GENESIS ENGINEERING & REDEVELOPMENT

# SITE CHARACTERIZATION REPORT

## Best-DDK Cleaners
## 38-68 13th Street,
## Long Island City, New York

**Site Number 241126**

Prepared For:

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Ms. Maryuhn Young Moon
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March 9, 2012

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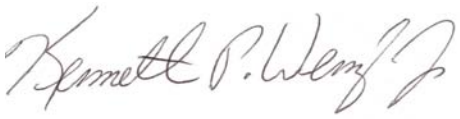
## CERTIFICATION

I, Kenneth P. Wenz, Jr., certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Site Characterization Report 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).



March 9, 2012

Kenneth P. Wenz, Jr., CPG, PG, LEP — Date

# 1.0 INTRODUCTION

This Site Characterization Report ("SC Report") was prepared on behalf of Mr. Jay Moon and Ms. Maryuhn Young Moon ("Owners") to fulfill the requirements of the Order on Consent and Administrative Settlement for Site Number 241126, dated November 22, 2010 ("Order on Consent"). The Order on Consent was executed between the Owners and the New York State Department of Environmental Conservation ("NYSDEC"), regarding the property located at 38-68 13th Street, Queens, New York ("Site"). This SC Report documents the results of a subsurface environmental investigation at the Site that was conducted in January and February 2012 to assess whether historic Site operations have impacted the quality of soil, groundwater, and/or soil vapor beneath the Site. The field investigation was conducted in accordance with the Site Characterization Work Plan ("Work Plan"), which was approved by the NYSDEC in a letter dated December 22, 2011. The Site location is shown on Figures 1 and 2.

## 1.1 Report Organization

The SC Report includes is divided into four sections:

1. Section 1.0 – Introduction;
2. Section 2.0 – Scope of Work – A description of the sampling program that was implemented at the Site, including the sampling and analytical procedures that were used; and
3. Section 3.0 – Findings - The findings of the site characterization investigation program, including results of laboratory analyses; and
4. Section 4.0 – Conclusions and Recommendations.

In addition, the following Appendices are included as a part of the SC Report:

Appendix A – *Field Notes* – The field notes for the project;

Appendix B – *Soil Boring Logs* – The geologic information obtained from soil sampling conducted at temporary wells GER-1 and GER-2;

Appendix C – *Temporary Well Survey Information* – The top of casing and ground surface elevation information for the three temporary wells;

Appendix D – *Field Sampling Forms* – Field information during groundwater and air sampling activities;

Appendix E – *Laboratory Data Sheets* – The Form I sheets from the laboratory data packages for the project (the complete Analytical Services Protocol Category B data packages have been submitted separately in electronic format);

Appendix F – *Data Usability Summary Report* – The results of the independent data validation process.

## 1.2 Field Investigation Objective

The objective of the field investigation was to provide data to determine whether the relatively low levels of volatile organic compounds ("VOC") that were previously detected in groundwater immediately adjacent to the Site, are the result of Site operations. The scope of work that was designed and implemented to meet this objective included collection of soil samples, collection and laboratory analysis of groundwater samples, and collection and laboratory analysis of ambient air and sub-slab soil vapor samples. In addition, the localized groundwater flow direction was determined using surveyed temporary monitoring wells.

## 1.3 Background Information

The information in this section is a summary of previous environmental activities at the Site, based on review of documents provided to GE&R, which are assumed to be complete and factual. However, no assessment of the completeness or accuracy of the provided information has been made.

### 1.3.1 Site Description and History

The Site is located at 38-68 13$^{th}$ Street in Long Island City, New York, and includes property identified on the Queens tax map as Block 472, Lot 683. The Site is a 0.12-acre industrial property containing a 5,053 square foot building that has been used as a dry cleaning business since approximately 1996 (and has always used closed-loop, fourth-generation dry cleaning machinery). Prior to this time, the building was reportedly used for sheet metal fabrication (since the 1950s), and prior to that the Site was residential (from the 1890s).

The Site building is currently utilized for wet laundry and dry cleaning operations, which at present uses three dry cleaning machines, all located in rear-central portion of the building. According to information provided by the building owner and current occupant,

tetrachloroethene ("PCE") has never been stored at the Site, but has been brought to the Site and added to the dry cleaning machines by an outside vendor when needed. In addition, hazardous wastes generated by the dry cleaning process have always been removed from the Site by an outside vendor (Safety-Kleen from 1996 through 2004 and from 2008 through the present, and National Waste Clean, Inc. between 2004 and 2008). No floor drains were observed in the building during the April 20, 2011 Site inspection or the 2012 field program, but substantial cracking of the foundation was apparent on the main floor of the building.

According to the Phase I Environmental Site Assessment ("ESA") Report prepared in December 2004, the one-story building at the Site was built in 1953, and is constructed with brick or concrete block walls, a flat roof and a concrete slab foundation. The building covers the entire property, with the exception of a very small strip along 13th Street. During the Site inspection on April 20, 2011, it was noted that this strip was less than one foot wide, concrete-covered, and adjacent to the sidewalk along 13th Street. This report notes that there is partial basement under the eastern portion of the building, which can only be accessed from the sidewalk, via a near-vertical stairway. The basement area has a concrete floor throughout and contains a gas-fired boiler and an air compressor, as well as utility services (water, natural gas, and sanitary sewer). The sanitary sewer discharge pipe connects to the municipal sanitary sewer system that runs along 13th Street.

The Site elevation is approximately 15 feet above sea level and is relatively flat, as is the surrounding area. No storm drains were observed at the Site, but storm sewers are present along 13th Street. The Site is served by public utilities and the East River is located approximately 1,800 feet west of the Site. According to a June 2009 subsurface investigation report (see Section 1.3.2), brick fragments and gravel are present below the sidewalk to a depth of two feet. This material is underlain by brown, fine to medium sand to a depth of four feet, then brown to dark brown, fine silty sand to ten feet below grade (the terminal depth of the borings). According to the NYSDEC, bedrock outcrops are present in the Site vicinity, but bedrock was not observed during the April 20, 2011 Site inspection. During the February 2012 field investigation, bedrock was encountered in boring GER-2 at a depth of approximately 26.8 feet below grade (see Section 3.0).

In 2009, groundwater at the Site was reported to be encountered at seven to eight feet below grade (in 2012, groundwater was identified in GER-1 and GER-2 at approximately 10.5 feet below grade). Based on review of U.S. Geological Survey reports and the topography in the Site vicinity, it is expected that groundwater flow is toward the East River (a westerly flow direction was confirmed during the February 2012 field investigation).

### 1.3.2 Surrounding Area

The area surrounding the Site is occupied by various commercial/industrial establishments. The Queensbridge Houses, a public housing complex, is located approximately 700 feet south of the Site (on the south side of 40th Avenue), a public school (PS 111) is located approximately 1,200 feet north of the Site (on 13th Street north of 38th Avenue), and a private school (St. Rita's School) is located approximately 1,800 feet north of the Site (on 36th Avenue).

Immediately across 13th Street (upgradient) from the Site is a Pep Boys automobile repair facility. According to information from the facility manager (as reported by the Owner), the Pep Boys building was constructed in 1998 or 1999, on a previously-vacant lot with substantial illegal dumping. In addition, several other auto repair and/or auto body shops are located on 13th Street northeast of the Site, and along 21st Street, located southeast and east of the Site.

### 1.3.3 Previous Environmental Investigations

According to a December 2010 draft site characterization work plan (that was prepared by others), three soil vapor samples were collected from beneath the building foundation in July 2008. These samples reportedly contained PCE at concentrations ranging from 3,750 micrograms per cubic meter ("µg/$m^3$") to 8,270 µg/$m^3$ and trichloroethene ("TCE") at concentrations ranging from 11 µg/$m^3$ to 70.4 µg/$m^3$. Since the locations of these samples were not provided and no reference to these samples was found in any other document provided to GE&R, the validity of these data is questionable.

In June 2009, two soil probes were advanced through the sidewalk along 13th Street, in front of the Site (these locations, SB-1 and SB-2, are shown on Figure 3), and one groundwater sample was collected for laboratory analysis at each location. As shown in Table 1 and on Figure 3, PCE and cis-1,2-dichloroethene ("cis-1,2-DCE") were detected in both samples, and the sample from SB-2 also contained TCE. PCE has historically been used as a dry cleaning solvent, and TCE and cis-1,2-DCE are breakdown products of PCE. However, all three VOC are used as degreasing agents in industries other than dry cleaning. Both PCE concentrations and the cis-1,2-DCE concentration in the sample from SB-2 exceeded the New York State Class GA standards for these constituents.

Based on these results, the NYSDEC opened Spill Case Number 09-13336, even though a release from the Site was not documented. Correspondence from the NYSDEC dated March 29, 2010 required that the Owners submit a work plan to determine the groundwater flow

direction and delineate soil and groundwater impacts, as well as submit a Phase I ESA Report for the Site.

In November 2010, the Order on Consent was executed, and a draft site characterization work plan was submitted to the NYSDEC on behalf of the Owners in December 2010. In correspondence dated January 18, 2011, the NYSDEC rejected that work plan and required submittal of a revised work plan within 60 days. GE&R was subsequently contracted by the Owners, and a site characterization work plan was submitted to the NYSDEC on April 22, 2011. Based on comments received from the NYSDEC, a revised work plan was submitted on October 28, 2011. Approval of the Work Plan was received from the NYSDEC in a letter dated December 22, 2011.

In January 2011, three groundwater samples were collected at the property immediately northwest of the Site, as part of a property transaction investigation. As shown in Table 1 and on Figure 3, chloroform was detected in each of the samples, and cis-1,2-DCE and vinyl chloride were each detected in one sample.

**Table 1. Summary of Historic Groundwater Data**

| Sample | Sample Date | Location | PCE *(µg/l)* | TCE *(µg/l)* | cis-1,2-DCE *(µg/l)* | Chloroform *(µg/l)* | Vinyl Chloride *(µg/l)* |
|---|---|---|---|---|---|---|---|
| SB-1 | 6/2/09 | Site | 9.8 | < 1.0 | 4.4 | < 1.0 | < 1.0 |
| SB-2 | 6/2/09 | Site | 25.6 | 3.1 | 62.7 | < 1.0 | < 1.0 |
| GW-1 | 1/3/11 | NW property | < 1.0 | < 1.0 | < 1.0 | 2.6 | < 1.0 |
| GW-2 | 1/3/11 | NW property | < 1.0 | < 1.0 | 5.3 | 2.6 | 1.7 |
| GW-3 | 1/3/11 | NW property | < 1.0 | < 1.0 | < 1.0 | 5.5 | < 1.0 |

Note: Only detected compounds reported in Table.

# 2.0 SCOPE OF WORK

As approved by the NYSDEC, the scope of work for the Site Characterization program included soil characterization (and contingent laboratory analysis of soil samples) and determination of the depth to bedrock at one exterior location, installation of temporary monitoring wells at three exterior locations, assessment of Site-specific groundwater flow direction, collection and laboratory analysis of groundwater samples at three exterior locations, collection and laboratory analysis of sub-slab soil vapor samples at five interior locations, and collection and laboratory analysis of one exterior ambient air sample. The sample locations utilized during the field investigation are shown on Figure 4. Geophysical screening of the proposed sample locations was conducted on January 31, 2012, and the field program at the Site was implemented on February 8, 2012. The specific procedures associated with each of these activities are described below.

## 2.1 Pre-sampling Activities

Prior to initiation of the sampling program, GE&R's drilling subcontractor (Eastern Environmental Solutions, Inc., of Manorville, New York) contacted the One Call Center to request that subsurface utilities in the Site vicinity be marked, and submitted sidewalk use permit applications to the New York City Department of Transportation. Because of construction that closed the sidewalk at the planned location of temporary well GER-3, this well was relocated to the opposite side of 12$^{th}$ Street, and a new permit application was filed and approved.

On January 31, 2012, each of the soil vapor and temporary well locations was screened using a geophysical survey (magnetics and ground-penetrating radar) to identify any subsurface utilities or other obstructions that could impact the successful completion of the sampling program as proposed. These activities were conducted by NAEVA Geophysics of Congers, New York. No obstructions were identified at any of the planned sample locations.

## 2.2 Soil Sampling

Soil samples were collected at drilling locations GER-1 and GER-2, using the direct push method. At each location, the direct push rig was used to cut through the sidewalk, and the subsurface material was removed to a depth of five feet using a hand auger, to verify the absence of subsurface utilities. Soil samples were then collected, using new, dedicated disposable acetate sleeves, continuously from five feet below grade to the water table (GER-1) or to bedrock (GER-2). Upon retrieval, each sleeve was opened and the soil within scanned for total VOC using a photoionization detector ("PID") and geologically described using the Unified Soil Classification System, including documentation of observations regarding potential contamination such as odors, staining, etc. All descriptions and

observations were documented in a field notebook. Field notes are included in Appendix A and the soil boring logs are included in Appendix B.

The approved Work Plan included contingent soil sampling for laboratory analysis if elevated PID readings (relative to background) were detected in any of the unsaturated soil characterization samples. However, since PID readings for all soil samples were 0.0 parts per million, no soil samples were submitted for laboratory analysis.

## 2.3 Temporary Well Installation and Groundwater Sampling

As shown on Figure 4, one temporary well was located in the sidewalk on the west side of 12th Street, downgradient of the Site, and two temporary wells were located in the sidewalk on the western side of 13th Street, immediately outside of the Site. The temporary wells were installed using the direct push method, using 1-inch diameter PVC, with ten feet of screen installed to a depth of 18 feet below grade (approximately eight feet below the water table grade). Each temporary well was developed to establish a good connection between the well and the surrounding formation, by agitation using a check valve and new, dedicated tubing. Development water was contained for subsequent proper disposal. The temporary well specifications are summarized in Table 2.

Following completion of development at each temporary well, a New York State-licensed surveyor (Municipal Land Survey, PC of Middle Island, New York) measured the top of casing and ground surface elevations at each well location, relative to a common random datum established at the step for the door at the northeastern end of the Site building. The surveyor's report is included as Appendix C.

**Table 2. Temporary Well Specification Summary**

| Well | Screen Zone [1] | Development Volume | Ground Surface Elevation [2] | Ground Surface Elevation [2] | Depth to Groundwater [3] | Groundwater Elevation [2] |
|---|---|---|---|---|---|---|
| GER-1 | 8-18 | 5 gallons | 98.86 | 100.88 | 10.08 | 90.80 |
| GER-2 | 8-18 | 8.5 gallons | 98.97 | 100.93 | 10.12 | 90.81 |
| GER-3 | 8-18 | 8 gallons | 100.50 | 101.39 | 10.65 | 90.74 |

[1] Feet below grade.
[2] Feet relative to a common random datum established as 100.00 feet.
[3] Feet below top of casing, after completion of development.

The depth to groundwater in each well was measured using an electronic water level indicator. As shown in Table 2, these measurements were used in conjunction with the top of casing elevations to calculate the groundwater elevation at each well location, to allow determination of the groundwater flow direction at the Site.

One groundwater sample was then collected from each temporary well. Purging and sampling were conducted in accordance with the U.S. Environmental Protection Agency ("USEPA") guidance document entitled, " Low Stress (Low Flow) Purging and Sampling Procedure for Collection of Groundwater Samples from Monitoring Wells", revised January 19, 2010. Because of the small diameter of the temporary wells, purging and sampling was conducted using a peristaltic pump and new dedicated Teflon-lined tubing. Samples were collected directly from the tubing into laboratory-supplied sample containers, which were immediately placed into an iced cooler for subsequent transport to the laboratory under chain-of-custody procedures. The purge water was collected for subsequent proper disposal with the development water. Purge parameters are summarized in the field forms contained in Appendix D.

Each groundwater sample was submitted to Alpha Analytical of Mahwah, New Jersey for analysis of VOC, using Method 8260B with a New York State Analytical Services Protocol ("ASP") Category B data package. Alpha Analytical is approved under the New York State Department of Health ("NYSDOH") Environmental Laboratory Approval Program ("ELAP") for the analyses performed. Quality assurance/quality control ("QA/QC") samples included one blind duplicate sample (collected from GER-2), one MS/MSD sample set (collected from GER-1), and one trip blank. Since dedicated equipment was utilized for sample collection, field blanks were not collected during this program.

Following completion of sampling at each location, the temporary wells were removed and each probe hole was backfilled with excess soil cuttings, clean sand, and/or cement/bentonite grout, and the sidewalk was restored with concrete.

## 2.4 Sub-slab Soil Vapor and Ambient Air Sampling

The five interior soil vapor samples were collected from temporary, sub-slab sample points in accordance with the NYSDOH document entitled "Guidance for Evaluating Soil Vapor Intrusion in the State of New York", dated October 2006. As shown on Figure 4, sample GER-SV5 was collected below the basement floor. At each location, a portable core drill was used to penetrate the concrete foundation for manual installation of the soil vapor sampling probe, which was comprised of a new, 6-inch stainless steel screen connected to 0.25-inch inside diameter Teflon tubing. For probes GER-SV1 through GER-SV4, the screen was installed from two to eight inches below the building foundation. The screen and

tubing was surrounded by glass beads to the bottom of the foundation, and the tubing was sealed to the foundation with bentonite. At location GER-SV5, groundwater was encountered at a depth of approximately 8 inches below the bottom of the foundation. As a result, this screen was installed to a depth of 5 inches below the foundation. All probes were installed by Eastern under GE&R supervision.

Prior to sampling, the ambient temperature and atmospheric pressure were recorded at each location. An overturned plastic container was sealed to the floor over the sample location, with the Teflon tubing penetrating the container wall. Helium was introduced into the container, the helium concentration within the container was measured using a helium detector and recorded, and the sample tubing was purged for three minutes, using an air sampling pump pre-set to a rate of 0.2 liters per minute. After purging, the air pump discharge was collected in a Tedlar® bag. The concentrations of total VOC and helium in the bag were measured using a PID and helium detector, respectively, and recorded. These readings are summarized in Table 3 (Note: As a result of elevated helium concentrations in several of the bag samples, as shown in Table 3, the ambient helium concentration was also measured, for comparison), as well as in the field sampling form in Appendix D.

After purging, the container was removed and the sample tubing was connected to a laboratory-supplied, pre-evacuated Summa canister equipped with a regulator calibrated to provide a 4-hour sample period (the serial numbers of each canister and regulator are included in the field sampling form in Appendix D). The ambient air temperature and atmospheric pressure at the sample location were measured and recorded, the canister valve was opened for sample collection, and the initial canister vacuum was recorded. These readings are summarized in Table 4 and in the field form in Appendix D.

**Table 3. Soil Vapor Sample Purge Measurements**

| Sample Location | Helium in Container | Helium in Ambient Air | Helium in Sample Tubing After Purging | Total VOC in Ambient Air | Total VOC in Sample Tubing After Purging |
|---|---|---|---|---|---|
| GER-SV1 | 999,999 | 246 | 252 | 0.0 | 0.1 |
| GER-SV2 | 535,000 | 880 | 580 | 0.0 | 0.4 |
| GER-SV3 | 999,999 | 540 | 560 | 0.0 | 0.2 |
| GER-SV4 | 999,999 | 2,020 | 1,510 | 0.3 | 3.5 |
| GER-SV5 | 999,999 | 1,352 | 1,403 | 0.1 | 0.6 |

Helium and total VOC measurements are in parts per million.

**Table 4. Soil Vapor Sample Measurement Summary**

| Sample Location | Start | | | | End | | | |
|---|---|---|---|---|---|---|---|---|
| | Time | Temp. [1] | Atm. Pressure [2] | Canister Pressure [3] | Time | Temp. [1] | Atm. Pressure [2] | Canister Pressure [3] |
| GER-SV1 | 09:30 | 63 | 30.45 | -30.09 | 14:00 | 64 | 30.42 | -5.36 |
| GER-SV2 | 09:45 | 67 | 30.45 | -30.53 | 13:55 | 61 | 30.42 | -5.26 |
| GER-SV3 | 10:00 | 74 | 30.57 | -30.43 | 14:10 | 64 | 30.45 | -5.93 |
| GER-SV4 | 09:00 | 55 | 30.46 | -30.30 | 13:17 | 61 | 300.42 | -5.51 |
| GER-SV5 | 10:15 | 58 | 30.57 | -28.25 | 14:15 | 56 | 30.42 | -3.87 |

[1] Ambient air temperature at sample location, in degrees Fahrenheit.
[2] Atmospheric pressure at sample location, in inches of mercury.
[3] Canister pressure shown on regulator, in inches of mercury.

The ambient air sample was collected from an outdoor location adjacent to the basement access hatch in the sidewalk, and was also collected over a 4-hour period. The results from the ambient air sample were used in comparison to the sub-slab soil vapor samples. Since the Site is currently used as an active dry cleaner, indoor air sampling was not conducted during this program.

Upon completion of sampling, the final canister vacuum was recorded, the canister valve was closed, and the sampling apparatus was disassembled. At locations GER-SV1, GER-SV2, and GER-SV3, the Summa canisters appeared to have been moved slightly during the sample collection period, potentially affecting the integrity of the seal through the foundation.

Each tubing and screen was removed and the foundation was patched with concrete by Eastern. The canisters were packaged for delivery to the laboratory under chain-of-custody procedures, for analysis of VOC using Method TO-15.

Each air sample was submitted to Alpha Analytical of Mahwah, New Jersey for laboratory analysis of VOC, using Method TO-15 with an ASP Category B data package. Alpha Analytical is approved under the NYSDOH ELAP for the analyses performed.

## 2.5 Community Air Monitoring Plan

During outdoor intrusive activities associated with the field investigation (i.e., direct push soil sampling and temporary well installation), continuous monitoring for VOC was conducted at the work zone, using a PID. Background PID readings of 0.0 parts per million ("ppm") were measured at each temporary well locations prior to initiation of intrusive

activities, and no PID readings above this level were measured in ambient air at any of the direct push locations. In accordance with the approved Work Plan, particulate monitoring was not conducted during this investigation because of the low potential for dust generation by the direct push sampling equipment.

## 2.6 Sample Handling and Laboratory Analysis

Immediately after collection, each groundwater sample was placed into an iced cooler for subsequent delivery to the laboratory under chain-of-custody procedures. Soil vapor and ambient air samples were packaged in accordance with laboratory and shipping requirements for delivery to the laboratory under chain-of-custody procedures. All samples were picked up by the laboratory's courier on February 9, 2012.

As described above and summarized in Tables 5 and 6, the sampling program included collection of three groundwater samples (plus QA/QC samples), five soil vapor samples, and one ambient air sample for laboratory analysis of VOC. All samples collected during this program were analyzed by Alpha Analytical of Wyckoff, New Jersey, which is approved under the NYSDOH ELAP for the analyses performed. The analyses were conducted using the latest version of the ASP and the analytical results were provided with an ASP Category B data package and a 14-day turnaround time.

**Table 5. Sample Summary**

| Medium | Number of Samples | Analysis | Analytical Method | Container |
|---|---|---|---|---|
| Groundwater | 7 * | VOC | 8260B | 40-milliliter glass |
| Ambient Air | 1 | VOC | TO-15 | 6-liter Summa canister |
| Soil Vapor | 5 | VOC | TO-15 | 6-liter Summa canister |

* Includes three groundwater samples, one blind duplicate sample, one MS/MSD sample set, and one trip blank.

## 2.7 Investigation-Derived Waste

As described above, excess soil sample material was returned to the boring from which it was removed (i.e., GER-1 and GER-2). The temporary well development water (approximately 21.5 gallons) and the purge water generated during groundwater sampling (approximately five gallons) were contained in a drum and transported by Eastern to their facility for subsequent proper disposal as non-hazardous waste.

**Table 6. Sampling Rationale**

| Sample | Medium/Sample Depth *(feet)* | Analysis/Method | Rationale |
|---|---|---|---|
| GER-1 | Groundwater/18 | VOC/8260B | Immediately outside of Site |
| GER-2 | Groundwater/18 | VOC/8260B | Immediately outside of Site |
| GER-3 | Groundwater/18 | VOC/8260B | Downgradient of Site |
| GER-SV1 | Soil Vapor/0.7* | VOC/TO-15 | Below building foundation |
| GER-SV2 | Soil Vapor/0.7* | VOC/TO-15 | Below building foundation |
| GER-SV3 | Soil Vapor/0.7* | VOC/TO-15 | Below building foundation |
| GER-SV4 | Soil Vapor/0.7* | VOC/TO-15 | Below building foundation |
| GER-SV5 | Soil Vapor/0.5** | VOC/TO-15 | Below building foundation |
| GER-AA | Ambient Air/NA | VOC/TO-15 | Comparison to soil vapor sample results |

* Sample collected from depth of 8 inches beneath foundation

** Sample collected from depth of 5 inches beneath foundation

## 2.8 Data Review and Reporting

The ASP Category B data packages were validated by an independent data validation subconsultant (Data Validation Services of North Creek, New York, who have been approved by the NYSDEC for data validation). The laboratory data sheets for the groundwater and air samples are included in Appendix E, and the Data Usability Summary Report ("DUSR") summarizing the results of the data validation process is included in Appendix F. The complete data packages have also been submitted to the NYSDEC Environmental Information Management System ("EIMS") in the standardized electronic data deliverable format. The analytical results, qualified as necessary by the data validation and DUSR, are provided in Section 3.0 (Findings), in comparison to background concentrations and/or applicable New York State criteria:

1. *Groundwater* – Class GA groundwater standards and guidance values for groundwater (as listed in Technical Operational and Guidance Series ("TOGS") 1.1.1); and

2. *Soil Vapor* – Ambient air sample results.

# 3.0 FINDINGS

## 3.1 Geologic Characterization

Soil boring logs for GER-1 and GER-2 are included in Appendix B. As noted in the logs, the material encountered immediately below the sidewalk consisted of sand to depths of four feet at GER-1 and to seven feet at GER-2. Below this was silty sand, which ranged in color from black to gray-black to tan-brown to olive-brown to brown-gray. The silty sand continued to the deepest depth of sampling at GER-1 (15 feet below grade) and to a depth of 26.8 feet below grade in GER-2, at which point weathered bedrock was encountered. As shown in the logs, no staining or odors were observed in any of the collected soil samples, and PID readings for all soil samples were 0.0 parts per million. In accordance with the approved Work Plan, soil sampling was not conducted at location GER-3 on 12th Street.

Groundwater was encountered at a depth of approximately 10.5 feet below grade at both locations. Based on this information, in accordance with the approved Work Plan, temporary monitoring wells were installed at these locations (and GER-3) to total depths of 18 feet below grade, as described in Section 2.3 and shown in Table 2.

## 3.2 Groundwater Flow Direction

As described in Section 2.3, the top of casing elevation for each of the three was measured by a New York State-licensed surveyor, relative to a common random datum that was established at 100.00 feet. Using these elevations and the depth to groundwater measured in the temporary wells after completion of development (see Table 2), relative groundwater elevations were calculated for each of the temporary wells. As shown in Table 2, these elevations were 90.80 feet for GER-1, 90.81 feet for GER-2, and 90.74 feet for GER-3. As a result, the groundwater flow is at the Site in a westerly direction, toward the East River. Contours for the calculated groundwater elevations are shown on Figure 5.

## 3.3 Groundwater Sample Results

Analytical results for the groundwater samples are summarized in Table 7. As shown in this table, several VOC were detected at concentrations exceeding New York State Class GA groundwater standards or guidance values. These included naphthalene and cis-1,2-DCE in the sample from GER-1, and chloroform, PCE, and cis-1,2-DCE in the sample from GER-2 (as well as in the duplicate sample "DUP" collected from GER-2). Chloroform and PCE were also detected in the samples from GER-1 and GER-3 at concentrations below their standards, and TCE was detected in the samples from GER-1 and GER-2 at concentrations below its standard. Low concentrations of other VOC were also detected in the sample from GER-1, including bromodichloromethane and naphthalene, and the sample from GER-2 also

contained low concentrations of vinyl chloride, toluene, ethylbenzene, xylenes, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 1,4-diethylbenzene, and 4-ethyltoluene. The groundwater data are also summarized on Figure 6.

### 3.4 Soil Vapor and Air Sample Results

Analytical results for the soil vapor and ambient air samples are summarized in Table 8 and on Figure 7. As shown, many VOC were detected in the soil vapor samples at concentrations exceeding those detected in the ambient air sample. These compounds included propylene (GER-SV2), dichlorodifluoromethane (GER-SV1, GER-SV2 and GER-SV5), cyclohexane (GER-SV1 and GER-SV2), bromodichloromethane (GER-SV5), TCE (all five samples), heptane (GER-SV1 and GER-SV2), ethanol (GER-SV1), acetone (GER-SV2, GER-SV3, GER-SV4 and GER-SV5), methylene chloride (GER-SV5), PCE (all five samples), carbon disulfide (GER-SV1, GER-SV2 and GER-SV5), 2-butanone (GER-SV1 and GER-SV2), cis-1,2-DCE (GER-SV3, GER-SV4 and GER-SV5), ethylbenzene (GER-SV1 and GER-SV2), xylenes (GER-SV1, GER-SV2 and GER-SV5), ethyl acetate (GER-SV1 and GER-SV2), chloroform (all five samples), n-hexane (GER-SV2), 1,1,1-trichlorethane (GER-SV1 and GER-SV2), benzene (GER-SV1 and GER-SV2), carbon tetrachloride (GER-SV1 and GER-SV2), and 1,2,4-trimethylbenzene (GER-SV1, GER-SV2 and GER-SV5).

Compounds that were detected in the soil vapor samples at concentrations significantly (ten times or greater) above those in the ambient air sample, or were detected in soil vapor but not detected in the ambient air sample, included, cyclohexane (GER-SV1 and GER-SV2), bromodichloromethane (GER-SV5), TCE (all five samples), methylene chloride (GER-SV5), PCE (all five samples), carbon disulfide (GER-SV1, GER-SV2 and GER-SV5), cis-1,2-DCE (GER-SV3, GER-SV4 and GER-SV5), ethyl acetate (GER-SV1 and GER-SV2), chloroform (all five samples), 1,1,1-trichlorethane (GER-SV1 and GER-SV2), and carbon tetrachloride (GER-SV1 and GER-SV2).

# 4.0 CONCLUSIONS AND RECOMMENDATIONS

## 4.1 Conclusions

Based on the results of the field investigation conducted at the Site in January and February 2012, the following conclusions are drawn:

1. The results of the field screening and observations made during the soil sampling portion of this investigation program indicate that Site operations have not impacted shallow subsurface soil in the area immediately southeast of the Site building.

2. Based on the groundwater elevation measurements collected during this investigation, groundwater beneath the Site flows in a westerly direction, toward the East River. As a result, temporary wells GER-1 and GER-2 are upgradient of the Site building and dry cleaning operations, and temporary well GER-3 is cross-gradient to the Site.

3. The sample from upgradient temporary well GER-1 contained cis-1.2-DCE and naphthalene at concentrations above New York State Class GA standards/guidance values. In addition, low concentrations (below New York State Class GA standards/ guidance values) of other petroleum-related compounds (toluene, ethylbenzene, xylenes, and various substituted benzene compounds) and chlorinated VOC (chloroform, PCE, TCE, and vinyl chloride) were detected in this sample. The sample from upgradient temporary well GER-2 contained chloroform, PCE, and cis-1.2-DCE at concentrations above New York State Class GA standards/guidance values. This sample also contained low concentrations (below New York State Class GA standards/guidance values) of bromodichloromethane, TCE, and naphthalene. These results indicate a regional zone of impacted groundwater not related to Site operations, as these temporary wells are located upgradient of the Site building, approximately 80 feet upgradient of Site's dry cleaning equipment (which has always consisted of fourth-generation, closed-loop machines), and at least ten feet from the sanitary sewer line from the Site building.

4. The presence of PCE breakdown products TCE, cis-1,2-DCE, and vinyl chloride in the upgradient groundwater samples provides additional support for a source of groundwater impacts other than the Site, as these VOC are not used directly for dry cleaning operations and other potential sources of VOC are located upgradient of the Site. In addition, the presence of each of these PCE breakdown products indicates sufficient time from the release for the PCE to fully degrade to TCE, cis-1,2-DCE, and vinyl chloride.

5. Based on the westerly groundwater flow direction that was determined during this investigation, temporary well GER-3 is not directly downgradient of the Site, yet the sample from this temporary well contained PCE at a concentration of 1.2 micrograms per liter (as well as chloroform at 0.62 micrograms per liter). This information, in conjunction with the absence of PCE in any of the groundwater samples collected at the property immediately northwest of the Site in January 2011 (see Section 1.3.3 and Figure 3), provides further evidence that the Site is not a contributor to the VOC identified in groundwater.

6. The sub-slab soil vapor results show the presence of PCE and TCE in all five samples, and cis-1,2-DCE was detected in three samples. Other VOC detected in all five samples were acetone and chloroform, and several VOC were detected in at least three of the sub-slab samples, including dichlorodifluoromethane, toluene, carbon disulfide, 2-butanone, xylenes, and 1,2,4-trimethylbenzene. In addition, cyclohexane, heptane, ethylbenzene, ethyl acetate, 1,1,1-trichloroethane, benzene, and carbon tetrachloride were each detected in two of the sub-slab soil vapor samples. Based on this information, it is concluded that there are many sources beyond dry cleaning that are contributing to the VOC detected in soil vapor.

7. The presence of the boiler in the basement beneath the front of the Site building may be inducing infiltration of indoor air containing VOC related to dry cleaning into the subsurface through the observed cracks in the building foundation.

## 4.2 Recommendations

The Site is located in a historically and currently industrial area. All dry cleaning operations, since opening the facility in approximately 1996, have been with closed-loop, fourth-generation dry cleaning equipment and there has never been any on-Site storage of PCE. In addition, despite the open NYSDEC case associated with the Site, a release of dry cleaning chemicals from the Site has not been documented.

No sensory indications of contamination (such as staining or odors) were identified in any of the soil samples collected during this investigation. In addition, PID readings for all soil samples collected during this investigation in the Site vicinity were 0.0 ppm. This shows that Site operations have not adversely affected soil quality.

The groundwater flow direction determined during this investigation is toward the west, meaning that the groundwater samples collected at SB-1 and SB-2 in 2009, and at GER-1 and GER-2 during this investigation, are upgradient of the Site building and dry cleaning operations. Since these groundwater samples were located approximately 80 feet upgradient of Site's dry cleaning machinery and at least 10 feet from the sanitary sewer line from the

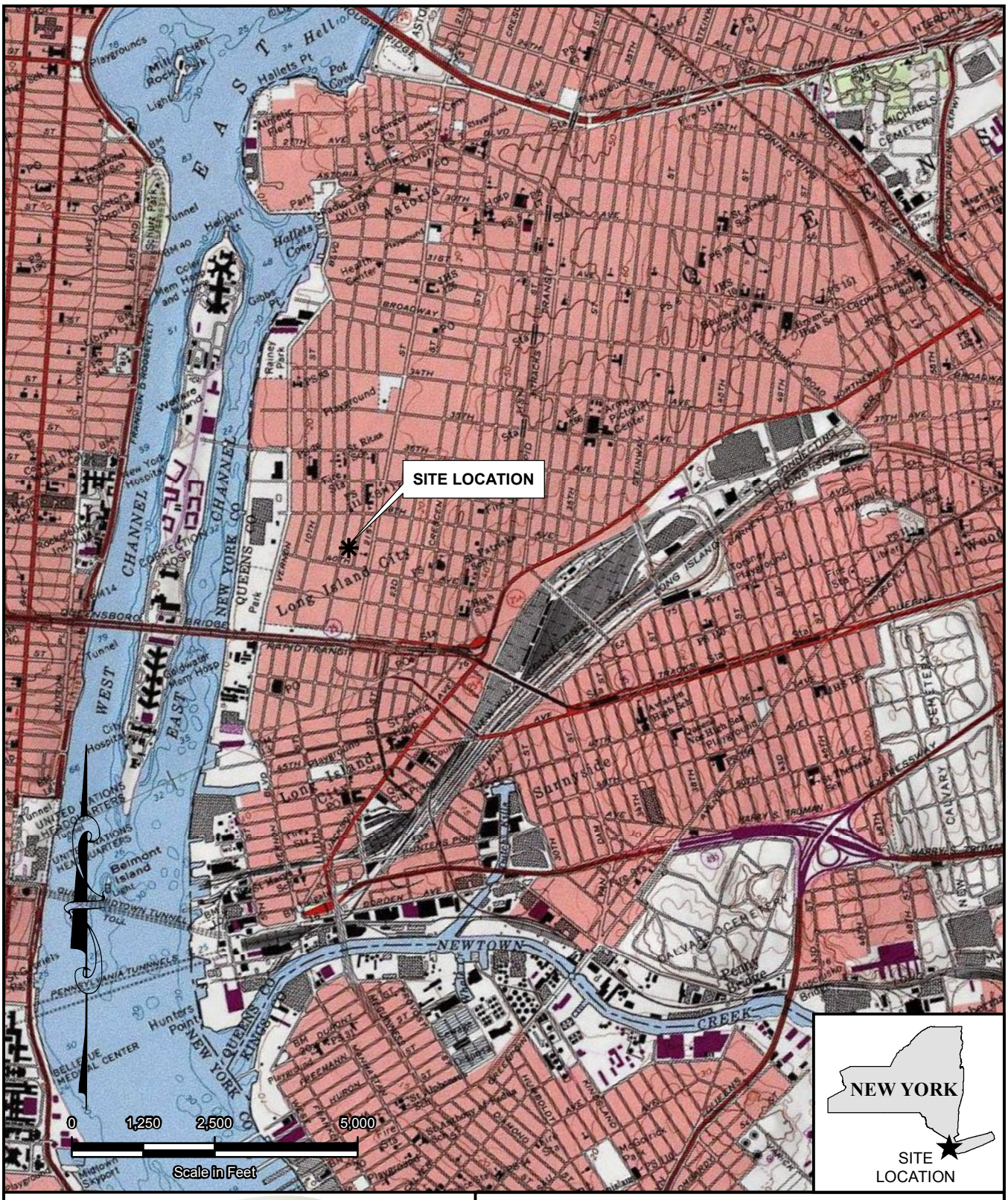
Site, it is apparent that the VOC detected in the groundwater are not the result of Site operations. Further confirmation of this is provided by the numerous VOC detected in groundwater that are not utilized for dry cleaning, such as chloroform and petroleum-related compounds. In addition, the presence of PCE in the sample from GER-3, which is not directly downgradient of the Site, and the absence of PCE in any of the three groundwater samples collected at the adjacent property in January 2011 (which is downgradient of the Site) shows that Site operations have not impacted groundwater. Based on these factors, it is apparent that VOC-contaminated groundwater exists in the Site vicinity and is migrating beneath the Site from upgradient areas.

Numerous VOC were detected in sub-slab soil vapor samples located throughout the Site building, including areas well distant from potential on-Site sources (e.g., dry cleaning machinery and sanitary sewer line); many VOC not related to dry cleaning were detected in the samples. This indicates the likelihood of sources other than the Site for the detected compounds. In addition, the presence of the Site's boiler in the basement and the numerous cracks in the foundation of the Site building suggest the possibility of induced airflow from the building interior through the foundation into the subsurface.

Based on the facts presented above, it is recommended that no further investigation of the Site be required, and that the open NYSDEC case associated with the Site be closed.

GENESIS ENGINEERING & REDEVELOPMENT

# FIGURES




SITE LOCATION MAP

Site Characterization Report
38-68 13th Street, Long Island City, New York

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| | | | | |
|---|---|---|---|---|
| Designed: | DH | Project Number: | 155-C-3 | Figure 1 |
| Drawn: | DH | File: | 155C3_1 | |
| Checked: | KW | Revision: | xxxxx | Date: 04/18/11 |


0 150 300 600

Scale in Feet

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# SITE VICINITY MAP

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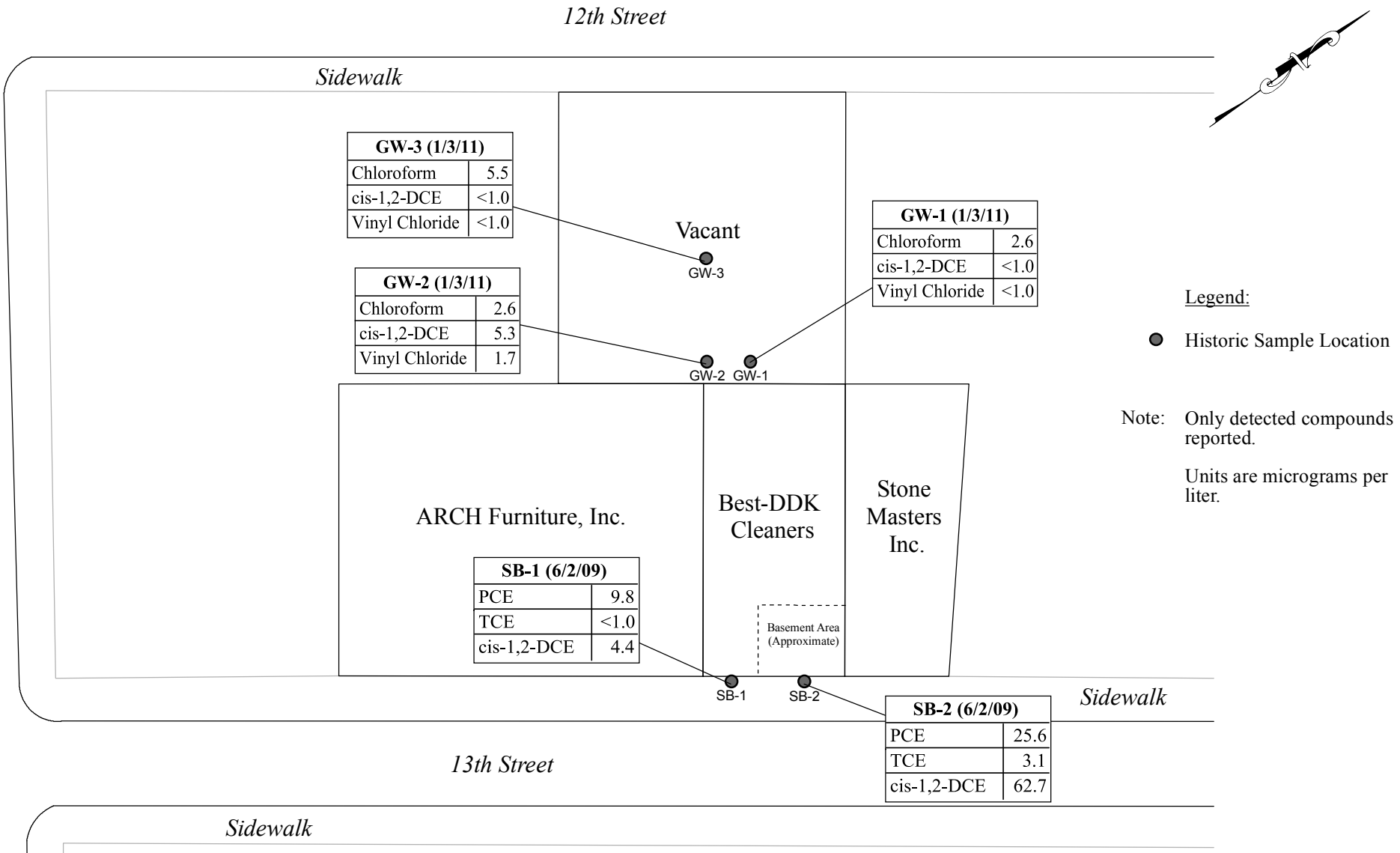
38-68 13th Street, Long Island City, New York

| | | | | |
|---|---|---|---|---|
| Designed: | KW | Project Number : | 153-C-3 | Figure 2 |
| Drawn: | DH | File : | 155C3_2 | |
| Checked: | KW | Revision : | xxxxx | Date: 04/18/11 |

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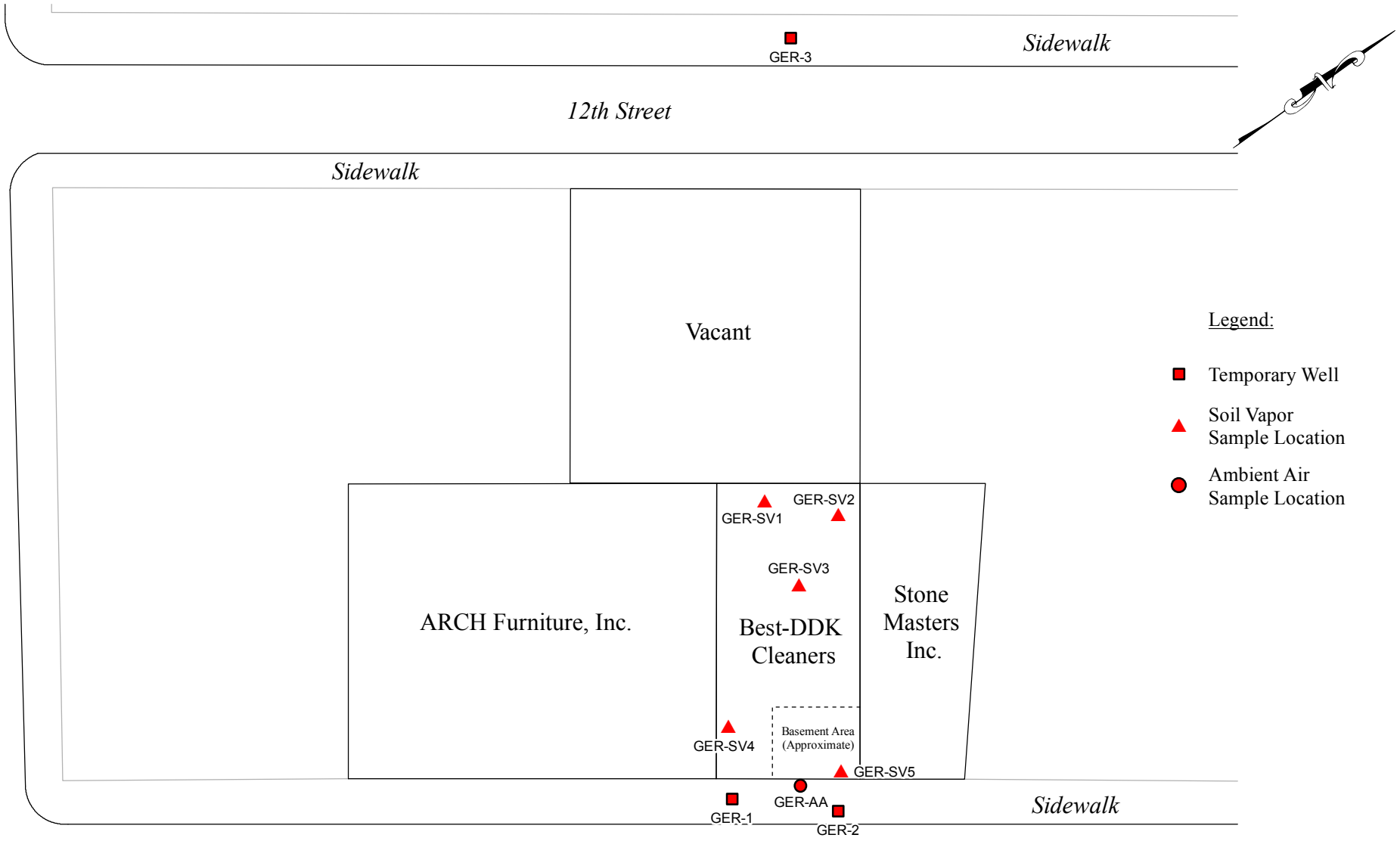
HISTORIC SAMPLE LOCATIONS AND GROUNDWATER SAMPLE RESULTS
Site Characterization Report
38-68 13th Street, Long Island City, New York

| | | | | |
|---|---|---|---|---|
| Designed: | KW | Project Number : | 153-C-3 | Figure 3 |
| Drawn: | DH | File : | 155C3_4 | |
| Checked: | KW | Revision : | xxxxx | Date: 10/19/11 |

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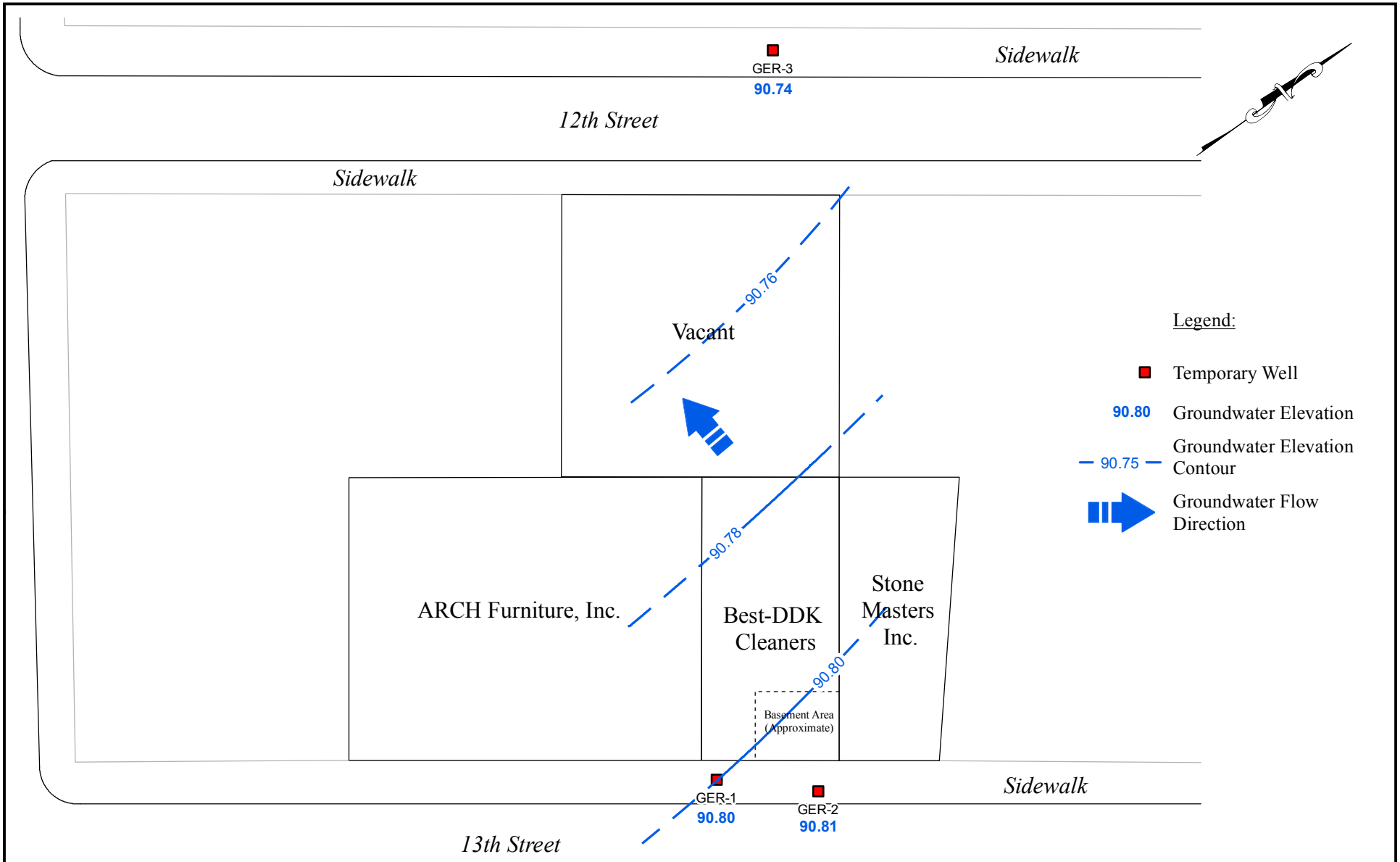
SAMPLE LOCATIONS
Site Characterization Report
38-68 13th Street, Long Island City, New York

| | | | | |
|---|---|---|---|---|
| Designed: | KW | Project Number : | 153-C-3 | Figure 4 |
| Drawn: | DH | File : | 155C3_5 | |
| Checked: | KW | Revision : | xxxxx | Date: 02/23/12 |

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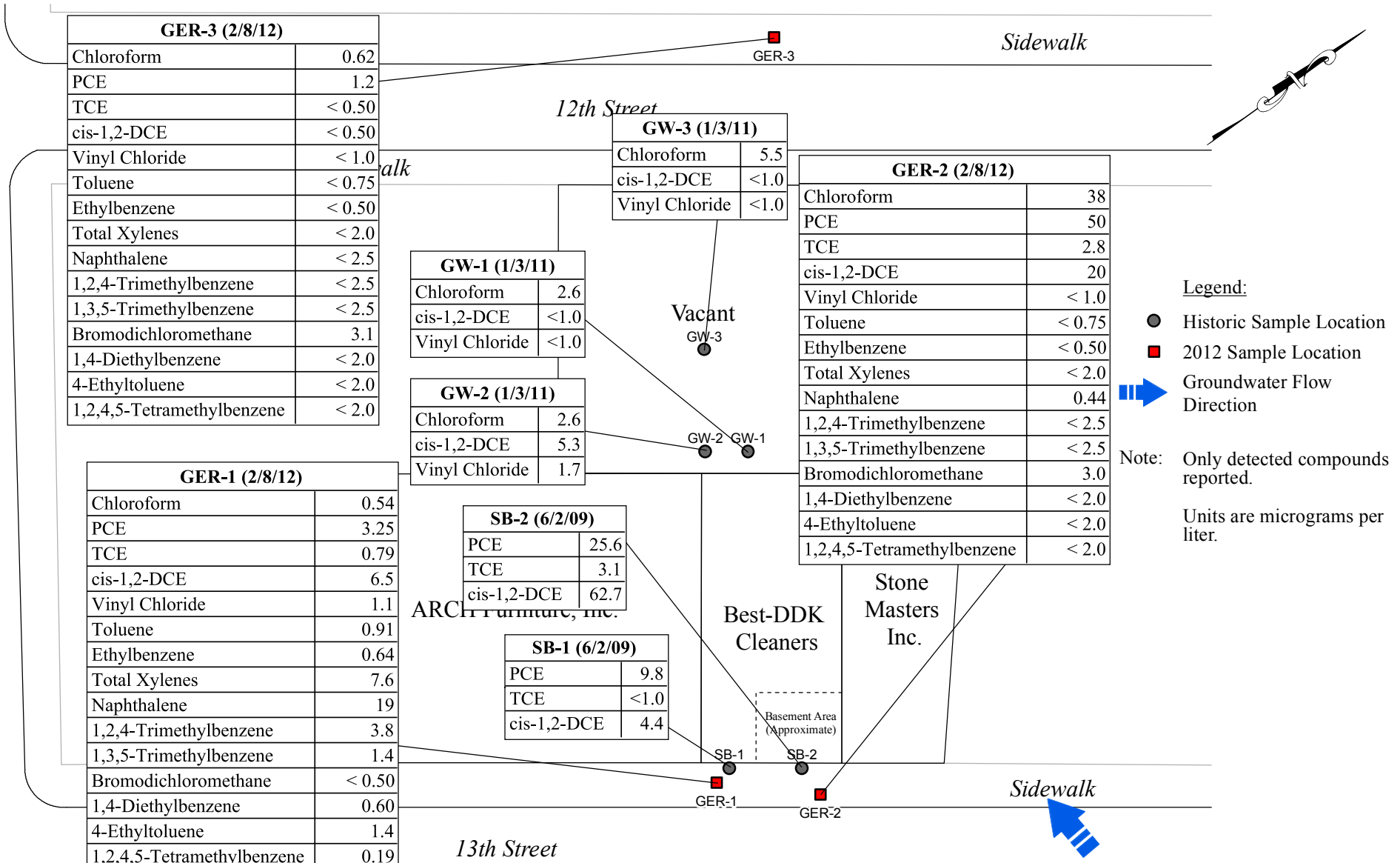
GROUNDWATER ELEVATION CONTOUR MAP
Site Characterization Report
38-68 13th Street, Long Island City, New York

| | | | | |
|---|---|---|---|---|
| Designed: | KW | Project Number : | 153-C-3 | Figure 5 |
| Drawn: | DH | File : | 155C3_6 | |
| Checked: | KW | Revision : | xxxxx | Date: 02/23/12 |

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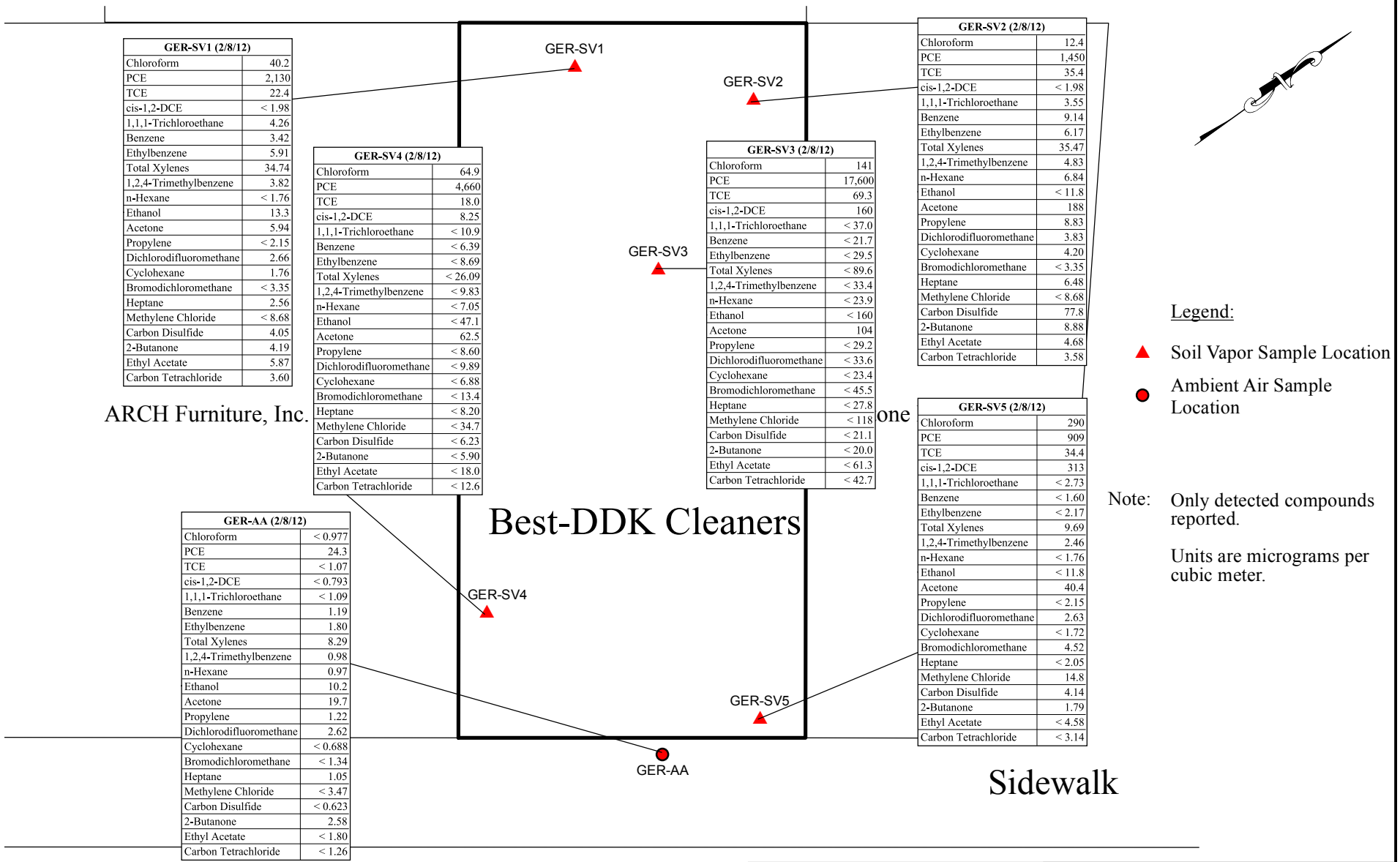
HISTORIC AND CURRENT GROUNDWATER SAMPLE RESULTS
Site Characterization Report
38-68 13th Street, Long Island City, New York

| | | | | |
|---|---|---|---|---|
| Designed: | KW | Project Number : | 153-C-3 | Figure 6 |
| Drawn: | DH | File : | 155C3_8 | |
| Checked: | KW | Revision : | xxxxx | Date: 03/05/12 |




| GER-SV1 (2/8/12) | |
|---|---|
| Chloroform | 40.2 |
| PCE | 2,130 |
| TCE | 22.4 |
| cis-1,2-DCE | < 1.98 |
| 1,1,1-Trichloroethane | 4.26 |
| Benzene | 3.42 |
| Ethylbenzene | 5.91 |
| Total Xylenes | 34.74 |
| 1,2,4-Trimethylbenzene | 3.82 |
| n-Hexane | < 1.76 |
| Ethanol | 13.3 |
| Acetone | 5.94 |
| Propylene | < 2.15 |
| Dichlorodifluoromethane | 2.66 |
| Cyclohexane | 1.76 |
| Bromodichloromethane | < 3.35 |
| Heptane | 2.56 |
| Methylene Chloride | < 8.68 |
| Carbon Disulfide | 4.05 |
| 2-Butanone | 4.19 |
| Ethyl Acetate | 5.87 |
| Carbon Tetrachloride | 3.60 |

| GER-SV2 (2/8/12) | |
|---|---|
| Chloroform | 12.4 |
| PCE | 1,450 |
| TCE | 35.4 |
| cis-1,2-DCE | < 1.98 |
| 1,1,1-Trichloroethane | 3.55 |
| Benzene | 9.14 |
| Ethylbenzene | 6.17 |
| Total Xylenes | 35.47 |
| 1,2,4-Trimethylbenzene | 4.83 |
| n-Hexane | 6.84 |
| Ethanol | < 11.8 |
| Acetone | 188 |
| Propylene | 8.83 |
| Dichlorodifluoromethane | 3.83 |
| Cyclohexane | 4.20 |
| Bromodichloromethane | < 3.35 |
| Heptane | 6.48 |
| Methylene Chloride | < 8.68 |
| Carbon Disulfide | 77.8 |
| 2-Butanone | 8.88 |
| Ethyl Acetate | 4.68 |
| Carbon Tetrachloride | 3.58 |

| GER-SV3 (2/8/12) | |
|---|---|
| Chloroform | 141 |
| PCE | 17,600 |
| TCE | 69.3 |
| cis-1,2-DCE | 160 |
| 1,1,1-Trichloroethane | < 37.0 |
| Benzene | < 21.7 |
| Ethylbenzene | < 29.5 |
| Total Xylenes | < 89.6 |
| 1,2,4-Trimethylbenzene | < 33.4 |
| n-Hexane | < 23.9 |
| Ethanol | < 160 |
| Acetone | 104 |
| Propylene | < 29.2 |
| Dichlorodifluoromethane | < 33.6 |
| Cyclohexane | < 23.4 |
| Bromodichloromethane | < 45.5 |
| Heptane | < 27.8 |
| Methylene Chloride | < 118 |
| Carbon Disulfide | < 21.1 |
| 2-Butanone | < 20.0 |
| Ethyl Acetate | < 61.3 |
| Carbon Tetrachloride | < 42.7 |

| GER-SV4 (2/8/12) | |
|---|---|
| Chloroform | 64.9 |
| PCE | 4,660 |
| TCE | 18.0 |
| cis-1,2-DCE | 8.25 |
| 1,1,1-Trichloroethane | < 10.9 |
| Benzene | < 6.39 |
| Ethylbenzene | < 8.69 |
| Total Xylenes | < 26.09 |
| 1,2,4-Trimethylbenzene | < 9.83 |
| n-Hexane | < 7.05 |
| Ethanol | < 47.1 |
| Acetone | 62.5 |
| Propylene | < 8.60 |
| Dichlorodifluoromethane | < 9.89 |
| Cyclohexane | < 6.88 |
| Bromodichloromethane | < 13.4 |
| Heptane | < 8.20 |
| Methylene Chloride | < 34.7 |
| Carbon Disulfide | < 6.23 |
| 2-Butanone | < 5.90 |
| Ethyl Acetate | < 18.0 |
| Carbon Tetrachloride | < 12.6 |

| GER-SV5 (2/8/12) | |
|---|---|
| Chloroform | 290 |
| PCE | 909 |
| TCE | 34.4 |
| cis-1,2-DCE | 313 |
| 1,1,1-Trichloroethane | < 2.73 |
| Benzene | < 1.60 |
| Ethylbenzene | < 2.17 |
| Total Xylenes | 9.69 |
| 1,2,4-Trimethylbenzene | 2.46 |
| n-Hexane | < 1.76 |
| Ethanol | < 11.8 |
| Acetone | 40.4 |
| Propylene | < 2.15 |
| Dichlorodifluoromethane | 2.63 |
| Cyclohexane | < 1.72 |
| Bromodichloromethane | 4.52 |
| Heptane | < 2.05 |
| Methylene Chloride | 14.8 |
| Carbon Disulfide | 4.14 |
| 2-Butanone | 1.79 |
| Ethyl Acetate | < 4.58 |
| Carbon Tetrachloride | < 3.14 |

| GER-AA (2/8/12) | |
|---|---|
| Chloroform | < 0.977 |
| PCE | 24.3 |
| TCE | < 1.07 |
| cis-1,2-DCE | < 0.793 |
| 1,1,1-Trichloroethane | < 1.09 |
| Benzene | 1.19 |
| Ethylbenzene | 1.80 |
| Total Xylenes | 8.29 |
| 1,2,4-Trimethylbenzene | 0.98 |
| n-Hexane | 0.97 |
| Ethanol | 10.2 |
| Acetone | 19.7 |
| Propylene | 1.22 |
| Dichlorodifluoromethane | 2.62 |
| Cyclohexane | < 0.688 |
| Bromodichloromethane | < 1.34 |
| Heptane | 1.05 |
| Methylene Chloride | < 3.47 |
| Carbon Disulfide | < 0.623 |
| 2-Butanone | 2.58 |
| Ethyl Acetate | < 1.80 |
| Carbon Tetrachloride | < 1.26 |

Legend:

- Soil Vapor Sample Location
- Ambient Air Sample Location

Note: Only detected compounds reported.

Units are micrograms per cubic meter.

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SOIL VAPOR RESULTS SUMMARY
Site Characterization Report
38-68 13th Street, Long Island City, New York

| | | | | |
|---|---|---|---|---|
| Designed: | KW | Project Number : | 153-C-3 | Figure 7 |
| Drawn: | DH | File : | 155C3_9 | |
| Checked: | KW | Revision : | xxxxx | Date: 03/05/12 |

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# TABLE 7

## Groundwater Sample Analytical Results

**Table 7**
**Groundwater Sample Analytical Results**
**Samples Collected on February 8, 2012**

| Sample ID (Laboratory ID) | Methylene Chloride | 1,1-Dichloroethane | Chloroform | Carbon Tetrachloride | 1,2-Dichloropropane | Dibromochloro-methane |
|---|---|---|---|---|---|---|
| GER-1 (L1202347-01) | < 5.0 | < 0.75 | 0.54 J | <0.50 | < 1.8 | < 0.50 |
| GER-2 (L1202347-02) | < 5.0 | < 0.75 | **38** | <0.50 | < 1.8 | < 0.50 |
| DUP (L1202347-04) * | < 5.0 | < 0.75 | **38** | <0.50 | < 1.8 | < 0.50 |
| GER-3 (L1202347-03) | < 5.0 | < 0.75 | 0.62 J | <0.50 | < 1.8 | < 0.50 |
| Trip Blank (L1202347-05) | < 5.0 | < 0.75 | < 0.75 | <0.50 | < 1.8 | < 0.50 |
| Class GA Groundwater Standard/Guidance Value | 5 | 5 | 7 | 5 | 1 | 50 GV |

| Sample ID | 1,2,3-Trichloropropane | Acrylonitrile | Styrene | Dichlorodifluoro-methane | Acetone | Carbon Disulfide |
|---|---|---|---|---|---|---|
| GER-1 (L1202347-1) | < 5.0 | < 5.0 | < 1.0 | < 5.0 | < 5.0 | < 5.0 |
| GER-2 (L1202347-2) | < 5.0 | < 5.0 | < 1.0 | < 5.0 | < 5.0 | < 5.0 |
| DUP (L1202347-4) * | < 5.0 | < 5.0 | < 1.0 | < 5.0 | < 5.0 | < 5.0 |
| GER-3 (L1202347-3) | < 5.0 | < 5.0 | < 1.0 | < 5.0 | < 5.0 | < 5.0 |
| Trip Blank (L1202347-5) | < 5.0 | < 5.0 | < 1.0 | < 5.0 | < 5.0 | < 5.0 |
| Class GA Groundwater Standard/Guidance Value | 0.04 | 5 | 50 | 5 | 50 GV | 60 GV |

Units are micrograms per liter.
--: Not established.
*: Duplicate of GER-2.
+: Applies to sum of isomers.

Bold indicates exceedance of standard or guidance value.
<: Result less than the Reporting Limit shown.
J: Estimated. J*: Estimated due to data validation criteria.
GV: Guidance Value.

**Table 7**
**Groundwater Sample Analytical Results**
**Samples Collected on February 8, 2012**

| Sample ID (Laboratory ID) | 1,1,2-Trichloroethane | Tetrachloroethene | Chlorobenzene | Trichlorofluoro-methane | 1,2-Dichloroethane | 1,1,1-Trichloroethane |
|---|---|---|---|---|---|---|
| GER-1 (L1202347-01) | < 0.75 | 3.5 | < 0.50 | < 2.5 | < 0.50 | < 0.50 |
| GER-2 (L1202347-02) | < 0.75 | **50** | < 0.50 | < 2.5 | < 0.50 | < 0.50 |
| DUP (L1202347-04) * | < 0.75 | **48** | < 0.50 | < 2.5 | < 0.50 | < 0.50 |
| GER-3 (L1202347-03) | < 0.75 | 1.2 | < 0.50 | < 2.5 | < 0.50 | < 0.50 |
| Trip Blank (L1202347-05) | < 0.75 | < 0.5 | < 0.50 | < 2.5 | < 0.50 | < 0.50 |
| Class GA Groundwater Standard/Guidance Value | 1 | 5 | 5 | 5 | 0.6 | 5 |

| Sample ID | 2-Butanone (Methyl-ethyl Ketone) | Vinyl Acetate | 4-Methyl-2-Pentanone | 2-Hexanone | Bromochloro-methane | 2,2-Dichloropropane |
|---|---|---|---|---|---|---|
| GER-1 (L1202347-1) | < 5.0 | < 5.0 | < 5.0 J* | < 5.0 | < 2.5 | < 2.5 |
| GER-2 (L1202347-2) | < 5.0 | < 5.0 | < 5.0 J* | < 5.0 | < 2.5 | < 2.5 |
| DUP (L1202347-4) * | < 5.0 | < 5.0 | < 5.0 J* | < 5.0 | < 2.5 | < 2.5 |
| GER-3 (L1202347-3) | < 5.0 | < 5.0 | < 5.0 J* | < 5.0 | < 2.5 | < 2.5 |
| Trip Blank (L1202347-5) | < 5.0 | < 5.0 | < 5.0 J* | < 5.0 | < 2.5 | < 2.5 |
| Class GA Groundwater Standard/Guidance Value | 50 GV | -- | -- | 50 GV | 5 | 5 |

Units are micrograms per liter.
--: Not established.
*: Duplicate of GER-2.
+: Applies to sum of isomers.

Bold indicates exceedance of standard or guidance value.
<: Result less than the Reporting Limit shown.
J: Estimated. J*: Estimated due to data validation criteria.
GV: Guidance Value.

**Table 7**
**Groundwater Sample Analytical Results**
**Samples Collected on February 8, 2012**

| Sample ID (Laboratory ID) | Bromodichloro-methane | trans-1,3-Dichloropropene | cis-1,3-Dichloropropene | 1,1,-Dichloropropene | Bromoform | 1,1,2,2-Tetrachloroethane |
|---|---|---|---|---|---|---|
| GER-1 (L1202347-01) | < 0.50 | < 0.50 | < 0.50 | < 2.5 | < 2.0 | < 0.50 |
| GER-2 (L1202347-02) | 3.0 | < 0.50 | < 0.50 | < 2.5 | < 2.0 | < 0.50 |
| DUP (L1202347-04) * | 3.1 | < 0.50 | < 0.50 | < 2.5 | < 2.0 | < 0.50 |
| GER-3 (L1202347-03) | < 0.50 | < 0.50 | < 0.50 | < 2.5 | < 2.0 | < 0.50 |
| Trip Blank (L1202347-05) | < 0.50 | < 0.50 | < 0.50 | < 2.5 | < 2.0 | < 0.50 |
| Class GA Groundwater Standard/Guidance Value | 50 GV | 0.4 + | 0.4 + | 5 | 50 GV | 5 |

| Sample ID | 1,2-Dibromo-methane | 1,3-Dichloropropane | 1,1,1,2-Tetrachloroethane | Bromobenzene | n-Butylbenzene | sec-Butylbenzene |
|---|---|---|---|---|---|---|
| GER-1 (L1202347-1) | < 2.0 | < 2.5 | < 0.50 | < 2.5 | < 0.50 | < 0.50 |
| GER-2 (L1202347-2) | < 2.0 | < 2.5 | < 0.50 | < 2.5 | < 0.50 | < 0.50 |
| DUP (L1202347-4) * | < 2.0 | < 2.5 | < 0.50 | < 2.5 | < 0.50 | < 0.50 |
| GER-3 (L1202347-3) | < 2.0 | < 2.5 | < 0.50 | < 2.5 | < 0.50 | < 0.50 |
| Trip Blank (L1202347-5) | < 2.0 | < 2.5 | < 0.50 | < 2.5 | < 0.50 | < 0.50 |
| Class GA Groundwater Standard/Guidance Value | 5 | 5 | 5 | 5 | 5 | 5 |

Units are micrograms per liter.
--: Not established.
*: Duplicate of GER-2.
+: Applies to sum of isomers.
Bold indicates exceedance of standard or guidance value.
<: Result less than the Reporting Limit shown.
J: Estimated. J*: Estimated due to data validation criteria.
GV: Guidance Value.

**Table 7**
**Groundwater Sample Analytical Results**
**Samples Collected on February 8, 2012**

| Sample ID (Laboratory ID) | Benzene | Toluene | Ethylbenzene | Chloromethane | Bromomethane | Vinyl Chloride |
|---|---|---|---|---|---|---|
| GER-1 (L1202347-01) | < 0.50 | 0.91 | 0.64 | < 2.5 | < 1.0 | 1.1 |
| GER-2 (L1202347-02) | < 0.50 | < 0.75 | < 0.50 | < 2.5 | < 1.0 | < 1.0 |
| DUP (L1202347-04) * | < 0.50 | < 0.75 | < 0.50 | < 2.5 | < 1.0 | < 1.0 |
| GER-3 (L1202347-03) | < 0.50 | < 0.75 | < 0.50 | < 2.5 | < 1.0 | < 1.0 |
| Trip Blank (L1202347-05) | < 0.50 | < 0.75 | < 0.50 | < 2.5 | < 1.0 | < 1.0 |
| Class GA Groundwater Standard/Guidance Value | 1 | 5 | 5 | 5 | 5 | 2 |

| Sample ID | tert-Butylbenzene | o-Chlorotoluene | p-Chlorotoluene | 1,2-Dibromo-3-Chloropropane | Hexachloro-butadiene | Isopropylbenzene |
|---|---|---|---|---|---|---|
| GER-1 (L1202347-1) | < 2.5 | < 2.5 | < 2.5 | < 2.5 | < 0.60 | < 0.50 |
| GER-2 (L1202347-2) | < 2.5 | < 2.5 | < 2.5 | < 2.5 | < 0.60 | < 0.50 |
| DUP (L1202347-4) * | < 2.5 | < 2.5 | < 2.5 | < 2.5 | < 0.60 | < 0.50 |
| GER-3 (L1202347-3) | < 2.5 | < 2.5 | < 2.5 | < 2.5 | < 0.60 | < 0.50 |
| Trip Blank (L1202347-5) | < 2.5 | < 2.5 | < 2.5 | < 2.5 | < 0.60 | < 0.50 |
| Class GA Groundwater Standard/Guidance Value | 5 | 5 | 5 | 0.04 | 0.5 | 5 |

Units are micrograms per liter.
--: Not established.
*: Duplicate of GER-2.
+: Applies to sum of isomers.

Bold indicates exceedance of standard or guidance value.
<: Result less than the Reporting Limit shown.
J: Estimated. J*: Estimated due to data validation criteria.
GV: Guidance Value.

**Table 7**
**Groundwater Sample Analytical Results**
**Samples Collected on February 8, 2012**

| Sample ID (Laboratory ID) | Chloroethane | 1,1-Dichloroethene | trans-1,2-Dichloroethene | Trichloroethene | 1,2-Dichlorobenzene | 1,3-Dichlorobenzene |
|---|---|---|---|---|---|---|
| GER-1 (L1202347-01) | < 1.0 | < 0.50 | < 0.75 | 0.79 | < 2.5 | < 2.5 |
| GER-2 (L1202347-02) | < 1.0 | < 0.50 | < 0.75 | 2.8 | < 2.5 | < 2.5 |
| DUP (L1202347-04) * | < 1.0 | < 0.50 | < 0.75 | 2.8 | < 2.5 | < 2.5 |
| GER-3 (L1202347-03) | < 1.0 | < 0.50 | < 0.75 | < 0.50 | < 2.5 | < 2.5 |
| Trip Blank (L1202347-05) | < 1.0 | < 0.50 | < 0.75 | < 0.50 | < 2.5 | < 2.5 |
| Class GA Groundwater Standard/Guidance Value | 5 | 5 | 5 | 5 | 3 | 3 |

| Sample ID | p-Isopropyltoluene | Naphthalene | n-Propylbenzene | 1,2,3-Trichlorobenzene | 1,2,4-Trichlorobenzene | 1,3,5-Trimethylbenzene |
|---|---|---|---|---|---|---|
| GER-1 (L1202347-1) | < 0.50 | **19 J*** | < 0.50 | < 2.5 | < 2.5 | 1.4 J |
| GER-2 (L1202347-2) | < 0.50 | 0.44 J | < 0.50 | < 2.5 | < 2.5 | < 2.5 |
| DUP (L1202347-4) * | < 0.50 | < 2.5 | < 0.50 | < 2.5 | < 2.5 | < 2.5 |
| GER-3 (L1202347-3) | < 0.50 | < 2.5 | < 0.50 | < 2.5 | < 2.5 | < 2.5 |
| Trip Blank (L1202347-5) | < 0.50 | < 2.5 | < 0.50 | < 2.5 | < 2.5 | < 2.5 |
| Class GA Groundwater Standard/Guidance Value | 5 | 10 GV | 5 | 5 | 5 | 5 |

Units are micrograms per liter.
--: Not established.
*: Duplicate of GER-2.
+: Applies to sum of isomers.

Bold indicates exceedance of standard or guidance value.
<: Result less than the Reporting Limit shown.
J: Estimated. J*: Estimated due to data validation criteria.
GV: Guidance Value.

**Table 7**
**Groundwater Sample Analytical Results**
**Samples Collected on February 8, 2012**

| Sample ID (Laboratory ID) | 1,4-Dichlorobenzene | Methyl tert-Butyl Ether | m&p Xylene | o-Xylene | cis-1,2-Dichloroethene | Dibromomethane |
|---|---|---|---|---|---|---|
| GER-1 (L1202347-01) | < 2.5 | < 1.0 | 4.1 | 3.5 | **6.5** | < 5.0 |
| GER-2 (L1202347-02) | < 2.5 | < 1.0 | < 1.0 | < 1.0 | **20** | < 5.0 |
| DUP (L1202347-04) * | < 2.5 | < 1.0 | < 1.0 | < 1.0 | **20** | < 5.0 |
| GER-3 (L1202347-03) | < 2.5 | < 1.0 | < 1.0 | < 1.0 | < 0.50 | < 5.0 |
| Trip Blank (L1202347-05) | < 2.5 | < 1.0 | < 1.0 | < 1.0 | < 0.50 | < 5.0 |
| Class GA Groundwater Standard/Guidance Value | 3 | 10 GV | 5 | 5 | 5 | 5 |

| Sample ID | 1,2,4-Trimethylbenzene | 1,4-Diethylbenzene | 4-Ethyltoluene | 1,2,4,5-Tetramethyl-benzene | Ethyl Ether | trans-1,4-Dichloro-2-Butene |
|---|---|---|---|---|---|---|
| GER-1 (L1202347-1) | 3.8 J* | 0.60 J | 1.4 J | 0.19 J | < 2.5 | < 2.5 J* |
| GER-2 (L1202347-2) | < 2.5 | < 2.0 | < 2.0 | < 2.0 | < 2.5 | < 2.5 J* |
| DUP (L1202347-4) * | < 2.5 | < 2.0 | < 2.0 | < 2.0 | < 2.5 | < 2.5 J* |
| GER-3 (L1202347-3) | < 2.5 | < 2.0 | < 2.0 | < 2.0 | < 2.5 | < 2.5 J* |
| Trip Blank (L1202347-5) | < 2.5 | < 2.0 | < 2.0 | < 2.0 | < 2.5 | < 2.5 J* |
| Class GA Groundwater Standard/Guidance Value | 5 | -- | -- | 5 | -- | 5 |

Units are micrograms per liter.
--: Not established.
*: Duplicate of GER-2.
+: Applies to sum of isomers.

Bold indicates exceedance of standard or guidance value.
<: Result less than the Reporting Limit shown.
J: Estimated. J*: Estimated due to data validation criteria.
GV: Guidance Value.

GENESIS ENGINEERING & REDEVELOPMENT

# TABLE 8

## Soil Vapor and Ambient Air
## Sample Analytical Results

**Table 8**
**Soil Vapor and Ambient Air Analytical Results**
**Samples Collected on February 8, 2012**

| Sample ID (Laboratory ID) | Propylene | Dichloro-difluoromethane | Chloromethane | Freon 114 | Vinyl Chloride | 1,3-Butadiene | Bromoethene | Chloroethane |
|---|---|---|---|---|---|---|---|---|
| **Sub-slab** | | | | | | | | |
| GER-SV1 (L1202360-01) | < 2.15 | **2.66** | < 1.03 | < 3.49 | < 1.28 | < 1.11 | < 1.94 | < 1.32 |
| GER-SV2 (L1202360-02) | **8.83** | **3.83** | < 1.03 | < 3.49 | < 1.28 | < 1.11 | < 1.94 | < 1.32 |
| GER-SV3 (L1202360-03) | < 29.2 | < 33.6 | < 14.0 | < 47.5 | < 17.4 | < 15.0 | < 26.4 | < 17.9 |
| GER-SV4 (L1202360-04) | < 8.60 | < 9.89 | < 4.13 | < 14.0 | < 5.11 | < 4.42 | < 7.77 | < 5.28 |
| GER-SV5 (L1202360-05) | < 2.15 | **2.63** | < 1.03 | < 3.49 | < 1.28 | < 1.11 | < 1.94 | < 1.32 |
| **Ambient Air** | | | | | | | | |
| GER-AA (L1202360-06) | 1.22 | 2.62 | 1.13 | < 1.40 | < 0.511 | < 0.442 | < 0.777 | < 0.528 |

| Sample ID (Laboratory ID) | Cyclohexane | 1,2-Dichloropropane | Bromodichloro-methane | 1,4-Dioxane | Trichloroethene | 2,2,4-Trimethylpentane | Heptane | cis-1,3-Dichloropropene |
|---|---|---|---|---|---|---|---|---|
| **Sub-slab** | | | | | | | | |
| GER-SV1 (L1202360-01) | **1.76** | < 2.31 | < 3.35 | < 1.80 | **22.4** | < 2.34 | **2.56** | < 2.27 |
| GER-SV2 (L1202360-02) | **4.20** | < 2.31 | < 3.35 | < 1.80 | **35.4** | < 2.34 | **6.48** | < 2.27 |
| GER-SV3 (L1202360-03) | < 23.4 | < 31.4 | < 45.5 | < 24.5 | **69.3** | < 31.7 | < 27.8 | < 30.8 |
| GER-SV4 (L1202360-04) | < 6.88 | < 9.24 | < 13.4 | < 7.21 | **18.0** | < 9.34 | < 8.20 | < 9.08 |
| GER-SV5 (L1202360-05) | < 1.72 | < 2.31 | **4.52** | < 1.80 | **34.4** | < 2.34 | < 2.05 | < 2.27 |
| **Ambient Air** | | | | | | | | |
| GER-AA (L1202360-06) | < 0.688 | < 0.924 | < 1.34 | < 0.721 | < 1.07 | < 0.934 | 1.05 | < 0.908 |

Units are micrograms per cubic meter.
D: Result from diluted sample.
NJ: Detection is tantative in identification and estimated in value, due to data validation criteria.
Highlighted concentrations exceed concentration detected in ambient air.

**Table 8**
**Soil Vapor and Ambient Air Analytical Results**
**Samples Collected on February 8, 2012**

| Sample ID (Laboratory ID) | Ethanol | Vinyl Bromide | Acetone | Trichloro-fluoromethane | Isopropanol | 1,1-Dichloroethene | Methylene Chloride | 3-Chloropropene |
|---|---|---|---|---|---|---|---|---|
| **Sub-slab** | | | | | | | | |
| GER-SV1 (L1202360-01) | **13.3** | < 2.19 | 5.94 | < 2.81 | < 3.07 | < 1.98 | < 8.68 | < 1.56 |
| GER-SV2 (L1202360-02) | < 11.8 | < 2.19 | **188** | < 2.81 | < 3.07 | < 1.98 | < 8.68 | < 1.56 |
| GER-SV3 (L1202360-03) | < 160 | < 29.7 | **104** | < 38.2 | < 41.8 | < 26.9 | < 118 | < 21.2 |
| GER-SV4 (L1202360-04) | < 47.1 | < 8.74 | **62.5** | < 11.2 | < 12.3 | < 7.93 | < 34.7 | < 6.26 |
| GER-SV5 (L1202360-05) | < 11.8 | < 2.19 | **40.4** | < 2.81 | < 3.07 | < 1.98 | **14.8** | < 1.56 |
| **Ambient Air** | | | | | | | | |
| GER-AA (L1202360-06) | 10.2 | < 0.874 | 19.7 | 1.62 | 1.53 | < 0.793 | < 3.47 | < 0.626 |

| Sample ID (Laboratory ID) | 4-Methyl-2-Pentanone | trans-1,3-Dichloropropene | 1,1,2-Trichloroethane | Toluene | 2-Hexanone | Dibromo-chloromethane | 1,2-Dibromoethane | Tetrachloroethene |
|---|---|---|---|---|---|---|---|---|
| **Sub-slab** | | | | | | | | |
| GER-SV1 (L1202360-01) | < 2.05 | < 2.27 | < 2.73 | 5.69 NJ | < 2.05 | < 4.26 | < 3.84 | **2,130 D** |
| GER-SV2 (L1202360-02) | < 2.05 | < 2.27 | < 2.73 | 7.35 NJ | < 2.05 | < 4.26 | < 3.84 | **1,450 D** |
| GER-SV3 (L1202360-03) | < 27.8 | < 30.8 | < 37.0 | < 25.6 | < 27.8 | < 57.8 | < 52.2 | **17,600** |
| GER-SV4 (L1202360-04) | < 8.20 | < 9.08 | < 10.9 | < 7.54 | < 8.20 | < 17.0 | < 15.4 | **4,660** |
| GER-SV5 (L1202360-05) | < 2.05 | < 2.27 | < 2.73 | 2.80 | < 2.05 | < 4.26 | < 3.84 | **909** |
| **Ambient Air** | | | | | | | | |
| GER-AA (L1202360-06) | 1.10 | < 0.908 | < 1.09 | 12.0 | < 0.820 | < 1.70 | < 1.54 | 24.3 |

Units are micrograms per cubic meter.
D: Result from diluted sample.
NJ: Detection is tantative in identification and estimated in value, due to data validation criteria.
Highlighted concentrations exceed concentration detected in ambient air.

**Table 8**
**Soil Vapor and Ambient Air Analytical Results**
**Samples Collected on February 8, 2012**

| Sample ID (Laboratory ID) | Carbon Disulfide | Freon 113 | trans-1,2-Dichloroethene | 1,1-Dichloroethane | Methyl tert-Butyl Ether | Vinyl Acetate | 2-Butanone | cis-1,2-Dichloroethene |
|---|---|---|---|---|---|---|---|---|
| **Sub-slab** | | | | | | | | |
| GER-SV1 (L1202360-01) | **4.05** | < 3.83 | < 1.98 | < 2.02 | < 1.80 | < 1.76 | **4.19** | < 1.98 |
| GER-SV2 (L1202360-02) | **77.8** | < 3.83 | < 1.98 | < 2.02 | < 1.80 | < 1.76 | **8.88** | < 1.98 |
| GER-SV3 (L1202360-03) | < 21.1 | < 52.0 | < 26.9 | < 27.5 | < 24.5 | < 23.9 | < 20.0 | **160** |
| GER-SV4 (L1202360-04) | < 6.23 | < 15.3 | < 7.93 | < 8.09 | < 7.21 | < 7.04 | < 5.90 | **8.25** |
| GER-SV5 (L1202360-05) | **4.14** | < 3.83 | < 1.98 | < 2.02 | < 1.80 | < 1.76 | 1.79 | **313** |
| **Ambient Air** | | | | | | | | |
| GER-AA (L1202360-06) | < 0.623 | < 1.53 | < 0.793 | < 0.809 | < 0.721 | < 0.704 | 2.58 | < 0.793 |

| Sample ID (Laboratory ID) | Chlorobenzene | Ethylbenzene | m&p-Xylene | Bromoform | Styrene | 1,1,2,2-Tetrachloroethane | o-Xylene | 4-Ethyltoluene |
|---|---|---|---|---|---|---|---|---|
| **Sub-slab** | | | | | | | | |
| GER-SV1 (L1202360-01) | < 2.30 | **5.91** | **26.1** | < 5.17 | < 2.13 | < 3.43 | **8.64** | < 2.46 |
| GER-SV2 (L1202360-02) | < 2.30 | **6.17** | **26.0** | < 5.17 | < 2.13 | < 3.43 | **9.47** | < 2.46 |
| GER-SV3 (L1202360-03) | < 31.3 | < 29.5 | < 59.1 | < 70.2 | < 28.9 | < 46.6 | < 29.5 | < 33.4 |
| GER-SV4 (L1202360-04) | < 9.21 | < 8.69 | < 17.4 | < 20.7 | < 8.52 | < 13.7 | < 8.69 | < 9.83 |
| GER-SV5 (L1202360-05) | < 2.30 | < 2.17 | **7.12** | < 5.17 | < 2.13 | < 3.43 | **2.57** | < 2.46 |
| **Ambient Air** | | | | | | | | |
| GER-AA (L1202360-06) | < 0.921 | 1.80 | 6.38 | < 2.07 | 0.94 | < 1.37 | 1.91 | < 0.983 |

Units are micrograms per cubic meter.
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NJ: Detection is tantative in identification and estimated in value, due to data validation criteria.
Highlighted concentrations exceed concentration detected in ambient air.

**Table 8**
**Soil Vapor and Ambient Air Analytical Results**
**Samples Collected on February 8, 2012**

| Sample ID (Laboratory ID) | Ethyl Acetate | Chloroform | Tetrahydrofuran | 1,2-Dichloroethane | n-Hexane | 1,1,1-Trichloroethane | Benzene | Carbon Tetrachloride |
|---|---|---|---|---|---|---|---|---|
| **Sub-slab** | | | | | | | | |
| GER-SV1 (L1202360-01) | **5.87** | **40.2** | < 1.47 | < 2.02 | < 1.76 | **4.26** | **3.42** | **3.60** |
| GER-SV2 (L1202360-02) | **4.68** | **12.4** | < 1.47 | < 2.02 | **6.84** | **3.55** | **9.14** | **3.58** |
| GER-SV3 (L1202360-03) | < 61.3 | **141** | < 20.0 | < 27.5 | < 23.9 | < 37.0 | < 21.7 | < 42.7 |
| GER-SV4 (L1202360-04) | < 18.0 | **64.9** | < 5.90 | < 8.09 | < 7.05 | < 10.9 | < 6.39 | < 12.6 |
| GER-SV5 (L1202360-05) | < 4.50 | **290** | < 1.47 | < 2.02 | < 1.76 | < 2.73 | < 1.60 | < 3.14 |
| **Ambient Air** | | | | | | | | |
| GER-AA (L1202360-06) | < 1.80 | < 0.977 | < 0.590 | < 0.809 | 0.97 | < 1.09 | 1.19 | < 1.26 |

| Sample ID (Laboratory ID) | 1,3,5-Trimethyl-benzene | 1,2,4-Trimethyl-benzene | Benzyl Chloride | 1,3-Dichlorobenzene | 1,4-Dichlorobenzene | 1,2-Dichlorobenzene | 1,2,4-Trichlorobenzene | Hexachloro-butadiene |
|---|---|---|---|---|---|---|---|---|
| **Sub-slab** | | | | | | | | |
| GER-SV1 (L1202360-01) | < 2.46 | **3.82** | < 2.59 | < 3.01 | < 3.01 | < 3.01 | < 3.71 | < 5.33 |
| GER-SV2 (L1202360-02) | < 2.46 | **4.83** | < 2.59 | < 3.01 | < 3.01 | < 3.01 | < 3.71 | < 5.33 |
| GER-SV3 (L1202360-03) | < 33.4 | < 33.4 | < 35.2 | < 40.8 | < 40.8 | < 40.8 | < 50.4 | < 72.4 |
| GER-SV4 (L1202360-04) | < 9.83 | < 9.83 | < 10.4 | < 12.0 | < 12.0 | < 12.0 | < 14.8 | < 21.3 |
| GER-SV5 (L1202360-05) | < 2.46 | **2.46** | < 2.59 | < 3.01 | < 3.01 | < 3.01 | < 3.71 | < 5.33 |
| **Ambient Air** | | | | | | | | |
| GER-AA (L1202360-06) | < 0.983 | 0.98 | < 1.04 | < 1.20 | < 1.20 | < 1.20 | < 1.48 | < 2.13 |

Units are micrograms per cubic meter.
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NJ: Detection is tantative in identification and estimated in value, due to data validation criteria.
Highlighted concentrations exceed concentration detected in ambient air.

GENESIS ENGINEERING & REDEVELOPMENT

# APPENDIX A

## Field Notes

1/31/12 Best Cleaners #155

KW onsite 1005
NAEVA onsite 1010 (Frank & Mike)

KW call to Eastern 0945 - informed that permits are on administrative hold, probably due to construction on 12TH Street, which closes SW sidewalks. We will try to locate address on NW side of 12TH Street. Eastern will call monitors in today.

GER SVS cleaned at base of basement steps

Sewer line exits front of bldg 134" southwest of SW end of basement door hatch
- water line at same place

② 1/31/12 Best Cleaners

38-60 12TH Street should be acceptable substitute, on NW side of street

GGR-1 proposed 5'6" from SW end of Best DDK (clear by NAEVA)
GGR-2 proposed 7'6" from NE end of bldg

T. DeAth & D. Whang (Genesis) on-site 1115-1200

Jay Moon on-site 1035-1700

All other interior SV locations cleared by NAEVA

1/31/12 Best Cleaners

1215 KW call to Joe Napoli, Eastern to provide 38-60 12TH Street address for markouts and permit. He will check about SV sampling on 2/1/12, and will schedule soil and groundwater sampling for Wed, 2/8/12.

Sidewalk in front of 38-60 12TH Street examined for utilities by NAEVA - proposed location OK, as marked.

NAEVA off-site 1250
KW off-site 1300

Edmund D. Whang Jr

(4)

2/6/12 Cloudy 35°F, 5 MPH from SE
Best Cleaners #155

KW on site 0550 - Best Cleaners closed. Opened at 0610
He detector not field calibratable
PID calibrated using 100 ppm isobutylene in air - final reading 100.1 ppm
air pump pre-calibrated @ 0.2 L/min
Horiba calibrated successfully
Jay Moore on-site 0630-0640
Easter on site 0655
Josh Falk, Ed Gallo, Bob Casabianca, Anthony Smith

Ion GasCheck Gx Helium Detector (#10-01120)
GilAir 5 Air Pump (#20081101005)
Mini RAE PID (#14600)
Horiba U-22 (#6007)

2/6/12 Best Cleaners

0715 Bob and Ed begin installing GERSV-4 drilling through tile with vacuum collecting dust
foundation ~6" thick
6" screen attached to 1/4" ID Teflon-lined tubing; top of screen installed 2" below foundation, surrounded w/ glass beads and sealed w/ bentonite, 4' from S wall and 18' from front of bldg.

0730 Josh and Anthony use track-mounted 6610 Geoprobe to core sidewalk at GERP-2 7½' from N end of bldg and 4' off curb and 11' from bldg. Hand auger to 6'

(6) 2/6/12 Best Cleaners

Jay Moon on-site 0720-1500

- Bob and Ed move to GER-SV-3, located 67' from front of bldg, 21' from N wall and 28' from S wall.
- GER-SV1 located 6' from back wall and 16½' from S wall

- GER-SV2 located 10½' from back wall and 7½' from N wall

GER-SV5 located in basement, groundwater encountered at 8" below 3" slab - probe installed 5" below bottom of slab. 3' from front bldg wall & 6½' from N wall. SV-1, SV-2, SV-3, SV-4 installed using specifications as per GER-SV4

2/6/12 Best Cleaners

Soil sampling at GER-2 (PID BG 0.0)
Hand cleared; black to brown, fr sand, 0-5' same fr gravel; dry; no odor, PID 0.0
0745 5-10' (5' macro core)
REC: 3.6' PID: 0.0 throughout
0-1.9' black to brown fr sand, tr brick pieces, dry, no odor
1.9-3.4': black fm sand and silt; dry, no odor
3.4-3.6' olive-gray; same; moist bottom 0.1'
0750 10'-15' REC 1.8'
PID 0.0 throughout
same; wet at ~0.6'

0755 15'-20' REC 3.3' PID 0.0
same; tan to brown-gray, wet

(8) 2/8/12 Best Cleaners

GER-2

0800 20-25' REC 5' PID 0.0

same.

0805 25-30' REC 1.5' PID 0.0

refusal at 26'9"

0-1.3' same

1.3-1.5' weathered bedrock

No elevated PID readings so no soil samples will be analyzed.

As per work plan, TW will be installed to 18' (8' below water table), 10' of 1" PVC screen

1030 DTW = 9.75' below TOC, with ~2' stick up

Dennis Wiring onsite 0830-1125

2/8/12 Best Cleaners

Sampling at SV4

after 3 minutes of purging

PID 3.5 ppm, He 1510 ppm (ambient 20'20 ppm), PID amb 0.3 ppm

He in container 999,999 ppm

-30.30 vacuum (initial)

canister 1709, regulator 0735

opened at 0900

55°F, 30.46" Hg at sample location

Ended 1317 Pr final -5.5, 61°F, 30.42"

AA set up by basement door (sidewalk)

pressure -30.12 (initial) - started at 0915 46°F 30.51" Hg

ended 1312 Pr final -5.0Z, 41°F, 30.42" Hg

Ambient air sample canister 919 regulator 0048

(10) 2/6/12 Best Cleaners

Sampling at SV-2

He in container 535,000 ppm

Canister 1669 regulator 0317

Purged for 3 minutes

PID 0.4 ppm (0.0 amb)

He 520 ppm

He ambient 1880 ppm

63°F, 30.45" Hg

started at 930

Pr initial -30.53

Ended at 1355 - Canister possibly moved

Pr final -5.26, 61°F,

30.42" Hg

2/6/12 Best Cleaners

Sampling at SV-1

He in container 9999,999 ppm

He ambient 246 ppm

Canister 1648 regulator 0189

He purge 252 ppm

PID purge 0.1 ppm (0.0 ambient)

purge for 3 minutes

Start at 0945

Pr initial -30.09

67° 30.45" Hg

Ended at 1400 - canister possibly moved

Pr final -5.36 64°F, 30.42" Hg

(12) 2/6/12 Best Cleaners

Sampling at SV-3 (3 minute purge)
He ambient 540 ppm
He container 999,999
He purge (3 min) 560 ppm
PID purge 0.2 ppm (0.0 ambient)
Canister 629 regulator 0166
Vacuum initial -30.43
74°F, 30.57" Hg
Started at 1000
Ended at 1410 - canister possibly moved during filling
Pr final -5.93, 64°F, 30.45" Hg

2/6/12 Best Cleaners

Sampling at SV-5
3 minutes of purging
He in container 999,999 ppm
He ambient 1352 ppm
PID ambient 0.1 ppm
PID purge 0.6 ppm
He purge 1403 ppm
Canister 1544 regulator 0299
Pr initial -28.25
Started at 1015
~~58~~°F 30.57" Hg
Ended at 1415
Pr final -3.87, 56°F, 30.42" Hg

(14) 2/8/12 Best Cleaners

GER-1 5'6" from S side of bldg, 8' from curb and 7' from front bldg wall BG PID 0.0

0830 Hand cleared to 5' - concrete pieces and black fc sand and fc gravel 0-4'; 4-5' tan-brown silt and fn sand; some clay; all dry, no odor

0845 5-10' Rec 3.3' PID 0.0
0-2.4' same
2.4-3.3' gray black, same, wet no odor

2/8/12 Best Cleaners

0850 10-15' Rec 4.6' PID 0.0
0-3.1': same
3.1-4.6' same; olive-brown

GER-1 installed with 10' of One-inch screen to 18' bgs

1035 DTW = 10.21' below TOC, w/ ~25" stick-up

No elevated PID readings, so no soil samples will be analyzed

2/6/12 Best Cleaners

0930 Eastern begins cleaning for GER-3, in front of 38-60 12th Street. Well completed to 18", using 10' of 1-inch PVC screen. After development (8 gal), DTW = 10.65' below TOC.

1045 Eastern begins developing GER-1 and GER-2 using tubing and check valve.

GER-2 very turbid, no odor or sheen, developed for 8.5 gallons (~25 casing volumes). DTW after developing is 10.12' below TOC

2/6/12 Best Cleaners

GER-1 very turbid, no sheen no odor DTW after removing 5 gallons (~15 casing volumes) DTW after development = 10.08' below TOC,

1115 GER-3 being developed - very turbid, no odor or sheen. Developed 8 gallons from well, slightly clearer. DTW after development = 10.65' below TOC

1300 Bob Ott, Municipal Land Survey on-site. Off-site 1405

1330 Pump arrives from Pine

GER-3 is located 20' from N side of property and 8' from bldg (5' from curb)

(10) 2/8/12 Best Cleaners

Purge GGR-1 starting at 1340
purge rate 250 ml/minute

| pH | Temp | Turb | SC | ORP |
|---|---|---|---|---|
| 1350 6.37 | 14.64 | 541.0 | 77.4 | -168 |
| 1355 6.46 | 14.55 | 279.0 | 79.8 | -172 |
| 1400 6.51 | 14.60 | 175.0 | 83.2 | -176 |
| 1405 6.51 | 14.61 | 180.8 | 83.1 | -176 |
| 1410 6.51 | 14.60 | 172.0 | 83.4 | -176 |

Sample collected 1415 MS/MSD also collected here

| WELL ELEVATIONS | Sidewalk | TOC |
|---|---|---|
| GGR-1 | 98.86 | 100.88 |
| GGR-2 | 98.97 | 100.93 |
| GGR-3 | 100.50 | 101.39 |

Top of step (grout line) at Best Cleaners = 100.00

2/8/12 Best Cleaners

DTW initial = 10.08

| DO | DTW |
|---|---|
| 1.63 | 10.08 |
| 1.52 | 10.09 |
| 1.54 | 10.09 |
| 1.56 | 10.09 |
| 1.56 | 10.10 |

Samples iced

Total purged 705 liters

(20) 2/8/12 Best Cleaners

1430 Begin purging GER-2
rate 200 ml/min DTW = 10.12

| Time | pH | Cond | Temp | Turb | DO | ORP | DTW |
|---|---|---|---|---|---|---|---|
| 1440 | 6.49 | 61.0 | 11.72 | 46 | 6.11 | -140 | 10.12 |
| 1445 | 6.48 | 61.7 | 11.51 | 40 | 6.40 | -135 | 10.13 |
| 1450 | 6.50 | 60.9 | 11.52 | 40 | 6.42 | -138 | 10.12 |
| 1455 | 6.51 | 60.8 | 11.51 | 41 | 6.41 | -136 | 10.12 |

Total purged 6.25 l

Sample collected at 1500
Duplicate "DUP" also collected here (Time for DUP is 1440)
Samples iced

2/8/12 Best Cleaners

1515 Begin purging GER-3 DTW = 10.65
rate is 200 ml/min

| Time | pH | Temp | Turb | Cond | DO | ORP | DTW |
|---|---|---|---|---|---|---|---|
| 1525 | 6.14 | 12.60 | 57 | 92.9 | 2.77 | -33 | 10.65 |
| 1530 | 6.05 | 13.00 | 55 | 91.8 | 2.75 | -40 | 10.66 |
| 1535 | 6.06 | 12.98 | 56 | 91.9 | 2.72 | -38 | 10.65 |
| 1540 | 6.06 | 12.98 | 57 | 91.9 | 2.73 | -38 | 10.66 |

Total purged 6.0 liter

Sample collected at 1545
Samples iced

(22) 2/9/12 Best Cleaners

All SV probes removed, sealed w/ bentonite and restored floor with cement

All Temporary wells removed, backfilled with soil samples & clean sand, and restored sidewalk with cement.

Eastern offsite 1615

NW offsite 1620

GENESIS ENGINEERING & REDEVELOPMENT

# APPENDIX B

## Soil Boring Logs

# BORING LOG



**GENESIS ENGINEERING & REDEVELOPMENT**

| | | | |
|---|---|---|---|
| **Client Name** | Jay Moon | **Boring Name** | GER-1 |
| **Job/Site Name** | Best-DDK Cleaners | **Drilling Started** | 2/8/12 @ 08:30 |
| **Location** | 38-68 13th Street, Long Island City, NY | **Drilling Completed** | 2/8/12 @ 09:20 |
| **Project Number** | 155-C-2 | **Ground Surface Elevation** | 98.96' |
| **Driller** | Eastern Environmental Solutions, Inc. | **Boring Location** | In sidewalk near SW site boundary |
| **Drilling Method** | Hand Auger to 5', Direct Push to 18' | **Total Boring Depth** | 18' |
| **Boring Diameter** | 4" to 5', 2" to 18' | | |
| **Logged By** | K. Wenz | **Depth to Water (First Encountered)** | Approx. 10.5' |
| **Reviewed By** | K. Wenz | **Depth to Water (Static)** | 10.08' |
| **Notes** | Installed temporary 1" pvc well with screened interval of 8'-18' bgs | | |

**Sample Condition**

Undisturbed Sample | Disturbed Sample | No Recovery

| Date Sampled | Time Sampled | PID (ppm) | Sample ID | Depth (ft bgs) | Graphic Log | U.S.C.S | Lithologic Description | Contact Depth (ft bgs) |
|---|---|---|---|---|---|---|---|---|
| | | | | 0 | | | (0.0'- 0.2') Concrete | 0.0<br>0.2 |
| | | 0.0 | | | | SW | (0.2'- 4.0') SAND: black, fine to coarse grained sand with fine to coarse gravel, dry, no odor | |
| | | 0.0 | | | | SM | (4.0'- 15.0') Silty SAND: tan-brown, silt and fine to medium grained sand, some clay present, no odor | 4.0 |
| | | | | 5 | | | | |
| | | 0.0 | | | | | Sample Recovery for core collected from 5' - 10' was 3.3' | |
| | | 0.0 | | | | | @ 8.5' color change to gray-black | |
| | | 0.0 | | 10 | | | Sample Recovery for core collected from 10' - 15' was 4.6' | |
| | | | | | | | @ 10.5' material becomes wet | |
| | | 0.0 | | | | | @ 13.5' color change to olive-brown | |
| | | 0.0 | | 15 | | | (15.0'- 18.0') soil samples not collected below depth of 15' | 15.0 |

GENESIS ENGINEERING & REDEVELOPMENT

# BORING LOG



**Project Number** 155-C-2 **Boring Name** GER-1

| Date Sampled | Time Sampled | PID (ppm) | Sample ID | Depth (ft bgs) | Graphic Log | U.S.C.S | Sample Condition / Lithologic Description | Contact Depth (ft bgs) |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

Sample Condition: Undisturbed Sample; No Recovery; Disturbed Sample

Lithologic Description

Boring Terminated @ 18.0'

Additional Notes:

TOC Elevation @ 100.88'

Ground surface and TOC Elevation were referenced to a common, random benchmark established at 100.00'

A total of 5 gallons were removed during well development prior to sampling

Temporary well was abandoned after GW sample was collected

GENESIS ENGINEERING & REDEVELOPMENT

# BORING LOG



| | | | |
|---|---|---|---|
| **Client Name** | Jay Moon | **Boring Name** | GER-2 |
| **Job/Site Name** | Best-DDK Cleaners | **Drilling Started** | 2/8/12 @ 07:20 |
| **Location** | 38-68 13th Street, Long Island City, NY | **Drilling Completed** | 2/8/12 @ 08:15 |
| **Project Number** | 155-C-2 | **Ground Surface Elevation** | 98.97' |
| **Driller** | Eastern Environmental Solutions, Inc. | **Boring Location** | In sidewalk near Site basement access |
| **Drilling Method** | Hand Auger to 5', Direct Push to 26.8' | **Total Boring Depth** | 26.8' |
| **Boring Diameter** | 4" to 5', 2" to 26.8' | | |
| **Logged By** | K. Wenz | **Depth to Water (First Encountered)** | Approx. 10.5' |
| **Reviewed By** | K. Wenz | **Depth to Water (Static)** | 10.12' |
| **Notes** | Installed temporary 1" pvc well with screened interval of 8'-18' bgs | | |

**Sample Condition**

Undisturbed Sample | Disturbed Sample | No Recovery

| Date Sampled | Time Sampled | PID (ppm) | Sample ID | Depth (ft bgs) | Graphic Log | U.S.C.S | Lithologic Description | Contact Depth (ft bgs) |
|---|---|---|---|---|---|---|---|---|
| | | | | 0 | | | (0.0'- 0.2') Concrete | 0.0<br>0.2 |
| | | | | | | SW | (0.2'- 7.5') SAND: black to brown, fine to coarse grained sand, some fine to coarse gravel, occasional brick pieces, dry, no odor | |
| | | 0.0 | | | | | | |
| | | 0.0 | | | | | | |
| | | | | 5 | | | Sample Recovery for core collected from 5' - 10' was 3.6' | |
| | | 0.0 | | | | | | |
| | | 0.0 | | | | SM | (7.5'- 26.5') Silty SAND: black, silt and fine to medium grained sand, dry, no odor | 7.5 |
| | | 0.0 | | 10 | | | @ 9.5' color change to olive-gray<br>@ 9.8' material becomes moist<br>@ 10.5' material becomes wet<br>Sample Recovery for core collected from 10' - 15' was 1.8' | |
| | | 0.0 | | | | | | |
| | | 0.0 | | 15 | | | @ 15' color change of tan to brown-gray<br>Sample Recovery for core collected from 15' - 20' was 3.3' | |
| | | 0.0 | | | | | | |

GENESIS ENGINEERING & REDEVELOPMENT

# BORING LOG



**Project Number** 155-C-2 **Boring Name** GER-2

| Date Sampled | Time Sampled | PID (ppm) | Sample ID | Depth (ft bgs) | Graphic Log | U.S.C.S | Sample Condition / Lithologic Description | Contact Depth (ft bgs) |
|---|---|---|---|---|---|---|---|---|
| | | 0.0 | | | | | | |
| | | 0.0 | | 20 | | | Sample Recovery for core collected from 20' - 25' was 5.0' | |
| | | 0.0 | | | | | | |
| | | 0.0 | | | | | | |
| | | 0.0 | | 25 | | | Sample Recovery for core collected from 25' - 26.8' was 1.5' | |
| | | | | | | | (26.5'- 26.8') Weathered Bedrock | 26.5 |

Sample Condition: Undisturbed Sample; Disturbed Sample; No Recovery

Boring Terminated @ 26.8' due to refusal

Additional Notes:

TOC Elevation @ 100.93'

Ground surface and TOC Elevation were referenced to a common, random benchmark established at 100.00'

A total of 8.5 gallons were removed during well development prior to sampling

Temporary well was abandoned after GW sample was collected

GENESIS ENGINEERING & REDEVELOPMENT

# APPENDIX C

## Temporary Well Survey Information

Municipal Land Survey, P.C.
*Land, Hydrographic and Engineering Surveys*

Mr. Ken Wenz, P.E.
Genesis Engineering & Redevelopment, Inc.
69-49 185th Street, Suite 1A
Fresh Meadows, NY 11365

March 23, 2012

Re: Best Cleaners, Long Island City, NY

Dear Mr. Wenz

Pursuant to our survey of March 8, 2012 here are the elevations for the three monitoring wells:

| Mon Well # | Sidewalk Elevation | Top of Casing Elev. |
|---|---|---|
| GER1 | 98.86 | 100.88 |
| GER2 | 98.97 | 100.93 |
| GER3 | 100.50 | 101.39 |

The above elevations are referenced to the first floor elevation of Best Cleaners being held at Elev. 100.00. If there are any questions, please do not hesitate to call me.

Thank you for the opportunity to be of assistance.

Very truly yours,

Robert W. Ott L.S.
President

10 Sylvia Lane • Middle Island, NY 11953
631-345-2658 • FAX 631-924-1270

GENESIS ENGINEERING & REDEVELOPMENT

# APPENDIX D

## Field Sampling Forms

GENESIS ENGINEERING & REDEVELOPMENT

# FIELD SAMPLING DATA FORM

PROJECT NAME: Best-DDK Cleaners
Well/Surface Station I.D.: GER-1
LOCATION/ADDRESS: 38-68 13th Street, Long Island City, New York
Sample Designation: GER-1
PROJECT NO.: 155-C-2
Date: 2/8/2012
CLIENT/CONTACT: Jay Moon

## WATER LEVEL MEASUREMENTS:

Water Level: 90.80' Feet below reference elevation: 10.08 Date: 2/8/2012 Time: 13:40

## WELL EVACUATION:

Well Depth: 18 feet Well Diameter: 1 inches Casing Volume: 0.103 gallons
Depth to Top of Screen: 8 feet 0.39 liters

Total No. of Casing Volumes: 19.2
Total Liters Removed: 7.5
Elapsed Time: 30 minutes

| Factor * Water Column Height Equals Gallons | |
|---|---|
| Factor | er |
| 0.163 | 2" Well |
| 0.653 | 4" Well |
| 1.469 | 6" Well |

WELL EVACUATION METHOD: Peristaltic pump _ X Submersible Pump _____ Bailer _____ Other _____
Non-Dedicated Equipment Identification: Purge rate 0.250 liter/minute

## FIELD WATER QUALITY TESTS:

| Casing Volume (total) | pH | Specific Conductance (umhos/cm) | Temperature | Turbidity (NTU) | Dissolved Oxgen (DO) | Oxidation-Reduction Potential (ORP) | DTW (ft. below TOC) | Time |
|---|---|---|---|---|---|---|---|---|
| 3.2 | Not measured | Not measured | Not measured | Not measured | Not measured | Not measured | Not measured | 13:45 |
| 6.4 | 6.37 | 77.4 | 14.64 | 544.0 | 1.63 | -168 | 10.08 | 13:50 |
| 9.6 | 6.46 | 79.8 | 14.55 | 279.0 | 1.52 | -172 | 10.09 | 13:55 |
| 12.8 | 6.51 | 83.2 | 14.60 | 175.0 | 1.54 | -176 | 10.09 | 14:00 |
| 16.0 | 6.51 | 83.1 | 14.61 | 170.8 | 1.56 | -176 | 10.08 | 14:05 |
| 19.2 | 6.51 | 83.4 | 14.60 | 172.0 | 1.56 | -176 | 10.10 | 14:10 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

## SAMPLING:

Date: 2/8/2012 Time: 14:15

| Sample Analysis | Volume | Container Type | Number of Containers | Preservative |
|---|---|---|---|---|
| VOC | 40 ml | Glass | 3 | HCl |
| VOC (MS) | 40 ml | Glass | 3 | HCl |
| VOC (MSD) | 40 ml | Glass | 3 | HCl |
| | | | | |
| | | | | |
| | | | | |

SAMPLING METHOD: Stainless Steel Bailer _____ Teflon Bailer _____ Grab _____ Other: Peristaltic Pump

## EQUIPMENT DECONTAMINATION PROCEDURES:

DECONTAMINATION METHOD: ☐Non Phosphatic detergent wash/distilled water rinse ☐Hot pressure wash/steam cleaning ☐Methanol rinse

NOTES:

GENESIS ENGINEERING & REDEVELOPMENT

# FIELD SAMPLING DATA FORM

PROJECT NAME: Best-DDK Cleaners
Well/Surface Station I.D.: GER-2
LOCATION/ADDRESS: 38-68 13th Street, Long Island City, New York
Sample Designation: GER-2 and DUP (duplicate)
PROJECT NO.: 155-C-2
Date: 2/8/2012
CLIENT/CONTACT: Jay Moon

## WATER LEVEL MEASUREMENTS:

Water Level: 90.81' Feet below reference elevation: 10.12 Date: 2/8/2012 Time: 14:30

## WELL EVACUATION:

Well Depth: 18 feet Well Diameter: 1 inches Casing Volume: 0.102 gallons
Depth to Top of Screen: 8 feet 0.39 liters

Total No. of Casing Volumes: 16.0
Total Liters Removed: 6.25
Elapsed Time: 25 minutes

| Factor * Water Column Height Equals Gallons | |
|---|---|
| Factor | er |
| 0.163 | 2" Well |
| 0.653 | 4" Well |
| 1.469 | 6" Well |

WELL EVACUATION METHOD: Peristaltic pump _ X Submersible Pump _____ Bailer _____ Other _____
Non-Dedicated Equipment Identification: Purge rate 0.250 liter/minute

## FIELD WATER QUALITY TESTS:

| Casing Volume (total) | pH | Specific Conductance (umhos/cm) | Temperature | Turbidity (NTU) | Dissolved Oxgen (DO) | Oxidation-Reduction Potential (ORP) | DTW (ft. below TOC) | Time |
|---|---|---|---|---|---|---|---|---|
| 3.2 | Not measured | Not measured | Not measured | Not measured | Not measured | Not measured | Not measured | 14:35 |
| 6.4 | 6.47 | 61.0 | 11.72 | 46.0 | 6.11 | -140 | 10.12 | 14:40 |
| 9.6 | 6.48 | 61.7 | 11.51 | 40.0 | 6.40 | -135 | 10.13 | 14:45 |
| 12.8 | 6.50 | 60.9 | 11.52 | 40.0 | 6.42 | -138 | 10.13 | 14:50 |
| 16.0 | 6.51 | 60.8 | 11.51 | 41.0 | 6.41 | -136 | 10.13 | 14:55 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

## SAMPLING:

Date: 2/8/2012 Time: 15:00 (DUP time 14:40)

| Sample Analysis | Volume | Container Type | Number of Containers | Preservative |
|---|---|---|---|---|
| VOC | 40 ml | Glass | 3 | HCl |
| VOC (DUP) | 40 ml | Glass | 3 | HCl |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

SAMPLING METHOD: Stainless Steel Bailer _____ Teflon Bailer _____ Grab _____ Other: Peristaltic Pump

## EQUIPMENT DECONTAMINATION PROCEDURES:

DECONTAMINATION METHOD: ☐Non Phosphatic detergent wash/distilled water rinse ☐Hot pressure wash/steam cleaning ☐Methanol rinse

NOTES:

GENESIS ENGINEERING & REDEVELOPMENT

# FIELD SAMPLING DATA FORM

PROJECT NAME: Best-DDK Cleaners
Well/Surface Station I.D.: GER-3
LOCATION/ADDRESS: 38-68 13th Street, Long Island City, New York
Sample Designation: GER-3
PROJECT NO.: 155-C-2
Date: 2/8/2012
CLIENT/CONTACT: Jay Moon

## WATER LEVEL MEASUREMENTS:

Water Level: 90.74' Feet below reference elevation: 10.65 Date: 2/8/2012 Time: 15:15

## WELL EVACUATION:

Well Depth: 18 feet Well Diameter: 1 inches Casing Volume: 0.096 gallons
Depth to Top of Screen: 8 feet 0.36 liters

Total No. of Casing Volumes: 13.9
Total Liters Removed: 5.0
Elapsed Time: 30 minutes

| Factor * Water Column Height Equals Gallons | |
|---|---|
| Factor | er |
| 0.163 | 2" Well |
| 0.653 | 4" Well |
| 1.469 | 6" Well |

WELL EVACUATION METHOD: Peristaltic pump _ X Submersible Pump _____ Bailer _____ Other _____
Non-Dedicated Equipment Identification: Purge rate 0.200 liter/minute

## FIELD WATER QUALITY TESTS:

| Casing Volume (total) | pH | Specific Conductance (umhos/cm) | Temperature | Turbidity (NTU) | Dissolved Oxgen (DO) | Oxidation-Reduction Potential (ORP) | DTW (ft. below TOC) | Time |
|---|---|---|---|---|---|---|---|---|
| 2.8 | Not measured | Not measured | Not measured | Not measured | Not measured | Not measured | Not measured | 15:20 |
| 5.6 | 6.14 | 93.9 | 12.60 | 57 | 2.77 | -33 | 10.65 | 15:25 |
| 8.3 | 6.05 | 91.8 | 13.00 | 55 | 2.75 | -40 | 10.66 | 15:30 |
| 11.1 | 6.06 | 91.9 | 12.98 | 56 | 2.72 | -38 | 10.65 | 15:35 |
| 13.9 | 6.06 | 91.9 | 12.98 | 57 | 2.73 | -38 | 10.66 | 15:40 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

## SAMPLING:

Date: 2/8/2012 Time: 15:45

| Sample Analysis | Volume | Container Type | Number of Containers | Preservative |
|---|---|---|---|---|
| VOC | 40 ml | Glass | 3 | HCl |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

SAMPLING METHOD: Stainless Steel Bailer _____ Teflon Bailer _____ Grab _____ Other: Peristaltic Pump

## EQUIPMENT DECONTAMINATION PROCEDURES:

DECONTAMINATION METHOD: ☐Non Phosphatic detergent wash/distilled water rinse ☐Hot pressure wash/steam cleaning ☐Methanol rinse

NOTES:

GENESIS ENGINEERING & REDEVELOPMENT


**Logged by:** K. Wenz

**Genesis Engineering & Redevelopment, LLC**
**Soil Gas Log Sheet**

**Date:** 2/8/2012 **GE&R Project No.:** 155-C-2
**Project Name:** Best-DDK Cleaners **Project Location:** 38-68 13th Street, Long Island City, New York

| Sample Location | Depth [1] | Volume Purged (liters) | Canister SN/ Regulator SN | Start time/ Temp./ Pressure [2] | End time/ Temp./ Pressure [2] | Tracer | Canister Pressure (initial/final) | Notes |
|---|---|---|---|---|---|---|---|---|
| GER-SV1 | 2-8 | 0.6 | 1648/0189 | 09:30/63°/ 30.45" | 14:00/64°/ 30.42" | helium | -30.09"/-5.36" | Canister moved during sampling. |
| GER-SV2 | 2-8 | 0.6 | 1669/0317 | 09:45/67°/ 30.45" | 13:55/61°/ 30.42" | helium | -30.53"/-5.26" | Canister moved during sampling. |
| GER-SV3 | 2-8 | 0.6 | 629/0166 | 10:00/74°/ 30.57" | 14:10/64°/ 30.45" | helium | -30.43"/-5.93" | Canister moved during sampling. |
| GER-SV4 | 2-8 | 0.6 | 1709/0735 | 09:00/55°/ 30.46" | 13:17/61°/ 30.42" | helium | -30.30"/-5.51" | |
| GER-SV5 | -1-5 [3] | 0.6 | 1544/0299 | 10:15/58°/ 30.57" | 14:15/56°/ 30.42" | helium | -28.25"/-3.87" | |
| GER-AA | -- | -- | 919/0048 | 09:15/46°/ 30.51" | 13:12/41°/ 30.42" | -- | -30.12"/-5.02" | |

**NOTES:**

All regulators pre-set for a 4-hour sample collection time.
Purging performed at a rate of 0.2 liters per minute.

[1] Inches below foundation.

[2] Ambient temperature (°F) and atmospheric pressure (inches of mercury).

[3] Groundwater encountered 8 inches below basement foundation, so this probe was installed to depth of 5 inches below foundation.

GENESIS ENGINEERING & REDEVELOPMENT

# APPENDIX E

## Laboratory Data Sheets

GENESIS ENGINEERING & REDEVELOPMENT

# Groundwater Samples

**Project Name:** BEST CLEANERS
**Project Number:** 155-C-2
**Lab Number:** L1202347
**Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202347-01
Client ID: GER-1
Sample Location: LIC, NY
Matrix: Water
Analytical Method: 1,8260B
Analytical Date: 02/14/12 13:45
Analyst: PD

Date Collected: 02/08/12 14:15
Date Received: 02/09/12
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab | | | | | | |
| Methylene chloride | ND | | ug/l | 5.0 | 0.54 | 1 |
| 1,1-Dichloroethane | ND | | ug/l | 0.75 | 0.22 | 1 |
| Chloroform | 0.54 | J | ug/l | 0.75 | 0.20 | 1 |
| Carbon tetrachloride | ND | | ug/l | 0.50 | 0.16 | 1 |
| 1,2-Dichloropropane | ND | | ug/l | 1.8 | 0.30 | 1 |
| Dibromochloromethane | ND | | ug/l | 0.50 | 0.19 | 1 |
| 1,1,2-Trichloroethane | ND | | ug/l | 0.75 | 0.26 | 1 |
| Tetrachloroethene | 3.5 | | ug/l | 0.50 | 0.18 | 1 |
| Chlorobenzene | ND | | ug/l | 0.50 | 0.19 | 1 |
| Trichlorofluoromethane | ND | | ug/l | 2.5 | 0.27 | 1 |
| 1,2-Dichloroethane | ND | | ug/l | 0.50 | 0.16 | 1 |
| 1,1,1-Trichloroethane | ND | | ug/l | 0.50 | 0.16 | 1 |
| Bromodichloromethane | ND | | ug/l | 0.50 | 0.19 | 1 |
| trans-1,3-Dichloropropene | ND | | ug/l | 0.50 | 0.16 | 1 |
| cis-1,3-Dichloropropene | ND | | ug/l | 0.50 | 0.14 | 1 |
| 1,1-Dichloropropene | ND | | ug/l | 2.5 | 0.26 | 1 |
| Bromoform | ND | | ug/l | 2.0 | 0.25 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/l | 0.50 | 0.19 | 1 |
| Benzene | ND | | ug/l | 0.50 | 0.19 | 1 |
| Toluene | 0.91 | | ug/l | 0.75 | 0.23 | 1 |
| Ethylbenzene | 0.64 | | ug/l | 0.50 | 0.26 | 1 |
| Chloromethane | ND | | ug/l | 2.5 | 0.28 | 1 |
| Bromomethane | ND | | ug/l | 1.0 | 0.26 | 1 |
| Vinyl chloride | 1.1 | | ug/l | 1.0 | 0.22 | 1 |
| Chloroethane | ND | | ug/l | 1.0 | 0.23 | 1 |
| 1,1-Dichloroethene | ND | | ug/l | 0.50 | 0.18 | 1 |
| trans-1,2-Dichloroethene | ND | | ug/l | 0.75 | 0.21 | 1 |
| Trichloroethene | 0.79 | | ug/l | 0.50 | 0.17 | 1 |
| 1,2-Dichlorobenzene | ND | | ug/l | 2.5 | 0.18 | 1 |
| 1,3-Dichlorobenzene | ND | | ug/l | 2.5 | 0.19 | 1 |
| 1,4-Dichlorobenzene | ND | | ug/l | 2.5 | 0.22 | 1 |

**Project Name:** BEST CLEANERS
**Project Number:** 155-C-2
**Lab Number:** L1202347
**Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202347-01
Client ID: GER-1
Sample Location: LIC, NY
Date Collected: 02/08/12 14:15
Date Received: 02/09/12
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Methyl tert butyl ether | ND | | ug/l | 1.0 | 0.16 | 1 |
| p/m-Xylene | 4.1 | | ug/l | 1.0 | 0.35 | 1 |
| o-Xylene | 3.5 | | ug/l | 1.0 | 0.33 | 1 |
| cis-1,2-Dichloroethene | 6.5 | | ug/l | 0.50 | 0.19 | 1 |
| Dibromomethane | ND | | ug/l | 5.0 | 0.36 | 1 |
| 1,2,3-Trichloropropane | ND | | ug/l | 5.0 | 0.43 | 1 |
| Acrylonitrile | ND | | ug/l | 5.0 | 0.43 | 1 |
| Styrene | ND | | ug/l | 1.0 | 0.36 | 1 |
| Dichlorodifluoromethane | ND | | ug/l | 5.0 | 0.30 | 1 |
| Acetone | ND | | ug/l | 5.0 | 1.6 | 1 |
| Carbon disulfide | ND | | ug/l | 5.0 | 0.30 | 1 |
| 2-Butanone | ND | | ug/l | 5.0 | 1.9 | 1 |
| Vinyl acetate | ND | | ug/l | 5.0 | 0.31 | 1 |
| 4-Methyl-2-pentanone | ND | | ug/l | 5.0 | 0.42 | 1 |
| 2-Hexanone | ND | | ug/l | 5.0 | 0.58 | 1 |
| Bromochloromethane | ND | | ug/l | 2.5 | 0.33 | 1 |
| 2,2-Dichloropropane | ND | | ug/l | 2.5 | 0.40 | 1 |
| 1,2-Dibromoethane | ND | | ug/l | 2.0 | 0.19 | 1 |
| 1,3-Dichloropropane | ND | | ug/l | 2.5 | 0.21 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | ug/l | 0.50 | 0.16 | 1 |
| Bromobenzene | ND | | ug/l | 2.5 | 0.18 | 1 |
| n-Butylbenzene | ND | | ug/l | 0.50 | 0.20 | 1 |
| sec-Butylbenzene | ND | | ug/l | 0.50 | 0.18 | 1 |
| tert-Butylbenzene | ND | | ug/l | 2.5 | 0.30 | 1 |
| o-Chlorotoluene | ND | | ug/l | 2.5 | 0.18 | 1 |
| p-Chlorotoluene | ND | | ug/l | 2.5 | 0.18 | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/l | 2.5 | 0.33 | 1 |
| Hexachlorobutadiene | ND | | ug/l | 0.60 | 0.23 | 1 |
| Isopropylbenzene | ND | | ug/l | 0.50 | 0.19 | 1 |
| p-Isopropyltoluene | ND | | ug/l | 0.50 | 0.19 | 1 |
| Naphthalene | 19 | | ug/l | 2.5 | 0.22 | 1 |
| n-Propylbenzene | ND | | ug/l | 0.50 | 0.17 | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/l | 2.5 | 0.23 | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/l | 2.5 | 0.22 | 1 |
| 1,3,5-Trimethylbenzene | 1.4 | J | ug/l | 2.5 | 0.21 | 1 |
| 1,2,4-Trimethylbenzene | 3.8 | | ug/l | 2.5 | 0.27 | 1 |
| 1,4-Diethylbenzene | 0.60 | J | ug/l | 2.0 | 0.11 | 1 |
| 4-Ethyltoluene | 1.4 | J | ug/l | 2.0 | 0.42 | 1 |
| 1,2,4,5-Tetramethylbenzene | 0.19 | J | ug/l | 2.0 | 0.10 | 1 |

**Project Name:** BEST CLEANERS
**Lab Number:** L1202347
**Project Number:** 155-C-2
**Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202347-01
Client ID: GER-1
Sample Location: LIC, NY
Date Collected: 02/08/12 14:15
Date Received: 02/09/12
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab | | | | | | |
| Ethyl ether | ND | | ug/l | 2.5 | 0.20 | 1 |
| trans-1,4-Dichloro-2-butene | ND | | ug/l | 2.5 | 0.17 | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 123 | | 70-130 |
| Toluene-d8 | 100 | | 70-130 |
| 4-Bromofluorobenzene | 94 | | 70-130 |
| Dibromofluoromethane | 123 | | 70-130 |

**Project Name:** BEST CLEANERS
**Project Number:** 155-C-2
**Lab Number:** L1202347
**Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202347-02
Client ID: GER-2
Sample Location: LIC, NY
Matrix: Water
Analytical Method: 1,8260B
Analytical Date: 02/14/12 14:10
Analyst: PD

Date Collected: 02/08/12 15:00
Date Received: 02/09/12
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab | | | | | | |
| Methylene chloride | ND | | ug/l | 5.0 | 0.54 | 1 |
| 1,1-Dichloroethane | ND | | ug/l | 0.75 | 0.22 | 1 |
| Chloroform | 38 | | ug/l | 0.75 | 0.20 | 1 |
| Carbon tetrachloride | ND | | ug/l | 0.50 | 0.16 | 1 |
| 1,2-Dichloropropane | ND | | ug/l | 1.8 | 0.30 | 1 |
| Dibromochloromethane | ND | | ug/l | 0.50 | 0.19 | 1 |
| 1,1,2-Trichloroethane | ND | | ug/l | 0.75 | 0.26 | 1 |
| Tetrachloroethene | 50 | | ug/l | 0.50 | 0.18 | 1 |
| Chlorobenzene | ND | | ug/l | 0.50 | 0.19 | 1 |
| Trichlorofluoromethane | ND | | ug/l | 2.5 | 0.27 | 1 |
| 1,2-Dichloroethane | ND | | ug/l | 0.50 | 0.16 | 1 |
| 1,1,1-Trichloroethane | ND | | ug/l | 0.50 | 0.16 | 1 |
| Bromodichloromethane | 3.0 | | ug/l | 0.50 | 0.19 | 1 |
| trans-1,3-Dichloropropene | ND | | ug/l | 0.50 | 0.16 | 1 |
| cis-1,3-Dichloropropene | ND | | ug/l | 0.50 | 0.14 | 1 |
| 1,1-Dichloropropene | ND | | ug/l | 2.5 | 0.26 | 1 |
| Bromoform | ND | | ug/l | 2.0 | 0.25 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/l | 0.50 | 0.19 | 1 |
| Benzene | ND | | ug/l | 0.50 | 0.19 | 1 |
| Toluene | ND | | ug/l | 0.75 | 0.23 | 1 |
| Ethylbenzene | ND | | ug/l | 0.50 | 0.26 | 1 |
| Chloromethane | ND | | ug/l | 2.5 | 0.28 | 1 |
| Bromomethane | ND | | ug/l | 1.0 | 0.26 | 1 |
| Vinyl chloride | ND | | ug/l | 1.0 | 0.22 | 1 |
| Chloroethane | ND | | ug/l | 1.0 | 0.23 | 1 |
| 1,1-Dichloroethene | ND | | ug/l | 0.50 | 0.18 | 1 |
| trans-1,2-Dichloroethene | ND | | ug/l | 0.75 | 0.21 | 1 |
| Trichloroethene | 2.8 | | ug/l | 0.50 | 0.17 | 1 |
| 1,2-Dichlorobenzene | ND | | ug/l | 2.5 | 0.18 | 1 |
| 1,3-Dichlorobenzene | ND | | ug/l | 2.5 | 0.19 | 1 |
| 1,4-Dichlorobenzene | ND | | ug/l | 2.5 | 0.22 | 1 |

**Project Name:** BEST CLEANERS **Lab Number:** L1202347

**Project Number:** 155-C-2 **Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202347-02 Date Collected: 02/08/12 15:00

Client ID: GER-2 Date Received: 02/09/12

Sample Location: LIC, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Methyl tert butyl ether | ND | | ug/l | 1.0 | 0.16 | 1 |
| p/m-Xylene | ND | | ug/l | 1.0 | 0.35 | 1 |
| o-Xylene | ND | | ug/l | 1.0 | 0.33 | 1 |
| cis-1,2-Dichloroethene | 20 | | ug/l | 0.50 | 0.19 | 1 |
| Dibromomethane | ND | | ug/l | 5.0 | 0.36 | 1 |
| 1,2,3-Trichloropropane | ND | | ug/l | 5.0 | 0.43 | 1 |
| Acrylonitrile | ND | | ug/l | 5.0 | 0.43 | 1 |
| Styrene | ND | | ug/l | 1.0 | 0.36 | 1 |
| Dichlorodifluoromethane | ND | | ug/l | 5.0 | 0.30 | 1 |
| Acetone | ND | | ug/l | 5.0 | 1.6 | 1 |
| Carbon disulfide | ND | | ug/l | 5.0 | 0.30 | 1 |
| 2-Butanone | ND | | ug/l | 5.0 | 1.9 | 1 |
| Vinyl acetate | ND | | ug/l | 5.0 | 0.31 | 1 |
| 4-Methyl-2-pentanone | ND | | ug/l | 5.0 | 0.42 | 1 |
| 2-Hexanone | ND | | ug/l | 5.0 | 0.58 | 1 |
| Bromochloromethane | ND | | ug/l | 2.5 | 0.33 | 1 |
| 2,2-Dichloropropane | ND | | ug/l | 2.5 | 0.40 | 1 |
| 1,2-Dibromoethane | ND | | ug/l | 2.0 | 0.19 | 1 |
| 1,3-Dichloropropane | ND | | ug/l | 2.5 | 0.21 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | ug/l | 0.50 | 0.16 | 1 |
| Bromobenzene | ND | | ug/l | 2.5 | 0.18 | 1 |
| n-Butylbenzene | ND | | ug/l | 0.50 | 0.20 | 1 |
| sec-Butylbenzene | ND | | ug/l | 0.50 | 0.18 | 1 |
| tert-Butylbenzene | ND | | ug/l | 2.5 | 0.30 | 1 |
| o-Chlorotoluene | ND | | ug/l | 2.5 | 0.18 | 1 |
| p-Chlorotoluene | ND | | ug/l | 2.5 | 0.18 | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/l | 2.5 | 0.33 | 1 |
| Hexachlorobutadiene | ND | | ug/l | 0.60 | 0.23 | 1 |
| Isopropylbenzene | ND | | ug/l | 0.50 | 0.19 | 1 |
| p-Isopropyltoluene | ND | | ug/l | 0.50 | 0.19 | 1 |
| Naphthalene | 0.44 | J | ug/l | 2.5 | 0.22 | 1 |
| n-Propylbenzene | ND | | ug/l | 0.50 | 0.17 | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/l | 2.5 | 0.23 | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/l | 2.5 | 0.22 | 1 |
| 1,3,5-Trimethylbenzene | ND | | ug/l | 2.5 | 0.21 | 1 |
| 1,2,4-Trimethylbenzene | ND | | ug/l | 2.5 | 0.27 | 1 |
| 1,4-Diethylbenzene | ND | | ug/l | 2.0 | 0.11 | 1 |
| 4-Ethyltoluene | ND | | ug/l | 2.0 | 0.42 | 1 |
| 1,2,4,5-Tetramethylbenzene | ND | | ug/l | 2.0 | 0.10 | 1 |

**Project Name:** BEST CLEANERS **Lab Number:** L1202347

**Project Number:** 155-C-2 **Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202347-02 Date Collected: 02/08/12 15:00

Client ID: GER-2 Date Received: 02/09/12

Sample Location: LIC, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab | | | | | | |
| Ethyl ether | ND | | ug/l | 2.5 | 0.20 | 1 |
| trans-1,4-Dichloro-2-butene | ND | | ug/l | 2.5 | 0.17 | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 119 | | 70-130 |
| Toluene-d8 | 99 | | 70-130 |
| 4-Bromofluorobenzene | 95 | | 70-130 |
| Dibromofluoromethane | 121 | | 70-130 |

**Project Name:** BEST CLEANERS
**Project Number:** 155-C-2
**Lab Number:** L1202347
**Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202347-03
Client ID: GER-3
Sample Location: LIC, NY
Matrix: Water
Analytical Method: 1,8260B
Analytical Date: 02/14/12 14:36
Analyst: PD

Date Collected: 02/08/12 15:45
Date Received: 02/09/12
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab | | | | | | |
| Methylene chloride | ND | | ug/l | 5.0 | 0.54 | 1 |
| 1,1-Dichloroethane | ND | | ug/l | 0.75 | 0.22 | 1 |
| Chloroform | 0.62 | J | ug/l | 0.75 | 0.20 | 1 |
| Carbon tetrachloride | ND | | ug/l | 0.50 | 0.16 | 1 |
| 1,2-Dichloropropane | ND | | ug/l | 1.8 | 0.30 | 1 |
| Dibromochloromethane | ND | | ug/l | 0.50 | 0.19 | 1 |
| 1,1,2-Trichloroethane | ND | | ug/l | 0.75 | 0.26 | 1 |
| Tetrachloroethene | 1.2 | | ug/l | 0.50 | 0.18 | 1 |
| Chlorobenzene | ND | | ug/l | 0.50 | 0.19 | 1 |
| Trichlorofluoromethane | ND | | ug/l | 2.5 | 0.27 | 1 |
| 1,2-Dichloroethane | ND | | ug/l | 0.50 | 0.16 | 1 |
| 1,1,1-Trichloroethane | ND | | ug/l | 0.50 | 0.16 | 1 |
| Bromodichloromethane | ND | | ug/l | 0.50 | 0.19 | 1 |
| trans-1,3-Dichloropropene | ND | | ug/l | 0.50 | 0.16 | 1 |
| cis-1,3-Dichloropropene | ND | | ug/l | 0.50 | 0.14 | 1 |
| 1,1-Dichloropropene | ND | | ug/l | 2.5 | 0.26 | 1 |
| Bromoform | ND | | ug/l | 2.0 | 0.25 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/l | 0.50 | 0.19 | 1 |
| Benzene | ND | | ug/l | 0.50 | 0.19 | 1 |
| Toluene | ND | | ug/l | 0.75 | 0.23 | 1 |
| Ethylbenzene | ND | | ug/l | 0.50 | 0.26 | 1 |
| Chloromethane | ND | | ug/l | 2.5 | 0.28 | 1 |
| Bromomethane | ND | | ug/l | 1.0 | 0.26 | 1 |
| Vinyl chloride | ND | | ug/l | 1.0 | 0.22 | 1 |
| Chloroethane | ND | | ug/l | 1.0 | 0.23 | 1 |
| 1,1-Dichloroethene | ND | | ug/l | 0.50 | 0.18 | 1 |
| trans-1,2-Dichloroethene | ND | | ug/l | 0.75 | 0.21 | 1 |
| Trichloroethene | ND | | ug/l | 0.50 | 0.17 | 1 |
| 1,2-Dichlorobenzene | ND | | ug/l | 2.5 | 0.18 | 1 |
| 1,3-Dichlorobenzene | ND | | ug/l | 2.5 | 0.19 | 1 |
| 1,4-Dichlorobenzene | ND | | ug/l | 2.5 | 0.22 | 1 |

**Project Name:** BEST CLEANERS
**Project Number:** 155-C-2
**Lab Number:** L1202347
**Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202347-03
Client ID: GER-3
Sample Location: LIC, NY
Date Collected: 02/08/12 15:45
Date Received: 02/09/12
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Methyl tert butyl ether | ND | | ug/l | 1.0 | 0.16 | 1 |
| p/m-Xylene | ND | | ug/l | 1.0 | 0.35 | 1 |
| o-Xylene | ND | | ug/l | 1.0 | 0.33 | 1 |
| cis-1,2-Dichloroethene | ND | | ug/l | 0.50 | 0.19 | 1 |
| Dibromomethane | ND | | ug/l | 5.0 | 0.36 | 1 |
| 1,2,3-Trichloropropane | ND | | ug/l | 5.0 | 0.43 | 1 |
| Acrylonitrile | ND | | ug/l | 5.0 | 0.43 | 1 |
| Styrene | ND | | ug/l | 1.0 | 0.36 | 1 |
| Dichlorodifluoromethane | ND | | ug/l | 5.0 | 0.30 | 1 |
| Acetone | ND | | ug/l | 5.0 | 1.6 | 1 |
| Carbon disulfide | ND | | ug/l | 5.0 | 0.30 | 1 |
| 2-Butanone | ND | | ug/l | 5.0 | 1.9 | 1 |
| Vinyl acetate | ND | | ug/l | 5.0 | 0.31 | 1 |
| 4-Methyl-2-pentanone | ND | | ug/l | 5.0 | 0.42 | 1 |
| 2-Hexanone | ND | | ug/l | 5.0 | 0.58 | 1 |
| Bromochloromethane | ND | | ug/l | 2.5 | 0.33 | 1 |
| 2,2-Dichloropropane | ND | | ug/l | 2.5 | 0.40 | 1 |
| 1,2-Dibromoethane | ND | | ug/l | 2.0 | 0.19 | 1 |
| 1,3-Dichloropropane | ND | | ug/l | 2.5 | 0.21 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | ug/l | 0.50 | 0.16 | 1 |
| Bromobenzene | ND | | ug/l | 2.5 | 0.18 | 1 |
| n-Butylbenzene | ND | | ug/l | 0.50 | 0.20 | 1 |
| sec-Butylbenzene | ND | | ug/l | 0.50 | 0.18 | 1 |
| tert-Butylbenzene | ND | | ug/l | 2.5 | 0.30 | 1 |
| o-Chlorotoluene | ND | | ug/l | 2.5 | 0.18 | 1 |
| p-Chlorotoluene | ND | | ug/l | 2.5 | 0.18 | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/l | 2.5 | 0.33 | 1 |
| Hexachlorobutadiene | ND | | ug/l | 0.60 | 0.23 | 1 |
| Isopropylbenzene | ND | | ug/l | 0.50 | 0.19 | 1 |
| p-Isopropyltoluene | ND | | ug/l | 0.50 | 0.19 | 1 |
| Naphthalene | ND | | ug/l | 2.5 | 0.22 | 1 |
| n-Propylbenzene | ND | | ug/l | 0.50 | 0.17 | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/l | 2.5 | 0.23 | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/l | 2.5 | 0.22 | 1 |
| 1,3,5-Trimethylbenzene | ND | | ug/l | 2.5 | 0.21 | 1 |
| 1,2,4-Trimethylbenzene | ND | | ug/l | 2.5 | 0.27 | 1 |
| 1,4-Diethylbenzene | ND | | ug/l | 2.0 | 0.11 | 1 |
| 4-Ethyltoluene | ND | | ug/l | 2.0 | 0.42 | 1 |
| 1,2,4,5-Tetramethylbenzene | ND | | ug/l | 2.0 | 0.10 | 1 |

**Project Name:** BEST CLEANERS
**Project Number:** 155-C-2
**Lab Number:** L1202347
**Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202347-03
Client ID: GER-3
Sample Location: LIC, NY
Date Collected: 02/08/12 15:45
Date Received: 02/09/12
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab | | | | | | |
| Ethyl ether | ND | | ug/l | 2.5 | 0.20 | 1 |
| trans-1,4-Dichloro-2-butene | ND | | ug/l | 2.5 | 0.17 | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 124 | | 70-130 |
| Toluene-d8 | 100 | | 70-130 |
| 4-Bromofluorobenzene | 94 | | 70-130 |
| Dibromofluoromethane | 120 | | 70-130 |

**Project Name:** BEST CLEANERS
**Project Number:** 155-C-2
**Lab Number:** L1202347
**Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202347-04
Client ID: DUP
Sample Location: LIC, NY
Matrix: Water
Analytical Method: 1,8260B
Analytical Date: 02/14/12 15:02
Analyst: PD

Date Collected: 02/08/12 14:40
Date Received: 02/09/12
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab | | | | | | |
| Methylene chloride | ND | | ug/l | 5.0 | 0.54 | 1 |
| 1,1-Dichloroethane | ND | | ug/l | 0.75 | 0.22 | 1 |
| Chloroform | 38 | | ug/l | 0.75 | 0.20 | 1 |
| Carbon tetrachloride | ND | | ug/l | 0.50 | 0.16 | 1 |
| 1,2-Dichloropropane | ND | | ug/l | 1.8 | 0.30 | 1 |
| Dibromochloromethane | ND | | ug/l | 0.50 | 0.19 | 1 |
| 1,1,2-Trichloroethane | ND | | ug/l | 0.75 | 0.26 | 1 |
| Tetrachloroethene | 48 | | ug/l | 0.50 | 0.18 | 1 |
| Chlorobenzene | ND | | ug/l | 0.50 | 0.19 | 1 |
| Trichlorofluoromethane | ND | | ug/l | 2.5 | 0.27 | 1 |
| 1,2-Dichloroethane | ND | | ug/l | 0.50 | 0.16 | 1 |
| 1,1,1-Trichloroethane | ND | | ug/l | 0.50 | 0.16 | 1 |
| Bromodichloromethane | 3.1 | | ug/l | 0.50 | 0.19 | 1 |
| trans-1,3-Dichloropropene | ND | | ug/l | 0.50 | 0.16 | 1 |
| cis-1,3-Dichloropropene | ND | | ug/l | 0.50 | 0.14 | 1 |
| 1,1-Dichloropropene | ND | | ug/l | 2.5 | 0.26 | 1 |
| Bromoform | ND | | ug/l | 2.0 | 0.25 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/l | 0.50 | 0.19 | 1 |
| Benzene | ND | | ug/l | 0.50 | 0.19 | 1 |
| Toluene | ND | | ug/l | 0.75 | 0.23 | 1 |
| Ethylbenzene | ND | | ug/l | 0.50 | 0.26 | 1 |
| Chloromethane | ND | | ug/l | 2.5 | 0.28 | 1 |
| Bromomethane | ND | | ug/l | 1.0 | 0.26 | 1 |
| Vinyl chloride | ND | | ug/l | 1.0 | 0.22 | 1 |
| Chloroethane | ND | | ug/l | 1.0 | 0.23 | 1 |
| 1,1-Dichloroethene | ND | | ug/l | 0.50 | 0.18 | 1 |
| trans-1,2-Dichloroethene | ND | | ug/l | 0.75 | 0.21 | 1 |
| Trichloroethene | 2.8 | | ug/l | 0.50 | 0.17 | 1 |
| 1,2-Dichlorobenzene | ND | | ug/l | 2.5 | 0.18 | 1 |
| 1,3-Dichlorobenzene | ND | | ug/l | 2.5 | 0.19 | 1 |
| 1,4-Dichlorobenzene | ND | | ug/l | 2.5 | 0.22 | 1 |

**Project Name:** BEST CLEANERS **Lab Number:** L1202347

**Project Number:** 155-C-2 **Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202347-04 Date Collected: 02/08/12 14:40

Client ID: DUP Date Received: 02/09/12

Sample Location: LIC, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab | | | | | | |
| Methyl tert butyl ether | ND | | ug/l | 1.0 | 0.16 | 1 |
| p/m-Xylene | ND | | ug/l | 1.0 | 0.35 | 1 |
| o-Xylene | ND | | ug/l | 1.0 | 0.33 | 1 |
| cis-1,2-Dichloroethene | 20 | | ug/l | 0.50 | 0.19 | 1 |
| Dibromomethane | ND | | ug/l | 5.0 | 0.36 | 1 |
| 1,2,3-Trichloropropane | ND | | ug/l | 5.0 | 0.43 | 1 |
| Acrylonitrile | ND | | ug/l | 5.0 | 0.43 | 1 |
| Styrene | ND | | ug/l | 1.0 | 0.36 | 1 |
| Dichlorodifluoromethane | ND | | ug/l | 5.0 | 0.30 | 1 |
| Acetone | ND | | ug/l | 5.0 | 1.6 | 1 |
| Carbon disulfide | ND | | ug/l | 5.0 | 0.30 | 1 |
| 2-Butanone | ND | | ug/l | 5.0 | 1.9 | 1 |
| Vinyl acetate | ND | | ug/l | 5.0 | 0.31 | 1 |
| 4-Methyl-2-pentanone | ND | | ug/l | 5.0 | 0.42 | 1 |
| 2-Hexanone | ND | | ug/l | 5.0 | 0.58 | 1 |
| Bromochloromethane | ND | | ug/l | 2.5 | 0.33 | 1 |
| 2,2-Dichloropropane | ND | | ug/l | 2.5 | 0.40 | 1 |
| 1,2-Dibromoethane | ND | | ug/l | 2.0 | 0.19 | 1 |
| 1,3-Dichloropropane | ND | | ug/l | 2.5 | 0.21 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | ug/l | 0.50 | 0.16 | 1 |
| Bromobenzene | ND | | ug/l | 2.5 | 0.18 | 1 |
| n-Butylbenzene | ND | | ug/l | 0.50 | 0.20 | 1 |
| sec-Butylbenzene | ND | | ug/l | 0.50 | 0.18 | 1 |
| tert-Butylbenzene | ND | | ug/l | 2.5 | 0.30 | 1 |
| o-Chlorotoluene | ND | | ug/l | 2.5 | 0.18 | 1 |
| p-Chlorotoluene | ND | | ug/l | 2.5 | 0.18 | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/l | 2.5 | 0.33 | 1 |
| Hexachlorobutadiene | ND | | ug/l | 0.60 | 0.23 | 1 |
| Isopropylbenzene | ND | | ug/l | 0.50 | 0.19 | 1 |
| p-Isopropyltoluene | ND | | ug/l | 0.50 | 0.19 | 1 |
| Naphthalene | ND | | ug/l | 2.5 | 0.22 | 1 |
| n-Propylbenzene | ND | | ug/l | 0.50 | 0.17 | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/l | 2.5 | 0.23 | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/l | 2.5 | 0.22 | 1 |
| 1,3,5-Trimethylbenzene | ND | | ug/l | 2.5 | 0.21 | 1 |
| 1,2,4-Trimethylbenzene | ND | | ug/l | 2.5 | 0.27 | 1 |
| 1,4-Diethylbenzene | ND | | ug/l | 2.0 | 0.11 | 1 |
| 4-Ethyltoluene | ND | | ug/l | 2.0 | 0.42 | 1 |
| 1,2,4,5-Tetramethylbenzene | ND | | ug/l | 2.0 | 0.10 | 1 |

**Project Name:** BEST CLEANERS **Lab Number:** L1202347

**Project Number:** 155-C-2 **Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202347-04 Date Collected: 02/08/12 14:40

Client ID: DUP Date Received: 02/09/12

Sample Location: LIC, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab | | | | | | |
| Ethyl ether | ND | | ug/l | 2.5 | 0.20 | 1 |
| trans-1,4-Dichloro-2-butene | ND | | ug/l | 2.5 | 0.17 | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 124 | | 70-130 |
| Toluene-d8 | 97 | | 70-130 |
| 4-Bromofluorobenzene | 96 | | 70-130 |
| Dibromofluoromethane | 123 | | 70-130 |

**Project Name:** BEST CLEANERS
**Project Number:** 155-C-2
**Lab Number:** L1202347
**Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202347-05
Client ID: TRIP BLANK
Sample Location: LIC, NY
Matrix: Water
Analytical Method: 1,8260B
Analytical Date: 02/14/12 15:27
Analyst: PD

Date Collected: 02/08/12 00:00
Date Received: 02/09/12
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab | | | | | | |
| Methylene chloride | ND | | ug/l | 5.0 | 0.54 | 1 |
| 1,1-Dichloroethane | ND | | ug/l | 0.75 | 0.22 | 1 |
| Chloroform | ND | | ug/l | 0.75 | 0.20 | 1 |
| Carbon tetrachloride | ND | | ug/l | 0.50 | 0.16 | 1 |
| 1,2-Dichloropropane | ND | | ug/l | 1.8 | 0.30 | 1 |
| Dibromochloromethane | ND | | ug/l | 0.50 | 0.19 | 1 |
| 1,1,2-Trichloroethane | ND | | ug/l | 0.75 | 0.26 | 1 |
| Tetrachloroethene | ND | | ug/l | 0.50 | 0.18 | 1 |
| Chlorobenzene | ND | | ug/l | 0.50 | 0.19 | 1 |
| Trichlorofluoromethane | ND | | ug/l | 2.5 | 0.27 | 1 |
| 1,2-Dichloroethane | ND | | ug/l | 0.50 | 0.16 | 1 |
| 1,1,1-Trichloroethane | ND | | ug/l | 0.50 | 0.16 | 1 |
| Bromodichloromethane | ND | | ug/l | 0.50 | 0.19 | 1 |
| trans-1,3-Dichloropropene | ND | | ug/l | 0.50 | 0.16 | 1 |
| cis-1,3-Dichloropropene | ND | | ug/l | 0.50 | 0.14 | 1 |
| 1,1-Dichloropropene | ND | | ug/l | 2.5 | 0.26 | 1 |
| Bromoform | ND | | ug/l | 2.0 | 0.25 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/l | 0.50 | 0.19 | 1 |
| Benzene | ND | | ug/l | 0.50 | 0.19 | 1 |
| Toluene | ND | | ug/l | 0.75 | 0.23 | 1 |
| Ethylbenzene | ND | | ug/l | 0.50 | 0.26 | 1 |
| Chloromethane | ND | | ug/l | 2.5 | 0.28 | 1 |
| Bromomethane | ND | | ug/l | 1.0 | 0.26 | 1 |
| Vinyl chloride | ND | | ug/l | 1.0 | 0.22 | 1 |
| Chloroethane | ND | | ug/l | 1.0 | 0.23 | 1 |
| 1,1-Dichloroethene | ND | | ug/l | 0.50 | 0.18 | 1 |
| trans-1,2-Dichloroethene | ND | | ug/l | 0.75 | 0.21 | 1 |
| Trichloroethene | ND | | ug/l | 0.50 | 0.17 | 1 |
| 1,2-Dichlorobenzene | ND | | ug/l | 2.5 | 0.18 | 1 |
| 1,3-Dichlorobenzene | ND | | ug/l | 2.5 | 0.19 | 1 |
| 1,4-Dichlorobenzene | ND | | ug/l | 2.5 | 0.22 | 1 |

**Project Name:** BEST CLEANERS **Lab Number:** L1202347

**Project Number:** 155-C-2 **Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202347-05 Date Collected: 02/08/12 00:00

Client ID: TRIP BLANK Date Received: 02/09/12

Sample Location: LIC, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab | | | | | | |
| Methyl tert butyl ether | ND | | ug/l | 1.0 | 0.16 | 1 |
| p/m-Xylene | ND | | ug/l | 1.0 | 0.35 | 1 |
| o-Xylene | ND | | ug/l | 1.0 | 0.33 | 1 |
| cis-1,2-Dichloroethene | ND | | ug/l | 0.50 | 0.19 | 1 |
| Dibromomethane | ND | | ug/l | 5.0 | 0.36 | 1 |
| 1,2,3-Trichloropropane | ND | | ug/l | 5.0 | 0.43 | 1 |
| Acrylonitrile | ND | | ug/l | 5.0 | 0.43 | 1 |
| Styrene | ND | | ug/l | 1.0 | 0.36 | 1 |
| Dichlorodifluoromethane | ND | | ug/l | 5.0 | 0.30 | 1 |
| Acetone | ND | | ug/l | 5.0 | 1.6 | 1 |
| Carbon disulfide | ND | | ug/l | 5.0 | 0.30 | 1 |
| 2-Butanone | ND | | ug/l | 5.0 | 1.9 | 1 |
| Vinyl acetate | ND | | ug/l | 5.0 | 0.31 | 1 |
| 4-Methyl-2-pentanone | ND | | ug/l | 5.0 | 0.42 | 1 |
| 2-Hexanone | ND | | ug/l | 5.0 | 0.58 | 1 |
| Bromochloromethane | ND | | ug/l | 2.5 | 0.33 | 1 |
| 2,2-Dichloropropane | ND | | ug/l | 2.5 | 0.40 | 1 |
| 1,2-Dibromoethane | ND | | ug/l | 2.0 | 0.19 | 1 |
| 1,3-Dichloropropane | ND | | ug/l | 2.5 | 0.21 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | ug/l | 0.50 | 0.16 | 1 |
| Bromobenzene | ND | | ug/l | 2.5 | 0.18 | 1 |
| n-Butylbenzene | ND | | ug/l | 0.50 | 0.20 | 1 |
| sec-Butylbenzene | ND | | ug/l | 0.50 | 0.18 | 1 |
| tert-Butylbenzene | ND | | ug/l | 2.5 | 0.30 | 1 |
| o-Chlorotoluene | ND | | ug/l | 2.5 | 0.18 | 1 |
| p-Chlorotoluene | ND | | ug/l | 2.5 | 0.18 | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/l | 2.5 | 0.33 | 1 |
| Hexachlorobutadiene | ND | | ug/l | 0.60 | 0.23 | 1 |
| Isopropylbenzene | ND | | ug/l | 0.50 | 0.19 | 1 |
| p-Isopropyltoluene | ND | | ug/l | 0.50 | 0.19 | 1 |
| Naphthalene | ND | | ug/l | 2.5 | 0.22 | 1 |
| n-Propylbenzene | ND | | ug/l | 0.50 | 0.17 | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/l | 2.5 | 0.23 | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/l | 2.5 | 0.22 | 1 |
| 1,3,5-Trimethylbenzene | ND | | ug/l | 2.5 | 0.21 | 1 |
| 1,2,4-Trimethylbenzene | ND | | ug/l | 2.5 | 0.27 | 1 |
| 1,4-Diethylbenzene | ND | | ug/l | 2.0 | 0.11 | 1 |
| 4-Ethyltoluene | ND | | ug/l | 2.0 | 0.42 | 1 |
| 1,2,4,5-Tetramethylbenzene | ND | | ug/l | 2.0 | 0.10 | 1 |

**Project Name:** BEST CLEANERS
**Project Number:** 155-C-2
**Lab Number:** L1202347
**Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202347-05
Client ID: TRIP BLANK
Sample Location: LIC, NY
Date Collected: 02/08/12 00:00
Date Received: 02/09/12
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab | | | | | | |
| Ethyl ether | ND | | ug/l | 2.5 | 0.20 | 1 |
| trans-1,4-Dichloro-2-butene | ND | | ug/l | 2.5 | 0.17 | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 124 | | 70-130 |
| Toluene-d8 | 99 | | 70-130 |
| 4-Bromofluorobenzene | 96 | | 70-130 |
| Dibromofluoromethane | 121 | | 70-130 |

GENESIS ENGINEERING & REDEVELOPMENT

# Soil Vapor and Air Samples

**Project Name:** BEST CLEANERS
**Project Number:** Not Specified

**Lab Number:** L1202360
**Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202360-01 D
Client ID: GER-SV1
Sample Location: LIC, NY
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 02/11/12 00:01
Analyst: RY

Date Collected: 02/08/12 14:00
Date Received: 02/09/12
Field Prep: Not Specified

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier | Dilution Factor |
| Volatile Organics in Air (Low Level) - Mansfield Lab | | | | | | | | |
| Propylene | ND | 1.25 | -- | ND | 2.15 | -- | | 2.5 |
| Dichlorodifluoromethane | 0.538 | 0.500 | -- | 2.66 | 2.47 | -- | | 2.5 |
| Chloromethane | ND | 0.500 | -- | ND | 1.03 | -- | | 2.5 |
| Freon-114 | ND | 0.500 | -- | ND | 3.49 | -- | | 2.5 |
| Vinyl chloride | ND | 0.500 | -- | ND | 1.28 | -- | | 2.5 |
| 1,3-Butadiene | ND | 0.500 | -- | ND | 1.11 | -- | | 2.5 |
| Bromomethane | ND | 0.500 | -- | ND | 1.94 | -- | | 2.5 |
| Chloroethane | ND | 0.500 | -- | ND | 1.32 | -- | | 2.5 |
| Ethanol | 7.07 | 6.25 | -- | 13.3 | 11.8 | -- | | 2.5 |
| Vinyl bromide | ND | 0.500 | -- | ND | 2.19 | -- | | 2.5 |
| Acetone | 32.2 | 2.50 | -- | 76.5 | 5.94 | -- | | 2.5 |
| Trichlorofluoromethane | ND | 0.500 | -- | ND | 2.81 | -- | | 2.5 |
| Isopropanol | ND | 1.25 | -- | ND | 3.07 | -- | | 2.5 |
| 1,1-Dichloroethene | ND | 0.500 | -- | ND | 1.98 | -- | | 2.5 |
| Methylene chloride | ND | 2.50 | -- | ND | 8.68 | -- | | 2.5 |
| 3-Chloropropene | ND | 0.500 | -- | ND | 1.56 | -- | | 2.5 |
| Carbon disulfide | 1.30 | 0.500 | -- | 4.05 | 1.56 | -- | | 2.5 |
| Freon-113 | ND | 0.500 | -- | ND | 3.83 | -- | | 2.5 |
| trans-1,2-Dichloroethene | ND | 0.500 | -- | ND | 1.98 | -- | | 2.5 |
| 1,1-Dichloroethane | ND | 0.500 | -- | ND | 2.02 | -- | | 2.5 |
| Methyl tert butyl ether | ND | 0.500 | -- | ND | 1.80 | -- | | 2.5 |
| Vinyl acetate | ND | 0.500 | -- | ND | 1.76 | -- | | 2.5 |
| 2-Butanone | 1.42 | 0.500 | -- | 4.19 | 1.47 | -- | | 2.5 |
| cis-1,2-Dichloroethene | ND | 0.500 | -- | ND | 1.98 | -- | | 2.5 |

**Project Name:** BEST CLEANERS
**Project Number:** Not Specified

**Lab Number:** L1202360
**Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202360-01 D
Client ID: GER-SV1
Sample Location: LIC, NY

Date Collected: 02/08/12 14:00
Date Received: 02/09/12
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air (Low Level) - Mansfield Lab | | | | | | | | |
| Ethyl Acetate | 1.63 | 1.25 | -- | 5.87 | 4.50 | -- | | 2.5 |
| Chloroform | 8.24 | 0.500 | -- | 40.2 | 2.44 | -- | | 2.5 |
| Tetrahydrofuran | ND | 0.500 | -- | ND | 1.47 | -- | | 2.5 |
| 1,2-Dichloroethane | ND | 0.500 | -- | ND | 2.02 | -- | | 2.5 |
| n-Hexane | ND | 0.500 | -- | ND | 1.76 | -- | | 2.5 |
| 1,1,1-Trichloroethane | 0.780 | 0.500 | -- | 4.26 | 2.73 | -- | | 2.5 |
| Benzene | 1.07 | 0.500 | -- | 3.42 | 1.60 | -- | | 2.5 |
| Carbon tetrachloride | 0.572 | 0.500 | -- | 3.60 | 3.14 | -- | | 2.5 |
| Cyclohexane | 0.512 | 0.500 | -- | 1.76 | 1.72 | -- | | 2.5 |
| 1,2-Dichloropropane | ND | 0.500 | -- | ND | 2.31 | -- | | 2.5 |
| Bromodichloromethane | ND | 0.500 | -- | ND | 3.35 | -- | | 2.5 |
| 1,4-Dioxane | ND | 0.500 | -- | ND | 1.80 | -- | | 2.5 |
| Trichloroethene | 4.16 | 0.500 | -- | 22.4 | 2.69 | -- | | 2.5 |
| 2,2,4-Trimethylpentane | ND | 0.500 | -- | ND | 2.34 | -- | | 2.5 |
| Heptane | 0.625 | 0.500 | -- | 2.56 | 2.05 | -- | | 2.5 |
| cis-1,3-Dichloropropene | ND | 0.500 | -- | ND | 2.27 | -- | | 2.5 |
| 4-Methyl-2-pentanone | ND | 0.500 | -- | ND | 2.05 | -- | | 2.5 |
| trans-1,3-Dichloropropene | ND | 0.500 | -- | ND | 2.27 | -- | | 2.5 |
| 1,1,2-Trichloroethane | ND | 0.500 | -- | ND | 2.73 | -- | | 2.5 |
| Toluene | 1.51 | 0.500 | -- | 5.69 | 1.88 | -- | | 2.5 |
| 2-Hexanone | ND | 0.500 | -- | ND | 2.05 | -- | | 2.5 |
| Dibromochloromethane | ND | 0.500 | -- | ND | 4.26 | -- | | 2.5 |
| 1,2-Dibromoethane | ND | 0.500 | -- | ND | 3.84 | -- | | 2.5 |
| Tetrachloroethene | 264 | 0.500 | -- | 1790 | 3.39 | -- | E | 2.5 |
| Chlorobenzene | ND | 0.500 | -- | ND | 2.30 | -- | | 2.5 |
| Ethylbenzene | 1.36 | 0.500 | -- | 5.91 | 2.17 | -- | | 2.5 |
| p/m-Xylene | 6.00 | 1.00 | -- | 26.1 | 4.34 | -- | | 2.5 |
| Bromoform | ND | 0.500 | -- | ND | 5.17 | -- | | 2.5 |

**Project Name:** BEST CLEANERS
**Project Number:** Not Specified

**Lab Number:** L1202360
**Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202360-01 D
Client ID: GER-SV1
Sample Location: LIC, NY

Date Collected: 02/08/12 14:00
Date Received: 02/09/12
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air (Low Level) - Mansfield Lab | | | | | | | | |
| Styrene | ND | 0.500 | -- | ND | 2.13 | -- | | 2.5 |
| 1,1,2,2-Tetrachloroethane | ND | 0.500 | -- | ND | 3.43 | -- | | 2.5 |
| o-Xylene | 1.99 | 0.500 | -- | 8.64 | 2.17 | -- | | 2.5 |
| 4-Ethyltoluene | ND | 0.500 | -- | ND | 2.46 | -- | | 2.5 |
| 1,3,5-Trimethybenzene | ND | 0.500 | -- | ND | 2.46 | -- | | 2.5 |
| 1,2,4-Trimethylbenzene | 0.778 | 0.500 | -- | 3.82 | 2.46 | -- | | 2.5 |
| Benzyl chloride | ND | 0.500 | -- | ND | 2.59 | -- | | 2.5 |
| 1,3-Dichlorobenzene | ND | 0.500 | -- | ND | 3.01 | -- | | 2.5 |
| 1,4-Dichlorobenzene | ND | 0.500 | -- | ND | 3.01 | -- | | 2.5 |
| 1,2-Dichlorobenzene | ND | 0.500 | -- | ND | 3.01 | -- | | 2.5 |
| 1,2,4-Trichlorobenzene | ND | 0.500 | -- | ND | 3.71 | -- | | 2.5 |
| Hexachlorobutadiene | ND | 0.500 | -- | ND | 5.33 | -- | | 2.5 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 108 | | 60-140 |
| Bromochloromethane | 104 | | 60-140 |
| chlorobenzene-d5 | 126 | | 60-140 |

**Project Name:** BEST CLEANERS
**Project Number:** Not Specified

**Lab Number:** L1202360
**Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202360-01 D2
Client ID: GER-SV1
Sample Location: LIC, NY
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 02/11/12 09:53
Analyst: RY

Date Collected: 02/08/12 14:00
Date Received: 02/09/12
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air (Low Level) - Mansfield Lab | | | | | | | | |
| Tetrachloroethene | 314 | 1.00 | -- | 2130 | 6.78 | -- | | 5 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 103 | | 60-140 |
| Bromochloromethane | 107 | | 60-140 |
| chlorobenzene-d5 | 106 | | 60-140 |

**Project Name:** BEST CLEANERS
**Project Number:** Not Specified

**Lab Number:** L1202360
**Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202360-02 D
Client ID: GER-SV2
Sample Location: LIC, NY
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 02/11/12 00:36
Analyst: RY

Date Collected: 02/08/12 13:55
Date Received: 02/09/12
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air (Low Level) - Mansfield Lab | | | | | | | | |
| Propylene | 5.13 | 1.25 | -- | 8.83 | 2.15 | -- | | 2.5 |
| Dichlorodifluoromethane | 0.775 | 0.500 | -- | 3.83 | 2.47 | -- | | 2.5 |
| Chloromethane | ND | 0.500 | -- | ND | 1.03 | -- | | 2.5 |
| Freon-114 | ND | 0.500 | -- | ND | 3.49 | -- | | 2.5 |
| Vinyl chloride | ND | 0.500 | -- | ND | 1.28 | -- | | 2.5 |
| 1,3-Butadiene | ND | 0.500 | -- | ND | 1.11 | -- | | 2.5 |
| Bromomethane | ND | 0.500 | -- | ND | 1.94 | -- | | 2.5 |
| Chloroethane | ND | 0.500 | -- | ND | 1.32 | -- | | 2.5 |
| Ethanol | ND | 6.25 | -- | ND | 11.8 | -- | | 2.5 |
| Vinyl bromide | ND | 0.500 | -- | ND | 2.19 | -- | | 2.5 |
| Acetone | 79.3 | 2.50 | -- | 188 | 5.94 | -- | | 2.5 |
| Trichlorofluoromethane | ND | 0.500 | -- | ND | 2.81 | -- | | 2.5 |
| Isopropanol | ND | 1.25 | -- | ND | 3.07 | -- | | 2.5 |
| 1,1-Dichloroethene | ND | 0.500 | -- | ND | 1.98 | -- | | 2.5 |
| Methylene chloride | ND | 2.50 | -- | ND | 8.68 | -- | | 2.5 |
| 3-Chloropropene | ND | 0.500 | -- | ND | 1.56 | -- | | 2.5 |
| Carbon disulfide | 25.0 | 0.500 | -- | 77.8 | 1.56 | -- | | 2.5 |
| Freon-113 | ND | 0.500 | -- | ND | 3.83 | -- | | 2.5 |
| trans-1,2-Dichloroethene | ND | 0.500 | -- | ND | 1.98 | -- | | 2.5 |
| 1,1-Dichloroethane | ND | 0.500 | -- | ND | 2.02 | -- | | 2.5 |
| Methyl tert butyl ether | ND | 0.500 | -- | ND | 1.80 | -- | | 2.5 |
| Vinyl acetate | ND | 0.500 | -- | ND | 1.76 | -- | | 2.5 |
| 2-Butanone | 3.01 | 0.500 | -- | 8.88 | 1.47 | -- | | 2.5 |
| cis-1,2-Dichloroethene | ND | 0.500 | -- | ND | 1.98 | -- | | 2.5 |

**Project Name:** BEST CLEANERS
**Project Number:** Not Specified

**Lab Number:** L1202360
**Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202360-02 D
Client ID: GER-SV2
Sample Location: LIC, NY

Date Collected: 02/08/12 13:55
Date Received: 02/09/12
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air (Low Level) - Mansfield Lab | | | | | | | | |
| Ethyl Acetate | 1.30 | 1.25 | -- | 4.68 | 4.50 | -- | | 2.5 |
| Chloroform | 2.53 | 0.500 | -- | 12.4 | 2.44 | -- | | 2.5 |
| Tetrahydrofuran | ND | 0.500 | -- | ND | 1.47 | -- | | 2.5 |
| 1,2-Dichloroethane | ND | 0.500 | -- | ND | 2.02 | -- | | 2.5 |
| n-Hexane | 1.94 | 0.500 | -- | 6.84 | 1.76 | -- | | 2.5 |
| 1,1,1-Trichloroethane | 0.650 | 0.500 | -- | 3.55 | 2.73 | -- | | 2.5 |
| Benzene | 2.86 | 0.500 | -- | 9.14 | 1.60 | -- | | 2.5 |
| Carbon tetrachloride | 0.570 | 0.500 | -- | 3.58 | 3.14 | -- | | 2.5 |
| Cyclohexane | 1.22 | 0.500 | -- | 4.20 | 1.72 | -- | | 2.5 |
| 1,2-Dichloropropane | ND | 0.500 | -- | ND | 2.31 | -- | | 2.5 |
| Bromodichloromethane | ND | 0.500 | -- | ND | 3.35 | -- | | 2.5 |
| 1,4-Dioxane | ND | 0.500 | -- | ND | 1.80 | -- | | 2.5 |
| Trichloroethene | 6.59 | 0.500 | -- | 35.4 | 2.69 | -- | | 2.5 |
| 2,2,4-Trimethylpentane | ND | 0.500 | -- | ND | 2.34 | -- | | 2.5 |
| Heptane | 1.58 | 0.500 | -- | 6.48 | 2.05 | -- | | 2.5 |
| cis-1,3-Dichloropropene | ND | 0.500 | -- | ND | 2.27 | -- | | 2.5 |
| 4-Methyl-2-pentanone | ND | 0.500 | -- | ND | 2.05 | -- | | 2.5 |
| trans-1,3-Dichloropropene | ND | 0.500 | -- | ND | 2.27 | -- | | 2.5 |
| 1,1,2-Trichloroethane | ND | 0.500 | -- | ND | 2.73 | -- | | 2.5 |
| Toluene | 1.95 | 0.500 | -- | 7.35 | 1.88 | -- | | 2.5 |
| 2-Hexanone | ND | 0.500 | -- | ND | 2.05 | -- | | 2.5 |
| Dibromochloromethane | ND | 0.500 | -- | ND | 4.26 | -- | | 2.5 |
| 1,2-Dibromoethane | ND | 0.500 | -- | ND | 3.84 | -- | | 2.5 |
| Tetrachloroethene | 292 | 0.500 | -- | 1980 | 3.39 | -- | E | 2.5 |
| Chlorobenzene | ND | 0.500 | -- | ND | 2.30 | -- | | 2.5 |
| Ethylbenzene | 1.42 | 0.500 | -- | 6.17 | 2.17 | -- | | 2.5 |
| p/m-Xylene | 5.98 | 1.00 | -- | 26.0 | 4.34 | -- | | 2.5 |
| Bromoform | ND | 0.500 | -- | ND | 5.17 | -- | | 2.5 |

**Project Name:** BEST CLEANERS
**Project Number:** Not Specified

**Lab Number:** L1202360
**Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202360-02 D
Client ID: GER-SV2
Sample Location: LIC, NY

Date Collected: 02/08/12 13:55
Date Received: 02/09/12
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air (Low Level) - Mansfield Lab | | | | | | | | |
| Styrene | ND | 0.500 | -- | ND | 2.13 | -- | | 2.5 |
| 1,1,2,2-Tetrachloroethane | ND | 0.500 | -- | ND | 3.43 | -- | | 2.5 |
| o-Xylene | 2.18 | 0.500 | -- | 9.47 | 2.17 | -- | | 2.5 |
| 4-Ethyltoluene | ND | 0.500 | -- | ND | 2.46 | -- | | 2.5 |
| 1,3,5-Trimethybenzene | ND | 0.500 | -- | ND | 2.46 | -- | | 2.5 |
| 1,2,4-Trimethylbenzene | 0.982 | 0.500 | -- | 4.83 | 2.46 | -- | | 2.5 |
| Benzyl chloride | ND | 0.500 | -- | ND | 2.59 | -- | | 2.5 |
| 1,3-Dichlorobenzene | ND | 0.500 | -- | ND | 3.01 | -- | | 2.5 |
| 1,4-Dichlorobenzene | ND | 0.500 | -- | ND | 3.01 | -- | | 2.5 |
| 1,2-Dichlorobenzene | ND | 0.500 | -- | ND | 3.01 | -- | | 2.5 |
| 1,2,4-Trichlorobenzene | ND | 0.500 | -- | ND | 3.71 | -- | | 2.5 |
| Hexachlorobutadiene | ND | 0.500 | -- | ND | 5.33 | -- | | 2.5 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 105 | | 60-140 |
| Bromochloromethane | 86 | | 60-140 |
| chlorobenzene-d5 | 109 | | 60-140 |

**Project Name:** BEST CLEANERS
**Project Number:** Not Specified

**Lab Number:** L1202360
**Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202360-02 D2
Client ID: GER-SV2
Sample Location: LIC, NY
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 02/11/12 10:28
Analyst: RY

Date Collected: 02/08/12 13:55
Date Received: 02/09/12
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air (Low Level) - Mansfield Lab | | | | | | | | |
| Tetrachloroethene | 214 | 1.00 | -- | 1450 | 6.78 | -- | | 5 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 105 | | 60-140 |
| Bromochloromethane | 107 | | 60-140 |
| chlorobenzene-d5 | 107 | | 60-140 |

**Project Name:** BEST CLEANERS
**Project Number:** Not Specified

**Lab Number:** L1202360
**Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202360-03 D
Client ID: GER-SV3
Sample Location: LIC, NY
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 02/11/12 01:11
Analyst: RY

Date Collected: 02/08/12 14:10
Date Received: 02/09/12
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air (Low Level) - Mansfield Lab | | | | | | | | |
| Propylene | ND | 17.0 | -- | ND | 29.2 | -- | | 33.97 |
| Dichlorodifluoromethane | ND | 6.79 | -- | ND | 33.6 | -- | | 33.97 |
| Chloromethane | ND | 6.79 | -- | ND | 14.0 | -- | | 33.97 |
| Freon-114 | ND | 6.79 | -- | ND | 47.5 | -- | | 33.97 |
| Vinyl chloride | ND | 6.79 | -- | ND | 17.4 | -- | | 33.97 |
| 1,3-Butadiene | ND | 6.79 | -- | ND | 15.0 | -- | | 33.97 |
| Bromomethane | ND | 6.79 | -- | ND | 26.4 | -- | | 33.97 |
| Chloroethane | ND | 6.79 | -- | ND | 17.9 | -- | | 33.97 |
| Ethanol | ND | 84.9 | -- | ND | 160 | -- | | 33.97 |
| Vinyl bromide | ND | 6.79 | -- | ND | 29.7 | -- | | 33.97 |
| Acetone | 43.8 | 34.0 | -- | 104 | 80.8 | -- | | 33.97 |
| Trichlorofluoromethane | ND | 6.79 | -- | ND | 38.2 | -- | | 33.97 |
| Isopropanol | ND | 17.0 | -- | ND | 41.8 | -- | | 33.97 |
| 1,1-Dichloroethene | ND | 6.79 | -- | ND | 26.9 | -- | | 33.97 |
| Methylene chloride | ND | 34.0 | -- | ND | 118 | -- | | 33.97 |
| 3-Chloropropene | ND | 6.79 | -- | ND | 21.2 | -- | | 33.97 |
| Carbon disulfide | ND | 6.79 | -- | ND | 21.1 | -- | | 33.97 |
| Freon-113 | ND | 6.79 | -- | ND | 52.0 | -- | | 33.97 |
| trans-1,2-Dichloroethene | ND | 6.79 | -- | ND | 26.9 | -- | | 33.97 |
| 1,1-Dichloroethane | ND | 6.79 | -- | ND | 27.5 | -- | | 33.97 |
| Methyl tert butyl ether | ND | 6.79 | -- | ND | 24.5 | -- | | 33.97 |
| Vinyl acetate | ND | 6.79 | -- | ND | 23.9 | -- | | 33.97 |
| 2-Butanone | ND | 6.79 | -- | ND | 20.0 | -- | | 33.97 |
| cis-1,2-Dichloroethene | 40.4 | 6.79 | -- | 160 | 26.9 | -- | | 33.97 |

**Project Name:** BEST CLEANERS
**Project Number:** Not Specified

**Lab Number:** L1202360
**Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202360-03 D
Client ID: GER-SV3
Sample Location: LIC, NY

Date Collected: 02/08/12 14:10
Date Received: 02/09/12
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air (Low Level) - Mansfield Lab | | | | | | | | |
| Ethyl Acetate | ND | 17.0 | -- | ND | 61.3 | -- | | 33.97 |
| Chloroform | 28.8 | 6.79 | -- | 141 | 33.2 | -- | | 33.97 |
| Tetrahydrofuran | ND | 6.79 | -- | ND | 20.0 | -- | | 33.97 |
| 1,2-Dichloroethane | ND | 6.79 | -- | ND | 27.5 | -- | | 33.97 |
| n-Hexane | ND | 6.79 | -- | ND | 23.9 | -- | | 33.97 |
| 1,1,1-Trichloroethane | ND | 6.79 | -- | ND | 37.0 | -- | | 33.97 |
| Benzene | ND | 6.79 | -- | ND | 21.7 | -- | | 33.97 |
| Carbon tetrachloride | ND | 6.79 | -- | ND | 42.7 | -- | | 33.97 |
| Cyclohexane | ND | 6.79 | -- | ND | 23.4 | -- | | 33.97 |
| 1,2-Dichloropropane | ND | 6.79 | -- | ND | 31.4 | -- | | 33.97 |
| Bromodichloromethane | ND | 6.79 | -- | ND | 45.5 | -- | | 33.97 |
| 1,4-Dioxane | ND | 6.79 | -- | ND | 24.5 | -- | | 33.97 |
| Trichloroethene | 12.9 | 6.79 | -- | 69.3 | 36.5 | -- | | 33.97 |
| 2,2,4-Trimethylpentane | ND | 6.79 | -- | ND | 31.7 | -- | | 33.97 |
| Heptane | ND | 6.79 | -- | ND | 27.8 | -- | | 33.97 |
| cis-1,3-Dichloropropene | ND | 6.79 | -- | ND | 30.8 | -- | | 33.97 |
| 4-Methyl-2-pentanone | ND | 6.79 | -- | ND | 27.8 | -- | | 33.97 |
| trans-1,3-Dichloropropene | ND | 6.79 | -- | ND | 30.8 | -- | | 33.97 |
| 1,1,2-Trichloroethane | ND | 6.79 | -- | ND | 37.0 | -- | | 33.97 |
| Toluene | ND | 6.79 | -- | ND | 25.6 | -- | | 33.97 |
| 2-Hexanone | ND | 6.79 | -- | ND | 27.8 | -- | | 33.97 |
| Dibromochloromethane | ND | 6.79 | -- | ND | 57.8 | -- | | 33.97 |
| 1,2-Dibromoethane | ND | 6.79 | -- | ND | 52.2 | -- | | 33.97 |
| Tetrachloroethene | 2600 | 6.79 | -- | 17600 | 46.0 | -- | | 33.97 |
| Chlorobenzene | ND | 6.79 | -- | ND | 31.3 | -- | | 33.97 |
| Ethylbenzene | ND | 6.79 | -- | ND | 29.5 | -- | | 33.97 |
| p/m-Xylene | ND | 13.6 | -- | ND | 59.1 | -- | | 33.97 |
| Bromoform | ND | 6.79 | -- | ND | 70.2 | -- | | 33.97 |

**Project Name:** BEST CLEANERS
**Project Number:** Not Specified

**Lab Number:** L1202360
**Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202360-03 D
Client ID: GER-SV3
Sample Location: LIC, NY

Date Collected: 02/08/12 14:10
Date Received: 02/09/12
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air (Low Level) - Mansfield Lab | | | | | | | | |
| Styrene | ND | 6.79 | -- | ND | 28.9 | -- | | 33.97 |
| 1,1,2,2-Tetrachloroethane | ND | 6.79 | -- | ND | 46.6 | -- | | 33.97 |
| o-Xylene | ND | 6.79 | -- | ND | 29.5 | -- | | 33.97 |
| 4-Ethyltoluene | ND | 6.79 | -- | ND | 33.4 | -- | | 33.97 |
| 1,3,5-Trimethybenzene | ND | 6.79 | -- | ND | 33.4 | -- | | 33.97 |
| 1,2,4-Trimethylbenzene | ND | 6.79 | -- | ND | 33.4 | -- | | 33.97 |
| Benzyl chloride | ND | 6.79 | -- | ND | 35.2 | -- | | 33.97 |
| 1,3-Dichlorobenzene | ND | 6.79 | -- | ND | 40.8 | -- | | 33.97 |
| 1,4-Dichlorobenzene | ND | 6.79 | -- | ND | 40.8 | -- | | 33.97 |
| 1,2-Dichlorobenzene | ND | 6.79 | -- | ND | 40.8 | -- | | 33.97 |
| 1,2,4-Trichlorobenzene | ND | 6.79 | -- | ND | 50.4 | -- | | 33.97 |
| Hexachlorobutadiene | ND | 6.79 | -- | ND | 72.4 | -- | | 33.97 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 101 | | 60-140 |
| Bromochloromethane | 102 | | 60-140 |
| chlorobenzene-d5 | 106 | | 60-140 |

**Project Name:** BEST CLEANERS
**Project Number:** Not Specified

**Lab Number:** L1202360
**Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202360-04 D
Client ID: GER-SV4
Sample Location: LIC, NY
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 02/11/12 01:46
Analyst: RY

Date Collected: 02/08/12 13:17
Date Received: 02/09/12
Field Prep: Not Specified

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier | Dilution Factor |
| Volatile Organics in Air (Low Level) - Mansfield Lab | | | | | | | | |
| Propylene | ND | 5.00 | -- | ND | 8.60 | -- | | 10 |
| Dichlorodifluoromethane | ND | 2.00 | -- | ND | 9.89 | -- | | 10 |
| Chloromethane | ND | 2.00 | -- | ND | 4.13 | -- | | 10 |
| Freon-114 | ND | 2.00 | -- | ND | 14.0 | -- | | 10 |
| Vinyl chloride | ND | 2.00 | -- | ND | 5.11 | -- | | 10 |
| 1,3-Butadiene | ND | 2.00 | -- | ND | 4.42 | -- | | 10 |
| Bromomethane | ND | 2.00 | -- | ND | 7.77 | -- | | 10 |
| Chloroethane | ND | 2.00 | -- | ND | 5.28 | -- | | 10 |
| Ethanol | ND | 25.0 | -- | ND | 47.1 | -- | | 10 |
| Vinyl bromide | ND | 2.00 | -- | ND | 8.74 | -- | | 10 |
| Acetone | 26.3 | 10.0 | -- | 62.5 | 23.8 | -- | | 10 |
| Trichlorofluoromethane | ND | 2.00 | -- | ND | 11.2 | -- | | 10 |
| Isopropanol | ND | 5.00 | -- | ND | 12.3 | -- | | 10 |
| 1,1-Dichloroethene | ND | 2.00 | -- | ND | 7.93 | -- | | 10 |
| Methylene chloride | ND | 10.0 | -- | ND | 34.7 | -- | | 10 |
| 3-Chloropropene | ND | 2.00 | -- | ND | 6.26 | -- | | 10 |
| Carbon disulfide | ND | 2.00 | -- | ND | 6.23 | -- | | 10 |
| Freon-113 | ND | 2.00 | -- | ND | 15.3 | -- | | 10 |
| trans-1,2-Dichloroethene | ND | 2.00 | -- | ND | 7.93 | -- | | 10 |
| 1,1-Dichloroethane | ND | 2.00 | -- | ND | 8.09 | -- | | 10 |
| Methyl tert butyl ether | ND | 2.00 | -- | ND | 7.21 | -- | | 10 |
| Vinyl acetate | ND | 2.00 | -- | ND | 7.04 | -- | | 10 |
| 2-Butanone | ND | 2.00 | -- | ND | 5.90 | -- | | 10 |
| cis-1,2-Dichloroethene | 2.08 | 2.00 | -- | 8.25 | 7.93 | -- | | 10 |

**Project Name:** BEST CLEANERS
**Project Number:** Not Specified

**Lab Number:** L1202360
**Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202360-04 D
Client ID: GER-SV4
Sample Location: LIC, NY

Date Collected: 02/08/12 13:17
Date Received: 02/09/12
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air (Low Level) - Mansfield Lab | | | | | | | | |
| Ethyl Acetate | ND | 5.00 | -- | ND | 18.0 | -- | | 10 |
| Chloroform | 13.3 | 2.00 | -- | 64.9 | 9.77 | -- | | 10 |
| Tetrahydrofuran | ND | 2.00 | -- | ND | 5.90 | -- | | 10 |
| 1,2-Dichloroethane | ND | 2.00 | -- | ND | 8.09 | -- | | 10 |
| n-Hexane | ND | 2.00 | -- | ND | 7.05 | -- | | 10 |
| 1,1,1-Trichloroethane | ND | 2.00 | -- | ND | 10.9 | -- | | 10 |
| Benzene | ND | 2.00 | -- | ND | 6.39 | -- | | 10 |
| Carbon tetrachloride | ND | 2.00 | -- | ND | 12.6 | -- | | 10 |
| Cyclohexane | ND | 2.00 | -- | ND | 6.88 | -- | | 10 |
| 1,2-Dichloropropane | ND | 2.00 | -- | ND | 9.24 | -- | | 10 |
| Bromodichloromethane | ND | 2.00 | -- | ND | 13.4 | -- | | 10 |
| 1,4-Dioxane | ND | 2.00 | -- | ND | 7.21 | -- | | 10 |
| Trichloroethene | 3.35 | 2.00 | -- | 18.0 | 10.7 | -- | | 10 |
| 2,2,4-Trimethylpentane | ND | 2.00 | -- | ND | 9.34 | -- | | 10 |
| Heptane | ND | 2.00 | -- | ND | 8.20 | -- | | 10 |
| cis-1,3-Dichloropropene | ND | 2.00 | -- | ND | 9.08 | -- | | 10 |
| 4-Methyl-2-pentanone | ND | 2.00 | -- | ND | 8.20 | -- | | 10 |
| trans-1,3-Dichloropropene | ND | 2.00 | -- | ND | 9.08 | -- | | 10 |
| 1,1,2-Trichloroethane | ND | 2.00 | -- | ND | 10.9 | -- | | 10 |
| Toluene | ND | 2.00 | -- | ND | 7.54 | -- | | 10 |
| 2-Hexanone | ND | 2.00 | -- | ND | 8.20 | -- | | 10 |
| Dibromochloromethane | ND | 2.00 | -- | ND | 17.0 | -- | | 10 |
| 1,2-Dibromoethane | ND | 2.00 | -- | ND | 15.4 | -- | | 10 |
| Tetrachloroethene | 688 | 2.00 | -- | 4660 | 13.6 | -- | | 10 |
| Chlorobenzene | ND | 2.00 | -- | ND | 9.21 | -- | | 10 |
| Ethylbenzene | ND | 2.00 | -- | ND | 8.69 | -- | | 10 |
| p/m-Xylene | ND | 4.00 | -- | ND | 17.4 | -- | | 10 |
| Bromoform | ND | 2.00 | -- | ND | 20.7 | -- | | 10 |

**Project Name:** BEST CLEANERS
**Project Number:** Not Specified

**Lab Number:** L1202360
**Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202360-04 D
Client ID: GER-SV4
Sample Location: LIC, NY

Date Collected: 02/08/12 13:17
Date Received: 02/09/12
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| **Volatile Organics in Air (Low Level) - Mansfield Lab** | | | | | | | | |
| Styrene | ND | 2.00 | -- | ND | 8.52 | -- | | 10 |
| 1,1,2,2-Tetrachloroethane | ND | 2.00 | -- | ND | 13.7 | -- | | 10 |
| o-Xylene | ND | 2.00 | -- | ND | 8.69 | -- | | 10 |
| 4-Ethyltoluene | ND | 2.00 | -- | ND | 9.83 | -- | | 10 |
| 1,3,5-Trimethybenzene | ND | 2.00 | -- | ND | 9.83 | -- | | 10 |
| 1,2,4-Trimethylbenzene | ND | 2.00 | -- | ND | 9.83 | -- | | 10 |
| Benzyl chloride | ND | 2.00 | -- | ND | 10.4 | -- | | 10 |
| 1,3-Dichlorobenzene | ND | 2.00 | -- | ND | 12.0 | -- | | 10 |
| 1,4-Dichlorobenzene | ND | 2.00 | -- | ND | 12.0 | -- | | 10 |
| 1,2-Dichlorobenzene | ND | 2.00 | -- | ND | 12.0 | -- | | 10 |
| 1,2,4-Trichlorobenzene | ND | 2.00 | -- | ND | 14.8 | -- | | 10 |
| Hexachlorobutadiene | ND | 2.00 | -- | ND | 21.3 | -- | | 10 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 107 | | 60-140 |
| Bromochloromethane | 104 | | 60-140 |
| chlorobenzene-d5 | 105 | | 60-140 |

**Project Name:** BEST CLEANERS
**Project Number:** Not Specified

**Lab Number:** L1202360
**Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202360-05 D
Client ID: GER-SV5
Sample Location: LIC, NY
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 02/11/12 02:20
Analyst: RY

Date Collected: 02/08/12 14:15
Date Received: 02/09/12
Field Prep: Not Specified

| | ppbV | | | ug/m3 | | | | |
|---|---|---|---|---|---|---|---|---|
| Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier | Dilution Factor |
| Volatile Organics in Air (Low Level) - Mansfield Lab | | | | | | | | |
| Propylene | ND | 1.25 | -- | ND | 2.15 | -- | | 2.5 |
| Dichlorodifluoromethane | 0.532 | 0.500 | -- | 2.63 | 2.47 | -- | | 2.5 |
| Chloromethane | ND | 0.500 | -- | ND | 1.03 | -- | | 2.5 |
| Freon-114 | ND | 0.500 | -- | ND | 3.49 | -- | | 2.5 |
| Vinyl chloride | ND | 0.500 | -- | ND | 1.28 | -- | | 2.5 |
| 1,3-Butadiene | ND | 0.500 | -- | ND | 1.11 | -- | | 2.5 |
| Bromomethane | ND | 0.500 | -- | ND | 1.94 | -- | | 2.5 |
| Chloroethane | ND | 0.500 | -- | ND | 1.32 | -- | | 2.5 |
| Ethanol | ND | 6.25 | -- | ND | 11.8 | -- | | 2.5 |
| Vinyl bromide | ND | 0.500 | -- | ND | 2.19 | -- | | 2.5 |
| Acetone | 17.0 | 2.50 | -- | 40.4 | 5.94 | -- | | 2.5 |
| Trichlorofluoromethane | ND | 0.500 | -- | ND | 2.81 | -- | | 2.5 |
| Isopropanol | ND | 1.25 | -- | ND | 3.07 | -- | | 2.5 |
| 1,1-Dichloroethene | ND | 0.500 | -- | ND | 1.98 | -- | | 2.5 |
| Methylene chloride | 4.26 | 2.50 | -- | 14.8 | 8.68 | -- | | 2.5 |
| 3-Chloropropene | ND | 0.500 | -- | ND | 1.56 | -- | | 2.5 |
| Carbon disulfide | 1.33 | 0.500 | -- | 4.14 | 1.56 | -- | | 2.5 |
| Freon-113 | ND | 0.500 | -- | ND | 3.83 | -- | | 2.5 |
| trans-1,2-Dichloroethene | ND | 0.500 | -- | ND | 1.98 | -- | | 2.5 |
| 1,1-Dichloroethane | ND | 0.500 | -- | ND | 2.02 | -- | | 2.5 |
| Methyl tert butyl ether | ND | 0.500 | -- | ND | 1.80 | -- | | 2.5 |
| Vinyl acetate | ND | 0.500 | -- | ND | 1.76 | -- | | 2.5 |
| 2-Butanone | 0.608 | 0.500 | -- | 1.79 | 1.47 | -- | | 2.5 |
| cis-1,2-Dichloroethene | 79.0 | 0.500 | -- | 313 | 1.98 | -- | | 2.5 |

**Project Name:** BEST CLEANERS
**Project Number:** Not Specified

**Lab Number:** L1202360
**Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202360-05 D
Client ID: GER-SV5
Sample Location: LIC, NY

Date Collected: 02/08/12 14:15
Date Received: 02/09/12
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air (Low Level) - Mansfield Lab | | | | | | | | |
| Ethyl Acetate | ND | 1.25 | -- | ND | 4.50 | -- | | 2.5 |
| Chloroform | 59.4 | 0.500 | -- | 290 | 2.44 | -- | | 2.5 |
| Tetrahydrofuran | ND | 0.500 | -- | ND | 1.47 | -- | | 2.5 |
| 1,2-Dichloroethane | ND | 0.500 | -- | ND | 2.02 | -- | | 2.5 |
| n-Hexane | ND | 0.500 | -- | ND | 1.76 | -- | | 2.5 |
| 1,1,1-Trichloroethane | ND | 0.500 | -- | ND | 2.73 | -- | | 2.5 |
| Benzene | ND | 0.500 | -- | ND | 1.60 | -- | | 2.5 |
| Carbon tetrachloride | ND | 0.500 | -- | ND | 3.14 | -- | | 2.5 |
| Cyclohexane | ND | 0.500 | -- | ND | 1.72 | -- | | 2.5 |
| 1,2-Dichloropropane | ND | 0.500 | -- | ND | 2.31 | -- | | 2.5 |
| Bromodichloromethane | 0.675 | 0.500 | -- | 4.52 | 3.35 | -- | | 2.5 |
| 1,4-Dioxane | ND | 0.500 | -- | ND | 1.80 | -- | | 2.5 |
| Trichloroethene | 6.40 | 0.500 | -- | 34.4 | 2.69 | -- | | 2.5 |
| 2,2,4-Trimethylpentane | ND | 0.500 | -- | ND | 2.34 | -- | | 2.5 |
| Heptane | ND | 0.500 | -- | ND | 2.05 | -- | | 2.5 |
| cis-1,3-Dichloropropene | ND | 0.500 | -- | ND | 2.27 | -- | | 2.5 |
| 4-Methyl-2-pentanone | ND | 0.500 | -- | ND | 2.05 | -- | | 2.5 |
| trans-1,3-Dichloropropene | ND | 0.500 | -- | ND | 2.27 | -- | | 2.5 |
| 1,1,2-Trichloroethane | ND | 0.500 | -- | ND | 2.73 | -- | | 2.5 |
| Toluene | 0.742 | 0.500 | -- | 2.80 | 1.88 | -- | | 2.5 |
| 2-Hexanone | ND | 0.500 | -- | ND | 2.05 | -- | | 2.5 |
| Dibromochloromethane | ND | 0.500 | -- | ND | 4.26 | -- | | 2.5 |
| 1,2-Dibromoethane | ND | 0.500 | -- | ND | 3.84 | -- | | 2.5 |
| Tetrachloroethene | 134 | 0.500 | -- | 909 | 3.39 | -- | | 2.5 |
| Chlorobenzene | ND | 0.500 | -- | ND | 2.30 | -- | | 2.5 |
| Ethylbenzene | ND | 0.500 | -- | ND | 2.17 | -- | | 2.5 |
| p/m-Xylene | 1.64 | 1.00 | -- | 7.12 | 4.34 | -- | | 2.5 |
| Bromoform | ND | 0.500 | -- | ND | 5.17 | -- | | 2.5 |

**Project Name:** BEST CLEANERS
**Project Number:** Not Specified

**Lab Number:** L1202360
**Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202360-05 D
Client ID: GER-SV5
Sample Location: LIC, NY

Date Collected: 02/08/12 14:15
Date Received: 02/09/12
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air (Low Level) - Mansfield Lab | | | | | | | | |
| Styrene | ND | 0.500 | -- | ND | 2.13 | -- | | 2.5 |
| 1,1,2,2-Tetrachloroethane | ND | 0.500 | -- | ND | 3.43 | -- | | 2.5 |
| o-Xylene | 0.592 | 0.500 | -- | 2.57 | 2.17 | -- | | 2.5 |
| 4-Ethyltoluene | ND | 0.500 | -- | ND | 2.46 | -- | | 2.5 |
| 1,3,5-Trimethybenzene | ND | 0.500 | -- | ND | 2.46 | -- | | 2.5 |
| 1,2,4-Trimethylbenzene | 0.500 | 0.500 | -- | 2.46 | 2.46 | -- | | 2.5 |
| Benzyl chloride | ND | 0.500 | -- | ND | 2.59 | -- | | 2.5 |
| 1,3-Dichlorobenzene | ND | 0.500 | -- | ND | 3.01 | -- | | 2.5 |
| 1,4-Dichlorobenzene | ND | 0.500 | -- | ND | 3.01 | -- | | 2.5 |
| 1,2-Dichlorobenzene | ND | 0.500 | -- | ND | 3.01 | -- | | 2.5 |
| 1,2,4-Trichlorobenzene | ND | 0.500 | -- | ND | 3.71 | -- | | 2.5 |
| Hexachlorobutadiene | ND | 0.500 | -- | ND | 5.33 | -- | | 2.5 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 101 | | 60-140 |
| Bromochloromethane | 105 | | 60-140 |
| chlorobenzene-d5 | 107 | | 60-140 |

**Project Name:** BEST CLEANERS
**Project Number:** Not Specified

**Lab Number:** L1202360
**Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202360-06
Client ID: GER-AA
Sample Location: LIC, NY
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 02/10/12 21:38
Analyst: RY

Date Collected: 02/08/12 13:12
Date Received: 02/09/12
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air (Low Level) - Mansfield Lab | | | | | | | | |
| Propylene | 0.709 | 0.500 | -- | 1.22 | 0.860 | -- | | 1 |
| Dichlorodifluoromethane | 0.530 | 0.200 | -- | 2.62 | 0.989 | -- | | 1 |
| Chloromethane | 0.549 | 0.200 | -- | 1.13 | 0.413 | -- | | 1 |
| Freon-114 | ND | 0.200 | -- | ND | 1.40 | -- | | 1 |
| Vinyl chloride | ND | 0.200 | -- | ND | 0.511 | -- | | 1 |
| 1,3-Butadiene | ND | 0.200 | -- | ND | 0.442 | -- | | 1 |
| Bromomethane | ND | 0.200 | -- | ND | 0.777 | -- | | 1 |
| Chloroethane | ND | 0.200 | -- | ND | 0.528 | -- | | 1 |
| Ethanol | 5.44 | 2.50 | -- | 10.2 | 4.71 | -- | | 1 |
| Vinyl bromide | ND | 0.200 | -- | ND | 0.874 | -- | | 1 |
| Acetone | 8.31 | 1.00 | -- | 19.7 | 2.38 | -- | | 1 |
| Trichlorofluoromethane | 0.289 | 0.200 | -- | 1.62 | 1.12 | -- | | 1 |
| Isopropanol | 0.624 | 0.500 | -- | 1.53 | 1.23 | -- | | 1 |
| 1,1-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |
| Methylene chloride | ND | 1.00 | -- | ND | 3.47 | -- | | 1 |
| 3-Chloropropene | ND | 0.200 | -- | ND | 0.626 | -- | | 1 |
| Carbon disulfide | ND | 0.200 | -- | ND | 0.623 | -- | | 1 |
| Freon-113 | ND | 0.200 | -- | ND | 1.53 | -- | | 1 |
| trans-1,2-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |
| 1,1-Dichloroethane | ND | 0.200 | -- | ND | 0.809 | -- | | 1 |
| Methyl tert butyl ether | ND | 0.200 | -- | ND | 0.721 | -- | | 1 |
| Vinyl acetate | ND | 0.200 | -- | ND | 0.704 | -- | | 1 |
| 2-Butanone | 0.874 | 0.200 | -- | 2.58 | 0.590 | -- | | 1 |
| cis-1,2-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | | 1 |

**Project Name:** BEST CLEANERS
**Project Number:** Not Specified

**Lab Number:** L1202360
**Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202360-06
Client ID: GER-AA
Sample Location: LIC, NY

Date Collected: 02/08/12 13:12
Date Received: 02/09/12
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air (Low Level) - Mansfield Lab | | | | | | | | |
| Ethyl Acetate | ND | 0.500 | -- | ND | 1.80 | -- | | 1 |
| Chloroform | ND | 0.200 | -- | ND | 0.977 | -- | | 1 |
| Tetrahydrofuran | ND | 0.200 | -- | ND | 0.590 | -- | | 1 |
| 1,2-Dichloroethane | ND | 0.200 | -- | ND | 0.809 | -- | | 1 |
| n-Hexane | 0.275 | 0.200 | -- | 0.969 | 0.705 | -- | | 1 |
| 1,1,1-Trichloroethane | ND | 0.200 | -- | ND | 1.09 | -- | | 1 |
| Benzene | 0.373 | 0.200 | -- | 1.19 | 0.639 | -- | | 1 |
| Carbon tetrachloride | ND | 0.200 | -- | ND | 1.26 | -- | | 1 |
| Cyclohexane | ND | 0.200 | -- | ND | 0.688 | -- | | 1 |
| 1,2-Dichloropropane | ND | 0.200 | -- | ND | 0.924 | -- | | 1 |
| Bromodichloromethane | ND | 0.200 | -- | ND | 1.34 | -- | | 1 |
| 1,4-Dioxane | ND | 0.200 | -- | ND | 0.721 | -- | | 1 |
| Trichloroethene | ND | 0.200 | -- | ND | 1.07 | -- | | 1 |
| 2,2,4-Trimethylpentane | ND | 0.200 | -- | ND | 0.934 | -- | | 1 |
| Heptane | 0.256 | 0.200 | -- | 1.05 | 0.820 | -- | | 1 |
| cis-1,3-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | | 1 |
| 4-Methyl-2-pentanone | 0.268 | 0.200 | -- | 1.10 | 0.820 | -- | | 1 |
| trans-1,3-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | | 1 |
| 1,1,2-Trichloroethane | ND | 0.200 | -- | ND | 1.09 | -- | | 1 |
| Toluene | 3.20 | 0.200 | -- | 12.0 | 0.754 | -- | | 1 |
| 2-Hexanone | ND | 0.200 | -- | ND | 0.820 | -- | | 1 |
| Dibromochloromethane | ND | 0.200 | -- | ND | 1.70 | -- | | 1 |
| 1,2-Dibromoethane | ND | 0.200 | -- | ND | 1.54 | -- | | 1 |
| Tetrachloroethene | 3.58 | 0.200 | -- | 24.3 | 1.36 | -- | | 1 |
| Chlorobenzene | ND | 0.200 | -- | ND | 0.921 | -- | | 1 |
| Ethylbenzene | 0.414 | 0.200 | -- | 1.80 | 0.869 | -- | | 1 |
| p/m-Xylene | 1.47 | 0.400 | -- | 6.38 | 1.74 | -- | | 1 |
| Bromoform | ND | 0.200 | -- | ND | 2.07 | -- | | 1 |

**Project Name:** BEST CLEANERS
**Project Number:** Not Specified

**Lab Number:** L1202360
**Report Date:** 02/16/12

## SAMPLE RESULTS

Lab ID: L1202360-06
Client ID: GER-AA
Sample Location: LIC, NY

Date Collected: 02/08/12 13:12
Date Received: 02/09/12
Field Prep: Not Specified

| Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | Dilution Factor |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics in Air (Low Level) - Mansfield Lab | | | | | | | | |
| Styrene | 0.220 | 0.200 | -- | 0.937 | 0.852 | -- | | 1 |
| 1,1,2,2-Tetrachloroethane | ND | 0.200 | -- | ND | 1.37 | -- | | 1 |
| o-Xylene | 0.440 | 0.200 | -- | 1.91 | 0.869 | -- | | 1 |
| 4-Ethyltoluene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| 1,3,5-Trimethybenzene | ND | 0.200 | -- | ND | 0.983 | -- | | 1 |
| 1,2,4-Trimethylbenzene | 0.200 | 0.200 | -- | 0.983 | 0.983 | -- | | 1 |
| Benzyl chloride | ND | 0.200 | -- | ND | 1.04 | -- | | 1 |
| 1,3-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,4-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,2-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | | 1 |
| 1,2,4-Trichlorobenzene | ND | 0.200 | -- | ND | 1.48 | -- | | 1 |
| Hexachlorobutadiene | ND | 0.200 | -- | ND | 2.13 | -- | | 1 |

| Internal Standard | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,4-Difluorobenzene | 91 | | 60-140 |
| Bromochloromethane | 94 | | 60-140 |
| chlorobenzene-d5 | 90 | | 60-140 |

GENESIS ENGINEERING & REDEVELOPMENT

# APPENDIX F

## Data Usability Summary Report

# Data Validation Services

120 Cobble Creek Road P.O. Box 208
North Creek, NY 12853

Phone 518-251-4429
Facsimile 518-251-4428

March 3, 2012

Kenneth Wenz
GEER
69-49 185th St. Suite 1A
Fresh Meadows, NY 11365

RE: Best –DDK Cleaners Analytical Data
Data Usability Summary Report (DUSR)
Alpha Analytical SDG Nos. 1202347 And 1202360

Dear Mr. Wenz:

Review has been completed for the data packages generated by Alpha Analytical that pertains to collected on 02/08/12 at the Best DDK Cleaners site. Six 6-L summa canister air samples, three aqueous samples and an aqueous field duplicate were analyzed for full lists of volatile analytes using USEPA method TO-15 and USEPA method 8260B.

The data packages submitted contained full deliverables for validation, but this usability report is generated from review of the summary form information, with review of sample raw data, and limited review of associated QC raw data. Full validation has not been performed. However, the reported summary forms have been reviewed for application of validation qualifiers, per the USEPA Region 2 validation SOPs and the USEPA National Functional Guidelines for Organic Data Review, as affects the usability of the sample data. The following items were reviewed:

* Data Completeness
* Case Narrative
* Custody Documentation
* Holding Times
* Surrogate Recoveries
* Matrix Spike Recoveries
* Laboratory and Blind Field Duplicate Correlations
* Internal Standard Recoveries
* Method and Canister Blanks
* Laboratory Control Samples (LCSs)
* Instrumental Tunes
* Initial and Continuing Calibration Standards
* Method Compliance
* Sample Result Verification

Those items showing deficiencies are discussed in the following sections of this report. All others were found to be acceptable as outlined in the above-mentioned validation procedures, and as applicable for the methodology. Unless noted specifically in the following text, reported results are substantiated by the raw data, and generated in compliance with project requirements.

**In summary**, sample processing was conducted in compliance with analytical project requirements. All sample results are usable either as reported, or with minor qualification. No data are rejected.

Copies of the laboratory case narratives are attached to this text, and should be reviewed in conjunction with this report. Also attached are the laboratory sample result forms edited to reflect the validation qualifiers noted within this report.

**Volatile Analyses by USEPA Method TO-15**

The results for toluene in GER-SV1 and GER-SV2 have been qualified as tentative in identification and estimated in value due to interferences in the mass spectra.

The result for tetrachloroethene in GER-SV1, initially reported with the "E" laboratory flag, has been derived from the dilution analysis of the sample, thus reflecting response within the established instrument linear range.

Holding times and instrument tunes meet requirements. Internal standard recoveries are acceptable. Method and canister blanks show no contamination.

The laboratory duplicate correlation of GER-SV5 shows acceptable correlations. While 2-butanone exhibited an elevated %RPD value, the variance was within the allowance of ±CRDL applicable to values close to the reporting limit.

An elevated recovery observed in the LCS does not affect reported results, as the samples show no detection of that compound.

Initial and continuing calibration standard responses were acceptable, with all response factors (RRFs) above 0.05, linearity within the 30%RSD limit, and continuing responses not above 30%D.

Several of the samples were processed at initial dilution due to detected target analyte concentrations. Therefore, reporting limits for the compounds that were not detected are elevated in those samples.

**TCL Volatile Analyses by USEPA Method 8260B**

Matrix spikes of GER-1 show acceptable accuracy and precision, with the following exceptions, results for which are qualified as estimated in the parent sample:

- 1,2,4-trimethylbenzene (139% and 154%)
- naphthalene (262% and 348%)
- trans-1,4-dichloro2-butene (52% and 51%)

The blind field duplicate of GER-2 shows acceptable correlations.

The LCSs show low recoveries for trans-1,4-dichloro-2-butene (67% and 68%). Therefore, results for that compound in the samples have been qualified as estimated, with a possible low bias.

Initial calibrations standards showed responses within analytical protocol and validation guidelines, with the exception of that for 4-methyl-2-pentanone in the lowest concentration standard (low RRF). The results for that compound in the project samples are qualified as estimated in value.

Continuing calibration standards show several elevated responses for analytes not detected in the samples; reported results are unaffected.

Holding times were met. Surrogate and internal standard responses are within required ranges. Blanks show no contamination.

Please do not hesitate to contact me if questions or comments arise during your review of this report.

Very truly yours,

Judy Harry

## VALIDATION DATA QUALIFIER DEFINITIONS

| | |
|---|---|
| **U** | The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit. |
| **J** | The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample. |
| **UJ** | The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise. |
| **NJ** | The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value. |
| **R** | The data are unusable. The analyte may or may not be present. |
| **EMPC** | The results do not meet all criteria for a confirmed identification. The quantitative value represents the Estimated Maximum Possible Concentration of the analyte in the sample. |

# CLIENT and LABORATORY SAMPLE IDs and CASE NARRATIVES

**Project Name:** BEST CLEANERS
**Project Number:** 155-C-2

**Lab Number:** L1202347
**Report Date:** 02/16/12

## Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

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Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics

L1202347-04: The pH of the sample was greater than two; however, the sample was analyzed within the method required holding time.

The WG518579-1/-2 LCS/LCSD recoveries, associated with L1202347-01 through -05, are below the individual acceptance criteria for trans-1,4-Dichloro-2-butene (67%/66%), but within the overall method allowances. The results of the associated samples are reported.

The WG518579-4/-5 MS/MSD recoveries, performed on L1202347-01, were outside the acceptance criteria for Carbon tetrachloride (136%/133%), Naphthalene (262%/348%), 1,3,5-Trimethylbenzene (MSD at 132%),

**Project Name:** BEST CLEANERS
**Project Number:** 155-C-2

**Lab Number:** L1202347
**Report Date:** 02/16/12

**Case Narrative (continued)**

1,2,4-Trimethylbenzene (139%/154%) and trans-1,4-Dichloro-2-butene (52%/51%)

The WG518579-4/-5 MS/MSD RPDs, performed on L1202347-01, are above the acceptance criteria for Chloromethane (22%) and Bromomethane (29%).

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Michelle M. Morris

Title: Technical Director/Representative

Date: 02/16/12

**Project Name:** BEST CLEANERS
**Project Number:** Not Specified

**Lab Number:** L1202360
**Report Date:** 02/16/12

## Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

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Volatile Organics in Air

Canisters were released from the laboratory on January 30, 2012.

The canister certification results are provided as an addendum.

L1202360-01, -02, -03, -04, -05 and WG517910-5 Duplicate have elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the samples.

L1202360-01 and -02 were re-analyzed on dilution in order to quantitate the samples within the calibration range. The result should be considered estimated, and is qualified with an E flag, for any compound that exceeded the calibration on the initial analysis. The re-analysis was performed only for the compound that exceeded the calibration range.

**Project Name:** BEST CLEANERS
**Project Number:** Not Specified

**Lab Number:** L1202360
**Report Date:** 02/16/12

**Case Narrative (continued)**

The WG517910-3 LCS recovery for 1,2,4-Trichlorobenzene (133%) is above the upper 130% acceptance limit. All samples associated with this LCS do not have reportable amounts of this analyte.

WG517910-5: The relative percent difference for 2-Butanone (28%) is above the RPD limit of 25%. This compound represented less than 10% of the compounds detected, therefore no further action was taken.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Christopher J. Anderson

Title: Technical Director/Representative

Date: 02/16/12

# QUALIFIED LABORATORY RESULTS FORMS

# Form 1
# Volatile

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202347 |
| Project Name | : BEST CLEANERS | Project Number | : 155-C-2 |
| Lab ID | : L1202347-01 | Date Collected | : 02/08/12 14:15 |
| Client ID | : GER-1 | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/14/12 13:45 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 1,8260B | Analyst | : PD |
| Lab File ID | : 0214A11 | Instrument ID | : VOA101.I |
| Sample Amount | : 10.0 ml | GC Column | : RTX-502.2 |
| Level | : LOW | %Solids | : N/A |
| Soil Extract Volume | : -- | Injection Volume | : |

| CAS NO. | Parameter | ug/L Results | RL | MDL | Qualifier |
|---|---|---|---|---|---|
| 75-09-2 | Methylene chloride | ND | 5.0 | 0.54 | U |
| 75-34-3 | 1,1-Dichloroethane | ND | 0.75 | 0.22 | U |
| 67-66-3 | Chloroform | 0.54 | 0.75 | 0.20 | J |
| 56-23-5 | Carbon tetrachloride | ND | 0.50 | 0.16 | U |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.8 | 0.30 | U |
| 124-48-1 | Dibromochloromethane | ND | 0.50 | 0.19 | U |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 0.75 | 0.26 | U |
| 127-18-4 | Tetrachloroethene | 3.5 | 0.50 | 0.18 | |
| 108-90-7 | Chlorobenzene | ND | 0.50 | 0.19 | U |
| 75-69-4 | Trichlorofluoromethane | ND | 2.5 | 0.27 | U |
| 107-06-2 | 1,2-Dichloroethane | ND | 0.50 | 0.16 | U |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 0.50 | 0.16 | U |
| 75-27-4 | Bromodichloromethane | ND | 0.50 | 0.19 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 0.50 | 0.16 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 0.50 | 0.14 | U |
| 563-58-6 | 1,1-Dichloropropene | ND | 2.5 | 0.26 | U |
| 75-25-2 | Bromoform | ND | 2.0 | 0.25 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 0.50 | 0.19 | U |
| 71-43-2 | Benzene | ND | 0.50 | 0.19 | U |
| 108-88-3 | Toluene | 0.91 | 0.75 | 0.23 | |
| 100-41-4 | Ethylbenzene | 0.64 | 0.50 | 0.26 | |
| 74-87-3 | Chloromethane | ND | 2.5 | 0.28 | U |
| 74-83-9 | Bromomethane | ND | 1.0 | 0.26 | U |
| 75-01-4 | Vinyl chloride | 1.1 | 1.0 | 0.22 | |
| 75-00-3 | Chloroethane | ND | 1.0 | 0.23 | U |
| 75-35-4 | 1,1-Dichloroethene | ND | 0.50 | 0.18 | U |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 0.75 | 0.21 | U |

# Form 1
# Volatile

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202347 |
| Project Name | : BEST CLEANERS | Project Number | : 155-C-2 |
| Lab ID | : L1202347-01 | Date Collected | : 02/08/12 14:15 |
| Client ID | : GER-1 | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/14/12 13:45 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 1,8260B | Analyst | : PD |
| Lab File ID | : 0214A11 | Instrument ID | : VOA101.I |
| Sample Amount | : 10.0 ml | GC Column | : RTX-502.2 |
| Level | : LOW | %Solids | : N/A |
| Soil Extract Volume | : -- | Injection Volume | : |

| CAS NO. | Parameter | ug/L Results | RL | MDL | Qualifier | |
|---|---|---|---|---|---|---|
| 79-01-6 | Trichloroethene | 0.79 | 0.50 | 0.17 | | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 2.5 | 0.18 | U | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 2.5 | 0.19 | U | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 2.5 | 0.22 | U | |
| 1634-04-4 | Methyl tert butyl ether | ND | 1.0 | 0.16 | U | |
| 106-42-3/108-38-3 | p/m-Xylene | 4.1 | 1.0 | 0.35 | | |
| 95-47-6 | o-Xylene | 3.5 | 1.0 | 0.33 | | |
| 156-59-2 | cis-1,2-Dichloroethene | 6.5 | 0.50 | 0.19 | | |
| 74-95-3 | Dibromomethane | ND | 5.0 | 0.36 | U | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 5.0 | 0.43 | U | |
| 107-13-1 | Acrylonitrile | ND | 5.0 | 0.43 | U | |
| 100-42-5 | Styrene | ND | 1.0 | 0.36 | U | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.0 | 0.30 | U | |
| 67-64-1 | Acetone | ND | 5.0 | 1.6 | U | |
| 75-15-0 | Carbon disulfide | ND | 5.0 | 0.30 | U | |
| 78-93-3 | 2-Butanone | ND | 5.0 | 1.9 | U | |
| 108-05-4 | Vinyl acetate | ND | 5.0 | 0.31 | U | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 5.0 | 0.42 | U | UJ |
| 591-78-6 | 2-Hexanone | ND | 5.0 | 0.58 | U | |
| 74-97-5 | Bromochloromethane | ND | 2.5 | 0.33 | U | |
| 594-20-7 | 2,2-Dichloropropane | ND | 2.5 | 0.40 | U | |
| 106-93-4 | 1,2-Dibromoethane | ND | 2.0 | 0.19 | U | |
| 142-28-9 | 1,3-Dichloropropane | ND | 2.5 | 0.21 | U | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 0.50 | 0.16 | U | |
| 108-86-1 | Bromobenzene | ND | 2.5 | 0.18 | U | |
| 104-51-8 | n-Butylbenzene | ND | 0.50 | 0.20 | U | |
| 135-98-8 | sec-Butylbenzene | ND | 0.50 | 0.18 | U | |

# Form 1
# Volatile

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202347 |
| Project Name | : BEST CLEANERS | Project Number | : 155-C-2 |
| Lab ID | : L1202347-01 | Date Collected | : 02/08/12 14:15 |
| Client ID | : GER-1 | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/14/12 13:45 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 1,8260B | Analyst | : PD |
| Lab File ID | : 0214A11 | Instrument ID | : VOA101.I |
| Sample Amount | : 10.0 ml | GC Column | : RTX-502.2 |
| Level | : LOW | %Solids | : N/A |
| Soil Extract Volume | : -- | Injection Volume | : |

| CAS NO. | Parameter | ug/L Results | RL | MDL | Qualifier | |
|---|---|---|---|---|---|---|
| 98-06-6 | tert-Butylbenzene | ND | 2.5 | 0.30 | U | |
| 95-49-8 | o-Chlorotoluene | ND | 2.5 | 0.18 | U | |
| 106-43-4 | p-Chlorotoluene | ND | 2.5 | 0.18 | U | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.5 | 0.33 | U | |
| 87-68-3 | Hexachlorobutadiene | ND | 0.60 | 0.23 | U | |
| 98-82-8 | Isopropylbenzene | ND | 0.50 | 0.19 | U | |
| 99-87-6 | p-Isopropyltoluene | ND | 0.50 | 0.19 | U | |
| 91-20-3 | Naphthalene | 19 | 2.5 | 0.22 | | J |
| 103-65-1 | n-Propylbenzene | ND | 0.50 | 0.17 | U | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.5 | 0.23 | U | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.5 | 0.22 | U | |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1.4 | 2.5 | 0.21 | J | |
| 95-63-6 | 1,2,4-Trimethylbenzene | 3.8 | 2.5 | 0.27 | | J |
| 105-05-5 | 1,4-Diethylbenzene | 0.60 | 2.0 | 0.11 | J | |
| 622-96-8 | 4-Ethyltoluene | 1.4 | 2.0 | 0.42 | J | |
| 95-93-2 | 1,2,4,5-Tetramethylbenzene | 0.19 | 2.0 | 0.10 | J | |
| 60-29-7 | Ethyl ether | ND | 2.5 | 0.20 | U | |
| 110-57-6 | trans-1,4-Dichloro-2-butene | ND | 2.5 | 0.17 | U | UJ |

# Form 1
# Volatile

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202347 |
| Project Name | : BEST CLEANERS | Project Number | : 155-C-2 |
| Lab ID | : L1202347-02 | Date Collected | : 02/08/12 15:00 |
| Client ID | : GER-2 | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/14/12 14:10 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 1,8260B | Analyst | : PD |
| Lab File ID | : 0214A12 | Instrument ID | : VOA101.I |
| Sample Amount | : 10.0 ml | GC Column | : RTX-502.2 |
| Level | : LOW | %Solids | : N/A |
| Soil Extract Volume | : -- | Injection Volume | : |

| CAS NO. | Parameter | ug/L Results | RL | MDL | Qualifier |
|---|---|---|---|---|---|
| 75-09-2 | Methylene chloride | ND | 5.0 | 0.54 | U |
| 75-34-3 | 1,1-Dichloroethane | ND | 0.75 | 0.22 | U |
| 67-66-3 | Chloroform | 38 | 0.75 | 0.20 | |
| 56-23-5 | Carbon tetrachloride | ND | 0.50 | 0.16 | U |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.8 | 0.30 | U |
| 124-48-1 | Dibromochloromethane | ND | 0.50 | 0.19 | U |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 0.75 | 0.26 | U |
| 127-18-4 | Tetrachloroethene | 50 | 0.50 | 0.18 | |
| 108-90-7 | Chlorobenzene | ND | 0.50 | 0.19 | U |
| 75-69-4 | Trichlorofluoromethane | ND | 2.5 | 0.27 | U |
| 107-06-2 | 1,2-Dichloroethane | ND | 0.50 | 0.16 | U |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 0.50 | 0.16 | U |
| 75-27-4 | Bromodichloromethane | 3.0 | 0.50 | 0.19 | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 0.50 | 0.16 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 0.50 | 0.14 | U |
| 563-58-6 | 1,1-Dichloropropene | ND | 2.5 | 0.26 | U |
| 75-25-2 | Bromoform | ND | 2.0 | 0.25 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 0.50 | 0.19 | U |
| 71-43-2 | Benzene | ND | 0.50 | 0.19 | U |
| 108-88-3 | Toluene | ND | 0.75 | 0.23 | U |
| 100-41-4 | Ethylbenzene | ND | 0.50 | 0.26 | U |
| 74-87-3 | Chloromethane | ND | 2.5 | 0.28 | U |
| 74-83-9 | Bromomethane | ND | 1.0 | 0.26 | U |
| 75-01-4 | Vinyl chloride | ND | 1.0 | 0.22 | U |
| 75-00-3 | Chloroethane | ND | 1.0 | 0.23 | U |
| 75-35-4 | 1,1-Dichloroethene | ND | 0.50 | 0.18 | U |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 0.75 | 0.21 | U |

# Form 1
# Volatile

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202347 |
| Project Name | : BEST CLEANERS | Project Number | : 155-C-2 |
| Lab ID | : L1202347-02 | Date Collected | : 02/08/12 15:00 |
| Client ID | : GER-2 | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/14/12 14:10 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 1,8260B | Analyst | : PD |
| Lab File ID | : 0214A12 | Instrument ID | : VOA101.I |
| Sample Amount | : 10.0 ml | GC Column | : RTX-502.2 |
| Level | : LOW | %Solids | : N/A |
| Soil Extract Volume | : -- | Injection Volume | : |

| CAS NO. | Parameter | ug/L Results | RL | MDL | Qualifier | |
|---|---|---|---|---|---|---|
| 79-01-6 | Trichloroethene | 2.8 | 0.50 | 0.17 | | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 2.5 | 0.18 | U | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 2.5 | 0.19 | U | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 2.5 | 0.22 | U | |
| 1634-04-4 | Methyl tert butyl ether | ND | 1.0 | 0.16 | U | |
| 106-42-3/108-38-3 | p/m-Xylene | ND | 1.0 | 0.35 | U | |
| 95-47-6 | o-Xylene | ND | 1.0 | 0.33 | U | |
| 156-59-2 | cis-1,2-Dichloroethene | 20 | 0.50 | 0.19 | | |
| 74-95-3 | Dibromomethane | ND | 5.0 | 0.36 | U | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 5.0 | 0.43 | U | |
| 107-13-1 | Acrylonitrile | ND | 5.0 | 0.43 | U | |
| 100-42-5 | Styrene | ND | 1.0 | 0.36 | U | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.0 | 0.30 | U | |
| 67-64-1 | Acetone | ND | 5.0 | 1.6 | U | |
| 75-15-0 | Carbon disulfide | ND | 5.0 | 0.30 | U | |
| 78-93-3 | 2-Butanone | ND | 5.0 | 1.9 | U | |
| 108-05-4 | Vinyl acetate | ND | 5.0 | 0.31 | U | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 5.0 | 0.42 | U | UJ |
| 591-78-6 | 2-Hexanone | ND | 5.0 | 0.58 | U | |
| 74-97-5 | Bromochloromethane | ND | 2.5 | 0.33 | U | |
| 594-20-7 | 2,2-Dichloropropane | ND | 2.5 | 0.40 | U | |
| 106-93-4 | 1,2-Dibromoethane | ND | 2.0 | 0.19 | U | |
| 142-28-9 | 1,3-Dichloropropane | ND | 2.5 | 0.21 | U | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 0.50 | 0.16 | U | |
| 108-86-1 | Bromobenzene | ND | 2.5 | 0.18 | U | |
| 104-51-8 | n-Butylbenzene | ND | 0.50 | 0.20 | U | |
| 135-98-8 | sec-Butylbenzene | ND | 0.50 | 0.18 | U | |

# Form 1
# Volatile

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202347 |
| Project Name | : BEST CLEANERS | Project Number | : 155-C-2 |
| Lab ID | : L1202347-02 | Date Collected | : 02/08/12 15:00 |
| Client ID | : GER-2 | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/14/12 14:10 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 1,8260B | Analyst | : PD |
| Lab File ID | : 0214A12 | Instrument ID | : VOA101.I |
| Sample Amount | : 10.0 ml | GC Column | : RTX-502.2 |
| Level | : LOW | %Solids | : N/A |
| Soil Extract Volume | : -- | Injection Volume | : |

| CAS NO. | Parameter | ug/L Results | RL | MDL | Qualifier | |
|---|---|---|---|---|---|---|
| 98-06-6 | tert-Butylbenzene | ND | 2.5 | 0.30 | U | |
| 95-49-8 | o-Chlorotoluene | ND | 2.5 | 0.18 | U | |
| 106-43-4 | p-Chlorotoluene | ND | 2.5 | 0.18 | U | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.5 | 0.33 | U | |
| 87-68-3 | Hexachlorobutadiene | ND | 0.60 | 0.23 | U | |
| 98-82-8 | Isopropylbenzene | ND | 0.50 | 0.19 | U | |
| 99-87-6 | p-Isopropyltoluene | ND | 0.50 | 0.19 | U | |
| 91-20-3 | Naphthalene | 0.44 | 2.5 | 0.22 | J | |
| 103-65-1 | n-Propylbenzene | ND | 0.50 | 0.17 | U | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.5 | 0.23 | U | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.5 | 0.22 | U | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 2.5 | 0.21 | U | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 2.5 | 0.27 | U | |
| 105-05-5 | 1,4-Diethylbenzene | ND | 2.0 | 0.11 | U | |
| 622-96-8 | 4-Ethyltoluene | ND | 2.0 | 0.42 | U | |
| 95-93-2 | 1,2,4,5-Tetramethylbenzene | ND | 2.0 | 0.10 | U | |
| 60-29-7 | Ethyl ether | ND | 2.5 | 0.20 | U | |
| 110-57-6 | trans-1,4-Dichloro-2-butene | ND | 2.5 | 0.17 | U | UJ |

# Form 1
# Volatile

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202347 |
| Project Name | : BEST CLEANERS | Project Number | : 155-C-2 |
| Lab ID | : L1202347-03 | Date Collected | : 02/08/12 15:45 |
| Client ID | : GER-3 | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/14/12 14:36 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 1,8260B | Analyst | : PD |
| Lab File ID | : 0214A13 | Instrument ID | : VOA101.I |
| Sample Amount | : 10.0 ml | GC Column | : RTX-502.2 |
| Level | : LOW | %Solids | : N/A |
| Soil Extract Volume | : -- | Injection Volume | : |

| CAS NO. | Parameter | ug/L Results | RL | MDL | Qualifier |
|---|---|---|---|---|---|
| 75-09-2 | Methylene chloride | ND | 5.0 | 0.54 | U |
| 75-34-3 | 1,1-Dichloroethane | ND | 0.75 | 0.22 | U |
| 67-66-3 | Chloroform | 0.62 | 0.75 | 0.20 | J |
| 56-23-5 | Carbon tetrachloride | ND | 0.50 | 0.16 | U |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.8 | 0.30 | U |
| 124-48-1 | Dibromochloromethane | ND | 0.50 | 0.19 | U |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 0.75 | 0.26 | U |
| 127-18-4 | Tetrachloroethene | 1.2 | 0.50 | 0.18 | |
| 108-90-7 | Chlorobenzene | ND | 0.50 | 0.19 | U |
| 75-69-4 | Trichlorofluoromethane | ND | 2.5 | 0.27 | U |
| 107-06-2 | 1,2-Dichloroethane | ND | 0.50 | 0.16 | U |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 0.50 | 0.16 | U |
| 75-27-4 | Bromodichloromethane | ND | 0.50 | 0.19 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 0.50 | 0.16 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 0.50 | 0.14 | U |
| 563-58-6 | 1,1-Dichloropropene | ND | 2.5 | 0.26 | U |
| 75-25-2 | Bromoform | ND | 2.0 | 0.25 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 0.50 | 0.19 | U |
| 71-43-2 | Benzene | ND | 0.50 | 0.19 | U |
| 108-88-3 | Toluene | ND | 0.75 | 0.23 | U |
| 100-41-4 | Ethylbenzene | ND | 0.50 | 0.26 | U |
| 74-87-3 | Chloromethane | ND | 2.5 | 0.28 | U |
| 74-83-9 | Bromomethane | ND | 1.0 | 0.26 | U |
| 75-01-4 | Vinyl chloride | ND | 1.0 | 0.22 | U |
| 75-00-3 | Chloroethane | ND | 1.0 | 0.23 | U |
| 75-35-4 | 1,1-Dichloroethene | ND | 0.50 | 0.18 | U |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 0.75 | 0.21 | U |

# Form 1
# Volatile

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202347 |
| Project Name | : BEST CLEANERS | Project Number | : 155-C-2 |
| Lab ID | : L1202347-03 | Date Collected | : 02/08/12 15:45 |
| Client ID | : GER-3 | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/14/12 14:36 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 1,8260B | Analyst | : PD |
| Lab File ID | : 0214A13 | Instrument ID | : VOA101.I |
| Sample Amount | : 10.0 ml | GC Column | : RTX-502.2 |
| Level | : LOW | %Solids | : N/A |
| Soil Extract Volume | : -- | Injection Volume | : |

| CAS NO. | Parameter | ug/L Results | RL | MDL | Qualifier | |
|---|---|---|---|---|---|---|
| 79-01-6 | Trichloroethene | ND | 0.50 | 0.17 | U | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 2.5 | 0.18 | U | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 2.5 | 0.19 | U | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 2.5 | 0.22 | U | |
| 1634-04-4 | Methyl tert butyl ether | ND | 1.0 | 0.16 | U | |
| 106-42-3/108-38-3 | p/m-Xylene | ND | 1.0 | 0.35 | U | |
| 95-47-6 | o-Xylene | ND | 1.0 | 0.33 | U | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 0.50 | 0.19 | U | |
| 74-95-3 | Dibromomethane | ND | 5.0 | 0.36 | U | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 5.0 | 0.43 | U | |
| 107-13-1 | Acrylonitrile | ND | 5.0 | 0.43 | U | |
| 100-42-5 | Styrene | ND | 1.0 | 0.36 | U | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.0 | 0.30 | U | |
| 67-64-1 | Acetone | ND | 5.0 | 1.6 | U | |
| 75-15-0 | Carbon disulfide | ND | 5.0 | 0.30 | U | |
| 78-93-3 | 2-Butanone | ND | 5.0 | 1.9 | U | |
| 108-05-4 | Vinyl acetate | ND | 5.0 | 0.31 | U | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 5.0 | 0.42 | U | UJ |
| 591-78-6 | 2-Hexanone | ND | 5.0 | 0.58 | U | |
| 74-97-5 | Bromochloromethane | ND | 2.5 | 0.33 | U | |
| 594-20-7 | 2,2-Dichloropropane | ND | 2.5 | 0.40 | U | |
| 106-93-4 | 1,2-Dibromoethane | ND | 2.0 | 0.19 | U | |
| 142-28-9 | 1,3-Dichloropropane | ND | 2.5 | 0.21 | U | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 0.50 | 0.16 | U | |
| 108-86-1 | Bromobenzene | ND | 2.5 | 0.18 | U | |
| 104-51-8 | n-Butylbenzene | ND | 0.50 | 0.20 | U | |
| 135-98-8 | sec-Butylbenzene | ND | 0.50 | 0.18 | U | |

# Form 1
# Volatile

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202347 |
| Project Name | : BEST CLEANERS | Project Number | : 155-C-2 |
| Lab ID | : L1202347-03 | Date Collected | : 02/08/12 15:45 |
| Client ID | : GER-3 | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/14/12 14:36 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 1,8260B | Analyst | : PD |
| Lab File ID | : 0214A13 | Instrument ID | : VOA101.I |
| Sample Amount | : 10.0 ml | GC Column | : RTX-502.2 |
| Level | : LOW | %Solids | : N/A |
| Soil Extract Volume | : -- | Injection Volume | : |

| CAS NO. | Parameter | ug/L Results | RL | MDL | Qualifier | |
|---|---|---|---|---|---|---|
| 98-06-6 | tert-Butylbenzene | ND | 2.5 | 0.30 | U | |
| 95-49-8 | o-Chlorotoluene | ND | 2.5 | 0.18 | U | |
| 106-43-4 | p-Chlorotoluene | ND | 2.5 | 0.18 | U | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.5 | 0.33 | U | |
| 87-68-3 | Hexachlorobutadiene | ND | 0.60 | 0.23 | U | |
| 98-82-8 | Isopropylbenzene | ND | 0.50 | 0.19 | U | |
| 99-87-6 | p-Isopropyltoluene | ND | 0.50 | 0.19 | U | |
| 91-20-3 | Naphthalene | ND | 2.5 | 0.22 | U | |
| 103-65-1 | n-Propylbenzene | ND | 0.50 | 0.17 | U | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.5 | 0.23 | U | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.5 | 0.22 | U | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 2.5 | 0.21 | U | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 2.5 | 0.27 | U | |
| 105-05-5 | 1,4-Diethylbenzene | ND | 2.0 | 0.11 | U | |
| 622-96-8 | 4-Ethyltoluene | ND | 2.0 | 0.42 | U | |
| 95-93-2 | 1,2,4,5-Tetramethylbenzene | ND | 2.0 | 0.10 | U | |
| 60-29-7 | Ethyl ether | ND | 2.5 | 0.20 | U | |
| 110-57-6 | trans-1,4-Dichloro-2-butene | ND | 2.5 | 0.17 | U | UJ |

# Form 1
# Volatile

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202347 |
| Project Name | : BEST CLEANERS | Project Number | : 155-C-2 |
| Lab ID | : L1202347-04 | Date Collected | : 02/08/12 14:40 |
| Client ID | : DUP | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/14/12 15:02 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 1,8260B | Analyst | : PD |
| Lab File ID | : 0214A14 | Instrument ID | : VOA101.I |
| Sample Amount | : 10.0 ml | GC Column | : RTX-502.2 |
| Level | : LOW | %Solids | : N/A |
| Soil Extract Volume | : -- | Injection Volume | : |

| CAS NO. | Parameter | ug/L Results | RL | MDL | Qualifier |
|---|---|---|---|---|---|
| 75-09-2 | Methylene chloride | ND | 5.0 | 0.54 | U |
| 75-34-3 | 1,1-Dichloroethane | ND | 0.75 | 0.22 | U |
| 67-66-3 | Chloroform | 38 | 0.75 | 0.20 | |
| 56-23-5 | Carbon tetrachloride | ND | 0.50 | 0.16 | U |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.8 | 0.30 | U |
| 124-48-1 | Dibromochloromethane | ND | 0.50 | 0.19 | U |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 0.75 | 0.26 | U |
| 127-18-4 | Tetrachloroethene | 48 | 0.50 | 0.18 | |
| 108-90-7 | Chlorobenzene | ND | 0.50 | 0.19 | U |
| 75-69-4 | Trichlorofluoromethane | ND | 2.5 | 0.27 | U |
| 107-06-2 | 1,2-Dichloroethane | ND | 0.50 | 0.16 | U |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 0.50 | 0.16 | U |
| 75-27-4 | Bromodichloromethane | 3.1 | 0.50 | 0.19 | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 0.50 | 0.16 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 0.50 | 0.14 | U |
| 563-58-6 | 1,1-Dichloropropene | ND | 2.5 | 0.26 | U |
| 75-25-2 | Bromoform | ND | 2.0 | 0.25 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 0.50 | 0.19 | U |
| 71-43-2 | Benzene | ND | 0.50 | 0.19 | U |
| 108-88-3 | Toluene | ND | 0.75 | 0.23 | U |
| 100-41-4 | Ethylbenzene | ND | 0.50 | 0.26 | U |
| 74-87-3 | Chloromethane | ND | 2.5 | 0.28 | U |
| 74-83-9 | Bromomethane | ND | 1.0 | 0.26 | U |
| 75-01-4 | Vinyl chloride | ND | 1.0 | 0.22 | U |
| 75-00-3 | Chloroethane | ND | 1.0 | 0.23 | U |
| 75-35-4 | 1,1-Dichloroethene | ND | 0.50 | 0.18 | U |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 0.75 | 0.21 | U |

# Form 1
# Volatile

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202347 |
| Project Name | : BEST CLEANERS | Project Number | : 155-C-2 |
| Lab ID | : L1202347-04 | Date Collected | : 02/08/12 14:40 |
| Client ID | : DUP | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/14/12 15:02 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 1,8260B | Analyst | : PD |
| Lab File ID | : 0214A14 | Instrument ID | : VOA101.I |
| Sample Amount | : 10.0 ml | GC Column | : RTX-502.2 |
| Level | : LOW | %Solids | : N/A |
| Soil Extract Volume | : -- | Injection Volume | : |

| CAS NO. | Parameter | ug/L Results | RL | MDL | Qualifier | |
|---|---|---|---|---|---|---|
| 79-01-6 | Trichloroethene | 2.8 | 0.50 | 0.17 | | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 2.5 | 0.18 | U | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 2.5 | 0.19 | U | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 2.5 | 0.22 | U | |
| 1634-04-4 | Methyl tert butyl ether | ND | 1.0 | 0.16 | U | |
| 106-42-3/108-38-3 | p/m-Xylene | ND | 1.0 | 0.35 | U | |
| 95-47-6 | o-Xylene | ND | 1.0 | 0.33 | U | |
| 156-59-2 | cis-1,2-Dichloroethene | 20 | 0.50 | 0.19 | | |
| 74-95-3 | Dibromomethane | ND | 5.0 | 0.36 | U | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 5.0 | 0.43 | U | |
| 107-13-1 | Acrylonitrile | ND | 5.0 | 0.43 | U | |
| 100-42-5 | Styrene | ND | 1.0 | 0.36 | U | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.0 | 0.30 | U | |
| 67-64-1 | Acetone | ND | 5.0 | 1.6 | U | |
| 75-15-0 | Carbon disulfide | ND | 5.0 | 0.30 | U | |
| 78-93-3 | 2-Butanone | ND | 5.0 | 1.9 | U | |
| 108-05-4 | Vinyl acetate | ND | 5.0 | 0.31 | U | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 5.0 | 0.42 | U | UJ |
| 591-78-6 | 2-Hexanone | ND | 5.0 | 0.58 | U | |
| 74-97-5 | Bromochloromethane | ND | 2.5 | 0.33 | U | |
| 594-20-7 | 2,2-Dichloropropane | ND | 2.5 | 0.40 | U | |
| 106-93-4 | 1,2-Dibromoethane | ND | 2.0 | 0.19 | U | |
| 142-28-9 | 1,3-Dichloropropane | ND | 2.5 | 0.21 | U | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 0.50 | 0.16 | U | |
| 108-86-1 | Bromobenzene | ND | 2.5 | 0.18 | U | |
| 104-51-8 | n-Butylbenzene | ND | 0.50 | 0.20 | U | |
| 135-98-8 | sec-Butylbenzene | ND | 0.50 | 0.18 | U | |

# Form 1
# Volatile

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202347 |
| Project Name | : BEST CLEANERS | Project Number | : 155-C-2 |
| Lab ID | : L1202347-04 | Date Collected | : 02/08/12 14:40 |
| Client ID | : DUP | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/14/12 15:02 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 1,8260B | Analyst | : PD |
| Lab File ID | : 0214A14 | Instrument ID | : VOA101.I |
| Sample Amount | : 10.0 ml | GC Column | : RTX-502.2 |
| Level | : LOW | %Solids | : N/A |
| Soil Extract Volume | : -- | Injection Volume | : |

| CAS NO. | Parameter | ug/L Results | RL | MDL | Qualifier | |
|---|---|---|---|---|---|---|
| 98-06-6 | tert-Butylbenzene | ND | 2.5 | 0.30 | U | |
| 95-49-8 | o-Chlorotoluene | ND | 2.5 | 0.18 | U | |
| 106-43-4 | p-Chlorotoluene | ND | 2.5 | 0.18 | U | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.5 | 0.33 | U | |
| 87-68-3 | Hexachlorobutadiene | ND | 0.60 | 0.23 | U | |
| 98-82-8 | Isopropylbenzene | ND | 0.50 | 0.19 | U | |
| 99-87-6 | p-Isopropyltoluene | ND | 0.50 | 0.19 | U | |
| 91-20-3 | Naphthalene | ND | 2.5 | 0.22 | U | |
| 103-65-1 | n-Propylbenzene | ND | 0.50 | 0.17 | U | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.5 | 0.23 | U | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.5 | 0.22 | U | |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 2.5 | 0.21 | U | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 2.5 | 0.27 | U | |
| 105-05-5 | 1,4-Diethylbenzene | ND | 2.0 | 0.11 | U | |
| 622-96-8 | 4-Ethyltoluene | ND | 2.0 | 0.42 | U | |
| 95-93-2 | 1,2,4,5-Tetramethylbenzene | ND | 2.0 | 0.10 | U | |
| 60-29-7 | Ethyl ether | ND | 2.5 | 0.20 | U | |
| 110-57-6 | trans-1,4-Dichloro-2-butene | ND | 2.5 | 0.17 | U | UJ |

# Form 1
# Volatile

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202347 |
| Project Name | : BEST CLEANERS | Project Number | : 155-C-2 |
| Lab ID | : L1202347-05 | Date Collected | : 02/08/12 00:00 |
| Client ID | : TRIP BLANK | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/14/12 15:27 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 1,8260B | Analyst | : PD |
| Lab File ID | : 0214A15 | Instrument ID | : VOA101.I |
| Sample Amount | : 10.0 ml | GC Column | : RTX-502.2 |
| Level | : LOW | %Solids | : N/A |
| Soil Extract Volume | : -- | Injection Volume | : |

| CAS NO. | Parameter | ug/L Results | RL | MDL | Qualifier |
|---|---|---|---|---|---|
| 75-09-2 | Methylene chloride | ND | 5.0 | 0.54 | U |
| 75-34-3 | 1,1-Dichloroethane | ND | 0.75 | 0.22 | U |
| 67-66-3 | Chloroform | ND | 0.75 | 0.20 | U |
| 56-23-5 | Carbon tetrachloride | ND | 0.50 | 0.16 | U |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.8 | 0.30 | U |
| 124-48-1 | Dibromochloromethane | ND | 0.50 | 0.19 | U |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 0.75 | 0.26 | U |
| 127-18-4 | Tetrachloroethene | ND | 0.50 | 0.18 | U |
| 108-90-7 | Chlorobenzene | ND | 0.50 | 0.19 | U |
| 75-69-4 | Trichlorofluoromethane | ND | 2.5 | 0.27 | U |
| 107-06-2 | 1,2-Dichloroethane | ND | 0.50 | 0.16 | U |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 0.50 | 0.16 | U |
| 75-27-4 | Bromodichloromethane | ND | 0.50 | 0.19 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 0.50 | 0.16 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 0.50 | 0.14 | U |
| 563-58-6 | 1,1-Dichloropropene | ND | 2.5 | 0.26 | U |
| 75-25-2 | Bromoform | ND | 2.0 | 0.25 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 0.50 | 0.19 | U |
| 71-43-2 | Benzene | ND | 0.50 | 0.19 | U |
| 108-88-3 | Toluene | ND | 0.75 | 0.23 | U |
| 100-41-4 | Ethylbenzene | ND | 0.50 | 0.26 | U |
| 74-87-3 | Chloromethane | ND | 2.5 | 0.28 | U |
| 74-83-9 | Bromomethane | ND | 1.0 | 0.26 | U |
| 75-01-4 | Vinyl chloride | ND | 1.0 | 0.22 | U |
| 75-00-3 | Chloroethane | ND | 1.0 | 0.23 | U |
| 75-35-4 | 1,1-Dichloroethene | ND | 0.50 | 0.18 | U |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 0.75 | 0.21 | U |

# Form 1
# Volatile

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202347 |
| Project Name | : BEST CLEANERS | Project Number | : 155-C-2 |
| Lab ID | : L1202347-05 | Date Collected | : 02/08/12 00:00 |
| Client ID | : TRIP BLANK | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/14/12 15:27 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 1,8260B | Analyst | : PD |
| Lab File ID | : 0214A15 | Instrument ID | : VOA101.I |
| Sample Amount | : 10.0 ml | GC Column | : RTX-502.2 |
| Level | : LOW | %Solids | : N/A |
| Soil Extract Volume | : -- | Injection Volume | : |

| CAS NO. | Parameter | ug/L Results | RL | MDL | Qualifier | |
|---|---|---|---|---|---|---|
| 79-01-6 | Trichloroethene | ND | 0.50 | 0.17 | U | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 2.5 | 0.18 | U | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 2.5 | 0.19 | U | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 2.5 | 0.22 | U | |
| 1634-04-4 | Methyl tert butyl ether | ND | 1.0 | 0.16 | U | |
| 106-42-3/108-38-3 | p/m-Xylene | ND | 1.0 | 0.35 | U | |
| 95-47-6 | o-Xylene | ND | 1.0 | 0.33 | U | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 0.50 | 0.19 | U | |
| 74-95-3 | Dibromomethane | ND | 5.0 | 0.36 | U | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 5.0 | 0.43 | U | |
| 107-13-1 | Acrylonitrile | ND | 5.0 | 0.43 | U | |
| 100-42-5 | Styrene | ND | 1.0 | 0.36 | U | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.0 | 0.30 | U | |
| 67-64-1 | Acetone | ND | 5.0 | 1.6 | U | |
| 75-15-0 | Carbon disulfide | ND | 5.0 | 0.30 | U | |
| 78-93-3 | 2-Butanone | ND | 5.0 | 1.9 | U | |
| 108-05-4 | Vinyl acetate | ND | 5.0 | 0.31 | U | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 5.0 | 0.42 | U | UJ |
| 591-78-6 | 2-Hexanone | ND | 5.0 | 0.58 | U | |
| 74-97-5 | Bromochloromethane | ND | 2.5 | 0.33 | U | |
| 594-20-7 | 2,2-Dichloropropane | ND | 2.5 | 0.40 | U | |
| 106-93-4 | 1,2-Dibromoethane | ND | 2.0 | 0.19 | U | |
| 142-28-9 | 1,3-Dichloropropane | ND | 2.5 | 0.21 | U | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 0.50 | 0.16 | U | |
| 108-86-1 | Bromobenzene | ND | 2.5 | 0.18 | U | |
| 104-51-8 | n-Butylbenzene | ND | 0.50 | 0.20 | U | |
| 135-98-8 | sec-Butylbenzene | ND | 0.50 | 0.18 | U | |

# Form 1
# Volatile

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202347 |
| Project Name | : BEST CLEANERS | Project Number | : 155-C-2 |
| Lab ID | : L1202347-05 | Date Collected | : 02/08/12 00:00 |
| Client ID | : TRIP BLANK | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/14/12 15:27 |
| Sample Matrix | : WATER | Dilution Factor | : 1 |
| Analytical Method | : 1,8260B | Analyst | : PD |
| Lab File ID | : 0214A15 | Instrument ID | : VOA101.I |
| Sample Amount | : 10.0 ml | GC Column | : RTX-502.2 |
| Level | : LOW | %Solids | : N/A |
| Soil Extract Volume | : -- | Injection Volume | : |

| CAS NO. | Parameter | ug/L Results | RL | MDL | Qualifier |
|---|---|---|---|---|---|
| 98-06-6 | tert-Butylbenzene | ND | 2.5 | 0.30 | U |
| 95-49-8 | o-Chlorotoluene | ND | 2.5 | 0.18 | U |
| 106-43-4 | p-Chlorotoluene | ND | 2.5 | 0.18 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.5 | 0.33 | U |
| 87-68-3 | Hexachlorobutadiene | ND | 0.60 | 0.23 | U |
| 98-82-8 | Isopropylbenzene | ND | 0.50 | 0.19 | U |
| 99-87-6 | p-Isopropyltoluene | ND | 0.50 | 0.19 | U |
| 91-20-3 | Naphthalene | ND | 2.5 | 0.22 | U |
| 103-65-1 | n-Propylbenzene | ND | 0.50 | 0.17 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.5 | 0.23 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.5 | 0.22 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 2.5 | 0.21 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 2.5 | 0.27 | U |
| 105-05-5 | 1,4-Diethylbenzene | ND | 2.0 | 0.11 | U |
| 622-96-8 | 4-Ethyltoluene | ND | 2.0 | 0.42 | U |
| 95-93-2 | 1,2,4,5-Tetramethylbenzene | ND | 2.0 | 0.10 | U |
| 60-29-7 | Ethyl ether | ND | 2.5 | 0.20 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | ND | 2.5 | 0.17 | U UJ |

# Form 1
## Volatile Organics

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202360 |
| Project Name | : BEST CLEANERS | Project Number | : |
| Lab ID | : L1202360-01D | Date Collected | : 02/08/12 14:00 |
| Client ID | : GER-SV1 | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/11/12 00:01 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor | : 2.5 |
| Analytical Method | : 48,TO-15 | Analyst | : RY |
| Lab File ID | : R219114 | Instrument ID | : AIRPIANO2 |
| Sample Amount | : 100 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 115-07-1 | Propylene | ND | 1.25 | -- | ND | 2.15 | -- | U |
| 75-71-8 | Dichlorodifluoromethane | 0.538 | 0.500 | -- | 2.66 | 2.47 | -- | |
| 74-87-3 | Chloromethane | ND | 0.500 | -- | ND | 1.03 | -- | U |
| 76-14-2 | Freon-114 | ND | 0.500 | -- | ND | 3.49 | -- | U |
| 75-01-4 | Vinyl chloride | ND | 0.500 | -- | ND | 1.28 | -- | U |
| 106-99-0 | 1,3-Butadiene | ND | 0.500 | -- | ND | 1.11 | -- | U |
| 74-83-9 | Bromomethane | ND | 0.500 | -- | ND | 1.94 | -- | U |
| 75-00-3 | Chloroethane | ND | 0.500 | -- | ND | 1.32 | -- | U |
| 64-17-5 | Ethanol | 7.07 | 6.25 | -- | 13.3 | 11.8 | -- | |
| 593-60-2 | Vinyl bromide | ND | 0.500 | -- | ND | 2.19 | -- | U |
| 67-64-1 | Acetone | 32.2 | 2.50 | -- | 76.5 | 5.94 | -- | |
| 75-69-4 | Trichlorofluoromethane | ND | 0.500 | -- | ND | 2.81 | -- | U |
| 67-63-0 | Isopropanol | ND | 1.25 | -- | ND | 3.07 | -- | U |
| 75-35-4 | 1,1-Dichloroethene | ND | 0.500 | -- | ND | 1.98 | -- | U |
| 75-09-2 | Methylene chloride | ND | 2.50 | -- | ND | 8.68 | -- | U |
| 107-05-1 | 3-Chloropropene | ND | 0.500 | -- | ND | 1.56 | -- | U |
| 75-15-0 | Carbon disulfide | 1.30 | 0.500 | -- | 4.05 | 1.56 | -- | |
| 76-13-1 | Freon-113 | ND | 0.500 | -- | ND | 3.83 | -- | U |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 0.500 | -- | ND | 1.98 | -- | U |
| 75-34-3 | 1,1-Dichloroethane | ND | 0.500 | -- | ND | 2.02 | -- | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 0.500 | -- | ND | 1.80 | -- | U |
| 108-05-4 | Vinyl acetate | ND | 0.500 | -- | ND | 1.76 | -- | U |
| 78-93-3 | 2-Butanone | 1.42 | 0.500 | -- | 4.19 | 1.47 | -- | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 0.500 | -- | ND | 1.98 | -- | U |
| 141-78-6 | Ethyl Acetate | 1.63 | 1.25 | -- | 5.87 | 4.50 | -- | |
| 67-66-3 | Chloroform | 8.24 | 0.500 | -- | 40.2 | 2.44 | -- | |
| 109-99-9 | Tetrahydrofuran | ND | 0.500 | -- | ND | 1.47 | -- | U |
| 107-06-2 | 1,2-Dichloroethane | ND | 0.500 | -- | ND | 2.02 | -- | U |

# Form 1
## Volatile Organics

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202360 |
| Project Name | : BEST CLEANERS | Project Number | : |
| Lab ID | : L1202360-01D | Date Collected | : 02/08/12 14:00 |
| Client ID | : GER-SV1 | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/11/12 00:01 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor | : 2.5 |
| Analytical Method | : 48,TO-15 | Analyst | : RY |
| Lab File ID | : R219114 | Instrument ID | : AIRPIANO2 |
| Sample Amount | : 100 ml | GC Column | : RTX-1 |

| CAS NO. | Parameter | ppbV Results | ppbV RL | ppbV MDL | ug/m3 Results | ug/m3 RL | ug/m3 MDL | Qualifier | |
|---|---|---|---|---|---|---|---|---|---|
| 110-54-3 | n-Hexane | ND | 0.500 | -- | ND | 1.76 | -- | U | |
| 71-55-6 | 1,1,1-Trichloroethane | 0.780 | 0.500 | -- | 4.26 | 2.73 | -- | | |
| 71-43-2 | Benzene | 1.07 | 0.500 | -- | 3.42 | 1.60 | -- | | |
| 56-23-5 | Carbon tetrachloride | 0.572 | 0.500 | -- | 3.60 | 3.14 | -- | | |
| 110-82-7 | Cyclohexane | 0.512 | 0.500 | -- | 1.76 | 1.72 | -- | | |
| 78-87-5 | 1,2-Dichloropropane | ND | 0.500 | -- | ND | 2.31 | -- | U | |
| 75-27-4 | Bromodichloromethane | ND | 0.500 | -- | ND | 3.35 | -- | U | |
| 123-91-1 | 1,4-Dioxane | ND | 0.500 | -- | ND | 1.80 | -- | U | |
| 79-01-6 | Trichloroethene | 4.16 | 0.500 | -- | 22.4 | 2.69 | -- | | |
| 540-84-1 | 2,2,4-Trimethylpentane | ND | 0.500 | -- | ND | 2.34 | -- | U | |
| 142-82-5 | Heptane | 0.625 | 0.500 | -- | 2.56 | 2.05 | -- | | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 0.500 | -- | ND | 2.27 | -- | U | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 0.500 | -- | ND | 2.05 | -- | U | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 0.500 | -- | ND | 2.27 | -- | U | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 0.500 | -- | ND | 2.73 | -- | U | |
| 108-88-3 | Toluene | 1.51 | 0.500 | -- | 5.69 | 1.88 | -- | | NJ |
| 591-78-6 | 2-Hexanone | ND | 0.500 | -- | ND | 2.05 | -- | U | |
| 124-48-1 | Dibromochloromethane | ND | 0.500 | -- | ND | 4.26 | -- | U | |
| 106-93-4 | 1,2-Dibromoethane | ND | 0.500 | -- | ND | 3.84 | -- | U | |
| 127-18-4 | Tetrachloroethene | 314 ~~264~~ | 0.500 | -- | 2130 ~~1790~~ | 3.39 | -- | E | |
| 108-90-7 | Chlorobenzene | ND | 0.500 | -- | ND | 2.30 | -- | U | |
| 100-41-4 | Ethylbenzene | 1.36 | 0.500 | -- | 5.91 | 2.17 | -- | | |
| 106-42-3/108-38-3 | p/m-Xylene | 6.00 | 1.00 | -- | 26.1 | 4.34 | -- | | |
| 75-25-2 | Bromoform | ND | 0.500 | -- | ND | 5.17 | -- | U | |
| 100-42-5 | Styrene | ND | 0.500 | -- | ND | 2.13 | -- | U | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 0.500 | -- | ND | 3.43 | -- | U | |
| 95-47-6 | o-Xylene | 1.99 | 0.500 | -- | 8.64 | 2.17 | -- | | |
| 622-96-8 | 4-Ethyltoluene | ND | 0.500 | -- | ND | 2.46 | -- | U | |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202360 |
| Project Name | : BEST CLEANERS | Project Number | : |
| Lab ID | : L1202360-01D | Date Collected | : 02/08/12 14:00 |
| Client ID | : GER-SV1 | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/11/12 00:01 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor | : 2.5 |
| Analytical Method | : 48,TO-15 | Analyst | : RY |
| Lab File ID | : R219114 | Instrument ID | : AIRPIANO2 |
| Sample Amount | : 100 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 108-67-8 | 1,3,5-Trimethybenzene | ND | 0.500 | -- | ND | 2.46 | -- | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 0.778 | 0.500 | -- | 3.82 | 2.46 | -- | |
| 100-44-7 | Benzyl chloride | ND | 0.500 | -- | ND | 2.59 | -- | U |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 0.500 | -- | ND | 3.01 | -- | U |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 0.500 | -- | ND | 3.01 | -- | U |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 0.500 | -- | ND | 3.01 | -- | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 0.500 | -- | ND | 3.71 | -- | U |
| 87-68-3 | Hexachlorobutadiene | ND | 0.500 | -- | ND | 5.33 | -- | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202360 |
| Project Name | : BEST CLEANERS | Project Number | : |
| Lab ID | : L1202360-02D | Date Collected | : 02/08/12 13:55 |
| Client ID | : GER-SV2 | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/11/12 00:36 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor | : 2.5 |
| Analytical Method | : 48,TO-15 | Analyst | : RY |
| Lab File ID | : R219115 | Instrument ID | : AIRPIANO2 |
| Sample Amount | : 100 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 115-07-1 | Propylene | 5.13 | 1.25 | -- | 8.83 | 2.15 | -- | |
| 75-71-8 | Dichlorodifluoromethane | 0.775 | 0.500 | -- | 3.83 | 2.47 | -- | |
| 74-87-3 | Chloromethane | ND | 0.500 | -- | ND | 1.03 | -- | U |
| 76-14-2 | Freon-114 | ND | 0.500 | -- | ND | 3.49 | -- | U |
| 75-01-4 | Vinyl chloride | ND | 0.500 | -- | ND | 1.28 | -- | U |
| 106-99-0 | 1,3-Butadiene | ND | 0.500 | -- | ND | 1.11 | -- | U |
| 74-83-9 | Bromomethane | ND | 0.500 | -- | ND | 1.94 | -- | U |
| 75-00-3 | Chloroethane | ND | 0.500 | -- | ND | 1.32 | -- | U |
| 64-17-5 | Ethanol | ND | 6.25 | -- | ND | 11.8 | -- | U |
| 593-60-2 | Vinyl bromide | ND | 0.500 | -- | ND | 2.19 | -- | U |
| 67-64-1 | Acetone | 79.3 | 2.50 | -- | 188 | 5.94 | -- | |
| 75-69-4 | Trichlorofluoromethane | ND | 0.500 | -- | ND | 2.81 | -- | U |
| 67-63-0 | Isopropanol | ND | 1.25 | -- | ND | 3.07 | -- | U |
| 75-35-4 | 1,1-Dichloroethene | ND | 0.500 | -- | ND | 1.98 | -- | U |
| 75-09-2 | Methylene chloride | ND | 2.50 | -- | ND | 8.68 | -- | U |
| 107-05-1 | 3-Chloropropene | ND | 0.500 | -- | ND | 1.56 | -- | U |
| 75-15-0 | Carbon disulfide | 25.0 | 0.500 | -- | 77.8 | 1.56 | -- | |
| 76-13-1 | Freon-113 | ND | 0.500 | -- | ND | 3.83 | -- | U |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 0.500 | -- | ND | 1.98 | -- | U |
| 75-34-3 | 1,1-Dichloroethane | ND | 0.500 | -- | ND | 2.02 | -- | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 0.500 | -- | ND | 1.80 | -- | U |
| 108-05-4 | Vinyl acetate | ND | 0.500 | -- | ND | 1.76 | -- | U |
| 78-93-3 | 2-Butanone | 3.01 | 0.500 | -- | 8.88 | 1.47 | -- | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 0.500 | -- | ND | 1.98 | -- | U |
| 141-78-6 | Ethyl Acetate | 1.30 | 1.25 | -- | 4.68 | 4.50 | -- | |
| 67-66-3 | Chloroform | 2.53 | 0.500 | -- | 12.4 | 2.44 | -- | |
| 109-99-9 | Tetrahydrofuran | ND | 0.500 | -- | ND | 1.47 | -- | U |
| 107-06-2 | 1,2-Dichloroethane | ND | 0.500 | -- | ND | 2.02 | -- | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202360 |
| Project Name | : BEST CLEANERS | Project Number | : |
| Lab ID | : L1202360-02D | Date Collected | : 02/08/12 13:55 |
| Client ID | : GER-SV2 | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/11/12 00:36 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor | : 2.5 |
| Analytical Method | : 48,TO-15 | Analyst | : RY |
| Lab File ID | : R219115 | Instrument ID | : AIRPIANO2 |
| Sample Amount | : 100 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 110-54-3 | n-Hexane | 1.94 | 0.500 | -- | 6.84 | 1.76 | -- | |
| 71-55-6 | 1,1,1-Trichloroethane | 0.650 | 0.500 | -- | 3.55 | 2.73 | -- | |
| 71-43-2 | Benzene | 2.86 | 0.500 | -- | 9.14 | 1.60 | -- | |
| 56-23-5 | Carbon tetrachloride | 0.570 | 0.500 | -- | 3.58 | 3.14 | -- | |
| 110-82-7 | Cyclohexane | 1.22 | 0.500 | -- | 4.20 | 1.72 | -- | |
| 78-87-5 | 1,2-Dichloropropane | ND | 0.500 | -- | ND | 2.31 | -- | U |
| 75-27-4 | Bromodichloromethane | ND | 0.500 | -- | ND | 3.35 | -- | U |
| 123-91-1 | 1,4-Dioxane | ND | 0.500 | -- | ND | 1.80 | -- | U |
| 79-01-6 | Trichloroethene | 6.59 | 0.500 | -- | 35.4 | 2.69 | -- | |
| 540-84-1 | 2,2,4-Trimethylpentane | ND | 0.500 | -- | ND | 2.34 | -- | U |
| 142-82-5 | Heptane | 1.58 | 0.500 | -- | 6.48 | 2.05 | -- | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 0.500 | -- | ND | 2.27 | -- | U |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 0.500 | -- | ND | 2.05 | -- | U |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 0.500 | -- | ND | 2.27 | -- | U |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 0.500 | -- | ND | 2.73 | -- | U |
| 108-88-3 | Toluene | 1.95 | 0.500 | -- | 7.35 | 1.88 | -- | NJ |
| 591-78-6 | 2-Hexanone | ND | 0.500 | -- | ND | 2.05 | -- | U |
| 124-48-1 | Dibromochloromethane | ND | 0.500 | -- | ND | 4.26 | -- | U |
| 106-93-4 | 1,2-Dibromoethane | ND | 0.500 | -- | ND | 3.84 | -- | U |
| 127-18-4 | Tetrachloroethene | 292 | 0.500 | -- | 1980 | 3.39 | -- | E |
| 108-90-7 | Chlorobenzene | ND | 0.500 | -- | ND | 2.30 | -- | U |
| 100-41-4 | Ethylbenzene | 1.42 | 0.500 | -- | 6.17 | 2.17 | -- | |
| 106-42-3/108-38-3p/m-Xylene | | 5.98 | 1.00 | -- | 26.0 | 4.34 | -- | |
| 75-25-2 | Bromoform | ND | 0.500 | -- | ND | 5.17 | -- | U |
| 100-42-5 | Styrene | ND | 0.500 | -- | ND | 2.13 | -- | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 0.500 | -- | ND | 3.43 | -- | U |
| 95-47-6 | o-Xylene | 2.18 | 0.500 | -- | 9.47 | 2.17 | -- | |
| 622-96-8 | 4-Ethyltoluene | ND | 0.500 | -- | ND | 2.46 | -- | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202360 |
| Project Name | : BEST CLEANERS | Project Number | : |
| Lab ID | : L1202360-02D | Date Collected | : 02/08/12 13:55 |
| Client ID | : GER-SV2 | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/11/12 00:36 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor | : 2.5 |
| Analytical Method | : 48,TO-15 | Analyst | : RY |
| Lab File ID | : R219115 | Instrument ID | : AIRPIANO2 |
| Sample Amount | : 100 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 108-67-8 | 1,3,5-Trimethybenzene | ND | 0.500 | -- | ND | 2.46 | -- | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 0.982 | 0.500 | -- | 4.83 | 2.46 | -- | |
| 100-44-7 | Benzyl chloride | ND | 0.500 | -- | ND | 2.59 | -- | U |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 0.500 | -- | ND | 3.01 | -- | U |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 0.500 | -- | ND | 3.01 | -- | U |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 0.500 | -- | ND | 3.01 | -- | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 0.500 | -- | ND | 3.71 | -- | U |
| 87-68-3 | Hexachlorobutadiene | ND | 0.500 | -- | ND | 5.33 | -- | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202360 |
| Project Name | : BEST CLEANERS | Project Number | : |
| Lab ID | : L1202360-02D2 | Date Collected | : 02/08/12 13:55 |
| Client ID | : GER-SV2 | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/11/12 10:28 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor | : 5 |
| Analytical Method | : 48,TO-15 | Analyst | : RY |
| Lab File ID | : R219122 | Instrument ID | : AIRPIANO2 |
| Sample Amount | : 50.0 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 127-18-4 | Tetrachloroethene | 214 | 1.00 | -- | 1450 | 6.78 | -- | |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202360 |
| Project Name | : BEST CLEANERS | Project Number | : |
| Lab ID | : L1202360-03D | Date Collected | : 02/08/12 14:10 |
| Client ID | : GER-SV3 | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/11/12 01:11 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor | : 33.97 |
| Analytical Method | : 48,TO-15 | Analyst | : RY |
| Lab File ID | : R219116 | Instrument ID | : AIRPIANO2 |
| Sample Amount | : 7.36 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 115-07-1 | Propylene | ND | 17.0 | -- | ND | 29.2 | -- | U |
| 75-71-8 | Dichlorodifluoromethane | ND | 6.79 | -- | ND | 33.6 | -- | U |
| 74-87-3 | Chloromethane | ND | 6.79 | -- | ND | 14.0 | -- | U |
| 76-14-2 | Freon-114 | ND | 6.79 | -- | ND | 47.5 | -- | U |
| 75-01-4 | Vinyl chloride | ND | 6.79 | -- | ND | 17.4 | -- | U |
| 106-99-0 | 1,3-Butadiene | ND | 6.79 | -- | ND | 15.0 | -- | U |
| 74-83-9 | Bromomethane | ND | 6.79 | -- | ND | 26.4 | -- | U |
| 75-00-3 | Chloroethane | ND | 6.79 | -- | ND | 17.9 | -- | U |
| 64-17-5 | Ethanol | ND | 84.9 | -- | ND | 160 | -- | U |
| 593-60-2 | Vinyl bromide | ND | 6.79 | -- | ND | 29.7 | -- | U |
| 67-64-1 | Acetone | 43.8 | 34.0 | -- | 104 | 80.8 | -- | |
| 75-69-4 | Trichlorofluoromethane | ND | 6.79 | -- | ND | 38.2 | -- | U |
| 67-63-0 | Isopropanol | ND | 17.0 | -- | ND | 41.8 | -- | U |
| 75-35-4 | 1,1-Dichloroethene | ND | 6.79 | -- | ND | 26.9 | -- | U |
| 75-09-2 | Methylene chloride | ND | 34.0 | -- | ND | 118 | -- | U |
| 107-05-1 | 3-Chloropropene | ND | 6.79 | -- | ND | 21.2 | -- | U |
| 75-15-0 | Carbon disulfide | ND | 6.79 | -- | ND | 21.1 | -- | U |
| 76-13-1 | Freon-113 | ND | 6.79 | -- | ND | 52.0 | -- | U |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 6.79 | -- | ND | 26.9 | -- | U |
| 75-34-3 | 1,1-Dichloroethane | ND | 6.79 | -- | ND | 27.5 | -- | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 6.79 | -- | ND | 24.5 | -- | U |
| 108-05-4 | Vinyl acetate | ND | 6.79 | -- | ND | 23.9 | -- | U |
| 78-93-3 | 2-Butanone | ND | 6.79 | -- | ND | 20.0 | -- | U |
| 156-59-2 | cis-1,2-Dichloroethene | 40.4 | 6.79 | -- | 160 | 26.9 | -- | |
| 141-78-6 | Ethyl Acetate | ND | 17.0 | -- | ND | 61.3 | -- | U |
| 67-66-3 | Chloroform | 28.8 | 6.79 | -- | 141 | 33.2 | -- | |
| 109-99-9 | Tetrahydrofuran | ND | 6.79 | -- | ND | 20.0 | -- | U |
| 107-06-2 | 1,2-Dichloroethane | ND | 6.79 | -- | ND | 27.5 | -- | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202360 |
| Project Name | : BEST CLEANERS | Project Number | : |
| Lab ID | : L1202360-03D | Date Collected | : 02/08/12 14:10 |
| Client ID | : GER-SV3 | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/11/12 01:11 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor | : 33.97 |
| Analytical Method | : 48,TO-15 | Analyst | : RY |
| Lab File ID | : R219116 | Instrument ID | : AIRPIANO2 |
| Sample Amount | : 7.36 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 110-54-3 | n-Hexane | ND | 6.79 | -- | ND | 23.9 | -- | U |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 6.79 | -- | ND | 37.0 | -- | U |
| 71-43-2 | Benzene | ND | 6.79 | -- | ND | 21.7 | -- | U |
| 56-23-5 | Carbon tetrachloride | ND | 6.79 | -- | ND | 42.7 | -- | U |
| 110-82-7 | Cyclohexane | ND | 6.79 | -- | ND | 23.4 | -- | U |
| 78-87-5 | 1,2-Dichloropropane | ND | 6.79 | -- | ND | 31.4 | -- | U |
| 75-27-4 | Bromodichloromethane | ND | 6.79 | -- | ND | 45.5 | -- | U |
| 123-91-1 | 1,4-Dioxane | ND | 6.79 | -- | ND | 24.5 | -- | U |
| 79-01-6 | Trichloroethene | 12.9 | 6.79 | -- | 69.3 | 36.5 | -- | |
| 540-84-1 | 2,2,4-Trimethylpentane | ND | 6.79 | -- | ND | 31.7 | -- | U |
| 142-82-5 | Heptane | ND | 6.79 | -- | ND | 27.8 | -- | U |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 6.79 | -- | ND | 30.8 | -- | U |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 6.79 | -- | ND | 27.8 | -- | U |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 6.79 | -- | ND | 30.8 | -- | U |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 6.79 | -- | ND | 37.0 | -- | U |
| 108-88-3 | Toluene | ND | 6.79 | -- | ND | 25.6 | -- | U |
| 591-78-6 | 2-Hexanone | ND | 6.79 | -- | ND | 27.8 | -- | U |
| 124-48-1 | Dibromochloromethane | ND | 6.79 | -- | ND | 57.8 | -- | U |
| 106-93-4 | 1,2-Dibromoethane | ND | 6.79 | -- | ND | 52.2 | -- | U |
| 127-18-4 | Tetrachloroethene | 2600 | 6.79 | -- | 17600 | 46.0 | -- | |
| 108-90-7 | Chlorobenzene | ND | 6.79 | -- | ND | 31.3 | -- | U |
| 100-41-4 | Ethylbenzene | ND | 6.79 | -- | ND | 29.5 | -- | U |
| 106-42-3/108-38-3 | p/m-Xylene | ND | 13.6 | -- | ND | 59.1 | -- | U |
| 75-25-2 | Bromoform | ND | 6.79 | -- | ND | 70.2 | -- | U |
| 100-42-5 | Styrene | ND | 6.79 | -- | ND | 28.9 | -- | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 6.79 | -- | ND | 46.6 | -- | U |
| 95-47-6 | o-Xylene | ND | 6.79 | -- | ND | 29.5 | -- | U |
| 622-96-8 | 4-Ethyltoluene | ND | 6.79 | -- | ND | 33.4 | -- | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202360 |
| Project Name | : BEST CLEANERS | Project Number | : |
| Lab ID | : L1202360-03D | Date Collected | : 02/08/12 14:10 |
| Client ID | : GER-SV3 | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/11/12 01:11 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor | : 33.97 |
| Analytical Method | : 48,TO-15 | Analyst | : RY |
| Lab File ID | : R219116 | Instrument ID | : AIRPIANO2 |
| Sample Amount | : 7.36 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 108-67-8 | 1,3,5-Trimethybenzene | ND | 6.79 | -- | ND | 33.4 | -- | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 6.79 | -- | ND | 33.4 | -- | U |
| 100-44-7 | Benzyl chloride | ND | 6.79 | -- | ND | 35.2 | -- | U |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 6.79 | -- | ND | 40.8 | -- | U |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 6.79 | -- | ND | 40.8 | -- | U |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 6.79 | -- | ND | 40.8 | -- | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 6.79 | -- | ND | 50.4 | -- | U |
| 87-68-3 | Hexachlorobutadiene | ND | 6.79 | -- | ND | 72.4 | -- | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202360 |
| Project Name | : BEST CLEANERS | Project Number | : |
| Lab ID | : L1202360-04D | Date Collected | : 02/08/12 13:17 |
| Client ID | : GER-SV4 | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/11/12 01:46 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor | : 10 |
| Analytical Method | : 48,TO-15 | Analyst | : RY |
| Lab File ID | : R219117 | Instrument ID | : AIRPIANO2 |
| Sample Amount | : 25.0 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 115-07-1 | Propylene | ND | 5.00 | -- | ND | 8.60 | -- | U |
| 75-71-8 | Dichlorodifluoromethane | ND | 2.00 | -- | ND | 9.89 | -- | U |
| 74-87-3 | Chloromethane | ND | 2.00 | -- | ND | 4.13 | -- | U |
| 76-14-2 | Freon-114 | ND | 2.00 | -- | ND | 14.0 | -- | U |
| 75-01-4 | Vinyl chloride | ND | 2.00 | -- | ND | 5.11 | -- | U |
| 106-99-0 | 1,3-Butadiene | ND | 2.00 | -- | ND | 4.42 | -- | U |
| 74-83-9 | Bromomethane | ND | 2.00 | -- | ND | 7.77 | -- | U |
| 75-00-3 | Chloroethane | ND | 2.00 | -- | ND | 5.28 | -- | U |
| 64-17-5 | Ethanol | ND | 25.0 | -- | ND | 47.1 | -- | U |
| 593-60-2 | Vinyl bromide | ND | 2.00 | -- | ND | 8.74 | -- | U |
| 67-64-1 | Acetone | 26.3 | 10.0 | -- | 62.5 | 23.8 | -- | |
| 75-69-4 | Trichlorofluoromethane | ND | 2.00 | -- | ND | 11.2 | -- | U |
| 67-63-0 | Isopropanol | ND | 5.00 | -- | ND | 12.3 | -- | U |
| 75-35-4 | 1,1-Dichloroethene | ND | 2.00 | -- | ND | 7.93 | -- | U |
| 75-09-2 | Methylene chloride | ND | 10.0 | -- | ND | 34.7 | -- | U |
| 107-05-1 | 3-Chloropropene | ND | 2.00 | -- | ND | 6.26 | -- | U |
| 75-15-0 | Carbon disulfide | ND | 2.00 | -- | ND | 6.23 | -- | U |
| 76-13-1 | Freon-113 | ND | 2.00 | -- | ND | 15.3 | -- | U |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 2.00 | -- | ND | 7.93 | -- | U |
| 75-34-3 | 1,1-Dichloroethane | ND | 2.00 | -- | ND | 8.09 | -- | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 2.00 | -- | ND | 7.21 | -- | U |
| 108-05-4 | Vinyl acetate | ND | 2.00 | -- | ND | 7.04 | -- | U |
| 78-93-3 | 2-Butanone | ND | 2.00 | -- | ND | 5.90 | -- | U |
| 156-59-2 | cis-1,2-Dichloroethene | 2.08 | 2.00 | -- | 8.25 | 7.93 | -- | |
| 141-78-6 | Ethyl Acetate | ND | 5.00 | -- | ND | 18.0 | -- | U |
| 67-66-3 | Chloroform | 13.3 | 2.00 | -- | 64.9 | 9.77 | -- | |
| 109-99-9 | Tetrahydrofuran | ND | 2.00 | -- | ND | 5.90 | -- | U |
| 107-06-2 | 1,2-Dichloroethane | ND | 2.00 | -- | ND | 8.09 | -- | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202360 |
| Project Name | : BEST CLEANERS | Project Number | : |
| Lab ID | : L1202360-04D | Date Collected | : 02/08/12 13:17 |
| Client ID | : GER-SV4 | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/11/12 01:46 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor | : 10 |
| Analytical Method | : 48,TO-15 | Analyst | : RY |
| Lab File ID | : R219117 | Instrument ID | : AIRPIANO2 |
| Sample Amount | : 25.0 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 110-54-3 | n-Hexane | ND | 2.00 | -- | ND | 7.05 | -- | U |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 2.00 | -- | ND | 10.9 | -- | U |
| 71-43-2 | Benzene | ND | 2.00 | -- | ND | 6.39 | -- | U |
| 56-23-5 | Carbon tetrachloride | ND | 2.00 | -- | ND | 12.6 | -- | U |
| 110-82-7 | Cyclohexane | ND | 2.00 | -- | ND | 6.88 | -- | U |
| 78-87-5 | 1,2-Dichloropropane | ND | 2.00 | -- | ND | 9.24 | -- | U |
| 75-27-4 | Bromodichloromethane | ND | 2.00 | -- | ND | 13.4 | -- | U |
| 123-91-1 | 1,4-Dioxane | ND | 2.00 | -- | ND | 7.21 | -- | U |
| 79-01-6 | Trichloroethene | 3.35 | 2.00 | -- | 18.0 | 10.7 | -- | |
| 540-84-1 | 2,2,4-Trimethylpentane | ND | 2.00 | -- | ND | 9.34 | -- | U |
| 142-82-5 | Heptane | ND | 2.00 | -- | ND | 8.20 | -- | U |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 2.00 | -- | ND | 9.08 | -- | U |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 2.00 | -- | ND | 8.20 | -- | U |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 2.00 | -- | ND | 9.08 | -- | U |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 2.00 | -- | ND | 10.9 | -- | U |
| 108-88-3 | Toluene | ND | 2.00 | -- | ND | 7.54 | -- | U |
| 591-78-6 | 2-Hexanone | ND | 2.00 | -- | ND | 8.20 | -- | U |
| 124-48-1 | Dibromochloromethane | ND | 2.00 | -- | ND | 17.0 | -- | U |
| 106-93-4 | 1,2-Dibromoethane | ND | 2.00 | -- | ND | 15.4 | -- | U |
| 127-18-4 | Tetrachloroethene | 688 | 2.00 | -- | 4660 | 13.6 | -- | |
| 108-90-7 | Chlorobenzene | ND | 2.00 | -- | ND | 9.21 | -- | U |
| 100-41-4 | Ethylbenzene | ND | 2.00 | -- | ND | 8.69 | -- | U |
| 106-42-3/108-38-3 | p/m-Xylene | ND | 4.00 | -- | ND | 17.4 | -- | U |
| 75-25-2 | Bromoform | ND | 2.00 | -- | ND | 20.7 | -- | U |
| 100-42-5 | Styrene | ND | 2.00 | -- | ND | 8.52 | -- | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 2.00 | -- | ND | 13.7 | -- | U |
| 95-47-6 | o-Xylene | ND | 2.00 | -- | ND | 8.69 | -- | U |
| 622-96-8 | 4-Ethyltoluene | ND | 2.00 | -- | ND | 9.83 | -- | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202360 |
| Project Name | : BEST CLEANERS | Project Number | : |
| Lab ID | : L1202360-04D | Date Collected | : 02/08/12 13:17 |
| Client ID | : GER-SV4 | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/11/12 01:46 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor | : 10 |
| Analytical Method | : 48,TO-15 | Analyst | : RY |
| Lab File ID | : R219117 | Instrument ID | : AIRPIANO2 |
| Sample Amount | : 25.0 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 108-67-8 | 1,3,5-Trimethybenzene | ND | 2.00 | -- | ND | 9.83 | -- | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 2.00 | -- | ND | 9.83 | -- | U |
| 100-44-7 | Benzyl chloride | ND | 2.00 | -- | ND | 10.4 | -- | U |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 2.00 | -- | ND | 12.0 | -- | U |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 2.00 | -- | ND | 12.0 | -- | U |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 2.00 | -- | ND | 12.0 | -- | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.00 | -- | ND | 14.8 | -- | U |
| 87-68-3 | Hexachlorobutadiene | ND | 2.00 | -- | ND | 21.3 | -- | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202360 |
| Project Name | : BEST CLEANERS | Project Number | : |
| Lab ID | : L1202360-05D | Date Collected | : 02/08/12 14:15 |
| Client ID | : GER-SV5 | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/11/12 02:20 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor | : 2.5 |
| Analytical Method | : 48,TO-15 | Analyst | : RY |
| Lab File ID | : R219118 | Instrument ID | : AIRPIANO2 |
| Sample Amount | : 100 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 115-07-1 | Propylene | ND | 1.25 | -- | ND | 2.15 | -- | U |
| 75-71-8 | Dichlorodifluoromethane | 0.532 | 0.500 | -- | 2.63 | 2.47 | -- | |
| 74-87-3 | Chloromethane | ND | 0.500 | -- | ND | 1.03 | -- | U |
| 76-14-2 | Freon-114 | ND | 0.500 | -- | ND | 3.49 | -- | U |
| 75-01-4 | Vinyl chloride | ND | 0.500 | -- | ND | 1.28 | -- | U |
| 106-99-0 | 1,3-Butadiene | ND | 0.500 | -- | ND | 1.11 | -- | U |
| 74-83-9 | Bromomethane | ND | 0.500 | -- | ND | 1.94 | -- | U |
| 75-00-3 | Chloroethane | ND | 0.500 | -- | ND | 1.32 | -- | U |
| 64-17-5 | Ethanol | ND | 6.25 | -- | ND | 11.8 | -- | U |
| 593-60-2 | Vinyl bromide | ND | 0.500 | -- | ND | 2.19 | -- | U |
| 67-64-1 | Acetone | 17.0 | 2.50 | -- | 40.4 | 5.94 | -- | |
| 75-69-4 | Trichlorofluoromethane | ND | 0.500 | -- | ND | 2.81 | -- | U |
| 67-63-0 | Isopropanol | ND | 1.25 | -- | ND | 3.07 | -- | U |
| 75-35-4 | 1,1-Dichloroethene | ND | 0.500 | -- | ND | 1.98 | -- | U |
| 75-09-2 | Methylene chloride | 4.26 | 2.50 | -- | 14.8 | 8.68 | -- | |
| 107-05-1 | 3-Chloropropene | ND | 0.500 | -- | ND | 1.56 | -- | U |
| 75-15-0 | Carbon disulfide | 1.33 | 0.500 | -- | 4.14 | 1.56 | -- | |
| 76-13-1 | Freon-113 | ND | 0.500 | -- | ND | 3.83 | -- | U |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 0.500 | -- | ND | 1.98 | -- | U |
| 75-34-3 | 1,1-Dichloroethane | ND | 0.500 | -- | ND | 2.02 | -- | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 0.500 | -- | ND | 1.80 | -- | U |
| 108-05-4 | Vinyl acetate | ND | 0.500 | -- | ND | 1.76 | -- | U |
| 78-93-3 | 2-Butanone | 0.608 | 0.500 | -- | 1.79 | 1.47 | -- | |
| 156-59-2 | cis-1,2-Dichloroethene | 79.0 | 0.500 | -- | 313 | 1.98 | -- | |
| 141-78-6 | Ethyl Acetate | ND | 1.25 | -- | ND | 4.50 | -- | U |
| 67-66-3 | Chloroform | 59.4 | 0.500 | -- | 290 | 2.44 | -- | |
| 109-99-9 | Tetrahydrofuran | ND | 0.500 | -- | ND | 1.47 | -- | U |
| 107-06-2 | 1,2-Dichloroethane | ND | 0.500 | -- | ND | 2.02 | -- | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202360 |
| Project Name | : BEST CLEANERS | Project Number | : |
| Lab ID | : L1202360-05D | Date Collected | : 02/08/12 14:15 |
| Client ID | : GER-SV5 | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/11/12 02:20 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor | : 2.5 |
| Analytical Method | : 48,TO-15 | Analyst | : RY |
| Lab File ID | : R219118 | Instrument ID | : AIRPIANO2 |
| Sample Amount | : 100 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 110-54-3 | n-Hexane | ND | 0.500 | -- | ND | 1.76 | -- | U |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 0.500 | -- | ND | 2.73 | -- | U |
| 71-43-2 | Benzene | ND | 0.500 | -- | ND | 1.60 | -- | U |
| 56-23-5 | Carbon tetrachloride | ND | 0.500 | -- | ND | 3.14 | -- | U |
| 110-82-7 | Cyclohexane | ND | 0.500 | -- | ND | 1.72 | -- | U |
| 78-87-5 | 1,2-Dichloropropane | ND | 0.500 | -- | ND | 2.31 | -- | U |
| 75-27-4 | Bromodichloromethane | 0.675 | 0.500 | -- | 4.52 | 3.35 | -- | |
| 123-91-1 | 1,4-Dioxane | ND | 0.500 | -- | ND | 1.80 | -- | U |
| 79-01-6 | Trichloroethene | 6.40 | 0.500 | -- | 34.4 | 2.69 | -- | |
| 540-84-1 | 2,2,4-Trimethylpentane | ND | 0.500 | -- | ND | 2.34 | -- | U |
| 142-82-5 | Heptane | ND | 0.500 | -- | ND | 2.05 | -- | U |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 0.500 | -- | ND | 2.27 | -- | U |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 0.500 | -- | ND | 2.05 | -- | U |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 0.500 | -- | ND | 2.27 | -- | U |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 0.500 | -- | ND | 2.73 | -- | U |
| 108-88-3 | Toluene | 0.742 | 0.500 | -- | 2.80 | 1.88 | -- | |
| 591-78-6 | 2-Hexanone | ND | 0.500 | -- | ND | 2.05 | -- | U |
| 124-48-1 | Dibromochloromethane | ND | 0.500 | -- | ND | 4.26 | -- | U |
| 106-93-4 | 1,2-Dibromoethane | ND | 0.500 | -- | ND | 3.84 | -- | U |
| 127-18-4 | Tetrachloroethene | 134 | 0.500 | -- | 909 | 3.39 | -- | |
| 108-90-7 | Chlorobenzene | ND | 0.500 | -- | ND | 2.30 | -- | U |
| 100-41-4 | Ethylbenzene | ND | 0.500 | -- | ND | 2.17 | -- | U |
| 106-42-3/108-38-3 | p/m-Xylene | 1.64 | 1.00 | -- | 7.12 | 4.34 | -- | |
| 75-25-2 | Bromoform | ND | 0.500 | -- | ND | 5.17 | -- | U |
| 100-42-5 | Styrene | ND | 0.500 | -- | ND | 2.13 | -- | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 0.500 | -- | ND | 3.43 | -- | U |
| 95-47-6 | o-Xylene | 0.592 | 0.500 | -- | 2.57 | 2.17 | -- | |
| 622-96-8 | 4-Ethyltoluene | ND | 0.500 | -- | ND | 2.46 | -- | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202360 |
| Project Name | : BEST CLEANERS | Project Number | : |
| Lab ID | : L1202360-05D | Date Collected | : 02/08/12 14:15 |
| Client ID | : GER-SV5 | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/11/12 02:20 |
| Sample Matrix | : SOIL_VAPOR | Dilution Factor | : 2.5 |
| Analytical Method | : 48,TO-15 | Analyst | : RY |
| Lab File ID | : R219118 | Instrument ID | : AIRPIANO2 |
| Sample Amount | : 100 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 108-67-8 | 1,3,5-Trimethybenzene | ND | 0.500 | -- | ND | 2.46 | -- | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 0.500 | 0.500 | -- | 2.46 | 2.46 | -- | |
| 100-44-7 | Benzyl chloride | ND | 0.500 | -- | ND | 2.59 | -- | U |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 0.500 | -- | ND | 3.01 | -- | U |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 0.500 | -- | ND | 3.01 | -- | U |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 0.500 | -- | ND | 3.01 | -- | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 0.500 | -- | ND | 3.71 | -- | U |
| 87-68-3 | Hexachlorobutadiene | ND | 0.500 | -- | ND | 5.33 | -- | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202360 |
| Project Name | : BEST CLEANERS | Project Number | : |
| Lab ID | : L1202360-06 | Date Collected | : 02/08/12 13:12 |
| Client ID | : GER-AA | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/10/12 21:38 |
| Sample Matrix | : AIR | Dilution Factor | : 1 |
| Analytical Method | : 48,TO-15 | Analyst | : RY |
| Lab File ID | : R219110 | Instrument ID | : AIRPIANO2 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 115-07-1 | Propylene | 0.709 | 0.500 | -- | 1.22 | 0.860 | -- | |
| 75-71-8 | Dichlorodifluoromethane | 0.530 | 0.200 | -- | 2.62 | 0.989 | -- | |
| 74-87-3 | Chloromethane | 0.549 | 0.200 | -- | 1.13 | 0.413 | -- | |
| 76-14-2 | Freon-114 | ND | 0.200 | -- | ND | 1.40 | -- | U |
| 75-01-4 | Vinyl chloride | ND | 0.200 | -- | ND | 0.511 | -- | U |
| 106-99-0 | 1,3-Butadiene | ND | 0.200 | -- | ND | 0.442 | -- | U |
| 74-83-9 | Bromomethane | ND | 0.200 | -- | ND | 0.777 | -- | U |
| 75-00-3 | Chloroethane | ND | 0.200 | -- | ND | 0.528 | -- | U |
| 64-17-5 | Ethanol | 5.44 | 2.50 | -- | 10.2 | 4.71 | -- | |
| 593-60-2 | Vinyl bromide | ND | 0.200 | -- | ND | 0.874 | -- | U |
| 67-64-1 | Acetone | 8.31 | 1.00 | -- | 19.7 | 2.38 | -- | |
| 75-69-4 | Trichlorofluoromethane | 0.289 | 0.200 | -- | 1.62 | 1.12 | -- | |
| 67-63-0 | Isopropanol | 0.624 | 0.500 | -- | 1.53 | 1.23 | -- | |
| 75-35-4 | 1,1-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | U |
| 75-09-2 | Methylene chloride | ND | 1.00 | -- | ND | 3.47 | -- | U |
| 107-05-1 | 3-Chloropropene | ND | 0.200 | -- | ND | 0.626 | -- | U |
| 75-15-0 | Carbon disulfide | ND | 0.200 | -- | ND | 0.623 | -- | U |
| 76-13-1 | Freon-113 | ND | 0.200 | -- | ND | 1.53 | -- | U |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | U |
| 75-34-3 | 1,1-Dichloroethane | ND | 0.200 | -- | ND | 0.809 | -- | U |
| 1634-04-4 | Methyl tert butyl ether | ND | 0.200 | -- | ND | 0.721 | -- | U |
| 108-05-4 | Vinyl acetate | ND | 0.200 | -- | ND | 0.704 | -- | U |
| 78-93-3 | 2-Butanone | 0.874 | 0.200 | -- | 2.58 | 0.590 | -- | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 0.200 | -- | ND | 0.793 | -- | U |
| 141-78-6 | Ethyl Acetate | ND | 0.500 | -- | ND | 1.80 | -- | U |
| 67-66-3 | Chloroform | ND | 0.200 | -- | ND | 0.977 | -- | U |
| 109-99-9 | Tetrahydrofuran | ND | 0.200 | -- | ND | 0.590 | -- | U |
| 107-06-2 | 1,2-Dichloroethane | ND | 0.200 | -- | ND | 0.809 | -- | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202360 |
| Project Name | : BEST CLEANERS | Project Number | : |
| Lab ID | : L1202360-06 | Date Collected | : 02/08/12 13:12 |
| Client ID | : GER-AA | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/10/12 21:38 |
| Sample Matrix | : AIR | Dilution Factor | : 1 |
| Analytical Method | : 48,TO-15 | Analyst | : RY |
| Lab File ID | : R219110 | Instrument ID | : AIRPIANO2 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 110-54-3 | n-Hexane | 0.275 | 0.200 | -- | 0.969 | 0.705 | -- | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 0.200 | -- | ND | 1.09 | -- | U |
| 71-43-2 | Benzene | 0.373 | 0.200 | -- | 1.19 | 0.639 | -- | |
| 56-23-5 | Carbon tetrachloride | ND | 0.200 | -- | ND | 1.26 | -- | U |
| 110-82-7 | Cyclohexane | ND | 0.200 | -- | ND | 0.688 | -- | U |
| 78-87-5 | 1,2-Dichloropropane | ND | 0.200 | -- | ND | 0.924 | -- | U |
| 75-27-4 | Bromodichloromethane | ND | 0.200 | -- | ND | 1.34 | -- | U |
| 123-91-1 | 1,4-Dioxane | ND | 0.200 | -- | ND | 0.721 | -- | U |
| 79-01-6 | Trichloroethene | ND | 0.200 | -- | ND | 1.07 | -- | U |
| 540-84-1 | 2,2,4-Trimethylpentane | ND | 0.200 | -- | ND | 0.934 | -- | U |
| 142-82-5 | Heptane | 0.256 | 0.200 | -- | 1.05 | 0.820 | -- | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | U |
| 108-10-1 | 4-Methyl-2-pentanone | 0.268 | 0.200 | -- | 1.10 | 0.820 | -- | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 0.200 | -- | ND | 0.908 | -- | U |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 0.200 | -- | ND | 1.09 | -- | U |
| 108-88-3 | Toluene | 3.20 | 0.200 | -- | 12.0 | 0.754 | -- | |
| 591-78-6 | 2-Hexanone | ND | 0.200 | -- | ND | 0.820 | -- | U |
| 124-48-1 | Dibromochloromethane | ND | 0.200 | -- | ND | 1.70 | -- | U |
| 106-93-4 | 1,2-Dibromoethane | ND | 0.200 | -- | ND | 1.54 | -- | U |
| 127-18-4 | Tetrachloroethene | 3.58 | 0.200 | -- | 24.3 | 1.36 | -- | |
| 108-90-7 | Chlorobenzene | ND | 0.200 | -- | ND | 0.921 | -- | U |
| 100-41-4 | Ethylbenzene | 0.414 | 0.200 | -- | 1.80 | 0.869 | -- | |
| 106-42-3/108-38-3 | p/m-Xylene | 1.47 | 0.400 | -- | 6.38 | 1.74 | -- | |
| 75-25-2 | Bromoform | ND | 0.200 | -- | ND | 2.07 | -- | U |
| 100-42-5 | Styrene | 0.220 | 0.200 | -- | 0.937 | 0.852 | -- | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 0.200 | -- | ND | 1.37 | -- | U |
| 95-47-6 | o-Xylene | 0.440 | 0.200 | -- | 1.91 | 0.869 | -- | |
| 622-96-8 | 4-Ethyltoluene | ND | 0.200 | -- | ND | 0.983 | -- | U |

# Form 1
# Volatile Organics

| | | | |
|---|---|---|---|
| Client | : Genesis Engineering & Redevelopment | Lab Number | : L1202360 |
| Project Name | : BEST CLEANERS | Project Number | : |
| Lab ID | : L1202360-06 | Date Collected | : 02/08/12 13:12 |
| Client ID | : GER-AA | Date Received | : 02/09/12 |
| Sample Location | : LIC, NY | Date Analyzed | : 02/10/12 21:38 |
| Sample Matrix | : AIR | Dilution Factor | : 1 |
| Analytical Method | : 48,TO-15 | Analyst | : RY |
| Lab File ID | : R219110 | Instrument ID | : AIRPIANO2 |
| Sample Amount | : 250 ml | GC Column | : RTX-1 |

| | | ppbV | | | ug/m3 | | | |
|---|---|---|---|---|---|---|---|---|
| CAS NO. | Parameter | Results | RL | MDL | Results | RL | MDL | Qualifier |
| 108-67-8 | 1,3,5-Trimethybenzene | ND | 0.200 | -- | ND | 0.983 | -- | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 0.200 | 0.200 | -- | 0.983 | 0.983 | -- | |
| 100-44-7 | Benzyl chloride | ND | 0.200 | -- | ND | 1.04 | -- | U |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | U |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | U |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 0.200 | -- | ND | 1.20 | -- | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 0.200 | -- | ND | 1.48 | -- | U |
| 87-68-3 | Hexachlorobutadiene | ND | 0.200 | -- | ND | 2.13 | -- | U |