



2012 PERIODIC REVIEW REPORT (PRR)  
FORMER SCM – CORTLANDVILLE  
839 NYS ROUTE 13  
CORTLANDVILLE, NEW YORK 13045  
SITE NO.: 712006

Prepared For:  
New York State Department of Environmental Conservation  
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March 2013  
GeoLogic Project No. 210087

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Charts 5 & 6: TCE Concentrations in Perimeter Shallow Wells;

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Charts 9 & 10: TCE Concentrations in Interior Shallow Wells;

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839 NYS ROUTE 13  
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SITE NO.: 712006**

## **1 INTRODUCTION**

This report provides the basis for review and certification of the groundwater treatment system and the institutional and engineering controls (IC's/EC's) implemented at Site No. 712006. Signed Institutional and Engineering Controls Certification Forms are included in Appendix A.

The site is currently owned by Cortland Commerce Center, LLC. (CCC) and this report is prepared and submitted at the direction of CCC, consistent with the Site's remedial program as approved by the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH). The reporting period addressed in this report is January 1, 2012 to December 31, 2012.

### **1.1 Summary of Site**

Former manufacturing activities at the site resulted in contamination of soil and groundwater with chlorinated organic solvents, primarily trichloroethylene (TCE) and its decomposition products. In 1986, the contaminant plume was found to extend approximately 1.5 miles downgradient (north) of the facility. The potential contaminant sources identified included a 3,000-gallon aboveground storage tank (AST) that formerly contained TCE, a 20,000-gallon underground storage tank (UST) that formerly contained tramp oil and four areas of stained surface soil associated with past material handling practices. Additionally, a former tumbling area was identified within the building footprint (adjacent to monitoring well MW-L16).

Remedial measures implemented at the site have included installing a soil vapor extraction (SVE) system and a groundwater pump and treat system. The SVE system was activated in 1990 and subsequently dismantled at an unknown date between 1996 through 1998. The groundwater remediation system is currently in operation. In June 1994, the Classification of the site was changed from 2 to 4 (site properly closed – required continued management).

## **2 SITE OVERVIEW**

### **2.1 Site Location and Description**

The site is located at 839 NYS Route 13, Town of Cortlandville, County of Cortland and State of New York (Appendix B, Drawing No. 1).

The site is approximately 47.4 acres in size and is developed with a one-story building occupying approximately 415,000 square feet. The building is utilized for office space, warehouse storage and manufacturing. The remainder of the site consists of employee

parking areas, several small outbuildings, treated water infiltration lagoons and vacant undeveloped land.

The site is bordered on the north by Lime Hollow Road and a predominately residential area. It is bordered on the east by NYS Route 13 and a predominately commercial area. It is bordered on the south by a cemetery and the JM Murray Center (formerly part of the Smith Corona complex). It is bordered on the west by a mixture of undeveloped land, agricultural land and some residential properties.

## **2.2 Site History**

The site was formerly owned and operated by Smith Corona Corporation (SCC), previously known as SCM Corporation (SCM). SCC utilized the site for the purposes of manufacturing typewriters. Trichloroethylene was used on the site by SCC during manufacturing processes.

In 1999, S. C. W. P., LLC (SCWP) purchased land and buildings from SCC and assumed operational responsibilities for the groundwater remediation system.

Cortland Commerce Center, LLC (CCC) purchased the site in May of 2010 from SCWP and assumed operational responsibilities for the groundwater remediation system.

## **2.3 Nature and Extent of Contamination**

The site overlies the Otter Creek/Dry Creek aquifer. Town of Cortlandville municipal water wells are located approximately 2,300 feet west of the site and the City of Cortland municipal water wells are located approximately 1.5 miles north-northeast of the site.

In or around 1986 a plume of contaminated groundwater was detected during the investigation of an unrelated petroleum spill. This plume extended from the SCM site approximately 1.5 miles downgradient (generally north) toward the City of Cortland municipal well field. The contaminants in this plume were identified as (TCE) and related decomposition products.

In accordance with the 1989 Settlement Agreement, monitoring of off-site groundwater contamination has been conducted periodically by the NYSDEC, Cortland County Soil and Water Conservation District and the Cortland County Health Department.

## **2.4 Chronology of Site Remediation Activities**

The remediation system, consisting of a recovery well, aeration tower, pipeline, rock cascade and an infiltration lagoon system, remains in place and has not been modified since its original construction.

A brief summary of the site remediation activities undertaken over the past 25 years is presented below<sup>1</sup>:

- October 1986 - March 1987: Use of TCE was discontinued. Various aboveground storage tanks (AST's) and underground storage tanks (UST's) containing TCE, tramp oil, fuel oil and muriatic acid were removed. Visibly contaminated soil encountered during the tank work was also removed. In addition, four areas of stained soil related to past material handling practices were excavated and disposed of off-site.
- January 1989: The Settlement Agreement for remediation of the site was signed between the NYSDEC, other parties, and SCC on January 12, 1989.
- September – December 1989: Approval of the remediation Phase I design was obtained from the NYSDEC on September 22, 1989. Phase I consisted of investigation, design, construction and installation of a groundwater recovery well. The groundwater recovery well came on-line on December 29, 1989. The water from the recovery well was utilized for non-contact cooling purposes and discharged into an existing sewer line until the Phase II system could be completed.
- May 1990: Approval of the remediation Phase II design was obtained from the NYSDEC on May 29, 1990. Phase II included installation of a (SVE) System and groundwater remediation system. The groundwater remediation system consisted of an air stripping column (aeration tower), distribution piping (water from recovery well to the air stripper and from the air stripper to an infiltration lagoon) and an engineered infiltration lagoon.
- August 1990: The SVE system came on-line.
- October 1990: The groundwater remediation system came on-line.
- 1996-1998: At an unknown date, the SVE system was shutdown and decommissioned. GeoLogic has not located or reviewed documentation related to the shutdown of the SVE system.
- 1997-1998: At an unknown date, the well monitoring frequency was reduced to annual. GeoLogic has not located or reviewed documentation related to the modification of the sampling frequency.
- April 1999: SCWP purchased the SCC land and buildings and assumed operational responsibilities for the groundwater remediation system.
- May 2001: With the permission of the NYSDEC, the stripping tower blower was turned off. The influent TCE concentration had reduced to the point that the tower was able to reduce TCE levels adequately to meet discharge limits without forced airflow. Sampling frequency of the tower influent, tower discharge and outfall cascade was increased from quarterly to monthly.

- May 2010: CCC purchased the SCWP land and buildings and assumed operational responsibilities for the groundwater remediation system.

## **2.5 Cleanup and Site Closure Criteria**

The site-wide groundwater cleanup criteria for the site are the New York State Class GA groundwater quality standards. Currently, the standard for TCE is 5 µg/L.

All site wells are required to be monitored a minimum of annually until all wells meet the clean-up criteria. When all wells meet the clean-up criteria, the remediation system may be shut down.

Groundwater monitoring will continue for a period of five years after the remedial system is shut down. If at any time during the post-remediation monitoring period any of the samples exceed the site-wide clean-up criteria, the system will be restarted. For the first two years, post remediation monitoring will occur quarterly, then semi-annual for the next two years and finally once in the fifth year. If the remedial system must be restarted for any reason, the five year post shut-down monitoring program will be restarted once the site-wide cleanup criteria has been re-achieved.

## **3 INSTITUTIONAL AND ENGINEERING CONTROLS**

Signed Institutional and Engineering Controls Certification Forms are included in Appendix A.

### **3.1 Summary of Institutional Controls (IC's)**

No IC's are identified in the Settlement Agreement or Record of Decision.

### **3.2 Summary of Engineering Controls (EC's)**

The EC's implemented at the site are described below:

- A groundwater remediation system consisting of an air stripping column (aeration tower), distribution piping (water from recovery well to the aeration tower and from the aeration tower to the infiltration lagoons) and engineered infiltration lagoons has been operating at the site since 1990.

Periodic monitoring of system performance is performed. The system must continue to operate until groundwater quality meets the clean-up criteria for the site. It should also be noted that although not required to be operated at present, the blowers (primary and back up) for the air stripper must remain in place and in good working order.

### **3.2.1 Summary of EC Operations During Reporting Period**

#### Site Monitoring & Groundwater Treatment System

The groundwater remediation system has operated without major breakdown during this reporting period. The pump rate was checked during monthly sampling events and the average flow rate for the year was 733 gallons per minute (gpm), which meets the design standard of 700 to 1,000 gpm<sup>2</sup>. Routine maintenance has been performed on system components on an as-needed basis.

It is noted that although the average flow rate for the year met the design standard, the average flow rate for the months of September, October, November and December was 660 gpm. This decrease in flow rate was associated with the decrease in groundwater levels. Charts 13 and 14, located in Appendix D, depict a comparison of recovery well groundwater elevations and pumping rates for 2011 and 2012.

In an attempt to increase the flow rate, the valve associated with the pumping well was opened all the way. It is also noted that the average flow rate for January 2013 was 700 GPM. It is expected the flow rate will continue to increase in the spring along with rising groundwater levels.

Both the primary and back-up blowers were energized and determined to be operational in January 2013.

During the annual sampling event, it was discovered that two wells (MW-6 and MW-11) were damaged and could not be sampled. The well casing at MW-6 was cracked and the protective steel casing at MW-11 was bent. Both locations were repaired and their reference elevations were established relative to the existing monitoring network. MW-6 and MW-11 were then sampled on December 7, 2012.

MW-2D remains blocked at a depth of 50 feet. It is likely that large gravel entered the well when it was originally damaged and that the gravel has become lodged in the well casing. Quarterly monitoring of well MW-10D continues to supplement the monitoring of conditions at the down gradient property boundary.

#### Sub-Slab Depressurization (SSD)/Soil Vapor Extraction (SVE) System

The sub-slab depressurization/soil vapor extraction system, installed in the vicinity of the former tumbling pit, has operated without major breakdown during this reporting period. The system consists of a single extraction point (well MW-L16) connected at a Gast Model R6P350A regenerative blower that extracts 218



cfm of vapor from under and around the former tumbling pit. Routine maintenance has been performed on system components on an as-needed basis.

A sample of the system emissions was obtained on November 27, 2012. The TCE concentration was reported at 3,200  $\mu\text{g}/\text{m}^3$ . This is an 82% decline from the initial concentration in January 2011. The analytical results demonstrate that the system has been and remains effective in removing residual contamination from under and around the former tumbling pit. The analytical results are included in Appendix F.

## **4 MONITORING PLAN**

### **4.1 Monitoring Plan Components**

Monitoring at the site consists of monthly sampling of the groundwater remediation system, quarterly monitoring of MW-10D and annual sampling of seventeen (17) groundwater monitoring wells (locations depicted on Drawing No. 2, Appendix B). Sampling events data trends and supporting charts are discussed in Section 5.

### **4.2 Summary of Monitoring Completed During Reporting Period**

The following sampling events have taken place during this reporting period:

- Annual Sampling of Groundwater Monitoring Wells (11/19/2012 - 11/20/2012):
  - Interior Shallow Wells: MW-6, MW-7, MW-8, MW-11 and MW-12S;
    - At the time of the annual sampling it was discovered that Interior Shallow Wells MW-6 and MW-11 were damaged and therefore, could not be sampled;
    - MW-6 and MW-11 were repaired, surveyed and subsequently sampled on 12/7/2012;
  - Interior Deep Wells: MW-9 and MW-12D;
  - Perimeter Shallow Wells: MW-5S, MW-1S, MW-10S, MW-2S and MW-4S;
  - Perimeter Deep Wells: MW-4D, MW-5D, MW-1D and MW-10D;
  - Facility Well: MW-L16 (installed in 2008);
  - Quarterly Monitoring of MW-10D (February 2012, May 2012 and August 2012, plus annual sampling).
- Monthly Groundwater Remediation System (36 total samples in 2012):
  - Treatment System Influent (12 samples in 2012);
  - Tower Discharge (12 samples in 2012);
  - Cascade Outfall (12 samples in 2012).

All groundwater samples were submitted for analysis to Life Science Laboratories, Inc., LSL Central Lab located at 5854 Butternut Drive, East Syracuse, New York. The groundwater samples were analyzed for specific Volatile Organic Compounds (VOC's) (1,1,1-Trichloroethane, 1,1-Dichloroethene, 1,2-Dichloroethene, Trichloroethene, Tetrachloroethene and Vinyl Chloride) utilizing EPA Method 8260B.

#### **4.2.1 Summary of Monthly Remediation System Sampling**

Each month samples are collected at the Tower Influent, Tower Discharge and Cascade Outfall. The pumping rate is also recorded during each monthly sampling event. Samples are submitted for laboratory analysis, results are reviewed and monitoring reports are submitted to the NYSDEC and NYSDOH after each monthly sampling event.

#### **4.2.2 Summary of Annual Sampling Event**

The depth to groundwater was measured in each of the seventeen (17) monitoring wells prior to collecting groundwater samples during the November 19, 2012 through November 20, 2012 annual sampling event. Based on recorded water levels, shallow and deep groundwater contour maps were prepared (Drawing No. 3 and No. 4, Appendix B). Generally, the groundwater flow under pumping conditions for the site was to the north-northwest; and was consistent with the previously reported flow direction. The recovery well continues to depress the water table sufficiently to influence groundwater flow at the site.

The field observations, including water levels, for the 2012 annual sampling event are summarized in Table 1, located in Appendix C.

Groundwater samples are submitted for laboratory analysis, results are reviewed and the results are detailed in the annual PRR for the site. The laboratory reports for the 2012 Annual Sampling event and the monthly monitoring results are included in Appendix E.

The results for the annual sampling event have been up-loaded to the NYSDEC EQUIS database.

#### **4.3 Monitoring Deficiencies**

During the annual sampling event (November 19, 2012 through November 20, 2012) the following deficiencies were noted:

- Interior Shallow Wells MW-6 and MW-11 were damaged and therefore, could not be sampled. Both locations were repaired, re-surveyed and subsequently sampled on 12/7/2012;

- Monitoring well MW-2D was unable to be sampled due to blockage within the well at a depth of about 50 feet;

## 5 DATA TRENDS AND REMEDIAL EFFECTIVENESS

### 5.1 Data Summary

Data from the annual groundwater sampling event and monthly remediation system sampling events are summarized in the following tables and charts and are included in Appendix C and Appendix D.

- APPENDIX C: Tables
  - Table 1: Groundwater Sampling Field Observations;
  - Table 2: Summary of Groundwater Analytical Results;
  - Table 3: Monthly Analytical Results May 2001 – December 2012.
- APPENDIX D: Charts
  - Charts 1 through 4: Remediation System TCE Concentrations;
  - Charts 5 & 6: TCE Concentrations in Perimeter Shallow Wells;
  - Charts 7 & 8: TCE Concentrations in Perimeter Deep Wells;
  - Charts 9 & 10: TCE Concentrations in Interior Shallow Wells;
  - Charts 11 & 12: TCE Concentrations in Interior Deep Wells.

The monitoring wells are categorized into four (4) groups (Perimeter Shallow, Perimeter Deep, Interior Shallow and Interior Deep). Charts 5 through 12 depict the TCE concentrations for both the last 10 years and 20 years for each well group (Appendix D). It should also be noted that in 2008 monitoring well MW-L16 was installed and is located inside the facility adjacent to a former tumbling pit. The data from this well is included in Table 2, located in Appendix C.

### 5.2 Remediation System Data Trends

A total of twelve monthly sampling events have taken place during this reporting period. Sampling of the remediation system consists of collecting samples from three (3) locations: Cascade Outfall, Tower Discharge and Tower Influent. Charts 1 through 3, located in Appendix D, depict the TCE concentrations for each of the three sample locations. As indicated in Charts 1, 2 and 3 the TCE concentration at each of the sample locations exhibits a continued downward trend.

The average TCE concentrations for the 2012 samples are listed below:

- Tower Influent: 7.7 µg/L
- Tower Discharge: 3.1 µg/L
- Cascade Outfall: 1.3 µg/L

### 5.3 Groundwater Quality Data Trends

Groundwater quality data trends are broken-down by the four groups of monitoring wells indicated below:

- **Perimeter Shallow Wells (MW-1S, MW-2S, MW-4S, MW-5S and MW-10S)**

Three (3) of the five (5) perimeter shallow wells revealed TCE concentrations below the cleanup objective of 5 µg/L. Wells MW-1S and MW-10S, did not meet the cleanup objective (a TCE concentration of 5.46 and 6.56 µg/L, respectively). 2012 year's results for all five (5) wells were similar to previous years and continue to indicate a long term downward trend. Charts 5 and 6, located in Appendix D, depict 10-Year and 20-Year TCE concentrations for the perimeter shallow wells.

- **Perimeter Deep Wells (MW-1D, MW-2D, MW-4D, MW-5D and MW-10D)**

It should be noted that MW-2D could not be sampled due to a blockage. Two (2) of the four (4) perimeter deep wells sampled revealed TCE concentrations below the cleanup objective of 5 µg/L. Wells MW-1D and the yearly average MW-10D, did not meet the cleanup objective (a TCE concentration of 5.65 and 7.5 µg/L, respectively). 2012 year's results for all five (5) wells were similar to previous years and continue to indicate a long term downward trend. Charts 7 and 8, located in Appendix D, depict 10-Year and 20-Year TCE concentrations for the perimeter deep wells.

- **Interior Shallow Wells (MW-6, MW-7, MW-8, MW-11 and MW-12S)**

Four (4) of the five (5) interior shallow wells revealed TCE concentrations below the cleanup objective of 5 µg/L. Well MW-12S, did not meet the cleanup objective (TCE concentration of 5.6 µg/L). However, the results for all of the interior shallow wells were lower than 2011. The results for all of the wells continue to indicate a decreasing trend over the past 20 years. Charts 9 and 10, located in Appendix D, depict 10-Year and 20-Year TCE Concentrations for the interior shallow wells.

- **Interior Deep Wells (MW-9 and MW-12D)**

Both of the interior deep wells revealed TCE concentrations below the cleanup objective of 5 µg/L. Charts 11 and 12, located in Appendix D, depict 10-Year and 20-Year TCE Concentrations for the interior deep wells.

Overall the TCE concentrations detected in the wells continue to indicate a decreasing trend over a 20-year span since the current groundwater treatment system was activated.

#### **5.4 Performance and Effectiveness of the IC's/EC's**

The groundwater remediation system continued to be effective in 2012 as demonstrated by both the system operating conditions and the continued decreasing trend of TCE concentrations in the wells over time.

The groundwater pumping system was designed for:

- Minimum Withdrawal Rate: 700 gpm
- Maximum Withdrawal Rate: 1,000 gpm

The average withdrawal rate for 2011 was 733 gpm. This is within the approved design operational range. However, the average flow rate for the months of September, October, November and December was 660 gpm. This decrease in flow rate was associated with the decrease in groundwater levels. Charts 13 and 14, located in Appendix D, depict a comparison of recovery well groundwater elevations and pumping rates for 2011 and 2012. In an attempt to increase the flow rate, the valve associated with the pumping well was opened all the way. It is also noted that the average flow rate for January 2013 was 700 gpm. It is expected the flow rate will continue to increase in the spring along with rising groundwater levels.

As stated in Section 5.3, contaminant concentrations have shown a declining trend over the past 20 years. This is particularly evident at the wells along Lime Hollow Road (the downgradient side of the site (wells MW-1S & MW-1D, MW-2S & MW-2D, MW-4S & MW-4D, and MW-10S & MW-10D). In 1990, the highest yearly average concentration of TCE in these wells was observed at well cluster MW-10S & MW-10D, 76 µg/L and 36 µg/L respectively. Over the past three years (2010-2012), the highest average concentration of TCE has been 6.67 µg/L at MW-10D.

Contaminant trends in the interior wells (MW-6, MW-7, MW-8, MW-9, MW-11, MW-12S and MW-12D) echo those along the downgradient boundary. The highest average TCE concentration in 1990 was 1,549 µg/L at MW-11. Over the past three years, the highest average concentration has been 21.5 µg/L at MW-12S. This represents a greater than 98% decline over the past 20 years.

Given the contaminant concentrations at the site have declined by more than 90% over the past 20 years, the system continues to be effective at removing contamination from the subsurface.

#### **5.5 Contaminant Mass Removal**

Using the following:

- Average pumping rate = 733 gpm
- Average influent concentration of TCE = 7.7 µg/L
- Density of TCE = 1.465 g/mL

The system removal rates for 2012 are:

- Total volume of water pumped = 385,264,800 gallons
- Total mass of TCE removed= 11.23 Kg or 24.76 lb.
- Total volume of TCE removed = 7.7 L or 2 gal.

## **6 RECOMMENDATIONS**

It is recommended that the current monthly remediation system sampling, quarterly sampling of MW-10D and annual groundwater sampling be conducted for another year. In addition, an annual submission of Periodic Review Reports is thought to be adequate to document data trends at the site.

The distribution piping from the cascade to the lagoons will be inspected in the Spring of 2013. The need to scarify the lagoons will be assessed at that time.

An attempt will be made to adjust the fins on the groundwater depression pump impeller to increase the pumping rate.

The next annual sampling event is scheduled for November 2013. All seventeen (17) monitoring wells will be sampled.

## **7 REFERENCES**

- <sup>1</sup> *2009 Periodic Review Report*, February 2010, Buck Engineering, LLC
- <sup>2</sup> *Remediation System As-Built Report*, December 1991, O'Brien & Gere
- <sup>3</sup> *Focused Feasibility Study*, May 1988, O'Brien & Gere

## 8 CERTIFICATION

Signed Institutional and Engineering Controls Certification Forms are included in Appendix A.

We certify that to the best of our professional knowledge and belief, we meet the definition of *Environmental Professional* as defined in 312.10 of 40 CFR 312. We further certify this report to be factually presented to the best of our knowledge and belief.

Prepared by,

GeoLogic NY, Inc.



Senior Author  
Forrest Earl  
President / Principal Hydrogeologist



Senior Reviewer  
Kenneth J. Teter, P.E./K. Teter Consulting, LLC  
NYS LN 081583

***APPENDIX A***

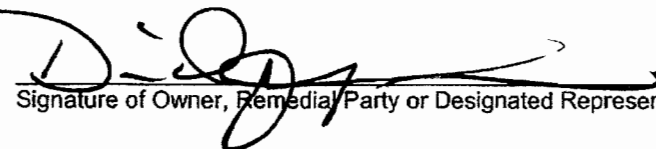
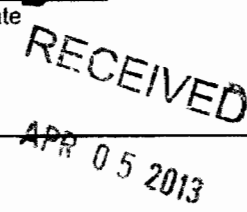
***INSTITUTIONAL AND ENGINEERING CONTROLS CERTIFICATION FORM***





**Enclosure 2**  
**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**  
**Site Management Periodic Review Report Notice**  
**Institutional and Engineering Controls Certification Form**



	Site Details	Box 1
<b>Site No.</b> 712006		
<b>Site Name</b> SCM - Cortlandville		
Site Address: 839 Route 13 South	Zip Code: 13045	
City/Town: Cortlandville		
County: Cortland		
Site Acreage: 47.3		
Reporting Period: January 01, 2012 to January 01, 2013		
		YES NO
1. Is the information above correct?		<input checked="" type="checkbox"/> <input type="checkbox"/>
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?		<input type="checkbox"/> <input checked="" type="checkbox"/>
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?		<input type="checkbox"/> <input checked="" type="checkbox"/>
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?		<input type="checkbox"/> <input checked="" type="checkbox"/>
		<b>Box 2</b>
		YES NO
6. Is the current site use consistent with the use(s) listed below? Industrial		<input checked="" type="checkbox"/> <input type="checkbox"/>
7. Are all ICs/ECs in place and functioning as designed?		<input checked="" type="checkbox"/> <input type="checkbox"/>
<b>IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.</b>		
A Corrective Measures Work Plan must be submitted along with this form to address these issues.		
 Signature of Owner, Remedial Party or Designated Representative		4/11/13 Date
		

SITE NO. 712006

Box 3

Description of Institutional Controls

<u>Parcel</u>	<u>Owner</u>	<u>Institutional Control</u>
95.00-10-01.100	<del>KARL OCHS. C/O S.C.W.P., LLC</del> Coutland Commerce Center, LLC	

Box 4

Description of Engineering Controls

<u>Parcel</u>	<u>Engineering Control</u>
95.00-10-01.100	Groundwater Containment Groundwater Treatment System Vapor Mitigation

Engineering Control Details for Site No. 712006

Parcel: 95.00-10-01.100

The ROD identified engineering controls required for OU1 (onsite). These controls include the continued operation and maintenance of the groundwater extraction & treatment system until groundwater quality meets the cleanup criteria of 5 ug/L for TCE for all wells.

The groundwater monitoring wells must be sampled at periodic intervals (currently annually). As outlined in 2001 correspondence, the groundwater extraction & treatment system may be operated without the blower component as long as effluent concentrations remain below 5 ug/L for TCE, and with monthly monitoring of the groundwater extraction & treatment system influent & effluent. The blower and a backup blower must remain in place and in working condition. The groundwater extraction system also acts as the onsite groundwater containment system, designed to eliminate contaminant migration offsite.

A Soil Vapor Extraction system was installed as part of the remedial program. The SVE was operational from August 1990 until operation was discontinued sometime after May 1994.

**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 engineering practices; and the information presented is accurate and complete.

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

**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

**A Corrective Measures Work Plan must be submitted along with this form to address these issues.**

  
Signature of Owner, Remedial Party or Designated Representative

4/1/13  
Date

IC CERTIFICATIONS  
SITE NO. 712006

Box 6

**SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE**

I certify that all information and statements in Boxes 1, 2, and 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.

I David J. [Signature] 839 W 45 St. 15, Colton NJ  
print name print business address

am certifying as MEMBER, COLTON (Owner or Remedial Party)  
COMMERCE CENTER, LLC

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

[Signature]  
Signature of Owner, Remedial Party, or Designated Representative  
Rendering Certification

4/1/13  
Date

IC/EC CERTIFICATIONS

Box 7

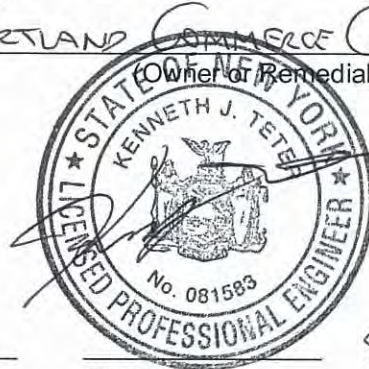
Professional Engineer Signature

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.

I KENNETH J. TETER at 32 CLINTON STREET  
HOMER, N.Y. 13077  
print name print business address

am certifying as a Professional Engineer for the CORTLAND COMMERCE CENTER, LLC  
(Owner or Remedial Party)

  
Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification

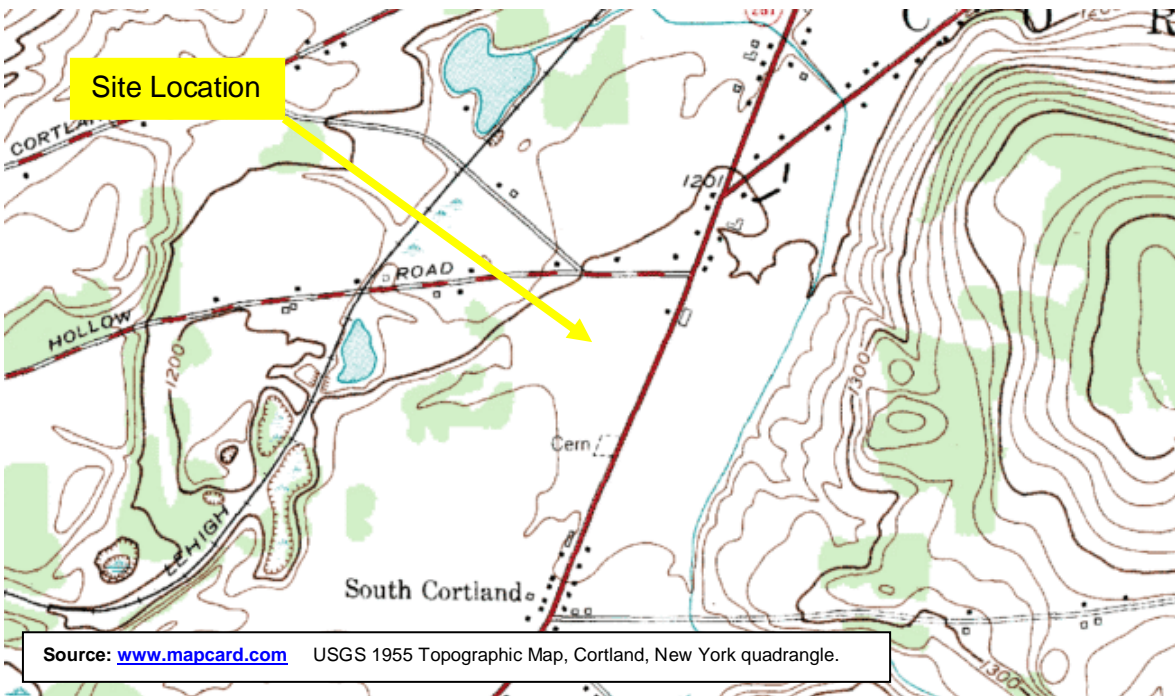


Stamp  
(Required for PE)

4/10/13  
Date

***APPENDIX B***

***DRAWINGS***



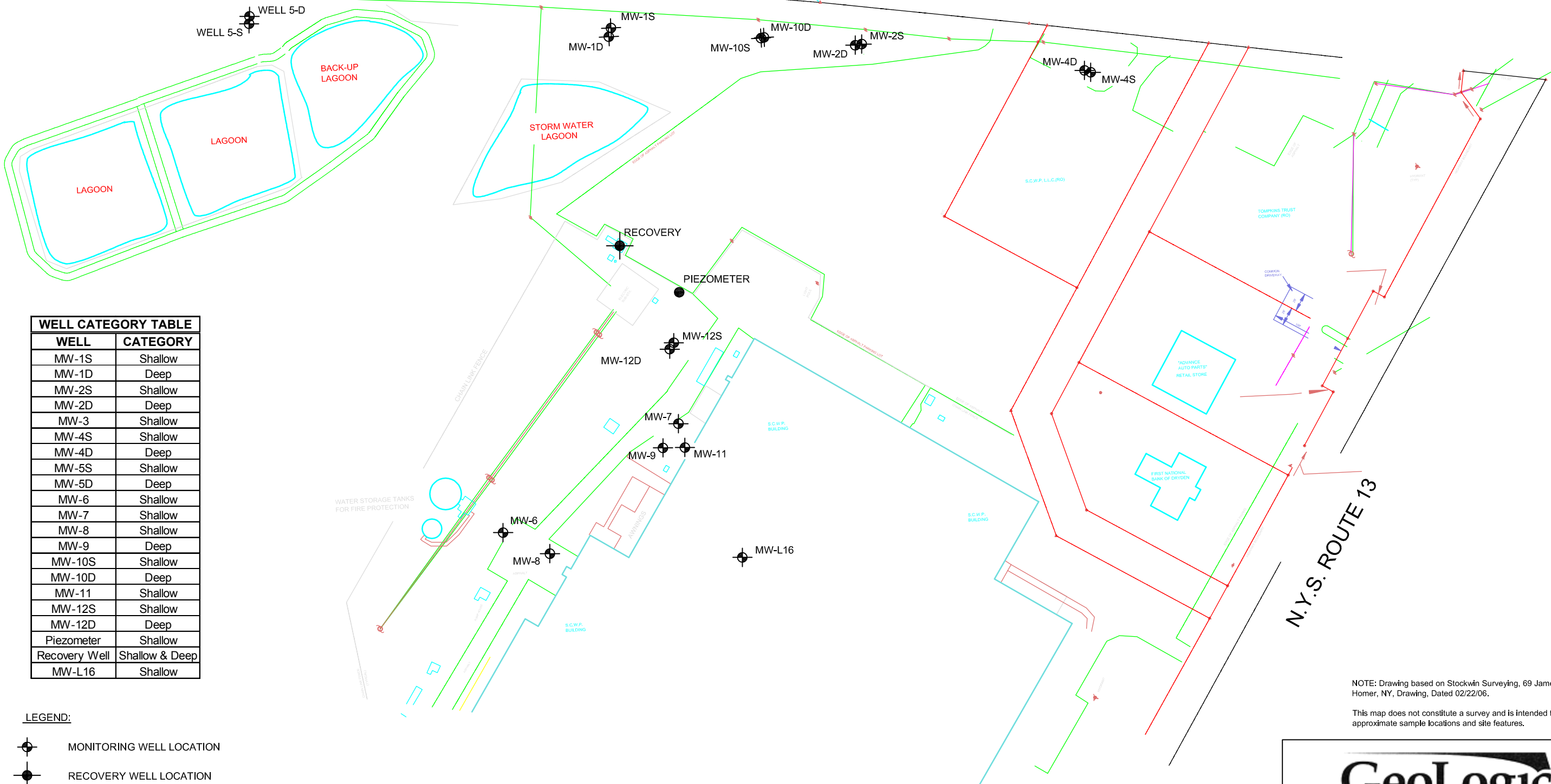
# GeoLogic

GeoLogic NY, Inc.

**SITE LOCATION PLAN  
FORMER SCM-CORTLANDVILLE (SITE #: 712006)  
839 NYS ROUTE 13  
CORTLANDVILLE, NEW YORK**

DRAWN BY: CTG	SCALE: Not To Scale	PROJECT NO: 210087
REVIEWED BY: FCE	DATE: DEC. 2012	DRAWING NO: 1

CL LIME HOLLOW ROAD



**WELL CATEGORY TABLE**

WELL	CATEGORY
MW-1S	Shallow
MW-1D	Deep
MW-2S	Shallow
MW-2D	Deep
MW-3	Shallow
MW-4S	Shallow
MW-4D	Deep
MW-5S	Shallow
MW-5D	Deep
MW-6	Shallow
MW-7	Shallow
MW-8	Shallow
MW-9	Deep
MW-10S	Shallow
MW-10D	Deep
MW-11	Shallow
MW-12S	Shallow
MW-12D	Deep
Piezometer	Shallow
Recovery Well	Shallow & Deep
MW-L16	Shallow

**LEGEND:**

- MONITORING WELL LOCATION
- RECOVERY WELL LOCATION
- PIEZOMETER LOCATION

NOTE: Drawing based on Stockwin Surveying, 69 James Street, Homer, NY, Drawing, Dated 02/22/06.

This map does not constitute a survey and is intended to convey approximate sample locations and site features.

# GeoLogic

GeoLogic NY, Inc., Homer, New York

SAMPLE LOCATION PLAN  
FORMER SCM-CORTLANDVILLE (NYSDEC SITE NO. 712006)  
839 NYS ROUTE 13  
CORTLANDVILLE, NEW YORK

APPROXIMATE SCALE:

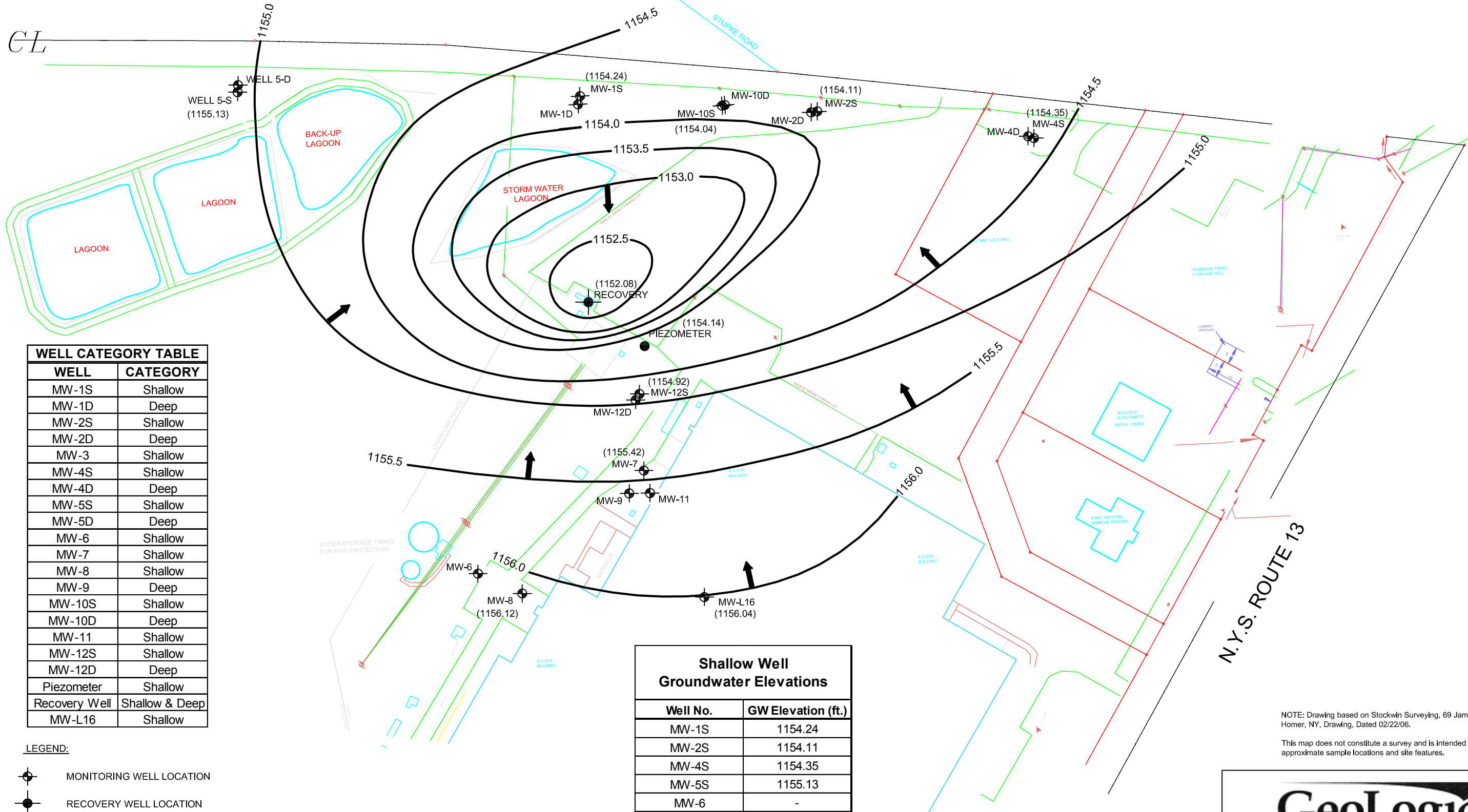


DRAWN BY: SDW/CTG	SCALE: AS SHOWN	PROJECT NO.: 210087
REVIEWED BY: FCE	DATE: JAN. 2012	DRAWING NO.: 2



LIME HOLLOW ROAD

CL



**WELL CATEGORY TABLE**

WELL	CATEGORY
MW-1S	Shallow
MW-1D	Deep
MW-2S	Shallow
MW-2D	Deep
MW-3	Shallow
MW-4S	Shallow
MW-4D	Deep
MW-5S	Shallow
MW-5D	Deep
MW-6	Shallow
MW-7	Shallow
MW-8	Shallow
MW-9	Deep
MW-10S	Shallow
MW-10D	Deep
MW-11	Shallow
MW-12S	Shallow
MW-12D	Deep
Piezometer	Shallow
Recovery Well	Shallow & Deep
MW-L16	Shallow

**Shallow Well Groundwater Elevations**

Well No.	GW Elevation (ft.)
MW-1S	1154.24
MW-2S	1154.11
MW-4S	1154.35
MW-5S	1155.13
MW-6	-
MW-7	1155.42
MW-8	1156.12
MW-10S	1154.04
MW-11	-
MW-12S	1154.92
Piezometer	1154.14
Recovery Well	1152.08
MW-L16	1156.04

**LEGEND:**

- MONITORING WELL LOCATION
- RECOVERY WELL LOCATION
- PIEZOMETER LOCATION
- (1164.99) GROUNDWATER ELEVATION (FT.) FOR 11/19/2012 AND 11/20/2012.
- 1162.0 GROUNDWATER ELEVATION CONTOUR FOR 11/19/2012 AND 11/20/2012.
- DIRECTION OF GROUNDWATER FLOW

NOTE: Drawing based on Stockwin Surveying, 69 James Street, Homer, NY, Drawing, Dated 02/22/06.

This map does not constitute a survey and is intended to convey approximate sample locations and site features.

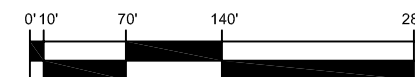


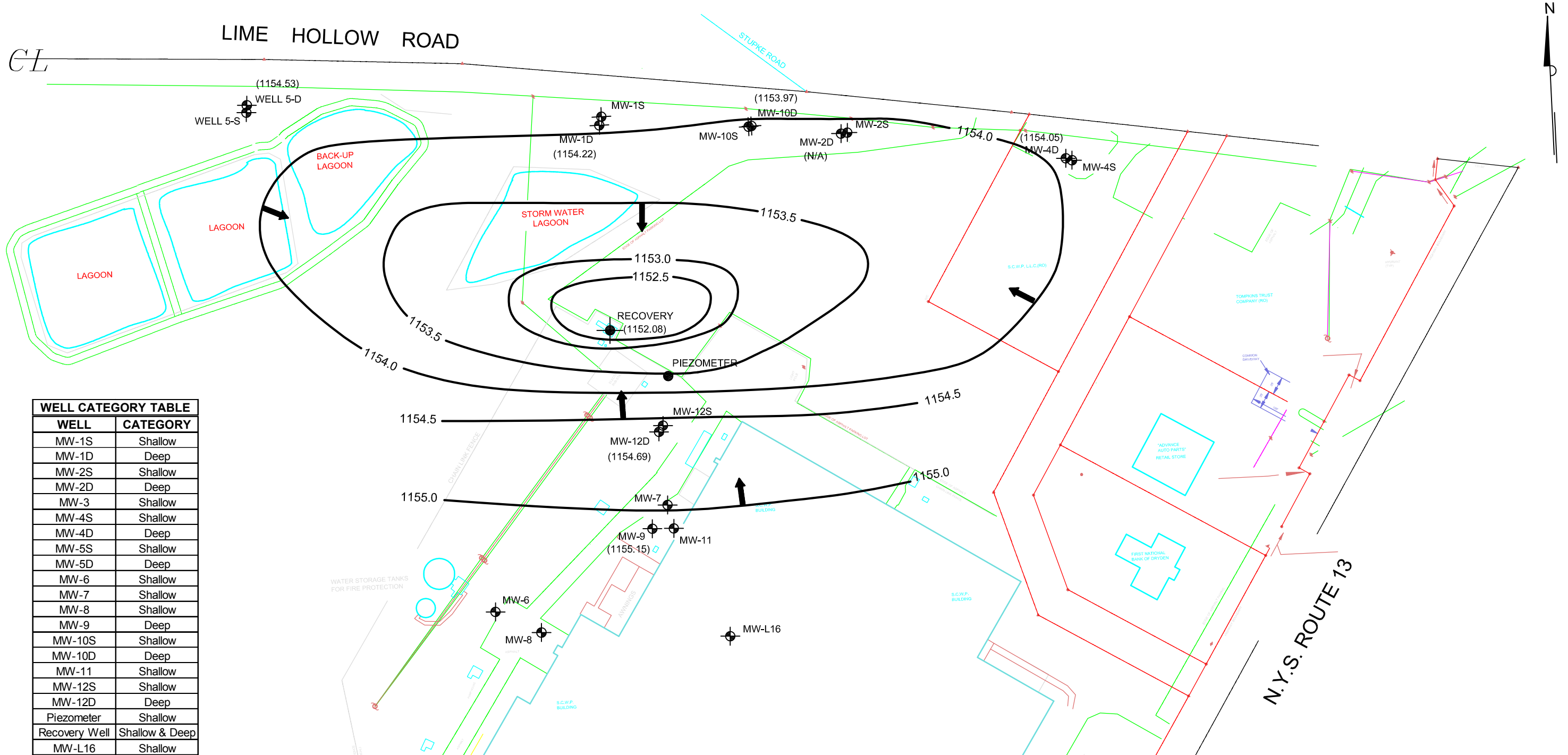
GeoLogic NY, Inc., Homer, New York

SHALLOW WELL GROUNDWATER CONTOUR MAP  
FOR 11/19/2012 AND 11/20/2012  
FORMER SCM-CORTLANDVILLE (NYSDEC SITE NO. 712006)  
839 NYS ROUTE 13  
CORTLANDVILLE, NEW YORK

DRAWN BY: SDW/CTG	SCALE: AS SHOWN	PROJECT NO.: 210087
REVIEWED BY: FCE	DATE: JAN. 2013	DRAWING NO.: 3

APPROXIMATE SCALE:





WELL CATEGORY TABLE	
WELL	CATEGORY
MW-1S	Shallow
MW-1D	Deep
MW-2S	Shallow
MW-2D	Deep
MW-3	Shallow
MW-4S	Shallow
MW-4D	Deep
MW-5S	Shallow
MW-5D	Deep
MW-6	Shallow
MW-7	Shallow
MW-8	Shallow
MW-9	Deep
MW-10S	Shallow
MW-10D	Deep
MW-11	Shallow
MW-12S	Shallow
MW-12D	Deep
Piezometer	Shallow
Recovery Well	Shallow & Deep
MW-L16	Shallow

Deep Well Groundwater Elevations	
Well No.	GW Elevation (ft.)
MW-1D	1154.22
MW-2D	-
MW-4D	1154.05
MW-5D	1154.53
MW-9	1155.15
MW-10D	1153.97
MW-12D	1154.69
Recovery Well	1152.08

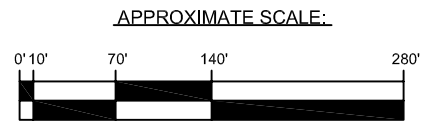
- LEGEND:**
- MONITORING WELL LOCATION
  - RECOVERY WELL LOCATION
  - PIEZOMETER LOCATION
  - (1164.99) GROUNDWATER ELEVATION (FT.) FOR 11/19/2012 AND 11/20/2012.
  - 1162.0 GROUNDWATER ELEVATION CONTOUR FOR 11/19/2012 AND 11/20/2012.
  - DIRECTION OF GROUNDWATER FLOW

NOTE: Drawing based on Stockwin Surveying, 69 James Street, Homer, NY, Drawing, Dated 02/22/06.  
 This map does not constitute a survey and is intended to convey approximate sample locations and site features.

GeoLogic NY, Inc., Homer, New York

DEEP WELL GROUNDWATER CONTOUR MAP  
 FOR 11/19/2012 AND 11/20/2012  
 FORMER SCM-CORTLANDVILLE (NYSDEC SITE NO. 712006)  
 839 NYS ROUTE 13  
 CORTLANDVILLE, NEW YORK

DRAWN BY: SDW/CTG	SCALE: AS SHOWN	PROJECT NO.: 210087
REVIEWED BY: FCE	DATE: JAN. 2013	DRAWING NO.: 4



***APPENDIX C***

***TABLES***

**TABLE 1.**

**Field Observations: 2012 Annual Groundwater Sampling Event**

Field Observations: Annual Groundwater Sampling Event: November 19 and 20, 2012								
Well#	CATEGORY	**TOP PVC ELEVATION	TOP PVC WATER LEVEL (FT)	GW ELEVATION	DEPTH OF WELL (FT)	VOLUME (GAL.) of WATER in WELL	APPROX. VOLUME PURGED (GAL.)	Notes
MW-1S	Shallow -Perimeter	1185.75	31.51	1154.24	39.50	1.28	5	Dark brown.
MW-1D	Deep - Perimeter	1185.85	31.63	1154.22	70.50	6.22	20	Clear.
MW-2S	Shallow -Perimeter	1210.91	56.80	1154.11	70.20	2.14	7.0	Clear.
MW-2D	Deep - Perimeter	N/A	-	-	104.00	-	-	No sample, well damaged.
MW-4S	Shallow -Perimeter	1209.72	55.37	1154.35	73.79	2.95	9	Light brown.
MW-4D	Deep - Perimeter	1210.14	56.09	1154.05	104.23	7.70	24	Clear.
MW-5S	Shallow -Perimeter	1178.46	23.33	1155.13	40.00	2.67	8.5	Clear.
MW-5D	Deep - Perimeter	1178.86	24.33	1154.53	71.88	7.61	24	Clear.
MW-6	Shallow - Interior	1211.42	55.88	1155.54	56.50	0.10	0.3	No sample, well damaged. Repaired, resurveyed & sampled 12-7. Brown, turbid.
MW-7	Shallow - Interior	1211.56	56.14	1155.42	58.75	0.42	1.5	Dark brown, turbid.
MW-8	Shallow - Interior	1212.76	56.64	1156.12	61.42	0.76	3	Brown.
MW-9	Deep - Interior	1212.94	57.79	1155.15	100.46	6.83	24	Clear.
MW-10S	Shallow -Perimeter	1207.23	53.19	1154.04	62.00	1.41	5	Light brown.
MW-10D	Deep - Perimeter	1207.52	53.55	1153.97	99.00	7.27	24	Clear.
MW-11	Shallow - Interior	1214.44	59.28	1155.16	59.50	0.04	1.75	No sample, well damaged. Repaired, resurveyed & sampled 12-7. Dark brown, turbid.
MW-12S	Shallow - Interior	1212.94	58.02	1154.92	62.00	0.64	2	Dark Brown, turbid.
MW-12D	Deep - Interior	1212.80	58.11	1154.69	89.00	4.94	18	Clear.
MW-L16	Shallow	1212.99	56.95	1156.04	60.00	0.49	2	Dark brown, turbid.
Piezometer	Shallow	1212.59	58.45	1154.14				No sample, water level only.
Recovery Well	Shallow & Deep	1205.62	53.54	1152.08	94.00			No sample, water level only.
<b>Notes:</b> ** Top of PVC elevations were determined from survey by Jim Stockwin, LS, 2006. N/A = Not available, well casing have been damaged or modified.								

Table 2: Page 1 of 2  
Summary of Groundwater Analytical Results

	Feb-90	Aug-90	Nov-90	Feb-91	May-91	Aug-91	Nov-91	Feb-92	May-92	Aug-92	Nov-92	Feb-93	May-93	Aug-93	Nov-93	Feb-94	Jun-94	Sep-94	Dec-94	Feb-95	May-95	Nov-95	May-96	Nov-96	May-97	Nov-97	May-98	Nov-98	Aug-99	Jan-00	Nov-01	Nov-02	Jun-03	Nov-03	Nov-04	Dec-05	Sep-06	Nov-06	May-07	Nov-07	Nov-08	Nov-09	Dec-10	Nov-11	Nov-12				
MW-1S	TCE	<1	47	41	25	17	19	12	9	13	15	2	11	26	3	13	7	19	13	9	11	8	11	5	8	10	11	15	8	7	5	6	8	6	11	6	7	4	3	2	5	4	4	5	5.46				
	TCE Yearly Ave.		32	32	21	23	13	9	15	17	2	13	34	3	13	7	22	15	9	13	8	11	5	8	10	11	16	8	7	5	6	8	6	11	6	7	4	3	2	5	4	4	5	5.59					
	Total VOC's	<1	47	41	25	21	23	13	9	15	17	2	13	34	3	13	7	22	15	9	13	8	11	5	8	10	11	16	8	7	5	6	8	6	11	6	7	4	3	2	5	4	4	5	5.59				
	Total VOC Yearly Ave.		32	32	21	23	13	9	15	17	2	13	34	3	13	7	22	15	9	13	8	11	5	8	10	11	16	8	7	5	6	8	6	11	6	7	4	3	2	5	4	4	5	5.59					
MW-1D	TCE	32	<1	25	25	18	19	12	13	13	14	13	12	16	12	13	9	11	12	12	13	7	10	7	8	7	7	8	3	3	1	2	3	5	NS	3	NS	4	5	4	3	4	5.65						
	TCE Yearly Ave.		21	21	24	24	12	13	14	16	15	16	16	115	17	13	13	10	13	14	14	13	7	11	7	8	7	8	3	3	1	2	3	5	3	3	5	3	3	4	5	4	3	4	5.85				
	Total VOC's	32	<1	25	25	24	24	12	13	14	16	15	16	115	17	13	13	10	13	14	14	13	7	11	7	8	7	8	3	3	1	2	3	5	3	3	5	3	3	4	5	4	3	4	5.85				
	Total VOC Yearly Ave.		21	21	24	24	12	13	14	16	15	16	115	17	13	13	10	13	14	14	13	7	11	7	8	7	8	3	3	1	2	3	5	3	3	5	3	3	4	5	4	3	4	5.85					
MW-2S	TCE	4	5	6	8	6	8	10	5	7	5	5	5	7	7	4	4	3	4	4	4	NA	4	NA	3	NA	4	NA	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1.66				
	TCE Yearly Ave.		5	5	6	8	8	8	5	7	6	6	7	7	6	4	4	4	4	4	4	NA	4	NA	3	NA	4	NA	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1.66			
	Total VOC's	4	5	6	8	6	8	10	5	7	5	5	5	7	7	4	4	3	4	4	4	NA	4	NA	3	NA	4	NA	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1.66			
	Total VOC Yearly Ave.		5	5	6	8	8	8	5	7	6	6	7	7	6	4	4	4	4	4	4	NA	4	NA	3	NA	4	NA	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1.66			
MW-2D	TCE	6	9	8	7	5	7	9	5	5	5	5	3	4	6	3	3	2	3	2	2	3	NA	2	NA	2	NA	1	NA	3	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS		
	TCE Yearly Ave.		7	7	7	7	7	7	5	5	5	3	4	6	3	3	2	3	2	2	3	NA	2	NA	2	NA	1	NA	3	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged		
	Total VOC's	6	9	8	7	5	7	10	5	5	5	5	3	4	6	3	3	2	6	2	2	3	NA	2	NA	2	NA	1	NA	3	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged			
	Total VOC Yearly Ave.		7	7	7	7	7	7	5	5	5	3	4	6	3	3	2	6	2	2	3	NA	2	NA	2	NA	1	NA	3	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged	Damaged		
MW-3	TCE	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1	<1	<1	<1	<1	4	<1	<1	<1	<1	NA	19	NA	2	<1	8	NA	<1	<1	<1	<1	<1	2	1	<1	NS	2	NS	<1	NS	NS	NS	NS	NS	NS			
	TCE Yearly Ave.		0	0	0	0	0	0	0	0	0	1	<1	<1	<1	<1	4	<1	<1	<1	<1	NA	19	NA	2	<1	8	NA	<1	<1	<1	<1	<1	2	1	<1	NS	2	NS	<1	NS	NS	NS	NS	NS	NS			
	Total VOC's	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	2	1	<1	<1	<1	4	<1	<1	<1	<1	NA	33	NA	2	<1	12	NA	<1	<1	<1	<1	<1	3	1	2	5	3	1	2	5	<1							
	Total VOC Yearly Ave.		0	0	0	0	0	0	0	0	1	<1	<1	<1	<1	<1	4	<1	<1	<1	<1	NA	33	NA	2	<1	12	NA	<1	<1	<1	<1	<1	3	1	2	5	3	1	2	5	<1							
MW-4S	TCE	<1	<1	2	<1	1	2	1	<1	1	1	1	<1	1	<1	<1	NA	<1	<1	<1	<1	1	NA	<1	NA	<1	NA	<1	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.61			
	TCE Yearly Ave.		1	1	1	1	1	1	1	1	1	1	<1	1	<1	<1	NA	<1	<1	<1	<1	1	NA	<1	NA	<1	NA	<1	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.61		
	Total VOC's	<1	<1	2	<1	1	2	1	<1	1	1	1	<1	1	<1	<1	NA	<1	<1	<1	<1	1	NA	<1	NA	<1	NA	<1	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.61		
	Total VOC Yearly Ave.		1	1	1	1	1	1	1	1	1	1	<1	1	<1	<1	NA	<1	<1	<1	<1	1	NA	<1	NA	<1	NA	<1	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.61		
MW-4D	TCE	<1	1	<1	1	<1	1	1	<1	<1	<1	<1	<1	<1	<1	NA	<1	<1	<1	<1	<1	NA	<1	NA	<1	NA	<1	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.46			
	TCE Yearly Ave.		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.46	
	Total VOC's	<1	1	<1	1	<1	1	1	<1	<1	<1	<1	<1	<1	<1	NA	<1	<1	<1	<1	<1	NA	<1	NA	<1	NA	<1	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.46	
	Total VOC Yearly Ave.		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.46	
MW-5S	TCE	1	2	3	<1	1	2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA	<1	NA	<1	NA	<1	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.72			
	TCE Yearly Ave.		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0.72	
	Total VOC's	1	3	3	<1	1	2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA	<1	NA	<1	NA	<1	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.72	
	Total VOC Yearly Ave.		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0.72	
MW-5D	TCE	2	3	5	3	3	3	1	<1	1	2	1	<1	2	2	<1	<1	<1	<1	<1	<1	NA	2	NA	2	NA	2	NA	<1	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.62	
	TCE Yearly Ave.		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1.62
	Total VOC's	2	8	5	3	3	3	1	<1	1	2	1	<1	2	2	<1	<1	<1	<1	<1	<1	NA	2	NA	2	NA	2	NA	<1	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.62
	Total VOC Yearly Ave.		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	1.62	
MW-6	TCE	NA	43	35	38	62	8	NA	18	30	40	21	21	70	32	19	45	50	20	17	18	14	7	34	14	18	7	<1	10	5	11	4	14	16</															



**Table No. 3**  
**Monthly Analytical Results May 2001- December 2012**  
**Former SCM - Cortlandville**  
**Site No. 712006**

<b>Sampling Date</b>	<b>Compound</b>	<b>Tower Influent</b>	<b>Tower Discharge</b>	<b>Reg Limit</b>	<b>Outfall at Cascade</b>
5/17/2001	Trichloroethene	19.0	7.6	5	3.5
	Total VOC's	19.0	7.6		3.5
6/4/2001	Trichloroethene	14.0	5.6	5	2.3
	Total VOC's	14.0	5.6		2.3
7/10/2001	Trichloroethene	9.7	3.5	5	1.8
	Total VOC's	9.7	3.5		1.8
8/2/2001	Trichloroethene	13.0	5.4	5	3.0
	Total VOC's	13.0	5.4		3.0
9/7/2001	Trichloroethene	8.3	1.7	5	1.4
	Total VOC's	8.3	1.7		1.4
10/9/2001	Trichloroethene	8.0	ND<1	5	ND<1
	Total VOC's	8.0	ND<1		ND<1
11/13/2001	Trichloroethene	6.0	1.9	5	ND<1
	Total VOC's	6.0	1.9		ND<1
12/13/2001	Trichloroethene	5.7	2.6	5	1.2
	Total VOC's	5.7	2.6		1.2
1/9/2002	Trichloroethene	6.6	3.0	5	1.3
	Total VOC's	6.6	3.0		1.3
2/15/2002	Trichloroethene	9.4	2.6	5	1.6
	Total VOC's	10.6	2.6		1.6
3/8/2002	Trichloroethene	9.9	5.7	5	2.1
	Total VOC's	9.9	5.7		2.1
4/2/2002	Trichloroethene	11.0	4.4	5	2.2
	Total VOC's	11.0	4.4		2.2
5/1/2002	Trichloroethene	13.0	6.7	5	3.4
	Total VOC's	14.1	6.7		3.4
6/24/2002	Trichloroethene	14.0	4.7	5	3.4
	Total VOC's	14.0	4.7		3.4
7/9/2002	Trichloroethene	4.3	1.6	5	ND<1
	Total VOC's	4.3	1.6		1.3
8/12/2002	Trichloroethene	16.0	5.9	5	3.1
	Total VOC's	16.0	5.9		3.1
9/9/2002	Trichloroethene	12.0	3.9	5	1.8
	Total VOC's	12.0	3.9		1.8
10/3/2002	Trichloroethene	11.0	4.1	5	1.3
	Total VOC's	11.0	4.1		1.3
11/14/2002	Trichloroethene	10.0	4.3	5	2.0
	Total VOC's	10.0	4.3		2.0

**Table No. 3**  
**Monthly Analytical Results May 2001- December 2012**  
**Former SCM - Cortlandville**  
**Site No. 712006**

<b>Sampling Date</b>	<b>Compound</b>	<b>Tower Influent</b>	<b>Tower Discharge</b>	<b>Reg Limit</b>	<b>Outfall at Cascade</b>
12/31/2002	Trichloroethene	12.0	5.1	5	2.0
	Total VOC's	12.0	5.1		2.0
1/13/2003	Trichloroethene	13.0	5.8	5	2.1
	Total VOC's	13.0	5.8		2.1
2/19/2003	Trichloroethene	14.0	5.1	5	2.1
	Total VOC's	14.0	5.1		2.1
3/12/2003	Trichloroethene	14.0	5.9	5	2.2
	Total VOC's	14.0	5.9		2.2
4/9/2003	Trichloroethene	18.0	8.0	5	3.1
	Total VOC's	18.0	8.0		3.1
5/2/2003	Trichloroethene	16.0	5.8	5	3.0
	Total VOC's	16.0	5.8		3.0
6/20/2003	Trichloroethene	18.0	7.2	5	3.4
	Total VOC's	18.0	7.2		3.4
7/1/2003	Trichloroethene	16.0	5.8	5	2.4
	Total VOC's	16.0	5.8		2.4
8/14/2003	Trichloroethene	14.0	4.7	5	2.4
	Total VOC's	14.0	4.7		2.4
9/11/2003	Trichloroethene	9.6	3.5	5	1.8
	Total VOC's	9.6	3.5		1.8
10/2/2003	Trichloroethene	12.0	5.5	5	2.4
	Total VOC's	12.0	5.5		2.4
11/24/2003	Trichloroethene	10.0	1.1	5	1.4
	Total VOC's	10.0	1.1		1.4
12/3/2003	Trichloroethene	13.0	6.5	5	3.0
	Total VOC's	13.0	6.5		3.0
1/5/2004	Trichloroethene	12.0	6.4	5	3.0
	Total VOC's	12.0	6.4		3.0
2/2/2004	Trichloroethene	14.0	7.0	5	3.1
	Total VOC's	14.0	7.0		3.1
3/1/2004	Trichloroethene	13.0	4.8	5	2.0
	Total VOC's	13.0	4.8		2.0
4/2/2004	Trichloroethene	16.0	6.0	5	2.7
	Total VOC's	16.0	6.0		2.7
5/6/2004	Trichloroethene	14.0	5.3	5	2.5
	Total VOC's	14.0	5.3		2.5
6/3/2004	Trichloroethene	12.0	4.9	5	2.5
	Total VOC's	12.0	4.9		2.5



**Table No. 3**  
**Monthly Analytical Results May 2001- December 2012**  
**Former SCM - Cortlandville**  
**Site No. 712006**

Sampling Date	Compound	Tower Influent	Tower Discharge	Reg Limit	Outfall at Cascade
7/1/2004	Trichloroethene	13.0	4.6	5	2.0
	Total VOC's	13.0	4.6		2.0
8/17/2004	Trichloroethene	12.0	4.7	5	1.9
	Total VOC's	12.0	4.7		1.9
9/7/2004	Trichloroethene	11.0	3.9	5	1.5
	Total VOC's	11.0	3.9		1.5
10/18/2004	Trichloroethene	12.0	2.2	5	2.1
	Total VOC's	12.0	2.2		2.1
11/18/2004	Trichloroethene	13.0	4.6	5	2.2
	Total VOC's	13.0	4.6		2.2
12/8/2004	Trichloroethene	11.0	2.8	5	1.3
	Total VOC's	11.0	2.8		1.3
1/11/2005	Trichloroethene	13.0	6.5	5	2.7
	Total VOC's	13.0	6.5		2.7
2/8/2005	Trichloroethene	9.0	5.0	5	2.0
	Total VOC's	9.0	5.0		2.0
3/3/2005	Trichloroethene	13.0	3.3	5	1.6
	Total VOC's	13.0	3.3		1.6
4/4/2005	Trichloroethene	15.0	6.2	5	2.2
	Total VOC's	15.0	6.2		2.2
5/5/2005	Trichloroethene	11.0	4.5	5	1.9
	Total VOC's	11.0	4.5		1.9
6/8/2005	Trichloroethene	5.6	2.4	5	1.0
	Total VOC's	5.6	2.4		1.0
7/11/2005	Trichloroethene	12.0	4.3	5	2.0
	Total VOC's	12.0	4.3		2.0
8/1/2005	Trichloroethene	9.9	3.5	5	1.7
	Total VOC's	9.9	3.5		1.7
9/6/2005	Trichloroethene	7.2	2.8	5	1.1
	Total VOC's	7.2	2.8		1.1
10/14/2005	Trichloroethene	6.0	2.3	5	ND<1
	Total VOC's	6.0	2.3		ND<1
11/18/2005	Trichloroethene	7.1	3.2	5	1.2
	Total VOC's	7.1	3.2		1.2
12/5/2005	Trichloroethene	7.4	3.1	5	1.2
	Total VOC's	7.4	3.1		1.2
1/3/2006	Trichloroethene	8.9	4.0	5	1.5
	Total VOC's	8.9	4.0		1.5
2/2/2006	Trichloroethene	9.5	4.0	5	1.7
	Total VOC's	9.5	4.0		1.7
3/20/2006	Trichloroethene	9.2	1.6	5	1.1
	Total VOC's	9.2	1.6		1.1

**Table No. 3**  
**Monthly Analytical Results May 2001- December 2012**  
**Former SCM - Cortlandville**  
**Site No. 712006**

<b>Sampling Date</b>	<b>Compound</b>	<b>Tower Influent</b>	<b>Tower Discharge</b>	<b>Reg Limit</b>	<b>Outfall at Cascade</b>
4/19/2006	Trichloroethene	10.0	4.0	5	1.6
	Total VOC's	10.0	4.0		1.6
5/4/2006	Trichloroethene	10.0	3.9	5	1.7
	Total VOC's	10.0	3.9		1.7
6/2/2006	Trichloroethene	9.6	3.6	5	1.7
	Total VOC's	9.6	3.6		1.7
7/6/2006	Trichloroethene	10.0	4.0	5	1.8
	Total VOC's	10.0	4.0		1.8
8/4/2006	Trichloroethene	10.0	4.2	5	1.7
	Total VOC's	10.0	4.2		1.7
9/5/2006	Trichloroethene	11.0	4.4	5	1.8
	Total VOC's	11.0	4.4		1.8
10/5/2006	Trichloroethene	11.0	4.4	5	1.8
	Total VOC's	11.0	4.4		1.8
11/20/2006	Trichloroethene	10.0	4.2	5	1.9
	Total VOC's	10.0	4.2		1.9
12/6/2006	Trichloroethene	11.0	2.9	5	1.2
	Total VOC's	11.0	2.9		1.2
1/8/2007	Trichloroethene	10.0	4.4	5	1.8
	Total VOC's	10.0	4.4		1.8
2/6/2007	Trichloroethene	12.0	3.1	5	ND<1
	Total VOC's	12.0	3.1		ND<1
3/21/2007	Trichloroethene	11.0	4.6	5	1.8
	Total VOC's	11.0	4.6		1.8
4/5/2007	Trichloroethene	10.0	4.8	5	1.6
	Total VOC's	10.0	4.8		1.6
5/18/2007	Trichloroethene	11.0	4.5	5	2.0
	Total VOC's	11.0	4.5		2.0
6/13/2007	Trichloroethene	12.0	4.3	5	2.0
	Total VOC's	12.0	4.3		2.0
7/9/2007	Trichloroethene	10.0	4.1	5	1.4
	Total VOC's	10.0	4.1		1.4
8/8/2007	Trichloroethene	9.2	3.4	5	1.4
	Total VOC's	9.2	3.4		1.4
9/7/2007	Trichloroethene	6.2	2.4	5	1.0
	Total VOC's	6.2	2.4		1.0

**Table No. 3**  
**Monthly Analytical Results May 2001- December 2012**  
**Former SCM - Cortlandville**  
**Site No. 712006**

<b>Sampling Date</b>	<b>Compound</b>	<b>Tower Influent</b>	<b>Tower Discharge</b>	<b>Reg Limit</b>	<b>Outfall at Cascade</b>
10/4/2007	Trichloroethene	5.9	2.2	5	1.2
	Total VOC's	5.9	2.2		1.2
11/26/2007	Trichloroethene	6.3	2.9	5	1.2
	Total VOC's	6.3	2.9		1.2
12/26/2007	Trichloroethene	10.0	4.8	5	1.9
	Total VOC's	10.0	4.8		3.0
1/11/2008	Trichloroethene	11.0	5.0	5	2.0
	Total VOC's	11.0	5.0		2.0
2/15/2008	Trichloroethene	8.9	3.5	5	1.3
	Total VOC's	8.9	3.5		1.3
3/24/2008	Trichloroethene	11.0	4.4	5	1.9
	Total VOC's	11.0	4.4		1.9
4/16/2008	Trichloroethene	9.6	3.9	5	1.7
	Total VOC's	9.6	3.9		1.7
5/21/2008	Trichloroethene	10.0	4.8	5	2.0
	Total VOC's	10.0	4.8		2.0
6/26/2008	Trichloroethene	8.5	3.4	5	1.7
	Total VOC's	8.5	3.4		1.7
7/22/2008	Trichloroethene	8.1	3.5	5	1.6
	Total VOC's	8.1	3.5		1.6
8/21/2008	Trichloroethene	6.0	3.0	5	1.3
	Total VOC's	6.0	3.0		1.3
9/18/2008	Trichloroethene	5.9	2.7	5	1.0
	Total VOC's	5.9	2.7		1.0
10/23/2008	Trichloroethene	3.5	2.2	5	<1
	Total VOC's	3.5	2.2		<1
11/26/2008	Trichloroethene	4.0	2.2	5	1.0
	Total VOC's	4.0	2.2		1.0
12/16/2008	Trichloroethene	4.2	2.2	5	1.1
	Total VOC's	4.2	2.2		1.1
1/20/2009	Trichloroethene	6.2	3.5	5	1.5
	Total VOC's	6.2	3.5		1.5
2/23/2009	Trichloroethene	5.0	2.1	5	<1
	Total VOC's	5.0	2.1		<1
3/17/2009	Trichloroethene	5.7	3.6	5	1.5
	Total VOC's	5.7	3.6		1.5
4/16/2009	Trichloroethene	6.0	3.5	5	1.8
	Total VOC's	6.0	3.5		1.8

**Table No. 3**  
**Monthly Analytical Results May 2001- December 2012**  
**Former SCM - Cortlandville**  
**Site No. 712006**

<b>Sampling Date</b>	<b>Compound</b>	<b>Tower Influent</b>	<b>Tower Discharge</b>	<b>Reg Limit</b>	<b>Outfall at Cascade</b>
5/19/2009	Trichloroethene	6.4	3.5	5	1.6
	Total VOC's	6.4	3.5		1.6
6/18/2009	Trichloroethene	6.2	2.8	5	1.6
	Total VOC's	6.2	2.8		1.6
7/14/2009	Trichloroethene	4.3	2.7	5	1.4
	Total VOC's	4.3	2.7		1.4
8/31/2009	Trichloroethene	3.7	1.9	5	1.0
	Total VOC's	3.7	1.9		1.0
9/24/2009	Trichloroethene	3.7	2.0	5	1.0
	Total VOC's	3.7	2.0		1.0
10/20/2009	Trichloroethene	3.9	2.0	5	1.0
	Total VOC's	3.9	2.0		1.0
11/30/2009	Trichloroethene	3.2	2.2	5	1.0
	Total VOC's	3.2	2.2		1.0
12/29/2009	Trichloroethene	5.1	1.7	5	<1
	Total VOC's	5.1	1.7		<1
1/28/2010	Trichloroethene	5.9	2.7	5	1.3
	Total VOC's	5.9	2.7		1.3
2/24/2010	Trichloroethene	6.9	2.9	5	1.4
	Total VOC's	6.9	2.9		1.4
3/30/2010	Trichloroethene	8.0	3.7	5	1.7
	Total VOC's	8.0	3.7		1.7
4/29/2010	Trichloroethene	8.6	3.5	5	1.7
	Total VOC's	8.6	3.5		1.7
5/27/2010	Trichloroethene	8.5	3.1	5	1.8
	Total VOC's	8.5	3.1		1.8
6/30/2010	Trichloroethene	8.0	3.1	5	1.6
	Total VOC's	8.0	3.1		1.6
7/29/2010	Trichloroethene	6.8	2.5	5	1.2
	Total VOC's	6.8	2.5		1.2
8/31/2010	Trichloroethene	4.6	2.0	5	1.1
	Total VOC's	4.6	2.0		1.1
9/29/2010	Trichloroethene	4.9	1.9	5	1.0
	Total VOC's	4.9	1.9		1.0
10/28/2010	Trichloroethene	5.4	2.2	5	1.0
	Total VOC's	5.4	2.2		1.0
11/29/2010	Trichloroethene	6.4	2.5	5	1.2
	Total VOC's	6.4	2.5		1.2

**Table No. 3**  
**Monthly Analytical Results May 2001- December 2012**  
**Former SCM - Cortlandville**  
**Site No. 712006**

<b>Sampling Date</b>	<b>Compound</b>	<b>Tower Influent</b>	<b>Tower Discharge</b>	<b>Reg Limit</b>	<b>Outfall at Cascade</b>
12/31/2010	Trichloroethene	9.9	3.7	5	1.3
	Total VOC's	9.9	3.7		1.3
1/24/2011	Trichloroethene	9.6	5.1	5	2.3
	Total VOC's	9.6	5.1		2.3
2/25/2011	Trichloroethene	8.0	5.3	5	2.0
	Total VOC's	8.0	5.3		2.0
3/31/2011	Trichloroethene	11.0	4.4	5	2.0
	Total VOC's	11.0	4.4		2.0
4/28/2011	Trichloroethene	11.0	4.1	5	1.9
	Total VOC's	11.0	4.1		1.9
5/31/2011	Trichloroethene	14.0	4.5	5	2.3
	Total VOC's	14.0	4.5		2.3
6/29/2011	Trichloroethene	12.0	4.5	5	2.2
	Total VOC's	12.0	4.5		2.2
7/29/2011	Trichloroethene	9.9	3.4	5	1.8
	Total VOC's	9.9	3.4		1.8
8/19/2011	Trichloroethene	9.8	3.5	5	1.8
	Total VOC's	9.8	3.5		1.8
9/27/2011	Trichloroethene	8.9	3.2	5	1.5
	Total VOC's	8.9	3.2		1.5
10/26/2011	Trichloroethene	9.7	3.9	5	1.7
	Total VOC's	9.7	3.9		1.7
11/22/2011	Trichloroethene	8.8	3.8	5	1.5
	Total VOC's	8.8	3.8		1.5
12/27/2011	Trichloroethene	10.4	4.3	5	1.7
	Total VOC's	10.7	4.5		1.7
1/27/2012	Trichloroethene	10.3	4.1	5	1.6
	Total VOC's	10.5	4.3		1.6
2/24/2012	Trichloroethene	12.0	5.0	5	2.1
	Total VOC's	12.3	5.2		2.1
3/27/2012	Trichloroethene	11.9	4.7	5	2.0
	Total VOC's	11.9	4.7		2.6
4/23/2012	Trichloroethene	10.2	4.2	5	1.9
	Total VOC's	10.4	4.3		1.9
5/31/2012	Trichloroethene	9.6	3.6	5	1.8
	Total VOC's	9.7	3.7		1.8
6/25/2012	Trichloroethene	8.3	3.4	5	1.4
	Total VOC's	8.4	3.5		1.4
7/26/2012	Trichloroethene	7.7	2.7	5	1.5
	Total VOC's	7.8	2.7		1.5

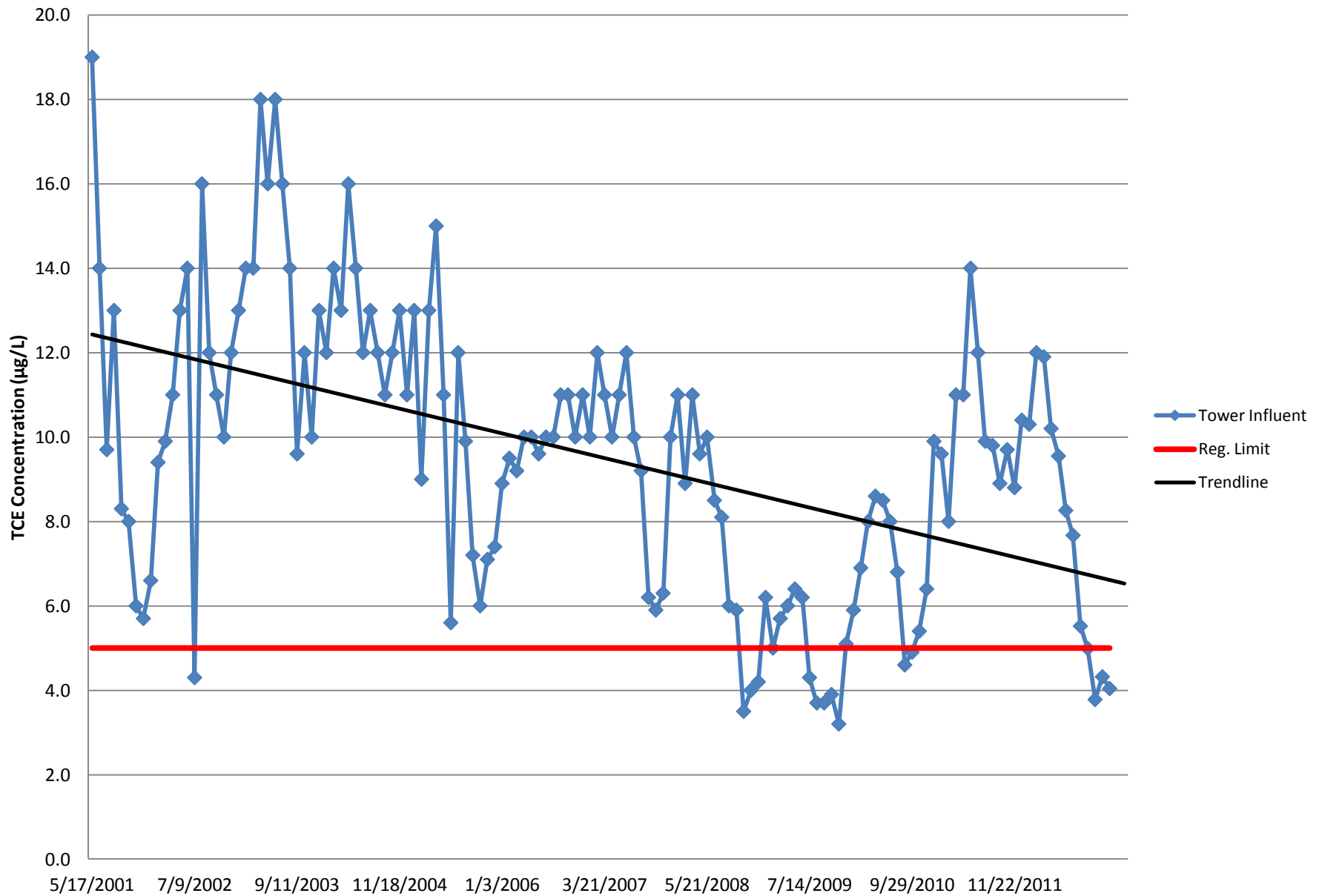
**Table No. 3**  
**Monthly Analytical Results May 2001- December 2012**  
**Former SCM - Cortlandville**  
**Site No. 712006**

<b>Sampling Date</b>	<b>Compound</b>	<b>Tower Influent</b>	<b>Tower Discharge</b>	<b>Reg Limit</b>	<b>Outfall at Cascade</b>
8/29/2012	Trichloroethene	5.5	2.0	5	0.9
	Total VOC's	5.5	2.0		0.9
9/25/2012	Trichloroethene	5.0	1.9	5	0.8
	Total VOC's	5.0	1.9		0.8
10/29/02012	Trichloroethene	3.8	1.6	5	0.6
	Total VOC's	3.8	1.6		0.6
11/21/2012	Trichloroethene	4.3	1.9	5	0.7
	Total VOC's	4.3	1.9		0.7
12/18/2012	Trichloroethene	4.0	1.7	5	0.7
	Total VOC's	4.0	1.7		0.7

***APPENDIX D***

***CHARTS***

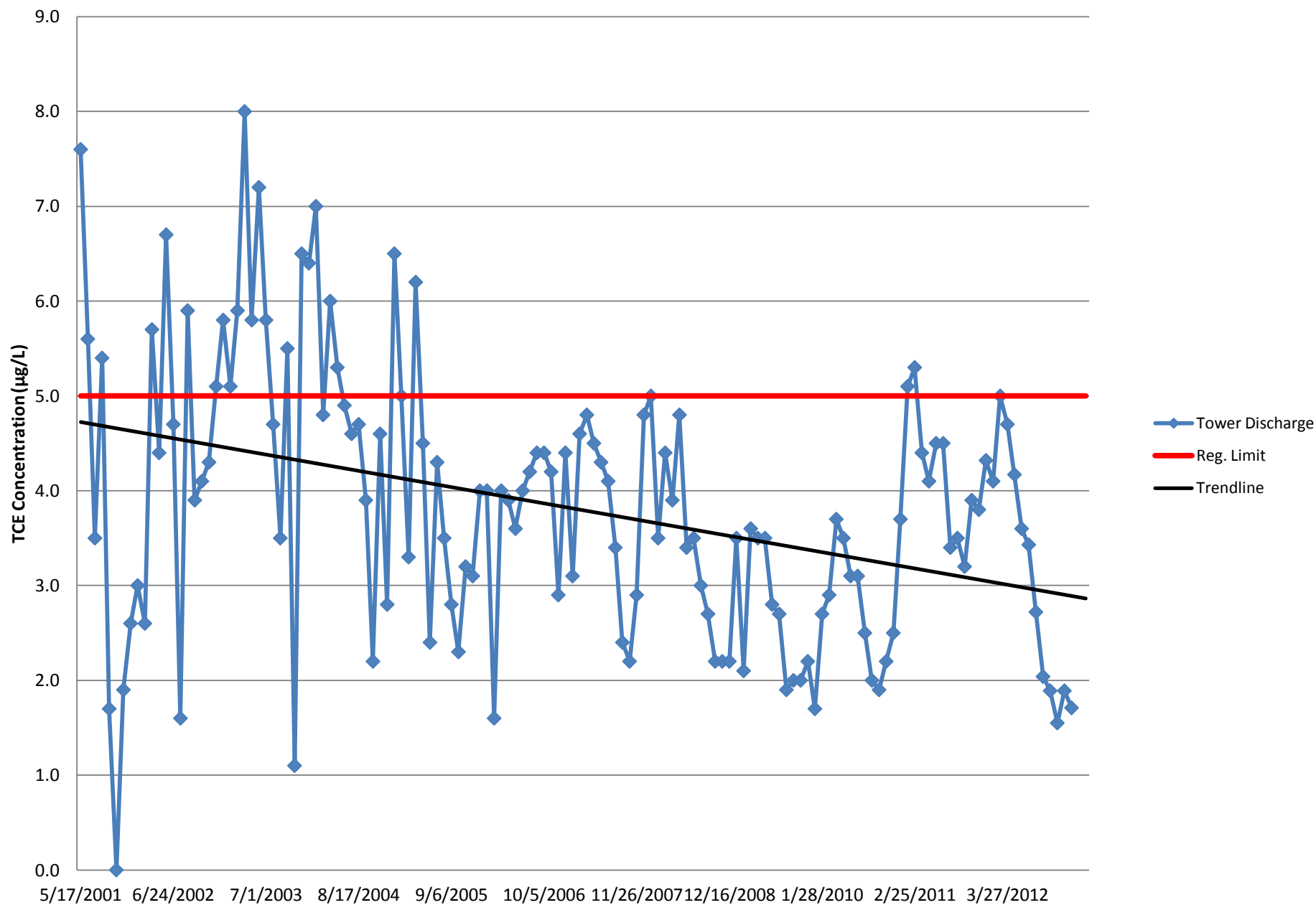
### Chart 1: Tower Influent TCE Concentrations (µg/L)



Former SCM - Cortlandville  
Site No. 712006  
2012 PRR

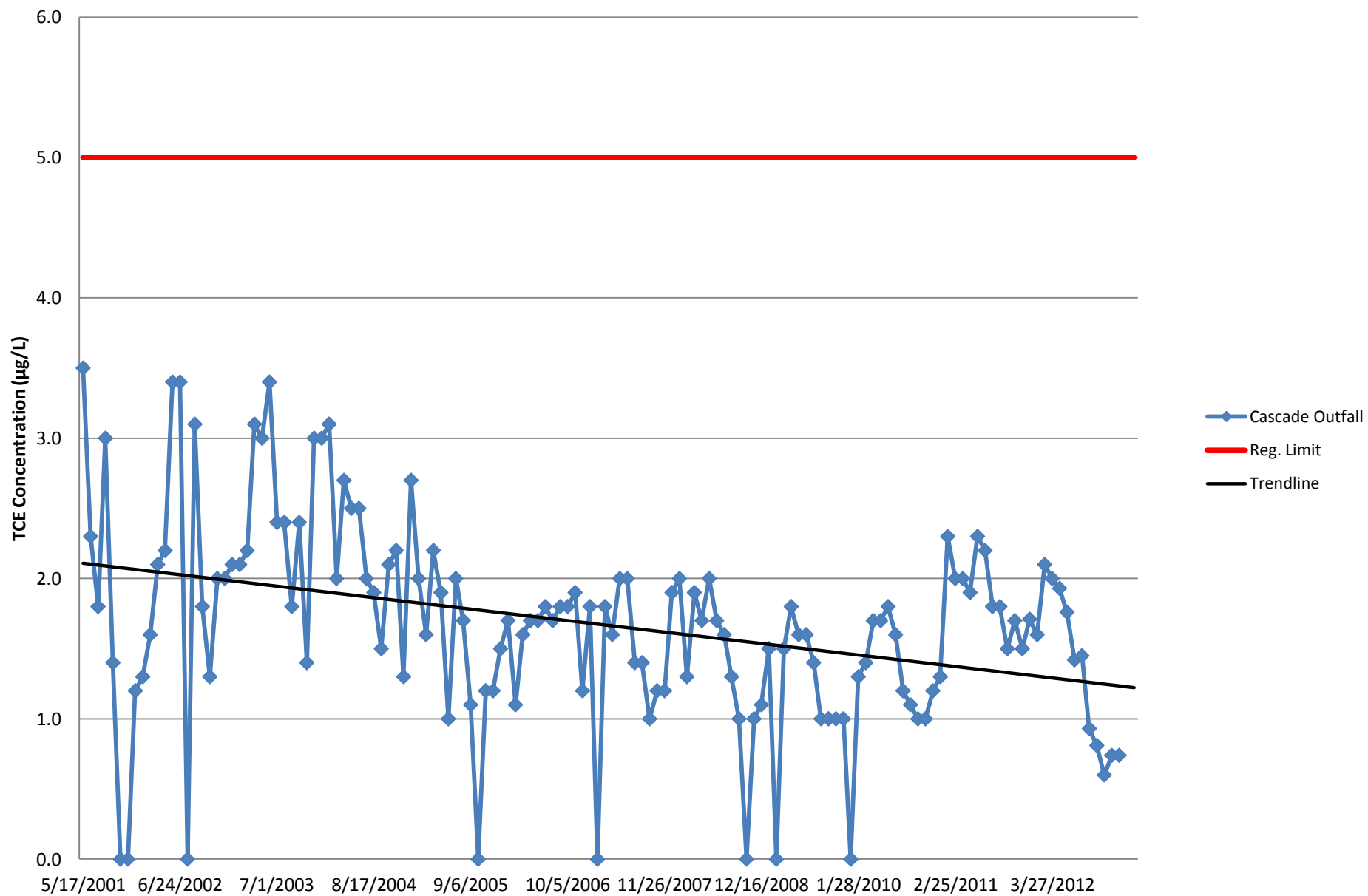


### Chart 2: Tower Discharge TCE Concentrations (µg/L)



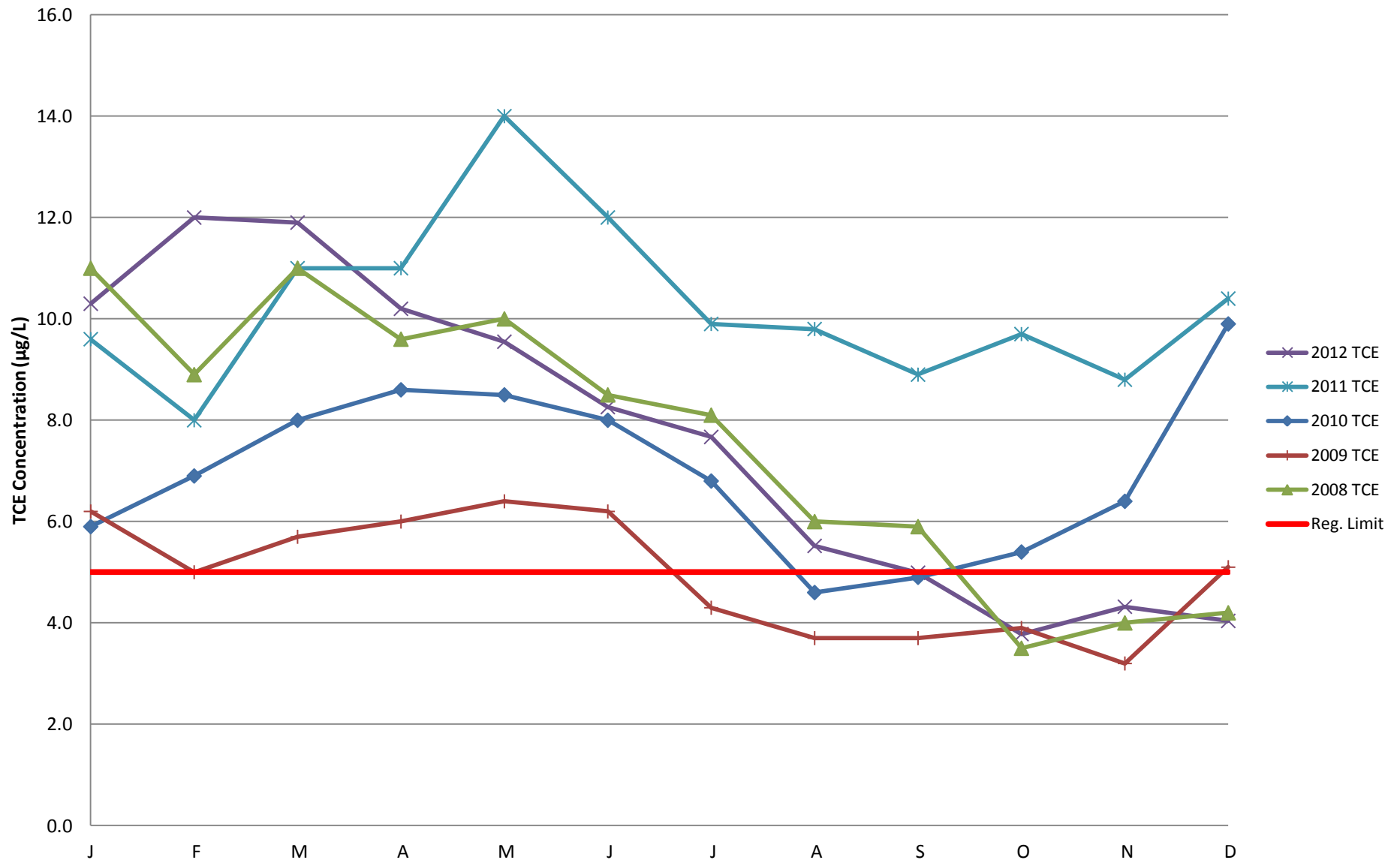
Former SCM - Cortlandville  
Site No. 712006  
2012 PRR

### Chart 3: Cascade Outfall TCE Concentrations (µg/L)



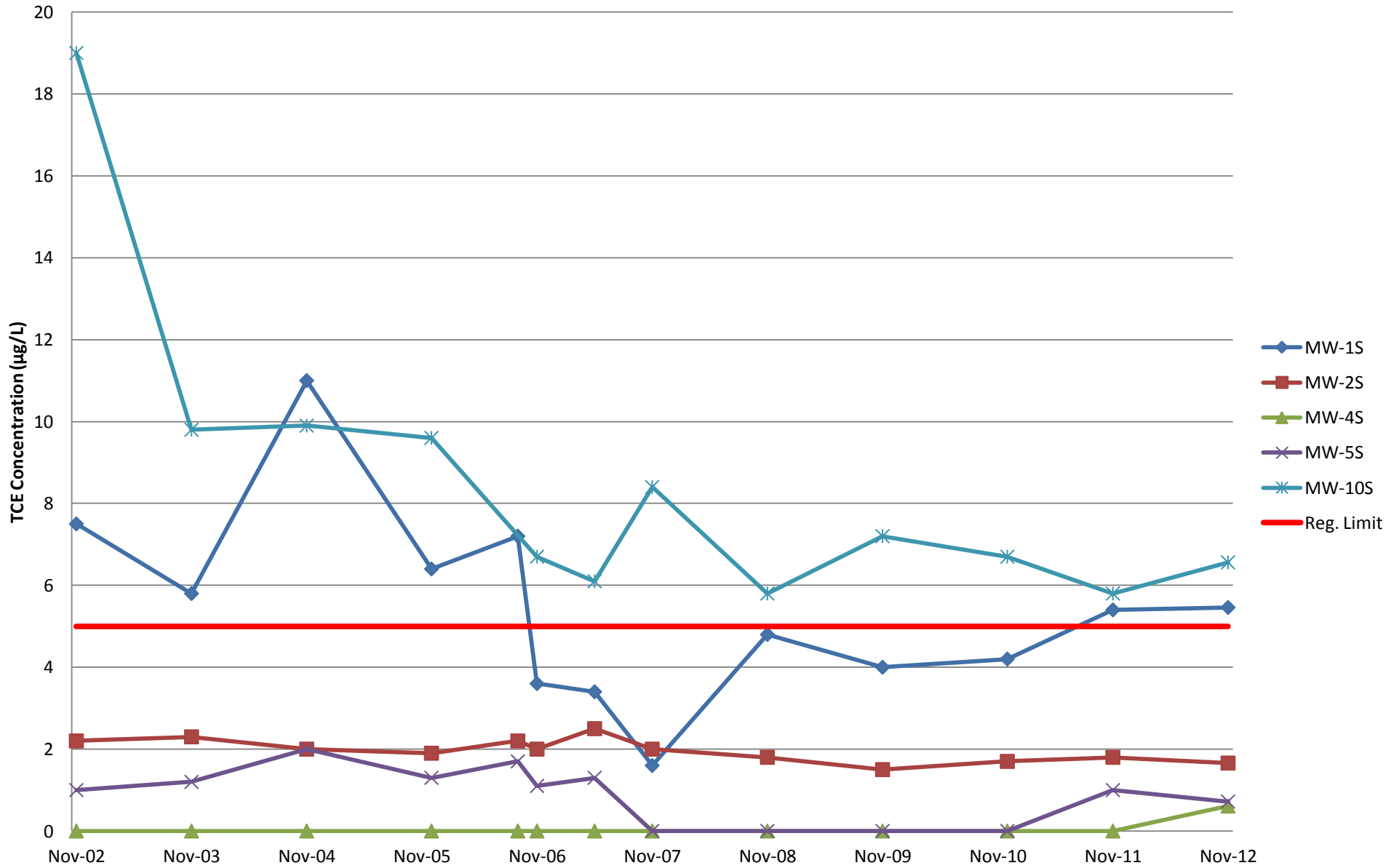
Former SCM - Cortlandville  
Site No. 712006  
2012 PRR

### Chart 4: Tower Influent TCE Concentrations (µg/L) 2008, 2009, 2010, 2011 & 2012



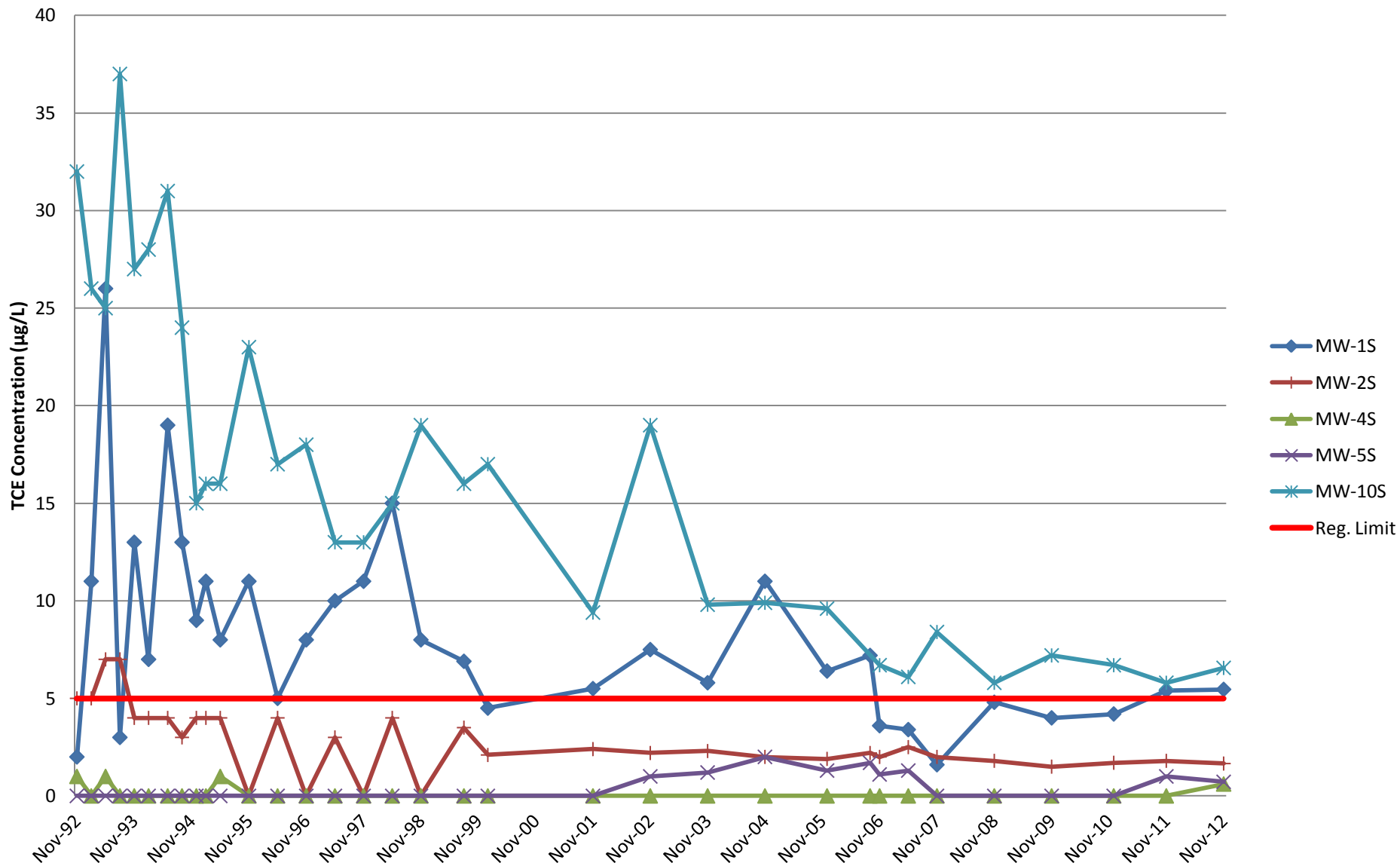
Former SCM - Cortlandville  
Site No. 712006  
2012 PRR

### Chart 5: Perimeter Shallow Wells 10-Year TCE Concentrations (µg/L)



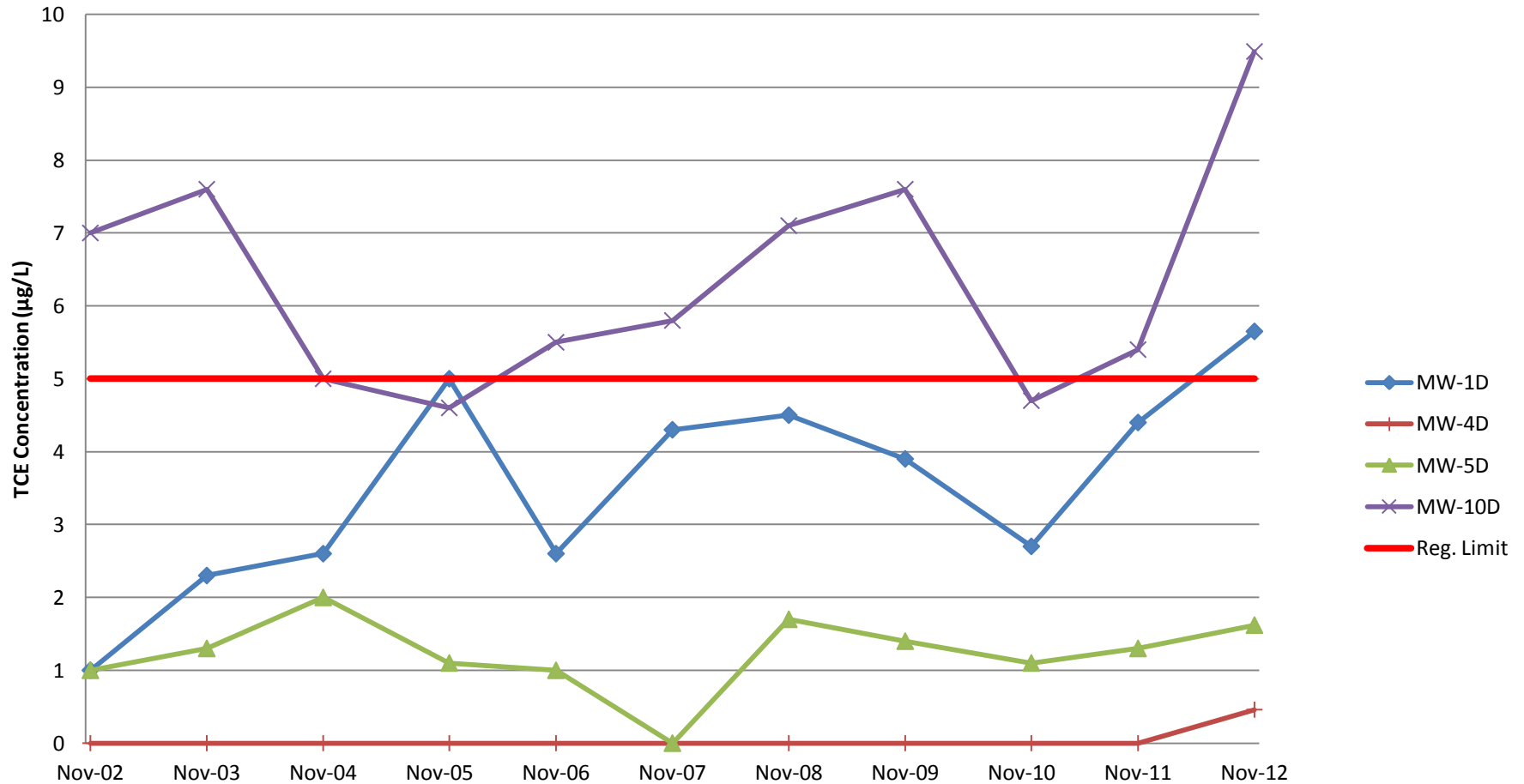
Former SCM - Cortlandville  
Site No. 712006  
2012 PRR

### Chart 6: Perimeter Shallow Wells 20-Year TCE Concentrations (µg/L)



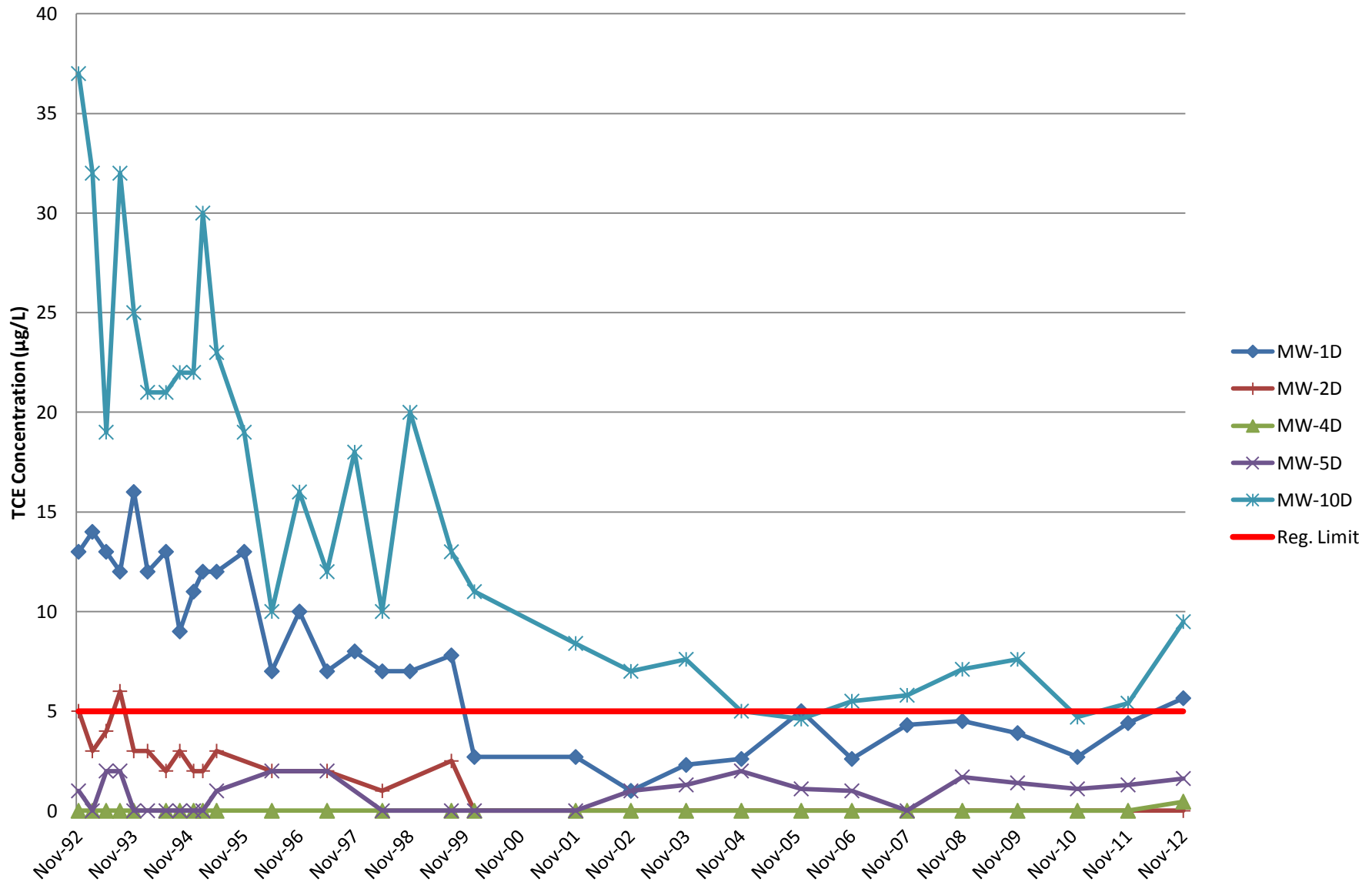
Former SCM - Cortlandville  
Site No. 712006  
2012 PRR

### Chart 7: Perimeter Deep Wells 10-Year TCE Concentrations (µg/L)



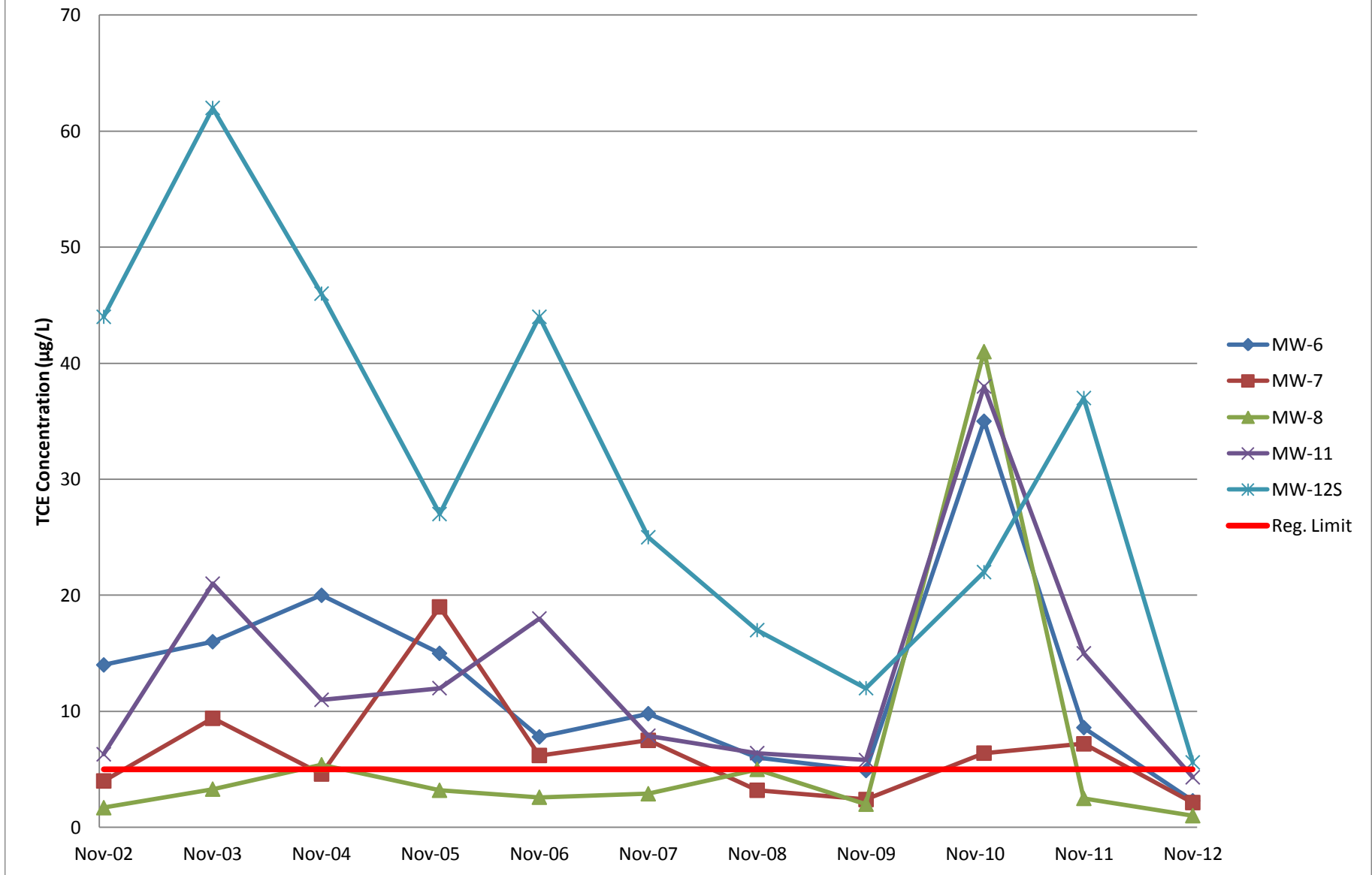
Former SCM - Cortlandville  
Site No. 712006  
2012 PRR

### Chart 8: Perimeter Deep Wells 20-Year TCE Concentrations (µg/L)



Former SCM - Cortlandville  
Site No. 712006  
2012 PRR

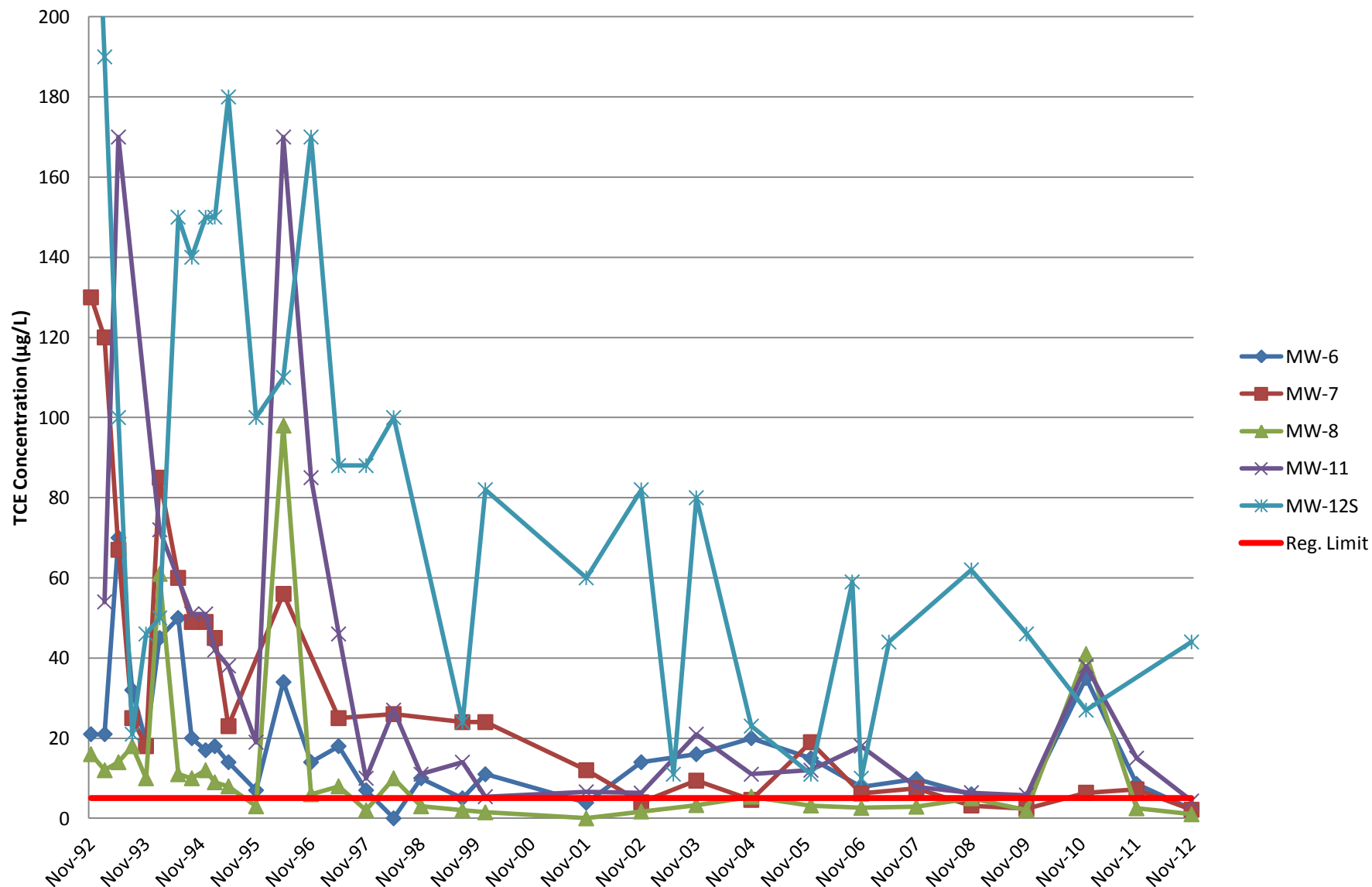
### Chart 9: Interior Shallow Wells 10-Year TCE Concentrations (µg/L)



Former SCM - Cortlandville  
Site No. 712006  
2012 PRR

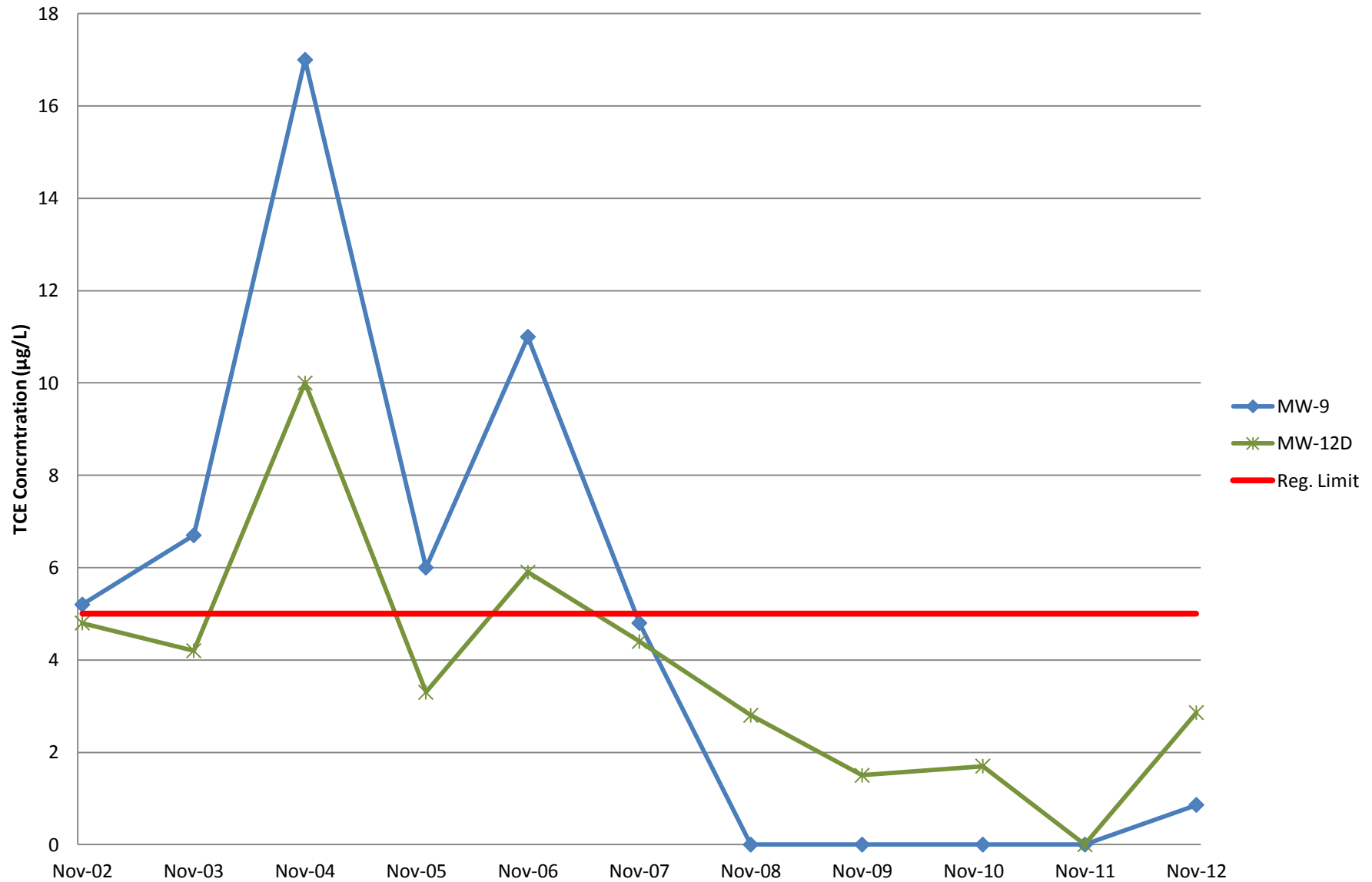


### Chart 10: Interior Shallow Wells 20-Year TCE Concentrations (µg/L)



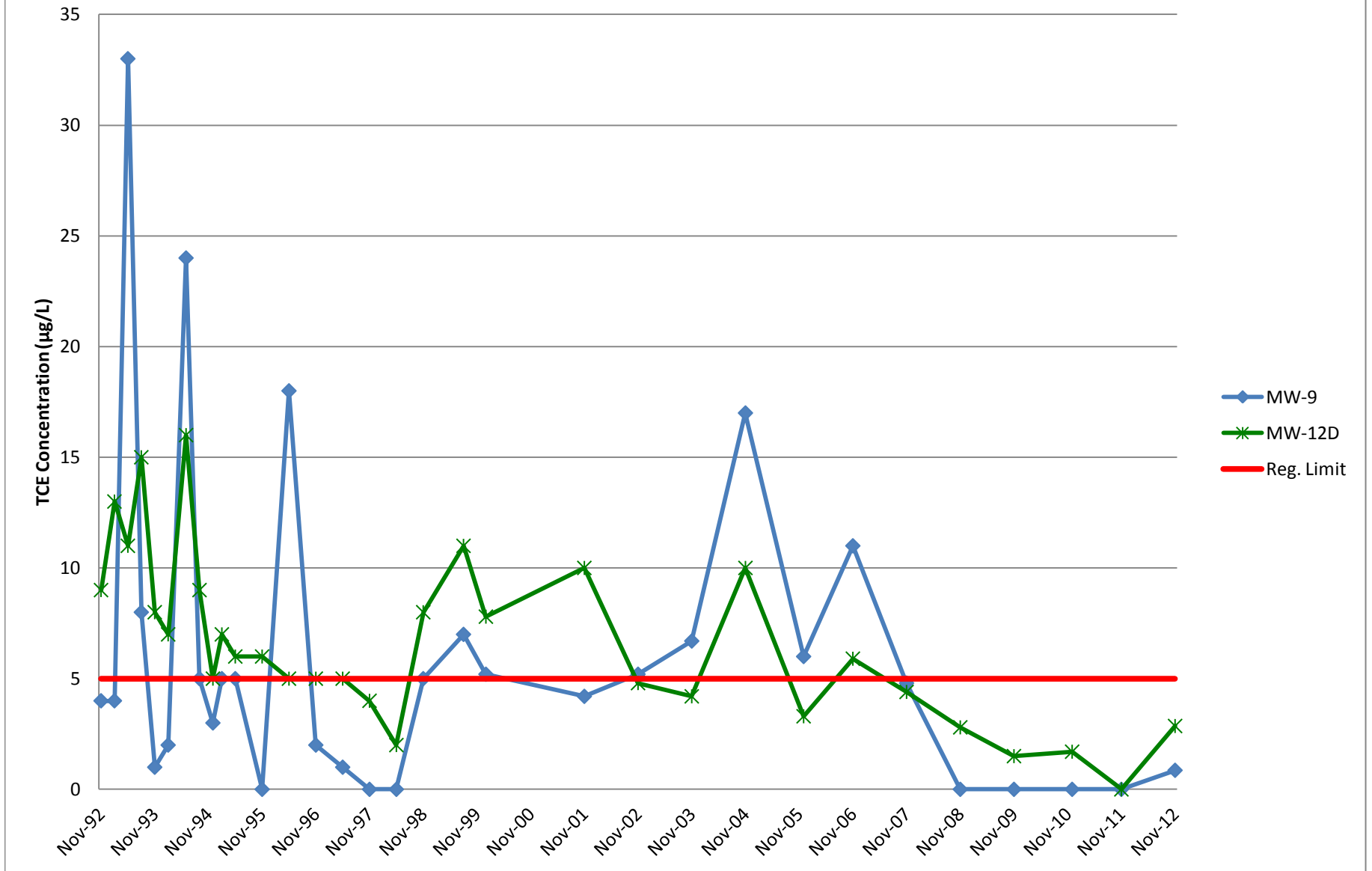
Former SCM - Cortlandville  
Site No. 712006  
2012 PRR

### Chart 11: Interior Deep Wells 10-Year TCE Concentration ( $\mu\text{g/L}$ )



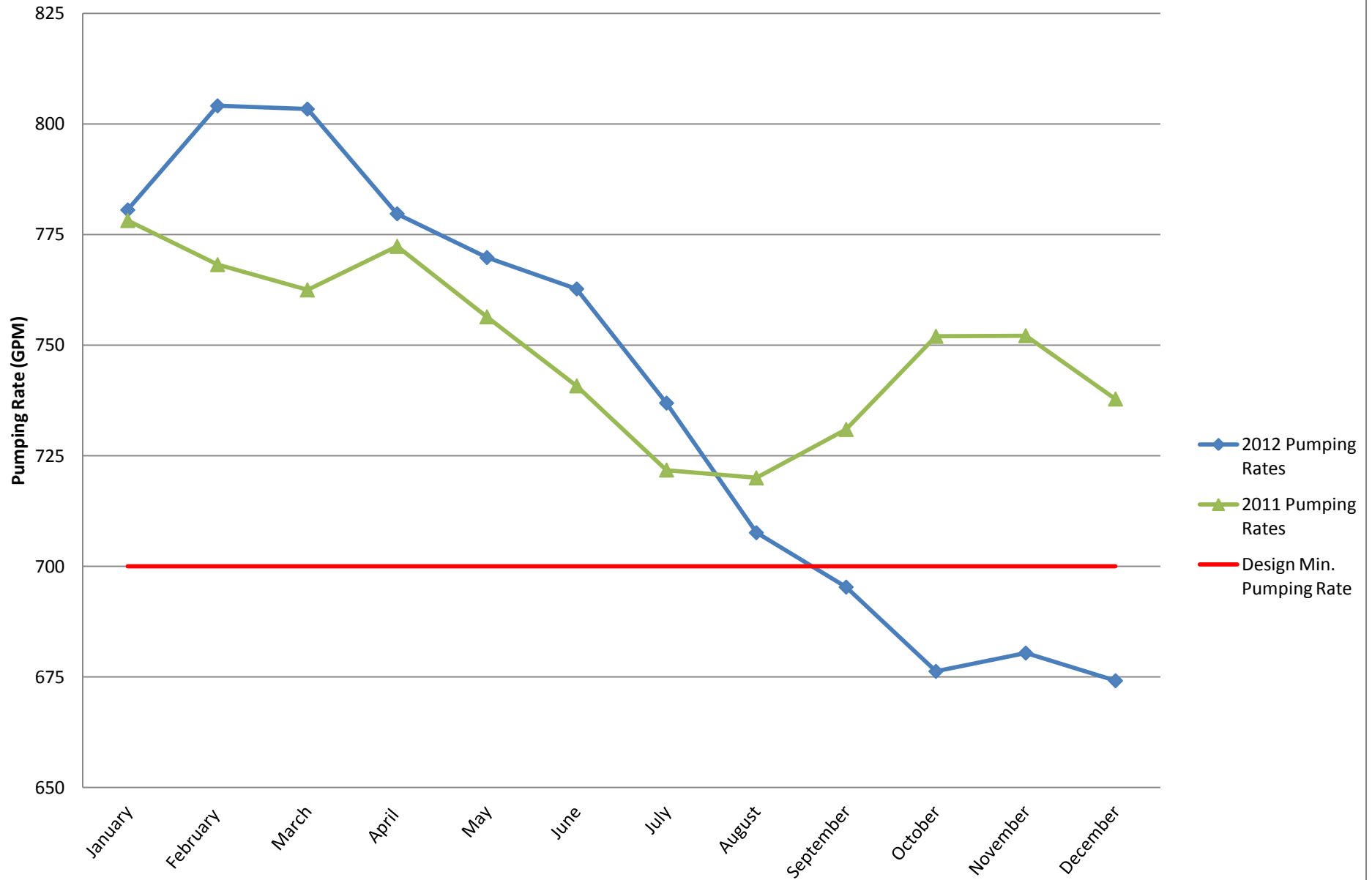
Former SCM - Cortlandville  
Site No. 712006  
2012 PRR

### Chart 12: Interior Deep Wells 20-Year TCE Concentrations (µg/L)



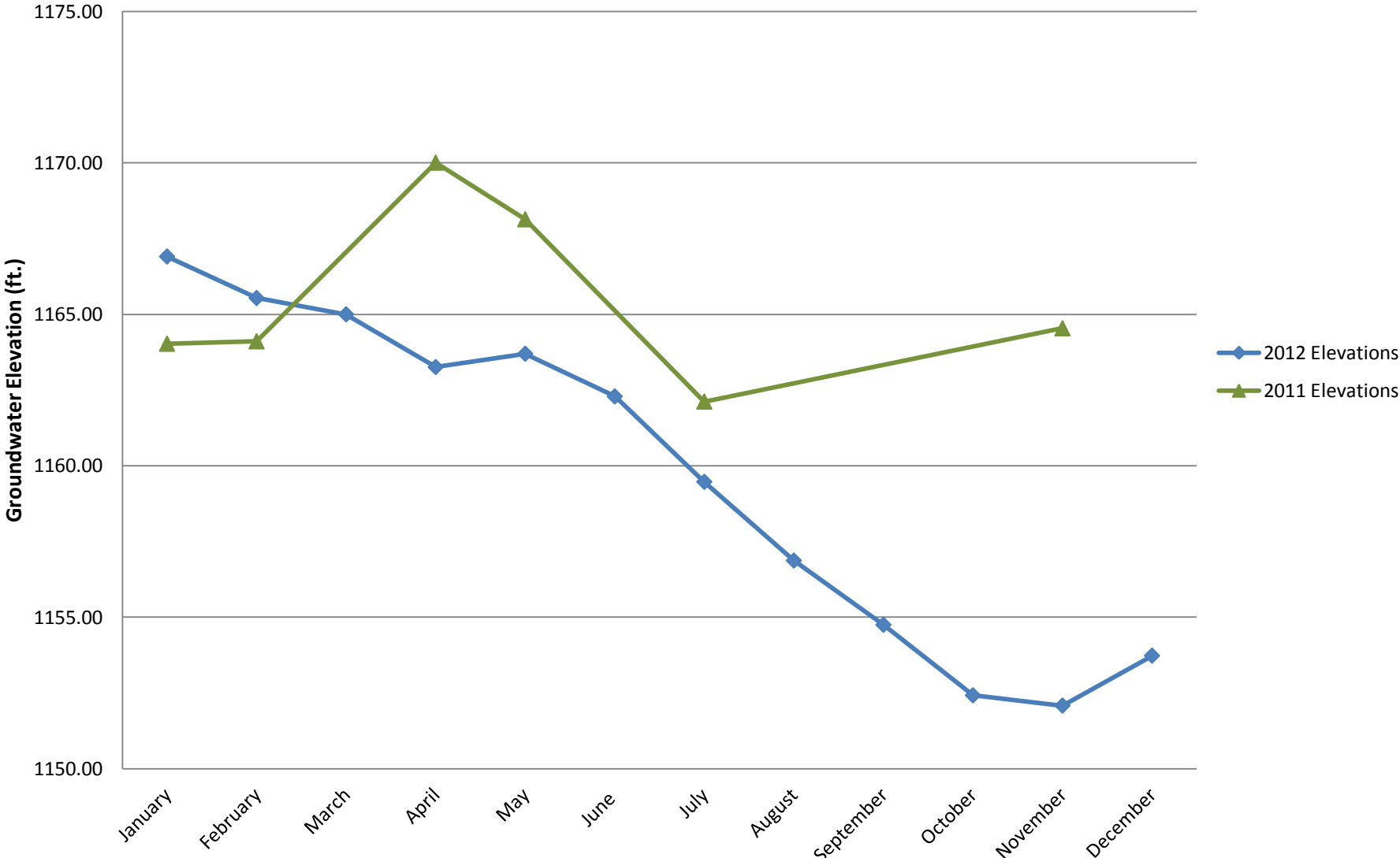
Former SCM - Cortlandville  
Site No. 712006  
2012 PRR

### Chart 13: 2011 & 2012 Pumping Rates vs. Design Minimum Pumping Rate



Former SCM - Cortlandville  
Site No. 712006  
2012 PRR

**Chart 14: 2012 Recovery Well Groundwater Elevation vs. 2011 Recovery Well Groundwater Elevations**



Former SCM - Cortlandville  
Site No. 712006  
2012 PRR

***APPENDIX E***

***ANALYTICAL RESULTS FROM 2012 ANNUAL SAMPLING EVENT***



**Life Science Laboratories, Inc.**

5854 Butternut Drive  
East Syracuse, NY 13057

(315) 445-1900

Thursday, December 06, 2012

Mr. Christopher Gabriel  
GeoLogic NY, Inc.  
37 Copeland Ave.  
Homer, NY 13077

TEL: 607 749-5000

Project: 210087

RE: Analytical Results

Order No.: K1211246

Dear Mr. Christopher Gabriel:

Life Science Laboratories, Inc. received 17 sample(s) on 11/21/2012 for the analyses presented in the following report. Sample results relate only to the samples as received by the laboratory.

Very truly yours,  
Life Science Laboratories, Inc.

Anthony Crescenzi  
Project Manager



# Life Science Laboratories, Inc.

5854 Butternut Drive

East Syracuse, NY 13057

(315) 445-1900

# Analytical Results

StateCertNo: 10248

**CLIENT** GeoLogic NY, Inc.

**Project:** 210087

**W Order:** K1211246

**Matrix:** WATER

**Inst. ID:** MS01\_11

**ColumnID:** Rtx-VMS

**Revision:** 12/04/12 13:07

**Col Type:**

**Sample Size** 10 mL

**%Moisture:**

**TestCode:** 8260W

**Lab ID:** K1211246-001A

**Client Sample ID:** MW-1S

**Collection Date:** 11/19/12 16:00

**Date Received:** 11/21/12 13:40

**PrepDate:**

**BatchNo:** R24877

**FileID:** 1-SAMP-T4730.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>				<b>SW8260B</b>			
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	11/29/12 13:14
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	11/29/12 13:14
cis-1,2-Dichloroethene	0.13	J	0.50	0.10	µg/L	1	11/29/12 13:14
Tetrachloroethene	ND		0.50	0.10	µg/L	1	11/29/12 13:14
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	11/29/12 13:14
Trichloroethene	5.46		0.50	0.10	µg/L	1	11/29/12 13:14
Vinyl chloride	ND		1.00	0.33	µg/L	1	11/29/12 13:14
Surr: 1,2-Dichloroethane-d4	113		75-130	0.16	%REC	1	11/29/12 13:14
Surr: Toluene-d8	105		75-125	0.10	%REC	1	11/29/12 13:14
Surr: 4-Bromofluorobenzene	106		75-125	0.10	%REC	1	11/29/12 13:14

Qualifiers:		
*	Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E	Value exceeds the instrument calibration range	H Holding times for preparation or analysis exceeded
J	Analyte detected below the PQL	ND Not Detected at the Practical Quantitation Limit (PQL)
P	Prim./Conf. column %D or RPD exceeds limit	S Spike Recovery outside accepted recovery limits

Print Date: 12/05/12 8:25

623933

roject Supervisor: Greg I. Smith





# Life Science Laboratories, Inc.

5854 Butternut Drive

East Syracuse, NY 13057

(315) 445-1900

## Analytical Results

StateCertNo: 10248

CLIENT GeoLogic NY, Inc.

Project: 210087

W Order: K1211246

Matrix: WATER

Inst. ID: MS01\_11

ColumnID: Rtx-VMS

Revision: 12/04/12 13:07

Col Type:

Sample Size 10 mL

%Moisture:

TestCode: 8260W

Lab ID: K1211246-002A

Client Sample ID: MW-1D

Collection Date: 11/19/12 16:15

Date Received: 11/21/12 13:40

PrepDate:

BatchNo: R24877

FileID: 1-SAMP-T4733.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>					<b>SW8260B</b>		
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	11/29/12 14:49
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	11/29/12 14:49
cis-1,2-Dichloroethene	0.20	J	0.50	0.10	µg/L	1	11/29/12 14:49
Tetrachloroethene	ND		0.50	0.10	µg/L	1	11/29/12 14:49
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	11/29/12 14:49
Trichloroethene	5.65		0.50	0.10	µg/L	1	11/29/12 14:49
Vinyl chloride	ND		1.00	0.33	µg/L	1	11/29/12 14:49
Surr: 1,2-Dichloroethane-d4	108		75-130	0.16	%REC	1	11/29/12 14:49
Surr: Toluene-d8	105		75-125	0.10	%REC	1	11/29/12 14:49
Surr: 4-Bromofluorobenzene	106		75-125	0.10	%REC	1	11/29/12 14:49

Qualifiers:		
*	Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E	Value exceeds the instrument calibration range	H Holding times for preparation or analysis exceeded
J	Analyte detected below the PQL	ND Not Detected at the Practical Quantitation Limit (PQL)
P	Prim./Conf. column %D or RPD exceeds limit	S Spike Recovery outside accepted recovery limits

Print Date: 12/05/12 8:25

623934

roject Supervisor: Greg I. Smith



# Life Science Laboratories, Inc.

5854 Butternut Drive

East Syracuse, NY 13057

(315) 445-1900

## Analytical Results

StateCertNo: 10248

**CLIENT** GeoLogic NY, Inc.

**Project:** 210087

**W Order:** K1211246

**Matrix:** WATER

**Inst. ID:** MS01\_11

**ColumnID:** Rtx-VMS

**Revision:** 12/04/12 13:07

**Col Type:**

**Sample Size** 10 mL

**%Moisture:**

**TestCode:** 8260W

**Lab ID:** K1211246-003A

**Client Sample ID:** MW-2S

**Collection Date:** 11/20/12 10:05

**Date Received:** 11/21/12 13:40

**PrepDate:**

**BatchNo:** R24877

**FileID:** 1-SAMP-T4734.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>				<b>SW8260B</b>			
1,1,1-Trichloroethane	ND	0.50	0.10	µg/L	1	11/29/12 15:20	
1,1-Dichloroethene	ND	0.50	0.16	µg/L	1	11/29/12 15:20	
cis-1,2-Dichloroethene	ND	0.50	0.10	µg/L	1	11/29/12 15:20	
Tetrachloroethene	ND	0.50	0.10	µg/L	1	11/29/12 15:20	
trans-1,2-Dichloroethene	ND	0.50	0.10	µg/L	1	11/29/12 15:20	
Trichloroethene	1.66	0.50	0.10	µg/L	1	11/29/12 15:20	
Vinyl chloride	ND	1.00	0.33	µg/L	1	11/29/12 15:20	
Surr: 1,2-Dichloroethane-d4	108	75-130	0.16	%REC	1	11/29/12 15:20	
Surr: Toluene-d8	107	75-125	0.10	%REC	1	11/29/12 15:20	
Surr: 4-Bromofluorobenzene	107	75-125	0.10	%REC	1	11/29/12 15:20	

Qualifiers:		
*	Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E	Value exceeds the instrument calibration range	H Holding times for preparation or analysis exceeded
J	Analyte detected below the PQL	ND Not Detected at the Practical Quantitation Limit (PQL)
P	Prim./Conf. column %D or RPD exceeds limit	S Spike Recovery outside accepted recovery limits

Print Date: 12/05/12 8:25

623935

roject Supervisor: Greg I. Smith



# Life Science Laboratories, Inc.

5854 Butternut Drive

East Syracuse, NY 13057

(315) 445-1900

# Analytical Results

StateCertNo: 10248

**CLIENT** GeoLogic NY, Inc.

**Project:** 210087

**W Order:** K1211246

**Matrix:** WATER

**Inst. ID:** MS01\_11

**ColumnID:** Rtx-VMS

**Revision:** 12/04/12 13:07

**Col Type:**

**Sample Size** 10 mL

**%Moisture:**

**TestCode:** 8260W

**Lab ID:** K1211246-004A

**Client Sample ID:** MW-4S

**Collection Date:** 11/20/12 11:00

**Date Received:** 11/21/12 13:40

**PrepDate:**

**BatchNo:** R24877

**FileID:** 1-SAMP-T4735.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>				<b>SW8260B</b>			
1,1,1-Trichloroethane	ND	0.50	0.10	µg/L	1	11/29/12 15:52	
1,1-Dichloroethene	ND	0.50	0.16	µg/L	1	11/29/12 15:52	
cis-1,2-Dichloroethene	ND	0.50	0.10	µg/L	1	11/29/12 15:52	
Tetrachloroethene	ND	0.50	0.10	µg/L	1	11/29/12 15:52	
trans-1,2-Dichloroethene	ND	0.50	0.10	µg/L	1	11/29/12 15:52	
Trichloroethene	0.61	0.50	0.10	µg/L	1	11/29/12 15:52	
Vinyl chloride	ND	1.00	0.33	µg/L	1	11/29/12 15:52	
Surr: 1,2-Dichloroethane-d4	109	75-130	0.16	%REC	1	11/29/12 15:52	
Surr: Toluene-d8	108	75-125	0.10	%REC	1	11/29/12 15:52	
Surr: 4-Bromofluorobenzene	105	75-125	0.10	%REC	1	11/29/12 15:52	

Qualifiers:		
*	Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E	Value exceeds the instrument calibration range	H Holding times for preparation or analysis exceeded
J	Analyte detected below the PQL	ND Not Detected at the Practical Quantitation Limit (PQL)
P	Prim./Conf. column %D or RPD exceeds limit	S Spike Recovery outside accepted recovery limits

Print Date: 12/05/12 8:25

623936

Project Supervisor: Greg I. Smith



# Life Science Laboratories, Inc.

5854 Butternut Drive

East Syracuse, NY 13057

(315) 445-1900

# Analytical Results

StateCertNo: 10248

**CLIENT** GeoLogic NY, Inc.

**Project:** 210087

**W Order:** K1211246

**Matrix:** WATER

**Inst. ID:** MS01\_11

**ColumnID:** Rtx-VMS

**Revision:** 12/04/12 13:07

**Col Type:**

**Sample Size** 10 mL

**%Moisture:**

**TestCode:** 8260W

**Lab ID:** K1211246-005A

**Client Sample ID:** MW-4D

**Collection Date:** 11/20/12 11:05

**Date Received:** 11/21/12 13:40

**PrepDate:**

**BatchNo:** R24877

**FileID:** 1-SAMP-T4736.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>				<b>SW8260B</b>			
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	11/29/12 16:23
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	11/29/12 16:23
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	11/29/12 16:23
Tetrachloroethene	ND		0.50	0.10	µg/L	1	11/29/12 16:23
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	11/29/12 16:23
Trichloroethene	0.46	J	0.50	0.10	µg/L	1	11/29/12 16:23
Vinyl chloride	ND		1.00	0.33	µg/L	1	11/29/12 16:23
Surr: 1,2-Dichloroethane-d4	109		75-130	0.16	%REC	1	11/29/12 16:23
Surr: Toluene-d8	108		75-125	0.10	%REC	1	11/29/12 16:23
Surr: 4-Bromofluorobenzene	105		75-125	0.10	%REC	1	11/29/12 16:23

Qualifiers:		
*	Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E	Value exceeds the instrument calibration range	H Holding times for preparation or analysis exceeded
J	Analyte detected below the PQL	ND Not Detected at the Practical Quantitation Limit (PQL)
P	Prim./Conf. column %D or RPD exceeds limit	S Spike Recovery outside accepted recovery limits

Print Date: 12/05/12 8:25

623937

roject Supervisor: Greg I. Smith



# Life Science Laboratories, Inc.

5854 Butternut Drive

East Syracuse, NY 13057

(315) 445-1900

# Analytical Results

StateCertNo: 10248

**CLIENT** GeoLogic NY, Inc.

**Project:** 210087

**W Order:** K1211246

**Matrix:** WATER

**Inst. ID:** MS01\_11

**ColumnID:** Rtx-VMS

**Revision:** 12/04/12 13:07

**Col Type:**

**Sample Size** 10 mL

**%Moisture:**

**TestCode:** 8260W

**Lab ID:** K1211246-006A

**Client Sample ID:** MW-5S

**Collection Date:** 11/19/12 15:00

**Date Received:** 11/21/12 13:40

**PrepDate:**

**BatchNo:** R24877

**FileID:** 1-SAMP-T4737.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>				<b>SW8260B</b>			
1,1,1-Trichloroethane	ND	0.50	0.10	µg/L	1	11/29/12 16:54	
1,1-Dichloroethene	ND	0.50	0.16	µg/L	1	11/29/12 16:54	
cis-1,2-Dichloroethene	ND	0.50	0.10	µg/L	1	11/29/12 16:54	
Tetrachloroethene	ND	0.50	0.10	µg/L	1	11/29/12 16:54	
trans-1,2-Dichloroethene	ND	0.50	0.10	µg/L	1	11/29/12 16:54	
Trichloroethene	0.72	0.50	0.10	µg/L	1	11/29/12 16:54	
Vinyl chloride	ND	1.00	0.33	µg/L	1	11/29/12 16:54	
Surr: 1,2-Dichloroethane-d4	109	75-130	0.16	%REC	1	11/29/12 16:54	
Surr: Toluene-d8	108	75-125	0.10	%REC	1	11/29/12 16:54	
Surr: 4-Bromofluorobenzene	106	75-125	0.10	%REC	1	11/29/12 16:54	

Qualifiers:		
*	Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E	Value exceeds the instrument calibration range	H Holding times for preparation or analysis exceeded
J	Analyte detected below the PQL	ND Not Detected at the Practical Quantitation Limit (PQL)
P	Prim./Conf. column %D or RPD exceeds limit	S Spike Recovery outside accepted recovery limits

Print Date: 12/05/12 8:25

623938

roject Supervisor: Greg I. Smith



# Life Science Laboratories, Inc.

5854 Butternut Drive

East Syracuse, NY 13057

(315) 445-1900

## Analytical Results

StateCertNo: 10248

**CLIENT** GeoLogic NY, Inc.

**Project:** 210087

**W Order:** K1211246

**Matrix:** WATER

**Inst. ID:** MS01\_11

**ColumnID:** Rtx-VMS

**Revision:** 12/04/12 13:07

**Col Type:**

**Sample Size** 10 mL

**%Moisture:**

**TestCode:** 8260W

**Lab ID:** K1211246-007A

**Client Sample ID:** MW-5D

**Collection Date:** 11/19/12 15:10

**Date Received:** 11/21/12 13:40

**PrepDate:**

**BatchNo:** R24877

**FileID:** 1-SAMP-T4738.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>				<b>SW8260B</b>			
1,1,1-Trichloroethane	ND	0.50	0.10	µg/L	1	11/29/12 17:26	
1,1-Dichloroethene	ND	0.50	0.16	µg/L	1	11/29/12 17:26	
cis-1,2-Dichloroethene	ND	0.50	0.10	µg/L	1	11/29/12 17:26	
Tetrachloroethene	ND	0.50	0.10	µg/L	1	11/29/12 17:26	
trans-1,2-Dichloroethene	ND	0.50	0.10	µg/L	1	11/29/12 17:26	
Trichloroethene	1.62	0.50	0.10	µg/L	1	11/29/12 17:26	
Vinyl chloride	ND	1.00	0.33	µg/L	1	11/29/12 17:26	
Surr: 1,2-Dichloroethane-d4	112	75-130	0.16	%REC	1	11/29/12 17:26	
Surr: Toluene-d8	107	75-125	0.10	%REC	1	11/29/12 17:26	
Surr: 4-Bromofluorobenzene	106	75-125	0.10	%REC	1	11/29/12 17:26	

Qualifiers:		
*	Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E	Value exceeds the instrument calibration range	H Holding times for preparation or analysis exceeded
J	Analyte detected below the PQL	ND Not Detected at the Practical Quantitation Limit (PQL)
P	Prim./Conf. column %D or RPD exceeds limit	S Spike Recovery outside accepted recovery limits

Print Date: 12/05/12 8:25

623939

roject Supervisor: Greg I. Smith



# Life Science Laboratories, Inc.

5854 Butternut Drive

East Syracuse, NY 13057

(315) 445-1900

## Analytical Results

StateCertNo: 10248

CLIENT GeoLogic NY, Inc.

Project: 210087

W Order: K1211246

Matrix: WATER

Inst. ID: MS01\_11

ColumnID: Rtx-VMS

Revision: 12/04/12 13:07

Col Type:

Sample Size 10 mL

%Moisture:

TestCode: 8260W

Lab ID: K1211246-008A

Client Sample ID: MW-7

Collection Date: 11/20/12 13:50

Date Received: 11/21/12 13:40

PrepDate:

BatchNo: R24877

FileID: 1-SAMP-T4739.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>				<b>SW8260B</b>			
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	11/29/12 17:57
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	11/29/12 17:57
cis-1,2-Dichloroethene	0.10	J	0.50	0.10	µg/L	1	11/29/12 17:57
Tetrachloroethene	ND		0.50	0.10	µg/L	1	11/29/12 17:57
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	11/29/12 17:57
Trichloroethene	2.14		0.50	0.10	µg/L	1	11/29/12 17:57
Vinyl chloride	ND		1.00	0.33	µg/L	1	11/29/12 17:57
Surr: 1,2-Dichloroethane-d4	113		75-130	0.16	%REC	1	11/29/12 17:57
Surr: Toluene-d8	106		75-125	0.10	%REC	1	11/29/12 17:57
Surr: 4-Bromofluorobenzene	106		75-125	0.10	%REC	1	11/29/12 17:57

Qualifiers:		
*	Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E	Value exceeds the instrument calibration range	H Holding times for preparation or analysis exceeded
J	Analyte detected below the PQL	ND Not Detected at the Practical Quantitation Limit (PQL)
P	Prim./Conf. column %D or RPD exceeds limit	S Spike Recovery outside accepted recovery limits

Print Date: 12/05/12 8:25

623940

Project Supervisor: Greg I. Smith



# Life Science Laboratories, Inc.

5854 Butternut Drive

East Syracuse, NY 13057

(315) 445-1900

# Analytical Results

StateCertNo: 10248

**CLIENT** GeoLogic NY, Inc.

**Project:** 210087

**W Order:** K1211246

**Matrix:** WATER

**Inst. ID:** MS01\_11

**ColumnID:** Rtx-VMS

**Revision:** 12/04/12 13:07

**Col Type:**

**Sample Size** 10 mL

**%Moisture:**

**TestCode:** 8260W

**Lab ID:** K1211246-009A

**Client Sample ID:** MW-8

**Collection Date:** 11/20/12 14:30

**Date Received:** 11/21/12 13:40

**PrepDate:**

**BatchNo:** R24877

**FileID:** 1-SAMP-T4740.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>					<b>SW8260B</b>		
1,1,1-Trichloroethane	ND	0.50	0.10	0.10	µg/L	1	11/29/12 18:29
1,1-Dichloroethene	ND	0.50	0.16	0.16	µg/L	1	11/29/12 18:29
cis-1,2-Dichloroethene	ND	0.50	0.10	0.10	µg/L	1	11/29/12 18:29
Tetrachloroethene	ND	0.50	0.10	0.10	µg/L	1	11/29/12 18:29
trans-1,2-Dichloroethene	ND	0.50	0.10	0.10	µg/L	1	11/29/12 18:29
Trichloroethene	1.01	0.50	0.10	0.10	µg/L	1	11/29/12 18:29
Vinyl chloride	ND	1.00	0.33	0.33	µg/L	1	11/29/12 18:29
Surr: 1,2-Dichloroethane-d4	114	75-130	0.16	0.16	%REC	1	11/29/12 18:29
Surr: Toluene-d8	106	75-125	0.10	0.10	%REC	1	11/29/12 18:29
Surr: 4-Bromofluorobenzene	105	75-125	0.10	0.10	%REC	1	11/29/12 18:29

Qualifiers:		
*	Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E	Value exceeds the instrument calibration range	H Holding times for preparation or analysis exceeded
J	Analyte detected below the PQL	ND Not Detected at the Practical Quantitation Limit (PQL)
P	Prim./Conf. column %D or RPD exceeds limit	S Spike Recovery outside accepted recovery limits

Print Date: 12/05/12 8:25

623941

roject Supervisor: Greg I. Smith





# Life Science Laboratories, Inc.

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East Syracuse, NY 13057

(315) 445-1900

# Analytical Results

StateCertNo: 10248

**CLIENT** GeoLogic NY, Inc.

**Project:** 210087

**W Order:** K1211246

**Matrix:** WATER

**Inst. ID:** MS01\_11

**ColumnID:** Rtx-VMS

**Revision:** 12/04/12 13:07

**Col Type:**

**Sample Size** 10 mL

**%Moisture:**

**TestCode:** 8260W

**Lab ID:** K1211246-010A

**Client Sample ID:** MW-9

**Collection Date:** 11/20/12 13:30

**Date Received:** 11/21/12 13:40

**PrepDate:**

**BatchNo:** R24877

**FileID:** 1-SAMP-T4741.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>				<b>SW8260B</b>			
1,1,1-Trichloroethane	ND	0.50	0.10	µg/L	1	11/29/12 19:00	
1,1-Dichloroethene	ND	0.50	0.16	µg/L	1	11/29/12 19:00	
cis-1,2-Dichloroethene	ND	0.50	0.10	µg/L	1	11/29/12 19:00	
Tetrachloroethene	ND	0.50	0.10	µg/L	1	11/29/12 19:00	
trans-1,2-Dichloroethene	ND	0.50	0.10	µg/L	1	11/29/12 19:00	
Trichloroethene	0.86	0.50	0.10	µg/L	1	11/29/12 19:00	
Vinyl chloride	ND	1.00	0.33	µg/L	1	11/29/12 19:00	
Surr: 1,2-Dichloroethane-d4	114	75-130	0.16	%REC	1	11/29/12 19:00	
Surr: Toluene-d8	106	75-125	0.10	%REC	1	11/29/12 19:00	
Surr: 4-Bromofluorobenzene	106	75-125	0.10	%REC	1	11/29/12 19:00	

Qualifiers:		
*	Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E	Value exceeds the instrument calibration range	H Holding times for preparation or analysis exceeded
J	Analyte detected below the PQL	ND Not Detected at the Practical Quantitation Limit (PQL)
P	Prim./Conf. column %D or RPD exceeds limit	S Spike Recovery outside accepted recovery limits

Print Date: 12/05/12 8:25

623942

roject Supervisor: Greg I. Smith



# Life Science Laboratories, Inc.

5854 Butternut Drive

East Syracuse, NY 13057

(315) 445-1900

# Analytical Results

StateCertNo: 10248

**CLIENT** GeoLogic NY, Inc.

**Project:** 210087

**W Order:** K1211246

**Matrix:** WATER

**Inst. ID:** MS01\_11

**ColumnID:** Rtx-VMS

**Revision:** 12/04/12 13:07

**Col Type:**

**Sample Size** 10 mL

**%Moisture:**

**TestCode:** 8260W

**Lab ID:** K1211246-011A

**Client Sample ID:** MW-10S

**Collection Date:** 11/19/12 16:55

**Date Received:** 11/21/12 13:40

**PrepDate:**

**BatchNo:** R24877

**FileID:** 1-SAMP-T4742.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>					<b>SW8260B</b>		
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	11/29/12 19:32
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	11/29/12 19:32
cis-1,2-Dichloroethene	0.27	J	0.50	0.10	µg/L	1	11/29/12 19:32
Tetrachloroethene	ND		0.50	0.10	µg/L	1	11/29/12 19:32
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	11/29/12 19:32
Trichloroethene	6.56		0.50	0.10	µg/L	1	11/29/12 19:32
Vinyl chloride	ND		1.00	0.33	µg/L	1	11/29/12 19:32
Surr: 1,2-Dichloroethane-d4	115		75-130	0.16	%REC	1	11/29/12 19:32
Surr: Toluene-d8	106		75-125	0.10	%REC	1	11/29/12 19:32
Surr: 4-Bromofluorobenzene	106		75-125	0.10	%REC	1	11/29/12 19:32

Qualifiers:		
*	Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E	Value exceeds the instrument calibration range	H Holding times for preparation or analysis exceeded
J	Analyte detected below the PQL	ND Not Detected at the Practical Quantitation Limit (PQL)
P	Prim./Conf. column %D or RPD exceeds limit	S Spike Recovery outside accepted recovery limits

Print Date: 12/05/12 8:25

623943

roject Supervisor: Greg I. Smith



# Life Science Laboratories, Inc.

5854 Butternut Drive

East Syracuse, NY 13057

(315) 445-1900

# Analytical Results

StateCertNo: 10248

**CLIENT** GeoLogic NY, Inc.

**Project:** 210087

**W Order:** K1211246

**Matrix:** WATER

**Inst. ID:** MS01\_11

**ColumnID:** Rtx-VMS

**Revision:** 12/04/12 13:07

**Col Type:**

**Sample Size** 10 mL

**%Moisture:**

**TestCode:** 8260W

**Lab ID:** K1211246-012A

**Client Sample ID:** MW-10D

**Collection Date:** 11/19/12 17:05

**Date Received:** 11/21/12 13:40

**PrepDate:**

**BatchNo:** R24877

**FileID:** 1-SAMP-T4743.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>				<b>SW8260B</b>			
1,1,1-Trichloroethane	ND	0.50	0.10	µg/L	1	11/29/12 20:03	
1,1-Dichloroethene	ND	0.50	0.16	µg/L	1	11/29/12 20:03	
cis-1,2-Dichloroethene	0.26 J	0.50	0.10	µg/L	1	11/29/12 20:03	
Tetrachloroethene	ND	0.50	0.10	µg/L	1	11/29/12 20:03	
trans-1,2-Dichloroethene	ND	0.50	0.10	µg/L	1	11/29/12 20:03	
Trichloroethene	9.49	0.50	0.10	µg/L	1	11/29/12 20:03	
Vinyl chloride	ND	1.00	0.33	µg/L	1	11/29/12 20:03	
Surr: 1,2-Dichloroethane-d4	117	75-130	0.16	%REC	1	11/29/12 20:03	
Surr: Toluene-d8	107	75-125	0.10	%REC	1	11/29/12 20:03	
Surr: 4-Bromofluorobenzene	104	75-125	0.10	%REC	1	11/29/12 20:03	

Qualifiers:		
*	Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E	Value exceeds the instrument calibration range	H Holding times for preparation or analysis exceeded
J	Analyte detected below the PQL	ND Not Detected at the Practical Quantitation Limit (PQL)
P	Prim./Conf. column %D or RPD exceeds limit	S Spike Recovery outside accepted recovery limits

Print Date: 12/05/12 8:25

623944

roject Supervisor: Greg I. Smith



# Life Science Laboratories, Inc.

5854 Butternut Drive

East Syracuse, NY 13057

(315) 445-1900

# Analytical Results

StateCertNo: 10248

**CLIENT** GeoLogic NY, Inc.

**Project:** 210087

**W Order:** K1211246

**Matrix:** WATER

**Inst. ID:** MS01\_11

**ColumnID:** Rix-VMS

**Revision:** 12/04/12 13:07

**Col Type:**

**Sample Size** 10 mL

**%Moisture:**

**TestCode:** 8260W

**Lab ID:** K1211246-013A

**Client Sample ID:** MW-12S

**Collection Date:** 11/20/12 12:00

**Date Received:** 11/21/12 13:40

**PrepDate:**

**BatchNo:** R24877

**FileID:** 1-SAMP-T4744.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>				<b>SW8260B</b>			
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	11/29/12 20:35
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	11/29/12 20:35
cis-1,2-Dichloroethene	0.18	J	0.50	0.10	µg/L	1	11/29/12 20:35
Tetrachloroethene	ND		0.50	0.10	µg/L	1	11/29/12 20:35
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	11/29/12 20:35
Trichloroethene	5.60		0.50	0.10	µg/L	1	11/29/12 20:35
Vinyl chloride	ND		1.00	0.33	µg/L	1	11/29/12 20:35
Surr: 1,2-Dichloroethane-d4	119		75-130	0.16	%REC	1	11/29/12 20:35
Surr: Toluene-d8	106		75-125	0.10	%REC	1	11/29/12 20:35
Surr: 4-Bromofluorobenzene	106		75-125	0.10	%REC	1	11/29/12 20:35

Qualifiers:		
*	Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E	Value exceeds the instrument calibration range	H Holding times for preparation or analysis exceeded
J	Analyte detected below the PQL	ND Not Detected at the Practical Quantitation Limit (PQL)
P	Prim./Conf. column %D or RPD exceeds limit	S Spike Recovery outside accepted recovery limits

Print Date: 12/05/12 8:25

623945

roject Supervisor: Greg I. Smith



# Life Science Laboratories, Inc.

5854 Butternut Drive

East Syracuse, NY 13057

(315) 445-1900

## Analytical Results

StateCertNo: 10248

**CLIENT** GeoLogic NY, Inc.

**Project:** 210087

**W Order:** K1211246

**Matrix:** WATER

**Inst. ID:** MSK\_75

**ColumnID:** Rtx-VMS

**Revision:** 12/04/12 12:01

**Col Type:**

**Sample Size** 10 mL

**%Moisture:**

**TestCode:** 8260W

**Lab ID:** K1211246-014A

**Client Sample ID:** MW-12D

**Collection Date:** 11/20/12 12:10

**Date Received:** 11/21/12 13:40

**PrepDate:**

**BatchNo:** R24875

**FileID:** 1-SAMP-K1559.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>				<b>SW8260B</b>			
1,1,1-Trichloroethane	ND	0.50	0.10	µg/L	1	11/29/12 15:18	
1,1-Dichloroethene	ND	0.50	0.16	µg/L	1	11/29/12 15:18	
cis-1,2-Dichloroethene	ND	0.50	0.10	µg/L	1	11/29/12 15:18	
Tetrachloroethene	ND	0.50	0.10	µg/L	1	11/29/12 15:18	
trans-1,2-Dichloroethene	ND	0.50	0.10	µg/L	1	11/29/12 15:18	
Trichloroethene	2.86	0.50	0.10	µg/L	1	11/29/12 15:18	
Vinyl chloride	ND	1.00	0.33	µg/L	1	11/29/12 15:18	
Surr: 1,2-Dichloroethane-d4	105	75-130	0.16	%REC	1	11/29/12 15:18	
Surr: Toluene-d8	100	75-125	0.10	%REC	1	11/29/12 15:18	
Surr: 4-Bromofluorobenzene	101	75-125	0.10	%REC	1	11/29/12 15:18	

Qualifiers:		
*	Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E	Value exceeds the instrument calibration range	H Holding times for preparation or analysis exceeded
J	Analyte detected below the PQL	ND Not Detected at the Practical Quantitation Limit (PQL)
P	Prim./Conf. column %D or RPD exceeds limit	S Spike Recovery outside accepted recovery limits

Print Date: 12/05/12 8:25

623903

roject Supervisor: Greg I. Smith



# Life Science Laboratories, Inc.

5854 Butternut Drive

East Syracuse, NY 13057

(315) 445-1900

# Analytical Results

StateCertNo: 10248

**CLIENT** GeoLogic NY, Inc.

**Project:** 210087

**W Order:** K1211246

**Matrix:** WATER

**Inst. ID:** MSK\_75

**ColumnID:** Rtx-VMS

**Revision:** 12/04/12 12:01

**Col Type:**

**Sample Size** 10 mL

**%Moisture:**

**TestCode:** 8260W

**Lab ID:** K1211246-015A

**Client Sample ID:** MW-L16

**Collection Date:** 11/20/12 15:40

**Date Received:** 11/21/12 13:40

**PrepDate:**

**BatchNo:** R24875

**FileID:** 1-SAMP-K1560.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>				<b>SW8260B</b>			
1,1,1-Trichloroethane	ND	0.50	0.10	µg/L	1	11/29/12 15:51	
1,1-Dichloroethene	ND	0.50	0.16	µg/L	1	11/29/12 15:51	
cis-1,2-Dichloroethene	ND	0.50	0.10	µg/L	1	11/29/12 15:51	
Tetrachloroethene	ND	0.50	0.10	µg/L	1	11/29/12 15:51	
trans-1,2-Dichloroethene	ND	0.50	0.10	µg/L	1	11/29/12 15:51	
Trichloroethene	1.95	0.50	0.10	µg/L	1	11/29/12 15:51	
Vinyl chloride	ND	1.00	0.33	µg/L	1	11/29/12 15:51	
Surr: 1,2-Dichloroethane-d4	108	75-130	0.16	%REC	1	11/29/12 15:51	
Surr: Toluene-d8	101	75-125	0.10	%REC	1	11/29/12 15:51	
Surr: 4-Bromofluorobenzene	102	75-125	0.10	%REC	1	11/29/12 15:51	

Qualifiers:		
*	Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E	Value exceeds the instrument calibration range	H Holding times for preparation or analysis exceeded
J	Analyte detected below the PQL	ND Not Detected at the Practical Quantitation Limit (PQL)
P	Prim./Conf. column %D or RPD exceeds limit	S Spike Recovery outside accepted recovery limits

Print Date: 12/05/12 8:25

623904

Project Supervisor: Greg I. Smith



# Life Science Laboratories, Inc.

5854 Butternut Drive

East Syracuse, NY 13057

(315) 445-1900

# Analytical Results

StateCertNo: 10248

**CLIENT** GeoLogic NY, Inc.

**Project:** 210087

**W Order:** K1211246

**Matrix:** WATER Q

**Inst. ID:** MS01\_11

**ColumnID:** Rtx-VMS

**Revision:** 12/04/12 13:07

**Col Type:**

**Sample Size** 10 mL

**%Moisture:**

**TestCode:** 8260W

**Lab ID:** K1211246-016A

**Client Sample ID:** Trip Blank

**Collection Date:** 11/20/12 0:00

**Date Received:** 11/21/12 13:40

**PrepDate:**

**BatchNo:** R24877

**FileID:** 1-SAMP-T4745.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>					<b>SW8260B</b>		
1,1,1-Trichloroethane	ND	0.50	0.10	µg/L	1	11/29/12 21:06	
1,1-Dichloroethene	ND	0.50	0.16	µg/L	1	11/29/12 21:06	
cis-1,2-Dichloroethene	ND	0.50	0.10	µg/L	1	11/29/12 21:06	
Tetrachloroethene	ND	0.50	0.10	µg/L	1	11/29/12 21:06	
trans-1,2-Dichloroethene	ND	0.50	0.10	µg/L	1	11/29/12 21:06	
Trichloroethene	ND	0.50	0.10	µg/L	1	11/29/12 21:06	
Vinyl chloride	ND	1.00	0.33	µg/L	1	11/29/12 21:06	
Surr: 1,2-Dichloroethane-d4	117	75-130	0.16	%REC	1	11/29/12 21:06	
Surr: Toluene-d8	106	75-125	0.10	%REC	1	11/29/12 21:06	
Surr: 4-Bromofluorobenzene	106	75-125	0.10	%REC	1	11/29/12 21:06	

Qualifiers:		
*	Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E	Value exceeds the instrument calibration range	H Holding times for preparation or analysis exceeded
J	Analyte detected below the PQL	ND Not Detected at the Practical Quantitation Limit (PQL)
P	Prim./Conf. column %D or RPD exceeds limit	S Spike Recovery outside accepted recovery limits

Print Date: 12/05/12 8:35

623946

roject Supervisor: Greg I. Smith



# Life Science Laboratories, Inc.

5854 Butternut Drive  
East Syracuse, NY 13057

(315) 445-1900

# Analytical Results

StateCertNo: 10248

**CLIENT** GeoLogic NY, Inc.

**Project:** 210087

**W Order:** K1211246

**Matrix:** EQUIPMENT BLANK

**Inst. ID:** MSK\_75

**Sample Size** 10 mL

**ColumnID:** Rtx-VMS

**%Moisture:**

**Revision:** 12/05/12 8:30

**TestCode:** 8260W

**Col Type:**

**Lab ID:** K1211246-017A

**Client Sample ID:** *Equipment Blank*

**Collection Date:** 11/20/12 16:45

**Date Received:** 11/21/12 13:40

**PrepDate:**

**BatchNo:** R24875

**FileID:** 1-SAMP-K1561.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>					<b>SW8260B</b>		
1,1,1-Trichloroethane	ND	0.50	0.10	µg/L	1	11/29/12 16:21	
1,1-Dichloroethene	ND	0.50	0.16	µg/L	1	11/29/12 16:21	
cis-1,2-Dichloroethene	ND	0.50	0.10	µg/L	1	11/29/12 16:21	
Tetrachloroethene	ND	0.50	0.10	µg/L	1	11/29/12 16:21	
trans-1,2-Dichloroethene	ND	0.50	0.10	µg/L	1	11/29/12 16:21	
Trichloroethene	ND	0.50	0.10	µg/L	1	11/29/12 16:21	
Vinyl chloride	ND	1.00	0.33	µg/L	1	11/29/12 16:21	
Surr: 1,2-Dichloroethane-d4	107	75-130	0.16	%REC	1	11/29/12 16:21	
Surr: Toluene-d8	101	75-125	0.10	%REC	1	11/29/12 16:21	
Surr: 4-Bromofluorobenzene	98	75-125	0.10	%REC	1	11/29/12 16:21	

Qualifiers:		
*	Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E	Value exceeds the instrument calibration range	H Holding times for preparation or analysis exceeded
J	Analyte detected below the PQL	ND Not Detected at the Practical Quantitation Limit (PQL)
P	Prim./Conf. column %D or RPD exceeds limit	S Spike Recovery outside accepted recovery limits

Print Date: 12/05/12 8:35

623905

roject Supervisor: Greg I. Smith



K1211246

**GeoLogic NY, Inc.**  
**CHAIN OF CUSTODY RECORD**

1 of 2

CLIENT: GeoLogic  
PROJECT: 210087

SAMPLERS NAME(S):  
C. T. Gabriel

SAMPLE LOCATION	DATE	TIME	SAMPLE TYPE			NO. of SAMPLES	ANALYSIS REQUIRED
			WATER	SOIL	AIR		
001 MW-1S	11-19	16:00	X			2	See Below
002 MW-1D	11-19	16:15	X			2	See Below
003 MW-2S	11-20	10:05	X			2	See Below
004 MW-4S	11-20	11:00	X			2	See Below
005 MW-4D	11-20	11:05	X			2	See Below
006 MW-5S	11-19	15:00	X			2	See Below
007 MW-5D	11-19	15:10	X			2	See Below
008 MW-7	11-20	13:50	X			2	See Below
009 MW-8	11-20	14:30	X			2	See Below
010 MW-9	11-20	13:30	X			2	See Below

Relinquished by: <i>C-T Gabriel</i>	Date <i>11-20</i>	Time <i>16:30</i>	Received by: <i>Sample Fridge</i>	Date <i>11-20</i>	Time <i>16:50</i>
Relinquished by: <i>Sample Fridge</i>	Date <i>11-21</i>	Time <i>09:45</i>	Received by: <i>Paul Smith</i>	Date <i>11-21-12</i>	Time <i>9:45</i>
Relinquished by: <i>Paul Smith</i>	Date <i>11-21-12</i>	Time <i>9:45</i>	Received for Lab by: <i>Paul Smith</i>	Date <i>11-21-12</i>	Time <i>13:40</i>

Method of Shipment: LAB PICK-UP  TEMP 5.0°C on Ice

COMMENTS:  
Sample Analysis (1 ug/L reporting limit)  
EPA 8260B for  
1,1,1-Trichloroethane  
1,1-Dichloroethene  
1,2-Dichloroethene  
Trichloroethene  
Tetrachloroethene  
Vinyl Chloride

K1211246

# GeoLogic NY, Inc.

## CHAIN OF CUSTODY RECORD

2 of 2

CLIENT: GeoLogic  
PROJECT: 210087

SAMPLERS NAME(S):  
C. T. Gabriel

SAMPLE LOCATION	DATE	TIME	SAMPLE TYPE			NO. of SAMPLES	ANALYSIS REQUIRED
			WATER	SOIL	AIR		
011 MW-10S	11-19	16:55	X			2	See Below
012 MW-10D	11-19	17:05	X			2	See Below
013 MW-12S	11-20	12:00	X			2	See Below
014 MW-12D	11-20	12:10	X			2	See Below
015 MW-L16	11-20	15:40	X			2	See Below
016 Trip Blank	11-20		X			2	See Below
017 Equipment Blank	11-20	16:45	X			2	See Below

Relinquished by: C.T. Gabriel	Date 11-20	Time 16:50	Received by: Sample Fridge	Date 11-20	Time 16:50
Relinquished by: Sample Fridge	Date 11-21	Time 09:45	Received by: Paul Bull	Date 11-21-12	Time 9:45
Relinquished by: Paul Bull	Date 11-21-12	Time 9:45	Received for Lab by: Gy. Song	Date 11-21-12	Time 13:40

Method of Shipment: **LAB PICK-UP**  **TEMP** 5°C on Ice

**COMMENTS:**

Sample Analysis (1 ug/L reporting limit)

EPA 8260B for

1,1,1-Trichloroethane

1,1-Dichloroethene

1,2-Dichloroethene

Trichloroethene

Tetrachloroethene

Vinyl Chloride





**Life Science Laboratories, Inc.**

5854 Butternut Drive  
East Syracuse, NY 13057

(315) 445-1900

Wednesday, December 26, 2012

Mr. Christopher Gabriel  
GeoLogic NY, Inc.  
37 Copeland Ave.  
Homer, NY 13077

TEL: 607 749-5000

Project: 210087

RE: Analytical Results

Order No.: K1212130

Dear Mr. Christopher Gabriel:

Life Science Laboratories, Inc. received 3 sample(s) on 12/11/2012 for the analyses presented in the following report. Sample results relate only to the samples as received by the laboratory.

Very truly yours,  
Life Science Laboratories, Inc.

A handwritten signature in black ink, appearing to read 'Anthony Crescenzi', is written over a horizontal line.

Anthony Crescenzi  
Project Manager



# Life Science Laboratories, Inc.

5854 Butternut Drive

East Syracuse, NY 13057

(315) 445-1900

# Analytical Results

StateCertNo: 10248

**CLIENT** GeoLogic NY, Inc.

**Project:** 210087

**W Order:** K1212130

**Matrix:** WATER

**Inst. ID:** MS01\_11

**ColumnID:** Rtx-VMS

**Revision:** 12/17/12 9:44

**Col Type:**

**Sample Size** 10 mL

**%Moisture:**

**TestCode:** 8260W

**Lab ID:** K1212130-001A

**Client Sample ID:** MW-6

**Collection Date:** 12/07/12 11:15

**Date Received:** 12/11/12 17:00

**PrepDate:**

**BatchNo:** R24961

**FileID:** 1-SAMP-T4948.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>					<b>SW8260B</b>		
1,1,1-Trichloroethane	ND	0.50	0.10	µg/L	1	12/13/12 15:46	
1,1-Dichloroethene	ND	0.50	0.16	µg/L	1	12/13/12 15:46	
cis-1,2-Dichloroethene	ND	0.50	0.10	µg/L	1	12/13/12 15:46	
Tetrachloroethene	ND	0.50	0.10	µg/L	1	12/13/12 15:46	
trans-1,2-Dichloroethene	ND	0.50	0.10	µg/L	1	12/13/12 15:46	
Trichloroethene	2.29	0.50	0.10	µg/L	1	12/13/12 15:46	
Vinyl chloride	ND	1.00	0.33	µg/L	1	12/13/12 15:46	
Surr: 1,2-Dichloroethane-d4	112	75-130	0.16	%REC	1	12/13/12 15:46	
Surr: Toluene-d8	109	75-125	0.10	%REC	1	12/13/12 15:46	
Surr: 4-Bromofluorobenzene	105	75-125	0.10	%REC	1	12/13/12 15:46	

Qualifiers:		
*	Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E	Value exceeds the instrument calibration range	H Holding times for preparation or analysis exceeded
J	Analyte detected below the PQL	ND Not Detected at the Practical Quantitation Limit (PQL)
P	Prim./Conf. column %D or RPD exceeds limit	S Spike Recovery outside accepted recovery limits

Print Date: 12/17/12 9:45

625301

Project Supervisor: Anthony Crescenzi



# Life Science Laboratories, Inc.

5854 Butternut Drive

East Syracuse, NY 13057

(315) 445-1900

# Analytical Results

StateCertNo: 10248

**CLIENT** GeoLogic NY, Inc.

**Project:** 210087

**W Order:** K1212130

**Matrix:** WATER

**Inst. ID:** MS01\_11

**ColumnID:** Rtx-VMS

**Revision:** 12/17/12 9:44

**Col Type:**

**Sample Size** 10 mL

**%Moisture:**

**TestCode:** 8260W

**Lab ID:** K1212130-002A

**Client Sample ID:** MW-11

**Collection Date:** 12/07/12 12:00

**Date Received:** 12/11/12 17:00

**PrepDate:**

**BatchNo:** R24961

**FileID:** 1-SAMP-T4949.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>					<b>SW8260B</b>		
1,1,1-Trichloroethane	ND	0.50	0.10	µg/L	1	12/13/12 16:18	
1,1-Dichloroethene	ND	0.50	0.16	µg/L	1	12/13/12 16:18	
cis-1,2-Dichloroethene	0.96	0.50	0.10	µg/L	1	12/13/12 16:18	
Tetrachloroethene	ND	0.50	0.10	µg/L	1	12/13/12 16:18	
trans-1,2-Dichloroethene	ND	0.50	0.10	µg/L	1	12/13/12 16:18	
Trichloroethene	4.32	0.50	0.10	µg/L	1	12/13/12 16:18	
Vinyl chloride	ND	1.00	0.33	µg/L	1	12/13/12 16:18	
Surr: 1,2-Dichloroethane-d4	113	75-130	0.16	%REC	1	12/13/12 16:18	
Surr: Toluene-d8	107	75-125	0.10	%REC	1	12/13/12 16:18	
Surr: 4-Bromofluorobenzene	111	75-125	0.10	%REC	1	12/13/12 16:18	

Qualifiers:		
*	Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E	Value exceeds the instrument calibration range	H Holding times for preparation or analysis exceeded
J	Analyte detected below the PQL	ND Not Detected at the Practical Quantitation Limit (PQL)
P	Prim./Conf. column %D or RPD exceeds limit	S Spike Recovery outside accepted recovery limits

Print Date: 12/17/12 9:45

625302

Project Supervisor: Anthony Crescenzi



# Life Science Laboratories, Inc.

5854 Butternut Drive

East Syracuse, NY 13057

(315) 445-1900

# Analytical Results

StateCertNo: 10248

CLIENT GeoLogic NY, Inc.

Project: 210087

W Order: K1212130

Matrix: WATER Q

Inst. ID: MS01\_11

ColumnID: Rtx-VMS

Revision: 12/17/12 9:44

Col Type:

Sample Size 10 mL

%Moisture:

TestCode: 8260W

Lab ID: K1212130-016A

Client Sample ID: Trip Blank

Collection Date: 08/29/12 0:00

Date Received: 12/11/12 17:00

PrepDate:

BatchNo: R24961

FileID: 1-SAMP-T4960.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>				<b>SW8260B</b>			
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	12/13/12 22:03
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/13/12 22:03
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/13/12 22:03
Tetrachloroethene	ND		0.50	0.10	µg/L	1	12/13/12 22:03
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/13/12 22:03
Trichloroethene	ND		0.50	0.10	µg/L	1	12/13/12 22:03
Vinyl chloride	ND		1.00	0.33	µg/L	1	12/13/12 22:03
Surr: 1,2-Dichloroethane-d4	115		75-130	0.16	%REC	1	12/13/12 22:03
Surr: Toluene-d8	108		75-125	0.10	%REC	1	12/13/12 22:03
Surr: 4-Bromofluorobenzene	103		75-125	0.10	%REC	1	12/13/12 22:03

Qualifiers:		
*	Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E	Value exceeds the instrument calibration range	H Holding times for preparation or analysis exceeded
J	Analyte detected below the PQL	ND Not Detected at the Practical Quantitation Limit (PQL)
P	Prim./Conf. column %D or RPD exceeds limit	S Spike Recovery outside accepted recovery limits

Print Date: 12/17/12 9:54

625303

Project Supervisor: Anthony Crescenzi

K1212130

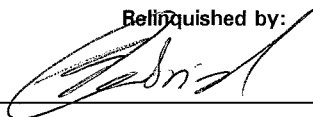
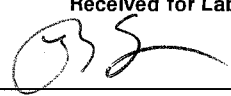
# GeoLogic NY, Inc.

## CHAIN OF CUSTODY RECORD

CLIENT: GeoLogic  
PROJECT: 210087

SAMPLERS NAME(S):  
C. T. Gabriel

SAMPLE LOCATION	DATE	TIME	SAMPLE TYPE			NO. of SAMPLES	ANALYSIS REQUIRED
			WATER	SOIL	AIR		
MW-6	12-7	11:15	X			2	See Below
MW-11	12-7	12:00	X			2	"
Trip Blank			X			2	"

Relinquished by: 	Date 12-7-2012	Time 13:00	Received by: Sample Fridge	Date 12-7-2012	Time 13:00
Relinquished by: Sample Fridge	Date 12-11-12	Time 09:00	Received by: Bill Donaldson	Date 12-11-12	Time 9:10
Relinquished by: Bill Donaldson	Date 12-11-12	Time	Received for Lab by: 	Date 12-11-12	Time 17:00

Method of Shipment: **HAND DELIVERED**  **TEMP** \_\_\_\_\_  
By Life Science Laboratories, Inc.

COMMENTS:  
Sample Analysis (1 ug/L reporting limit)  
EPA 8260B for  
1,1,1-Trichloroethane  
1,1-Dichloroethene  
1,2-Dichloroethene  
Trichloroethene  
Tetrachloroethene  
Vinyl Chloride



**Life Science Laboratories, Inc.**

**Sample Receipt Checklist**

Client Name: **GEOLOGIC**

Date and Time Received: **12/11/2012 5:00:00 PM**

Work Order Number: **K1212130**

Received by: **gis**

Checklist completed by: GS 12-11-12  
Initials Date

Reviewed by: AC 12-12-12  
Initials Date

Delivery Method: Courier

- |   |   |                             |  |
|---|---|-----------------------------|--|
| Shipping container/cooler in good condition?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/>               |
| Custody seals intact on shipping container/cooler?      | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/>    |
| Custody seals intact on sample bottles?                 | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Not Applicable <input checked="" type="checkbox"/> |
| Chain of custody present?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| Chain of custody agrees with sample labels?             | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| Samples in proper container/bottle?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| Sample containers intact?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| Sufficient sample volume for indicated test?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| All samples received within holding time?               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| Container/Temp Blank temperature in compliance?         | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| Water - VOA vials have zero headspace?                  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | No VOA vials submitted <input type="checkbox"/>    |
| Water - pH acceptable upon receipt?                     | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Not Applicable <input checked="" type="checkbox"/> |

Comments:

Corrective Action:

***APPENDIX F***  
***SSD/SVE DATA***



6500 Joy Road \* E. Syracuse, NY 13057 \* Phone (315) 701-0425 \* Fax (315) 218-5624

Forrest Earl  
GeoLogic, NY Inc.  
PO Box 350  
Homer, NY 13077

RE: Cortland

Tuesday, December 11, 2012

Order No.: E1211003

Dear Forrest Earl:

Enalytic, LLC received 1 sample(s) on 11/27/2012 for the analyses presented in the following report.

All analytical results relate to the samples as received by the laboratory.

All analytical data conforms with standard approved methodologies and quality control unless specified in the report.

We have included the Chain of Custody Record as part of your report. You may need to reference this form for a more detailed explanation of your samples. Samples will be disposed of approximately two weeks from final report date.

Should you have any questions regarding these tests, please feel free to give us a call.

Thank you for your patronage.

Sincerely,

A handwritten signature in black ink that reads 'Kris Perrotti'. The signature is written in a cursive style with a large initial 'K'.

Kris Perrotti  
Technical Director

Confidentiality Statement: This report is meant for the use of the intended recipient. It may contain confidential information, which is legally privileged or otherwise protected by law. If you have received this report in error, you are strictly prohibited from reviewing, using, disseminating, distributing or copying the information.

NY Lab ID 11920

# Analytic, LLC

## Analytical Report

Date 11-Dec-12

CLIENT: GeoLogic, NY Inc.  
Location: Cortland  
Project: 210087  
Lab ID E1211003-001A

Client Sample ID: SVE/SSD  
Collection Date: 11/27/2012 9:41:00 A  
Tag # 322  
Matrix SOIL VAPOR

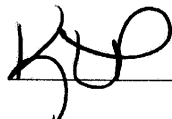
### TO-15\_1UG/M3

CASI	Target Compound List	Dilution Factor	Date Analyzed	ppbV			ug/m3		
				LOD	LOQ	Result	Data Qualifiers	LOQ	Result
71-55-6	1,1,1-Trichloroethane	1	06-Dec-12	0.1	0.20	2.9		1.1	16
75-35-4	1,1-Dichloroethene	1	06-Dec-12	0.1	0.20	ND		0.81	ND
156-59-2	cis-1,2-Dichloroethene	1	06-Dec-12	0.1	0.20	43		0.81	180
127-18-4	Tetrachloroethene	1	06-Dec-12	0.1	0.20	3.1		1.4	21
156-60-5	trans-1,2-Dichloroethene	1	06-Dec-12	0.1	0.20	0.38		0.81	1.5
79-01-6	Trichloroethene	9.85	10-Dec-12	0.99	2.0	590		11	3200
75-01-4	Vinyl chloride	1	06-Dec-12	0.1	0.20	0.23		0.52	0.60
	Surr: Bromofluorobenzene	9.85	10-Dec-12	0	65-135	91.8		0	0
	Surr: Bromofluorobenzene	1	06-Dec-12	0	65-135	92.9		0	0

#### Qualifiers:

- |     |  |    |  |
|-----|--|----|--|
| (*) | Certification not offered by NYS for this compound       | B  | Analyte detected in the associated Method Blank    |
| E   | Value above quantitation range                           | H  | Holding times for preparation or analysis exceeded |
| J   | Analyte detected below quantitation limits               | ND | Not Detected at the Reporting Limit                |
| Q   | Outlying QC recoveries were associated with this analyte | S  | Spike Recovery outside accepted recovery limits    |

Approved By



Page 1 of 1

Date:

12/11/12

# enalytic

Laboratories, LLC

6500 Joy Rd, East Syracuse, NY 13057  
 Tel: 315-701-0425 Fax: 315-218-5624  
 www.enalytic.com

## Chain of Custody Project Information:

Project Name:  
 Project Location: *Cortland*  
 Project Number: *210087*  
 PO Number:

## Report Delivery

Fax   
 Email   
 EDD   
 Other

## Detection Limit

5.0 ppbv   
 1.0 ug/m3   
 1.0 ug/m3+TCE 0.25   
 TIC's

## Report Format

Std   
 Level II   
 Cat A   
 Cat B

For Lab Use Only  
 Please Do Not  
 Write in Gray  
 Section

## Client Information:

Client: *Geologic NY, Inc*  
 Contact: *Forrest Earl*  
 Address: *P.O. Box 350  
 Homer, NY 13077*  
 Phone: *607-749-5000*  
 Fax: *607-749-5063*  
 Email: *GeologicNY@Geologic2.net*

## \*Sample Matrix Codes

OA - Outdoor Air  
 IA - Indoor Air  
 SS - Sub Slab or Soil Gas

## Turnaround Time

Please Check One

10 Business Days →   
 5 Business Days →   
 4 Business Days →   
 3 Business Days →   
 2 Business Days →   
 1 Business Days →   
 Same Day →

Hustle charges  
 may apply for fast  
 TATs.

Lab  
 Assigned  
 Sample  
 ID

Sample ID	*Sample Matrix	Canister #	Regulator #	Start Vac	Date Started	Start Time	Final Vac	Date Finished	End Time	Vac at Lab	Analysis Requested	
<i>SVE/SSD</i>	<i>OA</i>	<i>322</i>	<i>Not Applicable</i>	<i>7-30</i>	<i>11-27-12</i>	<i>0840</i>	<i>-6</i>	<i>11-27-12</i>	<i>0941</i>	<i>-1</i>	<i>See Attached</i>	<i>E1211003</i>

COMMENTS:  
 TO-15 for the following parameter only:  
 1,1,1-Trichloroethane  
 1,1-Dichloroethene  
 1,2-Dichloroethene  
 Trichloroethene  
 Tetrachloroethene  
 Vinyl Chloride

	Print Name	Signature	Date	Time	Company Affiliation or Courier
Sampled by:	<i>C.T. GABRIEL</i>	<i>[Signature]</i>	<i>11-27-12</i>	<i>10:30</i>	<i>Geologic NY Inc</i>
Relinquished by:	<i>C.T. GABRIEL</i>	<i>[Signature]</i>	<i>11/27/12</i>	<i>2:45</i>	<i>Geologic NY Inc</i>
Received by:	<i>VLT</i>	<i>[Signature]</i>	<i>11/27/12</i>	<i>2:45</i>	
Relinquished by:					
Received by:	<i>Rick Laprest</i>	<i>[Signature]</i>	<i>11/27/12</i>	<i>2:50 PM</i>	
Relinquished by:	<i>Rick Laprest</i>	<i>[Signature]</i>	<i>11/27/12</i>	<i>3:47 PM</i>	
Received by:	<i>Renee Saint Amour</i>	<i>[Signature]</i>	<i>11/27/12</i>	<i>3:47 PM</i>	
Relinquished by:					
Received by:					