,2,4-TRICHLOROBENZENE	5.0	5.0 U	UG/L
2,4,6-TRICHLOROPHENOL	10	10 U	UG/L
2,4,5-TRICHLOROPHENOL	10	10 U	UG/L

SURROGATE RECOVERIES

QC LIMITS

TERPHENYL-d14	(33 - 141)	89	%
NITROBENZENE-d5	(35 - 114)	84	%
PHENOL-d6	(10 - 94)	34	%
2-FLUOROBIPHENYL	(43 - 116)	86	%
2-FLUOROPHENOL	(21 - 110)	48	%
2,4,6-TRIBROMOPHENOL	(10 - 123)	90	%

GENERAL TESTING CORPORATION / CHAIN-OF-CUSTODY RECORD

710 Exchange Street 85 Trinity Place
Rochester, NY 14608 Hackensack, NJ 07601

435 Lawrence Bell Drive
Amherst, NY 14221-7077

GTC Job No. 4/4
Client Project No. 9-214

Sample Origination & Shipping Information

Collection Site NEWELL

Address MCINNSBURG NY

Collector MICHAEL R. ALANCHAN NY

Print BLOSLAND, BEVER & CO

State NY Zip 14221

Signature Michael R. Alanchan

Bottles Prepared by WLS (BBL)

Rec'd by _____

Bottles Shipped to Client via _____

Seal/Shipping # _____

Samples Shipped via _____

Seal/Shipping # _____

Sample(s) Relinquished by

Received by:

Date/Time

1. Sign <u>Michael R. Alanchan</u>	1. Sign <u>[Signature]</u>	9/20/95
for <u>BLOSLAND, BEVER & CO</u>	for <u>GTC</u>	10:00
2. Sign _____	2. Sign _____	1/1
for _____	for _____	:
3. Sign _____	3. Sign _____	1/1
for _____	for _____	:

Sample(s) Received in Laboratory by

JA Ryan 9/20/95 @ 10:00

Client I.D. # Lab #	Sample Location Date/Time	*	Analyte or Analyte Group(s) Required (see below for additional)	Sample Preserved		Prep Filtered		Bottle Set(s) (see below)
				Y	N	Y	N	
1 40133	MMW-1 9/19/95:1130	W	TCL VOCs 8260 PCBs METALS 6010/7070 CYANIDES 9012 TPH 418.1 TCL SDCs 8270	X		X		2-40mL VIALS 2-QT Amber 3-4Ltr Amber GLASS
2 40134	MMW-6 9/19/95:1700	W	"	X		X		"
3 40135	MMW-5 9/19/95:1815	W	"	X		X		"
4	/ / :							
5	/ / :							

Use Bottle No. for indicating type bottles used in each bottle set and fill in box with # of bottles used for each type.

Bottle No.	1	2	3	4	5	6	7	8	9	10	11
Bottle Type	40 ml Vial	Pint Glass	Qt. Glass	4 oz. Plastic	8 oz. Plastic	16 oz. Plastic	Qt. Pl.	Gal. Pl.	Steril. Pl.		
# of each											

Additional Analytes ANALYZE TPH (418.1) BEFORE ANALYZING TCL
SOCs (8270) ; HOLD SDCs 8270

Shaded area for Lab use only; bottom copy for client; maximum of 5 samples per page.

* Source Codes: Monitoring Well (W), Soil (S), Treatment Plant (T), Drinking Water (D), Leachate (L), Hazardous Waste (H),

GENERAL TESTING CORPORATION / CHAIN-OF-CUSTODY RECORD

710 Exchange Street 85 Trinity Place 435 Lawrence Bell Drive GTC Job No. 214
 Rochester, NY 14608 Hackensack, NJ 07601 Amherst, NY 14221-7077 Client Project No. 9-214

Sample Origination & Shipping Information

Collection Site NEWELL
 Address 06000SBURG NY
 Street City State Zip
 Collector MICHAEL R. ALANCHAS Michael R. Alanchas
 Print Signature

Bottles Prepared by WRA (BB-L) Rec'd by _____
 Bottles Shipped to Client via _____ Seal/Shipping # _____
 Samples Shipped via _____ Seal/Shipping # _____

Sample(s) Relinquished by:

1. Sign	Received by:	Date/Time
<u>Michael R. Alanchas</u>	<u>[Signature]</u>	<u>9/20/95</u>
for <u>WASTWATER, BENCIL & LEE</u>	for <u>WTL</u>	<u>10:00</u>
2. Sign	2. Sign	<u>1 1</u>
for	for	<u>:</u>
3. Sign	3. Sign	<u>1 1</u>
for	for	<u>:</u>

Sample(s) Received in Laboratory by OK/Regan 9/20/95 @ 10:00

	Client I.D. #	Sample Location	*	Analyte or Analyte Group(s) Required (see below for additional)	Sample Preserved		Sample Filtered		Bottle Set(s) (see below)
	Lab #	Date/Time			Y	N	Y	N	
1		MW-3	W	TCL VOCs 8260 ACRA METALS 6010/7000	X		X		2- 40 mL VIALS 2- 8T PLASTIC
	40136	9/18/95 : 1800		CYANIDE 335.2/335.3 TPH 418.1 TCL VOCs 8260					3- 1 LT AMBER GLASS
2		MW-9	W	SAME	X		X		"
	40137	9/18/95 : 1830							
3		MW-8	W	SAME	X		X		"
	40138	9/19/95 : 0700							
4		MW-7	W	SAME	X		X		"
	40139	9/19/95 : 0810							
5		TP-1	S	TCL VOCs 8260 ACRA METALS 6010/7000	X		X		1- 403 GLASS
		9/19/95 : 1050		CYANIDE 3012					1- 803 GLASS

Use Bottle No. for indicating type bottles used in each bottle set and fill in box with # of bottles used for each type.

Bottle No.	1	2	3	4	5	6	7	8	9	10	11
Bottle Type	40 ml Vial	Pint Glass	Qt. Glass	4 oz. Plastic	8 oz. Plastic	16 oz. Plastic	Qt. Pl.	Gal. Pl.	Steril. Pl.		
# of each											

Additional Analytes ANALYZE TPH PERFORM ANALYSIS SVOCs 8270
(SAME SVOCs 8270)

Shaded area for Lab use only; bottom copy for client; maximum of 5 samples per page.

* Source Codes: Monitoring Well (W), Soil (S), Treatment Plant (T), Drinking Water (D), Leachate (L), Hazardous Waste (H).

GENERAL TESTING CORPORATION / CHAIN-OF-CUSTODY RECORD

710 Exchange Street 85 Trinity Place 435 Lawrence Bell Drive GTC Job. No. 1/4
 Rochester, NY 14608 Hackensack, NJ 07601 Amherst, NY 14221-7077 Client Project No. 9-2410

Sample Origination & Shipping Information

Collection Site NEWELL
 Address COBENS BURG
 Collector Michael R. Arlauckas State NY Zip 14221
 Print BLANDS, BOULDER & LEE Signature Michael R. Arlauckas

Bottles Prepared by WNA (BBLL) Rec'd by _____
 Bottles Shipped to Client via _____ Seal/Shipping # _____
 Samples Shipped via (1) Seal/Shipping # _____

Sample(s) Relinquished by:	Received by:	Date/Time
1. Sign <u>Michael R. Arlauckas</u>	1. Sign <u>[Signature]</u>	9/20/95
for <u>BLANDS, BOULDER & LEE</u>	for <u>CTC</u>	10:00
2. Sign _____	2. Sign _____	1/1
for _____	for _____	:
3. Sign _____	3. Sign _____	1/1
for _____	for _____	:

Sample(s) Received in Laboratory by Dr. J. Gardner 9/20/95 @ 10:00

Client I.D. #	Sample Location	* Analyte or Analyte Group(s) Required (see below for additional)	Sample Prep Preserved Filtered	Bottle Set(s) (see below)
Lab #	Date/Time		Y N Y N	
1	NW-6 (9-11)	TCL VOCs 8260 RCRA METALS 6010/7000	X	2 - 4oz GLASS
	9-19/95 : 0930	CYANIDES 335.2/335.3 TPH 418.1 TDC 1900 TCL SVOCs 8270		2 - 8oz GLASS
2	WW-8 (2-4)	TCL VOCs 8260 RCRA METALS 6010/7000	X	2 - 4oz GLASS
	9/18/95 : 1000	CYANIDES 335.2/335.3 TPH 418.1 TDC 1900 TCL SVOCs 8270		2 - 8oz GLASS
3	SB-3 (2-4)	TCL PCBs	X	1 4oz GLASS
	9/18/95 : 1610	8080		2
4	SB-9 (4-6)	TCL PCBs	X	1 4oz GLASS
	9/18/95 : 1640	8080		
5	WW-10	TCL VOCs 8260 RCRA METALS 6010/7000 CYANIDES 335.2/335.3		2 - 40mL VIALS 2 - QT. PLASTIC
40140	9/18/95 : 1530	TPH 418.1 TCL SVOCs 8270	X	3 - 1LT. AMBER GLASS

Use Bottle No. for indicating type bottles used in each bottle set and fill in box with # of bottles used for each type.

Bottle No.	1	2	3	4	5	6	7	8	9	10	11
Bottle Type	40 ml Vial	Pint Glass	Qt. Glass	4 oz. Plastic	8 oz. Plastic	16 oz. Plastic	Qt. Pl.	Gal. Pl.	Steril. Pl.		
# of each											

Additional Analytes * DO TPH ANALYSIS BEFORE DOING TCL SVOCs
8270 ; HOLD TCL SVOCs 8270

Shaded area for Lab use only; bottom copy for client; maximum of 5 samples per page.

* Source Codes: Monitoring Well (W), Soil (S), Treatment Plant (T), Drinking Water (D), Leachate (L), Hazardous Waste (H),

GENERAL TESTING CORPORATION / CHAIN-OF-CUSTODY RECORD

710 Exchange Street 85 Trinity Place
Rochester, NY 14608 Hackensack, NJ 07601

435 Lawrence Bell Drive
Amherst, NY 14221-7077

GTC Job No. 3/4
Client Project No. 9-214

Sample Origination & Shipping Information

Collection Site MSWELL

Address ADAMSBURG NY

Collector MICHAEL R. ANASTUCKIS
Print

State NY
Signature Michael R. Anastuckis Zip

Bottles Prepared by MRA (BBCL)

Bottles Shipped to Client via

Samples Shipped via

Rec'd by

Seal/Shipping #

Seal/Shipping #

Sample(s) Relinquished by:

1. Sign Michael R. Anastuckis
for BUSLAND, BARK & LBS
2. Sign
for
3. Sign
for

Received by:

1. Sign [Signature]
for ETC
2. Sign
for
3. Sign
for

Date/Time

9/20/95
10:00
11
11
11
11

Sample(s) Received in Laboratory by

[Signature]

9/20/95 @ 10:00

Client I.D. #	Sample Location	*	Analyte or Analyte Group(s) Required (see below for additional)	Sample Prep Preserved Y N Filtered Y N	Bottle Set(s) (see below)
Lab #	Date/Time				
1	Sump H1	W	TCL VOCs 8260 RCRA METALS 6010/7000 CYANIDES 9012 TPH 418.1 TCL SVOCs 8270	X	2 - 40mL VIALS 2 - 0.5 PTASIC 4 - 1/2 AMBER GLASS
2	GW - WELL	W	"	X	"
3	MW - 5 (8-10)	S	TCL VOCs 8260 RCRA METALS 6010/7000 CYANIDES 9012 TPH 418.1/9060 TCL SVOCs 8270	X	2 - 4oz. GLASS 2 - 8oz. GLASS
4	MW - 7 (4-6)	S	TCL VOCs 8260 RCRA METALS 6010/7000 CYANIDES 9012 TPH 418.1 TCL SVOCs 8270	X	1 4oz. GLASS 1 - 8oz GLASS
5	TRIP BLANK	W	TCL VOCs 8260	X	2 - 40mL VIALS

Use Bottle No. for indicating type bottles used in each bottle set and fill in box with # of bottles used for each type.

Bottle No.	1	2	3	4	5	6	7	8	9	10	11
Bottle Type	40 ml Vial	Pint Glass	Qt. Glass	4 oz. Plastic	8 oz. Plastic	16 oz. Plastic	Qt. Pl.	Gal. Pl.	Steril. Pl.		
# of each											

Additional Analytes ANALYZES TPH BEFORE ANALYZING SVOCs 8270
(SAVES SVOCs 8270)

Shaded area for Lab use only; bottom copy for client; maximum of 5 samples per page.

* Source Codes: Monitoring Well (W), Soil (S), Treatment Plant (T), Drinking Water (D), Leachate (L), Hazardous Waste (H),

General Testing Corporation

A FULL SERVICE ENVIRONMENTAL LABORATORY

October 18, 1995

Mr. Richard Gahagan
Blasland, Bouck & Lee, Inc.
30 Corporate Woods, Suite 160
Rochester, NY 14623

RE: NEWELL COMPANY-SOILS
Submission #:9509000222

Dear Mr. Gahagan:

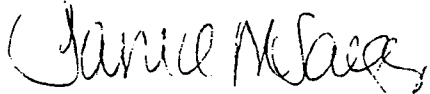
Enclosed are the analytical results of the analyses requested. The analytical data was provided to you on 09/21/95 per a Facsimile transmittal. All data has been reviewed prior to report submission.

Should you have any questions please contact me at 454-3760.

Thank you for letting us provide this service.

Sincerely,

GENERAL TESTING CORPORATION



Janice Jaeger
Project Manager

Enc.

DATE

10/20/95
MAILED

This package has been reviewed by General Testing Corporation's QA Department/Laboratory Director prior to report submittal. *MP 10/20/95*

710 Exchange Street • Rochester, NY 14608 • Tele:(716)454-3760 • Fax:(716)454-1245
85 Trinity Place • Hackensack, NJ 07601 • Tele:(201)488-5242 • Fax:(201)488-6386
435 Lawrence Bell Drive • Amherst, NY 14421 • Tele:(716)634-0454 • Fax:(716)634-9019

GTC LIST OF QUALIFIERS

(The basis of this proposal are the EPA-CLP Qualifiers)

- U - Indicates compound was analyzed for but was not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.
- J - Indicates an estimated value. For further explanation see case narrative / cover letter.
- B - This flag is used when the analyte is found in the associated blank as well as in the sample.
- E - This flag identifies compounds whose concentrations exceed the calibration range.
- A - This flag indicates that a TIC is a suspected aldol-condensation product.
- N - Spiked sample recovery not within control limits.
(Flag the entire batch - Inorganic analysis only)
- * - Duplicate analysis not within control limits.
(Flag the entire batch - Inorganic analysis only)
 - Also used to qualify Organics QC data outside limits.
- D - Spike diluted out.
- S - Reported value determined by Method of Standard Additions. (MSA)
- X - As specified in the case narrative.

GTC Lab ID # for State Certifications

NY ID # in Rochester: 10145
NY ID # in Hackensack: 10801
NY ID # in Massachusetts: M-NY032

NJ ID # in Rochester: 73331
NJ ID # in Hackensack: 02317



CASE NARRATIVE

COMPANY: Blasland, Bouck, & Lee, Inc.
Newell Co.

SUBMISSION #: 9509000222

BBL soil samples were collected on 9/19/95 and 9/19/95 and received at GTC on 9/20/95 in good condition at a cooler temperature of 2.5 C.

INORGANIC ANALYSIS

Five soil samples were analyzed for RCRA metals using SW-846 method 6010 except Mercury was analyzed using CVAA method 7470. These samples were also analyzed for Total Cyanide by SW-846 method 9012. Three samples were also analyzed for TPH by EPA method 418.1 and TOC using the Walkley-Black titration procedure.

No analytical or QC problems were encountered.

VOLATILE ORGANICS

Five soil samples were analyzed for Target Compound List (TCL) of volatile organics using SW-846 method 8260.

The tuning criteria for BFB were all within QC limits.

The initial and continuing calibration criteria were met for all analytes.

All surrogate standard recoveries were within acceptance limits except for Bromofluorobenzene on samples MW-8 and MW-7. These two samples were reanalyzed and the original results were confirmed and flagged with an "***"

No other analytical or QC problems were encountered.

SEMIVOLATILE ORGANICS

Four soil samples were analyzed for Target Compound List (TCL) of semivolatile organics using SW-846 method 8270.

The tuning criteria for DFTPP were all within QC limits.

The initial and continuing calibration criteria were met for all analytes.

The Surrogate Standard recoveries for all samples were within QC limits except 2-Fluorobiphenyl on sample MW-8. The surrogate recovery was flagged with an "***".

Sample MW-8 was analyzed at 1/10 dilution due to matrix interferences from non-target analytes.

PCB ANALYSIS

Two soil samples, SB-3 and SB-9 were analyzed for Target Compound List of PCBs by SW-846 method 8080.

All initial and continuing calibration criteria were met.

The surrogate standard recoveries for TCMX were within QC limits.

The Laboratory Blanks were free from contamination.

No analytical or QC problems were encountered.

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : GTC Order # : 44110 Sample Matrix: SOIL/SEDIMENT
Date Received: Submission #: Percent Solid: 100.0

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/20/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
ACETONE	10	10 U	UG/KG
BENZENE	5.0	5.0 U	UG/KG
BROMODICHLOROMETHANE	5.0	5.0 U	UG/KG
BROMOFORM	5.0	5.0 U	UG/KG
BROMOMETHANE	5.0	5.0 U	UG/KG
2-BUTANONE (MEK)	10	10 U	UG/KG
CARBON DISULFIDE	10	10 U	UG/KG
CARBON TETRACHLORIDE	5.0	5.0 U	UG/KG
CHLOROBENZENE	5.0	5.0 U	UG/KG
CHLOROETHANE	5.0	5.0 U	UG/KG
CHLOROFORM	5.0	5.0 U	UG/KG
CHLOROMETHANE	5.0	5.0 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/KG
1,1-DICHLOROETHANE	5.0	5.0 U	UG/KG
1,2-DICHLOROETHANE	5.0	5.0 U	UG/KG
1,1-DICHLOROETHENE	5.0	5.0 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/KG
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/KG
ETHYLBENZENE	5.0	5.0 U	UG/KG
2-HEXANONE	10	10 U	UG/KG
METHYLENE CHLORIDE	5.0	5.0 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/KG
STYRENE	5.0	5.0 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/KG
TETRACHLOROETHENE	5.0	5.0 U	UG/KG
TOLUENE	5.0	5.0 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/KG
TRICHLOROETHENE	5.0	5.0 U	UG/KG
VINYL CHLORIDE	5.0	5.0 U	UG/KG
O-XYLENE	5.0	5.0 U	UG/KG
M+P-XYLENE	5.0	5.0 U	UG/KG

SURROGATE RECOVERIES

QC LIMITS

4-BROMOFLUOROBENZENE	(74 - 121 %)	97	%
TOLUENE-D8	(81 - 117 %)	98	%
DIBROMOFLUOROMETHANE	(80 - 120 %)	112	%

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : GTC Order # : 44111 Sample Matrix: SOIL/SEDIMENT
Date Received: Submission #: Percent Solid: 100.0

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 09/21/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
ACETONE	10	10 U	UG/KG
BENZENE	5.0	5.0 U	UG/KG
BROMODICHLOROMETHANE	5.0	5.0 U	UG/KG
BROMOFORM	5.0	5.0 U	UG/KG
BROMOMETHANE	5.0	5.0 U	UG/KG
2-BUTANONE (MEK)	10	10 U	UG/KG
CARBON DISULFIDE	10	10 U	UG/KG
CARBON TETRACHLORIDE	5.0	5.0 U	UG/KG
CHLOROBENZENE	5.0	5.0 U	UG/KG
CHLOROETHANE	5.0	5.0 U	UG/KG
CHLOROFORM	5.0	5.0 U	UG/KG
CHLOROMETHANE	5.0	5.0 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/KG
1,1-DICHLOROETHANE	5.0	5.0 U	UG/KG
1,2-DICHLOROETHANE	5.0	5.0 U	UG/KG
1,1-DICHLOROETHENE	5.0	5.0 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/KG
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/KG
ETHYLBENZENE	5.0	5.0 U	UG/KG
2-HEXANONE	10	10 U	UG/KG
METHYLENE CHLORIDE	5.0	5.0 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/KG
STYRENE	5.0	5.0 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/KG
TETRACHLOROETHENE	5.0	5.0 U	UG/KG
TOLUENE	5.0	5.0 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/KG
TRICHLOROETHENE	5.0	5.0 U	UG/KG
VINYL CHLORIDE	5.0	5.0 U	UG/KG
O-XYLENE	5.0	5.0 U	UG/KG
M+P-XYLENE	5.0	5.0 U	UG/KG

SURROGATE RECOVERIES

QC LIMITS

4-BROMOFLUOROBENZENE	(74 - 121 %)	96	%
TOLUENE-D8	(81 - 117 %)	100	%
DIBROMOFLUOROMETHANE	(80 - 120 %)	98	%

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : GTC Order # : 40779 Sample Matrix: SOIL/SEDIMENT
Date Received: Submission #: Percent Solid: 100.0

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/22/95			
DATE ANALYZED : 09/22/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
4-CHLORO-3-METHYLPHENOL	670	670 U	UG/KG
2-METHYLPHENOL	670	670 U	UG/KG
4-METHYLPHENOL	670	670 U	UG/KG
NAPHTHALENE	330	330 U	UG/KG
2-NITROANILINE	330	330 U	UG/KG
3-NITROANILINE	330	330 U	UG/KG
4-NITROANILINE	330	330 U	UG/KG
NITROBENZENE	330	330 U	UG/KG
2-NITROPHENOL	670	670 U	UG/KG
4-NITROPHENOL	1300	1300 U	UG/KG
N-NITROSODIMETHYLAMINE	330	330 U	UG/KG
N-NITROSODIPHENYLAMINE	330	330 U	UG/KG
DI-N-OCTYL PHTHALATE	330	330 U	UG/KG
PENTACHLOROPHENOL	1300	1300 U	UG/KG
PHENANTHRENE	330	330 U	UG/KG
PHENOL	670	670 U	UG/KG
4-BROMOPHENYL-PHENYLETHER	330	330 U	UG/KG
4-CHLOROPHENYL-PHENYLETHER	330	330 U	UG/KG
N-NITROSO-DI-N-PROPYLAMINE	330	330 U	UG/KG
PYRENE	330	330 U	UG/KG
1,2,4-TRICHLOROBENZENE	330	330 U	UG/KG
2,4,6-TRICHLOROPHENOL	670	670 U	UG/KG
2,4,5-TRICHLOROPHENOL	670	670 U	UG/KG

SURROGATE RECOVERIES

QC LIMITS

TERPHENYL-d14	(18 - 137 %)	67	%
NITROBENZENE-d5	(23 - 120 %)	85	%
PHENOL-d6	(24 - 113 %)	77	%
2-FLUOROBIPHENYL	(30 - 115 %)	80	%
2-FLUOROPHENOL	(25 - 121 %)	75	%
2,4,6-TRIBROMOPHENOL	(19 - 122 %)	71	%

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : GTC Order # : 40779 Sample Matrix: SOIL/SEDIMENT
Date Received: Submission #: Percent Solid: 100.0

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/22/95			
DATE ANALYZED : 09/22/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
ACENAPHTHENE	330	330 U	UG/KG
ACENAPHTHYLENE	330	330 U	UG/KG
ANTHRACENE	330	330 U	UG/KG
BENZO (A) ANTHRACENE	330	330 U	UG/KG
BENZO (A) PYRENE	330	330 U	UG/KG
BENZO (B) FLUORANTHENE	330	330 U	UG/KG
BENZO (G, H, I) PERYLENE	330	330 U	UG/KG
BENZO (K) FLUORANTHENE	330	330 U	UG/KG
BENZYL ALCOHOL	330	330 U	UG/KG
BUTYL BENZYL PHTHALATE	330	330 U	UG/KG
DI-N-BUTYLPHTHALATE	330	330 U	UG/KG
CARBAZOLE	330	330 U	UG/KG
INDENO (1, 2, 3-CD) PYRENE	330	330 U	UG/KG
4-CHLOROANILINE	330	330 U	UG/KG
BIS (-2-CHLOROETHOXY) METHANE	330	330 U	UG/KG
BIS (2-CHLOROETHYL) ETHER	330	330 U	UG/KG
2-CHLORONAPHTHALENE	330	330 U	UG/KG
2-CHLOROPHENOL	670	670 U	UG/KG
2, 2'-OXYBIS (1-CHLOROPROPANE)	330	330 U	UG/KG
CHRYSENE	330	330 U	UG/KG
DIBENZO (A, H) ANTHRACENE	330	330 U	UG/KG
DIBENZOFURAN	330	330 U	UG/KG
1, 3-DICHLOROBENZENE	330	330 U	UG/KG
1, 2-DICHLOROBENZENE	330	330 U	UG/KG
1, 4-DICHLOROBENZENE	330	330 U	UG/KG
3, 3'-DICHLOROBENZIDINE	330	330 U	UG/KG
2, 4-DICHLOROPHENOL	670	670 U	UG/KG
DIETHYLPHTHALATE	330	330 U	UG/KG
DIMETHYL PHTHALATE	330	330 U	UG/KG
2, 4-DIMETHYLPHENOL	670	670 U	UG/KG
2, 4-DINITROPHENOL	1300	1300 U	UG/KG
2, 4-DINITROTOLUENE	330	330 U	UG/KG
2, 6-DINITROTOLUENE	330	330 U	UG/KG
BIS (2-ETHYLHEXYL) PHTHALATE	330	330 U	UG/KG
FLUORANTHENE	330	330 U	UG/KG
FLUORENE	330	330 U	UG/KG
HEXACHLOROBENZENE	330	330 U	UG/KG
HEXACHLOROBUTADIENE	330	330 U	UG/KG
HEXACHLOROCYCLOPENTADIENE	330	330 U	UG/KG
HEXACHLOROETHANE	330	330 U	UG/KG
ISOPHORONE	330	330 U	UG/KG
2-METHYLNAPHTHALENE	670	670 U	UG/KG
4, 6-DINITRO-2-METHYLPHENOL	1300	1300 U	UG/KG

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : GTC Order # : 41075 Sample Matrix: SOIL/SEDIMENT
Date Received: Submission #: Percent Solid: 100.0

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 09/21/95			
DATE ANALYZED : 09/25/95			Dry Weight
ANALYTICAL DILUTION: 1.0			
PCB 1016	17	17 U	UG/KG
PCB 1221	17	17 U	UG/KG
PCB 1232	17	17 U	UG/KG
PCB 1242	17	17 U	UG/KG
PCB 1248	17	17 U	UG/KG
PCB 1254	17	17 U	UG/KG
PCB 1260	17	17 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
TETRACHLORO-META-XYLENE	(60 - 150 %)	113	%

GENERAL TESTING CORPORATION / CHAIN-OF-CUSTODY RECORD

10 Exchange Street 85 Trinity Place 435 Lawrence Bell Drive GTC Job. No. 9-222 1/4
 Rochester, NY 14608 Hackensack, NJ 07601 Amherst, NY 14221-7077 Client Project No. _____

Sample Origination & Shipping Information

Collection Site NEWELL
 Address OSBORN BURG NY
 Street City State Zip
 Collector MICHAEL R. ARLAUCKAS Michael R. Arlauckas
 Print BLASLAND, BOUCK & LEE Signature

Bottles Prepared by MRS (RBL) Rec'd by _____
 Bottles Shipped to Client via _____ Seal/Shipping # _____
 Samples Shipped via _____ Seal/Shipping # _____

Sample(s) Relinquished by:		Received by:		Date/Time
Sign <u>Michael R. Arlauckas</u>		1. Sign <u>[Signature]</u>		<u>9/20/95</u>
for <u>BLASLAND, BOUCK & LEE</u>		for <u>GTC</u>		<u>10:00</u>
Sign _____		2. Sign _____		<u>/ /</u>
for _____		for _____		<u>/ /</u>
Sign _____		3. Sign _____		<u>/ /</u>
for _____		for _____		<u>/ /</u>

Sample(s) Received in Laboratory by [Signature] 9/20/95 @ 10:00

Client I.D. # Lab #	Sample Location Date/Time	*	Analyte or Analyte Group(s) Required (see below for additional)	Sample Prep				Bottle Set(s) (see below)
				Preserved	Y	N	Filtered	
	<u>MW-6 (9-11')</u>	<u>S</u>	<u>TCL VOCs 8260</u> <u>PCMT METALS 6010/7000</u>		<u>X</u>		<u>X</u>	<u>2 - 400 GLASS</u>
<u>10207</u>	<u>9/19/95 :0930</u>		<u>CYANIDES 335.2/1335.2</u> <u>TPH 418.1</u> <u>TOC/9000</u> <u>TCL SVOCs 8270</u>					<u>2 - 800 GLASS</u>
	<u>MW-8 (2-4')</u>	<u>S</u>	<u>TCL VOCs 8260</u> <u>PCMT METALS 6010/7000</u>		<u>X</u>		<u>X</u>	<u>2 - 400 GLASS</u>
<u>10209</u>	<u>9/18/95 :1000</u>		<u>CYANIDES 9002</u> <u>TPH 418.1</u> <u>TCL SVOCs 8270</u>					<u>2 - 800 GLASS</u>
	<u>SB-3 (2-4')</u>	<u>S</u>	<u>TCL PCBs</u>		<u>X</u>		<u>X</u>	<u>1 400 GLASS</u>
<u>10212</u>	<u>9/18/95 :1640</u>		<u>8080</u>					<u>2</u>
	<u>SB-9 (4-6')</u>	<u>S</u>	<u>TCL PCBs</u>		<u>X</u>		<u>X</u>	<u>1 400 GLASS</u>
<u>10213</u>	<u>9/18/95 :1640</u>		<u>8080</u>					
	<u>MW-10</u>	<u>W</u>	<u>TCL VOCs 8260</u> <u>PCMT METALS 6010/7000</u> <u>CYANIDES 335.2/1335.2</u>					<u>2 - 400 mL VIALS</u> <u>2 - QT. PLASTIC</u>
	<u>9/18/95 :1530</u>		<u>TPH 418.1</u> <u>TCL SVOCs 8270</u>	<u>X</u>			<u>X</u>	<u>3 - 1LT. AMBER GLASS</u>

Bottle No. for indicating type bottles used in each bottle set and fill in box with # of bottles used for each type.

Bottle No.	1	2	3	4	5	6	7	8	9	10	11
Bottle Type	40 ml Vial	Pint Glass	Qt. Glass	4 oz. Plastic	8 oz. Plastic	16 oz. Plastic	Qt. Pl.	Gal. Pl.	Steril. Pl.		
# of each											

Additional Analytes * DO TPH ANALYSIS BEING DONE TCL SVOCs
8270 ; HOLD TCL SVOCs 8270

Shaded area for Lab use only; bottom copy for client; maximum of 5 samples per page.

* Source Codes: Monitoring Well (W), Soil (S), Treatment Plant (T), Drinking Water (D), Leachate (L), Hazardous Waste (H), River or Stream (R), Pond (P), Industrial Discharge (I), _____(X), _____(Y).

GENERAL TESTING CORPORATION / CHAIN-OF-CUSTODY RECORD

2/4'

710 Exchange Street 85 Trinity Place 435 Lawrence Bell Drive GTC Job. No. _____
 Rochester, NY 14608 Hackensack, NJ 07601 Amherst, NY 14221-7077 Client Project No. 9-226

Sample Origination & Shipping Information

Collection Site NEWELL
 Address OSBORNESBURG NY
 Street City State
 Collector MICHAEL R. ALANCHAS Michael R. Alanchas Zip
 Print Signature

Bottles Prepared by MRS. (BBEL) Rec'd by _____
 Bottles Shipped to Client via _____ Seal/Shipping # _____
 Samples Shipped via _____ Seal/Shipping # _____

Sample(s) Relinquished by:	Received by:	Date/Time
1. Sign <u>Michael R. Alanchas</u>	1. Sign <u>[Signature]</u>	<u>9/20/95</u>
for <u>ROSLAND, PAUL LEE</u>	for <u>GTL</u>	<u>10:00</u>
2. Sign _____	2. Sign _____	<u>1/1</u>
for _____	for _____	<u>:</u>
3. Sign _____	3. Sign _____	<u>1/1</u>
for _____	for _____	<u>:</u>

Sample(s) Received in Laboratory by JH Gardner 9/20/95 @ 10:00

Client I.D. #	Sample Location	*	Analyte or Analyte Group(s) Required (see below for additional)	Sample Prep				Bottle Set(s) (see below)
	Lab #			Date/Time	Preserved	Filtered		
				Y	N	Y	N	
1	MW-3	W	TCL VOCs 8260 ACRS METALS 6010/7090 CYANIDE 335-7/335-3	X		X		2- 40 mL VIALS 2- QT PLASTIC
	9/18/95 : 1800		TPH 418.1 TCL SVOCs 8270					3- 1 LT AMBER GLASS
2	MW-9	W	SAME	X		X		"
	9/18/95 : 1830							
3	MW-8	W	SAME	X		X		"
	9/19/95 : 0700							
4	MW-7	W	SAME	X		X		"
	9/19/95 : 0810							
5	TP-1	S	TCL VOCs 8260 ACRS METALS 6010/7090 CYANIDE 9012	X		X		1- 4oz. GLASS
	40206 9/19/95 : 1000							1- 8oz. GLASS

Use Bottle No. for indicating type bottles used in each bottle set and fill in box with # of bottles used for each type.

Bottle No.	1	2	3	4	5	6	7	8	9	10	11
Bottle Type	40 ml Vial	Pint Glass	Qt. Glass	4 oz. Plastic	8 oz. Plastic	16 oz. Plastic	Qt. Pl.	Gal. Pl.	Steril. Pl.		
# of each											

Additional Analytes ANALYZE TPH BEFORE ANALYZING SVOCs 8270
(SAME SVOCs 8270)

Shaded area for Lab use only; bottom copy for client; maximum of 5 samples per page.

* Source Codes: Monitoring Well (W), Soil (S), Treatment Plant (T), Drinking Water (D), Leachate (L), Hazardous Waste (H), River or Stream (R), Pond (P), Industrial Discharge (I), _____(X), _____(Y).

GENERAL TESTING CORPORATION / CHAIN-OF-CUSTODY RECORD

710 Exchange Street 85 Trinity Place
Rochester, NY 14608 Hackensack, NJ 07601

435 Lawrence Bell Drive
Amherst, NY 14221-7077

GTC Job. No. 9-332
Client Project No. _____

Sample Origination & Shipping Information

Collection Site MSWELL
Address 06000 BUREN NY
Street City State Zip
Collector MICHAEL R. ANASTASAKIS Michael R. Anastasakis
Print Signature

Bottles Prepared by MRS (RBB/L) Rec'd by _____
Bottles Shipped to Client via _____ Seal/Shipping # _____
Samples Shipped via _____ Seal/Shipping # _____

Sample(s) Relinquished by:

1. Sign	Received by:	Date/Time
for <u>Michael R. Anastasakis</u>	1. Sign <u>[Signature]</u>	<u>9/20/95</u>
for <u>BURNSIDE, PARK & LGE</u>	for <u>GTC</u>	<u>10:00</u>
2. Sign	2. Sign	<u>1/1</u>
for	for	<u>:</u>
3. Sign	3. Sign	<u>1/1</u>
for	for	<u>:</u>

Sample(s) Received in Laboratory by

DA/29 Gardner 9/20/95 @ 10:00

Client I.D. #	Sample Location	*	Analyte or Analyte Group(s) Required (see below for additional)	Sample Prep Preserved Y N	Sample Prep Filtered Y N	Bottle Set(s) (see below)
Lab #	Date/Time					
1	<u>Sump #1</u>	<u>W</u>	<u>TCL VOCs 8260</u> <u>PCRA METALS 6010/7000</u> <u>CYANIDES 9012</u>	<u>X</u>	<u>X</u>	<u>2 - 40mL VIALS</u> <u>2 - 05 PLASTIC</u>
	<u>9/19/95 : 1230</u>		<u>TCL PCBs 8080</u> <u>TPH 418.1</u> <u>TCL SVOCs 8270</u>			<u>4 - 1/2 AMBER GLASS</u>
2	<u>GW - WELL</u>	<u>W</u>	<u>"</u>	<u>X</u>	<u>X</u>	<u>"</u>
	<u>9/19/95 : 1245</u>					
3	<u>MW-5 (8-10)</u>	<u>S</u>	<u>TCL VOCs 8260</u> <u>PCRA METALS 6010/7000</u> <u>CYANIDES 9012</u>	<u>X</u>	<u>X</u>	<u>2 - 40g. GLASS</u>
<u>40214</u>	<u>9/19/95 : 1420</u>		<u>TPH / TOC 418.1/9060</u> <u>TCL SVOCs 8270</u>			<u>2 - 80g. GLASS</u>
4	<u>MW-7 (4-6)</u>	<u>S</u>	<u>TCL VOCs 8260</u> <u>PCRA METALS 6010/7000</u> <u>CYANIDES 9012</u>	<u>X</u>	<u>X</u>	<u>1 40g. GLASS</u>
<u>40215</u>	<u>9/18/95 : 1320</u>		<u>TPH 418.1</u> <u>TCL SVOCs 8270</u>			<u>1 - 80g GLASS</u>
5	<u>TRIP BLANK</u>	<u>W</u>	<u>TCL VOCs 8260</u>	<u>X</u>	<u>X</u>	<u>2 - 40mL VIALS</u>
	<u>/ /</u>					

Use Bottle No. for indicating type bottles used in each bottle set and fill in box with # of bottles used for each type.

Bottle No.	1	2	3	4	5	6	7	8	9	10	11
Bottle Type	40 ml Vial	Pint Glass	Qt. Glass	4 oz. Plastic	8 oz. Plastic	16 oz. Plastic	Qt. Pl.	Gal. Pl.	Steril. Pl.		
# of each											

Additional Analytes ANALYZE TPH BUTANE ANALYZING SVOCs 8270
(SAVE SVOCs 8270)

Shaded area for Lab use only; bottom copy for client; maximum of 5 samples per page.

* Source Codes: Monitoring Well (W), Soil (S), Treatment Plant (T), Drinking Water (D), Leachate (L), Hazardous Waste (H), River or Stream (R), Pond (P), Industrial Discharge (I), _____ (X), _____ (Y).

Appendix G

Phase III ESA Report, Blasland, Bouck & Lee, Inc., October 1996

*Phase III Environmental
Site Assessment
Joanna/Crown Home
Furnishings Facility
Ogdensburg, New York*

Newell Company
Rockford, Illinois

October 1996



BLASLAND, BOUCK & LEE, INC.
engineers & scientists

Transmitted Via Federal Express

October 11, 1996

Dr. Peter J. Schultz
Newell Company
4000 Auburn Street
Rockford, IL 61103

Re: Phase III Environmental Site Assessment
Joanna/Crown Home Furnishings
Ogdensburg, New York
Project #: 0078-078.30 #2

Dear Dr. Schultz:

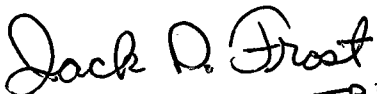
Please find enclosed two copies of the report entitled "Phase III Environmental Site Assessment, Joanna/Crown Home Furnishings Facility, Ogdensburg, New York, October 1996", prepared by Blasland, Bouck & Lee, Inc. (BBL). The report presents the results of the soil and ground-water sampling performed by BBL during August 1996, as described in our scope of work presented in Change Order No. 1996-01 to contract No. 07830, dated December 21, 1995.

Based upon the findings of this phase of work, BBL has proposed, as outlined in Section 3.2 (Recommendations) of this report, that an expanded subsurface investigation be implemented between the Main Building and the Shed 2-B area where the previous electroplating operations were performed on site. Additionally, a subsequent round of ground-water monitoring is suggested to be conducted during this phase. As we discussed, BBL will prepare and submit to Newell a proposed scope of work and cost estimate for these additional activities for review and authorization.

If you have any questions, please contact me at (716) 292-6740.

Very truly yours,

BLASLAND, BOUCK & LEE, INC.


T.P.H.

Jack D. Frost
Principal Scientist

JDF/lap
5096966.d

cc: Mr. Thomas P. Hasek, Jr., Blasland, Bouck & Lee, Inc.
Mr. William B. Popham, Blasland, Bouck & Lee, Inc. (w/o)

***Phase III Environmental
Site Assessment
Joanna/Crown Home
Furnishings Facility
Ogdensburg, New York***

Newell Company
Rockford, Illinois

October 1996

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1. Introduction

1.1 Overview

Newell Company (Newell) retained Blasland, Bouck & Lee, Inc. (BBL) to perform follow-up activities associated with the Joanna/CHF Industries' Site (site) located at 541 Covington Street, Ogdensburg, St. Lawrence County, New York (Figure 1). Newell is the current owner of the property and Crown Home Furnishings Company (CHF) was the operator of the facility. An initial Environmental Site Assessment (ESA) was conducted in November 1995 by BBL to assess and define existing and potential environmental liabilities associated with the historical use and operations of the site. As a follow-up to the initial investigation, a Supplemental Phase II ESA was performed to address various additional activities, which were outlined as recommendations in Sections 5.2 of the "Supplemental Phase II Environmental Site Assessment Report, Joanna/Crown Home Furnishings Facility, Ogdensburg, New York, May 1996" (Phase II ESA Report), prepared by BBL. A detailed scope of work was prepared by BBL in their correspondence dated May 24, 1996 to Dr. Peter J. Schultz, Director of Environmental Affairs, Newell Company, which outlines these proposed activities to be conducted in this Phase III investigation.

The previous ESA activities identified the presence of semi-volatile organic and inorganic compounds at concentrations exceeding the New York State Department of Environmental Conservation's (NYSDEC's) standard/guidance values in ground water and soil samples across the site. The presence of these compounds in ground water and soil could potentially represent an environmental concern. Based upon the recommendation of the Phase II ESA Report, Newell elected to conduct the follow-up activities to focus on the areas of concern at the site. The limited additional investigation for the Phase III focused on identification and verification of the possible sources of impacted ground water and soils to evaluate the extent of the on-site soil contamination in these areas. This investigation consisted of the following:

- Collection of ground-water samples from each of the existing monitoring wells for analysis of total RCRA metals and zinc. As part of this task, ground-water elevations were obtained from each of the existing monitoring wells to depict the current ground-water elevations and to compare to the ground-water elevation contour map previously prepared.
- Advancement of four overburden soil borings in the area of SB-13 to a depth of 8 feet below ground surface (BGS) or until ground water is encountered; the collection of two separate soil samples from each boring at the 0 to 2-foot interval (composite) and one in the 2-foot interval above the clay layer; or, in the 2-foot sampling interval above the ground water table for the following analyses:
 - RCRA metals and zinc;
 - Semi-volatile organic compounds;
 - Total cyanides; and
 - Total petroleum hydrocarbons.

2. Subsurface Conditions

2.1 Investigation Activities

To further assess subsurface soil and ground water conditions, a third round of ground-water sampling was performed to confirm the results of the initial sampling, and four additional soil borings were advanced to assess the soil quality in the overburden/fill in the vicinity of the former plating bath area and SB-13. Ground-water monitoring wells MW-1, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, and MW-10 (located on Figure 1) were sampled and analyzed by General Testing Corporation (GTC) for the eight RCRA metals and zinc. As in previous rounds, MW-2 could not be located. Four additional soil borings (SB16, SB17, SB18, and SB19) were installed at the locations indicated on Figure 1. The soil borings were advanced and sampled on August 8, 1996, along with the sampling of the existing ground-water monitoring wells. The soil samples were analyzed for semi-volatile organic compounds and the RCRA metals, plus zinc.

The additional soil borings were advanced at the following locations (also see Figure 1 and Appendix A):

- SB-16 was advanced to 8 feet below ground surface (BGS), north of the main building, 10 feet northeast of SB-13;
- SB-17 to 8 feet BGS, north of the Main Building, 12 to 15 feet west of SB-13;
- SB-18 to 8 feet BGS, south of Shed No. 2-B, 10 to 12 feet northwest of SB-13;
- SB-19 to 8 feet BGS, south of Shed 2-B, 15 feet northeast of SB-13;

Overburden soil descriptions are presented in the subsurface logs compiled in Appendix A.

2.1.1 Soil Boring Installation

Each soil boring was advanced into the overburden soil using decontaminated 4-1/4-inch inside diameter (I.D.) hollow-stem augers. The overburden soil at each drilling location was sampled continuously at two-foot intervals using a two-inch outer diameter split-spoon. Following their completion, all soil borings were backfilled with the soil cuttings produced during the advancement of the borings.

Upon retrieval, each split-spoon was opened and screened with the photoionization detection (PID) for the presence of TVO vapors. The soil sample from each borehole exhibiting the highest TVO vapor concentration as detected by the PID, visual evidence of contamination, and/or petroleum odors, was submitted to GTC for the following laboratory analyses:

- Total RCRA Metals and zinc by SW-846 Methods 6010/7470;
- Semi-Volatile Organic Compounds (TCL base neutral/acid extractables) by SW-846 Method 8270;

2.1.2 Ground-Water Sampling

- Total Cyanides by SW-846 Method 335.2; and
- Total Petroleum Hydrocarbon by SW-846 Method 418.1.

On August 8, 1996, monitoring wells MW-1, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, and MW-10 were sampled and transported to GTC for total RCRA metals and zinc analyses by USEPA Methods 6010A/7471. Prior to sampling, BBL measured the static water level in each well using a decontaminated electronic water-surface indicator to determine the volume of water in each well.

Each monitoring well was then purged of three well volumes using a disposable, polyethylene bailer with polypropylene rope. After purging each well, BBL obtained ground water samples using a bailer and placed them into laboratory-provided glassware. The ground water samples were placed into a cooler with ice as the preservative for delivery to GTC for laboratory analysis.

The ground-water elevations were utilized for comparison to establish the ground-water flow direction.

2.2 Site Hydrogeology

2.2.1 Regional Geology

The Joanna/CHF Industries is located in the St. Lawrence Valley of northern New York State. In St. Lawrence County, this area is characterized by low surface relief, unconsolidated overburden derived from glacial deposition, and bedrock dipping gently to the south at approximately 50 feet per mile. The bedrock consists of a dark tan, sandy, medium to fine grained, siliceous dolostone of Lower Ordovician age (Beekmantown Dolostone).

2.2.2 Site Overburden Geology and Ground-Water Flow

During the installation of the soil borings, sand-size material was the predominant grain size component observed in subsurface geology across the site. In soil borings SB-10, SB-11, SB-13, as well as the newly installed soil borings of SB-16, SB-17, SB-18, and SB-19 the overburden is comprised mainly of fine sand and silt. In soil borings SB16 and SB17, the overburden consisted of black/brown fine to coarse sand and fill material consisting of black ash and cinders in the 0 to 6 foot BGS zone and a brown fine/medium sand in the 6 to 8 foot BGS zone. In soil borings SB18 and SB19, the overburden also consisted of a black/brown fine to coarse sand and fill material to a depth of 4 foot and a brown fine to medium sand from in the 4 to 8 foot BGS zone. This deeper zone also indicated the presence of a trace dense, wet clay layer. Bedrock was not encountered during the drilling activities. The overburden encountered at each soil boring was field-logged and recorded on the boring logs included in Appendix A.

The revised shallow overburden ground-water flow pattern across the site was redetermined based on the water level data obtained from monitoring wells MW-1 and MW-3 through MW-10 during the most recent ground-water sampling round (August 1996). The depth to ground water across the site calculated from these data ranged between 2.45 and 9.60 feet BGS (Table 1).

2.3 Soil and Ground-Water Quality Data

2.3.1 Soil Sample Analytical Results

An overburden ground-water elevation contour map depicting the water levels from the most recent sampling event is presented on Figure 2. The general direction of ground water flow is interpreted from this figure to be from the south to the north across the site, similar to the direction that was determined from the September 1995 and January 31, 1996 and February 1, 1996 data. In particular, the water level at monitoring well MW-5 (upgradient) was approximately 13-feet higher during the August 1996 sampling round than during the September 1995 sampling round. In general, the ground-water levels associated with the monitoring wells furthest from the St. Lawrence River were much closer to ground surface during the August 1996 sampling round than during the September 1995 sampling round, while the water levels of the monitoring wells closer to the St. Lawrence River were only slightly closer to ground surface during the August 1996 sampling round. This condition is probably due to the drier conditions that usually persist during the late summer and early fall. The monitoring wells closest to the St. Lawrence River are not affected by seasonal fluctuation due to probable hydraulic connection with the river.

As part of this phase of work, one soil sample was collected from each of the six soil borings and submitted to GTC for analysis. Summaries of analytical results compared to the soil cleanup objectives listed in NYSDEC Technical and Administrative Guidance Memorandum (TAGM) No. 4046 for all soil samples are presented in Table 2.

The SVOCs compounds, benzo(a)anthracene, benzo(a) anthracene, benzo (a) pyrene, bis(2-ethylhexyl) phthalate, chrysene, di-n-butylphthalate, fluoranthene, and pyrene were detected at concentrations above the NYSDEC TAGM 4046 soil cleanup objectives; all other SVOC compounds were below detectable limits. As shown in Table 2, the comparison of the analytical results for the soil samples with NYSDEC soil cleanup objectives indicates that the following inorganic constituents were above the soil cleanup objectives:

- Chromium was detected in all four borehole samples (except SB-18, 0-2' interval) at concentrations above the NYSDEC TAGM 4046 cleanup objective of 10 ppm or site background (approximately 10 ppm from MW-5 soil sample obtained during the initial phase), with concentrations ranging from 9.52 ppm at SB-18 to 19.0 ppm at SB-17. The data from the SB-13 boring previously indicated chromium results at 11.8 ppm (0 to 2 feet) and 16.6 ppm (6 to 8 feet);
- Lead was detected in all borehole soil samples above the NYSDEC TAGM 4046 cleanup objective of site background (i.e., lead was detected at less than 1 ppm in the MW-5 soil sample obtained during the initial phase). The highest lead concentrations were detected in samples at 241 ppm in SB-18 (0 to 2 feet) and 376 ppm in SB-19 (4 to 6 feet). Previously, the highest lead concentrations were in the 60 to 70 ppm range in SB-13);
- Zinc was detected in all boreholes above the NYSDEC TAGM 4046 cleanup objective of 20 ppm or site background (no site background level exists, since

2.3.2 Ground-Water Sample Analytical Results

zinc was not analyzed for during the initial phase), with SB-19 exhibiting the most significant concentrations of 1010 ppm and 774 ppm from the 0-2' and 4' to 6' intervals, respectively;

- Mercury was detected in the SB-17 at 0.3 ppm in the 4 to 6 foot interval soil sample at almost three times the NYSDEC TAGM 4046 cleanup objective of 0.1 ppm; and
- Selenium was detected in all the borehole samples above the NYSDEC TAGM 4046 cleanup of 2 ppm or site background. The highest selenium concentration were detected in samples obtained from SB-17 and SB-19, which exhibited concentrations of 14.7 (0' to 2' interval) and 10.9 (4' to 6' interval), respectively.

In addition, total petroleum hydrocarbons (TPHs) were detected in the soil samples from SB-16, SB-17, SB-18, and SB-19 with the highest concentration of 7840 ppm being detected in the SB-19 sample collected from the 0- to 2-foot interval.

A copy of the laboratory report is provided in Appendix B.

As previously stated, one ground-water sample was collected from each well and submitted to GTC for totals analyses, in accordance with New York State ground-water sampling protocols. A summary of the analytical results, including comparison with NYSDEC ambient water quality standards and guidance values (6NYCRR Part 703), is presented in Table 3.

As Table 3 indicates, eight inorganics were detected in ground-water samples collected from monitoring wells across the site at concentrations exceeding NYSDEC standard. The following inorganics were detected above their respective NYSDEC standards/guidance values:

- Lead was detected in all the monitoring wells at concentrations ranging from 0.0134 to 0.66 ppm, with a NYSDEC standard guidance of 0.025, with only the background monitoring well (MW-5) exhibiting concentrations below NYSDEC ambient water quality standards. As previously noted, monitoring well MW-7 indicates the highest concentrations and may be the result of off-site influences (i.e., Diamond site), while MW-8 and MW-9 would appear to be the result of past operations conducted on the site;
- Chromium was detected in monitoring wells MW-7, MW-8, and MW-9 at 0.0559, 0.108, and 0.112 ppm, respectively. The NYSDEC standard guidance values for chromium is 0.050 ppm;
- Arsenic was detected in MW-8 and MW-9 at concentrations 1.1 to 2.5 times the NYSDEC standard/guidance value of 0.025 ppm;
- Cadmium was detected in MW-8 and MW-9 at concentrations one and one half to five times the NYSDEC standard/guidance value of 0.010 ppm;
- Selenium was detected in MW-7, MW-8, and MW-9 at concentrations of three to five times the NYSDEC Standard/Guidance Value of 0.010 ppm.

-
- Zinc was detected in MW-7, MW-8, and MW-9 at concentrations one to four times the NYSDEC standard/guidance value of 0.300 ppm.

A copy of the laboratory report is provided in Appendix B.

3. Conclusions and Recommendations

3.1 Conclusions

Select semivolatile organic compounds were detected in all of the recently installed soil boring samples at concentrations above the NYSDEC TAGM 4046 cleanup objectives. Total petroleum hydrocarbon (TPH) values were detected in elevated levels in the 0 to 2 foot soil boring samples ranging from 5640 ppm (SB-18) to 7830 ppm (SB-19). The highest TPH soil concentrations were previously detected during the installation of monitoring wells MW-7 (1340 ppm), MW-8 (1780 ppm), and MW-9 (2220 ppm), all of which are located along the shoreline in the fill of unknown origin. The areas where SB-16 and SB-19 were installed also indicated the presence of ash, cinders, and fill in the upper 1 to 4 feet. Although New York State does not currently have a formal guidance value for TPH's in soil, 100 ppm is a typical guidance value that has been adopted by many states nationwide. Therefore, it can be concluded that this area, as well as other isolated areas on the site have been impacted by TPH's.

The soil samples from the newly installed borings indicated the presence of various metals at concentrations exceeding NYSDEC's soil clean-up objectives. The concentration of selenium, zinc, lead, and barium were particularly elevated in certain soil samples. Barium elevations were elevated above site background levels, with selenium above current standards. The concentrations of zinc in soils at SB-18 was 463 ppm (0 to 2 feet) and 344 ppm (4 to 6 feet), and in SB-19 the concentration was detected at 1010 ppm (0 to 2 feet) and 773 ppm (4 to 6 feet). The concentrations of lead in soils at SB-18 was 241 ppm (0 to 2 feet) and 124 ppm (4 to 6 feet), and in SB-19 the concentration was detected at 183 ppm (0 to 2 feet) and 376 ppm (4 to 6 feet). The location of the soil borings were in the area between the main building and Shed No. 2-B, which is the area where electroplating operations have historically taken place.

The zinc concentrations in the ground water samples collected from monitoring wells MW-7, MW-8, and MW-9 were all greater than the NYSDEC standard of 0.3 ppm and ranged from 0.306 ppm to 1.23 ppm. These were elevated zinc levels in ground water samples obtained from monitoring wells downgradient of the SB-13 area (particularly MW-9), as well as elevated chromium, lead, and cadmium levels in these wells. This would suggest that the ground water quality at the site has been impacted by the electroplating operations that have previously taken place at the site.

3.2 Recommendations

- Continue to monitor the planned drum removal action and other anticipated environmental studies at the Diamond site, which are scheduled to be conducted by the USEPA. The removal action is anticipated to address the abandoned drums remaining on that site. A Freedom of Information request was submitted to the NYSDEC and received by BBL, and the findings of this data were forwarded to Newell in our correspondence dated October 1, 1996;
- Conduct further investigation of subsurface soils to determine if a discreet source of residual metals exist in the substrate near the former electroplating operations in the Main Building area. Test pit excavations and subsurface soil sampling and analysis will be used to further define the vertical and horizontal extent of elevated metals in the soils. Additionally, the test pit excavations will be used to observe the subsurface to determine if preferential flow paths exist in the form of sewer line bedding or backfill, building foundation backfill, roadbed, etc. The

goals of the study are to provide additional potential source area data to assist in the selection of a cost-effective and practical source reduction/remedial strategy.

It is anticipated that two to three backhoe test pits will be excavated beneath the roadway between the Main Building and Shed No. 2-B in the area where soil samples collected from borings contained concentrations of potential electroplating metals above background levels. Test pits will be excavated to a depth that will allow for observation of utility lines and building foundations. Observations will be made for signs of possible release and containment or preferential flow of solution from the former plating operation, as well as obvious irregularities in the backfill material. Additionally, the test pits will be used to provide additional information on the depth to ground water; and

- While on site, an additional round of ground water elevations will be measured and water samples will be collected for analysis. These data will be used to further define the spatial variations of ground water contaminants previously identified on-site and provide further evidence of source areas, as well as assess potential temporal trends. Given the potential for on-site contaminated ground water derived from off-site sources, these data will be important to the design of any ground water remedial program, if any.

Tables

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TABLE 1

NEWELL COMPANY
ENVIRONMENTAL SITE ASSESSMENT
GROUNDWATER ELEVATION DATA

Well I.D.	Ground Reference Elevation	Top of Riser Reference Elevation	September 18 - 19, 1995		January 31 - February 1, 1996		August 8, 1996	
			Depth to Water	Groundwater Elevation	Depth to Water	Groundwater Elevation	Depth to Water	Groundwater Elevation
MW-1	97.72	97.54	8.88	88.66	DRY	N/A	7.00	90.54
MW-2 (*)	104.42	104.10	N/A	N/A	N/A	N/A	N/A	N/A
MW-3	100.52	100.32	10.20	90.12	9.45	90.87	9.60	90.72
MW-4	98.99	98.77	9.65	89.12	7.95	90.82	8.12	90.65
MW-5	127.03	126.62	21.15	105.47	5.82	120.80	8.25	118.37
MW-6	111.81	111.52	11.15	100.37	4.84	106.68	5.00	106.52
MW-7	91.89	91.68	3.22	88.46	2.95	88.73	2.45	89.23
MW-8	91.94	91.66	3.30	88.36	3.04	88.62	2.50	89.16
MW-9	93.47	93.26	4.35	88.91	3.72	89.54	3.00	90.26
MW-10 (**)	94.55	94.20	3.75	90.45	N/A	N/A	3.12	91.08

Notes:

All data is expressed in feet.

All above elevations based on site bench elevations and monitoring wells 1, 3 and 4.

(*) MW-2 was unable to be located during sampling events.

(**) MW-10 was buried under a pile of snow during the January 31 thru February 1, 1996 sampling event.

N/A - Not available.

TABLE 2

NEWELL COMPANY
ENVIRONMENTAL SITE ASSESSMENT
SOIL BORINGS
SUBSURFACE SOIL SAMPLE ANALYTICAL RESULTS

Sample I.D.	NYSDEC TAGM 4046 Soil Cleanup Objectives (1)	Site Background*	SB-15 8/08/96 (0'-2') (4'-6')	SB-17 08/08/96 (0'-2') (4'-6')	SB-18 08/08/96 (0'-2') (4'-6')	SB-19 08/08/96 (0'-2') (4'-6')
SEMIVOLATILES						
Benzo (A) Anthracene	0.224 or MDL	ND	ND	ND	0.43	0.41
Benzo (A) Pyrene	0.061 or MDL	ND	0.44	ND	0.56	0.51
Benzo (B) Fluoranthene	1.1	ND	0.51	ND	0.96	0.95
Benzo (K) Fluoranthene	1.1	ND	ND	ND	ND	0.39
Bis (2-Ethylhexyl) Phthalate	50.0 **	ND	ND	ND	ND	ND
Chrysene	0.4	ND	ND	ND	0.49	0.59
Di - n - butylphthalate	50.0 **	ND	0.35	0.66	ND	0.36
Fluoranthene	50.0 **	ND	ND	ND	0.47	0.47
Phenanthrene	50.0 **	ND	ND	ND	ND	0.49
Pyrene	50.0 **	ND	0.60	0.48	0.90	1.20
INORGANICS						
Arsenic	7.5 or SB	2.11	2.80	5.05	6.53	5.41
Barium	300 or SB	47.7	53.3	67.7	56.6	87.8
Cadmium	1 or SB	ND	ND	0.915	1.39	7.71
Chromium	10 or SB	9.45	13.4	12	9.52	13.3
Lead	SB	ND	25.0	45.1	241	183
Mercury	0.1	ND	0.195	ND	ND	ND
Selenium	2 or SB	ND	5.86	6.24	10.7	8.51
Silver	SB	ND	ND	ND	7.96	ND
Zinc	20 or SB	ND	91.5	111	482	1010
Total Cyanide	NS	ND	ND	ND	ND	ND
Total TPH	NS	ND	5930	7790	5650	7840
			83.3	119	275	501

Notes:

Only compounds with detectable concentrations listed in table.
Results are reported in ug/g.

ND = non detect; for detection limits see laboratory analytical results in Appendix B.

NS = no standard.

(1) = NYSDEC TAGM 4046: Determination of Soil Cleanup Levels (HWR-94-4046) expressed cleanup objectives in (ppm).
SB = soil background.

MDL = method detection limits.

* = As identified from September 1995 soil sampling of background monitoring well, MW-5.

** = As per TAGM 4046, Total VOCs < 10 ppm., Total Semi-VOCs < 500 ppm and individual Semi-VOCs < 50 ppm.

TABLE 3

NEWELL COMPANY
ENVIRONMENTAL SITE ASSESSMENT
MONITORING WELLS
GROUNDWATER SUMMARY ANALYTICAL RESULTS

Sample I.D.	NYSDEC 6 NYCRR Part 703 Standards / Guidance Values (1)	MW-1 8/8/96	MW-3 8/8/96	MW-4 8/8/96	MW-5 8/8/96	MW-6 8/8/96	MW-7 8/8/96	MW-8 8/8/96	MW-9 8/8/96	MW-10 8/8/96
METALS										
Arsenic	0.025	ND	ND	ND	ND	ND	ND	0.0274	0.0617	ND
Barium	1.000	0.217	0.275	0.362	0.0638	0.206	0.309	0.915	0.704	0.207
Cadmium	0.010	ND	ND	ND	ND	ND	ND	0.0534	0.0132	ND
Chromium	0.050	0.0112	0.0155	0.0477	ND	ND	0.0559	0.108	0.112	0.033
Lead	0.025	0.0374	0.0506	0.0824	0.0134	0.118	3.07	0.568	0.66	0.0616
Mercury	0.002	ND	ND	ND	ND	ND	0.00243	0.000723	0.00126	ND
Selenium	0.010	ND	ND	0.016	ND	0.0169	0.0318	0.0459	0.0534	ND
Silver	0.050	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	0.300	0.0523	0.185	0.139	0.0353	0.105	0.306	0.598	1.23	0.0827

Notes:

Only compounds with detectable concentrations listed in table.

Results are reported in milligrams per liter (mg/L).

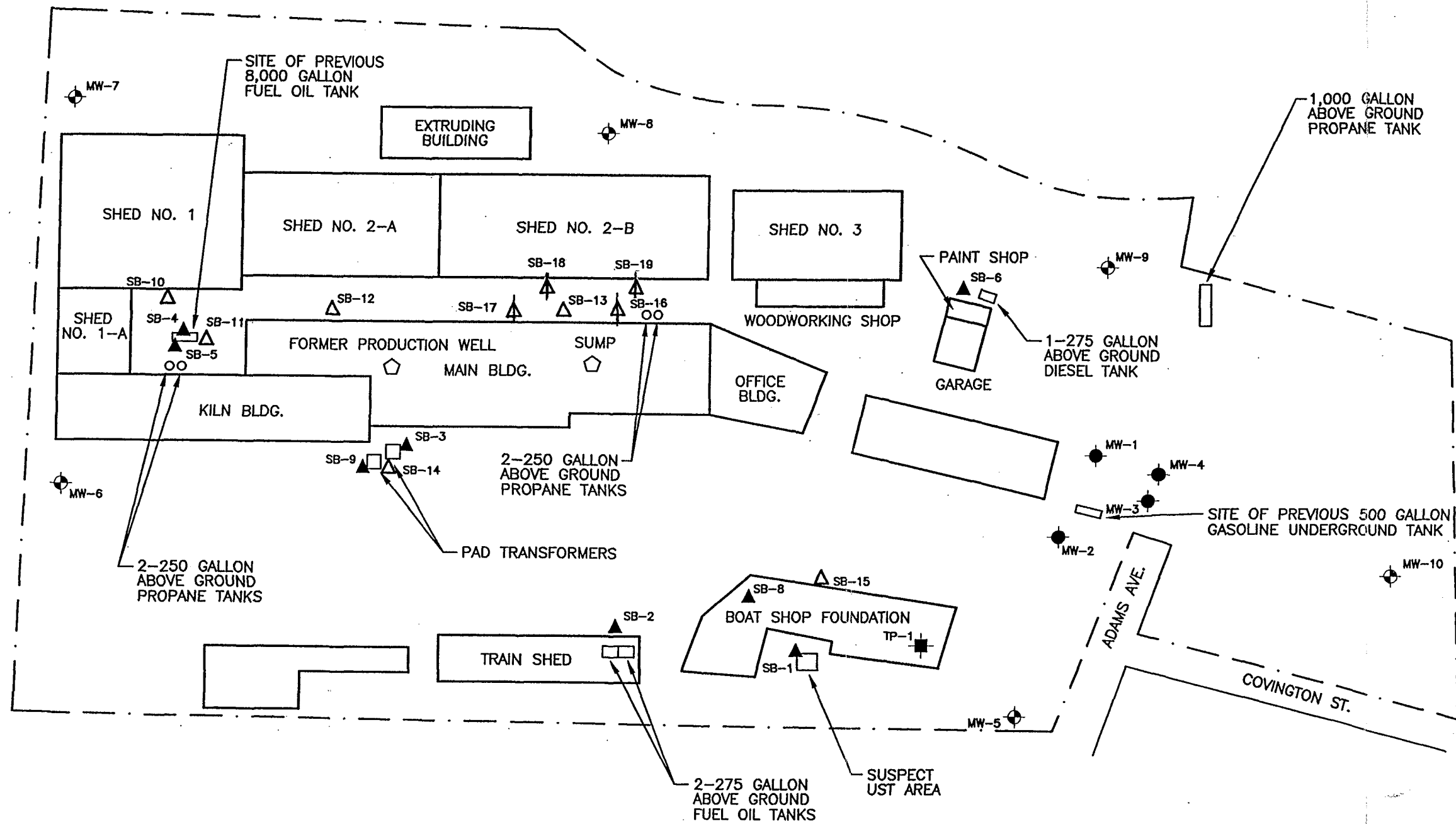
ND = non detect. (For actual detection limits see laboratory analytical results in Appendix B).

(1) = NYSDEC and 6 NYCRR Parts 700-705: Ambient Water Quality Standards and Guidance Values.

Figures

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ST. LAWRENCE SEAWAY
(1.5 MILES WIDE)



LEGEND

- MW-4 EXISTING MONITORING WELL
- MW-5 MONITORING WELL INSTALLED BY BBL IN 9/95
- SB-4 SOIL BORING INSTALLED BY BBL IN 9/95
- SB-10 SOIL BORING INSTALLED BY BBL IN 1/96-2/96
- SB-16 SOIL BORING INSTALLED BY BBL IN 8/96
- TP-1 TEST PIT
- GRAB SAMPLE

NOTES:

1. DRAWING NOT TO SCALE.
2. SAMPLE LOCATIONS IN THE MAIN BUILDING ARE APPROXIMATE.
3. UNABLE TO LOCATE MW-2 IN FIELD.

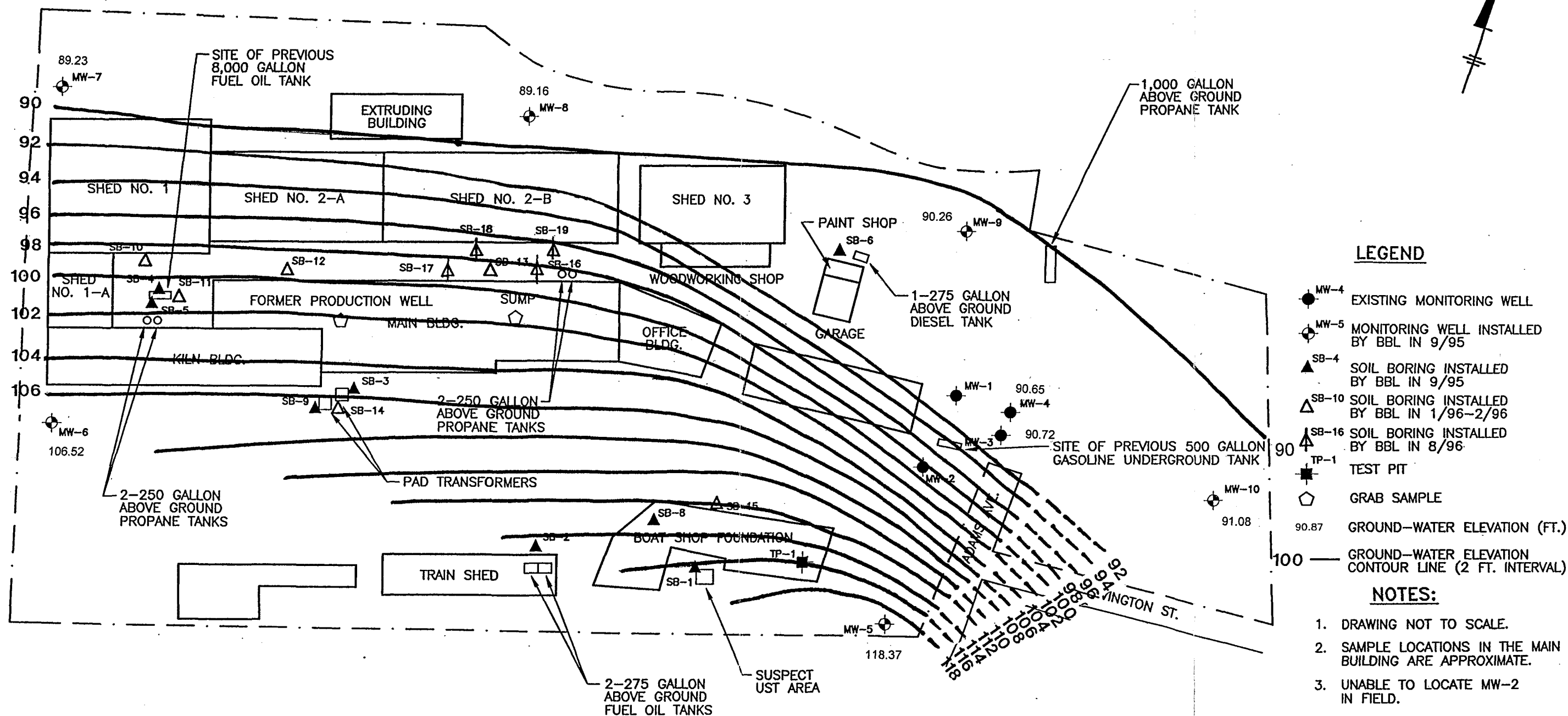
JOANNA/CHF INDUSTRIES SITE
OGDENSBURG, NEW YORK
NEWELL COMPANY
ENVIRONMENTAL SITE ASSESSMENT

SITE PLAN

BBL BLASLAND, BOUCK & LEE, INC.
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FIGURE
1

ST. LAWRENCE SEAWAY
(1.5 MILES WIDE)



JOANNA/CHF INDUSTRIES SITE
OGDENSBURG, NEW YORK
NEWELL COMPANY
ENVIRONMENTAL SITE ASSESSMENT
GROUND-WATER ELEVATION
CONTOUR MAP
AUGUST 8, 1996

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FIGURE
2

Appendices


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Appendix A - Soil Borings

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Date Start/Finish: 8/8/96 – 8/8/96 Drilling Company: Nothnagle Drilling Driller's Name: Neil Short Drilling Method: Hollow Stem Auger Rig Type: CME-75 Spoon Size: 2-in Hammer Weight: 140-lb Height of Fall: 30-in.	Northing: Easting: Borehole Depth: 8.0 ft. Geologist: Michael R. Arlauckas	Boring No. SB-16 Client: Newell Company Location: Joanna/CHF Facility Ogdensburg, New York
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DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	Headspace	Geotechnical Test	Geologic Column	Stratigraphic Description	Boring Construction
										GROUND SURFACE	
		1	/	46 92 24 12	116	1.0	0.0			Asphalt and cobbles. Black to brown, fine to coarse SAND, trace silt and black ash, cinders, dense, damp.	
		2	/	5 4 4 2	8	1.5	0.0			SAME.	
5		3	/	3 2 2 1	4	1.0	0.0			SAME, except damp.	
		4	/	2 2 2 4	4	1.0	0.0			Brown, fine to medium SAND, little trace clay, dense, damp to wet.	
										Bottom of boring at 8.0' BGS.	

 <p>BBL BLASLAND, BOUCK & LEE, INC. engineers & scientists</p>	<p>Remarks:</p> <p>Water encountered at approximately 7.0' BGS.</p>	Saturated Zones		
		Date / Time	Elevation	Depth

Date Start/Finish: 8/8/96 - 8/8/96
 Drilling Company: Nothnagle Drilling
 Driller's Name: Neil Short
 Drilling Method: Hollow Stem Auger

Rig Type: CME-75
 Spoon Size: 2-in
 Hammer Weight: 140-lb
 Height of Fall: 30-in.

Northing:
 Easting:
 Borehole Depth: 8.0 ft.

Geologist: Michael R. Arlauckas

Boring No. SB-17

Client:
 Newell Company

Location:
 Joanna/CHF Facility
 Ogdensburg, New York

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	Headspace	Geotechnical Test	Geologic Column	Stratigraphic Description	Boring Construction
										GROUND SURFACE	
		1		61 75 21 10	96	1.5	0.0			Asphalt and cobbles. Black to brown, fine to coarse SAND, trace silt and black ash, cinders, dense, damp.	
		2		6 5 4 3	9	1.0	0.0			SAME.	
5		3		1 2 2 1	4	2.0	0.0			SAME, except moist.	
		4		1 1 1 1	2	1.5	0.0			Brown, fine to medium SAND, little trace clay, dense, moist to wet.	
										Bottom of boring at 8.0' BGS.	
10											
15											

Backfilled with native material.

BBL
 BLASLAND, BOUCK & LEE, INC.
 engineers & scientists

Remarks:

Water encountered at approximately 7.0' BGS.

Saturated Zones

Date / Time	Elevation	Depth

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	Headspace	Geotechnical Test	Geologic Column	Stratigraphic Description	Boring Construction
										GROUND SURFACE	
0		1	/	28 6 3 3	6	1.8	0.0			Asphalt and cobbles. Black to brown, fine to coarse SAND, trace silt and black ash, cinders, dense, damp.	
1		2	/	2 1 1 1	2	1.5	0.0			SAME, except damp.	
2		3	/	2 2 1 1	3	1.0	0.0			Brown, fine to medium SAND, little trace clay, dense, moist to wet.	
3		4	/	2 2 1 1	3	1.5	0.0			SAME, except very dense, wet.	
4										Bottom of boring at 8.0' BGS.	

Date Start/Finish: 8/8/96 - 8/8/96
 Drilling Company: Nothnagle Drilling
 Driller's Name: Neil Short
 Drilling Method: Hollow Stem Auger

Rig Type: CME-75
 Spoon Size: 2-in
 Hammer Weight: 140-lb
 Height of Fall: 30-in.

Northing:
 Easting:
 Borehole Depth: 8.0 ft.

Geologist: Michael R. Arlauckas

Boring No. SB-19

Client:
 Newell Company

Location:
 Joanna/CHF Facility
 Ogdensburg, New York

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	Headspace	Geotechnical Test	Geologic Column	Stratigraphic Description	Boring Construction
										GROUND SURFACE	
		1		32 24 3 4	27	1.5	0.0			Asphalt and cobbles. Black to brown, fine to coarse SAND, trace silt and black ash, cinders, dense, damp.	
		2		1 2 2 1	4	2.0	0.0			SAME, except damp.	
5		3		2 1 3 2	4	1.8	0.0			Brown, fine to medium SAND, little trace clay, dense, moist to wet.	
		4		2 2 2 1	4	1.0	0.0			SAME, except very dense, wet.	
										Bottom of boring at 8.0' BGS.	
10											
15											

BBL
 BLASLAND, BOUCK & LEE, INC.
 engineers & scientists

Remarks:

Water encountered at approximately 7.0' BGS.

Saturated Zones

Date / Time	Elevation	Depth

Appendix B - Analytical Data

BLASLAND, BOUCK & LEE, INC.
engineers & scientists



A FULL SERVICE ENVIRONMENTAL LABORATORY

September 2, 1996

Mr. Tom Hasek
Blasland, Bouck & Lee, Inc.
30 Corporate Woods
Suite 160
Rochester, NY 14623

PROJECT: JOANNA/CHF INDUSTRIES
Submission #: 9608000060

Dear Mr. Hasek:

Enclosed are the analytical results of the analyses requested. The analytical data was provided to you on 08/23/96 per a Facsimile transmittal. All data has been reviewed prior to report submission.

Should you have any questions please contact me at (716) 454-6810.

Thank you for letting us provide this service.

Sincerely,

COLUMBIA ANALYTICAL SERVICES

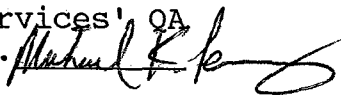

Janice Jaeger
Project Chemist

Enc.

RECEIVED

SEP - 9 1996

BLASLAND, BOUCK & LEE, INC.
ROCHESTER, NY

This package has been reviewed by Columbia Analytical Services' QA Department/Laboratory Director prior to report submittal. 

710 Exchange Street • Rochester, NY 14608 • Tele: (716) 454-6810 • Fax: (716) 454-6825
85 Trinity Place • Hackensack, NJ 07601 • Tele: (201) 512-3292 • Fax: (201) 512-3362
435 Lawrence Bell Drive • Amherst, NY 14421 • Tele: (716) 634-0454 • Fax: (716) 634-9019



CASE NARRATIVE

COMPANY: Blasland, Bouck & Lee, Inc.
Joanna/CHF Industries
SUBMISSION #: 9608000060

BBL samples were collected on 8/08/96 and received at CAS on 8/09/96. All samples were in good condition upon receipt and were at a temperature of 3.1 C.

INORGANIC ANALYSIS

Nine water and eight soil samples were analyzed for RCRA metals and Zinc using SW-846 ICP method 6010 except for Mercury was analyzed by method 7470.

The soil samples were also analyzed for TCN by 335.2 and TPH by EPA method 418.1.

No analytical or QC problems were encountered with these analyses

SEMIVOLATILE ORGANICS

Eight soil samples were analyzed for TCL Semivolatile Organics using SW-846 method 8270.

All Tuning criteria for DFTPP were met.

The initial and continuing calibration criteria were met for all analytes.

All surrogate standard recoveries were within QC acceptance limits except Terphenyl-d14 on samples SB-16(0-2'), SB-17(0-2'), SB-18(0-2'), SB-18(4-6'), SB-19(0-2'), and SB-19(4-6'), and 2,4,6-Tribromophenol on samples SB-16(0-2'). These recoveries were flagged with an "**". Low recovery internal standards # 5 and #6 was the cause for the high surrogate recoveries on the above referenced samples. These samples were reanalyzed at a 1/10 dilution but all analytes were diluted out.

All samples were extracted and analyzed within the specified holding times.

No other analytical or QC problems were encountered.



Effective 04/01/96

CAS LIST OF QUALIFIERS

(The basis of this proposal are the EPA-CLP Qualifiers)

- U - Indicates compound was analyzed for but was not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.
- J - Indicates an estimated value. For further explanation see case narrative / cover letter.
- B - This flag is used when the analyte is found in the associated blank as well as in the sample.
- E - This flag identifies compounds whose concentrations exceed the calibration range.
- A - This flag indicates that a TIC is a suspected aldol-condensation product.
- N - Spiked sample recovery not within control limits.
(Flag the entire batch - Inorganic analysis only)
- * - Duplicate analysis not within control limits.
(Flag the entire batch - Inorganic analysis only)
 - Also used to qualify Organics QC data outside limits.
- D - Spike diluted out.
- S - Reported value determined by Method of Standard Additions. (MSA)
- X - As specified in the case narrative.

CAS Lab ID # for State Certifications

NY ID # in Rochester: 10145
CT ID # in Rochester: PH0556
MA ID # in Rochester: M-NY032

NJ ID # in Rochester: 73004
RI ID # in Rochester: 158



ANALYTICAL REPORT SUMMARY

Reported: 09/02/96

Reported Units = MG/L

Blasland, Bouck & Lee, Inc.

JOANNA/CHF INDUSTRIES

SUBMISSION #: 9608000060

ORDER NUMBER	94267	94268	94269	94270
SAMPLE ID:	MW-3	MW-1	MW-10	MW-6
DATE SAMPLED:	08/08/96	08/08/96	08/08/96	08/08/96
DATE RECEIVED:	08/09/96	08/09/96	08/09/96	08/09/96
ARSENIC	0.0100 U	0.0100 U	0.0100 U	0.0100 U
BARIUM	0.275	0.217	0.207	0.206
CADMIUM	0.00500 U	0.00500 U	0.00500 U	0.00500 U
CHROMIUM	0.0155	0.0112	0.0330	0.0100 U
LEAD	0.0506	0.0374	0.0616	0.118
MERCURY	0.000300 U	0.000300 U	0.000300 U	0.000300 U
SELENIUM	0.00500 U	0.00500 U	0.00500 U	0.0169
SILVER	0.0100 U	0.0100 U	0.0100 U	0.0100 U
ZINC	0.185	0.0523	0.0827	0.105



ANALYTICAL REPORT SUMMARY

Reported: 09/02/96

Blasland, Bouck & Lee, Inc.
JOANNA/CHF INDUSTRIES
SUBMISSION #: 9608000060

ORDER NUMBER	94267	94268	94269	94270
SAMPLE ID:	MW-3	MW-1	MW-10	MW-6
DATE SAMPLED:	08/08/96	08/08/96	08/08/96	08/08/96
DATE RECEIVED:	08/09/96	08/09/96	08/09/96	08/09/96
ARSENIC	08/21/96	08/21/96	08/21/96	08/21/96
BARIUM	08/21/96	08/21/96	08/21/96	08/21/96
CADMIUM	08/21/96	08/21/96	08/21/96	08/21/96
CHROMIUM	08/21/96	08/21/96	08/21/96	08/21/96
LEAD	08/21/96	08/21/96	08/21/96	08/21/96
MERCURY	08/21/96	08/21/96	08/21/96	08/21/96
SELENIUM	08/21/96	08/21/96	08/21/96	08/21/96
SILVER	08/21/96	08/21/96	08/21/96	08/21/96
ZINC	08/22/96	08/22/96	08/22/96	08/22/96



ANALYTICAL REPORT SUMMARY

Reported: 09/02/96

Reported Units = MG/L

Blasland, Bouck & Lee, Inc.

JOANNA/CHF INDUSTRIES

SUBMISSION #: 9608000060

ORDER NUMBER	94271	94272	94273	94274
SAMPLE ID:	MW-5	MW-7	MW-8	MW-4
DATE SAMPLED:	08/08/96	08/08/96	08/08/96	08/08/96
DATE RECEIVED:	08/09/96	08/09/96	08/09/96	08/09/96
ARSENIC	0.0100 U	0.0100 U	0.0274	0.0100 U
BARIUM	0.0638	0.309	0.915	0.362
CADMIUM	0.00500 U	0.00500 U	0.0534	0.00500 U
CHROMIUM	0.0100 U	0.0559	0.108	0.0477
LEAD	0.0134	3.07	0.568	0.0824
MERCURY	0.000300 U	0.00243	0.000723	0.000300 U
SELENIUM	0.00500 U	0.0318	0.0459	0.0160
SILVER	0.0100 U	0.0100 U	0.0100 U	0.0100 U
ZINC	0.0353	0.306	0.598	0.139



ANALYTICAL REPORT SUMMARY

Reported: 09/02/96

Blasland, Bouck & Lee, Inc.
JOANNA/CHF INDUSTRIES
SUBMISSION #: 9608000060

ORDER NUMBER	94271	94272	94273	94274
SAMPLE ID:	MW-5	MW-7	MW-8	MW-4
DATE SAMPLED:	08/08/96	08/08/96	08/08/96	08/08/96
DATE RECEIVED:	08/09/96	08/09/96	08/09/96	08/09/96
ARSENIC	08/21/96	08/21/96	08/21/96	08/21/96
BARIUM	08/21/96	08/21/96	08/21/96	08/21/96
CADMIUM	08/21/96	08/21/96	08/21/96	08/21/96
CHROMIUM	08/21/96	08/21/96	08/21/96	08/21/96
LEAD	08/21/96	08/21/96	08/21/96	08/21/96
MERCURY	08/21/96	08/21/96	08/21/96	08/21/96
SELENIUM	08/21/96	08/21/96	08/21/96	08/21/96
SILVER	08/21/96	08/21/96	08/21/96	08/21/96
ZINC	08/22/96	08/22/96	08/22/96	08/22/96



ANALYTICAL REPORT SUMMARY

Reported: 09/02/96

Reported Units = MG/L

Blasland, Bouck & Lee, Inc.

JOANNA/CHF INDUSTRIES

SUBMISSION #: 9608000060

ORDER NUMBER	94275
SAMPLE ID:	MW-9
DATE SAMPLED:	08/08/96
DATE RECEIVED:	08/09/96

ARSENIC	0.0617
BARIUM	0.704
CADMIUM	0.0132
CHROMIUM	0.112
LEAD	0.660
MERCURY	0.00126
SELENIUM	0.0534
SILVER	0.0100 U
ZINC	1.23



ANALYTICAL REPORT SUMMARY

Reported: 09/02/96

Blasland, Bouck & Lee, Inc.

JOANNA/CHF INDUSTRIES

SUBMISSION #: 9608000060

ORDER NUMBER	94275
SAMPLE ID:	MW-9
DATE SAMPLED:	08/08/96
DATE RECEIVED:	08/09/96

ARSENIC	08/21/96
BARIUM	08/21/96
CADMIUM	08/21/96
CHROMIUM	08/21/96
LEAD	08/21/96
MERCURY	08/21/96
SELENIUM	08/21/96
SILVER	08/21/96
ZINC	08/22/96



ANALYTICAL REPORT SUMMARY

Reported: 09/02/96

Dry Weight Reported Units = UG/G

Blasland, Bouck & Lee, Inc.

JOANNA/CHF INDUSTRIES

SUBMISSION #: 9608000060

ORDER NUMBER	94276	94277	94279	94280
SAMPLE ID:	SB-16(0-2')	SB-16(4-6')	SB-17(0-2')	SB-17(4-6')
DATE SAMPLED:	08/08/96	08/08/96	08/08/96	08/08/96
DATE RECEIVED:	08/09/96	08/09/96	08/09/96	08/09/96
ARSENIC	2.80	2.50	5.05	5.57
BARIUM	53.3	29.2	67.7	81.8
CADMIUM	0.535 U	0.585 U	0.915	0.611 U
CHROMIUM	13.4	13.5	12.0	19.0
LEAD	25.0	23.0	45.1	55.7
MERCURY	0.195	0.175 U	0.161 U	0.300
SELENIUM	5.86	5.56	6.24	14.7
SILVER	1.07 U	1.17 U	1.07 U	1.22 U
ZINC	91.6	61.1	111	332
TOTAL CYANIDE	1.07 U	1.17 U	1.07 U	1.22 U
PERCENT SOLIDS %	93.5	85.5	93.3	81.9
TOTAL PETROLEUM HYDROCARB	5930	83.3	7790	119



ANALYTICAL REPORT SUMMARY

Reported: 09/02/96

Blasland, Bouck & Lee, Inc.

JOANNA/CHF INDUSTRIES

SUBMISSION #: 9608000060

ORDER NUMBER	94276	94277	94279	94280
SAMPLE ID:	SB-16(0-2')	SB-16(4-6')	SB-17(0-2')	SB-17(4-6')
DATE SAMPLED:	08/08/96	08/08/96	08/08/96	08/08/96
DATE RECEIVED:	08/09/96	08/09/96	08/09/96	08/09/96
ARSENIC	08/21/96	08/21/96	08/21/96	08/21/96
BARIUM	08/21/96	08/21/96	08/21/96	08/21/96
CADMIUM	08/21/96	08/21/96	08/21/96	08/21/96
CHROMIUM	08/21/96	08/21/96	08/21/96	08/21/96
LEAD	08/21/96	08/21/96	08/21/96	08/21/96
MERCURY	08/22/96	08/22/96	08/22/96	08/22/96
SELENIUM	08/21/96	08/21/96	08/21/96	08/21/96
SILVER	08/23/96	08/23/96	08/23/96	08/23/96
ZINC	08/21/96	08/21/96	08/21/96	08/21/96
TOTAL CYANIDE	08/20/96	08/20/96	08/20/96	08/20/96
PERCENT SOLIDS %	08/19/96	08/19/96	08/19/96	08/19/96
TOTAL PETROLEUM HYDROCARB	08/15/96	08/15/96	08/15/96	08/15/96

ANALYTICAL REPORT SUMMARY

METHOD 8270 SEMIVOLATILES

REPORTED UNITS: UG/KG

Blasland, Bouck & Lee, Inc.

JOANNA/CHF INDUSTRIES

SUBMISSION #: 9608000060

ORDER NUMBER		94276	94277	94279	94280
SAMPLE ID:		SB-16(0-2')	SB-16(4-6')	SB-17(0-2')	SB-17(4-6')
DATE SAMPLED:		08/08/1996	08/08/1996	08/08/1996	08/08/1996
DATE RECEIVED:	PQL	08/09/1996	08/09/1996	08/09/1996	08/09/1996
DATE ANALYZED:		8/21/96	8/19/96	8/21/96	8/19/96
DILUTION:		1.0	1.0	1.0	1.0
PERCENT SOLID (%):		93.5	85.5	93.3	81.9
ACENAPHTHENE	330	350 U	390 U	350 U	400 U
ACENAPHTHYLENE	330	350 U	390 U	350 U	400 U
ANTHRACENE	330	350 U	390 U	350 U	400 U
BENZO(A)ANTHRACENE	330	350 U	390 U	350 U	400 U
BENZO(A)PYRENE	330	440	390 U	350 U	400 U
BENZO(B)FLUORANTHENE	330	510	390 U	350 U	400 U
BENZO(G,H,I)PERYLENE	330	350 U	390 U	350 U	400 U
BENZO(K)FLUORANTHENE	330	350 U	390 U	350 U	400 U
BENZYL ALCOHOL	330	350 U	390 U	350 U	400 U
BUTYL BENZYL PHTHALATE	330	350 U	390 U	350 U	400 U
DI-N-BUTYLPHTHALATE	330	350	460	660	630
CARBAZOLE	330	350 U	390 U	350 U	400 U
INDENO(1,2,3-CD)PYRENE	330	350 U	390 U	350 U	400 U
4-CHLOROANILINE	330	350 U	390 U	350 U	400 U
BIS(-2-CHLOROETHOXY)METHANE	330	350 U	390 U	350 U	400 U
BIS(2-CHLOROETHYL)ETHER	330	350 U	390 U	350 U	400 U
2-CHLORONAPHTHALENE	330	350 U	390 U	350 U	400 U
2-CHLOROPHENOL	670	720 U	780 U	720 U	820 U
2,2'-OXYBIS(1-CHLOROPROPANE)	330	350 U	390 U	350 U	400 U
CHRYSENE	330	350 U	390 U	350 U	400 U
DIBENZO(A,H)ANTHRACENE	330	350 U	390 U	350 U	400 U
DIBENZOFURAN	330	350 U	390 U	350 U	400 U
1,2-DICHLOROBENZENE	330	350 U	390 U	350 U	400 U
1,3-DICHLOROBENZENE	330	350 U	390 U	350 U	400 U
1,4-DICHLOROBENZENE	330	350 U	390 U	350 U	400 U
3,3'-DICHLOROBENZIDINE	330	350 U	390 U	350 U	400 U
2,4-DICHLOROPHENOL	670	720 U	780 U	720 U	820 U
DIETHYLPHTHALATE	330	350 U	390 U	350 U	400 U
DIMETHYL PHTHALATE	330	350 U	390 U	350 U	400 U
2,4-DIMETHYLPHENOL	670	720 U	780 U	720 U	820 U
2,4-DINITROPHENOL	1300	1400 U	1500 U	1400 U	1600 U
2,4-DINITROTOLUENE	330	350 U	390 U	350 U	400 U
2,6-DINITROTOLUENE	330	350 U	390 U	350 U	400 U
BIS(2-ETHYLHEXYL)PHTHALATE	330	350 U	390 U	350 U	400 U
FLUORANTHENE	330	350 U	390 U	350 U	400 U
FLUORENE	330	350 U	390 U	350 U	400 U
HEXACHLOROBENZENE	330	350 U	390 U	350 U	400 U
HEXACHLOROBUTADIENE	330	350 U	390 U	350 U	400 U
HEXACHLOROCYCLOPENTADIENE	330	350 U	390 U	350 U	400 U
HEXACHLOROETHANE	330	350 U	390 U	350 U	400 U
ISOPHORONE	330	350 U	390 U	350 U	400 U
2-METHYLNAPHTHALENE	670	720 U	780 U	720 U	820 U
2-METHYLPHENOL	670	720 U	780 U	720 U	820 U



ANALYTICAL REPORT SUMMARY
METHOD 8270 SEMIVOLATILES
REPORTED UNITS: UG/KG

Blasland, Bouck & Lee, Inc.
JOANNA/CHF INDUSTRIES
SUBMISSION #: 9608000060

ORDER NUMBER		94276	94277	94279	94280
SAMPLE ID:		SB-16(0-2')	SB-16(4-6')	SB-17(0-2')	SB-17(4-6')
DATE SAMPLED:		08/08/1996	08/08/1996	08/08/1996	08/08/1996
DATE RECEIVED:	PQL	08/09/1996	08/09/1996	08/09/1996	08/09/1996
DATE ANALYZED:		8/21/96	8/19/96	8/21/96	8/19/96
DILUTION:		1.0	1.0	1.0	1.0
PERCENT SOLID (%):		93.5	85.5	93.3	81.9
4,6-DINITRO-2-METHYLPHENOL	1300	1400 U	1500 U	1400 U	1600 U
4-CHLORO-3-METHYLPHENOL	670	720 U	780 U	720 U	820 U
4-METHYLPHENOL	670	720 U	780 U	720 U	820 U
NAPHTHALENE	330	350 U	390 U	350 U	400 U
2-NITROANILINE	330	350 U	390 U	350 U	400 U
3-NITROANILINE	330	350 U	390 U	350 U	400 U
4-NITROANILINE	330	350 U	390 U	350 U	400 U
NITROBENZENE	330	350 U	390 U	350 U	400 U
2-NITROPHENOL	670	720 U	780 U	720 U	820 U
4-NITROPHENOL	1300	1400 U	1500 U	1400 U	1600 U
N-NITROSODIMETHYLAMINE	330	350 U	390 U	350 U	400 U
N-NITROSODIPHENYLAMINE	330	350 U	390 U	350 U	400 U
DI-N-OCTYL PHTHALATE	330	350 U	390 U	350 U	400 U
PENTACHLOROPHENOL	1300	1400 U	1500 U	1400 U	1600 U
PHENANTHRENE	330	350 U	390 U	350 U	400 U
PHENOL	670	720 U	780 U	720 U	820 U
4-BROMOPHENYL-PHENYLETHER	330	350 U	390 U	350 U	400 U
4-CHLOROPHENYL-PHENYLETHER	330	350 U	390 U	350 U	400 U
N-NITROSO-DI-N-PROPYLAMINE	330	350 U	390 U	350 U	400 U
PYRENE	330	600	390 U	480	400 U
1,2,4-TRICHLOROBENZENE	330	350 U	390 U	350 U	400 U
2,4,5-TRICHLOROPHENOL	670	720 U	780 U	720 U	820 U
2,4,6-TRICHLOROPHENOL	670	720 U	780 U	720 U	820 U
SURROGATE RECOVERIES	LIMITS				
TERPHENYL-d14	18 - 137	162 *	79	169 *	83
NITROBENZENE-d5	23 - 120	82	73	73	58
PHENOL-d6	24 - 113	83	83	77	71
2-FLUOROBIPHENYL	30 - 115	85	75	84	65
2-FLUOROPHENOL	25 - 121	75	79	59	63
2,4,6-TRIBROMOPHENOL	19 - 122	44	80	15 *	82



ANALYTICAL REPORT SUMMARY

Reported: 09/02/96

Dry Weight Reported Units = UG/G

Blasland, Bouck & Lee, Inc.

JOANNA/CHF INDUSTRIES

SUBMISSION #: 9608000060

ORDER NUMBER	94281	94283	94284	94285
SAMPLE ID:	SB-18(0-2')	SB-18(4-6')	SB-19(0-2')	SB-19(4-6')
DATE SAMPLED:	08/08/96	08/08/96	08/08/96	08/08/96
DATE RECEIVED:	08/09/96	08/09/96	08/09/96	08/09/96
ARSENIC	6.53	3.61	5.41	7.57
BARIUM	56.6	45.0	87.8	87.4
CADMIUM	1.39	0.734	7.71	3.58
CHROMIUM	9.52	10.4	13.3	12.9
LEAD	241	124	183	376
MERCURY	0.171 U	0.171 U	0.160 U	0.188 U
SELENIUM	10.7	7.96	8.51	10.9
SILVER	1.14 U	1.14 U	1.07 U	1.25 U
ZINC	482	343	1010	774
TOTAL CYANIDE	1.14 U	1.14 U	1.07 U	1.25 U
PERCENT SOLIDS	87.5	87.7	93.8	80.0
TOTAL PETROLEUM HYDROCARB	5650	275	7840	501



ANALYTICAL REPORT SUMMARY

Reported: 09/02/96

Blasland, Bouck & Lee, Inc.

JOANNA/CHF INDUSTRIES

SUBMISSION #: 9608000060

ORDER NUMBER	94281	94283	94284	94285
SAMPLE ID:	SB-18(0-2')	SB-18(4-6')	SB-19(0-2')	SB-19(4-6')
DATE SAMPLED:	08/08/96	08/08/96	08/08/96	08/08/96
DATE RECEIVED:	08/09/96	08/09/96	08/09/96	08/09/96
ARSENIC	08/21/96	08/21/96	08/21/96	08/21/96
BARIUM	08/21/96	08/21/96	08/21/96	08/21/96
CADMIUM	08/21/96	08/21/96	08/21/96	08/21/96
CHROMIUM	08/21/96	08/21/96	08/21/96	08/21/96
LEAD	08/21/96	08/21/96	08/21/96	08/21/96
MERCURY	08/22/96	08/22/96	08/22/96	08/22/96
SELENIUM	08/21/96	08/21/96	08/21/96	08/21/96
SILVER	08/23/96	08/23/96	08/23/96	08/23/96
ZINC	08/21/96	08/21/96	08/21/96	08/21/96
TOTAL CYANIDE	08/20/96	08/22/96	08/20/96	08/22/96
PERCENT SOLIDS %	08/19/96	08/19/96	08/19/96	08/19/96
TOTAL PETROLEUM HYDROCARB	08/15/96	08/15/96	08/15/96	08/15/96



ANALYTICAL REPORT SUMMARY
METHOD 8270 SEMIVOLATILES
REPORTED UNITS: UG/KG

Blasland, Bouck & Lee, Inc.
 JOANNA/CHF INDUSTRIES
 SUBMISSION #: 9608000060

ORDER NUMBER		94281	94283	94284	94285
SAMPLE ID:		SB-18(0-2')	SB-18(4-6')	SB-19(0-2')	SB-19(4-6')
DATE SAMPLED:		08/08/1996	08/08/1996	08/08/1996	08/08/1996
DATE RECEIVED:	PQL	08/09/1996	08/09/1996	08/09/1996	08/09/1996
DATE ANALYZED:		8/21/96	8/21/96	8/21/96	8/21/96
DILUTION:		1.0	1.0	1.0	1.0
PERCENT SOLID (%):		87.5	87.7	93.8	80.0
ACENAPHTHENE	330	380 U	380 U	350 U	410 U
ACENAPHTHYLENE	330	380 U	380 U	350 U	410 U
ANTHRACENE	330	380 U	380 U	350 U	410 U
BENZO(A)ANTHRACENE	330	430	510	410	410 U
BENZO(A)PYRENE	330	560	520	510	430
BENZO(B)FLUORANTHENE	330	960	1000	950	760
BENZO(G,H,I)PERYLENE	330	380 U	380 U	350 U	410 U
BENZO(K)FLUORANTHENE	330	380 U	380 U	390	410 U
BENZYL ALCOHOL	330	380 U	380 U	350 U	410 U
BUTYL BENZYL PHTHALATE	330	380 U	380 U	350 U	410 U
DI-N-BUTYLPHthalate	330	380 U	380	360	410
CARBAZOLE	330	380 U	380 U	350 U	410 U
INDENO(1,2,3-CD)PYRENE	330	380 U	380 U	350 U	410 U
4-CHLOROANILINE	330	380 U	380 U	350 U	410 U
BIS(-2-CHLOROETHOXY)METHANE	330	380 U	380 U	350 U	410 U
BIS(2-CHLOROETHYL)ETHER	330	380 U	380 U	350 U	410 U
2-CHLORONAPHTHALENE	330	380 U	380 U	350 U	410 U
2-CHLOROPHENOL	670	770 U	760 U	710 U	840 U
2,2'-OXYBIS(1-CHLOROPROPANE)	330	380 U	380 U	350 U	410 U
CHRYSENE	330	490	510	590	410 U
DIBENZO(A,H)ANTHRACENE	330	380 U	380 U	350 U	410 U
DIBENZOFURAN	330	380 U	380 U	350 U	410 U
1,2-DICHLOROBENZENE	330	380 U	380 U	350 U	410 U
1,3-DICHLOROBENZENE	330	380 U	380 U	350 U	410 U
1,4-DICHLOROBENZENE	330	380 U	380 U	350 U	410 U
3,3'-DICHLOROBENZIDINE	330	380 U	380 U	350 U	410 U
2,4-DICHLOROPHENOL	670	770 U	760 U	710 U	840 U
DIETHYLPHthalate	330	380 U	380 U	350 U	410 U
DIMETHYL PHTHALATE	330	380 U	380 U	350 U	410 U
2,4-DIMETHYLPHENOL	670	770 U	760 U	710 U	840 U
2,4-DINITROPHENOL	1300	1500 U	1500 U	1400 U	1600 U
2,4-DINITROTOLUENE	330	380 U	380 U	350 U	410 U
2,6-DINITROTOLUENE	330	380 U	380 U	350 U	410 U
BIS(2-ETHYLHEXYL)PHTHALATE	330	380 U	380 U	790	410 U
FLUORANTHENE	330	470	640	470	410 U
FLUORENE	330	380 U	380 U	350 U	410 U
HEXACHLOROBENZENE	330	380 U	380 U	350 U	410 U
HEXACHLOROBUTADIENE	330	380 U	380 U	350 U	410 U
HEXACHLOROCYCLOPENTADIENE	330	380 U	380 U	350 U	410 U
HEXACHLOROETHANE	330	380 U	380 U	350 U	410 U
ISOPHORONE	330	380 U	380 U	350 U	410 U
2-METHYLNAPHTHALENE	670	770 U	760 U	710 U	840 U
2-METHYLPHENOL	670	770 U	760 U	710 U	840 U



ANALYTICAL REPORT SUMMARY
METHOD 8270 SEMIVOLATILES
REPORTED UNITS: UG/KG

Blasland, Bouck & Lee, Inc.
JOANNA/CHF INDUSTRIES
SUBMISSION #: 9608000060

ORDER NUMBER		94281	94283	94284	94285
SAMPLE ID:		SB-18(0-2')	SB-18(4-6')	SB-19(0-2')	SB-19(4-6')
DATE SAMPLED:		08/08/1996	08/08/1996	08/08/1996	08/08/1996
DATE RECEIVED:	PQL	08/09/1996	08/09/1996	08/09/1996	08/09/1996
DATE ANALYZED:		8/21/96	8/21/96	8/21/96	8/21/96
DILUTION:		1.0	1.0	1.0	1.0
PERCENT SOLID (%):		87.5	87.7	93.8	80.0
4,6-DINITRO-2-METHYLPHENOL	1300	1500 U	1500 U	1400 U	1600 U
4-CHLORO-3-METHYLPHENOL	670	770 U	760 U	710 U	840 U
4-METHYLPHENOL	670	770 U	760 U	710 U	840 U
NAPHTHALENE	330	380 U	380 U	350 U	410 U
2-NITROANILINE	330	380 U	380 U	350 U	410 U
3-NITROANILINE	330	380 U	380 U	350 U	410 U
4-NITROANILINE	330	380 U	380 U	350 U	410 U
NITROBENZENE	330	380 U	380 U	350 U	410 U
2-NITROPHENOL	670	770 U	760 U	710 U	840 U
4-NITROPHENOL	1300	1500 U	1500 U	1400 U	1600 U
N-NITROSODIMETHYLAMINE	330	380 U	380 U	350 U	410 U
N-NITROSODIPHENYLAMINE	330	380 U	380 U	350 U	410 U
DI-N-OCTYL PHTHALATE	330	380 U	380 U	350 U	410 U
PENTACHLOROPHENOL	1300	1500 U	1500 U	1400 U	1600 U
PHENANTHRENE	330	380 U	380 U	490	410 U
PHENOL	670	770 U	760 U	710 U	840 U
4-BROMOPHENYL-PHENYLETHER	330	380 U	380 U	350 U	410 U
4-CHLOROPHENYL-PHENYLETHER	330	380 U	380 U	350 U	410 U
N-NITROSO-DI-N-PROPYLAMINE	330	380 U	380 U	350 U	410 U
PYRENE	330	900	1100	1200	600
1,2,4-TRICHLOROBENZENE	330	380 U	380 U	350 U	410 U
2,4,5-TRICHLOROPHENOL	670	770 U	760 U	710 U	840 U
2,4,6-TRICHLOROPHENOL	670	770 U	760 U	710 U	840 U
SURROGATE RECOVERIES	LIMITS				
TERPHENYL-d14	18 - 137	156 *	169 *	209 *	156 *
NITROBENZENE-d5	23 - 120	72	67	79	65
PHENOL-d6	24 - 113	80	85	79	84
2-FLUOROBIPHENYL	30 - 115	81	76	90	72
2-FLUOROPHENOL	25 - 121	73	76	75	74
2,4,6-TRIBROMOPHENOL	19 - 122	84	99	87	91



EXTRACTABLE ORGANICS
METHOD 8270 SEMIVOLATILES
Reported: 09/02/96

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : Order #: 97387 Sample Matrix: SOIL/SEDIMENT
Date Received: Submission #: Percent Solid: 100

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 08/14/96			
DATE ANALYZED : 08/19/96			Dry Weight
ANALYTICAL DILUTION: 1.0			
ACENAPHTHENE	330	330 U	UG/KG
ACENAPHTHYLENE	330	330 U	UG/KG
ANTHRACENE	330	330 U	UG/KG
BENZO (A) ANTHRACENE	330	330 U	UG/KG
BENZO (A) PYRENE	330	330 U	UG/KG
BENZO (B) FLUORANTHENE	330	330 U	UG/KG
BENZO (G, H, I) PERYLENE	330	330 U	UG/KG
BENZO (K) FLUORANTHENE	330	330 U	UG/KG
BENZYL ALCOHOL	330	330 U	UG/KG
BUTYL BENZYL PHTHALATE	330	330 U	UG/KG
DI-N-BUTYLPHTHALATE	330	330 U	UG/KG
CARBAZOLE	330	330 U	UG/KG
INDENO (1, 2, 3-CD) PYRENE	330	330 U	UG/KG
4-CHLOROANILINE	330	330 U	UG/KG
BIS (-2-CHLOROETHOXY) METHANE	330	330 U	UG/KG
BIS (2-CHLOROETHYL) ETHER	330	330 U	UG/KG
2-CHLORONAPHTHALENE	330	330 U	UG/KG
2-CHLOROPHENOL	670	670 U	UG/KG
2, 2'-OXYBIS (1-CHLOROPROPANE)	330	330 U	UG/KG
CHRYSENE	330	330 U	UG/KG
DIBENZO (A, H) ANTHRACENE	330	330 U	UG/KG
DIBENZOFURAN	330	330 U	UG/KG
1, 3-DICHLOROBENZENE	330	330 U	UG/KG
1, 2-DICHLOROBENZENE	330	330 U	UG/KG
1, 4-DICHLOROBENZENE	330	330 U	UG/KG
3, 3'-DICHLOROBENZIDINE	330	330 U	UG/KG
2, 4-DICHLOROPHENOL	670	670 U	UG/KG
DIETHYLPHTHALATE	330	330 U	UG/KG
DIMETHYL PHTHALATE	330	330 U	UG/KG
2, 4-DIMETHYLPHENOL	670	670 U	UG/KG
2, 4-DINITROPHENOL	1300	1300 U	UG/KG
2, 4-DINITROTOLUENE	330	330 U	UG/KG
2, 6-DINITROTOLUENE	330	330 U	UG/KG
BIS (2-ETHYLHEXYL) PHTHALATE	330	330 U	UG/KG
FLUORANTHENE	330	330 U	UG/KG
FLUORENE	330	330 U	UG/KG
HEXACHLOROBENZENE	330	330 U	UG/KG
HEXACHLOROBUTADIENE	330	330 U	UG/KG
HEXACHLOROCYCLOPENTADIENE	330	330 U	UG/KG
HEXACHLOROETHANE	330	330 U	UG/KG



EXTRACTABLE ORGANICS
METHOD 8270 SEMIVOLATILES
Reported: 09/02/96

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : Order #: 97387 Sample Matrix: SOIL/SEDIMENT
Date Received: Submission #: Percent Solid: 100

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 08/14/96			
DATE ANALYZED : 08/19/96			Dry Weight
ANALYTICAL DILUTION: 1.0			
ISOPHORONE	330	330 U	UG/KG
2-METHYLNAPHTHALENE	670	670 U	UG/KG
4,6-DINITRO-2-METHYLPHENOL	1300	1300 U	UG/KG
4-CHLORO-3-METHYLPHENOL	670	670 U	UG/KG
2-METHYLPHENOL	670	670 U	UG/KG
4-METHYLPHENOL	670	670 U	UG/KG
NAPHTHALENE	330	330 U	UG/KG
2-NITROANILINE	330	330 U	UG/KG
3-NITROANILINE	330	330 U	UG/KG
4-NITROANILINE	330	330 U	UG/KG
NITROBENZENE	330	330 U	UG/KG
2-NITROPHENOL	670	670 U	UG/KG
4-NITROPHENOL	1300	1300 U	UG/KG
N-NITROSODIMETHYLAMINE	330	330 U	UG/KG
N-NITROSODIPHENYLAMINE	330	330 U	UG/KG
DI-N-OCTYL PHTHALATE	330	330 U	UG/KG
PENTACHLOROPHENOL	1300	1300 U	UG/KG
PHENANTHRENE	330	330 U	UG/KG
PHENOL	670	670 U	UG/KG
4-BROMOPHENYL-PHENYLEETHER	330	330 U	UG/KG
4-CHLOROPHENYL-PHENYLEETHER	330	330 U	UG/KG
N-NITROSO-DI-N-PROPYLAMINE	330	330 U	UG/KG
PYRENE	330	330 U	UG/KG
1,2,4-TRICHLOROBENZENE	330	330 U	UG/KG
2,4,6-TRICHLOROPHENOL	670	670 U	UG/KG
2,4,5-TRICHLOROPHENOL	670	670 U	UG/KG

SURROGATE RECOVERIES

QC LIMITS

TERPHENYL-d14	(18 - 137 %)	83	%
NITROBENZENE-d5	(23 - 120 %)	86	%
PHENOL-d6	(24 - 113 %)	82	%
2-FLUOROBIPHENYL	(30 - 115 %)	88	%
2-FLUOROPHENOL	(25 - 121 %)	79	%
2,4,6-TRIBROMOPHENOL	(19 - 122 %)	95	%

COLUMBIA ANALYTICAL SERVICES, INC.
700 Exchange Street, Rochester, New York 14608
(716) 454-6810 • FAX (716) 454-6825

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM
(800) 695-7222
DATE 8/28/96 PAGE 1 OF 2

PROJECT NAME JOANNA / CHF INDUSTRIES				ANALYSIS REQUESTED															
PROJECT MANAGER/CONTACT TOM HASSEK																			
COMPANY/ADDRESS BUSLAND, BOCK & LEE																			
30 CORPORATE WOODS, SUITE 160																			
TEL (716) 292-6740 FAX (716) 292-6715																			
SAMPLER'S SIGNATURE Michael R. Land																			
SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX	# OF CONTAINERS	GC/MS VOAs 8260 <input type="checkbox"/> 624	GC/MS SVOAs 8270A <input type="checkbox"/> 625	GC VOAs 8010/8020 <input type="checkbox"/> 601/602	PESTICIDES/PCBs 8080 <input type="checkbox"/> 808	STARS LIST 8021 VOAs TOTAL <input type="checkbox"/> TCLP	STARS LIST 8270 SVOAs TOTAL <input type="checkbox"/> TCLP	TCLP <input type="checkbox"/> METALS VOAs <input type="checkbox"/> SVOAs <input type="checkbox"/> H/P	WASTE CHARACTERIZATION <input type="checkbox"/> React <input type="checkbox"/> Corros. <input type="checkbox"/> Ignit.	METALS, TOTAL (LIST BELOW)	METALS, DISSOLVED (LIST BELOW)	PRESERVATION			
																	PH < 2.0	PH > 12	Other
MW - 9	8/28/96	0600	94225	WATER	1										X				
MW - 8		0700	94273		1										X				
MW - 7		0725	94272		1										X				
MW - 3		0915	94267		1										X				
MW - 4		0800	94274		1										X				
MW - 1		0840	94268		1										X				
MW - 5		1425	94271		1										X				
MW - 10		1230	94289		1										X				
MW - 6	8/28/96	1320	94270	WATER	1										X				

RELINQUISHED BY:	RECEIVED BY:
Michael R. Land	Tom Hastings
Signature: Michael R. Land	Signature: Tom Hastings
Printed Name: Michael R. Land	Printed Name: Tom Hastings
Firm: BUSLAND, BOCK & LEE	Firm: CHF INDUSTRIES
Date/Time: 8/19/96 10:40	Date/Time: 8/19/96 10:40

RELINQUISHED BY:	RECEIVED BY:
	Michael R. Land
Signature:	Signature: Michael R. Land
Printed Name:	Printed Name: Michael R. Land
Firm:	Firm: CHF INDUSTRIES
Date/Time:	Date/Time: 8/19/96 10:40

RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:
Printed Name:	Printed Name:
Firm:	Firm:
Date/Time:	Date/Time:

REPORT REQUIREMENTS	INVOICE INFORMATION	SAMPLE RECEIPT
1. Routine Report 2. Routine Rep. w/CASE Narrative 3. EPA Level III Validatable Package 4. N.J. Reduced Deliverables Level IV 5. NY ASP/CLP Deliverables 6. Site specific QC.	P.O. #: Bill To:	Shipping Via: Client Shipping #: Temperature: 3.1 Submission No: 8-60

SPECIAL INSTRUCTIONS/COMMENTS:
METALS TOTAL PERA METALS AND ZINC BY SW-846 METHODS 6010A/747

ORGANICS: ☐ TCL ☐ PPL ☐ AE Only ☐ BN Only ☐ Special List

65 RAMAPO VALLEY ROAD MAHWAH, NJ 07430	201-512-3292 FAX 201-512-3362	435 LAWRENCE BELL DR. AMHERST, NY 14221	716-634-0454 FAX 716-634-9019
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Appendix H

**Supplemental ESA Report,
Blasland, Bouck & Lee, June 1997**

*Phase III Environmental
Site Assessment
Joanna/Crown Home
Furnishings Facility
Ogdensburg, New York*

Newell Company
Rockford, Illinois

October 1996



Transmitted Via Federal Express

October 11, 1996

Dr. Peter J. Schultz
Newell Company
4000 Auburn Street
Rockford, IL 61103

Re: Phase III Environmental Site Assessment
Joanna/Crown Home Furnishings
Ogdensburg, New York
Project #: 0078-078.30 #2

Dear Dr. Schultz:

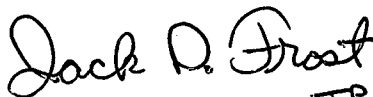
Please find enclosed two copies of the report entitled "Phase III Environmental Site Assessment, Joanna/Crown Home Furnishings Facility, Ogdensburg, New York, October 1996", prepared by Blasland, Bouck & Lee, Inc. (BBL). The report presents the results of the soil and ground-water sampling performed by BBL during August 1996, as described in our scope of work presented in Change Order No. 1996-01 to contract No. 07830, dated December 21, 1995.

Based upon the findings of this phase of work, BBL has proposed, as outlined in Section 3.2 (Recommendations) of this report, that an expanded subsurface investigation be implemented between the Main Building and the Shed 2-B area where the previous electroplating operations were performed on site. Additionally, a subsequent round of ground-water monitoring is suggested to be conducted during this phase. As we discussed, BBL will prepare and submit to Newell a proposed scope of work and cost estimate for these additional activities for review and authorization.

If you have any questions, please contact me at (716) 292-6740.

Very truly yours,

BLASLAND, BOUCK & LEE, INC.


T.P.H.

Jack D. Frost
Principal Scientist

JDF/lap
5096966.d

cc: Mr. Thomas P. Hasek, Jr., Blasland, Bouck & Lee, Inc.
Mr. William B. Popham, Blasland, Bouck & Lee, Inc. (w/o)

***Phase III Environmental
Site Assessment
Joanna/Crown Home
Furnishings Facility
Ogdensburg, New York***

Newell Company
Rockford, Illinois

October 1996

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1. Introduction

1.1 Overview

Newell Company (Newell) retained Blasland, Bouck & Lee, Inc. (BBL) to perform follow-up activities associated with the Joanna/CHF Industries' Site (site) located at 541 Covington Street, Ogdensburg, St. Lawrence County, New York (Figure 1). Newell is the current owner of the property and Crown Home Furnishings Company (CHF) was the operator of the facility. An initial Environmental Site Assessment (ESA) was conducted in November 1995 by BBL to assess and define existing and potential environmental liabilities associated with the historical use and operations of the site. As a follow-up to the initial investigation, a Supplemental Phase II ESA was performed to address various additional activities, which were outlined as recommendations in Sections 5.2 of the "Supplemental Phase II Environmental Site Assessment Report, Joanna/Crown Home Furnishings Facility, Ogdensburg, New York, May 1996" (Phase II ESA Report), prepared by BBL. A detailed scope of work was prepared by BBL in their correspondence dated May 24, 1996 to Dr. Peter J. Schultz, Director of Environmental Affairs, Newell Company, which outlines these proposed activities to be conducted in this Phase III investigation..

The previous ESA activities identified the presence of semi-volatile organic and inorganic compounds at concentrations exceeding the New York State Department of Environmental Conservation's (NYSDEC's) standard/guidance values in ground water and soil samples across the site. The presence of these compounds in ground water and soil could potentially represent an environmental concern. Based upon the recommendation of the Phase II ESA Report, Newell elected to conduct the follow-up activities to focus on the areas of concern at the site. The limited additional investigation for the Phase III focused on identification and verification of the possible sources of impacted ground water and soils to evaluate the extent of the on-site soil contamination in these areas. This investigation consisted of the following:

- Collection of ground-water samples from each of the existing monitoring wells for analysis of total RCRA metals and zinc. As part of this task, ground-water elevations were obtained from each of the existing monitoring wells to depict the current ground-water elevations and to compare to the ground-water elevation contour map previously prepared.
- Advancement of four overburden soil borings in the area of SB-13 to a depth of 8 feet below ground surface (BGS) or until ground water is encountered; the collection of two separate soil samples from each boring at the 0 to 2-foot interval (composite) and one in the 2-foot interval above the clay layer; or, in the 2-foot sampling interval above the ground water table for the following analyses:
 - RCRA metals and zinc;
 - Semi-volatile organic compounds;
 - Total cyanides; and
 - Total petroleum hydrocarbons.

2. Subsurface Conditions

2.1 Investigation Activities

To further assess subsurface soil and ground water conditions, a third round of ground-water sampling was performed to confirm the results of the initial sampling, and four additional soil borings were advanced to assess the soil quality in the overburden/fill in the vicinity of the former plating bath area and SB-13. Ground-water monitoring wells MW-1, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, and MW-10 (located on Figure 1) were sampled and analyzed by General Testing Corporation (GTC) for the eight RCRA metals and zinc. As in previous rounds, MW-2 could not be located. Four additional soil borings (SB16, SB17, SB18, and SB19) were installed at the locations indicated on Figure 1. The soil borings were advanced and sampled on August 8, 1996, along with the sampling of the existing ground-water monitoring wells. The soil samples were analyzed for semi-volatile organic compounds and the RCRA metals, plus zinc.

The additional soil borings were advanced at the following locations (also see Figure 1 and Appendix A):

- SB-16 was advanced to 8 feet below ground surface (BGS), north of the main building, 10 feet northeast of SB-13;
- SB-17 to 8 feet BGS, north of the Main Building, 12 to 15 feet west of SB-13;
- SB-18 to 8 feet BGS, south of Shed No. 2-B, 10 to 12 feet northwest of SB-13;
- SB-19 to 8 feet BGS, south of Shed 2-B, 15 feet northeast of SB-13;

Overburden soil descriptions are presented in the subsurface logs compiled in Appendix A.

2.1.1 Soil Boring Installation

Each soil boring was advanced into the overburden soil using decontaminated 4-1/4-inch inside diameter (I.D.) hollow-stem augers. The overburden soil at each drilling location was sampled continuously at two-foot intervals using a two-inch outer diameter split-spoon. Following their completion, all soil borings were backfilled with the soil cuttings produced during the advancement of the borings.

Upon retrieval, each split-spoon was opened and screened with the photoionization detection (PID) for the presence of TVO vapors. The soil sample from each borehole exhibiting the highest TVO vapor concentration as detected by the PID, visual evidence of contamination, and/or petroleum odors, was submitted to GTC for the following laboratory analyses:

- Total RCRA Metals and zinc by SW-846 Methods 6010/7470;
- Semi-Volatile Organic Compounds (TCL base neutral/acid extractables) by SW-846 Method 8270;

2.1.2 Ground-Water Sampling

- Total Cyanides by SW-846 Method 335.2; and
- Total Petroleum Hydrocarbon by SW-846 Method 418.1.

On August 8, 1996, monitoring wells MW-1, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, and MW-10 were sampled and transported to GTC for total RCRA metals and zinc analyses by USEPA Methods 6010A/7471. Prior to sampling, BBL measured the static water level in each well using a decontaminated electronic water-surface indicator to determine the volume of water in each well.

Each monitoring well was then purged of three well volumes using a disposable, polyethylene bailer with polypropylene rope. After purging each well, BBL obtained ground water samples using a bailer and placed them into laboratory-provided glassware. The ground water samples were placed into a cooler with ice as the preservative for delivery to GTC for laboratory analysis.

The ground-water elevations were utilized for comparison to establish the ground-water flow direction.

2.2 Site Hydrogeology

2.2.1 Regional Geology

The Joanna/CHF Industries is located in the St. Lawrence Valley of northern New York State. In St. Lawrence County, this area is characterized by low surface relief, unconsolidated overburden derived from glacial deposition, and bedrock dipping gently to the south at approximately 50 feet per mile. The bedrock consists of a dark tan, sandy, medium to fine grained, siliceous dolostone of Lower Ordovician age (Beekmantown Dolostone).

2.2.2 Site Overburden Geology and Ground-Water Flow

During the installation of the soil borings, sand-size material was the predominant grain size component observed in subsurface geology across the site. In soil borings SB-10, SB-11, SB-13, as well as the newly installed soil borings of SB-16, SB-17, SB-18, and SB-19 the overburden is comprised mainly of fine sand and silt. In soil borings SB16 and SB17, the overburden consisted of black/brown fine to coarse sand and fill material consisting of black ash and cinders in the 0 to 6 foot BGS zone and a brown fine/medium sand in the 6 to 8 foot BGS zone. In soil borings SB18 and SB19, the overburden also consisted of a black/brown fine to coarse sand and fill material to a depth of 4 foot and a brown fine to medium sand from in the 4 to 8 foot BGS zone. This deeper zone also indicated the presence of a trace dense, wet clay layer. Bedrock was not encountered during the drilling activities. The overburden encountered at each soil boring was field-logged and recorded on the boring logs included in Appendix A.

The revised shallow overburden ground-water flow pattern across the site was redetermined based on the water level data obtained from monitoring wells MW-1 and MW-3 through MW-10 during the most recent ground-water sampling round (August 1996). The depth to ground water across the site calculated from these data ranged between 2.45 and 9.60 feet BGS (Table 1).

2.3 Soil and Ground-Water Quality Data

2.3.1 Soil Sample Analytical Results

An overburden ground-water elevation contour map depicting the water levels from the most recent sampling event is presented on Figure 2. The general direction of ground water flow is interpreted from this figure to be from the south to the north across the site, similar to the direction that was determined from the September 1995 and January 31, 1996 and February 1, 1996 data. In particular, the water level at monitoring well MW-5 (upgradient) was approximately 13-feet higher during the August 1996 sampling round than during the September 1995 sampling round. In general, the ground-water levels associated with the monitoring wells furthest from the St. Lawrence River were much closer to ground surface during the August 1996 sampling round than during the September 1995 sampling round, while the water levels of the monitoring wells closer to the St. Lawrence River were only slightly closer to ground surface during the August 1996 sampling round. This condition is probably due to the drier conditions that usually persist during the late summer and early fall. The monitoring wells closest to the St. Lawrence River are not affected by seasonal fluctuation due to probable hydraulic connection with the river.

As part of this phase of work, one soil sample was collected from each of the six soil borings and submitted to GTC for analysis. Summaries of analytical results compared to the soil cleanup objectives listed in NYSDEC Technical and Administrative Guidance Memorandum (TAGM) No. 4046 for all soil samples are presented in Table 2.

The SVOCs compounds, benzo(a)anthracene, benzo(a) anthracene, benzo (a) pyrene, bis(2-ethylhexyl) phthalate, chrysene, di-n-butylphthalate, fluoranthene, and pyrene were detected at concentrations above the NYSDEC TAGM 4046 soil cleanup objectives; all other SVOC compounds were below detectable limits. As shown in Table 2, the comparison of the analytical results for the soil samples with NYSDEC soil cleanup objectives indicates that the following inorganic constituents were above the soil cleanup objectives:

- Chromium was detected in all four borehole samples (except SB-18, 0-2' interval) at concentrations above the NYSDEC TAGM 4046 cleanup objective of 10 ppm or site background (approximately 10 ppm from MW-5 soil sample obtained during the initial phase), with concentrations ranging from 9.52 ppm at SB-18 to 19.0 ppm at SB-17. The data from the SB-13 boring previously indicated chromium results at 11.8 ppm (0 to 2 feet) and 16.6 ppm (6 to 8 feet);
- Lead was detected in all borehole soil samples above the NYSDEC TAGM 4046 cleanup objective of site background (i.e., lead was detected at less than 1 ppm in the MW-5 soil sample obtained during the initial phase). The highest lead concentrations were detected in samples at 241 ppm in SB-18 (0 to 2 feet) and 376 ppm in SB-19 (4 to 6 feet). Previously, the highest lead concentrations were in the 60 to 70 ppm range in SB-13);
- Zinc was detected in all boreholes above the NYSDEC TAGM 4046 cleanup objective of 20 ppm or site background (no site background level exists, since

2.3.2 Ground-Water Sample Analytical Results

zinc was not analyzed for during the initial phase), with SB-19 exhibiting the most significant concentrations of 1010 ppm and 774 ppm from the 0-2' and 4' to 6' intervals, respectively;

- Mercury was detected in the SB-17 at 0.3 ppm in the 4 to 6 foot interval soil sample at almost three times the NYSDEC TAGM 4046 cleanup objective of 0.1 ppm; and
- Selenium was detected in all the borehole samples above the NYSDEC TAGM 4046 cleanup of 2 ppm or site background. The highest selenium concentration were detected in samples obtained from SB-17 and SB-19, which exhibited concentrations of 14.7 (0' to 2' interval) and 10.9 (4' to 6' interval), respectively.

In addition, total petroleum hydrocarbons (TPHs) were detected in the soil samples from SB-16, SB-17, SB-18, and SB-19 with the highest concentration of 7840 ppm being detected in the SB-19 sample collected from the 0- to 2-foot interval.

A copy of the laboratory report is provided in Appendix B.

As previously stated, one ground-water sample was collected from each well and submitted to GTC for totals analyses, in accordance with New York State ground-water sampling protocols. A summary of the analytical results, including comparison with NYSDEC ambient water quality standards and guidance values (6NYCRR Part 703), is presented in Table 3.

As Table 3 indicates, eight inorganics were detected in ground-water samples collected from monitoring wells across the site at concentrations exceeding NYSDEC standard. The following inorganics were detected above their respective NYSDEC standards/guidance values:

- Lead was detected in all the monitoring wells at concentrations ranging from 0.0134 to 0.66 ppm, with a NYSDEC standard guidance of 0.025, with only the background monitoring well (MW-5) exhibiting concentrations below NYSDEC ambient water quality standards. As previously noted, monitoring well MW-7 indicates the highest concentrations and may be the result of off-site influences (i.e., Diamond site), while MW-8 and MW-9 would appear to be the result of past operations conducted on the site;
- Chromium was detected in monitoring wells MW-7, MW-8, and MW-9 at 0.0559, 0.108, and 0.112 ppm, respectively. The NYSDEC standard guidance values for chromium is 0.050 ppm;
- Arsenic was detected in MW-8 and MW-9 at concentrations 1.1 to 2.5 times the NYSDEC standard/guidance value of 0.025 ppm;
- Cadmium was detected in MW-8 and MW-9 at concentrations one and one half to five times the NYSDEC standard/guidance value of 0.010 ppm;
- Selenium was detected in MW-7, MW-8, and MW-9 at concentrations of three to five times the NYSDEC Standard/Guidance Value of 0.010 ppm.

-
- Zinc was detected in MW-7, MW-8, and MW-9 at concentrations one to four times the NYSDEC standard/guidance value of 0.300 ppm.

A copy of the laboratory report is provided in Appendix B.

3. Conclusions and Recommendations

3.1 Conclusions

Select semivolatile organic compounds were detected in all of the recently installed soil boring samples at concentrations above the NYSDEC TAGM 4046 cleanup objectives. Total petroleum hydrocarbon (TPH) values were detected in elevated levels in the 0 to 2 foot soil boring samples ranging from 5640 ppm (SB-18) to 7830 ppm (SB-19). The highest TPH soil concentrations were previously detected during the installation of monitoring wells MW-7 (1340 ppm), MW-8 (1780 ppm), and MW-9 (2220 ppm), all of which are located along the shoreline in the fill of unknown origin. The areas where SB-16 and SB-19 were installed also indicated the presence of ash, cinders, and fill in the upper 1 to 4 feet. Although New York State does not currently have a formal guidance value for TPH's in soil, 100 ppm is a typical guidance value that has been adopted by many states nationwide. Therefore, it can be concluded that this area, as well as other isolated areas on the site have been impacted by TPH's.

The soil samples from the newly installed borings indicated the presence of various metals at concentrations exceeding NYSDEC's soil clean-up objectives. The concentration of selenium, zinc, lead, and barium were particularly elevated in certain soil samples. Barium elevations were elevated above site background levels, with selenium above current standards. The concentrations of zinc in soils at SB-18 was 463 ppm (0 to 2 feet) and 344 ppm (4 to 6 feet), and in SB-19 the concentration was detected at 1010 ppm (0 to 2 feet) and 773 ppm (4 to 6 feet). The concentrations of lead in soils at SB-18 was 241 ppm (0 to 2 feet) and 124 ppm (4 to 6 feet), and in SB-19 the concentration was detected at 183 ppm (0 to 2 feet) and 376 ppm (4 to 6 feet). The location of the soil borings were in the area between the main building and Shed No. 2-B, which is the area where electroplating operations have historically taken place.

The zinc concentrations in the ground water samples collected from monitoring wells MW-7, MW-8, and MW-9 were all greater than the NYSDEC standard of 0.3 ppm and ranged from 0.306 ppm to 1.23 ppm. These were elevated zinc levels in ground water samples obtained from monitoring wells downgradient of the SB-13 area (particularly MW-9), as well as elevated chromium, lead, and cadmium levels in these wells. This would suggest that the ground water quality at the site has been impacted by the electroplating operations that have previously taken place at the site.

3.2 Recommendations

- Continue to monitor the planned drum removal action and other anticipated environmental studies at the Diamond site, which are scheduled to be conducted by the USEPA. The removal action is anticipated to address the abandoned drums remaining on that site. A Freedom of Information request was submitted to the NYSDEC and received by BBL, and the findings of this data were forwarded to Newell in our correspondence dated October 1, 1996;
- Conduct further investigation of subsurface soils to determine if a discreet source of residual metals exist in the substrate near the former electroplating operations in the Main Building area. Test pit excavations and subsurface soil sampling and analysis will be used to further define the vertical and horizontal extent of elevated metals in the soils. Additionally, the test pit excavations will be used to observe the subsurface to determine if preferential flow paths exist in the form of sewer line bedding or backfill, building foundation backfill, roadbed, etc. The

goals of the study are to provide additional potential source area data to assist in the selection of a cost-effective and practical source reduction/remedial strategy.

It is anticipated that two to three backhoe test pits will be excavated beneath the roadway between the Main Building and Shed No. 2-B in the area where soil samples collected from borings contained concentrations of potential electroplating metals above background levels. Test pits will be excavated to a depth that will allow for observation of utility lines and building foundations. Observations will be made for signs of possible release and containment or preferential flow of solution from the former plating operation, as well as obvious irregularities in the backfill material. Additionally, the test pits will be used to provide additional information on the depth to ground water; and

- While on site, an additional round of ground water elevations will be measured and water samples will be collected for analysis. These data will be used to further define the spatial variations of ground water contaminants previously identified on-site and provide further evidence of source areas, as well as assess potential temporal trends. Given the potential for on-site contaminated ground water derived from off-site sources, these data will be important to the design of any ground water remedial program, if any.

Tables

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TABLE 1

NEWELL COMPANY
ENVIRONMENTAL SITE ASSESSMENT
GROUNDWATER ELEVATION DATA

Well ID	Ground Reference Elevation	Top of Riser Reference Elevation	September 18 - 19, 1995		January 31 - February 1, 1996		August 8, 1996	
			Depth to Water	Groundwater Elevation	Depth to Water	Groundwater Elevation	Depth to Water	Groundwater Elevation
MW-1	97.72	97.54	8.88	88.66	DRY	N/A	7.00	90.54
MW-2 (*)	104.42	104.10	N/A	N/A	N/A	N/A	N/A	N/A
MW-3	100.52	100.32	10.20	90.12	9.45	90.87	9.60	90.72
MW-4	98.99	98.77	9.65	89.12	7.95	90.82	8.12	90.65
MW-5	127.03	126.62	21.15	105.47	5.82	120.80	8.25	118.37
MW-6	111.81	111.52	11.15	100.37	4.84	106.68	5.00	106.52
MW-7	91.89	91.68	3.22	88.46	2.95	88.73	2.45	89.23
MW-8	91.94	91.66	3.30	88.36	3.04	88.62	2.50	89.16
MW-9	93.47	93.26	4.35	88.91	3.72	89.54	3.00	90.26
MW-10 (**)	94.55	94.20	3.75	90.45	N/A	N/A	3.12	91.08

Notes:

All data is expressed in feet.

All above elevations based on site bench elevations and monitoring wells 1, 3 and 4.

(*) MW-2 was unable to be located during sampling events.

(**) MW-10 was buried under a pile of snow during the January 31 thru February 1, 1996 sampling event.

N/A - Not available.

TABLE 2

NEWELL COMPANY
ENVIRONMENTAL SITE ASSESSMENT
SOIL BORINGS
SUBSURFACE SOIL SAMPLE ANALYTICAL RESULTS

Sample I.D.	NYSDEC TAGM 4046 Soil Cleanup Objectives (1)	Site Background*	SB-16 8/08/96 (0-2') (4-6')	SB-17 08/08/96 (0-2') (4-6')	SB-18 08/08/96 (0-2') (4-6')	SB-19 08/08/96 (0-2') (4-6')
SEMIVOLATILES						
Benzo (A) Anthracene	0.224 or MDL	ND	ND	ND	0.43	0.41
Benzo (A) Pyrene	0.061 or MDL	ND	0.44	ND	0.56	0.51
Benzo (B) Fluoranthene	1.1	ND	0.51	ND	0.96	0.95
Benzo (K) Fluoranthene	1.1	ND	ND	ND	ND	0.39
Bis (2-Ethylhexyl) Phthalate	50.0 **	ND	ND	ND	ND	0.79
Chrysene	0.4	ND	ND	ND	0.49	0.51
Di - n - butylphthalate	50.0 **	ND	0.35	0.66	ND	0.38
Fluoranthene	50.0 **	ND	ND	ND	0.47	0.64
Phenanthrene	50.0 **	ND	ND	ND	ND	0.49
Pyrene	50.0 **	ND	0.60	0.48	0.90	1.20
INORGANICS						
Arsenic	7.5 or SB	2.11	2.80	5.05	6.53	5.41
Barium	300 or SB	47.7	53.3	67.7	56.6	87.8
Cadmium	1 or SB	ND	ND	0.915	1.39	7.71
Chromium	10 or SB	9.45	13.4	12	9.52	13.3
Lead	SB	ND	25.0	45.1	241	183
Mercury	0.1	ND	0.195	ND	ND	ND
Selenium	2 or SB	ND	5.86	6.24	10.7	8.51
Silver	SB	ND	ND	ND	ND	ND
Zinc	20 or SB	ND	91.5	111	482	1010
Total Cyanide	NS	ND	ND	ND	ND	ND
Total TPH	NS	ND	5930	7790	5650	7840
			83.3	119	275	501

Notes:

Only compounds with detectable concentrations listed in table.
Results are reported in ug/g.

ND = non detect: for detection limits see laboratory analytical results in Appendix B.
NS = no standard.

(1) = NYSDEC TAGM 4046: Determination of Soil Cleanup Levels (HWR-94-4046) expressed cleanup objectives in (ppm).
SB = soil background.

MDL = method detection limits.

* = As identified from September 1995 soil sampling of background monitoring well, MW-5.

** = As per TAGM 4046, Total VOCs < 10 ppm., Total Semi-VOCs < 500 ppm and individual Semi-VOCs < 50 ppm.

TABLE 3

NEWELL COMPANY
ENVIRONMENTAL SITE ASSESSMENT
MONITORING WELLS
GROUNDWATER SUMMARY ANALYTICAL RESULTS

Sample I.D.	NYSDEC 6 NYCRR Part 703 Standards / Guidance Values (1)	MW-1 8/8/96	MW-3 8/8/96	MW-4 8/8/96	MW-5 8/8/96	MW-6 8/8/96	MW-7 8/8/96	MW-8 8/8/96	MW-9 8/8/96	MW-10 8/8/96
METALS										
Arsenic	0.025	ND	ND	ND	ND	ND	ND	0.0274	0.0617	ND
Barium	1.000	0.217	0.275	0.362	0.0638	0.206	0.309	0.915	0.704	0.207
Cadmium	0.010	ND	ND	ND	ND	ND	ND	0.0534	0.0132	ND
Chromium	0.050	0.0112	0.0155	0.0477	ND	ND	0.0559	0.108	0.112	0.033
Lead	0.025	0.0374	0.0506	0.0824	0.0134	0.118	3.07	0.568	0.66	0.0616
Mercury	0.002	ND	ND	ND	ND	ND	0.00243	0.000723	0.00126	ND
Selenium	0.010	ND	ND	0.016	ND	0.0169	0.0318	0.0459	0.0534	ND
Silver	0.050	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	0.300	0.0523	0.185	0.139	0.0353	0.105	0.306	0.598	1.23	0.0827

Notes:

Only compounds with detectable concentrations listed in table.

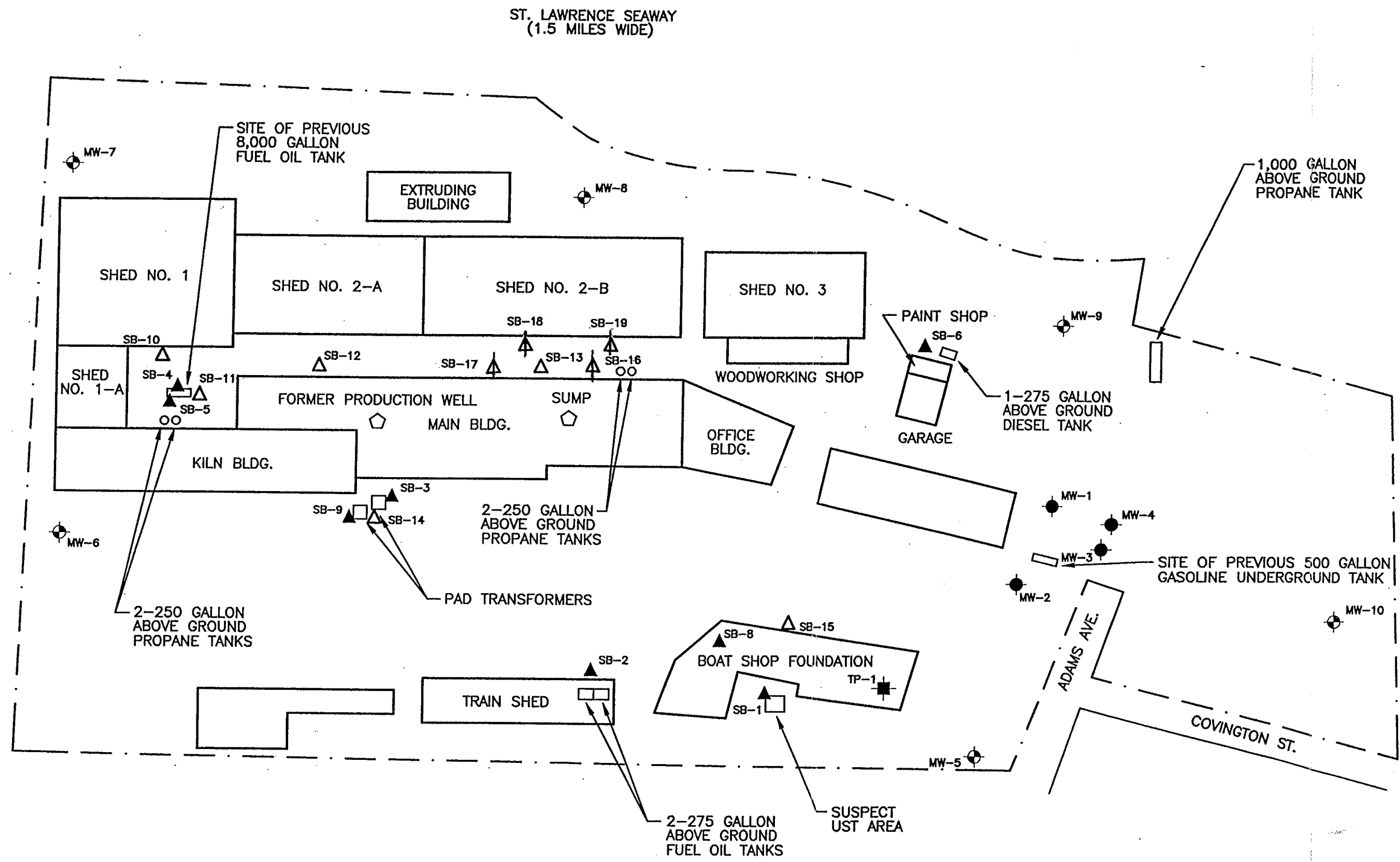
Results are reported in milligrams per liter (mg/L).

ND = non detect. (For actual detection limits see laboratory analytical results in Appendix B).

(1) = NYSDEC and 6 NYCRR Parts 700-705: Ambient Water Quality Standards and Guidance Values.

Figures

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LEGEND

- MW-4 ● EXISTING MONITORING WELL
- MW-5 ● MONITORING WELL INSTALLED BY BBL IN 9/95
- SB-4 ▲ SOIL BORING INSTALLED BY BBL IN 9/95
- SB-10 ▲ SOIL BORING INSTALLED BY BBL IN 1/96-2/96
- SB-16 ▲ SOIL BORING INSTALLED BY BBL IN 8/96
- TP-1 ■ TEST PIT
- GRAB SAMPLE

NOTES:

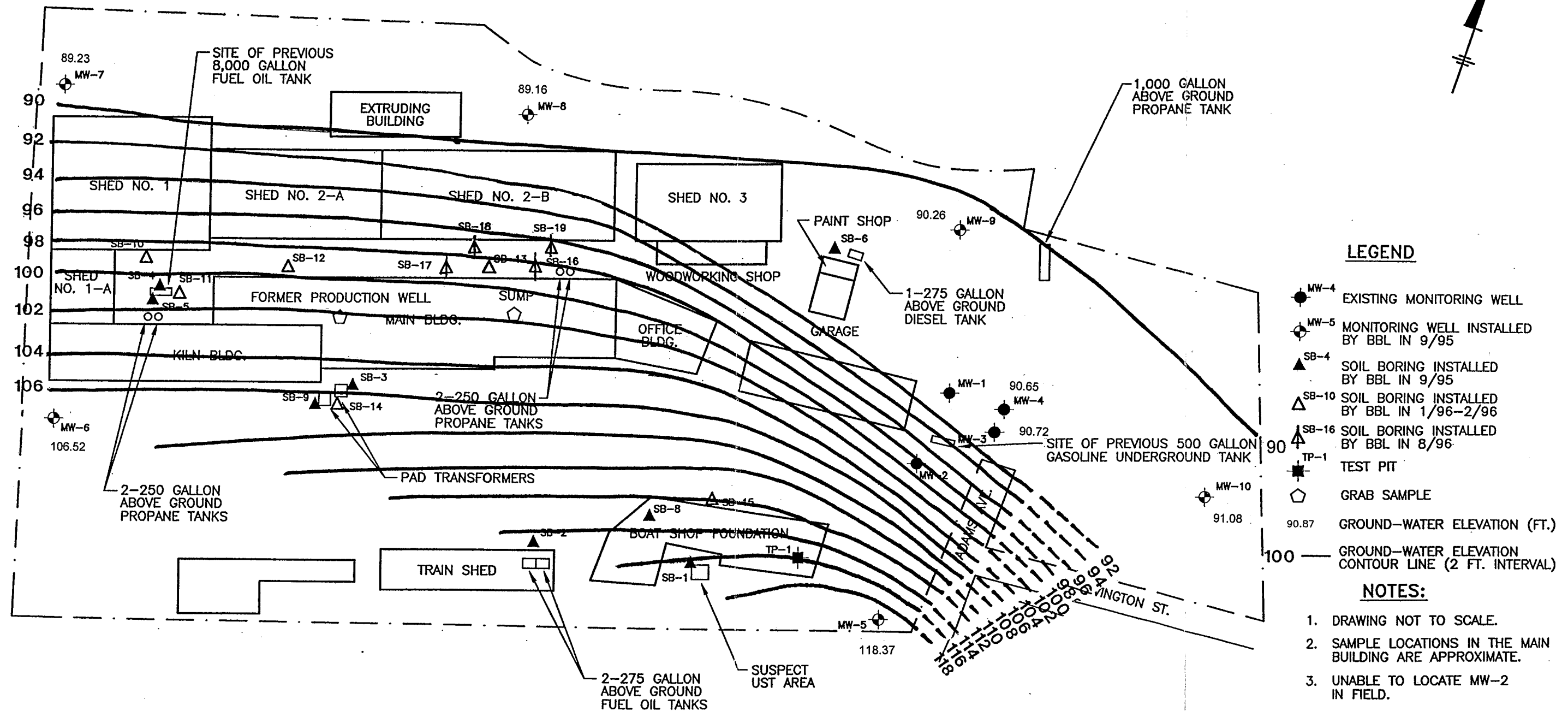
1. DRAWING NOT TO SCALE.
2. SAMPLE LOCATIONS IN THE MAIN BUILDING ARE APPROXIMATE.
3. UNABLE TO LOCATE MW-2 IN FIELD.

JOANNA/CHF INDUSTRIES SITE
 OGDENSBURG, NEW YORK
 NEWELL COMPANY
 ENVIRONMENTAL SITE ASSESSMENT

SITE PLAN

BBL BLASLAND, BOUCK & LEE, INC.
 engineers & scientists

ST. LAWRENCE SEAWAY
(1.5 MILES WIDE)



JOANNA/CHF INDUSTRIES SITE
OGDENSBURG, NEW YORK
NEWELL COMPANY
ENVIRONMENTAL SITE ASSESSMENT
GROUND-WATER ELEVATION
CONTOUR MAP
AUGUST 8, 1996

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FIGURE
2

Appendices

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Appendix A - Soil Borings

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DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	Headspace	Geotechnical Test	Geologic Column	Stratigraphic Description	Boring Construction
										GROUND SURFACE	
5		1	46 92 24 12	116	1.0	0.0				Asphalt and cobbles. Black to brown, fine to coarse SAND, trace silt and black ash, cinders, dense, damp.	
		2	5 4 4 2	8	1.5	0.0				SAME.	
		3	3 2 2 1	4	1.0	0.0				SAME, except damp.	
		4	2 2 2 4	4	1.0	0.0				Brown, fine to medium SAND, little trace clay, dense, damp to wet.	
10										Bottom of boring at 8.0' BGS.	

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	Headspace	Geotechnical Test	Geologic Column	Stratigraphic Description	Boring Construction
										GROUND SURFACE	
		1	/	61 75 21 10	96	1.5	0.0			Asphalt and cobbles. Black to brown, fine to coarse SAND, trace silt and black ash, cinders, dense, damp.	
		2	/	6 5 4 3	9	1.0	0.0			SAME.	
		3	/	1 2 2 1	4	2.0	0.0			SAME, except moist.	
		4	/	1 1 1 1	2	1.5	0.0			Brown, fine to medium SAND, little trace clay, dense, moist to wet.	
										Bottom of boring at 8.0' BGS.	Backfilled with native material.

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Blows/6 In.	N	Recovery (ft.)	Headspace	Geotechnical Test	Geologic Column	Stratigraphic Description	Boring Construction
										GROUND SURFACE	
		1	/	26 6 3 3	6	1.8	0.0			Asphalt and cobbles. Black to brown, fine to coarse SAND, trace silt and black ash, cinders, dense, damp.	
		2	/	2 1 1 1	2	1.5	0.0			SAME, except damp.	
5		3	/	2 2 1 1	3	1.0	0.0			Brown, fine to medium SAND, little trace clay, dense, moist to wet.	
		4	/	2 2 1 1	3	1.5	0.0			SAME, except very dense, wet.	
										Bottom of boring at 8.0' BGS.	

[illegible]

Appendix B - Analytical Data

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A FULL SERVICE ENVIRONMENTAL LABORATORY

September 2, 1996

Mr. Tom Hasek
Blasland, Bouck & Lee, Inc.
30 Corporate Woods
Suite 160
Rochester, NY 14623

PROJECT: JOANNA/CHF INDUSTRIES
Submission #: 9608000060

Dear Mr. Hasek:

Enclosed are the analytical results of the analyses requested. The analytical data was provided to you on 08/23/96 per a Facsimile transmittal. All data has been reviewed prior to report submission.

Should you have any questions please contact me at (716) 454-6810.

Thank you for letting us provide this service.

Sincerely,

COLUMBIA ANALYTICAL SERVICES

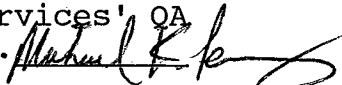

Janice Jaeger
Project Chemist

Enc.

RECEIVED

SEP - 9 1996

BLASLAND, BOUCK & LEE, INC.
ROCHESTER, NY

This package has been reviewed by Columbia Analytical Services' QA Department/Laboratory Director prior to report submittal. 

710 Exchange Street • Rochester, NY 14608 • Tele: (716) 454-6810 • Fax: (716) 454-6825
85 Trinity Place • Hackensack, NJ 07601 • Tele: (201) 512-3292 • Fax: (201) 512-3362
435 Lawrence Bell Drive • Amherst, NY 14421 • Tele: (716) 634-0454 • Fax: (716) 634-9019



CASE NARRATIVE

COMPANY: Blasland, Bouck & Lee, Inc.
Joanna/CHF Industries
SUBMISSION #: 9608000060

BBL samples were collected on 8/08/96 and received at CAS on 8/09/96. All samples were in good condition upon receipt and were at a temperature of 3.1 C.

INORGANIC ANALYSIS

Nine water and eight soil samples were analyzed for RCRA metals and Zinc using SW-846 ICP method 6010 except for Mercury was analyzed by method 7470.

The soil samples were also analyzed for TCN by 335.2 and TPH by EPA method 418.1.

No analytical or QC problems were encountered with these analyses

SEMIVOLATILE ORGANICS

Eight soil samples were analyzed for TCL Semivolatile Organics using SW-846 method 8270.

All Tuning criteria for DFTPP were met.

The initial and continuing calibration criteria were met for all analytes.

All surrogate standard recoveries were within QC acceptance limits except Terphenyl-d14 on samples SB-16(0-2'), SB-17(0-2'), SB-18(0-2'), SB-18(4-6'), SB-19(0-2'), and SB-19(4-6'), and 2,4,6-Tribromophenol on samples SB-16(0-2'). These recoveries were flagged with an "**". Low recovery internal standards # 5 and #6 was the cause for the high surrogate recoveries on the above referenced samples. These samples were reanalyzed at a 1/10 dilution but all analytes were diluted out.

All samples were extracted and analyzed within the specified holding times.

No other analytical or QC problems were encountered.



Effective 04/01/96

CAS LIST OF QUALIFIERS

(The basis of this proposal are the EPA-CLP Qualifiers)

- U - Indicates compound was analyzed for but was not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.
- J - Indicates an estimated value. For further explanation see case narrative / cover letter.
- B - This flag is used when the analyte is found in the associated blank as well as in the sample.
- E - This flag identifies compounds whose concentrations exceed the calibration range.
- A - This flag indicates that a TIC is a suspected aldol-condensation product.
- N - Spiked sample recovery not within control limits.
(Flag the entire batch - Inorganic analysis only)
- * - Duplicate analysis not within control limits.
(Flag the entire batch - Inorganic analysis only)
- Also used to qualify Organics QC data outside limits.
- D - Spike diluted out.
- S - Reported value determined by Method of Standard Additions. (MSA)
- X - As specified in the case narrative.

CAS Lab ID # for State Certifications

NY ID # in Rochester: 10145
CT ID # in Rochester: PH0556
MA ID # in Rochester: M-NY032

NJ ID # in Rochester: 73004
RI ID # in Rochester: 158



ANALYTICAL REPORT SUMMARY

Reported: 09/02/96

Reported Units = MG/L

Blasland, Bouck & Lee, Inc.

JOANNA/CHF INDUSTRIES

SUBMISSION #: 9608000060

ORDER NUMBER	94267	94268	94269	94270
SAMPLE ID:	MW-3	MW-1	MW-10	MW-6
DATE SAMPLED:	08/08/96	08/08/96	08/08/96	08/08/96
DATE RECEIVED:	08/09/96	08/09/96	08/09/96	08/09/96
ARSENIC	0.0100 U	0.0100 U	0.0100 U	0.0100 U
BARIUM	0.275	0.217	0.207	0.206
CADMIUM	0.00500 U	0.00500 U	0.00500 U	0.00500 U
CHROMIUM	0.0155	0.0112	0.0330	0.0100 U
LEAD	0.0506	0.0374	0.0616	0.118
MERCURY	0.000300 U	0.000300 U	0.000300 U	0.000300 U
SELENIUM	0.00500 U	0.00500 U	0.00500 U	0.0169
SILVER	0.0100 U	0.0100 U	0.0100 U	0.0100 U
ZINC	0.185	0.0523	0.0827	0.105



ANALYTICAL REPORT SUMMARY

Reported: 09/02/96

Blasland, Bouck & Lee, Inc.
JOANNA/CHF INDUSTRIES
SUBMISSION #: 9608000060

ORDER NUMBER	94267	94268	94269	94270
SAMPLE ID:	MW-3	MW-1	MW-10	MW-6
DATE SAMPLED:	08/08/96	08/08/96	08/08/96	08/08/96
DATE RECEIVED:	08/09/96	08/09/96	08/09/96	08/09/96
ARSENIC	08/21/96	08/21/96	08/21/96	08/21/96
BARIUM	08/21/96	08/21/96	08/21/96	08/21/96
CADMIUM	08/21/96	08/21/96	08/21/96	08/21/96
CHROMIUM	08/21/96	08/21/96	08/21/96	08/21/96
LEAD	08/21/96	08/21/96	08/21/96	08/21/96
MERCURY	08/21/96	08/21/96	08/21/96	08/21/96
SELENIUM	08/21/96	08/21/96	08/21/96	08/21/96
SILVER	08/21/96	08/21/96	08/21/96	08/21/96
ZINC	08/22/96	08/22/96	08/22/96	08/22/96



ANALYTICAL REPORT SUMMARY

Reported: 09/02/96

Reported Units = MG/L

Blasland, Bouck & Lee, Inc.

JOANNA/CHF INDUSTRIES

SUBMISSION #: 9608000060

ORDER NUMBER	94271	94272	94273	94274
SAMPLE ID:	MW-5	MW-7	MW-8	MW-4
DATE SAMPLED:	08/08/96	08/08/96	08/08/96	08/08/96
DATE RECEIVED:	08/09/96	08/09/96	08/09/96	08/09/96
ARSENIC	0.0100 U	0.0100 U	0.0274	0.0100 U
BARIUM	0.0638	0.309	0.915	0.362
CADMIUM	0.00500 U	0.00500 U	0.0534	0.00500 U
CHROMIUM	0.0100 U	0.0559	0.108	0.0477
LEAD	0.0134	3.07	0.568	0.0824
MERCURY	0.000300 U	0.00243	0.000723	0.000300 U
SELENIUM	0.00500 U	0.0318	0.0459	0.0160
SILVER	0.0100 U	0.0100 U	0.0100 U	0.0100 U
ZINC	0.0353	0.306	0.598	0.139



ANALYTICAL REPORT SUMMARY

Reported: 09/02/96

Blasland, Bouck & Lee, Inc.

JOANNA/CHF INDUSTRIES

SUBMISSION #: 9608000060

ORDER NUMBER	94271	94272	94273	94274
SAMPLE ID:	MW-5	MW-7	MW-8	MW-4
DATE SAMPLED:	08/08/96	08/08/96	08/08/96	08/08/96
DATE RECEIVED:	08/09/96	08/09/96	08/09/96	08/09/96
ARSENIC	08/21/96	08/21/96	08/21/96	08/21/96
BARIUM	08/21/96	08/21/96	08/21/96	08/21/96
CADMIUM	08/21/96	08/21/96	08/21/96	08/21/96
CHROMIUM	08/21/96	08/21/96	08/21/96	08/21/96
LEAD	08/21/96	08/21/96	08/21/96	08/21/96
MERCURY	08/21/96	08/21/96	08/21/96	08/21/96
SELENIUM	08/21/96	08/21/96	08/21/96	08/21/96
SILVER	08/21/96	08/21/96	08/21/96	08/21/96
ZINC	08/22/96	08/22/96	08/22/96	08/22/96



ANALYTICAL REPORT SUMMARY

Reported: 09/02/96

Reported Units = MG/L

Blasland, Bouck & Lee, Inc.

JOANNA/CHF INDUSTRIES

SUBMISSION #: 9608000060

ORDER NUMBER	94275
SAMPLE ID:	MW-9
DATE SAMPLED:	08/08/96
DATE RECEIVED:	08/09/96

ARSENIC	0.0617
BARIUM	0.704
CADMIUM	0.0132
CHROMIUM	0.112
LEAD	0.660
MERCURY	0.00126
SELENIUM	0.0534
SILVER	0.0100 U
ZINC	1.23



ANALYTICAL REPORT SUMMARY

Reported: 09/02/96

Blasland, Bouck & Lee, Inc.

JOANNA/CHF INDUSTRIES

SUBMISSION #: 9608000060

ORDER NUMBER	94275
SAMPLE ID:	MW-9
DATE SAMPLED:	08/08/96
DATE RECEIVED:	08/09/96

ARSENIC	08/21/96
BARIUM	08/21/96
CADMIUM	08/21/96
CHROMIUM	08/21/96
LEAD	08/21/96
MERCURY	08/21/96
SELENIUM	08/21/96
SILVER	08/21/96
ZINC	08/22/96



ANALYTICAL REPORT SUMMARY

Reported: 09/02/96

Dry Weight Reported Units = UG/G

Blasland, Bouck & Lee, Inc.

JOANNA/CHF INDUSTRIES

SUBMISSION #: 9608000060

ORDER NUMBER	94276	94277	94279	94280
SAMPLE ID:	SB-16(0-2')	SB-16(4-6')	SB-17(0-2')	SB-17(4-6')
DATE SAMPLED:	08/08/96	08/08/96	08/08/96	08/08/96
DATE RECEIVED:	08/09/96	08/09/96	08/09/96	08/09/96
ARSENIC	2.80	2.50	5.05	5.57
BARIUM	53.3	29.2	67.7	81.8
CADMIUM	0.535 U	0.585 U	0.915	0.611 U
CHROMIUM	13.4	13.5	12.0	19.0
LEAD	25.0	23.0	45.1	55.7
MERCURY	0.195	0.175 U	0.161 U	0.300
SELENIUM	5.86	5.56	6.24	14.7
SILVER	1.07 U	1.17 U	1.07 U	1.22 U
ZINC	91.6	61.1	111	332
TOTAL CYANIDE	1.07 U	1.17 U	1.07 U	1.22 U
PERCENT SOLIDS	93.5	85.5	93.3	81.9
TOTAL PETROLEUM HYDROCARB	5930	83.3	7790	119



ANALYTICAL REPORT SUMMARY

Reported: 09/02/96

Blasland, Bouck & Lee, Inc.

JOANNA/CHF INDUSTRIES

SUBMISSION #: 9608000060

ORDER NUMBER	94276	94277	94279	94280
SAMPLE ID:	SB-16(0-2')	SB-16(4-6')	SB-17(0-2')	SB-17(4-6')
DATE SAMPLED:	08/08/96	08/08/96	08/08/96	08/08/96
DATE RECEIVED:	08/09/96	08/09/96	08/09/96	08/09/96
ARSENIC	08/21/96	08/21/96	08/21/96	08/21/96
BARIUM	08/21/96	08/21/96	08/21/96	08/21/96
CADMIUM	08/21/96	08/21/96	08/21/96	08/21/96
CHROMIUM	08/21/96	08/21/96	08/21/96	08/21/96
LEAD	08/21/96	08/21/96	08/21/96	08/21/96
MERCURY	08/22/96	08/22/96	08/22/96	08/22/96
SELENIUM	08/21/96	08/21/96	08/21/96	08/21/96
SILVER	08/23/96	08/23/96	08/23/96	08/23/96
ZINC	08/21/96	08/21/96	08/21/96	08/21/96
TOTAL CYANIDE	08/20/96	08/20/96	08/20/96	08/20/96
PERCENT SOLIDS %	08/19/96	08/19/96	08/19/96	08/19/96
TOTAL PETROLEUM HYDROCARB	08/15/96	08/15/96	08/15/96	08/15/96



ANALYTICAL REPORT SUMMARY
METHOD 8270 SEMIVOLATILES
REPORTED UNITS: UG/KG

Blasland, Bouck & Lee, Inc.
JOANNA/CHF INDUSTRIES
SUBMISSION #: 9608000060

ORDER NUMBER		94276	94277	94279	94280
SAMPLE ID:		SB-16(0-2')	SB-16(4-6')	SB-17(0-2')	SB-17(4-6')
DATE SAMPLED:		08/08/1996	08/08/1996	08/08/1996	08/08/1996
DATE RECEIVED:	PQL	08/09/1996	08/09/1996	08/09/1996	08/09/1996
DATE ANALYZED:		8/21/96	8/19/96	8/21/96	8/19/96
DILUTION:		1.0	1.0	1.0	1.0
PERCENT SOLID (%):		93.5	85.5	93.3	81.9
ACENAPHTHENE	330	350 U	390 U	350 U	400 U
ACENAPHTHYLENE	330	350 U	390 U	350 U	400 U
ANTHRACENE	330	350 U	390 U	350 U	400 U
BENZO(A)ANTHRACENE	330	350 U	390 U	350 U	400 U
BENZO(A)PYRENE	330	440	390 U	350 U	400 U
BENZO(B)FLUORANTHENE	330	510	390 U	350 U	400 U
BENZO(G,H,I)PERYLENE	330	350 U	390 U	350 U	400 U
BENZO(K)FLUORANTHENE	330	350 U	390 U	350 U	400 U
BENZYL ALCOHOL	330	350 U	390 U	350 U	400 U
BUTYL BENZYL PHTHALATE	330	350 U	390 U	350 U	400 U
DI-N-BUTYLPHthalate	330	350	460	660	630
CARBAZOLE	330	350 U	390 U	350 U	400 U
INDENO(1,2,3-CD)PYRENE	330	350 U	390 U	350 U	400 U
4-CHLOROANILINE	330	350 U	390 U	350 U	400 U
BIS(-2-CHLOROETHOXY)METHANE	330	350 U	390 U	350 U	400 U
BIS(2-CHLOROETHYL)ETHER	330	350 U	390 U	350 U	400 U
2-CHLORONAPHTHALENE	330	350 U	390 U	350 U	400 U
2-CHLOROPHENOL	670	720 U	780 U	720 U	820 U
2,2'-OXYBIS(1-CHLOROPROPANE)	330	350 U	390 U	350 U	400 U
CHRYSENE	330	350 U	390 U	350 U	400 U
DIBENZO(A,H)ANTHRACENE	330	350 U	390 U	350 U	400 U
DIBENZOFURAN	330	350 U	390 U	350 U	400 U
1,2-DICHLOROBENZENE	330	350 U	390 U	350 U	400 U
1,3-DICHLOROBENZENE	330	350 U	390 U	350 U	400 U
1,4-DICHLOROBENZENE	330	350 U	390 U	350 U	400 U
3,3'-DICHLOROBENZIDINE	330	350 U	390 U	350 U	400 U
2,4-DICHLOROPHENOL	670	720 U	780 U	720 U	820 U
DIETHYLPHthalate	330	350 U	390 U	350 U	400 U
DIMETHYL PHTHALATE	330	350 U	390 U	350 U	400 U
2,4-DIMETHYLPHENOL	670	720 U	780 U	720 U	820 U
2,4-DINITROPHENOL	1300	1400 U	1500 U	1400 U	1600 U
2,4-DINITROTOLUENE	330	350 U	390 U	350 U	400 U
2,6-DINITROTOLUENE	330	350 U	390 U	350 U	400 U
BIS(2-ETHYLHEXYL)PHTHALATE	330	350 U	390 U	350 U	400 U
FLUORANTHENE	330	350 U	390 U	350 U	400 U
FLUORENE	330	350 U	390 U	350 U	400 U
HEXACHLOROBENZENE	330	350 U	390 U	350 U	400 U
HEXACHLOROBUTADIENE	330	350 U	390 U	350 U	400 U
HEXACHLOROCYCLOPENTADIENE	330	350 U	390 U	350 U	400 U
HEXACHLOROETHANE	330	350 U	390 U	350 U	400 U
ISOPHORONE	330	350 U	390 U	350 U	400 U
2-METHYLNAPHTHALENE	670	720 U	780 U	720 U	820 U
2-METHYLPHENOL	670	720 U	780 U	720 U	820 U



ANALYTICAL REPORT SUMMARY
METHOD 8270 SEMIVOLATILES
REPORTED UNITS: UG/KG

Blastland, Bouck & Lee, Inc.
JOANNA/CHF INDUSTRIES
SUBMISSION #: 9608000060

ORDER NUMBER		94276	94277	94279	94280
SAMPLE ID:		SB-16(0-2')	SB-16(4-6')	SB-17(0-2')	SB-17(4-6')
DATE SAMPLED:		08/08/1996	08/08/1996	08/08/1996	08/08/1996
DATE RECEIVED:	PQL	08/09/1996	08/09/1996	08/09/1996	08/09/1996
DATE ANALYZED:		8/21/96	8/19/96	8/21/96	8/19/96
DILUTION:		1.0	1.0	1.0	1.0
PERCENT SOLID (%):		93.5	85.5	93.3	81.9
4,6-DINITRO-2-METHYLPHENOL	1300	1400 U	1500 U	1400 U	1600 U
4-CHLORO-3-METHYLPHENOL	670	720 U	780 U	720 U	820 U
4-METHYLPHENOL	670	720 U	780 U	720 U	820 U
NAPHTHALENE	330	350 U	390 U	350 U	400 U
2-NITROANILINE	330	350 U	390 U	350 U	400 U
3-NITROANILINE	330	350 U	390 U	350 U	400 U
4-NITROANILINE	330	350 U	390 U	350 U	400 U
NITROBENZENE	330	350 U	390 U	350 U	400 U
2-NITROPHENOL	670	720 U	780 U	720 U	820 U
4-NITROPHENOL	1300	1400 U	1500 U	1400 U	1600 U
N-NITROSODIMETHYLAMINE	330	350 U	390 U	350 U	400 U
N-NITROSODIPHENYLAMINE	330	350 U	390 U	350 U	400 U
DI-N-OCTYL PHTHALATE	330	350 U	390 U	350 U	400 U
PENTACHLOROPHENOL	1300	1400 U	1500 U	1400 U	1600 U
PHENANTHRENE	330	350 U	390 U	350 U	400 U
PHENOL	670	720 U	780 U	720 U	820 U
4-BROMOPHENYL-PHENYLETHER	330	350 U	390 U	350 U	400 U
4-CHLOROPHENYL-PHENYLETHER	330	350 U	390 U	350 U	400 U
N-NITROSO-DI-N-PROPYLAMINE	330	350 U	390 U	350 U	400 U
PYRENE	330	600	390 U	480	400 U
1,2,4-TRICHLOROBENZENE	330	350 U	390 U	350 U	400 U
2,4,5-TRICHLOROPHENOL	670	720 U	780 U	720 U	820 U
2,4,6-TRICHLOROPHENOL	670	720 U	780 U	720 U	820 U
SURROGATE RECOVERIES	LIMITS				
TERPHENYL-d14	18 - 137	162 *	79	169 *	83
NITROBENZENE-d5	23 - 120	82	73	73	58
PHENOL-d6	24 - 113	83	83	77	71
2-FLUOROBIPHENYL	30 - 115	85	75	84	65
2-FLUOROPHENOL	25 - 121	75	79	59	63
2,4,6-TRIBROMOPHENOL	19 - 122	44	80	15 *	82



ANALYTICAL REPORT SUMMARY

Reported: 09/02/96

Dry Weight Reported Units = UG/G

Blasland, Bouck & Lee, Inc.

JOANNA/CHF INDUSTRIES

SUBMISSION #: 9608000060

ORDER NUMBER	94281	94283	94284	94285
SAMPLE ID:	SB-18(0-2')	SB-18(4-6')	SB-19(0-2')	SB-19(4-6')
DATE SAMPLED:	08/08/96	08/08/96	08/08/96	08/08/96
DATE RECEIVED:	08/09/96	08/09/96	08/09/96	08/09/96
ARSENIC	6.53	3.61	5.41	7.57
BARIUM	56.6	45.0	87.8	87.4
CADMIUM	1.39	0.734	7.71	3.58
CHROMIUM	9.52	10.4	13.3	12.9
LEAD	241	124	183	376
MERCURY	0.171 U	0.171 U	0.160 U	0.188 U
SELENIUM	10.7	7.96	8.51	10.9
SILVER	1.14 U	1.14 U	1.07 U	1.25 U
ZINC	482	343	1010	774
TOTAL CYANIDE	1.14 U	1.14 U	1.07 U	1.25 U
PERCENT SOLIDS	87.5	87.7	93.8	80.0
TOTAL PETROLEUM HYDROCARB	5650	275	7840	501



ANALYTICAL REPORT SUMMARY

Reported: 09/02/96

Blasland, Bouck & Lee, Inc.

JOANNA/CHF INDUSTRIES

SUBMISSION #: 9608000060

ORDER NUMBER	94281	94283	94284	94285
SAMPLE ID:	SB-18(0-2')	SB-18(4-6')	SB-19(0-2')	SB-19(4-6')
DATE SAMPLED:	08/08/96	08/08/96	08/08/96	08/08/96
DATE RECEIVED:	08/09/96	08/09/96	08/09/96	08/09/96
ARSENIC	08/21/96	08/21/96	08/21/96	08/21/96
BARIUM	08/21/96	08/21/96	08/21/96	08/21/96
CADMIUM	08/21/96	08/21/96	08/21/96	08/21/96
CHROMIUM	08/21/96	08/21/96	08/21/96	08/21/96
LEAD	08/21/96	08/21/96	08/21/96	08/21/96
MERCURY	08/22/96	08/22/96	08/22/96	08/22/96
SELENIUM	08/21/96	08/21/96	08/21/96	08/21/96
SILVER	08/23/96	08/23/96	08/23/96	08/23/96
ZINC	08/21/96	08/21/96	08/21/96	08/21/96
TOTAL CYANIDE	08/20/96	08/22/96	08/20/96	08/22/96
PERCENT SOLIDS %	08/19/96	08/19/96	08/19/96	08/19/96
TOTAL PETROLEUM HYDROCARB	08/15/96	08/15/96	08/15/96	08/15/96



ANALYTICAL REPORT SUMMARY
METHOD 8270 SEMIVOLATILES
REPORTED UNITS: UG/KG

Blasland, Bouck & Lee, Inc.
JOANNA/CHF INDUSTRIES
SUBMISSION #: 9608000060

ORDER NUMBER	94281	94283	94284	94285
SAMPLE ID:	SB-18(0-2')	SB-18(4-6')	SB-19(0-2')	SB-19(4-6')
DATE SAMPLED:	08/08/1996	08/08/1996	08/08/1996	08/08/1996
DATE RECEIVED:	PQL 08/09/1996	08/09/1996	08/09/1996	08/09/1996
DATE ANALYZED:	8/21/96	8/21/96	8/21/96	8/21/96
DILUTION:	1.0	1.0	1.0	1.0
PERCENT SOLID (%):	87.5	87.7	93.8	80.0
ACENAPHTHENE	330 380 U	380 U	350 U	410 U
ACENAPHTHYLENE	330 380 U	380 U	350 U	410 U
ANTHRACENE	330 380 U	380 U	350 U	410 U
BENZO(A)ANTHRACENE	330 430	510	410	410 U
BENZO(A)PYRENE	330 560	520	510	430
BENZO(B)FLUORANTHENE	330 960	1000	950	760
BENZO(G,H,I)PERYLENE	330 380 U	380 U	350 U	410 U
BENZO(K)FLUORANTHENE	330 380 U	380 U	390	410 U
BENZYL ALCOHOL	330 380 U	380 U	350 U	410 U
BUTYL BENZYL PHTHALATE	330 380 U	380 U	350 U	410 U
DI-N-BUTYLPHTHALATE	330 380 U	380	360	410
CARBAZOLE	330 380 U	380 U	350 U	410 U
INDENO(1,2,3-CD)PYRENE	330 380 U	380 U	350 U	410 U
4-CHLOROANILINE	330 380 U	380 U	350 U	410 U
BIS(-2-CHLOROETHOXY)METHANE	330 380 U	380 U	350 U	410 U
BIS(2-CHLOROETHYL)ETHER	330 380 U	380 U	350 U	410 U
2-CHLORONAPHTHALENE	330 380 U	380 U	350 U	410 U
2-CHLOROPHENOL	670 770 U	760 U	710 U	840 U
2,2'-OXYBIS(1-CHLOROPROPANE)	330 380 U	380 U	350 U	410 U
CHRYSENE	330 490	510	590	410 U
DIBENZO(A,H)ANTHRACENE	330 380 U	380 U	350 U	410 U
DIBENZOFURAN	330 380 U	380 U	350 U	410 U
1,2-DICHLOROBENZENE	330 380 U	380 U	350 U	410 U
1,3-DICHLOROBENZENE	330 380 U	380 U	350 U	410 U
1,4-DICHLOROBENZENE	330 380 U	380 U	350 U	410 U
3,3'-DICHLOROBENZIDINE	330 380 U	380 U	350 U	410 U
2,4-DICHLOROPHENOL	670 770 U	760 U	710 U	840 U
DIETHYLPHTHALATE	330 380 U	380 U	350 U	410 U
DIMETHYL PHTHALATE	330 380 U	380 U	350 U	410 U
2,4-DIMETHYLPHENOL	670 770 U	760 U	710 U	840 U
2,4-DINITROPHENOL	1300 1500 U	1500 U	1400 U	1600 U
2,4-DINITROTOLUENE	330 380 U	380 U	350 U	410 U
2,6-DINITROTOLUENE	330 380 U	380 U	350 U	410 U
BIS(2-ETHYLHEXYL)PHTHALATE	330 380 U	380 U	790	410 U
FLUORANTHENE	330 470	640	470	410 U
FLUORENE	330 380 U	380 U	350 U	410 U
HEXACHLOROBENZENE	330 380 U	380 U	350 U	410 U
HEXACHLOROBUTADIENE	330 380 U	380 U	350 U	410 U
HEXACHLOROCYCLOPENTADIENE	330 380 U	380 U	350 U	410 U
HEXACHLOROETHANE	330 380 U	380 U	350 U	410 U
ISOPHORONE	330 380 U	380 U	350 U	410 U
2-METHYLNAPHTHALENE	670 770 U	760 U	710 U	840 U
2-METHYLPHENOL	670 770 U	760 U	710 U	840 U



ANALYTICAL REPORT SUMMARY
METHOD 8270 SEMIVOLATILES
REPORTED UNITS: UG/KG

Blasland, Bouck & Lee, Inc.
JOANNA/CHF INDUSTRIES
SUBMISSION #: 9608000060

ORDER NUMBER		94281	94283	94284	94285
SAMPLE ID:		SB-18(0-2')	SB-18(4-6')	SB-19(0-2')	SB-19(4-6')
DATE SAMPLED:		08/08/1996	08/08/1996	08/08/1996	08/08/1996
DATE RECEIVED:	PQL	08/09/1996	08/09/1996	08/09/1996	08/09/1996
DATE ANALYZED:		8/21/96	8/21/96	8/21/96	8/21/96
DILUTION:		1.0	1.0	1.0	1.0
PERCENT SOLID (%):		87.5	87.7	93.8	80.0
4,6-DINITRO-2-METHYLPHENOL	1300	1500 U	1500 U	1400 U	1600 U
4-CHLORO-3-METHYLPHENOL	670	770 U	760 U	710 U	840 U
4-METHYLPHENOL	670	770 U	760 U	710 U	840 U
NAPHTHALENE	330	380 U	380 U	350 U	410 U
2-NITROANILINE	330	380 U	380 U	350 U	410 U
3-NITROANILINE	330	380 U	380 U	350 U	410 U
4-NITROANILINE	330	380 U	380 U	350 U	410 U
NITROBENZENE	330	380 U	380 U	350 U	410 U
2-NITROPHENOL	670	770 U	760 U	710 U	840 U
4-NITROPHENOL	1300	1500 U	1500 U	1400 U	1600 U
N-NITROSODIMETHYLAMINE	330	380 U	380 U	350 U	410 U
N-NITROSODIPHENYLAMINE	330	380 U	380 U	350 U	410 U
DI-N-OCTYL PHTHALATE	330	380 U	380 U	350 U	410 U
PENTACHLOROPHENOL	1300	1500 U	1500 U	1400 U	1600 U
PHENANTHRENE	330	380 U	380 U	490	410 U
PHENOL	670	770 U	760 U	710 U	840 U
4-BROMOPHENYL-PHENYLETHER	330	380 U	380 U	350 U	410 U
4-CHLOROPHENYL-PHENYLETHER	330	380 U	380 U	350 U	410 U
N-NITROSO-DI-N-PROPYLAMINE	330	380 U	380 U	350 U	410 U
PYRENE	330	900	1100	1200	600
1,2,4-TRICHLOROBENZENE	330	380 U	380 U	350 U	410 U
2,4,5-TRICHLOROPHENOL	670	770 U	760 U	710 U	840 U
2,4,6-TRICHLOROPHENOL	670	770 U	760 U	710 U	840 U
SURROGATE RECOVERIES	LIMITS				
TERPHENYL-d14	18 - 137	156 *	169 *	209 *	156 *
NITROBENZENE-d5	23 - 120	72	67	79	65
PHENOL-d6	24 - 113	80	85	79	84
2-FLUOROBIPHENYL	30 - 115	81	76	90	72
2-FLUOROPHENOL	25 - 121	73	76	75	74
2,4,6-TRIBROMOPHENOL	19 - 122	84	99	87	91



EXTRACTABLE ORGANICS
METHOD 8270 SEMIVOLATILES
Reported: 09/02/96

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : Order #: 97387 Sample Matrix: SOIL/SEDIMENT
Date Received: Submission #: Percent Solid: 100

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 08/14/96			
DATE ANALYZED : 08/19/96			Dry Weight
ANALYTICAL DILUTION: 1.0			
ACENAPHTHENE	330	330 U	UG/KG
ACENAPHTHYLENE	330	330 U	UG/KG
ANTHRACENE	330	330 U	UG/KG
BENZO (A) ANTHRACENE	330	330 U	UG/KG
BENZO (A) PYRENE	330	330 U	UG/KG
BENZO (B) FLUORANTHENE	330	330 U	UG/KG
BENZO (G, H, I) PERYLENE	330	330 U	UG/KG
BENZO (K) FLUORANTHENE	330	330 U	UG/KG
BENZYL ALCOHOL	330	330 U	UG/KG
BUTYL BENZYL PHTHALATE	330	330 U	UG/KG
DI-N-BUTYLPHTHALATE	330	330 U	UG/KG
CARBAZOLE	330	330 U	UG/KG
INDENO (1, 2, 3-CD) PYRENE	330	330 U	UG/KG
4-CHLOROANILINE	330	330 U	UG/KG
BIS (-2-CHLOROETHOXY) METHANE	330	330 U	UG/KG
BIS (2-CHLOROETHYL) ETHER	330	330 U	UG/KG
2-CHLORONAPHTHALENE	330	330 U	UG/KG
2-CHLOROPHENOL	670	670 U	UG/KG
2, 2'-OXYBIS (1-CHLOROPROPANE)	330	330 U	UG/KG
CHRYSENE	330	330 U	UG/KG
DIBENZO (A, H) ANTHRACENE	330	330 U	UG/KG
DIBENZOFURAN	330	330 U	UG/KG
1, 3-DICHLOROBENZENE	330	330 U	UG/KG
1, 2-DICHLOROBENZENE	330	330 U	UG/KG
1, 4-DICHLOROBENZENE	330	330 U	UG/KG
3, 3'-DICHLOROBENZIDINE	330	330 U	UG/KG
2, 4-DICHLOROPHENOL	670	670 U	UG/KG
DIETHYLPHTHALATE	330	330 U	UG/KG
DIMETHYL PHTHALATE	330	330 U	UG/KG
2, 4-DIMETHYLPHENOL	670	670 U	UG/KG
2, 4-DINITROPHENOL	1300	1300 U	UG/KG
2, 4-DINITROTOLUENE	330	330 U	UG/KG
2, 6-DINITROTOLUENE	330	330 U	UG/KG
BIS (2-ETHYLHEXYL) PHTHALATE	330	330 U	UG/KG
FLUORANTHENE	330	330 U	UG/KG
FLUORENE	330	330 U	UG/KG
HEXACHLOROBENZENE	330	330 U	UG/KG
HEXACHLOROBUTADIENE	330	330 U	UG/KG
HEXACHLOROCYCLOPENTADIENE	330	330 U	UG/KG
HEXACHLOROETHANE	330	330 U	UG/KG



EXTRACTABLE ORGANICS
METHOD 8270 SEMIVOLATILES
Reported: 09/02/96

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : Order #: 97387 Sample Matrix: SOIL/SEDIMENT
Date Received: Submission #: Percent Solid: 100

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 08/14/96			
DATE ANALYZED : 08/19/96			Dry Weight
ANALYTICAL DILUTION: 1.0			
ISOPHORONE	330	330 U	UG/KG
2-METHYLNAPHTHALENE	670	670 U	UG/KG
4,6-DINITRO-2-METHYLPHENOL	1300	1300 U	UG/KG
4-CHLORO-3-METHYLPHENOL	670	670 U	UG/KG
2-METHYLPHENOL	670	670 U	UG/KG
4-METHYLPHENOL	670	670 U	UG/KG
NAPHTHALENE	330	330 U	UG/KG
2-NITROANILINE	330	330 U	UG/KG
3-NITROANILINE	330	330 U	UG/KG
4-NITROANILINE	330	330 U	UG/KG
NITROBENZENE	330	330 U	UG/KG
2-NITROPHENOL	670	670 U	UG/KG
4-NITROPHENOL	1300	1300 U	UG/KG
N-NITROSODIMETHYLAMINE	330	330 U	UG/KG
N-NITROSODIPHENYLAMINE	330	330 U	UG/KG
DI-N-OCTYL PHTHALATE	330	330 U	UG/KG
PENTACHLOROPHENOL	1300	1300 U	UG/KG
PHENANTHRENE	330	330 U	UG/KG
PHENOL	670	670 U	UG/KG
4-BROMOPHENYL-PHENYLEETHER	330	330 U	UG/KG
4-CHLOROPHENYL-PHENYLEETHER	330	330 U	UG/KG
N-NITROSO-DI-N-PROPYLAMINE	330	330 U	UG/KG
PYRENE	330	330 U	UG/KG
1,2,4-TRICHLOROBENZENE	330	330 U	UG/KG
2,4,6-TRICHLOROPHENOL	670	670 U	UG/KG
2,4,5-TRICHLOROPHENOL	670	670 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
TERPHENYL-d14	(18 - 137 %)	83	%
NITROBENZENE-d5	(23 - 120 %)	86	%
PHENOL-d6	(24 - 113 %)	82	%
2-FLUOROBIPHENYL	(30 - 115 %)	88	%
2-FLUOROPHENOL	(25 - 121 %)	79	%
2,4,6-TRIBROMOPHENOL	(19 - 122 %)	95	%

COLUMBIA ANALYTICAL SERVICES, INC.
700 Exchange Street, Rochester, New York 14608
(716) 454-6810 • FAX (716) 454-6825

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

(800) 695-7222

DATE 8/2/96

PAGE 1 OF 2

PROJECT NAME <u>JOANNA / CHIF INDUSTRIES</u>		ANALYSIS REQUESTED										PRESERVATION									
PROJECT MANAGER/CONTACT <u>TOM HASTINGS</u>												PH < 2.0									
COMPANY/ADDRESS <u>BLASLAND, BARKER & LEE</u>												PH > 12									
30 CORPORATE WOODS, SUITE 160												Other									
TEL (716) 292-6740 FAX (716) 292-6715																					
SAMPLER'S SIGNATURE <u>Michael R. Land</u>																					
SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX	# OF CONTAINERS	GC/MS VOA's 8260 624	GC/MS SVOA's 8270A 625	GC VOA's 8010/8020 601/602	PESTICIDES/PCBs 8080 608	STAR'S LIST 8021 VOA's TOTAL TCLP	STAR'S LIST 8270 SVOA's TOTAL TCLP	TCLP METALS VOA's SVOA's H/P	WASTE CHARACTERIZATION React Corros. Ignit.	METALS, TOTAL (LIST BELOW)	METALS, DISSOLVED (LIST BELOW)						
MW-9	8/2/96	0600	94225	WATER	1									X							
MW-8		0700	94273		1									X							
MW-7		0725	94272		1									X							
MW-3		0915	94267		1									X							
MW-4		0800	94274		1									X							
MW-1		0840	94268		1									X							
MW-5		1425	94271		1									X							
MW-10		1230	94289		1									X							
MW-6	8/2/96	1320	94270	WATER	1									X							
RELINQUISHED BY: <u>Michael R. Land</u> Signature <u>Michael R. Land</u> Printed Name <u>Michael R. Land</u> Firm <u>BLASLAND, BARKER & LEE</u> Date/Time <u>8/19/96 10:40</u>		RECEIVED BY: <u>Tom Hastings</u> Signature <u>Tom Hastings</u> Printed Name <u>Tom Hastings</u> Firm <u>CH2M</u> Date/Time <u>8/19/96 10:40</u>		TURNAROUND REQUIREMENTS 24 hr. 48 hr. 5 day Standard (10-15 working days) Provide Verbal Preliminary Results Provide FAX Preliminary Results Requested Report Date		REPORT REQUIREMENTS 1. Routine Report 2. Routine Rep. w/CASE Narrative 3. EPA Level III Validatable Package 4. N.J. Reduced Deliverables Level IV 5. NY ASP/CLP Deliverables 6. Site specific QC.		INVOICE INFORMATION: P.O. #: Bill To:		SAMPLE RECEIPT: Shipping Via: <u>Client</u> Shipping #: <u>3.1</u> Temperature: <u>8-60</u> Submission No: <u>8-60</u>											
RELINQUISHED BY: Signature Printed Name Firm Date/Time		RECEIVED BY: <u>V. Gardner</u> Signature <u>V. Gardner</u> Printed Name <u>V. Gardner</u> Firm <u>CH2M</u> Date/Time <u>8/19/96 @ 1040</u>		SPECIAL INSTRUCTIONS/COMMENTS: METALS TOTAL PCRA METALS AND ZINC BY SW-846 METHODS 6010A/7477																	
RELINQUISHED BY: Signature Printed Name Firm Date/Time		RECEIVED BY: Signature Printed Name Firm Date/Time		ORGANICS: <input type="checkbox"/> TCL <input type="checkbox"/> PPL <input type="checkbox"/> AE Only <input type="checkbox"/> BN Only <input type="checkbox"/> Special List																	
RELINQUISHED BY: Signature Printed Name Firm Date/Time		RECEIVED BY: Signature Printed Name Firm Date/Time		65 RAMAPO VALLEY ROAD MAHWAH, NJ 07430																	
RELINQUISHED BY: Signature Printed Name Firm Date/Time		RECEIVED BY: Signature Printed Name Firm Date/Time		201-512-3292 FAX 201-512-3362																	
RELINQUISHED BY: Signature Printed Name Firm Date/Time		RECEIVED BY: Signature Printed Name Firm Date/Time		435 LAWRENCE BELL DR. AMHERST, NY 14221																	
RELINQUISHED BY: Signature Printed Name Firm Date/Time		RECEIVED BY: Signature Printed Name Firm Date/Time		716-634-0454 FAX 716-634-9019																	

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700 Exchange Street, Rochester, New York 14608
(716) 454-6810 • FAX (716) 454-6825

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM
(800) 695-7222

DATE 8/8/96 PAGE 2 OF 2

PROJECT NAME <u>JOANNA / CNE INDUSTRIES</u>				ANALYSIS REQUESTED <u>SEE BELOW</u>																			
PROJECT MANAGER/CONTACT <u>TOM HASTINGS</u>																							
COMPANY/ADDRESS <u>BUSLAND, BACK, 4650</u>																							
TEL <u>(716) 292-6740</u> FAX <u>(716) 292-6715</u>																							
SAMPLER'S SIGNATURE <u>Michael R. Alamed</u>																							
SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX	# OF CONTAINERS	GC/MS VOAs	GC/MS SVOAs	GC VOAs	PESTICIDES/PCBs	STAR'S LIST 8021 VOAs	STAR'S LIST 8270 SVOAs	TCLP	WASTE CHARACTERIZATION	METALS, TOTAL	METALS, DISSOLVED	TOTAL CYANIDES	TPH	SW-846 / W-418.1	PCRA METALS & ZINC	6010A / 7427	SVOC (TCL BN/AE)	SW-846 / W-8270	Other
SB-16 (0-2')	8/6/96	1030	94276	Soil	3	GC/MS VOAs	GC/MS SVOAs	GC VOAs	PESTICIDES/PCBs	STAR'S LIST 8021 VOAs	STAR'S LIST 8270 SVOAs	TCLP	WASTE CHARACTERIZATION	METALS, TOTAL	METALS, DISSOLVED	TOTAL CYANIDES	TPH	SW-846 / W-418.1	PCRA METALS & ZINC	6010A / 7427	SVOC (TCL BN/AE)	SW-846 / W-8270	
SB-16 (4'-6')		1040	94277		3																		
SB-17 (0-2')		1055	94279		3																		
SB-17 (4'-6')		1105	94280		3																		
SB-18 (0-2')		1125	94281		3																		
SB-18 (4'-6')		1135	94283		3																		
SB-19 (0-2')		1150	94284		3																		
SB-19 (4'-6')	8/6/96	1200	94285	Soil	3																		
RELINQUISHED BY: <u>Michael R. Alamed</u> Signature <u>Tom Hastings</u> Printed Name <u>Tom Hastings</u> Firm <u>AS</u> Date/Time <u>8/9/96 10:40</u>				RECEIVED BY: <u>Tom Hastings</u> Signature <u>Tom Hastings</u> Printed Name <u>Tom Hastings</u> Firm <u>AS</u> Date/Time <u>8/9/96 10:40</u>				TURNAROUND REQUIREMENTS 24 hr. <input type="checkbox"/> 48 hr. <input type="checkbox"/> 5 day <input type="checkbox"/> Standard (10-15 working days) <input type="checkbox"/> Provide Verbal Preliminary Results <input type="checkbox"/> Provide FAX Preliminary Results <input type="checkbox"/> Requested Report Date <input type="checkbox"/>				REPORT REQUIREMENTS 1. Routine Report <input type="checkbox"/> 2. Routine Rep. w/CASE Narrative <input type="checkbox"/> 3. EPA Level III <input type="checkbox"/> Validatable Package <input type="checkbox"/> 4. N.J. Reduced Deliverables Level IV <input type="checkbox"/> 5. NY ASP/CLP Deliverables <input type="checkbox"/> 6. Site specific QC <input type="checkbox"/>				INVOICE INFORMATION: P.O. #: Bill To: Shipping Via: <u>Clair</u> Shipping #: <u>301</u> Temperature: <u>301</u> Submission No: <u>8-60</u>				SAMPLE RECEIPT:			
RELINQUISHED BY: <u>Michael R. Alamed</u> Signature <u>Michael R. Alamed</u> Printed Name <u>Michael R. Alamed</u> Firm <u>AS</u> Date/Time <u>8/9/96 1040</u>				RECEIVED BY: <u>Michael R. Alamed</u> Signature <u>Michael R. Alamed</u> Printed Name <u>Michael R. Alamed</u> Firm <u>AS</u> Date/Time <u>8/9/96 1040</u>				SPECIAL INSTRUCTIONS/COMMENTS: METALS TOTAL PCRA METALS (Zinc by SW-846 METHODS 6010A/7427) ORGANICS: <u>TEL BN/AE ONLY</u> <input type="checkbox"/> <u>BN ONLY</u> <input type="checkbox"/> <u>Special List</u> <input type="checkbox"/> SW-1-UBIATES ORGANICS COMPOUNDS (TEL BN/AE ONLY) <u>PCRA METALS</u> <u>335.2</u> TOTAL CYANIDES by SW-846 METHOD <u>418.1</u> 65 RAMAPO VALLEY ROAD MAHWAH, NJ 07430 201-512-3292 FAX 201-512-3362				435 LAWRENCE BELL DR. AMHERST, NY 14221 716-634-0454 FAX 716-634-9019											

Appendix I

Hazardous Waste Survey Barton & Loguidice, P.C., February 2009

**Former Shade Roller Complex
Adams Avenue
Ogdensburg, New York
St. Lawrence County**

Hazardous Waste Survey

February 10, 2009



Engineers • Environmental Scientists • Planners • Landscape Architects

**290 Elwood Davis Road
Box 3107
Syracuse, New York 13220**

Shade Roller Complex
Adams Avenue

Hazardous Waste Survey

February 2009

Prepared For:

City of Ogdensburg
City Hall
330 Ford Street
Ogdensburg, New York 13669

Prepared By:

Barton & Loguidice, P.C.
290 Elwood Davis Road
P.O. Box 3107
Syracuse, New York 13220

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Figures

Building Floor Plans – Figures 1 through 3

1. Basement Plan
2. First Floor Plan
3. Second Floor Plan

Tables

Table 1 – Hazardous Waste Survey Summary

Table 2 –Hazardous Waste Sample Result Summary

Attachment

Attachment A – Laboratory Analytical Results

1.0 Introduction

Barton & Loguidice, P.C. conducted a building survey for hazardous materials within the eleven buildings comprising the former Shade Roller Complex located on Adams Avenue in Ogdensburg, New York. The survey included an assessment and inventory of the following buildings: Garage, Office Building, Main Building, Boiler Room, Kiln Building, Shed 1-A, Shed 1, Shed 2-A, Shed 2-B, Shed 3, and the Paint Shop.

The purpose of the Survey was to identify the existence of potentially hazardous materials/wastes, used oils, paints, and unidentified containers within the eleven surveyed buildings. In addition, the presence of factory machinery containing PCB and used oils was noted, and the presence of oil/waste/metal plating spills that may have contaminated building surfaces that could be impacted during demolition. Each building was reviewed for the presence of suspect hazardous materials and/or wastes, requiring handling prior to demolition. These materials were categorized and inventoried in preparation for removal under a hazardous materials removal contract. Several materials were sampled and analyzed for hazardous waste characteristics to identify disposal methods.

It should be noted that multiple items were classified as suspected hazardous materials due to their labels, container type, or location. Sealed containers and drums were not opened during this preliminary assessment, and will require full characterization as part of the removal project.

The building also contains materials categorized as "Universal Wastes." This category includes: fluorescent light bulbs, batteries, mercury-containing thermostats, certain pesticides, and mercury vapor lamps.

A summary of the buildings surveyed, contents cataloged, and hazardous/non-hazardous designation have been included in Table 1.

1.1 Building Survey

Eleven buildings were surveyed for the presence of hazardous materials. A tabular listing of the materials identified (Table 1) has been included in this report. In addition, floor plans for the basement, first floor, and second floor of each building are presented in Figures 1 through 3. These figures illustrate the approximate location of potential hazardous materials identified during the survey.

Specific materials were sampled to further delineate their hazardous content. The locations of these samples are indicated on the figures. Table 2 presents the results of the laboratory analysis and comparison to hazardous waste regulatory levels for toxicity characteristic (Table 2).

The survey was conducted on November 19 and 20, 2008.

1.1.1 *Garage*

The Garage is a single story concrete block building with a poured concrete floor and a full basement that connects underground to the office building.

Potentially hazardous materials observed include: an elevator with a hydraulic lift system, propane cylinders, and fluorescent lights. Other materials noted were general debris including clothing, household type

debris, and several pipes in the floor with unknown terminuses. The pipes did not appear to be of significant concern (Figures 1 and 2).

It is recommended that the hydraulic reservoir associated with the elevator be removed prior to demolition activities.

1.1.2 Office Building

The Office Building is a two story concrete block structure with a full basement and concrete slab foundation. The first floor is comprised of offices and the other floors served mainly as storage or staging areas.

Oil stained concrete was noted along the northeast corner of the building basement. No obvious source of this stain was observed. The stain may be due to a container that had been knocked over or prior plating operations in the basement. An empty sump was also noted in southwest corner of the basement and a 5-gallon container of unknown powder was found on the first floor (Figures 1 and 2).

1.1.3 Main Building

The Main Building is a two-story brick building with a full basement with a poured concrete floor. The Main building basement houses the boiler room. The basement and first floor connect with the Office Building and garage basement.

Potential hazardous materials observed in the Main Building basement included containers of oil, 1-gallon containers of unknown materials, 5-gallon and 55-gallon containers of unknown content, and oils

associated with elevator equipment. Fluorescent light bulbs are present throughout the structure. A large sump basin in the basement was observed with a layer of sediment with a petroleum appearance. Two metal pans were observed full of oil adjacent to the sump. The sump was sampled as part of the survey.

The boiler room contained a 55-gallon drum of Dimethyl-Isopropanolamine (a corrosive liquid), the abandoned boilers, condensate pumps, and other abandoned heating system and boiler water treatment equipment. This included several containers full of an unknown liquid. The liquid may be condensate or a residual treatment chemical. It will require further characterization prior to removal.

Materials noted on the first floor included unmarked 5-gallon containers, paint and light bulb debris, and dismantled electrical equipment. Two 6,000-gallon metal storage tanks are located along the eastern wall. A solid waxy substance was noted to have leaked from these tanks. In addition, areas of powdered residue were noted on the floor. The powder residue may be efflorescence from the concrete floors which have been exposed to the elements. Several hatches in the floors were noted, with bagged debris present beneath the floor within trench and utility corridors. The bags were inspected and found to contain gypsum wallboard.

On the second floor, additional unmarked small containers were noted and also a container labeled "Soda Acid." In the southeast corner of this floor are several rooms that housed electrical transformers. Most of the transformers had been dismantled and one was labeled as a PCB transformer. Within this area B&L observed a number of 1- to 2-gallon

pans on a bench and floor. Several of the pans on the bench were full of oil and a stain on the floor (and observed on the ceiling of the room below) suggested that others had been spilled. Since these were located in the former transformer room, a concern with transformer oil (possibly PCB contaminated) was identified. A sample of the oil was collected for analysis (see below).

Several materials/fluids observed in the Main Building were sampled to assist in identification of their characteristics. Samples were collected from the sediment in the sump in the basement of the Main Building (Sample 7), from the solidified waxy substance which had spilled from the two aboveground storage tanks (Sample 9), and samples of the oil was collected from the containers located on the second floor transformer room (Sample 10).

A summary of the identified materials is presented in Table 1.

1.1.4 Kiln Building

The Kiln Building is a single story brick building with a concrete slab foundation and basement, which connects to the boiler room of the Main Building.

Potential hazardous materials included 55-gallon drums, as noted in Table 1. Some of the drums were labeled to contain sulfonated styrene maleic anhydride copolymer (sodium salt), a non-hazardous substance, and sodium hydroxide, a hazardous substance. Both compounds are common in the manufacturing of paper and textiles. These materials will require disposal prior to demolition.

B&L sample #3 was collected from a mixing trough located in the north-middle portion of the Kiln Building (Figures 1 and 2).

1.1.5 Sheds 1 and 1A

Sheds 1 and 1A are single story warehouse buildings with a concrete slab foundation. Portions of 1A have concrete block walls.

The only potential hazardous material observed in the shed was a transformer noted inside Shed 1A that could potentially contain PCB oil and should be tested and removed prior to demolition activities (Figure 2).

1.1.6 Sheds 2A and 2B

Sheds 2A and 2B are interconnected single story warehouses with a poured concrete slab on grade. Shed 2B has limited office space in the northeast corner. Shed 2A has a single office.

One 55-gallon drum of cleaning fluid was assumed to contain suspect hazardous material. The drum was sealed and was not sampled (Figure 2).

1.1.7 Shed 3

Shed 3 is a single story warehouse structure with a concrete slab on grade. The building served mainly as storage, but also includes a workshop with a mezzanine over top.

Potential hazardous materials were observed in multiple locations within the shed which include 55-gallon drums, pressurized cylinders, a transformer containing possible PCB oils, multiple 1-gallon containers of epoxy, a 5-gallon container of epoxy, and a 70-gallon gasoline tank. The full summary of items is included in Table 1 and illustrated on Figure 2.

1.1.8 Paint Shop

The Paint Shop is a single story pole barn structure with metal siding and roofing. The building has a paint booth on the west end with a mezzanine level over top.

Potential hazardous materials were encountered in 40 to 50 containers of various sizes containing metal working fluid, a 30-gallon container of dielectric fluid (possible PCBs), epoxy, and paint. In addition, a 55-gallon drum from a previous investigation was noted to contain soil cuttings, which should be opened and tested for hazardous waste characteristics prior to building demolition.

1.2 General Hazards

Several general hazards were noted throughout the complex. These included the presence of flaking and loose paint, broken light bulbs, and bird guano.

1.2.1 Lead-Based Paint

Lead-based paint is assumed for all painted structural members within the building. EPA regulates lead-based paint within regulated housing, but has not established standards for industry. OSHA regulates lead-based paint during construction and demolition. OSHA has not identified a minimum threshold for paint to be considered lead-based paint. Any percentage of lead will qualify as lead-based paint under OSHA. B&L's experience sampling numerous samples of paints in industrial and commercial buildings has identified lead in virtually every sample. We therefore recommend that all paint within the structure be considered lead-based and handled as such during demolition and construction.

NYSDEC will allow the disposal of construction and demolition debris with adhered lead-based paint. The quantity of paint on structural members is small in relation to the mass of the substrate and, therefore, does not qualify the entire demolition debris as a lead-based waste. However, in order to dispose of C&D debris, any loose and flaking paint must be removed prior to demolition. This is due to the potential for the paint to flake off and become a general environmental exposure. Within the buildings, many of the painted surfaces exhibit flaking and many areas show evidence of paint debris on the building floors.

The handling, removal, and abatement of loose and flaking lead-based paint and paint debris on the building floors must be considered as part of the demolition design.

1.2.2 Broken Light Bulbs

Areas of the complex contain glass and residue from broken fluorescent light bulbs. These bulbs contain a low level of mercury and the dust and debris from the bulbs will need to be contained, abated, and disposed of.

1.2.3 Pigeon Guano

Throughout the structure we observed areas where birds have roosted and evidence of accumulated guano. This material presents a biological hazard due to the potential for the presence of fungi causing diseases such as histoplasmosis and cryptococcosis. The removal of these wastes prior to general building demolition will prevent exposure to the construction workers and general public.

2.0 Material Sampling

The assessment revealed many containers of unknown liquids and substances in the complex, and also various open containers of oil based fluids and sediment. Areas of stained flooring were also noted in the structures. Several stained areas of concrete were observed on the basement floor of the Main Building, near the location of the former metal plating operations. This area also included a sump with sludge/sediment. Many of these materials will need to be formally sampled and tested for toxicity, by the Toxicity Characteristic Leaching Procedure (TCLP) methods to determine hazardous/non-hazardous waste disposal status. Due to the number of materials identified, the testing conducted as part of this Assessment was limited.

Materials selected for sampling as part of this report were chosen to guide the pre-demolition design recommendations. The materials sampled included open containers of oil located adjacent to the transformers that were salvaged of copper; the waxy material leaking from the storage tanks; residual fluid found in a trough in the kiln room; and sediment from the large sump within the former plating areas of the basement.

The four samples were submitted to Upstate Laboratories for Analysis of EPA methods 8260 and 8270 full list compounds, 6010B (8 RCRA Metals), and 8082 (PCBs). The full laboratory report has been included in Attachment A.

Table 2 presents a summary of the laboratory results. For reference, the table includes a listing of the Toxicity Characteristic limits identified in DEC regulations (Part 371.3 Identification and Listing of Hazardous Wastes). The Toxicity Characteristic limits are based on a liquid sample extract. The waste samples were not subjected to the Toxicity Characteristic Leaching Procedure (TCLP) test for a direct comparison to these limits.

Two of the four samples consisted of a solid or sludge material. The total concentration of contaminants identified in the samples is not directly comparable to the Part 371.3 Toxicity limits. NYSDEC estimates that by dividing a total concentration result by 20, one can approximate the TCLP Leaching results. This approximation will vary widely depending on the content and substrate of the solid/sludge. In Table 2 we have provided both the original analytical results for the sludge samples and the calculated liquid equivalent compared to the Part 371.3 regulatory standards. This calculated equivalent was provided to give a general sense of whether the sampled wastes would be considered Hazardous Wastes to be handled under RCRA rules.

The following samples were submitted for analysis:

- B&L Sample #3: Sample #3 was collected from a mixing trough located in the Kiln Room basement. The sample was identified as an oil and sampled using a disposable bailer. Several contaminants were detected in the fluid, including pentachlorophenol, arsenic, and chromium. These substance are associated with wood preservation processes. The concentrations are lower than the Toxicity limits, and this waste fluid may not be a hazardous waste.
- B&L Sample #7: Sample #7 was collected from a sump located in the basement of the Main Building. The sump was noted to contain stained soils with a volatile odor. The sample was collected using a disposable stainless steel scoop and placed into a glass sampling jar. The results of the sampling analysis revealed detections of semi-volatile organic compound bis(2-ethylhexyl)phthalate and inorganic metals including barium, cadmium, chromium, and lead. The estimated Toxicity equivalents would classify this waste as non-hazardous.

- B&L Sample #9: Sample #9 was collected from a solidified substance located adjacent to two 6,000-gallon holding tanks on the first floor of the Main Building. The sample was collected using a disposable stainless steel scoop and placed into a glass sampling jar. Barium was one of the only detected substances in this material and appears below regulatory limits.

- B&L Sample #10: Sample #10 was oil collected from the containers located adjacent to a transformer with a PCB label on the second floor of the Main building. PCBs were suspected due to the location of the oil and the label transformer. Much of the transformer had been dismantled to scavenge copper. The sample was collected using a disposable bailer. PCBs were not detected in the oil sample. The heavy metal cadmium was present above the Toxicity limit (Table 2).

3.0 Conclusions

The former Standard Shade Roller complex is abandoned and slowly deteriorating. The City of Ogdensburg desires to have the building demolished to remove a local eyesore and safety hazard. The former manufacturing operations included a metals plating line in the basement of the Main building. Prior investigations by Blasland, Bouck & Lee have identified subsurface contaminants of concern associated with these operations (elevated groundwater and soil metals). Residues and sediment from these processes may remain on the floors of the basement areas.

Throughout the structure, B&L identified numerous waste materials, including empty, partially full, and full containers (1-, 5-, 55-gallons in size) of various identified and unidentified substances. Some of these materials will require disposal as hazardous waste. One area of the building contains a spill of a wax-based material. Deteriorated lead-based paint was observed on the walls and as debris on the building floors. Oil filled equipment and boilers remain in the structure. Asbestos containing materials are present in the buildings.

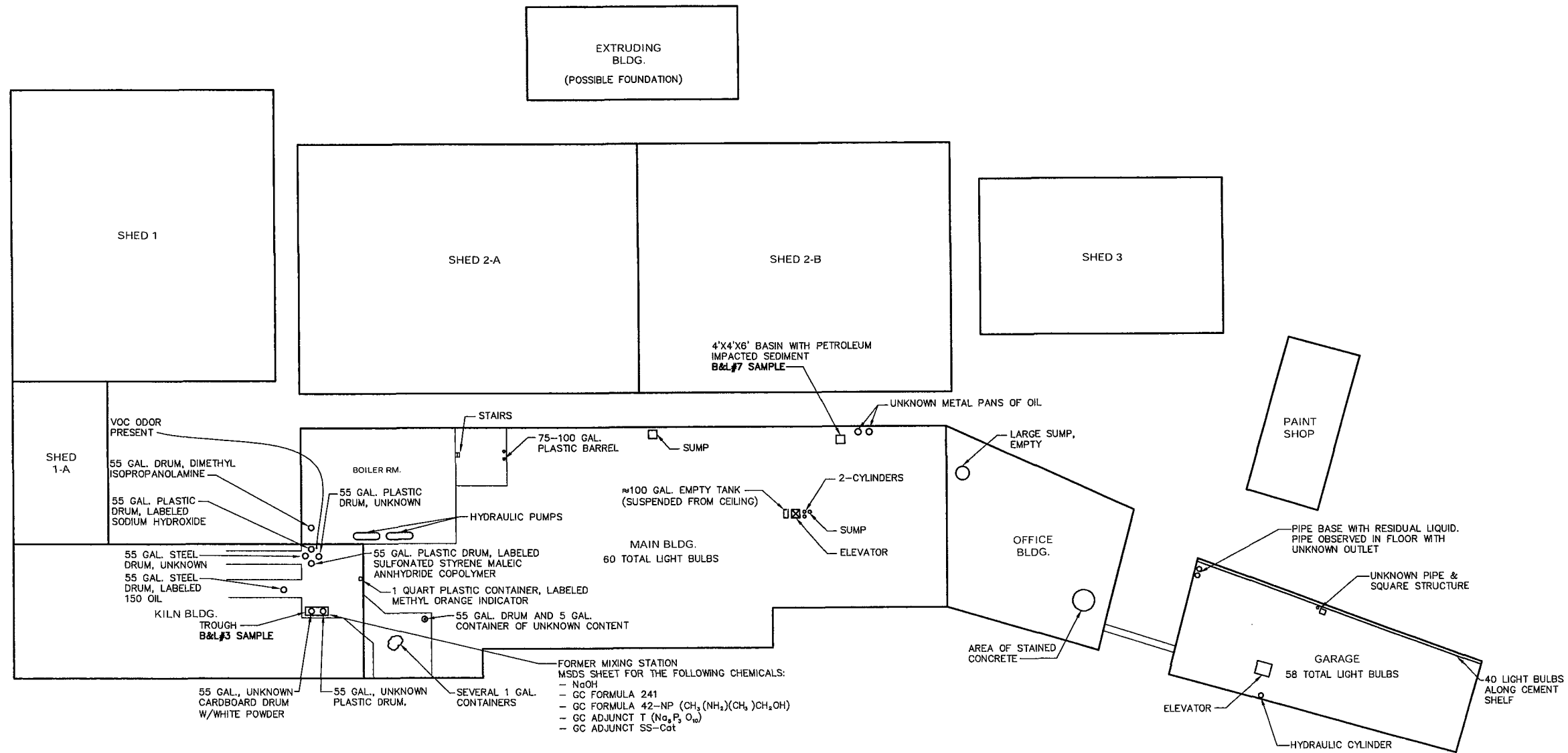
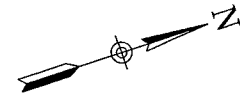
Due to the presence of the potentially hazardous substances, residues, and wastes within the buildings, it is recommended that the City contract with a Hazardous Waste Management contractor to fully characterize, containerize, abate, and dispose of the identified substances. This work should be conducted prior to any demolition work in the structure to prevent release of hazardous compounds into the environment and exposure of demolition workers and the general public to these contaminants.

This report is intended to be used as a guide to provide general information regarding the types, locations, and approximate quantities of hazardous or suspect hazardous materials, and does not represent a plan or design for any hazardous waste disposal work that may need to be conducted.

Figures

Building Floor Plans – Figures 1 through 3:

- 1. Basement Plan**
- 2. First Floor Plan**
- 3. Second Floor Plan**



NO ALTERATION PERMITTED
HEREON EXCEPT AS PROVIDED
UNDER SECTION 7209
SUBDIVISION 2 OF THE NEW
YORK STATE EDUCATION LAW.

COMPLETED CONSTRUCTION

Significant Construction
Changes Are Shown

By _____ Date _____

Ck'd _____ Date _____

REVISIONS

NO.	DESCRIPTION

HAZARDOUS WASTE SURVEY
BASEMENT PLAN

ST. LAWRENCE COUNTY, NEW YORK

CITY OF OGDENSBURG

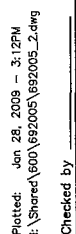


Date
DECEMBER, 2008

Scale
1"=30'

Sheet Number
1

File Number
692.005



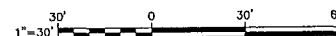
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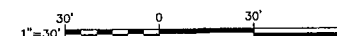
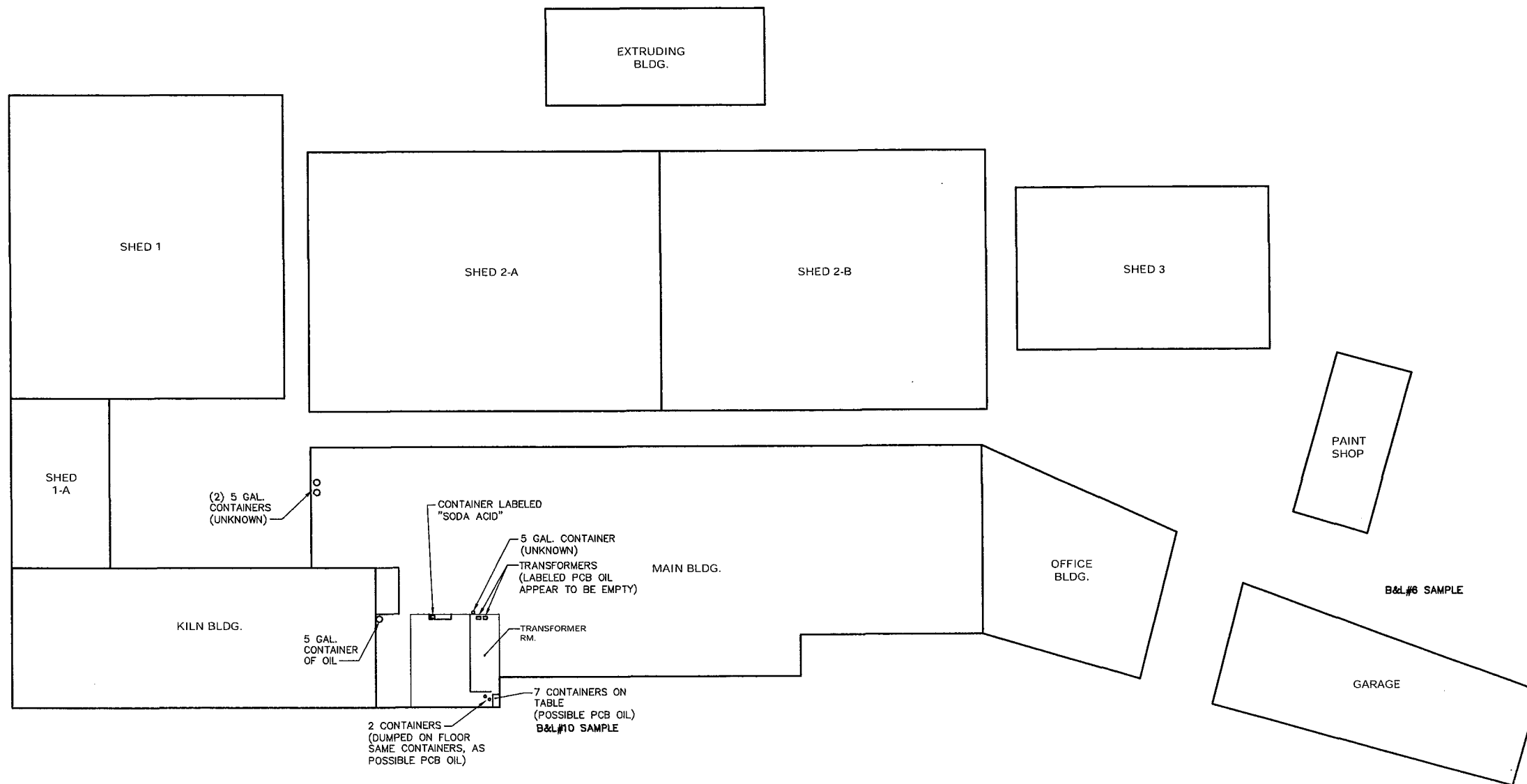
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EXTRUDING BLDG. (CONCRETE PAD ONLY)

- SHED 1**: 40 TOTAL LIGHT BULBS IN FIXTURES; FIRE EXTINGUISHER ON FLOOR
- SHED 2-A**: 35 TOTAL LIGHT BULBS IN FIXTURES; FIRE EXTINGUISHER ON FLOOR
- SHED 2-B**: 14 TOTAL LIGHT BULBS IN FIXTURES; 55 GAL. DRUM, LABELED CLEANER; HYDRAULIC MACHINE W/POSSIBLE OIL; 4 OFFICES, 6 LIGHT BULBS
- SHED 3**: 16 TOTAL LIGHT BULBS IN FIXTURES; 5 GAL. DRUM OF ADHESIVE; TRANSFORMER OR SWITCH W/OIL IN CONTAINER ON THE GROUND; 7 LIGHT BULBS; DOOR; ONE PRESSURIZED CONTAINER LABELED CHLORODIFLUOROMETHANE; ROAD SALT; 70 GAL. GAS CONTAINER; (2) 5 GAL. EPOXY SEALER; POSSIBLE OXYGEN AND ACETYLENE CYLINDERS; LOFT AREA; 55 GAL. STEEL DRUM LABELED SOIL CUTTINGS; 5 GAL. DRUM, LABELED METAL WORKING FLUID; FLOOR DRAIN 1'x1'x20"L; 1 QUART EPOXY CATALYST STARTER; 40-50 1 GAL. PAINT CANS SCATTERED THROUGHOUT BLDG.
- PAINT SHOP**: 55 GAL. PLASTIC DRUM, UNKNOWN; 30 GAL. PLASTIC DRUM, LABELED DIELECTRIC FLUID; FIRE HOUSE
- GARAGE**: 38 TOTAL LIGHT BULBS IN FIXTURES; HYDRAULIC LIFT; 2- 20 LB. PROPANE CYLINDERS
- OFFICE BLDG.**: 5 GAL. DRUMS, UNKNOWN; 5 GAL. DRUM, UNKNOWN POWDER; 5 & 10 GAL. CONTAINERS, UNKNOWN; COMPUTER MONITOR AND OLD PRINTER
- MAIN BLDG.**: ~124 TOTAL LIGHT BULBS IN FIXTURES; ELEVATOR; TRENCH DRAINS 1'x1'; SPILL FROM HOLDING TANKS B&L #9 SAMPLE; (2) 5,600 GAL. HOLDING TANKS; CEILING STAINED (POSSIBLE PCB OIL); 4'x6' STEEL COVER; TRANSFORMER; (3) 5 GAL. CONTAINERS W/UNKNOW LIQUID; OFFICE
- KILN BLDG.**: 30 TOTAL LIGHT BULBS IN FIXTURES; FLOOR DRAINS 10'x20'
- TRANSFORMER RM.**: TRANSFORMER ON WALL; ROUND OPENING THROUGH SUB FLOOR SLAB
- SHED 1-A**: FLOOR DRAIN 1'x1'x20'-30'L
- BOAT**: 1- 50 LB. PROPANE CYLINDER
- CLEANOUT RISER**
- SHELVED AREA**: W/14 UNKNOWN 1 GAL. OR SMALLER CONTAINERS, W/ EPOXY ADHESIVE
- DOOR**
- DOOR**

692.005





NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7208 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.	
COMPLETED CONSTRUCTION	
Significant Construction Changes Are Shown	
By _____	Date _____
Ck'd _____	Date _____
REVISIONS	
HAZARDOUS WASTE SURVEY	
SECOND FLOOR PLAN	
CITY OF OGDENSBURG	ST. LAWRENCE COUNTY, NEW YORK
 Barton Rogge, P.C.	
Date DECEMBER, 2008	
Scale 1"=30'	
Sheet Number 3	
File Number 692.005	

Tables

Table 1

Hazardous Waste Survey Summary

TABLE 1
City of Ogdensburg
Shade Roller Property Hazardous Waste Survey
November 19, 2008 through November 20, 2008
BASEMENT

Location	Material	Material Location	Estimated Quantity	Hazardous/Non-Hazardous
Garage	Light Bulbs	Light fixtures	98	Universal Waste
	Hydraulic vehicle lift	North wall, center of garage	1	Suspect Hazardous
	Hydraulic cylinder associated with elevator	Located on the southwest wall	1	Suspect Hazardous
	Cut-off pipes observed in floor with residual fluid	West wall and southwest corner of garage	3	Unknown
Office Building	Sump	Southwest corner of building	1	Non-Hazardous
	Stained Concrete	Northeast corner of building	-	Suspect Hazardous
Main Building Sample #7	Sump No. 1	West side middle of building	-	Non-Hazardous
	Sump No. 2	Northwest corner of building	-	Suspect Hazardous
	Sump No. 3	North end of building, middle of floor	-	Non-Hazardous
	Cylinders	North end of building, middle of floor	2	Unknown
	100 gallon tank	North end of building, middle of floor	1	Unknown
	Elevator (potential hydraulic fluids)	North end of building, middle of floor	1	Suspect Hazardous
	75-100 Gallon Plastic Barrel	Northwest corner of building	2	Unknown
	55-Gallon Drum	Southeast corner of building	1	Unknown
	5-Gallon Container	Southeast corner of building	1	Unknown
	Light Bulbs	Ceiling light fixtures	60	Universal Waste
	Hydraulic Pump	East wall	2	Suspected Hazardous
	55-Gallon Pump	Southeast corner	1	Dimethyl-Isopropanolamine
Kiln Building Sample #3	55-Gallon Steel Drum	Northwest corner of building	1	Unknown
	55-Gallon Plastic Drum	Northwest corner of building	1	Unknown
	55-Gallon Plastic Drum	Northwest corner of building	1	Sulfonated Styrene Maleic Anhydride Copolymer
	55-Gallon Drum	Northwest corner of building	1	Sodium Hydroxide
	55-Gallon Drum	Northwest corner of building	1	150 Oil
	1-Quart Plastic Container	Northwest corner of building	1	Methyl Orange Indicator
	Mixing Trough	North-middle portion of building	1	Suspect Hazardous
	55-Gallon Cardboard Drum	Over mixing trough	1	Empty
	55-Gallon Plastic Drum	Over mixing trough	1	White Powder, Unknown

TABLE 1
City of Ogdensburg
Shade Roller Property Hazardous Waste Survey
November 19, 2008 through November 20, 2008
FIRST FLOOR

Location	Material	Material Location	Estimated Quantity	Hazardous/Non-Hazardous
Garage	Light Bulbs	Ceiling fixtures	38	Universal Waste
	20 Pound Cylinders	Northeast corner of garage	2	Suspect Hazardous (Propane)
	Hydraulic Lift	North portion of garage	1	Suspect Hazardous (Hydraulic Oil)
	Elevator (potential hydraulic fluids)	Southern portion of garage	1	Suspect Hazardous (Hydraulic Oil)
Office Building	5-Gallon Drum	Southwest portion of office	1	Unknown powder
Main Building	Light Bulbs	Ceiling fixtures	124	Universal Waste
	5-Gallon Containers	West wall of main building inside the office	3	Unknown Liquid
	5-Gallon Containers	Northwest corner of main building	2	Unknown
	5,600 Gallon Tank	East wall, middle of the main building	2	Suspect Hazardous
	Sample #9 Hardened Substance on Floor	adjacent to 5,600 gallon tanks	-	Suspect Hazardous
	Stained Ceiling Tile	Southeast corner of main building, inside transformer room	-	Suspect Hazardous
	Transformer	Outside of main building east wall	1	Suspect Hazardous (Possible PCB Oil)
	Elevator (potential hydraulic fluids)	North end of main building, middle of floor	-	Suspect Hazardous (Hydraulic Oil)
	Trench drain	North east exterior wall of main building	2	Non-Hazardous
	Light Bulbs	Ceiling fixtures	30	Universal Waste
Kiln Building	Floor Drains	Middle of kiln building	3	Non-Hazardous
	Transformer	Northeast corner of shed	1	Suspect Hazardous (Possible PCB Oil)
Shed 1-A	Floor Drain	West side of shed	1	Non-Hazardous
	Round opening in floor	Northeast corner of shed	1	Unknown
	Light Bulbs	Ceiling fixtures	40	Universal Waste
Shed 1	Fire Extinguisher	Southeast quarter of building, on floor	1	Non-Hazardous
	Light Bulbs	Ceiling fixtures	35	Universal Waste
Shed 2-A	Fire Extinguisher	South portion of shed 2-A, on floor	1	Non-Hazardous
	Light Bulbs	Ceiling fixtures	20	Universal Waste
Shed 2-B	Hydraulic machine	East wall	1	Non-Hazardous
	55-Gallon Drum	Middle of building		
	Light Bulbs	Ceiling fixtures	21	Universal Waste
Shed 3	55-Gallon Drum	Northeast corner of shed	4	Unknown
	55-Gallon Drum	Northeast corner of shed	2	Suspect Hazardous (Volatile odor)
	55-Gallon Drum (Waste Oil)	Northeast corner of shed	1	Suspect Hazardous (Waste Oil)
	55-Gallon Drum (Empty)	Northeast corner of shed	1	Non-Hazardous
	Pressurized Cylinder	Northeast corner of shed	1	Non-Hazardous (Propane)
	Pressurized Cylinder	Northeast corner of shed	1	Non-Hazardous (Oxygen)
	Pressurized Cylinder	Northeast corner of shed	1	Non-Hazardous (Acetylene)
	Pressurized Cylinder	Northeast corner of shed	1	Hazardous (Chlorodifluoromethane)
	Transformer	East wall, center of storage room	1	Suspect Hazardous (Possible PCB Oil)
	1-Gallon Container	Southeast corner of shed	14	Suspect Hazardous (Epoxy)
	5-Gallon Container	Southeast corner of shed	1	Suspect Hazardous (Epoxy)
	70-Gallon Container	North wall, center of shed	1	Suspect Hazardous (Gasoline Container)
Paint Shop	5-Gallon Container	Southeast corner of shop	1	Unknown
	10-Gallon Container	Southeast corner of shop	1	Unknown
	55-Gallon Drum	Northwest corner of shop	1	Suspect Hazardous (soil cuttings)
	5-Gallon Drum	Northwest corner of shop	1	Suspect Hazardous (Metal Working Fluid)
	1-Quart Container	North wall of shop	1	Suspect Hazardous (Epoxy Catalyst)
	1-Gallon Container	Center of shop	40-50	Suspect Hazardous (Paint)
	30-Gallon Drum	Northeast corner of shop	1	Suspect Hazardous (Dielectric Fluid)

TABLE 1
City of Ogdensburg
Shade Rolier Property Hazardous Waste Survey
November 19, 2008 through November 20, 2008
SECOND FLOOR

Location	Material	Material Location	Estimated Quantity	Hazardous/Non-Hazardous
Main Building Transformer Room Sample #10	5-Gallon Container	Southeast corner of building	2	Unknown
	5-Gallon Container	South end of building	1	Suspect Hazardous (Oil)
	Transformer	South end of building	2	Suspect Hazardous (Possible PCB Oil)
	Containers	East wall, south end of building	9	Suspect Hazardous (Oil)
	Container	Southeast corner of building	1	Non-Hazardous (Soda Acid)

Table 2

Hazardous Waste Sample Result Summary


**TABLE 2
SHADE ROLLER COMPLEX
CITY OF OGDENSBURG**

HAZARDOUS WASTE SUMMARY

Parameter	Part 371.3 Hazardous Waste Regulatory Levels (Liquid) (ppm)	Hazardous Waste Samples (ppm)					
		B&L #3 (Liquid)	B&L #7 (Solid/Sludge)	B&L #7 Estimated Liquid Equivalent	B&L #9 (Solid/Sludge)	B&L #9 Estimated Liquid Equivalent	B&L #10 (Liquid)
Arsenic	5.0	0.28	< 3.3	0.17	< 4.4	0.22	< 1.0
Barium	100	< 0.03	120	6	3.7	0.19	3.7
Benzene	0.5	< 0.05	< 0.1	0.01	< 0.1	0.01	< 0.5
Cadmium	1.0	< 0.03	4.6	0.23	< 0.9	0.04	19.0
Carbon tetrachloride	0.5	< 0.05	< 0.1	0.01	< 0.1	0.01	< 0.5
Chlordane	0.03	-	-	-	-	-	-
Chlorobenzene	100	< 0.05	< 0.1	0.01	< 0.1	0.01	< 0.5
Chloroform	6.0	< 0.05	< 0.1	0.01	< 0.1	0.01	< 0.5
Chromium	5.0	0.19	54	2.70	< 1.8	0.09	< 0.4
o-Cresol	200.0	-	-	-	-	-	-
m-Cresol	200.0	-	-	-	-	-	-
Cresol (Total)	200.0	-	-	-	-	-	-
2,4-D	10.0	< 0.05	< 33.3	1.67	< 0.4	0.02	< 454
1,4-Dichlorobenzene	7.5	< 0.05	< 33.3	1.67	< 0.1	0.01	< 454
1,2-Dichloroethane	0.5	< 0.05	< 0.1	0.01	< 0.1	0.01	< 0.5
1,1-Dichloroethylene	0.7	-	-	-	-	-	-
2,4-Dinitrotoluene	0.13	< 0.05	< 33.3	1.67	< 0.4	0.02	< 454
Endrin	0.02	-	-	-	-	-	-
Heptachlor	0.008	-	-	-	-	-	-
Hexachlorobenzene	0.13	< 0.05	< 33.3	1.67	< 0.4	0.02	< 454
Hexachloro-1,3 butadiene	0.5	< 0.05	< 33.3	1.67	< 0.4	0.02	< 454
Hexachloroethane	3.0	< 0.05	< 33.3	1.67	< 0.4	0.02	< 454
Lead	5.0	< 0.03	87	4.35	< 2.2	0.11	1.4
Lindane	0.4	-	-	-	-	-	-
Mercury	0.2	< 0.0004	< 0.05	0.003	< 0.03	0.002	< 0.01
Methoxychlor	10	-	-	-	-	-	-
Methyl ethyl ketone	200.0	-	-	-	-	-	-
Nitrobenzene	2.0	< 0.05	< 33.3	1.67	< 0.4	0.02	< 454
Pentachlorophenol	100.0	< 0.12	< 33.3	1.67	< 0.4	0.02	< 454
Pyridine	5.0	< 0.05	< 33.3	1.67	< 0.4	0.02	< 454
Selenium	1.0	< 0.03	< 3.30	0.17	< 4.40	0.22	< 1.0
Silver	5.0	< 0.03	< 0.67	0.03	< 0.88	0.04	< 0.20
Tetrachloroethylene	0.7	-	-	-	-	-	-
Toxaphene	0.5	-	-	-	-	-	-
Trichloroethylene	0.5	-	-	-	-	-	-
2,4,5-Trichlorophenol	400.0	< 0.05	< 33.3	1.67	< 0.4	0.02	< 454
2,4,6-Trichlorophenol	2.0	< 0.05	< 33.3	1.67	< 0.4	0.02	< 454
2,4,5-TP (Silvex)	1.0	-	-	-	-	-	-
Vinyl chloride	0.2	< 0.05	< 0.1	0.01	< 0.1	0.01	< 0.5

Notes:

 = Compound in exceedance of Part 371.3 Hazardous Waste Regulatory Levels for a Liquid

 = Soil contaminant concentration is divided by 20 to determine hazardous waste characterization when compared to Part 371.3 Hazardous Waste Regulatory Levels for a Liquid.

All liquid limit levels are determined to be below Part 371.3 standards.

< = compound was "Non-Detect" at concentrations equal to or above the indicated laboratory detection limit

Attachment A

Laboratory Analytical Results



Environmental
LABORATORY SERVICES

7280 Caswell Street, Hancock Air Park, North Syracuse, NY 13212
(315) 458-8033, FAX (315) 458-0526, (800) 842-4667

Certified in:
• Connecticut
• Massachusetts
• New Jersey
• New York
• Pennsylvania

Laboratory Analysis Report

BARTON & LOGUIDICE P.C.
290 Elwood Davis Road
Box 3107
Syracuse, NY 13220
ATTN: Ms. Robin VerSchneider

PROJECT #: 231487
RECEIVED: 11/21/2008 @ 13:55

CLIENT JOB NUMBER: 692-005-S

TEST PERFORMED	RESULTS	UNITS	DATE/TIME PERFORMED	METHOD NUMBER	PERFORMED BY
SAMPLE #: 494163 CLIENT SAMPLE ID: B&L #3			DATE/TIME SAMPLED: 11/20/08 @ 12:05		
Volatile - 8260					
1,1,1,2-tetrachloroethane	<50.0	UG/L	12/01/08	EPA 8260B	DBA
1,1,1-trichloroethane	<50.0	UG/L	12/01/08	EPA 8260B	DBA
1,1,2,2-tetrachloroethane	<50.0	UG/L	12/01/08	EPA 8260B	DBA
1,1,2-trichloroethane	<50.0	UG/L	12/01/08	EPA 8260B	DBA
1,1-dichloroethane	<50.0	UG/L	12/01/08	EPA 8260B	DBA
1,1-dichloroethene	<50.0	UG/L	12/01/08	EPA 8260B	DBA
1,1-dichloropropene	<50.0	UG/L	12/01/08	EPA 8260B	DBA
1,2,3-trichlorobenzene	<50.0	UG/L	12/01/08	EPA 8260B	DBA
1,2,3-trichloropropane	<50.0	UG/L	12/01/08	EPA 8260B	DBA
1,2,4-trichlorobenzene	<50.0	UG/L	12/01/08	EPA 8260B	DBA
1,2,4-trimethylbenzene	<50.0	UG/L	12/01/08	EPA 8260B	DBA
1,2-dibromo-3-chloropropane	<50.0	UG/L	12/01/08	EPA 8260B	DBA
1,2-dibromoethane	<50.0	UG/L	12/01/08	EPA 8260B	DBA
1,2-dichlorobenzene	<50.0	UG/L	12/01/08	EPA 8260B	DBA
1,2-dichloroethane	<50.0	UG/L	12/01/08	EPA 8260B	DBA
1,2-dichloropropane	<50.0	UG/L	12/01/08	EPA 8260B	DBA
1,3,5-trimethylbenzene	<50.0	UG/L	12/01/08	EPA 8260B	DBA
1,3-dichlorobenzene	<50.0	UG/L	12/01/08	EPA 8260B	DBA
1,3-dichloropropane	<50.0	UG/L	12/01/08	EPA 8260B	DBA
1,4-dichlorobenzene	<50.0	UG/L	12/01/08	EPA 8260B	DBA
2,2-dichloropropane	<50.0	UG/L	12/01/08	EPA 8260B	DBA
2-butanone	<50.0	UG/L	12/01/08	EPA 8260B	DBA
2-chlorotoluene	<50.0	UG/L	12/01/08	EPA 8260B	DBA
2-hexanone	<50.0	UG/L	12/01/08	EPA 8260B	DBA
4-chlorotoluene	<50.0	UG/L	12/01/08	EPA 8260B	DBA
4-isopropyltoluene	<50.0	UG/L	12/01/08	EPA 8260B	DBA
4-methyl-2-pentanone	<50.0	UG/L	12/01/08	EPA 8260B	DBA
acetone	<50.0	UG/L	12/01/08	EPA 8260B	DBA
acrylonitrile	<50.0	UG/L	12/01/08	EPA 8260B	DBA
benzene	<50.0	UG/L	12/01/08	EPA 8260B	DBA

BARTON & LOGUIDICE P.C.
290 Elwood Davis Road
Box 3107
Syracuse, NY 13220
ATTN: Ms. Robin VerSchneider

PROJECT #: 231487
RECEIVED: 11/21/2008 @ 13:55

CLIENT JOB NUMBER: 692-005-S

TEST PERFORMED	RESULTS	UNITS	DATE/TIME PERFORMED	METHOD NUMBER	PERFORMED BY
SAMPLE #: 494163 CLIENT SAMPLE ID: B&L #3			DATE/TIME SAMPLED: 11/20/08 @ 12:05		
Volatile - 8260					
bromobenzene	<50.0	UG/L	12/01/08	EPA 8260B	DBA
bromochloromethane	<50.0	UG/L	12/01/08	EPA 8260B	DBA
bromodichloromethane	<50.0	UG/L	12/01/08	EPA 8260B	DBA
bromoform	<50.0	UG/L	12/01/08	EPA 8260B	DBA
bromomethane	<50.0	UG/L	12/01/08	EPA 8260B	DBA
carbon disulfide	<50.0	UG/L	12/01/08	EPA 8260B	DBA
carbon tetrachloride	<50.0	UG/L	12/01/08	EPA 8260B	DBA
chlorobenzene	<50.0	UG/L	12/01/08	EPA 8260B	DBA
chloroethane	<50.0	UG/L	12/01/08	EPA 8260B	DBA
chloroform	<50.0	UG/L	12/01/08	EPA 8260B	DBA
chloromethane	<50.0	UG/L	12/01/08	EPA 8260B	DBA
cis-1,2-dichloroethene	<50.0	UG/L	12/01/08	EPA 8260B	DBA
cis-1,3-dichloropropene	<50.0	UG/L	12/01/08	EPA 8260B	DBA
dibromochloromethane	<50.0	UG/L	12/01/08	EPA 8260B	DBA
dibromomethane	<50.0	UG/L	12/01/08	EPA 8260B	DBA
dichlorodifluoromethane	<50.0	UG/L	12/01/08	EPA 8260B	DBA
ethylbenzene	<50.0	UG/L	12/01/08	EPA 8260B	DBA
hexachlorobutadiene	<50.0	UG/L	12/01/08	EPA 8260B	DBA
iodomethane	<50.0	UG/L	12/01/08	EPA 8260B	DBA
isopropylbenzene	<50.0	UG/L	12/01/08	EPA 8260B	DBA
methylene chloride	<50.0	UG/L	12/01/08	EPA 8260B	DBA
mtbe	<50.0	UG/L	12/01/08	EPA 8260B	DBA
naphthalene	<50.0	UG/L	12/01/08	EPA 8260B	DBA
n-butylbenzene	<50.0	UG/L	12/01/08	EPA 8260B	DBA
n-propylbenzene	<50.0	UG/L	12/01/08	EPA 8260B	DBA
sec-butylbenzene	<50.0	UG/L	12/01/08	EPA 8260B	DBA
styrene	<50.0	UG/L	12/01/08	EPA 8260B	DBA
tert-butylbenzene	<50.0	UG/L	12/01/08	EPA 8260B	DBA
tetrachloroethene	<50.0	UG/L	12/01/08	EPA 8260B	DBA
toluene	<50.0	UG/L	12/01/08	EPA 8260B	DBA
trans-1,2-dichloroethene	<50.0	UG/L	12/01/08	EPA 8260B	DBA
trans-1,3-dichloropropene	<50.0	UG/L	12/01/08	EPA 8260B	DBA
trans-1,4-dichloro-2-butene	<50.0	UG/L	12/01/08	EPA 8260B	DBA
trichloroethene	<50.0	UG/L	12/01/08	EPA 8260B	DBA
trichlorofluoromethane	<50.0	UG/L	12/01/08	EPA 8260B	DBA
vinyl acetate	<50.0	UG/L	12/01/08	EPA 8260B	DBA
vinyl chloride	<50.0	UG/L	12/01/08	EPA 8260B	DBA
xylene, m+p	<50.0	UG/L	12/01/08	EPA 8260B	DBA
xylene, o	<50.0	UG/L	12/01/08	EPA 8260B	DBA



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Syracuse, NY 13220
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PROJECT #: 231487
RECEIVED: 11/21/2008 @ 13:55

CLIENT JOB NUMBER: 692-005-S

TEST PERFORMED	RESULTS	UNITS	DATE/TIME PERFORMED	METHOD NUMBER	PERFORMED BY
SAMPLE #: 494163 CLIENT SAMPLE ID: B&L #3 DATE/TIME SAMPLED: 11/20/08 @ 12:05					
Volatile - 8260					
<i>Surrogate (toluene-d8): 89 % recovery, (bromofluorobenzene): 86 % recovery, (1,2-dichlorobenzene-d4): 105 % recovery, Surrogate recovery acceptance limits are 85-115%, Reference recoveries for Trichlorofluoromethane, Iodomethane and trans-1,2-Dichloroethene were below the established acceptance limits. Results for these analytes may be biased low. Continuing Calibration Standard recovery for 1,1-Dichloroethene was below the established acceptance limits. Results for this analyte may be biased low. Dilution due to matrix.</i>					
SAMPLE #: 494164 CLIENT SAMPLE ID: B&L #3 DATE/TIME SAMPLED: 11/20/08 @ 12:05					
Semi-Volatile - 8270 A/B/N					
1,2,4-trichlorobenzene	<50.0	UG/L	11/26/08	EPA 8270C	ASI
1,2-dichlorobenzene	<50.0	UG/L	11/26/08	EPA 8270C	ASI
1,2-diphenylhydrazine	<50.0	UG/L	11/26/08	EPA 8270C	ASI
<i>1,2-Diphenylhydrazine breaks down in the injection port. It is analyzed and reported as Azobenzene.</i>					
1,3-dichlorobenzene	<50.0	UG/L	11/26/08	EPA 8270C	ASI
1,4-dichlorobenzene	<50.0	UG/L	11/26/08	EPA 8270C	ASI
2,4,5-trichlorophenol	<50.0	UG/L	11/26/08	EPA 8270C	ASI
2,4,6-trichlorophenol	<50.0	UG/L	11/26/08	EPA 8270C	ASI
2,4-dichlorophenol	<50.0	UG/L	11/26/08	EPA 8270C	ASI
2,4-dimethylphenol	<50.0	UG/L	11/26/08	EPA 8270C	ASI
2,4-dinitrophenol	<50.0	UG/L	11/26/08	EPA 8270C	ASI
2,4-dinitrotoluene	<50.0	UG/L	11/26/08	EPA 8270C	ASI
2,6-dinitrotoluene	<50.0	UG/L	11/26/08	EPA 8270C	ASI
2-chloronaphthalene	<10.0	UG/L	11/26/08	EPA 8270C	ASI
2-chlorophenol	<50.0	UG/L	11/26/08	EPA 8270C	ASI
2-methyl-4,6-dinitrophenol	<50.0	UG/L	11/26/08	EPA 8270C	ASI
2-methylnaphthalene	<10.0	UG/L	11/26/08	EPA 8270C	ASI
2-methylphenol	<50.0	UG/L	11/26/08	EPA 8270C	ASI
2-nitroaniline	<50.0	UG/L	11/26/08	EPA 8270C	ASI
2-nitrophenol	<50.0	UG/L	11/26/08	EPA 8270C	ASI
3,3-dichlorobenzidine	<200	UG/L	11/26/08	EPA 8270C	ASI
3+4-methylphenol	<50.0	UG/L	11/26/08	EPA 8270C	ASI
3-nitroaniline	<50.0	UG/L	11/26/08	EPA 8270C	ASI
4-bromophenyl phenyl ether	<50.0	UG/L	11/26/08	EPA 8270C	ASI
4-chloro-3-methylphenol	<50.0	UG/L	11/26/08	EPA 8270C	ASI
4-chloroaniline	<50.0	UG/L	11/26/08	EPA 8270C	ASI
4-chlorophenyl phenyl ether	<50.0	UG/L	11/26/08	EPA 8270C	ASI
4-nitroaniline	<50.0	UG/L	11/26/08	EPA 8270C	ASI
4-nitrophenol	<50.0	UG/L	11/26/08	EPA 8270C	ASI
acenaphthene	<10.0	UG/L	11/26/08	EPA 8270C	ASI
acenaphthylene	<10.0	UG/L	11/26/08	EPA 8270C	ASI
aniline	<50.0	UG/L	11/26/08	EPA 8270C	ASI



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CLIENT JOB NUMBER: 692-005-S

TEST PERFORMED	RESULTS	UNITS	DATE/TIME PERFORMED	METHOD NUMBER	PERFORMED BY
SAMPLE #: 494164 CLIENT SAMPLE ID: B&L #3			DATE/TIME SAMPLED: 11/20/08 @ 12:05		
Semi-Volatile - 8270 A/B/N					
anthracene	<10.0	UG/L	11/26/08	EPA 8270C	ASI
benzidine	<200	UG/L	11/26/08	EPA 8270C	ASI
benzo(a)anthracene	<10.0	UG/L	11/26/08	EPA 8270C	ASI
benzo(a)pyrene	<10.0	UG/L	11/26/08	EPA 8270C	ASI
benzo(b)fluoranthene	<10.0	UG/L	11/26/08	EPA 8270C	ASI
benzo(g,h,i)perylene	<10.0	UG/L	11/26/08	EPA 8270C	ASI
benzo(k)fluoranthene	<10.0	UG/L	11/26/08	EPA 8270C	ASI
benzoic acid	<50.0	UG/L	11/26/08	EPA 8270C	ASI
benzyl alcohol	<50.0	UG/L	11/26/08	EPA 8270C	ASI
bis(2-chloroethoxy)methane	<50.0	UG/L	11/26/08	EPA 8270C	ASI
bis(2-chloroethyl) ether	<50.0	UG/L	11/26/08	EPA 8270C	ASI
bis(2-chloroisopropyl) ether	<50.0	UG/L	11/26/08	EPA 8270C	ASI
bis(2-ethylhexyl) phthalate	<50.0	UG/L	11/26/08	EPA 8270C	ASI
butyl benzyl phthalate	<50.0	UG/L	11/26/08	EPA 8270C	ASI
chrysene	<10.0	UG/L	11/26/08	EPA 8270C	ASI
dibenz(a,h)anthracene	<10.0	UG/L	11/26/08	EPA 8270C	ASI
dibenzofuran	<50.0	UG/L	11/26/08	EPA 8270C	ASI
diethyl phthalate	<50.0	UG/L	11/26/08	EPA 8270C	ASI
dimethyl phthalate	<50.0	UG/L	11/26/08	EPA 8270C	ASI
di-n-butyl phthalate	<50.0	UG/L	11/26/08	EPA 8270C	ASI
di-n-octyl phthalate	<50.0	UG/L	11/26/08	EPA 8270C	ASI
fluoranthene	<10.0	UG/L	11/26/08	EPA 8270C	ASI
fluorene	<10.0	UG/L	11/26/08	EPA 8270C	ASI
hexachlorobenzene	<50.0	UG/L	11/26/08	EPA 8270C	ASI
hexachlorobutadiene	<50.0	UG/L	11/26/08	EPA 8270C	ASI
hexachlorocyclopentadiene	<50.0	UG/L	11/26/08	EPA 8270C	ASI
hexachloroethane	<50.0	UG/L	11/26/08	EPA 8270C	ASI
indeno(1,2,3-cd)pyrene	<10.0	UG/L	11/26/08	EPA 8270C	ASI
isophorone	<50.0	UG/L	11/26/08	EPA 8270C	ASI
naphthalene	<10.0	UG/L	11/26/08	EPA 8270C	ASI
nitrobenzene	<50.0	UG/L	11/26/08	EPA 8270C	ASI
n-nitrosodimethylamine	<50.0	UG/L	11/26/08	EPA 8270C	ASI
n-nitrosodiphenylamine	<50.0	UG/L	11/26/08	EPA 8270C	ASI
n-nitrosodipropylamine	<50.0	UG/L	11/26/08	EPA 8270C	ASI
pentachlorophenol	115	UG/L	11/26/08	EPA 8270C	ASI
phenanthrene	<10.0	UG/L	11/26/08	EPA 8270C	ASI
phenol	<50.0	UG/L	11/26/08	EPA 8270C	ASI
pyrene	<10.0	UG/L	11/26/08	EPA 8270C	ASI
pyridine	<50.0	UG/L	11/26/08	EPA 8270C	ASI



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CLIENT JOB NUMBER: 692-005-S

TEST PERFORMED	RESULTS	UNITS	DATE/TIME PERFORMED	METHOD NUMBER	PERFORMED BY
SAMPLE #: 494164 CLIENT SAMPLE ID: B&L #3 DATE/TIME SAMPLED: 11/20/08 @ 12:05					
Semi-Volatile - 8270 A/B/N					
<i>Surrogate (2-fluorophenol): 67% recovery, (phenol-d6): 69% recovery, (nitrobenzene-d5): 94% recovery, (2-fluorobiphenyl): 99% recovery, (2,4,6-tribromophenol): 90% recovery, (terphenyl-d14): 162% recovery, Surrogate recovery acceptance limits are 50-130%. Sample contains a hydrocarbon pattern.</i>					
Aqueous Separatory Funnel Extraction			11/25/08	EPA 3510C	JZY
SAMPLE #: 494165 CLIENT SAMPLE ID: B&L #3 DATE/TIME SAMPLED: 11/20/08 @ 12:05					
ICP/MS					
arsenic	280	UG/L	11/25/08	EPA 200.8	ABO
barium	<25	UG/L	11/25/08	EPA 200.8	ABO
cadmium	<25	UG/L	11/25/08	EPA 200.8	ABO
chromium	190	UG/L	11/25/08	EPA 200.8	ABO
lead	<25	UG/L	11/25/08	EPA 200.8	ABO
selenium	<25	UG/L	11/25/08	EPA 200.8	ABO
silver	<25	UG/L	11/25/08	EPA 200.8	ABO
Metal Digestion (SPDES,NPDES)			11/24/08	EPA 4.1.4	BDR
MERCURY	<0.4	UG/L	11/25/08	EPA 245.1	MBU
Mercury Prep 245.1			11/25/08	EPA 245.1	BDR
SAMPLE #: 494166 CLIENT SAMPLE ID: B&L #3 DATE/TIME SAMPLED: 11/20/08 @ 12:05					
Semi-Volatile - PCB'S					
aroclor 1016	<0.50	UG/L	12/02/08	EPA 8082	KAL
aroclor 1221	<0.50	UG/L	12/02/08	EPA 8082	KAL
aroclor 1232	<0.50	UG/L	12/02/08	EPA 8082	KAL
aroclor 1242	<0.50	UG/L	12/02/08	EPA 8082	KAL
aroclor 1248	<0.50	UG/L	12/02/08	EPA 8082	KAL
aroclor 1254	<0.50	UG/L	12/02/08	EPA 8082	KAL
aroclor 1260	<0.50	UG/L	12/02/08	EPA 8082	KAL
<i>Surrogate (2,4,5,6-tetrachloro-m-xylene): 38% recovery, (decachlorobiphenyl): 24% recovery, Surrogate recovery acceptance limits are 75-125%.</i>					
Aqueous Separatory Funnel Extraction			12/01/08	EPA 3510C	JZY
SAMPLE #: 494167 CLIENT SAMPLE ID: B&L #7 DATE/TIME SAMPLED: 11/20/08 @ 14:15					
MERCURY	<0.05	MG/KG DRY WT.	11/24/08	EPA 7471A	MBU
Mercury Prep 7471A			11/24/08	EPA 7471A	MBU
RCRA METALS (8)					
arsenic	<3.3	MG/KG DRY WT.	12/02/08	EPA 6010	ABO
barium	120	MG/KG DRY WT.	12/02/08	EPA 6010	ABO
cadmium	4.6	MG/KG DRY WT.	12/02/08	EPA 6010	ABO
chromium	54	MG/KG DRY WT.	12/02/08	EPA 6010	ABO



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TEST PERFORMED	RESULTS	UNITS	DATE/TIME PERFORMED	METHOD NUMBER	PERFORMED BY
SAMPLE #: 494167 CLIENT SAMPLE ID: B&L #7			DATE/TIME SAMPLED: 11/20/08 @ 14:15		
RCRA METALS (8)					
lead	87	MG/KG DRY WT.	12/02/08	EPA 6010	ABO
selenium	<3.3	MG/KG DRY WT.	12/02/08	EPA 6010	ABO
silver	<0.67	MG/KG DRY WT.	12/02/08	EPA 6010	ABO
Metals Digestion			12/01/08	EPA 3050B	BDR
Semi-Volatile - 8270 A/B/N					
1,2,4-trichlorobenzene	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
1,2-dichlorobenzene	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
1,2-diphenylhydrazine	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
<i>1,2-Diphenylhydrazine breaks down in the injection port. It is analyzed and reported as Azobenzene.</i>					
1,3-dichlorobenzene	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
1,4-dichlorobenzene	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
2,4,5-trichlorophenol	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
2,4,6-trichlorophenol	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
2,4-dichlorophenol	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
2,4-dimethylphenol	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
2,4-dinitrophenol	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
2,4-dinitrotoluene	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
2,6-dinitrotoluene	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
2-chloronaphthalene	<6.67	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
2-chlorophenol	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
2-methyl-4,6-dinitrophenol	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
2-methylnaphthalene	<6.67	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
2-methylphenol	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
2-nitroaniline	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
2-nitrophenol	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
3,3-dichlorobenzidine	<133	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
3+4-methylphenol	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
3-nitroaniline	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
4-bromophenyl phenyl ether	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
4-chloro-3-methylphenol	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
4-chloroaniline	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
4-chlorophenyl phenyl ether	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
4-nitroaniline	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
4-nitrophenol	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
acenaphthene	<6.67	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
acenaphthylene	<6.67	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
aniline	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
anthracene	<6.67	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
benzidine	<133	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
benzo(a)anthracene	<6.67	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
benzo(a)pyrene	<6.67	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
benzo(b)fluoranthene	<6.67	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI



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TEST PERFORMED	RESULTS	UNITS	DATE/TIME PERFORMED	METHOD NUMBER	PERFORMED BY
SAMPLE #: 494167 CLIENT SAMPLE ID: B&L #7			DATE/TIME SAMPLED: 11/20/08 @ 14:15		
Semi-Volatile - 8270 A/B/N					
benzo(g,h,i)perylene	<6.67	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
benzo(k)fluoranthene	<6.67	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
benzoic acid	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
benzyl alcohol	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
bis(2-chloroethoxy)methane	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
bis(2-chloroethyl) ether	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
bis(2-chloroisopropyl) ether	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
bis(2-ethylhexyl) phthalate	101	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
butyl benzyl phthalate	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
chrysene	<6.67	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
dibenz(a,h)anthracene	<6.67	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
dibenzofuran	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
diethyl phthalate	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
dimethyl phthalate	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
di-n-butyl phthalate	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
di-n-octyl phthalate	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
fluoranthene	<6.67	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
fluorene	<6.67	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
hexachlorobenzene	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
hexachlorobutadiene	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
hexachlorocyclopentadiene	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
hexachloroethane	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
indeno(1,2,3-cd)pyrene	<6.67	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
isophorone	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
naphthalene	<6.67	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
nitrobenzene	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
n-nitrosodimethylamine	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
n-nitrosodiphenylamine	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
n-nitrosodipropylamine	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
pentachlorophenol	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
phenanthrene	<6.67	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
phenol	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
pyrene	<6.67	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
pyridine	<33.3	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
Surrogates diluted out.					
Sample contains a hydrocarbon pattern.					
Solid Ultrasonic Extraction			11/26/08	EPA 3550B	JZY
Semi-Volatile - PCB'S					
aroclor 1016	<33	MG/KG DRY WT.	12/02/08	EPA 8082	KAL
aroclor 1221	<33	MG/KG DRY WT.	12/02/08	EPA 8082	KAL
aroclor 1232	<33	MG/KG DRY WT.	12/02/08	EPA 8082	KAL
aroclor 1242	<33	MG/KG DRY WT.	12/02/08	EPA 8082	KAL



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PROJECT #: 231487
RECEIVED: 11/21/2008 @ 13:55

CLIENT JOB NUMBER: 692-005-S

TEST PERFORMED	RESULTS	UNITS	DATE/TIME PERFORMED	METHOD NUMBER	PERFORMED BY
SAMPLE #: 494167 CLIENT SAMPLE ID: B&L #7			DATE/TIME SAMPLED: 11/20/08 @ 14:15		
Semi-Volatile - PCB'S					
aroclor 1248	<33	MG/KG DRY WT.	12/02/08	EPA 8082	KAL
aroclor 1254	<33	MG/KG DRY WT.	12/02/08	EPA 8082	KAL
aroclor 1260	<33	MG/KG DRY WT.	12/02/08	EPA 8082	KAL
<i>Surrogates diluted out.</i>					
Solid Ultrasonic Extraction			11/26/08	EPA 3550B	JZY
SOLIDS, TOTAL	75	PERCENT	11/25/08	SM18 2540B	KCH
Volatile - 8260					
1,1,1,2-tetrachloroethane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,1,1-trichloroethane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,1,2,2-tetrachloroethane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,1,2-trichloroethane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,1-dichloroethane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,1-dichloroethene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,1-dichloropropene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,2,3-trichlorobenzene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,2,3-trichloropropane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,2,4-trichlorobenzene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,2,4-trimethylbenzene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,2-dibromo-3-chloropropane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,2-dibromoethane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,2-dichlorobenzene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,2-dichloroethane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,2-dichloropropane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,3,5-trimethylbenzene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,3-dichlorobenzene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,3-dichloropropane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,4-dichlorobenzene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
2,2-dichloropropane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
2-butanone	<0.500	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
2-chlorotoluene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
2-hexanone	<0.500	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
4-chlorotoluene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
4-isopropyltoluene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
4-methyl-2-pentanone	<0.500	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
acetone	<0.500	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
acrylonitrile	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
benzene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
bromobenzene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
bromochloromethane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
bromodichloromethane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA



BARTON & LOGUIDICE P.C.
290 Elwood Davis Road
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Syracuse, NY 13220
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TEST PERFORMED	RESULTS	UNITS	DATE/TIME PERFORMED	METHOD NUMBER	PERFORMED BY
SAMPLE #: 494167 CLIENT SAMPLE ID: B&L #7 DATE/TIME SAMPLED: 11/20/08 @ 14:15					
Volatile - 8260					
bromoform	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
bromomethane	<0.500	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
carbon disulfide	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
carbon tetrachloride	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
chlorobenzene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
chloroethane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
chloroform	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
chloromethane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
cis-1,2-dichloroethene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
cis-1,3-dichloropropene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
dibromochloromethane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
dibromomethane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
dichlorodifluoromethane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
ethylbenzene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
hexachlorobutadiene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
iodomethane	<0.500	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
isopropylbenzene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
methylene chloride	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
mtbe	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
naphthalene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
n-butylbenzene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
n-propylbenzene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
sec-butylbenzene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
styrene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
tert-butylbenzene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
tetrachloroethene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
toluene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
trans-1,2-dichloroethene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
trans-1,3-dichloropropene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
trans-1,4-dichloro-2-butene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
trichloroethene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
trichlorofluoromethane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
vinyl acetate	<0.500	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
vinyl chloride	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
xylene, m+p	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
xylene, o	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA

Surrogate (toluene-d8): 90 % recovery, (bromofluorobenzene): 90 % recovery, (1,2-dichlorobenzene-d4): 102 % recovery,

Surrogate recovery acceptance limits are 85-115%,

Continuing Calibration Standard recoveries for Iodomethane and 1,1-Dichloroethane were below the established acceptance limits. Results for these analytes may be biased low.

Sample contains a hydrocarbon pattern.

Soil Extraction for Volatiles

12/01/08

EPA 5035

DBA



Environmental
LABORATORY SERVICES

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CLIENT JOB NUMBER: 692-005-S

TEST PERFORMED	RESULTS	UNITS	DATE/TIME PERFORMED	METHOD NUMBER	PERFORMED BY
SAMPLE #: 494168 CLIENT SAMPLE ID: B&L # 9 DATE/TIME SAMPLED: 11/20/08 @ 14:30					
MERCURY	<0.03	MG/KG DRY WT.	11/24/08	EPA 7471A	MBU
Mercury Prep 7471A			11/24/08	EPA 7471A	MBU
RCRA METALS (8)					
arsenic	<4.4	MG/KG DRY WT.	12/02/08	EPA 6010	ABO
barium	3.7	MG/KG DRY WT.	12/02/08	EPA 6010	ABO
cadmium	<0.88	MG/KG DRY WT.	12/02/08	EPA 6010	ABO
chromium	<1.8	MG/KG DRY WT.	12/02/08	EPA 6010	ABO
lead	<2.2	MG/KG DRY WT.	12/02/08	EPA 6010	ABO
selenium	<4.4	MG/KG DRY WT.	12/02/08	EPA 6010	ABO
silver	<0.88	MG/KG DRY WT.	12/02/08	EPA 6010	ABO
Metals Digestion			12/01/08	EPA 3050B	BDR
Semi-Volatile - 8270 A/B/N					
1,2,4-trichlorobenzene	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
1,2-dichlorobenzene	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
1,2-diphenylhydrazine	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
<i>1,2-Diphenylhydrazine breaks down in the injection port. It is analyzed and reported as Azobenzene.</i>					
1,3-dichlorobenzene	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
1,4-dichlorobenzene	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
2,4,5-trichlorophenol	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
2,4,6-trichlorophenol	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
2,4-dichlorophenol	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
2,4-dimethylphenol	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
2,4-dinitrophenol	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
2,4-dinitrotoluene	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
2,6-dinitrotoluene	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
2-chloronaphthalene	<0.0893	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
2-chlorophenol	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
2-methyl-4,6-dinitrophenol	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
2-methylnaphthalene	<0.0893	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
2-methylphenol	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
2-nitroaniline	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
2-nitrophenol	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
3,3-dichlorobenzidine	<1.79	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
3+4-methylphenol	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
3-nitroaniline	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
4-bromophenyl phenyl ether	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
4-chloro-3-methylphenol	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
4-chloroaniline	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
4-chlorophenyl phenyl ether	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
4-nitroaniline	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
4-nitrophenol	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI



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SAMPLE #: 494168 CLIENT SAMPLE ID: B&L # 9			DATE/TIME SAMPLED: 11/20/08 @ 14:30		
Semi-Volatile - 8270 A/B/N					
acenaphthene	<0.0893	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
acenaphthylene	<0.0893	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
aniline	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
anthracene	<0.0893	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
benzidine	<1.79	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
benzo(a)anthracene	<0.0893	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
benzo(a)pyrene	<0.0893	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
benzo(b)fluoranthene	<0.0893	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
benzo(g,h,i)perylene	<0.0893	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
benzo(k)fluoranthene	<0.0893	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
benzoic acid	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
benzyl alcohol	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
bis(2-chloroethoxy)methane	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
bis(2-chloroethyl) ether	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
bis(2-chloroisopropyl) ether	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
bis(2-ethylhexyl) phthalate	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
butyl benzyl phthalate	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
chrysene	<0.0893	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
dibenz(a,h)anthracene	<0.0893	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
dibenzofuran	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
diethyl phthalate	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
dimethyl phthalate	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
di-n-butyl phthalate	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
di-n-octyl phthalate	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
fluoranthene	<0.0893	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
fluorene	<0.0893	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
hexachlorobenzene	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
hexachlorobutadiene	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
hexachlorocyclopentadiene	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
hexachloroethane	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
indeno(1,2,3-cd)pyrene	<0.0893	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
isophorone	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
naphthalene	<0.0893	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
nitrobenzene	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
n-nitrosodimethylamine	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
n-nitrosodiphenylamine	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
n-nitrosodipropylamine	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
pentachlorophenol	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
phenanthrene	<0.0893	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
phenol	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
pyrene	<0.0893	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI
pyridine	<0.446	MG/KG DRY WT.	11/26/08	EPA 8270C	ASI



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SAMPLE #: 494168 CLIENT SAMPLE ID: B&L # 9			DATE/TIME SAMPLED: 11/20/08 @ 14:30		
Semi-Volatile - 8270 A/B/N					
Surrogate (2-fluorophenol): 87% recovery,(phenol-d6): 102% recovery,(nitrobenzene-d5): 76% recovery,(2-fluorobiphenyl): 93% recovery,(2,4,6-tribromophenol): 73% recovery,(terphenyl-d14): 116% recovery, Surrogate recovery acceptance limits are 50-130%.					
Solid Ultrasonic Extraction			11/26/08	EPA 3550B	JZY
SOLIDS, TOTAL	56	PERCENT	11/25/08	SM18 2540B	KCH
Volatile - 8260					
1,1,1,2-tetrachloroethane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,1,1-trichloroethane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,1,2,2-tetrachloroethane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,1,2-trichloroethane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,1-dichloroethane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,1-dichloroethene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,1-dichloropropene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,2,3-trichlorobenzene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,2,3-trichloropropane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,2,4-trichlorobenzene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,2,4-trimethylbenzene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,2-dibromo-3-chloropropane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,2-dibromoethane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,2-dichlorobenzene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,2-dichloroethane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,2-dichloropropane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,3,5-trimethylbenzene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,3-dichlorobenzene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,3-dichloropropane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
1,4-dichlorobenzene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
2,2-dichloropropane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
2-butanone	<0.500	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
2-chlorotoluene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
2-hexanone	<0.500	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
4-chlorotoluene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
4-isopropyltoluene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
4-methyl-2-pentanone	<0.500	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
acetone	<0.500	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
acrylonitrile	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
benzene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
bromobenzene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
bromochloromethane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
bromodichloromethane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
bromoform	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
bromomethane	<0.500	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA



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SAMPLE #: 494168 CLIENT SAMPLE ID: B&L #9 DATE/TIME SAMPLED: 11/20/08 @ 14:30					
Volatile - 8260					
carbon disulfide	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
carbon tetrachloride	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
chlorobenzene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
chloroethane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
chloroform	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
chloromethane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
cis-1,2-dichloroethene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
cis-1,3-dichloropropene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
dibromochloromethane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
dibromomethane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
dichlorodifluoromethane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
ethylbenzene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
hexachlorobutadiene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
iodomethane	<0.500	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
isopropylbenzene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
methylene chloride	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
mtbe	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
naphthalene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
n-butylbenzene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
n-propylbenzene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
sec-butylbenzene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
styrene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
tert-butylbenzene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
tetrachloroethene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
toluene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
trans-1,2-dichloroethene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
trans-1,3-dichloropropene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
trans-1,4-dichloro-2-butene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
trichloroethene	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
trichlorofluoromethane	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
vinyl acetate	<0.500	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
vinyl chloride	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
xylene, m+p	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA
xylene, o	<0.100	MG/KG DRY WT.	12/01/08	EPA 8260B	DBA

Surrogate (toluene-d8): 91 % recovery, (bromofluorobenzene): 81 % recovery, (1,2-dichlorobenzene-d4): 102 % recovery,

Surrogate recovery acceptance limits are 85-115%,

Continuing Calibration Standard recoveries for Iodomethane and 1,1-Dichloroethane were below the established acceptance limits. Results for these analytes may be biased low.

Sample contains a hydrocarbon pattern.

Soil Extraction for Volatiles

12/01/08

EPA 5035

DBA

SAMPLE #: 494169 CLIENT SAMPLE ID: B&L #10

DATE/TIME SAMPLED: 11/20/08 @ 14:45



BARTON & LOGUIDICE P.C.
290 Elwood Davis Road
Box 3107
Syracuse, NY 13220
ATTN: Ms. Robin VerSchneider

PROJECT #: 231487
RECEIVED: 11/21/2008 @ 13:55

CLIENT JOB NUMBER: 692-005-S

TEST PERFORMED	RESULTS	UNITS	DATE/TIME PERFORMED	METHOD NUMBER	PERFORMED BY
SAMPLE #: 494169 CLIENT SAMPLE ID: B&L #10			DATE/TIME SAMPLED: 11/20/08 @ 14:45		
Volatile - 8260					
1,1,1,2-tetrachloroethane	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
1,1,1-trichloroethane	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
1,1,2,2-tetrachloroethane	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
1,1,2-trichloroethane	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
1,1-dichloroethane	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
1,1-dichloroethene	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
1,1-dichloropropene	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
1,2,3-trichlorobenzene	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
1,2,3-trichloropropane	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
1,2,4-trichlorobenzene	1.46	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
1,2,4-trimethylbenzene	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
1,2-dibromo-3-chloropropane	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
1,2-dibromoethane	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
1,2-dichlorobenzene	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
1,2-dichloroethane	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
1,2-dichloropropane	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
1,3,5-trimethylbenzene	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
1,3-dichlorobenzene	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
1,3-dichloropropane	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
1,4-dichlorobenzene	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
2,2-dichloropropane	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
2-butanone	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
2-chlorotoluene	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
2-hexanone	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
4-chlorotoluene	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
4-isopropyltoluene	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
4-methyl-2-pentanone	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
acetone	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
acrylonitrile	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
benzene	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
bromobenzene	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
bromochloromethane	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
bromodichloromethane	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
bromoform	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
bromomethane	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
carbon disulfide	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
carbon tetrachloride	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
chlorobenzene	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
chloroethane	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
chloroform	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
chloromethane	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
cis-1,2-dichloroethene	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA



BARTON & LOGUIDICE P.C.
290 Elwood Davis Road
Box 3107
Syracuse, NY 13220
ATTN: Ms. Robin VerSchneider

PROJECT #: 231487
RECEIVED: 11/21/2008 @ 13:55

CLIENT JOB NUMBER: 692-005-S

TEST PERFORMED	RESULTS	UNITS	DATE/TIME PERFORMED	METHOD NUMBER	PERFORMED BY
SAMPLE #: 494169 CLIENT SAMPLE ID: B&L #10 DATE/TIME SAMPLED: 11/20/08 @ 14:45					
Volatile - 8260					
cis-1,3-dichloropropene	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
dibromochloromethane	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
dibromomethane	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
dichlorodifluoromethane	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
ethylbenzene	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
hexachlorobutadiene	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
iodomethane	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
isopropylbenzene	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
methylene chloride	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
mtbe	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
naphthalene	1.18	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
n-butylbenzene	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
n-propylbenzene	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
sec-butylbenzene	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
styrene	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
tert-butylbenzene	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
tetrachloroethene	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
toluene	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
trans-1,2-dichloroethene	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
trans-1,3-dichloropropene	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
trans-1,4-dichloro-2-butene	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
trichloroethene	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
trichlorofluoromethane	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
vinyl acetate	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
vinyl chloride	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
xylene, m+p	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA
xylene, o	<0.500	MG/KG as Rec'd	12/01/08	EPA 8260B	DBA

Surrogate (toluene-d8): 89 % recovery, (bromofluorobenzene): 86 % recovery, (1,2-dichlorobenzene-d4): 106 % recovery,

Surrogate recovery acceptance limits are 85-115%,

Continuing Calibration Standard recoveries for Iodomethane and 1,1-Dichloroethane were below the established acceptance limits. Results for these analytes may be biased low.

Sample contains a hydrocarbon pattern.

Waste Dilution for Volatile Organics

12/01/08

EPA 3580A

DBA

SAMPLE #: 494170 CLIENT SAMPLE ID: B&L #10 DATE/TIME SAMPLED: 11/20/08 @ 14:45					
Semi-Volatile - 8270 A/B/N					
1,2,4-trichlorobenzene	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
1,2-dichlorobenzene	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
1,2-diphenylhydrazine	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
1,2-Diphenylhydrazine breaks down in the injection port. It is analyzed and reported as Azobenzene.					
1,3-dichlorobenzene	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
1,4-dichlorobenzene	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI



Environmental
LABORATORY SERVICES

BARTON & LOGUIDICE P.C.
290 Elwood Davis Road
Box 3107
Syracuse, NY 13220
ATTN: Ms. Robin VerSchneider

PROJECT #: 231487
RECEIVED: 11/21/2008 @ 13:55

CLIENT JOB NUMBER: 692-005-S

TEST PERFORMED	RESULTS	UNITS	DATE/TIME PERFORMED	METHOD NUMBER	PERFORMED BY
SAMPLE #: 494170 CLIENT SAMPLE ID: B&L #10			DATE/TIME SAMPLED: 11/20/08 @ 14:45		
Semi-Volatile - 8270 A/B/N					
2,4,5-trichlorophenol	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
2,4,6-trichlorophenol	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
2,4-dichlorophenol	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
2,4-dimethylphenol	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
2,4-dinitrophenol	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
2,4-dinitrotoluene	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
2,6-dinitrotoluene	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
2-chloronaphthalene	<90.9	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
2-chlorophenol	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
2-methyl-4,6-dinitrophenol	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
2-methylnaphthalene	<90.9	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
2-methylphenol	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
2-nitroaniline	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
2-nitrophenol	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
3,3-dichlorobenzidine	<1800	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
3+4-methylphenol	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
3-nitroaniline	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
4-bromophenyl phenyl ether	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
4-chloro-3-methylphenol	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
4-chloroaniline	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
4-chlorophenyl phenyl ether	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
4-nitroaniline	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
4-nitrophenol	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
acenaphthene	<90.9	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
acenaphthylene	<90.9	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
aniline	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
anthracene	<90.9	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
benzidine	<1800	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
benzo(a)anthracene	<90.9	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
benzo(a)pyrene	<90.9	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
benzo(b)fluoranthene	<90.9	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
benzo(g,h,i)perylene	<90.9	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
benzo(k)fluoranthene	<90.9	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
benzoic acid	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
benzyl alcohol	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
bis(2-chloroethoxy)methane	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
bis(2-chloroethyl) ether	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
bis(2-chloroisopropyl) ether	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
bis(2-ethylhexyl) phthalate	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
butyl benzyl phthalate	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
chrysene	<90.9	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
dibenz(a,h)anthracene	<1.00	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI



BARTON & LOGUIDICE P.C.
290 Elwood Davis Road
Box 3107
Syracuse, NY 13220
ATTN: Ms. Robin VerSchneider

PROJECT #: 231487
RECEIVED: 11/21/2008 @ 13:55

CLIENT JOB NUMBER: 692-005-S

TEST PERFORMED	RESULTS	UNITS	DATE/TIME PERFORMED	METHOD NUMBER	PERFORMED BY
SAMPLE #: 494170 CLIENT SAMPLE ID: B&L #10 DATE/TIME SAMPLED: 11/20/08 @ 14:45					
Semi-Volatile - 8270 A/B/N					
dibenzofuran	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
diethyl phthalate	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
dimethyl phthalate	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
di-n-butyl phthalate	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
di-n-octyl phthalate	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
fluoranthene	<90.9	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
fluorene	<90.9	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
hexachlorobenzene	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
hexachlorobutadiene	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
hexachlorocyclopentadiene	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
hexachloroethane	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
indeno(1,2,3-cd)pyrene	<90.9	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
isophorone	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
naphthalene	<90.9	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
nitrobenzene	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
n-nitrosodimethylamine	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
n-nitrosodiphenylamine	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
n-nitrosodipropylamine	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
pentachlorophenol	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
phenanthrene	540	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
phenol	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
pyrene	<90.9	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI
pyridine	<454	MG/KG as Rec'd	12/03/08	EPA 8270C	ASI

Surrogate (2-fluorophenol): 101% recovery, (phenol-d6): 100% recovery, (nitrobenzene-d5): 92% recovery, (2-fluorobiphenyl): 103% recovery, (2,4,6-tribromophenol): 111% recovery, (terphenyl-d14): 117% recovery,
Surrogate recovery acceptance limits are 50-130%.

Sample contains a hydrocarbon pattern.

Continuing Calibration Standard recovery for 2-Methyl-4,6-dinitrophenol was below the established acceptance limits. Results for this analyte may be biased low.

Waste Dilution for Semi-Volatile Organics 12/02/08 EPA 3580A JZY

SAMPLE #: 494171 CLIENT SAMPLE ID: B&L #10 DATE/TIME SAMPLED: 11/20/08 @ 14:45					
MERCURY	<0.01	MG/KG as Rec'd	11/24/08	EPA 7471A	MBU
Mercury Prep 7471A			11/24/08	EPA 7471A	MBU
RCRA METALS (8)					
arsenic	<1.0	MG/KG as Rec'd	12/02/08	EPA 6010	ABO
barium	3.7	MG/KG as Rec'd	12/02/08	EPA 6010	ABO
cadmium	19	MG/KG as Rec'd	12/02/08	EPA 6010	ABO
chromium	<0.40	MG/KG as Rec'd	12/02/08	EPA 6010	ABO
lead	1.4	MG/KG as Rec'd	12/02/08	EPA 6010	ABO
selenium	<1.0	MG/KG as Rec'd	12/02/08	EPA 6010	ABO




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PROJECT #: 231487
RECEIVED: 11/21/2008 @ 13:55

CLIENT JOB NUMBER: 692-005-S

TEST PERFORMED	RESULTS	UNITS	DATE/TIME PERFORMED	METHOD NUMBER	PERFORMED BY
SAMPLE #: 494171 CLIENT SAMPLE ID:	B&L #10		DATE/TIME SAMPLED: 11/20/08 @ 14:45		
RCRA METALS (8)					
silver	<0.20	MG/KG as Rec'd	12/02/08	EPA 6010	ABO
Metals Digestion			12/01/08	EPA 3050B	BDR
SAMPLE #: 494172 CLIENT SAMPLE ID:	B&L #10		DATE/TIME SAMPLED: 11/20/08 @ 14:45		
Semi-Volatile - PCB'S-OIL					
aroclor 1016	<1.0	MG/KG as Rec'd	11/25/08	EPA 4-81-045	KAL
aroclor 1221	<1.0	MG/KG as Rec'd	11/25/08	EPA 4-81-045	KAL
aroclor 1232	<1.0	MG/KG as Rec'd	11/25/08	EPA 4-81-045	KAL
aroclor 1242	<1.0	MG/KG as Rec'd	11/25/08	EPA 4-81-045	KAL
aroclor 1248	<1.0	MG/KG as Rec'd	11/25/08	EPA 4-81-045	KAL
aroclor 1254	<1.0	MG/KG as Rec'd	11/25/08	EPA 4-81-045	KAL
aroclor 1260	<1.0	MG/KG as Rec'd	11/25/08	EPA 4-81-045	KAL
<i>Surrogate (2,4,5,6-tetrachloro-m-xylene): 40% recovery, (decachlorobiphenyl): 49% recovery,</i>					
<i>Surrogate recovery acceptance limits are 75-125%.</i>					
Waste Dilution for Semi-Volatile Organics			11/24/08	EPA 3580A	JZY

Sample Receipt Temperature: 3.5 Degrees C


David R. Hill
Laboratory Director

12/03/2008
Print Date

All tests performed under NYS ELAP Laboratory Certification # 11375 unless otherwise stated.
Report relates only to the samples as received by the laboratory and shall not be reproduced
except in full, without written approval from Environmental Laboratory Services.



Environmental
LABORATORY SERVICES



Environmental LABORATORY SERVICES

7280 Caswell Street, Hancock Air Park North Syracuse, NY 13212
(315) 458-8033 FAX (315) 458-0526 (866) LAB TIME

231487

CHAIN OF CUSTODY RECORD and Authorization for Analysis www.els-lab.com

Billing Information: Name <u>Bryce Dingman</u>				Quote No.				E-mail Address <u>B.Dingman@els-lab.com</u>				Site Address: <u>Former Rulke Skull</u> <u>Company Ogdensburg, NY</u>			
Company <u>Barton & Associates, P.C.</u>				Job No. <u>692-005's Shade</u>				Fax							
Address <u>240 Elmwood Avenue Rd-</u>				PO No.				<input checked="" type="checkbox"/> E-mail Results <input type="checkbox"/> Fax Results							
City, State, Zip <u>Syracuse, NY</u>				Telephone No. <u>457-5200</u>				Sample Receipt Temperature <u>3-5</u> °C							
Standard Turn Around Time is end of day, 10 Work Days after lab receipt. Surcharges may apply for Express Service.				Matrix Codes: AR - Air DW - Drinking Water FT - Filter GW - Ground Water OL - Oil PC - Paint Chips PR - Product SL - Sludge SD - Solid/Soil SW - Surface Water SB - Swab TP - Tape WP - Wipe WW - Waste Water				Sample(s) State of Origin: CT <input type="checkbox"/> DE <input type="checkbox"/> MA <input type="checkbox"/> MD <input type="checkbox"/> NH <input type="checkbox"/> NJ <input type="checkbox"/> NY <input checked="" type="checkbox"/> PA <input type="checkbox"/> RI <input type="checkbox"/> VT <input type="checkbox"/> — <input type="checkbox"/>				Number of Containers			
<input type="checkbox"/> Same Day <input type="checkbox"/> 1 Work Day <input type="checkbox"/> 2 Work Days <input type="checkbox"/> 3 Work Days <input type="checkbox"/> 4 Work Days <input type="checkbox"/> 5 Work Days <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Other															
Time Required:															
ELC Use Only				Date				Time				Comp/Grab			
				Matrix				Sampling Location/Sample ID							
				11/20/08				13:20				Grab SW B+L #1			
494163 von				11/20/08				14:06				Grab SW B+L #2			
494164 von				11/20/08				12:05				Grab OL B+L #3			
494165 von				11/20/08				12:30				Grab OL B+L #4			
494166 von				11/20/08				12:50				Grab SD B+L #5			
				11/20/08				11:20				Grab OL B+L #6			
494167 N/B				11/20/08				14:15				Grab SL B+L #7			
				11/20/08				14:50				Grab SD B+L #8			
494168 N/B				11/20/08				14:30				Grab SL B+L #9			
494169				11/20/08				14:45				Grab OL B+L #10			
494170															
494171															
494172															
Relinquished by: <u>Bryce Dingman</u>				Date <u>11/20/08</u>				Time <u>19:40</u>				Received by: <u>Adam C. [Signature]</u>			
Relinquished by:				Date				Time				Received by:			
Your signature authorizes ELS to analyze the sample as indicated.				Date <u>11/21/08</u>				Time <u>13:35</u>				Received at Lab by: <u>[Signature]</u>			
Relinquished by: <u>[Signature]</u>				Date <u>11/21/08</u>				Time <u>13:35</u>				Date <u>11/20/08</u> Time <u>18:40</u>			
Sampler Signature: <u>Bryce Dingman</u>				White - LABORATORY				Canada - ACCOMPANIES RESULTS				2217.ELS.905.0301 (REV. 9/07)			

Please return completed form and all sample containers to Environmental Laboratory Services.

Appendix J

Analytical Data Summary Tables, 2010 Targeted Site Assessment Report, OP-TECH Environmental Services, Inc., October 2010

**TABLE 1
SURFACE SOIL & SEDIMENT**

RESTRICTED SOIL CLEANUP OBJECTIVES (SCO) - RESIDENTIAL			SAMPLE ID: LAB ORDER: SAMPLE DATE:		SS-01(0-2) B3628-13 9/21/2010		SS-01(0-2)RE B3628-13RE 9/21/2010		SS-02(0-2) B3628-19 9/22/2010		SS-02(0-2)RE B3628-19RE 9/22/2010		SS-03(0-2) B3628-23 9/23/2010				
VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8260)			CAS	RSCo	Comment	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
1,1,1-Trichloroethane	71-55-6	100000 a	UG/KG	4.90	U	1	--	--	5.1	U	1	5	U	1	--	--	--
1,1,2,2-Tetrachloroethane	79-34-5	-	UG/KG	4.9	U	1	--	--	5.1	U	1	5	U	1	--	--	--
1,1,2-Trichloroethane	79-00-5	-	UG/KG	4.9	U	1	--	--	5.1	U	1	5	U	1	--	--	--
1,1,2-Trichlorotrifluoroethane	76-13-1	-	UG/KG	4.9	U	1	--	--	5.1	U	1	5	U	1	--	--	--
1,1-Dichloroethane	75-34-3	19000 -	UG/KG	4.9	U	1	--	--	5.1	U	1	5	U	1	--	--	--
1,1-Dichloroethene	75-35-4	100000 a	UG/KG	4.9	U	1	--	--	5.1	U	1	5	U	1	--	--	--
1,2,4-Trichlorobenzene	120-82-1	-	UG/KG	4.9	U	1	--	--	5.10	U	1	5	U	1	--	--	--
1,2-Dibromo-3-chloropropane	96-12-8	-	UG/KG	4.9	U	1	--	--	5.1	U	1	5	U	1	--	--	--
1,2-Dibromoethane	106-93-4	-	UG/KG	4.9	U	1	--	--	5.1	U	1	5	U	1	--	--	--
1,2-Dichlorobenzene	95-50-1	100000 a	UG/KG	4.9	U	1	--	--	5.1	U	1	5	U	1	--	--	--
1,2-Dichloroethane	107-06-2	2300 -	UG/KG	4.9	U	1	--	--	5.1	U	1	5	U	1	--	--	--
1,2-Dichloropropane	78-87-5	-	UG/KG	4.9	U	1	--	--	5.1	U	1	5	U	1	--	--	--
1,3-Dichlorobenzene	541-73-1	17000 -	UG/KG	4.9	U	1	--	--	5.1	U	1	5	U	1	--	--	--
1,4-Dichlorobenzene	106-46-7	9800 -	UG/KG	4.9	U	1	--	--	5.1	U	1	5.0	U	1	--	--	--
2-Butanone	78-93-3	100000 a	UG/KG	25	U	1	--	--	26	U	1	25	U	1	--	--	--
2-Hexanone	591-78-6	-	UG/KG	25	U	1	--	--	26	U	1	25	U	1	--	--	--
4-Methyl-2-pentanone	108-10-1	-	UG/KG	25	U	1	--	--	26	U	1	25	U	1	--	--	--
Acetone	67-64-1	100000 a	UG/KG	25	U	1	--	--	18	J	1	7.9	J	1	--	--	--
Benzene	71-43-2	2900 -	UG/KG	4.9	U	1	--	--	5.1	U	1	5	U	1	--	--	--
Bromodichloromethane	75-27-4	-	UG/KG	4.9	U	1	--	--	5.1	U	1	5	U	1	--	--	--
Bromoform	75-25-2	-	UG/KG	4.9	U	1	--	--	5.1	U	1	5	U	1	--	--	--
Bromomethane	74-83-9	-	UG/KG	4.9	U	1	--	--	5.1	U	1	5	U	1	--	--	--
Carbon Disulfide	75-15-0	-	UG/KG	4.9	U	1	--	--	5.1	U	1	5	U	1	--	--	--
Carbon tetrachloride	56-23-5	1400 -	UG/KG	4.9	U	1	--	--	5.1	U	1	5	U	1	--	--	--
Chlorobenzene	108-90-7	100000 a	UG/KG	4.9	U	1	--	--	5.1	U	1	5	U	1	--	--	--
Chloroethane	75-00-3	-	UG/KG	4.9	U	1	--	--	5.1	U	1	5.00	U	1	--	--	--
Chloroform	67-66-3	10000 -	UG/KG	4.9	U	1	--	--	5.1	U	1	5	U	1	--	--	--
Chloromethane	74-87-3	-	UG/KG	4.9	U	1	--	--	5.1	U	1	5.00	U	1	--	--	--
cis-1,2-Dichloroethene	156-59-2	59000 -	UG/KG	4.9	U	1	--	--	5.1	U	1	5.0	U	1	--	--	--
cis-1,3-Dichloropropene	10061-01-5	-	UG/KG	4.9	U	1	--	--	5.1	U	1	5	U	1	--	--	--
Cyclohexane	110-82-7	-	UG/KG	4.9	U	1	--	--	5.10	U	1	5	U	1	--	--	--
Chlorodibromomethane	124-48-1	-	UG/KG	4.9	U	1	--	--	5.1	U	1	5	U	1	--	--	--
Dichlorodifluoromethane	75-71-8	-	UG/KG	4.9	U	1	--	--	5.1	U	1	5	U	1	--	--	--
Ethylbenzene	100-41-4	30000 -	UG/KG	4.9	U	1	--	--	5.10	U	1	5	U	1	--	--	--
Isopropylbenzene	98-82-8	-	UG/KG	4.9	U	1	--	--	5.1	U	1	5.00	U	1	--	--	--
m&p-Xylene	179601-23-1	-	UG/KG	9.9	U	1	--	--	10	U	1	10.00	U	1	--	--	--
Methyl Acetate	79-20-9	-	UG/KG	4.9	U	1	--	--	5.1	U	1	5	U	1	--	--	--
Methyl tert-butyl ether	1634-04-4	62000 -	UG/KG	4.9	U	1	--	--	5.1	U	1	5	U	1	--	--	--
Methylcyclohexane	108-87-2	-	UG/KG	4.9	U	1	--	--	5.1	U	1	5	U	1	--	--	--
Methylene chloride	75-09-2	51000 -	UG/KG	4.9	U	1	--	--	5.1	U	1	5	U	1	--	--	--
o-Xylene	95-47-6	-	UG/KG	4.9	U	1	--	--	5.1	U	1	5	U	1	--	--	--
Styrene	100-42-5	-	UG/KG	4.9	U	1	--	--	5.1	U	1	5	U	1	--	--	--
trans-1,3-Dichloropropene	10061-02-6	-	UG/KG	4.9	U	1	--	--	5.1	U	1	5	U	1	--	--	--
Tetrachloroethene	127-18-4	5500 -	UG/KG	4.9	U	1	--	--	5.10	U	1	5	U	1	--	--	--
Toluene	108-88-3	100000 a	UG/KG	4.9	U	1	--	--	5.1	U	1	5	U	1	--	--	--
trans-1,2-Dichloroethene	156-60-5	100000 a	UG/KG	4.9	U	1	--	--	5.1	U	1	5	U	1	--	--	--
Trichloroethene	79-01-6	10000 -	UG/KG	4.9	U	1	--	--	5.1	U	1	5.00	U	1	--	--	--
Trichlorofluoromethane	75-69-4	-	UG/KG	4.9	U	1	--	--	5.1	U	1	5	U	1	--	--	--
Vinyl chloride	75-01-4	210 -	UG/KG	4.9	U	1	--	--	5.1	U	1	5	U	1	--	--	--
Total TICs	TTICs	-	UG/KG				--	--	11						--	--	--
TOTAL DETECTABLE (excluding TICs)				0		0		18		7.9		0					

Notes:

High indicates exceedance of SCO value.

Refer to NYSDEC Part 375 Table 6.8(a) for explanation of SCO

Qualifiers:

U - Not detected

J - Estimated value

B - Analyte found in associated method blank

N - Presumptive evidence of a compound

E - Value exceeds calibration range

D - Dilution

**TABLE 1
SURFACE SOIL & SEDIMENT**

Restricted Soil Cleanup Objectives (SCO) - Residential				SAMPLE ID: LAB ORDER: SAMPLE DATE:		SS-04 B3628-25 9/24/2010		SS-05 B3701-11 9/29/2010		SS-06(0-2) B3701-14 9/30/2010		SS-06(0-2)RE B3701-14RE 9/30/2010		SS-07(0-2) B3701-17 10/1/2010	
VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8260)				RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
1,1,1-Trichloroethane	71-55-6	100000 a	UG/KG	--	--		--	--		--	--		--	--	
1,1,2,2-Tetrachloroethane	79-34-5	- -	UG/KG	--	--		--	--		--	--		--	--	
1,1,2-Trichloroethane	79-00-5	- -	UG/KG	--	--		--	--		--	--		--	--	
1,1,2-Trichlorotrifluoroethane	76-13-1	- -	UG/KG	--	--		--	--		--	--		--	--	
1,1-Dichloroethane	75-34-3	19000 -	UG/KG	--	--		--	--		--	--		--	--	
1,1-Dichloroethene	75-35-4	100000 a	UG/KG	--	--		--	--		--	--		--	--	
1,2,4-Trichlorobenzene	120-82-1	- -	UG/KG	--	--		--	--		--	--		--	--	
1,2-Dibromo-3-chloropropane	96-12-8	- -	UG/KG	--	--		--	--		--	--		--	--	
1,2-Dibromoethane	106-93-4	- -	UG/KG	--	--		--	--		--	--		--	--	
1,2-Dichlorobenzene	95-50-1	100000 a	UG/KG	--	--		--	--		--	--		--	--	
1,2-Dichloroethane	107-06-2	2300 -	UG/KG	--	--		--	--		--	--		--	--	
1,2-Dichloropropane	78-87-5	- -	UG/KG	--	--		--	--		--	--		--	--	
1,3-Dichlorobenzene	541-73-1	17000 -	UG/KG	--	--		--	--		--	--		--	--	
1,4-Dichlorobenzene	106-46-7	9800 -	UG/KG	--	--		--	--		--	--		--	--	
2-Butanone	78-93-3	100000 a	UG/KG	--	--		--	--		--	--		--	--	
2-Hexanone	591-78-6	- -	UG/KG	--	--		--	--		--	--		--	--	
4-Methyl-2-pentanone	108-10-1	- -	UG/KG	--	--		--	--		--	--		--	--	
Acetone	67-64-1	100000 a	UG/KG	--	--		--	--		--	--		--	--	
Benzene	71-43-2	2900 -	UG/KG	--	--		--	--		--	--		--	--	
Bromodichloromethane	75-27-4	- -	UG/KG	--	--		--	--		--	--		--	--	
Bromoform	75-25-2	- -	UG/KG	--	--		--	--		--	--		--	--	
Bromomethane	74-83-9	- -	UG/KG	--	--		--	--		--	--		--	--	
Carbon Disulfide	75-15-0	- -	UG/KG	--	--		--	--		--	--		--	--	
Carbon tetrachloride	56-23-5	1400 -	UG/KG	--	--		--	--		--	--		--	--	
Chlorobenzene	108-90-7	100000 a	UG/KG	--	--		--	--		--	--		--	--	
Chloroethane	75-00-3	- -	UG/KG	--	--		--	--		--	--		--	--	
Chloroform	67-66-3	10000 -	UG/KG	--	--		--	--		--	--		--	--	
Chloromethane	74-87-3	- -	UG/KG	--	--		--	--		--	--		--	--	
cis-1,2-Dichloroethene	156-59-2	59000 -	UG/KG	--	--		--	--		--	--		--	--	
cis-1,3-Dichloropropene	10061-01-5	- -	UG/KG	--	--		--	--		--	--		--	--	
Cyclohexane	110-82-7	- -	UG/KG	--	--		--	--		--	--		--	--	
Chlorodibromomethane	124-48-1	- -	UG/KG	--	--		--	--		--	--		--	--	
Dichlorodifluoromethane	75-71-8	- -	UG/KG	--	--		--	--		--	--		--	--	
Ethylbenzene	100-41-4	30000 -	UG/KG	--	--		--	--		--	--		--	--	
Isopropylbenzene	98-82-8	- -	UG/KG	--	--		--	--		--	--		--	--	
m&p-Xylene	179601-23-1	- -	UG/KG	--	--		--	--		--	--		--	--	
Methyl Acetate	79-20-9	- -	UG/KG	--	--		--	--		--	--		--	--	
Methyl tert-butyl ether	1634-04-4	62000 -	UG/KG	--	--		--	--		--	--		--	--	
Methylcyclohexane	108-87-2	- -	UG/KG	--	--		--	--		--	--		--	--	
Methylene chloride	75-09-2	51000 -	UG/KG	--	--		--	--		--	--		--	--	
o-Xylene	95-47-6	- -	UG/KG	--	--		--	--		--	--		--	--	
Styrene	100-42-5	- -	UG/KG	--	--		--	--		--	--		--	--	
trans-1,3-Dichloropropene	10061-02-6	- -	UG/KG	--	--		--	--		--	--		--	--	
Tetrachloroethene	127-18-4	5500 -	UG/KG	--	--		--	--		--	--		--	--	
Toluene	108-88-3	100000 a	UG/KG	--	--		--	--		--	--		--	--	
trans-1,2-Dichloroethene	156-60-5	100000 a	UG/KG	--	--		--	--		--	--		--	--	
Trichloroethene	79-01-6	10000 -	UG/KG	--	--		--	--		--	--		--	--	
Trichlorofluoromethane	75-69-4	- -	UG/KG	--	--		--	--		--	--		--	--	
Vinyl chloride	75-01-4	210 -	UG/KG	--	--		--	--		--	--		--	--	
Total TICs	TTICs	- -	UG/KG	--	--		--	--		--	--		--	--	
TOTAL DETECTABLE (excluding TICs)				0			0			0			0		

Notes:

High indicates exceedance of SCO value.

Refer to NYSDEC Part 375 Table 6.8(a) for explanation of SCO

Qualifiers:

U - Not detected

J - Estimated value

B - Analyte found in associated method blank

N - Presumptive evidence of a compound

E - Value exceeds calibration range

D - Dilution

**TABLE 1
SURFACE SOIL & SEDIMENT**

Restricted Soil Cleanup Objectives (SCO) - Residential				SAMPLE ID: LAB ORDER: SAMPLE DATE:			SS-08(0-2) B3701-26 10/5/2010			SED-01 B3628-03 9/20/2010			SED-01RE B3628-03RE 9/20/2010			SED-02 B3701-10 9/29/2010		
VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8260)							RESULT			RESULT			RESULT			RESULT		
	CAS	RSCo	Comment		QUAL	DF		QUAL	DF		QUAL	DF		QUAL	DF		QUAL	DF
1,1,1-Trichloroethane	71-55-6	100000	a UG/KG	--	--		7.90	U	1	8.4	U	1	--	--		--	--	
1,1,2,2-Tetrachloroethane	79-34-5	-	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
1,1,2-Trichloroethane	79-00-5	-	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
1,1,2-Trichlorotrifluoroethane	76-13-1	-	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
1,1-Dichloroethane	75-34-3	19000	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
1,1-Dichloroethene	75-35-4	100000	a UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
1,2,4-Trichlorobenzene	120-82-1	-	- UG/KG	--	--		7.9	U	1	8.40	U	1	--	--		--	--	
1,2-Dibromo-3-chloropropane	96-12-8	-	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
1,2-Dibromoethane	106-93-4	-	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
1,2-Dichlorobenzene	95-50-1	100000	a UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
1,2-Dichloroethane	107-06-2	2300	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
1,2-Dichloropropane	78-87-5	-	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
1,3-Dichlorobenzene	541-73-1	17000	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
1,4-Dichlorobenzene	106-46-7	9800	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
2-Butanone	78-93-3	100000	a UG/KG	--	--		40	U	1	42	U	1	--	--		--	--	
2-Hexanone	591-78-6	-	- UG/KG	--	--		40	U	1	42	U	1	--	--		--	--	
4-Methyl-2-pentanone	108-10-1	-	- UG/KG	--	--		40	U	1	42	U	1	--	--		--	--	
Acetone	67-64-1	100000	a UG/KG	--	--		40	U	1	42	U	1	--	--		--	--	
Benzene	71-43-2	2900	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
Bromodichloromethane	75-27-4	-	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
Bromoform	75-25-2	-	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
Bromomethane	74-83-9	-	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
Carbon Disulfide	75-15-0	-	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
Carbon tetrachloride	56-23-5	1400	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
Chlorobenzene	108-90-7	100000	a UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
Chloroethane	75-00-3	-	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
Chloroform	67-66-3	10000	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
Chloromethane	74-87-3	-	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
cis-1,2-Dichloroethene	156-59-2	59000	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
cis-1,3-Dichloropropene	10061-01-5	-	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
Cyclohexane	110-82-7	-	- UG/KG	--	--		7.9	U	1	8.40	U	1	--	--		--	--	
Chlorodibromomethane	124-48-1	-	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
Dichlorodifluoromethane	75-71-8	-	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
Ethylbenzene	100-41-4	30000	- UG/KG	--	--		7.9	U	1	8.40	U	1	--	--		--	--	
Isopropylbenzene	98-82-8	-	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
m&p-Xylene	179601-23-1	-	- UG/KG	--	--		16	U	1	17	U	1	--	--		--	--	
Methyl Acetate	79-20-9	-	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
Methyl tert-butyl ether	1634-04-4	62000	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
Methylcyclohexane	108-87-2	-	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
Methylene chloride	75-09-2	51000	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
o-Xylene	95-47-6	-	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
Styrene	100-42-5	-	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
trans-1,3-Dichloropropene	10061-02-6	-	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
Tetrachloroethene	127-18-4	5500	- UG/KG	--	--		7.9	U	1	8.40	U	1	--	--		--	--	
Toluene	108-88-3	100000	a UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
trans-1,2-Dichloroethene	156-60-5	100000	a UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
Trichloroethene	79-01-6	10000	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
Trichlorofluoromethane	75-69-4	-	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
Vinyl chloride	75-01-4	210	- UG/KG	--	--		7.9	U	1	8.4	U	1	--	--		--	--	
Total TICs	TTICs	-	- UG/KG	--	--								--	--		--	--	
TOTAL DETECTABLE (excluding TICs)				0			0			0			0			0		

Notes:

High indicates exceedance of SCO value.

Refer to NYSDEC Part 375 Table 6.8(a) for explanation of SCO

Qualifiers:

U - Not detected

J - Estimated value

B - Analyte found in associated method blank

N - Presumptive evidence of a compound

E - Value exceeds calibration range

D - Dilution

**TABLE 1
SURFACE SOIL & SEDIMENT**

Restricted Soil Cleanup Objectives (SCO) - Residential			SAMPLE ID: LAB ORDER: SAMPLE DATE:	SS-01(0-2) B3628-13 9/21/2010	SS-01(0-2)RE B3628-13RE 9/21/2010	SS-02(0-2) B3628-19 9/22/2010	SS-02(0-2)RE B3628-19RE 9/22/2010	SS-03(0-2) B3628-23 9/23/2010									
SEMI-VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8270)																	
CAS	RSCo	Comment	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF			
Biphenyl	92-52-4	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
Bis(2-chloroisopropyl)ether	108-60-1	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
2,4,5-Trichlorophenol	95-95-4	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
2,4,6-Trichlorophenol	88-06-2	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
2,4-Dichlorophenol	120-83-2	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
2,4-Dimethylphenol	105-67-9	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
2,4-Dinitrophenol	51-28-5	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
2,4-Dinitrotoluene	121-14-2	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
2,6-Dinitrotoluene	606-20-2	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
2-Chloronaphthalene	91-58-7	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
2-Chlorophenol	95-57-8	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
2-Methylnaphthalene	91-57-6	- - UG/KG	360	U	1	--	--		390	U	1	--	--		120	J	1
2-Methylphenol	95-48-7	100000 a UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
2-Nitroaniline	88-74-4	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
2-Nitrophenol	88-75-5	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
3,3-Dichlorobenzidine	91-94-1	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
3+4-Methylphenols	65794-96-9	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
3-Nitroaniline	99-09-2	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
4,6-Dinitro-2-methylphenol	534-52-1	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
4-Bromophenyl-phenylether	101-55-3	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
4-Chloro-3-Methylphenol	59-50-7	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
4-Chloroaniline	106-47-8	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
4-Chlorophenyl-phenylether	7005-72-3	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
4-Nitroaniline	100-01-6	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
4-Nitrophenol	100-02-7	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
Acenaphthene	83-32-9	100000 a UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
Acenaphthylene	208-96-8	100000 a UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
Acetophenone	98-86-2	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
Anthracene	120-12-7	100000 a UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
Atrazine	1912-24-9	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
Benzaldehyde	100-52-7	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
Benzo(a)anthracene	56-55-3	1000 f UG/KG	360	U	1	--	--		390	U	1	--	--		61	J	1
Benzo(a)pyrene	50-32-8	1000 f UG/KG	360	U	1	--	--		390	U	1	--	--		60	J	1
Benzo(b)fluoranthene	205-99-2	1000 f UG/KG	360	U	1	--	--		390	U	1	--	--		79	J	1
Benzo(g,h,i)perylene	191-24-2	100000 a UG/KG	360	U	1	--	--		390	U	1	--	--		49	J	1
Benzo(k)fluoranthene	207-08-9	1000 - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
bis(2-Chloroethoxy)methane	111-91-1	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
bis(2-Chloroethyl)Ether	111-44-4	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
bis(2-Ethylhexyl)phthalate	117-81-7	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
Butylbenzylphthalate	85-68-7	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
Caprolactam	105-60-2	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
Carbazole	86-74-8	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
Chrysene	218-01-9	1000 f UG/KG	360	U	1	--	--		390	U	1	--	--		59	J	1
Dibenzo(a,h)anthracene	53-70-3	330 e UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
Dibenzofuran	132-64-9	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
Diethylphthalate	84-66-2	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
Dimethylphthalate	131-11-3	- - UG/KG	350	JB	1	--	--		480	B	1	--	--		290	J	1
Di-n-butylphthalate	84-74-2	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
Di-n-octylphthalate	117-84-0	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
Fluoranthene	206-44-0	100000 a UG/KG	360	U	1	--	--		390	U	1	--	--		100	J	1
Fluorene	86-73-7	100000 a UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
Hexachlorobenzene	118-74-1	330 e UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
Hexachlorobutadiene	87-68-3	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
Hexachlorocyclopentadiene	77-47-4	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
Hexachloroethane	67-72-1	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
Indeno(1,2,3-cd)pyrene	193-39-5	500 f UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
Isophorone	78-59-1	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
Naphthalene	91-20-3	100000 a UG/KG	360	U	1	--	--		390	U	1	--	--		71	J	1
Nitrobenzene	98-95-3	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
N-Nitroso-di-n-propylamine	621-64-7	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
N-Nitrosodiphenylamine(1)	86-30-6	- - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
Pentachlorophenol	87-86-5	2400 - UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
Phenanthrene	85-01-8	100000 a UG/KG	360	U	1	--	--		390	U	1	--	--		97	J	1
Phenol	108-95-2	100000 a UG/KG	360	U	1	--	--		390	U	1	--	--		350	U	1
Pyrene	129-00-0	100000 a UG/KG	360	U	1	--	--		390	U	1	--	--		100	J	1
Total TICs		TTCs - - UG/KG	2249			--	--		2506			--	--		2355		
TOTAL DETECTABLE (excluding TICs)			350			0			480			0			1086		

Notes:

Highly indicates exceedance of SCO value.

Refer to NYSDC Part 375 Table 6.8(a) for explanation of SCO

Qualifiers:

U - Not detected

J - Estimated value

B - Analyte found in associated method blank

N - Presumptive evidence of a compound

E - Value exceeds calibration range

D - Dilution

**TABLE 1
SURFACE SOIL & SEDIMENT**

Restricted Soil Cleanup Objectives (SCO) - Residential			SAMPLE ID: LAB ORDER: SAMPLE DATE:	SS-04 B3628-25 9/24/2010	SS-05 B3701-11 9/29/2010	SS-06(0-2) B3701-14 9/30/2010	SS-06(0-2)RE B3701-14RE 9/30/2010	SS-07(0-2) B3701-17 10/1/2010										
SEMI-VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8270)				RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF			
CAS	RSCo	Comment																
Biphenyl	92-52-4	- -	UG/KG	390	U	1	370	U	1	84	J	1	--	--	400	U	1	
Bis(2-chloroisopropyl)ether	108-60-1	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
2,4,5-Trichlorophenol	95-95-4	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
2,4,6-Trichlorophenol	88-06-2	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
2,4-Dichlorophenol	120-83-2	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
2,4-Dimethylphenol	105-67-9	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
2,4-Dinitrophenol	51-28-5	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
2,4-Dinitrotoluene	121-14-2	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
2,6-Dinitrotoluene	606-20-2	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
2-Chloronaphthalene	91-58-7	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
2-Chlorophenol	95-57-8	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
2-Methylnaphthalene	91-57-6	- -	UG/KG	260	J	1	68	J	1	880	1	--	--	410	1	--	--	
2-Methylphenol	95-48-7	100000 a	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
2-Nitroaniline	88-74-4	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
2-Nitrophenol	88-75-5	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
3,3-Dichlorobenzidine	91-94-1	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
3+4-Methylphenols	65794-96-9	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
3-Nitroaniline	99-09-2	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
4,6-Dinitro-2-methylphenol	534-52-1	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
4-Bromophenyl-phenylether	101-55-3	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
4-Chloro-3-Methylphenol	59-50-7	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
4-Chloroaniline	106-47-8	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
4-Chlorophenyl-phenylether	7005-72-3	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
4-Nitroaniline	100-01-6	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
4-Nitrophenol	100-02-7	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
Acenaphthene	83-32-9	100000 a	UG/KG	59	J	1	370	U	1	470	U	1	--	--	400	U	1	
Acenaphthylene	208-96-8	100000 a	UG/KG	330	J	1	370	U	1	180	J	1	--	--	400	U	1	
Acetophenone	98-86-2	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
Anthracene	120-12-7	100000 a	UG/KG	290	J	1	370	U	1	200	J	1	--	--	400	U	1	
Atrazine	1912-24-9	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
Benzaldehyde	100-52-7	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
Benzo(a)anthracene	56-55-3	1000 f	UG/KG	640	1	150	J	1	800	1	--	--	200	J	1	--	--	
Benzo(a)pyrene	50-32-8	1000 f	UG/KG	740	1	160	J	1	720	1	--	--	140	J	1	--	--	
Benzo(b)fluoranthene	205-99-2	1000 f	UG/KG	870	1	200	J	1	970	1	--	--	200	J	1	--	--	
Benzo(g,h,i)perylene	191-24-2	100000 a	UG/KG	450	1	99	J	1	550	1	--	--	68	J	1	--	--	
Benzo(k)fluoranthene	207-08-9	1000 -	UG/KG	320	J	1	76	J	1	350	J	1	--	--	110	J	1	
bis(2-Chloroethoxy)methane	111-91-1	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
bis(2-Chloroethyl)Ether	111-44-4	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
bis(2-Ethylhexyl)phthalate	117-81-7	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
Butylbenzylphthalate	85-68-7	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
Caprolactam	105-60-2	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
Carbazole	86-74-8	- -	UG/KG	110	J	1	370	U	1	69	J	1	--	--	400	U	1	
Chrysene	218-01-9	1000 f	UG/KG	560	1	160	J	1	750	1	--	--	190	J	1	--	--	
Dibenzo(a,h)anthracene	53-70-3	330 e	UG/KG	140	J	1	370	U	1	100	J	1	--	--	400	U	1	
Dibenzofuran	132-64-9	- -	UG/KG	81	J	1	370	U	1	160	J	1	--	--	89	J	1	
Diethylphthalate	84-66-2	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
Dimethylphthalate	131-11-3	- -	UG/KG	370	JB	1	610	B	1	470	U	1	--	--	380	JB	1	
Di-n-butylphthalate	84-74-2	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
Di-n-octylphthalate	117-84-0	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
Fluoranthene	206-44-0	100000 a	UG/KG	1100	1	200	J	1	1800	1	--	--	490	1	--	--		
Fluorene	86-73-7	100000 a	UG/KG	140	J	1	370	U	1	100	J	1	--	--	400	U	1	
Hexachlorobenzene	118-74-1	330 e	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
Hexachlorobutadiene	87-68-3	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
Hexachlorocyclopentadiene	77-47-4	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
Hexachloroethane	67-72-1	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
Indeno(1,2,3-cd)pyrene	193-39-5	500 f	UG/KG	420	1	84	J	1	510	1	--	--	58	J	1	--	--	
Isophorone	78-59-1	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
Naphthalene	91-20-3	100000 a	UG/KG	180	J	1	370	U	1	510	1	--	--	270	J	1	--	--
Nitrobenzene	98-95-3	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
N-Nitroso-di-n-propylamine	621-64-7	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
N-Nitrosodiphenylamine(1)	86-30-6	- -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
Pentachlorophenol	87-86-5	2400 -	UG/KG	390	U	1	370	U	1	470	U	1	--	--	400	U	1	
Phenanthrene	85-01-8	100000 a	UG/KG	650	1	110	J	1	1000	1	--	--	410	1	--	--		
Phenol	108-95-2	100000 a	UG/KG	390	U	1	370	U	1	66	J	1	--	--	400	U	1	
Pyrene	129-00-0	100000 a	UG/KG	970	1	180	J	1	1500	1	--	--	380	J	1	--	--	
Total TICs	TTCs	- -	UG/KG	4487			1384			9170			--	--	5810			
TOTAL DETECTABLE (excluding TICs)				8680			2097			11299			0		3395			

Notes:

Highly indicates exceedance of SCO value.

Refer to NYSDC Part 375 Table 6.8(a) for explanation of SCO

Qualifiers:

U - Not detected

J - Estimated value

B - Analyte found in associated method blank

N - Presumptive evidence of a compound

E - Value exceeds calibration range

D - Dilution

**TABLE 1
SURFACE SOIL & SEDIMENT**

Restricted Soil Cleanup Objectives (SCO) - Residential			SAMPLE ID: LAB ORDER: SAMPLE DATE:	SS-08(0-2) B3701-26 10/5/2010	SED-01 B3628-03 9/20/2010	SED-01RE B3628-03RE 9/20/2010	SED-02 B3701-10 9/29/2010							
SEMI-VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8270)														
	CAS	RSCo	Comment	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF		
Biphenyl	92-52-4	- -	UG/KG	430	U	1	460	U	1	--	--	430	U	1
Bis(2-chloroisopropyl)ether	108-60-1	- -	UG/KG	430	U	1	460	U	1	--	--	430	U	1
2,4,5-Trichlorophenol	95-95-4	- -	UG/KG	430	U	1	460	U	1	--	--	430	U	1
2,4,6-Trichlorophenol	88-06-2	- -	UG/KG	430	U	1	460	U	1	--	--	430	U	1
2,4-Dichlorophenol	120-83-2	- -	UG/KG	430	U	1	460	U	1	--	--	430	U	1
2,4-Dimethylphenol	105-67-9	- -	UG/KG	430	U	1	460	U	1	--	--	430	U	1
2,4-Dinitrophenol	51-28-5	- -	UG/KG	430	U	1	350	J	1	--	--	430	U	1
2,4-Dinitrotoluene	121-14-2	- -	UG/KG	430	U	1	69	J	1	--	--	430	U	1
2,6-Dinitrotoluene	606-20-2	- -	UG/KG	430	U	1	460	U	1	--	--	430	U	1
2-Chloronaphthalene	91-58-7	- -	UG/KG	430	U	1	460	U	1	--	--	430	U	1
2-Chlorophenol	95-57-8	- -	UG/KG	430	U	1	460	U	1	--	--	430	U	1
2-Methylnaphthalene	91-57-6	- -	UG/KG	430	U	1	460	U	1	--	--	430	U	1
2-Methylphenol	95-48-7	100000 a	UG/KG	430	U	1	460	U	1	--	--	430	U	1
2-Nitroaniline	88-74-4	- -	UG/KG	430	U	1	460	U	1	--	--	430	U	1
2-Nitrophenol	88-75-5	- -	UG/KG	430	U	1	460	U	1	--	--	430	U	1
3,3-Dichlorobenzidine	91-94-1	- -	UG/KG	430	U	1	77	J	1	--	--	430	U	1
3+4-Methylphenols	65794-96-9	- -	UG/KG	430	U	1	460	U	1	--	--	430	U	1
3-Nitroaniline	99-09-2	- -	UG/KG	430	U	1	460	U	1	--	--	430	U	1
4,6-Dinitro-2-methylphenol	534-52-1	- -	UG/KG	430	U	1	460	U	1	--	--	430	U	1
4-Bromophenyl-phenylether	101-55-3	- -	UG/KG	430	U	1	460	U	1	--	--	430	U	1
4-Chloro-3-Methylphenol	59-50-7	- -	UG/KG	430	U	1	460	U	1	--	--	430	U	1
4-Chloroaniline	106-47-8	- -	UG/KG	430	U	1	460	U	1	--	--	430	U	1
4-Chlorophenyl-phenylether	7005-72-3	- -	UG/KG	430	U	1	460	U	1	--	--	430	U	1
4-Nitroaniline	100-01-6	- -	UG/KG	430	U	1	93	J	1	--	--	430	U	1
4-Nitrophenol	100-02-7	- -	UG/KG	430	U	1	110	J	1	--	--	430	U	1
Acenaphthene	83-32-9	100000 a	UG/KG	430	U	1	460	U	1	--	--	430	U	1
Acenaphthylene	208-96-8	100000 a	UG/KG	430	U	1	460	U	1	--	--	430	U	1
Acetophenone	98-86-2	- -	UG/KG	430	U	1	460	U	1	--	--	430	U	1
Anthracene	120-12-7	100000 a	UG/KG	430	U	1	99	J	1	--	--	430	U	1
Atrazine	1912-24-9	- -	UG/KG	430	U	1	62	J	1	--	--	430	U	1
Benzaldehyde	100-52-7	- -	UG/KG	430	U	1	460	U	1	--	--	430	U	1
Benzo(a)anthracene	56-55-3	1000 f	UG/KG	430	U	1	140	J	1	--	--	430	U	1
Benzo(a)pyrene	50-32-8	1000 f	UG/KG	430	U	1	130	J	1	--	--	430	U	1
Benzo(b)fluoranthene	205-99-2	1000 f	UG/KG	430	U	1	130	J	1	--	--	430	U	1
Benzo(g,h,i)perylene	191-24-2	100000 a	UG/KG	430	U	1	110	J	1	--	--	430	U	1
Benzo(k)fluoranthene	207-08-9	1000 -	UG/KG	430	U	1	130	J	1	--	--	430	U	1
bis(2-Chloroethoxy)methane	111-91-1	- -	UG/KG	430	U	1	460	U	1	--	--	430	U	1
bis(2-Chloroethyl)Ether	111-44-4	- -	UG/KG	430	U	1	460	U	1	--	--	430	U	1
bis(2-Ethylhexyl)phthalate	117-81-7	- -	UG/KG	430	U	1	170	J	1	--	--	430	U	1
Butylbenzylphthalate	85-68-7	- -	UG/KG	430	U	1	150	J	1	--	--	430	U	1
Caprolactam	105-60-2	- -	UG/KG	430	U	1	460	U	1	--	--	430	U	1
Carbazole	86-74-8	- -	UG/KG	430	U	1	140	J	1	--	--	430	U	1
Chrysene	218-01-9	1000 f	UG/KG	430	U	1	140	J	1	--	--	430	U	1
Dibenzo(a,h)anthracene	53-70-3	330 e	UG/KG	430	U	1	97	J	1	--	--	430	U	1
Dibenzofuran	132-64-9	- -	UG/KG	430	U	1	460	U	1	--	--	430	U	1
Diethylphthalate	84-66-2	- -	UG/KG	430	U	1	77	J	1	--	--	430	U	1
Dimethylphthalate	131-11-3	- -	UG/KG	380	JB	1	500	B	1	--	--	540	B	1
Di-n-butylphthalate	84-74-2	- -	UG/KG	430	U	1	170	J	1	--	--	430	U	1
Di-n-octylphthalate	117-84-0	- -	UG/KG	430	U	1	130	J	1	--	--	430	U	1
Fluoranthene	206-44-0	100000 a	UG/KG	70	J	1	160	J	1	--	--	72	J	1
Fluorene	86-73-7	100000 a	UG/KG	430	U	1	460	U	1	--	--	430	U	1
Hexachlorobenzene	118-74-1	330 e	UG/KG	430	U	1	83	J	1	--	--	430	U	1
Hexachlorobutadiene	87-68-3	- -	UG/KG	430	U	1	460	U	1	--	--	430	U	1
Hexachlorocyclopentadiene	77-47-4	- -	UG/KG	430	U	1	460	U	1	--	--	430	U	1
Hexachloroethane	67-72-1	- -	UG/KG	430	U	1	460	U	1	--	--	430	U	1
Indeno(1,2,3-cd)pyrene	193-39-5	500 f	UG/KG	430	U	1	110	J	1	--	--	430	U	1
Isophorone	78-59-1	- -	UG/KG	430	U	1	460	U	1	--	--	430	U	1
Naphthalene	91-20-3	100000 a	UG/KG	430	U	1	460	U	1	--	--	430	U	1
Nitrobenzene	98-95-3	- -	UG/KG	430	U	1	460	U	1	--	--	430	U	1
N-Nitroso-di-n-propylamine	621-64-7	- -	UG/KG	430	U	1	460	U	1	--	--	430	U	1
N-Nitrosodiphenylamine(1)	86-30-6	- -	UG/KG	430	U	1	78	J	1	--	--	430	U	1
Pentachlorophenol	87-86-5	2400 -	UG/KG	430	U	1	300	J	1	--	--	430	U	1
Phenanthrene	85-01-8	100000 a	UG/KG	430	U	1	120	J	1	--	--	430	U	1
Phenol	108-95-2	100000 a	UG/KG	430	U	1	460	U	1	--	--	430	U	1
Pyrene	129-00-0	100000 a	UG/KG	54	J	1	160	J	1	--	--	63	J	1
Total TICs	TTCs	- -	UG/KG	2392			4032			--	--	1190		
TOTAL DETECTABLE (excluding TICs)				504			4085			0		675		

Notes:

Highly indicates exceedance of SCO value.

Refer to NYSDC Part 375 Table 6.8(a) for explanation of SCO

Qualifiers:

U - Not detected

J - Estimated value

B - Analyte found in associated method blank

N - Presumptive evidence of a compound

E - Value exceeds calibration range

D - Dilution

**TABLE 1
SURFACE SOIL & SEDIMENT**

Restricted Soil Cleanup Objectives (SCO) - Residential				SAMPLE ID: LAB ORDER: SAMPLE DATE:		SS-01(0-2) B3628-13 9/21/2010		SS-01(0-2)RE B3628-13RE 9/21/2010		SS-02(0-2) B3628-19 9/22/2010		SS-02(0-2)RE B3628-19RE 9/22/2010		SS-03(0-2) B3628-23 9/23/2010	
METALS (EPA METHOD 6010B)				CAS	RSCO	Comment	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
Aluminum	7429-90-5	-	-	MG/KG			4040		1	--	--		4680		1
Antimony	7440-36-0	-	-	MG/KG			2.2	U	1	--	--		2.05	U	1
Arsenic	7440-38-2	16	f	MG/KG			3.17		1	--	--		5.0		1
Barium	7440-39-3	350	f	MG/KG			33.3		1	--	--		67.9		1
Beryllium	7440-41-7	14	-	MG/KG			0.33		1	--	--		0.38		1
Cadmium	7440-43-9	2.5	f	MG/KG			0.26	U	1	--	--		0.25	U	1
Calcium	7440-70-2	-	-	MG/KG			85900		1	--	--		70400		1
Chromium	7440-47-3	22*	h	MG/KG			8.27		1	--	--		9.1		1
Cobalt	7440-48-4	-	-	MG/KG			4.28		1	--	--		4.85		1
Copper	7440-50-8	270	-	MG/KG			7.43		1	--	--		16.7		1
Iron	7439-89-6	-	-	MG/KG			9680		1	--	--		10500		1
Lead	7439-92-1	400	-	MG/KG			94		1	--	--		39.5		1
Magnesium	7439-95-4	-	-	MG/KG			40300		1	--	--		34600		1
Manganese	7439-96-5	2000	f	MG/KG			364		1	--	--		381		1
Total Mercury	7439-97-6	0.81	j	MG/KG			0.022		1	--	--		0.182		1
Nickel	7440-02-0	140	-	MG/KG			10.3		1	--	--		10.5		1
Potassium	7440-09-7	-	-	MG/KG			792		1	--	--		1030		1
Selenium	7782-49-2	36	-	MG/KG			0.64	J	1	--	--		0.63	J	1
Silver	7440-22-4	36	-	MG/KG			0.19	J	1	--	--		0.37	J	1
Sodium	7440-23-5	-	-	MG/KG			293		1	--	--		312		1
Thallium	7440-28-0	-	-	MG/KG			1.76	U	1	--	--		1.64	U	1
Vanadium	7440-62-2	-	-	MG/KG			13.4		1	--	--		15.7		1
Zinc	7440-66-6	2200	-	MG/KG			24.7		1	--	--		50		1
TOTAL DETECTABLE				MG/KG			141569.032			0			122123.832		

Notes:

Highhigh indicates exceedance of SCO value.

Refer to NYSDEC Part 375 Table 6.8(a) for explanation of SCO

*Total chromium results compared to hexavalent chromium SCO
per NYSDEC Part 375 Table 6.8(a) footnote

Qualifiers:

U - Not detected

J - Estimated value

B - Analyte found in associated method blank

N - Presumptive evidence of a compound

E - Value exceeds calibration range

D - Dilution

**TABLE 1
SURFACE SOIL & SEDIMENT**

Restricted Soil Cleanup Objectives (SCO) - Residential				SAMPLE ID: LAB ORDER: SAMPLE DATE:			SS-04 B3628-25 9/24/2010			SS-05 B3701-11 9/29/2010			SS-06(0-2) B3701-14 9/30/2010			SS-06(0-2)RE B3701-14RE 9/30/2010			SS-07(0-2) B3701-17 10/1/2010		
METALS (EPA METHOD 6010B)				CAS	RSCO	Comment	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
Aluminum	7429-90-5	-	-	MG/KG			7240		1	3920		1	2740		1	--	--		3080		1
Antimony	7440-36-0	-	-	MG/KG			2.11	U	1	1.52	U	1	0.44	J	1	--	--		1.59	U	1
Arsenic	7440-38-2	16	f	MG/KG			3.63		1	6.81		1	8.0		1	--	--		7.2		1
Barium	7440-39-3	350	f	MG/KG			73.7		1	51.3		1	63.5		1	--	--		123		1
Beryllium	7440-41-7	14	-	MG/KG			0.51		1	0.43		1	0.35		1	--	--		0.33		1
Cadmium	7440-43-9	2.5	f	MG/KG			0.25	U	1	0.18	U	1	0.38		1	--	--		0.19	U	1
Calcium	7440-70-2	-	-	MG/KG			65500		1	41200		1	80400		1	--	--		39700		1
Chromium	7440-47-3	22*	h	MG/KG			13		1	6.18		1	7.55		1	--	--		6.28		1
Cobalt	7440-48-4	-	-	MG/KG			6.47		1	5.13		1	3.43		1	--	--		3.73		1
Copper	7440-50-8	270	-	MG/KG			16.2		1	24.5		1	20.2		1	--	--		16.9		1
Iron	7439-89-6	-	-	MG/KG			13500		1	9690		1	10200		1	--	--		11200		1
Lead	7439-92-1	400	-	MG/KG			24.9		1	80.3		1	113		1	--	--		33.4		1
Magnesium	7439-95-4	-	-	MG/KG			28200		1	14200		1	45100		1	--	--		18900		1
Manganese	7439-96-5	2000	f	MG/KG			389		1	183		1	292		1	--	--		236		1
Total Mercury	7439-97-6	0.81	j	MG/KG			0.087		1	0.221		1	0.095		1	--	--		0.12		1
Nickel	7440-02-0	140	-	MG/KG			18.1		1	11.4		1	8.58		1	--	--		8.06		1
Potassium	7440-09-7	-	-	MG/KG			1770		1	589		1	566		1	--	--		661		1
Selenium	7782-49-2	36	-	MG/KG			0.89		1	1.24		1	1.2	N	1	--	--		1.19	N	1
Silver	7440-22-4	36	-	MG/KG			0.29	J	1	0.34		1	0.27	J	1	--	--		0.26	J	1
Sodium	7440-23-5	-	-	MG/KG			375		1	235		1	375		1	--	--		213		1
Thallium	7440-28-0	-	-	MG/KG			1.69	U	1	1.21	U	1	1.51	U	1	--	--		1.27	U	1
Vanadium	7440-62-2	-	-	MG/KG			40.9		1	9.92		1	12		1	--	--		10.7		1
Zinc	7440-66-6	2200	-	MG/KG			48.6		1	71.8		1	135		1	--	--		32.5		1
TOTAL DETECTABLE				MG/KG			117221.277			70286.571			140046.955			0			74233.7		

Notes:

Highhigh indicates exceedance of SCO value.

Refer to NYSDEC Part 375 Table 6.8(a) for explanation of SCO

*Total chromium results compared to hexavalent chromium SCO
per NYSDEC Part 375 Table 6.8(a) footnote

Qualifiers:

U - Not detected

J - Estimated value

B - Analyte found in associated method blank

N - Presumptive evidence of a compound

E - Value exceeds calibration range

D - Dilution

**TABLE 1
SURFACE SOIL & SEDIMENT**

Restricted Soil Cleanup Objectives (SCO) - Residential				SAMPLE ID: LAB ORDER: SAMPLE DATE:			SS-08(0-2) B3701-26 10/5/2010			SED-01 B3628-03 9/20/2010			SED-01RE B3628-03RE 9/20/2010			SED-02 B3701-10 9/29/2010		
METALS (EPA METHOD 6010B)				CAS	RSC	Comment	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
Aluminum	7429-90-5	-	-	MG/KG			6320		1	6470		1	--	--		530		1
Antimony	7440-36-0	-	-	MG/KG			3.25	U	1	3.48	U	1	--	--		1.83	U	1
Arsenic	7440-38-2	16	f	MG/KG			5		1	7.09		1	--	--		2.9		1
Barium	7440-39-3	350	f	MG/KG			79.5		1	63.5		1	--	--		17.7		1
Beryllium	7440-41-7	14	-	MG/KG			0.55		1	0.5		1	--	--		0.12	J	1
Cadmium	7440-43-9	2.5	f	MG/KG			0.39	U	1	0.42	U	1	--	--		0.11	J	1
Calcium	7440-70-2	-	-	MG/KG			57700		1	30700		1	--	--		113000		1
Chromium	7440-47-3	22*	h	MG/KG			11.9		1	12.6		1	--	--		2.24		1
Cobalt	7440-48-4	-	-	MG/KG			5.72		1	7.31		1	--	--		0.98	J	1
Copper	7440-50-8	270	-	MG/KG			43.4		1	17.2		1	--	--		11.2		1
Iron	7439-89-6	-	-	MG/KG			17500		1	16900		1	--	--		2590		1
Lead	7439-92-1	400	-	MG/KG			115		1	21.4		1	--	--		14.4		1
Magnesium	7439-95-4	-	-	MG/KG			26900		1	13000		1	--	--		60800		1
Manganese	7439-96-5	2000	f	MG/KG			387		1	251		1	--	--		337		1
Total Mercury	7439-97-6	0.81	j	MG/KG			0.239		1	0.05		1	--	--		0.017		1
Nickel	7440-02-0	140	-	MG/KG			14		1	14.9		1	--	--		2.43		1
Potassium	7440-09-7	-	-	MG/KG			1730		1	1430		1	--	--		204		1
Selenium	7782-49-2	36	-	MG/KG			2.08		1	1.37	J	1	--	--		0.73	U	1
Silver	7440-22-4	36	-	MG/KG			0.26	J	1	0.28	J	1	--	--		0.37	U	1
Sodium	7440-23-5	-	-	MG/KG			635		1	637		1	--	--		305		1
Thallium	7440-28-0	-	-	MG/KG			2.6	U	1	2.78	U	1	--	--		1.46	U	1
Vanadium	7440-62-2	-	-	MG/KG			20.2		1	19.3		1	--	--		4.94		1
Zinc	7440-66-6	2200	-	MG/KG			59.9		1	62.6		1	--	--		20.1		1
TOTAL DETECTABLE				MG/KG			111529.749			69616.1			0			177843.127		

Notes:

Highhigh indicates exceedance of SCO value.

Refer to NYSDEC Part 375 Table 6.8(a) for explanation of SCO

*Total chromium results compared to hexavalent chromium SCO
per NYSDEC Part 375 Table 6.8(a) footnote

Qualifiers:

U - Not detected

J - Estimated value

B - Analyte found in associated method blank

N - Presumptive evidence of a compound

E - Value exceeds calibration range

D - Dilution

**TABLE 1
SURFACE SOIL & SEDIMENT**

Restricted Soil Cleanup Objectives (SCO) - Residential			SAMPLE ID: LAB ORDER: SAMPLE DATE:	SS-01(0-2) B3628-13 9/21/2010	SS-01(0-2)RE B3628-13RE 9/21/2010	SS-02(0-2) B3628-19 9/22/2010	SS-02(0-2)RE B3628-19RE 9/22/2010	SS-03(0-2) B3628-23 9/23/2010									
PCBs (EPA METHOD 8080)			CAS	RSCO	Comment	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF			
Aroclor 1016	12674-11-2	- -	UG/KG	19	U	1	19	U	1	20	U	1	--	--	18	U	1
Aroclor 1221	11104-28-2	- -	UG/KG	19	U	1	19	U	1	20	U	1	--	--	18	U	1
Aroclor 1232	11141-16-5	- -	UG/KG	19	U	1	19	U	1	20	U	1	--	--	18	U	1
Aroclor 1242	53469-21-9	- -	UG/KG	19	U	1	19	U	1	20	U	1	--	--	18	U	1
Aroclor 1248	12672-29-6	- -	UG/KG	19	U	1	19	U	1	20	U	1	--	--	18	U	1
Aroclor 1254	11097-69-1	- -	UG/KG	19	U	1	19	U	1	20	U	1	--	--	18	U	1
Aroclor 1260	11096-82-5	- -	UG/KG	19	U	1	19	U	1	20	U	1	--	--	18	U	1
TOTAL DETECTABLE			1,000 -	UG/KG	0	0	0	0	0	0	0	0	0	0	0	0	0

Notes:

Highligh indicates exceedance of SCO value.

Refer to NYSDEC Part 375 Table 6.8(a) for explanation of SCO

Qualifiers:

U - Not detected

J - Estimated value

B - Analyte found in associated method blank

N - Presumptive evidence of a compound

E - Value exceeds calibration range

D - Dilution

**TABLE 1
SURFACE SOIL & SEDIMENT**

RESTRICTED SOIL CLEANUP OBJECTIVES (SCO) - Residential						SAMPLE ID: LAB ORDER: SAMPLE DATE:		SS-04 B3628-25 9/24/2010		SS-05 B3701-11 9/29/2010		SS-06(0-2) B3701-14 9/30/2010		SS-06(0-2)RE B3701-14RE 9/30/2010		SS-07(0-2) B3701-17 10/1/2010				
PCBs (EPA METHOD 8080)						CAS	RSCO	Comment	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
Aroclor 1016						12674-11-2	- -	UG/KG	20	U	1	19	U	1	24	U	1	24	U	1
Aroclor 1221						11104-28-2	- -	UG/KG	20	U	1	19	U	1	24	U	1	24	U	1
Aroclor 1232						11141-16-5	- -	UG/KG	20	U	1	19	U	1	24	U	1	24	U	1
Aroclor 1242						53469-21-9	- -	UG/KG	20	U	1	19	U	1	24	U	1	24	U	1
Aroclor 1248						12672-29-6	- -	UG/KG	20	U	1	19	U	1	24	U	1	24	U	1
Aroclor 1254						11097-69-1	- -	UG/KG	20	U	1	19	U	1	24	U	1	24	U	1
Aroclor 1260						11096-82-5	- -	UG/KG	20	U	1	19	U	1	24	U	1	24	U	1
TOTAL DETECTABLE						1,000 -	UG/KG		0			0			0			0		

Notes:

Highhigh indicates exceedance of SCO value.

Refer to NYSDEC Part 375 Table 6.8(a) for explanation of SCO

Qualifiers:

U - Not detected

J - Estimated value

B - Analyte found in associated method blank

N - Presumptive evidence of a compound

E - Value exceeds calibration range

D - Dilution

**TABLE 1
SURFACE SOIL & SEDIMENT**

Restricted Soil Cleanup Objectives (SCO) - Residential			SAMPLE ID: LAB ORDER: SAMPLE DATE:			SS-08(0-2) B3701-26 10/5/2010			SED-01 B3628-03 9/20/2010			SED-01RE B3628-03RE 9/20/2010			SED-02 B3701-10 9/29/2010		
PCBs (EPA METHOD 8080)			CAS	RSCO	Comment	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
Aroclor 1016	12674-11-2	- -	UG/KG	22	U 1	23	U 1	--	--	22	U 1						
Aroclor 1221	11104-28-2	- -	UG/KG	22	U 1	23	U 1	--	--	22	U 1						
Aroclor 1232	11141-16-5	- -	UG/KG	22	U 1	23	U 1	--	--	22	U 1						
Aroclor 1242	53469-21-9	- -	UG/KG	22	U 1	23	U 1	--	--	22	U 1						
Aroclor 1248	12672-29-6	- -	UG/KG	22	U 1	23	U 1	--	--	22	U 1						
Aroclor 1254	11097-69-1	- -	UG/KG	22	U 1	23	U 1	--	--	22	U 1						
Aroclor 1260	11096-82-5	- -	UG/KG	22	U 1	23	U 1	--	--	22	U 1						
TOTAL DETECTABLE			1,000 - UG/KG	0		0			0			0			0		

Notes:

Highligh indicates exceedance of SCO value.

Refer to NYSDEC Part 375 Table 6.8(a) for explanation of SCO

Qualifiers:

U - Not detected

J - Estimated value

B - Analyte found in associated method blank

N - Presumptive evidence of a compound

E - Value exceeds calibration range

D - Dilution

SECRET/NOFORN

Restricted Soil Cleanup Objectives (SCO) - Residential

SAMPLE ID:
LAB ORDER:
SAMPLE DATE:

B-1 8-10.5ft
U1008256-002A
8/5/2010

B-3 2.5-4ft
U1008256-003A
8/5/2010

B-4 10-11.5ft
U1008256-004A
8/5/2010

B-6 5ft
U1008256-00
8/5/2010

GA	B-7 8-1 U1008256 8/6/201
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ft	B-8 6
006A	U100823
	8/6/2

0.7ft	B-9
G-007A	U1000
110	8/

7.5-13ft	E
256-008A	U10
2010	

10 8-12ft
08256-009A U
/6/2010

4-11 8.2-8.8ft
1008256-010A
8/6/2010

B-12 6.2-8.2ft
U1008256-011
8/6/2010

B-20 8-11.5
U1008324-0
8/13/2010

t	B-23 7.4
2A	U1008324
	8/13/20

1.5ft	B-24
003A	U10083
0	8/13

-6.5ft	B-25
4-004A	U100
010	8/

10.3-11.5
324-005A
3/2010

VOLATILES/SEMI-VOLATILES (EPA METHOD 8260-8270)		CAS	RSO Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL							
1,1,1,2-Tetrachloroethane	630-20-6	- -	UG/KG																													
1,1,1-Trichloroethane	71-55-6	100000	a	UG/KG																												
1,1,2,2-Tetrachloroethane	79-34-5	- -	UG/KG																													
1,1,2-Trichloroethane	79-00-5	- -	UG/KG																													
1,1-Dichloroethane	75-34-3	19000	-	UG/KG																												
1,1-Dichloroethene	75-35-4	100000	a	UG/KG																												
1,1-Dichloropropene	563-58-6	- -	UG/KG																													
1,2,3-Trichlorobenzene	87-61-6	- -	UG/KG																													
1,2,3-Trichloropropane	96-18-4	- -	UG/KG																													
1,2,4-Trichlorobenzene	120-82-1	- -	UG/KG																													
1,2,4-Trimethylbenzene	95-63-6	47000	-	UG/KG	8.7	U	7.3	U	13000	400	U	71	36	U	68	U	20000	350	U	380	1700	U	1700.0	U	780	17.0	U					
1,2-Dibromo-3-chloropropane	96-12-8	- -	UG/KG																													
1,2-Dichlorobenzene	95-50-1	100000	a	UG/KG						89000	U		4000	U			4000	U														
1,2-Dichloroethane	107-06-2	2300	-	UG/KG																												
1,2-Dichloropropane	78-87-5	- -	UG/KG																													
1,3,5-Trimethylbenzene	108-67-8	47000	-	UG/KG	8.7	U	7.3	U	4400	400	U	41	36	U	68	U	5100	350	U	360	1700	U	1700	U	350	U	17	U				
1,3-Dichlorobenzene	541-73-1	17000	-	UG/KG						89000	U		4000	U			4000	U														
1,3-Dichloropropane	142-28-9	- -	UG/KG																													
1,4-Dichlorobenzene	106-46-7	9800	-	UG/KG						89000	U		4000	U			4000	U														
2,2-Dichloropropane	594-20-7	- -	UG/KG																													
2-Chlorotoluene	95-49-8	- -	UG/KG																													
2-Hexanone	591-78-6	- -	UG/KG																													
2-Isopropyltoluene	95-70-5	- -	UG/KG																													
4-Chlorotoluene	106-43-4	- -	UG/KG																													
4-Methyl-2-pentanone	108-10-1	- -	UG/KG																													
Acetone	67-64-1	100000	a	UG/KG																												
Acrylonitrile	107-13-1	- -	UG/KG																													
Benzene	71-43-2	2900	-	UG/KG	8.7	U	7.3	U	640	U	400	U	41	U	36	U	68	U	3600	U	350	U	360	U	1700	U	1700.0	U	350	U	17.0	U
Bromobenzene	108-86-1	- -	UG/KG																													
Bromochloromethane	74-97-5	- -	UG/KG																													
Bromodichloromethane	594-18-3	- -	UG/KG																													
Bromoform	75-25-2	- -	UG/KG																													
Bromomethane	74-83-9	- -	UG/KG																													
Carbon Disulfide	75-15-0	- -	UG/KG																													
Carbon tetrachloride	56-23-5	1400	-	UG/KG																												
Chlorobenzene	108-90-7	100000	a	UG/KG																												
Chloroethane	75-00-3	- -	UG/KG																													
Chloroform	67-66-3	10000	-	UG/KG																												
Chloromethane	74-87-3	- -	UG/KG																													
cis-1,2-Dichloroethene	156-59-2	59000	-	UG/KG																												
cis-1,3-Dichloropropene	10061-01-5	- -	UG/KG																													
Chlorodibromomethane	124-48-1	- -	UG/KG																													
1,2-Dibromoethane	106-93-4	- -	UG/KG																													
DiBromomethane	74-95-3	- -	UG/KG																													
Dichlorodifluoromethane	75-71-8	- -	UG/KG																													
Ethylbenzene	100-41-4	30000	-	UG/KG	8.7	U	7.3	U	1200	400	U	41	36	U	68	U	4200	350	U	360	1700	U	1700	U	350	U	17	U				
Hexachlorobutadiene	87-68-3	- -	UG/KG							89000.0	U		4000	U			4000	U														
Isopropylbenzene	98-82-8	- -	UG/KG	8.7	U	7.3	U	760	400	U	41	36	U	68	U	3600	U	350	U	360	1700	U	1700	U	350	U	17.0	U				
m&p-Xylene	108-38-3	- -	UG/KG	8.7	U	7.3	U	7800	400	U	72	36	U	68	U	14000	350	U	360	1700	U	1700.0	U	350	U	17.0	U					
2-Butanone	78-93-3	100000	a	UG/KG																												
Methyl n-butyl ether	1634-04-4	- -	UG/KG	8.7	U	7.3	U	640	U	400.0	U	41.0	36	U	68	U	3600	U	350	U	360	1700	U	1700.0	U	350	U	17.0	U			
Methylene chloride	75-09-2	51000	-	UG/KG																												
n-Butylbenzene	104-51-8	100000	a	UG/KG	8.7	U	7.3	U	1100	400	U	41	36	U	68	U	3600	U	350.00	U	360	1700	U	1700.0	U	350	U	17.0	U			
n-Propylbenzene	103-65-1	100000	a	UG/KG	8.7	U	7.3	U	1200	400	U	41	36	U	68	U	3600	U	350.00	U	360	1700	U	1700.0	U	350	U	17.0	U			
Naphthalene	91-20-3	100000	a	UG/KG	8.7	U	7.3	U	2900	150000	U	41	4000	U	68	U	4000	U	350	U	360	1700	U	1700.0	U	350	U	17.0	U			
o-Xylene	95-47-6	- -	UG/KG	8.7	U	7.3	U	2500	400	U	41	36	U	68	U	8300	350	U	360	1700	U	1700.0	U	350	U	17.0	U					
4-Isopropyltoluene	99-87-6	- -	UG/KG	8.7	U	7.3	U	640	U	400	U	41	36	U	68	U	3600	U	350	U	360	1700	U	1700.0	U	350	U	17.0	U			
sec-Butylbenzene	135-98-8	100000	a	UG/KG	8.7	U	7.3	U	640	U	400	U	41	36	U	68	U	3600	U	350	U	360	1700	U	1700	U	350	U	17	U		
Styrene	100-42-5	- -	UG/KG																													
tert-Butylbenzene	98-06-6	100000	a	UG/KG	8.7	U	7.3	U	640	U	400	U	41	36	U	68	U	3600	U	350	U	360	1700	U	1700.0	U	350	U	17.0	U		
Tetrachloroethene	127-18-4	550	-	UG/KG																												
Tetrahydrofuran	109-99-9	- -	UG/KG																													
Toluene	108-88-3	100000	a	UG/KG	8.7	U	7.3	U	640	U	400	U	46	36	U	68	U	4000	350	U	360	1700	U	1700.0	U	350	U	17.0	U			
Xylene (mixed)	1330-20-7	100000	a	UG/KG																												
trans-1,2-Dichloroethene	156-60-5	100000	a	UG/KG																												
trans-1,3-Dichloropropene	10061-02-6	- -	UG/KG																													
trans-1,4-dichloro-2-butene	110-57-6	- -	UG/KG																													
Trichloroethene	79-01-6	10000	-	UG/KG																												
Trichlorofluoromethane	75-69-4	- -	UG/KG																													
1,1,2-Trichlorotrifluoroethane	78-13-1	- -	UG/KG																													
Vinyl chloride	75-01-4	210	-	UG/KG																												
1,4-Dioxane	123-91-1	9800	-	UG/KG																												
Cyclohexane	110-82-7	- -	UG/KG																													
Methyl Acetate	79-20-9	- -	UG/KG																													
Methylcyclohexane	108-87-2	- -	UG/KG																													
tert-butyl alcohol	75-65-0	- -	UG/KG																													
m-Cresol	108-39-4	100000	a	UG/KG						89000	U		4000	U			4000	U														
1,2,4-Trichlorobenzene	120-82-1	- -	UG/KG																													
1,2-Dichlorobenzene	95-50-1	100000	a	UG/KG																												
1,3-Dichlorobenzene	541-73-1	17000	-	UG/KG																												
1,4-Dichlorobenzene</																																

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VOLATILES/SEMI-VOLATILES (EPA METHOD 8260-8270)			CAS	RSCo	Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
1,1,1,2-Tetrachloroethane			630-20-6		UG/KG																		
1,1,1-Trichloroethane			71-55-6	100000	a	UG/KG																	
1,1,2,2-Tetrachloroethane			79-34-5		--	UG/KG																	
1,1,2-Trichloroethane			79-00-5		--	UG/KG																	
1,1-Dichloroethane			75-34-3	19000	-	UG/KG																	
1,1-Dichloroethene			75-35-4	100000	a	UG/KG																	
1,1-Dichloropropene			563-58-6		--	UG/KG																	
1,2,3-Trichlorobenzene			87-61-6		--	UG/KG																	
1,2,3-Trichloropropane			96-18-4		--	UG/KG																	
1,2,4-Trichlorobenzene			120-82-1		--	UG/KG																	
1,2,4-Trimethylbenzene			95-63-6	47000	-	UG/KG																	
1,2-Dibromo-3-chloropropane			96-12-8		--	UG/KG																	
1,2-Dichlorobenzene			95-50-1	100000	a	UG/KG																	
1,2-Dichloroethane			107-06-2	2300	-	UG/KG																	
1,2-Dichloropropane			78-87-5		--	UG/KG																	
1,3,5-Trimethylbenzene			108-67-8	47000	-	UG/KG																	
1,3-Dichlorobenzene			541-73-1	17000	-	UG/KG																	
1,3-Dichloropropane			142-28-9		--	UG/KG																	
1,4-Dichlorobenzene			106-46-7	9800	-	UG/KG																	
2,2-Dichloropropane			594-20-7		--	UG/KG																	
2-Chlorotoluene			95-49-8		--	UG/KG																	
2-Hexanone			591-78-6		--	UG/KG																	
2-Isopropyltoluene			95-70-5		--	UG/KG																	
4-Chlorotoluene			106-43-4		--	UG/KG																	
4-Methyl-2-pentanone			108-10-1		--	UG/KG																	
Acetone			67-64-1	100000	a	UG/KG																	
Acrylonitrile			107-13-1		--	UG/KG																	
Benzene			71-43-2	2900	-	UG/KG																	
Bromobenzene			108-86-1		--	UG/KG																	
Bromochloromethane			74-97-5		--	UG/KG																	
Bromodichloromethane			594-18-3		--	UG/KG																	
Bromoform			75-25-2		--	UG/KG																	
Bromomethane			74-83-9		--	UG/KG																	
Carbon Disulfide			75-15-0		--	UG/KG																	
Carbon tetrachloride			56-23-5	1400	-	UG/KG																	
Chlorobenzene			108-90-7	100000	a	UG/KG																	
Chloroethane			75-00-3		--	UG/KG																	
Chloroform			67-66-3	10000	-	UG/KG																	
Chloromethane			74-87-3		--	UG/KG																	
cis-1,2-Dichloroethene			156-59-2	59000	-	UG/KG																	
cis-1,3-Dichloropropene			10061-01-5		--	UG/KG																	
Chlorodibromomethane			124-48-1		--	UG/KG																	
1,2-Dibromomethane			106-93-4		--	UG/KG																	
Dibromomethane			74-95-3		--	UG/KG																	
Dichlorodifluoromethane			75-71-8		--	UG/KG																	
Ethylbenzene			100-41-4	30000	-	UG/KG																	
Hexachlorobutadiene			87-68-3	4000	U	4800	U																
Isopropylbenzene			98-82-8		--	UG/KG																	
m&p-Xylene			108-38-3		--	UG/KG																	
2-Butanone			78-93-3	100000	a	UG/KG																	
Methyl tert-butyl ether			1634-04-4		--	UG/KG																	
Methylene chloride			75-09-2	51000	-	UG/KG																	
n-Butylbenzene			104-51-8	100000	a	UG/KG																	
n-Propylbenzene			103-65-1	100000	a	UG/KG																	
Naphthalene			91-20-3	100000	a	UG/KG																	
o-Xylene			95-47-6		--	UG/KG																	
4-Isopropyltoluene			99-87-6		--	UG/KG																	
sec-Butylbenzene			135-98-8	100000	a	UG/KG																	
Styrene			100-42-5		--	UG/KG																	
tert-Butylbenzene			98-06-6	100000	a	UG/KG																	
Tetrachloroethene			127-18-4	5500	-	UG/KG																	
Tetrahydrofuran			109-99-9		--	UG/KG																	
Toluene			108-88-3	100000	a	UG/KG																	
Xylene (mixed)			1330-20-7	100000	a	UG/KG																	
trans-1,2-Dichloroethene			156-60-5	100000	a	UG/KG																	
trans-1,3-Dichloropropene			10061-02-6		--	UG/KG																	
trans-1,4-dichloro-2-butene			110-57-6		--	UG/KG																	
Trichloroethene			79-01-6	10000	-	UG/KG																	
Trichlorofluoromethane			75-69-4		--	UG/KG																	
1,1,2-Trichlorotrifluoroethane			75-13-1		--	UG/KG																	
Vinyl chloride			75-01-4	210	-	UG/KG																	
1,4-Dioxane			123-91-1	9800	-	UG/KG																	
Cyclohexane			110-82-7		--	UG/KG																	
Methyl Acetate			79-20-9		--	UG/KG																	
Methylcyclohexane			108-87-2		--	UG/KG																	
tert-butyl alcohol			75-65-0		--	UG/KG																	
m-Cresol			108-39-4	100000	a	UG/KG																	
1,2,4-Trichlorobenzene			120-82-1		--	UG/KG																	
1,2-Dichlorobenzene			95-50-1	100000	a	UG/KG																	
1,3-Dichlorobenzene			541-73-1	17000	-	UG/KG																	
1,4-Dichlorobenzene			106-46-7	9800	-	UG/KG																	

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Restricted Soil Cleanup Objectives (SCO) - Residential

SAMPLE ID
LAB ORDER
SAMPLE DATE

B-72 0-1.5ft
U1008459-003
8/23/2010

B-72 6-7ft
U1008459-00
8/23/2010

B-74 2-3ft
U1008459-00
8/23/2010

B-75 0-2.5
U1008459-0
8/23/201

B-76 0-1
U1008459-1
8/23/201

7A	B-77 0.3 U1008459 8/23/20
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U1008459	E-1 C
8/23/20	

09A	E-2 Oil/S
	U100845
	8/23/2

Edge	B-76 0-
010A	U10084
0	8/23/

Dup	B-78
011A	U10084
10	8/24

2ft	B-79
U-012A	U1008
010	8/2

4.8ft	B-80
9-013A	U1008
010	8/2

8-1.8ft	B-
59-014A	U100
2010	8/

1-2ft	B-8
59-015A	U10
2010	8

0.8-1.8ft
459-016A
4/2010

[illegible]

SECRET/NOFORN

SECRET/NOFORN

[illegible]

VOLATILES/SEMI-VOLATILES (EPA METHOD 8260-8270)			CAS	RSCD	Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
1,1,1,2-Tetrachloroethane	630-20-6	- -	UG/KG																										
1,1,1-Trichloroethane	71-55-6	100000	a	UG/KG										5.8	U	11	U	5.7	U	5	U	43	U						
1,1,2,2-Tetrachloroethane	79-34-5	- -	UG/KG											5.8	U	11	U	5.7	U	5	U	43	U						
1,1,2-Trichloroethane	79-00-5	- -	UG/KG											5.8	U	11	U	5.7	U	5	U	43	U						
1,1-Dichloroethane	75-34-3	19000	-	UG/KG										5.8	U	11	U	5.7	U	5	U	43	U						
1,1-Dichloroethene	75-35-4	100000	a	UG/KG										5.8	U	11	U	5.7	U	5	U	43	U						
1,1-Dichloropropene	563-58-6	- -	UG/KG																										
1,2,3-Trichlorobenzene	87-61-6	- -	UG/KG											5.8	U	11	U	5.7	U	5	U	43	U						
1,2,3-Trichloropropane	96-18-4	- -	UG/KG																										
1,2,4-Trichlorobenzene	120-82-1	- -	UG/KG											5.8	U	11	U	5.7	U	5	U	43	U	400	U				
1,2,4-Trimethylbenzene	95-63-6	47000	-	UG/KG										5.8	U	11	U	5.7	U	5	U	43	U						
1,2-Dibromo-3-chloropropane	96-12-8	- -	UG/KG											5.8	U	11	U	5.7	U	5	U	43	U						
1,2-Dichlorobenzene	95-50-1	100000	a	UG/KG										5.8	U	11	U	5.7	U	5	U	43	U	400	U				
1,2-Dichloroethane	107-06-2	2300	-	UG/KG										5.8	U	11	U	5.7	U	5	U	43	U						
1,3-Dichloropropane	78-87-5	- -	UG/KG											5.8	U	11	U	5.7	U	5	U	43	U						
1,3,5-Trimethylbenzene	108-67-8	47000	-	UG/KG										5.8	U	11	U	5.7	U	5	U	43	U						
1,3-Dichlorobenzene	541-73-1	17000	-	UG/KG										5.8	U	11	U	5.7	U	5	U	43	U	400.0	U				
1,3-Dichloropropane	142-28-9	- -	UG/KG																										
1,4-Dichlorobenzene	106-46-7	9800	-	UG/KG										5.8	U	11	U	5.7	U	5	U	43	U	400.00	U				
2,2-Dichloropropane	594-20-7	- -	UG/KG																										
2-Chlorotoluene	95-49-8	- -	UG/KG																										
2-Hexanone	591-78-6	- -	UG/KG											12	U	23	U	11	U	10	U	85	U						
2-Isopropyltoluene	95-70-5	- -	UG/KG																										
4-Chlorotoluene	106-43-4	- -	UG/KG																										
4-Methyl-2-pentanone	108-10-1	- -	UG/KG											12	U	23	U	11	U	10	U	85	U						
Acetone	67-64-1	100000	a	UG/KG										12	U	23	U	11	U	10	U	380	U						
Acrylonitrile	107-13-1	- -	UG/KG																										
Benzene	71-43-2	2900	-	UG/KG										5.8	U	11	U	5.7	U	5	U	43	U						
Bromobenzene	108-86-1	- -	UG/KG																										
Bromochloromethane	74-97-5	- -	UG/KG											5.8	U	11	U	5.7	U	5	U	43	U						
Bromodichloromethane	594-18-3	- -	UG/KG											5.8	U	11	U	5.7	U	5	U	43	U						
Bromoform	75-25-2	- -	UG/KG											5.8	U	11	U	5.7	U	5	U	43	U						
Bromomethane	74-83-9	- -	UG/KG											5.8	U	11	U	5.7	U	5	U	43	U						
Carbon Disulfide	75-15-0	- -	UG/KG											5.8	U	11	U	5.7	U	5	U	65	U						
Carbon tetrachloride	56-23-5	1400	-	UG/KG										5.8	U	11	U	5.7	U	5	U	43	U						
Chlorobenzene	108-90-7	100000	a	UG/KG										5.8	U	11	U	5.7	U	5	U	43	U						
Chloroethane	75-00-3	- -	UG/KG											5.8	U	11	U	5.7	U	5	U	43	U						
Chloroform	67-66-3	10000	-	UG/KG										5.8	U	11	U	5.7	U	5	U	43	U						
Chloromethane	74-87-3	- -	UG/KG											5.8	U	11	U	5.7	U	5	U	43	U						
cis-1,2-Dichloroethene	156-59-2	59000	-	UG/KG										5.8	U	34		5.7	U	5	U	96	U						
cis-1,3-Dichloropropene	10061-01-5	- -	UG/KG											5.8	U	11	U	5.7	U	5	U	43	U						
Chlorodibromomethane	124-48-1	- -	UG/KG											5.8	U	11	U	5.7	U	5	U	43	U						
1,2-Dibromoethane	106-93-4	- -	UG/KG											5.8	U	11	U	5.7	U	5	U	43	U						
Dibromomethane	74-95-3	- -	UG/KG											5.8	U	11	U	5.7	U	5	U	43	U						
Dichlorodifluoromethane	75-71-8	- -	UG/KG											5.8	U	11	U	5.7	U	5	U	43	U						
Ethylbenzene	100-41-4	30000	-	UG/KG										5.8	U	11	U	5.7	U	5	U	43	U						
Hexachlorobutadiene	87-68-3	- -	UG/KG																5	U			400	U					
Isopropylbenzene	98-82-8	- -	UG/KG											5.8	U	11	U	5.7	U	5	U	43	U						
m&p-Xylene	108-38-3	- -	UG/KG											5.8	U	11	U	5.7	U	5	U	43	U						
2-Butanone	78-93-3	100000	a	UG/KG										12	U	23	U	11	U	10	U	96	U						
Methyl tert-butyl ether	1634-04-4	- -	UG/KG											5.8	U	11	U	5.7	U	5	U	43	U						
Methylene chloride	75-09-2	51000	-	UG/KG										5.8	U	11	U	5.7	U	5	U	43	U						
n-Butylbenzene	104-51-8	100000	a	UG/KG										5.8	U	11	U	5.7	U	5	U	43	U						
n-Propylbenzene	103-65-1	100000	a	UG/KG										5.8	U	11	U	5.7	U	5	U	43	U						
Naphthalene	91-20-3	100000	a	UG/KG															5	U			400	U					
o-Xylene	95-47-6	- -	UG/KG											5.8	U	11	U	5.7	U	5	U	43	U						
4-Isopropyltoluene	99-87-6	- -	UG/KG																										
sec-Butylbenzene	135-98-8	100000	a	UG/KG										5.8	U	11	U	5.7	U	5	U	43	U						
Styrene	100-42-5	- -	UG/KG											5.8	U	11	U	5.7	U	5	U	43	U						
tert-Butylbenzene	98-06-6	100000	a	UG/KG										5.8	U	11	U	5.7	U	5	U	43	U						
Tetrachloroethene	127-18-4	5500	-	UG/KG										5.8	U	11	U	27				5	U	43	U				
Tetrahydrofuran	109-99-9	- -	UG/KG																										
Toluene	108-88-3	100000	a	UG/KG										5.8	U	11	U	5.7	U	5	U	43	U						
Xylene (mixed)	1330-20-7	100000	a	UG/KG																									
trans-1,2-Dichloroethene	156-60-5	100000	a	UG/KG										5.8	U	11	U	5.7	U	5	U	43	U						
trans-1,3-Dichloropropene	10061-02-6	- -	UG/KG											5.8	U	11	U	5.7	U	5	U	43	U						
trans-1,4-dichloro-2-butene	110-57-6	- -	UG/KG																										
Trichloroethene	79-01-6	10000	-	UG/KG										7.3		11	U	19				5	U	43	U				
Trichlorofluoromethane	75-69-4	- -	UG/KG											5.8	U	11	U	5.7	U	5	U	43	U						
1,1,2-Trichlorotrifluoroethane	75-13-1	- -	UG/KG											5.8	U	11	U	5.7	U	5	U	43	U						
Vinyl chloride	75-01-4	210	-	UG/KG										5.8	U	11	U	5.7	U	5	U	58	U						
1,4-Dioxane	123-91-1	9800	-	UG/KG										120	U	230	U	110	U	100	U	850	U						

TABLE 2
SUBSURFACE SOIL SAMPLES

SUBSURFACE SOIL SAMPLES				SAMPLE ID: U1009054-007A		FC 108 0.6-2ft	FC 109 0.8-2.2ft	FC 110 0.6-1.4ft	FC 111 0.8-2ft	FC 112 1.5-3.2ft	B-60A 1-4ft	B-60A 4-8ft	B-60B 1-4ft	B-60B 4-10ft	B-60C 1-4ft	B 60C 4-8ft	B 60D 1-4ft	B 60D 4-8ft	MH1 0-4ft		
Restricted Soil Cleanup Objectives (SCO) - Residential				LAB ORDER: U1009054-007A		U1009054-007A	U1009054-008A	U1009054-009A	U1009054-010A	U1009054-011A	U1009400-002A	U1009400-003A	U1009400-005A	U1009400-006A	U1009400-008A	U1009400-009A	U1009400-011A	U1009400-013A	U1009400-014B		
SAMPLE DATE: 8/31/2010				8/31/2010	8/31/2010	8/31/2010	8/31/2010	8/31/2010	8/31/2010	8/31/2010	9/20/2010	9/20/2010	9/20/2010	9/20/2010	9/20/2010	9/20/2010	9/20/2010	9/20/2010	9/20/2010	9/20/2010	
VOLATILES/SEMI-VOLATILES (EPA METHOD 8260-8270)				CAS	RSCQ Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
1,1,1,2-Tetrachloroethane				630-20-6	-- UG/KG					1,1,1,2-Tetrachloroethane											
1,1,1-Trichloroethane				71-55-6	100000 a UG/KG			12	U												
1,1,2,2-Tetrachloroethane				79-34-5	-- UG/KG			12	U												
1,1,2-Trichloroethane				79-00-5	-- UG/KG			12	U												
1,1-Dichloroethane				75-34-3	19000 - UG/KG			12	U												
1,1-Dichloroethene				75-35-4	100000 a UG/KG			12	U												
1,1-Dichloropropene				563-58-6	-- UG/KG																
1,2,3-Trichlorobenzene				87-61-6	-- UG/KG			12	U												
1,2,3-Trichloropropane				96-18-4	-- UG/KG																
1,2,4-Trichlorobenzene				120-82-1	-- UG/KG			380	U												
1,2,4-Trimethylbenzene				95-63-6	47000 - UG/KG			12	U												
1,2-Dibromo-3-chloropropane				96-12-8	-- UG/KG			12	U												
1,2-Dichlorobenzene				95-50-1	100000 a UG/KG			380	U												
1,2-Dichloroethane				107-06-2	2300 - UG/KG			12	U												
1,2-Dichloropropane				78-87-5	-- UG/KG			12	U												
1,3,5-Trimethylbenzene				108-67-8	47000 - UG/KG			12	U												
1,3-Dichlorobenzene				541-73-1	17000 - UG/KG			380	U												
1,3-Dichloropropane				142-28-9	-- UG/KG																
1,4-Dichlorobenzene				106-46-7	9800 - UG/KG			380	U												
2,2-Dichloropropane				594-20-7	-- UG/KG																
2-Chlorotoluene				95-49-8	-- UG/KG																
2-Hexanone				591-78-6	-- UG/KG			23	U												
2-Isopropyltoluene				95-70-5	-- UG/KG																
4-Chlorotoluene				106-43-4	-- UG/KG																
4-Methyl-2-pentanone				108-10-1	-- UG/KG			23.00	U												
Acetone				67-64-1	100000 a UG/KG			320	U												
Acrylonitrile				107-13-1	-- UG/KG																
Benzene				71-43-2	2900 - UG/KG			12	U												
Bromobenzene				108-86-1	-- UG/KG																
Bromochloromethane				74-97-5	-- UG/KG			12	U												
Bromodichloromethane				594-18-3	-- UG/KG			12	U												
Bromoform				75-25-2	-- UG/KG			12	U												
Bromomethane				74-83-9	-- UG/KG			12	U												
Carbon Disulfide				75-15-0	-- UG/KG			12	U												
Carbon tetrachloride				56-23-5	1400 - UG/KG			12	U												
Chlorobenzene				108-90-7	100000 a UG/KG			12	U												
Chloroethane				75-00-3	-- UG/KG			12	U												
Chloroform				67-66-3	10000 - UG/KG			12.00	U												
Chloromethane				74-87-3	-- UG/KG			12	U												
cis-1,2-Dichloroethene				156-59-2	59000 - UG/KG			12	U												
cis-1,3-Dichloropropene				10061-01-5	-- UG/KG			12	U												
Chlorodibromomethane				124-48-1	-- UG/KG			12	U												
1,2-Dibromoethane				106-93-4	-- UG/KG			12	U												
Dibromomethane				74-95-3	-- UG/KG																
Dichlorodifluoromethane				75-71-8	-- UG/KG			12	U												
Ethylbenzene				100-41-4	30000 - UG/KG			12	U												
Hexachlorobutadiene				87-68-3	-- UG/KG			380	U												
Isopropylbenzene				98-82-8	-- UG/KG			12	U												
m&p-Xylene				108-38-3	-- UG/KG			12	U												
2-Butanone				78-93-3	100000 a UG/KG			23	U												
Methyl tert-butyl ether				1634-04-4	-- UG/KG			12	U												
Methylene chloride				75-09-2	51000 - UG/KG			12	U												
n-Butylbenzene				104-51-8	100000 a UG/KG			12.00	U												
n-Propylbenzene				103-65-1	100000 a UG/KG			12.00	U												
Naphthalene				91-20-3	100000 a UG/KG			380	U												
o-Xylene				95-47-6	-- UG/KG			12	U												
4-Isopropyltoluene				99-87-6	-- UG/KG																
sec-Butylbenzene				135-98-8	100000 a UG/KG			12	U												
Styrene				100-42-5	-- UG/KG			12	U												
tert-Butylbenzene				98-06-6	100000 a UG/KG			12	U												
Tetrachloroethene				127-18-4	5500 - UG/KG			14	U												
Tetrahydrofuran				109-99-9	-- UG/KG																
Toluene				108-88-3	100000 a UG/KG			12	U												
Xylene (mixed)				1330-20-7	100000 a UG/KG																
trans-1,2-Dichloroethene				156-60-5	100000 a UG/KG			12	U												
trans-1,3-Dichloropropene				10061-02-6	-- UG/KG			12	U												
trans-1,4-dichloro-2-butene				110-57-6	-- UG/KG																
Trichloroethene				79-01-6	10000 - UG/KG			12	U												
Trichlorofluoromethane				75-69-4	-- UG/KG			12	U												
1,1,2-Trichloro-1,1,2,2-tetrafluoroethane				75-71-1	-- UG/KG			12	U												
Vinyl chloride				75-01-4	210 - UG/KG			12	U												
1,4-Dioxane				123-91-1	9800 - UG/KG			230	U												
Cyclohexane				110-82-7	-- UG/KG			12.00	U												
Methyl Acetate				79-20-9	-- UG/KG			12	U												
Methylcyclohexane				108-87-2	-- UG/KG			12	U												
tert-butyl alcohol				75-65-0	-- UG/KG			230	U												
m-Cresol				108-39-4	100000 a UG/KG			380	U												
1,2,4-Trichlorobenzene				120-82-1	-- UG/KG			12	U												
1,2-Dichlorobenzene				95-50-1	100000 a UG/KG			12	U												
1,3-Dichlorobenzene				541-73-1	17000 - UG/KG			12	U												
1,4-Dichlorobenzene				106-46-7	9800 - UG/KG			12	U												

SECRETAGE COLE SAINT LEE

VOLATILES/SEMI-VOLATILES (EPA METHOD 8260-8270)		CAS	RSO	Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
1,1,1,2-Tetrachloroethane	630-20-6	--	UG/KG																											
1,1,1-Trichloroethane	71-55-6	100000	a	UG/KG	12.0	U		46.0	U				680	U	18.0	U	38	U	13	U	670.0	U	14.0	U			11.0	U	68.0	U
1,1,2,2-Tetrachloroethane	79-34-5	--	UG/KG	12	U	46.0	U						680	U	18	U	38	UQ	13	U	670.0	U	14.0	U			11	U	68.0	U
1,1,2-Trichloroethane	79-00-5	--	UG/KG	12	U	46.0	U						680	U	18	U	38	UQ	13	U	670.0	U	14.0	U			11	U	68.0	U
1,1-Dichloroethane	75-34-3	19000	-	UG/KG	12.00	U		46.0	U				680	U	18.00	U	38	U	13	U	670.0	U	14.0	U			11.00	U	68.0	U
1,1-Dichloroethene	75-35-4	100000	a	UG/KG	12	U		46.0	U				680	U	18	U	38	U	13	U	670.0	U	14.0	U			11	U	68.0	U
1,1-Dichloropropane	563-58-6	--	UG/KG																											
1,2,3-Trichlorobenzene	87-61-6	--	UG/KG	12	U	46.0	U						680	U	18	U	38	U	13	U	670.0	U	14.0	U			11	U	68.0	U
1,2,3-Trichloropropane	96-18-4	--	UG/KG																											
1,2,4-Trichlorobenzene	120-82-1	--	UG/KG	12	U	46.0	U						680	U	18	U	38	U	4200	U	670.0	U	14.0	U			11	U	68.0	U
1,2,4-Trimethylbenzene	95-63-6	47000	-	UG/KG	12	U		46.0	U				680	U	18	U	38	U	13	U	670.0	U	14.0	U			11	U	68.0	U
1,2-Dibromo-3-chloropropane	96-12-8	--	UG/KG	12	U	46.0	U						680	U	18	U	38	U	13	U	670.0	U	14.0	U			11	U	68.0	U
1,2-Dichlorobenzene	95-50-1	100000	a	UG/KG	12	U		46.0	U				680	U	18	U	38	U	4200	U	670.0	U	14.0	U			11	U	68.0	U
1,2-Dichloroethane	107-06-2	2300	-	UG/KG	12	UQ		46.0	UQ				680	U	18	UQ	38	UQ	13	UQ	670.0	UQ	14.0	UQ			11	UQ	68.0	U
1,2-Dichloropropane	78-87-5	--	UG/KG	12	U	46	U						680	U	18	U	38	UQ	13	U	670	U	14	U			11	U	68	U
1,3,5-Trimethylbenzene	108-67-8	47000	-	UG/KG	12	U		46	U				680	U	18	U	38	U	13	U	670	U	14	U			11	U	68	U
1,3-Dichlorobenzene	541-73-1	17000	-	UG/KG	12.0	U		46	U				680	U	18.0	U	38	U	4200	U	670	U	14	U			11.0	U	68	U
1,3-Dichloropropane	142-28-9	--	UG/KG																											
1,4-Dichlorobenzene	106-46-7	9800	-	UG/KG	12.00	U		46.0	U				680	U	18.00	U	38	U	4200	U	670.0	U	14.0	U			11.00	U	68.0	U
2,2-Dichloropropane	594-20-7	--	UG/KG																											
2-Chlorotoluene	95-49-8	--	UG/KG																											
2-Hexanone	591-78-6	--	UG/KG	24	U	91.0	U						1400	U	37	U	77	UQ	25	U	1300.0	U	28.0	U			22	U	140.0	U
2-Isopropyltoluene	95-70-5	--	UG/KG																											
4-Chlorotoluene	106-43-4	--	UG/KG																											
4-Methyl-2-pentanone	108-10-1	--	UG/KG	24.00	U	91.0	U						1400	U	37.00	U	77.00	UQ	25.00	U	1300	U	28.0	U			22.00	U	140.0	U
Acetone	67-64-1	100000	a	UG/KG	24	U		91.0	U				1400	U	37	U	77	U	25	U	1300	U	40.0	U			22	U	140.0	U
Acrylonitrile	107-13-1	--	UG/KG																											
Benzene	71-43-2	2900	-	UG/KG	12	U		46.0	U				680	U	18	U	38	UQ	13	U	670.0	U	14.0	U			11	U	68.0	U
Bromobenzene	108-86-1	--	UG/KG																											
Bromochloromethane	74-97-5	--	UG/KG	12	U	46.0	U						680	U	18	U	38	UQ	13	U	670.0	U	14.0	U			11	U	68.0	U
Bromodichloromethane	594-18-3	--	UG/KG	12.00	U	46.0	U						680	U	18.00	U	38	UQ	13	U	670.0	U	14.0	U			11.00	U	68.0	U
Bromoform	75-25-2	--	UG/KG	12	U	46.0	U						680	U	18	U	38	UQ	13	U	670.0	U	14.0	U			11	U	68.0	U
Bromomethane	74-83-9	--	UG/KG	12	U	46.0	U						680	U	18	U	38	U	13	U	670.0	U	14.0	U			11	U	68.0	U
Carbon Disulfide	75-15-0	--	UG/KG	12.00	U	46.0	U						680	U	18.00	U	38	UQ	13	U	670.0	U	14.0	U			11.00	U	68.0	U
Carbon tetrachloride	56-23-5	1400	-	UG/KG	12	U		46.0	U				680	U	18	U	38	U	13	U	670.0	U	14.0	U			11	U	68.0	U
Chlorobenzene	108-90-7	100000	a	UG/KG	12	U		46.0	U				680	U	18	U	38	U	13	U	670.0	U	14.0	U			11	U	68.0	U
Chloroethane	75-00-3	--	UG/KG	12	UQ	46.0	UQ						680	U	18	UQ	38	UQ	13	UQ	670.0	UQ	14.0	UQ			11	UQ	68.0	U
Chloroform	67-66-3	10000	-	UG/KG	12	U		46.0	U				680	U	18	U	38.00	UQ	13.00	U	670.0	U	14.0	U			11	U	68.0	U
Chloromethane	74-87-3	--	UG/KG	12	U	46.0	U						680	U	18	U	38	U	13	U	670.0	U	14.0	U			11	U	68.0	U
cis-1,2-Dichloroethene	156-59-2	59000	-	UG/KG	12	U		46.0	U				700		93		38	UQ	13	U	670.0	U	14.0	U			11	U	68.0	U
cis-1,3-Dichloropropene	10061-01-5	--	UG/KG	12	U	46.0	U						680	U	18	U	38	UQ	13	U	670.0	U	14.0	U			11	U	68.0	U
Chlorodibromomethane	124-48-1	--	UG/KG	12	U	46.0	U						680	U	18	U	38	UQ	13	U	670.0	U	14.0	U			11	U	68.0	U
1,2-Dibromomethane	106-59-4	--	UG/KG	12	UQ	46.0	UQ						680	U	18	UQ	38	UQ	13	UQ	670.0	UQ	14.0	UQ			11	UQ	68.0	U
Dibromomethane	74-95-3	--	UG/KG																											
Dichlorodifluoromethane	75-71-8	--	UG/KG	12	U	46	U						680	U	18	U	38	U	13	U	670	U	14	U			11	U	68	U
Ethylbenzene	100-41-4	30000	-	UG/KG	12.0	U		46	U				680	U	18.0	U	38	U	13	U	670	U	14	U			11.0	U	68	U
Hexachlorobutadiene	87-68-3	--	UG/KG																4200	U	4400	U								
Isopropylbenzene	98-82-8	--	UG/KG	12.00	U	46.0	U						680	U	18.00	U	38	U	13	U	670.0	U	14.0	U			11.00	U	68.0	U
m&p-Xylene	108-38-3	--	UG/KG	12	U	46.0	U						680	U	18	U	38	U	13	U	670.0	U	14.0	U			11	U	68.0	U
2-Butanone	78-93-3	100000	a	UG/KG	24	UQ		91.0	UQ				1400	U	37	UQ	77	UQ	25	UQ	1300.0	UQ	28.0	UQ			22	UQ	140.0	U
Methyl tert-butyl ether	1634-04-4	--	UG/KG	12	UQ	46.0	UQ						680	U	18	UQ	38	U	13	UQ	670.0	UQ	14.0	UQ			11	UQ	68.0	U
Methylene chloride	75-09-2	51000	-	UG/KG	12	U		46.0	U				680	UQ	18	U	38	U	13	U	670.0	U	14.0	U			11	U	73.0	Q
n-Butylbenzene	104-51-8	100000	a	UG/KG	12.00	U		46.0	U				680	U	18.00	U	38.00	U	13.00	U	670.0	U	14.0	U			11.00	U	68.0	U
n-Propylbenzene	103-65-1	100000	a	UG/KG	12.00	U		46.0	U				680	U	18.00	U	38.00	U	13.00	U	670.0	U	14.0	U			11.00	U	68.0	U
Naphthalene	91-20-3	100000	a	UG/KG															4200	U	4400	U								
o-Xylene	95-47-6	--	UG/KG	12	U	46.0	U						680	U	18	U	38	U	13	U	670.0	U	14.0	U			11	U	68.0	U
4-Isopropyltoluene	99-87-6	--	UG/KG																											
sec-Butylbenzene	135-98-8	100000	a	UG/KG	12	U		46.0	U				680	U	18	U	38	U	13	U	670.0	U	14.0	U			11	U	68.0	U
Styrene	100-42-5	--	UG/KG	12	U	46.0	U						680	U	18	U	38	U	13	U	670.0	U	14.0	U			11	U	68.0	U
tert-Butylbenzene	98-06-6	100000	a	UG/KG	12.00	U		46.0	U				680	U	18.00	U	38	U	13	U	670.0	U	14.0	U			11.00	U	68.0	U
Tetrachloroethene	127-18-4	5500	-	UG/KG	12	UQ		46.0	UQ				680	U	18															

TABLE 2
SUBSURFACE SOIL SAMPLES

Restricted Soil Cleanup Objectives (SCO) - Residential			SAMPLE ID: LAB ORDER: SAMPLE DATE:		B 32D 2-10ft U1009400-031A 9/21/2010		OP-6 U1009400-032C 9/21/2010		MH3 U1009400-033B 9/21/2010		MH4 U1009400-034B 9/21/2010		SS-3 U1009400-035A 9/21/2010		SS-4 U1009400-036A 9/21/2010	
VOLATILES/SEMI-VOLATILES (EPA METHOD 8260-8270)			CAS	RSCQ Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
1,1,1,2-Tetrachloroethane	630-20-6	- -	UG/KG													
1,1,1-Trichloroethane	71-55-6	100000	a	UG/KG												
1,1,2,2-Tetrachloroethane	79-34-5	- -	UG/KG													
1,1,2-Trichloroethane	79-00-5	- -	UG/KG													
1,1-Dichloroethane	75-34-3	19000	-	UG/KG												
1,1-Dichloroethene	75-35-4	100000	a	UG/KG												
1,1-Dichloropropene	563-58-6	- -	UG/KG													
1,2,3-Trichlorobenzene	87-61-6	- -	UG/KG													
1,2,3-Trichloropropane	96-18-4	- -	UG/KG													
1,2,4-Trichlorobenzene	120-82-1	- -	UG/KG													
1,2,4-Trimethylbenzene	95-63-6	47000	-	UG/KG												
1,2-Dibromo-3-chloropropane	96-12-8	- -	UG/KG													
1,2-Dichlorobenzene	95-50-1	100000	a	UG/KG												
1,2-Dichloroethane	107-06-2	2300	-	UG/KG												
1,2-Dichloropropane	78-87-5	- -	UG/KG													
1,3,5-Trimethylbenzene	108-67-8	47000	-	UG/KG												
1,3-Dichlorobenzene	541-73-1	17000	-	UG/KG												
1,3-Dichloropropane	142-28-9	- -	UG/KG													
1,4-Dichlorobenzene	106-46-7	9800	-	UG/KG												
2,2-Dichloropropane	594-20-7	- -	UG/KG													
2-Chlorotoluene	95-49-8	- -	UG/KG													
2-Hexanone	591-78-6	- -	UG/KG													
2-Isopropyltoluene	95-70-5	- -	UG/KG													
4-Chlorotoluene	106-43-4	- -	UG/KG													
4-Methyl-2-pentanone	108-10-1	- -	UG/KG													
Acetone	67-64-1	100000	a	UG/KG												
Acrylonitrile	107-13-1	- -	UG/KG													
Benzene	71-43-2	2900	-	UG/KG												
Bromobenzene	108-86-1	- -	UG/KG													
Bromochloromethane	74-97-5	- -	UG/KG													
Bromodichloromethane	594-18-3	- -	UG/KG													
Bromofom	75-25-2	- -	UG/KG													
Bromomethane	74-83-9	- -	UG/KG													
Carbon Disulfide	75-15-0	- -	UG/KG													
Carbon tetrachloride	56-23-5	1400	-	UG/KG												
Chlorobenzene	108-90-7	100000	a	UG/KG												
Chloroethane	75-00-3	- -	UG/KG													
Chloroform	67-66-3	10000	-	UG/KG												
Chloromethane	74-87-3	- -	UG/KG													
cis-1,2-Dichloroethene	156-59-2	59000	-	UG/KG												
cis-1,3-Dichloropropene	10061-01-5	- -	UG/KG													
Chlorodibromomethane	124-48-1	- -	UG/KG													
1,2-Dibromoethane	106-93-4	- -	UG/KG													
Dibromomethane	74-95-3	- -	UG/KG													
Dichlorodifluoromethane	75-71-8	- -	UG/KG													
Ethylbenzene	100-41-4	30000	-	UG/KG												
Hexachlorobutadiene	87-68-3	- -	UG/KG													
Isopropylbenzene	98-82-8	- -	UG/KG													
m&p-Xylene	108-38-3	- -	UG/KG													
2-Butane	78-93-3	100000	a	UG/KG												
Methyl tert-butyl ether	1634-04-4	- -	UG/KG													
Methylene chloride	75-09-2	51000	-	UG/KG												
n-Butylbenzene	104-51-8	100000	a	UG/KG												
n-Propylbenzene	103-65-1	100000	a	UG/KG												
Naphthalene	91-20-3	100000	a	UG/KG												
o-Xylene	95-47-6	- -	UG/KG													
4-Isopropyltoluene	99-87-6	- -	UG/KG													
sec-Butylbenzene	135-98-8	100000	a	UG/KG												
Styrene	100-42-5	- -	UG/KG													
tert-Butylbenzene	98-06-6	100000	a	UG/KG												
Tetrachloroethene	127-18-4	5500	-	UG/KG												
Tetrahydrofuran	109-99-9	- -	UG/KG													
Toluene	108-88-3	100000	a	UG/KG												
Xylene (mixed)	1330-20-7	100000	a	UG/KG												
trans-1,2-Dichloroethene	156-60-5	100000	a	UG/KG												
trans-1,3-Dichloropropene	10061-02-6	- -	UG/KG													
trans-1,4-dichloro-2-butene	110-57-6	- -	UG/KG													
Trichloroethene	79-01-6	10000	-	UG/KG												
Trichlorofluoromethane	75-69-4	- -	UG/KG													
1,1,2-Trichlorotrifluoroethane	76-13-1	- -	UG/KG													
Vinyl chloride	75-01-4	210	-	UG/KG												
1,4-Dioxane	123-91-1	9800	-	UG/KG												
Cyclohexane	110-82-7	- -	UG/KG													
Methyl Acetate	77-20-9	- -	UG/KG													
Methylcyclohexane	108-87-2	- -	UG/KG													
tert-butyl alcohol	75-65-0	- -	UG/KG													
m-Cresol	108-39-4	100000	a	UG/KG												
1,2,4-Trichlorobenzene	120-82-1	- -	UG/KG													
1,2-Dichlorobenzene	95-50-1	100000	a	UG/KG												
1,3-Dichlorobenzene	541-73-1	17000	-	UG/KG												
1,4-Dichlorobenzene	106-46-7	9800	-	UG/KG												

TABLE 2
SUBSURFACE SOIL SAMPLES

SUBSURFACE SOIL SAMPLES			SAMPLE ID: LAB ORDER: SAMPLE DATE:		B-1 8-10.5ft U1008256-002A 8/5/2010	B-3 2.5-4ft U1008256-003A 8/5/2010	B-4 10-11.5ft U1008256-004A 8/5/2010	B-6 5ft U1008256-005A 8/5/2010	B-7 8-12ft U1008256-006A 8/6/2010	B-8 6-9.7ft U1008256-007A 8/6/2010	B-9 7.5-13ft U1008256-008A 8/6/2010	B-10 8-12ft U1008256-009A 8/6/2010	B-11 8.2-8.8ft U1008256-010A 8/6/2010	B-12 6.2-8.2ft U1008256-011A 8/6/2010	B-20 8-11.5ft U1008324-002A 8/13/2010	B-23 7.4-8.5ft U1008324-003A 8/13/2010	B-24 4-6.5ft U1008324-004A 8/13/2010	B-25 10.3-11.5 U1008324-005A 8/13/2010													
VOLATILES/SEMI-VOLATILES (Continued) (EPA METHOD 8260-8270)			CAS	RSCQ Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL													
2,3,4,6-Tetrachlorophenol	58-90-2	- -	UG/KG						89000.0	U			4000	U																	
2,4,5-Trichlorophenol	95-95-4	- -	UG/KG						89000.0	U			4000	U																	
2,4,6-Trichlorophenol	88-06-2	- -	UG/KG						89000.0	U			4000	U																	
2,4-Dichlorophenol	120-83-2	- -	UG/KG						89000.0	U			4000	U																	
2,4-Dimethylphenol	105-67-9	- -	UG/KG						89000.0	U			4000	U																	
2,4-Dinitrophenol	51-28-5	- -	UG/KG						89000.0	U			4000	U																	
2,4-Dinitrotoluene	121-14-2	- -	UG/KG						89000.0	U			4000	U																	
2,6-Dinitrotoluene	606-20-2	- -	UG/KG						89000.0	U			4000	U																	
2-Chloronaphthalene	91-58-7	- -	UG/KG						89000.0	U			4000	U																	
2-Chlorophenol	95-57-8	- -	UG/KG						89000.0	U			4000	U																	
2-Methylnaphthalene	91-57-6	- -	UG/KG						89000.0	U			4000	U																	
2-Methylphenol	95-48-7	100000 a	UG/KG						89000.0	U			4000	U																	
2-Nitroaniline	88-74-4	- -	UG/KG						890000.0	U			40000	U																	
2-Nitrophenol	88-75-5	- -	UG/KG						89000.0	U			4000	U																	
3,3-Dichlorobenzidine	91-94-1	- -	UG/KG						89000.0	U			4000	U																	
3-Nitroaniline	99-09-2	- -	UG/KG						890000.0	U			40000	U																	
4,6-Dinitro-2-methylphenol	534-52-1	- -	UG/KG						890000.0	U			40000	U																	
4-Bromophenyl-phenylether	101-55-3	- -	UG/KG						89000.0	U			4000	U																	
4-Chloro-3-Methylphenol	59-50-7	- -	UG/KG						89000.0	U			4000	U																	
4-Chloroaniline	106-47-8	- -	UG/KG						89000.0	U			4000	U																	
4-Chlorophenyl-phenylether	7005-72-3	- -	UG/KG						89000.0	U			4000	U																	
4-Nitroaniline	100-01-6	- -	UG/KG						890000.00	U			40000	U																	
4-Nitrophenol	100-02-7	- -	UG/KG						890000.0	U			4000	U																	
Acenaphthene	83-32-9	100000 a	UG/KG	4800	U	4000	U	350	U	89000.0	U	4500	U	4000	U	7500	U	4000	U	38000	U	4000	U	3800	U	3700.0	U	3800	U	3700.0	U
Acenaphthylene	208-96-8	100000 a	UG/KG						89000.0	U			4000	U																	
Anthracene	120-12-7	100000 a	UG/KG	4800	U	4000	U	350	U	140000	U	4500	U	4000	U	7500	U	4000	U	38000	U	4000	U	3800	U	3700.0	U	3800	U	3700.0	U
Benzo(a)anthracene	56-55-3	1000 f	UG/KG	4800	U	4000	U	350	U	130000	U	4500	U	4000	U	7500.0	U	4000	U	38000	U	4000	U	3800	U	3700	U	3800	U	3700	U
Benzo(a)pyrene	50-32-8	1000 f	UG/KG	4800	U	4000	U	350	U	100000	U	4500	U	4000	U	7500	U	4000	U	38000	U	4000	U	3800	U	3700	U	3800	U	3700	U
Benzo(b)fluoranthene	205-99-2	1000 f	UG/KG	4800	U	4000	U	350	U	100000	U	4500	U	4000	U	7500	U	4000	U	38000	U	4000	U	3800	U	3700	U	3800	U	3700	U
Benzo(g,h,i)perylene	191-24-2	100000 a	UG/KG	4800	U	4000	U	350	U	89000.0	U	4500.0	U	4000	U	7500	U	4000	U	38000	U	4000	U	3800	U	3700	U	3800	U	3700	U
Benzo(k)fluoranthene	207-08-9	1000 -	UG/KG	4800	U	4000	U	350	U	89000.0	U	4500	U	4000	U	7500	U	4000	U	38000	U	4000	U	3800	U	3700.0	U	3800	U	3700.0	U
bis(2-Chloroethoxy)methane	111-91-1	- -	UG/KG						89000.0	U			4000	U			4000	U													
bis(2-Chloroethyl)Ether	111-44-4	- -	UG/KG						89000.0	U			4000	U			4000	U													
Bis(2-chloroisopropyl)ether	108-60-1	- -	UG/KG						89000.0	U			4000	U			4000	U													
bis(2-Ethylhexyl)phthalate	117-81-7	- -	UG/KG						89000.00	U			4000	U			4000	U													
Butylbenzylphthalate	85-68-7	- -	UG/KG						89000.0	U			4000	U			4000	U													
Carbazole	86-74-8	- -	UG/KG						89000.0	U			4000	U			4000	U													
Chrysene	218-01-9	1000 f	UG/KG	4800	U	4000	U	350	U	100000	U	4500	U	4000	U	7500	U	4000	U	38000	U	4000	U	3800	U	3700.0	U	3800	U	3700.0	U
Di-n-butylphthalate	84-74-2	- -	UG/KG						89000.0	U			4000	U			4000	U													
Di-n-octylphthalate	117-84-0	- -	UG/KG						89000.0	U			4000	U			4000	U													
Dibenzo(a,h)anthracene	53-70-3	330 e	UG/KG	4800	U	4000	U	350	U	89000.0	U	4500	U	4000	U	7500	U	4000	U	38000	U	4000	U	3800	U	3700	U	3800	U	3700	U
Dibenzofuran	132-64-9	- -	UG/KG						89000.0	U			4000	U			4000	U													
Diethylphthalate	84-66-2	- -	UG/KG						89000.0	U			4000	U			4000	U													
Dimethylphthalate	131-11-3	- -	UG/KG						89000.0	U			4000	U			4000	U													
Fluoranthene	206-44-0	100000 a	UG/KG	4800	U	4000	U	350	U	420000	U	4500	U	5700	U	7500	U	4000	U	38000	U	4000	U	3800	U	3700.0	U	3800	U	3700.0	U
Fluorene	86-73-7	100000 a	UG/KG	4800	U	4000	U	350	U	100000	U	4500	U	4000	U	7500	U	4000	U	38000	U	4000	U	3800	U	3700.0	U	3800	U	3700.0	U
Hexachlorobenzene	118-74-1	330 e	UG/KG						89000.0	U			4000	U			4000	U													
Hexachlorobutadiene	87-68-3	- -	UG/KG						89000.0	U			4000	U			4000	U													
Hexachlorocyclopentadiene	77-47-4	- -	UG/KG						89000.0	U			4000	U			4000	U													
Hexachloroethane	67-72-1	- -	UG/KG						89000.0	U			4000	U			4000	U													
Indeno(1,2,3-cd)pyrene	193-39-5	500 f	UG/KG	4800	U	4000	U	350	U	90000	U	4500	U	4000.00	U	7500	U	4000	U	38000	U	4000	U	3800	U	3700.0	U	3800	U	3700.0	U
Isophorone	78-59-1	- -	UG/KG						89000.0	U			4000	U			4000	U													
N-Nitroso-di-n-propylamine	621-64-7	- -	UG/KG						89000.0	U			4000	U			4000	U													
N-Nitrosodiphenylamine(1)	86-30-6	- -	UG/KG						89000.0	U			4000	U			4000	U													
Naphthalene	91-20-3	100000 a	UG/KG						3600				36				3600	U													
Nitrobenzene	98-95-3	- -	UG/KG						89000.0	U			4000	U			4000	U													
Pentachlorophenol	87-86-5	2400 -	UG/KG						180000	U			8100	U			8100	U													
Phenanthrene	85-01-3	100000 a	UG/KG	4800	U	4000	U	350	U	890000	U	4500	U	4000	U	7500	U	4000	U	38000	U	4000	U	3800	U	3700	U	3800	U	3700	U
Phenol	108-95-2	100000 a	UG/KG						89000.0	U			4000	U			4000	U													
Pyrene	129-00-0	100000 a	UG/KG	4800	U	4000	U	350	U	160000	U	4500	U	4000	U	7500	U	4000	U	38000	U	4000	U	3800	U	3700.0	U	3800	U	3700.0	U
Total TICs			TTICs	- -	UG/KG				Done			Done		Done																	
TOTAL DETECTABLE (excludes TICs)						0	0	34860	1923600	189	5700	0	55600	0	380	0	0	780	0												

TABLE 2
SUBSURFACE SOIL SAMPLES

SUBSURFACE SOIL SAMPLES			SAMPLE ID: LAB ORDER: SAMPLE DATE:		B-28 0.5-0.8 U1008324-006A 8/13/2010	B-29 2-4ft U1008324-007A 8/13/2010	B-29 4-8ft U1008324-008A 8/13/2010	B-31 6.8-10ft U1008324-009A 8/13/2010	B-32 3.7-10ft U1008324-010A 8/13/2010	B-33 3-5.5ft U1008324-011A 8/16/2010	B-34 6-7ft U1008324-012A 8/16/2010	B-36 2.5-3.9ft U1008324-013A 8/16/2010	B-36 2.5-3.9ft U1008324-013A 8/16/2010	B-42 4-8ft U1008324-014A 8/17/2010	B-42 4-8ft U1008324-014A 8/17/2010	B-44 12-16ft U1008324-015A 8/17/2010	B-44 12-16ft U1008324-015A 8/17/2010	B-47 8ft-12ft U1008324-016A 8/17/2010		
Restricted Soil Cleanup Objectives (SCO) - Residential																				
VOLATILES/SEMI-VOLATILES (Continued) (EPA METHOD 8260-8270)			CAS	RSCQ Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL		
2,3,4,6-Tetrachlorophenol	58-90-2	- - UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520	U	4500	U	480	U
2,4,5-Trichlorophenol	95-95-4	- - UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480.00	U
2,4,6-Trichlorophenol	88-06-2	- - UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480	U
2,4-Dichlorophenol	120-83-2	- - UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480	U
2,4-Dimethylphenol	105-67-9	- - UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480	U
2,4-Dinitrophenol	51-28-5	- - UG/KG	40000	U	43000	U			42000	U	40000	U	38000	U	5200.0	U	45000	U	4800	U
2,4-Dinitrotoluene	121-14-2	- - UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500.00	U	480.00	U
2,6-Dinitrotoluene	606-20-2	- - UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500.00	U	480.00	U
2-Chloronaphthalene	91-58-7	- - UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480	U
2-Chlorophenol	95-57-8	- - UG/KG	4000	U	4300.00	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480	U
2-Methylnaphthalene	91-57-6	- - UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480	U
2-Methylphenol	95-48-7	100000 a UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480	U
2-Nitroaniline	88-74-4	- - UG/KG	40000	U	43000	U			42000	U	40000	U	38000	U	5200.0	U	45000	U	4800	U
2-Nitrophenol	88-75-5	- - UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480.00	U
3,3-Dichlorobenzidine	91-94-1	- - UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480	U
3-Nitroaniline	99-09-2	- - UG/KG	40000	U	43000	U			42000	U	40000	U	38000	U	5200.0	U	45000	U	4800	U
4,6-Dinitro-2-methylphenol	534-52-1	- - UG/KG	40000	U	43000	U			42000	U	40000	U	38000	U	5200.0	U	45000	U	4800.00	U
4-Bromophenyl-phenylether	101-55-3	- - UG/KG	4000.00	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480	U
4-Chloro-3-Methylphenol	59-50-7	- - UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480	U
4-Chloroaniline	106-47-8	- - UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480	U
4-Chlorophenyl-phenylether	7005-72-3	- - UG/KG	4000	U	4300.00	U			4200	U	4000	U	3800	U	520.0	U	4500.00	U	480	U
4-Nitroaniline	100-01-6	- - UG/KG	40000	U	43000	U			42000	U	40000	U	38000	U	5200.0	U	45000	U	4800	U
4-Nitrophenol	100-02-7	- - UG/KG	40000	U	43000	U			42000	U	40000	U	38000	U	5200.0	U	45000	U	4800	U
Acenaphthene	83-32-9	100000 a UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480	U
Acenaphthylene	208-96-8	100000 a UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480	U
Anthracene	120-12-7	100000 a UG/KG	4000.00	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480	U
Benzo(a)anthracene	56-55-3	1000 f UG/KG	4000	U	4300.0	U			4200	U	4000	U	3800	U	810		4500	U	480	U
Benzo(a)pyrene	50-32-8	1000 f UG/KG	4000.0	U	4300	U			4200	U	4000	U	3800	U	530		4500	U	480	U
Benzo(b)fluoranthene	205-99-2	1000 f UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	740		4500	U	480.0	U
Benzo(k)fluoranthene	191-24-2	100000 a UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520	U	4500	U	480	U
Benzo(k)fluoranthene	207-08-9	1000 - UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480.00	U
bis(2-Chloroethoxy)methane	111-91-1	- - UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480	U
bis(2-Chloroethyl)ether	111-44-4	- - UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480	U
Bis(2-chloroisopropyl)ether	108-60-1	- - UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480	U
bis(2-Ethylhexyl)phthalate	117-81-7	- - UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480	U
Butylbenzylphthalate	85-68-7	- - UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500.00	U	480.00	U
Carbazole	86-74-8	- - UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500.00	U	480.00	U
Chrysene	218-01-9	1000 f UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	760.0		4500	U	480	U
Di-n-butylphthalate	84-74-2	- - UG/KG	4000	U	4300.00	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480	U
Di-n-octylphthalate	117-84-0	- - UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480	U
Dibenzo(a,h)anthracene	53-70-3	330 e UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480	U
Dibenzofuran	132-64-9	- - UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480	U
Diethylphthalate	84-66-2	- - UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480.00	U
Dimethylphthalate	131-11-3	- - UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480	U
Fluoranthene	206-44-0	100000 a UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	5800		480	U
Fluorene	86-73-7	100000 a UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480.00	U
Hexachlorobenzene	118-74-1	330 e UG/KG	4000.00	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480	U
Hexachlorobutadiene	87-68-3	- - UG/KG																		
Hexachlorocyclopentadiene	77-47-4	- - UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480	U
Hexachloroethane	67-72-1	- - UG/KG	4000	U	4300.00	U			4200	U	4000	U	3800	U	520.0	U	4500.00	U	480	U
Indeno(1,2,3-cd)pyrene	193-39-5	500 f UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480	U
Isophorone	78-59-1	- - UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480	U
N-Nitroso-di-n-propylamine	621-64-7	- - UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480	U
N-Nitrosodiphenylamine(1)	86-30-6	- - UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	520.0	U	4500	U	480	U
Naphthalene	91-20-3	100000 a UG/KG	7.30	U	20	U								520.0	U	4500	U	480	U	
Nitrobenzene	98-95-3	- - UG/KG	4000	U	4300.0	U			4200	U	4000	U	3800	U	520	U	4500	U	480	U
Pentachlorophenol	87-86-5	2400 - UG/KG	8100.0	U	8700	U			8600	U	8200	U	7800	U	1100	U	9200	U	970	U
Phenanthrene	85-01-3	100000 a UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	850		4500	U	480	U
Phenol	108-95-2	100000 a UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	530		4500	U	480	U
Pyrene	129-00-0	100000 a UG/KG	4000	U	4300	U			4200	U	4000	U	3800	U	790.0		4500	U	480.00	U
Total TTCs	TTCs	- - UG/KG	Done		Done				Done	Done	Done	Done	Done	Done	Done	Done	Done	Done		
TOTAL DETECTABLE (excludes TTCs)			0		0		0		0	0	352	93	0	4525	0	10300	0	0	0	

TABLE 2
SUBSURFACE SOIL SAMPLES

SUBSURFACE SOIL SAMPLES			SAMPLE ID: LAB ORDER: SAMPLE DATE:		B-72 0-1.5ft U1008459-003A 8/23/2010	B-72 6-7ft U1008459-004A 8/23/2010	B-74 2-3ft U1008459-005A 8/23/2010	B-75 0-2.5ft U1008459-006A 8/23/2010	B-76 0-1ft U1008459-007A 8/23/2010	B-77 0.3-1ft U1008459-008A 8/23/2010	E-1 Oil U1008459-009A 8/23/2010	E-2 Oil/Sludge U1008459-010A 8/23/2010	B-76 0-1ft Dup U1008459-011A 8/23/2010	B-78 1-2ft U1008459-012A 8/24/2010	B-79 3.8-4.8ft U1008459-013A 8/24/2010	B-80 0.8-1.8ft U1008459-014A 8/24/2010	B-81 1-2ft U1008459-015A 8/24/2010	B-82 0.8-1.8ft U1008459-016A 8/24/2010		
VOLATILES/SEMI-VOLATILES (Continued) (EPA METHOD 8260-8270)			CAS	RSCQ Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
2,3,4,6-Tetrachlorophenol	58-90-2	- -	UG/KG																	
2,4,5-Trichlorophenol	95-95-4	- -	UG/KG																	
2,4,6-Trichlorophenol	88-06-2	- -	UG/KG																	
2,4-Dichlorophenol	120-83-2	- -	UG/KG																	
2,4-Dimethylphenol	105-67-9	- -	UG/KG																	
2,4-Dinitrophenol	51-28-5	- -	UG/KG																	
2,4-Dinitrotoluene	121-14-2	- -	UG/KG																	
2,6-Dinitrotoluene	606-20-2	- -	UG/KG																	
2-Chloronaphthalene	91-58-7	- -	UG/KG																	
2-Chlorophenol	95-57-8	- -	UG/KG																	
2-Methylnaphthalene	91-57-6	- -	UG/KG																	
2-Methylphenol	95-48-7	100000	a	UG/KG																
2-Nitroaniline	88-74-4	- -	UG/KG																	
2-Nitrophenol	88-75-5	- -	UG/KG																	
3,3-Dichlorobenzidine	91-94-1	- -	UG/KG																	
3-Nitroaniline	99-09-2	- -	UG/KG																	
4,6-Dinitro-2-methylphenol	534-52-1	- -	UG/KG																	
4-Bromophenyl-phenylether	101-55-3	- -	UG/KG																	
4-Chloro-3-Methylphenol	59-50-7	- -	UG/KG																	
4-Chloroaniline	106-47-8	- -	UG/KG																	
4-Chlorophenyl-phenylether	7005-72-3	- -	UG/KG																	
4-Nitroaniline	100-01-6	- -	UG/KG																	
4-Nitrophenol	100-02-7	- -	UG/KG																	
Acenaphthene	83-32-9	100000	a	UG/KG																
Acenaphthylene	208-96-8	100000	a	UG/KG																
Anthracene	120-12-7	100000	a	UG/KG																
Benzo(a)anthracene	56-55-3	1000	f	UG/KG																
Benzo(a)pyrene	50-32-8	1000	f	UG/KG																
Benzo(b)fluoranthene	205-99-2	1000	f	UG/KG																
Benzo(g,h,i)perylene	191-24-2	100000	a	UG/KG																
Benzo(k)fluoranthene	207-08-9	1000	-	UG/KG																
bis(2-Chloroethoxy)methane	111-91-1	- -	UG/KG																	
bis(2-Chloroethyl)Ether	111-44-4	- -	UG/KG																	
Bis(2-chloroisopropyl)ether	108-60-1	- -	UG/KG																	
bis(2-Ethylhexyl)phthalate	117-81-7	- -	UG/KG																	
Butylbenzylphthalate	85-68-7	- -	UG/KG																	
Carbazole	86-74-8	- -	UG/KG																	
Chrysene	218-01-9	1000	f	UG/KG																
Di-n-butylphthalate	84-74-2	- -	UG/KG																	
Di-n-octylphthalate	117-84-0	- -	UG/KG																	
Dibenzo(a,h)anthracene	53-70-3	330	e	UG/KG																
Dibenzofuran	132-64-9	- -	UG/KG																	
Diethylphthalate	84-66-2	- -	UG/KG																	
Dimethylphthalate	131-11-3	- -	UG/KG																	
Fluoranthene	206-44-0	100000	a	UG/KG																
Fluorene	86-73-7	100000	a	UG/KG																
Hexachlorobenzene	118-74-1	330	e	UG/KG																
Hexachlorobutadiene	87-68-3	- -	UG/KG																	
Hexachlorocyclopentadiene	77-47-4	- -	UG/KG																	
Hexachloroethane	67-72-1	- -	UG/KG																	
Indeno(1,2,3-cd)pyrene	193-39-5	500	f	UG/KG																
Isophorone	78-59-1	- -	UG/KG																	
N-Nitroso-di-n-propylamine	621-64-7	- -	UG/KG																	
N-Nitrosodiphenylamine(1)	86-30-6	- -	UG/KG																	
Naphthalene	91-20-3	100000	a	UG/KG																
Nitrobenzene	98-95-3	- -	UG/KG																	
Pentachlorophenol	87-86-5	2400	-	UG/KG																
Phenanthrene	85-01-8	100000	a	UG/KG																
Phenol	108-95-2	100000	a	UG/KG																
Pyrene	129-00-0	100000	a	UG/KG																
Total TICs	TTCs	- -	UG/KG																	
TOTAL DETECTABLE (excludes TICs)					0		0		0		0		0		0		0		0	

TABLE 2
SUBSURFACE SOIL SAMPLES

SUBSURFACE SOIL SAMPLES			SAMPLE ID: B-83 0.8-1.5ft B-84 0.5-2ft B-85 0.5-1.8ft B-86 0.8-4ft B-88 4-8ft B-89 1.5-3ft B-91 4-7.5ft B-92 7-8.5ft B-93 1.5-4.0ft DP-1 B-94 7-8ft B-94 8-10ft B-96 0.5-2ft B-96 2-4ft	
Restricted Soil Cleanup Objectives (SCO) - Residential			LAB ORDER: U1008459-017A U1008459-018A U1008459-019A U1008522-002A U1008522-003A U1008522-004A U1008522-005A U1008522-006A U1008522-007A U1008522-008B U1008522-009A U1008522-010A U1008522-011A U1008522-012A	
SAMPLE DATE: 8/24/2010 8/24/2010 8/24/2010 8/24/2010 8/24/2010 8/25/2010 8/25/2010 8/25/2010 8/25/2010 8/25/2010 8/25/2010 8/25/2010 8/25/2010 8/25/2010				
VOLATILES/SEMI-VOLATILES (Continued)				
(EPA METHOD 8260-8270)				
CAS	RSCQ	Comment	RESULT	QUAL
2,3,4,6-Tetrachlorophenol	58-90-2	-- UG/KG		
2,4,5-Trichlorophenol	95-95-4	-- UG/KG		
2,4,6-Trichlorophenol	88-06-2	-- UG/KG		
2,4-Dichlorophenol	120-83-2	-- UG/KG		
2,4-Dimethylphenol	105-67-9	-- UG/KG		
2,4-Dinitrophenol	51-28-5	-- UG/KG		
2,4-Dinitrotoluene	121-14-2	-- UG/KG		
2,6-Dinitrotoluene	606-20-2	-- UG/KG		
2-Chloronaphthalene	91-58-7	-- UG/KG		
2-Chlorophenol	95-57-8	-- UG/KG		
2-Methylnaphthalene	91-57-6	-- UG/KG		
2-Methylphenol	95-48-7	100000 a UG/KG		
2-Nitroaniline	88-74-4	-- UG/KG		
2-Nitrophenol	88-75-5	-- UG/KG		
3,3-Dichlorobenzidine	91-94-1	-- UG/KG		
3-Nitroaniline	99-09-2	-- UG/KG		
4,6-Dinitro-2-methylphenol	534-52-1	-- UG/KG		
4-Bromophenyl-phenylether	101-55-3	-- UG/KG		
4-Chloro-3-Methylphenol	59-50-7	-- UG/KG		
4-Chloroaniline	106-47-8	-- UG/KG		
4-Chlorophenyl-phenylether	7005-72-3	-- UG/KG		
4-Nitroaniline	100-01-6	-- UG/KG		
4-Nitrophenol	100-02-7	-- UG/KG		
Acenaphthene	83-32-9	100000 a UG/KG		
Acenaphthylene	208-96-8	100000 a UG/KG		
Anthracene	120-12-7	100000 a UG/KG		
Benzo(a)anthracene	56-55-3	1000 f UG/KG		
Benzo(a)pyrene	50-32-8	1000 f UG/KG		
Benzo(b)fluoranthene	205-99-2	1000 f UG/KG		
Benzo(g,h,i)perylene	191-24-2	100000 a UG/KG		
Benzo(k)fluoranthene	207-08-9	1000 - UG/KG		
bis(2-Chloroethoxy)methane	111-91-1	-- UG/KG		
bis(2-Chloroethyl)Ether	111-44-4	-- UG/KG		
Bis(2-chloroisopropyl)ether	108-60-1	-- UG/KG		
bis(2-Ethylhexyl)phthalate	117-81-7	-- UG/KG		
Butylbenzylphthalate	85-68-7	-- UG/KG		
Carbazole	86-74-8	-- UG/KG		
Chrysene	218-01-9	1000 f UG/KG		
Di-n-butylphthalate	84-74-2	-- UG/KG		
Di-n-octylphthalate	117-84-0	-- UG/KG		
Dibenzo(a,h)anthracene	53-70-3	330 e UG/KG		
Dibenzofuran	132-64-9	-- UG/KG		
Diethylphthalate	84-66-2	-- UG/KG		
Dimethylphthalate	131-11-3	-- UG/KG		
Fluoranthene	206-44-0	100000 a UG/KG		
Fluorene	86-73-7	100000 a UG/KG		
Hexachlorobenzene	118-74-1	330 e UG/KG		
Hexachlorobutadiene	87-66-3	-- UG/KG		
Hexachlorocyclopentadiene	77-47-4	-- UG/KG		
Hexachloroethane	67-72-1	-- UG/KG		
Indeno(1,2,3-cd)pyrene	193-39-5	500 f UG/KG		
Isophorone	78-59-1	-- UG/KG		
N-Nitroso-di-n-propylamine	621-64-7	-- UG/KG		
N-Nitrosodiphenylamine(1)	86-30-6	-- UG/KG		
Naphthalene	91-20-3	100000 a UG/KG		
Nitrobenzene	98-95-3	-- UG/KG		
Pentachlorophenol	87-86-5	2400 - UG/KG		
Phenanthrene	85-01-8	100000 a UG/KG		
Phenol	108-95-2	100000 a UG/KG		
Pyrene	129-00-0	100000 a UG/KG		
Total TICs	TICs	-- UG/KG		
TOTAL DETECTABLE (excludes TICs)			0	0
			0	0
			0	0
			0	0
			0	0
			0	0
			7.3	34
			46	0
			695	0
			0	0
			0	0
			0	0

**TABLE 2
SUBSURFACE SOIL SAMPLES**

Restricted Soil Cleanup Objectives (SCO) - Residential		SAMPLE ID: LAB ORDER: SAMPLE DATE:		B-97 0.5-2ft U1008522-013A 8/25/2010	B-97 2-4ft U1008522-014A 8/25/2010	B-98 0.5-2ft U1008522-015A 8/25/2010	B-98 2-4ft U1008522-016A 8/25/2010	SW-1 U1008522-017B 8/25/2010	B-99 0.5-2ft U1008522-018A 8/25/2010	B-99 2-4ft U1008522-019A 8/25/2010	B-99 6-8ft U1008522-020A 8/25/2010	SS-1 U1008522-021A 8/25/2010	SS-2 U1009054-002A 8/27/2010	FC 104 1-1.8 ft U1009054-003A 8/31/2010	FC 105 0.9-1.7ft U1009054-004A 8/31/2010	FC 106 1-2ft U1009054-005A 8/31/2010	FC 107 1-2ft U1009054-006A 8/31/2010
VOLATILES/SEMI-VOLATILES (Continued)		CAS	RSCQ Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
(EPA METHOD 8260-8270)																	
2,3,4,6-Tetrachlorophenol	58-90-2		- - UG/KG					10 U				4200 U	60000 U			380 U	3700 U
2,4,5-Trichlorophenol	95-95-4		- - UG/KG					5 U				4200 U	60000.0 U			380 U	3700 U
2,4,6-Trichlorophenol	88-06-2		- - UG/KG					5 U				4200 U	60000.0 U			380 U	3700.00 U
2,4-Dichlorophenol	120-83-2		- - UG/KG					5 U				4200 U	60000.0 U			380 U	3700 U
2,4-Dimethylphenol	105-67-9		- - UG/KG					5 U				4200 U	60000.0 U			380 U	3700 U
2,4-Dinitrophenol	51-28-5		- - UG/KG					50 U				42000 U	600000.0 U			3800 U	37000.00 U
2,4-Dinitrotoluene	121-14-2		- - UG/KG					5.00 U				4200 U	60000.0 U			380.00 U	3700 U
2,6-Dinitrotoluene	606-20-2		- - UG/KG					5.00 U				4200 U	60000.0 U			380.00 U	3700 U
2-Chloronaphthalene	91-58-7		- - UG/KG					5 U				4200 U	60000.0 U			380 U	3700 U
2-Chlorophenol	95-57-8		- - UG/KG					5 U				4200 U	60000.0 U			380 U	3700 U
2-Methylnaphthalene	91-57-6		- - UG/KG					5 U				4200 U	60000.0 U			380 U	3700 U
2-Methylphenol	95-48-7	100000	a UG/KG					5 U				4200 U	60000.0 U			380 U	3700 U
2-Nitroaniline	88-74-4		- - UG/KG					50 U				42000 U	600000.0 U			3800 U	37000 U
2-Nitrophenol	88-75-5		- - UG/KG					5 U				4200 U	60000.0 U			380 U	3700 U
3,3-Dichlorobenzidine	91-94-1		- - UG/KG					5 U				4200 U	60000.0 U			380 U	3700 U
3-Nitroaniline	99-09-2		- - UG/KG					50 U				42000 U	600000.0 U			3800 U	37000 U
4,6-Dinitro-2-methylphenol	534-52-1		- - UG/KG					50 U				42000 U	600000.0 U			3800 U	37000 U
4-Bromophenyl-phenylether	101-55-3		- - UG/KG					5 U				4200 U	60000.0 U			380 U	3700 U
4-Chloro-3-Methylphenol	59-50-7		- - UG/KG					5 U				4200 U	60000.0 U			380 U	3700 U
4-Chloroaniline	106-47-8		- - UG/KG					5 U				4200 U	60000.0 U			380 U	3700 U
4-Chlorophenyl-phenylether	7005-72-3		- - UG/KG					5.00 U				4200 U	60000.0 U			380.00 U	3700 U
4-Nitroaniline	100-01-6		- - UG/KG					50 U				42000 U	600000.0 U			3800 U	37000 U
4-Nitrophenol	100-02-7		- - UG/KG					50 U				42000 U	600000.0 U			3800 U	37000 U
Acenaphthene	83-32-9	100000	a UG/KG					5 U				4200 U	60000.0 U			380 U	3700 U
Acenaphthylene	208-96-8	100000	a UG/KG					5 U				4200 U	60000.0 U			380 U	3700.00 U
Anthracene	120-12-7	100000	a UG/KG					5 U				4200 U	60000.0 U			380 U	3700 U
Benzo(a)anthracene	56-55-3	1000	f UG/KG					5 U				4200 U	60000 U			380 U	3700 U
Benzo(a)pyrene	50-32-8	1000	f UG/KG					5 U				4200 U	60000 U			380 U	3700.0 U
Benzo(b)fluoranthene	205-99-2	1000	f UG/KG					5 U				4200 U	60000 U			380 U	3700 U
Benzo(g,h,i)perylene	191-24-2	100000	a UG/KG					5 U				4200 U	60000 U			380 U	3700 U
Benzo(k)fluoranthene	207-08-9	1000	- UG/KG					5 U				4200 U	60000.0 U			380 U	3700 U
bis(2-Chloroethoxy)methane	111-91-1		- - UG/KG					5 U				4200 U	60000.0 U			380 U	3700.00 U
bis(2-Chloroethyl)Ether	111-44-4		- - UG/KG					5 U				4200 U	60000.0 U			380 U	3700 U
Bis(2-chloroisopropyl)ether	108-60-1		- - UG/KG					5 U				4200 U	60000.0 U			380 U	3700 U
bis(2-Ethylhexyl)phthalate	117-81-7		- - UG/KG					7.7				4200 U	60000.0 U			380 U	3700.00 U
Butylbenzylphthalate	85-68-7		- - UG/KG					5.00 U				4200 U	60000.0 U			380.00 U	3700 U
Carbazole	86-74-8		- - UG/KG					5.00 U				4200 U	60000.0 U			380.00 U	3700 U
Chrysene	218-01-9	1000	f UG/KG					5 U				4200 U	60000.0 U			380 U	3700 U
Di-n-butylphthalate	84-74-2		- - UG/KG					5 U				4200 U	60000.0 U			380 U	3700 U
Di-n-octylphthalate	117-84-0		- - UG/KG					5 U				4200 U	60000.0 U			380 U	3700 U
Dibenzo(a,h)anthracene	53-70-3	330	e UG/KG					5 U				4200 U	60000.0 U			380 U	3700 U
Dibenzofuran	132-64-9		- - UG/KG					5 U				4200 U	60000.0 U			380 U	3700 U
Diethylphthalate	84-66-2		- - UG/KG					5 U				4200 U	60000.0 U			380 U	3700 U
Dimethylphthalate	131-11-3		- - UG/KG					5 U				4200 U	60000.0 U			380 U	3700 U
Fluoranthene	206-44-0	100000	a UG/KG					5 U				4200 U	60000.0 U			380 U	3700 U
Fluorene	86-73-7	100000	a UG/KG					5 U				4200 U	60000.0 U			380 U	3700 U
Hexachlorobenzene	118-74-1	330	e UG/KG					5 U				4200 U	60000.0 U			380 U	3700 U
Hexachlorobutadiene	87-68-3		- - UG/KG					5 U				4200 U	60000.0 U			380 U	3700 U
Hexachlorocyclopentadiene	77-47-4		- - UG/KG					5.00 U				4200 U	60000.0 U			380.00 U	3700 U
Hexachloroethane	67-72-1		- - UG/KG					5 U				4200 U	60000.0 U			380 U	3700 U
Indeno(1,2,3-cd)pyrene	193-39-5	500	f UG/KG					5 U				4200 U	60000.0 U			380 U	3700 U
Isophorone	78-59-1		- - UG/KG					5 U				4200 U	60000.0 U			380 U	3700 U
N-Nitroso-di-n-propylamine	621-64-7		- - UG/KG					5 U				4200 U	60000.0 U			380 U	3700 U
N-Nitrosodiphenylamine(1)	86-30-6		- - UG/KG					5 U				4200 U	60000.0 U			380 U	3700.00 U
Naphthalene	91-20-3	100000	a UG/KG														
Nitrobenzene	98-95-3		- - UG/KG					5 U				4200 U	60000 U			380 U	3700 U
Pentachlorophenol	87-86-5	2400	- UG/KG					10 U				8600 U	120000 U			770 U	7600.0 U
Phenanthrene	85-01-8	100000	a UG/KG					5 U				4200 U	60000 U			380 U	3700 U
Phenol	108-95-2	100000	a UG/KG					5 U				4200 U	60000 U			380 U	3700 U
Pyrene	129-00-0	100000	a UG/KG					5 U				4200 U	60000.0 U			380 U	3700 U
Total TICs	TTCs		- - UG/KG														
TOTAL DETECTABLE (excludes TICs)				0		0		0		0		113	10000	0		260	0

TABLE 2
SUBSURFACE SOIL SAMPLES

SUBSURFACE SOIL SAMPLES			SAMPLE ID: LAB ORDER: SAMPLE DATE:		FC 108 0.6-2ft U1009054-007A 8/31/2010	FC 109 0.8-2.2ft U1009054-008A 8/31/2010	FC 110 0.6-1.4ft U1009054-009A 8/31/2010	FC 111 0.8-2ft U1009054-010A 8/31/2010	FC 112 1.5-3.2ft U1009054-011A 8/31/2010	B-60A 1-4ft U1009400-002A 9/20/2010	B-60A 4-8ft U1009400-003A 9/20/2010	B-60B 1-4ft U1009400-005A 9/20/2010	B-60B 4-10ft U1009400-006A 9/20/2010	B-60C 1-4ft U1009400-008A 9/20/2010	B 60C 4-8ft U1009400-009A 9/20/2010	B 60D 1-4ft U1009400-011A 9/20/2010	B 60D 4-8ft U1009400-013A 9/20/2010	MH1 0-4ft U1009400-014B 9/20/2010							
VOLATILES/SEMI-VOLATILES (Continued) (EPA METHOD 8260-8270)			CAS	RSCQ Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL					
2,3,4,6-Tetrachlorophenol	58-90-2	- -	UG/KG				380	U			410	U													
2,4,5-Trichlorophenol	95-95-4	- -	UG/KG				380	U			410	U													
2,4,6-Trichlorophenol	88-06-2	- -	UG/KG				380	U			410	U													
2,4-Dichlorophenol	120-83-2	- -	UG/KG				380	U			410	U													
2,4-Dimethylphenol	105-67-9	- -	UG/KG				380	U			410	U													
2,4-Dinitrophenol	51-28-5	- -	UG/KG				3800	U			4100	U													
2,4-Dinitrotoluene	121-14-2	- -	UG/KG				380.00	U			410.00	U													
2,6-Dinitrotoluene	606-20-2	- -	UG/KG				380.00	U			410.00	U													
2-Chloronaphthalene	91-58-7	- -	UG/KG				380	U			410	U													
2-Chlorophenol	95-57-8	- -	UG/KG				380	U			410	U													
2-Methylnaphthalene	91-57-6	- -	UG/KG				380	U			410	U													
2-Methylphenol	95-48-7	100000	a	UG/KG			380	U			410	U													
2-Nitroaniline	88-74-4	- -	UG/KG				3800	U			4100	U													
2-Nitrophenol	88-75-5	- -	UG/KG				380	U			410	U													
3,3-Dichlorobenzidine	91-94-1	- -	UG/KG				380	U			410	U													
3-Nitroaniline	99-09-2	- -	UG/KG				3800	U			4100	U													
4,6-Dinitro-2-methylphenol	534-52-1	- -	UG/KG				3800	U			4100	U													
4-Bromophenyl-phenylether	101-55-3	- -	UG/KG				380	U			410	U													
4-Chloro-3-Methylphenol	59-50-7	- -	UG/KG				380	U			410	U													
4-Chloroaniline	106-47-8	- -	UG/KG				380	U			410	U													
4-Chlorophenyl-phenylether	7005-72-3	- -	UG/KG				380.00	U			410.00	U													
4-Nitroaniline	100-01-6	- -	UG/KG				3800	U			4100	U													
4-Nitrophenol	100-02-7	- -	UG/KG				3800	U			4100	U													
Acenaphthene	83-32-9	100000	a	UG/KG			380	U			410	U													
Acenaphthylene	208-96-8	100000	a	UG/KG			380	U			410	U													
Anthracene	120-12-7	100000	a	UG/KG			380	U			410	U													
Benzo(a)anthracene	56-55-3	1000	f	UG/KG			380	U			410	U													
Benzo(a)pyrene	50-32-8	1000	f	UG/KG			380	U			410	U													
Benzo(b)fluoranthene	205-99-2	1000	f	UG/KG			380	U			410	U													
Benzo(g,h,i)perylene	191-24-2	100000	a	UG/KG			380	U			410	U													
Benzo(k)fluoranthene	207-08-9	1000	-	UG/KG			380	U			410	U													
bis(2-Chloroethoxy)methane	111-91-1	- -	UG/KG				380	U			410	U													
bis(2-Chloroethyl)Ether	111-44-4	- -	UG/KG				380	U			410	U													
Bis(2-chloroisopropyl)ether	108-60-1	- -	UG/KG				380	U			410	U													
bis(2-Ethylhexyl)phthalate	117-81-7	- -	UG/KG				380	U			410	U													
Butylbenzylphthalate	85-68-7	- -	UG/KG				380.00	U			410.00	U													
Carbazole	86-74-8	- -	UG/KG				380.00	U			410.00	U													
Chrysene	218-01-9	1000	f	UG/KG			380	U			410	U													
Di-n-butylphthalate	84-74-2	- -	UG/KG				380	U			410	U													
Di-n-octylphthalate	117-84-0	- -	UG/KG				380	U			410	U													
Dibenzo(a,h)anthracene	53-70-3	330	e	UG/KG			380	U			410	U													
Dibenzofuran	132-64-9	- -	UG/KG				380	U			410	U													
Diethylphthalate	84-66-2	- -	UG/KG				380	U			410	U													
Dimethylphthalate	131-11-3	- -	UG/KG				380	U			410	U													
Fluoranthene	206-44-0	100000	a	UG/KG			380	U			410	U													
Fluorene	86-73-7	100000	a	UG/KG			380	U			410	U													
Hexachlorobenzene	118-74-1	330	e	UG/KG			380	U			410	U													
Hexachlorobutadiene	87-68-3	- -	UG/KG																						
Hexachlorocyclopentadiene	77-47-4	- -	UG/KG				380	U			410	U													
Hexachloroethane	67-72-1	- -	UG/KG				380.00	U			410.00	U													
Indeno(1,2,3-cd)pyrene	193-39-5	500	f	UG/KG			380	U			410	U													
Isophorone	78-59-1	- -	UG/KG				380	U			410	U													
N-Nitroso-di-n-propylamine	621-64-7	- -	UG/KG				380	U			410	U													
N-Nitrosodiphenylamine(1)	86-30-6	- -	UG/KG				380	U			410	U													
Naphthalene	91-20-3	100000	a	UG/KG																					
Nitrobenzene	98-95-3	- -	UG/KG				380	U			410	U													
Pentachlorophenol	87-86-5	2400	-	UG/KG			770	U			820	U													
Phenanthrene	85-01-8	100000	a	UG/KG			380	U			410	U													
Phenol	108-95-2	100000	a	UG/KG			380	U			410	U													
Pyrene	129-00-0	100000	a	UG/KG			380	U			410	U													
Total TICs	TTCs	- -	UG/KG																						
TOTAL DETECTABLE (excludes TICs)							0		334		0		0		29		0		57		30		0		52

TABLE 2
SUBSURFACE SOIL SAMPLES

SUBSURFACE SOIL SAMPLES			SAMPLE ID: LAB ORDER: SAMPLE DATE:		B 36A 1-4ft U1009400-015A 9/20/2010	B 36A 4-8ft U1009400-016A 9/20/2010	B 6A 1-4ft U1009400-018A 9/20/2010	B 6A 4-8ft U1009400-019A 9/20/2010	MH 2 0-3ft U1009400-021B 9/21/2010	MH 2 3-4ft U1009400-022A 9/21/2010	MH 2 4-8ft U1009400-023B 9/21/2010	B 32A 10-13.5ft U1009400-024A 9/21/2010	B 32A 4-10ft U1009400-025B 9/21/2010	B 32B 8-11ft U1009400-026A 9/21/2010	B 30A 4-10ft U1009400-027A 9/21/2010	B 31A 0.8-4ft U1009400-028A 9/21/2010	B 32C 1-4ft U1009400-029A 9/21/2010	B 32C 4-8ft U1009400-030A 9/21/2010	
VOLATILES/SEMI-VOLATILES (Continued) (EPA METHOD 8260-8270)					CAS	RSC0	Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
2,3,4,6-Tetrachlorophenol	58-90-2	- -	UG/KG									4200	U	4400	U				
2,4,5-Trichlorophenol	95-95-4	- -	UG/KG									4200	U	4400.0	U				
2,4,6-Trichlorophenol	88-06-2	- -	UG/KG									4200	U	4400.0	U				
2,4-Dichlorophenol	120-83-2	- -	UG/KG									4200	U	4400.0	U				
2,4-Dimethylphenol	105-67-9	- -	UG/KG									4200	U	4400.0	U				
2,4-Dinitrophenol	51-28-5	- -	UG/KG									42000	U	44000.0	U				
2,4-Dinitrotoluene	121-14-2	- -	UG/KG									4200.00	U	4400.0	U				
2,6-Dinitrotoluene	606-20-2	- -	UG/KG									4200.00	U	4400.0	U				
2-Chloronaphthalene	91-58-7	- -	UG/KG									4200	U	4400.0	U				
2-Chlorophenol	95-57-8	- -	UG/KG									4200	U	4400.0	U				
2-Methylnaphthalene	91-57-6	- -	UG/KG									4200	U	4400.0	U				
2-Methylphenol	95-48-7	100000	a	UG/KG								4200	U	4400.0	U				
2-Nitroaniline	88-74-4	- -	UG/KG									42000	U	44000.0	U				
2-Nitrophenol	88-75-5	- -	UG/KG									4200	U	4400.0	U				
3,3-Dichlorobenzidine	91-94-1	- -	UG/KG									4200	U	4400.0	U				
3-Nitroaniline	99-09-2	- -	UG/KG									42000	U	44000.0	U				
4,6-Dinitro-2-methylphenol	534-52-1	- -	UG/KG									42000	U	44000.0	U				
4-Bromophenyl-phenylether	101-55-3	- -	UG/KG									4200	U	4400.0	U				
4-Chloro-3-Methylphenol	59-50-7	- -	UG/KG									4200	U	4400.0	U				
4-Chloroaniline	106-47-8	- -	UG/KG									4200	U	4400.0	U				
4-Chlorophenyl-phenylether	7005-72-3	- -	UG/KG									4200.00	U	4400.0	U				
4-Nitroaniline	100-01-6	- -	UG/KG									42000	U	44000.0	U				
4-Nitrophenol	100-02-7	- -	UG/KG									42000	U	44000.0	U				
Acenaphthene	83-32-9	100000	a	UG/KG								4200	U	4400.0	U				
Acenaphthylene	208-96-8	100000	a	UG/KG								4200	U	4400.0	U				
Anthracene	120-12-7	100000	a	UG/KG								4200	U	4400.0	U				
Benzo(a)anthracene	56-55-3	1000	f	UG/KG								4200	U	4400	U				
Benzo(a)pyrene	50-32-8	1000	f	UG/KG								4200	U	4400	U				
Benzo(b)fluoranthene	205-99-2	1000	f	UG/KG								4200	U	4400	U				
Benzo(g,h,i)perylene	191-24-2	100000	a	UG/KG								4200	U	4400	U				
Benzo(k)fluoranthene	207-08-9	1000	-	UG/KG								4200	U	4400.0	U				
bis(2-Chloroethoxy)methane	111-91-1	- -	UG/KG									4200	U	4400.0	U				
bis(2-Chloroethyl)Ether	111-44-4	- -	UG/KG									4200	U	4400.0	U				
Bis(2-chloroisopropyl)ether	108-60-1	- -	UG/KG									4200	U	4400.0	U				
bis(2-Ethylhexyl)phthalate	117-81-7	- -	UG/KG									4200	U	4400.0	U				
Butylbenzylphthalate	85-68-7	- -	UG/KG									4200.00	U	4400.0	U				
Carbazole	86-74-8	- -	UG/KG									4200.00	U	4400.0	U				
Chrysene	218-01-9	1000	f	UG/KG								4200	U	4400.0	U				
Di-n-butylphthalate	84-74-2	- -	UG/KG									4200	U	4400.0	U				
Di-n-octylphthalate	117-84-0	- -	UG/KG									4200	U	4400.0	U				
Dibenzo(a,h)anthracene	53-70-3	330	e	UG/KG								4200	U	4400.0	U				
Dibenzofuran	132-64-9	- -	UG/KG									4200	U	4400.0	U				
Diethylphthalate	84-66-2	- -	UG/KG									4200	U	4400.0	U				
Dimethylphthalate	131-11-3	- -	UG/KG									4200	U	4400.0	U				
Fluoranthene	206-44-0	100000	a	UG/KG								4200	U	4400.0	U				
Fluorene	86-73-7	100000	a	UG/KG								4200	U	4400.0	U				
Hexachlorobenzene	118-74-1	330	e	UG/KG								4200	U	4400.0	U				
Hexachlorobutadiene	87-68-3	- -	UG/KG									4200	U	4400.0	U				
Hexachlorocyclopentadiene	77-47-4	- -	UG/KG									4200	U	4400.0	U				
Hexachloroethane	67-72-1	- -	UG/KG									4200.00	U	4400.0	U				
Indeno(1,2,3-cd)pyrene	193-39-5	500	f	UG/KG								4200	U	4400.0	U				
Isophorone	78-59-1	- -	UG/KG									4200	U	4400.0	U				
N-Nitroso-di-n-propylamine	621-64-7	- -	UG/KG									4200	U	4400.0	U				
N-Nitrosodiphenylamine(1)	86-30-6	- -	UG/KG									4200	U	4400.0	U				
Naphthalene	91-20-3	100000	a	UG/KG								4200	U	4400.0	U				
Nitrobenzene	98-95-3	- -	UG/KG									4200	U	4400	U				
Pentachlorophenol	87-86-5	2400	-	UG/KG								8500	U	9000	U				
Phenanthrene	85-01-8	100000	a	UG/KG								4200	U	4400	U				
Phenol	108-95-2	100000	a	UG/KG								4200	U	4400	U				
Pyrene	129-00-0	100000	a	UG/KG								4200	U	4400.0	U				
Total TICs	TICs	- -	UG/KG																
TOTAL DETECTABLE (excludes TICs)					0	0	0	0	4100	152	0	0	0	40	0	0	15	553	

TABLE 2
SUBSURFACE SOIL SAMPLES

SUBSURFACE SOIL SAMPLES			SAMPLE ID: LAB ORDER: SAMPLE DATE:		B 32D 2-10ft U1009400-031A 9/21/2010	OP-6 U1009400-032C 9/21/2010	MH3 U1009400-033B 9/21/2010	MH4 U1009400-034B 9/21/2010	SS-3 U1009400-035A 9/21/2010	SS-4 U1009400-036A 9/21/2010					
Restricted Soil Cleanup Objectives (SCO) - Residential															
VOLATILES/SEMI-VOLATILES (Continued) (EPA METHOD 8260-8270)			CAS	RSC0	Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
2,3,4,6-Tetrachlorophenol	58-90-2	- -	UG/KG			10	U	58000	U	59000	U	70000	U	53000	U
2,4,5-Trichlorophenol	95-95-4	- -	UG/KG			5	U	58000	U	59000	U	70000	U	53000	U
2,4,6-Trichlorophenol	88-06-2	- -	UG/KG			5	U	58000.00	U	59000	U	70000	U	53000	U
2,4-Dichlorophenol	120-83-2	- -	UG/KG			5	U	58000	U	59000	U	70000	U	53000	U
2,4-Dimethylphenol	105-67-9	- -	UG/KG			5	U	58000	U	59000	U	70000	U	53000	U
2,4-Dinitrophenol	51-28-5	- -	UG/KG			50	U	#####	U	590000	U	700000	U	530000	U
2,4-Dinitrotoluene	121-14-2	- -	UG/KG			5.00	U	58000	U	59000	U	70000.00	U	53000.00	U
2,6-Dinitrotoluene	606-20-2	- -	UG/KG			5.00	U	58000	U	59000	U	70000.00	U	53000.00	U
2-Chloronaphthalene	91-58-7	- -	UG/KG			5	U	58000	U	59000	U	70000	U	53000	U
2-Chlorophenol	95-57-8	- -	UG/KG			5	U	58000	U	59000	U	70000	U	53000	U
2-Methylnaphthalene	91-57-6	- -	UG/KG			5	U	58000	U	59000.0	U	70000	U	53000	U
2-Methylphenol	95-48-7	100000	a	UG/KG		5	U	58000	U	59000.00	U	70000	U	53000	U
2-Nitroaniline	88-74-4	- -	UG/KG			50	U	580000	U	590000	U	700000	U	530000	U
2-Nitrophenol	88-75-5	- -	UG/KG			5	U	58000	U	59000	U	70000	U	53000	U
3,3-Dichlorobenzidine	91-94-1	- -	UG/KG			5	U	58000	U	59000	U	70000	U	53000	U
3-Nitroaniline	99-09-2	- -	UG/KG			50	U	580000	U	590000	U	700000	U	530000	U
4,6-Dinitro-2-methylphenol	534-52-1	- -	UG/KG			50	U	580000	U	590000	U	700000	U	530000	U
4-Bromophenyl-phenylether	101-55-3	- -	UG/KG			5	U	58000	U	59000	U	70000	U	53000	U
4-Chloro-3-Methylphenol	59-50-7	- -	UG/KG			5	U	58000	U	59000	U	70000	U	53000	U
4-Chloroaniline	106-47-8	- -	UG/KG			5	U	58000	U	59000	U	70000	U	53000	U
4-Chlorophenyl-phenylether	7005-72-3	- -	UG/KG			5.00	U	58000	U	59000	U	70000.00	U	53000.00	U
4-Nitroaniline	100-01-6	- -	UG/KG			50	U	580000	U	590000	U	700000	U	530000	U
4-Nitrophenol	100-02-7	- -	UG/KG			50	U	580000	U	590000	U	700000	U	530000	U
Acenaphthene	83-32-9	100000	a	UG/KG		5	U	58000	U	59000	U	70000	U	53000	U
Acenaphthylene	208-96-8	100000	a	UG/KG		5	U	58000.00	U	59000	U	70000	U	53000	U
Anthracene	120-12-7	100000	a	UG/KG		5	U	58000	U	59000	U	70000	U	53000	U
Benzo(a)anthracene	56-55-3	1000	f	UG/KG		5	U	58000	U	59000	U	70000	U	53000	U
Benzo(a)pyrene	50-32-8	1000	f	UG/KG		5	U	58000.0	U	59000	U	70000	U	53000	U
Benzo(b)fluoranthene	205-99-2	1000	f	UG/KG		5	U	58000	U	59000	U	70000	U	53000	U
Benzo(g,h,i)perylene	191-24-2	100000	a	UG/KG		5	U	58000	U	59000	U	70000	U	53000	U
Benzo(k)fluoranthene	207-08-9	1000	-	UG/KG		5	U	58000	U	59000	U	70000	U	53000	U
bis(2-Chloroethoxy)methane	111-91-1	- -	UG/KG			5	U	58000.00	U	59000	U	70000	U	53000	U
bis(2-Chloroethyl)Ether	111-44-4	- -	UG/KG			5	U	58000	U	59000	U	70000	U	53000	U
Bis(2-chloroisopropyl)ether	108-60-1	- -	UG/KG			5	U	58000	U	59000	U	70000	U	53000	U
bis(2-Ethylhexyl)phthalate	117-81-7	- -	UG/KG			5	U	58000.00	U	59000	U	130000		53000	U
Butylbenzylphthalate	85-68-7	- -	UG/KG			5.00	U	58000	U	59000	U	70000.00	U	53000.00	U
Carbazole	86-74-8	- -	UG/KG			5.00	U	58000	U	59000	U	70000.00	U	53000.00	U
Chrysene	218-01-9	1000	f	UG/KG		5	U	58000	U	59000	U	70000	U	53000	U
Di-n-butylphthalate	84-74-2	- -	UG/KG			5	U	58000	U	59000	U	70000	U	53000	U
Di-n-octylphthalate	117-84-0	- -	UG/KG			5	U	58000	U	59000.0	U	70000	U	53000	U
Dibenzo(a,h)anthracene	53-70-3	330	e	UG/KG		5	U	58000	U	59000.00	U	70000	U	53000	U
Dibenzofuran	132-64-9	- -	UG/KG			5	U	58000	U	59000	U	70000	U	53000	U
Diethylphthalate	84-66-2	- -	UG/KG			5	U	58000	U	59000	U	70000	U	53000	U
Dimethylphthalate	131-11-3	- -	UG/KG			5	U	58000	U	59000	U	70000	U	53000	U
Fluoranthene	206-44-0	100000	a	UG/KG		5	U	58000	U	59000	U	70000	U	53000	U
Fluorene	86-73-7	100000	a	UG/KG		5	U	58000	U	59000	U	70000	U	53000	U
Hexachlorobenzene	118-74-1	330	e	UG/KG		5	U	58000	U	59000	U	70000	U	53000	U
Hexachlorobutadiene	87-68-3	- -	UG/KG			5	U	58000	U	59000	U	70000	U	53000	U
Hexachlorocyclopentadiene	77-47-4	- -	UG/KG			5	U	58000	U	59000	U	70000	U	53000	U
Hexachloroethane	67-72-1	- -	UG/KG			5.00	U	58000	U	59000	U	70000.00	U	53000.00	U
Indeno(1,2,3-cd)pyrene	193-39-5	500	f	UG/KG		5	U	58000	U	59000	U	70000	U	53000	U
Isophorone	78-59-1	- -	UG/KG			5	U	58000	U	59000	U	70000	U	53000	U
N-Nitroso-di-n-propylamine	621-64-7	- -	UG/KG			5	U	58000	U	59000	U	70000	U	53000	U
N-Nitrosodiphenylamine(1)	86-30-6	- -	UG/KG			5	U	58000.00	U	59000	U	70000	U	53000	U
Naphthalene	91-20-3	100000	a	UG/KG		5	U	58000	U	59000	U	70000	U	53000	U
Nitrobenzene	98-95-3	- -	UG/KG			5	U	58000	U	59000	U	70000	U	53000	U
Pentachlorophenol	87-86-5	2400	-	UG/KG		10	U	120000.0	U	120000	U	140000	U	110000	U
Phenanthrene	85-01-8	100000	a	UG/KG		5	U	58000	U	59000	U	70000	U	53000	U
Phenol	108-95-2	100000	a	UG/KG		5	U	58000	U	59000	U	70000	U	53000	U
Pyrene	129-00-0	100000	a	UG/KG		5	U	58000	U	59000	U	70000	U	53000	U
Total TICs		TTCs	- -	UG/KG											
TOTAL DETECTABLE (excludes TICs)						0		11		580		370		130000	

TABLE 2
SUBSURFACE SOIL SAMPLES

SAMPLE ID: LAB ORDER: SAMPLE DATE:			B-1 8-10.5ft U1008256-002A 8/5/2010		B-3 2.5-4ft U1008256-003A 8/5/2010		B-4 10-11.5ft U1008256-004A 8/5/2010		B-6 5ft U1008256-005A 8/5/2010		B-7 8-12ft U1008256-006A 8/6/2010		B-8 6-9.7ft U1008256-007A 8/6/2010		B-9 7.5-13ft U1008256-008A 8/6/2010		B-10 8-12ft U1008256-009A 8/6/2010		B-11 8.2-8.8ft U1008256-010A 8/6/2010		B-12 6.2-8.2ft U1008256-011A 8/6/2010		B-20 8-11.5ft U1008324-002A 8/13/2010		B-23 7.4-8.5ft U1008324-003A 8/13/2010		B-24 4-6.5ft U1008324-004A 8/13/2010		B-25 10.3-11.5 U1008324-005A 8/13/2010	
Restricted Soil Cleanup Objectives (SCO) - Residential			RESULT		RESULT		RESULT		RESULT		RESULT		RESULT		RESULT		RESULT		RESULT		RESULT		RESULT		RESULT		RESULT		RESULT	
METALS (EPA METHOD 6010B)			CAS		RSC0 Comment		RESULT		RESULT		RESULT		RESULT		RESULT		RESULT		RESULT		RESULT		RESULT		RESULT		RESULT		RESULT	
Barium	7440-39-3	350 f	MG/KG										42				180													
Cadmium	7440-43-9	2.5 f	MG/KG										0.61	U			0.6	U												
Chromium	7440-47-3	22* h	MG/KG										8				6.1													
Copper	7440-50-8	270 -	MG/KG										94				380													
Lead	7439-92-1	400 -	MG/KG										35				260													
Nickel	7440-02-0	140 -	MG/KG										34				150,000													
Silver	7440-22-4	36 -	MG/KG										6.1	U			6	U												
Zinc	7440-66-6	2200 -	MG/KG										51				120													
Arsenic	7440-38-2	16 f	MG/KG										52				25,60													
Selenium	7782-49-2	36 -	MG/KG										3.6	U			3.6	U												
Total Mercury	7439-97-6	0.81 j	MG/KG										0.121	U			0.165													
Total Cyanide	57-12-5	27 -	MG/KG																											
TOTAL DETECTABLE			MG/KG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	316.00	0.00	1,121.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

PCBs (EPA METHOD 8080)			CAS	RSC0 Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
Aroclor 1016		12674-11-2	- -	UG/KG																										
Aroclor 1221		11104-28-2	- -	UG/KG																										
Aroclor 1232		11141-16-5	- -	UG/KG																										
Aroclor 1242		53469-21-9	- -	UG/KG																										
Aroclor 1248		12672-29-6	- -	UG/KG																										
Aroclor 1254		11097-69-1	- -	UG/KG																										
Aroclor 1260		11096-82-5	- -	UG/KG																										
TOTAL DETECTABLE				1,000 - UG/KG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ORGANOCHLORINE PESTICIDES (EPA METHOD 8081A)			CAS	RSC0 Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
4,4'-DDD		72-54-8	2600	- UG/KG																										
4,4'-DDE		72-55-9	1800	- UG/KG																										
4,4'-DDT		50-29-3	1700	- UG/KG																										
Aldrin		309-00-2	19	- UG/KG																										
alpha-BHC		319-84-6	97	- UG/KG																										
Chlordane (alpha)		5103-71-9	910	- UG/KG																										
beta-BHC		319-85-7	72	- UG/KG																										
delta-BHC		319-86-8	100000	a UG/KG																										
Dieldrin		60-57-1	39	- UG/KG																										
Endosulfan I		959-98-8	4800	j UG/KG																										
Endosulfan II		33213-65-9	4800	j UG/KG																										
Endosulfan sulfate		1031-07-8	4800	j UG/KG																										
Endrin		72-20-8	2200	- UG/KG																										
Endrin aldehyde		7421-93-4	- -	UG/KG																										
Endrin ketone		53494-70-5	- -	UG/KG																										
Lindane		58-89-9	280	- UG/KG																										
gamma-Chlordane		5103-74-2	- -	UG/KG																										
Heptachlor		76-44-8	420	- UG/KG																										
Heptachlor epoxide		1024-57-3	- -	UG/KG																										
Methoxychlor		72-43-5	- -	UG/KG																										
Toxaphene		8001-35-2	- -	UG/KG																										
2,4,5-T		93-76-5	- -	UG/KG																										
2,4,5-TP Acid (Silvex)		93-72-1	58000	- UG/KG																										
2,4-D		94-75-7	- -	UG/KG																										
Dinoseb		88-85-7	- -	UG/KG																										
TOTAL DETECTABLE				UG/KG	0		0		0		0		0		0		0		0		0		0		0		0		0	

TOTAL PETROLEUM HYDROCARBONS			CAS	RSC0 Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	
Fuel #2 (#)	Fuel #2 (#)	--	UG/KG																												
Gasoline (#)	Gasoline (#)	--	UG/KG																												
Kerosene (#)	Kerosene (#)	--	UG/KG																												
Lube Oil (#)	Lube Oil (#)	--	UG/KG																												
Unidentified Hydrocarbon (#)	Unidentified Hydrocarbon (#)	--	UG/KG																												
TOTAL DETECTABLE			UG/KG		0		0		0		0		0		0		0		0		0		0		0		0		0		0

TABLE 2
SUBSURFACE SOIL SAMPLES

		SAMPLE ID: LAB ORDER: SAMPLE DATE:		B-28 0.5-0.8 U1008324-006A 8/13/2010	B-29 2-4ft U1008324-007A 8/13/2010	B-29 4-8ft U1008324-008A 8/13/2010	B-31 6.8-10ft U1008324-009A 8/13/2010	B-32 3.7-10ft U1008324-010A 8/13/2010	B-33 3-5.5ft U1008324-011A 8/16/2010	B-34 6-7ft U1008324-012A 8/16/2010	B-36 2.5-3.9ft U1008324-013A 8/16/2010	B-36 2.5-3.9ft U1008324-013A 8/16/2010	B-42 4-8ft U1008324-014A 8/17/2010	B-42 4-8ft U1008324-014A 8/17/2010	B-44 12-16ft U1008324-015A 8/17/2010	B-44 12-16ft U1008324-015A 8/17/2010	B-47 8ft-12ft U1008324-016A 8/17/2010
Restricted Soil Cleanup Objectives (SCO) - Residential																	
METALS (EPA METHOD 6010B)		CAS	RSC0 Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
Barium	7440-39-3	350 f	MG/KG	68		480		310		96				100		41	U
Cadmium	7440-43-9	2.5 f	MG/KG	0.57	U	0.61	U	0.77		0.64	U			0.8	U	0.69	U
Chromium	7440-47-3	22* h	MG/KG	12		10		6.8		9.8				15		27	
Copper	7440-50-8	270 -	MG/KG	19		69		19		340				120		210	
Lead	7439-92-1	400 -	MG/KG	11	U	4800		67		480				150		150	
Nickel	7440-02-0	140 -	MG/KG	4.7		23.000		4.7		120				280		54	
Silver	7440-22-4	36 -	MG/KG	5.7	U	6.1	U	6.5	U	6.4	U			7.9	U	6.9	U
Zinc	7440-66-6	2200 -	MG/KG	35		280		1100		280				120		59	
Arsenic	7440-38-2	16 f	MG/KG	8.2		16		6.5	U					11		13	
Selenium	7782-49-2	36 -	MG/KG	3.4	U	3.6	U	3.9	U					4.8	U	4.1	U
Total Mercury	7439-97-6	0.81 j	MG/KG	0.115	U	0.129		0.13	U	0.395				0.159	U	0.137	U
Total Cyanide	57-12-5	27 -	MG/KG					3.06	U								
TOTAL DETECTABLE			MG/KG	146.90		5,678.13		1,508.27		0.00		1,345.20		0.00		0.00	

PCBs (EPA METHOD 8080)		CAS	RSC0 Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
Aroclor 1016		12674-11-2	- - UG/KG		21 U					22 U				27 U						25 U	
Aroclor 1221		11104-28-2	- - UG/KG		21 U					22 U				27 U						25 U	
Aroclor 1232		11141-16-5	- - UG/KG		21 U					22 U				27 U						25 U	
Aroclor 1242		53469-21-9	- - UG/KG		21 U					22 U				27 U						25.0 U	
Aroclor 1248		12672-29-6	- - UG/KG		21 U					22 U				27 U						25 U	
Aroclor 1254		11097-69-1	- - UG/KG		21 U					22 U				27 U						25 U	
Aroclor 1260		11096-82-5	- - UG/KG		21 U					22 U				27 U						25 U	
TOTAL DETECTABLE			1,000 - UG/KG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ORGANOCHLORINE PESTICIDES (EPA METHOD 8081A)		CAS	RSC0 Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
4,4'-DDD		72-54-8	2600 - UG/KG			40	U			42	U			52	U			48	U
4,4'-DDE		72-55-9	1800 - UG/KG			40	U			42	U			52	U			48	U
4,4'-DDT		50-29-3	1700 - UG/KG			40	UQ			49	Q			52	UQ			48	UQ
Aldrin		309-00-2	19 - UG/KG			21	U			22	U			27	U			25	U
alpha-BHC		319-84-6	97 - UG/KG			21	U			22	U			27	U			25	U
Chlordane (alpha)		5103-71-9	910 - UG/KG			21	U			22	U			27	U			25	U
beta-BHC		319-85-7	72 - UG/KG			21	U			22	U			27	U			25	U
delta-BHC		319-86-8	100000 a UG/KG			21	U			22	U			27	U			25	U
Dieldrin		60-57-1	39 - UG/KG			40	U			42	U			52	U			48	U
Endosulfan I		959-98-8	4800 j UG/KG			21	UQ			22	UQ			27	UQ			25	UQ
Endosulfan II		33213-65-9	4800 j UG/KG			40	UQ			42	UQ			52	UQ			48	UQ
Endosulfan sulfate		1031-07-8	4800 j UG/KG			40	U			42	U			52	U			48	U
Endrin		72-20-8	2200 - UG/KG			40	U			42	U			52	U			48	U
Endrin aldehyde		7421-93-4	- - UG/KG			40	U			42	U			52	U			48	U
Endrin ketone		53494-70-5	- - UG/KG			40	U			42	U			52	U			48	U
Lindane		58-89-9	280 - UG/KG			21	U			22	U			27	U			25	U
gamma-Chlordane		5103-74-2	- - UG/KG			21	U			22	U			27	U			25	U
Heptachlor		76-44-8	420 - UG/KG			21	U			22	U			27	U			25	U
Heptachlor epoxide		1024-57-3	- - UG/KG			21	U			22	U			27	U			25	U
Methoxychlor		72-43-5	- - UG/KG			210	UQ			220	UQ			270	UQ			250	UQ
Toxaphene		8001-35-2	- - UG/KG			2100	U			2200	U			2700	U			2500	U
2,4,5-T		93-76-5	- - UG/KG																
2,4,5-TP Acid (Silvex)		93-72-1	58000 - UG/KG																
2,4-D		94-75-7	- - UG/KG																
Dinoseb		88-85-7	- - UG/KG																
TOTAL DETECTABLE			UG/KG	0		0		0		49		0		0		0		0	

TOTAL PETROLEUM HYDROCARBONS		CAS	RSC0 Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
Fuel #2 (#)	Fuel #2 (#)	- -	UG/KG					20	UQ	21	UQ								
Gasoline (#)	Gasoline (#)	- -	UG/KG					40	U	42	U								
Kerosene (#)	Kerosene (#)	- -	UG/KG					4	U	4.2	U								
Lube Oil (#)	Lube Oil (#)	- -	UG/KG					910		1600									
Unidentified Hydrocarbon (#)	Unidentified Hydrocarbon (#)	- -	UG/KG					1.2	U	1.3	U								
TOTAL DETECTABLE			UG/KG	0		0		910		1600		0		0		0		0	

TABLE 2
SUBSURFACE SOIL SAMPLES

		SAMPLE ID: LAB ORDER: SAMPLE DATE:		B-47 8ft-12ft U1008324-016A 8/17/2010	B-51 0-12ft U1008395-002B 8/17/2010	B-55 8-12ft U1008395-003A 8/18/2010	B-55 12-13ft U1008395-004A 8/18/2010	B-56 9-11ft U1008395-005B 8/18/2010	B-57 0-2ft U1008395-006A 8/18/2010	B-58 1-3ft U1008395-007B 8/18/2010	B-59 1-4ft U1008395-008B 8/18/2010	B-60 1-4ft U1008395-009B 8/18/2010	B-65 1.5-4ft U1008395-010A 8/18/2010	B-66 6in-4ft U1008395-011A 8/19/2010	B-68 6in-4ft U1008395-012A 8/19/2010	B-70 1-4ft U1008395-013A 8/19/2010	B-71 0.5-2ft U1008459-002A 8/23/2010
Restricted Soil Cleanup Objectives (SCO) - Residential																	
METALS (EPA METHOD 6010B)		CAS	RSC0 Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
Barium	7440-39-3	350 f	MG/KG			0.6	U	0.73	U			1	U			0.55	U
Cadmium	7440-43-9	2.5 f	MG/KG			14.0		45.0		10	U	0.62	U	0.57	U	0.59	U
Chromium	7440-47-3	22" h	MG/KG			39		7700		37		11.0		9.2		12	
Copper	7440-50-8	270 -	MG/KG					750		1500		54		270		19	
Lead	7439-92-1	400 -	MG/KG			16		130		13		62		61		82	
Nickel	7440-02-0	140 -	MG/KG			6	U	7.3	U	10	U	12		22		86	
Silver	7440-22-4	36 -	MG/KG			150		390		220		6.2	U	5.7	U	5.9	U
Zinc	7440-66-6	2200 -	MG/KG			12	Q	33	Q	10	UQ	100		70		88	
Arsenic	7440-38-2	16 f	MG/KG			3.6	U	4.4	U	6.3	U	8	Q	8.4	Q	8	Q
Selenium	7782-49-2	36 -	MG/KG			1.77		0.145	U	0.16		3.7	U	3.4	U	3.5	U
Total Mercury	7439-97-6	0.81 j	MG/KG					0.402		0.16		0.223		0.118	U	0.1	U
Total Cyanide	57-12-5	27 -	MG/KG														
TOTAL DETECTABLE		MG/KG	0.00			269.77		9,048.00		0.00		3,133.40		0.00		232.16	

PCBs (EPA METHOD 8080)		CAS	RSC0 Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
Aroclor 1016	12674-11-2	- -	UG/KG			0.1	U	0.24	U					0.098	U		
Aroclor 1221	11104-28-2	- -	UG/KG			0.1	U	0.24	U					0.098	U		
Aroclor 1232	11141-16-5	- -	UG/KG			0.1	U	0.24	U					0.098	U		
Aroclor 1242	53469-21-9	- -	UG/KG			0.1	U	0.12	U					0.1	U		
Aroclor 1248	12672-29-6	- -	UG/KG			0.1	U	0.12	U					0.098	U		
Aroclor 1254	11097-69-1	- -	UG/KG			0.1	U	0.12	U					0.098	U		
Aroclor 1260	11096-82-5	- -	UG/KG											0.097	U		
TOTAL DETECTABLE		1,000 -	UG/KG	0		0		0		0		0		0		0	

ORGANOCHLORINE PESTICIDES (EPA METHOD 8081A)		CAS	RSC0 Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
4,4'-DDD	72-54-8	2600 -	UG/KG														
4,4'-DDE	72-55-9	1800 -	UG/KG														
4,4'-DDT	50-29-3	1700 -	UG/KG														
Aldrin	309-00-2	19 -	UG/KG														
alpha-BHC	319-84-6	97 -	UG/KG														
Chlordane (alpha)	5103-71-9	910 -	UG/KG			0.1	U	0.24	U					0.098	U		
beta-BHC	319-85-7	72 -	UG/KG														
delta-BHC	319-86-8	100000 a	UG/KG														
Dieldrin	60-57-1	39 -	UG/KG														
Endosulfan I	959-98-8	4800 j	UG/KG														
Endosulfan II	33213-65-9	4800 j	UG/KG														
Endosulfan sulfate	1031-07-8	4800 j	UG/KG														
Endrin	72-20-8	2200 -	UG/KG														
Endrin aldehyde	7421-93-4	- -	UG/KG														
Endrin ketone	53494-70-5	- -	UG/KG														
Lindane	58-89-9	280 -	UG/KG														
gamma-Chlordane	5103-74-2	- -	UG/KG														
Heptachlor	76-44-8	420 -	UG/KG														
Heptachlor epoxide	1024-57-3	- -	UG/KG														
Methoxychlor	72-43-5	- -	UG/KG														
Toxaphene	8001-35-2	- -	UG/KG													19	U
2,4,5-T	93-76-5	- -	UG/KG														
2,4,5-TP Acid (Silvex)	93-72-1	58000 -	UG/KG														
2,4-D	94-75-7	- -	UG/KG														
Dinoseb	88-85-7	- -	UG/KG														
TOTAL DETECTABLE		UG/KG	0			0		0		0		0		0		0	

TOTAL PETROLEUM HYDROCARBONS		CAS	RSC0 Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
Fuel #2 (#)	Fuel #2 (#)	- -	UG/KG													38	U
Gasoline (#)	Gasoline (#)	- -	UG/KG													3.8	UQ
Kerosene (#)	Kerosene (#)	- -	UG/KG													360	U
Lube Oil (#)	Lube Oil (#)	- -	UG/KG													1.2	U
Unidentified Hydrocarbon (#)	Unidentified Hydrocarbon (#)	- -	UG/KG											1.17	U	1.11	U
TOTAL DETECTABLE		UG/KG	0			0		0		0		0		0		0	

TABLE 2
SUBSURFACE SOIL SAMPLES

SUBSURFACE SOIL SAMPLES			SAMPLE ID: B-72 0-1.5ft		B-72 6-7ft		B-74 2-3ft		B-75 0-2.5ft		B-76 0-1ft		B-77 0.3-1ft		E-1 Oil		E-2 Oil/Sludge		B-76 0-1ft Dup		B-78 1-2ft		B-79 3.8-4.8ft		B-80 0.8-1.8ft		B-81 1-2ft		B-82 0.8-1.8ft		
Restricted Soil Cleanup Objectives (SCO) - Residential			LAB ORDER: U1008459-003A		U1008459-004A		U1008459-005A		U1008459-006A		U1008459-007A		U1008459-008A		U1008459-009A		U1008459-010A		U1008459-011A		U1008459-012A		U1008459-013A		U1008459-014A		U1008459-015A		U1008459-016A		
SAMPLE DATE: 8/23/2010			8/23/2010		8/23/2010		8/23/2010		8/23/2010		8/23/2010		8/23/2010		8/23/2010		8/23/2010		8/23/2010		8/24/2010		8/24/2010		8/24/2010		8/24/2010		8/24/2010		
METALS (EPA METHOD 6010B)			CAS	RSC0 Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	
Barium		7440-39-3		350 f	MG/KG																67		120		77		45		98		
Cadmium		7440-43-9		2.5 f	MG/KG																0.57	U	0.57	U	0.59	U	0.55	U	0.6	U	
Chromium		7440-47-3		22* h	MG/KG																10		11		12		6		15		
Copper		7440-50-8		270 -	MG/KG																21		12		19		17		15		
Lead		7439-92-1		400 -	MG/KG																41		31		110		57		12	U	
Nickel		7440-02-0		140 -	MG/KG																5.7		7.600		5.9		3.3		11		
Silver		7440-22-4		36 -	MG/KG																5.7	U	5.7		5.9		5.5		6	U	
Zinc		7440-66-6		2200 -	MG/KG																37		31		70		51		31		
Arsenic		7440-38-2		16 f	MG/KG																5.7		5.70		5.9		5.5		6	U	
Selenium		7782-49-2		36 -	MG/KG																3.4	UQ	3.4	UQ	3.6	UQ	3.3	UQ	3.6	UQ	
Total Mercury		7439-97-6		0.81 j	MG/KG																0.114	U	0.113	U	0.244		0.136		0.121	U	
Total Cyanide		57-12-5		27 -	MG/KG																										
TOTAL DETECTABLE				MG/KG		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		181.70		212.60		294.14		176.14		170.00	
PCBs (EPA METHOD 8080)			CAS	RSC0 Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	
Aroclor 1016		12674-11-2		-	UG/KG	0.092	U			0.089	U	0.094	U	0.097	U	0.097	U	5	U	5	U	0.097	U					0.092	U	0.1	U
Aroclor 1221		11104-28-2		-	UG/KG	0.092	U			0.089	U	0.094	U	0.097	U	0.097	U	5	U	5	U	0.097	U					0.092	U	0.1	U
Aroclor 1232		11141-16-5		-	UG/KG	0.092	U			0.089	U	0.094	U	0.097	U	0.097	U	5	U	5	U	0.097	U					0.092	U	0.1	U
Aroclor 1242		53469-21-9		-	UG/KG	0.1	U			0.1	U	0.094	U	0.097	U	0.097	U	5.0	U	5.0	U	0.097	U					0.092	U	0.1	U
Aroclor 1248		12672-29-6		-	UG/KG	0.092	U			0.089	U	0.094	U	0.097	U	0.097	U	5	U	5	U	0.097	U					0.092	U	0.1	U
Aroclor 1254		11097-69-1		-	UG/KG	0.092	U			0.089	U	0.094	U	0.097	U	0.097	U	5	U	5	U	0.1	U					0.092	U	0.1	U
Aroclor 1260		11096-82-5		-	UG/KG	0.092	U			0.089	U	0.094	U	0.097	U	0.097	U	5	U	5	U	0.1	U					0.092	U	0.1	U
TOTAL DETECTABLE				1,000 -	UG/KG	0		0		0		0		0		0		0		0		0		0		0		0		0	
ORGANOCHLORINE PESTICIDES (EPA METHOD 8081A)			CAS	RSC0 Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	
4,4'-DDD		72-54-8		2600	UG/KG																										
4,4'-DDE		72-55-9		1800	UG/KG																										
4,4'-DDT		50-29-3		1700	UG/KG																										
Aldrin		309-00-2		19	UG/KG																										
alpha-BHC		319-84-6		97	UG/KG																										
Chlordane (alpha)		5103-71-9		910	UG/KG																										
beta-BHC		319-85-7		72	UG/KG																										
delta-BHC		319-86-8		100000	a	UG/KG																									
Dieldrin		60-57-1		39	UG/KG																										
Endosulfan I		959-98-8		4800	j	UG/KG																									
Endosulfan II		33213-65-9		4800	j	UG/KG																									
Endosulfan sulfate		1031-07-8		4800	j	UG/KG																									
Endrin		72-20-8		2200	-	UG/KG																									
Endrin aldehyde		7421-93-4		-	UG/KG																										
Endrin ketone		53494-70-5		-	UG/KG																										
Lindane		58-89-9		280	UG/KG																										
gamma-Chlordane		5103-74-2		-	UG/KG																										
Heptachlor		76-44-8		420	UG/KG																										
Heptachlor epoxide		1024-57-3		-	UG/KG																										
Methoxychlor		72-43-5		-	UG/KG																										
Toxaphene		8001-35-2		-	UG/KG																										
2,4,5-T		93-76-5		-	UG/KG																										
2,4,5-TP Acid (Silvex)		93-72-1		58000	-	UG/KG																									
2,4-D		94-75-7		-	UG/KG																										
Dinoseb		88-85-7		-	UG/KG																										
TOTAL DETECTABLE				UG/KG		0		0		0		0		0		0		0		0		0		0		0		0		0	
TOTAL PETROLEUM HYDROCARBONS			CAS	RSC0 Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	
Fuel #2 (#)		Fuel #2 (#)		-	UG/KG	18	U			290																					
Gasoline (#)		Gasoline (#)		-	UG/KG	36	U			70		U																			
Kerosene (#)		Kerosene (#)		-	UG/KG	3.6	U			7		U																			
Lube Oil (#)		Lube Oil (#)		-	UG/KG	360	U			700		U																			
Unidentified Hydrocarbon (#)		Unidentified Hydrocarbon (#)		-	UG/KG	1.1	U			2.1		U																			
TOTAL DETECTABLE				UG/KG		0		0		290		0		0		0		0		0		0		0		0		0		0	

TABLE 2
SUBSURFACE SOIL SAMPLES

		SAMPLE ID: LAB ORDER: SAMPLE DATE:		B-83 0.8-1.5ft U1008459-017A 8/24/2010	B-84 0.5-2ft U1008459-018A 8/24/2010	B-85 0.5-1.8ft U1008459-019A 8/24/2010	B-86 0.8-4ft U1008522-002A 8/24/2010	B-88 4-8ft U1008522-003A 8/24/2010	B-89 1.5-3ft U1008522-004A 8/25/2010	B-91 4-7.5ft U1008522-005A 8/25/2010	B-92 7-8.5ft U1008522-006A 8/25/2010	B-93 1.5-4.0ft U1008522-007A 8/25/2010	DP-1 U1008522-008B 8/25/2010	B-94 7-8ft U1008522-009A 8/25/2010	B-94 8-10ft U1008522-010A 8/25/2010	B-96 0.5-2ft U1008522-011A 8/25/2010	B-96 2-4ft U1008522-012A 8/25/2010
Restricted Soil Cleanup Objectives (SCO) - Residential																	
METALS (EPA METHOD 6010B)		CAS	RSC0 Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
Barium	7440-39-3	350 f	MG/KG	79		70		91		63		260		67	0.3 U	57	47
Cadmium	7440-43-9	2.5 f	MG/KG	0.63 U		0.57 U		0.58 U	0.6 U	2.2		3.7		0.82	0.005 U	0.61 U	1.0
Chromium	7440-47-3	22* h	MG/KG	17		11		5.8 U	8.1	7.9		6.7		7.6	0.05 U	6.1 U	8.9
Copper	7440-50-8	270 -	MG/KG	18		15		16	21	60		810		51.0	0.0 U	240.0	22
Lead	7439-92-1	400 -	MG/KG	30		17		27	12 U	27		190		44	0.100 U	120	17
Nickel	7440-02-0	140 -	MG/KG	11		6.900		4.1	12	15.000		65		12.000	0.03 U	33	13
Silver	7440-22-4	36 -	MG/KG	6.3 U		5.7 U		5.8 U	6 U	5.7 U		6.4 U		5.7 U	0.05 U	6.1 U	5.5 U
Zinc	7440-66-6	2200 -	MG/KG	39		44		24	30	85		750		82	0.033 U	470	48
Arsenic	7440-38-2	16 f	MG/KG	6.3 U		5.7 U		9.1	6 U	5.7 U		31		9.5	0.01 U	6.1 U	5.5 U
Selenium	7782-49-2	36 -	MG/KG	3.8 UO		3.4 UO		3.5 UO	3.6 U	3.4 U		8.9		3.4 U	0.005 U	3.7 U	3.3 U
Total Mercury	7439-97-6	0.81 j	MG/KG	0.125 U		0.113 U		0.116 U	0.121 U	0.115		2.54		0.113 U	0.0004 U	0.122 U	0.11 U
Total Cyanide	57-12-5	27 -	MG/KG	1.25 U		1.13 U		1.16 U		1.28 U						1.1 U	1.12 U
TOTAL DETECTABLE			MG/KG	194.00		163.90		171.20	134.10	268.22		2,127.84		0.00	0.00	273.92	0.03

PCBs (EPA METHOD 8080)		CAS	RSC0 Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
Aroclor 1016	12674-11-2	- -	UG/KG							0.095 U				0.05 U		0.1 U	
Aroclor 1221	11104-28-2	- -	UG/KG							0.095 U				0.05 U		0.1 U	
Aroclor 1232	11141-16-5	- -	UG/KG							0.095 U				0.05 U		0.1 U	
Aroclor 1242	53469-21-9	- -	UG/KG							0.095 U				0.05 U		0.1 U	
Aroclor 1248	12672-29-6	- -	UG/KG							0.095 U				0.05 U		0.1 U	
Aroclor 1254	11097-69-1	- -	UG/KG							0.095 U				0.05 U		0.1 U	
Aroclor 1260	11096-82-5	- -	UG/KG							0.095 U				0.05 U		0.1 U	
TOTAL DETECTABLE		1,000 -	UG/KG	0		0		0	0	0		0		0		0	0

ORGANOCHLORINE PESTICIDES (EPA METHOD 8081A)		CAS	RSC0 Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
4,4'-DDD	72-54-8	2600 -	UG/KG														
4,4'-DDE	72-55-9	1800 -	UG/KG														
4,4'-DDT	50-29-3	1700 -	UG/KG														
Aldrin	309-00-2	19 -	UG/KG														
alpha-BHC	319-84-6	97 -	UG/KG														
Chlordane (alpha)	5103-71-9	910 -	UG/KG														
beta-BHC	319-85-7	72 -	UG/KG														
delta-BHC	319-86-8	100000 a	UG/KG														
Dieldrin	60-57-1	39 -	UG/KG														
Endosulfan I	959-98-8	4800 j	UG/KG														
Endosulfan II	33213-65-9	4800 j	UG/KG														
Endosulfan sulfate	1031-07-8	4800 j	UG/KG														
Endrin	72-20-8	2200 -	UG/KG														
Endrin aldehyde	7421-93-4	- -	UG/KG														
Endrin ketone	53494-70-5	- -	UG/KG														
Lindane	58-89-9	280 -	UG/KG														
gamma-Chlordane	5103-74-2	- -	UG/KG														
Heptachlor	76-44-8	420 -	UG/KG														
Heptachlor epoxide	1024-57-3	- -	UG/KG														
Methoxychlor	72-43-5	- -	UG/KG														
Toxaphene	8001-35-2	- -	UG/KG														
2,4,5-T	93-76-5	- -	UG/KG														
2,4,5-TP Acid (Silvex)	93-72-1	58000 -	UG/KG														
2,4-D	94-75-7	- -	UG/KG														
Dinoseb	88-85-7	- -	UG/KG														
TOTAL DETECTABLE			UG/KG	0		0		0	0	0		0		0		0	0

TOTAL PETROLEUM HYDROCARBONS		CAS	RSC0 Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
Fuel #2 (#)	Fuel #2 (#)	- -	UG/KG														
Gasoline (#)	Gasoline (#)	- -	UG/KG														
Kerosene (#)	Kerosene (#)	- -	UG/KG														
Lube Oil (#)	Lube Oil (#)	- -	UG/KG														
Unidentified Hydrocarbon (#)	Unidentified Hydrocarbon (#)	- -	UG/KG														
TOTAL DETECTABLE			UG/KG	0		0		0	0	0		0		0		0	0

TABLE 2
SUBSURFACE SOIL SAMPLES

		SAMPLE ID: LAB ORDER: SAMPLE DATE:		B-97 0.5-2ft U1008522-013A 8/25/2010	B-97 2-4ft U1008522-014A 8/25/2010	B-98 0.5-2ft U1008522-015A 8/25/2010	B-98 2-4ft U1008522-016A 8/25/2010	SW-1 U1008522-017B 8/25/2010	B-99 0.5-2ft U1008522-018A 8/25/2010	B-99 2-4ft U1008522-019A 8/25/2010	B-99 6-8ft U1008522-020A 8/25/2010	SS-1 U1008522-021A 8/25/2010	SS-2 U1009054-002A 8/27/2010	FC 104 1-1.8 ft U1009054-003A 8/31/2010	FC 105 0.9-1.7ft U1009054-004A 8/31/2010	FC 106 1-2ft U1009054-005A 8/31/2010	FC 107 1-2ft U1009054-006A 8/31/2010
Restricted Soil Cleanup Objectives (SCO) - Residential																	
METALS (EPA METHOD 6010B)		CAS	RSC0 Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
Barium	7440-39-3	350 f	MG/KG	150		350		60		42		0.3	U	47		50	
Cadmium	7440-43-9	2.5 f	MG/KG	1.8		4.8		0.57	U	0.58	U	0.005	U	0.6	U	0.6	U
Chromium	7440-47-3	22" h	MG/KG	5.7	U	6	U	7.9		6.8		0.05	U	6.7		6	
Copper	7440-50-8	270 -	MG/KG	43		29		32.0		12		0.057		10		10	
Lead	7439-92-1	400 -	MG/KG	130		34		23		12	U	0.1	U	12	U	11	U
Nickel	7440-02-0	140 -	MG/KG	14		9		15		8.7		0.03	U	10		9.3	
Silver	7440-22-4	36 -	MG/KG	5.7	U	6	U	5.7	U	5.8	U	0.05	U	5.8	U	5.5	U
Zinc	7440-66-6	2200 -	MG/KG	110		57		56		21		0.037		19		21	
Arsenic	7440-38-2	16 f	MG/KG	12		8.8		6.7		5.8	U	0.1	U	5.8	U	5.5	U
Selenium	7782-49-2	36 -	MG/KG	3.4	U	3.6	U	3.4	U	3.5	U	0.05	U	3.5	U	3.3	U
Total Mercury	7439-97-6	0.81 j	MG/KG	0.204		0.126		0.115	U	0.116	U	0.0004	U	0.116	U	0.111	U
Total Cyanide	57-12-5	27 -	MG/KG	1.15	U	1.21	U	1.15	U	1.16	U			1.16	U	1.11	U
TOTAL DETECTABLE			MG/KG	461.00		492.43		200.60		90.50		0.09		92.70		96.30	

PCBs (EPA METHOD 8080)		CAS	RSC0 Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
Aroclor 1016	12674-11-2	- -	UG/KG							0.05	U			0.11	U	0.15	U
Aroclor 1221	11104-28-2	- -	UG/KG							0.05	U			0.11	U	0.15	U
Aroclor 1232	11141-16-5	- -	UG/KG							0.05	U			0.11	U	0.15	U
Aroclor 1242	53469-21-9	- -	UG/KG							0.1	U			0.11	U	0.15	U
Aroclor 1248	12672-29-6	- -	UG/KG							0.05	U			0.11	U	0.15	U
Aroclor 1254	11097-69-1	- -	UG/KG							0.05	U			0.11	U	0.15	U
Aroclor 1260	11096-82-5	- -	UG/KG							0.05	U			0.11	U	0.15	U
TOTAL DETECTABLE		1,000 -	UG/KG	0		0		0		0		0		0		0	

ORGANOCHLORINE PESTICIDES (EPA METHOD 8081A)		CAS	RSC0 Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
4,4'-DDD	72-54-8	2600 -	UG/KG														
4,4'-DDE	72-55-9	1800 -	UG/KG														
4,4'-DDT	50-29-3	1700 -	UG/KG														
Aldrin	309-00-2	19 -	UG/KG														
alpha-BHC	319-84-6	97 -	UG/KG														
Chlordane (alpha)	5103-71-9	910 -	UG/KG														
beta-BHC	319-85-7	72 -	UG/KG														
delta-BHC	319-86-8	100000 a	UG/KG														
Dieldrin	60-57-1	39 -	UG/KG														
Endosulfan I	959-98-8	4800 j	UG/KG														
Endosulfan II	33213-65-9	4800 j	UG/KG														
Endosulfan sulfate	1031-07-8	4800 j	UG/KG														
Endrin	72-20-8	2200 -	UG/KG														
Endrin aldehyde	7421-93-4	- -	UG/KG														
Endrin ketone	53494-70-5	- -	UG/KG														
Lindane	58-89-9	280 -	UG/KG														
gamma-Chlordane	5103-74-2	- -	UG/KG														
Heptachlor	76-44-8	420 -	UG/KG														
Heptachlor epoxide	1024-57-3	- -	UG/KG														
Methoxychlor	72-43-5	- -	UG/KG														
Toxaphene	8001-35-2	- -	UG/KG														
2,4,5-T	93-76-5	- -	UG/KG														
2,4,5-TP Acid (Silvex)	93-72-1	58000 -	UG/KG														
2,4-D	94-75-7	- -	UG/KG														
Dinoseb	88-85-7	- -	UG/KG														
TOTAL DETECTABLE			UG/KG	0		0		0		0		0		0		0	

TOTAL PETROLEUM HYDROCARBONS		CAS	RSC0 Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
Fuel #2 (#)	Fuel #2 (#)	- -	UG/KG														
Gasoline (#)	Gasoline (#)	- -	UG/KG														
Kerosene (#)	Kerosene (#)	- -	UG/KG														
Lube Oil (#)	Lube Oil (#)	- -	UG/KG														
Unidentified Hydrocarbon (#)	Unidentified Hydrocarbon (#)	- -	UG/KG														
TOTAL DETECTABLE			UG/KG	0		0		0		0		0		0		0	

TABLE 2
SUBSURFACE SOIL SAMPLES

SUBSURFACE SOIL SAMPLES																																
SAMPLE ID:		FC 108 0.6-2ft		FC 109 0.8-2.2ft		FC 110 0.6-1.4ft		FC 111 0.8-2ft		FC 112 1.5-3.2ft		B-60A 1-4ft		B-60A 4-8ft		B-60B 1-4ft		B-60B 4-10ft		B-60C 1-4ft		B 60C 4-8ft		B 60D 1-4ft		B 60D 4-8ft		MH1 0-4ft				
LAB ORDER:		U1009054-007A		U1009054-008A		U1009054-009A		U1009054-010A		U1009054-011A		U1009400-002A		U1009400-003A		U1009400-005A		U1009400-006A		U1009400-008A		U1009400-009A		U1009400-011A		U1009400-013A		U1009400-014B				
SAMPLE DATE:		8/31/2010		8/31/2010		8/31/2010		8/31/2010		8/31/2010		9/20/2010		9/20/2010		9/20/2010		9/20/2010		9/20/2010		9/20/2010		9/20/2010		9/20/2010		9/20/2010				
METALS (EPA METHOD 6010B)		CAS		RSC0 Comment		RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL			
Barium		7440-39-3		350 f	MG/KG	74		59		57		52		46																		
Cadmium		7440-43-9		2.5 f	MG/KG	79		5.6		0.55	U	0.56	U	0.61	U																	
Chromium		7440-47-3		22* h	MG/KG	12		130		18		7.8		7.7																		
Copper		7440-50-8		270 -	MG/KG	44		62		26		10		8.8																		
Lead		7439-92-1		400 -	MG/KG	63		26		17		11	U	12	U																	
Nickel		7440-02-0		140 -	MG/KG	48		32		16		5.4		3.7	U																	
Silver		7440-22-4		36 -	MG/KG	5.8	U	5.8	U	5.5	U	5.6	U	6.1	U																	
Zinc		7440-66-6		2200 -	MG/KG	2900		390		83		34		28																		
Arsenic		7440-38-2		16 f	MG/KG	9.9		6.8		10		11		7	Q																	
Selenium		7782-49-2		36 -	MG/KG	3.5	U	3.5	U	3.3	U	3.4	U	3.7	U																	
Total Mercury		7439-97-6		0.81 j	MG/KG	0.117	U	0.115	U	0.109	U	0.112	U	0.123	U	0.122	UQ	0.123	UQ	0.113	UQ	0.726	Q	0.169	Q	0.167	Q	0.118	UQ	0.425	Q	
Total Cyanide		57-12-5		27 -	MG/KG	122		17.1		1.09	U	1.12	U	1.23	U																	
TOTAL DETECTABLE					MG/KG	3,351.90		728.50		227.00		120.20		97.50		0.00		0.00		0.00		0.73		0.17		0.17		0.00		0.43		0.20

PCBs (EPA METHOD 8080)		CAS	RSC0 Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
Aroclor 1016	12674-11-2	- -	UG/KG			0.096	U												
Aroclor 1221	11104-28-2	- -	UG/KG			0.096	U												
Aroclor 1232	11141-16-5	- -	UG/KG			0.096	U												
Aroclor 1242	53469-21-9	- -	UG/KG			0.1	U												
Aroclor 1248	12672-29-6	- -	UG/KG			0.096	U												
Aroclor 1254	11097-69-1	- -	UG/KG			0.096	U												
Aroclor 1260	11096-82-5	- -	UG/KG			0.096	U												
TOTAL DETECTABLE		1,000 -	UG/KG	0		0		0		0		0		0		0		0	

ORGANOCHLORINE PESTICIDES (EPA METHOD 8081A)		CAS	RSC0 Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
4,4'-DDD	72-54-8	2600 -	UG/KG							40	U	41	U					47	U
4,4'-DDE	72-55-9	1800 -	UG/KG							40	U	41	U					47	U
4,4'-DDT	50-29-3	1700 -	UG/KG							40	UQ	41	UQ					47	UQ
Aldrin	309-00-2	19 -	UG/KG							21	U	21	U					24	U
alpha-BHC	319-84-6	97 -	UG/KG							21	U	21	U					24	U
Chlordane (alpha)	5103-71-9	910 -	UG/KG							21	U	21	U					24	U
beta-BHC	319-85-7	72 -	UG/KG							21	U	21	U					24	U
delta-BHC	319-86-8	100000 a	UG/KG							21	U	21	U					24	U
Dieldrin	60-57-1	39 -	UG/KG							40	U	41	U					47	U
Endosulfan I	959-98-8	4800 j	UG/KG							21	UQ	21	UQ					24	UQ
Endosulfan II	33213-65-9	4800 j	UG/KG							40	UQ	41	UQ					290	Q
Endosulfan sulfate	1031-07-8	4800 j	UG/KG							40	U	41	U					47	U
Endrin	72-20-8	2200 -	UG/KG							40	U	41	U					47	U
Endrin aldehyde	7421-93-4	- -	UG/KG							40	U	41	U					47	U
Endrin ketone	53494-70-5	- -	UG/KG							40	U	41	U					47	U
Lindane	58-89-9	280 -	UG/KG							21	U	21	U					24	U
gamma-Chlordane	5103-74-2	- -	UG/KG							21	U	21	U					24	U
Heptachlor	76-44-8	420 -	UG/KG							21	U	21	U					24	U
Heptachlor epoxide	1024-57-3	- -	UG/KG							21	U	21	U					24	U
Methoxychlor	72-43-5	- -	UG/KG							210	UQ	210	UQ					240	UQ
Toxaphene	8001-35-2	- -	UG/KG							2100	U	2100	U					2400	U
2,4,5-T	93-76-5	- -	UG/KG							40	UQ	41	UQ					47	UQ
2,4,5-TP Acid (Silvex)	93-72-1	58000 -	UG/KG							40	UQ	41	UQ					47	UQ
2,4-D	94-75-7	- -	UG/KG							40	U	41	U					47	U
Dinoseb	88-85-7	- -	UG/KG							40	U	41	U					47	U
TOTAL DETECTABLE			UG/KG	0		0		0		0		0		0		0		0	

TOTAL PETROLEUM HYDROCARBONS		CAS	RSC0 Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
Fuel #2 (#)	Fuel #2 (#)	- -	UG/KG													23	U		
Gasoline (#)	Gasoline (#)	- -	UG/KG													45	U		
Kerosene (#)	Kerosene (#)	- -	UG/KG													4.5	U		
Lube Oil (#)	Lube Oil (#)	- -	UG/KG													450	U		
Unidentified Hydrocarbon (#)	Unidentified Hydrocarbon (#)	- -	UG/KG													1.4	U		
TOTAL DETECTABLE			UG/KG	0		0		0		0		0		0		0		0	

TABLE 2
SUBSURFACE SOIL SAMPLES

SUBSURFACE SOIL SAMPLES																															
Restricted Soil Cleanup Objectives (SCO) - Residential		SAMPLE ID:		B 36A 1-4ft		B 36A 4-8ft		B 6A 1-4ft		B 6A 4-8ft		MH 2 0-3ft		MH 2 3-4ft		MH 2 4-8ft		B 32A 10-13.5ft		B 32A 4-10ft		B 32B 8-11ft		B 30A 4-10ft		B 31A 0.8-4ft		B 32C 1-4ft		B 32C 4-8ft	
		LAB ORDER:		U1009400-015A		U1009400-016A		U1009400-018A		U1009400-019A		U1009400-021B		U1009400-022A		U1009400-023B		U1009400-024A		U1009400-025B		U1009400-026A		U1009400-027A		U1009400-028A		U1009400-029A		U1009400-030A	
		SAMPLE DATE:		9/20/2010		9/20/2010		9/20/2010		9/20/2010		9/21/2010		9/21/2010		9/21/2010		9/21/2010		9/21/2010		9/21/2010		9/21/2010		9/21/2010		9/21/2010		9/21/2010	
METALS																															
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PCBs (EPA METHOD 8080)		CAS	RSC0	Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
Aroclor 1016	12674-11-2	- -	UG/KG														23	U	24	U					19	U	23	U		
Aroclor 1221	11104-28-2	- -	UG/KG														23	U	24	U					19	U	23	U		
Aroclor 1232	11141-16-5	- -	UG/KG														23	U	24	U					19	U	23	U		
Aroclor 1242	53469-21-9	- -	UG/KG														23	U	24	U					19.0	U	23	U		
Aroclor 1248	12672-29-6	- -	UG/KG														23	U	24	U					19	U	23	U		
Aroclor 1254	11097-69-1	- -	UG/KG														23	U	24	U					19	U	23	U		
Aroclor 1260	11096-82-5	- -	UG/KG														23	U	24	U					19	U	23	U		
TOTAL DETECTABLE		1,000 -	UG/KG	0			0			0	0		0		0		0	0	0	0	0		0		0		0		0	

ORGANOCHLORINE PESTICIDES (EPA METHOD 8081A)		CAS	RSC0	Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
4,4'-DDD	72-54-8	2600 -	UG/KG	40 U		60 U		46 U		38 U		45 U		61 U		51 U		42 U		44 U		46 U		36 U		45 U				
4,4'-DDE	72-55-9	1800 -	UG/KG	40 U		60 U		46 U		38 U		45 U		61 U		51 U		42 U		44 U		46 U		36 U		45 U				
4,4'-DDT	50-29-3	1700 -	UG/KG	40 UQ		60 UQ		46 UQ		38 UQ		45 UQ		61 UQ		51 UQ		42 UQ		44 UQ		46 UQ		36 UQ		45 UQ				
Aldrin	309-00-2	19 -	UG/KG	20 U		31 U		24 U		20 U		23 U		31 U		26 U		22 U		23 U		24 U		19 U		23 U				
alpha-BHC	319-84-6	97 -	UG/KG	20 U		31 U		24 U		20 U		23 U		31 U		26 U		22 U		23 U		24 U		19 U		23 U				
Chlordane (alpha)	5103-71-9	910 -	UG/KG	20 U		31 U		24 U		20 U		23 U		31 U		26 U		22 U		23 U		24 U		19 U		23 U				
beta-BHC	319-85-7	72 -	UG/KG	20 U		31 U		24 U		20 U		23 U		31 U		26 U		22 U		23 U		24 U		19 U		23 U				
delta-BHC	319-86-8	100000 a	UG/KG	20 U		31 U		24 U		20 U		23 U		31 U		26 U		22 U		23 U		24 U		19 U		23 U				
Dieldrin	60-57-1	39 -	UG/KG	40 U		60 U		46 U		38 U		45 U		61 U		51 U		42 U		44 U		46 U		36 U		45 U				
Endosulfan I	959-98-8	4800 j	UG/KG	20 UQ		31 UQ		24 UQ		20 UQ		23 UQ		31 UQ		26 UQ		22 UQ		23 UQ		24 UQ		19 UQ		23 UQ				
Endosulfan II	33213-65-9	4800 j	UG/KG	40 UQ		60 UQ		46 UQ		38 UQ		45 UQ		61 UQ		51 UQ		42 UQ		44 UQ		46 UQ		36 UQ		45 UQ				
Endosulfan sulfate	1031-07-8	4800 j	UG/KG	40 U		60 U		46 U		38 U		45 U		61 U		51 U		42 U		44 U		46 U		36 U		45 U				
Endrin	72-20-8	2200 -	UG/KG	40 U		60 U		46 U		38 U		45 U		61 U		51 U		42 U		44 U		46 U		36 U		45 U				
Endrin aldehyde	7421-93-4	- -	UG/KG	40 U		60 U		46 U		38 U		45 U		61 U		51 U		42 U		44 U		46 U		36 U		45 U				
Endrin ketone	53494-70-5	- -	UG/KG	40 U		60 U		46 U		38 U		45 U		61 U		51 U		42 U		44 U		46 U		36 U		45 U				
Lindane	58-89-9	280 -	UG/KG	20 U		31 U		24 U		20 U		23 U		31 U		26 U		22 U		23 U		24 U		19 U		23 U				
gamma-Chlordane	5103-74-2	- -	UG/KG	20 U		31 U		24 U		20 U		23 U		31 U		26 U		22 U		23 U		24 U		19 U		23 U				
Heptachlor	76-44-8	420 -	UG/KG	20 U		31 U		24 U		20 U		23 U		31 U		26 U		22 U		23 U		24 U		19 U		23 U				
Heptachlor epoxide	1024-57-3	- -	UG/KG	20 U		31 U		24 U		20 U		23 U		31 U		26 U		22 U		23 U		24 U		19 U		23 U				
Methoxychlor	72-43-5	- -	UG/KG	200 UQ		310 UQ		240 UQ		200 UQ		230 UQ		310 UQ		260 UQ		220 UQ		230 UQ		240 UQ		190 UQ		230 UQ				
Toxaphene	8001-35-2	- -	UG/KG	2000 U		3100 U		2400 U		2000 U		2300 U		3100 U		2600 U		2200 U		2300 U		2400 U		1900 U		2300 U				
2,4,5-T	93-76-5	- -	UG/KG	40 UQ		60 UQ		46 UQ		38 UQ		45 UQ		61 UQ		51 UQ		42 UQ		44 UQ		46 UQ		36 UQ		45 UQ				
2,4,5-TP Acid (Silvex)	93-72-1	58000 -	UG/KG	40 UQ		60 UQ		46 UQ		38 UQ		45 UQ		61 UQ		51 UQ		42 UQ		44 UQ		46 UQ		36 UQ		45 UQ				
2,4-D	94-75-7	- -	UG/KG	40 U		60 U		46 U		38 U		45 U		61 U		51 U		42 U		44 U		46 U		36 U		45 U				
Dinoseb	88-85-7	- -	UG/KG	40 U		60 U		46 U		38 U		45 U		61 U		51 U		42 U		44 U		46 U		36 U		45 U				
TOTAL DETECTABLE			UG/KG	0		0		0		0		0		0		0		0		0		0		0		0		0		0

TOTAL PETROLEUM HYDROCARBONS		CAS	RSC0	Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
Fuel #2 (#)	Fuel #2 (#)	- -	UG/KG																						22	U	18	U		
Gasoline (#)	Gasoline (#)	- -	UG/KG																						44	U	35	U		
Kerosene (#)	Kerosene (#)	- -	UG/KG																						4.4	U	3.5	U		
Lube Oil (#)	Lube Oil (#)	- -	UG/KG																						440	U	350	U		
Unidentified Hydrocarbon (#)	Unidentified Hydrocarbon (#)	- -	UG/KG																						1.3	U	1.1	U		
TOTAL DETECTABLE			UG/KG	0		0		0		0		0		0		0		0		0		0		0		0		0		0

**TABLE 2
SUBSURFACE SOIL SAMPLES**

Restricted Soil Cleanup Objectives (SCO) - Residential			SAMPLE ID: LAB ORDER: SAMPLE DATE:		B 32D 2-10ft U1009400-031A 9/21/2010		OP-6 U1009400-032C 9/21/2010		MH3 U1009400-033B 9/21/2010		MH4 U1009400-034B 9/21/2010		SS-3 U1009400-035A 9/21/2010		SS-4 U1009400-036A 9/21/2010	
METALS (EPA METHOD 6010B)			CAS	RSC0 Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
Barium	7440-39-3		350 f	MG/KG					250	Q	220	Q	720	Q	140	Q
Cadmium	7440-43-9		2.5 f	MG/KG					15		21		23		46	
Chromium	7440-47-3		22* h	MG/KG					140		830		300		53	
Copper	7440-50-8		270 -	MG/KG												
Lead	7439-92-1		400 -	MG/KG					480.000		840		820		140	
Nickel	7440-02-0		140 -	MG/KG												
Silver	7440-22-4		36 -	MG/KG					4.4	UQ	11	Q	53	UQ	4	UQ
Zinc	7440-66-6		2200 -	MG/KG												
Arsenic	7440-38-2		16 f	MG/KG					7.6		8.2		21	U	40	
Selenium	7782-49-2		36 -	MG/KG					1.1	U	1.3		13	U	4.8	U
Total Mercury	7439-97-6		0.81 j	MG/KG					0.715	Q	5.9	Q	2.36	Q	0.0064	UQ
Total Cyanide	57-12-5		27 -	MG/KG					2.74		35.8		2.13	U	3.34	
TOTAL DETECTABLE			MG/KG		0.00		0.00		896.06		1,973.20		1,865.35		421.34	

PCBs (EPA METHOD 8080)			CAS	RSC0 Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
Aroclor 1016	12674-11-2		- -	UG/KG			1	U	230.0	U	230	U	220	U	2700	U
Aroclor 1221	11104-28-2		- -	UG/KG			1	U	230.0	U	230	U	220	U	2700	U
Aroclor 1232	11141-16-5		- -	UG/KG			1	U	230.0	U	230	U	220	U	2700	U
Aroclor 1242	53469-21-9		- -	UG/KG			1.0	U	230	U	230.0	U	220.0	U	2700.0	U
Aroclor 1248	12672-29-6		- -	UG/KG			1	U	230.0	U	230	U	220	U	2700	U
Aroclor 1254	11097-69-1		- -	UG/KG			1	U	230	U	230	U	220	U	2700	U
Aroclor 1260	11096-82-5		- -	UG/KG			1	U	230	U	230	U	220	U	2700	UQ
TOTAL DETECTABLE			1,000 -		UG/KG		0		0		0		0		0	

ORGANOCHLORINE PESTICIDES (EPA METHOD 8081A)			CAS	RSC0 Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
4,4'-DDD	72-54-8		2600 -	UG/KG			0.1	U	440	U	440	U	420	U	5300	U
4,4'-DDE	72-55-9		1800 -	UG/KG			0.1	U	440	U	440	U	420	U	5300	U
4,4'-DDT	50-29-3		1700 -	UG/KG			0.1	UQ	440	UQ	440	UQ	420	UQ	5300	UQ
Aldrin	309-00-2		19 -	UG/KG			0.05	UQ	230	U	230	U	220	U	2700	U
alpha-BHC	319-84-6		97 -	UG/KG			0.05	U	230	U	230	U	220	U	2700	U
Chlordane (alpha)	5103-71-9		910 -	UG/KG			0.05	U	230	U	230	U	220	U	2700	U
beta-BHC	319-85-7		72 -	UG/KG			0.1	U	230	U	230	U	220	U	2700	U
delta-BHC	319-86-8		100000 a	UG/KG			0.1	U	230	U	230	U	220	U	2700	U
Dieldrin	60-57-1		39 -	UG/KG			0.1	U	440	U	440	U	420	U	5300	U
Endosulfan I	959-98-8		4800 j	UG/KG			0.05	U	230	UQ	230	UQ	220	UQ	2700	UQ
Endosulfan II	33213-65-9		4800 j	UG/KG			0.1	U	440	UQ	440	UQ	420	UQ	5300	UQ
Endosulfan sulfate	1031-07-8		4800 j	UG/KG			0.1	U	440	U	440	U	420	U	5300	U
Endrin	72-20-8		2200 -	UG/KG			0.1	U	440	U	440	U	420	U	5300	U
Endrin aldehyde	7421-93-4		- -	UG/KG			0.1	U	440	U	440	U	420	U	5300	U
Endrin ketone	53494-70-5		- -	UG/KG			0.1	U	440	U	440	U	420	U	5300	U
Lindane	58-89-9		280 -	UG/KG			0.05	U	230	U	230	U	220	U	2700	U
gamma-Chlordane	5103-74-2		- -	UG/KG			0.05	U	230	U	230	U	220	U	2700	U
Heptachlor	76-44-8		420 -	UG/KG			0.05	U	230	U	230	U	220	U	2700	U
Heptachlor epoxide	1024-57-3		- -	UG/KG			0.05	U	230	U	230	U	220	U	2700	U
Methoxychlor	72-43-5		- -	UG/KG			0.5	UQ	2300	UQ	2300	UQ	2200	UQ	27000	UQ
Toxaphene	8001-35-2		- -	UG/KG			5	U	23000	U	23000	U	22000	U	270000	U
2,4,5-T	93-76-5		- -	UG/KG			1	U	58	UQ	59	UQ	420	UQ	5300	U
2,4,5-TP Acid (Silvex)	93-72-1		58000 -	UG/KG			1	U	58	UQ	59	UQ	420	UQ	5300	U
2,4-D	94-75-7		- -	UG/KG			1	U	58	U	59	U	420	U	5300	U
Dinoseb	88-85-7		- -	UG/KG			1	U	58	U	59	U	420	U	5300	U
TOTAL DETECTABLE			UG/KG		0		0		0		0		0		0	

TOTAL PETROLEUM HYDROCARBONS			CAS	RSC0 Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
Fuel #2 (#)	Fuel #2 (#)		- -	UG/KG	21	U	0.5	U								
Gasoline (#)	Gasoline (#)		- -	UG/KG	42	U	1	U								
Kerosene (#)	Kerosene (#)		- -	UG/KG	4.2	U	0.1	U								
Lube Oil (#)	Lube Oil (#)		- -	UG/KG	920	U	10	U								
Unidentified Hydrocarbon (#)	Unidentified Hydrocarbon (#)		- -	UG/KG	1.3	U	0	U								
TOTAL DETECTABLE			UG/KG		920		0		0		0		0		0	

GROUNDWATER

Part 703.5 Water Standard

[illegible]

TABLE 3
GROUNDWATER SAMPLES

Part 703.5 Water Standard

TABLE 3 GROUNDWATER SAMPLES																																
SAMPLE ID:			OP-1		MW-3		BL-1		MW-7		BL-2		OP-3		OP-2		MW-8		MW-9		OP-5		OP-4		MW-7 Dup		BL-2 Dup		OP-2 Dup			
LAB ORDER:			U1009057-002D		U1009057-003D		U1009057-004E		U1009057-005E		U1009057-006E		U1009057-007E		U1009057-008E		U1009057-009E		U1009057-010E		U1009057-011E		U1009057-012E		U1009057-013A		U1009057-014A		U1009057-015A			
SAMPLE DATE:			8/31/2010		8/31/2010		8/31/2010		8/31/2010		8/31/2010		8/31/2010		8/31/2010		8/31/2010		8/31/2010		8/31/2010		8/31/2010		8/31/2010		8/31/2010		8/31/2010			
VOLATILES/SEMI-VOLATILES (Continued) (EPA METHOD 8260-8270)																																
CAS	GWCO	Comment	RESULT	Qual	RESULT	Qual	RESULT	Qual	RESULT	Qual	RESULT	Qual	RESULT	Qual	RESULT	Qual	RESULT	Qual	RESULT	Qual	RESULT	Qual	RESULT	Qual	RESULT	Qual	RESULT	Qual	RESULT	Qual	RESULT	Qual
2,3,4,6-Tetrachlorophenol	58-90-2	-- UGL																														
2,4,5-Trichlorophenol	95-95-4	-- UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
2,4,6-Trichlorophenol	88-06-2	-- UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
2,4-Dichlorophenol	120-83-2	-- UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
2,4-Dimethylphenol	105-67-9	-- UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
2,4-Dinitrophenol	51-28-5	-- UGL	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U			50	U						
2,4-Dinitrotoluene	121-14-2	5 a UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
2,6-Dinitrotoluene	606-20-2	5 a UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
2-Chloronaphthalene	91-59-7	10 - UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
2-Chlorophenol	95-57-8	-- UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
2-Methylnaphthalene	91-57-6	-- UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
2-Methylphenol	95-48-7	-- UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
2-Nitroaniline	88-74-4	5 a UGL	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U			50	U						
2-Nitrophenol	88-75-5	-- UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
3,3-Dichlorobenzidine	91-94-1	5 a UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
3-Nitroaniline	99-09-2	5 a UGL	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U			50	U						
4,6-Dinitro-2-methylphenol	534-52-1	-- UGL	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U			50	U						
4-Bromophenyl-phenylether	101-55-3	-- UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
4-Chloro-3-Methylphenol	59-50-7	-- UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
4-Chloroaniline	106-47-8	5 a UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
4-Chlorophenyl-phenylether	7005-72-3	-- UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
4-Nitroaniline	100-01-6	5 a UGL	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U			50	U						
4-Nitrophenol	100-02-7	-- UGL	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U			50	U						
Acenaphthene	83-32-9	20 - UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
Acenaphthylene	208-96-8	20 - UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
Anthracene	120-12-7	50 - UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
Benzo(a)anthracene	56-55-3	0.002 - UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
Benzo(a)pyrene	50-32-8	ND - UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
Benzo(b)fluoranthene	205-99-2	0.002 - UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
Benzo(g,h,i)perylene	191-24-2	-- UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
Benzo(k)fluoranthene	207-08-9	0.002 - UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
bis(2-Chloroethoxy)methane	111-91-1	5 a UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
bis(2-Chloroethyl)Ether	111-44-4	1 a UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
Bis(2-chloroisopropyl)ether	109-60-1	5 - UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
bis(2-Ethylhexyl)phthalate	117-81-7	5 - UGL	5	U	5	U	15		12		6.3		15		13		5.4		5	U	5	U			5	U						
Butylbenzylphthalate	85-68-7	50 - UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
Carbazole	86-74-8	-- UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
Chrysene	218-01-9	0.002 - UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
Di-n-butylphthalate	84-74-2	50 - UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
Di-n-octylphthalate	117-84-0	50 - UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
Dibenz(a,h)anthracene	53-70-3	-- UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
Dibenzofuran	132-64-9	-- UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
Diethylphthalate	84-66-2	50 - UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
Dimethylphthalate	131-11-3	50 - UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
Fluoranthene	206-44-0	50 - UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
Fluorene	86-73-7	50 - UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
Hexachlorobenzene	118-74-1	0.04 - UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
Hexachlorobutadiene	87-68-3	0.5 - UGL																														
Hexachlorocyclopentadiene	77-47-4	5 a UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
Hexachloroethane	67-72-1	5 a UGL	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U			5	U						
Indeno(1,2,3-cd)pyrene	193-39-5	0.002 - UGL	5	U	5	U	5	U	5	U	5	U	5</																			

**TABLE 3
GROUNDWATER SAMPLES**

Part 703.5 Water Standard

		SAMPLE ID:		OP-1	MW-3	BL-1	MW-7	BL-2	OP-3	OP-2	MW-8	MW-9	OP-5	OP-4	MW-7 Dup	BL-2 Dup	OP-2 Dup
		LAB ORDER:		U1009057-002D	U1009057-003D	U1009057-004E	U1009057-005E	U1009057-006E	U1009057-007E	U1009057-008E	U1009057-009E	U1009057-010E	U1009057-011E	U1009057-012E	U1009057-013A	U1009057-014A	U1009057-015A
		SAMPLE DATE:		8/31/2010	8/31/2010	8/31/2010	8/31/2010	8/31/2010	8/31/2010	8/31/2010	8/31/2010	8/31/2010	8/31/2010	8/31/2010	8/31/2010	8/31/2010	8/31/2010
METALS (EPA METHOD 6010B)		CAS	GWCO Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
Barium	7440-39-3	1000 -	UG/L	0.3	U	0.3	U	0.4		0.3	U	0.3	U	0.3	U	0.3	U
Cadmium	7440-43-9	5 -	UG/L	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
Chromium	7440-47-3	- -	UG/L	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
Copper	7440-50-8	200 -	UG/L	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Lead	7439-92-1	25 -	UG/L	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Nickel	7440-02-0	100 -	UG/L	0.03	U	0.03	U	0.03	U	0.03	U	0.03	U	0.03	U	0.03	U
Silver	7440-22-4	50 -	UG/L	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
Zinc	7440-66-6	2000 -	UG/L	0.01	UQ	0.01	UQ	0.01	UQ	0.012	Q	0.01	UQ	0.014	Q	0.01	UQ
Arsenic	7440-38-2	25 k	UG/L	0.01	UQ	0.01	Q	0.01	UQ	0.01	UQ	0.01	UQ	0.01	Q	0.01	UQ
Selenium	7782-49-2	10 -	UG/L	0.005	UQ	0.005	UQ	0.005	UQ	0.005	UQ	0.005	UQ	0.005	UQ	0.005	UQ
Total Mercury	7439-97-6	0.7 -	UG/L	0.0004	U	0.0004	U	0.0004	U	0.0004	U	0.0004	U	0.0004	U	0.0004	U
Total Cyanide	57-12-5	- -	UG/L														
TOTAL DETECTABLE				UG/L	0	0.01	0.4	0.012	0	0.384	0.819	0.019	0.132	0.068	0	0	0

PCBs (EPA METHOD 8080)		CAS	GWCO Comment	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
Aroclor 1016	12674-11-2	- -	UG/L			0.05	U	50	U	0.05	U	0.05	U	0.05	U	50	U
Aroclor 1221	11104-28-2	- -	UG/L			0.05	U	50	U	0.05	U	0.05	U	0.05	U	50	U
Aroclor 1232	11141-16-5	- -	UG/L			0.05	U	50	U	0.05	U	0.05	U	0.05	U	50	U
Aroclor 1242	53469-21-9	- -	UG/L			0.05	U	50	U	0.05	U	0.05	U	0.05	U	50	U
Aroclor 1248	12672-29-6	- -	UG/L			0.05	U	50	U	0.05	U	0.05	U	0.05	U	50	U
Aroclor 1254	11097-69-1	- -	UG/L			0.05	U	50	U	0.05	U	0.05	U	0.05	U	50	U
Aroclor 1260	11096-82-5	- -	UG/L			0.05	U	50	U	0.05	U	0.05	U	0.05	U	50	U
TOTAL DETECTABLE				1336-36-3	0.09 o	UG/L	0	0	0	0	0	0	0	0	0	0	0

ORGANOCHLORINE PESTICIDES

CAS	GWCO	Com	AB ID:	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
Morpholine	Morpholine	- -	UG/L	100	U	100	U	100	U	100	U	100	U	100	U	100	U

**TABLE 4
FIELD EQUIPMENT/TRIP BLANKS**

Part 703.5 Water Standard

SAMPLE ID:
LAB ORDER:
SAMPLE DATE:FIELD BLANK
B3628-07
9/20/2010FIELD BLANK
B3628-10
9/21/2010FIELD BLANK
B3628-17
9/22/2010FIELD BLANK
B3628-20
9/23/2010FIELD BLANK
B3628-28
9/24/2010

VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8260)				RESULT			RESULT			RESULT			RESULT			RESULT		
CAS	GWCO	Comment		QUAL	DF		QUAL	DF		QUAL	DF		QUAL	DF		QUAL	DF	
1,1,1-Trichloroethane	71-55-6	5 a	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
1,1,2,2-Tetrachloroethane	79-34-5	5 a	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
1,1,2-Trichloroethane	79-00-5	1 -	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
1,1,2-Trichlorotrifluoroethane	76-13-1	5 a	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
1,1-Dichloroethane	75-34-3	5 a	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
1,1-Dichloroethene	75-35-4	5 a	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
1,2,4-Trichlorobenzene	120-82-1	5 b	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
1,2-Dibromo-3-chloropropane	96-12-8	0.04 -	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
1,2-Dibromoethane	106-93-4	5 -	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
1,2-Dichlorobenzene	95-50-1	3 -	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
1,2-Dichloroethane	107-06-2	0.6 -	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
1,2-Dichloropropane	78-87-5	1 -	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
1,3-Dichlorobenzene	541-73-1	3 -	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
1,4-Dichlorobenzene	106-46-7	3 -	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
2-Butanone	78-93-3	50 -	UG/L	5	U 1		5	U 1		5	U 1		5	U 1		5	U 1	
2-Hexanone	591-78-6	50 -	UG/L	5	U 1		5	U 1		5	U 1		5	U 1		5	U 1	
4-Methyl-2-pentanone	108-10-1	-	UG/L	5	U 1		5	U 1		5	U 1		5	U 1		5	U 1	
Acetone	67-64-1	50 -	UG/L	5	U 1		5	U 1		5	U 1		5	U 1		5	U 1	
Benzene	71-43-2	1 -	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
Bromodichloromethane	75-27-4	-	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
Bromoform	75-25-2	50 -	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
Bromomethane	74-83-9	5 a	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
Carbon Disulfide	75-15-0	60 -	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
Carbon tetrachloride	56-23-5	5 -	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
Chlorobenzene	108-90-7	5 a	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
Chloroethane	75-00-3	5 a	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
Chloroform	67-66-3	7 -	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
Chloromethane	74-87-3	5 a	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
cis-1,2-Dichloroethene	156-59-2	5 a	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
cis-1,3-Dichloropropene	10061-01-5	0.4 -	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
Cyclohexane	110-82-7	-	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
Chlorodibromomethane	124-48-1	50 -	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
Dichlorodifluoromethane	75-71-8	5 a	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
Ethylbenzene	100-41-4	5 a	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
Isopropylbenzene	98-82-8	5 a	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
Xylene (mixed)	1330-20-7	5 -	UG/L	2	U 1		2	U 1		2	U 1		2	U 1		2	U 1	
Methyl Acetate	79-20-9	-	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
Methyl tert-butyl ether	1634-04-4	10 -	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
Methylcyclohexane	108-87-2	-	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
Methylene chloride	75-09-2	5 a	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
o-Xylene	95-47-6	5 -	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
Styrene	100-42-5	5 a	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
trans-1,3-Dichloropropene	10061-02-6	-	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
Tetrachloroethene	127-18-4	5 a	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
Toluene	108-88-3	5 a	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
trans-1,2-Dichloroethene	156-60-5	5 a	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
Trichloroethene	79-01-6	5 a	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
Trichlorofluoromethane	75-69-4	5 a	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
Vinyl chloride	75-01-4	2 -	UG/L	1	U 1		1	U 1		1	U 1		1	U 1		1	U 1	
cis- + trans-1,3-Dichloroproper	542-75-6	0.4* i	UG/L	--	--		--	--		--	--		--	--		--	--	
Total TICs	-	-	UG/L															
TOTAL DETECTABLE (excludes TICs)				UG/L		0			0			0			0			0

Notes:

Highlight indicates exceedance of the groundwater standard

*1,3-Dichloropropene standard applies to sum of cis- and trans-1,3-dichloropropene per NYSDEC Part 703.5 narrative water quality standard. This row is calculated.

Qualifiers:

U - Not detected

J - Estimated value

B - Analyte found in associated method blank

N - Presumptive evidence of a compound

E - Value exceeds calibration range

D - Dilution

**TABLE 4
FIELD EQUIPMENT/TRIP BLANKS**

Part 703.5 Water Standard

SAMPLE ID:
LAB ORDER:
SAMPLE DATE:FIELD BLANK
B3701-04
9/27/2010FIELD BLANK
B3701-06
9/27/2010FIELD BLANK
B3701-09
9/29/2010FIELD BLANK
B3701-15
9/30/2010FIELD BLANK
B3701-19
10/1/2010

VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8260)				RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
CAS	GWCO	Comment																
1,1,1-Trichloroethane	71-55-6	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,1,2,2-Tetrachloroethane	79-34-5	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,1,2-Trichloroethane	79-00-5	1 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,1,2-Trichlorotrifluoroethane	76-13-1	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,1-Dichloroethane	75-34-3	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,1-Dichloroethene	75-35-4	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,2,4-Trichlorobenzene	120-82-1	5 b	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,2-Dibromo-3-chloropropane	96-12-8	0.04 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,2-Dibromoethane	106-93-4	5 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,2-Dichlorobenzene	95-50-1	3 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,2-Dichloroethane	107-06-2	0.6 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,2-Dichloropropane	78-87-5	1 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,3-Dichlorobenzene	541-73-1	3 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,4-Dichlorobenzene	106-46-7	3 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
2-Butanone	78-93-3	50 -	UG/L	5	U	1	5	U	1	5	U	1	5	U	1	5	U	1
2-Hexanone	591-78-6	50 -	UG/L	5	U	1	5	U	1	5	U	1	5	U	1	5	U	1
4-Methyl-2-pentanone	108-10-1	-	UG/L	5	U	1	5	U	1	5	U	1	5	U	1	5	U	1
Acetone	67-64-1	50 -	UG/L	5	U	1	5	U	1	5	U	1	5	U	1	5	U	1
Benzene	71-43-2	1 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Bromodichloromethane	75-27-4	-	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Bromoform	75-25-2	50 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Bromomethane	74-83-9	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Carbon Disulfide	75-15-0	60 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Carbon tetrachloride	56-23-5	5 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Chlorobenzene	108-90-7	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Chloroethane	75-00-3	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Chloroform	67-66-3	7 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Chloromethane	74-87-3	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
cis-1,2-Dichloroethene	156-59-2	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
cis-1,3-Dichloropropene	10061-01-5	0.4 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Cyclohexane	110-82-7	-	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Chlorodibromomethane	124-48-1	50 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Dichlorodifluoromethane	75-71-8	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Ethylbenzene	100-41-4	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Isopropylbenzene	98-82-8	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Xylene (mixed)	1330-20-7	5 -	UG/L	2	U	1	2	U	1	2	U	1	2	U	1	2	U	1
Methyl Acetate	79-20-9	-	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Methyl tert-butyl ether	1634-04-4	10 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Methylcyclohexane	108-87-2	-	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Methylene chloride	75-09-2	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
o-Xylene	95-47-6	5 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Styrene	100-42-5	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
trans-1,3-Dichloropropene	10061-02-6	-	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Tetrachloroethene	127-18-4	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Toluene	108-88-3	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
trans-1,2-Dichloroethene	156-60-5	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Trichloroethene	79-01-6	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Trichlorofluoromethane	75-69-4	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Vinyl chloride	75-01-4	2 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
cis- + trans-1,3-Dichloroproper	542-75-6	0.4* i	UG/L	--	--		--	--		--	--		--	--		--	--	
Total TICs	-	-	UG/L															
TOTAL DETECTABLE (excludes TICs)				0			0			0			0			0		

Notes:

Highlight indicates exceedance of the groundwater standard
 *1,3-Dichloropropene standard applies to sum of cis- and trans-
 1,3-dichloropropene per NYSDEC Part 703.5 narrative water
 quality standard. This row is calculated.

Qualifiers:

U - Not detected

J - Estimated value

B - Analyte found in associated method blank

N - Presumptive evidence of a compound

E - Value exceeds calibration range

D - Dilution

**TABLE 4
FIELD EQUIPMENT/TRIP BLANKS**

Part 703.5 Water Standard

SAMPLE ID:
LAB ORDER:
SAMPLE DATE:FIELD BLANK
B3701-22
10/4/2010FIELD BLANK
B3701-30
10/5/2010FIELD BLANK
B4172-05
11/4/2010FIELD BLANK
B4172-06
11/5/2010FIELD BLANK
B4172-10
11/10/2010

VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8260)				FIELD BLANK B3701-22 10/4/2010			FIELD BLANK B3701-30 10/5/2010			FIELD BLANK B4172-05 11/4/2010			FIELD BLANK B4172-06 11/5/2010			FIELD BLANK B4172-10 11/10/2010		
CAS	GWCO	Comment		RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
1,1,1-Trichloroethane	71-55-6	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,1,2,2-Tetrachloroethane	79-34-5	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,1,2-Trichloroethane	79-00-5	1 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,1,2-Trichlorotrifluoroethane	76-13-1	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,1-Dichloroethane	75-34-3	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,1-Dichloroethene	75-35-4	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,2,4-Trichlorobenzene	120-82-1	5 b	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,2-Dibromo-3-chloropropane	96-12-8	0.04 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,2-Dibromoethane	106-93-4	5 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,2-Dichlorobenzene	95-50-1	3 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,2-Dichloroethane	107-06-2	0.6 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,2-Dichloropropane	78-87-5	1 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,3-Dichlorobenzene	541-73-1	3 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,4-Dichlorobenzene	106-46-7	3 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
2-Butanone	78-93-3	50 -	UG/L	5	U	1	5	U	1	5	U	1	5	U	1	5	U	1
2-Hexanone	591-78-6	50 -	UG/L	5	U	1	5	U	1	5	U	1	5	U	1	5	U	1
4-Methyl-2-pentanone	108-10-1	-	UG/L	5	U	1	5	U	1	5	U	1	5	U	1	5	U	1
Acetone	67-64-2	50 -	UG/L	5	U	1	5	U	1	5	U	1	5	U	1	5	U	1
Benzene	71-43-2	1 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Bromodichloromethane	75-27-4	-	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Bromoform	75-25-2	50 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Bromomethane	74-83-9	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Carbon Disulfide	75-15-0	60 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Carbon tetrachloride	56-23-5	5 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Chlorobenzene	108-90-7	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Chloroethane	75-00-3	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Chloroform	67-66-3	7 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Chloromethane	74-87-3	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
cis-1,2-Dichloroethene	156-59-2	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
cis-1,3-Dichloropropene	10061-01-5	0.4 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Cyclohexane	110-82-7	-	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Chlorodibromomethane	124-48-1	50 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Dichlorodifluoromethane	75-71-8	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Ethylbenzene	100-41-4	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Isopropylbenzene	98-82-8	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Xylene (mixed)	1330-20-7	5 -	UG/L	2	U	1	2	U	1	2	U	1	2	U	1	2	U	1
Methyl Acetate	79-20-9	-	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Methyl tert-butyl ether	1634-04-4	10 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Methylcyclohexane	108-87-2	-	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Methylene chloride	75-09-2	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
o-Xylene	95-47-6	5 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Styrene	100-42-5	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
trans-1,3-Dichloropropene	10061-02-6	-	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Tetrachloroethene	127-18-4	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Toluene	108-88-3	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
trans-1,2-Dichloroethene	156-60-5	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Trichloroethene	79-01-6	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Trichlorofluoromethane	75-69-4	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Vinyl chloride	75-01-4	2 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
cis- + trans-1,3-Dichloroproper	542-75-6	0.4* i	UG/L	--	--		--	--		--	--		--	--		--	--	
Total TICs		-	UG/L							250			36			11		
TOTAL DETECTABLE (excludes TICs)				UG/L			0			0			0			0		

Notes:

Highlight indicates exceedance of the groundwater standard

*1,3-Dichloropropene standard applies to sum of cis- and trans-1,3-dichloropropene per NYSDEC Part 703.5 narrative water quality standard. This row is calculated.

Qualifiers:

U - Not detected

J - Estimated value

B - Analyte found in associated method blank

N - Presumptive evidence of a compound

E - Value exceeds calibration range

D - Dilution

**TABLE 4
FIELD EQUIPMENT/TRIP BLANKS**

Part 703.5 Water Standard

SAMPLE ID:
LAB ORDER:
SAMPLE DATE:FIELD BLANK
B4172-15
11/11/2010FIELD BLANK
B4172-17
11/12/2010FIELD BLANK
B4279-03
11/15/2010FIELD BLANK RE
B4279-03RE
11/15/2010FIELD BLANK
B4279-05
11/16/2010

VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8260)				RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
CAS	GWCO	Comment																
1,1,1-Trichloroethane	71-55-6	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,1,2,2-Tetrachloroethane	79-34-5	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,1,2-Trichloroethane	79-00-5	1 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,1,2-Trichlorotrifluoroethane	76-13-1	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,1-Dichloroethane	75-34-3	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,1-Dichloroethene	75-35-4	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,2,4-Trichlorobenzene	120-82-1	5 b	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,2-Dibromo-3-chloropropane	96-12-8	0.04 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,2-Dibromoethane	106-93-4	5 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,2-Dichlorobenzene	95-50-1	3 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,2-Dichloroethane	107-06-2	0.6 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,2-Dichloropropane	78-87-5	1 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,3-Dichlorobenzene	541-73-1	3 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,4-Dichlorobenzene	106-46-7	3 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
2-Butanone	78-93-3	50 -	UG/L	5	U	1	5	U	1	5	U	1	5	U	1	5	U	1
2-Hexanone	591-78-6	50 -	UG/L	5	U	1	5	U	1	5	U	1	5	U	1	5	U	1
4-Methyl-2-pentanone	108-10-1	-	UG/L	5	U	1	5	U	1	5	U	1	5	U	1	5	U	1
Acetone	67-64-2	50 -	UG/L	5	U	1	5	U	1	5	U	1	5	U	1	5	U	1
Benzene	71-43-2	1 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Bromodichloromethane	75-27-4	-	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Bromoform	75-25-2	50 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Bromomethane	74-83-9	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Carbon Disulfide	75-15-0	60 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Carbon tetrachloride	56-23-5	5 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Chlorobenzene	108-90-7	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Chloroethane	75-00-3	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Chloroform	67-66-3	7 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Chloromethane	74-87-3	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
cis-1,2-Dichloroethene	156-59-2	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
cis-1,3-Dichloropropene	10061-01-5	0.4 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Cyclohexane	110-82-7	-	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Chlorodibromomethane	124-48-1	50 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Dichlorodifluoromethane	75-71-8	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Ethylbenzene	100-41-4	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Isopropylbenzene	98-82-8	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Xylene (mixed)	1330-20-7	5 -	UG/L	2	U	1	2	U	1	2	U	1	2	U	1	2	U	1
Methyl Acetate	79-20-9	-	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Methyl tert-butyl ether	1634-04-4	10 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Methylcyclohexane	108-87-2	-	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Methylene chloride	75-09-2	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
o-Xylene	95-47-6	5 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Styrene	100-42-5	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
trans-1,3-Dichloropropene	10061-02-6	-	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Tetrachloroethene	127-18-4	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Toluene	108-88-3	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
trans-1,2-Dichloroethene	156-60-5	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Trichloroethene	79-01-6	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Trichlorofluoromethane	75-69-4	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Vinyl chloride	75-01-4	2 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
cis- + trans-1,3-Dichloroproper	542-75-6	0.4* i	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total TICs	-	-	UG/L	230			510			150			180			510		
TOTAL DETECTABLE (excludes TICs)				0			0			0			0			0		

Notes:

Highlight indicates exceedance of the groundwater standard

*1,3-Dichloropropene standard applies to sum of cis- and trans-1,3-dichloropropene per NYSDEC Part 703.5 narrative water quality standard. This row is calculated.

Qualifiers:

U - Not detected

J - Estimated value

B - Analyte found in associated method blank

N - Presumptive evidence of a compound

E - Value exceeds calibration range

D - Dilution

**TABLE 4
FIELD EQUIPMENT/TRIP BLANKS**

Part 703.5 Water Standard

SAMPLE ID:
LAB ORDER:
SAMPLE DATE:FIELD BLANK RE
B4279-05RE
11/16/2010FIELD BLANK
B4287-02
11/17/2010FIELD BLANK RE
B4287-02RE
11/17/2010FIELD BLANK
B4308-02
11/18/2010TRIP BLANK
B4172-07
10/27/2010

VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8260)				RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
CAS	GWCO	Comment																
1,1,1-Trichloroethane	71-55-6	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,1,2,2-Tetrachloroethane	79-34-5	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,1,2-Trichloroethane	79-00-5	1 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,1,2-Trichlorotrifluoroethane	76-13-1	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,1-Dichloroethane	75-34-3	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,1-Dichloroethene	75-35-4	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,2,4-Trichlorobenzene	120-82-1	5 b	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,2-Dibromo-3-chloropropane	96-12-8	0.04 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,2-Dibromoethane	106-93-4	5 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,2-Dichlorobenzene	95-50-1	3 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,2-Dichloroethane	107-06-2	0.6 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,2-Dichloropropane	78-87-5	1 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,3-Dichlorobenzene	541-73-1	3 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,4-Dichlorobenzene	106-46-7	3 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
2-Butanone	78-93-3	50 -	UG/L	5	U	1	5	U	1	5	U	1	5	U	1	5	U	1
2-Hexanone	591-78-6	50 -	UG/L	5	U	1	5	U	1	5	U	1	5	U	1	5	U	1
4-Methyl-2-pentanone	108-10-1	-	UG/L	5	U	1	5	U	1	5	U	1	5	U	1	5	U	1
Acetone	67-64-2	50 -	UG/L	5	U	1	5	U	1	5	U	1	5	U	1	5	U	1
Benzene	71-43-2	1 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Bromodichloromethane	75-27-4	-	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Bromoform	75-25-2	50 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Bromomethane	74-83-9	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Carbon Disulfide	75-15-0	60 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Carbon tetrachloride	56-23-5	5 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Chlorobenzene	108-90-7	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Chloroethane	75-00-3	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Chloroform	67-66-3	7 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Chloromethane	74-87-3	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
cis-1,2-Dichloroethene	156-59-2	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
cis-1,3-Dichloropropene	10061-01-5	0.4 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Cyclohexane	110-82-7	-	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Chlorodibromomethane	124-48-1	50 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Dichlorodifluoromethane	75-71-8	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Ethylbenzene	100-41-4	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Isopropylbenzene	98-82-8	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Xylene (mixed)	1330-20-7	5 -	UG/L	2	U	1	2	U	1	2	U	1	2	U	1	2	U	1
Methyl Acetate	79-20-9	-	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Methyl tert-butyl ether	1634-04-4	10 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Methylcyclohexane	108-87-2	-	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Methylene chloride	75-09-2	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
o-Xylene	95-47-6	5 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Styrene	100-42-5	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
trans-1,3-Dichloropropene	10061-02-6	-	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Tetrachloroethene	127-18-4	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Toluene	108-88-3	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
trans-1,2-Dichloroethene	156-60-5	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Trichloroethene	79-01-6	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Trichlorofluoromethane	75-69-4	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Vinyl chloride	75-01-4	2 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
cis- + trans-1,3-Dichloroproper	542-75-6	0.4* i	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total TICs	-	-	UG/L	1300			390			630			100					
TOTAL DETECTABLE (excludes TICs)				0			0			0			0			0		

Notes:

Highlight indicates exceedance of the groundwater standard

*1,3-Dichloropropene standard applies to sum of cis- and trans-1,3-dichloropropene per NYSDEC Part 703.5 narrative water quality standard. This row is calculated.

Qualifiers:

U - Not detected

J - Estimated value

B - Analyte found in associated method blank

N - Presumptive evidence of a compound

E - Value exceeds calibration range

D - Dilution

**TABLE 4
FIELD EQUIPMENT/TRIP BLANKS**

Part 703.5 Water Standard

SAMPLE ID:
LAB ORDER:
SAMPLE DATE:TRIPBLANK
B4172-11
11/3/2010TRIPBLANK
B4172-16
11/3/2010TRIPBLANK
B4172-20
11/10/2010TRIPBLANK
B4172-23
11/10/2010TIRPBLANK
B4279-04
11/10/2010

VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8260)				RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF	RESULT	QUAL	DF
CAS	GWCO	Comment																
1,1,1-Trichloroethane	71-55-6	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,1,2,2-Tetrachloroethane	79-34-5	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,1,2-Trichloroethane	79-00-5	1 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,1,2-Trichlorotrifluoroethane	76-13-1	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,1-Dichloroethane	75-34-3	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,1-Dichloroethene	75-35-4	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,2,4-Trichlorobenzene	120-82-1	5 b	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,2-Dibromo-3-chloropropane	96-12-8	0.04 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,2-Dibromoethane	106-93-4	5 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,2-Dichlorobenzene	95-50-1	3 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,2-Dichloroethane	107-06-2	0.6 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,2-Dichloropropane	78-87-5	1 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,3-Dichlorobenzene	541-73-1	3 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
1,4-Dichlorobenzene	106-46-7	3 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
2-Butanone	78-93-3	50 -	UG/L	5	U	1	5	U	1	5	U	1	5	U	1	5	U	1
2-Hexanone	591-78-6	50 -	UG/L	5	U	1	5	U	1	5	U	1	5	U	1	5	U	1
4-Methyl-2-pentanone	108-10-1	-	UG/L	5	U	1	5	U	1	5	U	1	5	U	1	5	U	1
Acetone	67-64-1	50 -	UG/L	5	U	1	5	U	1	5	U	1	5	U	1	5	U	1
Benzene	71-43-2	1 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Bromodichloromethane	75-27-4	-	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Bromoform	75-25-2	50 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Bromomethane	74-83-9	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Carbon Disulfide	75-15-0	60 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Carbon tetrachloride	56-23-5	5 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Chlorobenzene	108-90-7	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Chloroethane	75-00-3	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Chloroform	67-66-3	7 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Chloromethane	74-87-3	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
cis-1,2-Dichloroethene	156-59-2	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
cis-1,3-Dichloropropene	10061-01-5	0.4 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Cyclohexane	110-82-7	-	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Chlorodibromomethane	124-48-1	50 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Dichlorodifluoromethane	75-71-8	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Ethylbenzene	100-41-4	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Isopropylbenzene	98-82-8	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Xylene (mixed)	1330-20-7	5 -	UG/L	2	U	1	2	U	1	2	U	1	2	U	1	2	U	1
Methyl Acetate	79-20-9	-	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Methyl tert-butyl ether	1634-04-4	10 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Methylcyclohexane	108-87-2	-	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Methylene chloride	75-09-2	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
o-Xylene	95-47-6	5 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Styrene	100-42-5	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
trans-1,3-Dichloropropene	10061-02-6	-	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Tetrachloroethene	127-18-4	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Toluene	108-88-3	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
trans-1,2-Dichloroethene	156-60-5	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Trichloroethene	79-01-6	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Trichlorofluoromethane	75-69-4	5 a	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
Vinyl chloride	75-01-4	2 -	UG/L	1	U	1	1	U	1	1	U	1	1	U	1	1	U	1
cis- + trans-1,3-Dichloroproper	542-75-6	0.4* i	UG/L	--	--		--	--		--	--		--	--		--	--	
Total TICs		-	UG/L										25			100		
TOTAL DETECTABLE (excludes TICs)				0			0			0			0			0		

Notes:

Highlight indicates exceedance of the groundwater standard

*1,3-Dichloropropene standard applies to sum of cis- and trans-1,3-dichloropropene per NYSDEC Part 703.5 narrative water quality standard. This row is calculated.

Qualifiers:

U - Not detected

J - Estimated value

B - Analyte found in associated method blank

N - Presumptive evidence of a compound

E - Value exceeds calibration range

D - Dilution

TABLE 4
FIELD EQUIPMENT/TRIP BLANKS

Part 703.5 Water Standard

SAMPLE ID:
LAB ORDER:
SAMPLE DATE:TRIPBLANK
B4287-01
11/10/2010TRIPBLANK
B4308-01
11/10/2010

VOLATILE ORGANIC COMPOUNDS (EPA METHOD 8260)									
	CAS	GWCO	Comment	RESULT	QUAL	DF	RESULT	QUAL	DF
1,1,1-Trichloroethane	71-55-6	5 a	UG/L	1	U	1	1	U	1
1,1,2,2-Tetrachloroethane	79-34-5	5 a	UG/L	1	U	1	1	U	1
1,1,2-Trichloroethane	79-00-5	1 -	UG/L	1	U	1	1	U	1
1,1,2-Trichlorotrifluoroethane	76-13-1	5 a	UG/L	1	U	1	1	U	1
1,1-Dichloroethane	75-34-3	5 a	UG/L	1	U	1	1	U	1
1,1-Dichloroethene	75-35-4	5 a	UG/L	1	U	1	1	U	1
1,2,4-Trichlorobenzene	120-82-1	5 b	UG/L	1	U	1	1	U	1
1,2-Dibromo-3-chloropropane	96-12-8	0.04 -	UG/L	1	U	1	1	U	1
1,2-Dibromoethane	106-93-4	5 -	UG/L	1	U	1	1	U	1
1,2-Dichlorobenzene	95-50-1	3 -	UG/L	1	U	1	1	U	1
1,2-Dichloroethane	107-06-2	0.6 -	UG/L	1	U	1	1	U	1
1,2-Dichloropropane	78-87-5	1 -	UG/L	1	U	1	1	U	1
1,3-Dichlorobenzene	541-73-1	3 -	UG/L	1	U	1	1	U	1
1,4-Dichlorobenzene	106-46-7	3 -	UG/L	1	U	1	1	U	1
2-Butanone	78-93-3	50 -	UG/L	5	U	1	5	U	1
2-Hexanone	591-78-6	50 -	UG/L	5	U	1	5	U	1
4-Methyl-2-pentanone	108-10-1	- -	UG/L	5	U	1	5	U	1
Acetone	67-64-1	50 -	UG/L	5	U	1	5	U	1
Benzene	71-43-2	1 -	UG/L	1	U	1	1	U	1
Bromodichloromethane	75-27-4	- -	UG/L	1	U	1	1	U	1
Bromoform	75-25-2	50 -	UG/L	1	U	1	1	U	1
Bromomethane	74-83-9	5 a	UG/L	1	U	1	1	U	1
Carbon Disulfide	75-15-0	60 -	UG/L	1	U	1	1	U	1
Carbon tetrachloride	56-23-5	5 -	UG/L	1	U	1	1	U	1
Chlorobenzene	108-90-7	5 a	UG/L	1	U	1	1	U	1
Chloroethane	75-00-3	5 a	UG/L	1	U	1	1	U	1
Chloroform	67-66-3	7 -	UG/L	1	U	1	1	U	1
Chloromethane	74-87-3	5 a	UG/L	1	U	1	1	U	1
cis-1,2-Dichloroethene	156-59-2	5 a	UG/L	1	U	1	1	U	1
cis-1,3-Dichloropropene	10061-01-5	0.4 -	UG/L	1	U	1	1	U	1
Cyclohexane	110-82-7	- -	UG/L	1	U	1	1	U	1
Chlorodibromomethane	124-48-1	50 -	UG/L	1	U	1	1	U	1
Dichlorodifluoromethane	75-71-8	5 a	UG/L	1	U	1	1	U	1
Ethylbenzene	100-41-4	5 a	UG/L	1	U	1	1	U	1
Isopropylbenzene	98-82-8	5 a	UG/L	1	U	1	1	U	1
Xylene (mixed)	1330-20-7	5 -	UG/L	2	U	1	2	U	1
Methyl Acetate	79-20-9	- -	UG/L	1	U	1	1	U	1
Methyl tert-butyl ether	1634-04-4	10 -	UG/L	1	U	1	1	U	1
Methylcyclohexane	108-87-2	- -	UG/L	1	U	1	1	U	1
Methylene chloride	75-09-2	5 a	UG/L	1	U	1	1	U	1
o-Xylene	95-47-6	5 -	UG/L	1	U	1	1	U	1
Styrene	100-42-5	5 a	UG/L	1	U	1	1	U	1
trans-1,3-Dichloropropene	10061-02-6	- -	UG/L	1	U	1	1	U	1
Tetrachloroethene	127-18-4	5 a	UG/L	1	U	1	1	U	1
Toluene	108-88-3	5 a	UG/L	1	U	1	1	U	1
trans-1,2-Dichloroethene	156-60-5	5 a	UG/L	1	U	1	1	U	1
Trichloroethene	79-01-6	5 a	UG/L	1	U	1	1	U	1
Trichlorofluoromethane	75-69-4	5 a	UG/L	1	U	1	1	U	1
Vinyl chloride	75-01-4	2 -	UG/L	1	U	1	1	U	1
cis- + trans-1,3-Dichloroproper	542-75-6	0.4* i	UG/L	--	--		--	--	
Total TICs		- -	UG/L						
TOTAL DETECTABLE (excludes TICs)				0			0		

Notes:

Highlight indicates exceedance of the groundwater standard

*1,3-Dichloropropene standard applies to sum of cis- and trans-1,3-dichloropropene per NYSDEC Part 703.5 narrative water quality standard. This row is calculated.

Qualifiers:

U - Not detected

J - Estimated value

B - Analyte found in associated method blank

N - Presumptive evidence of a compound

E - Value exceeds calibration range

D - Dilution