REMEDIAL INVESTIGATION REPORT
CAROL CLEANERS/ROUSE STATEN ISLAND MALL
STATEN ISLAND, NEW YORK

NYSDEC IHWDS SITE #2-43-020

Prepared for:

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1.0 INTRODUCTION

On behalf of General Growth Properties, Inc. (GGP; formerly The Rouse Company [Rouse]), the hydrogeological and environmental consulting firm of Leggette, Brashears and Graham, Inc. (LBG) has prepared this Remedial Investigation Report (RIR) as a summary of supplemental activities conducted in connection with the Carol Cleaners/Rouse Staten Island Mall [the Site], located at 280 Marsh Avenue in Staten Island, New York (Figure 1). The RIR activities were completed in accordance with the Remedial Investigation Workplan (RIW) Addendum dated April 7, 2010, and as approved by the New York State Department of Environmental Conservation (NYSDEC) on October 14, 2010. The RIW addendum work focused on developing a better understanding of the on-site subsurface mechanisms for chlorinated volatile organic compound (CVOS) fate and transport [specifically, the dry-cleaning solvent tetrachloroethene (PCE) and its breakdown products]; further delineation of the extent of groundwater impacted by CVOCs; and preliminary identification of conceptual methods for preventing future CVOC vapor intrusion into the indoor air space of respective Site tenants. These activities were performed under an existing Order On Consent between the NYSDEC and GGP (formerly Rouse), effective October 14, 2002 and recently updated by the Order On Consent effective October 5, 2011.

1.1 Background

As per the 2002 Order On Consent, an initial interim remedial investigation (IRM) was previously completed by LBG on behalf of GGP. The IRM focused on identifying and locating the general source area for PCE and related CVOCs detected in the subsurface environment at the Site. As part of the IRM-related activities, soil and groundwater samples were collected at locations proximal to the Carol Cleaners and the Damowa Laundry & Dry Cleaning (aka Tumble Dry Cleaners) facilities (see Figure 2). The work completed as part of the past IRM ("Task 1" through "Task 6") was conducted to address the following: 1) the vertical and horizontal extent of CVOCs in soil in the area of the Carol Cleaners and Tumble Dry Cleaners facilities; 2) determination of the existence of CVOC-related dense non-aqueous phase liquid (DNAPL) at the potential release location, and, if detected, the potential for the local overburden materials (e.g., soil) and underlying bedrock surface to influence DNAPL migration; and 3) delineation of the current extent and migration route of CVOCs in groundwater at the Site.

The IRM results indicated that PCE was the only CVOC detected in any of the collected soil samples that occurred at a concentration above its respective "soil cleanup objective" [1.40 parts per million (ppm) as defined by NYSDEC "Technical and Administrative Guidance Manual (TAGM) 4046", Volatile Organic Compounds (VOCs) Soil Cleanup Criteria Table 1/ Recommended Soil Cleanup Objectives (RSCO)]. The detected exceedance was minor (2.05

ppm versus the 1.40 ppm RSCO) and isolated, occurring in only one soil sample ("B-1-6") that was collected at a depth of about 6-feet below grade (ft bg), which was just above the encountered local groundwater surface. The boring (B-1) from which the sample was collected, was completed at a location proximal to the identified suspected "source area", that consisted of an area of broken-up asphalt near the discharge point for a building rooftop storm water leader at the rear of the Carol Cleaners [near Monitor Well MW-3 (Figure 2)]. No remediation of the overburden material near Boring B-1 (the "source area") was considered warranted based on: the relatively low concentration of PCE detected in the overburden at depth (about 6 feet) in the source area; the comparatively lower concentrations of PCE (below the TAGM objective of 1.4 ppm) detected at the numerous surrounding boring locations; the composition of the overburden (primarily fine sand and silt); the absence of CVOC DNAPL; and the prevalence of primarily impervious surfaces at the Site.

Results of groundwater sampling conducted between 1995 and 2004, indicated the presence of one or more CVOCs at concentrations above NYSDEC groundwater standards, as defined by 6 NYCRR Part 703, were detected at Monitor Wells MW-2, MW-3, MW-4, MW-5, MW-7, MW-8 and MW-9 (Table 1; Figure 2). The detected elevated CVOCs consisted of PCE, and its breakdown products: trichloroethylene (TCE); cis-1,2-dichloroethylene (cis-1,2-DCE); and vinyl chloride (VC). Based on the determined groundwater flow direction and distribution of the respective CVOCs in groundwater at the Site, the apparent source of the detected compounds at Monitor Wells MW-3, MW-4, MW-5, MW-7, MW-8 and MW-9 occurred proximal to the Carol Cleaners facility and was of a limited extent.

Based on in-situ testing conducted at several of the on-site monitor wells during the IRM activities, it was determined that the hydraulic conductivity of the overburden formation at the Site is low to moderate. As such, groundwater and CVOC movement through the overburden on-site is expected to occur at a slow rate, which in turn should afford greater potential for natural degradation (e.g., reductive dechlorination) of the respective constituents to occur. The analytical results of the groundwater sampling conducted since 1995 indicate that PCE related to the on-site source area is clearly undergoing reductive dechlorination (i.e., breakdown to TCE, cis-1,2-DCE and VC), which substantiates the occurrence of natural degradation at the Site. The occurrence of natural degradation of PCE is further corroborated by the detection of methane, ethane and/or ethene in groundwater at most of the monitor wells, specifically those which are located the closest with respect to groundwater flow direction to the source area (Carol Cleaners).

Following completion of the IRM activities, a Remedial Investigation (RI) was performed between 2006 and 2008. The work completed as part of the RI focused on

establishing the current soil vapor/indoor air quality, and refining previous assessment findings regarding soil and groundwater conditions in the vicinity of the Carol Cleaners portion of the mall building. The RI work also assessed the potential for use of monitored natural attenuation (MNA) as an appropriate remedial measure for the Site. The analytical results for the indoor air and sub-slab air samples collected at the Babies R Us, SI Shoe Repair, Carol Cleaners, Mon Amie Nails and Carvel spaces indicated that the appropriate action for the respective tenant spaces were to reduce exposure to PCE and TCE. Soil samples collected as part of the RI work exhibited no evidence of DNAPL or CVOC concentrations above the respective NYSDEC RSCOs with most of the analytical results indicating non-detectable concentrations. In addition to the soil borings, seven additional monitor wells were installed at the Site as part of the RI activities including one shallow bedrock monitor well (MW-3D). The results of the subsequent round of groundwater sampling indicated that the CVOC plume originating near the Carol Cleaners facility was generally following the local direction of groundwater flow towards Platinum Avenue, and may be affected by local subsurface utilities.

Based on the RI findings, LBG recommended continued groundwater monitoring to confirm the rate of natural degradation and further investigation of the role that on-site and nearby subsurface utilities potentially play in connection with the migration of CVOCs in groundwater in the vicinity of the Site and Platinum Avenue. The following RI report summarizes recent field activities conducted in connection with the recommendations from the RI report submitted in 2008, and those to further investigate the CVOC impacted groundwater along Platinum Avenue.

2.0 SCOPE OF SUPPLEMENTAL RI WORK

Based on the results of the previous IRM, the subsequent RI activities conducted between 2006 and 2008, and related discussions with the NYSDEC, LBG on behalf of GGP presented a Remedial Investigation Workplan (RIW) that proposed supplemental RI activities intended to: assess the potential for impacts from subsurface utility routes in the migration and extent of the CVOC plume; to further delineate the extent of CVOC-impacted groundwater; and to undertake an evaluation of current indoor air and sub-slab vapor conditions in the tenant spaces proximal to the Carol Cleaner.

As part of the proposed RIW activities, soil borings were advanced in May and July 2011, at on-site and off-site locations. The on-site locations corresponded to the Site storm water system route, while the off-site locations corresponded to utility routes beneath Platinum

Avenue. In addition to the respective soil borings, water samples were collected from the on-site storm drain catch basins for the same purpose.

Following completion of the soil and storm water sampling program, four additional monitor wells (MW-16, MW-17, MW-18 and MW-19) were installed in July 2011 at off-site locations to further address plume delineation requirements as per the RIW addendum. Following installation of the additional monitor wells, a round of groundwater sampling inclusive of both previously installed and newly installed monitor wells was performed in August 2011. A second, confirmatory round was scheduled for October 2011, and the corresponding results will be provided sometime in November 2011.

As per the RIW addendum, the conceptual design of a sub-slab depressurization (SSD) system for the Babies R Us and adjacent strip mall space (e.g., Carol Cleaners) was developed based on an indoor air diagnostic program completed in November 2010. This RIR presents the details of the diagnostic testing performed in order to design an appropriate SSD system and also presents a proposed SSD design.

2.1 Soil Boring Program

2.1.1 Soil Borings – May 2011

Six (6) soil borings (SB-1 through SB-6) were advanced in May 2011 by Summit Drilling Co. of Bridgewater, New Jersey using a Geoprobe® rig. The borings were advanced at locations intended to assess the potential for CVOC-impacts from on-site subsurface utility routes, specifically storm water lines and as such were advanced in the parking areas on the western and southern sides of the mall building proximal to storm drain catch basins (Figure 3). The locations of the respective soil borings were surveyed in September 2011 by Volosin Associates, LLC.

Due to equipment-related limitations, each of the borings could only be advanced to the respective completion depths ranging from approximately 6 to 9 feet below grade (ft bg). Soil samples were continuously collected from the respective boreholes using a macro-core device with dedicated, disposable, clear-acetate sleeves. All drilling and sample collection equipment was decontaminated before and between set-ups at each boring location. All of the resulting boreholes were backfilled with bentonite, and cold patch /concrete was used to finish the respective grade surfaces.

The subsurface materials and conditions encountered at each boring location (e.g., depth to groundwater and bedrock) were characterized by the on-site LBG hydrogeologist. The grain-size makeup of the encountered overburden materials were described using the Unified Soil

Classification System and the Modified Burmister Method. The respective soil boring logs are provided in Appendix I. The LBG hydrogeologist also recorded any evidence of odor, staining, and VOC presence (determined using a PID). Samples exhibiting elevated VOC concentrations (as per the PID) were screened for DNAPL using hydrophobic dye (i.e., Sudan IV). Cuttings generated during the completion of the respective borings were placed in 55-gallon sealable steel drums, labeled and staged in a previously determined location for appropriate disposal at a later time.

The overburden materials encountered at each of the boring locations were consistent with those encountered during previous on-site subsurface explorations elsewhere at the Site. The naturally-occurring materials generally consisted mainly of fine grain-size deposits of clay, silt, and fine sand with varying amounts of gravel. A total of nine (9) soil samples were collected for subsequent laboratory analyses at depths corresponding to immediately above the encountered groundwater surface (typically about 5 ft bg) and/or above refusal at each boring location. The respective soil samples along with QA/QC blanks (field and trip) were submitted for laboratory analyses in laboratory provided containers. No soil samples were collected from Boring SB-3 due to refusal of the Geoprobe at a shallow depth of 3 ft bg.

A written chain-of-custody record was maintained by the on-site LBG hydrogeologist to trace the collection, possession, and handling of each sample from the time of its collection to its final fate, including all transfers, storage, analysis, and ultimate disposition by the laboratory. The collected samples and QA/QC blanks were submitted to Accutest Laboratories (Accutest) of Dayton, New Jersey (an NYSDEC Certified Laboratory), and analyzed for VOCs using EPA Method 8260B, and for total organic carbon (TOC). The detection limits used by Accutest for Method 8260B were lower than the respective regulatory action levels for the corresponding VOCs. The data were reviewed by Accutest to confirm compliance with NYSDEC "Guidance for the Development of Data Usability Summary Reports" (DUSR). The laboratory data package is provided in Appendix II.

A summary of the analytical results is provided as Table 2. The analytical results for the respective soil samples did not indicate the occurrence of any of the CVOCs of interest at concentrations in exceedance of the respective NYSDEC Restricted Use Commercial Soil Cleanup Criteria (SCOs). No evidence of DNAPL was encountered at any of the boring locations.

2.1.2 Soil Borings – July 2011

Five (5) soil borings (SB-7 through SB-11) were advanced in July 2011 by Summit Drilling Co. of Bridgewater, New Jersey using a hollow-stem auger rig. The borings were advanced at locations intended to assess the potential for CVOC-impacts from off-site subsurface

utility routes, specifically the sanitary sewer line running beneath Platinum Avenue. As such, one soil boring (SB-7) was advanced in the entry to the mall building from Platinum Avenue and the remaining four soil borings (SB-8 through SB-11) were advanced in a line along Platinum Avenue (Figure 3). The locations of the respective soil borings were surveyed in September 2011 by Volosin Associates, LLC.

Each soil boring was advanced from grade to refusal, which typically corresponded to the top of the local bedrock surface. Soil samples were continuously collected from the respective boreholes using a split-spoon device. All drilling and sample collection equipment was decontaminated before and between set-ups at each boring location. All of the resulting boreholes were backfilled with bentonite, and cold patch /concrete was used to finish the respective grade surfaces.

The subsurface materials and conditions encountered at each boring location (e.g., depth to groundwater and bedrock) were characterized by the on-site LBG hydrogeologist. The grain-size makeup of the encountered overburden materials were described using the Unified Soil Classification System and the Modified Burmister Method. The respective soil boring logs are provided in Appendix I. The LBG hydrogeologist also recorded any evidence of odor, staining, and VOC presence (determined using a PID). Samples exhibiting elevated VOC concentrations (as per the PID) were screened for DNAPL using hydrophobic dye (i.e., Sudan IV). Cuttings generated during the completion of the respective borings were placed in 55-gallon sealable steel drums, labeled and staged in a previously determined location for appropriate disposal at a later time.

As with previous borings, the overburden materials encountered at each of the boring locations was consistent with those encountered during previous subsurface explorations at the Site. The naturally-occurring materials generally consisted mainly of fine grain-size deposits of clay, silt and fine sand with varying amounts of gravel. The encountered depth to groundwater and bedrock ranged from about 7 to 13 ft bg, and 15 to 18 ft bg, respectively. Soil samples were collected at the interval immediately above the encountered groundwater surface and the interval immediately above the bedrock surface at each boring location. The collected soil samples along with QA/QC blanks (field and trip) were submitted for laboratory analyses in laboratory provided containers.

A written chain-of-custody record was maintained by the on-site LBG hydrogeologist to trace the collection, possession, and handling of each sample from the time of its collection to its final fate, including all transfers, storage, analysis, and ultimate disposition by the laboratory. The collected samples and QA/QC blanks were submitted to Accutest and analyzed for VOCs

using EPA Method 8260B, and for total organic carbon (TOC). The detection limits used by Accutest for Method 8260B were lower than the respective regulatory action levels for the corresponding VOCs. The data were reviewed by Accutest to confirm compliance with NYSDEC DUSR. The laboratory data package is provided in Appendix III.

A total of ten (10) soil samples were collected from the soil borings conducted in Platinum Avenue. A summary of the analytical results is provided as Table 2. The analytical results for the respective soil samples did not indicate the occurrence of any of the CVOCs of interest at concentrations in exceedance of the respective NYSDEC Restricted Use Commercial Soil Cleanup Criteria (SCOs). No evidence of DNAPL was encountered at any of the boring locations.

2.2 Storm Drain Sampling Program

On May 13, 2011 six (6) storm drain catch basins were sampled. The respective catch basins are identified as Storm Drain 1 through Storm Drain 4 (labeled as CB-1 through CB-4) and Storm Drains 6 and 7 (labeled as CB-6 and CB-7). Storm Drain 5 (labeled as CB-5) could not be sampled as there was no standing water present at the time of sampling. The locations of the storm drains are provided on Figure 3. The storm drain system flows from CB-4 to CB-8 towards the south, then towards the northwest. The bottom depths of the respective storm drain catch basins range between 3.0 ft bg at catch basin CB-3 to 6.28 ft bg at catch basin CB-7. The respective storm drain catch basin location and grade elevations were surveyed in September 2011 by Volosin Associates, LLC. Using the survey and depth information, the respective catch basin bottom elevations were established (Table 3). Based on the respective calculations, the corresponding storm drain piping and catch basin bottom elevations are higher than the proximal groundwater elevation as determined from the nearby monitor wells.

A total of six (6) water samples were collected from the on-site catch basins with dedicated Teflon bailers. The samples were transferred directly into laboratory supplied bottles and placed in a cooler with ice for later laboratory analysis. The collected samples were submitted along with the soil boring samples collected on May 12, 2011 to Accutest for VOC analysis via EPA Method 8260. Laboratory QA/QC blanks (field and trip) were submitted and analyzed using Method 8260 as part of the sampling program. The data were reviewed by Accutest to confirm compliance with NYSDEC DUSR. The laboratory data package and is provided in Appendix II.

The analytical results for the respective surface water samples indicated exceedances of the NYSDEC Surface Water/Groundwater Standards for PCE, TCE, cis-1,2-DCE, and toluene as shown in Table 4. The concentrations of PCE of 39.6 ug/L, 59.9 ug/L and 30.5 ug/L exceeded the standard of 5 ug/L or parts per billion (ppb) at catch basins CB-1, 2 and 6, respectively. The

concentrations of TCE of 6.5 ug/L and 9 ug/L exceeded the standard of 5 ug/L at catch basins CB-1 and 2, respectively. The concentrations of cis-1,2-DCE of 17.8 ug/L, 23.1 ug/L, 10.7 ug/L, and 12.5 ug/L exceeded the standard of 5 ug/L at catch basins CB-1, 2, 3 and 6, respectively. The concentration of toluene of 7.6 ug/L exceeded the standard for toluene of 5 ug/L at catch basin CB-4.

The CVOC-impacted surface water detected in catch basins CB-1, 2, 3 and 6 occurs at locations corresponding to the eastern and southern portions of the Site. Though the soil samples collected from borings located adjacent to the respective storm drains did not exhibit CVOC concentrations above the respective SCOs, the comprising compounds of PCE, TCE, cis-1,2-DCE, and VC were still detected. Based on the fact that the surface water in the storm drains is higher in elevation than the surrounding groundwater it does appear that CVOCs in the storm water system have impacted the on-site overburden groundwater and that historical dumping of CVOCs into the storm drain took place at some point in time.

2.3 Supplemental Groundwater Sampling

2.3.1 Monitor-Well Installations

As part of the RIW addendum, four (4) monitor wells (MW-16, MW-17, MW-18 and MW-19) were installed off-site, under New York City Department of Transportation (NYCDOT) Street Opening Permit # S01-2011196-014, along Platinum Avenue at locations as close as possible to the southern Pergament property boundary (Figure 4). These monitor wells were installed in order to provide for a more comprehensive delineation of the off-site CVOC-impacted groundwater. All existing and newly installed on-site and off-site monitor wells were surveyed in September 2011 by Volosin Associates, LLC.

The monitor well boreholes were advanced to the respective bedrock surface by Summit Drilling Co. using hollow stem augers. As per the RIW addendum, the respective monitor wells were constructed with 2-inch diameter PVC riser and screen set. Each monitor well was constructed with five feet of screen with the bottom set immediately at the encountered bedrock surface, and surrounded by a gravel pack overlain by a bentonite seal. Soil samples retrieved during the drilling of the respective monitor-well boreholes were screened for VOCs using a PID. Samples exhibiting elevated VOC concentrations (as per the PID) were screened for DNAPL using hydrophobic dye (i.e., Sudan IV). No evidence of DNAPL was encountered during advancement of any of the monitor well boreholes. Each completed monitor well was developed, and the purge water contained on-site for future appropriate disposal. Activities associated with the installation of each of the monitor wells were implemented following applicable NYSDOH Community Air Monitoring Plan (CAMP) guidelines.

Monitor Wells MW-16, MW-17, MW-18 and MW-19 were completed at depths of 28 ft bg, 26 ft bg, 20.5 ft bg and 20.5 ft bg, respectively. The depths to water encountered at Monitor Wells MW-16, MW-17, MW-18 and MW-19 were approximately 9.5 ft bg, 8.4 ft bg, 9.5 ft bg, and 10.0 ft bg, respectively. The construction information for all of the on-site and off-site monitor wells completed to date is summarized in Table 5. Geologic logs for each of the newly installed monitor wells (MW-16, MW-17, MW-18 and MW-19) are provided in Appendix IV.

2.3.2 Groundwater Sampling

A comprehensive round of groundwater samples was collected between August 2 and 4, 2011 from the existing and newly installed monitor wells with the exception of Monitor Well MW-14 (Figure 4). The United States Environmental Protection Agency (USEPA) "low-flow" purging and sampling method, was employed using a peristaltic pump at each of the monitor wells.

Prior to purging, the depth to water was measured at each of the candidate monitor wells utilizing a combination electric water-level/DNAPL interface probe, accurate to the nearest 0.01-feet. The collected groundwater levels were subsequently converted to groundwater elevations using survey information for the respective monitor wells (Table 5). The subsurface cover for Monitor Well MW-14 was damaged and could not be opened at the time of sampling. Therefore a water level measurement and groundwater sample could not be collected during the August 2011 sampling event. Based on the distribution of the respective groundwater elevations, the general direction of groundwater flow is toward the southwest (Figure 4). This direction is relatively consistent with the historic direction determined for the Site. The groundwater elevation data also indicate that the local vertical flow gradient is downward from the overburden into the bedrock (i.e., Monitor Wells MW-3 and MW-3D).

During purging, the temperature, pH, conductivity, turbidity, dissolved oxygen concentration, and redox potential of the discharged water were monitored using a Horiba U-22 flow-through cell water-quality meter. The respective readings were recorded on the low-flow groundwater sampling log sheets as provided in Appendix V. The purge water was contained in drums on-site for future disposal.

Groundwater samples were collected from the peristaltic pump discharge downstream of the Horiba flow-through cell, and placed directly into laboratory supplied bottles. The collected samples were then submitted to Accutest for analysis of VOCs via EPA Method 8260. Samples were also analyzed for natural-degradation indicator parameters including: methane and ethane/ethene via EPA Method 8015; hardness; and chloride. Sulfate and carbon dioxide concentrations in the discharge water were determined in the field using the Horiba water-quality meter. Laboratory QA/QC blanks (field and trip) were submitted and analyzed using Method

8260 as part of the sampling program. The analytical data was reviewed by Accutest in accordance with NYSDEC DUSR. The laboratory data package is provided in Appendix VI.

Based on the analytical results for the nineteen groundwater samples collected during the August 2011 sampling round, one or more CVOCs were detected at all the sampled monitor well locations with the exception of Monitor Wells MW-1, MW-6R and MW-15 (Table 6). Exceedances of the respective NYSDEC Groundwater Standards were identified for one of more CVOCs at Monitor Wells MW-2, MW-3, MW-4, MW-5, MW-7, MW-8, MW-9, MW-11, MW-12, MW-13 and newly installed Monitor Wells MW-16, MW-17, MW-18 and MW-19. Concentrations of PCE ranged from not detected at Monitor Wells MW-1, MW-6R, MW-10 and MW-15 to 2,490 ug/L (ppb) at Monitor Well MW-4. The occurrence of the related "breakdown" CVOCs (TCE, cis-1,2-DCE, and VC) at concentrations above the respective groundwater standards was generally detected in those monitor wells located downgradient (southwest) of Carol Cleaners. There were no exceedances of CVOCs detected in the groundwater sample collected from bedrock Monitor Well MW-3D.

The distribution of PCE concentrations and its breakdown CVOCs in groundwater occurring during the August 2 – 4, 2011 sampling round are presented on Figure 5. Based on the historic (Table 1) and most recent analytical data, the CVOC distribution in groundwater and the encompassing PCE plume is generally following the local direction of groundwater flow towards Platinum Avenue. The related distribution of breakdown constituents including TCE, cis-1,2-DCE and VC along Platinum Avenue confirms this general migration direction. However, as presented in the RI, the plume migration route also appears to reflect a localized hydraulic influence corresponding to the route of Platinum Avenue.

The analytical results regarding the corresponding reductive-dechlorination indicator parameters are summarized in Table 7. The analytical results indicate that groundwater at the locations of most of the existing and newly installed monitor wells exhibit the occurrence of methane, ethane and/or ethene, which indicates that the corresponding PCE and related CVOCs are undergoing some degree of reductive dechlorination. Monitor Wells MW-5 and MW-7 were the exception where methane, ethane and ethene were not detected, however these wells are located on the edge of the CVOC plume and as such do not have much contributory source mass. As described previously Monitor Well MW-14 was not accessible during the August sampling round, however, PCE and related CVOCs historically have not been detected at this monitor well.

2.4 Hydrogeologic Characterization

In order to further characterize the on-site and off-site subsurface environment, and its related influence on groundwater flow and CVOC migration, in-situ hydraulic testing and mapping of local geologic formations were completed using the information gleaned from the recently completed borings and expanded monitor-well network. To this end, "slug tests" were performed on a select number of monitor wells located about the CVOC plume area. Additionally, a hydrogeologic cross-section was prepared utilizing several existing and newly installed monitor wells to illustrate the sub-surface conditions at the Site with respect to the CVOC plume. These tasks and the results are further described below.

2.4.1 Hydraulic Conductivity

Slug testing was previously conducted at the Site in November 2002. Based on the slug testing performed in 2002, it was determined that the hydraulic conductivity of the overburden materials underlying the Site generally ranged from 0.06 feet per day (ft/d) to 0.7 ft/d and are typical for fine sand and mixtures of fine sand and silt that primarily comprise the overburden.

Additional slug testing was performed in October 2011 utilizing on-site Monitor Wells MW-4, MW-5, MW-6R, MW-15, and off-site Monitor Wells MW-11 and MW-16. The tests were conducted by rapidly introducing a solid, 2½" diameter inert PVC "slug" beneath the standing groundwater within the respective monitor well. A complimentary test was subsequently completed as the slug was removed from the monitor well. The corresponding rise and fall of the standing column water level was monitored at rapid intervals using a pressure transducer and data logger. The collected data were analyzed using the Bouwer-Rice method. The respective slug-test data and analysis results are summarized in Appendix VII.

The slug test analysis results indicate a range of on-site hydraulic conductivity values of about 0.4 ft/d at Monitor Well MW-6R to 1.8 ft/d at Monitor Well MW-15. The hydraulic conductivity values for off-site overburden materials underlying Platinum Avenue ranged from about 29.2 ft/d at Monitor Well MW-11 to 7.0 ft/d at Monitor Well MW-16. The contrast between the ranges of on-site overburden and off-site hydraulic conductivity values appear to reflect an increase in the amount of coarse sand and gravel in the deeper portion of the overburden that occurs to the west-southwest of the Site. As such, groundwater movement through the on-site overburden is anticipated to occur at a slower rate than that occurring off-site along Platinum Avenue. However, the relative difference is not significant enough to cause the on-site overburden to be any more or less favorable than the off-site overburden to naturally occurring reductive dechlorination.

2.4.2 Bedrock Surface/Geologic Cross-Section

As part of the soil boring completion and monitor-well installation activities implemented since the 1990s, the respective encountered materials and depth to bedrock were characterized by an LBG hydrogeologist. As such the depth to bedrock encountered at the Site ranges from approximately 12 ft bg at Monitor Well MW-2 to 28 ft bg at Monitor Well MW-16. The encountered depths to bedrock were converted to approximate elevations and water used to map the surface elevation of the bedrock across the Site (Figure 6). Based on the respective map, the corresponding bedrock surface generally slopes downwards in elevation from the vicinity of Monitor Well MW-1 where the bedrock elevation is 31 feet above mean sea level (famsl) towards the southwest at Monitor Well MW-16 where the bedrock elevation is 2 famsl. In addition to the general slope in surface towards the southwest, three localized "channels" occur in the bedrock surface in the vicinity of Platinum Avenue. These channels are anticipated to impart a localized influence on the basal groundwater flow in the overburden.

Besides determining the local bedrock surface, the boring and monitor-well logs were used to prepare a hydrogeologic cross-section (A-A') that illustrates the vertical distribution of encountered surface conditions across the Site (Figure 7). The respective cross-section illustrates the general slope of the bedrock surface from northeast to southwest, and a similar slope in groundwater surface. The cross-section also illustrates the increase in thickness of the naturally occurring overburden materials (primarily fine sand and silt) from northeast to southwest.

2.5 CVOC Plume Delineation

As of the 2008 groundwater sampling event, it was concluded that the local on-site storm water system could be locally influencing CVOC migration at the Site. As described in Section 2.3, water samples collected from the storm drain system catch basins on the eastern and southern side of the mall building exhibited PCE concentrations ranging from "not detected" at CB-4 (upgradient of the CVOC-impacted groundwater plume) to 59.9 ug/L and 39.6 ug/L identified at CB-2 and CB-1, respectively. It should be noted that though the storm water sampled at CB-1 exhibited a PCE concentration of 39.6 ug/L, the adjacent monitor well (MW-6R) did not exhibit the presence of PCE or any of the related VOCs. Given that most of the soil samples collected above the groundwater surface and adjacent to the on-site storm water catch basins and sanitary sewer lines along Platinum Avenue exhibited slightly detectable CVOC concentrations (e.g., CB-4 and Boring SB-6), it appears that a link exists between the respective utility lines and the respective CVOC plume.

Based on the distribution of PCE and related CVOCs in groundwater, the corresponding plume is generally following the local direction of groundwater flow from the Site towards

Platinum Avenue. The wide-spread occurrence of PCE breakdown constituents (TCE, cis-1,2-DCE and VC) occurring in groundwater along Platinum Avenue substantiates the plume migration route and persistence of reductive dechlorination along its extent. Based on historical and recent sampling results, it can be concluded that: the on-site CVOC-impacted groundwater has been delineated in the overburden; the shallow bedrock groundwater underlying the Site near the Carol Cleaners (MW-3D) exhibits minimal CVOC impact (all detections below the respective NYSDEC Groundwater Standards); and no evidence of DNAPL has been found on-site. The off-site portion of the plume exhibits elevated CVOC concentrations to the west of the intersection of Platinum Avenue and Staten Island Mall Drive, and includes a localized "hot spot" of PCE-impacted groundwater. The absence of DNAPL and occurrence of an off-site "hot spot" in the plume suggest an intermittent source of PCE.

The groundwater data collected to date, suggests that the initially identified PCE located at the rear of Carol Cleaners in the area of Monitor Well MW-3 has diminished in influence. However, the historic data also suggest that either the initially identified "source area" has shifted from the vicinity of Monitor Well MW-3 or has been replaced and/or supplemented by another source near Monitor Well MW-4 along Platinum Avenue. Furthermore, the apparent shift and/or addition of a "source area" appear to be influencing PCE concentrations near Monitor Well MW-13. Based on the recent storm water and soil boring sampling, in conjunction with the August 2011 monitor well sampling round, it appears that the shift in CVOC concentration discussed above may be due to contributions from other sources besides Carol Cleaners. Specifically, it appears that PCE discharges to one or more of the on-site storm water system catch basins, this along with the downward bedrock-surface slope and groundwater gradient allows for plume persistence and migration along Platinum Avenue. As such, the existing monitor-well network is adequate for long-term monitoring of CVOC migration and attenuation relative to the Site.

2.6 Sub-Slab Vapor Mitigation

The results of the April 2006 and February 2008 indoor air and sub-slab air sampling summarized in the RI report submitted in 2008, indicated that PCE and related CVOCs have impacted the indoor air in the Babies R Us space, and the adjacent strip mall spaces occupied by SI Shoe Repair, Carol Cleaners, Mon Amie Nails and Carvel. The locations of previously collected indoor air and sub-slab air samples are shown on Figure 8. The areas where of indoor air impacts appear to be greatest are generally coincident with areas corresponding to the nearby groundwater plume. Based on the detected concentrations and respective NYSDOH guidelines, a sub-slab depressurization (SSD) system is proposed to mitigate these impacts.

As per the RIW addendum, sub-slab communication testing was performed in November 2010 at the respective spaces. The testing was completed by Obar Systems of Highland Lakes, New Jersey under the observation of LBG and focused on the preparation of an appropriate SSD system design for the Babies R Us and the adjacent strip mall spaces. The following sections summarize the results of the diagnostic testing and describe the conceptual design aspects of the proposed SSD system for the Site.

2.6.1 General Building Information

The property was developed in the early 1970s in three separate phases as a retail shopping mall (the SI Mall). The portion of the building where Babies R Us, SI Shoe Repair, Carol Cleaners, Mon Amie Nails and Carvel spaces are situated was constructed during the initial phase in the early 1970s. The building is a slab-on-grade steel frame and masonry construction. There is no basement in this building.

In designing an SSD system for a large building such as the SI Mall, it is important to understand the nature and extent of the CVOC source beneath the building, and the range of pressure differentials between the sub-slab vapor and the indoor airspace. Large commercial buildings with sub-slab vapor contaminant issues are often found to have source zones that underlie only a portion of the floor slab and that may be isolated due to footings and other subsurface construction components. Typical indoor air vapor source zones may include areas of contaminated soil above the groundwater surface or the presence of a plume of contaminated groundwater. In developing the system design for a large building it is important to focus the design on areas where depressurization is required in order to intercept contaminated soil vapor before it can enter the building. Soil gas beneath other portions of the building (not overlying or in proximity to the source zone) will eventually become depleted of CVOCs if an effective, source-focused SSD system is put into operation.

2.6.2 SSD System Design Focus Area

An SSD system installation focus area was developed for the portion of the SI Mall building that was based upon the locations of the more elevated PCE concentrations observed in the sub-slab and in an area coincident with the CVOC-impacted groundwater. The comprehensive area includes a portion of the Babies R Us, SI Shoe Repair, Carol Cleaners, Mon Amie Nails and Carvel spaces of the mall building (Figure 9). The affected portions of the building can be best addressed by performing active mitigation efforts on the area where the highest concentrations were observed. Any residual vapors in the more distal portions of the sub-slab area can be depleted during the initial weeks of operation of the mitigation system. Thus, the objective of an appropriately designed SSD system for the space has been determined

to be one that will effectively achieve a vacuum of at least 0.004 inches of water column (inches w.c.) beneath the slab floor within the focus area.

In a large commercial facility such as the SI Mall, the degree of pneumatic communication between the sub-slab vapor environment and the indoor air (and consequently VOC levels in indoor air) can be highly variable because of ventilation changes due to entry dynamics, weather and building operation. Despite these variations, it has been concluded that an SSD system can be implemented to maintain a negative pressure below the slab to mitigate the intrusion of VOCs from soil vapor.

2.6.3 Sub-Slab Communication Testing

In order to prepare a design for the SSD system, sub-slab pneumatic communication tests were performed throughout the SSD focus area. A total of 115 diagnostic measurements were collected at 28 locations in the Babies R Us space, while 23 diagnostic measurements were collected at 10 locations in the adjacent strip mall as shown on Figure 9.

The diagnostics testing consisted of first installing 2.5-inch diameter suction test holes (drilled through the slab). Two suction test holes designated as S1 and S2 were installed at the Babies R Us space and at the adjacent strip mall (S1) as shown on Figure 9. Numerous smaller, 5/16-inch diameter, vacuum observation holes were installed in the Babies R Us space (SSP1 through T26) and in the adjacent strip mall spaces (SSP1 through T10). A specialized Sub-Slab Diagnostic Vacuum (SSDV) capable of pulling a flow of 200 cubic feet per minute (cfm) and vacuum of 45 inches w.c. was used with a variable speed controller to withdraw air from the suction test holes while pressure differential measurements were obtained from the vacuum test holes. Suction tests were conducted at the suction test holes at different operating vacuum levels. The resulting sub-slab vacuum fields were observed in the test holes and recorded for each test. Using these observations, presented in Tables 8 and 9, the relative pneumatic permeability of the underlying soil was evaluated based on the vacuum generated at the suction hole versus the resulting negative pressure observed in the nearest test hole. This information, when plotted relative to a number of commonly used commercial fan curves, was used to determine an appropriate fan and the corresponding system piping necessary to adequately depressurize the sub-slab soil.

2.6.4 Sub-Slab Communication Testing Results

The diagnostic testing in the Babies R Us space indicates that the perimeter of the store has a large volume of available sub-slab air with communication observed beyond 100 feet. The interior of the building has a denser sub-slab material and a lower volume of available sub-slab air with communication observed at 65 feet. The diagnostic testing in the adjacent strip mall

spaces indicate a sub-slab communication of 45 feet in addition to a large volume of air available at the rear of the building which is caused by fill materials settling in the areas of the slab located above grade.

The data showing the results of the radius of influence of the applied vacuum field during pneumatic communication testing at the Babies R Us space and the adjacent strip mall spaces are graphically presented in Figures 10 and 11, respectively. Based on the vacuum extension data observed during the diagnostic testing, a total of six suction points will be required: three suction points at the Babies R Us space; and three suction points in the Carol Cleaners space. One of the suction points will be connected directly to a high volume blower fan to address the large volume of air available at the rear of this space. All together, the suction points will be capable of inducing a pressure change of 0.004 inches w.c. in the focus area.

2.6.5 Determination of the Fan Size

Plots showing the observed pneumatic resistance of the soil relative to the predicted performance of two pre-selected system fans when connected to single suction locations are provided in Figure 12. The fan performance curve is indicated in blue with the soil resistance lines showing the extrapolations of the observed vacuums induced at the various suction points (in cfm) versus the corresponding pressure change observed at the nearest monitoring point (about one foot from the respective suction hole). The fans must be properly sized to produce the necessary negative pressure and flow rate at each of the suction ports. The fan performance plots indicate the required vacuum needed to produce a given airflow at each suction test location as a function of the observed pneumatic permeability of the sub-slab soil. The intersection of the fan curve and the observed soil resistance curve is used to predict the final airflow required to achieve the desired sub-slab pressure at the location tested.

Based on the diagnostic data, two different fan makes were selected due to the differing sub-slab soil characteristics across the focus area for the mitigation system design, and to minimize the number of roof penetrations. Two high output GBR 76 blowers will be utilized to tie in three suction points together at the Babies R Us space and two suction points in the Carol Cleaners space. In addition, a Fan Tech FR-225 will also be utilized at one suction point in the rear of the Carol Cleaners space to handle the higher volume of sub-slab air encountered during the diagnostic testing. The performance chart for the Fan Tech-225 is shown in Figure 13.

2.6.6 SSD Design Parameters and Layout

Based on the results of the diagnostic testing and the effective radius calculations, the property will require as stated previously, a total of six suction points: three suction points at the Babies R Us space; and three suction points in the Carol Cleaners space. One of the suction

points will be connected directly to a high volume blower fan to address the large volume of air available at the rear of this space. All together, the suction points will be capable of inducing a pressure change of 0.004 inches w.c in the focus area.

The SSD system will consist of three suction points in the Babies R Us space connected to a GBR 76 blower fan capable of providing a vacuum of 15 inches w.c. with a flow of 90 cfm or a vacuum of 15 inches w.c. with a flow of 30 cfm at each suction point.

The SSD system in the Carol Cleaners space will consist of two suction points connected to a GBR 76 blower fan capable of providing a vacuum of 22 inches w.c. with a flow of 66 cfm or a vacuum of 22 inches w.c. with a flow of 33 cfm at each suction point. Additionally, a third suction point located on the exterior southern wall of the Carol Cleaners space will be connected to Fantech FR-225 fan operating at a vacuum of 1.5 inches w.c. with a flow of 300 cfm. This third suction point is designed to handle the large volume of sub-slab air encountered in this area during the diagnostic testing. The blower fans will be a mounted on the roof of the mall building. A design drawing showing the location of these features is provided as Figure 14. The installation specifications for the SSD system are provided in Appendix VIII.

3.0 SUMMARY

The results of the recent RI activities completed at the Carol Cleaners/Rouse Staten Island Mall indicate the following:

1) The subsurface conditions encountered as part of the soil boring program indicate the generally dominant occurrence of finer-grain overburden materials consistent with those previously encountered at the Site. The depth to bedrock encountered at the recently installed monitor wells slopes drastically downward to the southwest. The observed conditions did not indicate any evidence of DNAPL in the overburden or at the bedrock interface. The respective analytical results for the collected soil samples indicate that no CVOCs occurred in the unsaturated overburden at concentrations above the respective NYSDEC SCOs. Furthermore, most of the results indicate non-detect concentrations. This is generally consistent with previous soil sampling results from 2002, 2006 and 2008.

2) The groundwater conditions which were determined using the expanded monitor-well network indicate that the general groundwater flow direction in the overburden is towards the southwest, towards Platinum Avenue, and the vertical gradient is downward from overburden to the bedrock.

3) The analytical results for the recent groundwater sampling round indicate the presence of one or more CVOCs at concentrations above the respective NYSDEC Groundwater Standards at Monitor Wells MW-2, MW-3, MW-4, MW-5, MW-7, MW-8, MW-9, MW-11, MW-12, MW-13 and newly installed Monitor Wells MW-16, MW-17, MW-18 and MW-19. The detected elevated CVOCs consist of PCE and its breakdown products: TCE, cis-1,2-DCE, and VC. Based on the limited occurrence of CVOC-impacted soil, absence of DNAPL, the determined groundwater flow direction, and distribution of the respective CVOCs in groundwater at the Site, past activities at the Carol Cleaners space and the on-site storm water system are the apparent source areas associated with the plume emanating from the Site.

4) The historical and recent analytical data indicate that the PCE occurring in the groundwater at the Site is clearly undergoing reductive dechlorination resulting as reflected in the observed formation of the related breakdown compounds (TCE, cis-1,2-DCE and VC). This point is further corroborated by the detection of methane, ethane, and/or ethene at mostly all of the monitor wells. As such, the naturally occurring

subsurface conditions and slow groundwater transport at the Site are conducive to the continued natural degradation of the CVOCs in soil and groundwater associated with the on-site dry cleaner source areas. In addition, these areas do not exhibit evidence of residual source material (DNAPL). Enhancement of the naturally occurring degradation of PCE and related CVOCs is expected to be promoted by focused remediation of the plume area near Carol Cleaners, and possible remedial measures associated with the on-site storm drain system (e.g., catch basin cleaning and sealing).

4.0 RECOMMENDATIONS

Based on the investigation completed to date, the following recommendations are warranted:

1) The extent of the CVOC-impacted groundwater in the vicinity of recently installed monitor wells along Platinum Avenue is adequate for long-term monitoring of the continued migration and attenuation of COVC-impacted groundwater emanating from the Site. However, additional evaluations regarding the role of the on-site storm water system need to be implemented.

2) A feasibility study (FS) focused on removal of residual PCE source(s) associated with the Carol Cleaners and on-site storm water system is warranted. The FS report will be submitted subsequent to this report.

3) Though reductive dechlorination and low on-site groundwater velocity is continuing to mitigate the impact of PCE in groundwater at the Site, continued groundwater monitoring on an annual basis is recommended to confirm the rate of natural degradation.

4) The diagnostics testing results indicate that an SSD system located in the Babies R Us and Carol Cleaners spaces will be effective in mitigating the CVOC-impacted indoor air at these locations.

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TABLES

TABLE 1

GGP STATEN ISLAND MALL, LLC.
STATEN ISLAND, NEW YORK

Historical Groundwater Sampling Results

Well ID	Sample Date	Depth to Water[1]	Groundwater Elevation[2]	Concentration (ug/L)[3] Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride
MW-1								
	7/31/1995	11.20	30.73	ND	ND	ND[4]	ND	ND
	9/14/1995	11.85	30.08	ND	ND	ND	ND	ND
	11/20/2002	11.36	30.57	ND	ND	ND	ND	ND
	7/31/2003	10.96	30.97	ND	ND	ND	ND	ND
	10/16/2003	11.65	30.28	ND	ND	ND	ND	ND
	1/20/2004	11.38	30.55	ND	ND	ND	ND	ND
	4/26/2004	10.65	31.28	ND	ND	ND	ND	ND
	7/21/2004	10.63	31.30	ND	ND	ND	ND	ND
	4/7/2008	11.10	30.83	4.8	ND	ND	ND	ND
	9/29/2009	11.71	30.22	ND	ND	ND	ND	ND
	8/2/2011	11.64	32.64	ND	ND	ND	ND	ND
MW-2								
	7/31/1995	7.70	27.92	**21**	ND	1.7	ND	ND
	9/14/1995	8.26	27.36	**11**	1	2	ND	ND
	11/20/2002	7.98	27.64	**49.2**	1.9	0.38	ND	ND
	7/31/2003	7.44	28.18	**53.2**	1.8	ND	ND	ND
	10/16/2003	8.05	27.57	**50.2**	1.5	ND	ND	ND
	1/20/2004	7.90	27.72	**42.3**	1.4	ND	ND	ND
	4/26/2004	7.34	28.28	**43.9**	1.4	ND	ND	ND
	7/21/2004	7.35	28.27	**48.8**	1.5	ND	ND	ND
	4/7/2008	7.41	28.21	**41.4**	1.1	ND	ND	ND
	9/30/2009	7.91	27.71	**36**	0.89 J	ND	ND	ND
	8/2/2011	7.73	30.01	**31.9**	3.9	0.3 J[5]	ND	0.58 J
MW-3								
	7/31/1995	7.10	22.94	**25**	**3.7**	**6.9**	ND	ND
	11/20/2002	7.24	22.80	**2,030**	**323**	**205**	ND	**4.8**
	7/31/2003	6.71	23.33	**7,290**	**1,370**	**645**	ND	ND
	10/16/2003	7.19	22.85	**5,090**	**934**	**707**	**5.4**	**10.8**
	1/20/2004	6.89	23.15	**2,770**	**433**	**352**	**11.4**	ND
	4/26/2004	6.47	23.57	**5,170**	**540**	**368**	ND	ND
	7/21/2004	6.80	23.24	**8,340**	**1,550**	**1,040**	**8.5**	**22.1**
	4/7/2008	6.66	23.38	**442**	**112**	**110**	0.8 J	**3.9**
	9/29/2009	7.31	22.73	**993**	**191**	**210**	1.8	**3.2**
	8/3/2011	6.99	25.13	**694**	**146**	**115**	1	**3.2**
MW-3D								
	4/7/2008	6.52	23.79	2.7	ND	0.95 J	ND	ND
	9/29/2009	8.08	22.23	1	0.4 J	4.1	ND	ND
	8/3/2011	7.42	25.04	1.7	0.51 J	3.6	ND	ND
MW-4								
	7/31/1995	8.46	22.12	ND	ND	2.9	ND	ND
	9/14/1995	9.13	21.45	0.56	ND	2.4	ND	ND
	11/20/2002	8.37	22.21	**137**	**105**	**747**	**10**	**73.6**
	7/31/2003	7.95	22.63	**41.2**	**43.7**	**394**	**5.5**	**49.5**
	10/16/2003	8.43	22.15	**83.1**	**69**	**299**	4.7	**30.1**
	1/20/2004	8.38	22.20	**74.6**	**77.3**	**182**	3.9	**23.8**
	4/26/2004	7.70	22.88	**52.8**	**60.3**	**121**	2.5	**21.3**
	7/21/2004	7.81	22.77	**33.1**	**36.8**	**78.9**	2.3	**10.7**
	4/7/2008	7.63	22.95	**8,810**	**2,490**	**2,200**	**18.2 J**	**67.7**
	9/29/2009	8.36	22.22	**3,850**	**828**	**543**	**14.9**	**7.4 J**
	8/3/2011	8.24	24.44	**2,490**	**694**	**696**	**7.9**	**10.2**
MW-5								
	7/31/1995	9.33	20.17	**71**	**24**	**82**	ND	ND
	9/14/1995	10.00	19.50	**660**	**500**	**2,300**	**21**	ND
	11/20/2002	8.91	20.59	**32.9**	**11.7**	3	ND	ND
	7/31/2003	8.49	21.01	**38.6**	**9.3**	2	ND	ND
	10/16/2003	8.98	20.52	**32.7**	**8.1**	4.6	ND	ND
	1/20/2004	8.58	20.92	**35.5**	**10.1**	**5.4**	ND	ND
	4/26/2004	8.50	21.00	**41.4**	**13.5**	**13.5**	ND	ND
	7/21/2004	8.75	20.75	**50.2**	**20.3**	**20**	ND	ND
	4/7/2008	8.21	21.29	**57.1**	**9.9**	4.1	ND	ND
	9/29/2009	8.60	20.90	**72.4**	**7.2**	3.9	ND	ND
	8/3/2011	8.10	23.50	**43.3**	2.4	0.42 J	ND	ND
MW-6R								
	7/31/1995	6.04	26.68	1.1	ND	ND	ND	ND
	9/14/1995	7.12	25.60	ND	ND	ND	ND	ND
	11/20/2002	6.11	26.61	ND	ND	ND	ND	ND
	7/31/2003	6.49	26.23	ND	ND	ND	ND	ND
	10/16/2003	6.98	25.74	ND	ND	ND	ND	ND
	1/20/2004	6.30	26.42	ND	ND	ND	ND	ND
	4/26/2004	5.97	26.75	ND	ND	ND	ND	ND
	7/21/2004	5.80	26.92	ND	ND	ND	ND	ND
	4/7/2008	5.99	26.73	1	ND	ND	ND	ND
	9/29/2009	7.30	25.42	ND	ND	ND	ND	ND
	8/2/2011	7.28	27.57	ND	ND	ND	ND	ND
MW-7								
	11/20/2002	7.75	22.17	**5.4**	0.61	ND	ND	ND
	7/31/2003	7.40	22.52	2.7	ND	ND	ND	ND
	10/16/2003	7.73	22.19	4.9	ND	ND	ND	ND
	1/20/2004	7.76	22.16	**6.8**	0.67	ND	ND	ND
	4/26/2004	7.54	22.38	**5.9**	0.53	ND	ND	ND
	7/21/2004	7.55	22.37	**7.3**	0.81	ND	ND	ND
	4/7/2008	7.40	22.52	**10.3**	0.96 J	0.59 J	ND	ND
	9/29/2009	7.91	22.01	**6.5**	0.57 J	ND	ND	ND
	8/3/2011	7.34	24.71	**6.9**	0.52 J	ND	ND	ND
NYSDEC Groundwater Standards				**5**	**5**	**5**	**5**	**2**

TABLE 1

GGP STATEN ISLAND MALL, LLC.
STATEN ISLAND, NEW YORK

Historical Groundwater Sampling Results

Well ID	Sample Date	Depth to Water[1]	Ground-Water Elevation[2]	Concentration (ug/L)[3] Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride
MW-8								
	11/20/2002	8.35	20.86	**39.8**	**6.6**	3.1	ND	ND
	7/31/2003	8.02	21.19	**35.1**	**5**	2.2	ND	ND
	10/16/2003	8.40	20.81	**52.6**	**8.4**	3.8	ND	ND
	1/20/2004	8.45	20.76	**49.9**	**8**	3.7	ND	ND
	4/26/2004	7.91	21.30	**37**	**6**	2.5	ND	ND
	7/21/2004	8.05	21.16	**51.8**	**9.4**	4.3	ND	ND
	4/7/2008	8.02	21.19	**35.5**	**5.7**	2.6	ND	ND
	9/29/2009	8.55	20.66	**24.7**	4.9	2.9	ND	ND
	8/3/2011	8.23	23.08	**37.1**	**6.4**	3.2	ND	ND
MW-9								
	11/20/2002	9.55	19.32	**110**	**46.3**	**174**	1.3	ND
	7/31/2003	9.17	19.70	**103**	**42.4**	**111**	0.95	1
	10/16/2003	9.17	19.70	**159**	**51.4**	**174**	1.3	1.9
	1/20/2004	9.85	19.02	**151**	**49.2**	**135**	0.95	1.7
	4/26/2004	9.23	19.64	**181**	**58.1**	**130**	ND	ND
	7/21/2004	9.45	19.42	**163**	**54**	**132**	1.1	1.8
	4/7/2008	9.11	19.76	**344**	**70.7**	**141**	1.1	**3.6**
	9/30/2009	9.80	19.07	**261**	**38.5**	**84.3**	1	1.3
	8/4/2011	10.43	20.63	**131**	**21.7**	**40.1**	ND	0.82 J
MW-10								
	4/7/2008	7.66	24.41	0.56 J	ND	0.79 J	ND	ND
	9/30/2009	8.20	23.87	ND	ND	0.76 J	ND	ND
	8/3/2011	8.17	26.04	ND	ND	1.1	ND	ND
MW-11								
	4/7/2008	9.11	19.43	**1,380**	**109**	**191**	2.3 J	**3.4 J**
	9/29/2009	9.41	19.13	**931**	**91**	**129**	0.95 J	1.3 J
	8/4/2011	9.14	21.57	**560**	**84**	**117**	0.92 J	ND
MW-12								
	4/7/2008	9.81	19.80	**534**	**136**	**205**	1.3 J	**2.9**
	9/30/2009	10.21	19.40	**283**	**159**	**235**	1.3	**3.6**
	8/4/2011	9.89	21.88	**145**	**124**	**156**	0.89 J	**3**
MW-13								
	4/7/2008	10.87	20.32	**7.9**	3.4	**9.1**	ND	ND
	9/30/2009	11.41	19.78	**193**	**48.1**	**73.4**	0.34 J	1.4
	8/4/2011	11.12	22.26	**487**	**90.8**	**126**	0.71 J	**3.7**
MW-14								
	4/7/2008	8.69	20.85	ND	ND	ND	ND	ND
	9/30/2009	8.99	20.55	ND	ND	ND	ND	ND
	8/2/2011	NS	NS	NS	NS	NS[6]	NS	NS
MW-15								
	4/7/2008	7.58	26.81	ND	ND	ND	ND	ND
	9/30/2009	8.21	26.18	ND	ND	ND	ND	ND
	8/2/2011	7.67	28.84	ND	ND	ND	ND	ND
MW-16								
	8/4/2011	9.32	20.14	**171**	**25.6**	**58.7**	0.53 J	1.8
MW-17								
	8/4/2011	8.75	21.30	**1,650**	**88.7**	**275**	1.8 J	**3.7**
MW-18								
	8/3/2011	9.34	21.33	**418**	**69.9**	**97.5**	0.83 J	1.4
MW-19								
	8/3/2011	10.04	21.78	**287**	**25.4**	**30.3**	ND	ND
NYSDEC Groundwater Standards				**5**	**5**	**5**	**5**	**2**

Notes:
(1) Feet below top of casing.
(2) Feet above mean sea level.
(3) All concentrations are presented in units of micrograms per liter. Bold values indicate the concentrations exceed the respective NYSDEC Groundwater Standards.
(4) ND - Compound not detected at laboratory detection limits.
(5) J - Estimated value.
(6) NS - Not Sampled.

TABLE 2

GGP STATEN ISLAND MALL, LLC.
STATEN ISLAND, NEW YORK

Soil Boring Sampling Results

Boring ID	SB-1	SB-2	SB-4	SB-5			SB-6			SB-7		SB-8		SB-9		SB-10		SB-11		NYSDEC Restricted Use Commercial SCO[3]
Sample Depth (ft bg)	6	4.5	5.5	4.5	5.5	8	1.5	4.5	7	7	16	7	18	9	13	9	15	9	14	
Date Sampled	05/12/11	05/12/11	05/12/11	05/12/11	05/12/11	05/12/11	05/12/11	05/12/11	05/12/11	07/20/11	07/20/11	07/21/11	07/21/11	07/20/11	07/20/11	07/21/11	07/21/11	07/21/11	07/21/11	
Constituent/Compound	Constituent Concentration (mg/kg)[2]																			
Acetone	ND[5]	ND	ND	ND	ND	ND	0.0623	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**500**
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**44**
Bromobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
2-Butanone (MEK)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**500**
n-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00049 J	ND	**500**
sec-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00027 J	0.00067 J	ND	**500**
tert-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**500**
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**22**
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**500**
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**350**
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
o-Chorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
p-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**500**
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**280**
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**130**
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**240**
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**30**
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**500**
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	0.00041 J	ND	ND	ND	ND	0.0045 J	ND	ND	ND	ND	ND	ND	**500**
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**500**
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
1,1-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
Ethylbenzene	ND	ND	ND	ND	ND	ND	0.00051 J[6]	0.00057 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**390**
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
Isopropylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
p-Isopropyltoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00052 J	ND	-
Methyl tert butyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**500**
4-Methyl-2-pentanone (MIBK)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
Methylene bromide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**500**
Naphthalene[4]	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0034 J	ND	**500**
n-Propylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00048 J	ND	**500**
Styrene	ND	ND	ND	0.00039 J	ND	ND	0.00038 J	0.00068 J	0.00028 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
Tetrachloroethene	ND	ND	ND	ND	ND	0.0054 J	ND	0.0103	ND	0.00058 J	0.0022 J	ND	0.0286	ND	0.00039 J	ND	ND	ND	ND	**150**
Toluene	ND	ND	ND	ND	ND	ND	ND	0.00052 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**500**
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**500**
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	0.0008 J	ND	ND	ND	ND	0.003 J	ND	ND	ND	ND	ND	ND	**200**
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0023 J	ND	**190**
1,3,5-Trimethylbenzene	0.00037 J	ND	0.00031 J	0.00024 J	0.00032 J	ND	0.00041 J	0.0004 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00066 J	ND	**190**
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**13**
Xylenes (total)	0.00061 J	ND	0.00061 J	0.00098 J	0.0013	0.00088 J	0.0029	0.0031	0.00054 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**500**

Notes:
(1) See Figure 3.
(2) All concentrations presented in milligrams per kilogram; bold numbers represent exceedance of NYSDEC SCOs.
(3) New York State Department of Environmental Protection (NYSDEC) Soil Cleanup Objectives (SCOs).
(4) Napthalene SCOs are from the semi-volatile organic compound list.
(5) ND - Compound not detected at laboratory detection limits.
(6) J - Estimated value.

TABLE 3

GGP STATEN ISLAND MALL, LLC.
STATEN ISLAND, NEW YORK

Storm Drain Elevations

Storm Drain ID[1]	Total Depth (ft bg) [2]	Top Elevation (ft amsl) [3]	Bottom Elevation Elevation (ft amsl)	Depth to Water (ft bg)	Storm Drain Water Elevation (ft amsl)
Storm Drain 1 (CB-1)	4.00	34.73	30.73	4.00	30.73
Storm Drain 2 (CB-2)	3.65	34.21	30.56	3.65	30.56
Storm Drain 3 (CB-3)	3.00	34.17	31.17	3.00	31.17
Storm Drain 4 (CB-4)	5.10	40.88	35.78	5.10	35.78
Storm Drain 5 (CB-5)	3.30	NM[4]	-	-	-
Storm Drain 6 (CB-6)	3.90	32.61	28.71	3.90	28.71
Storm Drain 7 (CB-7)	6.28	NM	-	5.94	-
Storm Drain 8 (CB-8)	4.30	26.17	21.87	4.27	21.90
Storm Drain 8A (CB-8A)	4.30	26.29	21.99	4.30	21.99

Notes:
(1) See Figure 3 for locations.
(2) Feet below ground surface.
(3) Feet above mean sea level.
(4) NM - Not Measured.

TABLE 4

GGP STATEN ISLAND MALL, LLC.
STATEN ISLAND, NEW YORK

Storm Drain Sampling Results

Sample ID	Storm Drain 1	Storm Drain 2	Storm Drain 3	Storm Drain 4	Storm Drain 6	Storm Drain 7	NYSDEC Surface Water/Groundwater Standards
Date Sampled	05/13/11	05/13/11	05/13/11	05/13/11	05/13/11	05/13/11	
Constituent/Compound	Constituent Concentration (ug/L)[2]						
Acetone	ND[5]	ND	5.1 J[6]	117	ND	87.2	-
Benzene	ND	ND	ND	ND	ND	ND	**1**
Bromobenzene	ND	ND	ND	ND	ND	ND	**5**
Bromochloromethane	ND	ND	ND	ND	ND	ND	**5**
Bromodichloromethane	ND	ND	ND	ND	ND	ND	-
Bromoform	ND	ND	ND	ND	ND	ND	-
Bromomethane	ND	ND	ND	ND	ND	ND	-
2-Butanone (MEK)	ND	ND	ND	114	ND	21	-
n-Butylbenzene	ND	ND	ND	1 J	ND	ND	**5**
sec-Butylbenzene	ND	ND	ND	ND	ND	ND	**5**
tert-Butylbenzene	ND	ND	ND	ND	ND	ND	**5**
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	**5**
Chlorobenzene	ND	ND	ND	ND	ND	ND	**5**
Chloroethane	ND	ND	ND	ND	ND	ND	**5**
Chloroform	ND	ND	ND	0.46 J	ND	0.63 J	**7**
Chloromethane	ND	ND	ND	ND	ND	ND	**5**
o-Chorotoluene	ND	ND	ND	ND	ND	ND	**5**
p-Chlorotoluene	ND	ND	ND	ND	ND	ND	**5**
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	**0.04**
Dibromochloromethane	ND	ND	ND	ND	ND	ND	-
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	**0.0006**
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	**3**
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	**3**
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	**3**
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	**5**
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	**5**
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	**0.6**
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	**5**
cis-1,2-Dichloroethene	**17.8**	**23.1**	**10.7**	0.31 J	**12.5**	ND	**5**
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	**5**
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	**1**
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	**5**
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	**5**
1,1-Dichloropropane	ND	ND	ND	ND	ND	ND	**5**
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	-
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	-
Ethylbenzene	ND	ND	ND	ND	ND	ND	**5**
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	**0.5**
Isopropylbenzene	ND	ND	ND	ND	ND	ND	**5**
p-Isopropyltoluene	ND	ND	ND	1.8 J	ND	0.96 J	**5**
Methyl tert butyl ether	ND	ND	ND	ND	ND	ND	-
4-Methyl-2-pentanone (MIBK)	ND	ND	ND	ND	ND	ND	-
Methylene bromide	ND	ND	ND	ND	ND	ND	**5**
Methylene chloride	ND	ND	ND	1.5 J	ND	ND	**5**
Naphthalene[3]	ND	ND	ND	ND	ND	ND	**10**
n-Propylbenzene	ND	ND	ND	ND	ND	ND	**5**
Styrene	ND	ND	ND	ND	ND	ND	**5**
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	**5**
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	**5**
Tetrachloroethene	**39.6**	**59.9**	0.27 J	ND	**30.5**	ND	**5**
Toluene	ND	0.29 J	0.3 J	**7.6**	ND	0.87 J	**5**
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	**5**
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	**5**
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	**5**
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	**1**
Trichloroethene	**6.5**	**9**	ND	ND	4.8	ND	**5**
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	**5**
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	**0.04**
1,2,4-Trimethylbenzene	ND	ND	2.5 J	1.9 J	ND	ND	**5**
1,3,5-Trimethylbenzene	ND	ND	ND	0.49 J	ND	ND	**5**
Vinyl chloride	0.76 J	0.86 J	1.6	0.58 J	0.47 J	ND	**2**
Xylenes (total)[4]	ND	ND	ND	ND	ND	ND	**5**

Notes:
(1) See Figure 4.
(2) All concentrations presented in micrograms per liter; bold numbers represent exceedance of NYSDEC Surface Water/Groundwater Standards.
(3) Naphthalene standard is a surface water standard.
(4) NYSDEC Groundwater Standard for each isomer of xylene is 5 ug/L.
(5) ND - Compound not detected at laboratory detection limits.
(6) J - Estimated value.

TABLE 5

GGP STATEN ISLAND MALL, LLC.
STATEN ISLAND, NEW YORK

Summary of Monitor Well Construction and Groundwater Elevation Data for August 2, 2011

Well ID[1]	Date Completed	Total Depth (ft bg) [2]	Depth to Bedrock (ft bg)	Flush-Mount Rim Elevation (ft amsl) [3]	Top of PVC Elevation (ft amsl)	Screen Setting Interval (ft bg)	Depth to Water (ft btoc) [4]	Ground-Water Elevation (ft amsl)
MW-1	7/26/1995	13.5	13.5	44.58	44.28	8.5-13.5	11.64	32.64
MW-2	7/26/1995	12.0	12.0	37.97	37.74	7.0-12.0	7.73	30.01
MW-3	7/28/1995	14.8	13.0	32.59	32.12	9.8-14.8	6.99	25.13
MW-3D [5]	5/26/2006	43.5	25.0	32.85	32.46	35.5-43.5	7.42	25.04
MW-4	7/27/1995	14.6	17.0	33.02	32.68	9.6-14.6	8.24	24.44
MW-5	7/27/1995	14.0	14.0	31.98	31.60	9.0-14.0	8.10	23.50
MW-6R [6]	9/23/2002	15.0	13.0	35.16	34.85	10.0-15.0	7.28	27.57
MW-7	9/24/2002	15.0	13.0	32.35	32.05	10.0-15.0	7.34	24.71
MW-8	9/24/2002	15.0	13.0	31.86	31.31	10.0-15.0	8.23	23.08
MW-9	10/31/2002	16.0	15.0	31.30	31.06	11.0-16.0	10.43	20.63
MW-10	5/26/2006	20.0	19.0	34.53	34.21	15.0-20.0	8.17	26.04
MW-11	3/12/2008	17.0	16.0	31.19	30.71	12.0-17.0	9.14	21.57
MW-12	3/11/2008	18.0	17.0	32.13	31.77	13.0-18.0	9.89	21.88
MW-13	3/11/2008	18.0	17.0	33.81	33.38	13.0-18.0	11.12	22.26
MW-14	3/11/2008	17.0	16.0	32.23	31.67	12.0-17.0	NA	NA
MW-15	3/12/2008	17.0	16.2	36.97	36.51	12.0-17.0	7.67	28.84
MW-16[5]	7/22/2011	28.0	28.0	29.72	29.46	23.0-28.0	9.32	20.14
MW-17[5]	7/22/2011	26.0	26.0	30.47	30.05	21.0-26.0	8.75	21.30
MW-18[5]	7/22/2011	20.5	20.5	31.05	30.67	15.5-20.5	9.34	21.33
MW-19[5]	7/22/2011	20.5	20.5	32.37	31.82	15.5-20.5	10.04	21.78

Notes:
(1) See Figure 2 for locations. Monitor wells completed with 4-inch diameter, Schedule 40 PVC riser and screen, and flush-mount surface casings except where noted as 2-inch diameter.
(2) Feet below ground surface.
(3) Feet above mean sea level.
(4) Feet below top of PVC riser.
(5) Constructed with 2-inch diameter, Schedule 40 PVC riser and screen.
(6) Replacement for Monitor Well MW-6 (installed 7/28/1995).
Site monitor wells, newly installed borings (2011) and catch basins were surveyed in September 2011.

TABLE 6

GGP STATEN ISLAND MALL, LLC.
STATEN ISLAND, NEW YORK

Groundwater Sampling Results - August 2-4, 2011

Well ID[1]	Depth to Water[2]	Top of Casing Elevation	Groundwater Elevation[3]	Concentration (µg/L)[4] Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride
MW-1	11.64	44.28	32.64	ND	ND	ND[5]	ND	ND
MW-2	7.73	37.74	30.01	**31.9**	3.9	0.3 J[6]	ND	0.58 J
MW-3	6.99	32.12	25.13	**694**	**146**	**115**	1	**3.2**
MW-3D	7.42	32.46	25.04	1.7	0.51 J	3.6	ND	ND
MW-4	8.24	32.68	24.44	**2,490**	**694**	**696**	**7.9**	**10.2**
MW-5	8.10	31.60	23.50	**43.3**	2.4	0.42 J	ND	ND
MW-6R	7.28	34.85	27.57	ND	ND	ND	ND	ND
MW-7	7.34	32.05	24.71	**6.9**	0.52 J	ND	ND	ND
MW-8	8.23	31.31	23.08	**37.1**	**6.4**	3.2	ND	ND
MW-9	10.43	31.06	20.63	**131**	**21.7**	**40.1**	ND	0.82 J
MW-10	8.17	34.21	26.04	ND	ND	1.1	ND	ND
MW-11	9.14	30.71	21.57	**560**	**84**	**117**	0.92 J	ND
MW-12	9.89	31.77	21.88	**145**	**124**	**156**	0.89 J	**3**
MW-13	11.12	33.38	22.26	**487**	**90.8**	**126**	0.71 J	**3.7**
MW-14	--	31.67	--	NS	NS	NS[7]	NS	NS
MW-15	7.67	36.51	28.84	ND	ND	ND	ND	ND
MW-16	9.32	29.46	20.14	**171**	**25.6**	**58.7**	0.53 J	1.8
MW-17	8.75	30.05	21.30	**1,650**	**88.7**	**275**	1.8 J	**3.7**
MW-18	9.34	30.67	21.33	**418**	**69.9**	**97.5**	0.83 J	1.4
MW-19	10.04	31.82	21.78	**287**	**25.4**	**30.3**	ND	ND
NYSDEC Groundwater Standards				**5.0**	**5.0**	**5.0**	**5.0**	**2.0**

Notes:
(1) See Figure 4.
(2) Feet below top of casing.
(3) Feet above mean sea level.
(4) All concentrations are presented in units of micrograms per liter. Bold values indicate the concentrations exceed the respective NYSDEC Groundwater Standards.
(5) ND - Compound not detected at laboratory detection limits.
(6) J - Estimated value.
(7) NS - Not Sampled.

TABLE 7

GGP STATEN ISLAND MALL, LLC.
STATEN ISLAND, NEW YORK

Reductive Dechlorination Parameters in Ground Water - August 2-4, 2011

Well ID[1]	Methane[2]	Ethane	Ethene	Sulfate[3]	Hardness	Chloride	Carbon Dioxide
	Concentration (ug/L)[4]			Concentration (mg/L)[5]			
MW-1	1.5	ND[6]	ND	80	550	604	90
MW-2	2.9	ND	ND	100	681	998	120
MW-3	0.49	ND	ND	55	320	304	85
MW-3D	3.3	0.14	0.28	50	99.6	35.4	250
MW-4	19	0.57	0.49	50	355	362	85
MW-5	ND	ND	ND	50	101	288	75
MW-6R	10.7	ND	ND	75	326	337	175
MW-7	ND	ND	ND	60	362	349	50
MW-8	8.8	ND	ND	70	445	497	95
MW-9	38.2	ND	ND	55	536	1,200	65
MW-10	6.5	ND	ND	70	670	630	260
MW-11	1.1	ND	ND	65	346	422	90
MW-12	178	ND	ND	85	662	788	100
MW-13	35.3	ND	ND	90	474	558	60
MW-14	NS[7]	NS	NS	NS	NS	NS	NS
MW-15	0.92	ND	ND	80	729	485	95
MW-16	3.6	0.15	ND	70	507	457	72
MW-17	2.4	0.74	0.49	72	421	468	91
MW-18	57.1	0.32	0.55	70	679	672	120
MW-19	1.2	0.41	0.46	55	543	368	85

Notes:
(1) See Figure 4.
(2) Methane, Ethane, Ethene, Hardness and Chloride data determined by laboratory analysis.
(3) Sulfate and Carbon Dioxide data determined by field analysis (HACH).
(4) Micrograms per liter.
(5) Milligrams per liter.
(6) ND - Not Detected.
(7) NS - Not Sampled.

TABLE 8

GGP STATEN ISLAND MALL, LLC.
STATEN ISLAND, NEW YORK

Diagnostic Testing Measurements Collected at Babies R Us

	S1				S2	
Test Point	**Distance from Suction Point S-1 (feet)**	**Vacuum (inches w.c.)[1] at 41 cfm[2]**	**Vacuum (inches w.c.) at 23 cfm**	**Vacuum (inches w.c.) at 14 cfm**	**Distance from Suction Point S-2 (feet)**	**Vacuum (inches w.c.) at 21 cfm**
SSP1	1	20.180	10.060	5.020	-	20.000
SSP2	1	19.500	10.180	5.030	-	-
T1	10	1.660	0.875	0.410	65	0.180
T2	20	0.443	0.263	0.112	57	0.040
T3	30	0.188	0.109	0.064	50	0.071
T4	40	0.118	0.072	0.033	45	0.074
T5	50	0.063	0.045	0.002	42	0.255
T6	60	0.062	0.044	0.014	40	0.673
T7	70	0.040	0.033	0.012	40	0.536
T8	80	0.092	0.050	0.020	42	0.374
T9	90	0.085	0.073	0.027	45	0.399
T10	100	0.156	0.084	0.032	52	0.275
T11	10	0.348	0.181	0.074	65	0.012
T12	20	0.251	0.131	0.053	60	0.013
T13	30	0.214	0.098	0.038	58	0.010
T14	40	0.143	0.075	0.029	55	0.016
T15	50	0.119	0.062	0.025	55	0.016
T16	60	0.101	0.051	0.021	58	0.006
T17	70	0.075	0.037	0.010	62	0.002
T18	80	0.051	0.024	0.007	65	0.005
T19	90	0.050	0.024	0.009	70	0.003
T20	100	0.048	0.024	0.008	75	NC
T21	110	0.052	0.025	0.010	80	NC
T22	120	0.014	0.005	0.002	NC	NC
T23	130	0.009	0.001	NC	NC	NC
T24	140	NC	NC	NC	NC	NC
T25	NC[3]	NC	NC	NC	NC	NC
T26	NC	NC	NC	NC	NC	NC

Notes:
(1) inches w.c. - inches of water column.
(2) cfm - cubic feet per minute.
(3) NC - Not Collected.

TABLE 9

GGP STATEN ISLAND MALL, LLC.
STATEN ISLAND, NEW YORK

Diagnostic Testing Measurements Collected at Adjacent Strip Mall

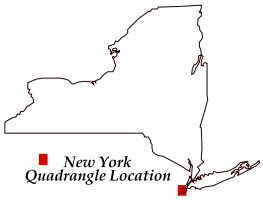
	S1		
Test Point	**Distance from Suction Point S-1 (feet)**	**Vacuum (inches w.c.)[1] at 33 cfm[2]**	**Vacuum (inches w.c.) at 14 cfm**
SSP1	1	20.220	2.000
SSP2	1	14.200	1.400
T1	11	1.300	0.433
T2	21	0.000	0.001
T3	10	1.140	0.374
T4	20	0.162	0.048
T5	15	0.152	0.045
T6	23	0.136	0.043
T7	34	0.038	0.013
T8	48	0.016	0.005
T9	50	0.001	0.000
T10	27	0.030	0.008

Notes:
(1) inches w.c. - inches of water column.
(2) cfm - cubic feet per minute.

FIGURES

1000 0 1000 2000 Feet

BASE SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE, ARTHUR KILL, NY-NJ, 1981.

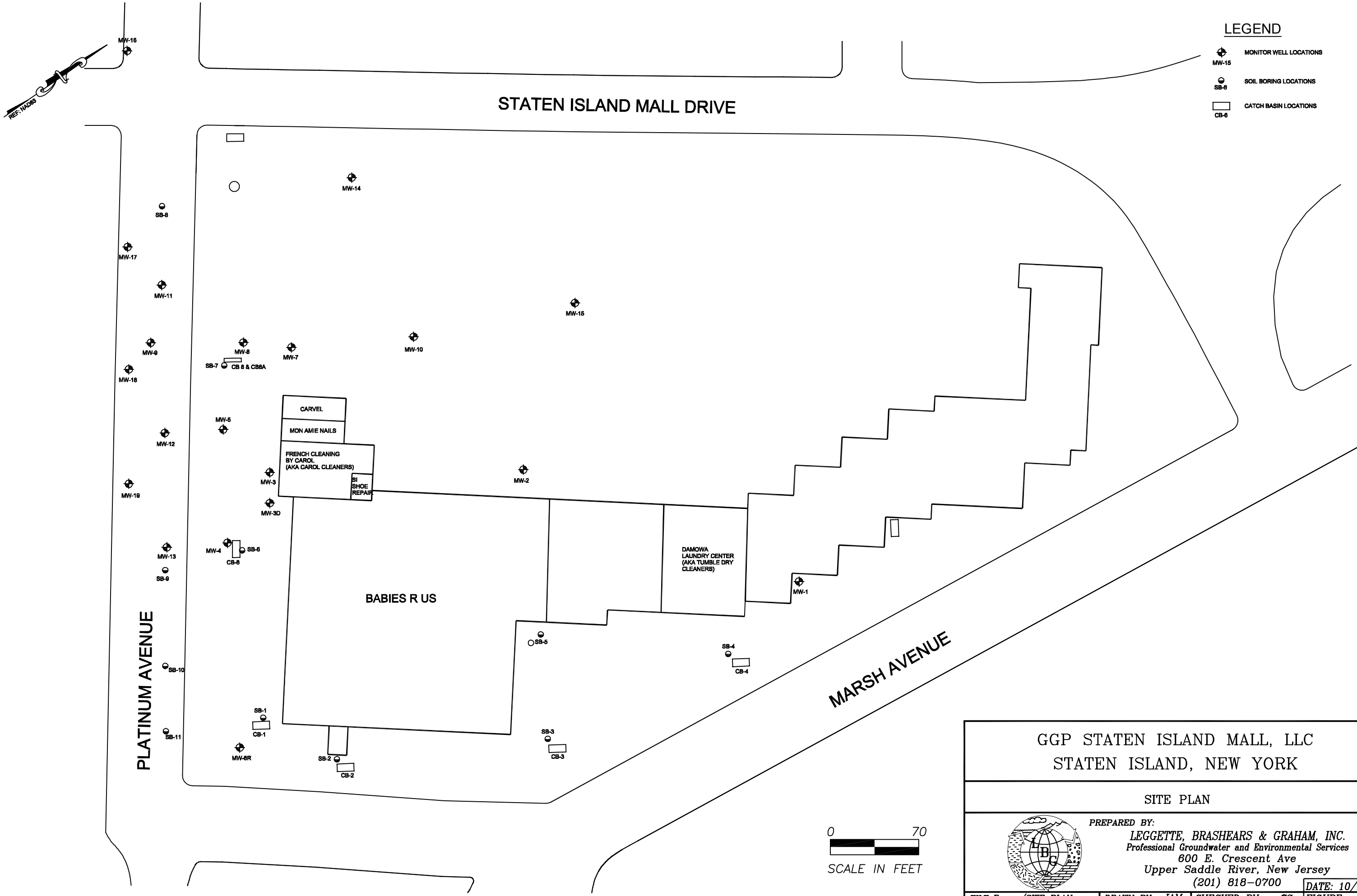


GGP STATEN ISLAND MALL, LLC
STATEN ISLAND, NEW YORK

SITE LOCATION MAP

Prepared by:
Leggette, Brashears & Graham, Inc.
Professional Ground-Water and Environmental Services
600 East Crescent Avenue, Suite 200
Upper Saddle River, NJ 07458
(201) 818-0700 www.lbgweb.com

FILE: ROUSE\GIS	DRAWN BY: MA	CHECKED BY: FG	DATE: 10/26/11
			FIGURE: 1



GGP STATEN ISLAND MALL, LLC
STATEN ISLAND, NEW YORK

SITE PLAN

PREPARED BY:
LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Groundwater and Environmental Services
600 E. Crescent Ave
Upper Saddle River, New Jersey
(201) 818-0700

FILE: Rouse/SITE PLAN	DRAWN BY: JAM	CHECKED BY: CS	DATE: 10/18/11 FIGURE: 2

REF.: NAD83

STATEN ISLAND MALL DRIVE

PLATINUM AVENUE

MARSH AVENUE

BABIES R US

CARVEL

MON AMIE NAILS

FRENCH CLEANING BY CAROL (AKA CAROL CLEANERS)

SI SHOE REPAIR

DAMOWA LAUNDRY CENTER (AKA TUMBLE DRY CLEANERS)

MW-16 MW-17 MW-11 MW-9 MW-18 MW-12 MW-19 MW-13 MW-5 MW-4 MW-3 MW-3D MW-14 MW-8 MW-7 MW-15 MW-10 MW-2 MW-1 MW-6R

SB-8 SB-6 SB-9 SB-10 SB-11 SB-1 SB-2 SB-7 SB-5 SB-3 SB-4

CB-8 & 8A CB-6 CB-1 CB-2 CB-5 CB-3 CB-4 CB-7

NS NS NS NS NS

SB-8	PCE	TCE	CIS-1,2-DCE	VC
7'	ND	ND	ND	ND
18'	0.0286	0.003J	0.0045J	ND

SB-7	PCE	TCE	CIS-1,2-DCE	VC
7'	0.00058J	ND	ND	ND
16'	0.0022J	ND	ND	ND

SB-6	PCE	TCE	CIS-1,2-DCE	VC
1.5	ND	ND	ND	ND
4.5	0.0103	0.0008J	0.00041J	ND
7.0	ND	ND	ND	ND

CB-6	PCE	TCE	CIS-1,2-DCE	VC
5/13/11	30.5	4.8	12.5	0.47 J

SB-5	PCE	TCE	CIS-1,2-DCE	VC
4.5'	ND	ND	ND	ND
5.5'	ND	ND	ND	ND
8'	0.0054J	ND	ND	ND

SB-9	PCE	TCE	CIS-1,2-DCE	VC
9'	ND	ND	ND	ND
13'	0.00039J	ND	ND	ND

SB-10	PCE	TCE	CIS-1,2-DCE	VC
9'	ND	ND	ND	ND
15'	ND	ND	ND	ND

SB-11	PCE	TCE	CIS-1,2-DCE	VC
9'	ND	ND	ND	ND
14'	ND	ND	ND	ND

SB-1	PCE	TCE	CIS-1,2-DCE	VC
6'	ND	ND	ND	ND

CB-1	PCE	TCE	CIS-1,2-DCE	VC
5/13/11	39.8	6.5	17.8	0.76 J

SB-2	PCE	TCE	CIS-1,2-DCE	VC
4.5'	ND	ND	ND	ND

CB-2	PCE	TCE	CIS-1,2-DCE	VC
5/13/11	59.9	9	23.1	0.86 J

CB-3	PCE	TCE	CIS-1,2-DCE	VC
5/13/11	0.27 J	ND	10.7	1.6

CB-4	PCE	TCE	CIS-1,2-DCE	VC
5/13/11	ND	ND	0.31 J	0.58 J

CB-7	PCE	TCE	CIS-1,2-DCE	VC
5/13/11	ND	ND	ND	ND

SB-4	PCE	TCE	CIS-1,2-DCE	VC
5.5'	ND	ND	ND	ND

LEGEND

CONCENTRATIONS PRESENTED IN ug/L(WATER)/ mg/kg(SOIL) CONCENTRATIONS IN RED REPRESENT EXCEEDENCE OF RESPECTIVE NYSDEC GW SOIL STANDARDS

- MW-15 — MONITOR WELL
- SB 1 — SOIL BORING (INSTALLED BETWEEN MAY AND JULY 2011)
- CB 1 — CATCH BASINS
- MANHOLES
- APPROXIMATE STORMWATER LINE LOCATION ON-SITE
- J — ESTIMATED VALUE
- ND — NOT DETECTED
- NS — NOT SAMPLED

0 70

SCALE IN FEET

GGP STATEN ISLAND MALL, LLC
STATEN ISLAND, NEW YORK

SOIL BORING AND STORM DRAIN SAMPLING RESULTS SUMMARY

PREPARED BY:
LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Groundwater and Environmental Services
600 E. Crescent Ave
Upper Saddle River, New Jersey
(201) 818-0700

DATE: 10/18/11

FILE: Rouse/fig3soil-storm | DRAWN BY: JAM | CHECKED BY: CS | FIGURE: 3

REF: NAD83

STATEN ISLAND MALL DRIVE

PLATINUM AVENUE

MARSH AVENUE

MW-16
20.14

MW-17
21.30

MW-11
21.57

MW-9
20.63

MW-18
21.33

MW-12
21.88

MW-19
21.78

MW-13
22.26

MW-4
24.44

MW-8
23.08

MW-5
23.50

MW-14
NA

MW-7
24.71

MW-3
25.13

MW-3D
25.04

MW-6R
27.57

MW-10
26.04

MW-15
28.84

MW-2
30.01

MW-1
32.64

CARVEL

MON AMIE NAILS

FRENCH CLEANING
BY CAROL
(AKA CAROL CLEANERS)

SI
SHOE
REPAIR

BABIES R US

DAMOWA
LAUNDRY CENTER
(AKA TUMBLE DRY
CLEANERS)

21.00
22.00
23.00
24.00
25.00
26.00
27.00
28.00
29.00
30.00
31.00
32.00

LEGEND

MW-15
28.84 — MONITOR WELL LOCATION WITH GROUNDWATER ELEVATIONS

GROUNDWATER CONTOURS WITH FLOW DIRECTION

NA — NOT APPLICABLE

CATCH BASIN

0 70

SCALE IN FEET

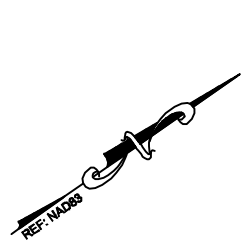
NOTE: MW-3D IS A BEDROCK WELL AND ELEVATION IS ONLY INCLUDED FOR REFERENCE

GGP STATEN ISLAND MALL, LLC
STATEN ISLAND, NEW YORK

GROUNDWATER FLOW MAP
FOR AUGUST 2, 2011

PREPARED BY:
LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Groundwater and Environmental Services
600 E. Crescent Ave
Upper Saddle River, New Jersey
(201) 818-0700

FILE: Rouse/fig5/gwe	DRAWN BY: JAM	CHECKED BY: CS	DATE: 10/18/11
			FIGURE: 4



STATEN ISLAND MALL DRIVE

WELL	PCE	TCE	CIS-1,2-DCE	VC
MW-1	ND	ND	ND	ND
MW-2	31.9	3.9	0.3 J	0.58 J
MW-3	694	146	115	3.2
MW-4	2,490	694	696	10.2
MW-5	43.3	2.4	0.42 J	ND
MW-6R	ND	ND	ND	ND
MW-7	6.9	0.52 J	ND	ND
MW-8	37.1	6.4	3.2	ND
MW-9	131	21.7	40.1	0.82 J
MW-10	ND	ND	1.1	ND
MW-11	560	84	117	ND
MW-12	145	124	156	3
MW-13	487	90.8	126	3.7
MW-15	ND	ND	ND	ND
MW-16	171	25.6	58.7	1.8
MW-17	1,650	88.7	275	3.7
MW-18	418	69.9	97.5	1.4
MW-19	287	25.4	30.3	ND

LEGEND

- MW-15 — MONITOR WELL
- PCE CONCENTRATION CONTOURS (DASHED WHERE INFERRED)
- PCE CONCENTRATION 5-50 ug/L
- PCE CONCENTRATION 50-500 ug/L
- PCE CONCENTRATION 500+ ug/L

MW-16 MW-14 MW-17 MW-11 MW-15 MW-9 MW-8 MW-7 MW-10 MW-18 MW-5 MW-12 MW-19 MW-3 MW-3D MW-4 MW-13 MW-2 MW-1 MW-6R

500 500 500 50 5

CARVEL
MON AMIE NAILS
FRENCH CLEANING BY CAROL (AKA CAROL CLEANERS)
SJ SHOE REPAIR
DAMOWA LAUNDRY CENTER (AKA TUMBLE DRY CLEANERS)
BABIES R US

PLATINUM AVENUE
MARSH AVENUE

0 70
SCALE IN FEET

GGP STATEN ISLAND MALL, LLC
STATEN ISLAND, NEW YORK

PCE PLUME AND SUMMARY OF RELATED CVOCs IN GROUNDWATER FOR AUGUST 2011

PREPARED BY:
LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Groundwater and Environmental Services
600 E. Crescent Ave
Upper Saddle River, New Jersey
(201) 818-0700

FILE: Rouse/fig5/	DRAWN BY: JAM	CHECKED BY: CS	DATE: 10/18/11
			FIGURE: 5

REF.: NAD83

STATEN ISLAND MALL DRIVE

PLATINUM AVENUE

MARSH AVENUE

BABIES R US

CARVEL

MON AMIE NAILS

FRENCH CLEANING BY CAROL (AKA CAROL CLEANERS)

SI SHOE REPAIR

DAMOWA LAUNDRY CENTER (AKA TUMBLE DRY CLEANERS)

MW-16 2'

MW-17 4.5'

MW-18 10.5'

MW-19 12'

MW-12 15'

MW-13 17'

MW-11 15'

MW-9 16'

MW-8 19'

MW-7 19'

MW-5 18'

MW-4 16'

MW-3 19.5'

MW-3D

MW-6R 22'

MW-14 16'

MW-10 15.5'

MW-15 21'

MW-2 26'

MW-1 31'

SB-8 13'

SB-7 13'

SB-9 18'

SB-6

SB-10 20'

SB-11 21'

SB-1

SB-2

SB-3

SB-5

SB-4

A A'

LEGEND

MW-15 21' — MONITOR WELL WITH BEDROCK ELEVATION IN FEET MEAN SEA LEVEL

SB 7 13' — SOIL BORING WITH BEDROCK ELEVATION IN FEET MEAN SEA LEVEL

14' — BEDROCK SURFACE ELEVATION IN FEET MEAN SEA LEVEL CONTOUR

A A' — CROSS SECTION A-A' LOCATION

0 70

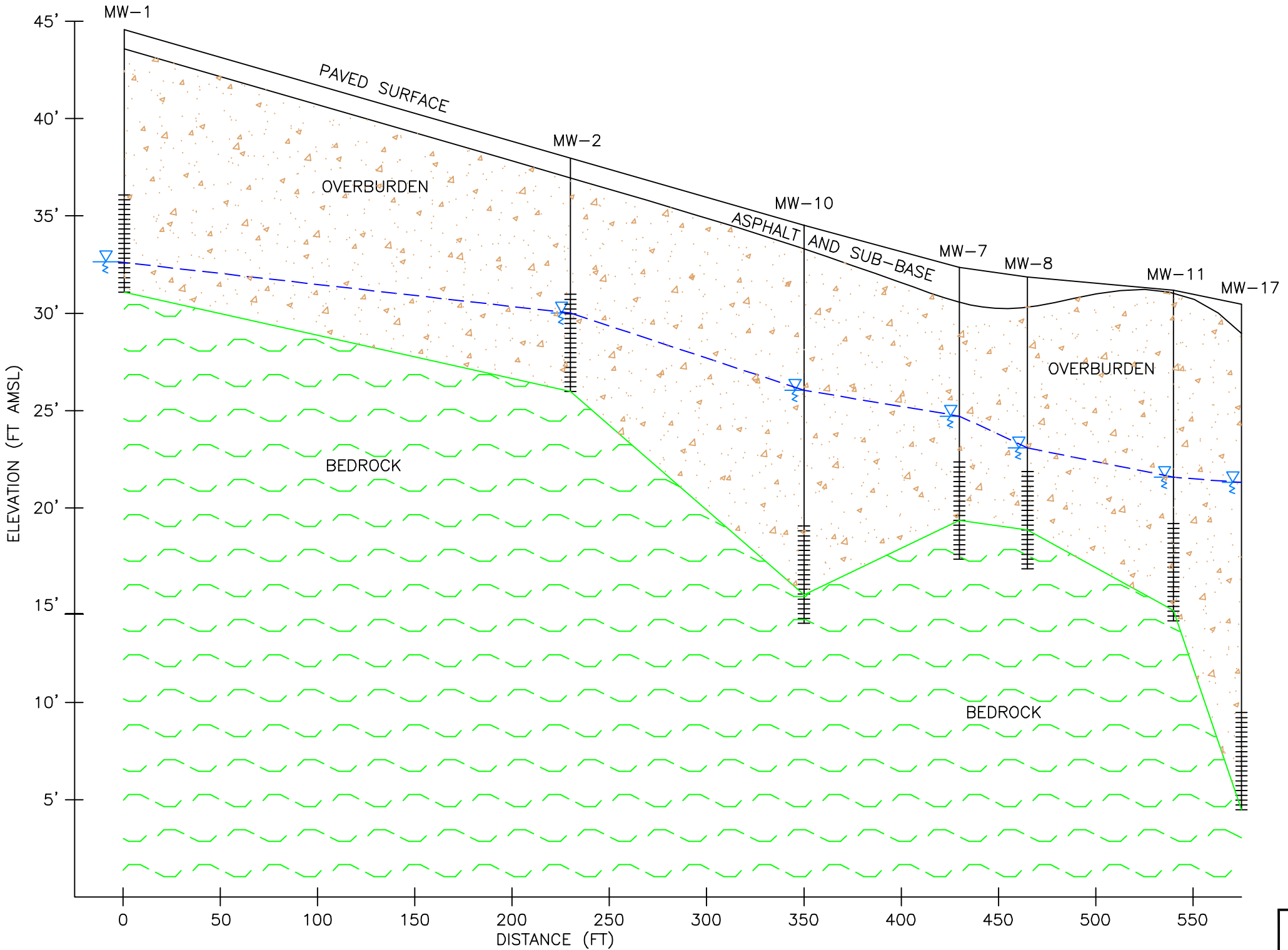
SCALE IN FEET

GGP STATEN ISLAND MALL, LLC
STATEN ISLAND, NEW YORK

BEDROCK SURFACE ELEVATION AND GEOLOGIC CROSS-SECTION LOCATION MAP

PREPARED BY:
LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Groundwater and Environmental Services
600 E. Crescent Ave
Upper Saddle River, New Jersey
(201) 818-0700

FILE: Rouse/BEDROCK2	DRAWN BY: JAM	CHECKED BY: CS	DATE: 10/18/11 FIGURE: 6



LEGEND

SCREENED INTERVAL

GROUNDWATER ELEVATION

GGP STATEN ISLAND MALL, LLC
STATEN ISLAND, NEW YORK

GEOLOGIC CROSS SECTION A–A’

PREPARED BY:
LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground–Water and Environmental Services
600 E. Crescent Ave; Suite 200
Upper Saddle River, New Jersey
(201) 818–0700

FILE: Rouse\cross sec A–A’	DRAWN BY: JAM	CHECKED BY: FG	DATE: 10/28/11
			FIGURE: 7

LEGEND

⊕ AIR SAMPLING LOCATION 2006 & 2008

▨⊕ SUB-SLAB AIR SAMPLING LOCATION 2006 & 2008

REF: NAD83

STATEN ISLAND MALL DRIVE

CARVEL

MON AMIE NAILS

FRENCH CLEANING BY CAROL (AKA CAROL CLEANERS)

SI SHOE REPAIR

BABIES R US

DAMOWA LAUNDRY CENTER (AKA TUMBLE DRY CLEANERS)

PLATINUM AVENUE

MARSH AVENUE

0 70

SCALE IN FEET

GGP STATEN ISLAND MALL, LLC
STATEN ISLAND, NEW YORK

SUB-SLAB AND AIR SAMPLING LOCATIONS

PREPARED BY:
LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Groundwater and Environmental Services
600 E. Crescent Ave
Upper Saddle River, New Jersey
(201) 818-0700

FILE: Rouse/SITE PLAN	DRAWN BY: JAM	CHECKED BY: CS	DATE: 10/18/11
			FIGURE: 8

LEGEND

S1 DIAGNOSTIC SUCTION TEST POINT LOCATION

T15 DIAGNOSTIC OBSERVATION POINT LOCATION

0 23

FEET

GGP STATEN ISLAND MALL, LLC
STATEN ISLAND, NEW YORK

DIAGNOSTIC TESTING LOCATIONS

PREPARED BY:
LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Groundwater and Environmental Services
600 E. Crescent Ave; Suite 200
Upper Saddle River, New Jersey
(201) 818-0700

DATE: 10/19/11

FILE: ROUSE/Fig10-diagtest | DRAWN BY: JAM | CHECKED BY: MA | FIGURE: 9

FIGURE 10
GGP STATEN ISLAND MALL, LLC.
STATEN ISLAND, NEW YORK
Pneumatic Communication Testing Results – Babies R Us – S1 and S2

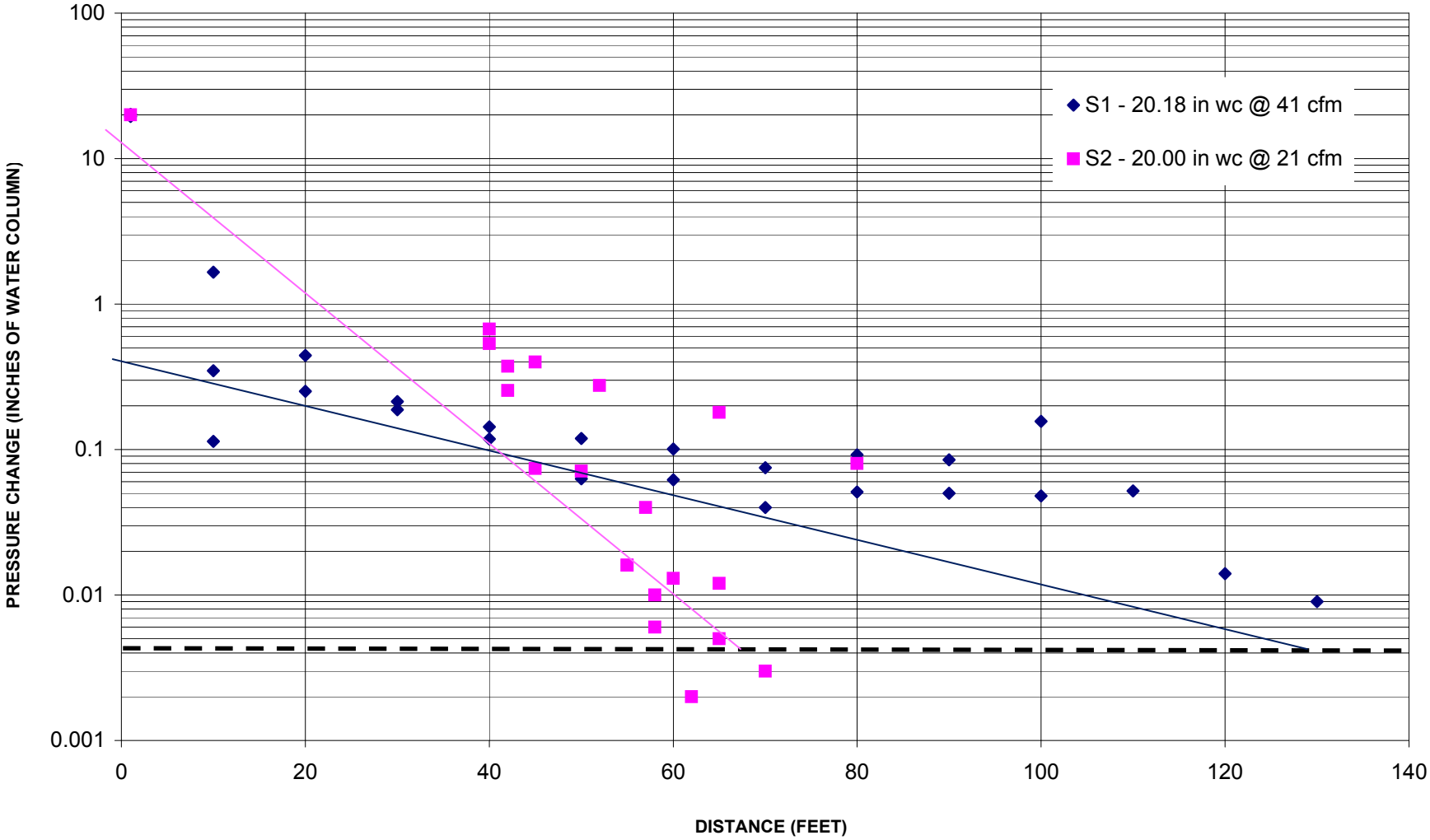


FIGURE 11
GGP STATEN ISLAND MALL, LLC.
STATEN ISLAND, NEW YORK
Pneumatic Communication Testing Results – Carol Cleaners – S1

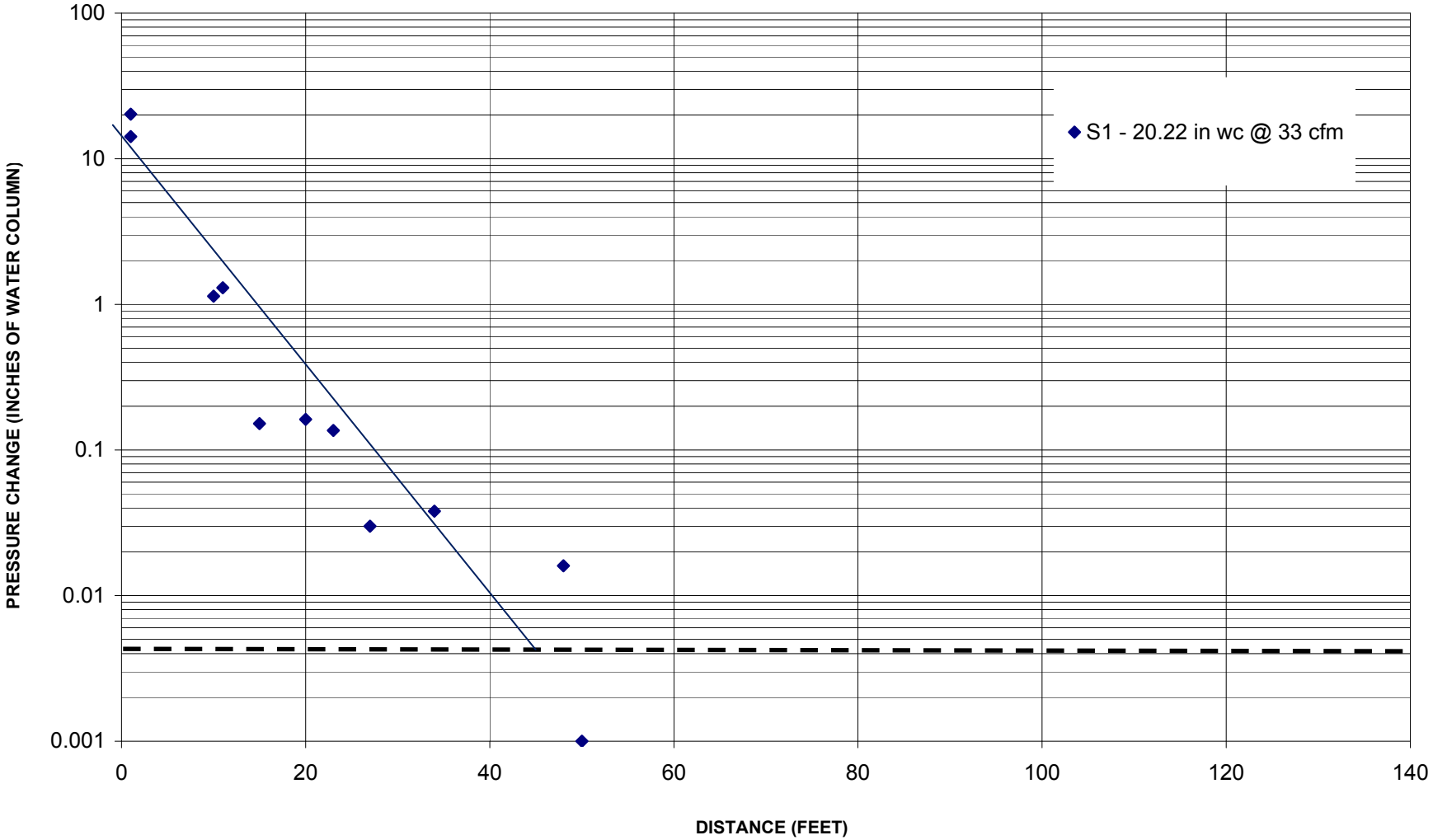


FIGURE 12
GGP STATEN ISLAND MALL, LLC.
STATEN ISLAND, NEW YORK

Soil Resistance vs. Fan Performance Curve - GBR 76

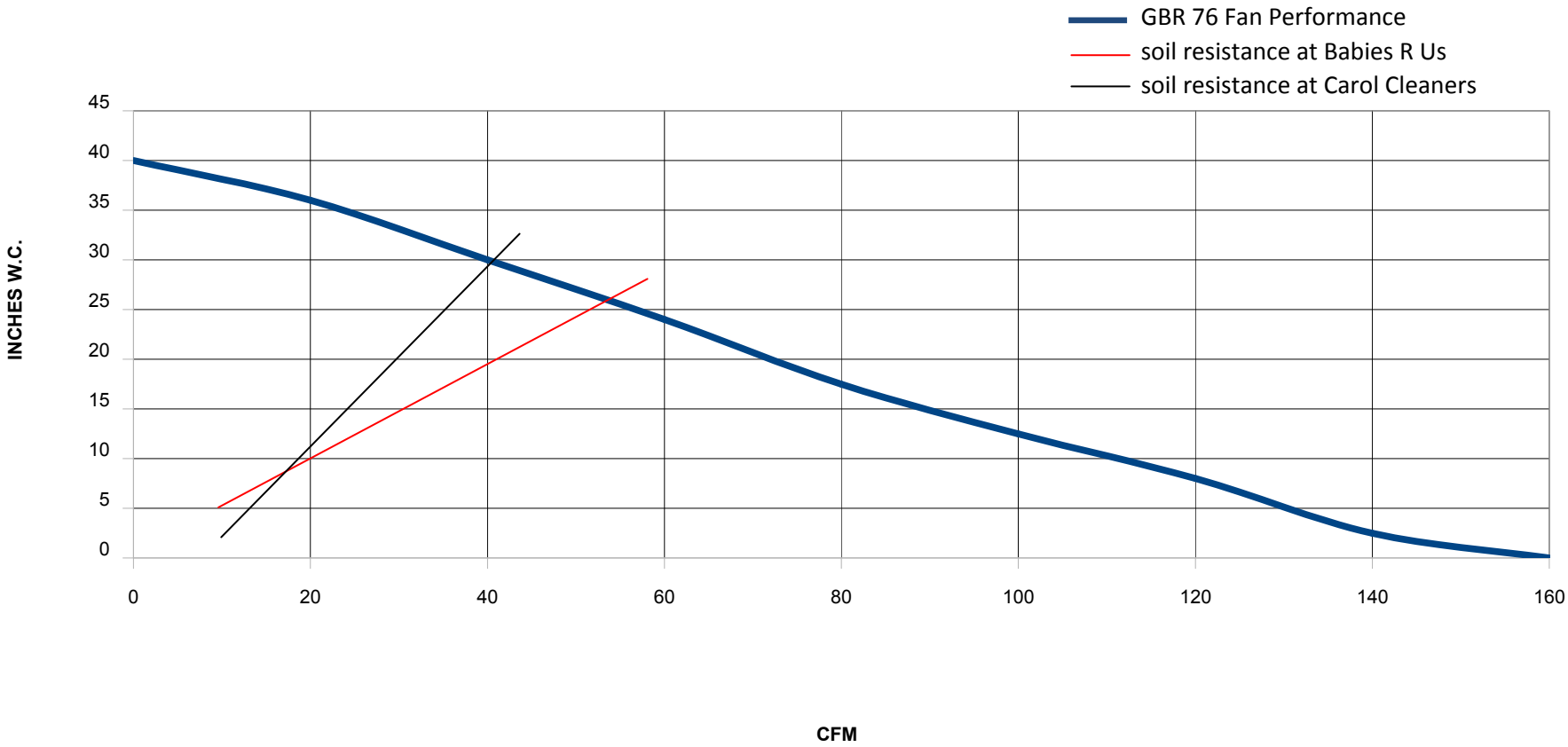
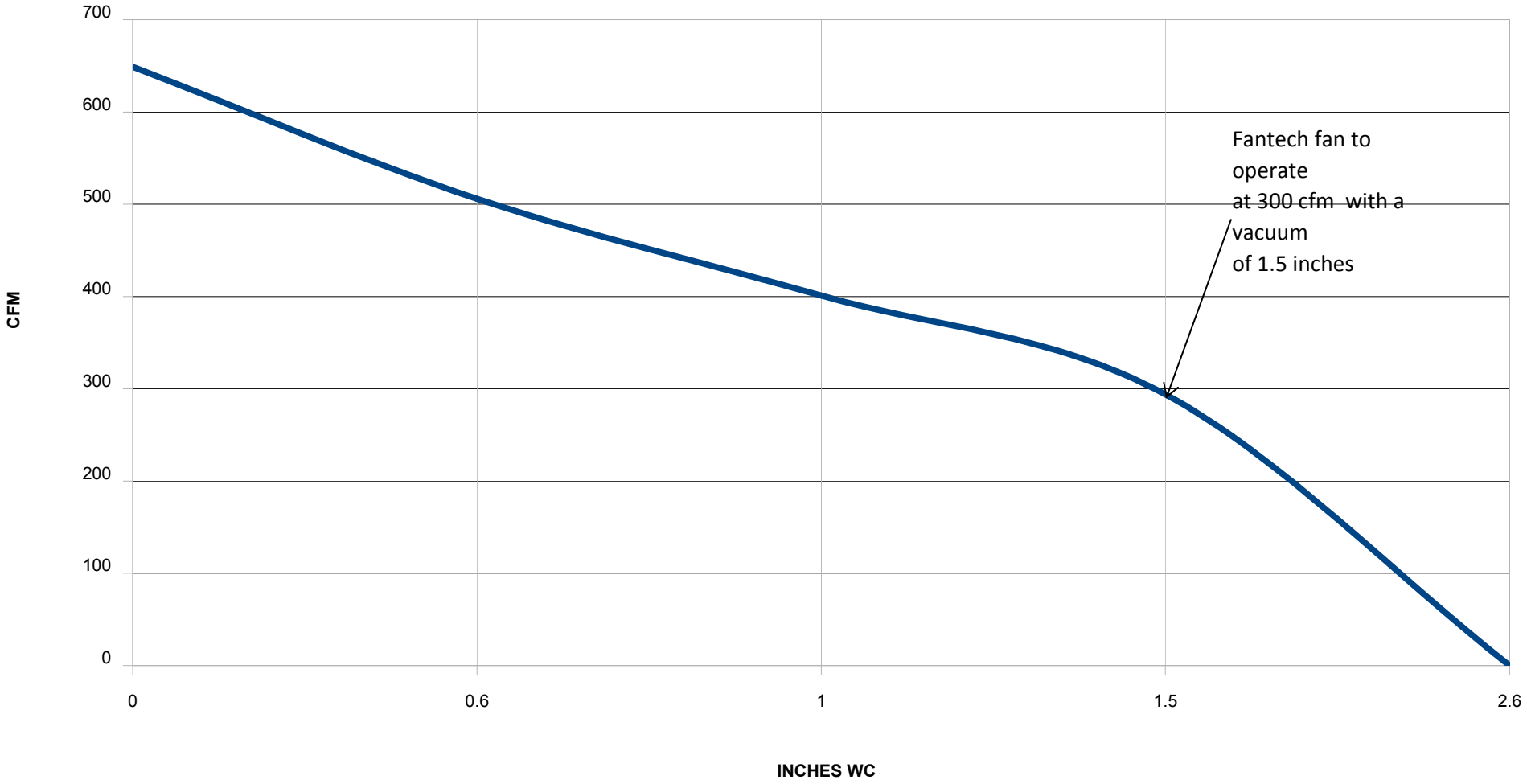


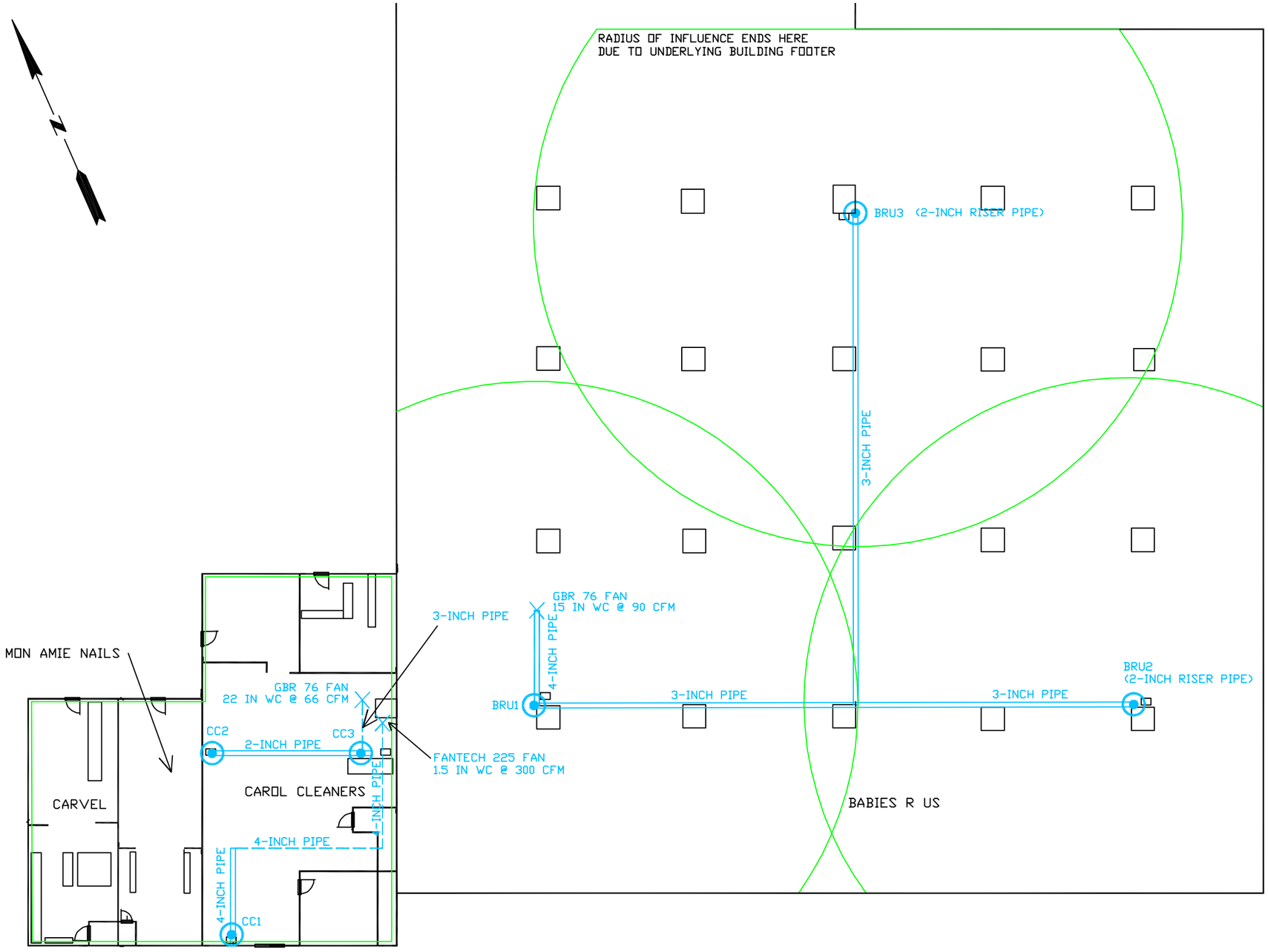
FIGURE 13

GGP STATEN ISLAND MALL, LLC.

STATEN ISLAND, NEW YORK

Fan Performance Curve for Fan Tech FR225





LEGEND

- CC1 — PROPOSED SUCTION POINT LOCATION WITH DESIGNATION
- PVC PIPING
- PIPING LOCATED ON ROOF OF BUILDING
- GBR 76 FAN — LOCATION OF FAN ON ROOF OF BUILDING WITH TYPE
- PROPOSED EFFECTIVE RADIUS OF INFLUENCE EXERTED BY BLOWER FAN

0 23
FEET

GGP STATEN ISLAND MALL, LLC
STATEN ISLAND, NEW YORK

SUB-SLAB DEPRESSURIZATION SYSTEM DESIGN

PREPARED BY:
LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Groundwater and Environmental Services
600 E. Crescent Ave; Suite 200
Upper Saddle River, New Jersey
(201) 818-0700

FILE: ROUSE/Fig15-sub slab	DRAWN BY: JAM	CHECKED BY: MA	DATE: 10/19/11
			FIGURE: 14

APPENDIX I

SOIL BORING LOGS

GEOLOGIC LOG

Leggette, Brashears & Graham, Inc.
6 Arrow Road, Suite 103
Ramsey, New Jersey 07446
www.lbgweb.com

OWNER: Rouse Staten Island Mall

BORING ID: SB-1

PAGE: 1 **of** 1 **PAGES**

SITE LOCATION: Staten Island, New York	**SCREEN TYPE:** N/A **DIAMETER:** N/A
	SLOT NO.: NA **SETTING:** N/A
DATE COMPLETED: 5/12/11	**SAND PACK SIZE:** N/A
DRILLING COMPANY: Summit Drilling Co.	**SETTING:** N/A
	CASING TYPE: N/A **DIAMETER:** N/A
DRILLING METHOD: Geoprobe Direct Push	**SETTING:** NA
SAMPLING METHOD: Acetate Sleeve	**SEAL TYPE:** N/A
OBSERVER: Eric S Ricci	**SETTING**: N/A
REFERENCE POINT (RP): Ground Level	**BACKFILL TYPE**:
ELEVATION OF RP:	**STATIC WATER LEVEL:** N/A **DATE:** N/A
SURFACE COMPLETION Asphalt patch	**DEVELOPMENT METHOD**: N/A
	DURATION: N/A **ESTIMATED YIELD:** N/A
COMMENTS:	
ABBREVIATIONS: C = Coarse, M = Medium, F = Fine	

DEPTH (FEET) FROM	TO	PID (ppm)	RECOVERY (feet)	DESCRIPTION
0.0	1.0	2.6	3.5	Black Asphalt and Subbase; dry
1.0	3.0	2.2		Red/brown F-M SAND; little silt; dry to moist
3.0	4.0	0.7		Red/brown F-M SAND; little silt; very moist
4.0	5.0	0.3		Red/brown F-M SAND; some silt; very moist at 4.5’
5.0	6.0	0.3	2.1	Red/brown F-M SAND; some silt; very moist
6.0	6.5	0.3		Red/brown F-M SAND; some silt; little clay; very moist
6.5	8.0	0.3		Red/brown F SAND and M-C rounded gravel; some silt; saturated
				Refusal at 8.0’, E.O.B.

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OWNER: Rouse Staten Island Mall

BORING ID: SB-2

PAGE: 1 **of** 1 **PAGES**

SITE LOCATION: Staten Island, New York	**SCREEN TYPE:** N/A **DIAMETER:** N/A
	SLOT NO.: NA **SETTING:** N/A
DATE COMPLETED: 5/12/11	**SAND PACK SIZE:** N/A
DRILLING COMPANY: Summit Drilling Co.	**SETTING:** N/A
	CASING TYPE: N/A **DIAMETER:** N/A
DRILLING METHOD: Geoprobe Direct Push	**SETTING:** NA
SAMPLING METHOD: Acetate Sleeve	**SEAL TYPE:** N/A
OBSERVER: Eric S Ricci	**SETTING**: N/A
REFERENCE POINT (RP): Ground Level	**BACKFILL TYPE**:
ELEVATION OF RP:	**STATIC WATER LEVEL:** N/A **DATE:** N/A
SURFACE COMPLETION: Asphalt patch	**DEVELOPMENT METHOD**: N/A
	DURATION: N/A **ESTIMATED YIELD:** N/A
COMMENTS:	
ABBREVIATIONS: C = Coarse, M = Medium, F = Fine	

DEPTH (FEET) FROM	TO	PID (ppm)	RECOVERY (feet)	DESCRIPTION
0.0	1.0	2.9	4.6	Black and gray Gravel and Asphalt; dry
1.0	2.0	1.4		Fill; Red/brown F SAND and SILT; dry
2.0	3.0	0.0		Red/brown F SAND; little F-M-C subrounded gravel; dry
3.0	5.0	0.0		Red/brown SAND; some F-M-C subrounded gravel; dry
5.0	6.0	0.0		Red/brown SAND; with gray cobble; moist
				Refusal at 6.0', E.O.B.

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OWNER: Rouse Staten Island Mall

BORING ID: SB-3

PAGE: 1 **of** 1 **PAGES**

SITE LOCATION: Staten Island, New York	**SCREEN TYPE:** N/A **DIAMETER:** N/A
	SLOT NO.: NA **SETTING:** N/A
DATE COMPLETED: 5/12/11	**SAND PACK SIZE:** N/A
DRILLING COMPANY: Summit Drilling Co.	**SETTING:** N/A
	CASING TYPE: N/A **DIAMETER:** N/A
DRILLING METHOD: Geoprobe Direct Push	**SETTING:** NA
SAMPLING METHOD: Acetate Sleeve	**SEAL TYPE:** N/A
OBSERVER: Eric S Ricci	**SETTING**: N/A
REFERENCE POINT (RP): Ground Level	**BACKFILL TYPE**:
ELEVATION OF RP:	**STATIC WATER LEVEL:** N/A **DATE:** N/A
SURFACE COMPLETION: Asphalt patch	**DEVELOPMENT METHOD**: N/A
	DURATION: N/A **ESTIMATED YIELD:** N/A
COMMENTS:	
ABBREVIATIONS: C = Coarse, M = Medium, F = Fine	

DEPTH (FEET) FROM	DEPTH (FEET) TO	PID (ppm)	RECOVERY (feet)	DESCRIPTION
0.0	1.0	0.5		Black Asphalt and Subbase; dry
1.0	3.0	0.0		Red/brown F SAND and SILT; with gray sub angular pebbles; dry
				Refusal at 3.0', E.O.B.

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	OWNER: Rouse Staten Island Mall
	WELL NO.: SB-4
	PAGE: 1 **of** 1 **PAGES**
SITE LOCATION: Staten Island, New York	**SCREEN TYPE:** N/A **DIAMETER:** N/A
	SLOT NO.: N/A **SETTING:** N/A
DATE COMPLETED: 5/12/11	**SAND PACK SIZE:** N/A
DRILLING COMPANY: Summit Drilling Co.	**SETTING:** N/A
	CASING TYPE: N/A **DIAMETER:** N/A
DRILLING METHOD: Geoprobe Direct Push	**SETTING:** N/A
SAMPLING METHOD: Acetate Sleeve	**SEAL TYPE:** N/A
OBSERVER: Eric S Ricci	**SETTING**: N/A
REFERENCE POINT (RP): Ground Level	**BACKFILL TYPE**: N/A
ELEVATION OF RP:	**STATIC WATER LEVEL:** N/A **DATE:** N/A
SURFACE COMPLETION: Asphalt patch	**DEVELOPMENT METHOD**: N/A
	DURATION: N/A **ESTIMATED YIELD:** N/A
COMMENTS:	
ABBREVIATIONS: C = Coarse, M = Medium, F = Fine	

DEPTH (FEET) FROM	DEPTH (FEET) TO	PID (ppm)	RECOVERY (feet)	DESCRIPTION
0.0	1.0	0.0	1.2	Black Asphalt and Subbase; dry
1.0	5.0	40.0		Red/brown F SAND and SILT; with F-M-C subangular gravel; dry * Cobble lodged in macro core at 1.2’
5.0	5.5	2.8	2.8	Red/brown F SAND and SILT; very moist
5.5	6.0	1.0		Red/brown F SAND and SILT; saturated
6.0	7.0	0.2		Red/brown F SAND and SILT; trace clay with brown mottling; saturated
7.0	8.5	0.3		Red/brown F SAND and SILT; trace clay; very tight; saturated
8.5	9.0	0.1		Red/brown F SAND and SILT; very tight; some F-M-C gravel; saturated
				Refusal at 9.0’, E.O.B.

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OWNER: Rouse Staten Island Mall

WELL NO.: SB-5

PAGE: 1 **of** 1 **PAGES**

SITE LOCATION: Staten Island, New York	**SCREEN TYPE:** N/A **DIAMETER:** N/A
	SLOT NO.: N/A **SETTING:** N/A'
DATE COMPLETED: 5/12/11	**SAND PACK SIZE:** N/A
DRILLING COMPANY: Summit Drilling Co.	**SETTING:** N/A
	CASING TYPE: N/A **DIAMETER:** N/A
DRILLING METHOD: Geoprobe Direct Push	**SETTING:** N/A
SAMPLING METHOD: Acetate Sleeve	**SEAL TYPE:** N/A
OBSERVER: Eric S Ricci	**SETTING**: N/A
REFERENCE POINT (RP): Ground Level	**BACKFILL TYPE**: N/A
ELEVATION OF RP:	**STATIC WATER LEVEL:** N/A **DATE:** N/A
SURFACE COMPLETION: Asphalt patch	**DEVELOPMENT METHOD**: N/A
	DURATION: N/A **ESTIMATED YIELD:** N/A
COMMENTS:	
ABBREVIATIONS: C = Coarse, M = Medium, F = Fine	

DEPTH (FEET) FROM	DEPTH (FEET) TO	PID (ppm)	RECOVERY (feet)	DESCRIPTION
0.0	1.0	0.5	3.3	Black Asphalt and Subbase; dry
1.0	3.5	2.0		Red/brown F SAND and SILT; with F-M-C subrounded gravel; dry
3.5	5.0	5.3		Red/brown F SAND; with F-M-C subrounded gravel; moist
5.0	6.0	16.0	3.2	Red/brown F SAND and SILT; F-M-C gravel; moist
6.0	7.5	4.8		Red/brown F SAND and SILT; F-M-C gravel; very moist
7.5	8.5	4.2		Red/brown F SAND and SILT; M-C gravel; very tight; moist
				Refusal at 8.5', E.O.B.

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OWNER: Rouse Staten Island Mall

WELL NO.: SB-6

PAGE: 1 **of** 1 **PAGES**

SITE LOCATION: Staten Island, New York	**SCREEN TYPE:** N/A **DIAMETER:** N/A
	SLOT NO.: N/A **SETTING:** N/A'
DATE COMPLETED: 5/12/11	**SAND PACK SIZE:** N/A
DRILLING COMPANY: Summit Drilling Co.	**SETTING:** N/A
	CASING TYPE: N/A **DIAMETER:** N/A
DRILLING METHOD: Geoprobe Direct Push	**SETTING:** N/A
SAMPLING METHOD: Acetate Sleeve	**SEAL TYPE:** N/A
OBSERVER: Eric S Ricci	**SETTING**: N/A
REFERENCE POINT (RP): Ground Level	**BACKFILL TYPE**: N/A
ELEVATION OF RP:	**STATIC WATER LEVEL:** N/A **DATE:** N/A
SURFACE COMPLETION: Asphalt patch	**DEVELOPMENT METHOD**: N/A
	DURATION: N/A **ESTIMATED YIELD:** N/A
COMMENTS:	
ABBREVIATIONS: C = Coarse, M = Medium, F = Fine	

DEPTH (FEET) FROM	DEPTH (FEET) TO	PID (ppm)	RECOVERY (feet)	DESCRIPTION
0.0	1.0	0.3	4.3	Black Asphalt and Subbase; dry
1.0	4.0	16.7		Brown F-M SAND and SILT; F-M-C subangular gravel; little gray clay seams; tight; dry
4.0	5.0	9.1		Red/brown F SAND and SILT; some M-C subrounded gravel; some grey brown clay pockets (possibly varved); tight; moist
5.0	6.5	2.9	2.4	Red/brown F SAND and SILT; with F-M rounded gravel; trace cobbles; very moist
6.5	7.5	3.7		Red/brown F SAND and SILT; with F-M rounded gravel; trace cobbles; very tight; slightly moist
7.5	9.0	--		*Cobble in shoe at 7.5
				Refusal at 9.0', E.O.B.

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OWNER: Rouse Staten Island Mall

WELL NO.: SB-7

PAGE: 1 **of** 2 **PAGES**

SITE LOCATION: Platinum Ave, Staten Island NY	**SCREEN TYPE:** N/A **DIAMETER:**
	SLOT NO.: N/A **SETTING:**
DATE COMPLETED: 7/20/11	**SAND PACK SIZE:** N/A
DRILLING COMPANY: Summit Drilling Co.	**SETTING:** N/A
	CASING TYPE: N/A **DIAMETER:**
DRILLING METHOD: Hollow Stem Auger	**SETTING:** N/A
SAMPLING METHOD: Split spoon	**SEAL TYPE:** N/A
OBSERVER: Spiros Zois	**SETTING**: N/A
REFERENCE POINT (RP): grade	**BACKFILL TYPE**: N/A
ELEVATION OF RP:	**STATIC WATER LEVEL:** N/A **DATE:**
SURFACE COMPLETION: asphalt patch	**DEVELOPMENT METHOD**: N/A
	DURATION: N/A **ESTIMATED YIELD:**
COMMENTS:	
ABBREVIATIONS: SS = split spoon C = cuttings F-M-C = Fine, Medium, Coarse	

DEPTH (FEET)		SAMPLE TYPE	BLOW COUNT	RECOVERY (feet)	DESCRIPTION
FROM	TO				
0	5	Airknife	-	-	0 – 0.5’ Asphalt; PID= 0.0 0.5 – 2’ Subbase (large angular gravel w/ fines); PID= 0.6 2 – 5’ Light brown F SILT; some F sand; w/ subangular F-M-C rounded gravel; dry; PID= 3.0 @ 5 ft.
5	7	SS	11-16-16-15	0.8	Red/brown SILT and F SAND; with F-M-C rounded gravel; some clay; moist at 7’; PID= 0.0
7	9	SS	18-15-11-28	1.1	7 – 8’ Red/brown SILT and F-M SAND; with F-M-C rounded gravel; saturated; PID= 0.0 8 – 9’ Red/brown F-M-C SAND; with F-M-C rounded gravel; some silt; saturated; PID= 0.0
9	11	SS	4-5-8-12	1.2	Red/brown SILT; some F-M-C sand; some F-M-C gravel; some clay; very moist; PID= 0.2 @ 9’ and 0.0 from 9.5’ – 11’

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WELL NO.:	SB-7 **PAGE:** 2 **OF** 2 **PAGES**

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DEPTH (FEET)		SAMPLE TYPE	BLOW COUNT	RECOVERY (feet)	DESCRIPTION
FROM	TO				
11	13	SS	27-20-32-50/5	1.2	11 - 12' Red/brown SILT and CLAY; with F rounded gravel; very tight; moist; PID= 0.0 12 - 12.5' Red/brown SILT and CLAY; with F-M rounded gravel; some F-M Sand; tight; moist; PID=0.0 12.5 – 13' Red/brown SILT and F-M SAND; with F-M-C rounded gravel; some clay; saturated; PID= 0.0
13	15	SS	5-19-24-48	1.0	M-C SAND; w/ F-M-C gravel; some cobbles; little fines; saturated; PID= 0.0
15	16	SS	28-15/4	0.5	Red/brown SILT and F SAND; with F rounded gravel; tight; moist; PID= 0.0
16	17	SS	50-50/1	0.2	Rock fragments (boulder or bedrock)
					AUGER REFUSAL @ 17', E.O.B.

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OWNER: Rouse Staten Island Mall

WELL NO.: SB-8

PAGE: 1 **of** 2 **PAGES**

SITE LOCATION: Platinum Ave, Staten Island NY	**SCREEN TYPE:** N/A **DIAMETER:**
	SLOT NO.: N/A **SETTING:**
DATE COMPLETED: 7/21/11	**SAND PACK SIZE:** N/A
DRILLING COMPANY: Summit Drilling Co.	**SETTING:** N/A
	CASING TYPE: N/A **DIAMETER:**
DRILLING METHOD: Hollow Stem Auger	**SETTING:** N/A
SAMPLING METHOD: Split spoon	**SEAL TYPE:** N/A
OBSERVER: Spiros Zois	**SETTING**: N/A
REFERENCE POINT (RP): grade	**BACKFILL TYPE**: N/A
ELEVATION OF RP:	**STATIC WATER LEVEL:** N/A **DATE:**
SURFACE COMPLETION: asphalt patch	**DEVELOPMENT METHOD**: N/A
	DURATION: N/A **ESTIMATED YIELD:**
COMMENTS:	
ABBREVIATIONS: SS = split spoon C = cuttings F-M-C = Fine, Medium, Coarse	

DEPTH (FEET)		SAMPLE TYPE	BLOW COUNT	RECOVERY (feet)	DESCRIPTION
FROM	TO				
0	5	Airknife	-	-	0 – 1’ Asphalt; PID= 0.0 1 – 3’ Subbase; PID= 0.0 3 – 5’ Light brown SILT and F SAND; some F-M-C rounded gravel; dry; PID= 0.0
5	7	SS	18-19-28-32	0.7	Red/brown SILT and F SAND; some F subrounded gravel; moist; PID= 0.0
7	9	SS	17-13-11-14	0.3	Red/brown SILT and F SAND; some F subrounded gravel; saturated; PID= 0.0
9	11	SS	50/2	0.0	No Recovery
11	13	SS	8-15-20-22	1.3	Red/brown C SAND and F-M-C GRAVEL; with red/brown fines; saturated; PID= 0.0
13	15	SS	22-29-20-15	1.3	F-M SAND; saturated; PID= 0.0

OWNER:	Rouse Staten Island Mall
WELL NO.:	SB-8 **PAGE:** 2 **OF** 2 **PAGES**

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DEPTH (FEET)		SAMPLE TYPE	BLOW COUNT	RECOVERY (feet)	DESCRIPTION
FROM	TO				
15	17	SS	3-6-5-30	1.3	15 – 16.5' F-M SAND; with fines; some F-M-C rounded gravel; saturated; PID= 0.0 ½" wood fiber layer (construction debris) @ 16'. 16.5 – 17' Weathered Rock in SILT with CLAY; PID= 0.0
17	18	SS	25-100/4	0.3	17 – 18' F-M SAND; with wood fibers; saturated; PID= 0.0 18' Bedrock
					AUGER REFUSAL @ 18', E.O.B.

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OWNER: Rouse Staten Island Mall

WELL NO.: SB-9

PAGE: 1 **of** 2 **PAGES**

SITE LOCATION: Platinum Ave, Staten Island NY	**SCREEN TYPE:** N/A **DIAMETER:**
	SLOT NO.: N/A **SETTING:**
DATE COMPLETED: 7/20/11	**SAND PACK SIZE:** N/A
DRILLING COMPANY: Summit Drilling Co.	**SETTING:** N/A
	CASING TYPE: N/A **DIAMETER:**
DRILLING METHOD: Hollow Stem Auger	**SETTING:** N/A
SAMPLING METHOD: Split spoon	**SEAL TYPE:** N/A
OBSERVER: Spiros Zois	**SETTING**: N/A
REFERENCE POINT (RP): grade	**BACKFILL TYPE**: N/A
ELEVATION OF RP:	**STATIC WATER LEVEL:** N/A **DATE:**
SURFACE COMPLETION: asphalt patch	**DEVELOPMENT METHOD**: N/A
	DURATION: N/A **ESTIMATED YIELD:**
COMMENTS:	
ABBREVIATIONS: SS = split spoon C = cuttings F-M-C = Fine, Medium, Coarse	

DEPTH (FEET)		SAMPLE TYPE	BLOW COUNT	RECOVERY (feet)	DESCRIPTION
FROM	TO				
0	5	Airknife	-	-	0 – 1’ Asphalt; PID= 0.0 1 – 3’ Subbase (large stone); PID= 0.0 3 – 5’ Light brown SILT and F SAND; some F-M-C subrounded gravel; dry; PID= 0.0
5	7	SS	10-17-12-8	1.0	Red/brown SILT; some F-M-C subangular to subrounded gravel; slightly moist; PID= 0.0
7	9	SS	5-7-5-8	0.9	Red/brown SILT and F-M-C subangular to subrounded GRAVEL; some cobbles; moist; PID= 0.0
9	11	SS	10-19-5-5	0.5	Red/brown SILT and F-M Sand; trace F rounded gravel; saturated; PID= 0.0
11	13	SS	11-28-20-50/4	0.4	Red/brown SILT; some F rounded gravel; very tight; barely moist; PID= 0.0

OWNER:	Rouse Staten Island Mall
WELL NO.:	SB-9 **PAGE:** 2 **OF** 2 **PAGES**

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DEPTH (FEET)		SAMPLE TYPE	BLOW COUNT	RECOVERY (feet)	DESCRIPTION
FROM	TO				
13	15	SS	50/3	0	No Recovery
15	17	SS	50/4	0.3	No Recovery; Weathered Rock
					AUGER REFUSAL @ 16', E.O.B.

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WELL NO.: SB-10

PAGE: 1 **of** 2 **PAGES**

SITE LOCATION: Platinum Ave, Staten Island NY	**SCREEN TYPE:** N/A **DIAMETER:**
	SLOT NO.: N/A **SETTING:**
DATE COMPLETED: 7/21/11	**SAND PACK SIZE:** N/A
DRILLING COMPANY: Summit Drilling Co.	**SETTING:** N/A
	CASING TYPE: N/A **DIAMETER:**
DRILLING METHOD: Hollow Stem Auger	**SETTING:** N/A
SAMPLING METHOD: Split spoon	**SEAL TYPE:** N/A
OBSERVER: Spiros Zois	**SETTING**: N/A
REFERENCE POINT (RP): grade	**BACKFILL TYPE**: N/A
ELEVATION OF RP:	**STATIC WATER LEVEL:** N/A **DATE:**
SURFACE COMPLETION: asphalt patch	**DEVELOPMENT METHOD**: N/A
	DURATION: N/A **ESTIMATED YIELD:**
COMMENTS:	
ABBREVIATIONS: SS = split spoon C = cuttings F-M-C = Fine, Medium, Coarse	

DEPTH (FEET)		SAMPLE TYPE	BLOW COUNT	RECOVERY (feet)	DESCRIPTION
FROM	TO				
0	5	Airknife	-	-	0 – 1’ Asphalt; PID= 0.0 1 – 3’ Subbase (large stone); PID= 0.0 3 – 5’ Light brown SILT and F SAND; some F-M-C subrounded gravel; dry; PID= 0.0
5	7	SS	7-17-32-19	0	No Recovery, lost split spoon nose in hole.
7	9	SS	23-27-12-8	0.5	Red/brown SILT and F SAND; some F-M-C subrounded gravel; very moist; PID= 0.0
9	11	SS	19-9-5-9	0.9	Red/brown SILT and F SAND; some F-M subrounded gravel; little cobbles; saturated; PID= 0.0
11	13	SS	15-24-31-50/4	0.6	Red/brown SILT and F-M SAND; some F rounded gravel; some C subrounded gravel and cobbles; saturated; PID= 0.0

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WELL NO.:	SB-10 **PAGE:** 2 **OF** 2 **PAGES**

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DEPTH (FEET)		SAMPLE TYPE	BLOW COUNT	RECOVERY (feet)	DESCRIPTION
FROM	TO				
13	15	SS	100/3	0.1	13 – 13.5' Cobble in nose of spoon; smear of clayey SILT and F SAND Weathered Rock
15	17	SS	100/0	0	No Recovery; Bedrock
					AUGER REFUSAL @ 15.25', E.O.B.

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PAGE: 1 **of** 2 **PAGES**

SITE LOCATION: Platinum Ave, Staten Island NY	**SCREEN TYPE:** N/A **DIAMETER:**
	SLOT NO.: N/A **SETTING:**
DATE COMPLETED: 7/21/11	**SAND PACK SIZE:** N/A
DRILLING COMPANY: Summit Drilling Co.	**SETTING:** N/A
	CASING TYPE: N/A **DIAMETER:**
DRILLING METHOD: Hollow Stem Auger	**SETTING:** N/A
SAMPLING METHOD: Split spoon	**SEAL TYPE:** N/A
OBSERVER: Spiros Zois	**SETTING**: N/A
REFERENCE POINT (RP): grade	**BACKFILL TYPE**: N/A
ELEVATION OF RP:	**STATIC WATER LEVEL:** N/A **DATE:**
SURFACE COMPLETION: asphalt patch	**DEVELOPMENT METHOD**: N/A
	DURATION: N/A **ESTIMATED YIELD:**
COMMENTS:	
ABBREVIATIONS: SS = split spoon C = cuttings F-M-C = Fine, Medium, Coarse	

DEPTH (FEET)		SAMPLE TYPE	BLOW COUNT	RECOVERY (feet)	DESCRIPTION
FROM	TO				
0	5	Airknife	-	-	0 – 1’ Asphalt; PID= 0.0 1 – 3’ Subbase (large stone); PID= 0.0 3 – 5’ Light brown SILT and F SAND; some F-M-C subrounded gravel; dry; PID= 0.0
5	7	SS	31-28-30-33	0.9	Red/brown SILT and F SAND; some F-M-C subangular to subrounded gravel and cobbles; slightly moist; PID= 3.5 @ 5’
7	9	SS	10-12-7-7	1.3	Red/brown SILT and F SAND; some F-M-C subrounded gravel and cobbles; moist; PID= 1.5 @ 7’ and 0.0 @ 9’
9	11	SS	15-50/4	0.2	Red/brown SILT and F SAND; some F-M subrounded gravel; little cobbles; very moist; PID= 0.0
11	13	SS	50/4	0.1	Red/brown SILT; some F rounded gravel; very tight; barely moist; PID= 0.0

OWNER:	Rouse Staten Island Mall
WELL NO.:	SB-11 **PAGE:** 2 **OF** 2 **PAGES**

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DEPTH (FEET)		SAMPLE TYPE	BLOW COUNT	RECOVERY (feet)	DESCRIPTION
FROM	TO				
13	15	SS	75-85-109-122	1.0	13 – 14.5' Red/brown SILT and F-M-C SAND; some F rounded gravel; saturated; PID= 0.0 14.5 – 15' Weathered bedrock; some Red/brown SILT and F SAND
					AUGER REFUSAL @ 15', E.O.B.

APPENDIX II

LABORATORY DATA PACKAGE
FOR SOIL SAMPLES AND STORM DRAIN SAMPLES – MAY 2011

Report of Analysis

Client Sample ID:	SB-1-6		
Lab Sample ID:	JA75840-1	**Date Sampled:**	05/12/11
Matrix:	SO - Soil	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	85.5
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X115050.D	1	05/25/11	JTP	n/a	n/a	VX4882
Run #2							

	Initial Weight
Run #1	4.5 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	13	8.6	ug/kg	
71-43-2	Benzene	ND	1.3	0.17	ug/kg	
108-86-1	Bromobenzene	ND	6.5	0.25	ug/kg	
74-97-5	Bromochloromethane	ND	6.5	0.67	ug/kg	
75-27-4	Bromodichloromethane	ND	6.5	0.29	ug/kg	
75-25-2	Bromoform	ND	6.5	0.98	ug/kg	
74-83-9	Bromomethane	ND	6.5	0.51	ug/kg	
78-93-3	2-Butanone (MEK)	ND	13	5.6	ug/kg	
104-51-8	n-Butylbenzene	ND	6.5	0.31	ug/kg	
135-98-8	sec-Butylbenzene	ND	6.5	0.21	ug/kg	
98-06-6	tert-Butylbenzene	ND	6.5	0.18	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.5	0.45	ug/kg	
108-90-7	Chlorobenzene	ND	6.5	0.42	ug/kg	
75-00-3	Chloroethane	ND	6.5	0.53	ug/kg	
67-66-3	Chloroform	ND	6.5	0.63	ug/kg	
74-87-3	Chloromethane	ND	6.5	0.81	ug/kg	
95-49-8	o-Chlorotoluene	ND	6.5	0.49	ug/kg	
106-43-4	p-Chlorotoluene	ND	6.5	0.27	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	13	2.0	ug/kg	
124-48-1	Dibromochloromethane	ND	6.5	0.22	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.3	0.31	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	6.5	0.36	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	6.5	0.25	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	6.5	0.22	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	6.5	0.42	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.5	0.28	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.3	0.24	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.5	0.80	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.5	0.42	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.5	0.55	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.5	0.35	ug/kg	
142-28-9	1,3-Dichloropropane	ND	6.5	0.48	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-1-6		
Lab Sample ID:	JA75840-1	**Date Sampled:**	05/12/11
Matrix:	SO - Soil	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	85.5
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	6.5	0.22	ug/kg	
563-58-6	1,1-Dichloropropene	ND	6.5	0.27	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.5	0.20	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.5	0.44	ug/kg	
100-41-4	Ethylbenzene	ND	1.3	0.19	ug/kg	
87-68-3	Hexachlorobutadiene	ND	6.5	0.68	ug/kg	
98-82-8	Isopropylbenzene	ND	6.5	0.18	ug/kg	
99-87-6	p-Isopropyltoluene	ND	6.5	0.38	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.3	0.23	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.5	3.4	ug/kg	
74-95-3	Methylene bromide	ND	6.5	0.74	ug/kg	
75-09-2	Methylene chloride	ND	6.5	0.30	ug/kg	
91-20-3	Naphthalene	ND	6.5	1.4	ug/kg	
103-65-1	n-Propylbenzene	ND	6.5	0.45	ug/kg	
100-42-5	Styrene	ND	6.5	0.24	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	6.5	0.24	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.5	0.23	ug/kg	
127-18-4	Tetrachloroethene	ND	6.5	0.25	ug/kg	
108-88-3	Toluene	ND	1.3	0.49	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	6.5	0.57	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	6.5	0.44	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.5	0.31	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.5	0.56	ug/kg	
79-01-6	Trichloroethene	ND	6.5	0.32	ug/kg	
75-69-4	Trichlorofluoromethane	ND	6.5	0.63	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	6.5	1.4	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	6.5	1.5	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	0.37	6.5	0.17	ug/kg	J
75-01-4	Vinyl chloride	ND	6.5	0.60	ug/kg	
	m,p-Xylene	ND	1.3	0.41	ug/kg	
95-47-6	o-Xylene	0.61	1.3	0.24	ug/kg	J
1330-20-7	Xylene (total)	0.61	1.3	0.24	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		67-131%
17060-07-0	1,2-Dichloroethane-D4	88%		66-130%
2037-26-5	Toluene-D8	99%		76-125%
460-00-4	4-Bromofluorobenzene	92%		53-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	SB-1-6		
Lab Sample ID:	JA75840-1	**Date Sampled:**	05/12/11
Matrix:	SO - Soil	**Date Received:**	05/13/11
		Percent Solids:	85.5
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	85.5		%	1	05/25/11	CS	SM18 2540G
Total Organic Carbon	< 1200	1200	mg/kg	1	05/25/11 10:02	SJG	CORP ENG 81M/SW9060M

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-2-4.5		
Lab Sample ID:	JA75840-2	**Date Sampled:**	05/12/11
Matrix:	SO - Soil	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	91.1
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X115051.D	1	05/25/11	JTP	n/a	n/a	VX4882
Run #2							

	Initial Weight
Run #1	4.7 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	12	7.7	ug/kg	
71-43-2	Benzene	ND	1.2	0.16	ug/kg	
108-86-1	Bromobenzene	ND	5.8	0.23	ug/kg	
74-97-5	Bromochloromethane	ND	5.8	0.61	ug/kg	
75-27-4	Bromodichloromethane	ND	5.8	0.26	ug/kg	
75-25-2	Bromoform	ND	5.8	0.88	ug/kg	
74-83-9	Bromomethane	ND	5.8	0.46	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	5.1	ug/kg	
104-51-8	n-Butylbenzene	ND	5.8	0.27	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.8	0.19	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.8	0.16	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.8	0.40	ug/kg	
108-90-7	Chlorobenzene	ND	5.8	0.38	ug/kg	
75-00-3	Chloroethane	ND	5.8	0.48	ug/kg	
67-66-3	Chloroform	ND	5.8	0.56	ug/kg	
74-87-3	Chloromethane	ND	5.8	0.73	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.8	0.44	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.8	0.24	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	12	1.8	ug/kg	
124-48-1	Dibromochloromethane	ND	5.8	0.20	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.2	0.28	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.8	0.32	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.8	0.22	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.8	0.20	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.8	0.37	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.8	0.25	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.2	0.21	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.8	0.72	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.8	0.38	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.8	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.8	0.31	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.8	0.44	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-2-4.5		
Lab Sample ID:	JA75840-2	**Date Sampled:**	05/12/11
Matrix:	SO - Soil	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	91.1
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	5.8	0.20	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.8	0.24	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.8	0.18	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.8	0.39	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.17	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.8	0.61	ug/kg	
98-82-8	Isopropylbenzene	ND	5.8	0.16	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.8	0.35	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.21	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.8	3.1	ug/kg	
74-95-3	Methylene bromide	ND	5.8	0.66	ug/kg	
75-09-2	Methylene chloride	ND	5.8	0.27	ug/kg	
91-20-3	Naphthalene	ND	5.8	1.2	ug/kg	
103-65-1	n-Propylbenzene	ND	5.8	0.40	ug/kg	
100-42-5	Styrene	ND	5.8	0.22	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.8	0.21	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.8	0.21	ug/kg	
127-18-4	Tetrachloroethene	ND	5.8	0.22	ug/kg	
108-88-3	Toluene	ND	1.2	0.44	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.8	0.51	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.8	0.40	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.8	0.28	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.8	0.51	ug/kg	
79-01-6	Trichloroethene	ND	5.8	0.29	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.8	0.56	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.8	1.2	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.8	1.3	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.8	0.15	ug/kg	
75-01-4	Vinyl chloride	ND	5.8	0.54	ug/kg	
	m,p-Xylene	ND	1.2	0.37	ug/kg	
95-47-6	o-Xylene	ND	1.2	0.21	ug/kg	
1330-20-7	Xylene (total)	ND	1.2	0.21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		67-131%
17060-07-0	1,2-Dichloroethane-D4	91%		66-130%
2037-26-5	Toluene-D8	99%		76-125%
460-00-4	4-Bromofluorobenzene	92%		53-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-2-4.5		
Lab Sample ID:	JA75840-2	**Date Sampled:**	05/12/11
Matrix:	SO - Soil	**Date Received:**	05/13/11
		Percent Solids:	91.1
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	91.1		%	1	05/25/11	CS	SM18 2540G
Total Organic Carbon	< 1100	1100	mg/kg	1	05/25/11 10:22	SJG	CORP ENG 81M/SW9060M

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-4-5.5		
Lab Sample ID:	JA75840-3	**Date Sampled:**	05/12/11
Matrix:	SO - Soil	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	89.8
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X115055.D	1	05/25/11	JTP	n/a	n/a	VX4882
Run #2							

	Initial Weight
Run #1	4.8 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	12	7.7	ug/kg	
71-43-2	Benzene	ND	1.2	0.15	ug/kg	
108-86-1	Bromobenzene	ND	5.8	0.23	ug/kg	
74-97-5	Bromochloromethane	ND	5.8	0.60	ug/kg	
75-27-4	Bromodichloromethane	ND	5.8	0.26	ug/kg	
75-25-2	Bromoform	ND	5.8	0.88	ug/kg	
74-83-9	Bromomethane	ND	5.8	0.46	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	5.0	ug/kg	
104-51-8	n-Butylbenzene	ND	5.8	0.27	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.8	0.18	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.8	0.16	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.8	0.40	ug/kg	
108-90-7	Chlorobenzene	ND	5.8	0.37	ug/kg	
75-00-3	Chloroethane	ND	5.8	0.47	ug/kg	
67-66-3	Chloroform	ND	5.8	0.56	ug/kg	
74-87-3	Chloromethane	ND	5.8	0.72	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.8	0.44	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.8	0.24	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	12	1.8	ug/kg	
124-48-1	Dibromochloromethane	ND	5.8	0.19	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.2	0.28	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.8	0.32	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.8	0.22	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.8	0.20	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.8	0.37	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.8	0.25	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.2	0.21	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.8	0.71	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.8	0.37	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.8	0.49	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.8	0.31	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.8	0.43	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-4-5.5		
Lab Sample ID:	JA75840-3	**Date Sampled:**	05/12/11
Matrix:	SO - Soil	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	89.8
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	5.8	0.20	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.8	0.24	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.8	0.18	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.8	0.39	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.17	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.8	0.60	ug/kg	
98-82-8	Isopropylbenzene	ND	5.8	0.16	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.8	0.34	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.21	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.8	3.1	ug/kg	
74-95-3	Methylene bromide	ND	5.8	0.66	ug/kg	
75-09-2	Methylene chloride	ND	5.8	0.27	ug/kg	
91-20-3	Naphthalene	ND	5.8	1.2	ug/kg	
103-65-1	n-Propylbenzene	ND	5.8	0.40	ug/kg	
100-42-5	Styrene	ND	5.8	0.21	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.8	0.21	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.8	0.21	ug/kg	
127-18-4	Tetrachloroethene	ND	5.8	0.22	ug/kg	
108-88-3	Toluene	ND	1.2	0.44	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.8	0.51	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.8	0.40	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.8	0.28	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.8	0.50	ug/kg	
79-01-6	Trichloroethene	ND	5.8	0.29	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.8	0.56	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.8	1.2	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.8	1.3	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	0.31	5.8	0.15	ug/kg	J
75-01-4	Vinyl chloride	ND	5.8	0.53	ug/kg	
	m,p-Xylene	ND	1.2	0.36	ug/kg	
95-47-6	o-Xylene	0.61	1.2	0.21	ug/kg	J
1330-20-7	Xylene (total)	0.61	1.2	0.21	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	91%		67-131%
17060-07-0	1,2-Dichloroethane-D4	87%		66-130%
2037-26-5	Toluene-D8	98%		76-125%
460-00-4	4-Bromofluorobenzene	92%		53-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-4-5.5		
Lab Sample ID:	JA75840-3	**Date Sampled:**	05/12/11
Matrix:	SO - Soil	**Date Received:**	05/13/11
		Percent Solids:	89.8
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	89.8		%	1	05/25/11	CS	SM18 2540G
Total Organic Carbon	< 1100	1100	mg/kg	1	05/25/11 10:31	SJG	CORP ENG 81M/SW9060M

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-5-4.5		
Lab Sample ID:	JA75840-4	**Date Sampled:**	05/12/11
Matrix:	SO - Soil	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	90.9
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X115056.D	1	05/25/11	JTP	n/a	n/a	VX4882
Run #2							

	Initial Weight
Run #1	5.0 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	7.3	ug/kg	
71-43-2	Benzene	ND	1.1	0.15	ug/kg	
108-86-1	Bromobenzene	ND	5.5	0.21	ug/kg	
74-97-5	Bromochloromethane	ND	5.5	0.57	ug/kg	
75-27-4	Bromodichloromethane	ND	5.5	0.25	ug/kg	
75-25-2	Bromoform	ND	5.5	0.83	ug/kg	
74-83-9	Bromomethane	ND	5.5	0.43	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	4.8	ug/kg	
104-51-8	n-Butylbenzene	ND	5.5	0.26	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.5	0.17	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.5	0.15	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.5	0.38	ug/kg	
108-90-7	Chlorobenzene	ND	5.5	0.35	ug/kg	
75-00-3	Chloroethane	ND	5.5	0.45	ug/kg	
67-66-3	Chloroform	ND	5.5	0.53	ug/kg	
74-87-3	Chloromethane	ND	5.5	0.69	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.5	0.41	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.5	0.23	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	11	1.7	ug/kg	
124-48-1	Dibromochloromethane	ND	5.5	0.18	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.26	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.5	0.30	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.5	0.21	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.5	0.19	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.5	0.35	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.5	0.24	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.20	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.5	0.67	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.5	0.35	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.5	0.47	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.5	0.29	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.5	0.41	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-5-4.5		
Lab Sample ID:	JA75840-4	**Date Sampled:**	05/12/11
Matrix:	SO - Soil	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	90.9
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	5.5	0.19	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.5	0.23	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.5	0.17	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.5	0.37	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.16	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.5	0.57	ug/kg	
98-82-8	Isopropylbenzene	ND	5.5	0.15	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.5	0.33	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.20	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.5	2.9	ug/kg	
74-95-3	Methylene bromide	ND	5.5	0.62	ug/kg	
75-09-2	Methylene chloride	ND	5.5	0.25	ug/kg	
91-20-3	Naphthalene	ND	5.5	1.2	ug/kg	
103-65-1	n-Propylbenzene	ND	5.5	0.38	ug/kg	
100-42-5	Styrene	0.39	5.5	0.20	ug/kg	J
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.5	0.20	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.5	0.20	ug/kg	
127-18-4	Tetrachloroethene	ND	5.5	0.21	ug/kg	
108-88-3	Toluene	ND	1.1	0.42	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.5	0.48	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.5	0.38	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.5	0.27	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.5	0.48	ug/kg	
79-01-6	Trichloroethene	ND	5.5	0.27	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.5	0.53	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.5	1.2	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.5	1.2	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	0.24	5.5	0.14	ug/kg	J
75-01-4	Vinyl chloride	ND	5.5	0.51	ug/kg	
	m,p-Xylene	0.65	1.1	0.35	ug/kg	J
95-47-6	o-Xylene	0.33	1.1	0.20	ug/kg	J
1330-20-7	Xylene (total)	0.98	1.1	0.20	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		67-131%
17060-07-0	1,2-Dichloroethane-D4	87%		66-130%
2037-26-5	Toluene-D8	99%		76-125%
460-00-4	4-Bromofluorobenzene	92%		53-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-5-4.5		
Lab Sample ID:	JA75840-4	**Date Sampled:**	05/12/11
Matrix:	SO - Soil	**Date Received:**	05/13/11
		Percent Solids:	90.9
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	90.9		%	1	05/25/11	CS	SM18 2540G
Total Organic Carbon	< 1100	1100	mg/kg	1	05/25/11 16:06	SJG	CORP ENG 81M/SW9060M

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-5-5.5		
Lab Sample ID:	JA75840-5	**Date Sampled:**	05/12/11
Matrix:	SO - Soil	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	90.5
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X115057.D	1	05/25/11	JTP	n/a	n/a	VX4882
Run #2							

	Initial Weight
Run #1	4.5 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	12	8.1	ug/kg	
71-43-2	Benzene	ND	1.2	0.16	ug/kg	
108-86-1	Bromobenzene	ND	6.1	0.24	ug/kg	
74-97-5	Bromochloromethane	ND	6.1	0.64	ug/kg	
75-27-4	Bromodichloromethane	ND	6.1	0.28	ug/kg	
75-25-2	Bromoform	ND	6.1	0.93	ug/kg	
74-83-9	Bromomethane	ND	6.1	0.48	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	5.3	ug/kg	
104-51-8	n-Butylbenzene	ND	6.1	0.29	ug/kg	
135-98-8	sec-Butylbenzene	ND	6.1	0.20	ug/kg	
98-06-6	tert-Butylbenzene	ND	6.1	0.17	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.1	0.42	ug/kg	
108-90-7	Chlorobenzene	ND	6.1	0.40	ug/kg	
75-00-3	Chloroethane	ND	6.1	0.50	ug/kg	
67-66-3	Chloroform	ND	6.1	0.59	ug/kg	
74-87-3	Chloromethane	ND	6.1	0.77	ug/kg	
95-49-8	o-Chlorotoluene	ND	6.1	0.46	ug/kg	
106-43-4	p-Chlorotoluene	ND	6.1	0.26	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	12	1.9	ug/kg	
124-48-1	Dibromochloromethane	ND	6.1	0.21	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.2	0.29	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	6.1	0.34	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	6.1	0.24	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	6.1	0.21	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	6.1	0.39	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.1	0.27	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.2	0.22	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.1	0.75	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.1	0.40	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.1	0.52	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.1	0.33	ug/kg	
142-28-9	1,3-Dichloropropane	ND	6.1	0.46	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-5-5.5		
Lab Sample ID:	JA75840-5	**Date Sampled:**	05/12/11
Matrix:	SO - Soil	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	90.5
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	6.1	0.21	ug/kg	
563-58-6	1,1-Dichloropropene	ND	6.1	0.26	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.1	0.19	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.1	0.41	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.18	ug/kg	
87-68-3	Hexachlorobutadiene	ND	6.1	0.64	ug/kg	
98-82-8	Isopropylbenzene	ND	6.1	0.17	ug/kg	
99-87-6	p-Isopropyltoluene	ND	6.1	0.36	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.22	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.1	3.2	ug/kg	
74-95-3	Methylene bromide	ND	6.1	0.70	ug/kg	
75-09-2	Methylene chloride	ND	6.1	0.28	ug/kg	
91-20-3	Naphthalene	ND	6.1	1.3	ug/kg	
103-65-1	n-Propylbenzene	ND	6.1	0.42	ug/kg	
100-42-5	Styrene	ND	6.1	0.23	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	6.1	0.23	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.1	0.22	ug/kg	
127-18-4	Tetrachloroethene	ND	6.1	0.23	ug/kg	
108-88-3	Toluene	ND	1.2	0.46	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	6.1	0.54	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	6.1	0.42	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.1	0.30	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.1	0.53	ug/kg	
79-01-6	Trichloroethene	ND	6.1	0.30	ug/kg	
75-69-4	Trichlorofluoromethane	ND	6.1	0.59	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	6.1	1.3	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	6.1	1.4	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	0.32	6.1	0.16	ug/kg	J
75-01-4	Vinyl chloride	ND	6.1	0.57	ug/kg	
	m,p-Xylene	0.78	1.2	0.39	ug/kg	J
95-47-6	o-Xylene	0.53	1.2	0.23	ug/kg	J
1330-20-7	Xylene (total)	1.3	1.2	0.23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		67-131%
17060-07-0	1,2-Dichloroethane-D4	90%		66-130%
2037-26-5	Toluene-D8	99%		76-125%
460-00-4	4-Bromofluorobenzene	92%		53-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-5-5.5		
Lab Sample ID:	JA75840-5	**Date Sampled:**	05/12/11
Matrix:	SO - Soil	**Date Received:**	05/13/11
		Percent Solids:	90.5
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	90.5		%	1	05/25/11	CS	SM18 2540G
Total Organic Carbon	4530	1100	mg/kg	1	05/25/11 11:16	SJG	CORP ENG 81M/SW9060M

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-5-8		
Lab Sample ID:	JA75840-6	**Date Sampled:**	05/12/11
Matrix:	SO - Soil	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	90.2
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X115058.D	1	05/25/11	JTP	n/a	n/a	VX4882
Run #2							

	Initial Weight
Run #1	5.0 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	7.3	ug/kg	
71-43-2	Benzene	ND	1.1	0.15	ug/kg	
108-86-1	Bromobenzene	ND	5.5	0.22	ug/kg	
74-97-5	Bromochloromethane	ND	5.5	0.58	ug/kg	
75-27-4	Bromodichloromethane	ND	5.5	0.25	ug/kg	
75-25-2	Bromoform	ND	5.5	0.84	ug/kg	
74-83-9	Bromomethane	ND	5.5	0.44	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	4.8	ug/kg	
104-51-8	n-Butylbenzene	ND	5.5	0.26	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.5	0.18	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.5	0.15	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.5	0.38	ug/kg	
108-90-7	Chlorobenzene	ND	5.5	0.36	ug/kg	
75-00-3	Chloroethane	ND	5.5	0.45	ug/kg	
67-66-3	Chloroform	ND	5.5	0.54	ug/kg	
74-87-3	Chloromethane	ND	5.5	0.69	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.5	0.42	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.5	0.23	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	11	1.7	ug/kg	
124-48-1	Dibromochloromethane	ND	5.5	0.19	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.26	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.5	0.31	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.5	0.21	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.5	0.19	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.5	0.36	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.5	0.24	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.20	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.5	0.68	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.5	0.36	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.5	0.47	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.5	0.29	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.5	0.41	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-5-8		
Lab Sample ID:	JA75840-6	**Date Sampled:**	05/12/11
Matrix:	SO - Soil	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	90.2
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	5.5	0.19	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.5	0.23	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.5	0.17	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.5	0.37	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.16	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.5	0.58	ug/kg	
98-82-8	Isopropylbenzene	ND	5.5	0.15	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.5	0.33	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.20	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.5	2.9	ug/kg	
74-95-3	Methylene bromide	ND	5.5	0.63	ug/kg	
75-09-2	Methylene chloride	ND	5.5	0.25	ug/kg	
91-20-3	Naphthalene	ND	5.5	1.2	ug/kg	
103-65-1	n-Propylbenzene	ND	5.5	0.38	ug/kg	
100-42-5	Styrene	ND	5.5	0.21	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.5	0.20	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.5	0.20	ug/kg	
127-18-4	Tetrachloroethene	5.4	5.5	0.21	ug/kg	J
108-88-3	Toluene	ND	1.1	0.42	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.5	0.49	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.5	0.38	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.5	0.27	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.5	0.48	ug/kg	
79-01-6	Trichloroethene	ND	5.5	0.27	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.5	0.53	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.5	1.2	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.5	1.2	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.5	0.14	ug/kg	
75-01-4	Vinyl chloride	ND	5.5	0.51	ug/kg	
	m,p-Xylene	0.60	1.1	0.35	ug/kg	J
95-47-6	o-Xylene	0.28	1.1	0.20	ug/kg	J
1330-20-7	Xylene (total)	0.88	1.1	0.20	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		67-131%
17060-07-0	1,2-Dichloroethane-D4	100%		66-130%
2037-26-5	Toluene-D8	99%		76-125%
460-00-4	4-Bromofluorobenzene	91%		53-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-5-8		
Lab Sample ID:	JA75840-6	**Date Sampled:**	05/12/11
Matrix:	SO - Soil	**Date Received:**	05/13/11
		Percent Solids:	90.2
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	90.2		%	1	05/25/11	CS	SM18 2540G
Total Organic Carbon	< 1100	1100	mg/kg	1	05/25/11 11:27	SJG	CORP ENG 81M/SW9060M

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-6-1.5		
Lab Sample ID:	JA75840-7	**Date Sampled:**	05/12/11
Matrix:	SO - Soil	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	92.2
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X115059.D	1	05/25/11	JTP	n/a	n/a	VX4882
Run #2							

	Initial Weight
Run #1	5.0 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	62.3	11	7.2	ug/kg	
71-43-2	Benzene	ND	1.1	0.14	ug/kg	
108-86-1	Bromobenzene	ND	5.4	0.21	ug/kg	
74-97-5	Bromochloromethane	ND	5.4	0.56	ug/kg	
75-27-4	Bromodichloromethane	ND	5.4	0.24	ug/kg	
75-25-2	Bromoform	ND	5.4	0.82	ug/kg	
74-83-9	Bromomethane	ND	5.4	0.43	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	4.7	ug/kg	
104-51-8	n-Butylbenzene	ND	5.4	0.25	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.4	0.17	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.4	0.15	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.4	0.38	ug/kg	
108-90-7	Chlorobenzene	ND	5.4	0.35	ug/kg	
75-00-3	Chloroethane	ND	5.4	0.44	ug/kg	
67-66-3	Chloroform	ND	5.4	0.52	ug/kg	
74-87-3	Chloromethane	ND	5.4	0.68	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.4	0.41	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.4	0.23	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	11	1.6	ug/kg	
124-48-1	Dibromochloromethane	ND	5.4	0.18	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.26	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.4	0.30	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.4	0.21	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.4	0.18	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.4	0.35	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.4	0.24	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.20	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.4	0.66	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.4	0.35	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.4	0.46	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.4	0.29	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.4	0.40	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-6-1.5		
Lab Sample ID:	JA75840-7	**Date Sampled:**	05/12/11
Matrix:	SO - Soil	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	92.2
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	5.4	0.19	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.4	0.23	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.4	0.16	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.4	0.36	ug/kg	
100-41-4	Ethylbenzene	0.51	1.1	0.16	ug/kg	J
87-68-3	Hexachlorobutadiene	ND	5.4	0.57	ug/kg	
98-82-8	Isopropylbenzene	ND	5.4	0.15	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.4	0.32	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.19	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.4	2.9	ug/kg	
74-95-3	Methylene bromide	ND	5.4	0.62	ug/kg	
75-09-2	Methylene chloride	ND	5.4	0.25	ug/kg	
91-20-3	Naphthalene	ND	5.4	1.1	ug/kg	
103-65-1	n-Propylbenzene	ND	5.4	0.38	ug/kg	
100-42-5	Styrene	0.38	5.4	0.20	ug/kg	J
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.4	0.20	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.4	0.19	ug/kg	
127-18-4	Tetrachloroethene	ND	5.4	0.21	ug/kg	
108-88-3	Toluene	ND	1.1	0.41	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.4	0.48	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.4	0.37	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.4	0.26	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.4	0.47	ug/kg	
79-01-6	Trichloroethene	ND	5.4	0.27	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.4	0.52	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.4	1.2	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.4	1.2	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	0.41	5.4	0.14	ug/kg	J
75-01-4	Vinyl chloride	ND	5.4	0.50	ug/kg	
	m,p-Xylene	1.9	1.1	0.34	ug/kg	
95-47-6	o-Xylene	1.0	1.1	0.20	ug/kg	J
1330-20-7	Xylene (total)	2.9	1.1	0.20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		67-131%
17060-07-0	1,2-Dichloroethane-D4	91%		66-130%
2037-26-5	Toluene-D8	100%		76-125%
460-00-4	4-Bromofluorobenzene	92%		53-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-6-1.5		
Lab Sample ID:	JA75840-7	**Date Sampled:**	05/12/11
Matrix:	SO - Soil	**Date Received:**	05/13/11
		Percent Solids:	92.2
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	92.2		%	1	05/25/11	CS	SM18 2540G
Total Organic Carbon	2550	1100	mg/kg	1	05/25/11 12:21	SJG	CORP ENG 81M/SW9060M

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-6-4.5		
Lab Sample ID:	JA75840-8	**Date Sampled:**	05/12/11
Matrix:	SO - Soil	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	88.3
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X115060.D	1	05/25/11	JTP	n/a	n/a	VX4882
Run #2							

	Initial Weight
Run #1	4.6 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	12	8.1	ug/kg	
71-43-2	Benzene	ND	1.2	0.16	ug/kg	
108-86-1	Bromobenzene	ND	6.2	0.24	ug/kg	
74-97-5	Bromochloromethane	ND	6.2	0.64	ug/kg	
75-27-4	Bromodichloromethane	ND	6.2	0.28	ug/kg	
75-25-2	Bromoform	ND	6.2	0.93	ug/kg	
74-83-9	Bromomethane	ND	6.2	0.49	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	5.3	ug/kg	
104-51-8	n-Butylbenzene	ND	6.2	0.29	ug/kg	
135-98-8	sec-Butylbenzene	ND	6.2	0.20	ug/kg	
98-06-6	tert-Butylbenzene	ND	6.2	0.17	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.2	0.43	ug/kg	
108-90-7	Chlorobenzene	ND	6.2	0.40	ug/kg	
75-00-3	Chloroethane	ND	6.2	0.50	ug/kg	
67-66-3	Chloroform	ND	6.2	0.59	ug/kg	
74-87-3	Chloromethane	ND	6.2	0.77	ug/kg	
95-49-8	o-Chlorotoluene	ND	6.2	0.46	ug/kg	
106-43-4	p-Chlorotoluene	ND	6.2	0.26	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	12	1.9	ug/kg	
124-48-1	Dibromochloromethane	ND	6.2	0.21	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.2	0.29	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	6.2	0.34	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	6.2	0.24	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	6.2	0.21	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	6.2	0.40	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.2	0.27	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.2	0.22	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.2	0.75	ug/kg	
156-59-2	cis-1,2-Dichloroethene	0.41	6.2	0.40	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	ND	6.2	0.52	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.2	0.33	ug/kg	
142-28-9	1,3-Dichloropropane	ND	6.2	0.46	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-6-4.5		
Lab Sample ID:	JA75840-8	**Date Sampled:**	05/12/11
Matrix:	SO - Soil	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	88.3
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	6.2	0.21	ug/kg	
563-58-6	1,1-Dichloropropene	ND	6.2	0.26	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.2	0.19	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.2	0.41	ug/kg	
100-41-4	Ethylbenzene	0.57	1.2	0.18	ug/kg	J
87-68-3	Hexachlorobutadiene	ND	6.2	0.64	ug/kg	
98-82-8	Isopropylbenzene	ND	6.2	0.17	ug/kg	
99-87-6	p-Isopropyltoluene	ND	6.2	0.36	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.22	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.2	3.2	ug/kg	
74-95-3	Methylene bromide	ND	6.2	0.70	ug/kg	
75-09-2	Methylene chloride	ND	6.2	0.28	ug/kg	
91-20-3	Naphthalene	ND	6.2	1.3	ug/kg	
103-65-1	n-Propylbenzene	ND	6.2	0.43	ug/kg	
100-42-5	Styrene	0.68	6.2	0.23	ug/kg	J
630-20-6	1,1,1,2-Tetrachloroethane	ND	6.2	0.23	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.2	0.22	ug/kg	
127-18-4	Tetrachloroethene	10.3	6.2	0.24	ug/kg	
108-88-3	Toluene	0.52	1.2	0.47	ug/kg	J
87-61-6	1,2,3-Trichlorobenzene	ND	6.2	0.54	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	6.2	0.42	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.2	0.30	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.2	0.53	ug/kg	
79-01-6	Trichloroethene	0.80	6.2	0.30	ug/kg	J
75-69-4	Trichlorofluoromethane	ND	6.2	0.59	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	6.2	1.3	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	6.2	1.4	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	0.40	6.2	0.16	ug/kg	J
75-01-4	Vinyl chloride	ND	6.2	0.57	ug/kg	
	m,p-Xylene	2.0	1.2	0.39	ug/kg	
95-47-6	o-Xylene	1.1	1.2	0.23	ug/kg	J
1330-20-7	Xylene (total)	3.1	1.2	0.23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		67-131%
17060-07-0	1,2-Dichloroethane-D4	93%		66-130%
2037-26-5	Toluene-D8	99%		76-125%
460-00-4	4-Bromofluorobenzene	91%		53-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-6-4.5		
Lab Sample ID:	JA75840-8	**Date Sampled:**	05/12/11
Matrix:	SO - Soil	**Date Received:**	05/13/11
		Percent Solids:	88.3
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	88.3		%	1	05/25/11	CS	SM18 2540G
Total Organic Carbon	2420	1100	mg/kg	1	05/25/11 12:33	SJG	CORP ENG 81M/SW9060M

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-6-7		
Lab Sample ID:	JA75840-9	**Date Sampled:**	05/12/11
Matrix:	SO - Soil	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	91.3
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X115061.D	1	05/25/11	JTP	n/a	n/a	VX4882
Run #2							

	Initial Weight
Run #1	5.1 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	7.1	ug/kg	
71-43-2	Benzene	ND	1.1	0.14	ug/kg	
108-86-1	Bromobenzene	ND	5.4	0.21	ug/kg	
74-97-5	Bromochloromethane	ND	5.4	0.56	ug/kg	
75-27-4	Bromodichloromethane	ND	5.4	0.24	ug/kg	
75-25-2	Bromoform	ND	5.4	0.81	ug/kg	
74-83-9	Bromomethane	ND	5.4	0.42	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	4.6	ug/kg	
104-51-8	n-Butylbenzene	ND	5.4	0.25	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.4	0.17	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.4	0.15	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.4	0.37	ug/kg	
108-90-7	Chlorobenzene	ND	5.4	0.35	ug/kg	
75-00-3	Chloroethane	ND	5.4	0.44	ug/kg	
67-66-3	Chloroform	ND	5.4	0.52	ug/kg	
74-87-3	Chloromethane	ND	5.4	0.67	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.4	0.40	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.4	0.22	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	11	1.6	ug/kg	
124-48-1	Dibromochloromethane	ND	5.4	0.18	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.26	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.4	0.30	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.4	0.21	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.4	0.18	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.4	0.34	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.4	0.23	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.20	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.4	0.66	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.4	0.35	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.4	0.46	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.4	0.29	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.4	0.40	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-6-7		
Lab Sample ID:	JA75840-9	**Date Sampled:**	05/12/11
Matrix:	SO - Soil	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	91.3
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	5.4	0.18	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.4	0.22	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.4	0.16	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.4	0.36	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.16	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.4	0.56	ug/kg	
98-82-8	Isopropylbenzene	ND	5.4	0.15	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.4	0.32	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.19	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.4	2.8	ug/kg	
74-95-3	Methylene bromide	ND	5.4	0.61	ug/kg	
75-09-2	Methylene chloride	ND	5.4	0.25	ug/kg	
91-20-3	Naphthalene	ND	5.4	1.1	ug/kg	
103-65-1	n-Propylbenzene	ND	5.4	0.37	ug/kg	
100-42-5	Styrene	0.28	5.4	0.20	ug/kg	J
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.4	0.20	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.4	0.19	ug/kg	
127-18-4	Tetrachloroethene	ND	5.4	0.21	ug/kg	
108-88-3	Toluene	ND	1.1	0.41	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.4	0.47	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.4	0.37	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.4	0.26	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.4	0.46	ug/kg	
79-01-6	Trichloroethene	ND	5.4	0.27	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.4	0.52	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.4	1.1	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.4	1.2	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.4	0.14	ug/kg	
75-01-4	Vinyl chloride	ND	5.4	0.50	ug/kg	
	m,p-Xylene	ND	1.1	0.34	ug/kg	
95-47-6	o-Xylene	0.22	1.1	0.20	ug/kg	J
1330-20-7	Xylene (total)	0.54	1.1	0.20	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		67-131%
17060-07-0	1,2-Dichloroethane-D4	87%		66-130%
2037-26-5	Toluene-D8	99%		76-125%
460-00-4	4-Bromofluorobenzene	93%		53-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-6-7		
Lab Sample ID:	JA75840-9	**Date Sampled:**	05/12/11
Matrix:	SO - Soil	**Date Received:**	05/13/11
		Percent Solids:	91.3
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	91.3		%	1	05/25/11	CS	SM18 2540G
Total Organic Carbon	< 1100	1100	mg/kg	1	05/25/11 13:01	SJG	CORP ENG 81M/SW9060M

RL = Reporting Limit

Accutest LabLink@641505 17:26 31-Oct-2011

Report of Analysis

Client Sample ID:	STORM DRAIN 1		
Lab Sample ID:	JA75840-10	**Date Sampled:**	05/13/11
Matrix:	AQ - Surface Water	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D96808.D	1	05/27/11	MAH	n/a	n/a	V2D3947
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	4.4	ug/l	
71-43-2	Benzene	ND	1.0	0.26	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.13	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.79	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.18	ug/l	
75-25-2	Bromoform	ND	4.0	0.42	ug/l	
74-83-9	Bromomethane	ND	2.0	0.24	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.7	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.26	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.40	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.34	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.35	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.15	ug/l	
75-00-3	Chloroethane	ND	1.0	0.25	ug/l	
67-66-3	Chloroform	ND	1.0	0.14	ug/l	
74-87-3	Chloromethane	ND	1.0	0.34	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.17	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.16	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.39	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.15	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.22	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.16	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.24	ug/l	
156-59-2	cis-1,2-Dichloroethene	17.8	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.30	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.23	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	STORM DRAIN 1		
Lab Sample ID:	JA75840-10	**Date Sampled:**	05/13/11
Matrix:	AQ - Surface Water	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	5.0	0.21	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.16	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.16	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.31	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.23	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.31	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.13	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.74	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.35	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.78	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.33	ug/l	
100-42-5	Styrene	ND	5.0	0.48	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.18	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.12	ug/l	
127-18-4	Tetrachloroethene	39.6	1.0	0.24	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.29	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.13	ug/l	
79-01-6	Trichloroethene	6.5	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.23	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.52	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.27	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.31	ug/l	
75-01-4	Vinyl chloride	0.76	1.0	0.22	ug/l	J
	m,p-Xylene	ND	1.0	0.39	ug/l	
95-47-6	o-Xylene	ND	1.0	0.28	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.28	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		77-120%
17060-07-0	1,2-Dichloroethane-D4	100%		70-127%
2037-26-5	Toluene-D8	93%		79-120%
460-00-4	4-Bromofluorobenzene	92%		76-118%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	STORM DRAIN 2		
Lab Sample ID:	JA75840-11	**Date Sampled:**	05/13/11
Matrix:	AQ - Surface Water	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E65283.D	1	05/25/11	MH	n/a	n/a	V2E2925
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	4.4	ug/l	
71-43-2	Benzene	ND	1.0	0.26	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.13	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.79	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.18	ug/l	
75-25-2	Bromoform	ND	4.0	0.42	ug/l	
74-83-9	Bromomethane	ND	2.0	0.24	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.7	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.26	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.40	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.34	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.35	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.15	ug/l	
75-00-3	Chloroethane	ND	1.0	0.25	ug/l	
67-66-3	Chloroform	ND	1.0	0.14	ug/l	
74-87-3	Chloromethane	ND	1.0	0.34	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.17	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.16	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.39	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.15	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.22	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.16	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.24	ug/l	
156-59-2	cis-1,2-Dichloroethene	23.1	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.30	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.23	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	STORM DRAIN 2		
Lab Sample ID:	JA75840-11	**Date Sampled:**	05/13/11
Matrix:	AQ - Surface Water	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	5.0	0.21	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.16	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.16	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.31	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.23	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.31	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.13	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.74	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.35	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.78	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.33	ug/l	
100-42-5	Styrene	ND	5.0	0.48	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.18	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.12	ug/l	
127-18-4	Tetrachloroethene	59.9	1.0	0.24	ug/l	
108-88-3	Toluene	0.29	1.0	0.27	ug/l	J
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.29	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.13	ug/l	
79-01-6	Trichloroethene	9.0	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.23	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.52	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.27	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.31	ug/l	
75-01-4	Vinyl chloride	0.86	1.0	0.22	ug/l	J
	m,p-Xylene	ND	1.0	0.39	ug/l	
95-47-6	o-Xylene	ND	1.0	0.28	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.28	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		77-120%
17060-07-0	1,2-Dichloroethane-D4	106%		70-127%
2037-26-5	Toluene-D8	100%		79-120%
460-00-4	4-Bromofluorobenzene	95%		76-118%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	STORM DRAIN 3		
Lab Sample ID:	JA75840-12	**Date Sampled:**	05/13/11
Matrix:	AQ - Surface Water	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B70773.D	1	05/26/11	TLR	n/a	n/a	V3B3301
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	5.1	10	4.4	ug/l	J
71-43-2	Benzene	ND	1.0	0.26	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.13	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.79	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.18	ug/l	
75-25-2	Bromoform	ND	4.0	0.42	ug/l	
74-83-9	Bromomethane	ND	2.0	0.24	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.7	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.26	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.40	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.34	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.35	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.15	ug/l	
75-00-3	Chloroethane	ND	1.0	0.25	ug/l	
67-66-3	Chloroform	ND	1.0	0.14	ug/l	
74-87-3	Chloromethane	ND	1.0	0.34	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.17	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.16	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.39	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.15	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.22	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.16	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.24	ug/l	
156-59-2	cis-1,2-Dichloroethene	10.7	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.30	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.23	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	STORM DRAIN 3		
Lab Sample ID:	JA75840-12	**Date Sampled:**	05/13/11
Matrix:	AQ - Surface Water	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	5.0	0.21	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.16	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.16	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.31	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.23	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.31	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.13	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.74	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.35	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.78	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.33	ug/l	
100-42-5	Styrene	ND	5.0	0.48	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.18	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.12	ug/l	
127-18-4	Tetrachloroethene	0.27	1.0	0.24	ug/l	J
108-88-3	Toluene	0.30	1.0	0.27	ug/l	J
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.29	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.13	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.23	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.52	ug/l	
95-63-6	1,2,4-Trimethylbenzene	2.5	5.0	0.27	ug/l	J
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.31	ug/l	
75-01-4	Vinyl chloride	1.6	1.0	0.22	ug/l	
	m,p-Xylene	ND	1.0	0.39	ug/l	
95-47-6	o-Xylene	ND	1.0	0.28	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.28	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		77-120%
17060-07-0	1,2-Dichloroethane-D4	89%		70-127%
2037-26-5	Toluene-D8	105%		79-120%
460-00-4	4-Bromofluorobenzene	99%		76-118%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	STORM DRAIN 4		
Lab Sample ID:	JA75840-13	**Date Sampled:**	05/13/11
Matrix:	AQ - Surface Water	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E65285.D	1	05/25/11	MH	n/a	n/a	V2E2925
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	117	10	4.4	ug/l	
71-43-2	Benzene	ND	1.0	0.26	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.13	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.79	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.18	ug/l	
75-25-2	Bromoform	ND	4.0	0.42	ug/l	
74-83-9	Bromomethane	ND	2.0	0.24	ug/l	
78-93-3	2-Butanone (MEK)	114	10	1.7	ug/l	
104-51-8	n-Butylbenzene	1.0	5.0	0.26	ug/l	J
135-98-8	sec-Butylbenzene	ND	5.0	0.40	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.34	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.35	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.15	ug/l	
75-00-3	Chloroethane	ND	1.0	0.25	ug/l	
67-66-3	Chloroform	0.46	1.0	0.14	ug/l	J
74-87-3	Chloromethane	ND	1.0	0.34	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.17	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.16	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.39	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.15	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.22	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.16	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.24	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.31	1.0	0.24	ug/l	J
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.30	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.23	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@641505 17:26 31-Oct-2011

Report of Analysis

Client Sample ID:	STORM DRAIN 4		
Lab Sample ID:	JA75840-13	**Date Sampled:**	05/13/11
Matrix:	AQ - Surface Water	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	5.0	0.21	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.16	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.16	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.31	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.23	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.31	ug/l	
99-87-6	p-Isopropyltoluene	1.8	5.0	0.13	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.74	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.35	ug/l	
75-09-2	Methylene chloride	1.5	2.0	0.20	ug/l	J
91-20-3	Naphthalene	ND	5.0	0.78	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.33	ug/l	
100-42-5	Styrene	ND	5.0	0.48	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.18	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.12	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.24	ug/l	
108-88-3	Toluene	7.6	1.0	0.27	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.29	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.13	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.23	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.52	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.9	5.0	0.27	ug/l	J
108-67-8	1,3,5-Trimethylbenzene	0.49	5.0	0.31	ug/l	J
75-01-4	Vinyl chloride	0.58	1.0	0.22	ug/l	J
	m,p-Xylene	ND	1.0	0.39	ug/l	
95-47-6	o-Xylene	ND	1.0	0.28	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.28	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		77-120%
17060-07-0	1,2-Dichloroethane-D4	105%		70-127%
2037-26-5	Toluene-D8	100%		79-120%
460-00-4	4-Bromofluorobenzene	102%		76-118%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	STORM DRAIN 6		
Lab Sample ID:	JA75840-14	**Date Sampled:**	05/13/11
Matrix:	AQ - Surface Water	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B70774.D	1	05/26/11	TLR	n/a	n/a	V3B3301
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	4.4	ug/l	
71-43-2	Benzene	ND	1.0	0.26	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.13	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.79	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.18	ug/l	
75-25-2	Bromoform	ND	4.0	0.42	ug/l	
74-83-9	Bromomethane	ND	2.0	0.24	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.7	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.26	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.40	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.34	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.35	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.15	ug/l	
75-00-3	Chloroethane	ND	1.0	0.25	ug/l	
67-66-3	Chloroform	ND	1.0	0.14	ug/l	
74-87-3	Chloromethane	ND	1.0	0.34	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.17	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.16	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.39	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.15	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.22	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.16	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.24	ug/l	
156-59-2	cis-1,2-Dichloroethene	12.5	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.30	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.23	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	STORM DRAIN 6		
Lab Sample ID:	JA75840-14	**Date Sampled:**	05/13/11
Matrix:	AQ - Surface Water	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	5.0	0.21	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.16	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.16	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.31	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.23	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.31	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.13	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.74	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.35	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.78	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.33	ug/l	
100-42-5	Styrene	ND	5.0	0.48	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.18	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.12	ug/l	
127-18-4	Tetrachloroethene	30.5	1.0	0.24	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.29	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.13	ug/l	
79-01-6	Trichloroethene	4.8	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.23	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.52	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.27	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.31	ug/l	
75-01-4	Vinyl chloride	0.47	1.0	0.22	ug/l	J
	m,p-Xylene	ND	1.0	0.39	ug/l	
95-47-6	o-Xylene	ND	1.0	0.28	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.28	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		77-120%
17060-07-0	1,2-Dichloroethane-D4	91%		70-127%
2037-26-5	Toluene-D8	106%		79-120%
460-00-4	4-Bromofluorobenzene	98%		76-118%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	STORM DRAIN 7		
Lab Sample ID:	JA75840-15	**Date Sampled:**	05/13/11
Matrix:	AQ - Surface Water	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B70775.D	1	05/26/11	TLR	n/a	n/a	V3B3301
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	87.2	10	4.4	ug/l	
71-43-2	Benzene	ND	1.0	0.26	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.13	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.79	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.18	ug/l	
75-25-2	Bromoform	ND	4.0	0.42	ug/l	
74-83-9	Bromomethane	ND	2.0	0.24	ug/l	
78-93-3	2-Butanone (MEK)	21.0	10	1.7	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.26	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.40	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.34	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.35	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.15	ug/l	
75-00-3	Chloroethane	ND	1.0	0.25	ug/l	
67-66-3	Chloroform	0.63	1.0	0.14	ug/l	J
74-87-3	Chloromethane	ND	1.0	0.34	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.17	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.16	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.39	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.15	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.22	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.16	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.24	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.30	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.23	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	STORM DRAIN 7		
Lab Sample ID:	JA75840-15	**Date Sampled:**	05/13/11
Matrix:	AQ - Surface Water	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	5.0	0.21	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.16	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.16	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.31	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.23	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.31	ug/l	
99-87-6	p-Isopropyltoluene	0.96	5.0	0.13	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.74	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.35	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.78	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.33	ug/l	
100-42-5	Styrene	ND	5.0	0.48	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.18	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.12	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.24	ug/l	
108-88-3	Toluene	0.87	1.0	0.27	ug/l	J
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.29	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.13	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.23	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.52	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.27	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.31	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.22	ug/l	
	m,p-Xylene	ND	1.0	0.39	ug/l	
95-47-6	o-Xylene	ND	1.0	0.28	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.28	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		77-120%
17060-07-0	1,2-Dichloroethane-D4	95%		70-127%
2037-26-5	Toluene-D8	107%		79-120%
460-00-4	4-Bromofluorobenzene	99%		76-118%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	FB051211		
Lab Sample ID:	JA75840-16	**Date Sampled:**	05/12/11
Matrix:	AQ - Field Blank Water	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E65284.D	1	05/25/11	MH	n/a	n/a	V2E2925
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	4.4	ug/l	
71-43-2	Benzene	ND	1.0	0.26	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.13	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.79	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.18	ug/l	
75-25-2	Bromoform	ND	4.0	0.42	ug/l	
74-83-9	Bromomethane	ND	2.0	0.24	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.7	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.26	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.40	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.34	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.35	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.15	ug/l	
75-00-3	Chloroethane	ND	1.0	0.25	ug/l	
67-66-3	Chloroform	ND	1.0	0.14	ug/l	
74-87-3	Chloromethane	ND	1.0	0.34	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.17	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.16	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.39	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.15	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.22	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.16	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.24	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.30	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.23	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB051211		
Lab Sample ID:	JA75840-16	**Date Sampled:**	05/12/11
Matrix:	AQ - Field Blank Water	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	5.0	0.21	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.16	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.16	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.31	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.23	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.31	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.13	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.74	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.35	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.78	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.33	ug/l	
100-42-5	Styrene	ND	5.0	0.48	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.18	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.12	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.24	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.29	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.13	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.23	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.52	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.27	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.31	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.22	ug/l	
	m,p-Xylene	ND	1.0	0.39	ug/l	
95-47-6	o-Xylene	ND	1.0	0.28	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.28	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		77-120%
17060-07-0	1,2-Dichloroethane-D4	108%		70-127%
2037-26-5	Toluene-D8	99%		79-120%
460-00-4	4-Bromofluorobenzene	97%		76-118%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@641505 17:26 31-Oct-2011

Report of Analysis

Client Sample ID:	FB051311		
Lab Sample ID:	JA75840-17	**Date Sampled:**	05/13/11
Matrix:	AQ - Field Blank Water	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B70778.D	1	05/26/11	TLR	n/a	n/a	V3B3301
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	4.4	ug/l	
71-43-2	Benzene	ND	1.0	0.26	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.13	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.79	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.18	ug/l	
75-25-2	Bromoform	ND	4.0	0.42	ug/l	
74-83-9	Bromomethane	ND	2.0	0.24	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.7	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.26	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.40	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.34	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.35	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.15	ug/l	
75-00-3	Chloroethane	ND	1.0	0.25	ug/l	
67-66-3	Chloroform	ND	1.0	0.14	ug/l	
74-87-3	Chloromethane	ND	1.0	0.34	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.17	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.16	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.39	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.15	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.22	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.16	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.24	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.30	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.23	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB051311		
Lab Sample ID:	JA75840-17	**Date Sampled:**	05/13/11
Matrix:	AQ - Field Blank Water	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	5.0	0.21	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.16	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.16	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.31	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.23	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.31	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.13	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.74	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.35	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.78	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.33	ug/l	
100-42-5	Styrene	ND	5.0	0.48	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.18	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.12	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.24	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.29	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.13	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.23	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.52	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.27	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.31	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.22	ug/l	
	m,p-Xylene	ND	1.0	0.39	ug/l	
95-47-6	o-Xylene	ND	1.0	0.28	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.28	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		77-120%
17060-07-0	1,2-Dichloroethane-D4	99%		70-127%
2037-26-5	Toluene-D8	108%		79-120%
460-00-4	4-Bromofluorobenzene	100%		76-118%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JA75840-18	**Date Sampled:**	05/13/11
Matrix:	AQ - Trip Blank Water	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B70777.D	1	05/26/11	TLR	n/a	n/a	V3B3301
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	4.4	ug/l	
71-43-2	Benzene	ND	1.0	0.26	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.13	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.79	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.18	ug/l	
75-25-2	Bromoform	ND	4.0	0.42	ug/l	
74-83-9	Bromomethane	ND	2.0	0.24	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.7	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.26	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.40	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.34	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.35	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.15	ug/l	
75-00-3	Chloroethane	ND	1.0	0.25	ug/l	
67-66-3	Chloroform	ND	1.0	0.14	ug/l	
74-87-3	Chloromethane	ND	1.0	0.34	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.17	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.16	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.39	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.15	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.22	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.16	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.24	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.30	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.23	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.22	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JA75840-18	**Date Sampled:**	05/13/11
Matrix:	AQ - Trip Blank Water	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	5.0	0.21	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.16	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.16	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.31	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.23	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.31	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.13	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.74	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.35	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.78	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.33	ug/l	
100-42-5	Styrene	ND	5.0	0.48	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.18	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.12	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.24	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.29	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.13	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.23	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.52	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.27	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.31	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.22	ug/l	
	m,p-Xylene	ND	1.0	0.39	ug/l	
95-47-6	o-Xylene	ND	1.0	0.28	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.28	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		77-120%
17060-07-0	1,2-Dichloroethane-D4	96%		70-127%
2037-26-5	Toluene-D8	108%		79-120%
460-00-4	4-Bromofluorobenzene	100%		76-118%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	SB-1-1.5		
Lab Sample ID:	JA75840-19	**Date Sampled:**	05/12/11
Matrix:	SO - Soil	**Date Received:**	05/13/11
		Percent Solids:	91.7
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	91.7		%	1	05/25/11	CS	SM18 2540G
Total Organic Carbon	< 1100	1100	mg/kg	1	05/25/11 13:13	SJG	CORP ENG 81M/SW9060M

RL = Reporting Limit

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Report of Analysis

Client Sample ID:	SB-5-2.5		
Lab Sample ID:	JA75840-20	**Date Sampled:**	05/12/11
Matrix:	SO - Soil	**Date Received:**	05/13/11
		Percent Solids:	90.7
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	90.7		%	1	05/25/11	CS	SM18 2540G
Total Organic Carbon	< 1100	1100	mg/kg	1	05/25/11 13:26	SJG	CORP ENG 81M/SW9060M

RL = Reporting Limit

APPENDIX III

LABORATORY DATA PACKAGE
FOR SOIL SAMPLES – JULY 2011

Report of Analysis

Client Sample ID:	SB-1 (7FT)		
Lab Sample ID:	JA81768-1	**Date Sampled:**	07/20/11
Matrix:	SO - Soil	**Date Received:**	07/22/11
Method:	SW846 8260B	**Percent Solids:**	91.8
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V117692.D	1	07/27/11	AVM	n/a	n/a	VV5013
Run #2							

	Initial Weight
Run #1	4.6 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	12	7.8	ug/kg	
71-43-2	Benzene	ND	1.2	0.16	ug/kg	
108-86-1	Bromobenzene	ND	5.9	0.23	ug/kg	
74-97-5	Bromochloromethane	ND	5.9	0.61	ug/kg	
75-27-4	Bromodichloromethane	ND	5.9	0.27	ug/kg	
75-25-2	Bromoform	ND	5.9	0.89	ug/kg	
74-83-9	Bromomethane	ND	5.9	0.47	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	5.1	ug/kg	
104-51-8	n-Butylbenzene	ND	5.9	0.28	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.9	0.19	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.9	0.16	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.9	0.41	ug/kg	
108-90-7	Chlorobenzene	ND	5.9	0.38	ug/kg	
75-00-3	Chloroethane	ND	5.9	0.48	ug/kg	
67-66-3	Chloroform	ND	5.9	0.57	ug/kg	
74-87-3	Chloromethane	ND	5.9	0.74	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.9	0.45	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.9	0.25	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	12	1.8	ug/kg	
124-48-1	Dibromochloromethane	ND	5.9	0.20	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.2	0.28	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.9	0.33	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.9	0.23	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.9	0.20	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.9	0.38	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.9	0.26	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.2	0.22	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.9	0.73	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.9	0.38	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.9	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.9	0.31	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.9	0.44	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-1 (7FT)		
Lab Sample ID:	JA81768-1	**Date Sampled:**	07/20/11
Matrix:	SO - Soil	**Date Received:**	07/22/11
Method:	SW846 8260B	**Percent Solids:**	91.8
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	5.9	0.20	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.9	0.25	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.9	0.18	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.9	0.40	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.18	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.9	0.62	ug/kg	
98-82-8	Isopropylbenzene	ND	5.9	0.16	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.9	0.35	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.21	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.9	3.1	ug/kg	
74-95-3	Methylene bromide	ND	5.9	0.67	ug/kg	
75-09-2	Methylene chloride	ND	5.9	0.27	ug/kg	
91-20-3	Naphthalene	ND	5.9	1.3	ug/kg	
103-65-1	n-Propylbenzene	ND	5.9	0.41	ug/kg	
100-42-5	Styrene	ND	5.9	0.22	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.9	0.22	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.9	0.21	ug/kg	
127-18-4	Tetrachloroethene	0.58	5.9	0.23	ug/kg	J
108-88-3	Toluene	ND	1.2	0.45	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.9	0.52	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.9	0.40	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.9	0.29	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.9	0.51	ug/kg	
79-01-6	Trichloroethene	ND	5.9	0.29	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.9	0.57	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.9	1.3	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.9	1.3	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.9	0.15	ug/kg	
75-01-4	Vinyl chloride	ND	5.9	0.55	ug/kg	
	m,p-Xylene	ND	1.2	0.37	ug/kg	
95-47-6	o-Xylene	ND	1.2	0.22	ug/kg	
1330-20-7	Xylene (total)	ND	1.2	0.22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		67-131%
17060-07-0	1,2-Dichloroethane-D4	105%		66-130%
2037-26-5	Toluene-D8	106%		76-125%
460-00-4	4-Bromofluorobenzene	98%		53-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-1 (7FT)		
Lab Sample ID:	JA81768-1	**Date Sampled:**	07/20/11
Matrix:	SO - Soil	**Date Received:**	07/22/11
		Percent Solids:	91.8
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	91.8		%	1	08/03/11	DD	SM18 2540G
Total Organic Carbon	< 1100	1100	mg/kg	1	08/03/11 10:57	SJG	CORP ENG 81M/SW9060M

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-1 (16FT)		
Lab Sample ID:	JA81768-2	**Date Sampled:**	07/20/11
Matrix:	SO - Soil	**Date Received:**	07/22/11
Method:	SW846 8260B	**Percent Solids:**	89.2
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V117693.D	1	07/27/11	AVM	n/a	n/a	VV5013
Run #2							

	Initial Weight
Run #1	4.6 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	12	8.1	ug/kg	
71-43-2	Benzene	ND	1.2	0.16	ug/kg	
108-86-1	Bromobenzene	ND	6.1	0.24	ug/kg	
74-97-5	Bromochloromethane	ND	6.1	0.63	ug/kg	
75-27-4	Bromodichloromethane	ND	6.1	0.27	ug/kg	
75-25-2	Bromoform	ND	6.1	0.92	ug/kg	
74-83-9	Bromomethane	ND	6.1	0.48	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	5.3	ug/kg	
104-51-8	n-Butylbenzene	ND	6.1	0.29	ug/kg	
135-98-8	sec-Butylbenzene	ND	6.1	0.19	ug/kg	
98-06-6	tert-Butylbenzene	ND	6.1	0.17	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.1	0.42	ug/kg	
108-90-7	Chlorobenzene	ND	6.1	0.39	ug/kg	
75-00-3	Chloroethane	ND	6.1	0.50	ug/kg	
67-66-3	Chloroform	ND	6.1	0.59	ug/kg	
74-87-3	Chloromethane	ND	6.1	0.76	ug/kg	
95-49-8	o-Chlorotoluene	ND	6.1	0.46	ug/kg	
106-43-4	p-Chlorotoluene	ND	6.1	0.25	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	12	1.8	ug/kg	
124-48-1	Dibromochloromethane	ND	6.1	0.20	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.2	0.29	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	6.1	0.34	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	6.1	0.23	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	6.1	0.21	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	6.1	0.39	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.1	0.27	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.2	0.22	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.1	0.75	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.1	0.39	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.1	0.52	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.1	0.32	ug/kg	
142-28-9	1,3-Dichloropropane	ND	6.1	0.45	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-1 (16FT)		
Lab Sample ID:	JA81768-2	**Date Sampled:**	07/20/11
Matrix:	SO - Soil	**Date Received:**	07/22/11
Method:	SW846 8260B	**Percent Solids:**	89.2
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	6.1	0.21	ug/kg	
563-58-6	1,1-Dichloropropene	ND	6.1	0.25	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.1	0.19	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.1	0.41	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.18	ug/kg	
87-68-3	Hexachlorobutadiene	ND	6.1	0.63	ug/kg	
98-82-8	Isopropylbenzene	ND	6.1	0.17	ug/kg	
99-87-6	p-Isopropyltoluene	ND	6.1	0.36	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.22	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.1	3.2	ug/kg	
74-95-3	Methylene bromide	ND	6.1	0.69	ug/kg	
75-09-2	Methylene chloride	ND	6.1	0.28	ug/kg	
91-20-3	Naphthalene	ND	6.1	1.3	ug/kg	
103-65-1	n-Propylbenzene	ND	6.1	0.42	ug/kg	
100-42-5	Styrene	ND	6.1	0.23	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	6.1	0.22	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.1	0.22	ug/kg	
127-18-4	Tetrachloroethene	2.2	6.1	0.23	ug/kg	J
108-88-3	Toluene	ND	1.2	0.46	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	6.1	0.53	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	6.1	0.42	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.1	0.29	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.1	0.53	ug/kg	
79-01-6	Trichloroethene	ND	6.1	0.30	ug/kg	
75-69-4	Trichlorofluoromethane	ND	6.1	0.59	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	6.1	1.3	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	6.1	1.4	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	6.1	0.15	ug/kg	
75-01-4	Vinyl chloride	ND	6.1	0.56	ug/kg	
	m,p-Xylene	ND	1.2	0.38	ug/kg	
95-47-6	o-Xylene	ND	1.2	0.22	ug/kg	
1330-20-7	Xylene (total)	ND	1.2	0.22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		67-131%
17060-07-0	1,2-Dichloroethane-D4	107%		66-130%
2037-26-5	Toluene-D8	106%		76-125%
460-00-4	4-Bromofluorobenzene	97%		53-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-1 (16FT)		
Lab Sample ID:	JA81768-2	**Date Sampled:**	07/20/11
Matrix:	SO - Soil	**Date Received:**	07/22/11
		Percent Solids:	89.2
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	89.2		%	1	08/03/11	DD	SM18 2540G
Total Organic Carbon	< 1100	1100	mg/kg	1	08/03/11 11:14	SJG	CORP ENG 81M/SW9060M

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-2 (7FT)		
Lab Sample ID:	JA81768-3	**Date Sampled:**	07/21/11
Matrix:	SO - Soil	**Date Received:**	07/22/11
Method:	SW846 8260B	**Percent Solids:**	88.0
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V117694.D	1	07/27/11	AVM	n/a	n/a	VV5013
Run #2							

	Initial Weight
Run #1	4.5 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	13	8.4	ug/kg	
71-43-2	Benzene	ND	1.3	0.17	ug/kg	
108-86-1	Bromobenzene	ND	6.3	0.25	ug/kg	
74-97-5	Bromochloromethane	ND	6.3	0.66	ug/kg	
75-27-4	Bromodichloromethane	ND	6.3	0.28	ug/kg	
75-25-2	Bromoform	ND	6.3	0.95	ug/kg	
74-83-9	Bromomethane	ND	6.3	0.50	ug/kg	
78-93-3	2-Butanone (MEK)	ND	13	5.5	ug/kg	
104-51-8	n-Butylbenzene	ND	6.3	0.30	ug/kg	
135-98-8	sec-Butylbenzene	ND	6.3	0.20	ug/kg	
98-06-6	tert-Butylbenzene	ND	6.3	0.17	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.3	0.44	ug/kg	
108-90-7	Chlorobenzene	ND	6.3	0.41	ug/kg	
75-00-3	Chloroethane	ND	6.3	0.52	ug/kg	
67-66-3	Chloroform	ND	6.3	0.61	ug/kg	
74-87-3	Chloromethane	ND	6.3	0.79	ug/kg	
95-49-8	o-Chlorotoluene	ND	6.3	0.47	ug/kg	
106-43-4	p-Chlorotoluene	ND	6.3	0.26	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	13	1.9	ug/kg	
124-48-1	Dibromochloromethane	ND	6.3	0.21	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.3	0.30	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	6.3	0.35	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	6.3	0.24	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	6.3	0.21	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	6.3	0.41	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.3	0.28	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.3	0.23	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.3	0.77	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.3	0.41	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.3	0.54	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.3	0.34	ug/kg	
142-28-9	1,3-Dichloropropane	ND	6.3	0.47	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-2 (7FT)		
Lab Sample ID:	JA81768-3	**Date Sampled:**	07/21/11
Matrix:	SO - Soil	**Date Received:**	07/22/11
Method:	SW846 8260B	**Percent Solids:**	88.0
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	6.3	0.22	ug/kg	
563-58-6	1,1-Dichloropropene	ND	6.3	0.26	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.3	0.19	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.3	0.42	ug/kg	
100-41-4	Ethylbenzene	ND	1.3	0.19	ug/kg	
87-68-3	Hexachlorobutadiene	ND	6.3	0.66	ug/kg	
98-82-8	Isopropylbenzene	ND	6.3	0.17	ug/kg	
99-87-6	p-Isopropyltoluene	ND	6.3	0.37	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.3	0.23	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.3	3.3	ug/kg	
74-95-3	Methylene bromide	ND	6.3	0.72	ug/kg	
75-09-2	Methylene chloride	ND	6.3	0.29	ug/kg	
91-20-3	Naphthalene	ND	6.3	1.3	ug/kg	
103-65-1	n-Propylbenzene	ND	6.3	0.44	ug/kg	
100-42-5	Styrene	ND	6.3	0.23	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	6.3	0.23	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.3	0.23	ug/kg	
127-18-4	Tetrachloroethene	ND	6.3	0.24	ug/kg	
108-88-3	Toluene	ND	1.3	0.48	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	6.3	0.55	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	6.3	0.43	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.3	0.30	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.3	0.55	ug/kg	
79-01-6	Trichloroethene	ND	6.3	0.31	ug/kg	
75-69-4	Trichlorofluoromethane	ND	6.3	0.61	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	6.3	1.4	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	6.3	1.4	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	6.3	0.16	ug/kg	
75-01-4	Vinyl chloride	ND	6.3	0.58	ug/kg	
	m,p-Xylene	ND	1.3	0.40	ug/kg	
95-47-6	o-Xylene	ND	1.3	0.23	ug/kg	
1330-20-7	Xylene (total)	ND	1.3	0.23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	115%		67-131%
17060-07-0	1,2-Dichloroethane-D4	110%		66-130%
2037-26-5	Toluene-D8	107%		76-125%
460-00-4	4-Bromofluorobenzene	97%		53-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-2 (7FT)		
Lab Sample ID:	JA81768-3	**Date Sampled:**	07/21/11
Matrix:	SO - Soil	**Date Received:**	07/22/11
		Percent Solids:	88.0
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	88		%	1	08/03/11	DD	SM18 2540G
Total Organic Carbon	3520	1100	mg/kg	1	08/03/11 11:23	SJG	CORP ENG 81M/SW9060M

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-2 (18FT)		
Lab Sample ID:	JA81768-4	**Date Sampled:**	07/21/11
Matrix:	SO - Soil	**Date Received:**	07/22/11
Method:	SW846 8260B	**Percent Solids:**	81.6
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V117695.D	1	07/27/11	AVM	n/a	n/a	VV5013
Run #2							

	Initial Weight
Run #1	4.8 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	13	8.5	ug/kg	
71-43-2	Benzene	ND	1.3	0.17	ug/kg	
108-86-1	Bromobenzene	ND	6.4	0.25	ug/kg	
74-97-5	Bromochloromethane	ND	6.4	0.66	ug/kg	
75-27-4	Bromodichloromethane	ND	6.4	0.29	ug/kg	
75-25-2	Bromoform	ND	6.4	0.96	ug/kg	
74-83-9	Bromomethane	ND	6.4	0.50	ug/kg	
78-93-3	2-Butanone (MEK)	ND	13	5.5	ug/kg	
104-51-8	n-Butylbenzene	ND	6.4	0.30	ug/kg	
135-98-8	sec-Butylbenzene	ND	6.4	0.20	ug/kg	
98-06-6	tert-Butylbenzene	ND	6.4	0.18	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.4	0.44	ug/kg	
108-90-7	Chlorobenzene	ND	6.4	0.41	ug/kg	
75-00-3	Chloroethane	ND	6.4	0.52	ug/kg	
67-66-3	Chloroform	ND	6.4	0.62	ug/kg	
74-87-3	Chloromethane	ND	6.4	0.80	ug/kg	
95-49-8	o-Chlorotoluene	ND	6.4	0.48	ug/kg	
106-43-4	p-Chlorotoluene	ND	6.4	0.27	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	13	1.9	ug/kg	
124-48-1	Dibromochloromethane	ND	6.4	0.21	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.3	0.30	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	6.4	0.35	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	6.4	0.25	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	6.4	0.22	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	6.4	0.41	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.4	0.28	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.3	0.23	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.4	0.78	ug/kg	
156-59-2	cis-1,2-Dichloroethene	4.5	6.4	0.41	ug/kg	J
156-60-5	trans-1,2-Dichloroethene	ND	6.4	0.54	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.4	0.34	ug/kg	
142-28-9	1,3-Dichloropropane	ND	6.4	0.48	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-2 (18FT)		
Lab Sample ID:	JA81768-4	**Date Sampled:**	07/21/11
Matrix:	SO - Soil	**Date Received:**	07/22/11
Method:	SW846 8260B	**Percent Solids:**	81.6
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	6.4	0.22	ug/kg	
563-58-6	1,1-Dichloropropene	ND	6.4	0.27	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.4	0.19	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.4	0.43	ug/kg	
100-41-4	Ethylbenzene	ND	1.3	0.19	ug/kg	
87-68-3	Hexachlorobutadiene	ND	6.4	0.67	ug/kg	
98-82-8	Isopropylbenzene	ND	6.4	0.17	ug/kg	
99-87-6	p-Isopropyltoluene	ND	6.4	0.38	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.3	0.23	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.4	3.4	ug/kg	
74-95-3	Methylene bromide	ND	6.4	0.73	ug/kg	
75-09-2	Methylene chloride	ND	6.4	0.29	ug/kg	
91-20-3	Naphthalene	ND	6.4	1.4	ug/kg	
103-65-1	n-Propylbenzene	ND	6.4	0.44	ug/kg	
100-42-5	Styrene	ND	6.4	0.24	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	6.4	0.23	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.4	0.23	ug/kg	
127-18-4	Tetrachloroethene	28.6	6.4	0.24	ug/kg	
108-88-3	Toluene	ND	1.3	0.48	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	6.4	0.56	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	6.4	0.44	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.4	0.31	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.4	0.55	ug/kg	
79-01-6	Trichloroethene	3.0	6.4	0.32	ug/kg	J
75-69-4	Trichlorofluoromethane	ND	6.4	0.62	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	6.4	1.4	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	6.4	1.4	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	6.4	0.16	ug/kg	
75-01-4	Vinyl chloride	ND	6.4	0.59	ug/kg	
	m,p-Xylene	ND	1.3	0.40	ug/kg	
95-47-6	o-Xylene	ND	1.3	0.23	ug/kg	
1330-20-7	Xylene (total)	ND	1.3	0.23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		67-131%
17060-07-0	1,2-Dichloroethane-D4	107%		66-130%
2037-26-5	Toluene-D8	107%		76-125%
460-00-4	4-Bromofluorobenzene	97%		53-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-2 (18FT)		
Lab Sample ID:	JA81768-4	**Date Sampled:**	07/21/11
Matrix:	SO - Soil	**Date Received:**	07/22/11
		Percent Solids:	81.6
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	81.6		%	1	08/03/11	DD	SM18 2540G
Total Organic Carbon	< 1200	1200	mg/kg	1	08/03/11 11:38	SJG	CORP ENG 81M/SW9060M

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-3 (9FT)		
Lab Sample ID:	JA81768-5	**Date Sampled:**	07/20/11
Matrix:	SO - Soil	**Date Received:**	07/22/11
Method:	SW846 8260B	**Percent Solids:**	88.0
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V117696.D	1	07/27/11	AVM	n/a	n/a	VV5013
Run #2							

	Initial Weight
Run #1	4.7 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	12	8.0	ug/kg	
71-43-2	Benzene	ND	1.2	0.16	ug/kg	
108-86-1	Bromobenzene	ND	6.0	0.24	ug/kg	
74-97-5	Bromochloromethane	ND	6.0	0.63	ug/kg	
75-27-4	Bromodichloromethane	ND	6.0	0.27	ug/kg	
75-25-2	Bromoform	ND	6.0	0.91	ug/kg	
74-83-9	Bromomethane	ND	6.0	0.48	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	5.2	ug/kg	
104-51-8	n-Butylbenzene	ND	6.0	0.28	ug/kg	
135-98-8	sec-Butylbenzene	ND	6.0	0.19	ug/kg	
98-06-6	tert-Butylbenzene	ND	6.0	0.17	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.0	0.42	ug/kg	
108-90-7	Chlorobenzene	ND	6.0	0.39	ug/kg	
75-00-3	Chloroethane	ND	6.0	0.49	ug/kg	
67-66-3	Chloroform	ND	6.0	0.58	ug/kg	
74-87-3	Chloromethane	ND	6.0	0.75	ug/kg	
95-49-8	o-Chlorotoluene	ND	6.0	0.45	ug/kg	
106-43-4	p-Chlorotoluene	ND	6.0	0.25	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	12	1.8	ug/kg	
124-48-1	Dibromochloromethane	ND	6.0	0.20	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.2	0.29	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	6.0	0.33	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	6.0	0.23	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	6.0	0.21	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	6.0	0.39	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.0	0.26	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.2	0.22	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.0	0.74	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.0	0.39	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.0	0.51	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.0	0.32	ug/kg	
142-28-9	1,3-Dichloropropane	ND	6.0	0.45	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-3 (9FT)		
Lab Sample ID:	JA81768-5	**Date Sampled:**	07/20/11
Matrix:	SO - Soil	**Date Received:**	07/22/11
Method:	SW846 8260B	**Percent Solids:**	88.0
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	6.0	0.21	ug/kg	
563-58-6	1,1-Dichloropropene	ND	6.0	0.25	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.0	0.18	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.0	0.41	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.18	ug/kg	
87-68-3	Hexachlorobutadiene	ND	6.0	0.63	ug/kg	
98-82-8	Isopropylbenzene	ND	6.0	0.17	ug/kg	
99-87-6	p-Isopropyltoluene	ND	6.0	0.36	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.22	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.0	3.2	ug/kg	
74-95-3	Methylene bromide	ND	6.0	0.69	ug/kg	
75-09-2	Methylene chloride	ND	6.0	0.28	ug/kg	
91-20-3	Naphthalene	ND	6.0	1.3	ug/kg	
103-65-1	n-Propylbenzene	ND	6.0	0.42	ug/kg	
100-42-5	Styrene	ND	6.0	0.22	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	6.0	0.22	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.0	0.22	ug/kg	
127-18-4	Tetrachloroethene	ND	6.0	0.23	ug/kg	
108-88-3	Toluene	ND	1.2	0.46	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	6.0	0.53	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	6.0	0.41	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.0	0.29	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.0	0.52	ug/kg	
79-01-6	Trichloroethene	ND	6.0	0.30	ug/kg	
75-69-4	Trichlorofluoromethane	ND	6.0	0.58	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	6.0	1.3	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	6.0	1.4	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	6.0	0.15	ug/kg	
75-01-4	Vinyl chloride	ND	6.0	0.56	ug/kg	
	m,p-Xylene	ND	1.2	0.38	ug/kg	
95-47-6	o-Xylene	ND	1.2	0.22	ug/kg	
1330-20-7	Xylene (total)	ND	1.2	0.22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		67-131%
17060-07-0	1,2-Dichloroethane-D4	109%		66-130%
2037-26-5	Toluene-D8	110%		76-125%
460-00-4	4-Bromofluorobenzene	97%		53-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-3 (9FT)		
Lab Sample ID:	JA81768-5	**Date Sampled:**	07/20/11
Matrix:	SO - Soil	**Date Received:**	07/22/11
		Percent Solids:	88.0
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	88		%	1	08/03/11	DD	SM18 2540G
Total Organic Carbon	< 1100	1100	mg/kg	1	08/03/11 12:08	SJG	CORP ENG 81M/SW9060M

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-3 (13FT)		
Lab Sample ID:	JA81768-6	**Date Sampled:**	07/20/11
Matrix:	SO - Soil	**Date Received:**	07/22/11
Method:	SW846 8260B	**Percent Solids:**	90.9
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V117735.D	1	07/28/11	AVM	n/a	n/a	VV5015
Run #2							

	Initial Weight
Run #1	4.7 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	12	7.7	ug/kg	
71-43-2	Benzene	ND	1.2	0.16	ug/kg	
108-86-1	Bromobenzene	ND	5.9	0.23	ug/kg	
74-97-5	Bromochloromethane	ND	5.9	0.61	ug/kg	
75-27-4	Bromodichloromethane	ND	5.9	0.26	ug/kg	
75-25-2	Bromoform	ND	5.9	0.88	ug/kg	
74-83-9	Bromomethane	ND	5.9	0.46	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	5.1	ug/kg	
104-51-8	n-Butylbenzene	ND	5.9	0.28	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.9	0.19	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.9	0.16	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.9	0.40	ug/kg	
108-90-7	Chlorobenzene	ND	5.9	0.38	ug/kg	
75-00-3	Chloroethane	ND	5.9	0.48	ug/kg	
67-66-3	Chloroform	ND	5.9	0.57	ug/kg	
74-87-3	Chloromethane	ND	5.9	0.73	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.9	0.44	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.9	0.24	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	12	1.8	ug/kg	
124-48-1	Dibromochloromethane	ND	5.9	0.20	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.2	0.28	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.9	0.32	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.9	0.22	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.9	0.20	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.9	0.38	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.9	0.26	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.2	0.21	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.9	0.72	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.9	0.38	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.9	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.9	0.31	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.9	0.44	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-3 (13FT)		
Lab Sample ID:	JA81768-6	**Date Sampled:**	07/20/11
Matrix:	SO - Soil	**Date Received:**	07/22/11
Method:	SW846 8260B	**Percent Solids:**	90.9
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	5.9	0.20	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.9	0.24	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.9	0.18	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.9	0.39	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.17	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.9	0.61	ug/kg	
98-82-8	Isopropylbenzene	ND	5.9	0.16	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.9	0.35	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.21	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.9	3.1	ug/kg	
74-95-3	Methylene bromide	ND	5.9	0.66	ug/kg	
75-09-2	Methylene chloride	ND	5.9	0.27	ug/kg	
91-20-3	Naphthalene	ND	5.9	1.2	ug/kg	
103-65-1	n-Propylbenzene	ND	5.9	0.40	ug/kg	
100-42-5	Styrene	ND	5.9	0.22	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.9	0.22	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.9	0.21	ug/kg	
127-18-4	Tetrachloroethene	0.39	5.9	0.22	ug/kg	J
108-88-3	Toluene	ND	1.2	0.44	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.9	0.51	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.9	0.40	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.9	0.28	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.9	0.51	ug/kg	
79-01-6	Trichloroethene	ND	5.9	0.29	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.9	0.56	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.9	1.3	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.9	1.3	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.9	0.15	ug/kg	
75-01-4	Vinyl chloride	ND	5.9	0.54	ug/kg	
	m,p-Xylene	ND	1.2	0.37	ug/kg	
95-47-6	o-Xylene	ND	1.2	0.22	ug/kg	
1330-20-7	Xylene (total)	ND	1.2	0.22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		67-131%
17060-07-0	1,2-Dichloroethane-D4	104%		66-130%
2037-26-5	Toluene-D8	107%		76-125%
460-00-4	4-Bromofluorobenzene	97%		53-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-3 (13FT)		
Lab Sample ID:	JA81768-6	**Date Sampled:**	07/20/11
Matrix:	SO - Soil	**Date Received:**	07/22/11
		Percent Solids:	90.9
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	90.9		%	1	08/03/11	DD	SM18 2540G
Total Organic Carbon	< 1100	1100	mg/kg	1	08/03/11 10:21	SJG	CORP ENG 81M/SW9060M

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-4 (9FT)		
Lab Sample ID:	JA81768-7	**Date Sampled:**	07/21/11
Matrix:	SO - Soil	**Date Received:**	07/22/11
Method:	SW846 8260B	**Percent Solids:**	88.7
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V117736.D	1	07/28/11	AVM	n/a	n/a	VV5015
Run #2							

	Initial Weight
Run #1	4.8 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	12	7.8	ug/kg	
71-43-2	Benzene	ND	1.2	0.16	ug/kg	
108-86-1	Bromobenzene	ND	5.9	0.23	ug/kg	
74-97-5	Bromochloromethane	ND	5.9	0.61	ug/kg	
75-27-4	Bromodichloromethane	ND	5.9	0.26	ug/kg	
75-25-2	Bromoform	ND	5.9	0.89	ug/kg	
74-83-9	Bromomethane	ND	5.9	0.46	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	5.1	ug/kg	
104-51-8	n-Butylbenzene	ND	5.9	0.28	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.9	0.19	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.9	0.16	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.9	0.41	ug/kg	
108-90-7	Chlorobenzene	ND	5.9	0.38	ug/kg	
75-00-3	Chloroethane	ND	5.9	0.48	ug/kg	
67-66-3	Chloroform	ND	5.9	0.57	ug/kg	
74-87-3	Chloromethane	ND	5.9	0.73	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.9	0.44	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.9	0.25	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	12	1.8	ug/kg	
124-48-1	Dibromochloromethane	ND	5.9	0.20	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.2	0.28	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.9	0.33	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.9	0.23	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.9	0.20	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.9	0.38	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.9	0.26	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.2	0.21	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.9	0.72	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.9	0.38	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.9	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.9	0.31	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.9	0.44	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-4 (9FT)		
Lab Sample ID:	JA81768-7	**Date Sampled:**	07/21/11
Matrix:	SO - Soil	**Date Received:**	07/22/11
Method:	SW846 8260B	**Percent Solids:**	88.7
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	5.9	0.20	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.9	0.25	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.9	0.18	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.9	0.39	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.17	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.9	0.61	ug/kg	
98-82-8	Isopropylbenzene	ND	5.9	0.16	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.9	0.35	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.21	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.9	3.1	ug/kg	
74-95-3	Methylene bromide	ND	5.9	0.67	ug/kg	
75-09-2	Methylene chloride	ND	5.9	0.27	ug/kg	
91-20-3	Naphthalene	ND	5.9	1.2	ug/kg	
103-65-1	n-Propylbenzene	ND	5.9	0.41	ug/kg	
100-42-5	Styrene	ND	5.9	0.22	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.9	0.22	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.9	0.21	ug/kg	
127-18-4	Tetrachloroethene	ND	5.9	0.22	ug/kg	
108-88-3	Toluene	ND	1.2	0.44	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.9	0.51	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.9	0.40	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.9	0.28	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.9	0.51	ug/kg	
79-01-6	Trichloroethene	ND	5.9	0.29	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.9	0.57	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.9	1.3	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.9	1.3	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.9	0.15	ug/kg	
75-01-4	Vinyl chloride	ND	5.9	0.54	ug/kg	
	m,p-Xylene	ND	1.2	0.37	ug/kg	
95-47-6	o-Xylene	ND	1.2	0.22	ug/kg	
1330-20-7	Xylene (total)	ND	1.2	0.22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		67-131%
17060-07-0	1,2-Dichloroethane-D4	108%		66-130%
2037-26-5	Toluene-D8	107%		76-125%
460-00-4	4-Bromofluorobenzene	97%		53-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-4 (9FT)		
Lab Sample ID:	JA81768-7	**Date Sampled:**	07/21/11
Matrix:	SO - Soil	**Date Received:**	07/22/11
		Percent Solids:	88.7
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	88.7		%	1	08/03/11	DD	SM18 2540G
Total Organic Carbon	< 1100	1100	mg/kg	1	08/03/11 12:32	SJG	CORP ENG 81M/SW9060M

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-4 (15FT)		
Lab Sample ID:	JA81768-8	**Date Sampled:**	07/21/11
Matrix:	SO - Soil	**Date Received:**	07/22/11
Method:	SW846 8260B	**Percent Solids:**	80.4
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V117737.D	1	07/28/11	AVM	n/a	n/a	VV5015
Run #2							

	Initial Weight
Run #1	5.1 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	12	8.1	ug/kg	
71-43-2	Benzene	ND	1.2	0.16	ug/kg	
108-86-1	Bromobenzene	ND	6.1	0.24	ug/kg	
74-97-5	Bromochloromethane	ND	6.1	0.63	ug/kg	
75-27-4	Bromodichloromethane	ND	6.1	0.27	ug/kg	
75-25-2	Bromoform	ND	6.1	0.92	ug/kg	
74-83-9	Bromomethane	ND	6.1	0.48	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	5.3	ug/kg	
104-51-8	n-Butylbenzene	ND	6.1	0.29	ug/kg	
135-98-8	sec-Butylbenzene	0.27	6.1	0.19	ug/kg	J
98-06-6	tert-Butylbenzene	ND	6.1	0.17	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.1	0.42	ug/kg	
108-90-7	Chlorobenzene	ND	6.1	0.39	ug/kg	
75-00-3	Chloroethane	ND	6.1	0.50	ug/kg	
67-66-3	Chloroform	ND	6.1	0.59	ug/kg	
74-87-3	Chloromethane	ND	6.1	0.76	ug/kg	
95-49-8	o-Chlorotoluene	ND	6.1	0.46	ug/kg	
106-43-4	p-Chlorotoluene	ND	6.1	0.25	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	12	1.8	ug/kg	
124-48-1	Dibromochloromethane	ND	6.1	0.20	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.2	0.29	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	6.1	0.34	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	6.1	0.23	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	6.1	0.21	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	6.1	0.39	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.1	0.27	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.2	0.22	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.1	0.75	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.1	0.39	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.1	0.52	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.1	0.32	ug/kg	
142-28-9	1,3-Dichloropropane	ND	6.1	0.45	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-4 (15FT)		
Lab Sample ID:	JA81768-8	**Date Sampled:**	07/21/11
Matrix:	SO - Soil	**Date Received:**	07/22/11
Method:	SW846 8260B	**Percent Solids:**	80.4
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	6.1	0.21	ug/kg	
563-58-6	1,1-Dichloropropene	ND	6.1	0.25	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.1	0.19	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.1	0.41	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.18	ug/kg	
87-68-3	Hexachlorobutadiene	ND	6.1	0.64	ug/kg	
98-82-8	Isopropylbenzene	ND	6.1	0.17	ug/kg	
99-87-6	p-Isopropyltoluene	ND	6.1	0.36	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.22	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.1	3.2	ug/kg	
74-95-3	Methylene bromide	ND	6.1	0.69	ug/kg	
75-09-2	Methylene chloride	ND	6.1	0.28	ug/kg	
91-20-3	Naphthalene	ND	6.1	1.3	ug/kg	
103-65-1	n-Propylbenzene	ND	6.1	0.42	ug/kg	
100-42-5	Styrene	ND	6.1	0.23	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	6.1	0.22	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.1	0.22	ug/kg	
127-18-4	Tetrachloroethene	ND	6.1	0.23	ug/kg	
108-88-3	Toluene	ND	1.2	0.46	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	6.1	0.53	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	6.1	0.42	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.1	0.29	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.1	0.53	ug/kg	
79-01-6	Trichloroethene	ND	6.1	0.30	ug/kg	
75-69-4	Trichlorofluoromethane	ND	6.1	0.59	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	6.1	1.3	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	6.1	1.4	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	6.1	0.15	ug/kg	
75-01-4	Vinyl chloride	ND	6.1	0.56	ug/kg	
	m,p-Xylene	ND	1.2	0.38	ug/kg	
95-47-6	o-Xylene	ND	1.2	0.22	ug/kg	
1330-20-7	Xylene (total)	ND	1.2	0.22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		67-131%
17060-07-0	1,2-Dichloroethane-D4	104%		66-130%
2037-26-5	Toluene-D8	108%		76-125%
460-00-4	4-Bromofluorobenzene	99%		53-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-4 (15FT)		
Lab Sample ID:	JA81768-8	**Date Sampled:**	07/21/11
Matrix:	SO - Soil	**Date Received:**	07/22/11
		Percent Solids:	80.4
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	80.4		%	1	08/03/11	DD	SM18 2540G
Total Organic Carbon	< 1200	1200	mg/kg	1	08/03/11 15:59	SJG	CORP ENG 81M/SW9060M

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-5 (9FT)		
Lab Sample ID:	JA81768-9	**Date Sampled:**	07/21/11
Matrix:	SO - Soil	**Date Received:**	07/22/11
Method:	SW846 8260B	**Percent Solids:**	88.9
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V117690.D	1	07/27/11	AVM	n/a	n/a	VV5013
Run #2							

	Initial Weight
Run #1	4.6 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	12	8.1	ug/kg	
71-43-2	Benzene	ND	1.2	0.16	ug/kg	
108-86-1	Bromobenzene	ND	6.1	0.24	ug/kg	
74-97-5	Bromochloromethane	ND	6.1	0.63	ug/kg	
75-27-4	Bromodichloromethane	ND	6.1	0.27	ug/kg	
75-25-2	Bromoform	ND	6.1	0.92	ug/kg	
74-83-9	Bromomethane	ND	6.1	0.48	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	5.3	ug/kg	
104-51-8	n-Butylbenzene	0.49	6.1	0.29	ug/kg	J
135-98-8	sec-Butylbenzene	0.67	6.1	0.19	ug/kg	J
98-06-6	tert-Butylbenzene	ND	6.1	0.17	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.1	0.42	ug/kg	
108-90-7	Chlorobenzene	ND	6.1	0.39	ug/kg	
75-00-3	Chloroethane	ND	6.1	0.50	ug/kg	
67-66-3	Chloroform	ND	6.1	0.59	ug/kg	
74-87-3	Chloromethane	ND	6.1	0.76	ug/kg	
95-49-8	o-Chlorotoluene	ND	6.1	0.46	ug/kg	
106-43-4	p-Chlorotoluene	ND	6.1	0.26	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	12	1.8	ug/kg	
124-48-1	Dibromochloromethane	ND	6.1	0.21	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.2	0.29	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	6.1	0.34	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	6.1	0.23	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	6.1	0.21	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	6.1	0.39	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.1	0.27	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.2	0.22	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.1	0.75	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.1	0.39	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.1	0.52	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.1	0.33	ug/kg	
142-28-9	1,3-Dichloropropane	ND	6.1	0.46	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-5 (9FT)		
Lab Sample ID:	JA81768-9	**Date Sampled:**	07/21/11
Matrix:	SO - Soil	**Date Received:**	07/22/11
Method:	SW846 8260B	**Percent Solids:**	88.9
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	6.1	0.21	ug/kg	
563-58-6	1,1-Dichloropropene	ND	6.1	0.26	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.1	0.19	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.1	0.41	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.18	ug/kg	
87-68-3	Hexachlorobutadiene	ND	6.1	0.64	ug/kg	
98-82-8	Isopropylbenzene	ND	6.1	0.17	ug/kg	
99-87-6	p-Isopropyltoluene	0.52	6.1	0.36	ug/kg	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.22	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.1	3.2	ug/kg	
74-95-3	Methylene bromide	ND	6.1	0.69	ug/kg	
75-09-2	Methylene chloride	ND	6.1	0.28	ug/kg	
91-20-3	Naphthalene	3.4	6.1	1.3	ug/kg	J
103-65-1	n-Propylbenzene	0.48	6.1	0.42	ug/kg	J
100-42-5	Styrene	ND	6.1	0.23	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	6.1	0.22	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.1	0.22	ug/kg	
127-18-4	Tetrachloroethene	ND	6.1	0.23	ug/kg	
108-88-3	Toluene	ND	1.2	0.46	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	6.1	0.54	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	6.1	0.42	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.1	0.29	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.1	0.53	ug/kg	
79-01-6	Trichloroethene	ND	6.1	0.30	ug/kg	
75-69-4	Trichlorofluoromethane	ND	6.1	0.59	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	6.1	1.3	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	2.3	6.1	1.4	ug/kg	J
108-67-8	1,3,5-Trimethylbenzene	0.66	6.1	0.16	ug/kg	J
75-01-4	Vinyl chloride	ND	6.1	0.56	ug/kg	
	m,p-Xylene	ND	1.2	0.38	ug/kg	
95-47-6	o-Xylene	ND	1.2	0.22	ug/kg	
1330-20-7	Xylene (total)	ND	1.2	0.22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		67-131%
17060-07-0	1,2-Dichloroethane-D4	106%		66-130%
2037-26-5	Toluene-D8	108%		76-125%
460-00-4	4-Bromofluorobenzene	97%		53-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-5 (9FT)		
Lab Sample ID:	JA81768-9	**Date Sampled:**	07/21/11
Matrix:	SO - Soil	**Date Received:**	07/22/11
		Percent Solids:	88.9
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	88.9		%	1	07/29/11	DK	SM18 2540G
Total Organic Carbon	< 1100	1100	mg/kg	1	08/03/11 15:37	SJG	CORP ENG 81M/SW9060M

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-5 (14FT)		
Lab Sample ID:	JA81768-10	**Date Sampled:**	07/21/11
Matrix:	SO - Soil	**Date Received:**	07/22/11
Method:	SW846 8260B	**Percent Solids:**	88.3
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V117691.D	1	07/27/11	AVM	n/a	n/a	VV5013
Run #2							

	Initial Weight
Run #1	5.1 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	7.4	ug/kg	
71-43-2	Benzene	ND	1.1	0.15	ug/kg	
108-86-1	Bromobenzene	ND	5.6	0.22	ug/kg	
74-97-5	Bromochloromethane	ND	5.6	0.58	ug/kg	
75-27-4	Bromodichloromethane	ND	5.6	0.25	ug/kg	
75-25-2	Bromoform	ND	5.6	0.84	ug/kg	
74-83-9	Bromomethane	ND	5.6	0.44	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	4.8	ug/kg	
104-51-8	n-Butylbenzene	ND	5.6	0.26	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.6	0.18	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.6	0.15	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.6	0.38	ug/kg	
108-90-7	Chlorobenzene	ND	5.6	0.36	ug/kg	
75-00-3	Chloroethane	ND	5.6	0.45	ug/kg	
67-66-3	Chloroform	ND	5.6	0.54	ug/kg	
74-87-3	Chloromethane	ND	5.6	0.69	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.6	0.42	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.6	0.23	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	11	1.7	ug/kg	
124-48-1	Dibromochloromethane	ND	5.6	0.19	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.26	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.6	0.31	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.6	0.21	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.6	0.19	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.6	0.36	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.6	0.24	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.20	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.6	0.68	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.6	0.36	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.6	0.47	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.6	0.30	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.6	0.41	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-5 (14FT)		
Lab Sample ID:	JA81768-10	**Date Sampled:**	07/21/11
Matrix:	SO - Soil	**Date Received:**	07/22/11
Method:	SW846 8260B	**Percent Solids:**	88.3
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	5.6	0.19	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.6	0.23	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.6	0.17	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.6	0.37	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.16	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.6	0.58	ug/kg	
98-82-8	Isopropylbenzene	ND	5.6	0.15	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.6	0.33	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.20	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.6	2.9	ug/kg	
74-95-3	Methylene bromide	ND	5.6	0.63	ug/kg	
75-09-2	Methylene chloride	ND	5.6	0.26	ug/kg	
91-20-3	Naphthalene	ND	5.6	1.2	ug/kg	
103-65-1	n-Propylbenzene	ND	5.6	0.38	ug/kg	
100-42-5	Styrene	ND	5.6	0.21	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.6	0.20	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.6	0.20	ug/kg	
127-18-4	Tetrachloroethene	ND	5.6	0.21	ug/kg	
108-88-3	Toluene	ND	1.1	0.42	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.6	0.49	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.6	0.38	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.6	0.27	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.6	0.48	ug/kg	
79-01-6	Trichloroethene	ND	5.6	0.27	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.6	0.54	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.6	1.2	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.6	1.2	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.6	0.14	ug/kg	
75-01-4	Vinyl chloride	ND	5.6	0.51	ug/kg	
	m,p-Xylene	ND	1.1	0.35	ug/kg	
95-47-6	o-Xylene	ND	1.1	0.20	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		67-131%
17060-07-0	1,2-Dichloroethane-D4	108%		66-130%
2037-26-5	Toluene-D8	108%		76-125%
460-00-4	4-Bromofluorobenzene	97%		53-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-5 (14FT)		
Lab Sample ID:	JA81768-10	**Date Sampled:**	07/21/11
Matrix:	SO - Soil	**Date Received:**	07/22/11
		Percent Solids:	88.3
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	88.3		%	1	08/03/11	DD	SM18 2540G
Total Organic Carbon [a]	< 1100	1100	mg/kg	1	08/03/11 16:28	SJG	CORP ENG 81M/SW9060M

(a) Multiple injections indicate possible sample non-homogeneity.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	FB072011		
Lab Sample ID:	JA81768-11	**Date Sampled:**	07/20/11
Matrix:	AQ - Field Blank Soil	**Date Received:**	07/22/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D13353.D	1	07/29/11	TYG	n/a	n/a	V4D590
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.18	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.33	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.24	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.19	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.19	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.19	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB072011		
Lab Sample ID:	JA81768-11	**Date Sampled:**	07/20/11
Matrix:	AQ - Field Blank Soil	**Date Received:**	07/22/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	5.0	0.26	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.36	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.23	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.19	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.46	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.68	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.17	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.54	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.18	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.23	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.27	ug/l	
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		77-120%
17060-07-0	1,2-Dichloroethane-D4	102%		70-127%
2037-26-5	Toluene-D8	93%		79-120%
460-00-4	4-Bromofluorobenzene	94%		76-118%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB072011		
Lab Sample ID:	JA81768-11	**Date Sampled:**	07/20/11
Matrix:	AQ - Field Blank Soil	**Date Received:**	07/22/11
		Percent Solids:	n/a
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Total Organic Carbon	< 1.0	1.0	mg/l	1	07/31/11 02:48	SJG	SM20 5310B, 9060 M

RL = Reporting Limit

Report of Analysis

Client Sample ID:	FB072111		
Lab Sample ID:	JA81768-12	**Date Sampled:**	07/21/11
Matrix:	AQ - Field Blank Soil	**Date Received:**	07/22/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D13354.D	1	07/29/11	TYG	n/a	n/a	V4D590
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.18	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.33	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.24	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.19	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.19	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.19	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB072111		
Lab Sample ID:	JA81768-12	**Date Sampled:**	07/21/11
Matrix:	AQ - Field Blank Soil	**Date Received:**	07/22/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	5.0	0.26	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.36	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.23	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.19	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.46	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.68	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.17	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.54	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.18	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.23	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.27	ug/l	
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		77-120%
17060-07-0	1,2-Dichloroethane-D4	104%		70-127%
2037-26-5	Toluene-D8	90%		79-120%
460-00-4	4-Bromofluorobenzene	94%		76-118%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB072111		
Lab Sample ID:	JA81768-12	**Date Sampled:**	07/21/11
Matrix:	AQ - Field Blank Soil	**Date Received:**	07/22/11
		Percent Solids:	n/a
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Total Organic Carbon	< 1.0	1.0	mg/l	1	07/31/11 03:04	SJG	SM20 5310B, 9060 M

RL = Reporting Limit

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JA81768-13	**Date Sampled:**	07/21/11
Matrix:	AQ - Trip Blank Soil	**Date Received:**	07/22/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D13355.D	1	07/29/11	TYG	n/a	n/a	V4D590
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.18	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.33	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.24	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.19	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.19	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.19	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JA81768-13	**Date Sampled:**	07/21/11
Matrix:	AQ - Trip Blank Soil	**Date Received:**	07/22/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	SI Mall, Platinum Avenue, Staten Island, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	5.0	0.26	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.36	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.23	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.19	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.46	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.68	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.17	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.54	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.18	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.23	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.27	ug/l	
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		77-120%
17060-07-0	1,2-Dichloroethane-D4	104%		70-127%
2037-26-5	Toluene-D8	91%		79-120%
460-00-4	4-Bromofluorobenzene	93%		76-118%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

APPENDIX IV

MONITOR WELL LOGS

GEOLOGIC LOG

Leggette, Brashears & Graham, Inc.
6 Arrow Road, Suite 103
Ramsey, New Jersey 07446
www.lbgweb.com

OWNER: Rouse Staten Island Mall

WELL NO.: MW-16

SITE LOCATION: Platinum Ave, Staten Island NY	**SCREEN TYPE:** PVC **DIAMETER:** 2”
	SLOT NO.: 10 **SETTING:** 23 – 28’
DATE COMPLETED: 7/22/11	**SAND PACK SIZE:** #1
DRILLING COMPANY: Summit Drilling Co.	**SETTING:** 21 – 28’
	CASING TYPE: PVC **DIAMETER:** 2”
DRILLING METHOD: Hollow Stem Auger	**SETTING:** 0 – 23’
SAMPLING METHOD: Split spoon	**SEAL TYPE:** #00 Sand
OBSERVER: Spiros Zois	**SETTING**: 20 – 21’
REFERENCE POINT (RP): grade	**BACKFILL TYPE**: grout
ELEVATION OF RP:	**STATIC WATER LEVEL:** 9.5’ **DATE:** 7/22/2011
SURFACE COMPLETION: flushmount	**DEVELOPMENT METHOD**: Purge
	DURATION: **ESTIMATED YIELD:**
COMMENTS:	
ABBREVIATIONS: SS = split spoon C = cuttings F-M-C = Fine, Medium, Coarse	

DEPTH (FEET)		SAMPLE TYPE	BLOW COUNT	RECOVERY (feet)	DESCRIPTION
FROM	TO				
0	5	Airknife	-	-	0 – 0.5’ Cement; PID= 0.0 0.5 – 1.5’ Subbase (large angular gravel w/ fines); PID= 0.0 1.5 – 5’ Light brown F SAND and SILT; w/ F rounded gravel and cobbles; saturated @ 3.5’ (possibly due to a leaky fire hydrant across street); PID= 0.0
5	7	SS	9-10-11-16	1.1	Red/brown SILT and F SAND; some clay; some F-M-C subrounded gravel; saturated; PID= 0.0
7	10	C			Red/brown SILT and F SAND; some clay; some F-M-C subrounded gravel; saturated; PID= 0.0 8 – 8.5’ Boulder
10	12	SS	4-4-5-10	0.9	Red/brown SILT; some clay; some F-M rounded gravel; moist; PID= 0.0
12	15	C			Red/brown SILT; some clay; some F-M rounded gravel; moist; PID= 0.0

OWNER:	Rouse Staten Island Mall
WELL NO.:	MW-16 **PAGE:** 2 **OF** 2 **PAGES**

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DEPTH (FEET)		SAMPLE TYPE	BLOW COUNT	RECOVERY (feet)	DESCRIPTION
FROM	TO				
15	17	SS	8-17-20-22	0.4	Red/brown SILT; with clay; some F rounded gravel; some pockets of yellow F sand and silt; moist; PID= 0.0
17	20	C			Red/brown SILT and CLAY; some F rounded gravel; PID=0.0
20	22	C			Red/brown SILT and CLAY; with F rounded gravel; moist; tight; PID= 0.0
22	26	C			Red/brown SILT and CLAY; some F rounded gravel; PID=0.0
26	28				Weathered Rock
					AUGER REFUSAL @ 28’

GEOLOGIC LOG

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OWNER: Rouse Staten Island Mall

WELL NO.: MW-17

SITE LOCATION: Platinum Ave, Staten Island NY	**SCREEN TYPE:** PVC **DIAMETER:** 2”
	SLOT NO.: 10 **SETTING:** 21 – 26’
DATE COMPLETED: 7/22/11	**SAND PACK SIZE:** #1
DRILLING COMPANY: Summit Drilling Co.	**SETTING:** 19 – 26’
	CASING TYPE: PVC **DIAMETER:** 2”
DRILLING METHOD: Hollow Stem Auger	**SETTING:** 0 – 21’
SAMPLING METHOD: Split spoon	**SEAL TYPE:** #00 Sand
OBSERVER: Spiros Zois	**SETTING**: 18 – 19’
REFERENCE POINT (RP): grade	**BACKFILL TYPE**: grout
ELEVATION OF RP:	**STATIC WATER LEVEL:** 8.4’ **DATE:** 7/22/2011
SURFACE COMPLETION: flushmount	**DEVELOPMENT METHOD**: Purge
	DURATION: **ESTIMATED YIELD:**
COMMENTS:	
ABBREVIATIONS: SS = split spoon C = cuttings F-M-C = Fine, Medium, Coarse	

DEPTH (FEET)		SAMPLE TYPE	BLOW COUNT	RECOVERY (feet)	DESCRIPTION
FROM	TO				
0	5	Airknife	-	-	0 – 0.5’ Cement; PID= 0.0 0.5 – 1.5’ Subbase (large angular gravel w/ fines); PID= 0.0 1.5 – 5’ Light brown F SAND and SILT; w/ F rounded gravel and cobbles; moist; PID= 0.0
5	7	SS	7-15-15-15	1.4	Red/brown SILT and F SAND; little F rounded gravel; moist; PID=0.0
7	10	C			Red/brown SILT and F SAND; little F rounded gravel; moist; PID=0.0
10	12	SS	5-6-11-15	1.4	Red/brown SILT; saturated; PID= 0.0
12	15	C			Red/brown SILT; saturated; PID= 0.0
15	17	SS	4-14-12-14	0.7	Red/brown SILT and F SAND; with F-M-C rounded gravel; moist; PID=0.0
17	20	C			Red/brown SILT and F SAND; with F-M-C rounded gravel; moist; PID=0.0

OWNER:	Rouse Staten Island Mall
WELL NO.:	MW-17 **PAGE:** 2 **OF** 2 **PAGES**

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DEPTH (FEET)		SAMPLE TYPE	BLOW COUNT	RECOVERY (feet)	DESCRIPTION
FROM	TO				
20	22	SS	2-6-29-20	0.7	20 - 21' Banded SILT and CLAY (Red/brown and grey); with F-M-C rounded gravel; moist; tight; PID= 0.0 21 – 22' F-M-C SAND and F-M-C rounded gravel; some fines; saturated; PID=0.0
24	26	SS	24-17-32-51	1.0	24 – 25' Red/brown SILT and F SAND; little F-M rounded gravel; moist; PID=0.0 25 – 26' Red/brown CLAY and SILT; some cobbles; moist; PID=0.0
					AUGER REFUSAL @ 26'

GEOLOGIC LOG

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OWNER: Rouse Staten Island Mall

WELL NO.: MW-18

SITE LOCATION: Platinum Ave, Staten Island NY	**SCREEN TYPE:** PVC **DIAMETER:** 2”
	SLOT NO.: 10 **SETTING:** 15.5 – 20.5’
DATE COMPLETED: 7/22/11	**SAND PACK SIZE:** #1
DRILLING COMPANY: Summit Drilling Co.	**SETTING:** 13.5 – 20.5’
	CASING TYPE: PVC **DIAMETER:** 2”
DRILLING METHOD: Hollow Stem Auger	**SETTING:** 0 – 15.5’
SAMPLING METHOD: Split spoon	**SEAL TYPE:** #00 Sand
OBSERVER: Spiros Zois	**SETTING**: 12.5 – 13.5’
REFERENCE POINT (RP): grade	**BACKFILL TYPE**: grout
ELEVATION OF RP:	**STATIC WATER LEVEL:** 9.5’ **DATE:** 7/22/2011
SURFACE COMPLETION: flushmount	**DEVELOPMENT METHOD**: Purge
	DURATION: **ESTIMATED YIELD:**
COMMENTS:	
ABBREVIATIONS: SS = split spoon C = cuttings F-M-C = Fine, Medium, Coarse	

DEPTH (FEET)		SAMPLE TYPE	BLOW COUNT	RECOVERY (feet)	DESCRIPTION
FROM	TO				
0	5	Airknife	-	-	0 – 0.5’ Cement; PID= 0.0 0.5 – 1.5’ Subbase (large angular gravel w/ fines); PID= 0.0 1.5 – 5’ Light brown F SAND and SILT; w/ F rounded gravel and cobbles; moist; PID= 0.0
5	7	C			Red/brown SILT and F SAND; some F-M rounded gravel; moist; PID=0.0
7	10	C			Red/brown SILT and F SAND; some F-M rounded gravel; moist; PID=0.0
10	12	C			Red/brown SILT; saturated; PID= 0.0
12	15	C			Red/brown SILT; saturated; PID= 0.0
15	17	C			Red/brown SILT; some clay; moist; PID=0.0
17	19	C			17 – 18’ Red/brown SILT; some clay; moist; PID=0.0 18 – 19’ chatter on rig (F-M SAND)

OWNER:	Rouse Staten Island Mall
WELL NO.:	MW-18 **PAGE:** 2 **OF** 2 **PAGES**

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DEPTH (FEET)		SAMPLE TYPE	BLOW COUNT	RECOVERY (feet)	DESCRIPTION
FROM	TO				
19	21	SS	50-50/1	0.3	19 – 20' M-C SAND and F-M-C rounded gravel; saturated; PID=0.0 20.5' Bedrock
					AUGER REFUSAL @ 20.5'

GEOLOGIC LOG

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OWNER: Rouse Staten Island Mall

WELL NO.: MW-19

SITE LOCATION: Platinum Ave, Staten Island NY	**SCREEN TYPE:** PVC **DIAMETER:** 2”
	SLOT NO.: 10 **SETTING:** 15.5 – 20.5’
DATE COMPLETED: 7/22/11	**SAND PACK SIZE:** #1
DRILLING COMPANY: Summit Drilling Co.	**SETTING:** 13.5 – 20.5’
	CASING TYPE: PVC **DIAMETER:** 2”
DRILLING METHOD: Hollow Stem Auger	**SETTING:** 0 – 15.5’
SAMPLING METHOD: Split spoon	**SEAL TYPE:** #00 Sand
OBSERVER: Spiros Zois	**SETTING**: 12.5 – 13.5’
REFERENCE POINT (RP): grade	**BACKFILL TYPE**: grout
ELEVATION OF RP:	**STATIC WATER LEVEL:** 10.0’ **DATE:** 7/22/2011
SURFACE COMPLETION: flushmount	**DEVELOPMENT METHOD**: Purge
	DURATION: **ESTIMATED YIELD:**
COMMENTS:	
ABBREVIATIONS: SS = split spoon C = cuttings F-M-C = Fine, Medium, Coarse	

DEPTH (FEET)		SAMPLE TYPE	BLOW COUNT	RECOVERY (feet)	DESCRIPTION
FROM	TO				
0	5	Airknife	-	-	0 – 0.5’ Cement; PID= 0.0 0.5 – 1.5’ Subbase (large angular gravel w/ fines); PID= 0.0 1.5 – 5’ Light brown F SAND and SILT; w/ F rounded gravel and cobbles; moist; PID= 0.0
5	7	C			Red/brown SILT; with F SAND; with F-M-C rounded gravel; moist; PID=0.0
7	10	C			Red/brown SILT; with F SAND; with F-M-C rounded gravel; moist; PID=0.0
10	12	C			Brown SILT and CLAY; some F-M rounded gravel and cobbles; saturated; PID= 0.0
12	15	C			Brown SILT and CLAY; some F-M rounded gravel and cobbles; saturated; PID= 0.0
15	17	C			Brown SILT and CLAY; some F rounded gravel; saturated; PID=0.0

OWNER:	Rouse Staten Island Mall
WELL NO.:	MW-19 **PAGE:** 2 **OF** 2 **PAGES**

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DEPTH (FEET)		SAMPLE TYPE	BLOW COUNT	RECOVERY (feet)	DESCRIPTION
FROM	TO				
17	20	C			Brown SILT and CLAY; some F rounded gravel; saturated; PID=0.0
20	20.5				No Recovery
					AUGER REFUSAL @ 20.5’

APPENDIX V

GROUNDWATER SAMPLING FORMS

LBG-NEW JERSEY OFFICE
STANDARD LOW-FLOW GROUND WATER SAMPLING LOG

This form is used to record data to establish the flow rate and duration for the initial low-flow event at a single monitor well. This data reported on this form can be used to establish the flow rate and duration for subsequent sampling events from the same well *without* the need to conduct full flow-through monitoring. For subsequent rounds, only the standard monitor well sampling form needs to be completed.

Project __SIMALL___ Site __RSIRI_____ Well No. _____**MW-1**____ Date ____8/2/11__ Total Well Depth__13.5'_____

Screen/Intake Zone Length __5'___Well Diameter __4"__ Pre-Pumping Water Level ___11.46___ Measuring Point __TOC___

Casing Type __PVC__ Calculated Water Column Volume: ___NA_____ Purge Device: ____peristaltic pump_____

Tubing Type: ___Poly_____ Flow-Through Device: __Horiba_____ Sampling Personnel _____MI/ZT_____

Monitoring Equipment: __m-scope____ Other Information: _____

Time	pH (units)	Cond. us/cm	Turb. (NTU)	DO (mg/l)	Temp. (^{0}C)	ORP (mV)	Rate (mL/min)	DTW (feet)	Notes
13:25	6.43	1.76	78.2	1.78	20.43	-167	300	12.28	
13:30	6.57	1.99	66.7	0.78	21.21	-179	300	12.31	
13:35	6.62	2.03	39.4	0.55	21.63	-182	325	12.43	
13:40	6.71	2.06	37.9	0.39	21.81	-185	300	12.46	
13:45	6.76	2.12	34.4	0.28	21.93	-188	300	12.49	
13:50	6.79	2.14	33.2	0.25	22.41	-187	300	12.51	
13:50	6.81	2.16	29.8	0.24	22.62	-190	275	12.52	
13:55	6.83	2.17	31.2	0.24	22.73	-191	275	12.50	
14:00									SAMPLE
									CO_2: 90 mg/L
									SO_4: 80 mg/L

Total time of purge: 35 min Total Volume Purge: 2.75 gal

LBG-NEW JERSEY OFFICE
STANDARD LOW-FLOW GROUND WATER SAMPLING LOG

This form is used to record data to establish the flow rate and duration for the initial low-flow event at a single monitor well. This data reported on this form can be used to establish the flow rate and duration for subsequent sampling events from the same well *without* the need to conduct full flow-through monitoring. For subsequent rounds, only the standard monitor well sampling form needs to be completed.

Project __SIMALL___ Site __RSIRI_____ Well No. _____**MW-2**____ Date ____8/2/11__ Total Well Depth__11.5'_____

Screen/Intake Zone Length __5'___Well Diameter __4"__ Pre-Pumping Water Level ___7.75___ Measuring Point __TOC____

Casing Type __PVC__ Calculated Water Column Volume: ___NA_____ Purge Device: ____peristaltic pump_____

Tubing Type: ___Poly_____ Flow-Through Device: __Horiba_____ Sampling Personnel _____MI/ZT_____

Monitoring Equipment: __m-scope____ Other Information: _____

Time	pH (units)	Cond. us/cm	Turb. (NTU)	DO (mg/l)	Temp. (^{0}C)	ORP (mV)	Rate (mL/min)	DTW (feet)	Notes
14:58	6.96	8.43	12.2	11.58	22.85	-63	425	7.90	
15:03	7.22	4.76	1.5	2.43	22.72	-54	425	8.13	
15:08	7.10	4.20	2.0	2.34	23.20	-54	375	8.28	
15:13	7.08	4.04	1.4	2.43	23.46	-55	275	8.46	
15:18	7.07	3.94	1.0	1.91	23.55	-47	225	8.69	
15:23	7.07	3.87	1.0	1.63	23.61	-45	200	8.85	
15:28	7.08	3.84	0.6	1.57	23.66	-44	200	8.94	
15:35									SAMPLE
									CO_2: 120 mg/L
									SO_4: 100 mg/L

Total time of purge: 30 min Total Volume Purge: 2.3 gal

LBG-NEW JERSEY OFFICE
STANDARD LOW-FLOW GROUND WATER SAMPLING LOG

This form is used to record data to establish the flow rate and duration for the initial low-flow event at a single monitor well. This data reported on this form can be used to establish the flow rate and duration for subsequent sampling events from the same well *without* the need to conduct full flow-through monitoring. For subsequent rounds, only the standard monitor well sampling form needs to be completed.

Project __SIMALL___ Site __RSIRI_____ Well No. _____**MW-3**____ Date ____8/3/11__ Total Well Depth__14.6'_____

Screen/Intake Zone Length __5'___Well Diameter __4"__ Pre-Pumping Water Level ___6.99___ Measuring Point __TOC____

Casing Type __PVC__ Calculated Water Column Volume: ___NA_____ Purge Device: ____peristaltic pump_____

Tubing Type: ___Poly_____ Flow-Through Device: __Horiba_____ Sampling Personnel _____MI/ZT_____

Monitoring Equipment: __m-scope____ Other Information: _____

Time	pH (units)	Cond. us/cm	Turb. (NTU)	DO (mg/l)	Temp. (^{0}C)	ORP (mV)	Rate (mL/min)	DTW (feet)	Notes
11:02	7.57	1.57	12.2	3.27	21.49	69	400	7.01	
11:07	7.72	1.53	4.1	2.47	21.35	58	320	7.41	
11:12	7.61	1.52	3.1	2.45	21.41	55	300	7.44	
11:17	7.62	1.47	2.9	2.37	21.47	53	300	7.45	
11:22	7.69	1.47	5.2	2.58	21.44	52	300	7.45	
11:27	7.65	1.46	3.1	2.67	21.43	50	300	7.45	
11:32	7.62	1.46	2.1	2.74	21.45	47	300	7.45	
11:40									SAMPLE
									CO_2: 85 mg/L
									SO_4: 55 mg/L

Total time of purge: 35 min Total Volume Purge: 4 gal

LBG-NEW JERSEY OFFICE
STANDARD LOW-FLOW GROUND WATER SAMPLING LOG

This form is used to record data to establish the flow rate and duration for the initial low-flow event at a single monitor well. This data reported on this form can be used to establish the flow rate and duration for subsequent sampling events from the same well *without* the need to conduct full flow-through monitoring. For subsequent rounds, only the standard monitor well sampling form needs to be completed.

Project __SIMALL___ Site __RSIRI_____ Well No. _____**MW-3D**____ Date ____8/3/11__ Total Well Depth__43.3'_____

Screen/Intake Zone Length __5'___Well Diameter __2"__ Pre-Pumping Water Level ___7.42___ Measuring Point __TOC____

Casing Type __PVC__ Calculated Water Column Volume: ___NA_____ Purge Device: ____peristaltic pump_____

Tubing Type: ___Poly_____ Flow-Through Device: __Horiba_____ Sampling Personnel _____MI/ZT_____

Monitoring Equipment: __m-scope____ Other Information: _____

Time	pH (units)	Cond. us/cm	Turb. (NTU)	DO (mg/l)	Temp. (^{0}C)	ORP (mV)	Rate (mL/min)	DTW (feet)	Notes
11:05	9.48	0.633	365	1.24	19.76	-21	400	12.57	
11:10	9.52	0.628	199	0.82	20.80	-56	300	14.05	
11:15	9.59	0.621	116	0.70	20.86	-84	300	15.08	
11:20	9.67	0.619	62.1	0.64	21.11	-98	300	15.91	
11:25	9.76	0.619	29.8	0.58	21.11	-98	300	16.61	
11:30	9.81	0.622	20.5	0.56	21.01	-96	250	17.04	
11:35	9.87	0.628	14.6	0.51	21.11	-93	250	17.55	
11:40	9.90	0.631	13.2	0.48	21.08	-92	250	17.82	
11:45	9.92	0.632	11.2	0.47	21.11	-91	250	17.99	
11:50									SAMPLE
									CO_2: 250 mg/L
									SO_4: 50 mg/L

Total time of purge: 40 min Total Volume Purge: 3 gal

LBG-NEW JERSEY OFFICE
STANDARD LOW-FLOW GROUND WATER SAMPLING LOG

This form is used to record data to establish the flow rate and duration for the initial low-flow event at a single monitor well. This data reported on this form can be used to establish the flow rate and duration for subsequent sampling events from the same well *without* the need to conduct full flow-through monitoring. For subsequent rounds, only the standard monitor well sampling form needs to be completed.

Project __SIMALL___ Site __RSIRI_____ Well No. _____**MW-4**____ Date ____8/3/11__ Total Well Depth__14.4'_____

Screen/Intake Zone Length __5'___Well Diameter __4"__ Pre-Pumping Water Level ___8.24 ___ Measuring Point __TOC____

Casing Type __PVC__ Calculated Water Column Volume: ___NA_____ Purge Device: ____peristaltic pump_____

Tubing Type: ___Poly_____ Flow-Through Device: __Horiba_____ Sampling Personnel _____MI/ZT_____

Monitoring Equipment: __m-scope____ Other Information: _____

Time	pH (units)	Cond. us/cm	Turb. (NTU)	DO (mg/l)	Temp. (^{0}C)	ORP (mV)	Rate (mL/min)	DTW (feet)	Notes
13:35	7.05	1.91	5.5	2.63	22.91	71	240	8.25	
13:40	6.82	1.81	4.0	2.89	22.46	76	240	8.89	
13:45	6.76	1.82	1.5	3.20	21.39	82	200	9.01	
13:50	6.74	1.77	0.6	3.51	21.44	81	200	9.08	
13:55	6.80	1.74	0.4	3.62	21.67	81	180	9.14	
14:00	6.82	1.74	0.4	3.69	21.75	80	180	9.15	
14:05	6.85	1.68	0.4	3.71	21.62	79	180	9.14	
14:10									SAMPLE
									CO_2: 85 mg/L
									SO_4: 50 mg/L

Total time of purge: 30 min Total Volume Purge: 2.5 gal

LBG-NEW JERSEY OFFICE
STANDARD LOW-FLOW GROUND WATER SAMPLING LOG

This form is used to record data to establish the flow rate and duration for the initial low-flow event at a single monitor well. This data reported on this form can be used to establish the flow rate and duration for subsequent sampling events from the same well *without* the need to conduct full flow-through monitoring. For subsequent rounds, only the standard monitor well sampling form needs to be completed.

Project __SIMALL___ Site __RSIRI_____ Well No. _____**MW-5**____ Date ____8/3/11__ Total Well Depth__14.0'_____

Screen/Intake Zone Length __5'___Well Diameter __4"__ Pre-Pumping Water Level ___8.10 ___ Measuring Point __TOC____

Casing Type __PVC__ Calculated Water Column Volume: ___NA_____ Purge Device: ____peristaltic pump_____

Tubing Type: ___Poly_____ Flow-Through Device: __Horiba_____ Sampling Personnel _____MI/ZT_____

Monitoring Equipment: __m-scope____ Other Information: _____

Time	pH (units)	Cond. us/cm	Turb. (NTU)	DO (mg/l)	Temp. (^{0}C)	ORP (mV)	Rate (mL/min)	DTW (feet)	Notes
13:26	7.70	1.45	69.5	4.10	23.52	101	350	8.70	
13:31	7.09	1.44	78.4	4.39	23.55	122	325	8.89	
13:36	6.88	1.43	96.1	4.68	23.57	134	300	8.99	
13:41	6.69	1.42	95.8	4.54	23.83	134	300	9.07	
13:46	6.56	1.40	94.0	4.49	24.00	133	300	9.14	
13:51	6.51	1.39	79.2	4.56	24.31	130	300	9.21	
13:56	6.50	1.40	65.9	4.56	24.42	128	300	9.20	
14:01	6.49	1.40	63.0	4.58	24.48	126	300	9.20	
14:06	6.48	1.41	59.4	4.56	24.49	124	300	9.21	
14:15									SAMPLE
									CO_2: 75 mg/L
									SO_4: 50 mg/L

Total time of purge: 40 min Total Volume Purge: 3.2 gal

LBG-NEW JERSEY OFFICE
STANDARD LOW-FLOW GROUND WATER SAMPLING LOG

This form is used to record data to establish the flow rate and duration for the initial low-flow event at a single monitor well. This data reported on this form can be used to establish the flow rate and duration for subsequent sampling events from the same well *without* the need to conduct full flow-through monitoring. For subsequent rounds, only the standard monitor well sampling form needs to be completed.

Project __SIMALL___ Site __RSIRI_____ Well No. _____**MW-6R**____ Date ____8/2/11__ Total Well Depth__14.4'_____

Screen/Intake Zone Length __5'___Well Diameter __4"__ Pre-Pumping Water Level ___7.23 ___ Measuring Point __TOC____

Casing Type __PVC__ Calculated Water Column Volume: ___NA_____ Purge Device: ____peristaltic pump_____

Tubing Type: ___Poly_____ Flow-Through Device: __Horiba_____ Sampling Personnel _____MI/ZT_____

Monitoring Equipment: __m-scope____ Other Information: _____

Time	pH (units)	Cond. us/cm	Turb. (NTU)	DO (mg/l)	Temp. (^{0}C)	ORP (mV)	Rate (mL/min)	DTW (feet)	Notes
12:32	6.94	2.15	15.1	5.34	19.48	40	450	8.18	
12:37	7.67	2.08	7.8	4.46	19.74	6	275	8.95	
12:42	7.66	2.01	4.0	4.39	20.69	5	275	9.47	
12:47	7.67	1.98	3.9	4.73	22.42	6	150	9.58	
12:52	7.69	1.97	3.0	4.64	22.75	6	150	9.65	
12:57	7.70	1.92	2.9	4.59	22.68	8	150	9.74	
13:02	7.70	1.89	1.9	4.58	22.42	9	150		
13:05									SAMPLE
									CO_2: 175 mg/L
									SO_4: 75 mg/L

Total time of purge: 30 min Total Volume Purge: 1.6 gal

LBG-NEW JERSEY OFFICE
STANDARD LOW-FLOW GROUND WATER SAMPLING LOG

This form is used to record data to establish the flow rate and duration for the initial low-flow event at a single monitor well. This data reported on this form can be used to establish the flow rate and duration for subsequent sampling events from the same well *without* the need to conduct full flow-through monitoring. For subsequent rounds, only the standard monitor well sampling form needs to be completed.

Project __SIMALL___ Site __RSIRI_____ Well No. _____**MW-7**____ Date ____8/3/11__ Total Well Depth__ 15.1' _____

Screen/Intake Zone Length __5'___Well Diameter __4"__ Pre-Pumping Water Level ___7.34 ___ Measuring Point __TOC____

Casing Type __PVC__ Calculated Water Column Volume: ___NA_____ Purge Device: ____peristaltic pump_____

Tubing Type: ___Poly_____ Flow-Through Device: __Horiba_____ Sampling Personnel _____MI/ZT_____

Monitoring Equipment: __m-scope____ Other Information: _____

Time	pH (units)	Cond. us/cm	Turb. (NTU)	DO (mg/l)	Temp. (^{0}C)	ORP (mV)	Rate (mL/min)	DTW (feet)	Notes
12:19	8.35	1.58	8.9	9.02	24.01	73	190	7.82	
12:24	8.20	1.58	9.8	8.34	24.71	75	190	7.89	
12:29	8.03	1.59	12.0	7.54	25.06	76	190	7.95	
12:34	8.00	1.58	11.8	6.99	25.63	74	190	8.01	
12:39	7.98	1.58	11.7	6.63	25.88	72	190	8.00	
12:44	7.97	1.57	12.0	6.21	26.24	70	190	8.01	
12:49	7.96	1.56	12.4	6.09	26.51	68	190	8.02	
12:55									SAMPLE
									CO_2: 50 mg/L
									SO_4: 60 mg/L

Total time of purge: 30 min Total Volume Purge: 1.5 gal

LBG-NEW JERSEY OFFICE
STANDARD LOW-FLOW GROUND WATER SAMPLING LOG

This form is used to record data to establish the flow rate and duration for the initial low-flow event at a single monitor well. This data reported on this form can be used to establish the flow rate and duration for subsequent sampling events from the same well *without* the need to conduct full flow-through monitoring. For subsequent rounds, only the standard monitor well sampling form needs to be completed.

Project __SIMALL___ Site __RSIRI_____ Well No. _____**MW-8**____ Date ____8/3/11__ Total Well Depth__ 14.3' _____

Screen/Intake Zone Length __5'___Well Diameter __4"__ Pre-Pumping Water Level ___8.23 ___ Measuring Point __TOC____

Casing Type __PVC__ Calculated Water Column Volume: ___NA_____ Purge Device: ____peristaltic pump_____

Tubing Type: ___Poly_____ Flow-Through Device: __Horiba_____ Sampling Personnel _____MI/ZT_____

Monitoring Equipment: __m-scope____ Other Information: _____

Time	pH (units)	Cond. us/cm	Turb. (NTU)	DO (mg/l)	Temp. (^{0}C)	ORP (mV)	Rate (mL/min)	DTW (feet)	Notes
12:22	7.36	2.07	36.0	3.03	22.71	74	400	8.24	
12:27	7.21	2.10	15.2	2.07	22.50	71	400	8.88	
12:32	7.03	2.15	2.0	0.52	21.99	62	250	9.15	
12:37	6.97	2.10	0.0	0.48	22.80	61	200	9.21	
12:42	6.92	2.07	0.0	0.48	22.94	58	200	9.28	
12:47	6.90	2.06	0.0	0.48	23.19	58	200	9.28	
12:52	6.86	2.06	0.0	0.50	23.47	58	200	9.27	
13:00									SAMPLE
									CO_2: 95 mg/L
									SO_4: 70 mg/L

Total time of purge: 30 min Total Volume Purge: 1.75 gal

LBG-NEW JERSEY OFFICE
STANDARD LOW-FLOW GROUND WATER SAMPLING LOG

This form is used to record data to establish the flow rate and duration for the initial low-flow event at a single monitor well. This data reported on this form can be used to establish the flow rate and duration for subsequent sampling events from the same well *without* the need to conduct full flow-through monitoring. For subsequent rounds, only the standard monitor well sampling form needs to be completed.

Project __SIMALL___ Site __RSIRI_____ Well No. _____**MW-9**____ Date ____8/4/11__ Total Well Depth__ 15.4' _____

Screen/Intake Zone Length __5'___Well Diameter __4"__ Pre-Pumping Water Level ___9.47 ___ Measuring Point __TOC____

Casing Type __PVC__ Calculated Water Column Volume: ___NA_____ Purge Device: ____peristaltic pump_____

Tubing Type: ___Poly_____ Flow-Through Device: __Horiba_____ Sampling Personnel _____MI/ZT_____

Monitoring Equipment: __m-scope____ Other Information: _____

Time	pH (units)	Cond. us/cm	Turb. (NTU)	DO (mg/l)	Temp. (^{0}C)	ORP (mV)	Rate (mL/min)	DTW (feet)	Notes
9:53	6.80	1.67	729	10.09	20.85	161	270	9.90	
9:58	6.84	1.79	351	3.91	20.66	39	270	10.33	
10:03	6.89	1.90	229	2.27	20.58	22	270	10.61	
10:08	6.94	1.41	158	1.84	20.62	20	270	10.83	
10:13	6.98	1.24	127	1.37	20.69	18	270	10.94	
10:18	6.82	1.73	104	2.31	20.92	-19	270	10.93	
10:23	6.61	1.89	94	2.66	21.45	-36	270	10.92	
10:28	6.60	1.85	60.2	2.83	21.40	-39	270	10.95	
10:33	6.60	1.96	57.1	2.92	21.37	-41	270	10.97	
10:38	6.60	1.98	52.9	2.93	21.32	-42	270	10.96	
10:40									SAMPLE
									CO_2: 65 mg/L
									SO_4: 55 mg/L

Total time of purge: 45 min Total Volume Purge: 3.2 gal

LBG-NEW JERSEY OFFICE
STANDARD LOW-FLOW GROUND WATER SAMPLING LOG

This form is used to record data to establish the flow rate and duration for the initial low-flow event at a single monitor well. This data reported on this form can be used to establish the flow rate and duration for subsequent sampling events from the same well *without* the need to conduct full flow-through monitoring. For subsequent rounds, only the standard monitor well sampling form needs to be completed.

Project __SIMALL___ Site __RSIRI_____ Well No. _____**MW-10**___ Date ____8/3/11__ Total Well Depth__ 19.3' _____

Screen/Intake Zone Length __5'___Well Diameter __4"__ Pre-Pumping Water Level ___8.17 ___ Measuring Point __TOC____

Casing Type __PVC__ Calculated Water Column Volume: ___NA_____ Purge Device: ____peristaltic pump_____

Tubing Type: ___Poly_____ Flow-Through Device: __Horiba_____ Sampling Personnel _____MI/ZT_____

Monitoring Equipment: __m-scope____ Other Information: _____

Time	pH (units)	Cond. us/cm	Turb. (NTU)	DO (mg/l)	Temp. (^{0}C)	ORP (mV)	Rate (mL/min)	DTW (feet)	Notes
9:55	7.24	2.39	8.7	2.44	18.01	111	500	8.60	
9:55	7.45	2.59	1.1	1.76	18.34	105	500	9.11	
10:00	7.49	2.57	4.2	1.30	19.39	98	225	9.34	
10:05	7.52	2.58	3.8	1.16	19.63	87	225	9.30	
10:10	7.48	2.60	3.1	1.18	19.66	83	225	9.32	
10:15	7.44	2.64	2.5	1.14	19.57	78	250	9.38	
10:20	7.42	2.69	2.3	1.06	19.56	72	225	9.35	
10:25	7.42	2.70	1.9	1.02	19.61	68	225	9.30	
10:30	7.43	2.70	2.0	1.00	19.67	66	225	9.30	
10:30									SAMPLE
									CO_2: 260 mg/L
									SO_4: 70 mg/L

Total time of purge: 40 min Total Volume Purge: 2.75 gal

LBG-NEW JERSEY OFFICE
STANDARD LOW-FLOW GROUND WATER SAMPLING LOG

This form is used to record data to establish the flow rate and duration for the initial low-flow event at a single monitor well. This data reported on this form can be used to establish the flow rate and duration for subsequent sampling events from the same well *without* the need to conduct full flow-through monitoring. For subsequent rounds, only the standard monitor well sampling form needs to be completed.

Project __SIMALL___ Site __RSIRI_____ Well No. _____**MW-11**___ Date ____8/4/11__ Total Well Depth__ 17.2' _____

Screen/Intake Zone Length __5'___Well Diameter __4"__ Pre-Pumping Water Level ___9.18 ___ Measuring Point __TOC____

Casing Type __PVC__ Calculated Water Column Volume: ___NA_____ Purge Device: ____peristaltic pump_____

Tubing Type: ___Poly_____ Flow-Through Device: __Horiba_____ Sampling Personnel _____MI/ZT_____

Monitoring Equipment: __m-scope____ Other Information: _____

Time	pH (units)	Cond. us/cm	Turb. (NTU)	DO (mg/l)	Temp. (^{0}C)	ORP (mV)	Rate (mL/min)	DTW (feet)	Notes
11:09	7.04	2.08	27.9	9.21	21.26	-11	225	9.23	
11:14	7.02	1.98	59.4	8.16	21.35	-6	225	9.95	
11:19	7.02	1.94	80.5	7.35	21.43	-1	225	9.28	
11:24	7.02	1.93	21.3	6.86	21.77	0	225	9.26	
11:29	7.02	1.92	16.1	6.72	21.84	0	225	9.25	
11:34	7.02	1.91	10.2	6.82	21.92	1	225	9.23	
11:39	7.02	1.91	6.6	6.85	21.93	1	225	9.22	
11:45									SAMPLE
									CO_2: 90 mg/L
									SO_4: 65 mg/L

Total time of purge: 30 min Total Volume Purge: 1.8 gal

LBG-NEW JERSEY OFFICE
STANDARD LOW-FLOW GROUND WATER SAMPLING LOG

This form is used to record data to establish the flow rate and duration for the initial low-flow event at a single monitor well. This data reported on this form can be used to establish the flow rate and duration for subsequent sampling events from the same well *without* the need to conduct full flow-through monitoring. For subsequent rounds, only the standard monitor well sampling form needs to be completed.

Project __SIMALL___ Site __RSIRI_____ Well No. _____**MW-12**___ Date ____8/4/11__ Total Well Depth__ 16.3' _____

Screen/Intake Zone Length __5'___Well Diameter __4"__ Pre-Pumping Water Level ___9.99 ___ Measuring Point __TOC____

Casing Type __PVC__ Calculated Water Column Volume: ___NA_____ Purge Device: ____peristaltic pump_____

Tubing Type: ___Poly_____ Flow-Through Device: __Horiba_____ Sampling Personnel _____MI/ZT_____

Monitoring Equipment: __m-scope____ Other Information: _____

Time	pH (units)	Cond. us/cm	Turb. (NTU)	DO (mg/l)	Temp. (^{0}C)	ORP (mV)	Rate (mL/min)	DTW (feet)	Notes
10:11	6.98	3.16	109	2.37	20.28	-6	240	10.10	
10:16	6.85	3.18	142	6.39	21.34	2	240	10.13	
10:21	6.71	3.19	161	9.72	21.71	7	240	10.15	
10:26	6.69	3.17	133	9.26	22.07	-1	240	10.12	
10:31	6.66	3.16	116	9.04	22.60	-13	240	10.10	
10:36	6.66	3.16	83.4	8.24	22.93	-19	240	10.11	
10:41	6.66	3.15	52.6	7.59	23.15	-24	240	10.10	
10:46	6.65	3.14	48.9	7.32	23.21	-27	240	10.09	
10:51	6.65	3.14	39.2	7.16	23.29	-29	240	10.09	
10:55									SAMPLE
									CO_2: 100 mg/L
									SO_4: 85 mg/L

Total time of purge: 40 min Total Volume Purge: 2.6 gal

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STANDARD LOW-FLOW GROUND WATER SAMPLING LOG

This form is used to record data to establish the flow rate and duration for the initial low-flow event at a single monitor well. This data reported on this form can be used to establish the flow rate and duration for subsequent sampling events from the same well *without* the need to conduct full flow-through monitoring. For subsequent rounds, only the standard monitor well sampling form needs to be completed.

Project __SIMALL___ Site __RSIRI_____ Well No. _____**MW-13**___ Date ____8/4/11__ Total Well Depth__ 17' _____

Screen/Intake Zone Length __5'___Well Diameter __4"__ Pre-Pumping Water Level ___11.15 ___ Measuring Point __TOC___

Casing Type __PVC__ Calculated Water Column Volume: ___NA_____ Purge Device: ____peristaltic pump_____

Tubing Type: ___Poly_____ Flow-Through Device: __Horiba_____ Sampling Personnel _____MI/ZT_____

Monitoring Equipment: __m-scope____ Other Information: _____

Time	pH (units)	Cond. us/cm	Turb. (NTU)	DO (mg/l)	Temp. (^{0}C)	ORP (mV)	Rate (mL/min)	DTW (feet)	Notes
11:56	7.06	2.62	33.1	11.15	19.51	17	300	11.27	
12:01	7.00	2.55	14.8	2.93	19.46	20	300	11.30	
12:06	6.94	2.45	2.6	1.03	19.42	23	300	11.31	
12:11	6.97	2.38	1.3	0.92	19.76	23	300	11.33	
12:16	7.00	2.36	0.0	0.88	19.97	23	300	11.35	
12:21	7.00	2.37	0.0	0.88	20.22	24	300	11.37	
12:26	7.00	2.37	0.0	0.88	20.34	25	300	11.38	
12:30									SAMPLE
									CO_2: 60 mg/L
									SO_4: 90 mg/L

Total time of purge: 30 min Total Volume Purge: 2.4 gal

LBG-NEW JERSEY OFFICE
STANDARD LOW-FLOW GROUND WATER SAMPLING LOG

This form is used to record data to establish the flow rate and duration for the initial low-flow event at a single monitor well. This data reported on this form can be used to establish the flow rate and duration for subsequent sampling events from the same well *without* the need to conduct full flow-through monitoring. For subsequent rounds, only the standard monitor well sampling form needs to be completed.

Project __SIMALL___ Site __RSIRI_____ Well No. _____**MW-14**___ Date ____NA_____Total Well Depth__ 17.2' _____

Screen/Intake Zone Length __5'___Well Diameter __4"__ Pre-Pumping Water Level ___ NA ___ Measuring Point __TOC___

Casing Type __PVC__ Calculated Water Column Volume: ___NA_____ Purge Device: ____peristaltic pump_____

Tubing Type: ___Poly_____ Flow-Through Device: __Horiba_____ Sampling Personnel _____MI/ZT_____

Monitoring Equipment: __m-scope____ Other Information: _____

Time	pH (units)	Cond. us/cm	Turb. (NTU)	DO (mg/l)	Temp. (^{0}C)	ORP (mV)	Rate (mL/min)	DTW (feet)	Notes
									WELL
									NOT
									SAMPLED
Total time of purge: -							Total Volume Purge: -		

LBG-NEW JERSEY OFFICE
STANDARD LOW-FLOW GROUND WATER SAMPLING LOG

This form is used to record data to establish the flow rate and duration for the initial low-flow event at a single monitor well. This data reported on this form can be used to establish the flow rate and duration for subsequent sampling events from the same well *without* the need to conduct full flow-through monitoring. For subsequent rounds, only the standard monitor well sampling form needs to be completed.

Project __SIMALL___ Site __RSIRI_____ Well No. _____**MW-15**___ Date ____8/2/11__ Total Well Depth__ 17.9' _____

Screen/Intake Zone Length __5'___Well Diameter __4"__ Pre-Pumping Water Level ___ 7.78 ___ Measuring Point __TOC___

Casing Type __PVC__ Calculated Water Column Volume: ___NA_____ Purge Device: ____peristaltic pump_____

Tubing Type: ___Poly_____ Flow-Through Device: __Horiba_____ Sampling Personnel _____MI/ZT_____

Monitoring Equipment: __m-scope____ Other Information: _____

Time	pH (units)	Cond. us/cm	Turb. (NTU)	DO (mg/l)	Temp. (^{0}C)	ORP (mV)	Rate (mL/min)	DTW (feet)	Notes
13:58	7.68	2.38	231	2.64	20.26	31	375	8.20	
14:03	7.43	2.28	22.4	1.78	20.02	37	325	8.56	
14:08	7.36	2.25	9.9	1.68	20.21	39	325	8.67	
14:13	7.32	2.25	5.9	1.63	20.31	40	325	8.71	
14:18	7.30	2.27	3.1	1.61	20.31	40	325	8.73	
14:23	7.30	2.28	1.7	1.57	20.25	40	325	8.74	
14:30									SAMPLE
									CO_2: 95 mg/L
									SO_4: 80 mg/L

Total time of purge: 25 min Total Volume Purge: 2.2 gal

LBG-NEW JERSEY OFFICE
STANDARD LOW-FLOW GROUND WATER SAMPLING LOG

This form is used to record data to establish the flow rate and duration for the initial low-flow event at a single monitor well. This data reported on this form can be used to establish the flow rate and duration for subsequent sampling events from the same well *without* the need to conduct full flow-through monitoring. For subsequent rounds, only the standard monitor well sampling form needs to be completed.

Project __SIMALL___ Site __RSIRI_____ Well No. _____**MW-16**___ Date ____8/4/11__ Total Well Depth__ 28' _____

Screen/Intake Zone Length __5'___Well Diameter __2"__ Pre-Pumping Water Level ___ 9.32 ___ Measuring Point __TOC___

Casing Type __PVC__ Calculated Water Column Volume: ___NA_____ Purge Device: ____peristaltic pump_____

Tubing Type: ___Poly_____ Flow-Through Device: __Horiba_____ Sampling Personnel _____MI/ZT_____

Monitoring Equipment: __m-scope____ Other Information: _____

Time	pH (units)	Cond. us/cm	Turb. (NTU)	DO (mg/l)	Temp. (^{0}C)	ORP (mV)	Rate (mL/min)	DTW (feet)	Notes
14:25	7.80	3.56	93	4.53	20.49	135	275	9.50	
14:30	7.79	3.41	94	4.37	20.56	120	250	9.48	
14:35	7.73	3.36	94	4.34	20.58	98	250	9.48	
14:40	7.71	3.35	97	4.12	20.59	82	250	9.46	
14:45	7.68	3.32	103	4.01	20.62	79	250	9.43	
14:50	7.65	3.32	109	3.92	20.62	76	250	9.44	
14:55	7.64	3.30	109	3.78	20.62	71	250	9.44	
15:05	7.64	3.29	111	3.41	20.61	71	250	9.45	
15:10									SAMPLE
									CO_2: 72 mg/L
									SO_4: 70 mg/L

Total time of purge: 40 min Total Volume Purge: 2.6 gal

LBG-NEW JERSEY OFFICE
STANDARD LOW-FLOW GROUND WATER SAMPLING LOG

This form is used to record data to establish the flow rate and duration for the initial low-flow event at a single monitor well. This data reported on this form can be used to establish the flow rate and duration for subsequent sampling events from the same well *without* the need to conduct full flow-through monitoring. For subsequent rounds, only the standard monitor well sampling form needs to be completed.

Project __SIMALL___ Site __RSIRI_____ Well No. _____**MW-17**___ Date ____8/4/11__ Total Well Depth__ 26' _____

Screen/Intake Zone Length __5'___Well Diameter __2"__ Pre-Pumping Water Level ___8.75 ___ Measuring Point __TOC___

Casing Type __PVC__ Calculated Water Column Volume: ___NA_____ Purge Device: ____peristaltic pump_____

Tubing Type: ___Poly_____ Flow-Through Device: __Horiba_____ Sampling Personnel _____MI/ZT_____

Monitoring Equipment: __m-scope____ Other Information: _____

Time	pH (units)	Cond. us/cm	Turb. (NTU)	DO (mg/l)	Temp. (^{0}C)	ORP (mV)	Rate (mL/min)	DTW (feet)	Notes
14:02	7.81	3.54	86.4	3.1	20.1	202	375	9.12	
14:07	7.65	3.42	72.9	2.9	19.8	167	400	9.04	
14:12	7.59	3.38	54.1	2.9	19.7	149	450	9.02	
14:17	7.58	3.38	43.7	2.8	19.7	132	450	9.02	
14:22	7.59	3.36	39.8	2.8	19.6	125	450	9.02	
14:27	7.57	3.36	38.4	2.7	19.6	121	450	9.02	
14:32	7.57	3.36	36.2	2.7	19.6	117	450	9.02	
14:37	7.57	3.35	32.1	2.7	19.6	106	450	9.02	
14:42	7.56	3.34	31.9	2.7	19.6	98	450	9.02	
14:45									
									CO_2: 91 mg/L
									SO_4: 72 mg/L

Total time of purge: 40 min Total Volume Purge: 4.5 gal

LBG-NEW JERSEY OFFICE
STANDARD LOW-FLOW GROUND WATER SAMPLING LOG

This form is used to record data to establish the flow rate and duration for the initial low-flow event at a single monitor well. This data reported on this form can be used to establish the flow rate and duration for subsequent sampling events from the same well *without* the need to conduct full flow-through monitoring. For subsequent rounds, only the standard monitor well sampling form needs to be completed.

Project __SIMALL___ Site __RSIRI_____ Well No. _____**MW-18**___ Date ____8/3/11__ Total Well Depth__ 20.5'_____

Screen/Intake Zone Length __5'___Well Diameter __2"__ Pre-Pumping Water Level ___ 9.34 ___ Measuring Point __TOC___

Casing Type __PVC__ Calculated Water Column Volume: ___NA_____ Purge Device: ____peristaltic pump_____

Tubing Type: ___Poly_____ Flow-Through Device: __Horiba_____ Sampling Personnel _____MI/ZT_____

Monitoring Equipment: __m-scope____ Other Information: _____

Time	pH (units)	Cond. us/cm	Turb. (NTU)	DO (mg/l)	Temp. (^{0}C)	ORP (mV)	Rate (mL/min)	DTW (feet)	Notes
14:55	7.10	3.26	52.1	3.1	22.4	87	275	9.52	
15:00	7.05	2.85	51.8	2.8	22.3	89	275	9.49	
15:05	7.04	2.83	45.3	2.7	21.7	93	275	9.47	
15:10	6.95	2.72	35.8	2.5	21.5	97	275	9.47	
15:15	6.94	2.65	35.2	2.5	21.5	100	275	9.47	
15:20	6.93	2.65	33.1	2.5	21.5	101	275	9.47	
15:25	6.93	2.64	32.6	2.4	21.5	105	275	9.47	
15:30									SAMPLE
									CO_2: 120 mg/L
									SO_4: 70 mg/L

Total time of purge: 30 min Total Volume Purge: 2.1 gal

LBG-NEW JERSEY OFFICE
STANDARD LOW-FLOW GROUND WATER SAMPLING LOG

This form is used to record data to establish the flow rate and duration for the initial low-flow event at a single monitor well. This data reported on this form can be used to establish the flow rate and duration for subsequent sampling events from the same well *without* the need to conduct full flow-through monitoring. For subsequent rounds, only the standard monitor well sampling form needs to be completed.

Project __SIMALL___ Site __RSIRI_____ Well No. _____**MW-19**___ Date ____8/3/11__ Total Well Depth__ 20.5' _____

Screen/Intake Zone Length __5'___Well Diameter __2"__ Pre-Pumping Water Level ___ 10.04___ Measuring Point __TOC___

Casing Type __PVC__ Calculated Water Column Volume: ___NA_____ Purge Device: ____peristaltic pump_____

Tubing Type: ___Poly_____ Flow-Through Device: __Horiba_____ Sampling Personnel _____MI/ZT_____

Monitoring Equipment: __m-scope____ Other Information: _____

Time	pH (units)	Cond. us/cm	Turb. (NTU)	DO (mg/l)	Temp. (^{0}C)	ORP (mV)	Rate (mL/min)	DTW (feet)	Notes
15:15	7.62	4.56	31	5.64	21.2	154	300	10.42	
15:20	7.53	4.23	28	5.02	21.6	141	300	10.36	
15:25	7.48	3.78	23	4.63	21.5	126	300	10.29	
15:30	7.31	3.72	19	4.78	21.4	125	300	10.32	
15:35	7.30	3.59	10	3.59	21.4	125	300	10.35	
15:40	7.30	3.57	11	3.58	21.4	125	300	10.35	
15:45	7.30	3.58	11	3.58	21.4	125	300	10.34	
15:50									SAMPLE
									CO_2: 85 mg/L
									SO_4: 55 mg/L

Total time of purge: 30 min Total Volume Purge: 2.3 gal

APPENDIX VI

LABORATORY DATA PACKAGE
FOR GROUNDWATER SAMPLES – AUGUST 2011

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	JA82946-1	**Date Sampled:**	08/02/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B73586.D	1	08/11/11	TLR	n/a	n/a	V3B3424
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	0.87	1.0	0.21	ug/l	J
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
123-91-1	1,4-Dioxane	ND	130	72	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	JA82946-1	**Date Sampled:**	08/02/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.27	ug/l	
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		77-120%
17060-07-0	1,2-Dichloroethane-D4	105%		70-127%
2037-26-5	Toluene-D8	110%		79-120%
460-00-4	4-Bromofluorobenzene	97%		76-118%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	JA82946-1	**Date Sampled:**	08/02/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	II52952.D	1	08/12/11	TCH	n/a	n/a	GII2583
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	1.5	0.10	0.022	ug/l	
74-84-0	Ethane	ND	0.12	0.037	ug/l	
74-85-1	Ethene	ND	0.16	0.031	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	JA82946-1	**Date Sampled:**	08/02/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
		Percent Solids:	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	604	6.0	mg/l	3	08/13/11 17:55	AE	EPA 300/SW846 9056A
Hardness, Total as CaCO3	550	4.0	mg/l	1	08/16/11	JA	SM19 2340C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-2		
Lab Sample ID:	JA82946-2	**Date Sampled:**	08/02/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B73587.D	1	08/12/11	TLR	n/a	n/a	V3B3424
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	0.47	1.0	0.21	ug/l	J
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.30	1.0	0.22	ug/l	J
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
123-91-1	1,4-Dioxane	ND	130	72	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2		
Lab Sample ID:	JA82946-2	**Date Sampled:**	08/02/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	31.9	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	3.9	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	0.58	1.0	0.27	ug/l	J
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		77-120%
17060-07-0	1,2-Dichloroethane-D4	103%		70-127%
2037-26-5	Toluene-D8	110%		79-120%
460-00-4	4-Bromofluorobenzene	97%		76-118%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2		
Lab Sample ID:	JA82946-2	**Date Sampled:**	08/02/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	II52953.D	1	08/12/11	TCH	n/a	n/a	GII2583
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	2.9	0.10	0.022	ug/l	
74-84-0	Ethane	ND	0.12	0.037	ug/l	
74-85-1	Ethene	ND	0.16	0.031	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2		
Lab Sample ID:	JA82946-2	**Date Sampled:**	08/02/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
		Percent Solids:	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	998	10	mg/l	5	08/13/11 18:19	AE	EPA 300/SW846 9056A
Hardness, Total as CaCO3	681	4.0	mg/l	1	08/16/11	JA	SM19 2340C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-3		
Lab Sample ID:	JA82946-3	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B73593.D	1	08/12/11	TLR	n/a	n/a	V3B3424
Run #2	3B73594.D	10	08/12/11	TLR	n/a	n/a	V3B3424

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	0.31	1.0	0.21	ug/l	J
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	115	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	1.0	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
123-91-1	1,4-Dioxane	ND	130	72	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3		
Lab Sample ID:	JA82946-3	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	694 [a]	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	146	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	3.2	1.0	0.27	ug/l	
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%	107%	77-120%
17060-07-0	1,2-Dichloroethane-D4	107%	105%	70-127%
2037-26-5	Toluene-D8	111%	109%	79-120%
460-00-4	4-Bromofluorobenzene	98%	95%	76-118%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3		
Lab Sample ID:	JA82946-3	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	II52951.D	1	08/12/11	TCH	n/a	n/a	GII2583
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	0.49	0.10	0.022	ug/l	
74-84-0	Ethane	ND	0.12	0.037	ug/l	
74-85-1	Ethene	ND	0.16	0.031	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3		
Lab Sample ID:	JA82946-3	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
		Percent Solids:	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	304	2.0	mg/l	1	08/13/11 18:43	AE	EPA 300/SW846 9056A
Hardness, Total as CaCO3	320	4.0	mg/l	1	08/16/11	JA	SM19 2340C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-3D		
Lab Sample ID:	JA82946-4	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B73588.D	1	08/12/11	TLR	n/a	n/a	V3B3424
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	3.6	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
123-91-1	1,4-Dioxane	ND	130	72	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3D		
Lab Sample ID:	JA82946-4	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	1.7	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	0.51	1.0	0.21	ug/l	J
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.27	ug/l	
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		77-120%
17060-07-0	1,2-Dichloroethane-D4	104%		70-127%
2037-26-5	Toluene-D8	112%		79-120%
460-00-4	4-Bromofluorobenzene	98%		76-118%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3D		
Lab Sample ID:	JA82946-4	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	II52954.D	1	08/12/11	TCH	n/a	n/a	GII2583
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	3.3	0.10	0.022	ug/l	
74-84-0	Ethane	0.14	0.12	0.037	ug/l	
74-85-1	Ethene	0.28	0.16	0.031	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3D		
Lab Sample ID:	JA82946-4	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
		Percent Solids:	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	35.4	2.0	mg/l	1	08/13/11 19:07	AE	EPA 300/SW846 9056A
Hardness, Total as CaCO3	99.6	4.0	mg/l	1	08/16/11	JA	SM19 2340C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-4		
Lab Sample ID:	JA82946-5	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B73595.D	5	08/12/11	TLR	n/a	n/a	V3B3424
Run #2	3B73596.D	50	08/12/11	TLR	n/a	n/a	V3B3424

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	38	ug/l	
71-43-2	Benzene	ND	5.0	1.1	ug/l	
74-97-5	Bromochloromethane	ND	25	2.0	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	1.1	ug/l	
75-25-2	Bromoform	ND	20	1.2	ug/l	
74-83-9	Bromomethane	ND	10	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	15	ug/l	
75-15-0	Carbon disulfide	ND	10	0.89	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	0.97	ug/l	
108-90-7	Chlorobenzene	ND	5.0	1.1	ug/l	
75-00-3	Chloroethane	ND	5.0	1.8	ug/l	
67-66-3	Chloroform	ND	5.0	1.0	ug/l	
74-87-3	Chloromethane	ND	5.0	1.1	ug/l	
110-82-7	Cyclohexane	ND	25	1.4	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	50	6.3	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	10	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	0.92	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	1.4	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	1.3	ug/l	
75-71-8	Dichlorodifluoromethane	ND	25	1.6	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	0.96	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	0.90	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	1.4	ug/l	
156-59-2	cis-1,2-Dichloroethene	696	5.0	1.1	ug/l	
156-60-5	trans-1,2-Dichloroethene	7.9	5.0	1.6	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	1.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.1	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	0.93	ug/l	
123-91-1	1,4-Dioxane	ND	630	360	ug/l	
100-41-4	Ethylbenzene	ND	5.0	1.1	ug/l	
76-13-1	Freon 113	ND	25	2.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-4		
Lab Sample ID:	JA82946-5	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	25	15	ug/l	
98-82-8	Isopropylbenzene	ND	10	0.97	ug/l	
79-20-9	Methyl Acetate	ND	25	14	ug/l	
108-87-2	Methylcyclohexane	ND	25	0.92	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	0.92	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	6.1	ug/l	
75-09-2	Methylene chloride	ND	10	1.0	ug/l	
100-42-5	Styrene	ND	25	1.1	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/l	
127-18-4	Tetrachloroethene	2490 [a]	50	16	ug/l	
108-88-3	Toluene	ND	5.0	0.73	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	25	3.4	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	25	0.75	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.2	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.2	ug/l	
79-01-6	Trichloroethene	694	5.0	1.1	ug/l	
75-69-4	Trichlorofluoromethane	ND	25	1.8	ug/l	
75-01-4	Vinyl chloride	10.2	5.0	1.3	ug/l	
	m,p-Xylene	ND	5.0	1.6	ug/l	
95-47-6	o-Xylene	ND	5.0	0.87	ug/l	
1330-20-7	Xylene (total)	ND	5.0	0.87	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%	106%	77-120%
17060-07-0	1,2-Dichloroethane-D4	107%	106%	70-127%
2037-26-5	Toluene-D8	110%	111%	79-120%
460-00-4	4-Bromofluorobenzene	96%	97%	76-118%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-4		
Lab Sample ID:	JA82946-5	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	II52956.D	1	08/12/11	TCH	n/a	n/a	GII2583
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	19.0	0.10	0.022	ug/l	
74-84-0	Ethane	0.57	0.12	0.037	ug/l	
74-85-1	Ethene	0.49	0.16	0.031	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-4		
Lab Sample ID:	JA82946-5	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
		Percent Solids:	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	362	2.0	mg/l	1	08/13/11 19:31	AE	EPA 300/SW846 9056A
Hardness, Total as CaCO3	355	4.0	mg/l	1	08/16/11	JA	SM19 2340C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-5		
Lab Sample ID:	JA82946-6	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B73589.D	1	08/12/11	TLR	n/a	n/a	V3B3424
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.42	1.0	0.22	ug/l	J
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
123-91-1	1,4-Dioxane	ND	130	72	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5		
Lab Sample ID:	JA82946-6	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	43.3	1.0	0.32	ug/l	
108-88-3	Toluene	0.50	1.0	0.15	ug/l	J
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	2.4	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.27	ug/l	
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		77-120%
17060-07-0	1,2-Dichloroethane-D4	106%		70-127%
2037-26-5	Toluene-D8	110%		79-120%
460-00-4	4-Bromofluorobenzene	96%		76-118%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5		
Lab Sample ID:	JA82946-6	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	II52957.D	1	08/12/11	TCH	n/a	n/a	GII2583
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	ND	0.10	0.022	ug/l	
74-84-0	Ethane	ND	0.12	0.037	ug/l	
74-85-1	Ethene	ND	0.16	0.031	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5		
Lab Sample ID:	JA82946-6	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
		Percent Solids:	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	288	2.0	mg/l	1	08/13/11 19:55	AE	EPA 300/SW846 9056A
Hardness, Total as CaCO3	101	4.0	mg/l	1	08/16/11	JA	SM19 2340C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-6		
Lab Sample ID:	JA82946-7	**Date Sampled:**	08/02/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B73590.D	1	08/12/11	TLR	n/a	n/a	V3B3424
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
123-91-1	1,4-Dioxane	ND	130	72	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-6		
Lab Sample ID:	JA82946-7	**Date Sampled:**	08/02/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.27	ug/l	
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		77-120%
17060-07-0	1,2-Dichloroethane-D4	105%		70-127%
2037-26-5	Toluene-D8	110%		79-120%
460-00-4	4-Bromofluorobenzene	96%		76-118%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-6		
Lab Sample ID:	JA82946-7	**Date Sampled:**	08/02/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	II52958.D	1	08/12/11	TCH	n/a	n/a	GII2583
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	10.7	0.10	0.022	ug/l	
74-84-0	Ethane	ND	0.12	0.037	ug/l	
74-85-1	Ethene	ND	0.16	0.031	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-6		
Lab Sample ID:	JA82946-7	**Date Sampled:**	08/02/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
		Percent Solids:	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	337	2.0	mg/l	1	08/13/11 21:07	AE	EPA 300/SW846 9056A
Hardness, Total as CaCO3	326	4.0	mg/l	1	08/16/11	JA	SM19 2340C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-7		
Lab Sample ID:	JA82946-8	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B73591.D	1	08/12/11	TLR	n/a	n/a	V3B3424
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	0.65	1.0	0.21	ug/l	J
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
123-91-1	1,4-Dioxane	ND	130	72	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-7		
Lab Sample ID:	JA82946-8	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	6.9	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	0.52	1.0	0.21	ug/l	J
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.27	ug/l	
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		77-120%
17060-07-0	1,2-Dichloroethane-D4	105%		70-127%
2037-26-5	Toluene-D8	111%		79-120%
460-00-4	4-Bromofluorobenzene	98%		76-118%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-7		
Lab Sample ID:	JA82946-8	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I152959.D	1	08/12/11	TCH	n/a	n/a	GI12583
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	ND	0.10	0.022	ug/l	
74-84-0	Ethane	ND	0.12	0.037	ug/l	
74-85-1	Ethene	ND	0.16	0.031	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-7		
Lab Sample ID:	JA82946-8	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
		Percent Solids:	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	349	2.0	mg/l	1	08/13/11 21:31	AE	EPA 300/SW846 9056A
Hardness, Total as CaCO3	362	4.0	mg/l	1	08/16/11	JA	SM19 2340C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-8		
Lab Sample ID:	JA82946-9	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B73592.D	1	08/12/11	TLR	n/a	n/a	V3B3424
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	0.46	1.0	0.21	ug/l	J
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	3.2	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
123-91-1	1,4-Dioxane	ND	130	72	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8		
Lab Sample ID:	JA82946-9	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	37.1	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	6.4	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.27	ug/l	
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		77-120%
17060-07-0	1,2-Dichloroethane-D4	105%		70-127%
2037-26-5	Toluene-D8	109%		79-120%
460-00-4	4-Bromofluorobenzene	95%		76-118%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8		
Lab Sample ID:	JA82946-9	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	II52960.D	1	08/12/11	TCH	n/a	n/a	GII2583
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	8.8	0.10	0.022	ug/l	
74-84-0	Ethane	ND	0.12	0.037	ug/l	
74-85-1	Ethene	ND	0.16	0.031	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8		
Lab Sample ID:	JA82946-9	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
		Percent Solids:	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	497	6.0	mg/l	3	08/16/11 11:29	AE	EPA 300/SW846 9056A
Hardness, Total as CaCO3	445	4.0	mg/l	1	08/16/11	JA	SM19 2340C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-9		
Lab Sample ID:	JA82946-10	**Date Sampled:**	08/04/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B73599.D	1	08/12/11	TLR	n/a	n/a	V3B3424
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	40.1	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
123-91-1	1,4-Dioxane	ND	130	72	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-9		
Lab Sample ID:	JA82946-10	**Date Sampled:**	08/04/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	131	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	21.7	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	0.82	1.0	0.27	ug/l	J
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		77-120%
17060-07-0	1,2-Dichloroethane-D4	106%		70-127%
2037-26-5	Toluene-D8	112%		79-120%
460-00-4	4-Bromofluorobenzene	96%		76-118%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-9		
Lab Sample ID:	JA82946-10	**Date Sampled:**	08/04/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	II53055.D	1	08/17/11	TCH	n/a	n/a	GII2587
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	38.2	0.10	0.022	ug/l	
74-84-0	Ethane	ND	0.12	0.037	ug/l	
74-85-1	Ethene	ND	0.16	0.031	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-9		
Lab Sample ID:	JA82946-10	**Date Sampled:**	08/04/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
		Percent Solids:	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1200	12	mg/l	6	08/16/11 12:17	AE	EPA 300/SW846 9056A
Hardness, Total as CaCO3	536	4.0	mg/l	1	08/16/11	JA	SM19 2340C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-10		
Lab Sample ID:	JA82946-11	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B73600.D	1	08/12/11	TLR	n/a	n/a	V3B3424
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	0.98	1.0	0.21	ug/l	J
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	1.1	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
123-91-1	1,4-Dioxane	ND	130	72	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-10		
Lab Sample ID:	JA82946-11	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.27	ug/l	
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		77-120%
17060-07-0	1,2-Dichloroethane-D4	107%		70-127%
2037-26-5	Toluene-D8	111%		79-120%
460-00-4	4-Bromofluorobenzene	97%		76-118%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-10		
Lab Sample ID:	JA82946-11	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	II52962.D	1	08/12/11	TCH	n/a	n/a	GII2583
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	6.5	0.10	0.022	ug/l	
74-84-0	Ethane	ND	0.12	0.037	ug/l	
74-85-1	Ethene	ND	0.16	0.031	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-10		
Lab Sample ID:	JA82946-11	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
		Percent Solids:	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	630	8.0	mg/l	4	08/16/11 12:41	AE	EPA 300/SW846 9056A
Hardness, Total as CaCO3	670	4.0	mg/l	1	08/16/11	JA	SM19 2340C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-11		
Lab Sample ID:	JA82946-12	**Date Sampled:**	08/04/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B73597.D	1	08/12/11	TLR	n/a	n/a	V3B3424
Run #2	3B73598.D	10	08/12/11	TLR	n/a	n/a	V3B3424

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	117	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.92	1.0	0.31	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
123-91-1	1,4-Dioxane	ND	130	72	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-11		
Lab Sample ID:	JA82946-12	**Date Sampled:**	08/04/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	560 [a]	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	84.0	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.27	ug/l	
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%	105%	77-120%
17060-07-0	1,2-Dichloroethane-D4	107%	107%	70-127%
2037-26-5	Toluene-D8	112%	111%	79-120%
460-00-4	4-Bromofluorobenzene	96%	97%	76-118%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-11		
Lab Sample ID:	JA82946-12	**Date Sampled:**	08/04/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	II53056.D	1	08/17/11	TCH	n/a	n/a	GII2587
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	1.1	0.10	0.022	ug/l	
74-84-0	Ethane	ND	0.12	0.037	ug/l	
74-85-1	Ethene	ND	0.16	0.031	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-11		
Lab Sample ID:	JA82946-12	**Date Sampled:**	08/04/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
		Percent Solids:	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	422	4.0	mg/l	2	08/16/11 13:05	AE	EPA 300/SW846 9056A
Hardness, Total as CaCO3	346	4.0	mg/l	1	08/18/11	ST	SM19 2340C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-12		
Lab Sample ID:	JA82946-13	**Date Sampled:**	08/04/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B73698.D	1	08/15/11	TLR	n/a	n/a	V3B3429
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	156	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.89	1.0	0.31	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
123-91-1	1,4-Dioxane	ND	130	72	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-12		
Lab Sample ID:	JA82946-13	**Date Sampled:**	08/04/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	145	1.0	0.32	ug/l	
108-88-3	Toluene	0.25	1.0	0.15	ug/l	J
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	124	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	3.0	1.0	0.27	ug/l	
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		77-120%
17060-07-0	1,2-Dichloroethane-D4	102%		70-127%
2037-26-5	Toluene-D8	111%		79-120%
460-00-4	4-Bromofluorobenzene	95%		76-118%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-12		
Lab Sample ID:	JA82946-13	**Date Sampled:**	08/04/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	II53058.D	1	08/17/11	TCH	n/a	n/a	GII2587
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	178	0.10	0.022	ug/l	
74-84-0	Ethane	ND	0.12	0.037	ug/l	
74-85-1	Ethene	ND	0.16	0.031	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-12		
Lab Sample ID:	JA82946-13	**Date Sampled:**	08/04/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
		Percent Solids:	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	788	10	mg/l	5	08/16/11 13:29	AE	EPA 300/SW846 9056A
Hardness, Total as CaCO3	662	4.0	mg/l	1	08/18/11	ST	SM19 2340C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-13		
Lab Sample ID:	JA82946-14	**Date Sampled:**	08/04/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B73703.D	1	08/15/11	TLR	n/a	n/a	V3B3429
Run #2	3B73704.D	10	08/15/11	TLR	n/a	n/a	V3B3429

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	126	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.71	1.0	0.31	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
123-91-1	1,4-Dioxane	ND	130	72	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-13		
Lab Sample ID:	JA82946-14	**Date Sampled:**	08/04/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	487 [a]	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	90.8	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	3.7	1.0	0.27	ug/l	
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%	105%	77-120%
17060-07-0	1,2-Dichloroethane-D4	106%	105%	70-127%
2037-26-5	Toluene-D8	112%	113%	79-120%
460-00-4	4-Bromofluorobenzene	96%	97%	76-118%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-13		
Lab Sample ID:	JA82946-14	**Date Sampled:**	08/04/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	II53059.D	1	08/17/11	TCH	n/a	n/a	GII2587
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	35.3	0.10	0.022	ug/l	
74-84-0	Ethane	ND	0.12	0.037	ug/l	
74-85-1	Ethene	ND	0.16	0.031	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-13		
Lab Sample ID:	JA82946-14	**Date Sampled:**	08/04/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
		Percent Solids:	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	558	6.0	mg/l	3	08/16/11 13:52	AE	EPA 300/SW846 9056A
Hardness, Total as CaCO3	474	4.0	mg/l	1	08/18/11	ST	SM19 2340C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-15		
Lab Sample ID:	JA82946-15	**Date Sampled:**	08/02/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B73697.D	1	08/15/11	TLR	n/a	n/a	V3B3429
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	1.3	1.0	0.21	ug/l	
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
123-91-1	1,4-Dioxane	ND	130	72	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-15		
Lab Sample ID:	JA82946-15	**Date Sampled:**	08/02/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.27	ug/l	
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		77-120%
17060-07-0	1,2-Dichloroethane-D4	105%		70-127%
2037-26-5	Toluene-D8	112%		79-120%
460-00-4	4-Bromofluorobenzene	98%		76-118%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-15		
Lab Sample ID:	JA82946-15	**Date Sampled:**	08/02/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	II52963.D	1	08/12/11	TCH	n/a	n/a	GII2583
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	0.92	0.10	0.022	ug/l	
74-84-0	Ethane	ND	0.12	0.037	ug/l	
74-85-1	Ethene	ND	0.16	0.031	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-15		
Lab Sample ID:	JA82946-15	**Date Sampled:**	08/02/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
		Percent Solids:	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	485	6.0	mg/l	3	08/16/11 14:16	AE	EPA 300/SW846 9056A
Hardness, Total as CaCO3	729	4.0	mg/l	1	08/18/11	ST	SM19 2340C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-16		
Lab Sample ID:	JA82946-16	**Date Sampled:**	08/04/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B73699.D	1	08/15/11	TLR	n/a	n/a	V3B3429
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	0.88	1.0	0.21	ug/l	J
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	0.31	1.0	0.28	ug/l	J
156-59-2	cis-1,2-Dichloroethene	58.7	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.53	1.0	0.31	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
123-91-1	1,4-Dioxane	ND	130	72	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-16		
Lab Sample ID:	JA82946-16	**Date Sampled:**	08/04/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.30	1.0	0.18	ug/l	J
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	171	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	25.6	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	1.8	1.0	0.27	ug/l	
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		77-120%
17060-07-0	1,2-Dichloroethane-D4	102%		70-127%
2037-26-5	Toluene-D8	112%		79-120%
460-00-4	4-Bromofluorobenzene	97%		76-118%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-16		
Lab Sample ID:	JA82946-16	**Date Sampled:**	08/04/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	II53060.D	1	08/17/11	TCH	n/a	n/a	GII2587
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	3.6	0.10	0.022	ug/l	
74-84-0	Ethane	0.15	0.12	0.037	ug/l	
74-85-1	Ethene	ND	0.16	0.031	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-16		
Lab Sample ID:	JA82946-16	**Date Sampled:**	08/04/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
		Percent Solids:	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	457	4.0	mg/l	2	08/16/11 15:28	AE	EPA 300/SW846 9056A
Hardness, Total as CaCO3	507	4.0	mg/l	.4	08/18/11	ST	SM19 2340C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-17		
Lab Sample ID:	JA82946-17	**Date Sampled:**	08/04/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B73746.D	2	08/16/11	TLR	n/a	n/a	V3B3431
Run #2	3B73741.D	20	08/16/11	TLR	n/a	n/a	V3B3431

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	15	ug/l	
71-43-2	Benzene	ND	2.0	0.44	ug/l	
74-97-5	Bromochloromethane	ND	10	0.79	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.46	ug/l	
75-25-2	Bromoform	ND	8.0	0.49	ug/l	
74-83-9	Bromomethane	ND	4.0	0.63	ug/l	
78-93-3	2-Butanone (MEK)	ND	20	5.8	ug/l	
75-15-0	Carbon disulfide	ND	4.0	0.36	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.39	ug/l	
108-90-7	Chlorobenzene	ND	2.0	0.45	ug/l	
75-00-3	Chloroethane	ND	2.0	0.73	ug/l	
67-66-3	Chloroform	ND	2.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	0.44	ug/l	
110-82-7	Cyclohexane	ND	10	0.57	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	20	2.5	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.41	ug/l	
106-93-4	1,2-Dibromoethane	ND	4.0	0.42	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.37	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.57	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	0.62	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.38	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.36	ug/l	
75-35-4	1,1-Dichloroethene	ND	2.0	0.56	ug/l	
156-59-2	cis-1,2-Dichloroethene	275	2.0	0.43	ug/l	
156-60-5	trans-1,2-Dichloroethene	1.8	2.0	0.63	ug/l	J
78-87-5	1,2-Dichloropropane	ND	2.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.43	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.37	ug/l	
123-91-1	1,4-Dioxane	ND	250	140	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.42	ug/l	
76-13-1	Freon 113	ND	10	0.98	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-17		
Lab Sample ID:	JA82946-17	**Date Sampled:**	08/04/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	10	6.1	ug/l	
98-82-8	Isopropylbenzene	ND	4.0	0.39	ug/l	
79-20-9	Methyl Acetate	ND	10	5.7	ug/l	
108-87-2	Methylcyclohexane	ND	10	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	2.0	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	10	2.4	ug/l	
75-09-2	Methylene chloride	ND	4.0	0.40	ug/l	
100-42-5	Styrene	ND	10	0.46	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.40	ug/l	
127-18-4	Tetrachloroethene	1650 [a]	20	6.4	ug/l	
108-88-3	Toluene	ND	2.0	0.29	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	10	1.4	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	10	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.47	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.46	ug/l	
79-01-6	Trichloroethene	88.7	2.0	0.42	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	0.70	ug/l	
75-01-4	Vinyl chloride	3.7	2.0	0.53	ug/l	
	m,p-Xylene	ND	2.0	0.64	ug/l	
95-47-6	o-Xylene	ND	2.0	0.35	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.35	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%	106%	77-120%
17060-07-0	1,2-Dichloroethane-D4	103%	104%	70-127%
2037-26-5	Toluene-D8	112%	112%	79-120%
460-00-4	4-Bromofluorobenzene	98%	97%	76-118%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-17		
Lab Sample ID:	JA82946-17	**Date Sampled:**	08/04/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	II53061.D	1	08/17/11	TCH	n/a	n/a	GII2587
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	2.4	0.10	0.022	ug/l	
74-84-0	Ethane	0.74	0.12	0.037	ug/l	
74-85-1	Ethene	0.49	0.16	0.031	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-17		
Lab Sample ID:	JA82946-17	**Date Sampled:**	08/04/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
		Percent Solids:	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	468	4.0	mg/l	2	08/16/11 15:56	AE	EPA 300/SW846 9056A
Hardness, Total as CaCO3	421	4.0	mg/l	.4	08/18/11	ST	SM19 2340C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-18		
Lab Sample ID:	JA82946-18	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B73745.D	1	08/16/11	TLR	n/a	n/a	V3B3431
Run #2	3B73750.D	10	08/16/11	TLR	n/a	n/a	V3B3431

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	0.24	1.0	0.21	ug/l	J
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	97.5	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.83	1.0	0.31	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
123-91-1	1,4-Dioxane	ND	130	72	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-18		
Lab Sample ID:	JA82946-18	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	418 [a]	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	69.9	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	1.4	1.0	0.27	ug/l	
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%	103%	77-120%
17060-07-0	1,2-Dichloroethane-D4	104%	99%	70-127%
2037-26-5	Toluene-D8	111%	111%	79-120%
460-00-4	4-Bromofluorobenzene	97%	97%	76-118%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-18		
Lab Sample ID:	JA82946-18	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	II52974.D	1	08/15/11	TCH	n/a	n/a	GII2584
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	57.1	0.10	0.022	ug/l	
74-84-0	Ethane	0.32	0.12	0.037	ug/l	
74-85-1	Ethene	0.55	0.16	0.031	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-18		
Lab Sample ID:	JA82946-18	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
		Percent Solids:	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	672	10	mg/l	5	08/16/11 16:19	AE	EPA 300/SW846 9056A
Hardness, Total as CaCO3	679	4.0	mg/l	.4	08/18/11	ST	SM19 2340C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-19		
Lab Sample ID:	JA82946-19	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B73742.D	1	08/16/11	TLR	n/a	n/a	V3B3431
Run #2	3B73743.D	10	08/16/11	TLR	n/a	n/a	V3B3431

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	0.38	2.0	0.18	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	30.3	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
123-91-1	1,4-Dioxane	ND	130	72	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-19		
Lab Sample ID:	JA82946-19	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	287 [a]	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	25.4	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.27	ug/l	
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%	105%	77-120%
17060-07-0	1,2-Dichloroethane-D4	102%	104%	70-127%
2037-26-5	Toluene-D8	113%	113%	79-120%
460-00-4	4-Bromofluorobenzene	97%	98%	76-118%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-19		
Lab Sample ID:	JA82946-19	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	II52976.D	1	08/15/11	TCH	n/a	n/a	GII2584
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	1.2	0.10	0.022	ug/l	
74-84-0	Ethane	0.41	0.12	0.037	ug/l	
74-85-1	Ethene	0.46	0.16	0.031	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-19		
Lab Sample ID:	JA82946-19	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
		Percent Solids:	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	368	2.0	mg/l	1	08/14/11 03:06	AE	EPA 300/SW846 9056A
Hardness, Total as CaCO3	543	4.0	mg/l	.4	08/18/11	ST	SM19 2340C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	REP 1		
Lab Sample ID:	JA82946-20	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B73744.D	1	08/16/11	TLR	n/a	n/a	V3B3431
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.47	1.0	0.22	ug/l	J
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
123-91-1	1,4-Dioxane	ND	130	72	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	REP 1		
Lab Sample ID:	JA82946-20	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	41.5	1.0	0.32	ug/l	
108-88-3	Toluene	0.46	1.0	0.15	ug/l	J
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	2.4	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.27	ug/l	
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		77-120%
17060-07-0	1,2-Dichloroethane-D4	105%		70-127%
2037-26-5	Toluene-D8	111%		79-120%
460-00-4	4-Bromofluorobenzene	97%		76-118%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	REP 1		
Lab Sample ID:	JA82946-20	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I152977.D	1	08/15/11	TCH	n/a	n/a	GI2584
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	ND	0.10	0.022	ug/l	
74-84-0	Ethane	ND	0.12	0.037	ug/l	
74-85-1	Ethene	ND	0.16	0.031	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	REP 1		
Lab Sample ID:	JA82946-20	**Date Sampled:**	08/03/11
Matrix:	AQ - Ground Water	**Date Received:**	08/05/11
		Percent Solids:	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	293	2.0	mg/l	1	08/14/11 03:29	AE	EPA 300/SW846 9056A
Hardness, Total as CaCO3	32.6	4.0	mg/l	1	08/18/11	ST	SM19 2340C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	FB080211		
Lab Sample ID:	JA82946-21	**Date Sampled:**	08/02/11
Matrix:	AQ - Field Blank Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B73705.D	1	08/15/11	TLR	n/a	n/a	V3B3429
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
123-91-1	1,4-Dioxane	ND	130	72	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB080211		
Lab Sample ID:	JA82946-21	**Date Sampled:**	08/02/11
Matrix:	AQ - Field Blank Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.27	ug/l	
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		77-120%
17060-07-0	1,2-Dichloroethane-D4	103%		70-127%
2037-26-5	Toluene-D8	112%		79-120%
460-00-4	4-Bromofluorobenzene	98%		76-118%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB080211		
Lab Sample ID:	JA82946-21	**Date Sampled:**	08/02/11
Matrix:	AQ - Field Blank Water	**Date Received:**	08/05/11
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	II52969.D	1	08/15/11	TCH	n/a	n/a	GII2584
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	0.40	0.10	0.022	ug/l	
74-84-0	Ethane	ND	0.12	0.037	ug/l	
74-85-1	Ethene	ND	0.16	0.031	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB080211		
Lab Sample ID:	JA82946-21	**Date Sampled:**	08/02/11
Matrix:	AQ - Field Blank Water	**Date Received:**	08/05/11
		Percent Solids:	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	< 2.0	2.0	mg/l	1	08/12/11 17:33	AE	EPA 300/SW846 9056A
Hardness, Total as CaCO3	< 4.0	4.0	mg/l	1	08/18/11	ST	SM19 2340C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	FB080311		
Lab Sample ID:	JA82946-22	**Date Sampled:**	08/03/11
Matrix:	AQ - Field Blank Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B73706.D	1	08/15/11	TLR	n/a	n/a	V3B3429
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
123-91-1	1,4-Dioxane	ND	130	72	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB080311		
Lab Sample ID:	JA82946-22	**Date Sampled:**	08/03/11
Matrix:	AQ - Field Blank Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.27	ug/l	
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		77-120%
17060-07-0	1,2-Dichloroethane-D4	103%		70-127%
2037-26-5	Toluene-D8	113%		79-120%
460-00-4	4-Bromofluorobenzene	97%		76-118%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB080311		
Lab Sample ID:	JA82946-22	**Date Sampled:**	08/03/11
Matrix:	AQ - Field Blank Water	**Date Received:**	08/05/11
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	II52970.D	1	08/15/11	TCH	n/a	n/a	GII2584
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	0.48	0.10	0.022	ug/l	
74-84-0	Ethane	ND	0.12	0.037	ug/l	
74-85-1	Ethene	ND	0.16	0.031	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB080311		
Lab Sample ID:	JA82946-22	**Date Sampled:**	08/03/11
Matrix:	AQ - Field Blank Water	**Date Received:**	08/05/11
		Percent Solids:	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	< 2.0	2.0	mg/l	1	08/12/11 17:57	AE	EPA 300/SW846 9056A
Hardness, Total as CaCO3	< 4.0	4.0	mg/l	1	08/18/11	JA	SM19 2340C

RL = Reporting Limit

Report of Analysis

Client Sample ID:	FB080411		
Lab Sample ID:	JA82946-23	**Date Sampled:**	08/04/11
Matrix:	AQ - Field Blank Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B73707.D	1	08/15/11	TLR	n/a	n/a	V3B3429
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
123-91-1	1,4-Dioxane	ND	130	72	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB080411		
Lab Sample ID:	JA82946-23	**Date Sampled:**	08/04/11
Matrix:	AQ - Field Blank Water	**Date Received:**	08/05/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.27	ug/l	
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		77-120%
17060-07-0	1,2-Dichloroethane-D4	103%		70-127%
2037-26-5	Toluene-D8	111%		79-120%
460-00-4	4-Bromofluorobenzene	97%		76-118%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB080411		
Lab Sample ID:	JA82946-23	**Date Sampled:**	08/04/11
Matrix:	AQ - Field Blank Water	**Date Received:**	08/05/11
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	II53062.D	1	08/17/11	TCH	n/a	n/a	GII2587
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	0.45	0.10	0.022	ug/l	
74-84-0	Ethane	ND	0.12	0.037	ug/l	
74-85-1	Ethene	ND	0.16	0.031	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB080411		
Lab Sample ID:	JA82946-23	**Date Sampled:**	08/04/11
Matrix:	AQ - Field Blank Water	**Date Received:**	08/05/11
		Percent Solids:	n/a
Project:	Rouse, Platinum Avenue, Staten Island, NY		

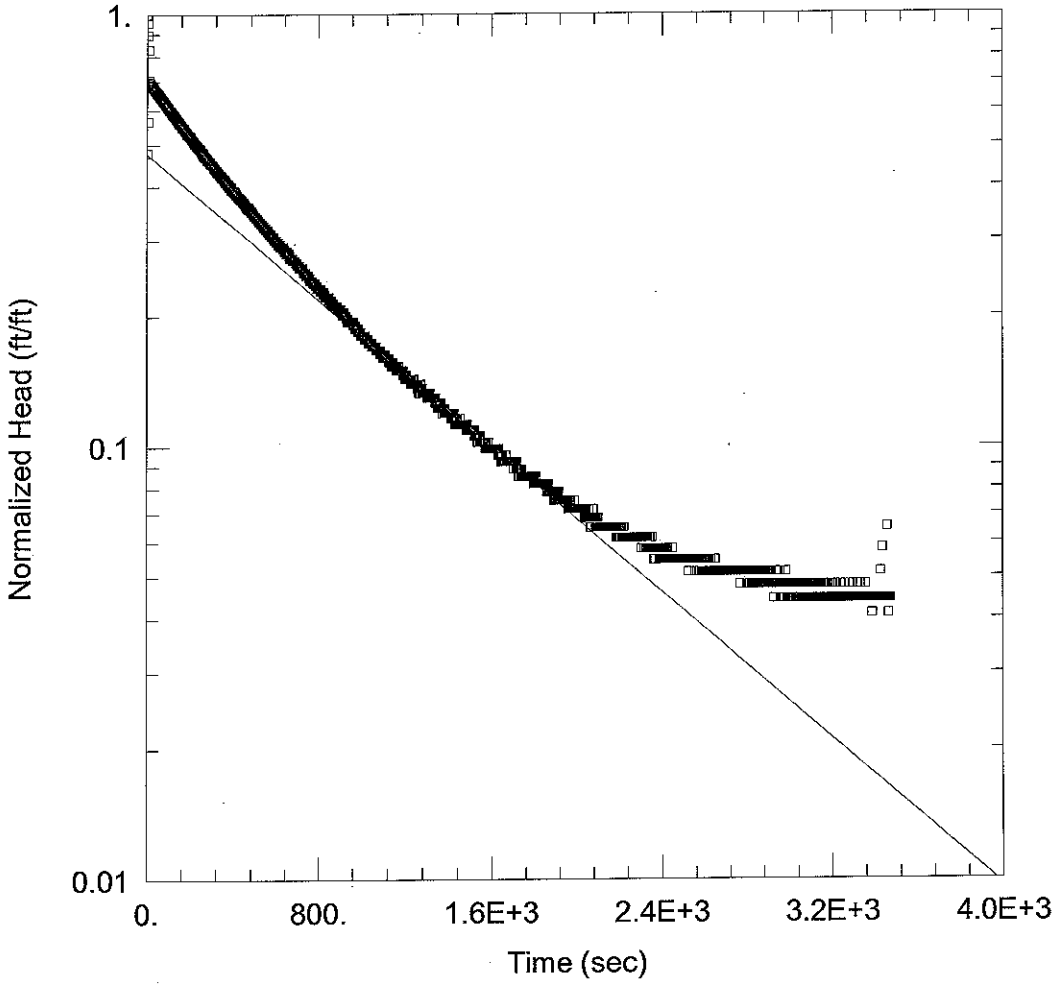
General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	< 2.0	2.0	mg/l	1	08/12/11 18:20	AE	EPA 300/SW846 9056A
Hardness, Total as CaCO3	< 4.0	4.0	mg/l	1	08/18/11	JA	SM19 2340C

RL = Reporting Limit

APPENDIX VII

SLUG TEST ANALYSIS RESULTS



WELL TEST ANALYSIS

Data Set: B:\ROUSE\2011 slug tests\AQTESOLV\mw-4 in.aqt
Date: 11/01/11 Time: 15:53:02

PROJECT INFORMATION

Client: RSIRI
Location: Platinum Ave
Test Well: mw-4 in
Test Date: 10/11/11

AQUIFER DATA

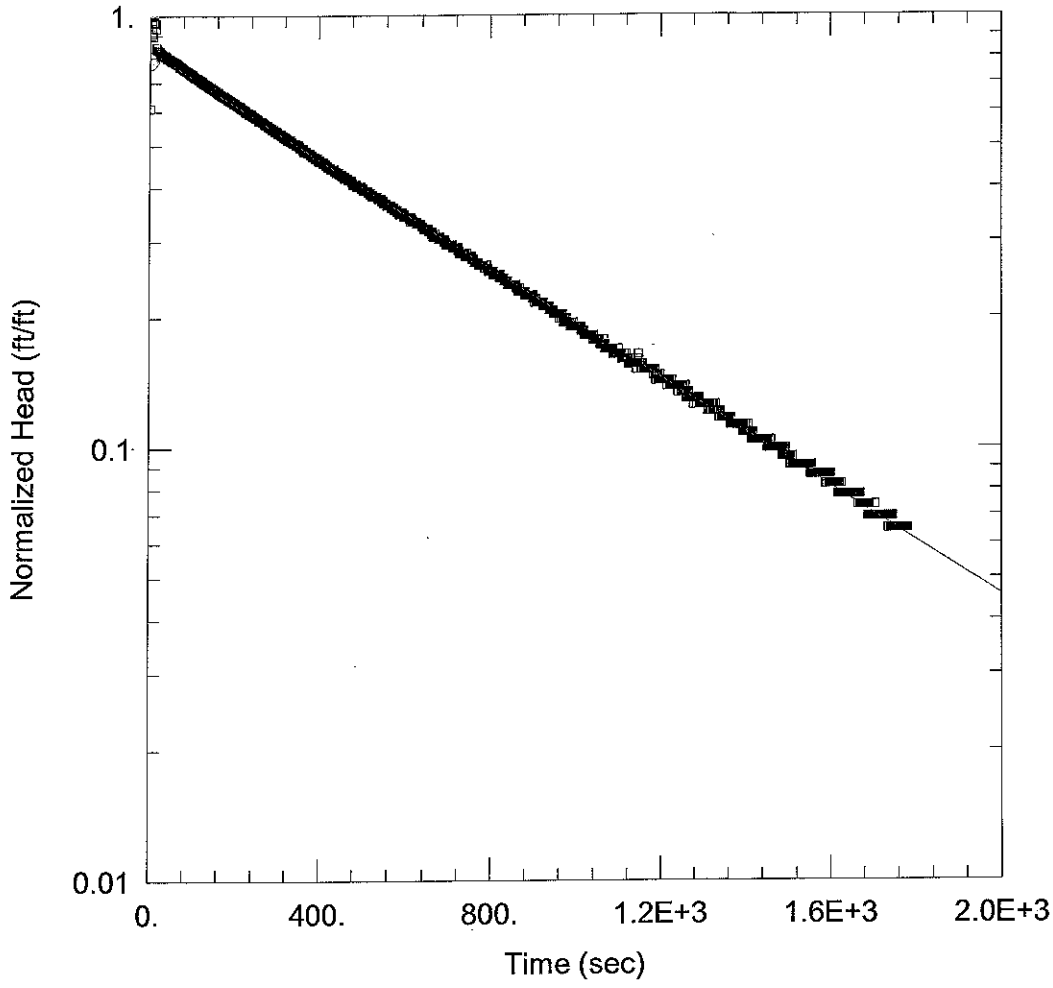
Saturated Thickness: 9.04 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (mw-4 in)

Initial Displacement: 2.93 ft
Total Well Penetration Depth: 11.97 ft
Casing Radius: 0.167 ft
Static Water Column Height: 9.04 ft
Screen Length: 9.04 ft
Well Radius: 0.167 ft

SOLUTION

Aquifer Model: Unconfined
K = 0.42 ft/day
Solution Method: Bouwer-Rice
y0 = 1.395 ft



WELL TEST ANALYSIS

Data Set: B:\rouse\2011 slug tests\AQTESOLV\mw-4 out.aqt
Date: 11/01/11 Time: 15:52:55

PROJECT INFORMATION

Client: RSIRI
Location: Platinum Ave
Test Well: mw-4 out
Test Date: 10/11/11

AQUIFER DATA

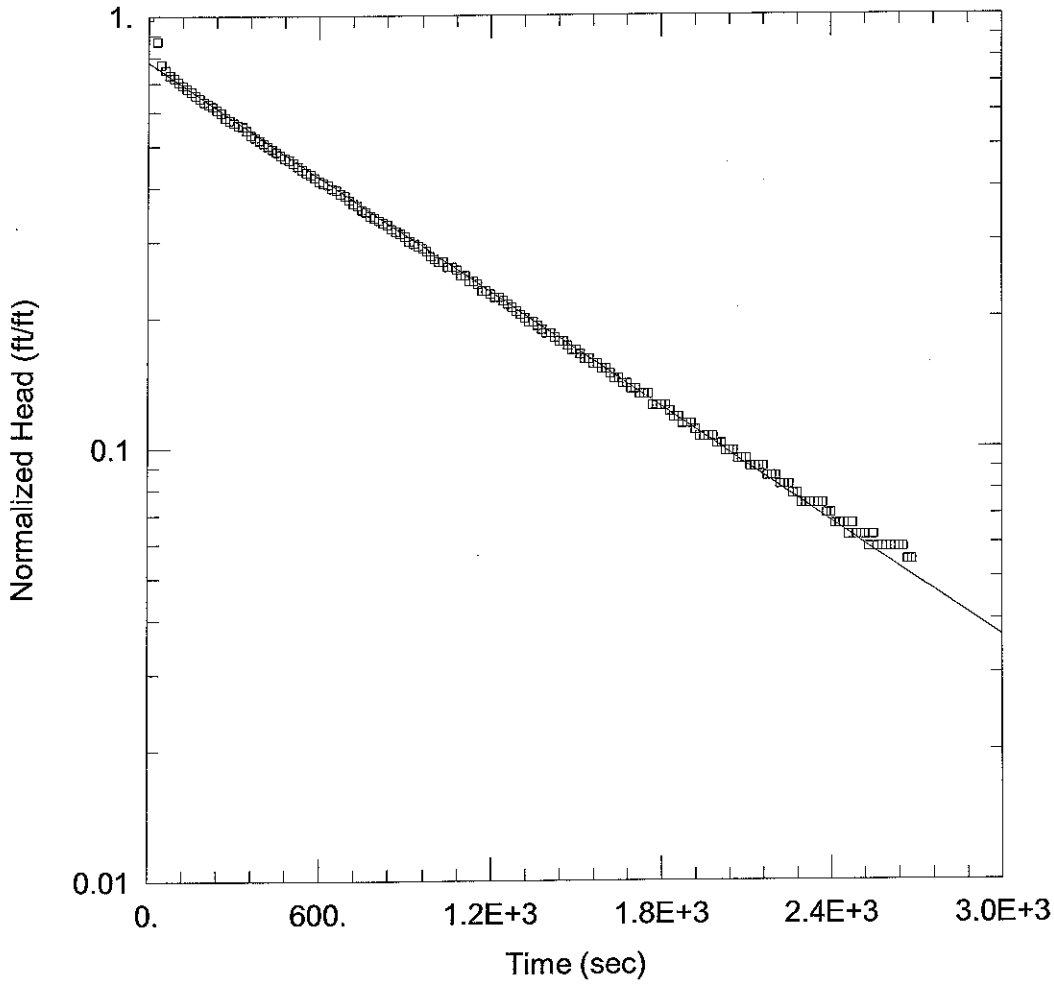
Saturated Thickness: 9.17 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (New Well)

Initial Displacement: 2.31 ft
Total Well Penetration Depth: 9.17 ft
Casing Radius: 0.167 ft
Static Water Column Height: 9.17 ft
Screen Length: 5. ft
Well Radius: 0.167 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 1.027 ft/day
y0 = 1.918 ft



WELL TEST ANALYSIS

Data Set: B:\rouse\2011 slug tests\AQTESOLV\mw-5 out.aqt
Date: 11/01/11 Time: 15:53:15

PROJECT INFORMATION

Client: RSIRI
Location: Platinum Ave
Test Well: MW-5
Test Date: 10/10/11

AQUIFER DATA

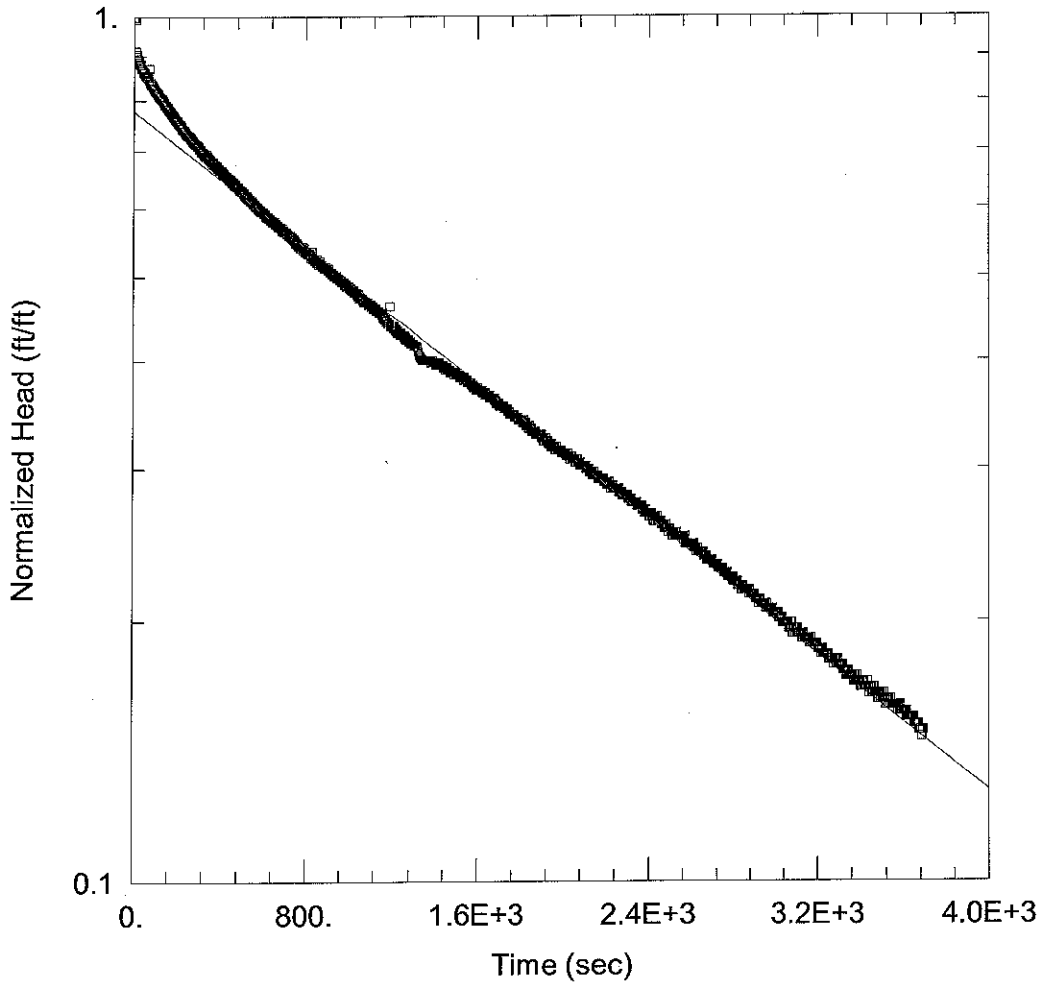
Saturated Thickness: 6.325 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (mw-5)

Initial Displacement: 1.55 ft
Total Well Penetration Depth: 6.83 ft
Casing Radius: 0.166 ft
Static Water Column Height: 6.325 ft
Screen Length: 5. ft
Well Radius: 0.167 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.671 ft/day
y0 = 1.211 ft



WELL TEST ANALYSIS

Data Set: B:\rouse\2011 slug tests\AQTESOLV\mw-6 in.aqt
Date: 11/01/11 Time: 15:53:31

PROJECT INFORMATION

Client: RSIRI
Location: Platinum Ave
Test Well: mw-6 in
Test Date: 10/11/11

AQUIFER DATA

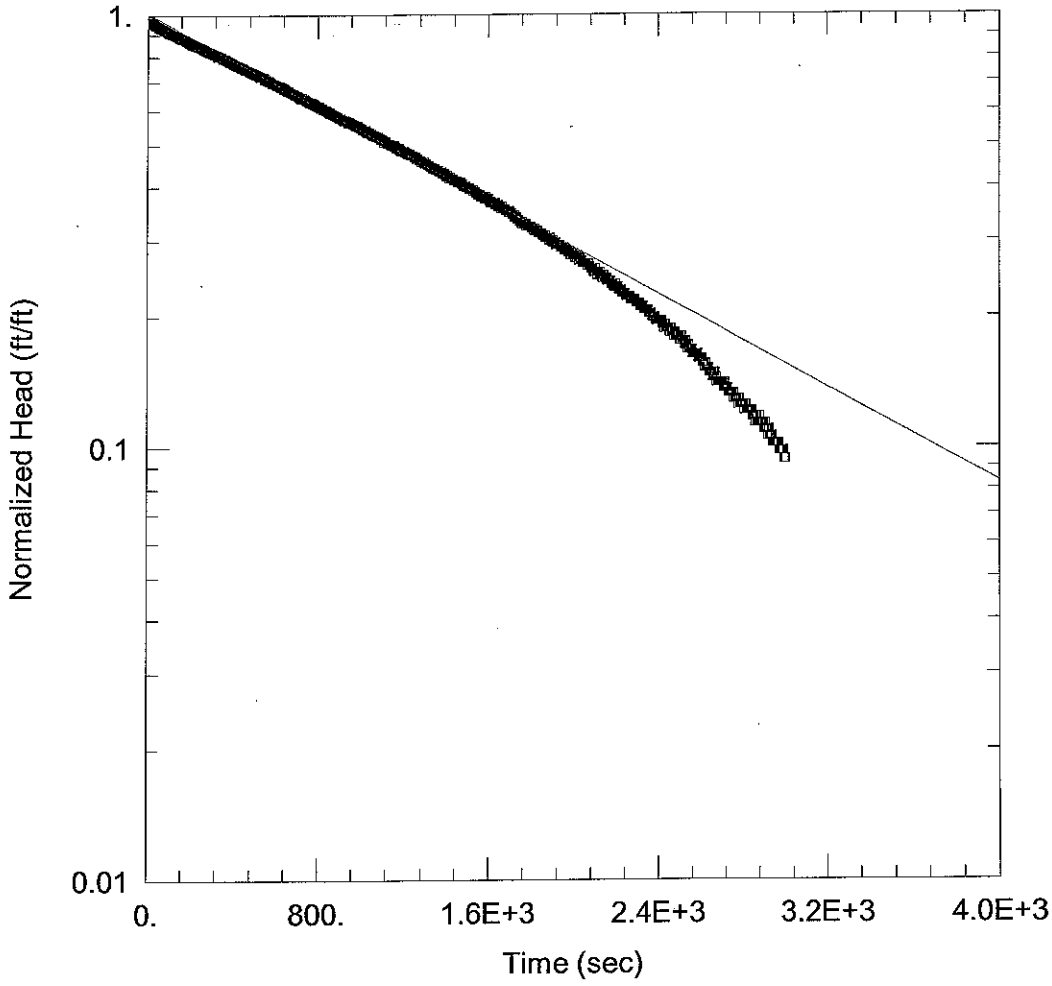
Saturated Thickness: 8.69 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (New Well)

Initial Displacement: 2.33 ft
Total Well Penetration Depth: 8.69 ft
Casing Radius: 0.167 ft
Static Water Column Height: 8.69 ft
Screen Length: 5. ft
Well Radius: 0.167 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.3168 ft/day
y0 = 1.813 ft



WELL TEST ANALYSIS

Data Set: B:\rouse\2011 slug tests\AQTESOLV\mw-6 out.aqt
Date: 11/01/11 Time: 15:53:44

PROJECT INFORMATION

Client: RSIRI
Location: Platinum Ave
Test Well: MW-6
Test Date: 10/10/11

AQUIFER DATA

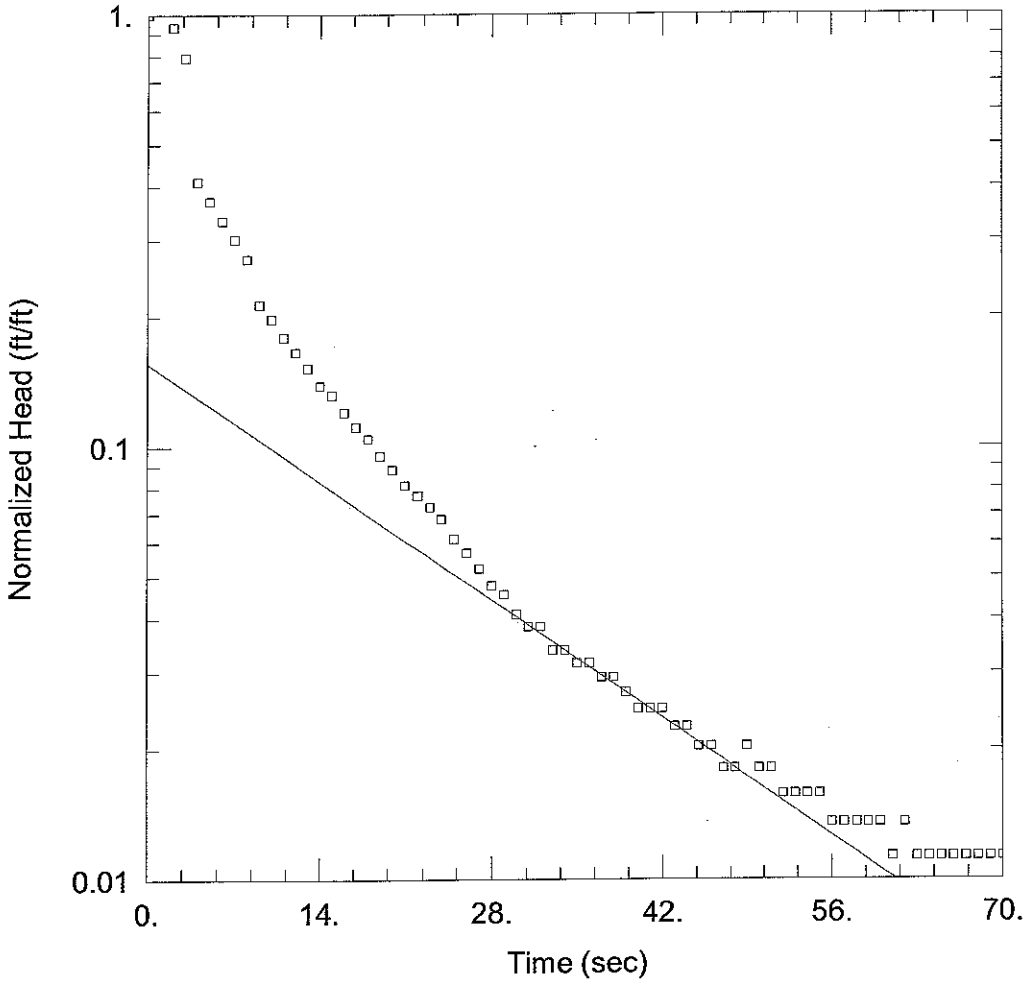
Saturated Thickness: 8.54 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (mw-6)

Initial Displacement: 1.549 ft
Total Well Penetration Depth: 9.643 ft
Casing Radius: 0.166 ft
Static Water Column Height: 8.54 ft
Screen Length: 5. ft
Well Radius: 0.166 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.442 ft/day
y0 = 1.565 ft



WELL TEST ANALYSIS

Data Set: B:\rouse\2011 slug tests\AQTESOLV\mw-11 in.aqt
Date: 11/01/11 Time: 15:55:08

PROJECT INFORMATION

Client: RSIRI
Location: Platinum Ave
Test Well: MW-11
Test Date: 10/10/11

AQUIFER DATA

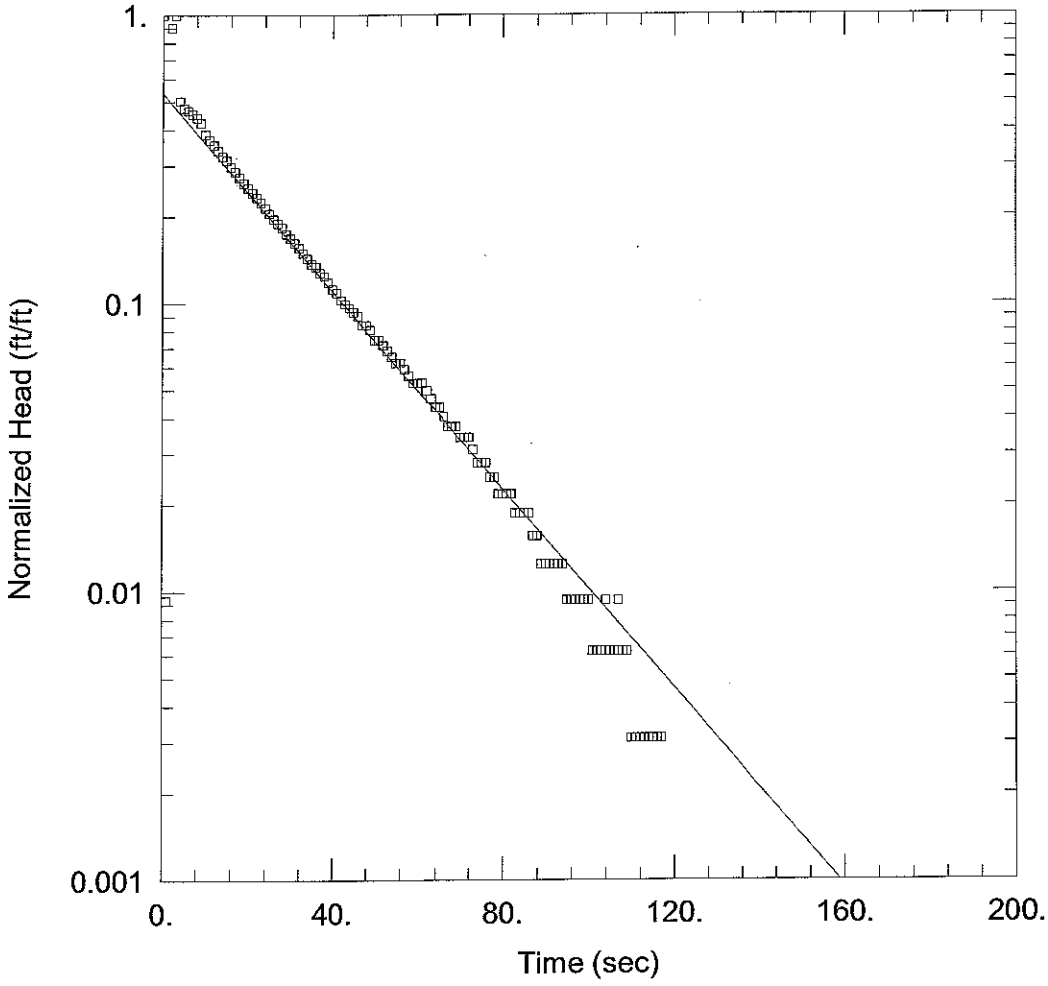
Saturated Thickness: 8.183 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (mw-11)

Initial Displacement: 2.66 ft
Total Well Penetration Depth: 8.183 ft
Casing Radius: 0.167 ft
Static Water Column Height: 8.189 ft
Screen Length: 5. ft
Well Radius: 0.167 ft

SOLUTION

Aquifer Model: Unconfined
K = 31.05 ft/day
Solution Method: Bouwer-Rice
y0 = 0.4148 ft



WELL TEST ANALYSIS

Data Set: B:\rouse\2011 slug tests\AQTESOLV\mw-11 out.aqt
Date: 11/01/11 Time: 15:55:26

PROJECT INFORMATION

Client: RSIRI
Location: Platinum Ave
Test Well: mw-11 out
Test Date: 10/11/11

AQUIFER DATA

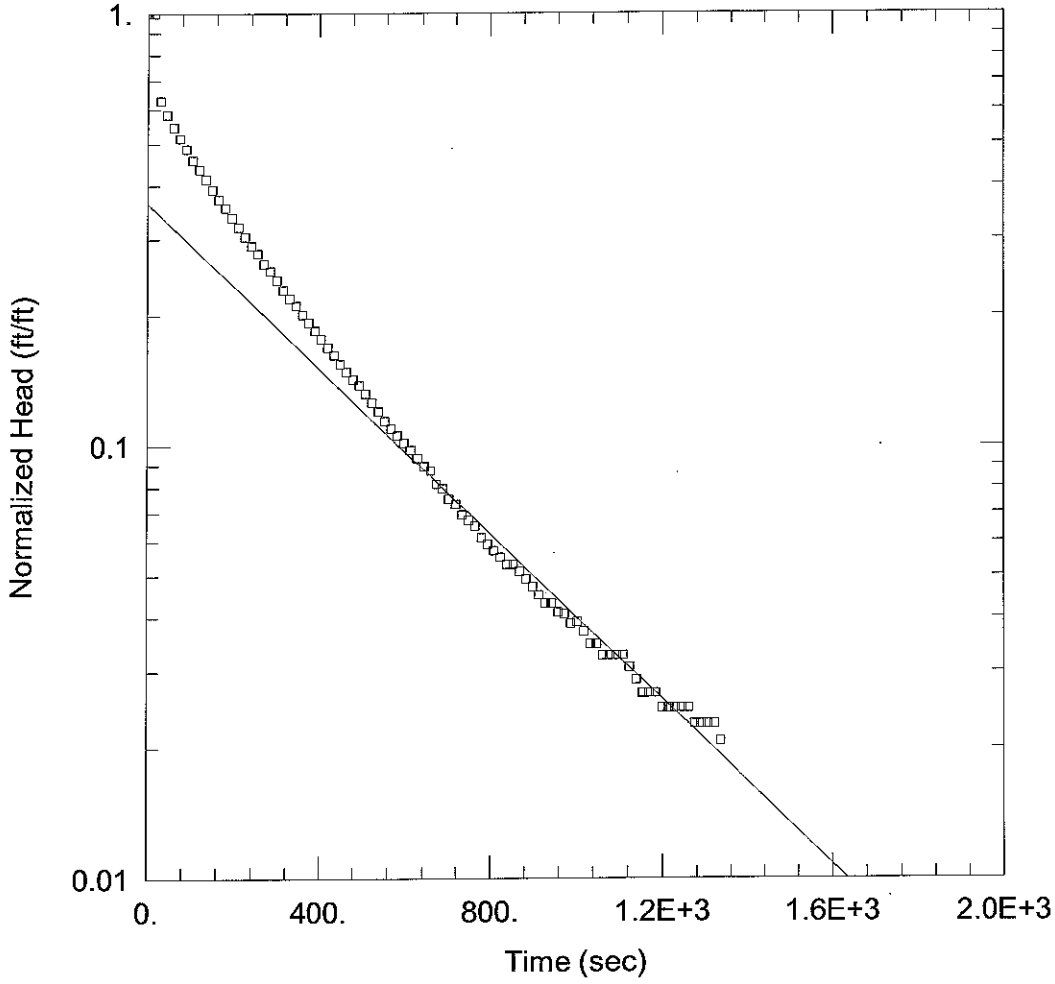
Saturated Thickness: 8.19 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (mw-11 out)

Initial Displacement: 3.22 ft
Total Well Penetration Depth: 8.19 ft
Casing Radius: 0.167 ft
Static Water Column Height: 8.19 ft
Screen Length: 5. ft
Well Radius: 0.167 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 27.37 ft/day
y0 = 1.722 ft



WELL TEST ANALYSIS

Data Set: B:\rouse\2011 slug tests\AQTESOLV\mw-15 in.aqt
Date: 11/01/11 Time: 15:56:22

PROJECT INFORMATION

Client: RSIRI
Location: Platinum Ave
Test Well: MW-15
Test Date: 10/10/11

AQUIFER DATA

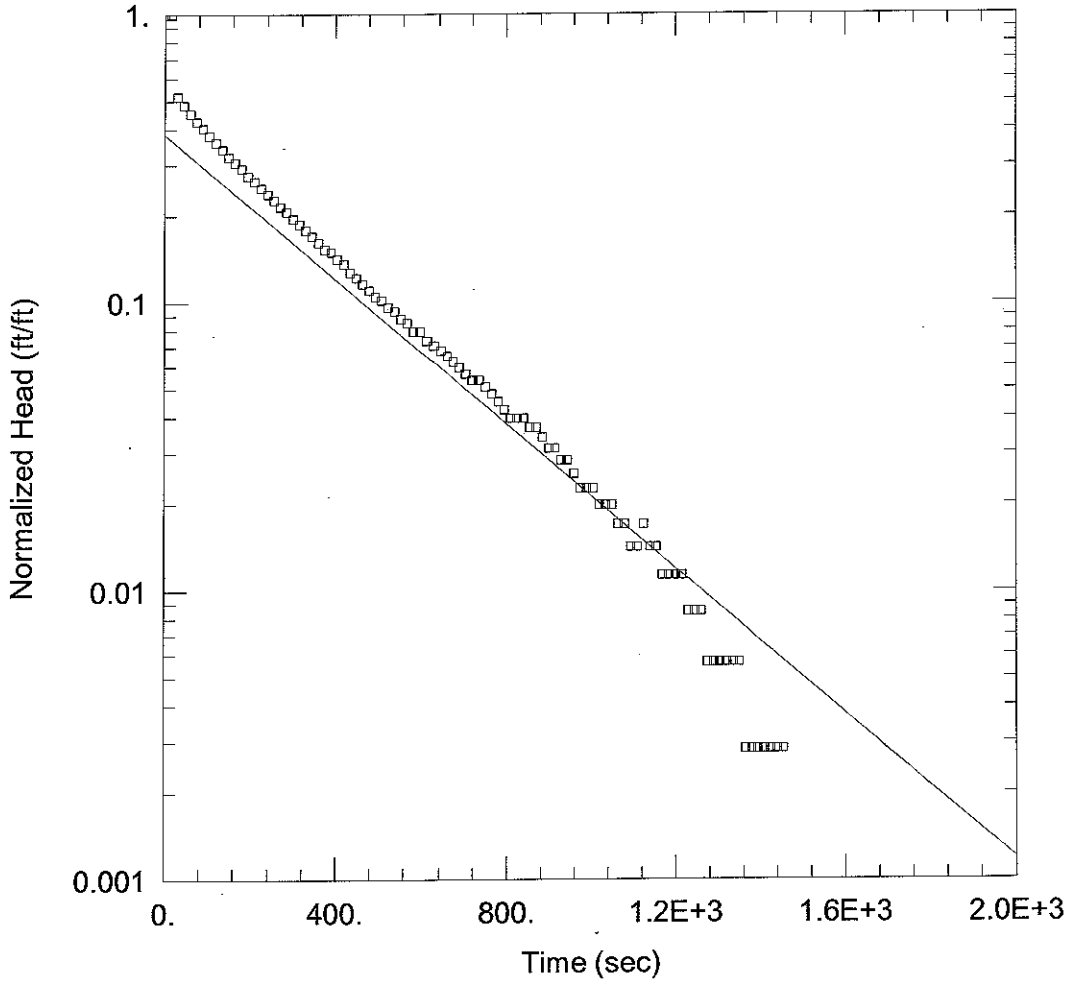
Saturated Thickness: 9.33 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (mw-15)

Initial Displacement: 2.99 ft
Total Well Penetration Depth: 9.33 ft
Casing Radius: 0.166 ft
Static Water Column Height: 9.33 ft
Screen Length: 5. ft
Well Radius: 0.166 ft

SOLUTION

Aquifer Model: Unconfined
K = 1.547 ft/day
Solution Method: Bouwer-Rice
y0 = 1.088 ft



WELL TEST ANALYSIS

Data Set: B:\rouse\2011 slug tests\AQTESOLV\mw-15 out.aqt
Date: 11/01/11 Time: 15:56:38

PROJECT INFORMATION

Client: RSIRI
Location: Platinum Ave
Test Well: mw-15 out
Test Date: 10/11/11

AQUIFER DATA

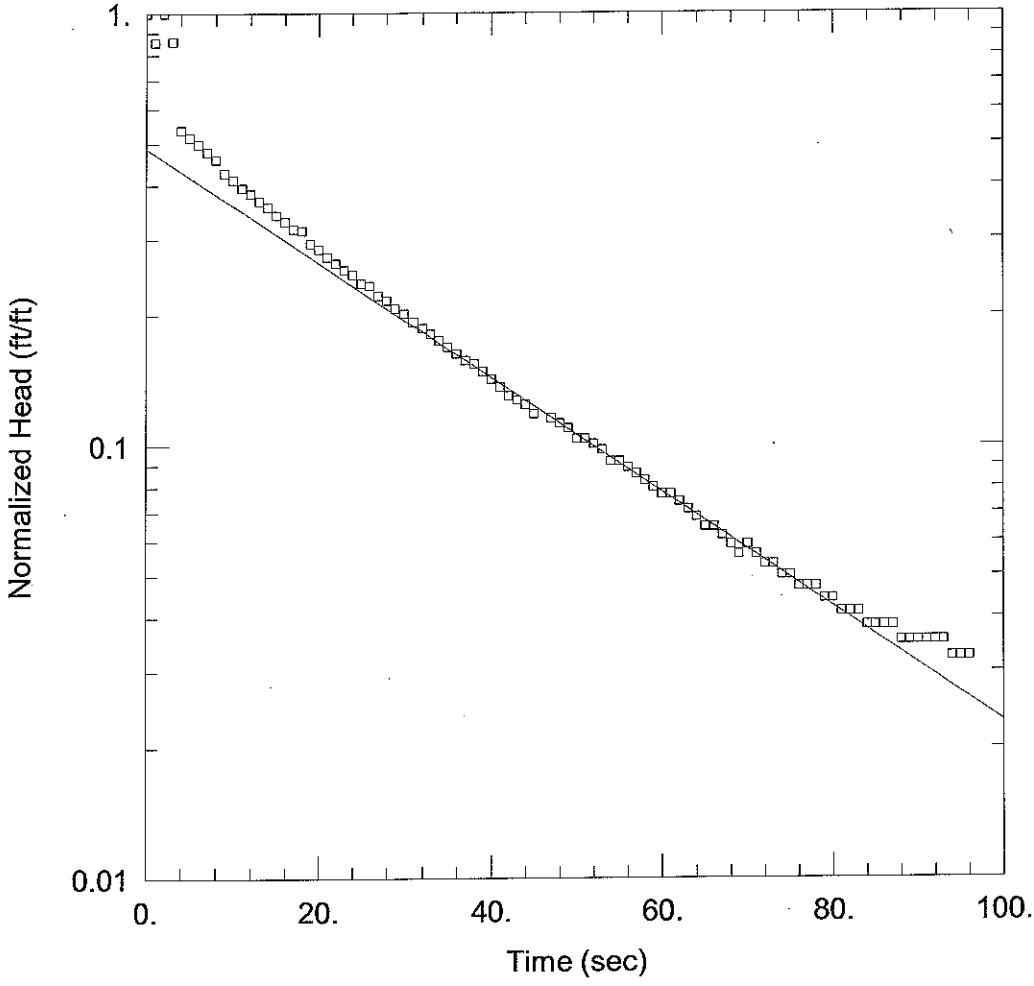
Saturated Thickness: 9.4 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (mw-15)

Initial Displacement: 3.53 ft
Total Well Penetration Depth: 9.4 ft
Casing Radius: 0.167 ft
Static Water Column Height: 9.4 ft
Screen Length: 5. ft
Well Radius: 0.167 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 2.057 ft/day
y0 = 1.355 ft



SI MALL

Data Set: B:\rouse\2011 slug tests\AQTESOLV\mw-16 in.aqt
Date: 11/01/11 Time: 15:57:41

PROJECT INFORMATION

Client: RSIRI
Location: Platinum Ave
Test Well: MW-16
Test Date: 10/16/11

AQUIFER DATA

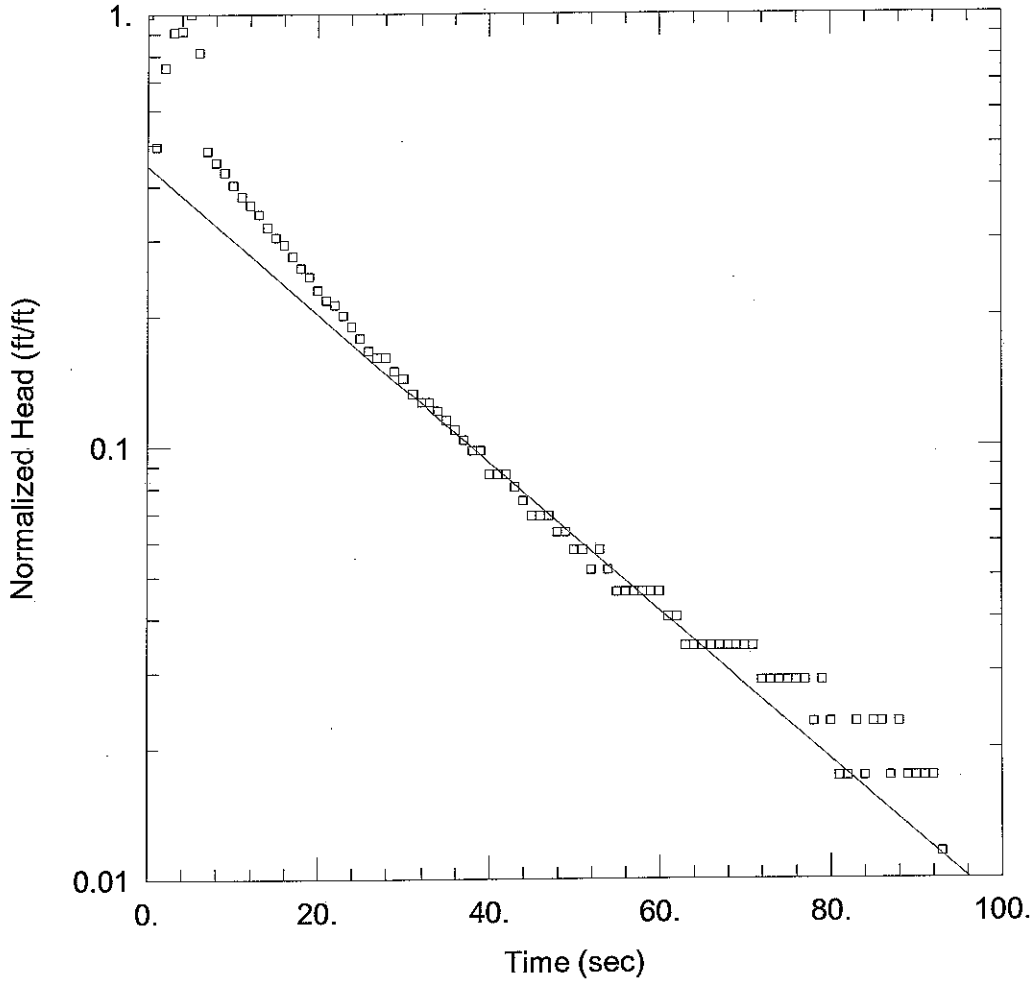
Saturated Thickness: 19.77 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-16)

Initial Displacement: 2.036 ft
Total Well Penetration Depth: 19.77 ft
Casing Radius: 0.083 ft
Static Water Column Height: 19.77 ft
Screen Length: 5. ft
Well Radius: 0.167 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 6.131 ft/day
y0 = 0.9911 ft



WELL TEST ANALYSIS

Data Set: B:\rouse\2011 slug tests\AQTESOLV\mw-16 out.aqt
Date: 11/01/11 Time: 16:02:19

PROJECT INFORMATION

Client: RSIRI
Location: Platinum Ave
Test Well: mw-16 out
Test Date: 10/11/11

AQUIFER DATA

Saturated Thickness: 19.81 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (mw-16)

Initial Displacement: 1.74 ft
Total Well Penetration Depth: 19.81 ft
Casing Radius: 0.083 ft
Static Water Column Height: 19.81 ft
Screen Length: 5. ft
Well Radius: 0.167 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 7.942 ft/day
y0 = 0.7755 ft

APPENDIX VIII

SSD INSTALLATION SPECIFICATIONS

GENERAL SYSTEM DESIGN INFORMATION

1.0 GENERAL REQUIREMENTS

1.1 All mitigation system components shall be installed in manner that will facilitate future servicing, maintenance and repair or replacement of equipment components in or outside the building. In cases where mounting heights are not detailed or dimensions are not given, system materials and equipment are to be installed to provide the maximum headroom and/or clearance with minimal projection into the open spaces as is practical. In cases where a conflict exists between these or other requirements and the system specifications the building owner and client will be consulted. All systems, materials and equipment shall be installed level, plumb, parallel or perpendicular to other building systems and components as applicable unless otherwise specified. There shall be a downward pitch of at least one- eighth of an inch for every foot of horizontal piping for all horizontal piping from all roof mounted fans to the first suction port.

1.2 The Contractor shall take every possible precaution to avoid any damage to existing utilities located anywhere in the building or those located in or below the slab floor. A metal detecting relay box or another similar instrument will be used in conjunction with any slab drilling to aid in sub-slab utility location where applicable.

1.3 The Contractor will not be responsible for enclosing the vapor system piping or electrical conduit in sheetrock or other similar finishing material, although it assumed electrical and plumbing conduits will be routed in a minimally invasive manner. The Contractor shall seal all penetrations through floors or foundation walls. All piping and conduit will be emplaced in such a manner that will not inhibit maintenance or the intended use of any areas.

1.4 The Contractor shall ensure that any foreign materials are not left or drawn into the vapor system piping or fan which may later interfere with or in any way impair the vapor system performance.

1.5 The entire system shall have UL or equivalent ratings for both individual components and the entire system as applicable.

2.0 SYSTEM MATERIALS

The Contractor shall utilize the following materials to complete the respective component of the Mitigation System, as outlined below.

Vapor Vent Piping:

- PVC schedule 40 pipe and fittings (ASTM D-2665) in occupied locations
- Foam core PVC can be substituted for solid core
- PVC cement primer shall comply with ASTM F-656
- PVC cement adhesive shall comply with ASTM D-2564

Piping Supports:

- 2”, 3” and 4” Hanging Pipe Supports
- Swivel ring or standard bolt type clevis
- Adjustable band hanger
- Double Drop in Anchors
- 3/8” threaded rod

- Assorted bolts, nuts & washers
- 2", 3" and 4" Pipe Secured to Concrete Floor or Wall
- Slotted Conduit Channel
- Conduit Clamps
- 3/8" Wedge Anchors
- Assorted bolts, nuts & washers

Suction Fans (or equivalent):

- GBR 76 and FanTech or equivalent
- 4" to 4" rubber boots with stainless steel hose clamps

Sealing Materials:

Urethane sealant shall comply with Federal Specification TT-S-00230C, Subject to compliance with Contract requirements; the following manufacturers of urethane caulking sealants may be used:

Pecora, Corp. (Dynatrol)

Mameco, Inc. (Vulkem or CR Lawrence)

Fire Protection (if needed):

- 2, 3 and 4 inch fire collars (Hilti or 3M)
- Fire stopping Caulk (Hilti)

Visual Pressure Indicator:

- Low Pressure light Indicator Panel

3.0 SUCTION PORT INSTALLATION

3.1 The specific location of each suction port is delineated on the floor plan layout Figures. These locations will be approved by the Client and Building Owner prior to initiating installation. Each suction port will be cut approximately 5" in diameter. The Contractor will follow all necessary procedures to minimize damaging any sub-slab utilities.

3.2 The Contractor shall remove a minimum of one cubic foot of sub-slab material from each suction port. Primary suction points will consist of PVC schedule 40 pipe and shall be installed so that they are flush with the bottom of the concrete slab in each suction hole. The pipe shall be secured above the suction hole with a pipe clamp attached to the steel column, block wall or overhead truss. The pipe will be sealed into each suction port by inserting backer rod material of sufficient size to compress between the pipe and the concrete floor. Urethane gun-grade caulking or mortar mix will be installed on top of the backer rod.

4.0 PVC PIPE INSTALLATION

4.1 All horizontal pipe runs between the fan and the first suction port shall be installed with a 1 inch pitch for every ten feet of horizontal pipe run (sloped back towards a suction port). All vertical

pipe runs shall be installed plumb. All horizontal runs after the first suction port may be run level. Special care must be taken to ensure that all piping is installed to eliminate any piping water traps.

4.2 The PVC pipe will be supported at least every six feet of horizontal run and at least every ten feet of vertical run. All horizontal pipe runs will have a support with an appropriate device within two feet of each fitting and a maximum distance between supports of six feet (as per BOCA National Plumbing Code). The ceiling supporting devices shall consist of 3/8 inch threaded rod anchored to structural members and capable of providing the necessary support. Conduit channel with pipe clamps can also be used to support pipe routed along the ceiling or walls. Installed pipe will not be supported by existing piping or ducts.

4.3 All support straps and anchors to be installed outdoors shall be either stainless steel or galvanized.

4.4 There is a wide range of sub-slab soil permeability that contributes to varying pressure fields and soil gas yields. The pipe diameters and blowers have been sized according to airflow measurements. The pipe sizing to be utilized has been detailed in the system layout figures.

5.0 FAN INSTALLATION

5.1 There will be total of three suction fans. All of the fans will be installed on the roof of the building as specified in the design figure. The roof mounted GBR76 and Fantech fans shall be installed on top of pressure treated 4x4 timbers or alternative that are laid perpendicular to the roof supports.

5.2 The location and types of fans to be installed are specified in the layout figure attached. Fan exhaust shall be directed upward and at least three feet above the roof. All exhaust will be at least 25 feet from all building air intakes and passive relief vents.

6.0 ROOF PENETRATIONS

6.1 All roof penetrations must be coordinated with the Client and Building Owner prior to performing the work. The Contractor will be responsible for making all necessary conduit penetrations through the roof. No penetrations shall be made through the built up or sloped portions of the roof or through portions of the flat roof that are within 10 feet of any roof drain.

6.2 All roof penetrations will be completely sealed and flashing/tar/silicone/caulking will be installed as necessary to ensure a water-tight seal is established around each installed conduit penetrating the roof of the facility.

7.0 SEALING

7.1 Slab Crack and Expansion Joint Sealing

Any visible expansion joints or slab cracks in the areas being mitigated that have 1/16 inch or greater aperture shall be sealed by the contractor. Cracks or open expansion joints in the concrete floor shall be sealed by applying a bead of urethane caulk on top of the joint. Any openings into the slab such as may occur around conduit pipe penetrations through the slab will be cleaned and sealed with gun-grade urethane caulk.

7.2 Expansion Joints

Any expansion strips in the concrete slab of the area being mitigated that are accessible shall be sealed with urethane caulking. Any accessible perimeter floor joints shall be sealed with gun-grade urethane caulking after the joint has been vacuumed.

8.0 INTERIOR VERTICAL PIPE ENCLOSURES

8.1 The Contractor will not be responsible for enclosing the vapor system piping or electrical conduit in sheetrock or other similar finishing material, although it assumed electrical and plumbing conduits will be routed in a minimally invasive manner.

9.0 FAN WIRING

9.1 The GBR76 fans draw approximately 3 amps at 110 volts while the FanTech FR-225 fan draws 2.7 amps at 110 volts. The circuit breaker to which the fans are connected shall be labeled with the fan number corresponding to the fan number on the system design layouts. The panel location and breaker number shall be referenced in the Contractor's final report.

10.0 LOW PRESSURE INDICATOR PANEL

10.1 One or more low pressure indicator panels will be installed in a location inside Co-Planar and will consist of Dwyer vacuum gauges to indicate a system failure. A legend or diagram will be included to demonstrate the fan location and which gauge corresponds to which fan.

11.0 FIRE PROTECTION

11.1 Pipes that penetrate fire-rated walls or ceilings and that are not completely enclosed behind a properly rated fire code sheetrock enclosure will be protected by local fire-code-official approved intumescent fire collars and fire-rated caulk or other approved materials or methods.

12.0 SYSTEM LABELING

12.1 A label will be installed at the disconnect switch next to each fan that says "Active Soil Depressurization System, Do Not Alter" or equivalent. The electrical circuit at the main panel that is used to control each fan shall be labeled as "Active Soil Depressurization System" or equivalent.

12.2 At least every 20 feet of exposed vent pipe length shall have a label that reads "Active Soil Depressurization System" or equivalent affixed to the pipe. All labels must be readable from three feet away.

12.3 The Contractors name, telephone number, and date of installation shall be affixed to the main panel that powers each vapor mitigation system.