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2015 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
625 Broadway, BURE
Albany, New York 12233

Owner:
Cortland Commerce Center, LLC.
Attn: Mr. David Yaman
839 NYS Route 13
Cortland, New York 13045

Prepared By:
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37 Copeland Avenue
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Homer, New York 13077

February 2016

GeoLogic Project No. 210087

GeoLogic

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2015 PERIODIC REVIEW REPORT
FORMER SCM - CORTLANDVILLE
839 NYS ROUTE 13, CORTLANDVILLE, NEW YORK 13045
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, 2015 to December 31, 2015.

In October 2015, beaver activity blocked the pipe between the cascade and infiltration lagoons. The necessary permits were procured and the beaver and blockage were removed. Copies of the permits are included with the IC/EC Certification Forms in Appendix A.

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 Site. 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 and 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 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[1]:

- 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 the rock cascade and infiltration lagoons), a rock cascade and engineered infiltration lagoons.

- 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.

- December 2008: a former tumbling area was identified within the building footprint and a groundwater monitoring well (MW-L16) was installed in this area.

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

- January 2012: A sub-slab depressurization/SVE system was energized in the former tumbling area located adjacent to monitoring well MW-L16.

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 an engineered rock cascade and

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 644 gallons per minute (gpm), which is less than the design standard of 700 to 1,000 gpm^2. Routine maintenance has been performed on system components on an as-needed basis. Charts 14 and 15, located in Appendix D, depict a comparison of recovery well groundwater elevations and pumping rates for 2011, 2012, 2013, 2014 and 2015.

Both the primary and back-up blowers were energized and determined to be operational on December 8, 2015.

During the annual sampling event, all wells (except MW-2D), were in good working order and able to be sampled. 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 December 1, 2015. The TCE concentration was reported at 780 $\mu g/m^3$. This is over a 95% decline from the initial concentration of 18,000 $\mu g/m^3$ detected in the sample collected on January 10, 2012. The analytical results demonstrate that the system has been and remains effective in removing residual contamination from under and

around the former tumbling pit. Table 5 and Chart 16, located in Appendix C and Appendix D respectively, depict the TCE concentrations observed in the SSD/SVE exhaust samples collected since the system was energized in January 2012. The SSD/SVE 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 event 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 (11/23/2015 - 11/24/2015):
    - Interior Shallow Wells: MW-6, MW-7, MW-8, MW-11 and MW-12S;
    - 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 2015, May 2015 and August 2015, plus November 2015 annual sampling).
- Monthly Groundwater Remediation System (36 total samples in 2015):
    - Treatment System Influent (12 samples in 2015);
    - Tower Discharge (12 samples in 2015);
    - Cascade Outfall (12 samples in 2015).

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 23 and November 24, 2015 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 non-pumping conditions for the Site is to the north-northwest. 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 2015 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 2015 Annual Sampling event and the monthly monitoring results (for November and December 2015) are included in Appendix E.

The results for the 2015 annual sampling event have been up-loaded to the NYSDEC EQuIS database.

4.3 Monitoring Deficiencies

During the annual sampling event (November 23 through November 24, 2015) the following deficiencies were noted:

- Monitoring well MW-2D was unable to be sampled due to blockage within the well at a depth of approximately 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 2015;
- Table 4: Comparison of TCE Concentrations in Groundwater.

- 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;
  - Chart13: TCE Concentrations in MW-L16;
  - Charts 14 & 15: 2011, 2012, 2013, 2014 & 2015 Recovery Well Pumping Rates & Groundwater Elevations.

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).

Monitoring well MW-L16 was installed in December 2008 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. Chart 13 depicts the TCE concentrations detected in groundwater samples collected from MW-L16 (Appendix D).

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 2015 samples are listed below:

- Tower Influent: 6.98 µg/L
- Tower Discharge: 2.66 µg/L
- Cascade Outfall: 1.19 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 (TCE concentrations of 5.37 µg/L and 12.40 µg/L respectively). In general, 2015 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.

It is noted that an increase in the TCE concentration observed at MW-10S in 2015. A TCE concentration of this magnitude has not been observed at MW-10S since 2002 and as such represents an anomalous result. Future results will be utilized to document TCE concentrations trends over time.

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

  It is noted that MW-2D could not be sampled due to a blockage. Three (3) of the four (4) perimeter deep wells sampled revealed TCE concentrations below the cleanup objective of 5 µg/L. Well MW-10D, did not meet the cleanup objective (a TCE concentration of 18.40 µg/L). 2015 year's results for all four (4) 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.

  It is noted that a spike in the TCE concentration observed at MW-10D in November 2015. Occasional spikes in the TCE concentration at MW-10D have occurred in the past. This well is sampled quarterly and future results will be utilized to document TCE concentration trends at MW-10D.

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

  One (1) of the five (5) interior shallow wells, MW-7, revealed a TCE concentrations below the cleanup objective of 5 µg/L. The remaining four (4) wells, MW-6, MW-8, MW-11 and MW-12S, did not meet the cleanup objective (TCE concentrations of 8.74, 5.46, 5.80 and 24.80 µg/L, respectively). 2015 year's results for all five (5) wells were similar to previous years and continue to indicate a long term downward trend. 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.

Table No. 4, located in Appendix C, compares the highest TCE concentration detected

in each of the monitoring wells to the TCE concentration detected during the 2015 annual groundwater sampling event. The TCE concentrations have decreased in all of the wells at least 60%. TCE concentrations have decreased more than 85% in 11 of the 17 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 2015 as demonstrated by the continued decreasing trend of TCE concentrations in the monitoring wells over time.

However, in 2015 a decline in the system operating conditions was observed. The average withdrawal rate for 2015 was 644 gpm, which is less than the original design standard of 700 to 1,000 gpm[2].

Recovery well groundwater elevations and pumping rates for 2011, 2012, 2013, 2014 and 2015 were charted to assess if lower groundwater elevations are associated with the decline in pumping rates (Charts 13 and 14, located in Appendix D). Although a correlation between seasonal variation of groundwater elevation and pumping rate is evident, it's unlikely to be the sole cause the decline in pumping rates observed in 2015.

The groundwater recovery well came on-line on December 29, 1989 and has operated continuously for the last 29 years with only routine maintenance. It is GeoLogic opinion that the age of the system is likely contributing to the decline in system operating conditions.

The capture zone for the recovery well was recomputed using the current average pumping rate of 644 gpm (338,468,400 per year). The calculation and capture zone as computed for 2010 and for 2015 are contained in Appendix G. While the capture zone for 2015 is slightly smaller than it was in 2010, the analysis shows the recovery well is still appropriately placed to capture groundwater migrating from under the building and from the known contaminant sources areas at the site.

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 (2013-2015), the highest yearly average concentration of TCE has been 12.40 µg/L at MW-10S (2015) and 8.97 µg/L at MW-10D (2015). This represents a greater than 83% decline at MW-10S and greater than 75% decline at MW-10D over the past 25 years.

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 (2013-2015), the highest average concentration has been 25.1 µg/L at MW-12S. This represents a greater than 98% decline over the past 25 years.

Given the contaminant concentrations at the Site have declined by approximately 85% over the past 25 years, the system continues to be effective at removing contamination from the subsurface.

5.5 Contaminant Mass Removal

Using the following:

- Average pumping rate = 644 gpm
- Average influent concentration of TCE = 6.98 µg/L
- Density of TCE = 1.465 g/mL

The system removal rates for 2015 are:

- Total volume of water pumped = 338,486,400 gallons in 2015.
- Total mass of TCE removed= 8.94 Kg or 19.72 lb.
- Total volume of TCE removed = 6.1 L or 1.6 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 a Periodic Review Report is thought to be adequate to document data trends at the Site.

The next annual sampling event is scheduled for November 2016.

7 REFERENCES

[1] *2009 Periodic Review* Report, February 2010, Buck Engineering, LLC.

[2] Remediation *System As-Built Report*, December 1991, O'Brien & Gere.

[3] *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**

Site No. **712006**

Site Name **SCM - Cortlandville**

Site Address: 839 Route 13 South Zip Code: 13045
City/Town: Cortlandville
County: Cortland
Site Acreage: 47.3

Reporting Period: January 01, 2015 to January 01, 2016

	YES	NO
1. Is the information above correct?	☒	☐
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?	☐	☒
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☒
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☒	☐

Nuisance beaver and beaver dam removal

If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.

Copies of permits attached

5. Is the site currently undergoing development?	☐	☒

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Industrial	☒	☐
7. Are all ICs/ECs in place and functioning as designed?	☒	☐

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.

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

Signature of Owner, Remedial Party or Designated Representative

Date

SITE NO. 712006

Box 3

Description of Institutional Controls

Parcel	Owner	Institutional Control
95.00-10-01.100	David Yaman Realty Services	Site Management Plan

Decision Document (ROD), Site Management Plan (SMP).

Box 4

Description of Engineering Controls

Parcel	Engineering Control
95.00-10-01.100	Vapor Mitigation
	Groundwater Treatment System
	Groundwater Containment

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.

A sub-slab depressurization system (SSDS) is installed in portions of the main warehouse building in the area of the former Tumbling Pit. The SSDS is required to operate continuously.

Box 5

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 compete.

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 — 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 Forrest Ewal (print name) at GeoLogic NY, Inc. 37 Copeland Ave, Homer, NY (print business address),

am certifying as Representative For (Owner or Remedial Party)

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

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

2-4-16
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 (print name) at 32 CLINTON STREET HOMER, N.Y. 13077 (print business address),

am certifying as a Professional Engineer for the OWNER (Owner or Remedial Party)

Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification	Stamp (Required for PE)	Date
		2/19/16

New York State Department of Environmental Conservation
Division of Fish, Wildlife and Marine Resources
Region 7 Wildlife Office
1285 Fisher Ave, Cortland, NY 13045
(607)753-3095 x 247

Joseph Martens
Commissioner

PERMIT TO TAKE OR HARASS NUISANCE OR DESTRUCTIVE WILDLIFE

Permit Number: **7-15-8959** Year Issued: **2015**

Landowner/Permittee Information:

Cortland Commerce Center		Home Phone:	(607) 756-5872
David	Yaman	Work Phone:	
839 NYS Rte 13		Fax:	
Cortland	NY 13045		

Street, Address or Coordinate

County: Cortland Town: Cortland Tax ID 95.00-10-01.100

Street, add Above Address

Pursuant to ECL sections 11-0505 and 11-0521, you or your agent (designated in writing) may:

- [x] Disturb/remove beaver dams
- [ ] Disturb/remove beaver lodges

Other permitted activity:

- [x] Kill beaver
  - [ ] Keep/sell pelts until May 15
  - [x] By trapping
    - [ ] Set traps <15' of lodge or dam
    - [ ] Agents certified by DEC may use cable restraint
  - [x] By shooting

Permit Issued: 10/13/15 **Permit Expires:** 10/31/2015 **Permit Issued By:** Toukatly

STANDARD CONDITIONS:

1. In executing this permit you (and your agent) must obey all Federal, State and local laws and ordinances governing such actions (e.g., firearms discharge, trap-setting and trap-tagging requirements) and obtain any additional permits as required.

2. This permit does not authorize you or your agent to trespass.

3. This permit is only valid for the property identified by the tax ID number listed above.

4. This permit may be renewed or revoked at any time by the Depart

5. You (and/or your agent) must carry a copy of this permit while excecuting this permit.

6. When removing a beaver dam, water levels above and below must be equalized by slow and partial breaching before the entire dam is removed.

7. All incidental captures of river otter must be reported to the Regional Wildlife Office for further direc

8. All beaver killed under this permit must be disposed of properly and may not be kept or marketed unless authorized.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

EFFECTIVE DATE 07/14/2006

EXPIRATION DATE 07/13/2016

GENERAL PERMIT GP-0-06-001

Removal or Modification of Recent Beaver Dams

Under the Environmental Conservation Law (ECL)

☑ New ☐ Renewal ☐ Modification

☐ Article 15 Title 5 Protection of Waters

☐ Article 24 Freshwater Wetlands

☒ Article 11 Title 5 Interference with Fish & Wildlife

Date: 10/31/2015

Permit Issued to:

David Yaman
839 NYS Rte 13 Cortland, NY 13045

Facility:

Cortland Commerce Center

County Cortland

Water Course _____

Municipality Cortland

NYTM-E _____ **NYTM-N** _____

General Permit Authorized Activity: Modification or removal of recently established beaver dams no more than 2 years old. This permit is applicable to regulated freshwater wetlands, including the adjacent area, outside the Adirondack Park, and to protected waterways throughout New York State.

(check one) ___ Beaver Dam Modification ✓ Beaver Dam Removal

(check one) Use of machinery authorized? ✓ Yes ___ No

X _____

Signature of landowner or authorized representative (FOR APPLICATION)

_____

Signature of authorized DEC Division of Fish, Wildlife, & Marine Resources Representative (FOR PERMIT). This authorization expires on 10/31/15

Chief Permit Administrator William R. Adriance	625 Broadway, Albany, NY 12233-1750
AUTHORIZED SIGNATURE William R. Adriance	DATE 07/14/2006

SPECIAL CONDITIONS

1. Water levels within the beaver impoundment shall be lowered no more than ____ below the existing top of the dam as specified during the on-site inspection by Division of Fish and Wildlife personnel.
2. Disturbances to the beaver dam shall be limited to the minimum necessary to lower the impoundment. Disturbances to other portions of the protected stream or wetland are prohibited.
3. If the Authorized Activity does not indicate an authorization for the use of machinery, all work must be undertaken using hand methods only.
4. If the Authorized Activity allows the use of machinery, the bed or banks of the stream must not be disturbed during dam work. Machinery shall not be allowed in the stream or on its banks, where it may cause the bank to collapse. All machinery used for dam work shall be rubber-tired, unless done from an existing roadway.
5. When modifying the beaver dam, water levels must be lowered gradually by slow and partial breaching.
6. Any fish remaining in the dewatered area shall be returned to the stream, lake or wetland.
7. All excavated beaver dam material shall be disposed of at an upland site outside the wetland and be suitably stabilized so that it cannot re-enter any waterbody, waterway or wetland area.
8. All activities authorized by this permit must be in strict conformance with any approved plans submitted by the applicant or applicant's agent as part of the permit application.

continued other side

Reset

9. The permittee is responsible for supervising this project, and shall ensure that all necessary measures are employed to prevent environmental degradation and to ensure successful mitigation.
10. The State of New York shall in no case be liable for any damage or injury to the structure or work herein authorized which may be caused by or result from future operations undertaken by the State for the conservation or improvement of navigation, or for other purposes, and no claim or right to compensation shall accrue from any such damage.
11. If future operations by the State of New York require an alteration in the position of the structure or work herein authorized, or if, in the opinion of the Department of Environmental Conservation it shall cause unreasonable obstruction to the free navigation of said waters or flood flows or endanger the health, safety or welfare of the people of the State, or cause loss or destruction of the natural resources of the State, the owner may be ordered by the Department to remove or alter the structural work, obstructions or hazards caused thereby without expense to the State, and if, upon the expiration or revocation of this permit, the structure, fill, excavation or other modification of the watercourse hereby authorized shall not be completed, the owners shall, without expense to the State, and to such extent and in such time and manner as the Department of Environmental Conservation may require, remove all or any portion of the uncompleted structure or fill and restore to its former condition the navigable and flood capacity of the watercourse. No claim shall be made against the State of New York on account of any such removal or alteration.
12. All necessary precautions shall be taken to preclude contamination of any wetland or waterway by suspended solids, sediments, fuels, solvents, lubricants, epoxy coatings, paints, concrete, leachate or any other environmentally deleterious materials associated with the project.
13. There shall be no unreasonable interference with navigation by the work herein authorized.
14. If upon the expiration or revocation of this permit, the project hereby authorized has not been completed, the applicant shall, without expense to the State, and to such extent and in such time and manner as the Department of Environmental Conservation may require, remove all or any portion of the uncompleted structure or fill and restore the site to its former condition. No claim shall be made against the State of New York on account of any such removal or alteration.

GENERAL CONDITIONS

1. The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71- 0301 and SAPA 401(3).

   The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

   A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.
2. Issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.
3. The permittee must submit a separate written application to the Department for permit renewal or modification of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing.

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification
The permittee, excepting state or federal agencies, expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees and agents ("DEC") for all claims, suits, actions and damages, to the extent attributable to the permittee's acts or omissions in connection with the permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits or actions naming the DEC and arising under Article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

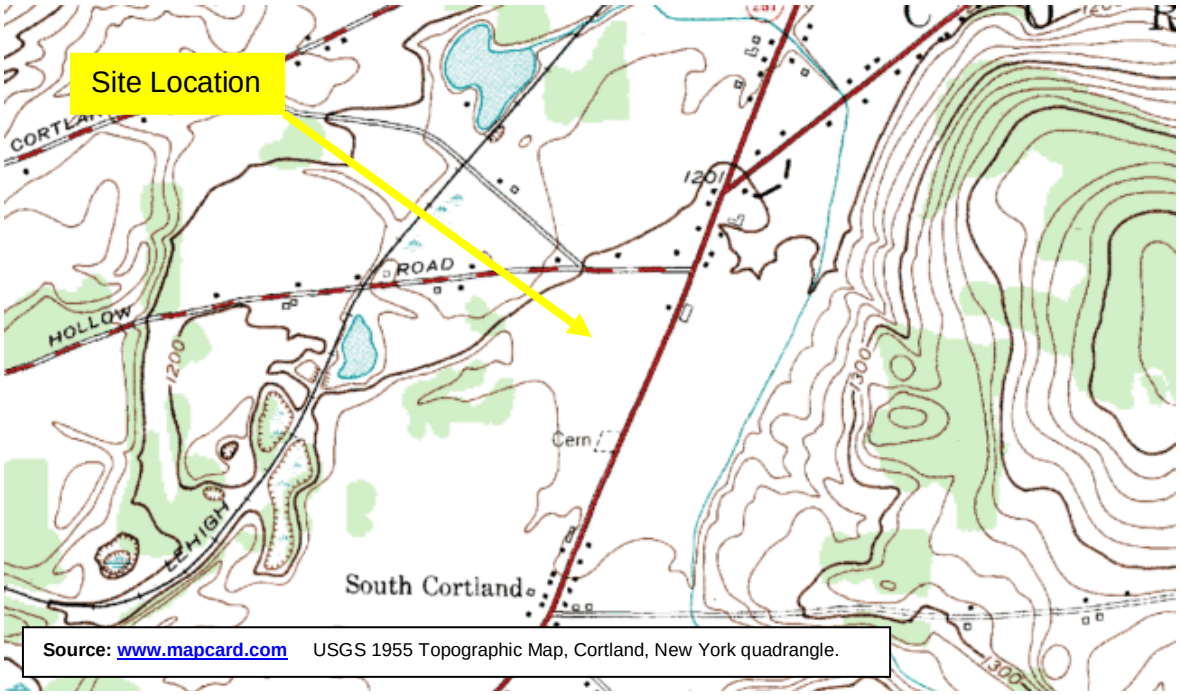
Item B: Permittee's Contractors to Comply with Permit
The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits
The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights
This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others to perform the permitted work, nor does it authorize the impairment of any rights, title or interest in real or personal property held or vested in a person not a party to the permit.

APPENDIX B

DRAWINGS



Source: www.mapcard.com USGS 1955 Topographic Map, Cortland, New York quadrangle.

Source: www.earth.google.com

N

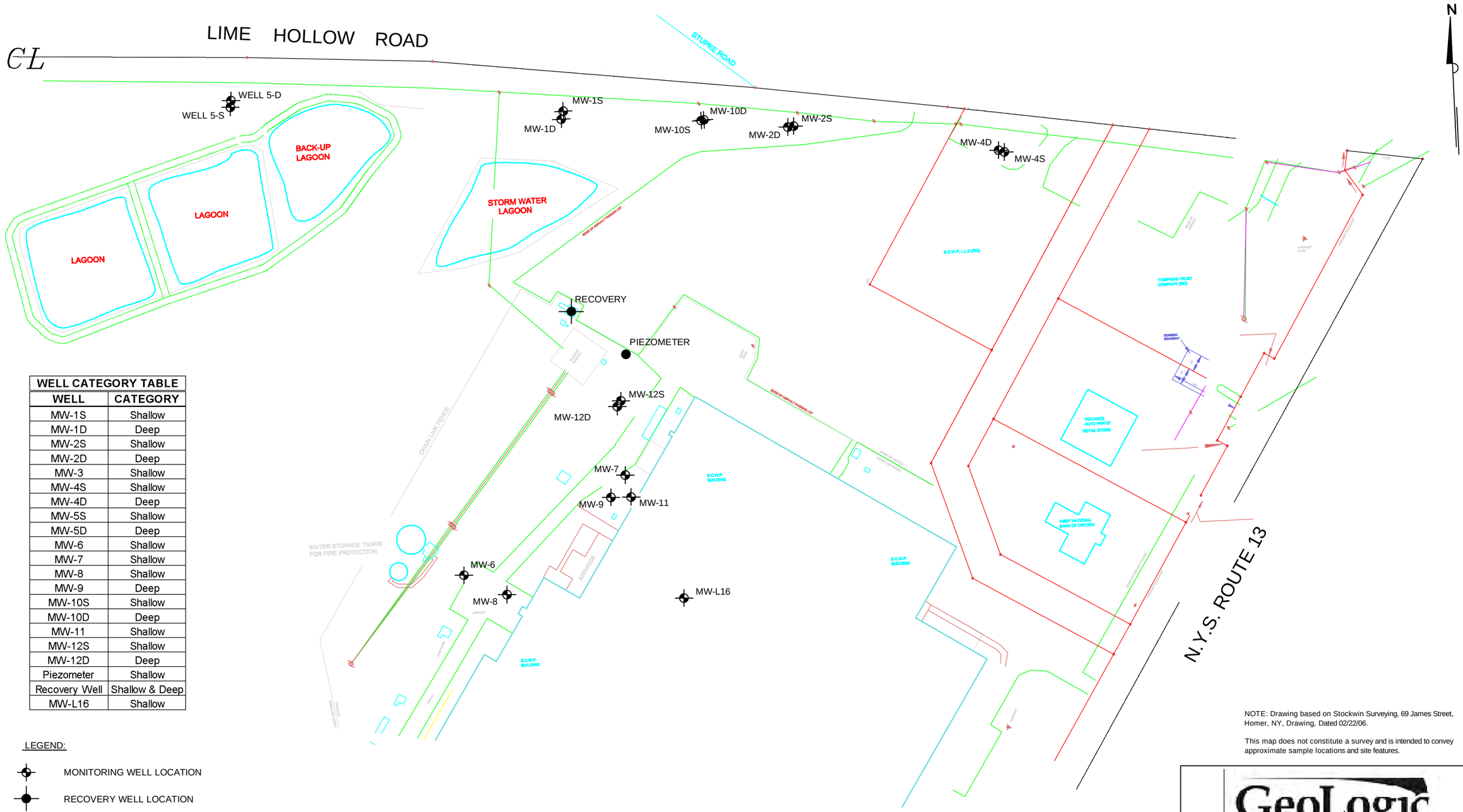
Project North

GeoLogic

GeoLogic NY, Inc.

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

DRAWN BY:	SCALE:	PROJECT NO:
CTG	Not To Scale	210087
REVIEWED BY:	DATE:	DRAWING NO:
FCE	JAN. 2016	1



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

APPROXIMATE SCALE:

0' 10' 70' 140' 280'

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.

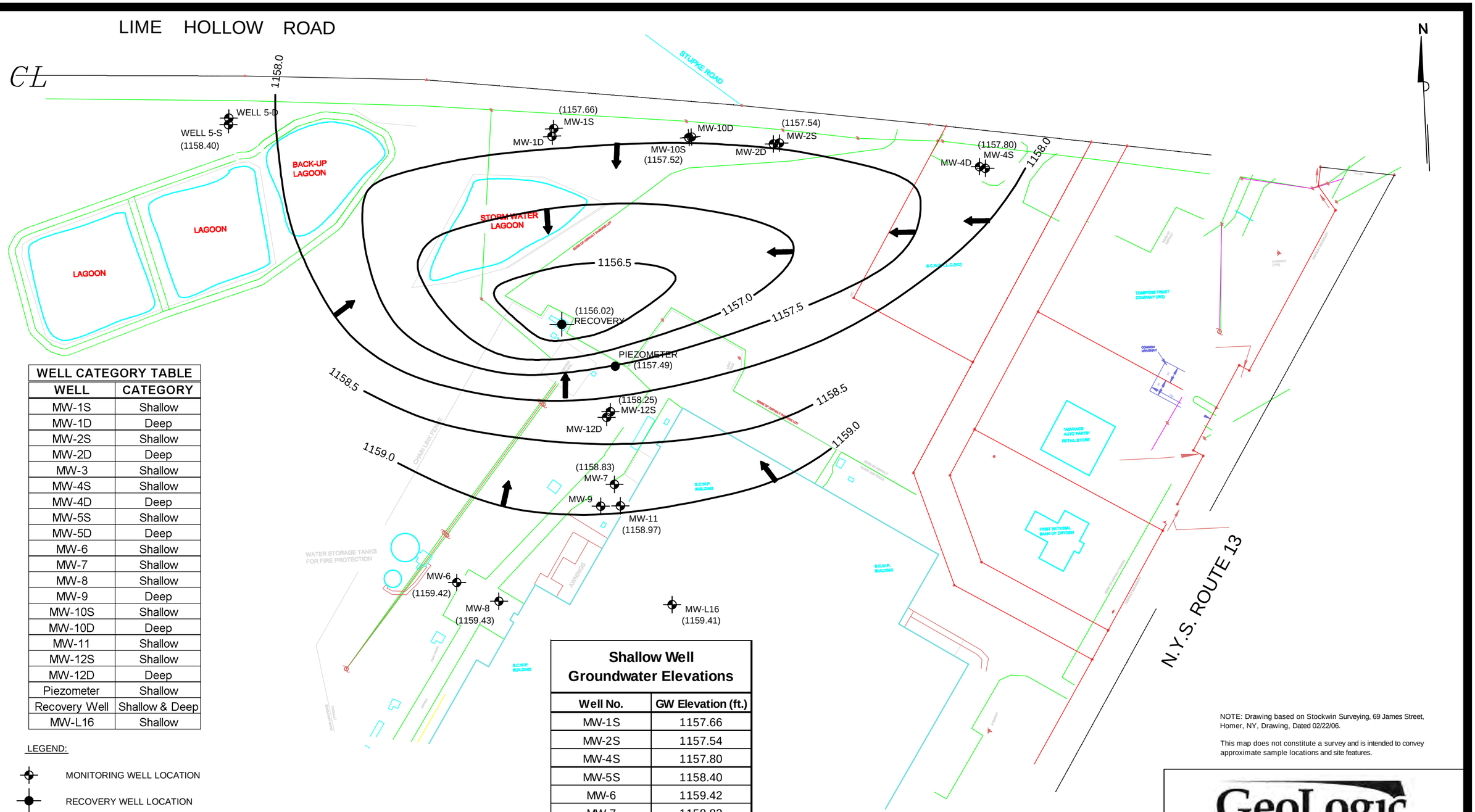
GeoLogic

GeoLogic NY, Inc., Homer, New York

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

DRAWN BY:	SCALE:	PROJECT NO.:
SDW/CTG	AS SHOWN	210087
REVIEWED BY:	DATE:	DRAWING NO.:
FCE	JAN. 2016	2

\..\210087\TECH\BASE MAP.DWG



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
- (1164.99) GROUNDWATER ELEVATION (FT.) FOR 11/23/2015 & 11/24/2015.
- 1162.0 GROUNDWATER ELEVATION CONTOUR FOR 11/23/2015 & 11/24/2015.
- DIRECTION OF GROUNDWATER FLOW

\..\210087\TECH\DRAWINGS\SHALLOW WELL GW CONTOUR MAP 11-23-15 & 11-24-15.DWG

Shallow Well Groundwater Elevations	
Well No.	GW Elevation (ft.)
MW-1S	1157.66
MW-2S	1157.54
MW-4S	1157.80
MW-5S	1158.40
MW-6	1159.42
MW-7	1158.83
MW-8	1159.43
MW-10S	1157.52
MW-11	1158.97
MW-12S	1158.25
Piezometer	1157.49
Recovery Well	1156.02
MW-L16	1159.41

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.

APPROXIMATE SCALE:

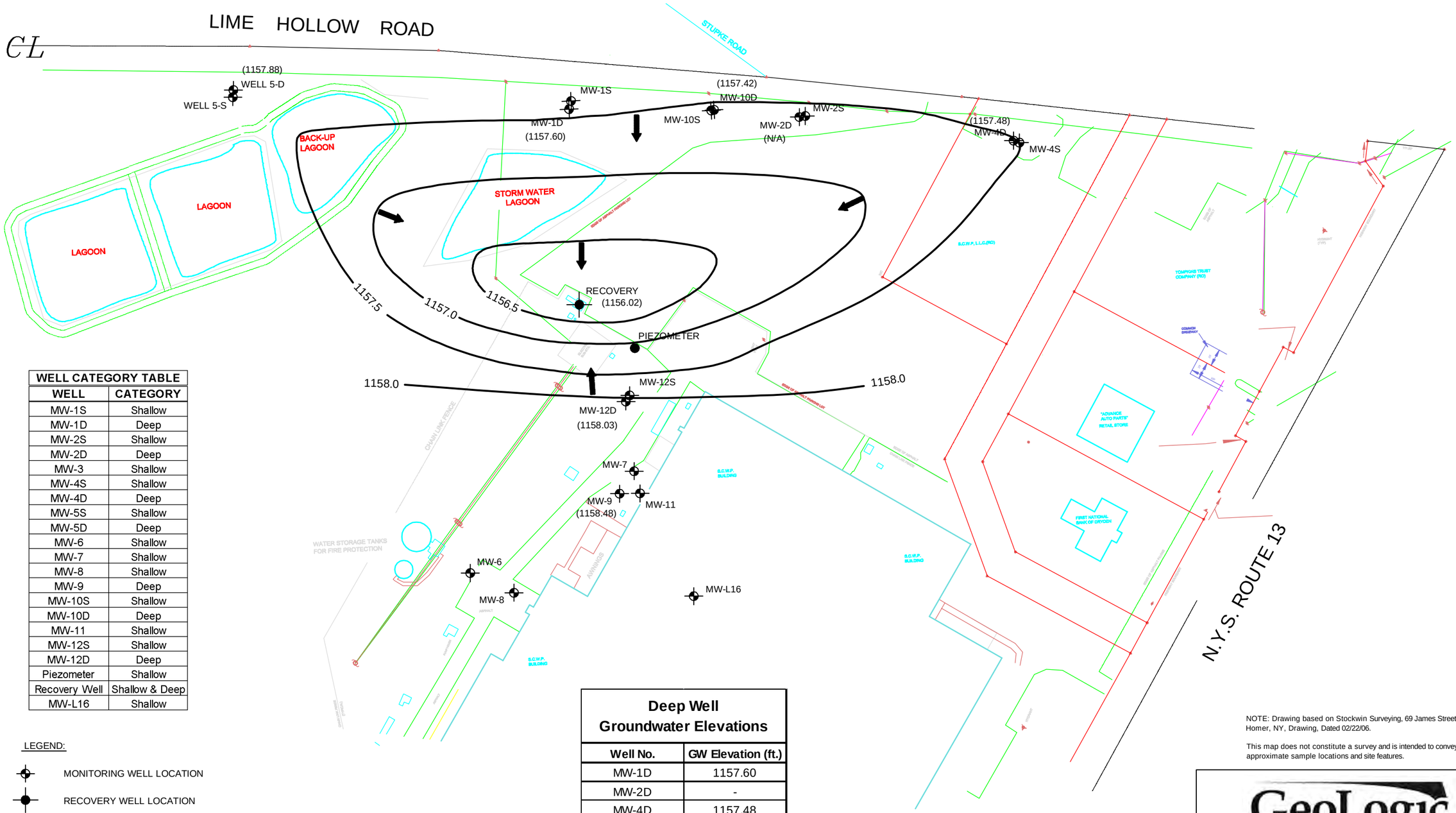
0' 10' 70' 140' 280'

GeoLogic

GeoLogic NY, Inc., Homer, New York

SHALLOW WELL GROUNDWATER CONTOUR MAP
FOR 11/23/2015 & 11/24/2015
FORMER SCM-CORTLANDVILLE (NYSDEC SITE NO. 712006)
839 NYS ROUTE 13
CORTLANDVILLE, NEW YORK

DRAWN BY:	SCALE:	PROJECT NO.:
SDW/CTG	AS SHOWN	210087
REVIEWED BY:	DATE:	DRAWING NO.:
FCE	JAN. 2016	3



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
- (1164.99) GROUNDWATER ELEVATION (FT.) FOR 11/23/2015 & 11/24/2015.
- 1162.0 GROUNDWATER ELEVATION CONTOUR FOR 11/23/2015 & 11/24/2015.
- DIRECTION OF GROUNDWATER FLOW

Deep Well Groundwater Elevations	
Well No.	GW Elevation (ft.)
MW-1D	1157.60
MW-2D	-
MW-4D	1157.48
MW-5D	1157.88
MW-9	1158.48
MW-10D	1157.42
MW-12D	1158.03
Recovery Well	1156.02

APPROXIMATE SCALE:

0' 10' 70' 140' 280'

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

DEEP WELL GROUNDWATER CONTOUR MAP
FOR 11/23/15 & 11/24/15
FORMER SCM-CORTLANDVILLE (NYSDEC SITE NO. 712006)
839 NYS ROUTE 13
CORTLANDVILLE, NEW YORK

DRAWN BY:	SCALE:	PROJECT NO.:
SDW/CTG	AS SHOWN	210087
REVIEWED BY:	DATE:	DRAWING NO.:
FCE	JAN. 2016	4

\..\210087\TECH\DRAWING\DEEP WELL GW CONTOUR MAP 11-23-15 11-24-15.DWG

APPENDIX C

TABLES

TABLE 1.
Field Observations: 2015 Annual Groundwater Sampling Event

Field Observations: Annual Groundwater Sampling Event: November 23 and 24, 2015								
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	28.09	1157.66	39.50	1.8	6	Light brown, some sand.
MW-1D	Deep - Perimeter	1185.85	28.25	1157.60	70.50	6.8	23	Clear.
MW-2S	Shallow -Perimeter	1210.91	53.37	1157.54	70.20	2.7	12	Clear.
MW-2D	Deep - Perimeter	N/A	-	-	104.00	-	-	No sample, well damaged.
MW-4S	Shallow -Perimeter	1209.72	51.92	1157.80	73.79	3.5	11	Light brown.
MW-4D	Deep - Perimeter	1210.14	52.66	1157.48	104.23	8.3	26	Clear.
MW-5S	Shallow -Perimeter	1178.46	20.06	1158.40	40.00	3.2	10.5	Clear.
MW-5D	Deep - Perimeter	1178.86	20.98	1157.88	71.88	8.1	25	Clear.
MW-6	Shallow - Interior	1211.42	52.00	1159.42	56.50	0.7	2.75	Light brown.
MW-7	Shallow - Interior	1211.56	52.73	1158.83	58.75	1.0	3	Dark brown, turbid.
MW-8	Shallow - Interior	1212.76	53.33	1159.43	61.42	1.3	4	Light brown.
MW-9	Deep - Interior	1212.94	54.46	1158.48	100.46	7.4	25	Clear.
MW-10S	Shallow -Perimeter	1207.23	49.71	1157.52	62.00	2.0	6	Light brown.
MW-10D	Deep - Perimeter	1207.52	50.10	1157.42	99.00	7.8	25	Clear.
MW-11	Shallow - Interior	1214.44	55.47	1158.97	59.50	0.6	2	Dark brown, turbid & sheen.
MW-12S	Shallow - Interior	1212.94	54.69	1158.25	62.00	1.2	3.5	Brown, turbid.
MW-12D	Deep - Interior	1212.80	54.77	1158.03	89.00	5.5	20	Clear.
MW-L16	Shallow	1212.99	53.58	1159.41	60.00	1.0	3.25	Brown, turbid.
Piezometer	Shallow	1212.59	55.10	1157.49		N/A	N/A	No sample, water level only.
Recovery Well	Shallow & Deep	1205.62	49.60	1156.02	94.00	N/A	N/A	No sample, water level only.

Notes:
** Top of PVC elevations were determined from survey by Jim Stockwin, LS, 2006.
N/A = Not applicable.

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	Nov-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	Nov-13	Nov-14	Nov-15
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	4.20	5.40	5.46	4.69	2.96	5.37
	TCE Yearly Ave.			32				18				10				13				13			10		7		11		12	7	5	6	8		6	11	6		4										
	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	4.20	5.40	5.59	4.82 J	2.96	5.37
	Total VOC Yearly Ave.			32				21				11				16				13			11		7		11		12	7	5	6	8		6	11	6		4										
MW-1D																																																
	TCE	32	<1	25	25	18	19	12	13	13	14	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	2.70	4.40	5.65	3.49	3.78	4.57
	TCE Yearly Ave.			21				19				13				14				11			12		9		8		7	8	3	3	1		2	3	5		3										
	Total VOC's	32	<1	25	25	24	24	12	13	14	16	15	16	16	115	17	13	13	10	13	14	14	13	7	11	7	8	7	7	8	3	3	1		2	3	5		3		4	5	4	2.70	4.40	5.85	3.60 J	4.36	4.57
	Total VOC Yearly Ave.			21				21				15				16				12			14		9		8		7	8	3	3	3		2	3	5		3										
MW-2S																																																
	TCE	4	5	6	8	6	8	10	5	7	5	5	5	7	7	4	4	4	3	4	4	4	NA	4	NA	3	NA	4	NA	4	2	2	2		2	2	2	2	2	3	2	2	2	1.70	1.80	1.66	1.48	1.27	1.90
	TCE Yearly Ave.			5				8				6				6				4			4		4		3		4	4	2	2	2		2	2	2		2										
	Total VOC's	4	5	6	8	6	8	12	5	7	8	5	5	7	7	4	4	4	3	4	4	4	NA	4	NA	3	NA	4	NA	4	2	2	2		2	2	2	2	2	3	2	2	2	1.70	1.80	1.66	1.48	1.27	1.90
	Total VOC Yearly Ave.			5				9				6				6				4			3		4		3		4	4	2	2	2		2	2	2		2										
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	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	TCE Yearly Ave.			7				7				5				4				3			3		2		2		1	3	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												
	Total VOC Yearly Ave.			7				7				5				4				3			2		2		2		1	3	Damaged	Damaged	Damaged		Damaged	Damaged	Damaged												
MW-3																																																
	TCE	<1	<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		2	1	<1	NS	2	NS	<1	NS	NS	NS	NS	NS	NS	NS	NS
	TCE Yearly Ave.			0				0				0				0				1			1		10		1		8	<1	<1	<1	<1		2	1	<1		2										
	Total VOC's	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	2	1	<1	<1	<1	<1	4	<1	<1	<1	<1	NA	33	NA	2	<1	12	NA	<1	<1	<1	<1		3	1	2		5		<1								
	Total VOC Yearly Ave.			0				0				1				0				1			0		33		1		12	<1	<1	<1	<1		3	1	2		5										
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	0.61	0.46 J	0.52	0.63
	TCE Yearly Ave.			1				1				1				0				0			1		0		0		0	<1	<1	<1	<1		<1	<1	<1		<1										
	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	0.61	0.46 J	0.52	0.63
	Total VOC Yearly Ave.			1				1				1				0				0			0		0		0		0	<1	<1	<1	<1		<1	<1	<1		<1										
MW-4D																																																
	TCE	<1	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	NS	<1	NS	<1	<1	<1	<1	0.46	0.38 J	0.38 J	0.54
	TCE Yearly Ave.			1				1				0				0				0			1		0		0		0	<1	<1	<1	<1		<1	<1	<1		<1										
	Total VOC's	<1	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	0.46	0.38 J	0.38 J	0.54
	Total VOC Yearly Ave.			1				1				0				0				0			0		0		0		0	<1	<1	<1	<1		<1	<1	<1		<1										
MW-5S																																																
	TCE	1	2	3	<1	1	2	<1	<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	2	1	2	1	1	<1	<1	<1	1.00	0.72	0.91	0.83	0.85
	TCE Yearly Ave.			2				1				0				0				0			1		0		0		0	<1	<1	<1	1		1	2	1		1										
	Total VOC's	1	3	3	<1	1	2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA	<1	NA	<1	NA	<1	NA	<1	<1	<1	2		1	2	1	2	1	1	<1	<1	<1	1.00	0.72	0.91	0.83	0.85
	Total VOC Yearly Ave.			2				1				0				0				0			0		0		0		0	<1	<1	<1	2		1	2	1		1										
MW-5D																																																
	TCE	2	3	5	3	3	3	1	<1	1	2	1	<1	2	2	<1	<1	<1	<1	<1	<1	1	NA	2	NA	2	NA	<1	NA	<1	<1	<1	1		1	2	1	NS	1	NS	<1	2	1	1.10	1.30	1.62	1.17	1.56	2.00
	TCE Yearly Ave.			3				3				1				1				0			1		2		2		<1	<1	<1	<1	1		1	2	1		1										
	Total VOC's	2	8	5	3	3	3	1	<1	1	2	1	<1	2	2	<1	<1	<1	<1	<1	<1	2	NA	2	NA	2	NA	<1	NA	<1	<1	<1	2		1	2	1		1		<1	2	1	1.10	1.30	1.62	1.17	1.56	2.00
	Total VOC Yearly Ave.			5				3				1				1				0			1		2		2		<1	<1	<1	<1	2		1	2	1		1										
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	20	15	NS	8	NS	10	6	5	35.00	8.60	2.29	6.54	5.68	8.74
	TCE Yearly Ave.			35				36				27				36				33			13		24		13		5	5	11	4	14		16	20	15		8										
	Total VOC's	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	15		16	20	15		8		10	6	5	35.00	8.60	2.29	6.54	5.68	8.74
	Total VOC Yearly Ave.			26				27				27				36				33			13		24		13		5	5	11	4	15		16	20	15		8										
MW-7																																																
	TCE	290	19	63	190	57	19	NA	11	57	130	130	120	67	25	18	85	60	49	49	45	23	NA	56	NA	25	NA	26	NA	24	24	12	4		9	5	19	NS	6	NS	8	3	2	6.40	7.20	2.14	3.08	2.00	4.32
	TCE Yearly Ave.			168				89				82				58				61			34		56		25		26	24	24	12	4		9	5	19		6										
	Total VOC's	290	19	63	190	157	30	NA	15	167	250	250	175	136	25	19	137	153	84	82	84	25	NA	73	NA	35	NA	39	NA	31	30	23	5		13	5	30		8		8	3	2	6.40	7.20	2.24	3.08	2.00	4.32
	Total VOC Yearly Ave.			168				94				171				89				114			55		73		35		39	31	30	23	5		13	5	30		8										
MW-8																																																
	TCE	70	10	48	31	110	8	3	31	31	48	16	12	14	18	10	61	11	10	12	9	8	3	98	6	8	2	10	3	2	2	<1	2		3	5	3	NS	3	NS	3	5	2	41.00	2.50	1.01	1.72	1.19	5.46
	TCE Yearly Ave.			97				38				32				14				24			7		52		5		7	2	2	<1	2		3	5	3		3										
	Total VOC's	70	10	48	31	110	8	3	31	31	48	16	12	14	18	10	61	11	10	12	9	8	3	98	6	8	2	10	3	2	2	<1	2		3	5	3		3		3	5	2	41.00	2.50	1.01	1.72	1.19	5.46
	Total VOC Yearly Ave.			103				38				32				14				24			7		52		5		7	2	2	<1	2		3	5	3		3										
MW-9																																																
	TCE	16	5	10	4	11	3	4	3	3	4	4	4	33	8	1	2	24	5	3	5	5	<1	18	2	1	<1	<1	5	7	5	4	5		7	17	6	NS	11	NS	5	<1	<1	<1	<1	0.86	0.54	0.78	1.72
	TCE Yearly Ave.			9				6				4				12				9			3		10		1		3	7	5	4	5		7	17	6		11										
	Total VOC's	16	5	10	4	14	3	4	3	3	4	4	4	42	8	1	2	24	5	3	5	5	<1	22	2	1	<1	<1	5	7	5	4	5		7	17	6		12		5	<1	<1	<1	<1	0.86	0.54	0.78	1.72
	Total VOC Yearly Ave.			9				6				4				14				9			3		12		1		3	7	5	4	5		7	17	6		12										
MW-10S																																																
	TCE	73	110	59	63	27	32	50	44	170	40	32	26	25	37	27	28	31	24	15	16	16	23	17	18	13	13	15	19	16	17	9	19		10	10	10	NS	7	6	8	6	7	6.70	5.80	6.56	6.76	6.02	12.40
	TCE Yearly Ave.			76				43				72				29				25			18		18		13		18	16	17	9	19		10	10	10		7										
	Total VOC's	73	110	59	110	33	44	62	57	228	46	37	29	32	37	31	31	31	27	16	17	18	25	18	20	13	13	17	19	17	17	9	21		10	10	11		7	6	8	6	7	6.70	5.80	6.83	7.10 J	6.63	13.76
	Total VOC Yearly Ave.			76				62				92				32				26			20		19		13		18	17	17	9	21		10	10	11		7										
MW-10D																																																
	TCE	23	33	60	33	54	31	40	30	10	41	37	32	19	32	25	21	21	22	22	30	23	19	10	16	12	18	10	20	13	11	8	7		8	5	5	NS	6		6	7	8	4.70	5.40	9.49	6.85	6.25	18.40
	TCE Yearly Ave.			36				40				30				27				23			24		13		15		15	13	11	8	7		8	5	5		6							6.67	5.90	5.40	8.97
	Total VOC's	23	33	60	33	66	39	45	35	12	46	43	36	21	32	28	22	21	25	24	32	26	19	10	16	12	18	10	20	13	11	8	7		8	5	5		6		6	7	8	4.70	5.40	9.75	7.02 J	6.85	19.70
	Total VOC Yearly Ave.			36				46				34				29				23			26		13		15		15	13	11	8	7		8	5	5		6							6.77	6.02 J	5.62 J	9.43
MW-11																																																
	TCE	2600	44	3400	480	290	31	NA	50	420	29	<50	54	170	<50	<50	72	<50	51	51	42	38	19	170	85	46	10	27	11	14	5	7	6		21	11	12	NS	18		8	6	6	38.00	15.00	4.32	3.60	5.01	5.80
	TCE Yearly Ave.			1549				267				125				56				44			33		128		28		19	14	5	7	6		21	11	12		18										
	Total VOC's	2600	44	3400	480	5090	141	NA	440	630	375	230	344	1170	1700	<50	1062	1260	105	130	101	87	144	300	415	96	41	49	11	35	5	31	6		49	11	32		40		8	6	6	81.00	15.00	5.28	4.14 J	5.79	7.00
	Total VOC Yearly Ave.			1549				1428				419				804				639			111		358		69		30	35	5	31	6		49	11	32		40										
MW-12S																																																
	TCE	190	280	120	270	190	100	21	46	50	150	140	150	150	180	100	110	170	88	88	100	NA	24	82	60	82	11	80	23	11	59	10	44		62	46	27	NS	44		25	17	12	22.00	37.00	5.60	32.20	18.40	24.80
	TCE Yearly Ave.			203				145				97				145				114			62		71		47		52	11	59	10	44		62	46	27		44										
	Total VOC's	190	280	120	270	330	137	23	83	62	196	179	172	183	180	109	119	192	99	102	101	NA	57	93	73	88	11	102	23	11	59	10	46		67	49	30		46		25	17	12	23.10	37.00	5.78	32.85	19.07	25.54
	Total VOC Yearly Ave.			203				190				130				161				128			56		83		50		63	11	59	10	46		67	49	30		46										
MW-12D																																																
	TCE	21	17	23	17	12	12	13	10	45	10	9	13	11	15	8	7	16	9	5	7	6	6	5	5	5	4	2	8	11	8	10	5		4	10	3	NS	6		4	3	2	1.70	<1	2.86	1.51	2.71	2.50
	TCE Yearly Ave.			19				14				19				11				9			6		5		5		5	11	8	10	5		4	10	3		6										
	Total VOC's	21	17	23	17	14	12	13	11	52	12	9	13	13	15	8	7	16	9	5	7	6	6	5	5	5	4	2	8	12	8	12	7		4	10	3		6		4	3	2	1.70	<1	2.86	1.51	2.71	2.50
	Total VOC Yearly Ave.			19				14				21				12				9			6		5		5		5	12	8	12	7		4	10	3		6										
MW-L16																																																
	TCE																																																
	TCE Yearly Ave.																																																
	Total VOC's																																																
	Total VOC Yearly Ave.																																															

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

		May-96	Nov-96	May-97	Nov-97	May-98	Nov-98	Aug-99	Nov-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	Nov-13	Nov-14	Nov-15
MW-BE1																											
	TCE							<1	NA	NA	NA	<1	NA	NA	NA												
	TCE Yearly Ave.							<1	NA	NA	NA	<1	NA	NA	NA												
	Total VOC's							<1	NA	NA	NA	<1	NA	NA	NA												
	Total VOC Yearly Ave.							<1	NA	NA	NA	<1	NA	NA	NA												
MW-BE2																											
	TCE							<1	NA	NA	NA	<1	NA	NA	NA												
	TCE Yearly Ave.							<1	NA	NA	NA	<1	NA	NA	NA												
	Total VOC's							<1	NA	NA	NA	1.2	NA	NA	NA												
	Total VOC Yearly Ave.							<1	NA	NA	NA	1.2	NA	NA	NA												
DEC-23																											
	TCE															<1		<1									
	Total VOC's															<1		<1									
DEC-24																											
	TCE															NS		<1									
	Total VOC's															NS		<1									
DEC-25																											
	TCE															2.3		2.2									
	Total VOC's															2.3		2.2									
DEC-26																											
	TCE															9.9		NS									
	Total VOC's															9.9		NS									
DEC-27																											
	TCE															4.7		NS									
	Total VOC's															4.7		NS									
DEC-28																											
	TCE															3.5		NS									
	Total VOC's															3.5		NS									
DEC-29																											
	TCE															2.4		NS									
	Total VOC's															2.4		NS									
DEC-30																											
	TCE															1.4		1.2									
	Total VOC's															1.4		1.2									

Notes:
NS = Not Sampled.
1. Units are µg/L.
2. Well L16 was constructed inside the building on 12/5/08.
3. All data prior to 2010 provided to GeoLogic NY, Inc. by Buck Engineering, LLC.

Table No. 3
Monthly Analytical Results May 2001- December 2015
Former SCM - Cortlandville
Site No. 712006

Sampling Date	Compound	Tower Influent	Tower Discharge	Reg Limit	Outfall at Cascade
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
12/31/2002	Trichloroethene	12.0	5.1	5	2.0
	Total VOC's	12.0	5.1		2.0

Table No. 3
Monthly Analytical Results May 2001- December 2015
Former SCM - Cortlandville
Site No. 712006

Sampling Date	Compound	Tower Influent	Tower Discharge	Reg Limit	Outfall at Cascade
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
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

Table No. 3
Monthly Analytical Results May 2001- December 2015
Former SCM - Cortlandville
Site No. 712006

Sampling Date	Compound	Tower Influent	Tower Discharge	Reg Limit	Outfall at Cascade
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
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

Table No. 3
Monthly Analytical Results May 2001- December 2015
Former SCM - Cortlandville
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Sampling Date	Compound	Tower Influent	Tower Discharge	Reg Limit	Outfall at Cascade
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
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

Table No. 3
Monthly Analytical Results May 2001- December 2015
Former SCM - Cortlandville
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Sampling Date	Compound	Tower Influent	Tower Discharge	Reg Limit	Outfall at Cascade
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
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

Table No. 3
Monthly Analytical Results May 2001- December 2015
Former SCM - Cortlandville
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Sampling Date	Compound	Tower Influent	Tower Discharge	Reg Limit	Outfall at Cascade
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
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

Table No. 3
Monthly Analytical Results May 2001- December 2015
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Sampling Date	Compound	Tower Influent	Tower Discharge	Reg Limit	Outfall at Cascade
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
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	4.04	1.71	5	0.74
	Total VOC's	4.04	1.71		0.74

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Sampling Date	Compound	Tower Influent	Tower Discharge	Reg Limit	Outfall at Cascade
1/24/2013	Trichloroethene	6.25	1.68	5	1.08
	Total VOC's	6.25	1.68		1.08
2/26/2013	Trichloroethene	6.97	2.83	5	1.17
	Total VOC's	7.10	2.83		1.17
3/21/2013	Trichloroethene	7.91	3.85	5	1.33
	Total VOC's	8.09 J	3.97 J		1.33
4/29/2013	Trichloroethene	7.57	3.08	5	1.36
	Total VOC's	7.73 J	3.18 J		1.36
5/21/2013	Trichloroethene	10.0	3.53	5	1.60
	Total VOC's	10.22 J	3.67 J		1.60
6/26/2013	Trichloroethene	7.42	2.56	5	1.27
	Total VOC's	7.56 J	2.56		1.27
7/29/2013	Trichloroethene	8.50	3.20	5	1.57
	Total VOC's	8.50	3.30 J		1.57
8/27/2013	Trichloroethene	10.60	3.78	5	1.65
	Total VOC's	10.75 J	3.78		1.65
9/25/2013	Trichloroethene	9.47	3.95	5	1.51
	Total VOC's	9.62 J	3.95		1.51
10/25/2013	Trichloroethene	9.23	4.18	5	1.62
	Total VOC's	9.41 J	4.31 J		1.62
11/26/2013	Trichloroethene	8.84	3.89	5	1.51
	Total VOC's	8.84	3.89		1.51
12/26/2013	Trichloroethene	10.00	4.71	5	1.77
	Total VOC's	10.14 J	4.71		1.77
1/29/2014	Trichloroethene	10.50	4.26	5	2.00
	Total VOC's	10.64 J	4.26		2.00
2/24/2014	Trichloroethene	10.90	1.94	5	1.35
	Total VOC's	11.1 J	1.94		1.35
3/28/2014	Trichloroethene	10.60	4.57	5	1.60
	Total VOC's	10.78 J	4.69 J		1.60
4/25/2014	Trichloroethene	11.20	4.34	5	1.62
	Total VOC's	11.35 J	4.34		1.62
5/29/2014	Trichloroethene	9.76	3.51	5	1.44
	Total VOC's	9.76	3.51		1.44
6/24/2014	Trichloroethene	10.40	3.50	5	1.64
	Total VOC's	10.52 J	3.50		1.64
7/23/2014	Trichloroethene	8.78	2.91	5	1.48
	Total VOC's	8.92 J	2.91		1.48
8/27/2014	Trichloroethene	8.10	2.77	5	1.31
	Total VOC's	8.22 J	2.77		1.31

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Sampling Date	Compound	Tower Influent	Tower Discharge	Reg Limit	Outfall at Cascade
9/23/2014	Trichloroethene	6.99	2.76	5	1.11
	Total VOC's	6.99	2.76		1.11
10/28/2014	Trichloroethene	6.05	2.20	5	0.86
	Total VOC's	6.05	2.20		0.86
11/20/2014	Trichloroethene	5.93	2.78	5	0.94
	Total VOC's	6.48	2.78		0.94
12/23/2014	Trichloroethene	4.97	1.97	5	0.84
	Total VOC's	4.97	1.97		0.84
1/27/2015	Trichloroethene	6.06	2.18	5	1.18
	Total VOC's	6.06	2.18		1.18
2/18/2015	Trichloroethene	6.05	2.98	5	1.24
	Total VOC's	6.17 J	2.98		1.24
3/27/2015	Trichloroethene	6.20	2.91	5	1.17
	Total VOC's	6.34 J	3.01		1.17
4/23/2015	Trichloroethene	7.85	3.43	5	1.39
	Total VOC's	7.97 J	3.43		1.39
5/28/2015	Trichloroethene	8.03	2.88	5	1.34
	Total VOC's	8.16 J	2.88		1.34
6/23/2015	Trichloroethene	8.57	2.68	5	1.47
	Total VOC's	9.19	2.68		1.47
7/21/2015	Trichloroethene	9.85	3.27	5	1.49
	Total VOC's	9.85	3.27		1.49
8/19/2015	Trichloroethene	8.63	2.72	5	1.37
	Total VOC's	8.83 J	2.84 J		1.37
9/28/2015	Trichloroethene	6.58	2.35	5	1.03
	Total VOC's	6.58	2.35		1.03
10/26/2015	Trichloroethene	6.26	2.41	5	0.93
	Total VOC's	6.26	2.41		0.93
11/25/2015	Trichloroethene	4.68	1.87	5	0.81
	Total VOC's	4.68	1.87		0.81
12/17/2015	Trichloroethene	4.99	2.22	5	0.83
	Total VOC's	4.99	2.22		0.83

Note:
All results in µg/L.

Table 4:
Comparison of TCE Concentrations in Groundwater

Well #	Highest TCE Concentration[1]	Date Highest TCE Observed[2]	Nov. 2015 TCE Concentration[3]	Highest TCE vs. Nov. 2014 % Change[4]
Perimeter Shallow Wells				
MW-1S	47	Aug-1990	5.37	-88.6%
MW-2S	10	Nov-1991	1.90	-81.0%
MW-4S	2	Nov-1990 & Aug-1991	0.63	-68.5%
MW-5S	3	Nov-1990	0.85	-71.7%
MW-10S	170	May-1992	12.40	-92.7%
Perimeter Deep Wells				
MW-1D	32	Feb-1990	4.57	-85.7%
MW-2D	9	Aug-1990 & Nov-1991	NS	NA
MW-4D	2	Nov-1990 & Aug-1991	0.54	-73.0%
MW-5D	5	Nov-1990	2.00	-60.0%
MW-10D	60	Nov-1990	18.40	-69.3%
Interior Shallow Wells				
MW-6	62	May-1991	8.74	-85.9%
MW-7	290	Feb-1990	4.32	-98.5%
MW-8	110	May-1991	5.46	-95.0%
MW-11	3400	Nov-1990	5.80	-99.8%
MW-12S	280	Aug-1990	24.80	-91.1%
Interior Deep Wells				
MW-9	33	May-1993	1.72	-94.8%
MW-12D	45	May-1992	2.50	-94.4%
Facility Well				
MW-L16	41	Nov-2008	2.97	-92.8%

Notes:
All concentrations in parts per billion (ppb).
Highlighted cell indicated decrease in TCE Concentration.
[1] Highest TCE concentration observed, per Table 2.
[2] Date the highest TCE concentration was observed, per Table 2.
[3] TCE concentration detected in November 2015, per Table 2.
[4] Percent change in TCE concentration between highest concentration and November 2015.
ND = Not detected at the reporting limit.
NS = Not sampled, well damaged.

Table 5:
Comparison of TCE Concentrations in SSD/SVE Exhaust Samples

TCE Concentrations in SSD/SVE Exhaust Samples		
Sampling Date	**TCE Concentration[1]**	**TCE Concentration % Change vs. Jan. 2012[2]**
1/10/2012	**18,000**	**NA**
5/31/2012	3,500	-80.6%
11/27/2012	3,200	-82.2%
11/26/2013	10,000	-44.4%
11/17/2014	2,700	-85.0%
11/1/2015	780	-95.7%

Notes:
All TCE concentrations in micrograms per cubic meter ($\mu g/m^3$).
[1] TCE concentration detected in SSD/SVE exhaust samples.
[2] Percent change in TCE concentration vs. January 2012.
NA = Not Applicable.
SSD/SVE system energized in January 2012.

APPENDIX D

CHARTS

Chart 1: Tower Influent TCE Concentrations (µg/L)
December 2001 to December 2015

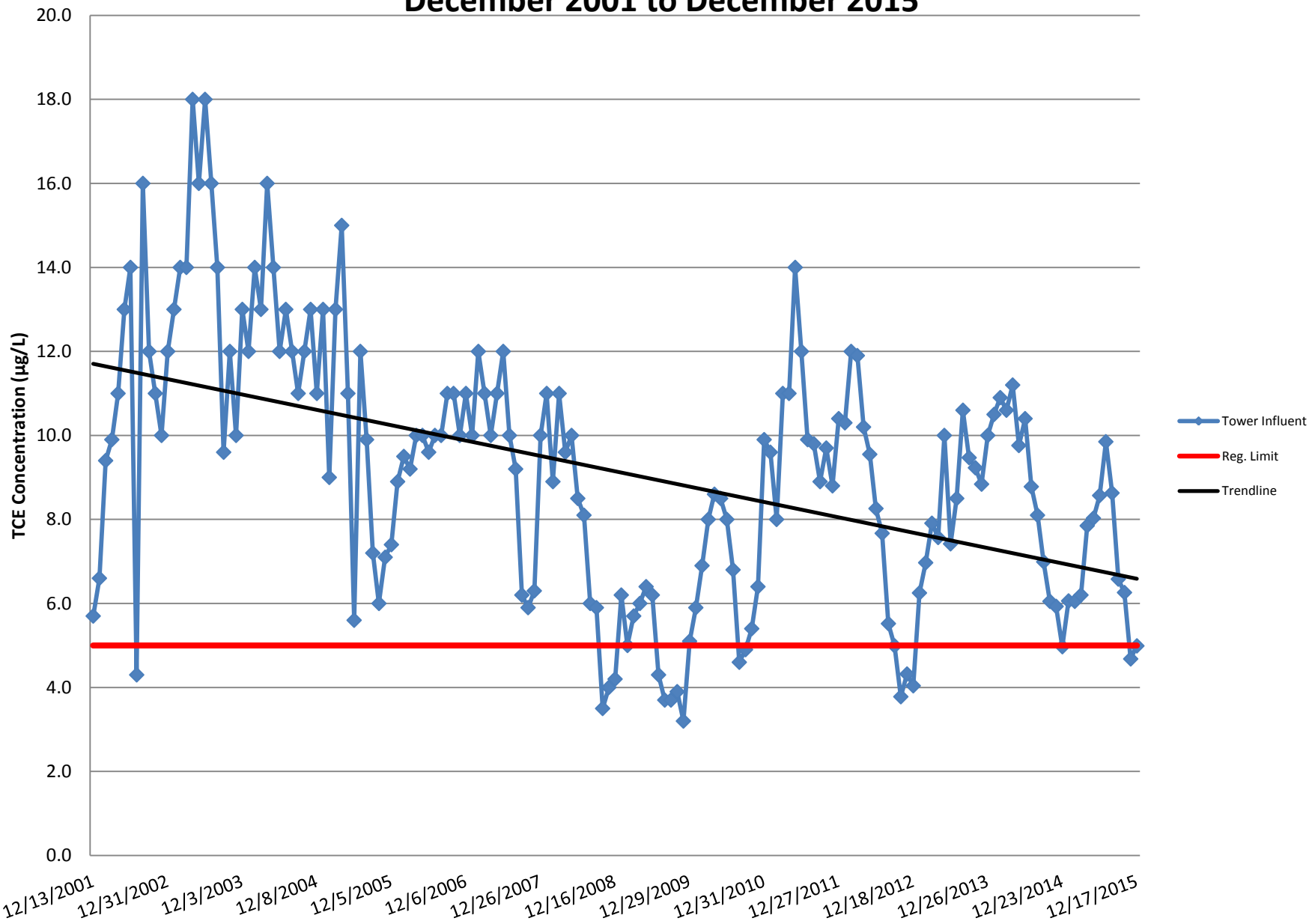


Chart 2: Tower Discharge TCE Concentrations (µg/L)
December 2001 to December 2015

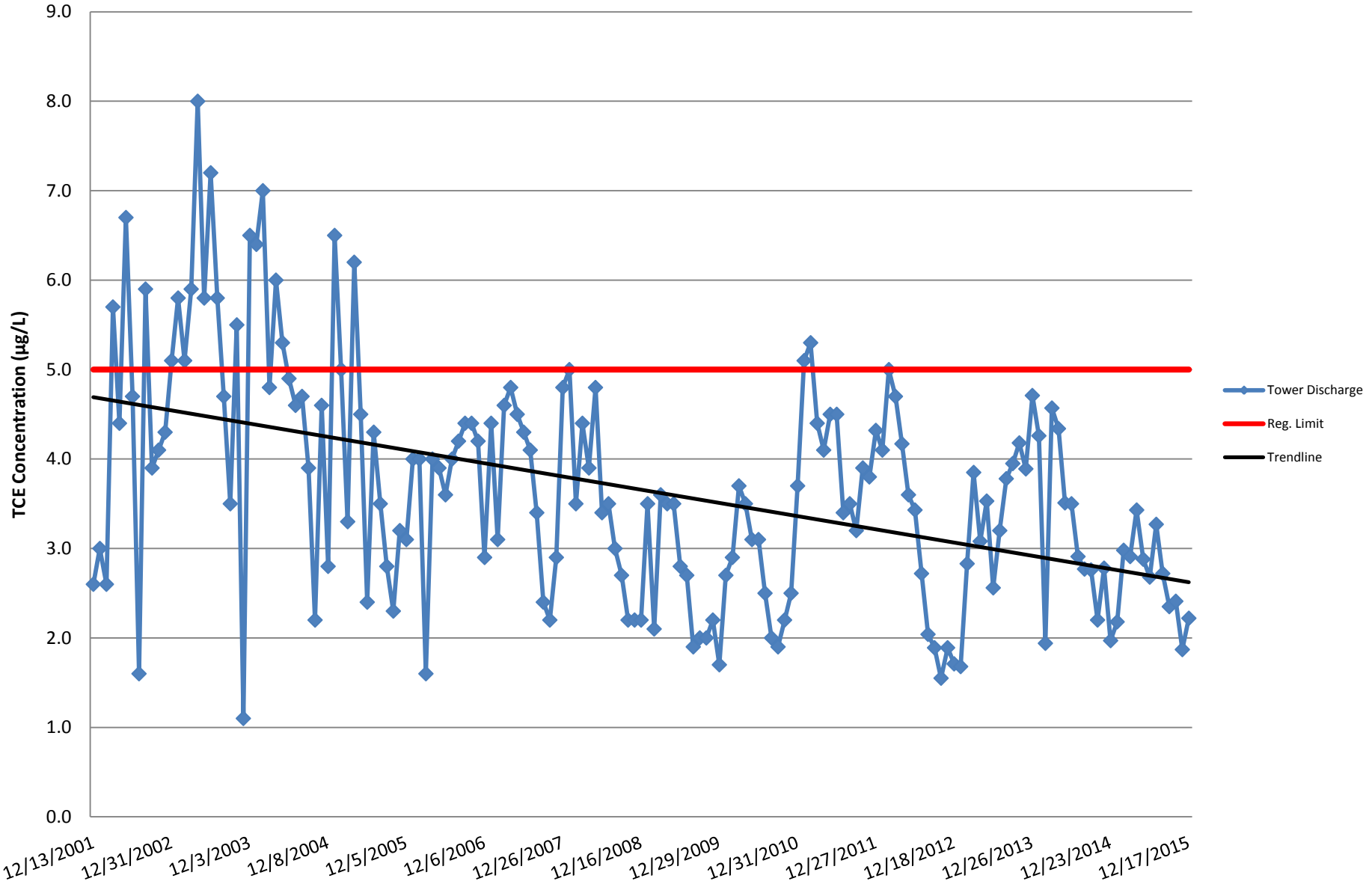


Chart 3: Cascade Outfall TCE Concentrations (µg/L)
December 2001 to December 2015

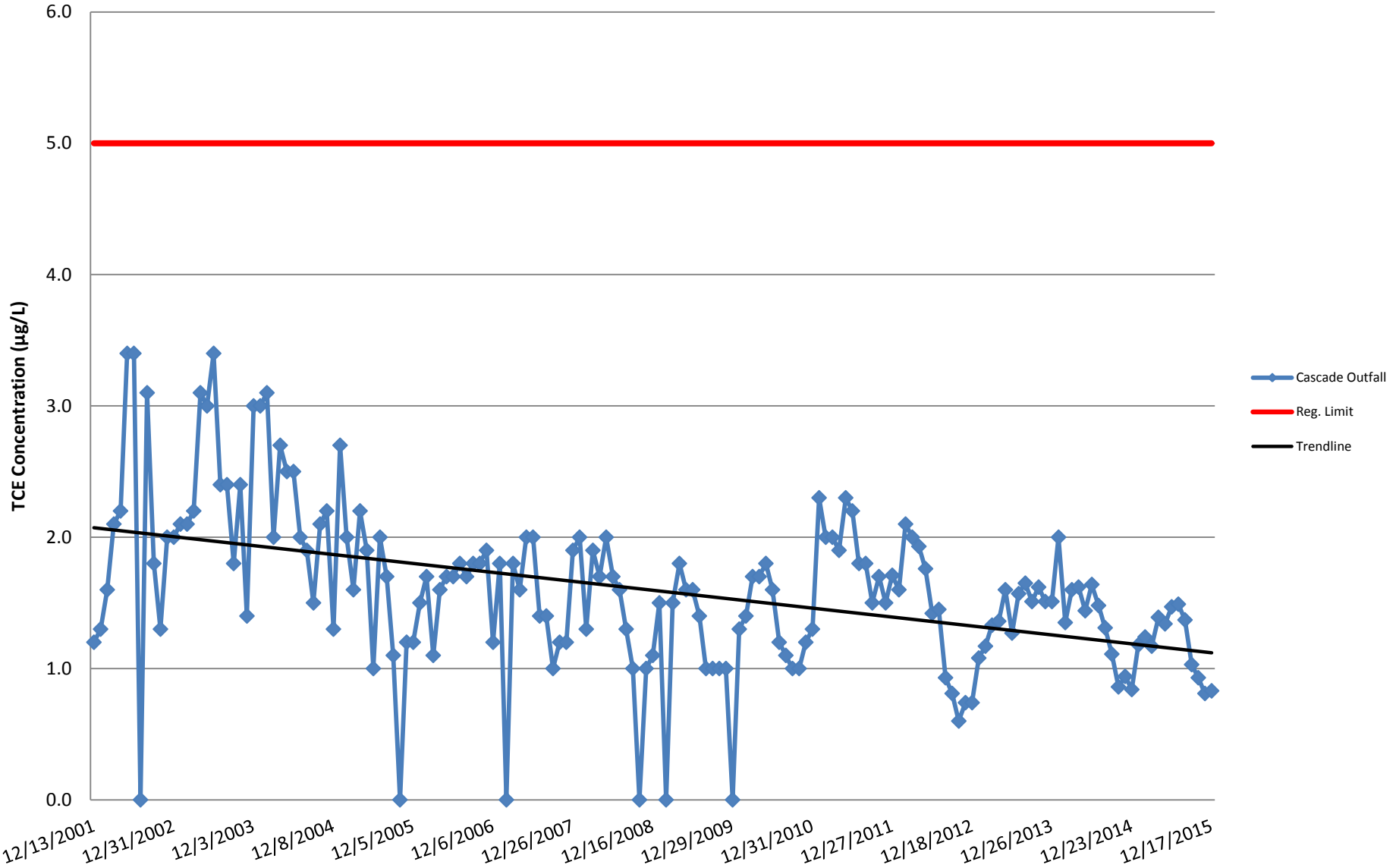


Chart 4: Tower Influent TCE Concentrations (µg/L)
2011, 2012, 2013, 2014 & 2015

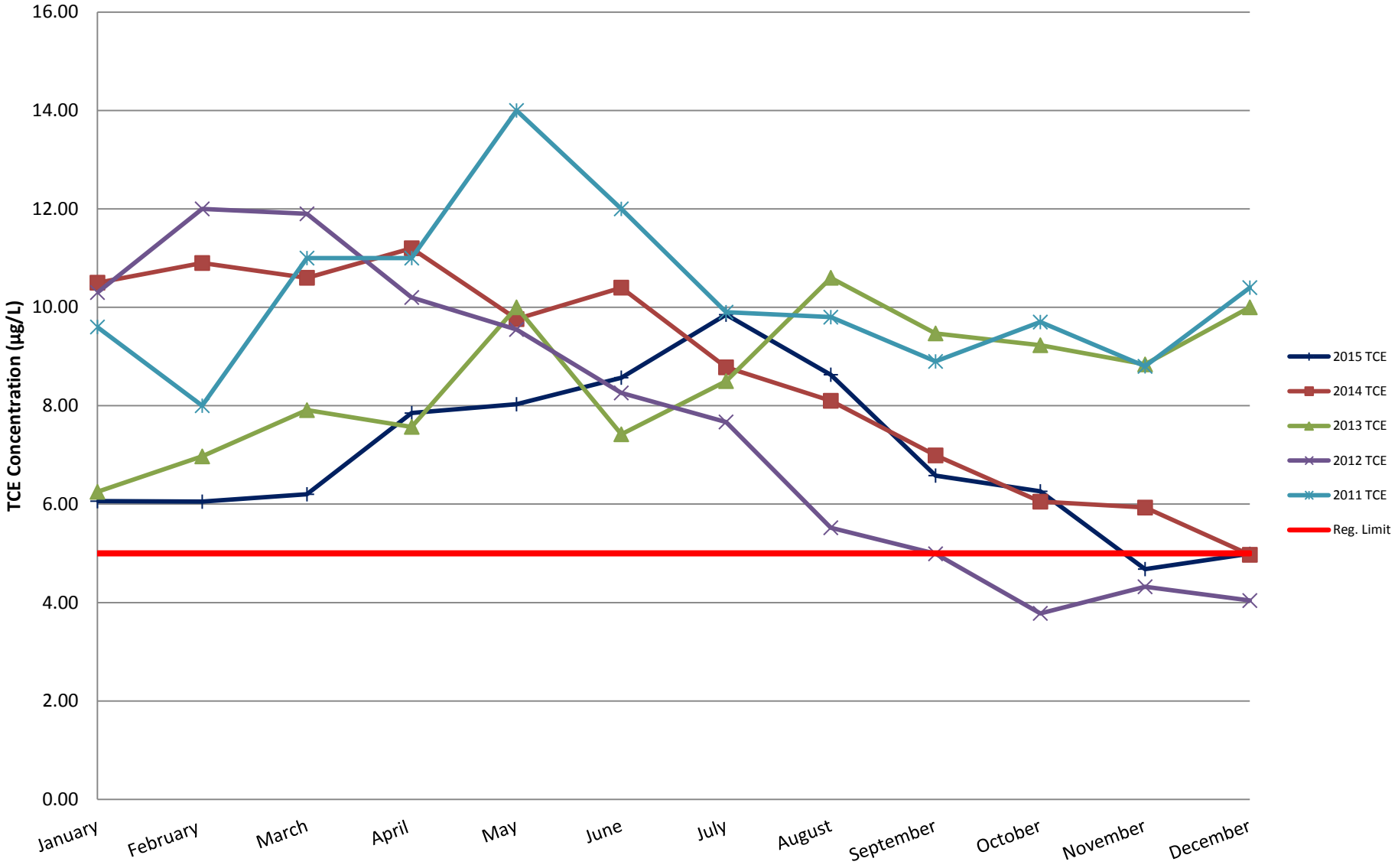


Chart 5: Perimeter Shallow Wells
10-Year TCE Concentrations (µg/L)

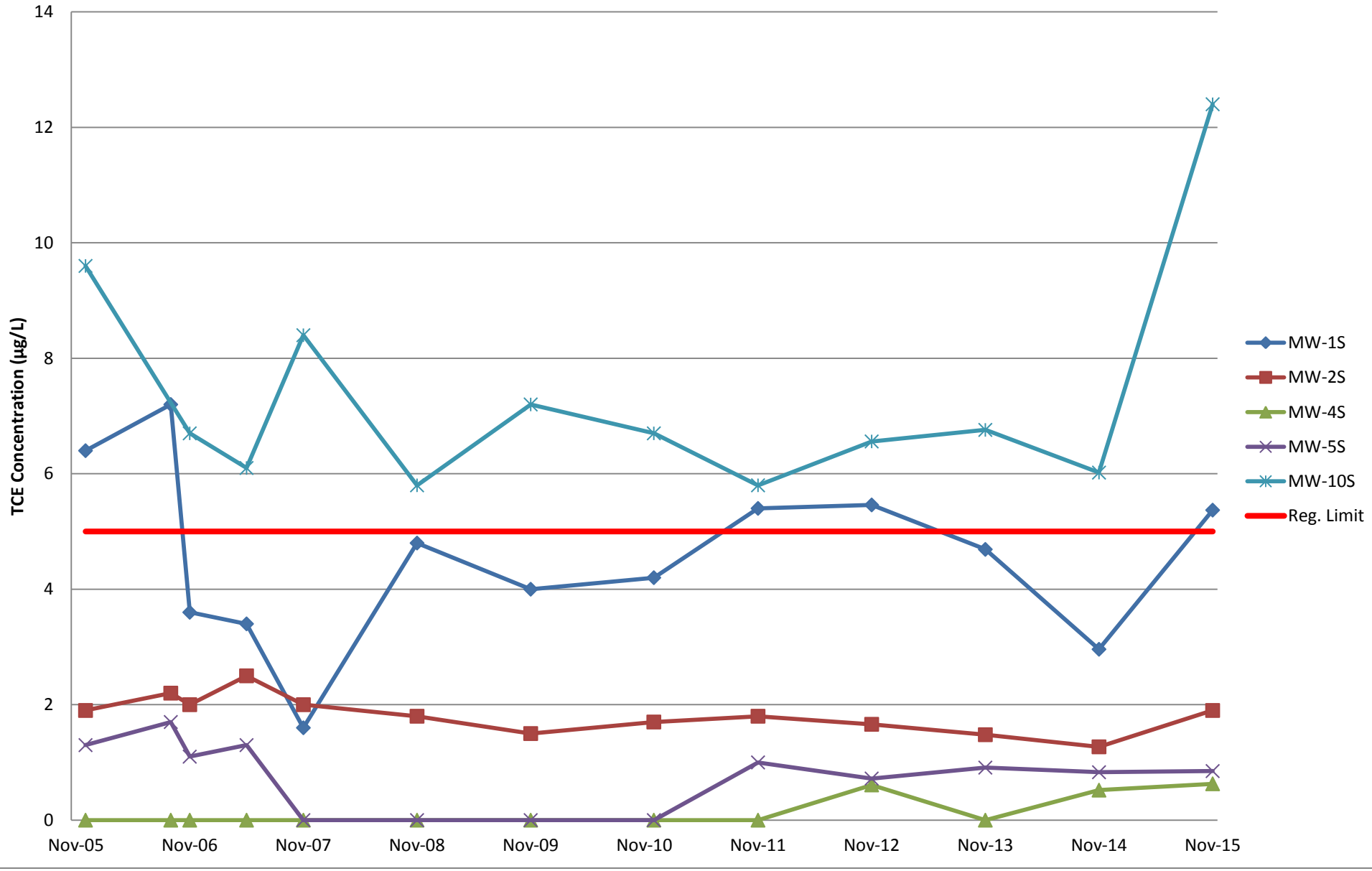


Chart 6: Perimeter Shallow Wells
20-Year TCE Conentrations (µg/L)

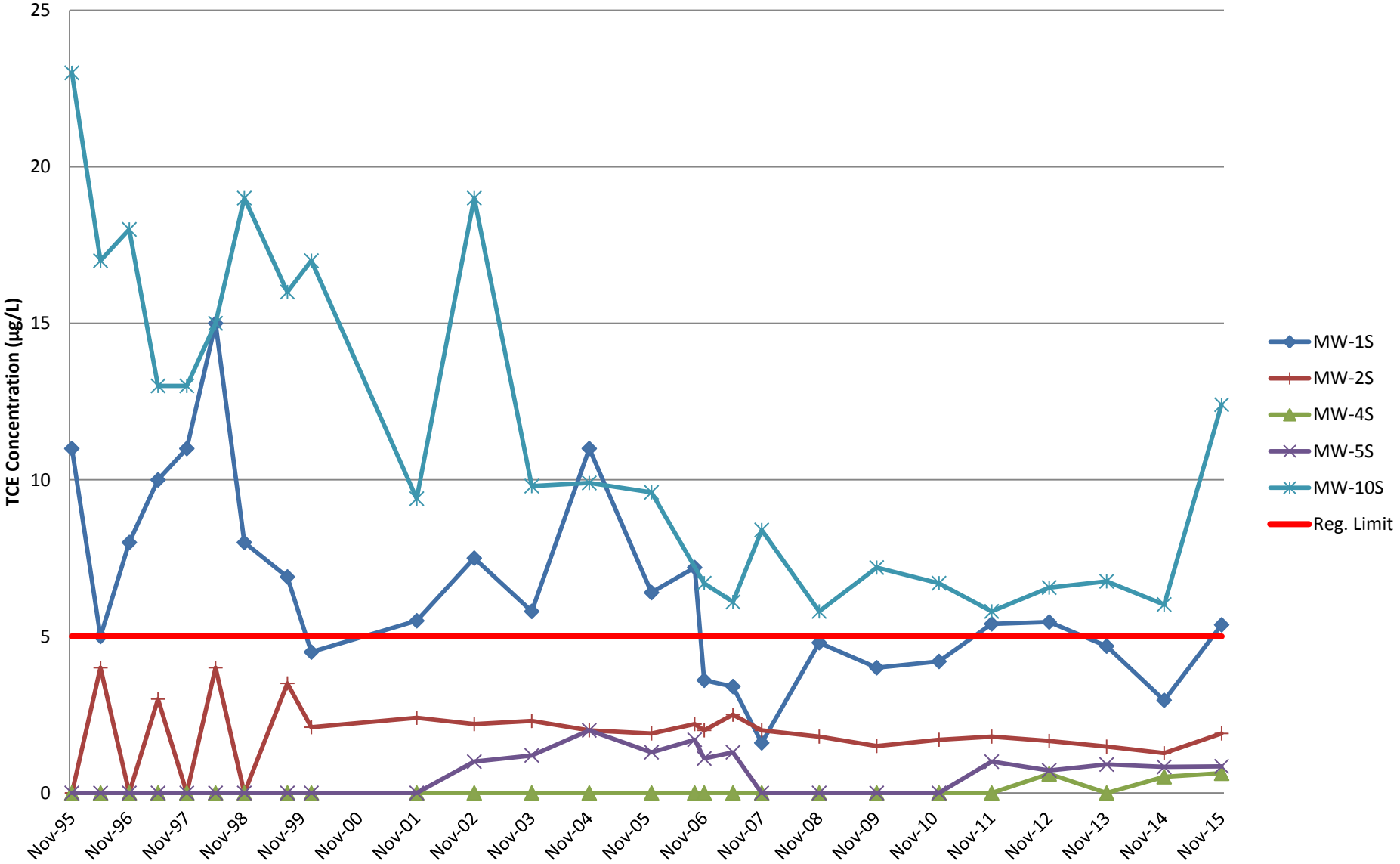


Chart 7: Perimeter Deep Wells
10-Year TCE Concentrations (µg/L)

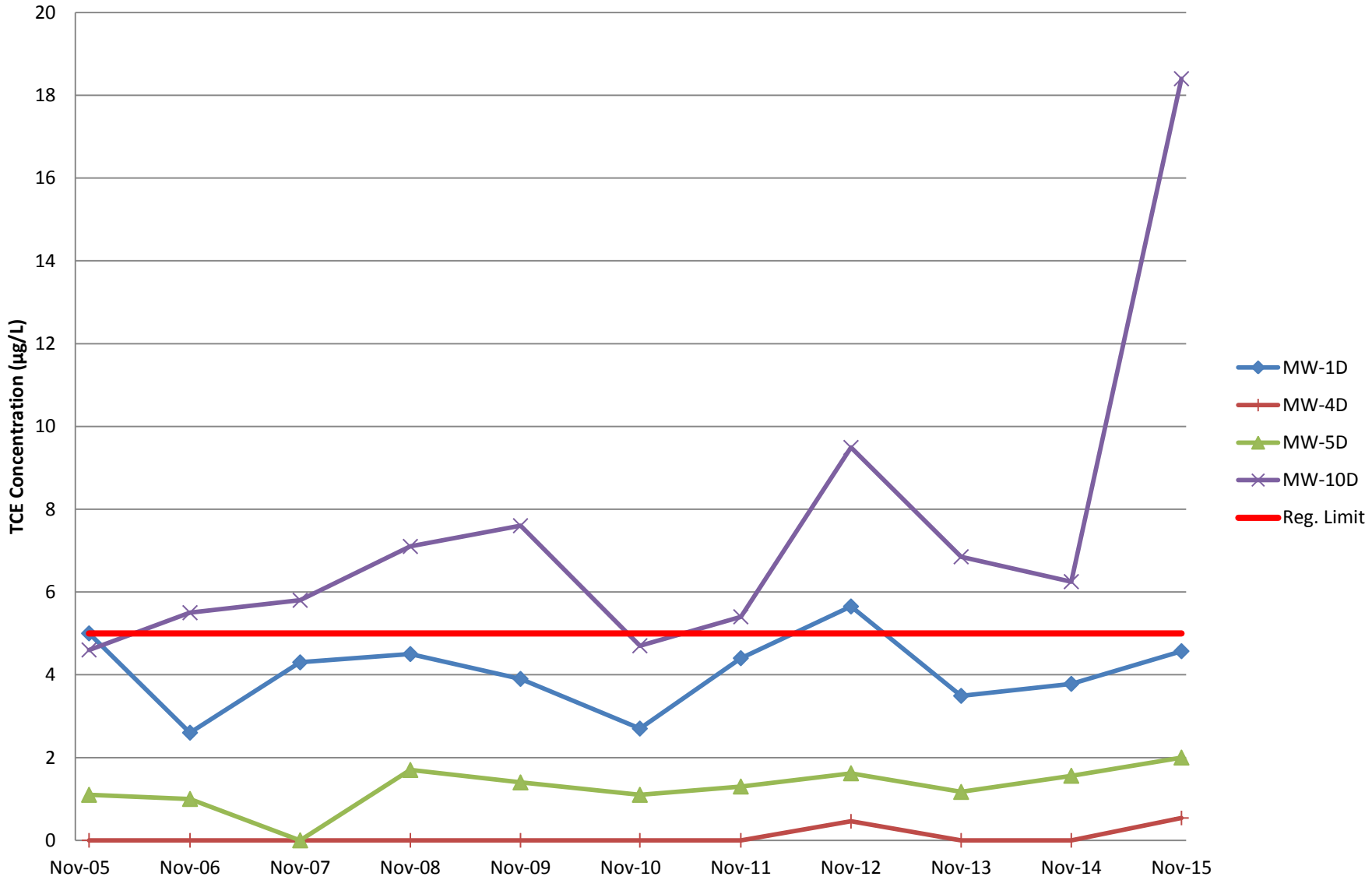


Chart 8: Perimeter Deep Wells
20-Year TCE Concentrations (µg/L)

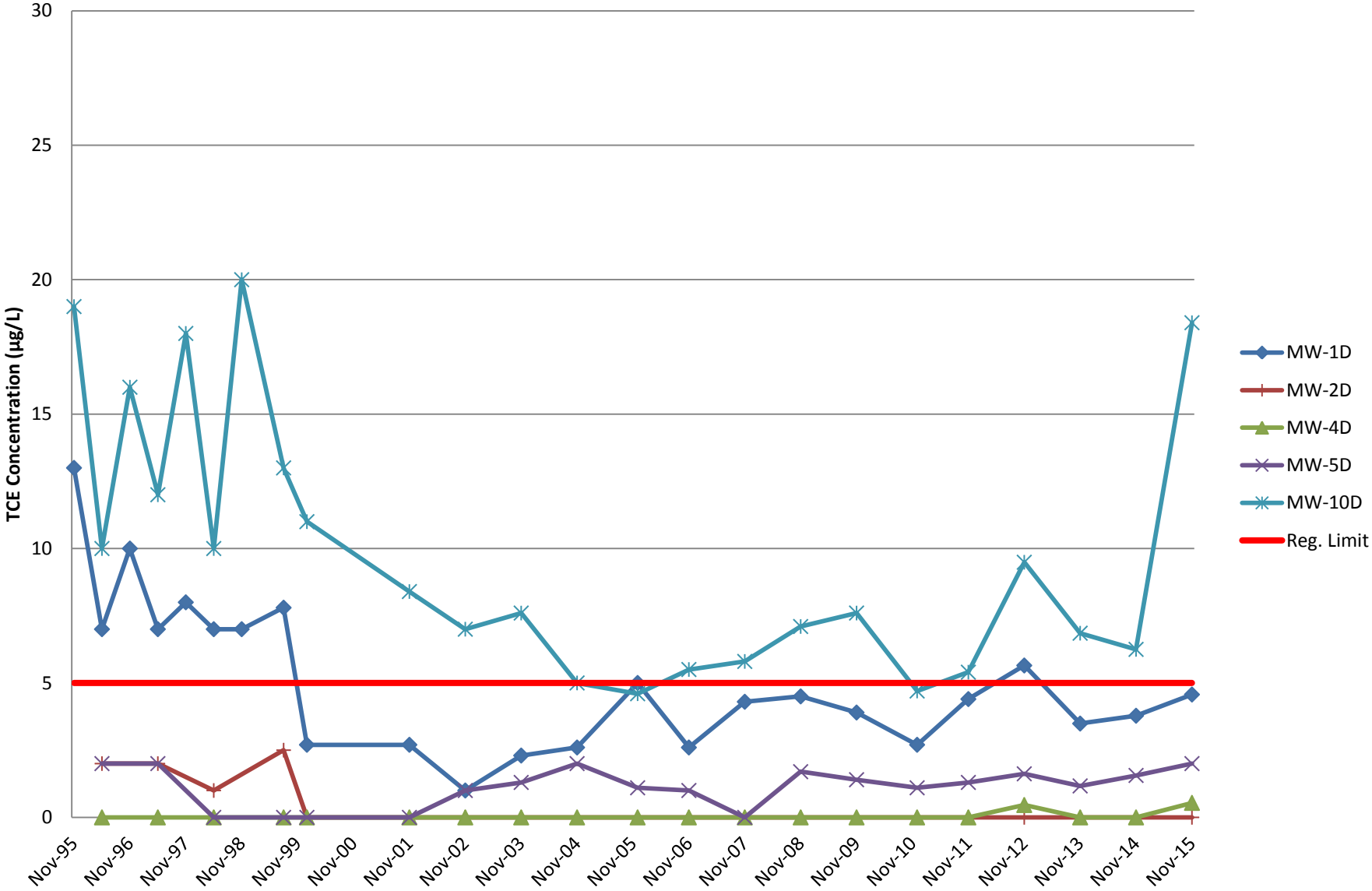


Chart 9: Interior Shallow Wells
10-Year TCE Concentrations (µg/L)

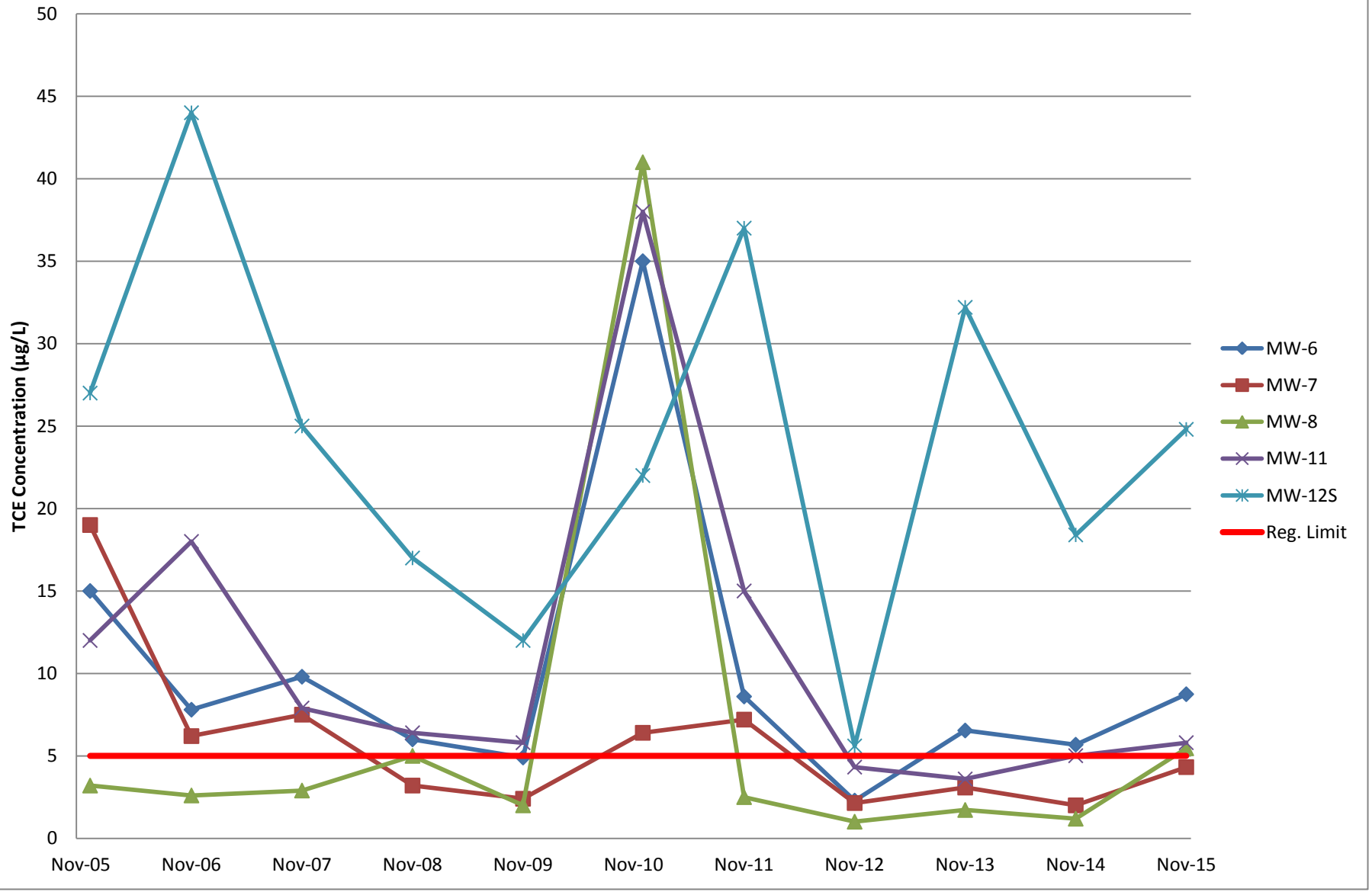


Chart 10: Interior Shallow Wells
20-Year TCE Conentrations (µg/L)

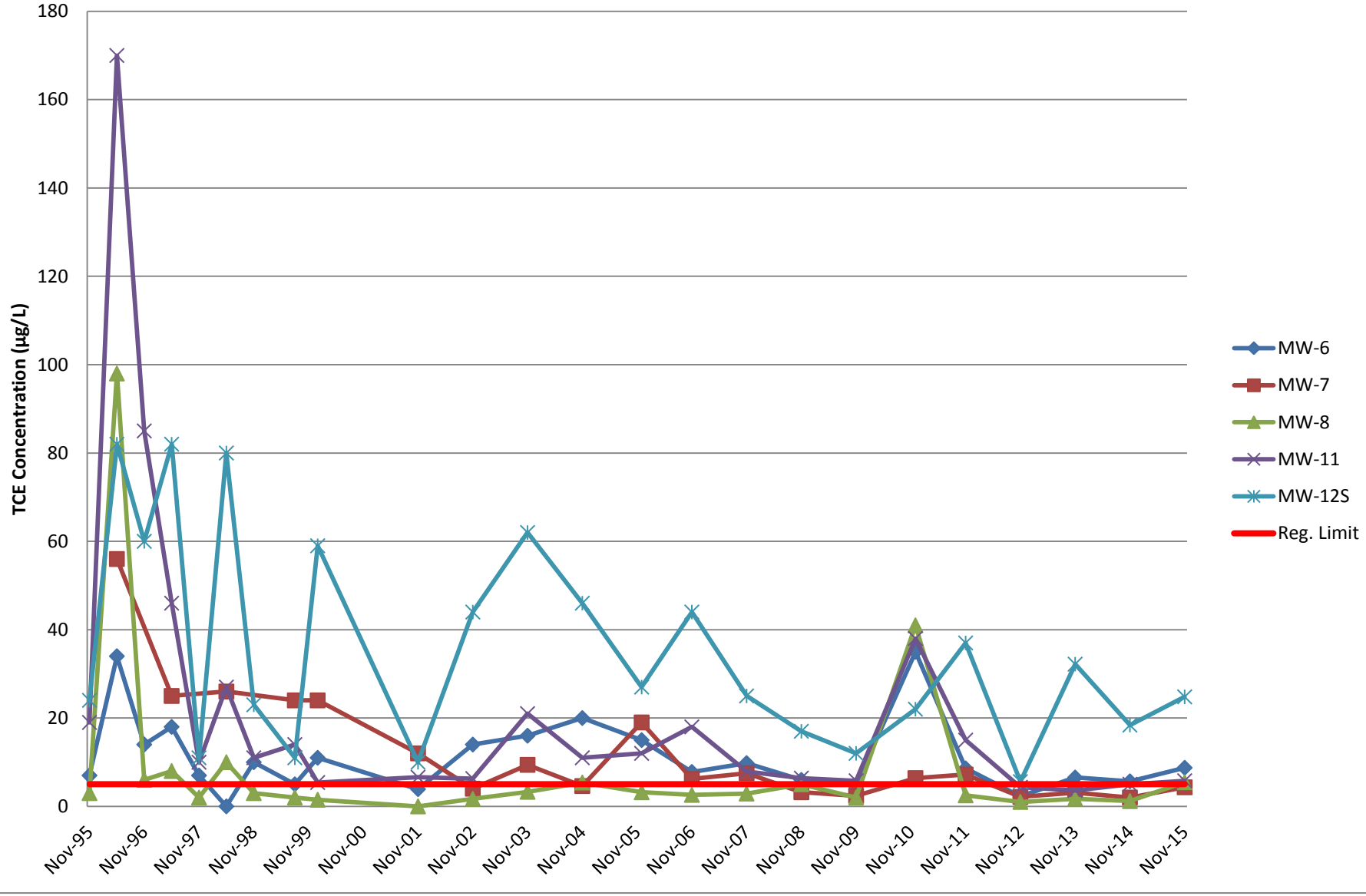


Chart 11: Interior Deep Wells
10-Year TCE Concentration (µg/L)

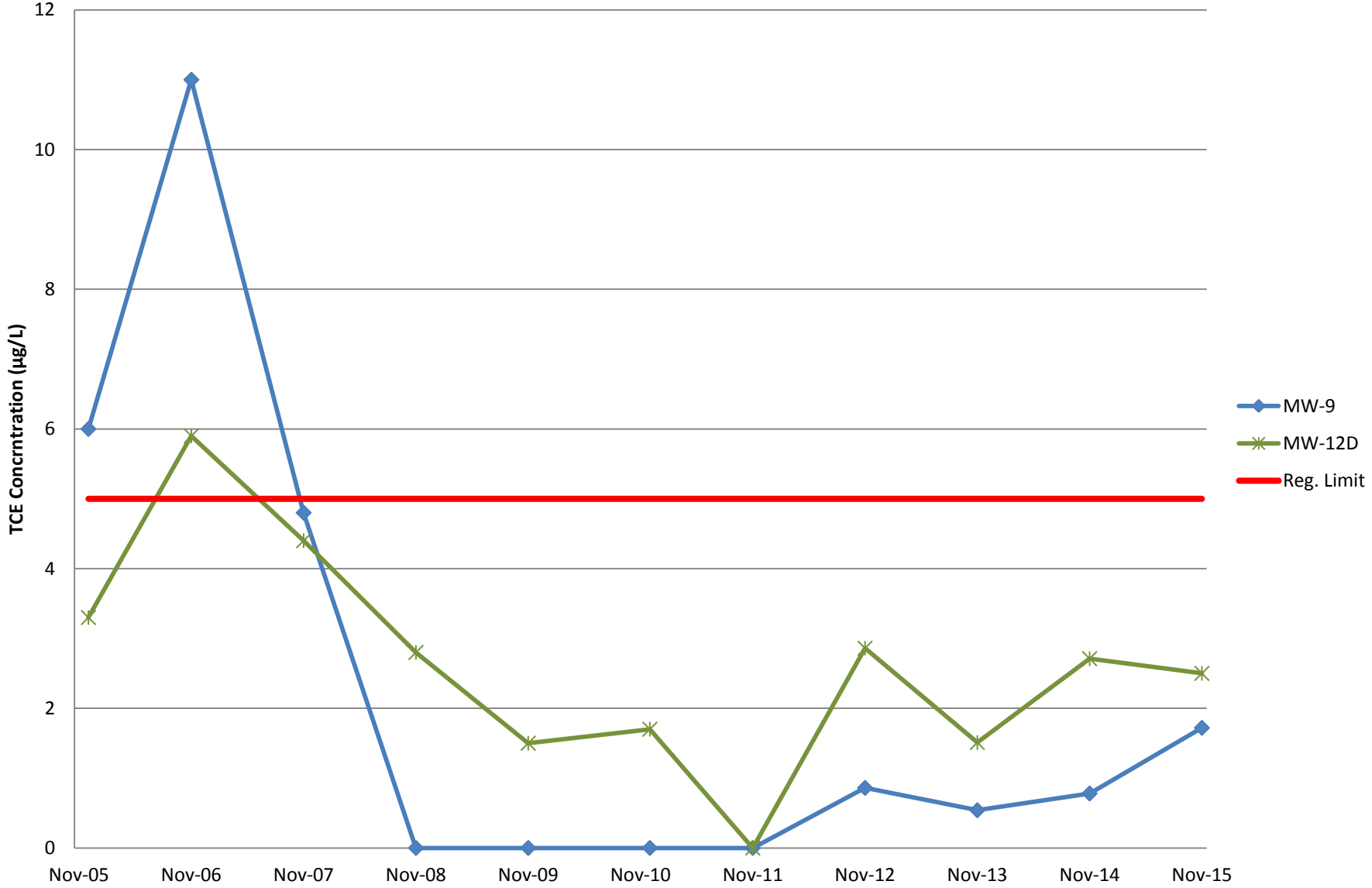


Chart 12: Interior Deep Wells
20-Year TCE Concentrations (µg/L)

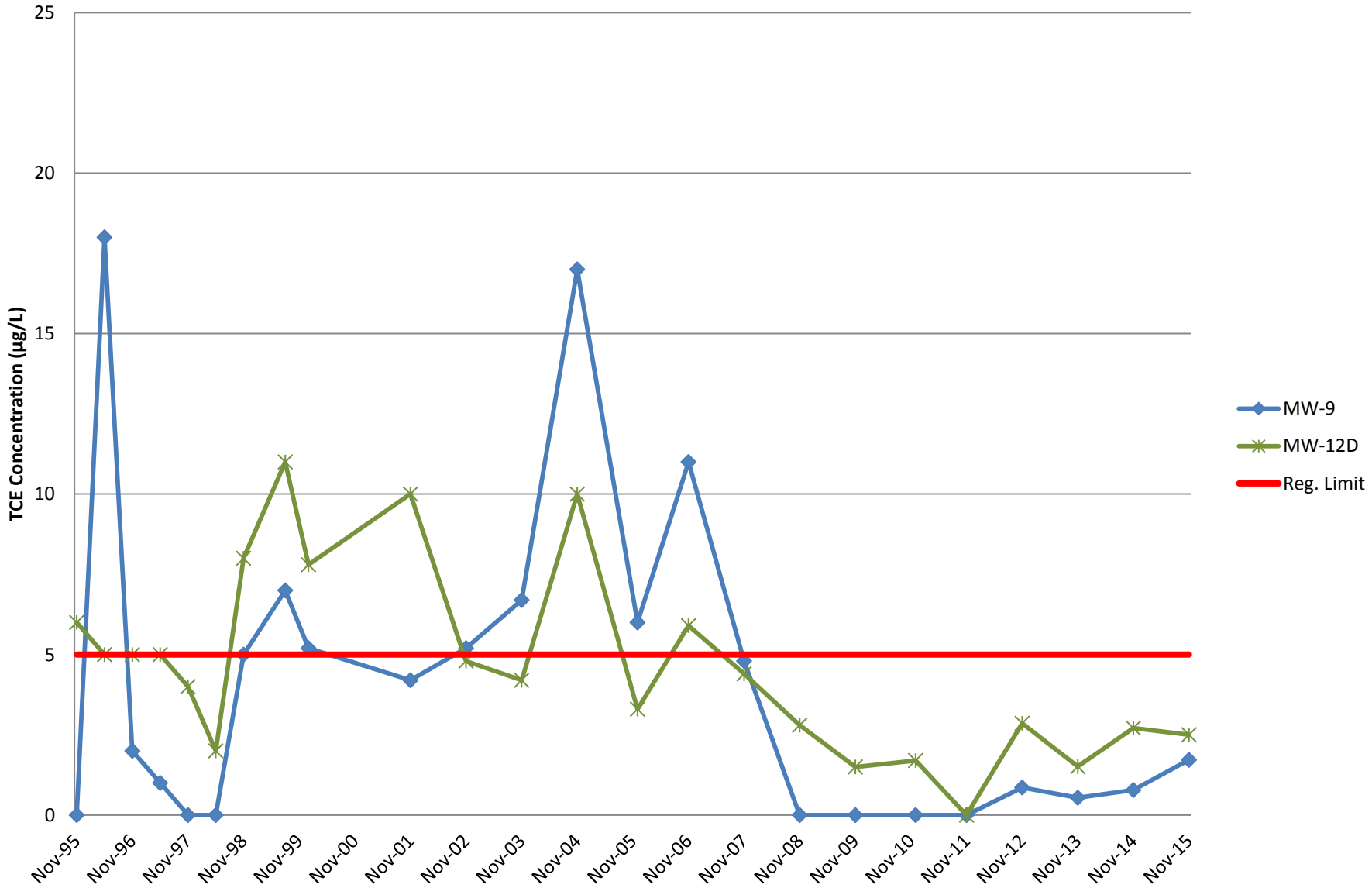


Chart 13: MW-L16 Interior Shallow Well
10-Year TCE Concentrations (µg/L)

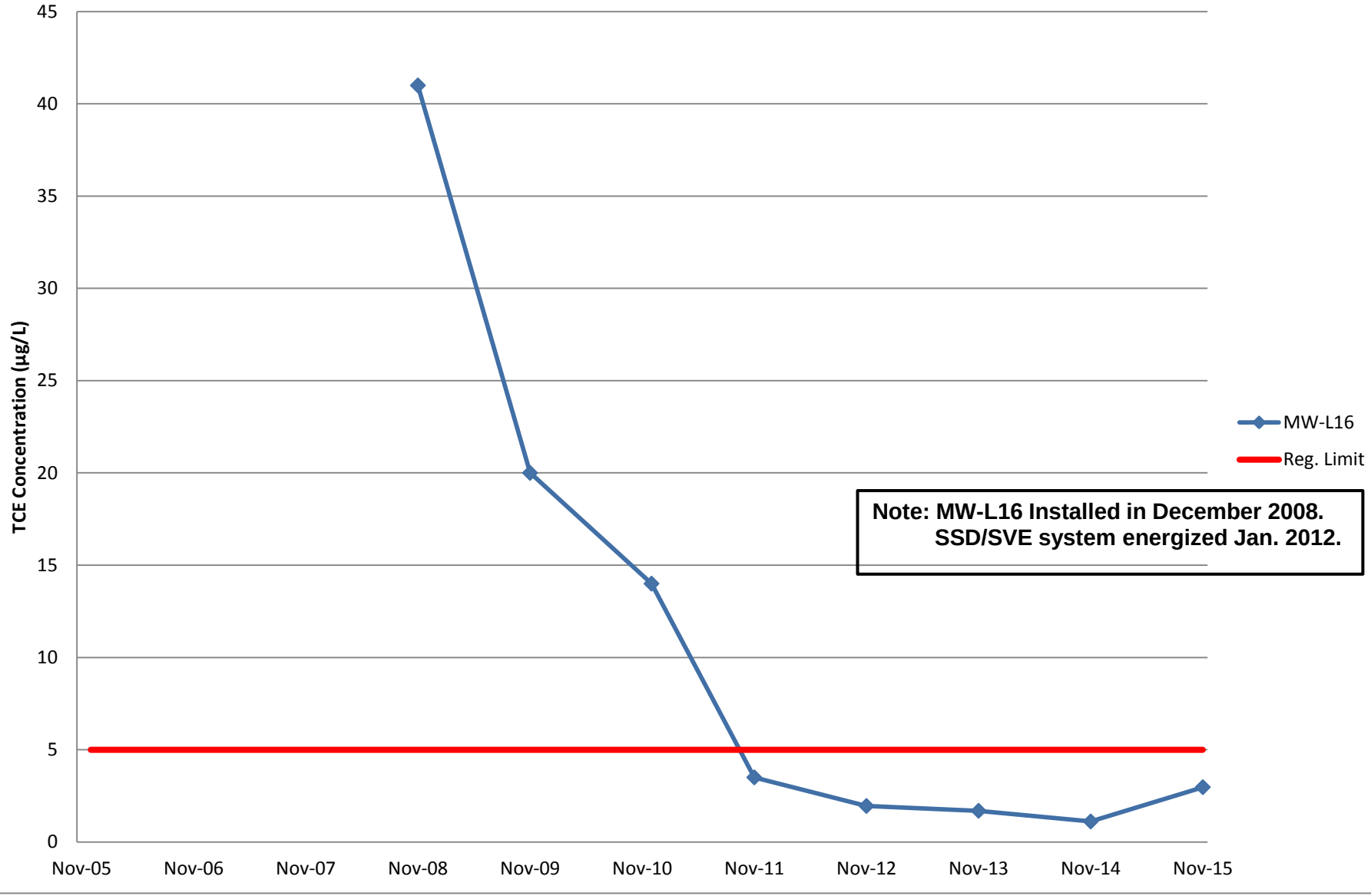


Chart 14: 2011, 2012, 2013, 2014 & 2015 Pumping Rates vs. Design Minimum Pumping Rate

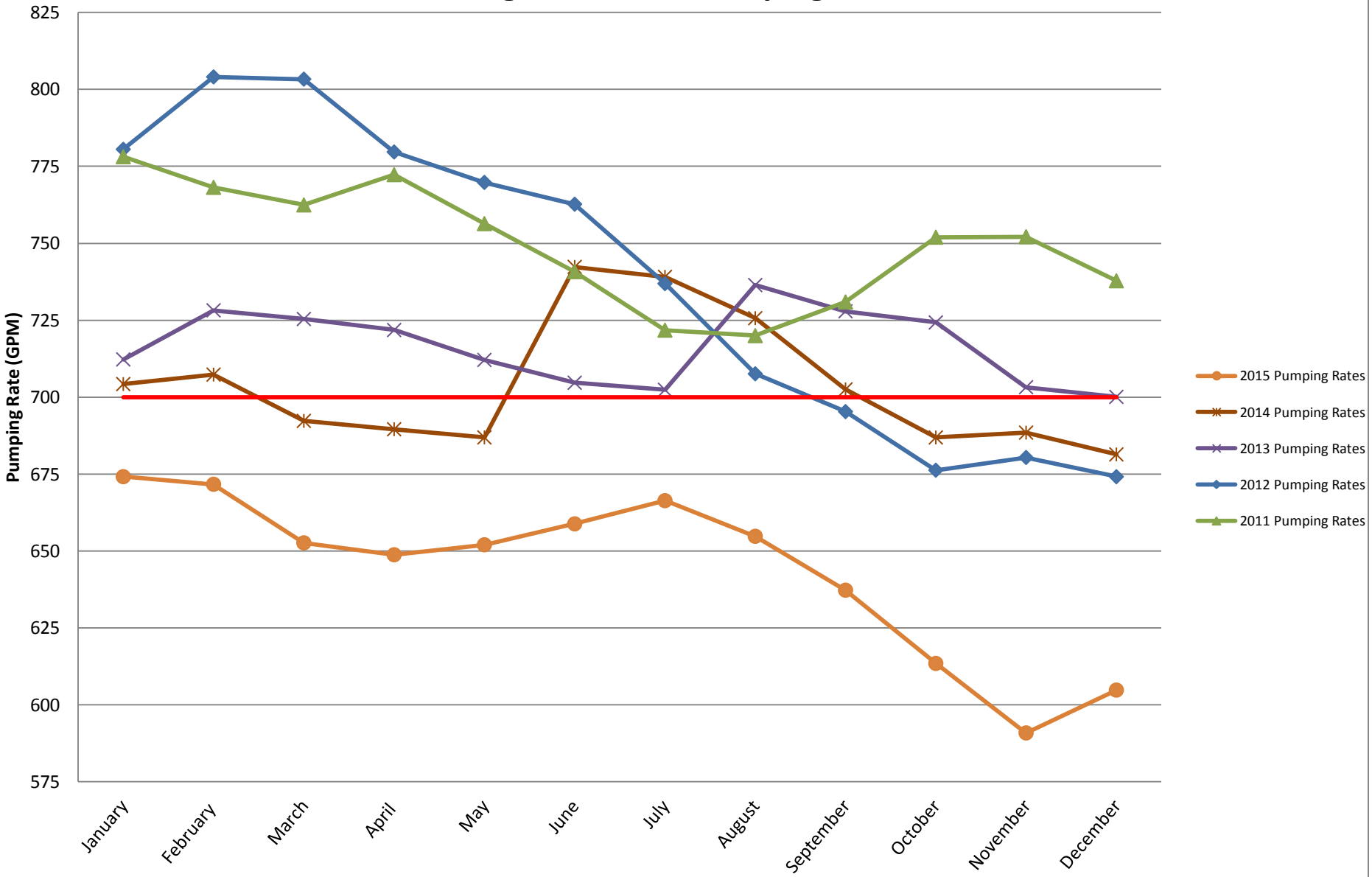


Chart 15: Recovery Well Groundwater Elevations: 2011, 2012, 2013, 2014 & 2015

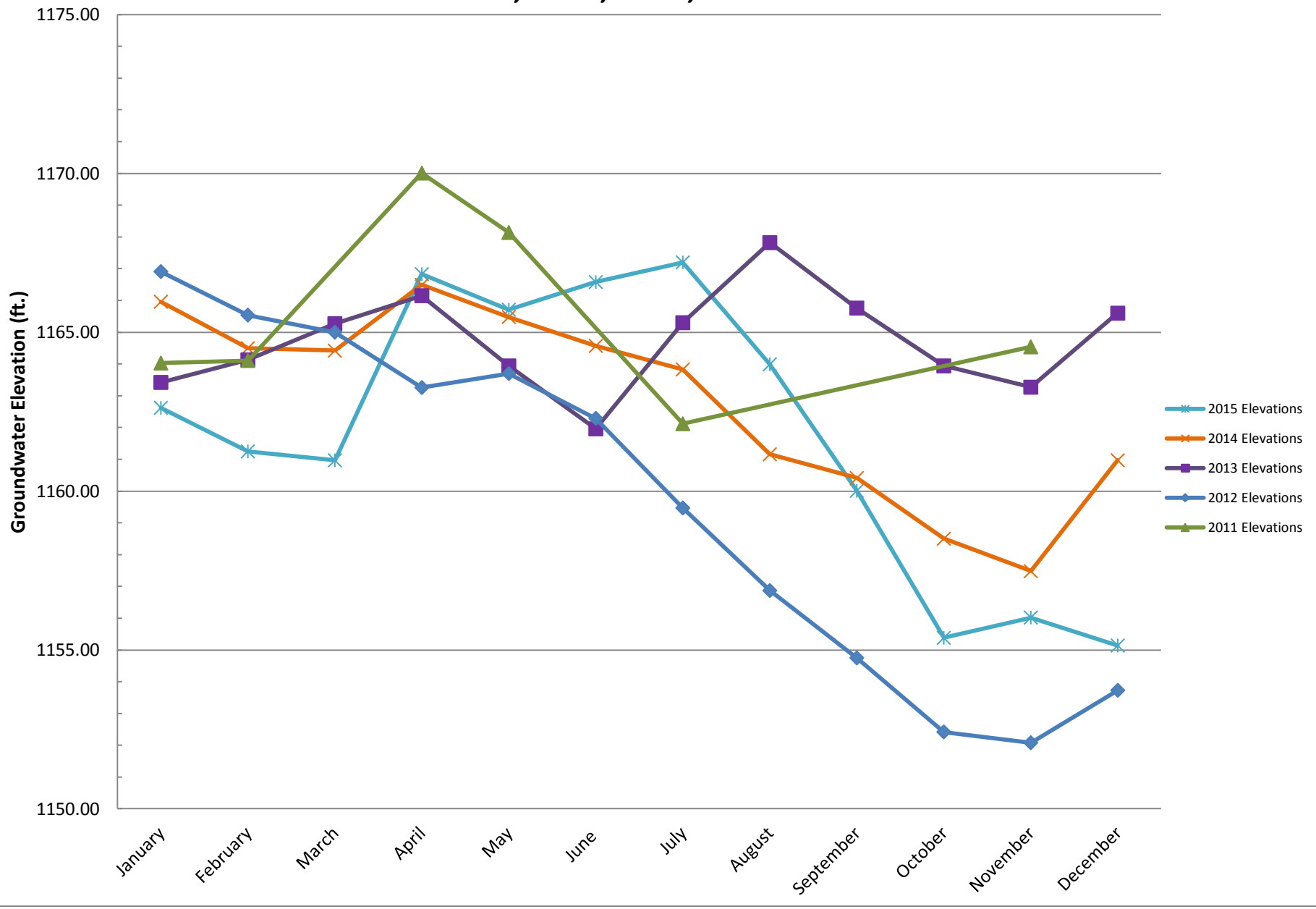
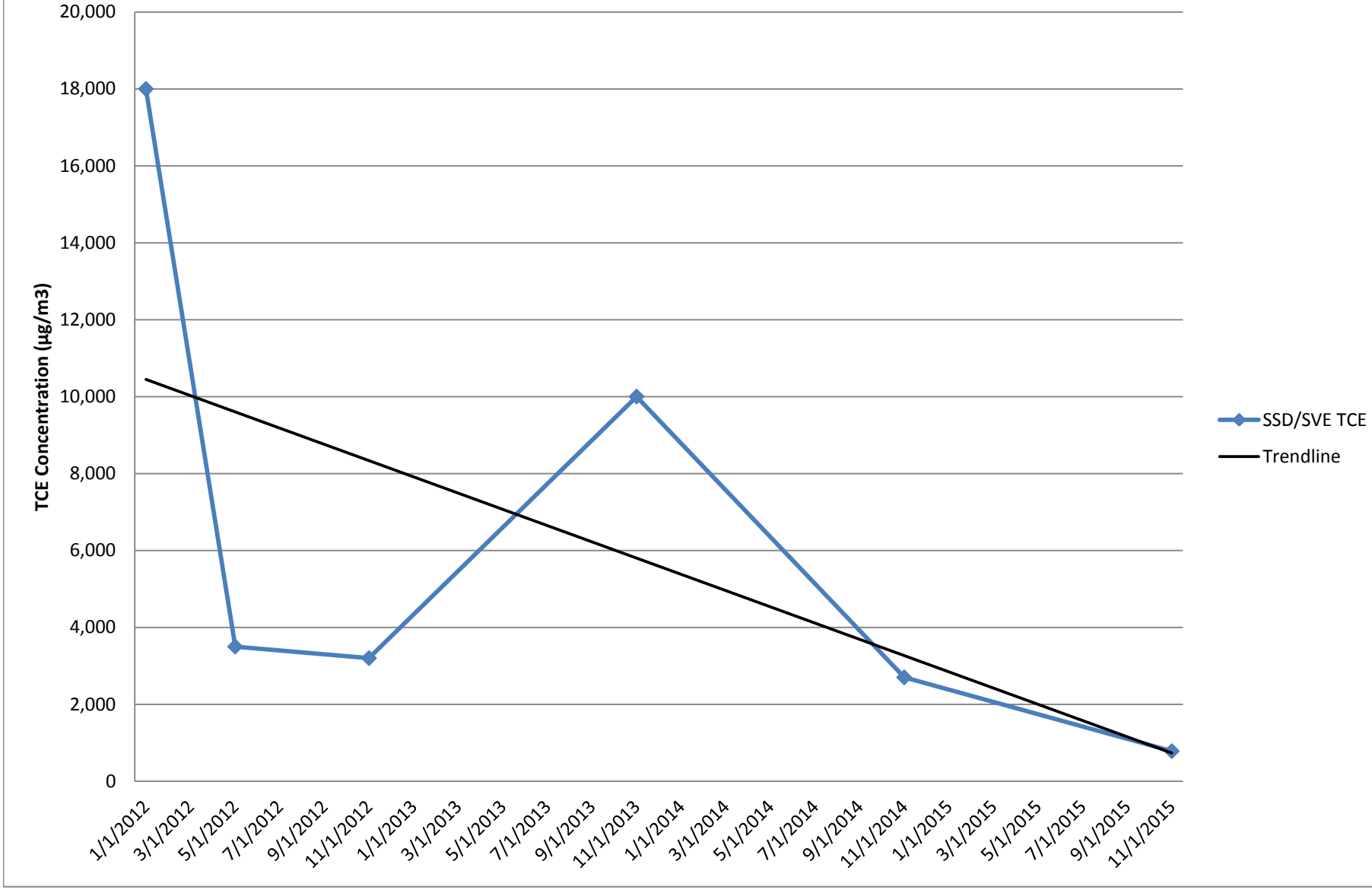


Chart 16: SSD/SVE Exhaust
TCE Concentrations (µg/m3)



APPENDIX E

ANALYTICAL RESULTS FROM 2015 ANNUAL SAMPLING EVENT

Life Science Laboratories, Inc.
5854 Butternut Drive
East Syracuse, NY 13057 (315) 445-1900

Saturday, December 05, 2015

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

TEL: 607 749-5000

Project: 210087 ANNUAL
RE: Analytical Results Order No.: K1511275

Dear Mr. Christopher Gabriel:

Life Science Laboratories, Inc. received 19 sample(s) on 11/24/2015 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.

David J Prichard
Project Manager

Life Science Laboratories, Inc.
5854 Butternut Drive
East Syracuse, NY 13057 (315) 445-1900

Analytical Results

StateCertNo: 10248

CLIENT	GeoLogic NY, Inc.			**Lab ID:**	K1511275-001A
Project:	210087 Annual			**Client Sample ID:**	*MW-1S*
W Order:	K1511275			**Collection Date:**	11/23/15 12:20
Matrix:	WATER			**Date Received:**	11/24/15 16:15
Inst. ID:	MS01_11	**Sample Size**	10 mL	**PrepDate:**	
ColumnID:	Rtx-VMS	**%Moisture:**		**BatchNo:**	R29128
Revision:	12/04/15 15:40	**TestCode:**	8260W	**FileID:**	1-SAMP-T3292.D
Col Type:					

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260C/5030C**		
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	11/25/15 16:33
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	11/25/15 16:33
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	11/25/15 16:33
Tetrachloroethene	ND		0.50	0.10	µg/L	1	11/25/15 16:33
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	11/25/15 16:33
Trichloroethene	5.37		0.50	0.10	µg/L	1	11/25/15 16:33
Vinyl chloride	ND		1.00	0.33	µg/L	1	11/25/15 16:33
Surr: 1,2-Dichloroethane-d4	109		75-130	0.16	%REC	1	11/25/15 16:33
Surr: Toluene-d8	102		75-125	0.10	%REC	1	11/25/15 16:33
Surr: 4-Bromofluorobenzene	93		75-125	0.10	%REC	1	11/25/15 16:33

Qualifiers:

*	Value may exceed the Acceptable 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: 12/04/15 15:46 732459 **Project Supervisor:** David J Prichard

Life Science Laboratories, Inc.
5854 Butternut Drive
East Syracuse, NY 13057 (315) 445-1900

Analytical Results

StateCertNo: 10248

CLIENT	GeoLogic NY, Inc.			**Lab ID:**	K1511275-002A
Project:	210087 Annual			**Client Sample ID:**	*MW-1D*
W Order:	K1511275			**Collection Date:**	11/23/15 12:30
Matrix:	WATER			**Date Received:**	11/24/15 16:15
Inst. ID:	MS01_11	**Sample Size**	10 mL	**PrepDate:**	
ColumnID:	Rtx-VMS	**%Moisture:**		**BatchNo:**	R29128
Revision:	12/04/15 15:40	**TestCode:**	8260W	**FileID:**	1-SAMP-T3293.D
Col Type:					

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260C/5030C**		
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	11/25/15 17:04
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	11/25/15 17:04
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	11/25/15 17:04
Tetrachloroethene	ND		0.50	0.10	µg/L	1	11/25/15 17:04
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	11/25/15 17:04
Trichloroethene	4.57		0.50	0.10	µg/L	1	11/25/15 17:04
Vinyl chloride	ND		1.00	0.33	µg/L	1	11/25/15 17:04
Surr: 1,2-Dichloroethane-d4	109		75-130	0.16	%REC	1	11/25/15 17:04
Surr: Toluene-d8	103		75-125	0.10	%REC	1	11/25/15 17:04
Surr: 4-Bromofluorobenzene	95		75-125	0.10	%REC	1	11/25/15 17:04

Qualifiers:				
	*	Value may exceed the Acceptable 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: 12/04/15 15:46 732460 **Project Supervisor:** David J Prichard

Life Science Laboratories, Inc.
5854 Butternut Drive
East Syracuse, NY 13057 (315) 445-1900

Analytical Results

StateCertNo: 10248

CLIENT	GeoLogic NY, Inc.	**Lab ID:**	**K1511275-003A**
Project:	210087 Annual	**Client Sample ID:**	***MW-2S***
W Order:	K1511275	**Collection Date:**	11/23/15 13:40
Matrix:	WATER	**Date Received:**	11/24/15 16:15
Inst. ID:	MS01_11	**Sample Size** 10 mL	**PrepDate:**
ColumnID:	Rtx-VMS	**%Moisture:**	**BatchNo:** R29128
Revision:	12/04/15 15:40	**TestCode:** 8260W	**FileID:** 1-SAMP-T3294.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260C/5030C**		
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	11/25/15 17:35
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	11/25/15 17:35
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	11/25/15 17:35
Tetrachloroethene	ND		0.50	0.10	µg/L	1	11/25/15 17:35
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	11/25/15 17:35
Trichloroethene	1.90		0.50	0.10	µg/L	1	11/25/15 17:35
Vinyl chloride	ND		1.00	0.33	µg/L	1	11/25/15 17:35
Surr: 1,2-Dichloroethane-d4	107		75-130	0.16	%REC	1	11/25/15 17:35
Surr: Toluene-d8	101		75-125	0.10	%REC	1	11/25/15 17:35
Surr: 4-Bromofluorobenzene	97		75-125	0.10	%REC	1	11/25/15 17:35

Qualifiers:

*	Value may exceed the Acceptable 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: 12/04/15 15:46 732461 **Project Supervisor:** David J Prichard

Life Science Laboratories, Inc.
5854 Butternut Drive
East Syracuse, NY 13057 (315) 445-1900

Analytical Results

StateCertNo: 10248

CLIENT	GeoLogic NY, Inc.	**Lab ID:**	**K1511275-004A**
Project:	210087 Annual	**Client Sample ID:**	***MW-4S***
W Order:	K1511275	**Collection Date:**	11/23/15 15:30
Matrix:	WATER	**Date Received:**	11/24/15 16:15
Inst. ID:	MS01_11	**Sample Size** 10 mL	**PrepDate:**
ColumnID:	Rtx-VMS	**%Moisture:**	**BatchNo:** R29128
Revision:	12/04/15 15:40	**TestCode:** 8260W	**FileID:** 1-SAMP-T3295.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260C/5030C**		
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	11/25/15 18:06
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	11/25/15 18:06
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	11/25/15 18:06
Tetrachloroethene	ND		0.50	0.10	µg/L	1	11/25/15 18:06
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	11/25/15 18:06
Trichloroethene	0.63		0.50	0.10	µg/L	1	11/25/15 18:06
Vinyl chloride	ND		1.00	0.33	µg/L	1	11/25/15 18:06
Surr: 1,2-Dichloroethane-d4	110		75-130	0.16	%REC	1	11/25/15 18:06
Surr: Toluene-d8	102		75-125	0.10	%REC	1	11/25/15 18:06
Surr: 4-Bromofluorobenzene	93		75-125	0.10	%REC	1	11/25/15 18:06

Qualifiers:				
	*	Value may exceed the Acceptable 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

Life Science Laboratories, Inc.
5854 Butternut Drive
East Syracuse, NY 13057 (315) 445-1900

Analytical Results

StateCertNo: 10248

CLIENT	GeoLogic NY, Inc.	**Lab ID:**	**K1511275-005A**
Project:	210087 Annual	**Client Sample ID:**	***MW-4D***
W Order:	K1511275	**Collection Date:**	11/23/15 15:40
Matrix:	WATER	**Date Received:**	11/24/15 16:15
Inst. ID:	MS01_11	**Sample Size** 10 mL	**PrepDate:**
ColumnID:	Rtx-VMS	**%Moisture:**	**BatchNo:** R29128
Revision:	12/04/15 15:40	**TestCode:** 8260W	**FileID:** 1-SAMP-T3296.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260C/5030C**		
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	11/25/15 18:37
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	11/25/15 18:37
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	11/25/15 18:37
Tetrachloroethene	ND		0.50	0.10	µg/L	1	11/25/15 18:37
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	11/25/15 18:37
Trichloroethene	0.54		0.50	0.10	µg/L	1	11/25/15 18:37
Vinyl chloride	ND		1.00	0.33	µg/L	1	11/25/15 18:37
Surr: 1,2-Dichloroethane-d4	109		75-130	0.16	%REC	1	11/25/15 18:37
Surr: Toluene-d8	102		75-125	0.10	%REC	1	11/25/15 18:37
Surr: 4-Bromofluorobenzene	94		75-125	0.10	%REC	1	11/25/15 18:37

Qualifiers:

*	Value may exceed the Acceptable 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: 12/04/15 15:46 732463 **Project Supervisor:** David J Prichard

Life Science Laboratories, Inc.
5854 Butternut Drive
East Syracuse, NY 13057 (315) 445-1900

Analytical Results

StateCertNo: 10248

CLIENT	GeoLogic NY, Inc.	**Lab ID:**	**K1511275-006A**
Project:	210087 Annual	**Client Sample ID:**	***MW-5S***
W Order:	K1511275	**Collection Date:**	11/23/15 11:25
Matrix:	WATER	**Date Received:**	11/24/15 16:15
Inst. ID:	MS01_11	**Sample Size** 10 mL	**PrepDate:**
ColumnID:	Rtx-VMS	**%Moisture:**	**BatchNo:** R29128
Revision:	12/04/15 15:40	**TestCode:** 8260W	**FileID:** 1-SAMP-T3297.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260C/5030C**		
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	11/25/15 19:08
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	11/25/15 19:08
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	11/25/15 19:08
Tetrachloroethene	ND		0.50	0.10	µg/L	1	11/25/15 19:08
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	11/25/15 19:08
Trichloroethene	0.85		0.50	0.10	µg/L	1	11/25/15 19:08
Vinyl chloride	ND		1.00	0.33	µg/L	1	11/25/15 19:08
Surr: 1,2-Dichloroethane-d4	109		75-130	0.16	%REC	1	11/25/15 19:08
Surr: Toluene-d8	101		75-125	0.10	%REC	1	11/25/15 19:08
Surr: 4-Bromofluorobenzene	94		75-125	0.10	%REC	1	11/25/15 19:08

Qualifiers:

*	Value may exceed the Acceptable 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: 12/04/15 15:46 732464 **Project Supervisor:** David J Prichard

Life Science Laboratories, Inc.
5854 Butternut Drive
East Syracuse, NY 13057 (315) 445-1900

Analytical Results

StateCertNo: 10248

CLIENT	GeoLogic NY, Inc.	**Lab ID:**	**K1511275-007A**
Project:	210087 Annual	**Client Sample ID:**	***MW-5D***
W Order:	K1511275	**Collection Date:**	11/23/15 11:35
Matrix:	WATER	**Date Received:**	11/24/15 16:15
Inst. ID:	MS01_11	**Sample Size** 10 mL	**PrepDate:**
ColumnID:	Rtx-VMS	**%Moisture:**	**BatchNo:** R29128
Revision:	12/04/15 15:40	**TestCode:** 8260W	**FileID:** 1-SAMP-T3298.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260C/5030C**		
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	11/25/15 19:39
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	11/25/15 19:39
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	11/25/15 19:39
Tetrachloroethene	ND		0.50	0.10	µg/L	1	11/25/15 19:39
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	11/25/15 19:39
Trichloroethene	2.00		0.50	0.10	µg/L	1	11/25/15 19:39
Vinyl chloride	ND		1.00	0.33	µg/L	1	11/25/15 19:39
Surr: 1,2-Dichloroethane-d4	112		75-130	0.16	%REC	1	11/25/15 19:39
Surr: Toluene-d8	103		75-125	0.10	%REC	1	11/25/15 19:39
Surr: 4-Bromofluorobenzene	93		75-125	0.10	%REC	1	11/25/15 19:39

Qualifiers:				
	*	Value may exceed the Acceptable 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

Life Science Laboratories, Inc.
5854 Butternut Drive
East Syracuse, NY 13057 (315) 445-1900

Analytical Results

StateCertNo: 10248

CLIENT	GeoLogic NY, Inc.			**Lab ID:**	K1511275-008A
Project:	210087 Annual			**Client Sample ID:**	*MW-6*
W Order:	K1511275			**Collection Date:**	11/24/15 12:45
Matrix:	WATER			**Date Received:**	11/24/15 16:15
Inst. ID:	MS01_11	**Sample Size**	10 mL	**PrepDate:**	
ColumnID:	Rtx-VMS	**%Moisture:**		**BatchNo:**	R29129
Revision:	12/04/15 15:43	**TestCode:**	8260W	**FileID:**	1-SAMP-T3309.D
Col Type:					

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260C/5030C**		
1,1,1-Trichloroethane	ND		1.00	0.20	µg/L	2	11/30/15 11:50
1,1-Dichloroethene	ND		1.00	0.32	µg/L	2	11/30/15 11:50
cis-1,2-Dichloroethene	ND		1.00	0.20	µg/L	2	11/30/15 11:50
Tetrachloroethene	ND		1.00	0.20	µg/L	2	11/30/15 11:50
trans-1,2-Dichloroethene	ND		1.00	0.20	µg/L	2	11/30/15 11:50
Trichloroethene	8.74		1.00	0.20	µg/L	2	11/30/15 11:50
Vinyl chloride	ND		2.00	0.66	µg/L	2	11/30/15 11:50
Surr: 1,2-Dichloroethane-d4	111		75-130	0.32	%REC	2	11/30/15 11:50
Surr: Toluene-d8	104		75-125	0.20	%REC	2	11/30/15 11:50
Surr: 4-Bromofluorobenzene	99		75-125	0.20	%REC	2	11/30/15 11:50

Qualifiers:

*	Value may exceed the Acceptable 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: 12/04/15 15:46 732471 **Project Supervisor:** David J Prichard

Life Science Laboratories, Inc.

5854 Butternut Drive
East Syracuse, NY 13057 (315) 445-1900

Analytical Results

StateCertNo: 10248

CLIENT GeoLogic NY, Inc.
Project: 210087 Annual
W Order: K1511275
Matrix: WATER
Inst. ID: MS01_11 **Sample Size** 10 mL
ColumnID: Rtx-VMS **%Moisture:**
Revision: 12/04/15 15:45 **TestCode:** 8260W
Col Type:

Lab ID: K1511275-009A
Client Sample ID: *MW-7*
Collection Date: 11/24/15 11:30
Date Received: 11/24/15 16:15
PrepDate:
BatchNo: R29130
FileID: 1-SAMP-T3336.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260C/5030C**		
1,1,1-Trichloroethane	ND		1.00	0.20	µg/L	2	12/02/15 10:15
1,1-Dichloroethene	ND		1.00	0.32	µg/L	2	12/02/15 10:15
cis-1,2-Dichloroethene	ND		1.00	0.20	µg/L	2	12/02/15 10:15
Tetrachloroethene	ND		1.00	0.20	µg/L	2	12/02/15 10:15
trans-1,2-Dichloroethene	ND		1.00	0.20	µg/L	2	12/02/15 10:15
Trichloroethene	4.32		1.00	0.20	µg/L	2	12/02/15 10:15
Vinyl chloride	ND		2.00	0.66	µg/L	2	12/02/15 10:15
Surr: 1,2-Dichloroethane-d4	109		75-130	0.32	%REC	2	12/02/15 10:15
Surr: Toluene-d8	98		75-125	0.20	%REC	2	12/02/15 10:15
Surr: 4-Bromofluorobenzene	96		75-125	0.20	%REC	2	12/02/15 10:15

Qualifiers:

*	Value may exceed the Acceptable 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: 12/04/15 15:46 732487 **Project Supervisor:** David J Prichard

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East Syracuse, NY 13057 (315) 445-1900

Analytical Results

StateCertNo: 10248

CLIENT	GeoLogic NY, Inc.			**Lab ID:**	**K1511275-010A**
Project:	210087 Annual			**Client Sample ID:**	***MW-8***
W Order:	K1511275			**Collection Date:**	11/24/15 13:03
Matrix:	WATER			**Date Received:**	11/24/15 16:15
Inst. ID:	MS01_11	**Sample Size**	10 mL	**PrepDate:**	
ColumnID:	Rtx-VMS	**%Moisture:**		**BatchNo:**	R29129
Revision:	12/04/15 15:43	**TestCode:**	8260W	**FileID:**	1-SAMP-T3311.D
Col Type:					

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260C/5030C**		
1,1,1-Trichloroethane	ND		1.00	0.20	µg/L	2	11/30/15 12:53
1,1-Dichloroethene	ND		1.00	0.32	µg/L	2	11/30/15 12:53
cis-1,2-Dichloroethene	ND		1.00	0.20	µg/L	2	11/30/15 12:53
Tetrachloroethene	ND		1.00	0.20	µg/L	2	11/30/15 12:53
trans-1,2-Dichloroethene	ND		1.00	0.20	µg/L	2	11/30/15 12:53
Trichloroethene	5.46		1.00	0.20	µg/L	2	11/30/15 12:53
Vinyl chloride	ND		2.00	0.66	µg/L	2	11/30/15 12:53
Surr: 1,2-Dichloroethane-d4	112		75-130	0.32	%REC	2	11/30/15 12:53
Surr: Toluene-d8	102		75-125	0.20	%REC	2	11/30/15 12:53
Surr: 4-Bromofluorobenzene	96		75-125	0.20	%REC	2	11/30/15 12:53

Qualifiers:

*	Value may exceed the Acceptable 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: 12/04/15 15:46 732472 **Project Supervisor:** David J Prichard

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Analytical Results

StateCertNo: 10248

CLIENT	GeoLogic NY, Inc.			**Lab ID:**	**K1511275-011A**
Project:	210087 Annual			**Client Sample ID:**	***MW-9***
W Order:	K1511275			**Collection Date:**	11/24/15 11:20
Matrix:	WATER			**Date Received:**	11/24/15 16:15
Inst. ID:	MS01_11	**Sample Size**	10 mL	**PrepDate:**	
ColumnID:	Rtx-VMS	**%Moisture:**		**BatchNo:**	R29129
Revision:	12/04/15 15:43	**TestCode:**	8260W	**FileID:**	1-SAMP-T3313.D
Col Type:					

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260C/5030C**		
1,1,1-Trichloroethane	ND		1.00	0.20	µg/L	2	11/30/15 13:55
1,1-Dichloroethene	ND		1.00	0.32	µg/L	2	11/30/15 13:55
cis-1,2-Dichloroethene	ND		1.00	0.20	µg/L	2	11/30/15 13:55
Tetrachloroethene	ND		1.00	0.20	µg/L	2	11/30/15 13:55
trans-1,2-Dichloroethene	ND		1.00	0.20	µg/L	2	11/30/15 13:55
Trichloroethene	1.72		1.00	0.20	µg/L	2	11/30/15 13:55
Vinyl chloride	ND		2.00	0.66	µg/L	2	11/30/15 13:55
Surr: 1,2-Dichloroethane-d4	111		75-130	0.32	%REC	2	11/30/15 13:55
Surr: Toluene-d8	101		75-125	0.20	%REC	2	11/30/15 13:55
Surr: 4-Bromofluorobenzene	94		75-125	0.20	%REC	2	11/30/15 13:55

Qualifiers:				
	*	Value may exceed the Acceptable 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: 12/04/15 15:46 732473 **Project Supervisor:** David J Prichard

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Analytical Results

StateCertNo: 10248

CLIENT	GeoLogic NY, Inc.			**Lab ID:**	**K1511275-012A**
Project:	210087 Annual			**Client Sample ID:**	***MW-10S***
W Order:	K1511275			**Collection Date:**	11/23/15 14:35
Matrix:	WATER			**Date Received:**	11/24/15 16:15
Inst. ID:	MS01_11	**Sample Size**	10 mL	**PrepDate:**	
ColumnID:	Rtx-VMS	**%Moisture:**		**BatchNo:**	R29129
Revision:	12/04/15 15:43	**TestCode:**	8260W	**FileID:**	1-SAMP-T3314.D
Col Type:					

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260C/5030C**		
1,1,1-Trichloroethane	ND		1.00	0.20	µg/L	2	11/30/15 14:26
1,1-Dichloroethene	ND		1.00	0.32	µg/L	2	11/30/15 14:26
cis-1,2-Dichloroethene	1.36		1.00	0.20	µg/L	2	11/30/15 14:26
Tetrachloroethene	ND		1.00	0.20	µg/L	2	11/30/15 14:26
trans-1,2-Dichloroethene	ND		1.00	0.20	µg/L	2	11/30/15 14:26
Trichloroethene	12.4		1.00	0.20	µg/L	2	11/30/15 14:26
Vinyl chloride	ND		2.00	0.66	µg/L	2	11/30/15 14:26
Surr: 1,2-Dichloroethane-d4	113		75-130	0.32	%REC	2	11/30/15 14:26
Surr: Toluene-d8	105		75-125	0.20	%REC	2	11/30/15 14:26
Surr: 4-Bromofluorobenzene	95		75-125	0.20	%REC	2	11/30/15 14:26

Qualifiers:	*	Value may exceed the Acceptable 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: 12/04/15 15:46 732474 **Project Supervisor:** David J Prichard

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Analytical Results

StateCertNo: 10248

CLIENT	GeoLogic NY, Inc.			**Lab ID:**	**K1511275-013A**
Project:	210087 Annual			**Client Sample ID:**	***MW-10D***
W Order:	K1511275			**Collection Date:**	11/23/15 14:45
Matrix:	WATER			**Date Received:**	11/24/15 16:15
Inst. ID:	MS01_11	**Sample Size**	10 mL	**PrepDate:**	
ColumnID:	Rtx-VMS	**%Moisture:**		**BatchNo:**	R29129
Revision:	12/04/15 15:43	**TestCode:**	8260W	**FileID:**	1-SAMP-T3315.D
Col Type:					

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260C/5030C**		
1,1,1-Trichloroethane	ND		1.00	0.20	µg/L	2	11/30/15 14:57
1,1-Dichloroethene	ND		1.00	0.32	µg/L	2	11/30/15 14:57
cis-1,2-Dichloroethene	1.30		1.00	0.20	µg/L	2	11/30/15 14:57
Tetrachloroethene	ND		1.00	0.20	µg/L	2	11/30/15 14:57
trans-1,2-Dichloroethene	ND		1.00	0.20	µg/L	2	11/30/15 14:57
Trichloroethene	18.4		1.00	0.20	µg/L	2	11/30/15 14:57
Vinyl chloride	ND		2.00	0.66	µg/L	2	11/30/15 14:57
Surr: 1,2-Dichloroethane-d4	112		75-130	0.32	%REC	2	11/30/15 14:57
Surr: Toluene-d8	103		75-125	0.20	%REC	2	11/30/15 14:57
Surr: 4-Bromofluorobenzene	96		75-125	0.20	%REC	2	11/30/15 14:57

Qualifiers:

*	Value may exceed the Acceptable 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: 12/04/15 15:46 732475 **Project Supervisor:** David J Prichard

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Analytical Results

StateCertNo: 10248

CLIENT GeoLogic NY, Inc.
Project: 210087 Annual
W Order: K1511275
Matrix: WATER
Inst. ID: MS01_11 **Sample Size** 10 mL
ColumnID: Rtx-VMS **%Moisture:**
Revision: 12/04/15 15:43 **TestCode:** 8260W
Col Type:

Lab ID: K1511275-014A
Client Sample ID: *MW-11*
Collection Date: 11/24/15 11:05
Date Received: 11/24/15 16:15
PrepDate:
BatchNo: R29129
FileID: 1-SAMP-T3317.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260C/5030C**		
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	11/30/15 16:00
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	11/30/15 16:00
cis-1,2-Dichloroethene	1.20		0.50	0.10	µg/L	1	11/30/15 16:00
Tetrachloroethene	ND		0.50	0.10	µg/L	1	11/30/15 16:00
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	11/30/15 16:00
Trichloroethene	5.80		0.50	0.10	µg/L	1	11/30/15 16:00
Vinyl chloride	ND		1.00	0.33	µg/L	1	11/30/15 16:00
Surr: 1,2-Dichloroethane-d4	110		75-130	0.16	%REC	1	11/30/15 16:00
Surr: Toluene-d8	100		75-125	0.10	%REC	1	11/30/15 16:00
Surr: 4-Bromofluorobenzene	104		75-125	0.10	%REC	1	11/30/15 16:00

Qualifiers:

*	Value may exceed the Acceptable 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

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Analytical Results

StateCertNo: 10248

CLIENT	GeoLogic NY, Inc.			**Lab ID:**	K1511275-015A
Project:	210087 Annual			**Client Sample ID:**	*MW-12S*
W Order:	K1511275			**Collection Date:**	11/24/15 10:25
Matrix:	WATER			**Date Received:**	11/24/15 16:15
Inst. ID:	MS01_11	**Sample Size**	10 mL	**PrepDate:**	
ColumnID:	Rtx-VMS	**%Moisture:**		**BatchNo:**	R29129
Revision:	12/04/15 15:43	**TestCode:**	8260W	**FileID:**	1-SAMP-T3318.D
Col Type:					

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260C/5030C**		
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	11/30/15 16:31
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	11/30/15 16:31
cis-1,2-Dichloroethene	0.74		0.50	0.10	µg/L	1	11/30/15 16:31
Tetrachloroethene	ND		0.50	0.10	µg/L	1	11/30/15 16:31
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	11/30/15 16:31
Trichloroethene	24.8		0.50	0.10	µg/L	1	11/30/15 16:31
Vinyl chloride	ND		1.00	0.33	µg/L	1	11/30/15 16:31
Surr: 1,2-Dichloroethane-d4	116		75-130	0.16	%REC	1	11/30/15 16:31
Surr: Toluene-d8	104		75-125	0.10	%REC	1	11/30/15 16:31
Surr: 4-Bromofluorobenzene	99		75-125	0.10	%REC	1	11/30/15 16:31

Qualifiers:

*	Value may exceed the Acceptable 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: 12/04/15 15:46 732477 **Project Supervisor:** David J Prichard

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Analytical Results

StateCertNo: 10248

CLIENT	GeoLogic NY, Inc.			**Lab ID:**	**K1511275-016A**
Project:	210087 Annual			**Client Sample ID:**	***MW-12D***
W Order:	K1511275			**Collection Date:**	11/24/15 10:35
Matrix:	WATER			**Date Received:**	11/24/15 16:15
Inst. ID:	MS01_11	**Sample Size**	10 mL	**PrepDate:**	
ColumnID:	Rtx-VMS	**%Moisture:**		**BatchNo:**	R29129
Revision:	12/04/15 15:43	**TestCode:**	8260W	**FileID:**	1-SAMP-T3319.D
Col Type:					

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260C/5030C**		
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	11/30/15 17:02
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	11/30/15 17:02
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	11/30/15 17:02
Tetrachloroethene	ND		0.50	0.10	µg/L	1	11/30/15 17:02
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	11/30/15 17:02
Trichloroethene	2.50		0.50	0.10	µg/L	1	11/30/15 17:02
Vinyl chloride	ND		1.00	0.33	µg/L	1	11/30/15 17:02
Surr: 1,2-Dichloroethane-d4	108		75-130	0.16	%REC	1	11/30/15 17:02
Surr: Toluene-d8	103		75-125	0.10	%REC	1	11/30/15 17:02
Surr: 4-Bromofluorobenzene	97		75-125	0.10	%REC	1	11/30/15 17:02

Qualifiers:

*	Value may exceed the Acceptable 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: 12/04/15 15:46 732478 **Project Supervisor:** David J Prichard

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Analytical Results

StateCertNo: 10248

CLIENT	GeoLogic NY, Inc.			**Lab ID:**	**K1511275-017A**
Project:	210087 Annual			**Client Sample ID:**	***MW-L16***
W Order:	K1511275			**Collection Date:**	11/24/15 13:45
Matrix:	WATER			**Date Received:**	11/24/15 16:15
Inst. ID:	MS01_11	**Sample Size**	10 mL	**PrepDate:**	
ColumnID:	Rtx-VMS	**%Moisture:**		**BatchNo:**	R29129
Revision:	12/04/15 15:43	**TestCode:**	8260W	**FileID:**	1-SAMP-T3320.D
Col Type:					

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260C/5030C**		
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	11/30/15 17:33
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	11/30/15 17:33
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	11/30/15 17:33
Tetrachloroethene	ND		0.50	0.10	µg/L	1	11/30/15 17:33
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	11/30/15 17:33
Trichloroethene	2.97		0.50	0.10	µg/L	1	11/30/15 17:33
Vinyl chloride	ND		1.00	0.33	µg/L	1	11/30/15 17:33
Surr: 1,2-Dichloroethane-d4	113		75-130	0.16	%REC	1	11/30/15 17:33
Surr: Toluene-d8	104		75-125	0.10	%REC	1	11/30/15 17:33
Surr: 4-Bromofluorobenzene	98		75-125	0.10	%REC	1	11/30/15 17:33

Qualifiers:

*	Value may exceed the Acceptable 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: 12/04/15 15:46 732479 **Project Supervisor:** David J Prichard

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Analytical Results

StateCertNo: 10248

CLIENT	GeoLogic NY, Inc.			**Lab ID:**	**K1511275-018A**
Project:	210087 Annual			**Client Sample ID:**	***Trip Blank***
W Order:	K1511275			**Collection Date:**	09/29/15 0:00
Matrix:	WATER Q			**Date Received:**	11/24/15 16:15
Inst. ID:	MS01_11	**Sample Size**	10 mL	**PrepDate:**	
ColumnID:	Rtx-VMS	**%Moisture:**		**BatchNo:**	R29129
Revision:	12/04/15 15:43	**TestCode:**	8260W	**FileID:**	1-SAMP-T3325.D
Col Type:					

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260C/5030C**		
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	11/30/15 20:09
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	11/30/15 20:09
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	11/30/15 20:09
Tetrachloroethene	ND		0.50	0.10	µg/L	1	11/30/15 20:09
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	11/30/15 20:09
Trichloroethene	ND		0.50	0.10	µg/L	1	11/30/15 20:09
Vinyl chloride	ND		1.00	0.33	µg/L	1	11/30/15 20:09
Surr: 1,2-Dichloroethane-d4	112		75-130	0.16	%REC	1	11/30/15 20:09
Surr: Toluene-d8	101		75-125	0.10	%REC	1	11/30/15 20:09
Surr: 4-Bromofluorobenzene	97		75-125	0.10	%REC	1	11/30/15 20:09

Qualifiers:	*	Value may exceed the Acceptable 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: 12/04/15 15:50 732480 **Project Supervisor:** David J Prichard

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Analytical Results

StateCertNo: 10248

CLIENT	GeoLogic NY, Inc.	**Lab ID:**	**K1511275-019A**
Project:	210087 Annual	**Client Sample ID:**	***Equipment Blank***
W Order:	K1511275	**Collection Date:**	11/24/15 14:15
Matrix:	EQUIPMENT BLANK	**Date Received:**	11/24/15 16:15
Inst. ID:	MS01_11 **Sample Size** 10 mL	**PrepDate:**	
ColumnID:	Rtx-VMS **%Moisture:**	**BatchNo:**	R29129
Revision:	12/04/15 15:43 **TestCode:** 8260W	**FileID:**	1-SAMP-T3326.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260C/5030C**		
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	11/30/15 20:40
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	11/30/15 20:40
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	11/30/15 20:40
Tetrachloroethene	ND		0.50	0.10	µg/L	1	11/30/15 20:40
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	11/30/15 20:40
Trichloroethene	ND		0.50	0.10	µg/L	1	11/30/15 20:40
Vinyl chloride	ND		1.00	0.33	µg/L	1	11/30/15 20:40
Surr: 1,2-Dichloroethane-d4	110		75-130	0.16	%REC	1	11/30/15 20:40
Surr: Toluene-d8	120		75-125	0.10	%REC	1	11/30/15 20:40
Surr: 4-Bromofluorobenzene	97		75-125	0.10	%REC	1	11/30/15 20:40

Qualifiers:

*	Value may exceed the Acceptable 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: 12/04/15 15:46 732481 **Project Supervisor:** David J Prichard

GeoLogic NY, Inc.

K1511275

CHAIN OF CUSTODY RECORD

CLIENT: GeoLogic

SAMPLER NAME: C. T. Gabriel

PROJECT: 210087 2014 Annual Sampling 1of 2

	SAMPLE LOCATION	DATE	TIME	SAMPLE TYPE			NO. of SAMPLES	ANALYSIS REQUIRED
				WATER	SOIL	AIR		
001	MW-1S	11-23	12:20	X			2	See Below
002	MW-1D	11-23	12:30	X			2	See Below
003	MW-2S	11-23	13:40	X			2	See Below
004	MW-4S	11-23	15:30	X			2	See Below
005	MW-4D	11-23	15:40	X			2	See Below
006	MW-5S	11-23	11:25	X			2	See Below
007	MW-5D	11-23	11:35	X			2	See Below
008	MW-6	11-24	12:45	X			2	See Below
009	MW-7	11-24	11:30	X			2	See Below
010	MW-8	11-24	13:10	X			2	See Below

Relinquished by:	Date	Time	Received by:	Date	Time
C. T. Gabriel of GeoLogic	11/24/2015	1515	Bill Donaldson	11-24-15	1515
Bill Donaldson	11-24-15	1555			
			Received for Lab by:	11-24-15	16:15

Method of Shipment: LAB PICK-UP X TEMP 2.5° Samples Received On Ice

COMMENTS:

Sample Analysis (1 µg/L reporting limit)

EPA 8260B for

1,1,1-Trichloroethane

1,1-Dichloroethene

1,2-Dichloroethene

Trichloroethene

Tetrachloroethene

Vinyl Chloride

P.O. BOX 350 HOMER, NEW YORK 13077 (607) 749-5000 FAX (607) 749-5063

GeoLogic NY, Inc.

CHAIN OF CUSTODY RECORD

K1511275

CLIENT: GeoLogic

SAMPLER NAME: C. T. Gabriel

PROJECT: 210087 2014 Annual Sampling 2of 2

SAMPLE LOCATION	DATE	TIME	SAMPLE TYPE			NO. of SAMPLES	ANALYSIS REQUIRED
			WATER	SOIL	AIR		
011 MW-9	11-24	11:20	X			2	See Below
012 MW-10S	11-23	14:35	X			2	See Below
013 MW-10D	11-23	14:45	X			2	See Below
014 MW-11	11-24	11:05	X			2	See Below
015 MW-12S	11-24	10:25	X			2	See Below
016 MW-12D	11-24	10:35	X			2	See Below
017 MW-L16	11-24	13:45	X			2	See Below
018 Trip Blank	9-29	none	X			2	See Below
019 Equipment Blank	11-24	14:15	X			2	See Below

Relinquished by:	Date	Time	Received by:	Date	Time
C. T. Gabriel of GeoLogic NY	11/24/2015	15:15	Bill Donaldson	11-24-15	1515
Bill Donaldson	11-24-15	1555			
Relinquished by:	Date	Time	Received for Lab by:	Date	Time
				11-24-15	16:15

Method of Shipment: LAB PICK-UP X TEMP 2.5°C Samples Received On Ice

COMMENTS:

Sample Analysis (1 µg/L reporting limit)

EPA 8260B for

1,1,1-Trichloroethane

1,1-Dichloroethene

1,2-Dichloroethene

Trichloroethene

Tetrachloroethene

Vinyl Chloride

P.O. BOX 350 HOMER, NEW YORK 13077 (607) 749-5000 FAX (607) 749-5063

Life Science Laboratories, Inc.

Sample Receipt Checklist

Client Name: **GEOLOGIC**

Date and Time Received: **11/24/2015 4:15:00 PM**

Work Order Number: **K1511275**

Received by: gis

Checklist completed by: JS (Initials) 11-24-15 (Date)

Reviewed by: [illegible] (Initials) 11/25/15 (Date)

Delivery Method: Courier

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

Comments:

Corrective Action:

Life Science Laboratories, Inc.
5854 Butternut Drive
East Syracuse, NY 13057 **(315) 445-1900**

Thursday, December 17, 2015

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

TEL: 607 749-5000

Project: 210087
RE: Analytical Results Order No.: K1512036

Dear Mr. Christopher Gabriel:

Life Science Laboratories, Inc. received 4 sample(s) on 12/3/2015 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.

David J Prichard
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: K1512036
Matrix: WATER
Inst. ID: MSN_76 **Sample Size** 10 mL
ColumnID: Rtx-VMS **%Moisture:**
Revision: 12/16/15 10:21 **TestCode:** 8260W
Col Type:

Lab ID: K1512036-001A
Client Sample ID: *Cascade*
Collection Date: 11/25/15 10:05
Date Received: 12/03/15 18:10
PrepDate:
BatchNo: R29178
FileID: 1-SAMP-n3876.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260C/5030C		
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	12/08/15 19:53
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/08/15 19:53
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/08/15 19:53
Tetrachloroethene	ND		0.50	0.10	µg/L	1	12/08/15 19:53
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/08/15 19:53
Trichloroethene	0.81		0.50	0.10	µg/L	1	12/08/15 19:53
Vinyl chloride	ND		1.00	0.33	µg/L	1	12/08/15 19:53
Surr: 1,2-Dichloroethane-d4	95		75-130	0.16	%REC	1	12/08/15 19:53
Surr: Toluene-d8	102		75-125	0.10	%REC	1	12/08/15 19:53
Surr: 4-Bromofluorobenzene	96		75-125	0.10	%REC	1	12/08/15 19:53

Qualifiers:

*	Value may exceed the Acceptable 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: 12/16/15 10:22 733513 **Project Supervisor:** David J Prichard

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: K1512036
Matrix: WATER
Inst. ID: MSN_76 **Sample Size** 10 mL
ColumnID: Rtx-VMS **%Moisture:**
Revision: 12/16/15 10:21 **TestCode:** 8260W
Col Type:

Lab ID: K1512036-002A
Client Sample ID: *Tower Discharge*
Collection Date: 11/25/15 10:20
Date Received: 12/03/15 18:10
PrepDate:
BatchNo: R29178
FileID: 1-SAMP-n3877.D

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					SW8260C/5030C		
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	12/08/15 20:25
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/08/15 20:25
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/08/15 20:25
Tetrachloroethene	ND		0.50	0.10	µg/L	1	12/08/15 20:25
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/08/15 20:25
Trichloroethene	1.87		0.50	0.10	µg/L	1	12/08/15 20:25
Vinyl chloride	ND		1.00	0.33	µg/L	1	12/08/15 20:25
Surr: 1,2-Dichloroethane-d4	96		75-130	0.16	%REC	1	12/08/15 20:25
Surr: Toluene-d8	102		75-125	0.10	%REC	1	12/08/15 20:25
Surr: 4-Bromofluorobenzene	95		75-125	0.10	%REC	1	12/08/15 20:25

Qualifiers:

*	Value may exceed the Acceptable 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: 12/16/15 10:22 733514 **Project Supervisor:** David J Prichard

Life Science Laboratories, Inc.
5854 Butternut Drive
East Syracuse, NY 13057 (315) 445-1900

Analytical Results

StateCertNo: 10248

CLIENT	GeoLogic NY, Inc.			**Lab ID:**	**K1512036-003A**
Project:	210087			**Client Sample ID:**	***Tower Influent***
W Order:	K1512036			**Collection Date:**	11/25/15 10:30
Matrix:	WATER			**Date Received:**	12/03/15 18:10
Inst. ID:	MSN_76	**Sample Size**	10 mL	**PrepDate:**	
ColumnID:	Rtx-VMS	**%Moisture:**		**BatchNo:**	R29178
Revision:	12/16/15 10:21	**TestCode:**	8260W	**FileID:**	1-SAMP-n3878.D
Col Type:					

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260C/5030C**		
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	12/08/15 20:57
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/08/15 20:57
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/08/15 20:57
Tetrachloroethene	ND		0.50	0.10	µg/L	1	12/08/15 20:57
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/08/15 20:57
Trichloroethene	4.68		0.50	0.10	µg/L	1	12/08/15 20:57
Vinyl chloride	ND		1.00	0.33	µg/L	1	12/08/15 20:57
Surr: 1,2-Dichloroethane-d4	95		75-130	0.16	%REC	1	12/08/15 20:57
Surr: Toluene-d8	102		75-125	0.10	%REC	1	12/08/15 20:57
Surr: 4-Bromofluorobenzene	96		75-125	0.10	%REC	1	12/08/15 20:57

Qualifiers:			
	* Value may exceed the Acceptable 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: 12/16/15 10:22 733515 **Project Supervisor:** David J Prichard

Life Science Laboratories, Inc.
5854 Butternut Drive
East Syracuse, NY 13057 (315) 445-1900

Analytical Results

StateCertNo: 10248

CLIENT	GeoLogic NY, Inc.	**Lab ID:**	**K1512036-004A**
Project:	210087	**Client Sample ID:**	***Trip Blank***
W Order:	K1512036	**Collection Date:**	09/29/15 0:00
Matrix:	WATER Q	**Date Received:**	12/03/15 18:10
Inst. ID:	MSN_76	**Sample Size** 10 mL	**PrepDate:**
ColumnID:	Rtx-VMS	**%Moisture:**	**BatchNo:** R29178
Revision:	12/16/15 10:21	**TestCode:** 8260W	**FileID:** 1-SAMP-n3879.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260C/5030C**		
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	12/08/15 21:29
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/08/15 21:29
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/08/15 21:29
Tetrachloroethene	ND		0.50	0.10	µg/L	1	12/08/15 21:29
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/08/15 21:29
Trichloroethene	ND		0.50	0.10	µg/L	1	12/08/15 21:29
Vinyl chloride	ND		1.00	0.33	µg/L	1	12/08/15 21:29
Surr: 1,2-Dichloroethane-d4	97		75-130	0.16	%REC	1	12/08/15 21:29
Surr: Toluene-d8	100		75-125	0.10	%REC	1	12/08/15 21:29
Surr: 4-Bromofluorobenzene	95		75-125	0.10	%REC	1	12/08/15 21:29

Qualifiers:			
	* Value may exceed the Acceptable 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: 12/16/15 10:35 733516 **Project Supervisor:** David J Prichard

GeoLogic NY, Inc.

CHAIN OF CUSTODY RECORD

K.512036

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	Cascade	11-25	10:05	X			2	See Below
002	Tower Discharge	11-25	10:20	X			2	"
003	Tower Influent	11-25	10:30	X			2	"
004	Trip Blank	9-29	None	X			2	"

Relinquished by:	Date	Time	Received by:	Date	Time
C. T. Gabriel of GeoLogic NY Inc.	11/25/2015	12:15	GeoLogic Sample Frig.	11/25/2015	12:15
Relinquished by:	Date	Time	Received by:	Date	Time
GeoLogic Sample Frig.	12/3/2015	10:20 am		12/3/15	10 20
Relinquished by:	Date	Time	Received for Lab by:	Date	Time
				12-3-15	18:10

Method of Shipment: LAB PICK-UP TEMP 1.6°C

Samples Received On Ice

COMMENTS:

Sample Analysis (1 µg/L reporting limit)

EPA 8260B for

1,1,1-Trichloroethane

1,1-Dichloroethene

1,2-Dichloroethene

Trichloroethene

Tetrachloroethene

Vinyl Chloride

P.O. BOX 350 HOMER, NEW YORK 13077 (607) 749-5000 FAX (607) 749-5063

Life Science Laboratories, Inc.

Sample Receipt Checklist

Client Name: **GEOLOGIC**

Date and Time Received: **12/3/2015 6:10:00 PM**

Work Order Number: **K1512036**

Received by: gis

Checklist completed by: JS (Initials) 12-3-15 (Date)

Reviewed by: DN (Initials) 12/4/15 (Date)

Delivery Method: Courier

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

Comments:

Corrective Action:

Life Science Laboratories, Inc.
5854 Butternut Drive
East Syracuse, NY 13057 (315) 445-1900

Monday, January 04, 2016

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

TEL: 607 749-5000

Project: 210087
RE: Analytical Results Order No.: K1512185

Dear Mr. Christopher Gabriel:

Life Science Laboratories, Inc. received 4 sample(s) on 12/21/2015 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.

David J Prichard
Project Manager

Life Science Laboratories, Inc.
5854 Butternut Drive
East Syracuse, NY 13057 (315) 445-1900

Analytical Results

StateCertNo: 10248

CLIENT:	GeoLogic NY, Inc.	**Lab ID:**	**K1512185-001A**
Project:	210087	**Client Sample ID:**	*Cascade*
W Order:	K1512185	**Collection Date:**	12/17/15 9:00
Matrix:	WATER	**Date Received:**	12/21/15 17:15
Inst. ID:	MS01 11	**Sample Size:** 10 mL	**PrepDate:**
ColumnID:	Rtx-VMS	**%Moisture:**	**BatchNo:** R29224
Revision:	12/30/15 14:22	**TestCode:** 8260W	**FileID:** 1-SAMP-T3564.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260C/5030C**		
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	12/22/15 13:44
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/22/15 13:44
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/22/15 13:44
Tetrachloroethene	ND		0.50	0.10	µg/L	1	12/22/15 13:44
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/22/15 13:44
Trichloroethene	0.83		0.50	0.10	µg/L	1	12/22/15 13:44
Vinyl chloride	ND		1.00	0.33	µg/L	1	12/22/15 13:44
Surr: 1,2-Dichloroethane-d4	115		75-130	0.16	%REC	1	12/22/15 13:44
Surr: Toluene-d8	101		75-125	0.10	%REC	1	12/22/15 13:44
Surr: 4-Bromofluorobenzene	99		75-125	0.10	%REC	1	12/22/15 13:44

Qualifiers:

*	Value may exceed the Acceptable 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: 01/04/16 14:33 734579 **Project Supervisor:** David J Prichard

Life Science Laboratories, Inc.
5854 Butternut Drive
East Syracuse, NY 13057 (315) 445-1900

Analytical Results

StateCertNo: 10248

CLIENT:	GeoLogic NY, Inc.	**Lab ID:**	**K1512185-002A**
Project:	210087	**Client Sample ID:**	*Tower Discharge*
W Order:	K1512185	**Collection Date:**	12/17/15 9:15
Matrix:	WATER	**Date Received:**	12/21/15 17:15
Inst. ID:	MS01 11	**Sample Size:** 10 mL	**PrepDate:**
ColumnID:	Rtx-VMS	**%Moisture:**	**BatchNo:** R29224
Revision:	12/30/15 14:22	**TestCode:** 8260W	**FileID:** 1-SAMP-T3565.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260C/5030C**		
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	12/22/15 14:15
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/22/15 14:15
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/22/15 14:15
Tetrachloroethene	ND		0.50	0.10	µg/L	1	12/22/15 14:15
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/22/15 14:15
Trichloroethene	2.22		0.50	0.10	µg/L	1	12/22/15 14:15
Vinyl chloride	ND		1.00	0.33	µg/L	1	12/22/15 14:15
Surr: 1,2-Dichloroethane-d4	111		75-130	0.16	%REC	1	12/22/15 14:15
Surr: Toluene-d8	105		75-125	0.10	%REC	1	12/22/15 14:15
Surr: 4-Bromofluorobenzene	102		75-125	0.10	%REC	1	12/22/15 14:15

Qualifiers:

*	Value may exceed the Acceptable 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: 01/04/16 14:33 734580 **Project Supervisor:** David J Prichard

Life Science Laboratories, Inc.
5854 Butternut Drive
East Syracuse, NY 13057 (315) 445-1900

Analytical Results

StateCertNo: 10248

CLIENT:	GeoLogic NY, Inc.	**Lab ID:**	**K1512185-003A**
Project:	210087	**Client Sample ID:**	***Tower Influent***
W Order:	K1512185	**Collection Date:**	12/17/15 9:25
Matrix:	WATER	**Date Received:**	12/21/15 17:15
Inst. ID:	MS01 11	**Sample Size:** 10 mL	**PrepDate:**
ColumnID:	Rtx-VMS	**%Moisture:**	**BatchNo:** R29224
Revision:	12/30/15 14:22	**TestCode:** 8260W	**FileID:** 1-SAMP-T3566.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260C/5030C**		
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	12/22/15 14:46
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/22/15 14:46
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/22/15 14:46
Tetrachloroethene	ND		0.50	0.10	µg/L	1	12/22/15 14:46
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/22/15 14:46
Trichloroethene	4.99		0.50	0.10	µg/L	1	12/22/15 14:46
Vinyl chloride	ND		1.00	0.33	µg/L	1	12/22/15 14:46
Surr: 1,2-Dichloroethane-d4	116		75-130	0.16	%REC	1	12/22/15 14:46
Surr: Toluene-d8	102		75-125	0.10	%REC	1	12/22/15 14:46
Surr: 4-Bromofluorobenzene	101		75-125	0.10	%REC	1	12/22/15 14:46

Qualifiers:

*	Value may exceed the Acceptable 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: 01/04/16 14:33 734581 **Project Supervisor:** David J Prichard

Life Science Laboratories, Inc.
5854 Butternut Drive
East Syracuse, NY 13057 (315) 445-1900

Analytical Results

StateCertNo: 10248

CLIENT:	GeoLogic NY, Inc.	**Lab ID:**	**K1512185-004A**
Project:	210087	**Client Sample ID:**	***Trip Blank***
W Order:	K1512185	**Collection Date:**	09/29/15 0:00
Matrix:	WATER Q	**Date Received:**	12/21/15 17:15
Inst. ID:	MS01 11	**Sample Size:** 10 mL	**PrepDate:**
ColumnID:	Rtx-VMS	**%Moisture:**	**BatchNo:** R29224
Revision:	12/30/15 14:22	**TestCode:** 8260W	**FileID:** 1-SAMP-T3567.D
Col Type:			

Analyte	Result	Qual	PQL	MDL	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS					**SW8260C/5030C**		
1,1,1-Trichloroethane	ND		0.50	0.10	µg/L	1	12/22/15 15:17
1,1-Dichloroethene	ND		0.50	0.16	µg/L	1	12/22/15 15:17
cis-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/22/15 15:17
Tetrachloroethene	ND		0.50	0.10	µg/L	1	12/22/15 15:17
trans-1,2-Dichloroethene	ND		0.50	0.10	µg/L	1	12/22/15 15:17
Trichloroethene	ND		0.50	0.10	µg/L	1	12/22/15 15:17
Vinyl chloride	ND		1.00	0.33	µg/L	1	12/22/15 15:17
Surr: 1,2-Dichloroethane-d4	107		75-130	0.16	%REC	1	12/22/15 15:17
Surr: Toluene-d8	102		75-125	0.10	%REC	1	12/22/15 15:17
Surr: 4-Bromofluorobenzene	103		75-125	0.10	%REC	1	12/22/15 15:17

Qualifiers:

*	Value may exceed the Acceptable 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: 01/04/16 14:33 734582 **Project Supervisor:** David J Prichard

GeoLogic NY, Inc.
CHAIN OF CUSTODY RECORD

K1512185

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	Cascade	12-17	9:00	X			2	See Below
002	Tower Discharge	12-17	9:15	X			2	"
003	Tower Influent	12-17	9:25	X			2	"
004	Trip Blank	9-29		X			2	"

Relinquished by:	Date	Time	Received by:	Date	Time
C.T. Gabriel of GeoLogic NY Inc	12/18/2015	10:20	GeoLogic Sample Fridge	12/18/2015	10:20
GeoLogic Sample Fridge			Bill Donaldson	12-21-15	9:05
Bill Donaldson	12-21-15	1510		12-21-15	17:15

Method of Shipment: LAB. PICK-UP X TEMP 0.9°C Samples Received On Ice

COMMENTS:

Sample Analysis (1 µg/L reporting limit)

EPA 8260B for

1,1,1-Trichloroethane

1,1-Dichloroethene

1,2-Dichloroethene

Trichloroethene

Tetrachloroethene

Vinyl Chloride

P.O. BOX 350 HOMER, NEW YORK 13077 (607) 749-5000 FAX (607) 749-5063

Life Science Laboratories, Inc.

Sample Receipt Checklist

Client Name: **GEOLOGIC**

Date and Time Received: **12/21/2015 5:15:00 PM**

Work Order Number: **K1512185**

Received by: gis

Checklist completed by: JS 12-21-15 (Initials / Date)

Reviewed by: DR 12/23 (Initials / Date)

Delivery Method: Courier

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

Comments:

Corrective Action:

APPENDIX F

SSD/SVE DATA

CENTEK LABORATORIES, LLC

143 Midler Park Drive * Syracuse, NY 13206
Phone (315) 431-9730 * Emergency 24/7 (315) 416-2752
NYSDOH ELAP Certificate No. 11830

Analytical Report

Sarah Mcculloch
GeoLogic NY, Inc.
37 Copeland Ave.
Homer, NY 13077

TEL: 607-749-5000
FAX 607-749-5063

Tuesday, December 08, 2015
Order No.: C1512011

RE: 210087

Dear Sarah Mcculloch:

Centek Laboratories, LLC received 1 sample(s) on 12/2/2015 for the analyses presented in the following report.

I certify that this data package is in compliance with the terms and conditions of the Contract, both technically and for completeness. Release of the data contained in this hardcopy data package and/or in the computer readable data submitted has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Centek Laboratories performs all analyses according to EPA, NIOSH or OSHA-approved analytical methods. Centek Laboratories is dedicated to providing quality analyses and exceptional customer service. All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objective except as indicated in the case narrative. All samples were received and analyzed within the EPA recommended holding times. Test results are not Method Blank (MB) corrected for contamination.

We do our best to make our reporting format clear and understandable and hope you are thoroughly satisfied with our services. Please contact your client service representative at (315) 431-9730 or myself, if you would like any additional information regarding this report.

Thank you for using Centek Laboratories. This report can not be reproduced except in its entirety, without prior written authorization.

Sincerely,

William Dobbin
Lead Technical Director

Disclaimer: The test results and procedures utilized, and laboratory interpretations of the data obtained by Centek as contained in this report are believed by Centek to be accurate and reliable

for sample(s) tested. In accepting this report, the customer agrees that the full extent of any and all liability for actual and consequential damages of Centek for the services performed shall be equal to the fee charged to the customer for the services as liquidated damages. ELAP does not offer certification for the following parameters by this method at present time, they are: 4-ethyltoluene, ethyl acetate, propylene, 4-PCH, sulfur derived and silcon series compounds.

Centek Laboratories, LLC Terms and Conditions

Sample Submission

All samples sent to Centek Laboratories should be accompanied by our Request for Analysis Form or Chain of Custody Form. A Chain of Custody will be provided with each order shipped for all sampling events, or if needed, one is available at our website www.CentekLabs.com. Samples received after 3:00pm are considered to be a part of the next day's business.

Sample Media

Samples can be collected in an canister or a Tedlar bag. Depending on your analytical needs, Centek Laboratories may receive a bulk, liquid, soil or other matrix sample for headspace analysis.

Blanks

Every sample is run with a surrogate or tracer compound at a pre-established concentration. The surrogate compound run with each sample is used as a standard to measure the performance of each run of the instrument. If required, a Minican can be provided containing nitrogen to be run as a trip blank with your samples.

Sampling Equipment

Centek Laboratories will be happy to provide the canisters to carry-out your sampling event at no charge. The necessary accessories, such as regulators, tubing or personal sampling belts, are also provided to meet your sampling needs. The customer is responsible for all shipping charges to the client's destination and return shipping to the laboratory. Client assumes all responsibility for lost, stolen and any damages of equipment.

Turn Around time (TAT)

Centek Laboratories will provide results to its clients in one business-week by 6:00pm EST after receipt of samples. For example, if samples are received on a Monday they are due on the following Monday by 6:00pm EST. Results are faxed or emailed to the requested location indicated on the Chain of Custody. Non-routine analysis may require more than the one business-week turnaround time. Please confirm non-routine sample turnaround times.

Reporting

Results are emailed or faxed at no additional charge. A hard copy of the result report is mailed within 24 hours of the faxing or emailing of your results. Cat "B" like packages are within 3-4 weeks from time of analysis. Standard Electronic Disk Deliverables (EDD) is also available at no additional charge.

Payment Terms

Payment for all purchases shall be due within 30 days from date of invoice. The client agrees to pay a finance charge of 1.5% per month on the overdue balance and cost of collection, including attorney fees, if collection proceedings are necessary. You must have a completed credit application on file to extend credit. Purchase orders or checks information must be submitted

for us to release results

Rush Turnaround Samples

Expedited turn around times is available. Please confirm rush turnaround times with Client Services before submitting samples.

Applicable Surcharges for Rush Turnaround Samples:
Same day TAT = 200%
Next business day TAT by Noon = 150%
Next business day TAT by 6:00pm = 100%
Second business day TAT by 6:00pm = 75%
Third business day TAT by 6:00pm = 50%
Fourth business day TAT by 6:00pm = 35%
Fifth business day = Standard

Statement of Confidentiality

Centek Laboratories, LLC is aware of the importance of the confidentiality of results to many of our clients. Your name and data will be held in the strictest of confidence. We will not accept business that may constitute a conflict of interest. We commonly sign Confidential Nondisclosure Agreements with clients prior to beginning work. All research, results and reports will be kept strictly confidential. Secrecy Agreements and Disclosure Statements will be signed for the client if so specified. Results will be provided only to the addressee specified on the Chain of Custody Form submitted with the samples unless law requires release. Written permission is required from the addressee to release results to any other party.

Limitation on Liability

Centek Laboratories, LLC warrants the test results to be accurate to the methodology and sample type for each sample submitted to Centek Laboratories, LLC. In no event shall Centek Laboratories, LLC be liable for direct, indirect, special, punitive, incidental, exemplary or consequential damages, or any damages whatsoever, even if Centek Laboratories, LLC has been previously advised of the possibility of such damages whether in an action under contract, negligence, or any other theory, arising out of or in connection with the use, inability to use or performance of the information, services, products and materials available from tbe laboratory or this site. These limitations shall apply notwithstanding any failure of essential purpose of any limited remedy. Because some jurisdictions do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of liability for consequential or incidental damages, the above limitations may not apply to you. This is a comprehensive limitation of liability that applies to all damages of any kind, including (without limitation) compensatory, direct, indirect or consequential damages, loss of data, income or profit and or loss of or damage to property and claims of third parties.

CENTEK LABORATORIES, LLC

Date: *14-Dec-15*

CLIENT: GeoLogic NY, Inc.

Project: 210087

Lab Order: C1512011

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Centek Laboratories, LLC SOP TS-80
Compendium of Methods for the Determination of Toxic Organic Compounds, Compendium Method TO-15, January 1999

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objective except as indicated in the corrective action report(s). All samples were received and analyzed within the EPA recommended holding times. Test results are not Method Blank (MB) corrected for contamination.

NYSDEC ASP samples:
Canisters should be evacuated to a reading of less than or equal to 50 millitorr prior to shipment to sampling personnel. The vacuum in the canister will be field checked prior to sampling, and must read 28" of Hg (±2", vacuum, absolute) before a sample can be collected. After the sample has been collected, the pressure of the canister will be read and recorded again, and must be 5" of Hg (±1", vacuum, absolute) for the sample to be valid. Once received at the laboratory, the canister vacuum should be confirmed to be 5" of Hg,±1". Please record and report the pressure/vacuum of received canisters on the sample receipt paperwork. A pressure/vacuum reading should also be taken just prior to the withdrawal of sample from the canister, and recorded on the sample preparation log sheet. All regulators are calibrated to meet these requirements before they leave the laboratory. However, due to environmental conditions and use of the equipment Centek can not guarantee that this criteria can always be achieved.

Centek Chain of Custody

Centek Laboratories
143 Midler Park Drive
Syracuse, NY 13206
315-431-9730
www.CentekLabs.com

Vapor Intrusion & IAQ

Site Name:
Project: 210087
PO#: 210087
Quote # Q-3P1
Other: 1805481

Detection Limit	Report Level
[N] 5ppbv	[Y] Level I
[ ] 1ug/M3	[ ] Level II
[ ] 1ug/M3 +TCE .25	[ ] Cat "B" Like

Turnaround Time:	Check One	Rush TAT Surcharge %	Due Date:
5 Business Days	[X]	0%	
4 Business Days	[ ]	25%	
3 Business Days	[ ]	50%	
2 Business Days	[ ]	75%	
Next Day by 5pm	[ ]	100%	
Next Day by Noon	[ ]	150%	
Same Day	[ ]	200%	

Company: GeoLogic NY, Inc

Report to:
Address: P.O. Box 350
City, State, Zip Homer, NY 13077
Email: GeologicNY@GeoLogic.NET
Phone: 607-749-5000

Company:
Check Here If Same: [X]

Invoice to:
Address: Same
City, State, Zip
Email:
Phone:

Sample ID	Date Sampled	Canister Number	Regulator Number	Analysis Request	Comments	Vacuum Gauge Reading Start ("Hg)	Vacuum Gauge Reading Stop ("Hg)
SSD/SVE	12/01/2015	1438	#1-Grab	TO-15	(*) See Comments below:		
						-29	-3
					Comments:		
					TO-15 Analysis for the following parameters Only:		
					1,1,1-Trichloroethane		
					1,1-Dichloroethene		
					1,2-Dichloroethene	cis/trans	
					Trichloroethene		12-3
					Tetrachloroethene		
					Vinyl Chloride		
					FedEx Tracking #		
					7818 3088 0691		

Chain of Custody	Print Name	Signature	Date/Time
Sampled by:	C.T. Gabriel of GeoLogic NY Inc		12-1-15/15:00
Relinquished by:	C.T. Gabriel of GeoLogic NY Inc		12-1-15/17:15
Received at Lab by:	NICK MANDRUND		12-2-15

Couriers: CIRCLE ONE
FedEx UPS Pickup/Dropoff

For LAB USE ONLY
Work Order # C1512011

*** By signing Centek Labs Chain of Custody, you are accepting Centek Labs Terms and Conditions listed on the reverse side.

CENTEK LABORATORIES, LLC

Sample Receipt Checklist

Client Name GEOLOGIC

Date and Time Receive 12/2/2015

Work Order Numbe C1512011

Received by NM

Checklist completed by _____ 12-2-15
Signature | Date

Reviewed by WD 12/2/15
Initials | Date

Matrix:

Carrier name: FedEx Ground

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Presen ☐
Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	Not Presen ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Presen ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☑	

Adjusted? _____ Checked by _____

Any No and/or NA (not applicable) response must be detailed in the comments section be

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

_____

_____

Corrective Action _____

_____

_____

Date: *14-Dec-15*

CENTEK LABORATORIES, LLC

CLIENT: GeoLogic NY, Inc.
Project: 210087
Lab Order: C1512011

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
C1512011-001A	SSD/SVE	1438	12/1/2015	12/2/2015

Centek Laboratories, LLC

14-Dec-15

Lab Order: C1512011
Client: GeoLogic NY, Inc.
Project: 210087

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
C1512011-001A	SSD/SVE	12/1/2015	Air	5ppb by Method TO15			12/3/2015
				5ppb by Method TO15			12/3/2015

Centek Laboratories, LLC

Date: *08-Dec-15*

CLIENT:	GeoLogic NY, Inc.	**Client Sample ID:**	SSD/SVE
Lab Order:	C1512011	**Tag Number:**	1438
Project:	210087	**Collection Date:**	12/1/2015
Lab ID:	C1512011-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab Vacuum In	-3			"Hg		12/2/2015
Lab Vacuum Out	-30			"Hg		12/2/2015
5PPB BY METHOD TO15		**TO-15**				Analyst: **WD**
1,1,1-Trichloroethane	< 5.0	5.0		ppbV	1	12/3/2015 9:24:00 PM
1,1-Dichloroethene	< 5.0	5.0		ppbV	1	12/3/2015 9:24:00 PM
cis-1,2-Dichloroethene	4.9	5.0	J	ppbV	1	12/3/2015 9:24:00 PM
Tetrachloroethylene	< 5.0	5.0		ppbV	1	12/3/2015 9:24:00 PM
trans-1,2-Dichloroethene	< 5.0	5.0		ppbV	1	12/3/2015 9:24:00 PM
Trichloroethene	140	50		ppbV	10	12/3/2015 8:47:00 PM
Vinyl chloride	< 5.0	5.0		ppbV	1	12/3/2015 9:24:00 PM
Surr: Bromofluorobenzene	93.8	73.7-124		%REC	1	12/3/2015 9:24:00 PM

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *08-Dec-15*

CLIENT:	GeoLogic NY, Inc.	**Client Sample ID:**	SSD/SVE
Lab Order:	C1512011	**Tag Number:**	1438
Project:	210087	**Collection Date:**	12/1/2015
Lab ID:	C1512011-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
5PPB BY METHOD TO15		**TO-15**				Analyst: **WD**
1,1,1-Trichloroethane	< 27	27		ug/m3	1	12/3/2015 9:24:00 PM
1,1-Dichloroethene	< 20	20		ug/m3	1	12/3/2015 9:24:00 PM
cis-1,2-Dichloroethene	19	20	J	ug/m3	1	12/3/2015 9:24:00 PM
Tetrachloroethylene	< 34	34		ug/m3	1	12/3/2015 9:24:00 PM
trans-1,2-Dichloroethene	< 20	20		ug/m3	1	12/3/2015 9:24:00 PM
Trichloroethene	780	270		ug/m3	10	12/3/2015 8:47:00 PM
Vinyl chloride	< 13	13		ug/m3	1	12/3/2015 9:24:00 PM

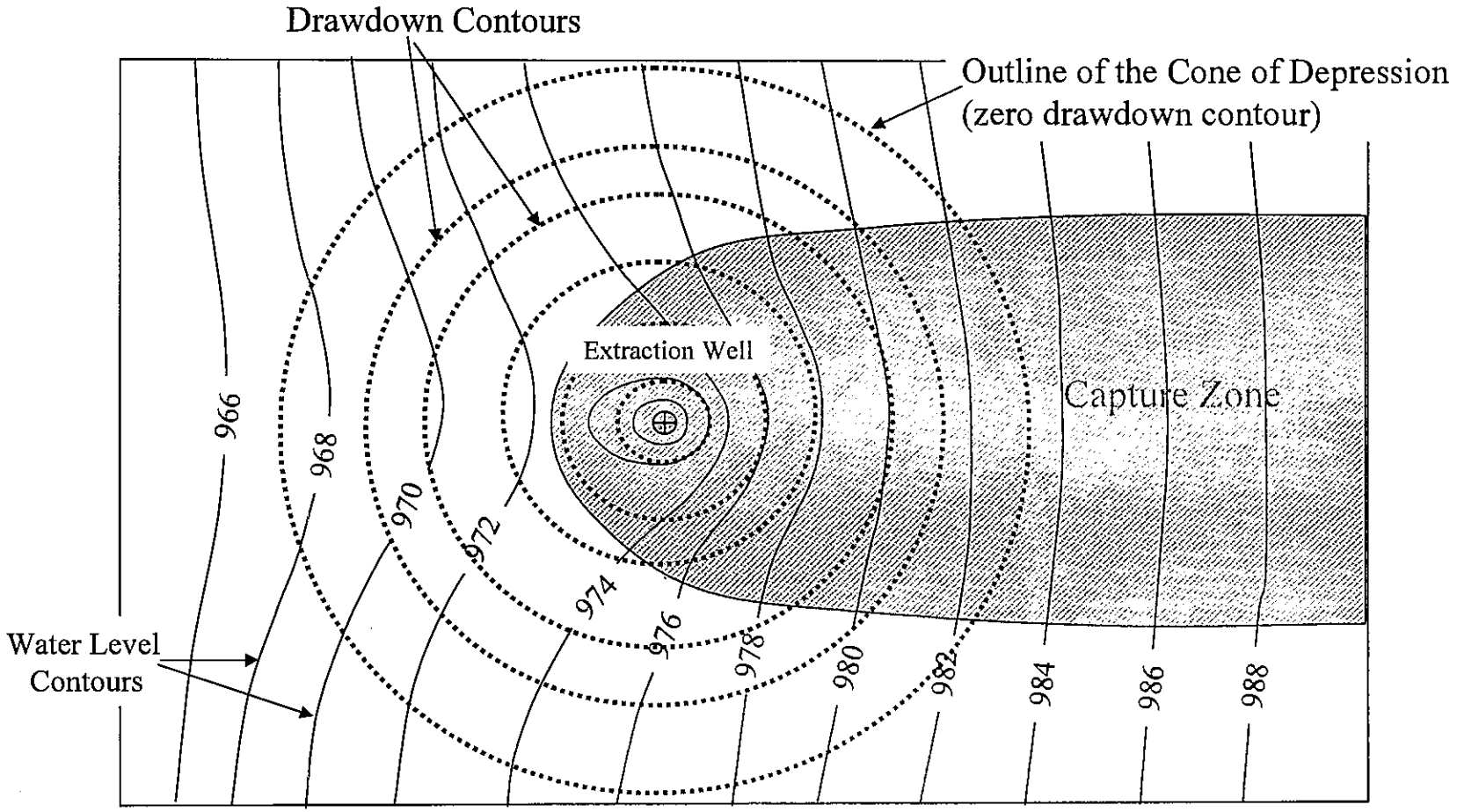
Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

APPENDIX G

CAPTURE ZONE ANALYSIS

Drawdown and Capture Are Not The Same Thing



Drawdown is the change of water level due to pumping. It is calculated by subtracting water level under pumping conditions from the water level without pumping.

Cone of Depression is the region where drawdown due to pumping is observed.

Capture Zone is the region that contributes the ground water extracted by the extraction well(s). It is a function of the drawdown due to pumping and the background (i.e., without pumping) hydraulic gradient. Capture zone will only coincide with the cone of depression if there is zero background hydraulic gradient.

Capture Zone Width Calculation

$$x = -y \Big/ \tan\left(\frac{2\pi Ti}{Q} y\right) \quad -or- \quad y = \pm\left(\frac{Q}{2Ti}\right) - \left(\frac{Q}{2\pi Ti}\right) \tan^{-1}\left(\frac{y}{x}\right)$$

$$X_0 = -Q/2\pi Ti;\ Y_{max} = \pm Q/2Ti;\ Y_{well} = \pm Q/4Ti$$

(*Must use consistent units*)

Where:

Q = extraction rate

T = transmissivity, K·b

K = hydraulic conductivity

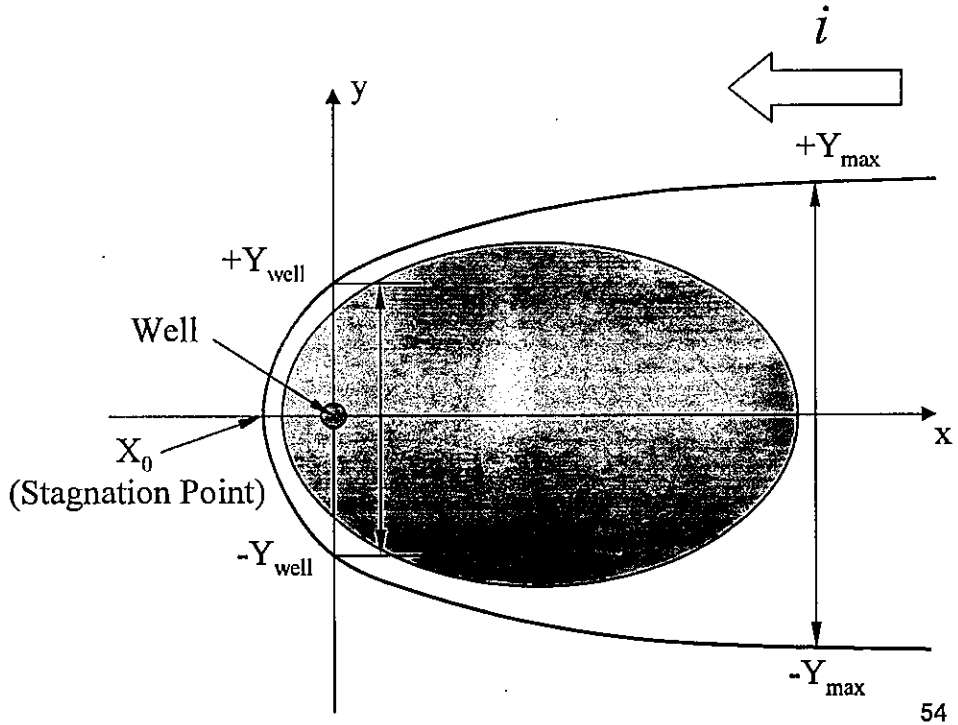
b = saturated thickness

i = hydraulic gradient

X_0 = distance from the well to the downgradient end of the capture zone along the central line of the flow direction

Y_{max} = maximum capture zone width from the central line of the plume

Y_{well} = capture zone width at the location of well from the central line of the plume



This simple calculation can also applied for multiple wells (in some cases) based on simplifying assumptions

Capture Zone Analysis
SCM-Cortlandville
Site No. 712006
May 2011

Variables

Q = extraction rate in gallons per day (gpd)
T = transmissivity in gallons per day per foot (gpd/ft)
i= average horizontal hydraulic gradient (dimensionless)
X_o = distance from well to downgradient stagnation point (ft)
Y_{well} = capture zone width at well (ft)
Y_{max} = maxiimum capture zone width (ft)

Calc #1

Q	T	i	X_o	Y_{well}	Y_{max}
1152000	400000	0.002	229	720	1440

Calc #2

Q	T	i	X_o	Y_{well}	Y_{max}
1152000	750000	0.002	122	384	768
		Average	175	552	1104

Q - average of monthly readings for June through Dec. 2010 (800 gpm)

T - "Remedial System As-Built Report", O'Brien & Gere, Dec. 1991

i- "Periodic Review Report" for 2009, Buck Engineering, LLC, Feb. 2010
(last time water levels were recorded with the system off)

Capture Zone Analysis For 2015
SCM-Cortlandville
Site No. 712006

Variables

Q = extraction rate in gallons per day (gpd)
T = transmissivity in gallons per day per foot (gpd/ft)
i= average horizontal hydraulic gradient (dimensionless)
X_o = distance from well to downgradient stagnation point (ft)
Y_{well} = capture zone width at well (ft)
Y_{max} = maxiimum capture zone width (ft)

Calc #1

Q	T	i	X_o	Y_{well}	Y_{max}
927360	400000	0.002	184	580	1159

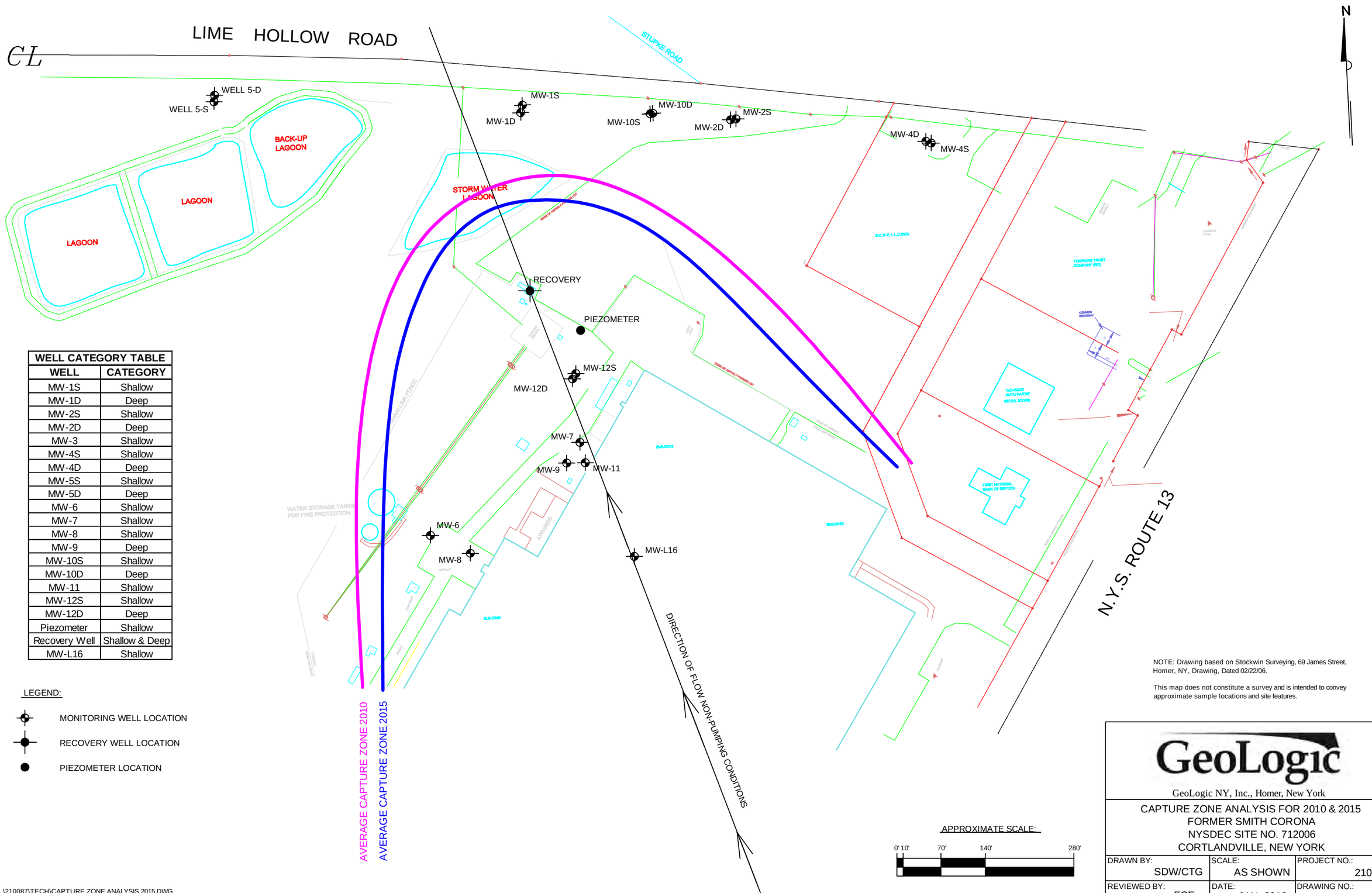
Calc #2

Q	T	i	X_o	Y_{well}	Y_{max}
927360	750000	0.002	98	309	618
		Average	141	444	889

Q - average of monthly readings for 2015 (644 gpm)

T - "Remedial System As-Built Report", O'Brien & Gere, Dec. 1991

i- "Periodic Review Report" for 2009, Buck Engineering, LLC, Feb. 2010
(last time water levels were recorded with the system off)



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

APPROXIMATE SCALE:

0' 10' 70' 140' 280'

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.

\..\210087\TECH\CAPTURE ZONE ANALYSIS 2015.DWG

GeoLogic

GeoLogic NY, Inc., Homer, New York

CAPTURE ZONE ANALYSIS FOR 2010 & 2015
FORMER SMITH CORONA
NYSDEC SITE NO. 712006
CORTLANDVILLE, NEW YORK

DRAWN BY:	SCALE:	PROJECT NO.:
SDW/CTG	AS SHOWN	210087
REVIEWED BY:	DATE:	DRAWING NO.:
FCE	JAN. 2016	A