



**Annual Groundwater, Soil Vapor and Indoor Air Monitoring Report for  
December 2010**

**Citizen Development Company / Flower Fashion Site  
47 Northern Boulevard  
Great Neck, New York**

**NYSDEC Site # 1-30-070**

**January 2011**

**Prepared for:**

**Citizen Development Company  
111-15 Queens Boulevard  
P.O. Box 10  
Forest Hills, NY 11375**

**Prepared by:**

**CA Rich Consultants, Inc.  
17 Dupont Street  
Plainview, NY 11803**



January 4, 2011

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**  
At SUNY  
50 Circle Road  
Stony Brook, New York 11794

Attention: Mr. Jamie Ascher

**Re: Annual Report  
December 2010 Groundwater, Soil Vapor & Indoor Air Monitoring Results  
The Citizens Development Company / Flower Fashion Site (the Site)  
47 Northern Boulevard, Great Neck, New York**

Dear Mr. Ascher:

In accordance with our Site Management Plan (SMP), attached is a copy of the Annual Groundwater, Soil Vapor & Indoor Air Monitoring Report and Certification (the Report) for the above-referenced Site. This document follows the Department's new "Periodic Review Report General Guidance" outline included in the NYSDEC's 45 – Day Reminder Notice. It also includes a signed Institutional and Engineering Controls Certification Form.

The findings presented in this Report indicate that the remedial activities completed remain effective in reducing the concentrations of perchloroethene (PCE) in the groundwater, soil vapor and indoor air at the Site and in the basements of the adjacent buildings. As described in detail within our Report, we recommend the following for this Site:

- During December 2010, a third post-remediation soil boring was installed in the northeastern portion of the rear yard (Figure 6). The PCE level at the 4 to 6 foot depth was 3.0 uk/kg, significantly less than the TAGM standard. In accordance with the SMP, we request permission to convert the SVE system to an SSD system by replacing the current blower with a smaller and more energy efficient fan as outlined in the SMP.
- Based on the historical analytical results from well MW-4, we request permission to terminate the program of annual groundwater monitoring at this Site.
- Lastly, we recommend that the program of indoor air monitoring and inspection of the SSD system continue on an annual basis in accordance with the SMP.

**ca RICH** Environmental Specialists

If there are any questions regarding this Report, please do not hesitate to call our Office.

Sincerely,

**CA RICH CONSULTANTS, INC.**



Eric A. Weinstock  
Vice President

cc: Rosalie K. Rusinko, Esq., NYSDEC-Tarrytown  
Charlotte Biblow, Esq., Farrell Fritz  
Sal Panico, Cord Meyer Development, LLC  
Jacqueline Nealon, NYSDOH

**Table of Contents**

	<u>Page</u>
1.0 Introduction	2
2.0 Site Overview	3
3.0 Evaluation of Remedy Performance, Effectiveness and Protectiveness	5
4.0 Institutional Controls/Engineering Controls (IC/EC) Plan Compliance	7
5.0 Monitoring Plan Compliance	7
6.0 Operations & Maintenance Plan Compliance	9
7.0 Overall Periodic Review Report Conclusions and Recommendations	10
References	11

**Figures**

1. Property Location Map
2. Location of Soil Removal Actions
3. Location of Subsurface Piping Layout for SVE System
4. Perchloroethene in Air Samples December 2, 2010
5. Location of Monitoring Wells
6. Post Remediation Boring Locations

**Tables**

1. Summary of Groundwater Results (MW-4)
2. Summary of VOCs in Soil Samples
3. Summary of Soil Vapor Extraction Readings
4. Summary of PCE Indoor Air Readings

**Enclosures**

1. Institutional and Engineering Control Certification Form

**Appendices**

- A. Groundwater Laboratory Results with DUSR
- B. Indoor Air Laboratory Results
- C. SVE System Laboratory Results

**Periodic Review Report (PRR) – December 2010  
Citizen Development Company /Flower Fashion Site  
47 Northern Boulevard  
Great Neck, New York  
NYSDEC Site # 1-30-070**

**1.0 Introduction**

The Citizen Development Corp./Fashion Flower (CDC/FF) site (the Site), located at 47 Northern Boulevard in Great Neck, New York (Figure 1), is currently occupied by an AT&T cellular telephone store. Previous tenants of this Property were: a Cingular cellular telephone store; a florist; and a dry cleaner. For the purposes of this document, the contaminant of concern is tetrachloroethene (a.k.a perchloroethene or "PCE") which is a remnant of the operation of the former dry cleaner. The media that were impacted included soil, soil vapor, groundwater and indoor air.

**A. Nature & Extent of Contamination and Remedial History**

During the 1980's and 1990's, a series of investigative and remedial activities including soil borings, well installations & sampling, soil vapor surveys, soil excavation, soil vapor extraction (SVE) system and groundwater pump & treat systems were employed at the CDC/FF Site to address a release of the dry cleaning chemical perchloroethene and its degradation products. During the 2000's, this was followed by a sub-slab depressurization (SSD) system below the building, an additional soil vapor survey, a second soil removal effort, a program of in-situ chemical oxidation, the operation of a second SVE system and the installation of additional monitoring wells.

As displayed in the chronologic tabulation included in Section 2 of this report, this Site has a long history of environmental investigative and remedial activities. A list of references for the work performed is included at the end of this Report. For the purposes of this periodic review, this Report will focus on the most recent investigative and remedial effort as outlined in the Site Management Plan (SMP) (Ref 12). These are: in-situ chemical oxidation; operation of an SVE system in the rear of the Property; operation of the SSD system below the building; and post remediation groundwater and indoor air monitoring.

**B. Effectiveness of Remedial Program**

The effectiveness of the corrective actions implemented at this Site has been evaluated by reviewing data collected regarding the following components of the remedial program. These are discussed in detail in Section 3 of this Report.

In-Situ Chemical Oxidation – The last in-situ chemical oxidation application was applied during the summer of 2006. Based on the results of the monitoring wells downgradient of the application Site, this remedial effort is deemed to have been effective. Well MW-4 (the well that has historically had the highest PCE levels at the Site), contained PCE at a concentration of 7.1 ug/l during the December 2010 sampling round, just slightly above the groundwater standard of 5.0 ug/l.

Operation of the SVE System in the Rear of the Property – The SVE system has remained in operation from January 2005 to the present. The new shallow SVE wells were installed during the summer of 2009. Over that period of time, it has been effective in reducing the concentration of remnant PCE soil vapors below the rear portion of the Property. The initial PCE concentration in the untreated or “raw” soil vapor in January 2005 was 540,000 ug/m<sup>3</sup>. During the December 2010 sampling round, this was reduced to 4,342 ug/m<sup>3</sup>.

Operation of the SSD System Below the Building – The operation of the SSD fan is checked on a regular basis. No operational problems have been reported during 2010. Based on the results of the indoor air samples collected in the AT&T store, the SSD system is deemed to have been effective and protective.

Post Remediation Groundwater and Indoor Air Monitoring – The results of the groundwater and indoor air monitoring program are discussed in Sections 2 and 3 of this Report. The groundwater PCE results are either below, or only slightly above groundwater standards in all of the sampled wells. The indoor air PCE results are also either below, or only slightly above State background levels. As such, the Groundwater and Indoor Air Monitoring program is deemed to have been effective and protective.

### **C. Compliance**

The Site is currently in compliance with the Site Management Plan (SMP)

### **D. Recommendations**

- During December 2010, a third post-remediation soil boring was installed in the northeastern portion of the rear yard (Figure 6). The PCE level at the 4 to 6 foot depth was 3.0 uk/kg, significantly less than the TAGM standard. In accordance with the SMP, we request permission to convert the SVE system to an SSD system by replacing the current blower with a smaller and more energy efficient fan as outlined in the SMP.
- Based on the historical analytical results from well MW-4, we request permission to terminate the program of annual groundwater monitoring at this Site.
- Lastly, we recommend that the program of indoor air monitoring and inspection of the SSD system continue on an annual basis in accordance with the SMP.

## **2.0 Site Overview**

### **A. Chronology of Investigative and Remedial Activities**

During the 1980's and 1990's, a series of investigative and remedial activities including soil borings, well installations & sampling, soil vapor surveys, soil excavation, soil vapor extraction (SVE) system and groundwater pump & treat systems were employed at the CDC/FF Site to address a release of the dry cleaning chemical perchloroethene and its degradation products. During the 2000's, this was followed by a sub-slab depressurization (SSD) system below the building, an additional soil vapor survey, a second soil removal effort, a program of in-situ chemical oxidation, the operation of a second SVE system and the installation of additional monitoring wells.

As displayed in the chronologic tabulation below, this Site has a long history of environmental investigative and remedial activities. A list of references for the work performed is included at the end of this Report.

A chronology of the Site activities is presented in the following tabulation.

Action	Time Period
Initial subsurface investigations	1983 – 1984
Initial soil removal action in northwest corner of Property	1984
Operation of the initial SVE and groundwater pump and treat systems	1986 – 1990
Post remediation groundwater monitoring	1990 – Present
Installation and operation of a SSD system below the building	2002 – Present
Post remediation indoor air monitoring	2002 – Present
Performance of a second soil vapor survey	2003
Second soil removal action in northeast corner of Property	2004
Application of in-situ chemical oxidation in rear of Property	2004 – 2006
Installation of additional deep monitoring wells	2005
Operation of second SVE system	2005 – Present
Preparation of a Site Management Plan	2006
Performance of post-remediation borings	2009
Installation of two new shallow SVE wells	2009
Performance of additional post-remediation borings	2010

**B. Nature and Extent of Contamination**

As the source of contamination was the operation of a former dry cleaning facility, the contaminant of concern is tetrachloroethene (a.k.a perchloroethene, PCE or "Perc") which is the trade name for dry cleaning fluid. The media that were impacted included soil, soil vapor, groundwater and indoor air. The extent of contamination in each of these media is discussed below.

Soil – Two known areas of soil contamination existed below the rear of the Property in the past as shown on Figure 2. One portion of contaminated soil located below the northwest portion of the property was removed in 1984 under the oversight of the Nassau County Department of Health.

A second soil removal action was performed in the northeast portion of the Property in 2004 under the oversight of the NYSDEC (Ref. 8). This was followed in-situ treatments with permanganate, a chemical oxidant, followed by the operation of a SVE system (Ref. 9).

Soil Vapor – In the past, elevated PCE levels were measured in the rear of the Property. During 2004, concentrations as high as 2,400,000 ug/m<sup>3</sup> of PCE were recorded in the rear yard of the Property. Since that time, a soil removal effort followed by chemical oxidation treatment and the operation of an SVE system have been employed. The concentration of PCE in the exhaust of the SVE system during our December 2010 sampling event was 4,342 ug/m<sup>3</sup>, a significant improvement since the 2004 sample collection. The historical results of the VOCs detected in the exhaust of the SVE system are included on Table 3 and the location of the SVE system is shown on Figure 3.

Indoor Air Quality – Indoor air sampling was initiated in 2002. Samples were collected from the basement and ground floor level of 47 Northern Blvd.; the basement of 55 Northern Blvd.; the ground floor level of 45 Northern Blvd. (an adjoining strip-type shopping center which has no basement); and from a designated outdoor sampling point. PCE was detected above the NYSDOH background level of 10 ug/m<sup>3</sup> and action level of 100 ug/m<sup>3</sup> in both 47 and 55 Northern Blvd locations during the initial 2002 sampling event. Results decreased after the SSD and SVE systems were placed into operation. During the December 2010 sampling event, the PCE levels at all locations were below the NYSDOH action level. Two samples in the basement of 55 Northern Blvd. were slightly above the NYSDOH background level. The historical results of PCE detected in the indoor air are included on Table 4, and the sample locations are shown on Figure 4.

Groundwater – A series of groundwater wells had been installed at the Site. Wells MW-1A, 1B, 1C, and 1D are all upgradient water table monitoring wells. These have historically shown low, but measurable, levels of PCE entering the Property. The historical results of VOCs detected in the Site well MW-4 are included on Table 1, and the well locations are shown on Figure 5.

Wells MW-2, 3, 4 are downgradient water table monitoring wells located along the northern boundary of the Site. In the past, these have contained PCE levels in the range of 100 to 1,000 ug/l with well MW-4 displaying the highest concentrations. Since the completion of the chemical oxidation program, the PCE levels decreased significantly. In fact, during the December 2009 sampling round, the PCE concentrations in wells MW-2 and 3 were 2.0 ug/l and 0.85 ug/l. Well MW-4, the well that has historically had the highest PCE levels at the site, contained 7.1 ug/l in December 2010, just slightly above the groundwater standard of 5.0 ug/l. (Well MW-4 is currently the only well sampled in the annual monitoring program.)

A series of multi-depth monitoring wells were installed in the area of MW-4. These are identified as MW-4(75) which is 75 feet deep, MW-4(90) which is 90 feet deep, and MW-4D which is 146 feet deep. During the December 2009 monitoring event, PCE was not detected in the water samples from any of these wells.

There were also a series of off-site wells installed for this Site. These are identified as wells MW-5, 6, 7, 8 and 10. The off-site wells were last sampled in 2005. At that time, the PCE detections were all relatively low, between 1 and 13 ug/l.

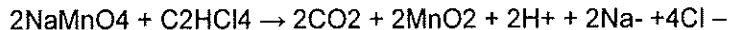
### **3.0 Evaluation of Remedy Performance, Effectiveness and Protectiveness**

For the purposes of our periodic review, this report will evaluate the most recent investigative and remedial effort as outlined in the SMP. These are: in-situ chemical oxidation; operation of an SVE system in the rear of the Property; operation of the SSD system below the building; and post remediation groundwater and indoor air monitoring.

In-Situ Chemical Oxidation – Permanganate is a strong oxidizer that has a long history of application for the control of odors at wastewater treatment plants. The application of permanganate directly to subsurface soils and groundwater has been proven successful for the



remediation of PCE. Once in contact with PCE, the permanganate converts the contaminant to harmless by-products as shown below:



(Permanganate + Perchloroethene → Carbon Dioxide Gas + Manganese Dioxide + Hydrogen ions + Sodium ions + Chlorine ions)

During the Fall of 2004, liquid permanganate was applied to a series of 27 shallow injection points and two water table injection points located in the rear of the Property. Additional applications of permanganate were applied to the water table injection points during the Summers of 2005 and 2006 (Ref 9).

The monitoring wells downgradient of the permanganate application site, wells MW-2, 3 and 4, were monitored periodically after the application program. The PCE levels in these wells have declined as a result of this treatment. During the December 2010 sampling round, the PCE concentrations in wells MW-2 and 3 were 2.0 ug/l and 0.85 ug/l. Well MW-4, the well that has historically had the highest PCE levels at the Site, contained 7.1 ug/l, just slightly above the groundwater standard of 5.0 ug/l.

Based on these results, the chemical oxidation program is deemed to have been effective and protective.

Operation of the SVE System in the Rear of the Property – After the permanganate application program was completed, an SVE system was placed in the northeast portion of the rear yard to remove the remnant PCE vapors that were not addressed by the soil removal and in-situ chemical oxidation programs. The SVE system for this Site includes three shallow horizontal SVE wells installed in the backfilled excavation area. Five of the shallow permanganate injection points were also converted in SVE wells. A description of the SVE system is included in Reference 9.

The SVE system has remained in operation from January 2005 to the present except for periodic repairs. Over that period of time, it has been effective in reducing the concentration of remnant PCE soil vapors below the rear portion of the Property. The initial PCE concentration in the untreated or "raw" soil vapor in January 2005 was 540,000 ug/m<sup>3</sup>. During the December 2010 sampling round, this was reduced to 4,342 ug/m<sup>3</sup>.

With respect to termination of the SVE system, the SMP states that once the levels of total VOCs in the SVE wells decreases to a near constant or asymptotic concentration, operation of the system will be suspended. In addition it states that three soil borings will then be placed in the rear yard. Soil samples will be collected at a level of 3 to 4 feet below grade in the native soil below the imported fill and analyzed for halogenated volatile organics. If the concentration of PCE and its degradation products in these samples do not exceed the NYSDEC TAGM (Ref.11) Cleanup Objectives, the SVE blower will be replaced with a smaller SSD blower.

Three post-remediation soil borings were installed in the rear of the Property (Ref. 13). In 2009, the soil samples in two of these borings were below the TAGM. Two new shallow SVE wells were installed later that year in the area of the third boring, the boring that exceeded the TAGM (Ref. 14). The boring in the third location was re-installed and tested for VOCs in March 2010 (Ref. 15) and December 2010. The results of the December sample analysis are included on Table 2 and were significantly below the TAGM levels. Therefore, we recommend that the SVE blower be replaced with a more energy efficient SSD fan as outlined in the SMP.

Operation of the SSD System Below the Building – The operation of the SSD fan is checked on a regular basis. No operational problems have been reported during 2010.

Based on the results of the indoor air samples collected in the AT&T store, the SSD system is deemed to have been effective and protective.

Post Remediation Groundwater and Indoor Air Monitoring – The results of the groundwater and indoor air monitoring program are discussed in Section 2 of this Report and documented in Reference 7. The groundwater PCE results are only slightly above groundwater standards. The indoor air sample PCE results are also either below or only slightly above State background levels. The concentration of PCE at 55 Northern Blvd. increased slightly during 2007-2008 while the blower was temporarily out of operation, but have since decreased to near background levels.

Based on these results, we believe the remedy and the post remediation monitoring program have been effective and protective. Furthermore, we request that the groundwater monitoring portion of this program be terminated as the results past sampling rounds have demonstrated that the remedy was successful.

#### **4.0 Institutional Controls/Engineering Controls (IC/EC) Plan Compliance**

##### **A. Requirements and Compliance**

Institutional Controls – Two institutional controls have been implemented for the site: 1) a deed restriction; and 2) groundwater beneath the Site cannot be used for potable or industrial purposes without treatment unless first obtaining permission to do so from NYSDEC. The deed notification has been filed, and the groundwater beneath the Site is not being used for potable or industrial purposes.

Engineering Controls – SVE and SSD systems were constructed and operate at the Site as engineering controls. The SMP includes provisions to convert the SVE system to a second SSD system which will remain in operation as part of the remedy. The SVE and SSD systems are performing properly as described in Section 3 of this Report.

##### **B. Certification**

An annual inspection of the Site is performed, and an Annual Certification is provided to the NYSDEC as required in the SMP.

#### **5.0 Monitoring Plan Compliance**

The following monitoring programs are described in the SMP and include: groundwater monitoring, soil vapor monitoring, and indoor air quality monitoring.

##### **5.1 Groundwater Monitoring**

Groundwater at this Site is monitored on an annual basis and includes the sampling and analysis of groundwater from monitoring of wells MW-1A, 1C, 2, 3, 4, 4(75), 4(90) and 4D. All groundwater samples, including the required QA/QC samples, are delivered under chain-of-custody control overnight to NYS-certified Laboratory and analyzed for volatile organic compounds (EPA Method 8260) in accordance with NYSDEC ASP Category B deliverables. The results of the December 2010 monitoring round are included on Table 1.

Termination Criteria - The SMP states that the groundwater monitoring program will be terminated after groundwater standards are achieved or NYSDEC indicates monitoring is no longer required. Based on the December 2010 data, we request permission to terminate the groundwater monitoring program at this Site.

## 5.2 Soil Vapor

Confirmatory soil vapor samples from the SVE system are collected on a semi-annual basis using a Summa® air sample canister. This sample is collected from a sample port located before the carbon treatment unit, and analyzed in accordance with USEPA TO-15 methodology. The SMP states that once the levels of total VOCs in the SVE wells decrease to a near constant or asymptotic concentration, operation of the system will be suspended. The December 2009 monitoring round results are included on Table 9.

Termination Criteria - Three soil borings will then be placed in the rear yard. Soil samples will be collected at a level of 3 to 4 feet below grade in the native soil below the imported fill, and analyzed for halogenated volatile organics. If the concentration of PCE and its degradation products in these samples do not exceed the NYSDEC TAGM (Ref. 11) Cleanup Objectives, the SVE blower will be replaced with a smaller SSD blower.

Three soil borings were installed in 2009. Two of the three soil borings revealed soil PCE concentrations below TAGM values. In the summer of 2009, two new shallow SVE wells were installed. The soil from 4 to 6 feet in the location of the third boring was resampled in December 2010 and the results are now below TAGM levels. Therefore, we request permission to convert the SVE system to an SSD system as outlined in the SMP.

## 5.3 Sub-Slab Depressurization System

Monitoring of the SSD system will consist of checking to confirm that the SSD blowers are operating. A field technician visited the Site in June and December and confirmed that there was a flow of air out of the SSD system and that the blower was functioning.

Termination Criteria -The SSD systems will be terminated when monitoring of the indoor air confirms that there are no impacts to the indoor quality of the Cingular store (now an AT&T store) and the 3 adjoining stores after the SSD blowers have been turned off for a period of 30 days during winter conditions.

## 5.4 Indoor Air Quality

Indoor air samples were collected at the following locations on an annual basis during the winter heating season.

BUILDING	SAMPLE LOCATION & IDENTIFICATION
CDC/FF Site (Cingular Store) 47 Northern Blvd.	Ground Floor and Basement (Sample ID: PDM-1 and PDM-2)
Health Nut Store 45 Northern Blvd.	No longer sampled
Cambridge Educational Center 55 Northern Blvd.	Basement (waiting room and NW Test Center) (Sample ID: PDM-4 and PDM-5)
Outdoor Ambient Air	Behind Site Building (Sample ID: PDM-6)

New 3M sampling badges were brought out to the Site and exposed for a period of approximately 24-hours. The samples were analyzed by ELAP-approved Galson Laboratories for the analysis of PCE. Monitoring of the indoor air quality at locations PDM-1 through 2 and 4 through 6 will

continue as long as the soil vapor extraction and sub-slab depressurization systems are in operation or the NYSDEC indicates monitoring is no longer required.

During the December 2010 sampling event, the PCE levels at all locations were below the NYSDOH action level. Two samples in the basement of 55 Northern Blvd. was slightly above the NYSDOH background level. The December 2010 monitoring round results are included on Table 4.

Termination Criteria - Once the air quality in the Cingular store (now an AT&T store) and the three adjoining stores remains at or below the established NYS background level for PCE (which is currently 10 ug/m<sup>3</sup>) during one round of sampling during the winter heating season with the SSD system turned off for a period of 30 days, the indoor air monitoring program will be terminated and the Site will be eligible for delisting from the Registry.

## **6.0 Operations & Maintenance Plan Compliance**

Currently there are two mechanisms in place at the Site that continue to control subsurface soil vapor contamination. These include a SVE system and a sub-slab depressurization system. The components of these are described in Section 4 of this Report

### **6.1 SVE system**

The following operations and maintenance procedures apply to the individual components of the SVE system and were employed during 2010.

#### **SVE Blower**

##### Monthly

- Check the vacuum gauge at the inlet and record value.
- Clean the inside and outside of the cooling fan.

#### **Moisture Knock-Out Drum**

- The water level in the drum should be checked once a month. Turn off the power to the blower, place a container in front of the drain valve at the bottom of the drum and open the drain valve. If water flows out of the drum, the drum should be drained and the water stored in a suitable plastic container with a water-tight lid. The system can then be restarted. Contact CA RICH to arrange for the proper disposal of the water.
- The moisture knock-out drum contains an air filter to prevent sediment from entering the blower. The filter should be checked every six months or after a significant increase in the measured vacuum at the inlet to the blower is observed. The filter element should be either cleaned or replaced depending on the condition of the element.

#### **Vacuum Relief Valve**

- There are no periodic maintenance procedures recommended by the manufacturer.

### **Carbon Canisters**

- The sampling ports on the discharge side of the blower (after the carbon filtration units) should be monitored quarterly using a Photo-Ionization Detector (PID) such as a MiniRae® 2000 and the values recorded. Once the meter indicates breakthrough of the carbon, CA RICH should be contacted to arrange for replacement of the carbon unit(s).
- There are no periodic maintenance procedures recommended by the manufacturer.

### **6.2 Sub-Slab Depressurization System**

Currently, there is a Sub-Slab Depressurization (SSD) system operating in the basement of the existing building. The system consists of a perforated pipe buried beneath the basement floor that is connected to a Fantec® low pressure SSD blower that exhausts extracted soil vapor at a rate of approximately 150 cfm. Indoor air quality tests currently indicate that this system is effectively controlling any PCE vapors inside the building.

Operations & Maintenance procedures that apply to the Fantec® low pressure blower includes a physical inspection of the blower to confirm that air is being discharged and that the fan is operating. These inspection were performed during 2010.

### **7.0 Overall Periodic Review Report Conclusions and Recommendations**

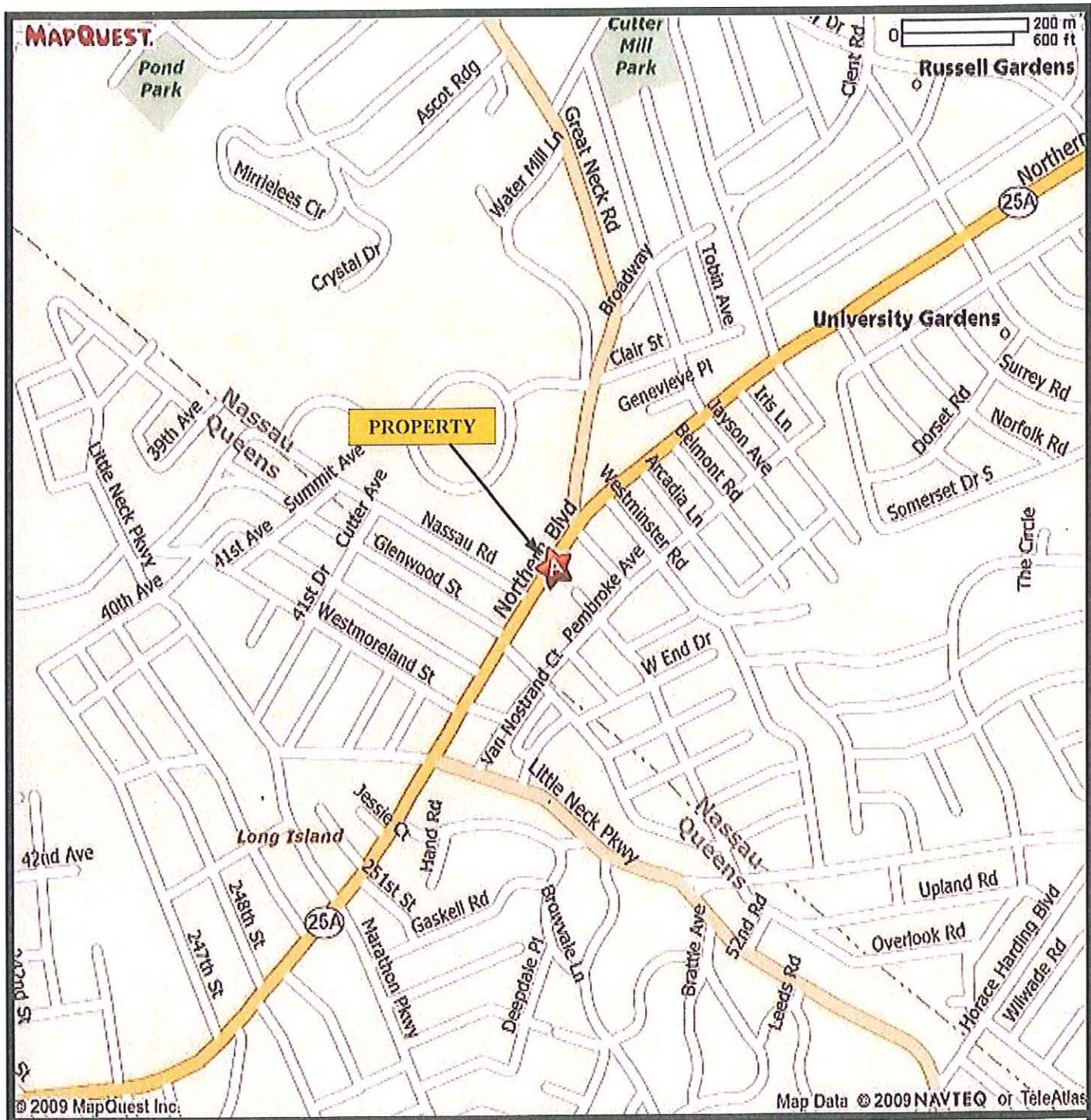
The corrective actions implemented at this Site has been evaluated by reviewing data collected at the Site, and they are deemed to be effective and protective.

- Based on the results of the monitoring wells downgradient of the application site, the In-Situ Chemical Oxidation remedial effort is deemed to have been effective. Well MW-4, (the well that has historically had the highest PCE levels at the site), contained PCE at a concentration of 7.1 ug/l during the December 2010 sampling round, just slightly above the groundwater standard of 5.0 ug/l. Based on the historical analytical results, we request permission to terminate the program of annual groundwater monitoring at this site
- During 2009, three post-remediation soil borings were installed. The PCE levels in two of those borings were less than the TAGM levels. Since that time, two additional SVE wells have been installed at the Site. The soil from 4 to 6 feet in the location of the third boring was resampled in December 2010 and the results are now below TAGM levels. In accordance with the SMP, we request permission to convert the SVE system to a smaller and more energy efficient SSD system as outlined in the SMP.
- The operation of the existing SSD fan is checked on a regular basis. No operational problems have been reported during 2010. Based on the results of the indoor air samples collected in the AT&T store, the SSD system is deemed to have been effective and protective. No modifications to the SSD system are recommended at this time.
- Lastly, we recommend that the program of indoor air monitoring and inspection of the SSD system continue on an annual basis in accordance with the SMP.

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13. CA RICH, (July 2009), Post-Remediation Borings Report, The Citizens Development Company / Flower Fashion Site, 47 Northern Blvd., Great Neck, New York.
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15. CA RICH (April 2010) Additional Post-Remediation Borings Report, The Citizens Development Company / Flower Fashion Site, 47 Northern Boulevard, Great Neck, New York

## Figures



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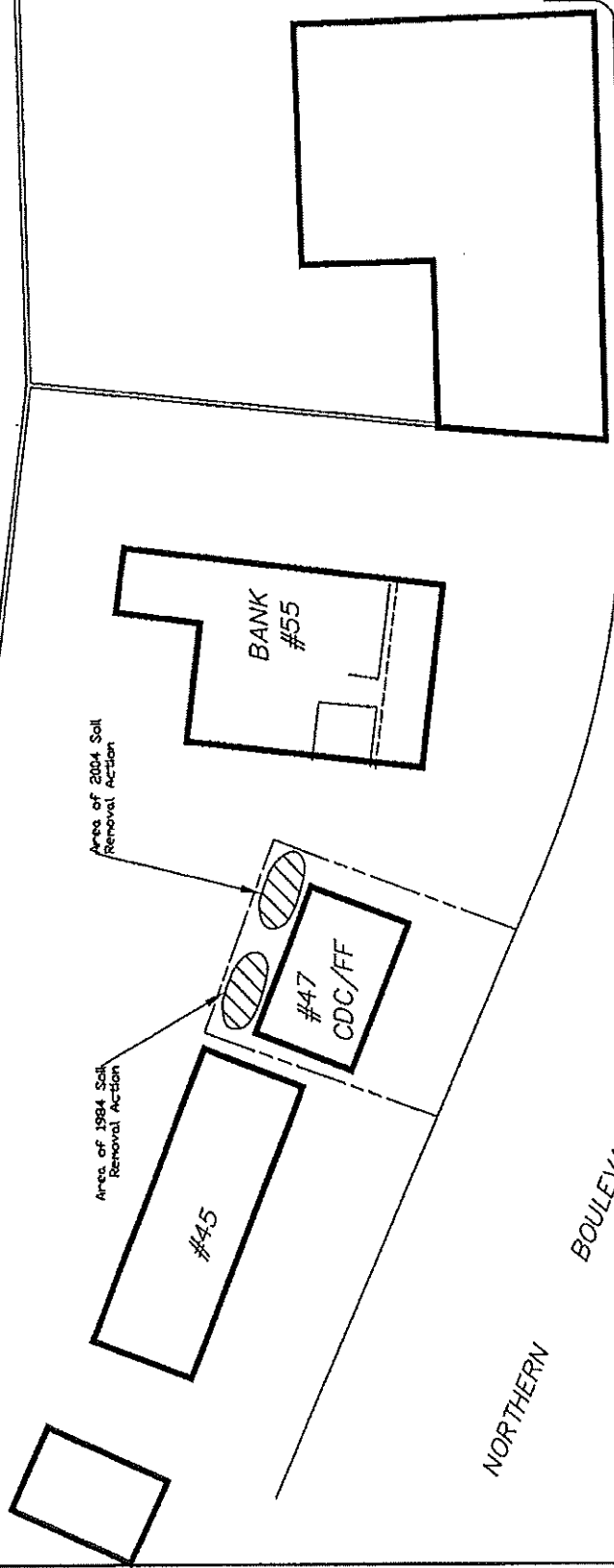
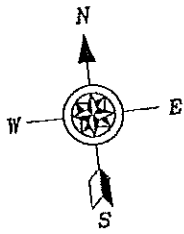


CA RICH CONSULTANTS, INC.  
17 Dupont Street,  
Plainview, NY 11803

TITLE: <b>PROPERTY LOCATION MAP</b>		DATE: <b>3/19/09</b>
FIGURE: <b>1</b>		SCALE: <b>AS SHOWN</b>
DRAWING:	<b>47 Northern Boulevard Great Neck, New York</b>	DRAWN BY: <b>JTC</b>
		APPR. BY: <b>EAW</b>

Map Adapted from Mapquest






GREAT NECK ROAD

NORTHERN BOULEVARD

<b>CA RICH CONSULTANTS, INC.</b>		Certified Groundwater and Environmental Specialists 17 Dupont Street, Plainview, New York 11803	
<b>TITLE</b>	Locations of Soil Removal Actions	<b>DATE</b>	3/19/2009
<b>FIGURE</b>	2	<b>SCALE</b>	As Shown
<b>DRAWING NO.</b>	2009--1	<b>DRAWN BY</b>	J.T.C.
		<b>APPR. BY</b>	E.A.W.

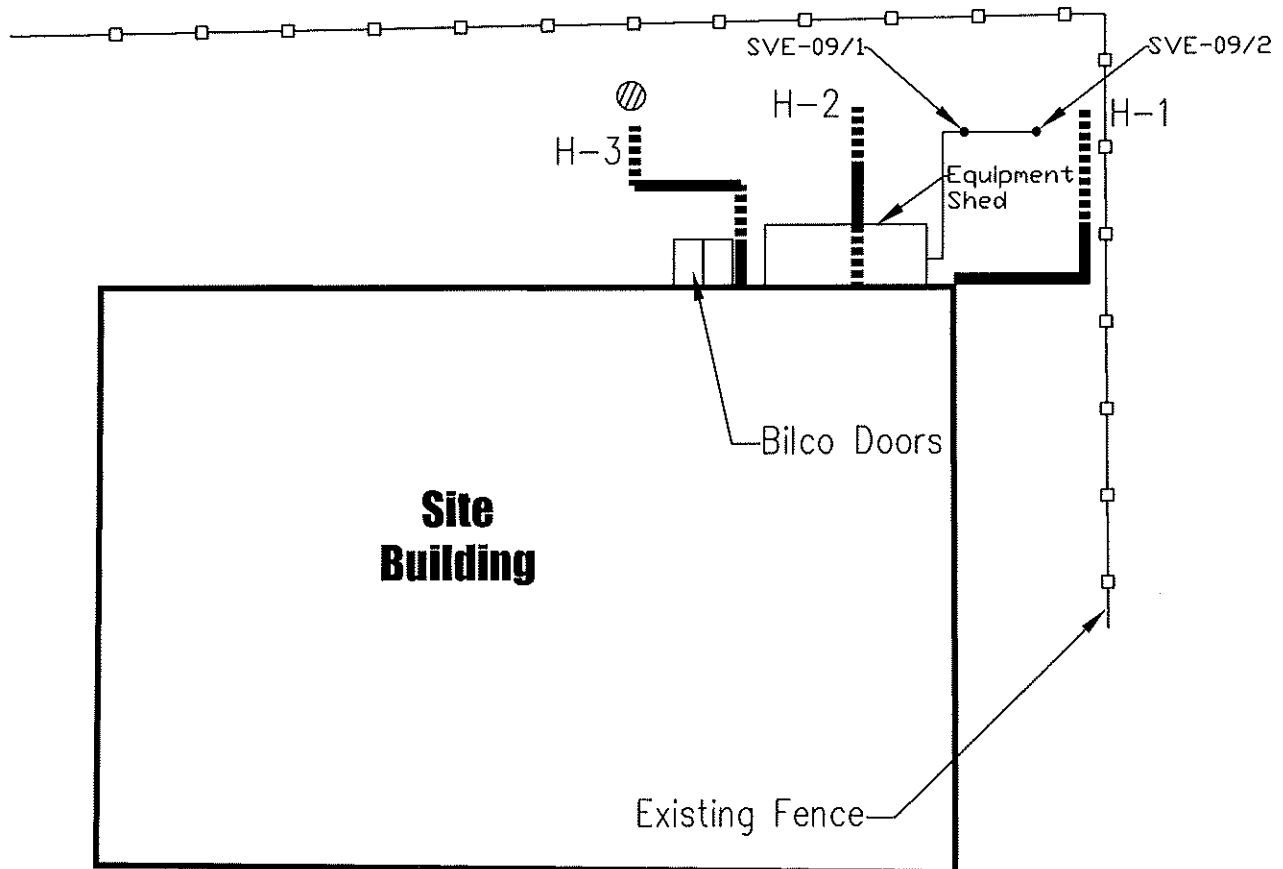
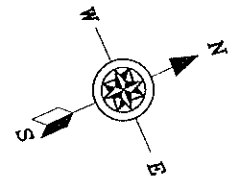
**Legend**


 Approximate Locations of Soil Removal Actions






GRAPHIC SCALE IN FEET

Note:  
 Map adapted from Civil and Environmental Engineers, Inc.  
 Site Area Map dated May 16, 2002.



**LEGEND**

-  FORMER STORM WATER DRYWELL
-  2-INCH DIAMETER 20 SLOT PVC PIPE
-  2-INCH DIAMETER PVC PIPE



GRAPHIC SCALE IN FEET

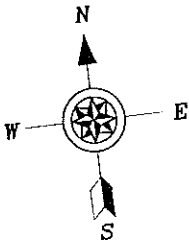
**CA RICH CONSULTANTS, INC.**

Certified Groundwater and Environmental Specialists  
17 Dupont Street, Plainview, New York 11803

**Stephen J. Osmundsen, P.E.**

Consulting Engineer  
514 Pantigo Road # 16, East Hampton New York 11937

TITLE: LOCATION OF SUBSURFACE PIPING LAYOUT FOR SOIL VAPOR EXTRACTION SYSTEM		DATE: 1/20/2010
FIGURE: 3		SCALE: 1" = 16'
DRAWING NO: 2009-2	CDC/FLOWER FASHION 47 NORTHERN BLVD. GREAT NECK, NY 11020	DRAWN BY: J.T.C.
		APPR. BY: S.J.O.



HEALTH NUT (Upstairs)  
No longer sampled

NW TESTROOM (downstairs)  
PDM-4 40 ug/m<sup>3</sup>

OUTSIDE  
PDM-6 < 1 ug/m<sup>3</sup>

FORMER CLEANERS  
USA #45

BANK #55

AT&T (downstairs)  
PDM-2 3.1 ug/m<sup>3</sup>

AT&T (upstairs)  
PDM-1 2 ug/m<sup>3</sup>

RECEPTION (downstairs)  
PDM-5 37 ug/m<sup>3</sup>

FORMER MAYFLOWER  
CLEANERS

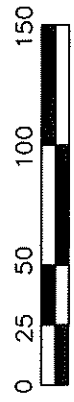
RETAINING WALL  
USED DRY CLEANING  
EQUIPMENT STORED  
OUTDOORS

NORTHERN  
BOULEVARD

GREAT NECK ROAD

**Legend**

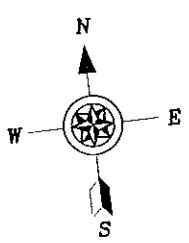
● AIR SAMPLE LOCATIONS



GRAPHIC SCALE IN FEET

Note:  
Map adapted from Civil and Environmental Engineers, Inc.  
Site Area Map dated May 16, 2002.

<b>CA RICH CONSULTANTS, INC.</b> Certified Groundwater and Environmental Specialists 17 Dupont Street, Plainview, New York 11803	
<b>TITLE</b>	PERCHLOROETHENE IN AIR SAMPLES DECEMBER 2, 2010
<b>DATE</b>	1/4/2011
<b>SCALE</b>	As Shown
<b>DRAWN BY</b>	S.T.M.
<b>APPR BY</b>	E.A.W.
<b>FIGURE</b>	4
<b>DRAWING NO.</b>	1192-1bc.6
CDC/FLOWER FASHION 47 NORTHERN BLVD. GREAT NECK, N Y 11020	

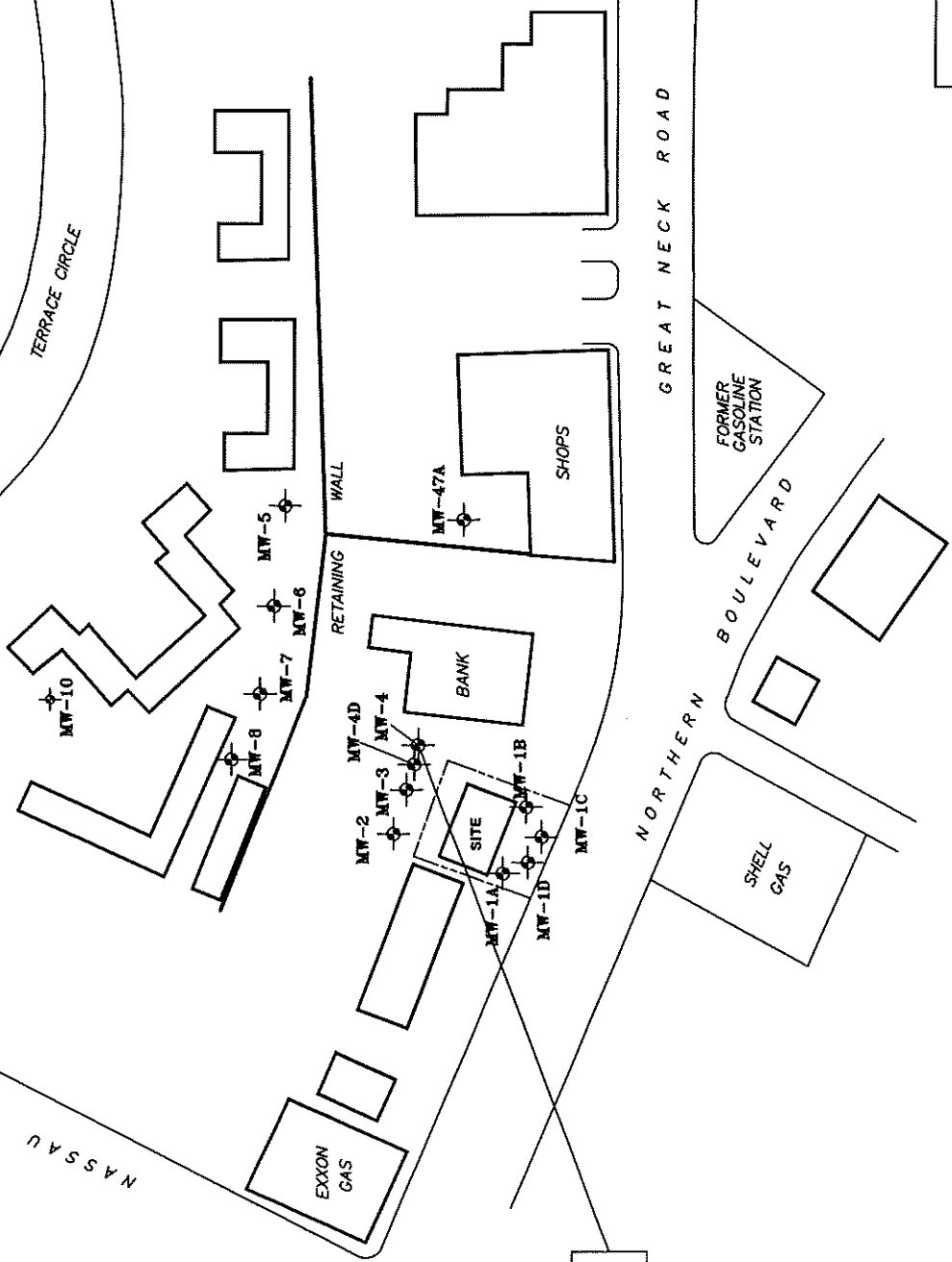


EAST MILL ROAD

TERRACE CIRCLE

GREAT NECK ROAD

NORTHERN BOULEVARD



MW-4  
PCE 7.1 ppb



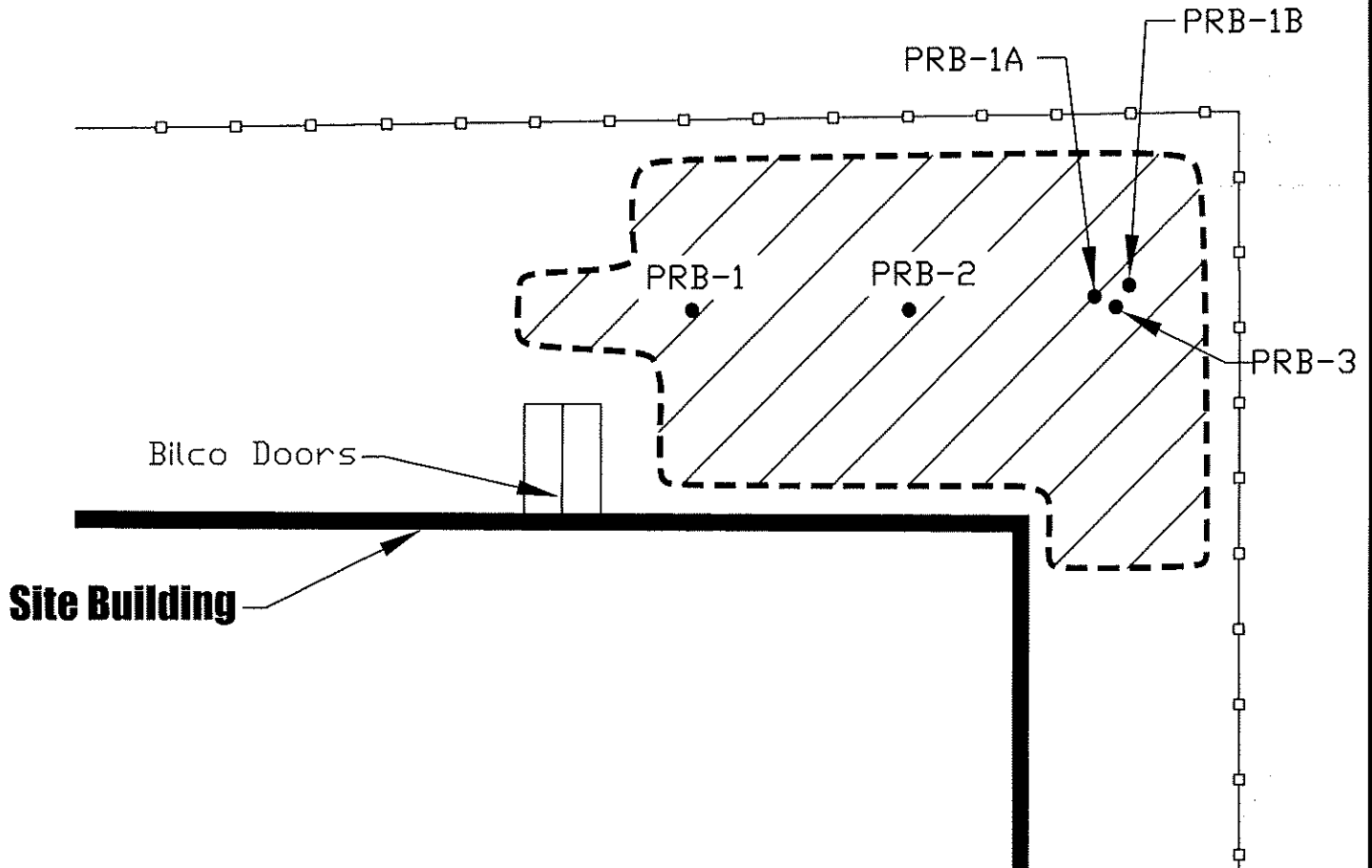
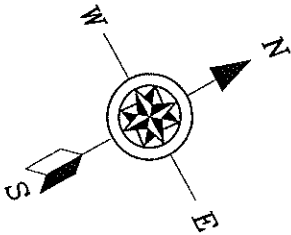
GRAPHIC SCALE IN FEET

**Legend**



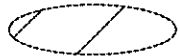
- ⊕ GROUNDWATER MONITORING WELL
- ppb PARTS PER BILLION, MICROGRAMS PER LITER
- ND NOT DETECTED
- 0.51 ↓ PCE CONCENTRATION WITH "J" INDICATING THE CONCENTRATION IS AN ESTIMATED VALUE

Note:  
Map adopted from Civil and Environmental Engineers, Inc. Site Area Map dated May 16, 2002.

<b>CA RICH CONSULTANTS, INC.</b> Certified Ground-Water and Environmental Specialists 17 Dupont Street, Plainview, New York 11803	
TITLE:	Locations of Monitoring Wells
DATE:	1/4/11
SCALE:	As Shown
FIGURE:	5
DRAWING NO.:	2009-3a
DRAWN BY:	CDC/FLOWER FASHION 47 NORTHERN BLVD. GREAT NECK, N Y 11020
APPR. BY:	S.T.M.
E.A.W.	



**LEGEND**

-  POST REMEDIATION BORING LOCATIONS
-  CHAIN LINK FENCE
-  SOIL EXCAVATION AREA

SEE TABLE 2 FOR RESULTS OF SOIL SAMPLES FROM BORINGS PRB-3, 1A, AND 1B



<b>CA RICH CONSULTANTS, INC.</b>	
Certified Groundwater and Environmental Specialists 17 Dupont Street, Plainview, New York 11803	
TITLE:	Post Remediation Boring Locations
DATE:	1/5/2010
SCALE:	As Shown
FIGURE:	6
DRAWN BY:	S.T.M.
DRAWING NO:	2009-4
APPR. BY:	E.A.W.
	CDC/FLOWER FASHION 47 NORTHERN BLVD. GREAT NECK, NY 11020

**Tables**



**Table 2**  
**Summary of VOCs in Soil Samples**  
**CDC/FF Site, Great Neck, New York**

Sample Number Boring Description  Depth in Feet Date Units	PRB-03 (4-6) 3rd boring from initial sampling effort 4 to 6 6/9/2009 ug/Kg	PRB-01A Re-sampling adjacent to 3rd boring from initial sampling effort 4 to 6 3/24/2010 ug/Kg	PRB-1B (4-6) Re-sampling adjacent to 3rd boring from initial sampling effort 4 to 6 12/2/2010 ug/Kg	NYSDEC TAGM* Standard ug/Kg
1,1 Dichloroethane	< 1,100	< 6	< 5.8	NA
1,1 Dichloroethene	< 1,100	< 6	< 5.8	NA
1,1-Dichloropropene	< 1,100	< 6	< 5.8	NA
1,2 Dibromoethane	< 1,100	< 6	< 5.8	NA
1,2 Dichlorobenzene (v)	< 1,100	< 6	< 5.8	NA
1,2 Dichloroethane	< 1,100	< 6	< 1.2	NA
1,2 Dichloropropane	< 1,100	< 6	< 5.8	NA
1,3 Dichlorobenzene (v)	< 1,100	< 6	< 5.8	NA
1,3-Dichloropropane	< 1,100	< 6	< 5.8	NA
1,4 Dichlorobenzene (v)	< 1,100	< 6	< 5.8	NA
111 Trichloroethane	< 1,100	< 6	< 5.8	NA
1112Tetrachloroethane	< 1,100	< 6	< 5.8	NA
112 Trichloroethane	< 1,100	< 6	< 5.8	NA
1122Tetrachloroethane	< 1,100	< 6	< 5.8	NA
123-Trichlorobenzene	< 1,100	< 6	< 5.8	NA
123-Trichloropropane	< 1,100	< 6	< 5.8	NA
124-Trichlorobenzene (v)	< 1,100	< 6	< 5.8	NA
124-Trimethylbenzene	< 1,100	< 6	< 5.8	NA
135-Trimethylbenzene	< 1,100	< 6	< 5.8	NA
2,2-Dichloropropane	< 1,100	< 6	< 5.8	NA
2-Chlorotoluene	< 1,100	< 6	< 5.8	NA
4-Chlorotoluene	< 1,100	< 6	< 5.8	NA
Acetone	< 11,000	< 60	< 5.8	NA
Benzene	< 1,100	< 6	< 5.8	NA
Bromobenzene	< 1,100	< 6	< 5.8	NA
Bromochloromethane	< 1,100	< 6	< 5.8	NA
Bromodichloromethane	< 1,100	< 6	< 5.8	NA
Bromoform	< 1,100	< 6	< 5.8	NA
c-1,2-Dichloroethene	< 1,100	< 6	< 5.8	NA
c-1,3Dichloropropene	< 1,100	< 6	< 5.8	NA
Carbon Tetrachloride	< 1,100	< 6	< 5.8	NA
Chlorobenzene	< 1,100	< 6	< 5.8	NA
Chlorodibromomethane	< 1,100	< 6	< 5.8	NA
Chloroform	< 1,100	< 6	< 5.8	NA
DBCP	< 1,100	< 6	< 5.8	NA
Dibromomethane	< 1,100	< 6	< 5.8	NA
Ethyl Benzene	< 1,100	< 6	< 5.8	NA
Hexachlorobutadiene	< 1,100	< 6	< 5.8	NA
Isopropylbenzene	< 1,100	< 6	< 5.8	NA
m + p Xylene	< 2,300	< 12	< 5.8	NA
Methylene Chloride	< 1,100	< 6	< 5.8	NA
n-Propylbenzene	< 1,100	< 6	< 5.8	NA
Naphthalene(v)	< 1,100	< 6	< 5.8	NA
o Xylene	< 1,100	< 6	< 5.8	NA
p-Isopropyltoluene	< 1,100	< 6	< 5.8	NA
sec-Butylbenzene	< 1,100	< 6	< 5.8	NA
Styrene	< 1,100	< 6	< 5.8	NA
t-1,2-Dichloroethene	< 1,100	< 6	< 5.8	NA
t-1,3Dichloropropene	< 1,100	< 6	< 5.8	NA
tert-Butylbenzene	< 1,100	< 6	< 5.8	NA
Tetrachloroethene	<b>1,500,000</b>	<b>8,700</b>	3.0	1,400
Toluene	< 1,100	< 6	< 5.8	NA
Trichloroethene	< 1,100	< 6	< 5.8	NA
Trichlorofluoromethane	< 1,100	< 6	< 5.8	NA
Vinyl Chloride	< 1,100	< 6	< 5.8	NA

Notes: < = less than or not detected  
 NA = Not applicable as constituent is not detected  
 \* = NYSDEC (Jan. 24, 1994), Technical & Administrative Guidance  
 Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels.  
 \*\* = NYSDEC (Dec. 14, 2006) DER Part 375 Table 375-6.8(b) Restricted Use  
 Soil Cleanup Objectives

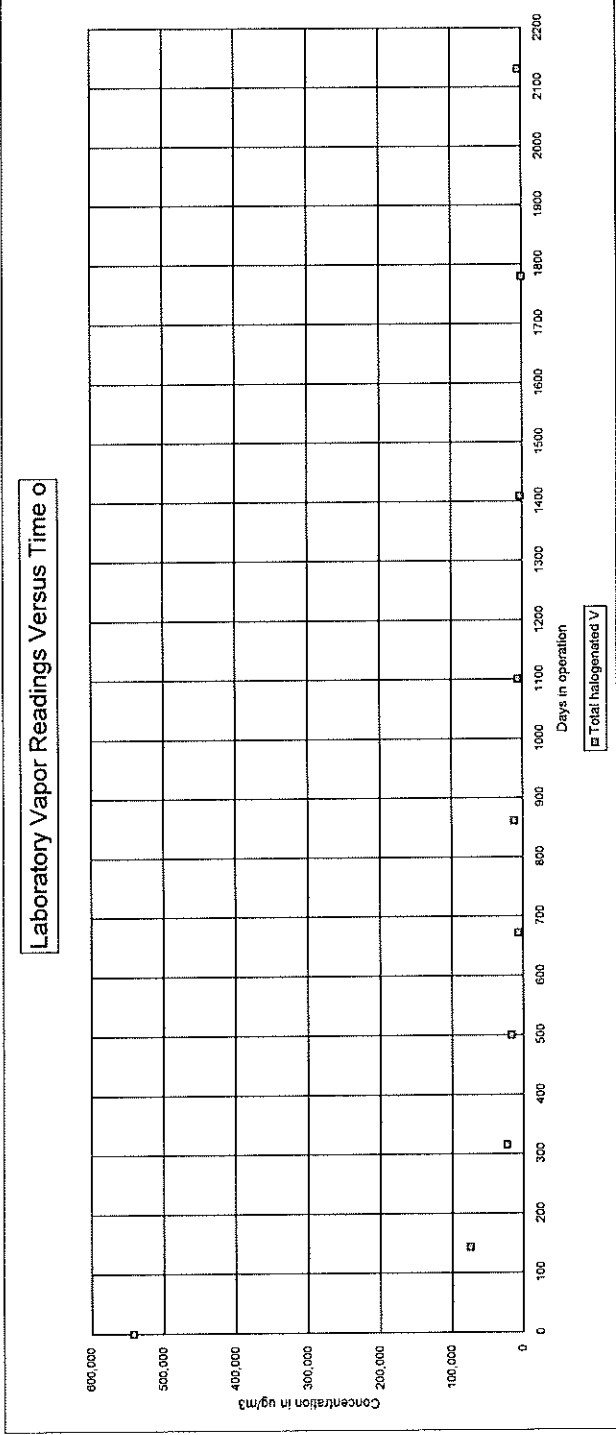
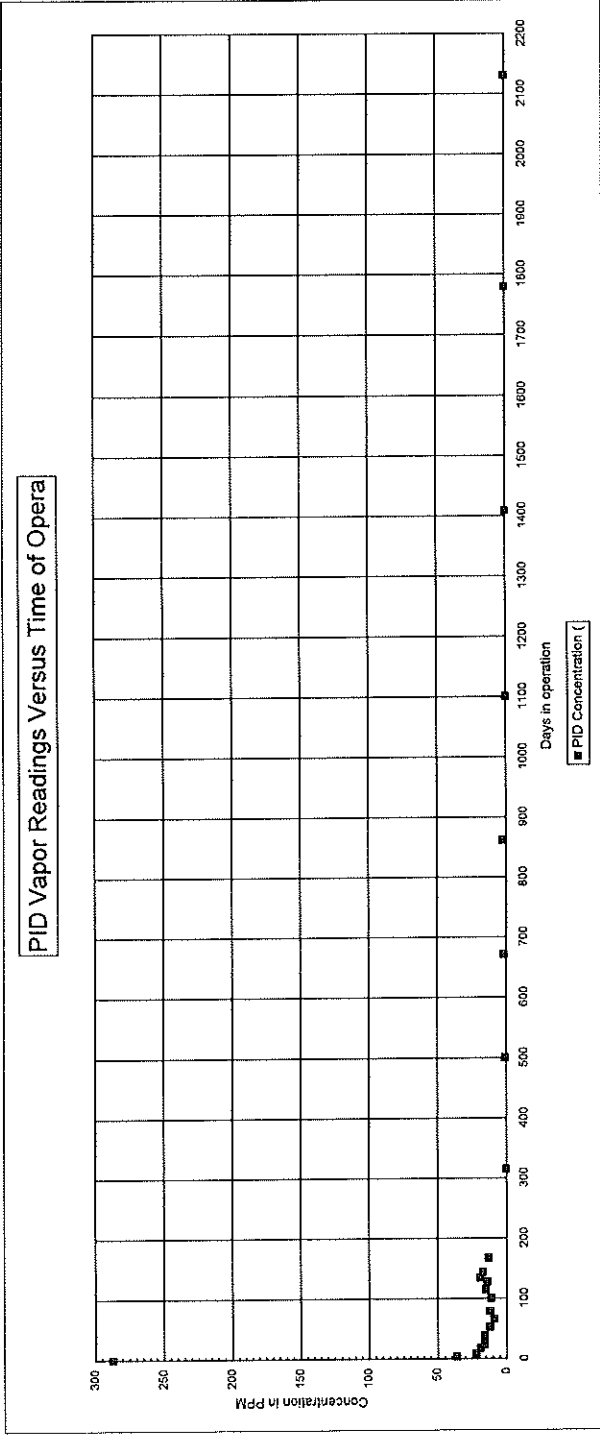


**Table 3**  
**Soil Vapor Extraction Readings**  
**Citizen Development Company - Flower Fashion**  
**47 Northern Boulevard, Great Neck, NY**

Date	Number of Days in Operation	MiniRae PID Before Carbon**	PCE Before Carbon**	TCE Before Carbon**	DCE Before Carbon**	Vinyl Chloride Before Carbon**	Total VOCs Before Carbon**	Comments
01/31/05	0	287	540,000	1,100	670	ND	541,770	Pilot Test & System Start-up - tube sample
02/04/05	4	36						Inject 10 gals. (5%) sodium permanganate
02/09/05	9	22						Inject 10 gals. (5%) sodium permanganate
02/18/05	18	19						Inject 10 gals. (5%) sodium permanganate
02/24/05	24	16						Inject 10 gals. (5%) sodium permanganate
03/04/05	32	16						Inject 10 gals. (5%) sodium permanganate
03/11/05	39	16						Inject 10 gals. (5%) sodium permanganate
03/25/05	53	12						Inject 10 gals. (5%) sodium permanganate
04/07/05	66	9						Inject 10 gals. (5%) sodium permanganate
04/20/05	79	12						Inject 10 gals. (5%) sodium permanganate
05/12/05	101	11						Inject 10 gals. (5%) sodium permanganate
05/26/05	115	15						Inject 10 gals. (5%) sodium permanganate
06/08/05	128	14						Inject 10 gals. (5%) sodium permanganate
06/15/05	135	19						Inject 10 gals. (5%) sodium permanganate
06/24/05	144	17	74,000	ND	ND	ND	74,000	
07/18/05	168	13						
12/13/05	316	0	23,000	ND	ND	ND	23,000	Very Cold, Temp. may have effected PID
06/16/06	501	1	16,284	91	83.0	6.4	16,464	Annual Winter Sample
12/04/06	672	1.7	6,446	59	41.2	1.3	6,548	Summer
06/12/07	862	2.1	11,535	86	83	ND	11,704	Annual Winter Sample
02/06/08	1101	N/A	5,968	44	59	ND	6,071	Annual Winter Sample
12/10/08	1409	2.0	2,511	29	ND	ND	2,540	Annual Winter Sample
12/16/09	1780	0	270	0.91	ND	ND	270.91	Annual Winter Sample
12/02/10	2131	0.3	4342	29.01	32.53	ND	4403.54	Annual Winter Sample

Notes: \* - MiniRae PID field meter measures total VOCs in PPM  
 \*\* - All laboratory analyses reported in ug/m3  
 ND - Not Detect.  
 N/A - Not Available due to PID malfunction.

Table 3 (Continued)





# Enclosures



Enclosure 1  
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
Site Management Periodic Review Report Notice  
Institutional and Engineering Controls Certification Form



Site Details		Box 1	
Site No.	130070		
Site Name	Citizens Development Co.		
Site Address:	47 Northern Boulevard	Zip Code:	11020
City/Town:	Great Neck		
County:	Nassau		
Allowable Use(s) (if applicable, does not address local zoning):	Industrial		
Site Acreage:	1.0		

Verification of Site Details	Box 2	
	YES	NO
1. Are the Site Details above, correct?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If NO, are changes handwritten above or included on a separate sheet?	<input type="checkbox"/>	
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment since the initial/last certification?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If YES, is documentation or evidence that documentation has been previously submitted included with this certification?	<input type="checkbox"/>	
3. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property since the initial/last certification?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If YES, is documentation (or evidence that documentation has been previously submitted) included with this certification?	<input type="checkbox"/>	
4. If use of the site is restricted, is the current use of the site consistent with those restrictions?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If NO, is an explanation included with this certification?	<input type="checkbox"/>	
5. For non-significant-threat Brownfield Cleanup Program Sites subject to ECL 27-1415.7(c), has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?	<input type="checkbox"/>	<input type="checkbox"/>
If YES, is the new information or evidence that new information has been previously submitted included with this Certification?	<input type="checkbox"/>	
6. For non-significant-threat Brownfield Cleanup Program Sites subject to ECL 27-1415.7(c), are the assumptions in the Qualitative Exposure Assessment still valid (must be certified every five years)?	<input type="checkbox"/>	<input type="checkbox"/>

SITE NO. 130070

Box 3

Description of Institutional Controls:

Parcel

Institutional Control

S\_B\_L Image: 0020051202

Decision Document  
Ground Water Use Restriction

Description of Engineering Controls

Box 4

Parcel

Engineering Control

S\_B\_L Image: 0020051202

Vapor Mitigation

Attach documentation if IC/ECs cannot be certified or why IC/ECs are no longer applicable.  
(See Instructions)

Control Description for Site No. 130070

Parcel: 0020051202

The OU-2 ROD calls for institutional controls in the form of an environmental easement to restrict groundwater use and continued OM&M of the soil vapor extraction system and the active sub-slab depressurization system.

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted

YES NO

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

(a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

3. If this site has an Operation and Maintenance (O&M) Plan (or equivalent as required in the Decision Document);

I certify by checking "YES" below that the O&M Plan Requirements (or equivalent as required in the Decision Document) are being met.

4. If this site has a Monitoring Plan (or equivalent as required in the remedy selection document);

I certify by checking "YES" below that the requirements of the Monitoring Plan (or equivalent as required in the Decision Document) is being met.

YES NO

IG CERTIFICATIONS  
SITE NO. 130070

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 2 and/or 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

PETER GALLETTA at CDC, 111-15 QUEENS BLVD, FOREST HILLS, NY  
print name print business address

1137:

am certifying as OWNER (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Peter Galletta 1/6/11  
Signature of Owner or Remedial Party Rendering Certification Date

IG/EG CERTIFICATIONS

Box 7

QUALIFIED ENVIRONMENTAL PROFESSIONAL (QEP) SIGNATURE

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

Eric Weinstock at CARich, 17 DuPont St., Plainville, NY 11803  
print name print business address

am certifying as a Qualified Environmental Professional for the Owner

(Owner or Remedial Party) for the Site named in the Site Details Section of this form.

Eric Weinstock  
Signature of Qualified Environmental Professional, for the Owner or Remedial Party, Rendering Certification



1/4/2011  
Stamp Date



**Appendix A  
Groundwater Laboratory Results  
With DUSR**

# *Premier Environmental Services*

DATA USABILTY SUMMARY REPORT (DUSR)  
OF THE  
CDC FLOWER STATION SITE  
GREAT NECK, NEW YORK

ORGANIC ANALYSES IN  
AQUEOUS AND NON-AQUEOUS SAMPLES

ACCUTEST LABORATORIES, INC.  
DAYTON, NEW JERSEY

LABORATORY REPORT: JA63130

February , 2011

Prepared for  
C.A. Rich Consultants, Inc.  
Plainview, New York

Prepared by  
Premier Environmental Services  
2815 Covered Bridge Road  
Merrick, New York 11566  
(516)223-9761

## NYS DEC Data Usability Summary Report

**DATA VALIDATION FOR:** Volatile Organic Analyses  
(EPA Method 8260B)

**SITE:** CDC- Flower Station  
Great Neck, NY

**CONTRACT LAB:** Accutest Laboratories, Inc.  
Dayton, New Jersey

**LAB REPORT NO.:** JA63130

**REVIEWER:** Renee Cohen

**DATE REVIEW COMPLETED:** February, 2011

**MATRIX:** Aqueous and Non-Aqueous

The data validation was performed according to the guidelines in the described in the New York State Department of Environmental Conservation, Division of Environmental Remediation, Guidance for the Development of Data Usability Summary Reports (DUSR). In addition the data was been reviewed using the protocol specified in the NYS Analytical Services Protocol ('95).

All data are considered valid and acceptable except those analytes which have been rejected "R" (unreliable/unusable). Due to various QC problems some analytes may have been qualified with a "J" (estimated), "N" (presumptive evidence for the presence of the material, "U" (non-detect), or "JN" (presumptive evidence for the presence of the material at an estimated value) flag. All actions are detailed on the attached sheets. A copy of the data qualifiers that may be used in this report is located in Appendix A of this report. Appendix B of this report contains a copy of each sample result page associated with this data set. When data qualifiers were necessary they have been added to these result pages.

Several factors should be noted for all persons using this data. Persons using this data should be aware that no result is guaranteed to be accurate even if it has passed all QC tests. The main purpose of this review is to appropriately qualify outliers and to determine whether the results presented meet the specific site/project criteria for data quality and data use.

This data assessment includes two (2) non-aqueous samples, two (2) aqueous samples, two (2) Field Blank samples and one (1) Trip Blank sample collected December 2, 2010. The samples associated with this data set are summarized in Table 1 of this report. All of the samples were delivered to Accutest Laboratories, located in Dayton, New Jersey. The samples were received at the laboratory on December 3, 2010. All samples were received in good condition. The samples were analyzed for Volatile Organic Analytes (EPA Method 8260B) as specified on the Chain of Custody (COC) documentation that accompanied the samples to the laboratory. A copy of the COC documents associated with this data set is located in Appendix C of this report.

## DATA USABILITY SUMMARY REPORT (DUSR)

### 1. OVERVIEW:

Two (2) non-aqueous,, two (2) aqueous samples, two (2) Field Blank samples and one (1) Trip Blank sample were submitted to the laboratory for the analyses requested on the Chain of Custody (COC) documentation. The samples were analyzed for Volatile Organic Analytes using EPA Test Methods for the Evaluation of Solid Waste (SW 846), Method 8260B. The laboratory reported the Halogenated Volatile Organic Compounds. The laboratory provided a deliverables package in accordance with the guidelines in the NYSDEC ASP, Rev '95, Category B.

### 2. HOLDING TIME:

**The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Preserved volatile organic analyses are required to be analyzed within 10 days of validated time of sample receipt (VTSR) in accordance with the NYSDEC ASP, Rev '95. The technical holding time for properly preserved aqueous and non-aqueous samples is 14 days from collection.**

The aqueous and non-aqueous samples in this data set were analyzed for Volatile Organic Analytes. The samples and associated QC samples were analyzed within the ten (10) days of VTSR. All sample analyses were completed by December 9, 2010. The holding times for all analyses associated with this data set were met.

### 3. SURROGATES:

**All samples are spiked with surrogate compounds prior to sample preparation to evaluate the overall laboratory performance and the efficiency of the analytical technique. If the measured surrogate concentrations are outside the QC limits, qualifiers were applied to the effected samples.**

Each sample was spiked with the surrogate compounds Dibromofluoromethane, 1,2-Dichloroethane-d4, 4-Bromofluorobenzene and Toluene-d8. In-house surrogate recovery limits were reported by the laboratory. The percent recovery of each surrogate met QC criteria in each of the field samples and QC samples associated with this data set.

### 4. MATRIX SPIKE/SPIKE DUPLICATE, MS/MSD:

**The MS/MSD data are generated to determine the long term precision and accuracy of the analytical method in various matrices. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data. The laboratory used the in-house generated recovery criteria and RPD (precision) data for reporting purposes.**

Additional sample volume was collected at location MW-4 for MS/MSD analysis. Accutest Laboratories performed a full component MS/MSD and reported the percent recovery of each target analyte and relative percent difference on this summary form. A review of the percent recoveries and relative percent differences was performed. 2-Chloroethylvinyl ether was not detected in either the MS or MSD sample due to the preservation of the VOA vial. Data was not qualified based on the percent recovery or the RPD of the site specific MS/MSD sample set.

In addition to the site specific MS/MSD analysis was performed on sample PRB-1B (4-6). The matrix spike sample was fortified with all target analytes. The percent recovery of all target analytes and each RPD met QC criteria.

In addition one (1) Blank Spike sample is associated with each sample batch as required by the method. The Blank spike sample was fortified with all target analytes. The recover of all analytes in each of the blank spike samples met QC criteria.

## **DATA USABILITY SUMMARY REPORT (DUSR)**

### **5. BLANK CONTAMINATION:**

**Quality assurance (QA) blanks, such as the method, trip, field, or rinse blanks are prepared to identify any contamination that may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field blanks measure cross-contamination of samples during field operations. Samples are then qualified based on blank contamination when detected.**

#### **A) Method Blank contamination**

Three (3) aqueous method blank samples are associated with this data set. Each was free from contamination of all target analytes.

#### **B) Field Blank contamination**

One (1) aqueous and one (1) non-aqueous Field Blank sample are reported with set. The non-aqueous sample Field Blank sample (PRBFB12210) was free from contamination of all target analytes. The aqueous sample Field Blank sample (MW4FB122110) was free from contamination of all target analytes.

#### **C) Trip Blank contamination**

The Trip Blank sample (TRIP BLANK) was free from contamination of all target analytes.

## DATA USABILITY SUMMARY REPORT (DUSR)

### 6. GC/MS CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument is giving satisfactory daily performance. USEPA data validation criteria is the same for all analytes in both GC/MS Volatile and GC/MS Semivolatile Organic analyses, therefore, all text discussion is for VOA and SVOA samples analyses.

#### A) RESPONSE FACTOR

The response factor measures the instrument's response to specific chemical compounds. USEPA data review requires that the response factor of all analytes be greater than or equal to 0.05 in both initial and continuing calibration analyses. A value less than 0.05 indicates a serious detection and quantitation problem (poor sensitivity). USEPA data validation criteria states that if the minimum RRF criteria are not met in an initial calibration the positive results are qualified "J". Non-detect results in the initial calibration with a RRF <0.05 are qualified "R", unusable. If RRF criteria is not met in the continuing calibration curve analysis, affected positive analytes will be qualified "J" estimated. Those analytes not detected are not qualified. The SW-846 Methods cite specific analytes known as System Performance Check Compounds (SPCC). Minimum response criteria has been set for these analytes. If the minimum criteria are not met, analyses must stop and the source of problems must be found and corrected. Data associated with this set has been reviewed for the criteria in the cited in the EPA Method and the USEPA criteria.

One (1) aqueous initial calibration curve and one (1) non-aqueous calibration curve analysis is associated with this data set. The laboratory performed an aqueous initial multi-level calibration on December 2, 2010 (Inst. 4D). The RRF for all target compounds met QC criteria in this initial calibration curve.

One (1) continuing calibration standard is associated with this data set. The response factor for all target analytes met QC criteria in this continuing calibration standard analysis.

The laboratory performed a non-aqueous initial multi-level calibration on December 1, 2010 (Inst. V). The RRF for all target compounds.

Two (2) continuing calibration standard is associated with this data set. The response factor for all target analytes met QC criteria in this continuing calibration standard analysis.

## DATA USABILITY SUMMARY REPORT (DUSR)

### 6. GC/MS CALIBRATION (cont'd):

#### B) PERCENT RELATIVE STANDARD DEVIATION (RSD) AND PERCENT DIFFERENCE (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of the compounds in the continuing calibration standard to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Region II data validation criteria states that the percent RSD of the initial calibration curve must be less than or equal to 30%. The %D must be <25% in the continuing calibration standard. This criteria has been applied to all target analytes. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects may be flagged "UJ", based on professional judgment. If %RSD and %D grossly exceed QC criteria (>90%), non-detects data may be qualified "R", unusable. Data associated with this set has been reviewed for the criteria in the cited in the USEPA Data Validation Guidelines.

One (1) aqueous initial calibration curve and one (1) non-aqueous calibration curve analysis is associated with this data set. The laboratory performed an aqueous initial multi-level calibration on December 2, 2010 (Inst. 4D). The %RSD of all target compounds met QC criteria in this initial calibration curve.

One (1) continuing calibration standard is associated with this data set. The %Difference/%Drift for all target analytes met QC criteria in this continuing calibration standard analysis.

The laboratory performed a non-aqueous initial multi-level calibration on December 1, 2010 (Inst. V). The %RSD for all target compounds met QC criteria in this initial calibration curve.

Two (2) continuing calibration standard is associated with this data set. The %Difference/%Drift factor for all target analytes met QC criteria in each of these continuing calibration standard analyses with the exception of that listed below:

File ID	Date of Analysis	Analyte	%Difference
V110209.D	12/9/10	Bromodichloromethane	26.1
		Trans 1,3-Dichloropropene	27.2
		1,1,2-Trichloroethane	27.8
		Tetrachloroethene	27.0
		Dibromochloromethane	26.8
		Bromoform	31.0

This continuing calibration standard analysis is associated with the site specific MS/MSD analysis of sample PRB-1B (4-6). All other non-aqueous samples in this data set were analyzed with the CCV standard V110227.D in which all %Difference/%Drift criteria were met.

## DATA USABILITY SUMMARY REPORT (DUSR)

### 7. GC/MS MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds, and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is Bromofluorobenzene (BFB). If the mass calibration is in error, or missing, all associated data will be classified as unusable, "R".

All BFB Instrument Tuning criteria were met for these sample analyses.

### 8. GC/MS INTERNAL STANDARDS PERFORMANCE:

Internal standard (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every run. The method recommends that the internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The method recommends that the retention time of the internal standard must not vary more than  $\pm 30$  seconds from the associated continuing calibration standard. The EPA CLP validation guidelines state that if the area count is outside the (-50% to +100%) range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified estimated, "J", and all non-detects below 50% are qualified "UJ", non-detects above 100% should not be qualified or "R" if there is a severe loss of sensitivity. The internal standard evaluation criteria are applied to all field and QC samples.

All samples were fortified with the internal standards Tert Butyl Alcohol-d9, Pentafluorobenzene, 1,4-Difluorobenzene, Chlorobenzene-d5 and 1,4-Dichlorobenzene-d4. All internal standard area criteria were met in each of the samples associated with this data set.

### 9. COMPOUND IDENTIFICATION:

Target compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within  $\pm 0.06$  RRT units of the standard compound, and have an ion spectra which has a ratio of the primary and secondary ion intensities with 20% of that in the standard compound.

The samples in this data set were analyzed in accordance with EPA Method 8260B. The Halogenated list of analytes was reported. The samples in this data set were all analyzed and reported without dilution to the laboratory reporting limit. The laboratory provided the sample chromatogram, quantitation report and spectra for the positive hits detected in each of the samples in this sample set. The sample data was reported in accordance with the cited method.



## DATA USABILITY SUMMARY REPORT (DUSR)

### 10. FIELD DUPLICATE ANALYSES:

Field duplicate samples are collected and analyzed as an indication of overall precision. These results are expected to have more variability than laboratory duplicate samples. Soil samples will have a greater variance due to the difficulties associated with collecting exact duplicate soil samples than aqueous samples. If the RPD among sample duplicates was greater than thirty-five (35) for sample results above the method detection limit the data was qualified based on the actions cited in the validation guidelines used to review this data set. Analytes reported above the reporting limit are listed.

CA Rich Consultants collected one (1) non-aqueous and one (1) aqueous sample in duplicate in this data set. Below is a summary of detected analytes in these field duplicate sample analyses.

#### Sample ID: PRB-1B (4-6) (JA63130-1)/MW-XX (JA63130-5)

Analyte	Result (ug/kg)	Result (ug/kg)	RPD (%)
Tetrachloroethene	3.0 J	0.92 J	>100

#### Sample ID: MW-4 (JA63130-4)/PRB-XX (JA63130-2)

Analyte	Result (ug/l)	Result (ug/l)	RPD (%)
Tetrachloroethene	7.1	6.3	11.9

The results of the duplicate sample data are reported above. Tetrachloroethene has been qualified "J" estimated in the soil sample field duplicate sample set. The aqueous field duplicate analysis met the criteria described in the validation guidelines.

Qualified data result pages are located in Appendix B of this report.

### 11. OVERALL ASSESSMENT:

Analytical QC criteria were met for these analyses. The data reported agrees with the raw data provided in the final report. The laboratory reported the sample data using acceptable protocols and laboratory qualifiers as defined in the report package. The data provided for this data set is acceptable for use with the noted data qualifiers.

A copy of the data result pages is located in Appendix B of this report. Qualifiers when applied are noted on these data result pages.

**TABLE 1**

**CLIENT SAMPLE ID**

**LABORATORY SAMPLE ID**

PRB-1B(4-6)  
PRB-1B(4-6)MS  
PRB-1B(4-6)MSD  
PRB-XX  
PRBFB12210  
MW-4  
MW-4MS  
MW-4MSD  
MW-XX  
MW-4FB122110  
TRIP BLANK

JA63130-1  
JA63130-1MS  
JA63130-1MSD  
JA63130-2  
JA63130-3  
JA63130-4  
JA63130-4MS  
JA63130-4MSD  
JA63130-5  
JA63130-6  
JA63130-7

## **APPENDIX A**

## **DATA QUALIFIER DEFINITIONS**

**U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.**

**J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.**

**N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a “tentative identification.”**

**NJ - The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated numerical value represents its approximate concentration.**

**UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.**

**R - The sample results are unreliable/unusable. The presence or absence of the analyte cannot be verified.**

**K – The analyte is present. The reported value may be biased high. The actual value is expected to be lower than reported.**

**L - The analyte is present. The reported value may be biased low. The actual value is expected to be higher than reported.**

**UL – The analyte was not detected, and the reported quantitation limit is probably higher than reported.**

## **APPENDIX B**

Accutest Laboratories

## Report of Analysis

Page 1 of 2

3.1

3

Client Sample ID:	PRB-1B(4-6)	Date Sampled:	12/02/10
Lab Sample ID:	JA63130-1	Date Received:	12/03/10
Matrix:	SO - Soil	Percent Solids:	93.1
Method:	SW846 8260B		
Project:	Flower Station, 47 Northern Boulevard, Great Neck, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V110233.D	1	12/09/10	JLI	n/a	n/a	VV4662
Run #2							

Run #	Initial Weight
Run #1	4.6 g
Run #2	

## VOA Halogenated List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-27-4	Bromodichloromethane	ND	5.8	0.30	ug/kg	
75-25-2	Bromoform	ND	5.8	0.18	ug/kg	
74-83-9	Bromomethane	ND	5.8	0.47	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.8	0.65	ug/kg	
108-90-7	Chlorobenzene	ND	5.8	0.40	ug/kg	
75-00-3	Chloroethane	ND	5.8	1.2	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	29	0.48	ug/kg	
67-66-3	Chloroform	ND	5.8	0.37	ug/kg	
74-87-3	Chloromethane	ND	5.8	0.19	ug/kg	
124-48-1	Dibromochloromethane	ND	5.8	0.13	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.8	0.32	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.8	0.32	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.8	0.39	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.8	1.1	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.8	0.16	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.2	0.40	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.8	0.77	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.8	0.28	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.8	0.52	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	5.8	0.28	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.8	0.15	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.8	0.16	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.8	0.11	ug/kg	
75-09-2	Methylene chloride	ND	5.8	0.26	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.8	0.34	ug/kg	
127-18-4	Tetrachloroethene	3.0 J	5.8	0.17	ug/kg	J
71-55-6	1,1,1-Trichloroethane	ND	5.8	0.15	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.8	0.22	ug/kg	
79-01-6	Trichloroethene	ND	5.8	0.61	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.8	0.27	ug/kg	
75-01-4	Vinyl chloride	ND	5.8	0.21	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

3.1

<b>Client Sample ID:</b> PRB-1B(4-6)	<b>Date Sampled:</b> 12/02/10
<b>Lab Sample ID:</b> JA63130-1	<b>Date Received:</b> 12/03/10
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 93.1
<b>Method:</b> SW846 8260B	
<b>Project:</b> Flower Station, 47 Northern Boulevard, Great Neck, NY	

**VOA Halogenated List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		67-127%
17060-07-0	1,2-Dichloroethane-D4	86%		65-132%
2037-26-5	Toluene-D8	108%		74-129%
460-00-4	4-Bromofluorobenzene	85%		62-138%

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

Page 1 of 2

3.2

3

Client Sample ID:	PRB-XX	Date Sampled:	12/02/10
Lab Sample ID:	JA63130-2	Date Received:	12/03/10
Matrix:	SO - Soil	Percent Solids:	88.2
Method:	SW846 8260B		
Project:	Flower Station, 47 Northern Boulevard, Great Neck, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V110234.D	1	12/09/10	JLI	n/a	n/a	VV4662
Run #2							

Run #	Initial Weight
Run #1	4.6 g
Run #2	

## VOA Halogenated List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-27-4	Bromodichloromethane	ND	6.2	0.32	ug/kg	
75-25-2	Bromoform	ND	6.2	0.19	ug/kg	
74-83-9	Bromomethane	ND	6.2	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.2	0.68	ug/kg	
108-90-7	Chlorobenzene	ND	6.2	0.42	ug/kg	
75-00-3	Chloroethane	ND	6.2	1.2	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	31	0.51	ug/kg	
67-66-3	Chloroform	ND	6.2	0.39	ug/kg	
74-87-3	Chloromethane	ND	6.2	0.20	ug/kg	
124-48-1	Dibromochloromethane	ND	6.2	0.14	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	6.2	0.33	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	6.2	0.34	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	6.2	0.42	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	6.2	1.2	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.2	0.17	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.2	0.43	ug/kg	
75-35-4	1,1-Dichloroethene	ND	6.2	0.82	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	6.2	0.29	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	6.2	0.55	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	6.2	0.29	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.2	0.16	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.2	0.16	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.2	0.12	ug/kg	
75-09-2	Methylene chloride	ND	6.2	0.27	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.2	0.36	ug/kg	
127-18-4	Tetrachloroethene	0.92 J	6.2	0.18	ug/kg	J
71-55-6	1,1,1-Trichloroethane	ND	6.2	0.16	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.2	0.23	ug/kg	
79-01-6	Trichloroethene	ND	6.2	0.65	ug/kg	
75-69-4	Trichlorofluoromethane	ND	6.2	0.28	ug/kg	
75-01-4	Vinyl chloride	ND	6.2	0.22	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



<b>Client Sample ID:</b> PRB-XX		<b>Date Sampled:</b> 12/02/10
<b>Lab Sample ID:</b> JA63130-2		<b>Date Received:</b> 12/03/10
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 88.2
<b>Method:</b> SW846 8260B		
<b>Project:</b> Flower Station, 47 Northern Boulevard, Great Neck, NY		

**VOA Halogenated List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		67-127%
17060-07-0	1,2-Dichloroethane-D4	88%		65-132%
2037-26-5	Toluene-D8	109%		74-129%
460-00-4	4-Bromofluorobenzene	83%		62-138%

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

Page 1 of 2

Client Sample ID:	PRBFB12210	Date Sampled:	12/02/10
Lab Sample ID:	JA63130-3	Date Received:	12/03/10
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Flower Station, 47 Northern Boulevard, Great Neck, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D04783.D	1	12/08/10	MMC	n/a	n/a	V4D210
Run #2							

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

## VOA Halogenated List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	1.4	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	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	0.25	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	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



<b>Client Sample ID:</b>	PRBFB12210	<b>Date Sampled:</b>	12/02/10
<b>Lab Sample ID:</b>	JA63130-3	<b>Date Received:</b>	12/03/10
<b>Matrix:</b>	AQ - Field Blank Soil	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	Flower Station, 47 Northern Boulevard, Great Neck, NY		

### VOA Halogenated List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		76-120%
17060-07-0	1,2-Dichloroethane-D4	95%		64-135%
2037-26-5	Toluene-D8	102%		76-117%
460-00-4	4-Bromofluorobenzene	100%		72-122%

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

Page 1 of 2

3.4

Client Sample ID:	MW-4	Date Sampled:	12/02/10
Lab Sample ID:	JA63130-4	Date Received:	12/03/10
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Flower Station, 47 Northern Boulevard, Great Neck, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D04782.D	1	12/08/10	MMC	n/a	n/a	V4D210
Run #2							

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

## VOA Halogenated List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	1.4	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	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	0.25	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	7.1	1.0	0.27	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	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



<b>Client Sample ID:</b> MW-4		<b>Date Sampled:</b> 12/02/10
<b>Lab Sample ID:</b> JA63130-4		<b>Date Received:</b> 12/03/10
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> Flower Station, 47 Northern Boulevard, Great Neck, NY		

VOA Halogenated List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		76-120%
17060-07-0	1,2-Dichloroethane-D4	93%		64-135%
2037-26-5	Toluene-D8	103%		76-117%
460-00-4	4-Bromofluorobenzene	101%		72-122%

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

Page 1 of 2

3.5

Client Sample ID:	MW-XX	Date Sampled:	12/02/10
Lab Sample ID:	JA63130-5	Date Received:	12/03/10
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Flower Station, 47 Northern Boulevard, Great Neck, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D04784.D	1	12/08/10	MMC	n/a	n/a	V4D210
Run #2							

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

## VOA Halogenated List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	1.4	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	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	0.25	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	6.3	1.0	0.27	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	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-XX	Date Sampled:	12/02/10
Lab Sample ID:	JA63130-5	Date Received:	12/03/10
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Flower Station, 47 Northern Boulevard, Great Neck, NY		

VOA Halogenated List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		76-120%
17060-07-0	1,2-Dichloroethane-D4	96%		64-135%
2037-26-5	Toluene-D8	102%		76-117%
460-00-4	4-Bromofluorobenzene	102%		72-122%

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

Page 1 of 2

3.6

Client Sample ID: MW4FB122110

Lab Sample ID: JA63130-6

Date Sampled: 12/02/10

Matrix: AQ - Field Blank Water

Date Received: 12/03/10

Method: SW846 8260B

Percent Solids: n/a

Project: Flower Station, 47 Northern Boulevard, Great Neck, NY

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D04785.D	1	12/08/10	MMC	n/a	n/a	V4D210
Run #2							

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

## VOA Halogenated List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	1.4	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	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	0.25	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	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



<b>Client Sample ID:</b> MW4FB122110	<b>Date Sampled:</b> 12/02/10
<b>Lab Sample ID:</b> JA63130-6	<b>Date Received:</b> 12/03/10
<b>Matrix:</b> AQ - Field Blank Water	<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B	
<b>Project:</b> Flower Station, 47 Northern Boulevard, Great Neck, NY	

VOA Halogenated List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		76-120%
17060-07-0	1,2-Dichloroethane-D4	95%		64-135%
2037-26-5	Toluene-D8	102%		76-117%
460-00-4	4-Bromofluorobenzene	102%		72-122%

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

Page 1 of 2

3.7

Client Sample ID:	TRIP BLANK	Date Sampled:	12/02/10
Lab Sample ID:	JA63130-7	Date Received:	12/03/10
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Flower Station, 47 Northern Boulevard, Great Neck, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D04786.D	1	12/08/10	MMC	n/a	n/a	V4D210
Run #2							

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

## VOA Halogenated List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	1.4	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	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	0.25	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	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



<b>Client Sample ID:</b> TRIP BLANK	<b>Date Sampled:</b> 12/02/10
<b>Lab Sample ID:</b> JA63130-7	<b>Date Received:</b> 12/03/10
<b>Matrix:</b> AQ - Trip Blank Water	<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B	
<b>Project:</b> Flower Station, 47 Northern Boulevard, Great Neck, NY	

### VOA Halogenated List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		76-120%
17060-07-0	1,2-Dichloroethane-D4	97%		64-135%
2037-26-5	Toluene-D8	102%		76-117%
460-00-4	4-Bromofluorobenzene	101%		72-122%

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 C**

<b>Client / Reporting Information</b> Company Name: <b>CA Rich Consultants Inc.</b> Street Address: <b>17 Dupont St</b> City: <b>Plainville, NY 11803</b> Project Contact: <b>eWeinstock@carichinc.com</b> Phone # 1: <b>516 576 8844</b> Phone # 2: <b>516 576 0093</b> Sample(s) Name(s): <b>Michael Yager 516 576 8844</b>		<b>Project Information</b> Project Name: <b>FF-CDC</b> Street: <b>47 Northern Blvd.</b> City: <b>Great Neck NY</b> Billing Information (if different from Report to): Company Name: _____ Street Address: _____ City: _____ State: _____ Zip: _____ Client Purchase Order #: _____ Project Manager: <b>Eric Weinstock</b>		<b>Requested Analysis (see TEST CODE sheet)</b> Matrix Codes: DW - Drinking Water GW - Ground Water WW - Wastewater SW - Surface Water SO - Soil SL - Sludge SED - Sediment CL - Oil LIQ - Other Liquids AIR - Air SOL - Other Solid WP - Waste FB - Field Blank ED - Equipment Blank RB - Reagent Blank TB - Trip Blank LAB USE ONLY 19MS 899B			
<b>Turnaround Time (Business days)</b> <input checked="" type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> Std. 10 Business Days (by Contract only) <input type="checkbox"/> 10 Day RUSH <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY Emergency & Rush TIA data available via Labfax		<b>Approved By (Account Mgr. / Detec)</b> _____ _____ _____ _____ _____		<b>Data Deliverable Information</b> <input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> NYASP Category A <input type="checkbox"/> Commercial "B" (Level 2) <input checked="" type="checkbox"/> NYASP Category B <input type="checkbox"/> FULLTY (Level 3-4) <input type="checkbox"/> State Permit <input type="checkbox"/> NJ Reduced <input type="checkbox"/> EDO Format <input type="checkbox"/> Commercial "C" <input type="checkbox"/> Other _____ Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw Data		Comments / Special Instructions: <b>VOC Halogenated Only by 8260</b>	
Sample Custody must be documented below each time samples change possession, including courier delivery.							
Released By: <b>Michael Yager</b> Date Time: <b>12/2/10 2pm</b>		Received By: <b>Fcd</b> Date Time: _____		Released By: <b>Fcd</b> Date Time: <b>12/2/10 9a</b>		Received By: <b>M Adams</b>	
Released By: _____ Date Time: _____		Received By: _____ Date Time: _____		Released By: _____ Date Time: _____		Received By: _____ Date Time: _____	
Released By: _____ Date Time: _____		Received By: _____ Date Time: _____		Released By: _____ Date Time: _____		Received By: _____ Date Time: _____	
Released By: _____ Date Time: _____		Received By: _____ Date Time: _____		Released By: _____ Date Time: _____		Received By: _____ Date Time: _____	

VOC-8260 Halogenated only

4.1  
4



**Appendix B**  
**Indoor Air Laboratory Data**





Mr. Eric Weinstock  
CA Rich Consultants, Inc.  
17 Dupont Street  
Plainview, NY 11803

December 10, 2010

DOH ELAP# 11626

Account# 14715

Login# L229687

Dear Mr. Weinstock:

Enclosed are the analytical results for the samples received by our laboratory on December 03, 2010. All test results meet the quality control requirements of AIHA and NELAC unless otherwise stated in this report. All samples on the chain of custody were received in good condition unless otherwise noted.

Results in this report are based on the sampling data provided by the client and refer only to the samples as they were received at the laboratory. Unless otherwise requested, all samples will be discarded 14 days from the date of this report.

Please contact Charlene Moser at (888) 432-5227, if you would like any additional information regarding this report.

Thank you for using Galson Laboratories.

Sincerely,

Galson Laboratories

A handwritten signature in cursive script that reads "Mary G. Unangst".

Mary G. Unangst  
Laboratory Director

Enclosure(s)



LABORATORY ANALYSIS REPORT

6601 Kirkville Road  
 East Syracuse, NY 13057  
 (315) 432-5227  
 FAX: (315) 437-0571  
 www.galsonlabs.com

Client : CA Rich Consultants, Inc  
 Site : 47 Northern Blvd  
 Project No. : FF-CDC  
 Date Sampled : 02-DEC-10  
 Date Received : 03-DEC-10  
 Date Analyzed : 07-DEC-10  
 Report ID : 674696  
 Account No.: 14715  
 Login No. : L229687

**Perchloroethylene**

<u>Sample ID</u>	<u>Lab ID</u>	<u>Time minutes</u>	<u>Raw ug</u>	<u>Total ug</u>	<u>Conc ug/m3</u>
PDM-1	L229687-1	1495	0.07	0.07	2
PDM-2	L229687-2	1500	0.13	0.13	3.1
PDM-4	L229687-3	1465	1.7	1.7	40
PDM-5	L229687-4	1475	1.6	1.6	37
PDM-6	L229687-5	1490	<0.06	<0.06	<1

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Level of quantitation: 0.06 ug  
 Analytical Method : mod. NYS DOH 311-9  
 OSHA PEL (TWA) : 100 ppm  
 Collection Media : M3M-3500  
 Submitted by: mln  
 Approved by : rjw  
 Date : 10-DEC-10 NYS DOH # : 11626  
 QC by: Tony D'Amico

< -Less Than                    mg -Milligrams                    m3 -Cubic Meters                    kg -Kilograms  
 > -Greater Than                ug -Micrograms                    l -Liters                                NS -Not Specified  
 NA -Not Applicable            ND -Not Detected                    ppm -Parts per Million



LABORATORY FOOTNOTE REPORT

6601 Kirkville Road  
East Syracuse, NY 13057  
(315) 432-5227  
FAX: (315) 437-0571  
www.galsonlabs.com

Client Name : CA Rich Consultants, Inc  
Site : 47 Northern Blvd  
Project No. : FF-CDC

Date Sampled : 02-DEC-10  
Date Received: 03-DEC-10  
Date Analyzed: 07-DEC-10

Account No.: 14715  
Login No. : L229687

---

Unless otherwise noted below, all quality control results associated with the samples were within established control limits.

Unrounded results are carried through the calculations that yield the final result and the final result is rounded to the number of significant figures appropriate to the accuracy of the analytical method. Please note that results appearing in the columns preceding the final result column may have been rounded in order to fit the report format and therefore, if carried through the calculations, may not yield an identical final result to the one reported.

The stated LOQs for each analyte represent the demonstrated LOQ concentrations prior to correction for desorption efficiency (if applicable).

L229687 (Report ID: 674696):  
Total ug corrected for a desorption efficiency of 103%.  
SOPs: GC-SOP-12(3), GC-SOP-16(5), GC-SOP-9(4)

---

< -Less Than	mg -Milligrams	m3 -Cubic Meters	kg -Kilograms
> -Greater Than	ug -Micrograms	l -Liters	NS -Not Specified
NA -Not Applicable	ND -Not Detected	ppm -Parts per Million	

---



6601 Kirkville Rd  
 East Syracuse, NY 13057  
 Tel: (315) 432-5227  
 888-432-LABS (5227)  
 Fax: (315) 437-0571  
 www.galsonlabs.com

Report To: CA Rich Consultants, Inc.  
17 Airport St  
Plainville, NY 11803

Invoice To: Same

Phone No.: 516-576-8844  
 Fax No.: 516-576-0093

Phone No.:  
 Fax No.:

Site Name: 47 Northern Blvd Project: FF-CDC Sampled By: M. Yager

Samples submitted using the FreePumpLoan™ Program.

Samples submitted using the FreeSamplingBadges™ Program.

Need Results By: (surcharge)  
 5 Business Days 0%  
 4 Business Days 35%  
 3 Business Days 50%  
 2 Business Days 75%  
 Next Day by 6pm 100%  
 Next Day by Noon 150%  
 Same day 200%

Client Account No.:  
 Purchase Order No.:  
 Credit Card No.:

Card Holder Name: Exp.:

Email / Fax Results To: Eric Weinstock  
 Email Address: e.weinstock@ca-rich.com Fax No.:

Sample Identification	Date Sampled	Collection Medium	*Air Volume (Liters)	Passive Monitors (Min)	Analysis Requested	Method Reference	Specific DL Needed
1. PAM-1	12/1-12/2/10	3M 3500 OVM	1495	1495	PCE	NYSDOH 311.9	5 ug/m <sup>3</sup>
2. PAM-2	12/1-12/2/10	3M 3500 OVM	1500	1500	PCE	NYSDOH 311.9	5 ug/m <sup>3</sup>
3. PAM-4	12/1-12/2/10	3M 3500 OVM	1465	1465	PCE	NYSDOH 311.9	5 ug/m <sup>3</sup>
4. PAM-5	12/1-12/2/10	3M 3500 OVM	1475	1475	PCE	NYSDOH 311.9	5 ug/m <sup>3</sup>
5. PAM-6	12/1-12/2/10	3M 3500 OVM	1490	1490	PCE	NYSDOH 311.9	5 ug/m <sup>3</sup>
6.							
7.							
8.							
9.							
10.							
11.							

Yes  No We normally add a laboratory blank for each analyte. We will charge you for this at our normal rate. If you agree please check "Yes" otherwise check "No".  
 List description of industry or process / interference's present in sampling area:

Comments:

Chain of Custody	Print Name	Signature	Date/Time
Relinquished by:	Michael Yager - CA Rich	Michael Yager	12/2/10 12:10 PM
Received by LAB:	ALOST	Michael Yager	12/3/10 09:35 AM

Samples received after 3pm will be considered as next day's business.

\* sample collection time X LPM = Air Vol.

LAB ORIGINAL

**Appendix C**  
**SVE System Laboratory Data**

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777 • FAX (631) 422-5770

Email: ecotestlab@aol.com Website: www.ecotestlabs.com

LAB NO.105589.00

12/06/10

C.A. Rich Consultants, Incorporated  
17 Dupont Street  
Plainview, NY 11803

ATTN: Eric Weinstock

PO#:

SOURCE OF SAMPLE: CDC-FF, 47 Northern Blvd., Great Neck, NY  
SOURCE OF SAMPLE:COLLECTED BY: Client DATE COL'D:12/02/10 RECEIVED:12/02/10  
TIME COL'D:0815

MATRIX:Air SAMPLE: RAW 12/2/10

ANALYTICAL PARAMETERS	UNITS	RESULT	DATE TIME	FLAG OF ANALYSIS	LRL	ANALYTICAL METHOD
Propylene	ppbv	< 0.5	120310		0.5	EPATO-15
Dichlorodifluoromethane	ppbv	< 0.2	120310		0.2	EPATO-15
1,2-Dichlorotetrafluoroethan	ppbv	< 0.2	120310		0.2	EPATO-15
Chloromethane	ppbv	< 1	120310		1	EPATO-15
1,3 Butadiene	ppbv	< 1	120310		1	EPATO-15
Vinyl Chloride	ppbv	< 0.2	120310		0.2	EPATO-15
Bromomethane	ppbv	< 0.2	120310		0.2	EPATO-15
Chloroethane	ppbv	< 1	120310		1	EPATO-15
Vinyl Bromide	ppbv	< 0.2	120310		0.2	EPATO-15
Trichlorofluoromethane	ppbv	< 0.2	120310		0.2	EPATO-15
Ethyl alcohol	ppbv	< 2	120310		2	EPATO-15
Freon 113	ppbv	< 0.1	120310		0.1	EPATO-15
1,1 Dichloroethene	ppbv	< 0.1	120310		0.1	EPATO-15
Acetone	ppbv	< 1	120310		1	EPATO-15
Carbon disulfide	ppbv	< 0.5	120310		0.5	EPATO-15
Isopropyl Alcohol	ppbv	< 5	120310		5	EPATO-15
3-Chloropropene	ppbv	< 0.5	120310		0.5	EPATO-15
Methylene Chloride	ppbv	< 0.2	120310		0.2	EPATO-15
tert. Butyl Alcohol	ppbv	< 2	120310		2	EPATO-15
ter. ButylMethylEther	ppbv	< 0.2	120310		0.2	EPATO-15
t-1,2-Dichloroethene	ppbv	< 0.2	120310		0.2	EPATO-15
Acrylonitrile	ppbv	< 1	120310		1	EPATO-15
Hexane	ppbv	< 0.5	120310		0.5	EPATO-15
Vinyl Acetate	ppbv	< 0.5	120310		0.5	EPATO-15
1,1 Dichloroethane	ppbv	< 0.2	120310		0.2	EPATO-15


cc:

LRL=Laboratory Reporting Limit

REMARKS: Grab sample.

The LOQ for all analytes was confirmed with a daily LOQ std.

DIRECTOR



rn = 31910

NYSDOH ID # 10320

Page 1 of 3

<b>ECOTEST ID</b>	<b>105589.00</b>			
<b>SOURCE OF SAMPLE</b>	<b>CDC-FE, 47 Northern Blvd., Great Neck, NY</b>			
<b>SAMPLE ID</b>	<b>RAW 12/2/10</b>			
<b>DATE SAMPLED</b>	<b>12/2/2010</b>			
<b>MATRIX</b>	<b>Air</b>			
<b>ANALYTICAL METHOD</b>	<b>EPA TO-15</b>			
		<b>DATE OF</b>	<b>CONC</b>	<b>LRL</b>
<b>ANALYTE</b>	<b>CAS NO</b>	<b>ANALYSIS</b>	<b>UG/M3</b>	<b>UG/M3</b>
1,1 Dichloroethane	75-34-3	12/3/2010	< 0.81	0.81
1,1 Dichloroethene	75-35-4	12/3/2010	< 0.40	0.40
1,2 Dibromoethane	106-93-4	12/3/2010	< 1.54	1.54
1,2 Dichlorobenzene (v)	95-50-1	12/3/2010	< 3.01	3.01
1,2 Dichloroethane	107-06-2	12/3/2010	< 2.03	2.03
1,2 Dichloropropane	78-87-5	12/3/2010	< 2.31	2.31
1,2-Dichlorotetrafluoroethane	76-14-2	12/3/2010	< 1.40	1.40
1,3 Butadiene	106-99-0	12/3/2010	< 2.21	2.21
1,3 Dichlorobenzene (v)	541-73-1	12/3/2010	< 1.20	1.20
1,4 Dichlorobenzene (v)	106-46-7	12/3/2010	< 3.01	3.01
1,4-Dioxane	123-91-1	12/3/2010	< 3.60	3.60
111 Trichloroethane	71-55-6	12/3/2010	< 1.09	1.09
112 Trichloroethane	79-00-5	12/3/2010	< 1.09	1.09
1122Tetrachloroethane	79-34-5	12/3/2010	< 1.37	1.37
124-Trimethylbenzene	95-63-6	12/3/2010	< 2.46	2.46
135-Trimethylbenzene	108-67-8	12/3/2010	< 2.46	2.46
2,2,4-Trimethylpentane	540-84-1	12/3/2010	< 2.33	2.33
2-Hexanone	591-78-6	12/3/2010	< 2.05	2.05
3-Chloropropene	107-05-1	12/3/2010	< 1.57	1.57
Acetone	67-64-1	12/3/2010	< 2.38	2.38
Acrylonitrile	107-13-1	12/3/2010	< 2.17	2.17
Benzene	71-43-2	12/3/2010	< 0.64	0.64
Benzyl Chloride	100-44-7	12/3/2010	< 1.04	1.04
Bromodichloromethane	75-27-4	12/3/2010	< 1.33	1.33
Bromoform	75-25-2	12/3/2010	< 2.07	2.07
Bromomethane	74-83-9	12/3/2010	< 0.78	0.78
c-1,2-Dichloroethene	156-59-2	12/3/2010	32.53	0.79
c-1,3Dichloropropene	10061-01-5	12/3/2010	< 2.27	2.27
Carbon disulfide	75-15-0	12/3/2010	< 1.56	1.56
Carbon Tetrachloride	56-23-5	12/3/2010	< 2.52	2.52
Chlorobenzene	108-90-7	12/3/2010	< 0.92	0.92
Chlorodibromomethane	124-48-1	12/3/2010	< 1.69	1.69
Chloroethane	75-00-3	12/3/2010	< 2.64	2.64
Chloroform	67-66-3	12/3/2010	< 0.97	0.97
Chloromethane	74-87-3	12/3/2010	< 2.07	2.07
Cyclohexane	110-82-7	12/3/2010	< 0.69	0.69
Dichlorodifluoromethane	75-71-8	12/3/2010	< 0.99	0.99
Ethyl Acetate	141-78-6	12/3/2010	< 18.01	18.01
Ethyl alcohol	64-17-5	12/3/2010	< 3.77	3.77
Ethyl Benzene	100-41-4	12/3/2010	< 0.87	0.87
Freon 113	76-13-1	12/3/2010	< 0.77	0.77

Heptane	142-82-5	12/3/2010	< 2.05	2.05
Hexachlorobutadiene	87-68-3	12/3/2010	< 5.34	5.34
Hexane	110-54-3	12/3/2010	< 1.76	1.76
Isopropyl Alcohol	67-63-0	12/3/2010	< 12.28	12.28
m + p Xylene	XYL-MP	12/3/2010	< 2.17	2.17
Methyl Ethyl Ketone	78-93-3	12/3/2010	< 2.95	2.95
Methylene Chloride	75-09-2	12/3/2010	< 0.69	0.69
Methylisobutylketone	108-10-1	12/3/2010	< 4.10	4.10
o Xylene	95-47-6	12/3/2010	< 0.87	0.87
p-Ethyltoluene	622-96-8	12/3/2010	< 2.46	2.46
Propylene	115-07-1	12/3/2010	< 0.86	0.86
Styrene	100-42-5	12/3/2010	< 0.85	0.85
t-1,2-Dichloroethene	156-60-5	12/3/2010	< 0.79	0.79
t-1,3Dichloropropene	10061-02-6	12/3/2010	< 0.91	0.91
ter. Butyl Methyl Ether	1634-04-4	12/3/2010	< 0.70	0.70
tert. Butyl Alcohol	75-65-0	12/3/2010	< 6.06	6.06
Tetrachloroethene	127-18-4	12/3/2010	4342.40	1.36
Tetrahydrofuran	109-99-9	12/3/2010	< 1.47	1.47
Toluene	108-88-3	12/3/2010	< 0.75	0.75
Trichloroethene	79-01-6	12/3/2010	29.01	1.07
Trichlorofluoromethane	75-69-4	12/3/2010	< 1.12	1.12
Vinyl Acetate	108-05-4	12/3/2010	< 1.76	1.76
Vinyl Bromide	593-60-2	12/3/2010	< 0.88	0.88
Vinyl Chloride	75-01-4	12/3/2010	< 0.51	0.51



105589

24

# ECOTEST LABORATORIES INC.

377 Sheffield Ave.

North Babylon, NY 11703

tel. 631-422-5777, fax 631-422-5770, Email ECOTESTLAB@aol.com

## CANISTER SAMPLING DATA SHEET

CANISTER SERIAL NO.

SAMPLE TRAIN SERIAL NO.

FLOW

EcoTest 35

NA

GRAB

This above referenced Summa can and sample train was received in good condition

DATE: 11/30/2010  
 CLIENT: CA Rich  
 CLIENTS AGENT (print): Michael Vager  
 SIGNED: Michael Vager

Client agrees to pay all replacement costs associated with loss or damage of canister train. Client acknowledges that this canister is valid for a maximum of 30 days from the date of evacuation. Client is responsible for any vacuum loss or contamination while in clients custody.

VAC leaving EcoTest: 29" Hg PERSON RECEIVING REPORT: Eric Weinstock  
 Date Evacuated: 11/30/2010 ANALYSIS: TC15  
 VAC/PRES returned EcoTest: 0 TAT: Standard

CANISTER SERIAL NO. 35  
 SAMPLE TRAIN SERIAL NO. N/A

RETURNED IN GOOD CONDITION TO ECOTEST LABORATORIES INC.

DATE: 12/2/10  
 SIGNED: [Signature] for ECOTEST LABS.

### ALL INFORMATION BELOW MUST BE PROVIDED BY CLIENT:

CLIENT <u>CA Rich Consultants, Inc.</u>	SAMPLE TYPE
SOURCE <u>CDC-FF 47 Northern Blvd, Great Neck, NY</u>	CHECK ONE
SAMPLE <u>RAW 12/2/10</u>	AMBIENT AIR <input type="checkbox"/>
DATE SAMPLED <u>12/2/10</u>	SUB SLAB VAPOR <input type="checkbox"/>
TIME SAMPLING STARTED: <u>0814</u>	VAPOR WELL <input type="checkbox"/>
TIME SAMPLING FINISHED: <u>0815</u>	SVE SYSTEM <input checked="" type="checkbox"/>
TEMPERATURE SAMPLING STARTED: <u>30°F</u>	EXPECTED CONC
TEMPERATURE SAMPLING FINISHED: <u>30°F</u>	CHECK ONE
DATE: <u>12/2/2010</u>	LOW <input type="checkbox"/>
CLIENT: <u>CA Rich Consultants, Inc.</u>	MEDIUM <input type="checkbox"/>
CLIENTS AGENT: <u>STEVE SOBSTAL</u>	HIGH <input type="checkbox"/>

RELINQUISHED BY: [Signature] DATE/TIME: 12/2/10 14:01  
 RECEIVED BY: [Signature] DATE/TIME: 12/2/10 14:01  
 RELINQUISHED BY: \_\_\_\_\_ DATE/TIME: \_\_\_\_\_  
 RECEIVED BY: \_\_\_\_\_ DATE/TIME: \_\_\_\_\_