Midler City Industrial Park

Site No. C734103

Seventh Annual Periodic Review Report

Prepared by

C&S Engineers, Inc.
499 Colonel Eileen Collins Blvd.
Syracuse, New York 13212

March 2015

TABLE OF CONTENTS

Page

FIGURES

APPENDICES

EXECUTIVE SUMMARY

Effectiveness of the Remedial Program

Data and discussion presented in this report indicate that chlorinated volatile organic compounds (CVOCs) in groundwater at the Midler City Industrial Park site (Site No. C734103) continue to decrease. Current concentrations are significantly less than those observed at the commencement of the Remedial Investigation and ensuing in-situ thermal treatment of significant source areas, and, except for MW-10D and MW-13D, have declined to levels consistent with Class GA Groundwater Standards since the end of the cool-down period (assumed to be December 2008). The decrease in contaminant levels in most wells, combined with the lines of evidence associated with reductive dechlorination, indicate that Monitored Natural Attenuation (MNA) continues to be an appropriate remedial technology for site groundwater.

At this point in the monitoring program for this site, several trends with respect to the presence and extent of CVOCs and MNA parameters in groundwater have been established:

- The original source contaminant, PCE, and the primary level reductive product, TCE, are no longer present at concentrations exceeding the 5 ug/l NYSDEC Class GA Groundwater Standard at any of the monitoring locations;
- The lower level degradation compounds (cis- and trans- DCE and vinyl chloride) exhibit marked variability in the short term; and
- Lines of evidence associated with reductive dechlorination indicate the dechlorination pathways remain viable.

Based on the past several monitoring rounds showing non-detect or below standards results, the October 2013 Fifth Annual PRR (covering the 2012 groundwater sampling events) recommended that, beginning in the first monitoring event in 2014, monitoring wells MW-14D and MW-16D be removed from the semi-annual monitoring for the site. Starting in June 2014, the semi-annual monitoring was continued for monitoring wells MW-9D, MW-10D, MW-13D and MW-15D and we will continue providing annual PRRs as scheduled.

Compliance

There are no areas of non-compliance regarding the major elements of the Site Management Plan that require corrective measures.

Recommendations

Relative to institutional controls and engineering controls (ICs/ECs) for the site, no changes are recommended.

SECTION 1 - INTRODUCTION AND HISTORICAL OVERVIEW

C&S Engineers, Inc., on behalf of our client Pioneer Midler Avenue, LLC, submits this seventh Annual Periodic Review Report (PRR) for the site known as Midler City Industrial Park - Site No. C734103.

The Midler City Industrial Park site encompasses approximately 22 acres and is located in the eastern portion of the City of Syracuse, as shown on Figure 1. Further detail concerning the property boundary is shown on Figure 2 (ASB-01 from the December 2007 *Final Engineering Report* for the site).

Developed as an industrial facility in the late nineteenth century and utilized as such through the mid-twentieth century, the Midler City Industrial Park is relatively flat and is bounded as follows:

- North by Interstate Route 690.
- East by undeveloped property owned by the City of Syracuse
- South by property owned by CSX Transportation.
- West by Midler Avenue.

The site was one of the last undeveloped accessible tracts of land adjacent to the highly urbanized Erie Boulevard corridor. Currently, a Lowe's home center and a branch of SEFCU occupy much of the site. Vacant outparcels remain available for development.

During the RI and demolition activities that occurred in 2004-2006, areas impacted by petroleum and chlorinated volatile organic compounds were discovered. The main CVOCs found at the site were tetrachloroethene (PCE), trichloroethene (TCE), vinyl chloride (VC), cis-1,2-dichloroethene (cis-1,2-DCE), and trans-1,2-dichloroethene (trans-1,2-DCE). The occurrence of CVOCs was found within the marl and peat layers and extended to depths of approximately 26 feet below ground surface. The source of the CVOCs is attributed to past manufacturing and or waste management practices of the former Prosperity Laundry Equipment Company. No.6 fuel oil and other petroleum hydrocarbons were discovered during earthwork where several underground storage tanks were once present for the boiler house and beneath certain floor slabs of the manufacturing complex where equipment was once located. Those areas of petroleum contamination were excavated and disposed of off-site. Clean-up objectives for petroleum impacted media were consistent with NYSDEC TAGM 4046/STARS which were in effect at the time the work was completed.

An IRM was conducted from 2006-2007 to remove CVOCs from four source areas identified during the RI. The technology adopted to remove CVOCs was ISTD. The smallest of the four source areas ("B-5" Area) was excavated and the impacted materials were placed within the two largest areas ("B-1" and "B-3" Areas) for CVOC removal via ISTD. Based upon the high organic content of subsurface soils (10.8% average), a site specific soil clean-up objective of 31,200 µg/kg total CVOCs was established consistent with TAGM 4046 guidance which was in affect at the time of the IRM. As a result of the ISTD treatment, approximately 86,000 pounds of CVOCs were

removed from the subsurface and treated on site via thermal oxidation. Further information regarding remedial efforts is presented in the December 2007 IRM report prepared by C&S.

Monitored Natural Attenuation (MNA), using protocol established by the United States Environmental Protection Agency (USEPA), was the final remedy selected for the site relative to groundwater, given:

- The significant source removal effort;
- Presence of soils with high organic content (10.8% average);
- Nature of CVOCs over 40 years of site inactivity;
- 40 years of site inactivity;
- Evidence of reductive dechlorination;
- Characteristics of groundwater including Oxidation-Reduction Potential (ORP), methane/ethane/ethene concentrations; and,
- The presence of *Dehalococcoides*, a genus of bacteria that obtains energy via the oxidation of hydrogen gas and subsequent reductive dehalogenation of halogenated organic compounds.

The groundwater MNA program commenced in 2008 and has been documented in a series of periodic data reports since that time. Evaluation of the data has been presented in reports to the NYSDEC entitled:

- *First Annual Site Monitoring Report* (February 2009),
- *Second Annual Periodic Review Report* (April 2010),
- *Third Annual Site Monitoring Report* (March 2011),
- *Fourth Annual Periodic Review Report* (April 2012)
- *Fifth Annual Periodic Review Report* (August 2013-Revised October 2013), *and*
- *Sixth Annual Periodic Review Report* (June 2014)

Quarterly groundwater monitoring was conducted through the third quarter of 2010 with results transmitted to NYSDEC Region 7 on a regular basis. Based on the progress of CVOC attenuation observed, the New York State Department of Environmental Conservation (NYSDEC) Region 7 office, in a letter dated September 14, 2010 agreed to reduce the frequency of groundwater sampling and analysis to twice per year, with those events occurring in Spring and Fall.. That same letter also allowed the deletion of monitoring well MW-2D from the sampling program. A copy of that letter is provided in Appendix A. Implementation of the modified groundwater monitoring program began in 2011 with full annual reporting as specified in the December 2007 Remedial Work Plan, Site Management Plan and, as required by the Brownfield Cleanup Agreement for the site. This *Fifth Annual Periodic Review Report* constitutes the second report under the modified program. Another modification took place with the 2014 sampling events with the deletion of wells MW-14 and MW-16. An email correspondence with NYSDEC is attached in Appendix A confirming the discontinuing of sampling these two wells.

Elevated groundwater temperatures recorded during the first year after the shutdown of the ISTD system were determined to be the result of the heating process which took place over a period of

approximately 11 months. The *Remedial Work Plan* issued in December 2007 established that the cool-down period would be considered complete when the range of groundwater temperatures recorded at the monitoring wells stabilized to within five degrees Fahrenheit (F) of each other.

The 2014 data indicate that, for the June 2014 sampling event, the groundwater temperatures for the four monitoring wells (9D, 10D, 13D, and 15D) ranged from 44.85 degrees F to 73.25 degrees F, a range of approximately 28.4 degrees F. For the December 2014 sampling event, the range was from 50.72 degrees F to 55.54 degrees F, a range of approximately 5.0 degrees F. These water temperature data suggest that since the cool down period has undoubtedly run its course, the range of groundwater temperatures observed appears to be indicative of a natural variability at the site.

SECTION 2 - EVALUATION OF REMEDY PERFORMANCE, EFFECTIVENESS, AND PROTECTIVENESS

Natural Attenuation Parameters

Samples collected during 2014 were analyzed for a variety of parameters associated with MNA including inorganic parameters, microbial indicators, and CVOCs. The resultant data were examined for evidence indicating overall reduction of contaminant levels. In addition, degradation rate constants were calculated using USEPA protocol.

Groundwater quality data (relative to chlorinated compounds) for each of the wells are presented on tables shown in Appendix B-1. Data Usability Summary reports for the 2014 groundwater quality monitoring are provided in Appendix B-2. Analytical results for the MNA parameters are shown on the table that is Appendix B-3 of this report. Appendix B-4 presents the groundwater contour maps for each sampling event conducted in 2014.

Other parameters of interest during 2014 include:

- Oxidation-reduction Potential - The ORP measurements ranged from -286 to -309 mV for the warm weather (June) sampling event. For the cold weather (December) event ORP measurements ranged from -282 to -377 mV. Values more negative than -100 mV are indicative of an environment that is supportive of reductive dechlorination.
- Dissolved Oxygen - Other than limited instances, the presence of dissolved oxygen in each of the monitoring wells continues to be essentially non-existent and indicative of a reducing environment.
- Sulfate – Concentrations of sulfate ranged from 180 mg/l in MW-13D up to 674 mg/l in MW-10D. According to USEPA MNA guidance, sulfate in excess of 20 mg/l may cause competitive exclusion of dechlorination. However, in many plumes with high concentrations of sulfate, reductive dechlorination still occurs. Based on CVOC data collected at the Midler Avenue site, it would appear that reductive dechlorination is occurring.

- Dehalococcoides (Dhc) - Concentrations in MW-9D reduced from 2 x 10^7 to 3 x 10^5 but for MW-10D, MW-13D, and MW-15D the concentrations stayed the same for both sampling events. The ranges were 1 x 10^3 to 3 x 10^7.
- Vinyl chloride reductase (vcrA) - vcrA concentrations have been observed to vary in proportion with Dhc concentrations in the site groundwater. Therefore, analysis for vcrA was dropped from the analytical protocol for the site following the June 2012 sampling.

Evaluation of Data Trends and Rate Constants

The February 2009 *First Annual Site Monitoring Report* developed rate constants from cool-down period data which were determined to be of minimal relevance with respect to long-term natural attenuation trends. The USEPA instructs that, to make a statistically valid projection of the rate of monitored natural attenuation, monitoring periods of at least three years should be considered. With data from eighteen sampling events since 2008 (which includes data from the cool down period) we offer the following observations and calculations regarding the apparent rate of CVOC reduction at each of the site monitoring wells during the 2,505 day (6.86 years) period extending from February12, 2008 through December 22, 2014.

CVOC Trendlines and Concentration Versus Time Rate Constants

The following discussion refers to recent trendlines and first order rate constants derived from a comparison of individual CVOC analytical results for each monitoring well. In this evaluation all of the data since 2008 were considered to see if a "best fit" linear relationship was evident. These data include the "cool down" data. By using all the data, there was much scatter and in some instances the resultant trend line suggested that concentrations of certain CVOCs were increasing. Nevertheless, groundwater quality has generally improved and at certain wells, detected CVOCs do not exceed Class GA Groundwater Standards. Appendix B-4 shows the total CVOCs vs Time for all the wells currently monitored.

The following is an evaluation of the recent trendlines including, when appropriate, rate constants; these will become more statistically valid as more data are generated and more time passes.

During past sampling events, non-detects at elevated detection limits has introduced an element of ambiguity to some of the trendlines and rate constant calculations. Therefore, the analytical laboratory was asked to provide lower detection limits, when possible, to document whether specific CVOCs are present at levels above their respective Class GA Groundwater Standard. In response to that request, in December 2012 Test America began to utilize USEPA Method OLC02.1 instead of Method OLM04.2 for project volatiles analyses.

MW-9D - Trans-1,2-DCE and cis-1,2-DCE have both been reported at concentrations less than the Class GA groundwater standard of 5 µg/l since October 2008. Given the data, further evaluation of first order rate constants for these two CVOCs was not performed. For vinyl chloride, the small increase that was exhibited from May 2011 to December 2012 returned to the longer-term trend of decrease in 2013 when vinyl chloride was non-detect at 2 µg/l during the June

sampling and detected at 1.7 µg/l in the December sampling. In the 2014 sampling events, the vinyl chloride concentration was non-detect at 2 µg/l during the June sampling and non-detect at 1 µg/l during the December sampling event.

MW-10D - The concentration of vinyl chloride has remained steady from the 2013 events to 2014 with a slight decrease to 74 µg/l in December 2014 from 90 µg/l in December 201. Cis-1,2-DCE data exhibited a slight increase from 480 µg/l in December 2013 to 510 µg/l in July 2014 and then back down to 410 µg/l in December 2014. The trans-1,2-DCE concentration has remained generally stable throughout the monitoring period and was 19 µg/l in December 2014.

MW-13D – The vinyl chloride concentration has exhibited considerable variability since February 2008. The concentration declined from 3,200 µg/l in December 2013 to 780 µg/l in July 2014 and then up to 1,600 µg/l in December 2014.

Cis-1,2-DCE concentrations declined from 430 µg/l to 260 µg/l during the February 2008 through October 2010 timeframe, but a spike in concentration occurred in March 2010, after which the concentrations have been varying with a general trend of decreasing. The 2014 data exhibited a decrease to 360 µg/l for the June sampling, followed by an increase to 1,200 µg/l for the December 2014 sampling. There seems to be a trend since 2008 showing an increase in the December sampling with a decrease in the June sampling event. Given that spikes of both cis-1,2-DCE and vinyl chloride were followed by general decreases it would appear that long-term improvements to groundwater quality are continuing.

Trans-1,2-DCE concentrations have remained consistent throughout the sampling events. From June 2012 to June 2013 the concentrations were "non-detect", but at concentrations ranging from 20 µg/l to 200 µg/l. In December 2013 the concentrations were at 25 µg/l. In the 2014 sampling events, the concentrations were "non-detect" at 50 µg/l. With regard to PCE and TCE, neither of these compounds was detected in either of the 2012, 2013, and 2014 sampling events for this location, thus no further evaluation of the data relative to prediction of "Time to Meet Standards" was performed.

MW-15D– No rate constants have been established for this well since the CVOC concentrations have been generally less than their respective Class GA groundwater Standards. In December 2014, the concentration of cis-1,2-Dichloroethene at MW-15D exhibited a decline to 4.2 ug/l from 4.9 µg/l in June 2014.

Charts of Total CVOC Concentrations vs. Time

To illustrate the changing site conditions with respect to CVOCs in groundwater over the approximately seven years that conditions have been monitored, C&S prepared charts for each monitoring well that track concentration of total CVOCs versus time. Since the process of dechlorination entails reductions of higher level chlorinated compounds accompanied by increases in the lower level compounds, it is likely that the concentrations of total CVOCs may be the truest

indicator of overall reductions (i.e., complete dechlorination of some fraction of the CVOCs). The charts for these data are presented in Appendix B-4. These charts indicate clear declining trends in total CVOCs at four of the six groundwater monitoring wells (MW-9D, MW-14D, MW-15D, and MW-16D. Only at monitoring wells MW-10D and MW-13D do the data sets indicate slightly upward trends over the monitoring period, due to data variability during the later portions of the monitoring period.

Conclusions

Data and discussion presented in the preceding text and accompanying data tables confirm that CVOCs in groundwater, while variable in the short term, continue to exhibit an overall trend of decrease. Current concentrations are consistently less than those observed at the commencement of the RI and ensuing in-situ thermal treatment of significant source areas, and with the exception of MW-10D and MW-13D, have declined significantly since the end of the cool-down period. The decrease in contaminant levels in most wells combined with the lines of evidence associated with reductive dechlorination, indicate that MNA continues to be the appropriate remedial technology for site groundwater.

SECTION 3 - IC/EC PLAN COMPLIANCE REPORT

Residual subsurface contamination remained after completion of the IRM performed under the BCP. Engineering Controls were incorporated into the site remedy to provide proper management of this contamination to ensure protection of public health and the environment. A site-specific Environmental Easement has been recorded with the Onondaga County Clerk that provides an enforceable means to ensure the continued and proper management of residual contamination and protection of public health and the environment. It requires strict adherence to ICs and ECs placed on this Site by NYSDEC by the grantor of the Environmental Easement and any and all successors and assigns of the grantor.

Site Specific Engineering Controls

As described in the December 2007 Site Management Plan (SMP), as approved by NYSDEC, the following site specific ECs have been implemented.

Sub-slab depressurization systems (SSDSs) - SSDSs have been installed and maintained on both the Lowe's home center and SEFCU branch building. A site plan showing the location of the monitoring points for each building is provided in Appendix C of this report. Inspection of the systems is performed on a regular basis by Pioneer Midler Avenue, LLC as documented on the forms in Appendix C of this PRR. No operational problems were reported with the systems during calendar year 2014.

If in the future additional buildings are constructed on the site, similar type SSDS will be designed, installed, and maintained. The designs and system performance requirements will be in accordance with applicable regulations and/or guidance.

Public water supply - The site and surrounding properties receive their domestic water from municipal service connections supplied by the City of Syracuse. The source of the municipal water supply is surface water from Skaneateles Lake, Otisco Lake, and Lake Ontario. The Lowe's home center and SEFCU branch office are connected to and obtain potable water from the municipal water supply described above. Currently there are no other known buildings or users of water on the site.

Paved and concrete surfaces -- To the extent reasonable, surfaces outside of the building footprints were paved or covered with conventional asphalt or concrete. Areas beneath the asphalt and/or concrete pavement received one foot of clean Type 1 or 2 crushed limestone from an approved quarry (i.e., T. H. Kinsella, Hansen). Areas beyond the footprint of the buildings and limits of paved areas received either a combination of clean crushed limestone fill, and/or clean topsoil to a depth of one foot. The clean crushed limestone fill and/or topsoil has been maintained to avoid direct contact with pre-existing urban fill material and native soils. As required by the Site Management Plan, Pioneer Midler Avenue, LLC performs a visual inspection of the site twice each year. Those inspections completed during 2014 are documented on the forms shown in Appendix D of this PRR.

Site-Specific Institutional Controls

As described in the December 2007 Site Management Plan (SMP) the following site specific ICs have been implemented.

Environmental Easement - Pioneer has granted the NYSDEC an environmental easement for the Site to ensure that use restrictions or engineering controls remain in place and will be binding to future owners and lessees, or until modified, extinguished, or amended by a written instrument executed by the Commissioner of the NYSDEC. No changes to the Environmental Easement occurred during 2014.

Groundwater Use Restriction - The use or discharge of untreated groundwater for any purpose will not be permitted at the Site. As stated above, each building is connected to the City of Syracuse municipal water supply.

Soil Management Plan - A site-specific Soil Management Plan (SoMP) dated December 2007 was approved by NYSDEC and has been implemented at this Site. The objective of the SoMP is to set guidelines for management of soil material during any future activities which would breach the cover system at the site. No excavation, construction, or dewatering activities were reported to have occurred at the site during 2014.

Recommendations

Relative to the SoMP, no changes to the plan are recommended for 2015.

SECTION 4 - MONITORING PLAN COMPLIANCE REPORT

The December 2007 *Monitoring Plan* and the December 2007 *Remedial Work Plan* described the measures for evaluating the performance and effectiveness of Monitored Natural Attenuation. The elements of these plans, relative to groundwater monitoring, consisted of sampling and laboratory analysis for chlorinated volatile organic compounds via EPA Method 8260. Additionally, each sample was further evaluated for the following MNA parameters:

- ORP
- Temperature
- pH
- Dissolved oxygen
- Ferric iron
- Ferrous iron
- Total Iron
- Sulfate
- Sulfide
- Dissolved Organic Carbon
- Dissolved Inorganic Carbon
- Microbial analysis to determine presence and concentration of Dhc populations and gene analysis to determine presence/concentrations of Dhc capable of dechlorinating vinyl chloride to ethene

Groundwater data (quality and water levels) are tabulated and entered into the cumulative summary tables after each sampling event. That information, accompanied by a Data Usability Summary Report (DUSR) and groundwater contour map, is submitted to NYSDEC Region 7 following each monitoring event. The cumulative groundwater data summary tables (groundwater quality and MNA parameters) are shown in Appendix B-1 and Appendix B-3, respectively, of this PRR. The individual laboratory reports are also provided in Appendices B-1 and B-3. Data Usability Summary Reports for the 2014 groundwater quality samples are provided in Appendix B-2. Groundwater contour maps for each 2014 sampling event are shown in Appendix B-5.

SECTION 5 - OPERATION AND MAINTENANCE PLAN

The December 2007 *Operation and Maintenance Plan* for the site describes the measures necessary to operate and maintain mechanical components of the SSDS systems installed at each of the buildings. The *Operation & Maintenance Plan* also included a description of visual inspections to be conducted to document the condition of the exterior paved surfaces.

SSDS Operation and Maintenance

During 2014, verification of normal operating status was conducted on an approximately weekly basis. This verification, performed by Pioneer Midler Avenue, LLC, is by visual observation of the magnehelic gauge attached to each discharge stack. These observations are recorded and kept on file. Copies of the inspection forms for 2014 are presented in Appendix C of this PRR.

Routine maintenance is performed every 12 months and includes:

- Visual inspection of above grade components
- Verification that no building intakes have been added within ten feet of the SSDS ventilation stacks
- Verification that floor penetrations are not leaking and if leaks are detected appropriate repairs are to be completed.

As appropriate, preventative maintenance, repairs, and/or adjustments will be made to the system to ensure its continued effectiveness. If significant changes are made to the building, the system will be modified and/or expanded to ensure the system is functioning properly.

No operational problems or significant building modifications were reported to have occurred with the systems installed at the SEFCU branch and Lowe's home center during 2014.

Pavement and Concrete Surfaces

All paved and concreted surfaces are maintained such that extensive perforations or cracks are sealed or repaired on an on-going basis. The Property Manager performs a semiannual inspection of these surfaces. Documentation of the visual inspections performed in 2014 is presented in Appendix D of this PRR.

Conclusion

Based on the information gathered during 2014, it is our opinion that no changes in the Operation and Maintenance Plan should be implemented for calendar year 2015.

SECTION 6 - OVERALL PRR CONCLUSIONS AND RECOMMENDATIONS

Compliance with Site Management Plan

During calendar year 2014, all the requirements of the *Site Management Plan* prepared in 2007 and amended in September 2010 were satisfied and no changes or modifications are contemplated at this time.

Performance and Effectiveness of the Remedy

Data from site monitoring confirm that CVOCs in groundwater, while displaying some variability in the short term, continue to decrease. Current CVOC concentrations are greatly reduced compared to those observed at the commencement of the Remedial Investigation and ensuing in-situ thermal treatment, and, with the exception of MW-10D and MW-13D, have declined significantly since the end of the cool-down period. The decrease in CVOC levels (in most wells) combined with the lines of evidence associated with reductive dechlorination, indicate that MNA continues to be an appropriate remedial technology for site groundwater.

At this point in the monitoring program for this site, several trends with respect to the presence and extent of CVOCs and MNA parameters in groundwater have been established:

- The original source contaminant, PCE, and the primary level reductive product, TCE, are no longer present at concentrations exceeding the 5 ug/l NYSDEC Class GA Groundwater Standard at any of the monitoring locations;
- The lower level degradation compounds (cis- and trans- DCE and vinyl chloride) exhibit marked variability in the short term; and
- Lines of evidence associated with reductive dechlorination indicate the dechlorination pathways remain viable.

In June 2015, the semi-annual monitoring will be continued for monitoring wells MW-9D, MW-10D, MW-13D, and MW-15D and we will continue providing annual PRRs as scheduled.

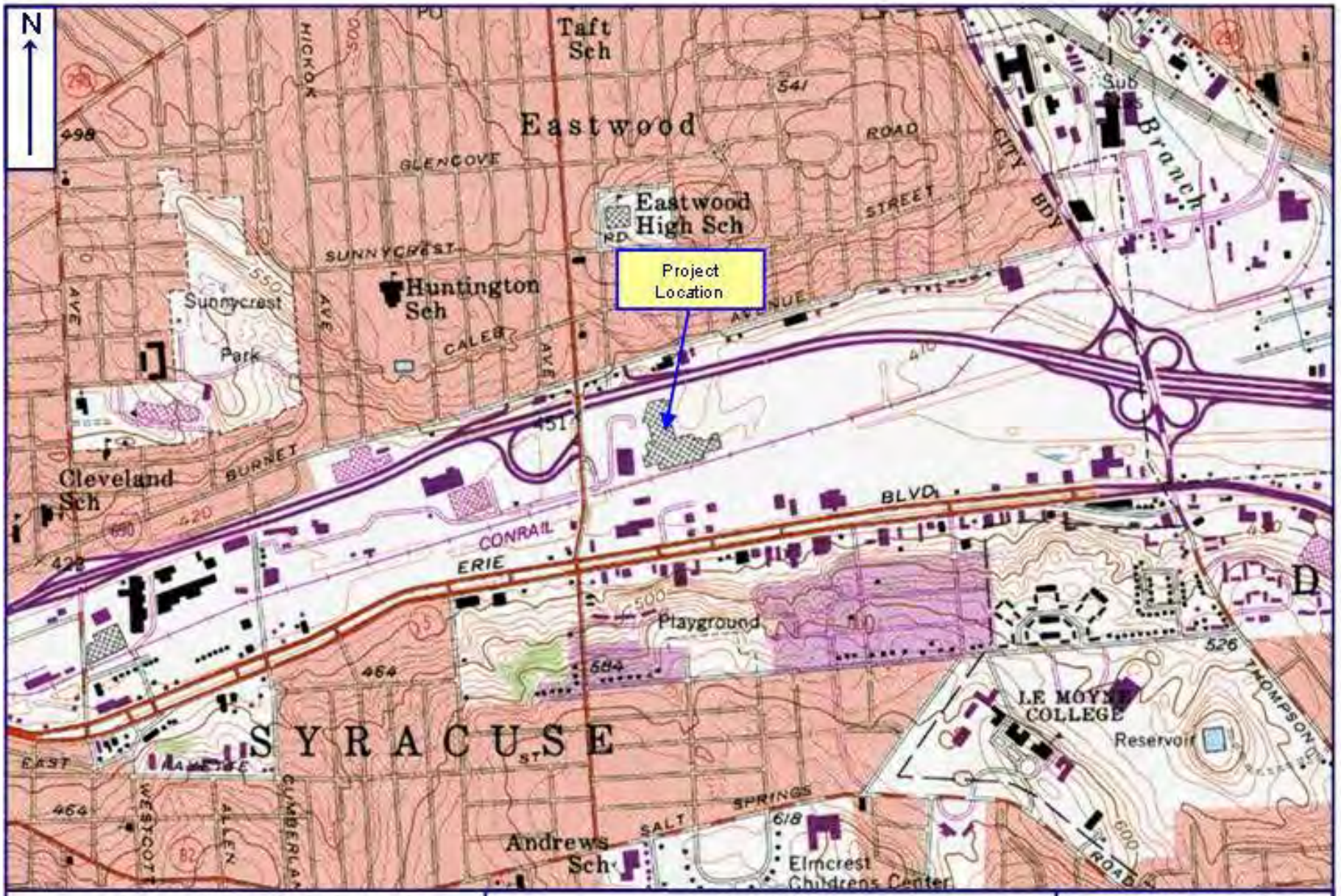
Future PRR Submittals

The PRR for calendar year 2015 will be issued during the second quarter of 2016.

f:\project\c81 - pioneer development\c81006001post irm gw monitoring\calendar year 2014 prr\calendar year 2014 prr.docx

FIGURE 1

SITE LOCATION MAP
SYRACUSE EAST USGS



Source: USGS Topographic Maps (Terrain Navigator)
Syracuse East, NY

Figure 1
Site Location Map
Pioneer Milder LLC Brownfield Project
City of Syracuse, Onondaga County, New York

C&S COMPANIES
ENGINEERS
DESIGN BUILD
TECHNICAL RESOURCES
OPERATIONS

FIGURE 2

ASB-01 FROM DECEMBER 2007 FINAL ENGINEERING REPORT

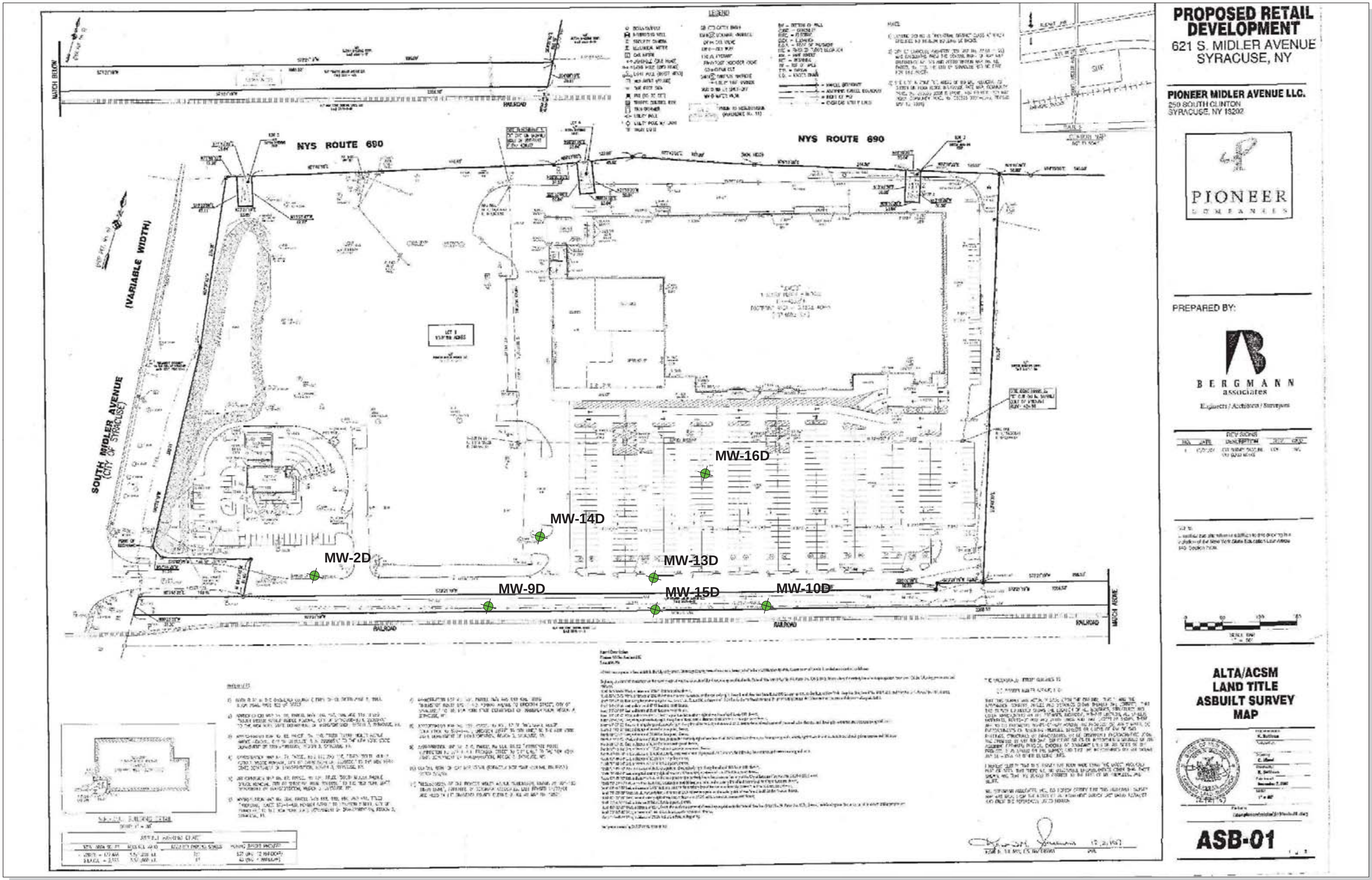
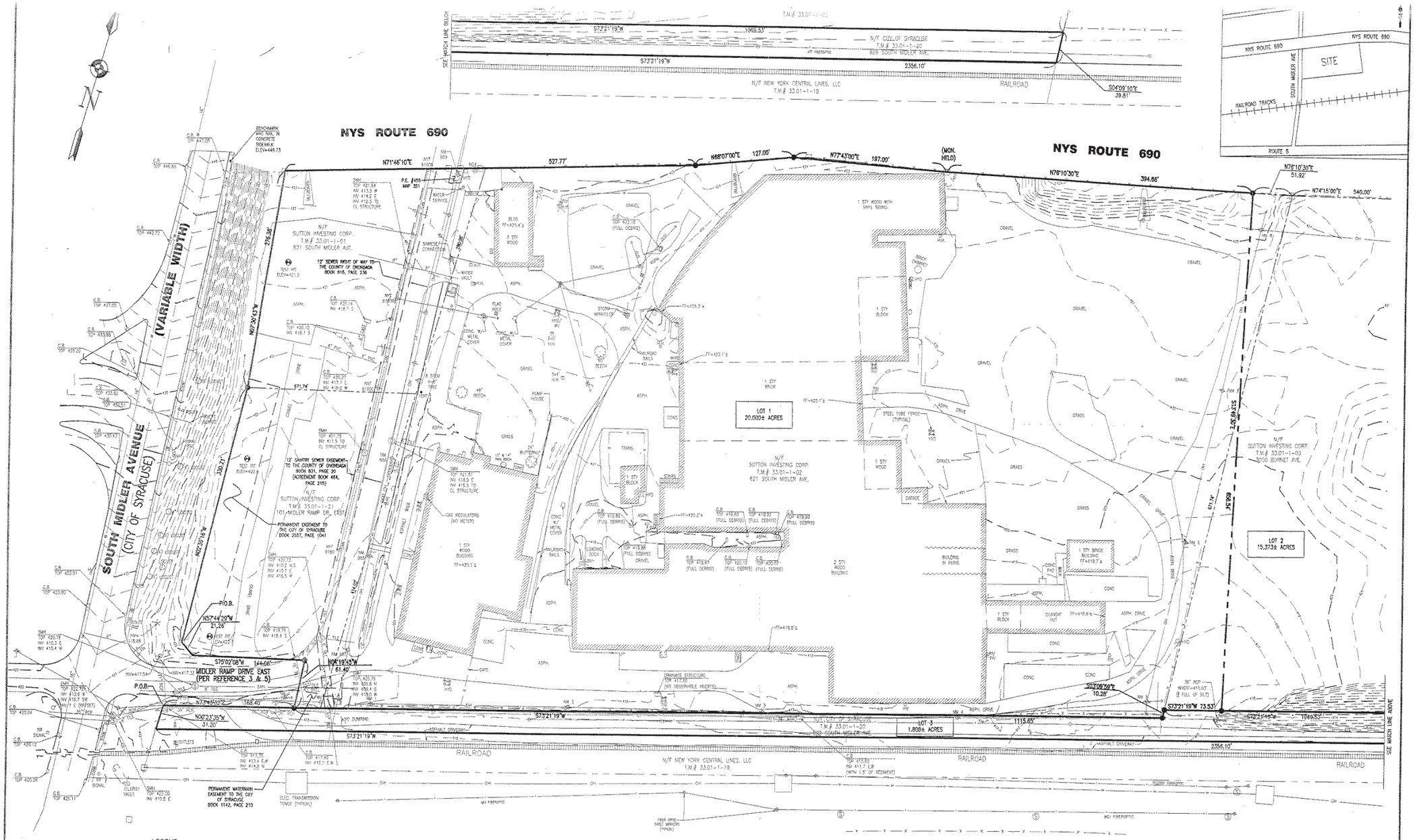

PROPOSED RETAIL DEVELOPMENT
621 S. MIDLER AVENUE
SYRACUSE, NY
PIONEER MIDLER AVENUE LLC.
250 SOUTH CLINTON
SYRACUSE, NY 13202
PIONEER
COMPANIES
PREPARED BY:
BERGMANN
associates
ALTA/ACSM
LAND TITLE
ASBUILT SURVEY
MAP
ASB-01
LEGEND
NYS ROUTE 690
NYS ROUTE 690
SOUTH MIDLER AVENUE
(CITY OF SYRACUSE)
(VARIABLE WIDTH)
RAILROAD
MW-16D
MW-14D
MW-2D
MW-13D
MW-9D
MW-15D
MW-10D

FIGURE 3

RE-SUBDIVISION MAP - 2006



LEGEND

- DECIDUOUS TREE
- ONE-POST SIGN
- TWO-POST SIGN
- REBAR FOUND
- IRON PIPE FOUND
- CONCRETE MONUMENT
- CORNER TO BE SET
- WALKWAY LIGHT
- ELECTRIC TRANSFORMER
- LIGHT POLE
- UTILITY POLE
- UTILITY POLE WITH LIGHT
- TRAFFIC CONTROL BOX
- TELEPHONE BOX
- ELECTRIC METER
- GAS METER
- GAS MARKER
- GAS VALVE
- HANDHOLES
- 420.5 SPOT ELEVATION
- 420 EXISTING CONTOUR LINE
- WV WATER VALVE
- HYD HYDRANT
- CATCH BASIN
- SANITARY SEWER MANHOLE
- STORM SEWER MANHOLE
- UNKNOWN MANHOLE
- TRAFFIC MANHOLE
- BOLLARD/POST
- TEST PIT LOCATION
- GUY WIRE
- SAN SANITARY SEWER
- ST STORM SEWER
- E ELECTRIC LINE
- FO FIBER OPTIC LINE
- T TELEPHONE LINE
- W WATER LINE
- G GAS LINE
- OH OVERHEAD ELECTRIC
- FENCE LINE
- GUIDE RAIL
- EDGE WOODS
- EASEMENT LINE
- PROPERTY LINE
- TAX PARCEL LINE
- RIGHT-OF-WAY LINE
- PROPOSED SUBDIVISION LINE

NOTES:

1) UTILITIES SHOWN WERE PLOTTED FROM RECORD INFORMATION AQUIRED FROM THE UTILITY PROVIDERS SERVICING THIS AREA. THEY ARE NOT CERTIFIED AS TO THE ACCURACY OF THEIR LOCATION OR THEIR COMPLETENESS.

2) EXISTING ZONING IS "INDUSTRIAL DISTRICT CLASS A" WHICH REQUIRES NO MINIMUM BUILDING SETBACKS.

3) CITY OF SYRACUSE PROPERTY (TAX MAP No. 33.01-1-20) WAS CALCULATED FROM THE CONRAIL RIGHT OF WAY MAP (REFERENCE No. 10) AND APPROPRIATION MAP No. 66, PARCEL No. 110. THE CITY OF SYRACUSE HAD NO DEED FOR THIS PARCEL.

4) SITE IS NOT WITHIN A FLOOD HAZARD ZONE PER COMMUNITY PANEL No. 360596 0080

REFERENCES:

1) DEED FILED IN THE ONONDAGA COUNTY CLERKS OFFICE DATED JUNE 2, 1961. BOOK 2046, PAGE 402 OF DEEDS.

2) APPROPRIATION MAP No. 66, PARCEL No's 106, 107, 108, AND 118, TITLED "SOUTH MIDLER AVENUE BRIDGE REMOVAL, CITY OF SYRACUSE-B.I.N. 2208650," TO THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION, REGION 3, SYRACUSE, NY.

3) APPROPRIATION MAP No. 66, PARCEL No. 110, TITLED "SOUTH MIDLER AVENUE BRIDGE REMOVAL, CITY OF SYRACUSE-B.I.N. 2208650," TO THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION, REGION 3, SYRACUSE, NY.

4) APPROPRIATION MAP No. 71, PARCEL No's 115 AND 116, TITLED "SOUTH MIDLER AVENUE BRIDGE REMOVAL, CITY OF SYRACUSE-B.I.N. 2208650," TO THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION, REGION 3, SYRACUSE, NY.

5) APPROPRIATION MAP No. 67, PARCEL No 109, TITLED "SOUTH MIDLER AVENUE BRIDGE REMOVAL, CITY OF SYRACUSE-B.I.N. 2208650," TO THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION, REGION 3, SYRACUSE, NY.

6) APPROPRIATION MAP No. 354, PARCEL No's 448, 449, 450, AND 451, TITLED "INTERSTATE ROUTE 570-1-4.0, FORMAN AVENUE TO ERICKSON STREET, CITY OF SYRACUSE," TO THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION, REGION 3, SYRACUSE, NY.

7) APPROPRIATION MAP No. 351, PARCEL No's 445 AND 455, TITLED "INTERSTATE ROUTE 570-1-4.0, FORMAN AVENUE TO ERICKSON STREET, CITY OF SYRACUSE," TO THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION, REGION 3, SYRACUSE, NY.

REFERENCES: CONTINUED

8) APPROPRIATION MAP No. 529, PARCEL No 631, TITLED "INTERSTATE ROUTE CONNECTION No 570-1-4.1, ERICKSON STREET TO CITY LINE," TO THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION, REGION 3, SYRACUSE, NY.

9) APPROPRIATION MAP No. 3-C, PARCEL No 684, TITLED "INTERSTATE ROUTE CONNECTION No 570-1-4.1, ERICKSON STREET TO CITY LINE," TO THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION, REGION 3, SYRACUSE, NY.

10) CONRAIL RIGHT OF WAY MAP V73/6 (FORMERLY NEW YORK CENTRAL RAILROAD,) DATED 5/5/92.

11) ABSTRACT OF TITLE PREPARED BY TICOR TITLE INSURANCE COMPANY, TITLE No. 530420350.

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT WAS BASED WERE MADE IN ACCORDANCE WITH "MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS," JOINTLY ESTABLISHED AND ADOPTED BY ALTA, ACSM AND NSPS IN 1999, AND INCLUDES ITEMS 1-11 AND 13 OF TABLE A THEREOF. PURSUANT TO THE ACCURACY STANDARDS AS ADOPTED BY ALTA, NSPS, AND ACSM AND IN EFFECT ON THE DATE OF THIS CERTIFICATION, UNDERSIGNED FURTHER CERTIFIES THAT THE SURVEY MEASUREMENTS WERE MADE IN ACCORDANCE WITH THE "MINIMUM ANGLE, DISTANCE, AND CLOSURE REQUIREMENTS FOR SURVEY MEASUREMENTS WHICH CONTROL LAND BOUNDARIES FOR ALTA/ACSM LAND TITLE SURVEYS."

THE UNDERSIGNED HEREBY CERTIFIES TO
1) LOWE'S HOME CENTERS, INC
2) TICOR TITLE INSURANCE COMPANY
THAT THIS SURVEY WAS ACTUALLY MADE UPON THE GROUND; THAT IT AND THE INFORMATION, COURSES, ANGLES AND DISTANCES SHOWN THEREON ARE CORRECT; THAT THIS SURVEY CORRECTLY SHOWS THE LOCATION OF ALL BUILDINGS, STRUCTURES AND OTHER IMPROVEMENTS ON THE PREMISES, INCLUDING, WITHOUT LIMITATION, ALL STREETS, EASEMENTS, RIGHTS-OF-WAY AND UTILITY LINES; AND THAT, EXCEPT AS SHOWN, THERE ARE NO (a) EASEMENTS RIGHTS-OF-WAY ACROSS THE PREMISES; (b) PARTY WALLS; (c) ENCROACHMENTS ON ADJOINING PREMISES, STREETS OR ALLEYS OF ANY OF SAID BUILDINGS, STRUCTURES OR IMPROVEMENTS, OR (d) OBSERVABLE ENCROACHMENTS UPON THE PREMISES BY ANY BUILDING, STRUCTURE OR OTHER IMPROVEMENTS SITUATED ON ANY ADJOINING PREMISES; PHYSICAL EVIDENCE OF BOUNDARY LINES ON ALL SIDES OF THE PREMISES IS AS STATED ON THE SURVEY; AND THAT THE IMPROVEMENTS DO NOT VIOLATE ANY SET-BACK OR OTHER BUILDING LINES.

I HEREBY CERTIFY THAT THIS SURVEY HAS BEEN MADE USING THE LATEST RECORDED PLAT OR DEED, THAT THERE ARE NO OBSERVABLE ENCROACHMENTS OTHER THAN THOSE SHOWN, AND THAT THE SURVEY IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

WE, BERGMANN ASSOCIATES, INC., DO HEREBY CERTIFY THAT THIS INSTRUMENT SURVEY MAP WAS MADE FROM THE NOTES OF AN INSTRUMENT SURVEY DATED 12/23/03 AND FROM THE REFERENCES LISTED HEREON.

Kevin M. Sullivan 8/16/04

KEVIN M. SULLIVAN, L.S. No. 049963 DATE

DEVELOPMENT
621 S. MIDLER AVENUE
SYRACUSE, NY

PIONEER MIDLER AVENUE LLC.
250 SOUTH.CLINTON
SYRACUSE, NY 13202

PIONEER COMPANIES

PREPARED BY:

BERGMANN associates
Engineers / Architects / Surveyors

REVISIONS				
NO.	DATE	DESCRIPTION	REV.	CK'D

NOTE:
Unauthorized alteration or addition to this drawing is a violation of the New York State Education Law Article 145, Section 7209.

AUG 17 2004

0 60 120 180 FT
SCALE BAR

ALTA/ACSM LAND TITLE SURVEY

STATE OF NEW YORK KEVIN M. SULLIVAN 049963 LICENSED LAND SURVEYOR

Project Manager: K. Sullivan
Designed by:
Drawn by: C. Wood
Checked by: K. Sullivan
Date Issued: August 16, 2004
Scale: 1" = 60'
Project Number: 6197.00
File Name: f:\dev\pioneer\midler\6197base.dwg
Drawing Number: EX-1

1 of 1

FIGURE 4

ISTD LAYOUT PLAN

SPARGE POINT

AREA B3

SPARGE POINT

ISTD ELECTRICAL DISTRIBUTION GEAR

ISTD OFF GAS TREATMENT EQUIPMENT

AREA B1

B-1 SHEET PILE

SPARGE POINT

AREA MW-3D

MW3D-SHEET PILE

1 STY BRICK BUILDING

1 STY BLOCK

1 STY BLOCK

6' DIA CISTERN

EQUIPMENT SUMP

EQUIPMENT VAULTS TOP=419.3 ±

VAULT 1 TOP=418.7 ±

CONCRETE SLAB TOP=422 ± SLAB TOP=421.4 ± WALL TOP=425 ±

BURIED PIER

BURIED PIER

BURIED PIER

QUONSET HUT

671.74'

656.54'

APPROX. SCALE
0 30 60 90 FEET

LEGEND

- ISTD HEATER WELL (18 FT. TREATMENT DEPTH)
- ISTD HEATER WELL (20 FT. TREATMENT DEPTH)
- ISTD HEATER WELL (25 FT. TREATMENT DEPTH)
- ISTD HORIZONTAL VACUUM SCREENS
- ISTD MANIFOLD PIPE
- ISTD TREATMENT ZONE
- ISTD TEMPERATURE MONITORING POINT
- ISTD SURFACE COVER PERIMETER
- ISTD SURVEY POINTS (H-5S)
- SPARGE POINTS
- SHEET PILE

C&S ENGINEERS, INC.
499 Col. Eileen Collins Blvd.
Syracuse, New York 13212
Phone 315-455-2000
Fax 315-455-9667
www.cscos.com

DATE: APRIL 2006
SCALE: AS SHOWN
FILE NO. C81.002.001

Pioneer Midler Avenue LLC
Interim Remedial Measure Report
Heater Well Layout & ISTD Enhancements

Figure 2

Oct 15, 2007 - 2:30pm
F:\Project\C81 - Pioneer Development\Cadd IRM Reports\Figure 2.dwg

Appendix A

NYSDEC Letter Concerning Reduction of Groundwater Sampling Frequency and Email Correspondence concerning Groundwater Well Reduction

New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 7
615 Erie Boulevard West, Syracuse, New York 13204-2400
Phone: (315) 426-7551 • **Fax:** (315) 426-7499
Website: www.dec.ny.gov

Alexander B. Grannis
Commissioner

September 14, 2010

Mr. Jed Schneider
Pioneer Midler Avenue, LLC
250 South Clinton Street, Suite 200
Syracuse, New York 13202-1258

Re: Midler City Industrial Park
Site No. C734103
Groundwater Sampling Frequency

Dear Mr. Schneider:

The New York State Department of Environmental Conservation (NYSDEC) has reviewed your August 3, 2010 letter requesting that the groundwater sampling frequency be reduced from quarterly to bi-annually (spring and fall). This request is hereby approved. In addition, based on the analytical data (i.e. non-detect levels of contaminants of concern since 2005), MW-2D can be removed from the list of wells sampled.

Respectfully,

Karen A. Cahill
Project Manager
Division of Environmental Remediation

cc: T. Barba/S. Vinci, C&S
R. Jones, DOH

ec: M. Peachey, DEC
G. Townsend, DEC

Wayne Randall

From: Karen Cahill <kacahill@gw.dec.state.ny.us>
Sent: Wednesday, June 25, 2014 10:12 AM
To: Wayne Randall
Subject: Re: NYSDEC Midler Site No. C734103

Yes. Thank you.
Karen A. Cahill
Div. of Environmental Remediation
NYSDEC Region 7
615 Erie Blvd. West, Syracuse, NY 13204-2400
Phone - (315) 426-7432
Fax - (315) 426-2653
Cell - (315) 289-6788
E-Mail: kacahill@gw.dec.state.ny.us

>>> Wayne Randall <WRandall@cscos.com> 6/25/2014 9:59:58 AM >>>
Good Morning Karen,
Are you OK with discontinuing MW-14D and MW-16D? Please let me know as I will be ordering the glassware today.

Thanks,
Wayne

C&S COMPANIES®
www.cscos.com

Wayne N. Randall
Geologist, Environmental Services
C&S Engineers, Inc.
wrandall@cscos.com, linkedIn
Direct: (315) 703-4110

From: Rory Woodmansee
Sent: Friday, June 06, 2014 1:21 PM
To: Karen Cahill; Marshall, Edward; Denise Seton
Cc: Wayne Randall; Warner, Harry
Subject: RE: NYSDEC Midler Site No. C734103

Hi Karen,

Appendix B-1

Groundwater Quality Summary through
December 2014 and
2014 Laboratory Reports

Pioneer Midler Avenue LLC

Summary of Groundwater VOC Data

Parameter	Units	NYSDEC GA		MW-2D		MW-2D		MW-2D		MW-2D		MW-2D		MW-2D		MW-2D		MW-2D		MW-2D		MW-2D		MW-2D		MW-2D	
Sample Date		Std	Guid	01/31/05		5/2/2006		08/23/07		02/12/08		06/02/08		10/06/08		12/23/08		03/02/09		06/02/09		09/30/09		12/21/09		03/02/10		06/07/10	
1,1,1-Trichloroethane	ug/l	5		10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
1,1,2,2-Tetrachloroethane	ug/l	5		10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
1,1,2-Trichloroethane	ug/l	5		10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
1,1,2-Tricloro-1,2,2,-triflouroethane	ug/l	5		10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
1,1-Dichloroethane	ug/l	5		10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
1,1-Dichloroethene	ug/l	5		10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
1,2,4-Trichlorobenzene	ug/l	5		10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
1,2-Dibromo-3-chloropropane	ug/l	0.04		10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
1,2-Dibromoethane	ug/l			10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
1,2-Dichlorobenzene	ug/l	3		10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
1,2-Dichloroethane	ug/l	0.6		10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
1,2-Dichloropropane	ug/l	1		10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
1,3-Dichlorobenzene	ug/l	3		10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
1,4-Dichlorobenzene	ug/l	3		10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
2-Butanone (MEK)	ug/l		50	15		50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
2-Hexanone	ug/l		50	10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
4-Methyl-2-pentanone (MIBK)	ug/l			10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
Acetone	ug/l		50	10	U	50	U	10	U	10	U	10	U	0.39	U	10	U	1	U	0.38	U	0.55	JB	0.41	JB	0.71	J B	2.6	JB
Benzene	ug/l	1		10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
Bromodichloromethane	ug/l		50	10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
Bromoform	ug/l		50	10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
Bromomethane	ug/l			10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
Carbon disulfide	ug/l	60		10	U	50	U	10	U	10	U	10	U	0.17	U	10	U	10	U	0.66	J	0.26	J	0.75	J	0.67	J	0.27	J
Carbon tetrachloride	ug/l	5		10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
Chlorobenzene	ug/l	5		10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
Chloroethane	ug/l	5		10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
Chloroform	ug/l	7		10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
Chloromethane	ug/l			10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	0.48	J
cis-1,2-Dichloroethene	ug/l	5		10	U	50	U	2.0	J	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	0.2	J	0.52	J
cis-1,3-Dichloropropene	ug/l	0.4		10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
Cyclohexane	ug/l			10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
Dibromochloromethane	ug/l	5		10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
Dichlorodifluoromethane	ug/l	5		10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
Ethylbenzene	ug/l	5		10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
Isopropylbenzene	ug/l	5		10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
Methyl acetate	ug/l			10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
Methyl tert butyl ether	ug/l	10		10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
Methylcyclohexane	ug/l			10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
Methylene chloride	ug/l	5		10	U	50	U	10	U	10	U	10	U	0.19	U	10	U	10	U	0.13	U	0.28	JB	0.32	JB	0.24	J B	0.18	JB
Styrene	ug/l	5		10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
Tetrachloroethene	ug/l	5		10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
Toluene	ug/l	5		10	U	50	U	10	U	10	U	10	U	10	U	10	U	0.13	U	10	U	0.11	U	10	U	0.14	J	0.12	J
trans-1,2-Dichloroethene	ug/l	5		10	U	50	U	10	U	10	U	10	U	0.15	J	10	U	10	U	0.1	J	0.17	J	10	U	0.14	J	10	U
trans-1,3-Dichloropropene	ug/l	0.4		10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
Trichloroethene	ug/l	5		10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
Trichlorofluoromethane	ug/l	5		10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U
Vinyl chloride	ug/l	2		10	U	50	U	10	U	10	U	10	U	0.15	J	10	U	0.19	J	0.19	J	0.15	J	0.28	J	0.55	J	1.1	J
Xylenes, Total	ug/l	5		10	U	50	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	3	U	10	U

Notes: - indicates value exceeds Class GA Standard or Guidance level.

Data Qualifiers:
ND - Not Detected, U-undetected,
J or E - Estimated value,
RE - re-extraction, D-Diluted
B-Analyte found in associated blank as well as in the sample.
NA-Parameter Not Analyzed

Pioneer Midler Avenue LLC

Summary of Groundwater VOC Data

Parameter	Units	NYSDEC GA		MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D
Sample Date		Std	Guid	5/3/2006	08/23/07	02/12/08	06/02/08	10/06/08	12/23/08	03/02/09	06/03/09	09/30/09	12/21/09	03/02/10	06/07/10	10/26/10	05/12/11	06/27/12	12/17/12	06/20/13	12/20/13	07/01/14	12/22/14
1,1,1-Trichloroethane	ug/l	5		20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	2 U	2 U	2 U	2 U	1 U
1,1,2,2-Tetrachloroethane	ug/l	5		20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	2 U	2 U	2 U	2 U	1 U
1,1,2-Trichloroethane	ug/l	5		20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	2 U	2 U	2 U	2 U	1 U
1,1,2-Tricloro-1,2,2,-triflouroethane	ug/l	5		20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	2 U	NA	NA	NA	1 U
1,1-Dichloroethane	ug/l	5		20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	2 U	2 U	2 U	2 U	1 U
1,1-Dichloroethene	ug/l	5		20 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	0.13 J	0.1 J	0.13 J	10 U	1 U	1 U	10 U	2 U	2 U	2 U	2 U	1 U
1,2,4-Trichlorobenzene	ug/l	5		20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	2 U	2 U	2 U	2 U	1 U
1,2-Dibromo-3-chloropropane	ug/l	0.04		20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	NA	NA	2 U	2 U	2 U	1 U
1,2-Dibromoethane	ug/l			20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	2 U	2 U	2 U	2 U	1 U
1,2-Dichlorobenzene	ug/l	3		20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	2 U	2 U	2 U	2 U	1 U
1,2-Dichloroethane	ug/l	0.6		20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	2 U	2 U	2 U	2 U	1 U
1,2-Dichloropropane	ug/l	1		20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	2 U	2 U	2 U	2 U	1 U
1,3-Dichlorobenzene	ug/l	3		20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	2 U	2 U	2 U	2 U	1 U
1,4-Dichlorobenzene	ug/l	3		20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	2 U	2 U	2 U	2 U	1 U
2-Butanone (MEK)	ug/l		50	20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	10 U	10 U	10 U	10 U	5 U
2-Hexanone	ug/l		50	20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	10 U	10 U	10 U	10 U	5 U
4-Methyl-2-pentanone (MIBK)	ug/l			20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	10 U	10 U	10 U	10 U	5 U
Acetone	ug/l		50	20 U	10 U	0.7 J	2 U	1 U	10 U	10 U	0.41 U	1.7 JB	0.6 JB	0.69 JB	3 JB	0.45 JB	0.91 J B	10 U	10 U	12	10 U	4 J	5 U
Benzene	ug/l	1		20 U	10 U	10 U	10 U	0.15 J	10 U	0.18 J	0.11 J	0.12 J	0.14 J	0.13 J	10 U	0.16 J	1 U	10 U	2 U	2 U	2 U	2 U	1 U
Bromodichloromethane	ug/l		50	20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	2 U	2 U	2 U	2 U	1 U
Bromoform	ug/l		50	20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	2 U	2 U	2 U	2 U	1 U
Bromomethane	ug/l			20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	2 U	2 U	2 U	2 U	1 U
Carbon disulfide	ug/l	60		20 U	10 U	10 U	10 U	0.23 U	10 U	10 U	10 U	0.31 J	1.3 J	0.41 J	0.38 J	1 U	0.48 J	10 U	1.2 J	0.55 J	2 U	2 U	1 U
Carbon tetrachloride	ug/l	5		20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	2 U	2 U	2 U	2 U	1 U
Chlorobenzene	ug/l	5		20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	2 U	2 U	2 U	2 U	1 U
Chloroethane	ug/l	5		20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	2 U	2 U	2 U	2 U	1 U
Chloroform	ug/l	7		20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	2 U	2 U	2 U	2 U	1 U
Chloromethane	ug/l			20 U	10 U	10 U	10 U	0.1 J	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	2 U	2 U	2 U	2 U	1 U
cis-1,2-Dichloroethene	ug/l	5		9 J	6 J	5 J	5 J	4.3 J	4 J	4.4 J	3.2 J	3.5 J	3.5 J	3.9	3.1 J	3.9	2.3	10 U	3.4			1.9 J	2.3 J	0.84 J
cis-1,3-Dichloropropene	ug/l	0.4		20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	2 U	2 U	2 U	2 U	1 U
Cyclohexane	ug/l			20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	NA	NA	NA	NA	NA
Dibromochloromethane	ug/l	5		20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	2 U	2 U	2 U	2 U	1 U
Dichlorodifluoromethane	ug/l	5		20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	NA	NA	NA	NA	NA
Ethylbenzene	ug/l	5		20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	2 U	2 U	2 U	2 U	1 U
Isopropylbenzene	ug/l	5		20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	NA	NA	NA	NA	NA
Methyl acetate	ug/l			20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	0.1 J	10 U	NA	NA	NA	NA	NA
Methyl tert butyl ether	ug/l	10		20 U	10 U	10 U	10 U	0.33 J	10 U	0.25 J	0.34 J	0.31 J	0.32 J	0.36 J	0.29 J	0.32 J	0.15 J	10 U	NA	NA	NA	NA	NA
Methylcyclohexane	ug/l			20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	NA	NA	NA	NA	NA
Methylene chloride	ug/l	5		20 U	10 U	10 U	10 U	0.19 U	10 U	10 U	0.15 U	0.28 U	0.31 JB	0.21 JB	0.14 JB	0.33 JB	0.28 J B	10 U	4 U	4 U	2 U	2 U	1 U
Styrene	ug/l	5		20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	2 U	2 U	2 U	2 U	1 U
Tetrachloroethene	ug/l	5		20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	2 U	2 U	2 U	2 U	1 U
Toluene	ug/l	5		20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	0.14 J	10 U	1 U	10 U	1 U	1 U	10 U	2 U	2.6	2 U	2 U	0.58 J
trans-1,2-Dichloroethene	ug/l	5		20 U	10 U	10 U	10 U	0.36 J	10 U	0.35 J	0.32 J	0.38 J	0.36 J	0.32 J	0.41 J	0.28 J	0.18 J	10 U	2 U	2 U	2 U	2 U	1 U
trans-1,3-Dichloropropene	ug/l	0.4		20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	2 U	2 U	2 U	2 U	1 U
Trichloroethene	ug/l	5		20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	0.1 J	10 U	0.17 J	1 U	10 U	2 U	2 U	2 U	2 U	1 U
Trichlorofluoromethane	ug/l	5		20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	10 U	NA	NA	NA	NA	NA
Vinyl chloride	ug/l	2		6 J	6 J	4 J	5 J	4.4 J	4 J	4.4 J	3.3 J	3.4 J	3.1 J	3.6	3.1 J	3.5	3	10 U	4.6	2 U	1.7 J	2 U	1 U
Xylenes, Total	ug/l	5		20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	3	10 U	3 U	3 U	10 U	2 U	2 U	2 U	2 U	1 U

Notes: - indicates value exceeds Class GA Standard or Guidance level.

Data Qualifiers:
ND - Not Detected, U-undetected,
J or E - Estimated value,
RE - re-extraction, D-Diluted
B-Analyte found in associated blank as well as in the sample.
NA-Parameter Not Analyzed

Pioneer Midler Avenue LLC

Summary of Groundwater VOC Data

Parameter	Units	NYSDEC GA		MW-10D DL		MW-10D		MW-10D DL		MW-10D		MW-10D		MW-10D		MW-10D		MW-10D		MW-10D		MW-10D		MW-10D		MW-10D		MW-10D		MW-10D		MW-10D DL		MW-10D		MW-10D		MW-10D DL		MW-10D		MW-10D		MW-10D	
Sample Date		Std	Guid	01/31/05		05/02/06		05/02/06		08/23/07		02/12/08		06/02/08		10/06/08		12/23/08		03/02/09		06/02/09		09/30/09		12/21/09		03/02/10		06/07/10		10/26/10		05/12/11		06/27/12		12/17/12		12/17/12		06/20/13		12/20/13		07/01/14		12/22/14	
1,1,1-Trichloroethane	ug/l	5		80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	4	U	20	U	20	U	20	U	40	U
1,1,2,2-Tetrachloroethane	ug/l	5		80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	4	U	20	U	20	U	20	U	40	U
1,1,2-Trichloroethane	ug/l	5		80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	4	U	20	U	20	U	20	U	40	U
1,1,2-Tricloro-1,2,2,-triflouroethane	ug/l	5		80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	4	U	20	U	NA		NA		NA		40	U
1,1-Dichloroethane	ug/l	5		80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	0.67	J	20	U	4	U	20	U	20	U	20	U	40	U
1,1-Dichloroethene	ug/l	5		80	U	10	U	40	U	28		20	U	20	U	0.33	J	20	U	0.65	J	0.43	J	0.56	J	0.41	J	0.38	J	0.52	J	0.51	J	4	U	20	U	4	U	20	U	20	U	20	U	40	U
1,2,4-Trichlorobenzene	ug/l	5		80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	4	U	20	U	20	U	20	U	40	U
1,2-Dibromo-3-chloropropane	ug/l	0.04		80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	NA		NA		NA		20	U	20	U	20	U	40	U
1,2-Dibromoethane	ug/l			80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	4	U	20	U	20	U	20	U	40	U
1,2-Dichlorobenzene	ug/l	3		80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	4	U	20	U	20	U	20	U	40	U
1,2-Dichloroethane	ug/l	0.6		80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	4	U	20	U	20	U	20	U	40	U
1,2-Dichloropropane	ug/l	1		80	U	10	U	40	U	20	`	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	4	U	20	U	20	U	20	U	40	U
1,3-Dichlorobenzene	ug/l	3		80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	4	U	20	U	20	U	20	U	40	U
1,4-Dichlorobenzene	ug/l	3		80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	4	U	20	U	20	U	20	U	40	U
2-Butanone (MEK)	ug/l		50	80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	20	U	100	U	100	U	100	U	200	U
2-Hexanone	ug/l		50	80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	20	U	100	U	100	U	100	U	200	U
4-Methyl-2-pentanone (MIBK)	ug/l			80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	20	U	100	U	100	U	100	U	200	U
Acetone	ug/l		50	80	U	10	U	40	U	20	U	20	U	2	U	0.74	U	20	U	0.68	U	1.8	U	1.5	JB	1.6	JB	1.9	J B	3.2	JB	1.7	JB	3.2	J B	20	U	20	U	100	U	100	U	100	U	200	U
Benzene	ug/l	1		80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	4	U	20	U	20	U	20	U	40	U
Bromodichloromethane	ug/l		50	80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	4	U	20	U	20	U	20	U	40	U
Bromoform	ug/l		50	80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	4	U	20	U	20	U	20	U	40	U
Bromomethane	ug/l			80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	0.47	J	20	U	4	U	20	U	20	U	20	U	40	U
Carbon disulfide	ug/l	60		80	U	10	U	40	U	20	U	20	U	20	U	0.49	U	20	U	10	U	0.72	U	0.61	J	3.5	J	0.37	J	0.51	J	2	U	1.1	J B	20	U	4	U	20	U	20	U	20	U	40	U
Carbon tetrachloride	ug/l	5		80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	4	U	20	U	20	U	20	U	40	U
Chlorobenzene	ug/l	5		80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	4	U	20	U	20	U	20	U	40	U
Chloroethane	ug/l	5		80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	4	U	20	U	20	U	20	U	40	U
Chloroform	ug/l	7		80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	4	U	20	U	20	U	20	U	40	U
Chloromethane	ug/l			80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	4	U	20	U	20	U	20	U	40	U
cis-1,2-Dichloroethene	ug/l	5		700	D	420		420	D	220		200		320		190		340		200		220		280		200		210		190		290		380		550		260	E	310		320		480		510	J	410	
cis-1,3-Dichloropropene	ug/l	0.4		80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	4	U	20	U	20	U	20	U	40	
Cyclohexane	ug/l			80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	NA		NA		NA		NA		NA		NA	
Dibromochloromethane	ug/l	5		80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	4	U	20	U	20	U	20	U	40	
Dichlorodifluoromethane	ug/l	5		80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	NA		NA		NA		NA		NA		NA	
Ethylbenzene	ug/l	5		80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	4	U	20	U	20	U	20	U	40	
Isopropylbenzene	ug/l	5		80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	NA		NA		NA		NA		NA		NA	
Methyl acetate	ug/l			80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	NA		NA		NA		NA		NA		NA	
Methyl tert butyl ether	ug/l	10		80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	NA		NA		NA		NA		NA		NA	
Methylcyclohexane	ug/l			80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	NA		NA		NA		NA		NA		NA	
Methylene chloride	ug/l	5		80	U	10	U	40	U	2	J	20	U	20	U	0.16	U	20	U	0.11	U	1	U	2.2	JB	0.86	JB	0.99	J B	1.5	JB	1.7	JB	6.1	B	20	U	8		40		40		40	U	40	U	80	
Styrene	ug/l	5		80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	4	U	20	U	20	U	20	U	40	
Tetrachloroethene	ug/l	5		80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	4	U	20	U	20	U	20	U	40	
Toluene	ug/l	5		80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	0.14	U	20	U	0.21	J	0.22	J	2	U	20	U	2	U	4	U	20	U	4	U	20	U	20	U	20	U	40	
trans-1,2-Dichloroethene	ug/l	5		46	DJ	25		22	DJ	25		16	J	19	J	13		25		18		14	J	13	J	12	J	12		11	J	14		19		28		16		17	J	16	J	19	J	25	J	19	J
trans-1,3-Dichloropropene	ug/l	0.4		80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	4	U	20	U	20	U	20	U	40	
Trichloroethene	ug/l	5		80	U	2	J	40	U	20	U	1	J	2	J	1.1	J	1	J	0.69	J	0.41	J	0.53	J	0.59	J	0.59	J	0.52	J	0.88	J	4	U	20	U	4	U	20	U	20	U	20	U	40	
Trichlorofluoromethane	ug/l	5		80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	2	U	20	U	2	U	4	U	20	U	NA		NA		NA		NA		NA		NA	
Vinyl chloride	ug/l	2		32	DJ	60	J	58	D	78		96		82		160		76		170		160		180		170		150		170		140		93		28		270	E	320	E	81		90		84		74	
Xylenes, Total	ug/l	5		80	U	10	U	40	U	20	U	20	U	20	U	10	U	20	U	10	U	20	U	20	U	20	U	6	U	20	U	6		12	U	20	U	4	4	20	U	20	U	20	U	40	U	40	

Notes: - indicates value exceeds Class GA Standard or Guidance level.

Data Qualifiers:
ND - Not Detected, U-undetected,
J or E - Estimated value,
RE - re-extraction, D-Diluted
B-Analyte found in associated blank as well as in the sample.
NA-Parameter Not Analyzed

Pioneer Midler Avenue LLC

Summary of Groundwater VOC Data

Parameter	Units	NYSDEC GA		MW-13D DL		MW-13D RE		MW-13D		MW-13D		MW-13D DL		MW-13D		MW-13D DL		MW-13D		MW-13D DL		MW-13D		MW-13D DL		MW-13D		MW-13D DL		MW-13D		MW-13D	
Sample Date		Std	Guid	05/03/06		05/03/06		04/11/07		07/20/07		07/20/07		08/23/07		08/23/07		10/11/07		10/11/07		02/12/08		06/02/08		06/02/08		10/06/08		10/06/08		12/23/08		03/02/09	
1,1,1-Trichloroethane	ug/l	5		100	U	50	U	40	U	50	U	800	U	100	U	1,000	U	10	U	2,000	U	200	U	20	U	200	U	10	U	20	U	200	U	200	U
1,1,2,2-Tetrachloroethane	ug/l	5		100	U	50	U	40	U	50	U	800	U	100	U	1,000	U	10	U	2,000	U	200	U	20	U	200	U	10	U	20	U	200	U	200	U
1,1,2-Trichloroethane	ug/l	5		100	U	50	U	40	U	50	U	800	U	100	U	1,000	U	10	U	2,000	U	200	U	20	U	200	U	10	U	20	U	200	U	200	U
1,1,2-Tricloro-1,2,2,-triflouroethane	ug/l	5		100	U	50	U	40	U	50	U	800	U	100	U	1,000	U	10	U	2,000	U	200	U	20	U	200	U	10	U	20	U	200	U	200	U
1,1-Dichloroethane	ug/l	5		100	U	50	U	40	U	50	U	800	U	100	U	1,000	U	10	U	2,000	U	200	U	20	U	200	U	10	U	20	U	200	U	200	U
1,1-Dichloroethene	ug/l	5		100	U	50	U	40	U	5.3	J	110	J	100	U	1,000	U	10	U	2,000	U	200	U	20	U	200	U	10	U	20	U	200	U	200	U
1,2,4-Trichlorobenzene	ug/l	5		100	U	50	U	40	U	50	U	800	U	100	U	1,000	U	10	U	2,000	U	200	U	20	U	200	U	10	U	20	U	200	U	0.83	U
1,2-Dibromo-3-chloropropane	ug/l	0.04		100	U	50	U	40	U	50	U	800	U	100	U	1,000	U	10	U	2,000	U	200	U	20	U	200	U	10	U	20	U	200	U	200	U
1,2-Dibromoethane	ug/l			100	U	50	U	40	U	50	U	800	U	100	U	1,000	U	10	U	2,000	U	200	U	20	U	200	U	10	U	20	U	200	U	200	U
1,2-Dichlorobenzene	ug/l	3		100	U	50	U	40	U	50	U	800	U	100	U	1,000	U	10	U	2,000	U	200	U	20	U	200	U	10	U	20	U	200	U	200	U
1,2-Dichloroethane	ug/l	0.6		100	U	50	U	40	U	50	U	800	U	100	U	1,000	U	10	U	2,000	U	200	U	20	U	200	U	10	U	20	U	200	U	200	U
1,2-Dichloropropane	ug/l	1		100	U	50	U	40	U	50	U	800	U	100	U	1,000	U	10	U	2,000	U	200	U	20	U	200	U	10	U	20	U	200	U	200	U
1,3-Dichlorobenzene	ug/l	3		100	U	50	U	40	U	50	U	800	U	100	U	1,000	U	10	U	2,000	U	200	U	20	U	200	U	10	U	20	U	200	U	200	U
1,4-Dichlorobenzene	ug/l	3		100	U	50	U	40	U	50	U	800	U	100	U	1,000	U	10	U	2,000	U	200	U	20	U	200	U	10	U	20	U	200	U	200	U
2-Butanone (MEK)	ug/l		50	100	U	50	U	1,300		50	U	800	U	100	U	1,000	U	10	U	2,000	U	200	U	2	J	200	U	10	U	20	U	200	U	200	U
2-Hexanone	ug/l		50	100	U	50	U	200	U	50	U	800	U	100	U	1,000	U	10	U	2,000	U	200	U	20	U	200	U	10	U	20	U	200	U	200	U
4-Methyl-2-pentanone (MIBK)	ug/l			100	U	50	U	170	J	23	J	800	U	44	J	1,000	U	14		2,000		200	U	2	J	200	U	4.3	J	3.7	J	200	U	200	U
Acetone	ug/l		50	100	U	50	U	5,000		24	J	130	J	22	J	1,000	U	10	U	2,000	U	200	U	6	U	200	U	5.5	J	20	U	200	U	23	JB
Benzene	ug/l	1		100	U	50	U	37	J	16	J	15	J	100	U	1,000	U	8	J	2,000	U	200	U	6	J	200	U	5.5	J	5.0	J	200	U	4.9	J
Bromodichloromethane	ug/l		50	100	U	50	U	40	U	50	U	800	U	100	U	1,000	U	10	U	2,000	U	200	U	20	U	200	U	10	U	20	U	200	U	200	U
Bromoform	ug/l		50	100	U	50	U	40	U	50	U	800	U	100	U	1,000	U	10	U	2,000	U	200	U	20	U	200	U	10	U	20	U	200	U	200	U
Bromomethane	ug/l			100	U	50	U	40	U	50	U	800	U	100	U	1,000	U	10	U	2,000	U	200	U	20	U	200	U	10	U	20	U	200	U	200	U
Carbon disulfide	ug/l	60		100	U	50	U	40	U	14	J	800	U	100	U	1,000	U	9	J	2,000	U	200	U	20	U	200	U	0.7	U	1.0	U	200	U	200	U
Carbon tetrachloride	ug/l	5		100	U	50	U	40	U	50	U	800	U	100	U	1,000	U	10	U	2,000	U	200	U	20	U	200	U	10	U	20	U	200	U	200	U
Chlorobenzene	ug/l	5		100	U	50	U	40	U	50	U	800	U	100	U	1,000	U	10	U	2,000	U	200	U	20	U	200	U	10	U	20	U	200	U	200	U
Chloroethane	ug/l	5		100	U	50	U	40	U	50	U	800	U	100	U	1,000	U	10	U	2,000	U	200	U	3	J	200	U	10	U	20	U	200	U	15	J
Chloroform	ug/l	7		100	U	50	U	40	U	50	U	800	U	100	U	1,000	U	10	U	2,000	U	200	U	20	U	200	U	10	U	20	U	200	U	200	U
Chloromethane	ug/l			100	U	50	U	40	U	50	U	800	U	100	U	1,000	U	10	U	2,000	U	200	U	20	U	200	U	10	U	20	U	200	U	200	U
cis-1,2-Dichloroethene	ug/l	5		750	D	630		980		3,400	E	3,200		1,600		1,700	D	10	D	2,000	D	430		39		39	DJ	38		36		50	J	86	
cis-1,3-Dichloropropene	ug/l	0.4		100	U	50	U	40	U	50	U	800	U	100	U	1,000	U	10	U	560	J	200	U	20	U	200	U	10	U	20	U	200	U	200	U
Cyclohexane	ug/l			100	U	50	U	40	U	50	U	800	U	100	U	1,000	U	10	U	2,000	U	200	U	20	U	200	U	10	U	20	U	200	U	200	U
Dibromochloromethane	ug/l	5		100	U	50	U	40	U	50	U	800	U	100	U	1,000	U	10	U	2,000	U	200	U	20	U	200	U	10	U	20	U	200	U	200	U
Dichlorodifluoromethane	ug/l	5		100	U	50	U	40	U	50	U	800	U	100	U	1,000	U	310	EJ	2,000	EJ	200	U	20	U	200	U	10	U	20	U	200	U	200	U
Ethylbenzene	ug/l	5		100	U	50	U	40	U	0.86	J	800	U	100	U	1,000	U	1	J	2,000	U	200	U	20	U	200	U	0.49	J	0.42	J	200	U	0.88	J
Isopropylbenzene	ug/l	5		100	U	50	U	40	U	50	U	800	U	100	U	1,000	U	0.23	JM	2,000	JM	200	U	20	U	200	U	10	U	20	U	200	U	200	U
Methyl acetate	ug/l			100	U	50	U	40	U	50	U	800	U	100	U	1,000	U	5	J	2,000	J	200	U	20	U	200	U	3.3	J	1.7	J	200	U	200	U
Methyl tert butyl ether	ug/l	10		100	U	50	U	40	U	50	U	800	U	100	U	1,000	U	10	U	2,000	U	200	U	20	U	200	U	10	U	20	U	200	U	200	U
Methylcyclohexane	ug/l			100	U	50	U	40	U	50	U	800	U	100	U	1,000	U	10	U	2,000	U	200	U	3	J	200	U	4.7	J	4	J	200	U	4.7	J
Methylene chloride	ug/l	5		100	U	50	U	32	B	2.6	JB	800	U	14	J	1,000	U	10	U	49	U	13	J	20	U	200	U	0.2	U	1.2	U	200	U	4.3	U
Styrene	ug/l	5		100	U	50	U	40	U	50	U	800	U	100	U	1,000	U	10	U	2,000	U	200	U	20	U	200	U	10	U	20	U	200	U	200	U
Tetrachloroethene	ug/l	5		36	B	50	U	40	U	160		160	J	100	U	1,000	U	10	U	2,000	U	200	U	20	U	200	U	10	U	20	U	200	U	1.3	U
Toluene	ug/l	5		100	U	50	U	40		18	J	16	J	17	J	1,000	U	10	U	2,000	U	10	J	6	J	200	U	9.2	J	9.2	J	200	U	12	J
trans-1,2-Dichloroethene	ug/l	5		13	DJ	13	J	95		150		93	J	93	J	1,000	U	60		2,000		36	J	9	J	200	U	10		9.9	J	200	U	6.8	J
trans-1,3-Dichloropropene	ug/l	0.4		100	U	50	U	40	U	50	U	800	U	100	U	1,000	U	10	U	2,000	U	200	U	20	U	200	U	10	U	20	U	200	U	200	U
Trichloroethene	ug/l	5		100	U	50	U	40	U	91		98	J	100	U	1,000	U	10	U	2,000	U	200	U	20	U	200	U	0.17	J	20	U	200	U	200	U
Trichlorofluoromethane	ug/l	5		100	U	50	U	40	U	50	U	800	U	100	U	1,000	U	10	U	2,000	U	200	U	20	U	200	U	10	U	20	U	200	U	200	U
Vinyl chloride	ug/l	2		900	D	720	J	2,000		9,500	E	7,200		13,000	E	16,000	D	650	EJ	21,000		3100		450	E	380	D	290	J	270	J	150	J	570	
Xylenes, Total	ug/l	5		U	U	50	U	120	U	4.8	J	800	U	100	U	1,000	U	7	J	2,000	J	200	U	20	U	200	U	2.6	J	2.3	J	200	U	2.6	U

Notes: ☐ - indicates value exceeds Class GA Standard or Guidance level.

Data Qualifiers:
ND - Not Detected, U-undetected,
J or E - Estimated value,
RE - re-extraction, D-Diluted
B-Analyte found in associated blank as well as in the sample.
NA-Parameter Not Analyzed

Pioneer Midler Avenue LLC

Summary of Groundwater VOC Data

Parameter	Units	NYSDEC GA		MW-13D		MW-13D		MW-13D		MW-13D DL		MW-13D DL		MW-13D DL		MW-13D DL		MW-13D		MW-13D DL		MW-13D DL		MW-13D		MW-13D		MW-13D		MW-13D DL	
Sample Date		Std	Guid	06/02/09		09/30/09		12/21/09		03/02/10		03/02/10		06/07/10		10/26/10		05/12/11		06/27/12		12/17/12		12/17/12		06/20/13		12/20/13		07/01/14		12/22/14		12/22/14	
1,1,1-Trichloroethane	ug/l	5		100	U	50	U	50	U	5	U	50	U	100	U	5	U	10	U	50	U	10	U	200	U	20	U	20	U	20	U	50	U	200	U
1,1,2,2-Tetrachloroethane	ug/l	5		100	U	50	U	50	U	5	U	50	U	100	U	5	U	10	U	50	U	10	U	200	U	20	U	20	U	20	U	50	U	200	U
1,1,2-Trichloroethane	ug/l	5		100	U	50	U	50	U	5	U	50	U	100	U	5	U	10	U	50	U	10	U	200	U	20	U	20	U	20	U	50	U	200	U
1,1,2-Tricloro-1,2,2,-triflouroethane	ug/l	5		100	U	50	U	50	U	5	U	50	U	100	U	5	U	10	U	50	U	NA		NA		NA		NA		NA		50	U	200	U
1,1-Dichloroethane	ug/l	5		100	U	50	U	50	U	5	U	50	U	100	U	5	U	10	U	50	U	10	U	200	U	20	U	20	U	20	U	50	U	200	U
1,1-Dichloroethene	ug/l	5		100	U	50	U	50	U	5.1		6.5	J	1.6	J	0.57	J	3.3	J	50	U	10	U	200	U	20	U	20	U	20	U	50	U	200	U
1,2,4-Trichlorobenzene	ug/l	5		100	U	50	U	50	U	5	U	50	U	100	U	5	U	10	U	50	U	10	U	200	U	20	U	20	U	20	U	50	U	200	U
1,2-Dibromo-3-chloropropane	ug/l	0.04		100	U	50	U	50	U	5	U	50	U	100	U	5	U	10	U	NA		NA		NA		20	U	20	U	20	U	50	U	200	U
1,2-Dibromoethane	ug/l			100	U	50	U	50	U	5	U	50	U	100	U	5	U	10	U	50	U	10	U	200	U	20	U	20	U	20	U	50	U	200	U
1,2-Dichlorobenzene	ug/l	3		100	U	50	U	50	U	5	U	50	U	100	U	5	U	10	U	50	U	10	U	200	U	20	U	20	U	20	U	50	U	200	U
1,2-Dichloroethane	ug/l	0.6		100	U	50	U	50	U	5	U	50	U	100	U	5	U	10	U	50	U	10	U	200	U	20	U	20	U	20	U	50	U	200	U
1,2-Dichloropropane	ug/l	1		100	U	50	U	50	U	5	U	50	U	100	U	5	U	10	U	50	U	10	U	200	U	20	U	20	U	20	U	50	U	200	U
1,3-Dichlorobenzene	ug/l	3		100	U	50	U	50	U	5	U	50	U	100	U	5	U	10	U	50	U	10	U	200	U	20	U	20	U	20	U	50	U	200	U
1,4-Dichlorobenzene	ug/l	3		100	U	50	U	50	U	5	U	50	U	100	U	5	U	10	U	50	U	10	U	200	U	20	U	20	U	20	U	50	U	200	U
2-Butanone (MEK)	ug/l		50	100	U	50	U	50	U	5	U	50	U	100	U	5	U	10	U	50	U	50	U	1000	U	100	U	100	U	100	U	250	U	1000	U
2-Hexanone	ug/l		50	100	U	50	U	50	U	5	U	49	J	100	U	5	U	10	U	50	U	50	U	1000	U	100	U	100	U	100	U	250	U	1000	U
4-Methyl-2-pentanone (MIBK)	ug/l			4.2	J	50	U	2.1	J	5	U	50	U	100	U	5	U	10	U	50	U	50	U	1000	U	100	U	100	U	100	U	250	U	1000	U
Acetone	ug/l		50	12	U	7.5	JB	6.3	JB	7.6	B	29	J B	15	JB	2.7	JB	9	J B	50	U	50	U	1000	U	100	U	100	U	100	U	50	U	200	U
Benzene	ug/l	1		4	J	3.7	J	4.1	J	5.4		50	U	5.4	J	5.3		3.6	J	50	U	3.9	J	200	U	20	U	20	U	20	U	50	U	200	U
Bromodichloromethane	ug/l		50	100	U	50	U	50	U	5	U	50	U	100	U	5	U	10	U	50	U	10	U	200	U	20	U	20	U	20	U	50	U	200	U
Bromoform	ug/l		50	100	U	50	U	50	U	5	U	50	U	100	U	5	U	10	U	50	U	10	U	200	U	20	U	20	U	20	U	50	U	200	U
Bromomethane	ug/l			100	U	50	U	50	U	5	U	50	U	100	U	5	U	10	U	50	U	10	U	200	U	20	U	20	U	20	U	50	U	200	U
Carbon disulfide	ug/l	60		3.5	J	1.9	J	9.5	J	1.4	J	27	J	2.1	J	0.59	J	2.2	J	50	U	10	U	200	U	20	U	20	U	20	U	50	U	200	U
Carbon tetrachloride	ug/l	5		100	U	50	U	50	U	5	U	50	U	100	U	5	U	10	U	50	U	10	U	200	U	20	U	20	U	20	U	50	U	200	U
Chlorobenzene	ug/l	5		100	U	50	U	50	U	5	U	50	U	100	U	5	U	10	U	50	U	10	U	200	U	20	U	20	U	20	U	50	U	200	U
Chloroethane	ug/l	5		100	U	50	U	50	U	5	U	50	U	100	U	5	U	10	U	50	U	10	U	200	U	20	U	20	U	20	U	50	U	200	U
Chloroform	ug/l	7		100	U	50	U	50	U	5	U	50	U	100	U	5	U	10	U	50	U	10	U	200	U	20	U	20	U	20	U	50	U	200	U
Chloromethane	ug/l			100	U	50	U	50	U	5	U	50	U	100	U	5	U	10	U	50	U	10	U	200	U	20	U	20	U	20	U	50	U	200	U
cis-1,2-Dichloroethene	ug/l	5		81	J	61		120		2900	E	3200		970		260		670		170		1100	E	1200		260		1900		360		1300	J	1200	
cis-1,3-Dichloropropene	ug/l	0.4		100	U	50	U	50	U	5	U	50	U	100	U	5	U	10	U	50	U	10	U	200	U	20	U	20	U	20	U	50	U	200	U
Cyclohexane	ug/l			100	U	50	U	50	U	5	U	50	U	100	U	5	U	10	U	50	U	NA		NA		20	U	20		20	U	50	U	200	U
Dibromochloromethane	ug/l	5		100	U	50	U	50	U	5	U	50	U	100	U	5	U	10	U	50	U	10	U	200	U	20	U	20	U	20	U	50	U	200	U
Dichlorodifluoromethane	ug/l	5		100	U	50	U	50	U	5	U	50	U	100	U	5	U	10	U	50	U	NA		NA		20	U	20		20	U	50	U	200	U
Ethylbenzene	ug/l	5		100	U	50	U	50	U	5	U	50	U	100	U	5	U	10	U	50	U	10	U	200	U	20	U	20	U	20	U	50	U	200	U
Isopropylbenzene	ug/l	5		100	U	50	U	50	U	5	U	50	U	100	U	5	U	10	U	50	U	NA		NA		NA		NA		NA		NA		NA	
Methyl acetate	ug/l			100	U	50	U	50	U	5	U	50	U	30	J	5	U	10	U	50	U	NA		NA		NA		NA		NA		NA		NA	
Methyl tert butyl ether	ug/l	10		100	U	50	U	50	U	5	U	50	U	100	U	5	U	10	U	50	U	NA		NA		NA		NA		NA		NA		NA	
Methylcyclohexane	ug/l			100	U	50	U	2.5	J	5	U	50	U	100	U	5	U	10	U	50	U	NA		NA		NA		NA		NA		NA		NA	
Methylene chloride	ug/l	5		17	U	8.8	JB	2.2	JB	3	J B	33	J B	9.8	JB	6.9	B	19	B	50	U	20	U	400	U	40	U	40	U	40	U	100	U	400	U
Styrene	ug/l	5		100	U	50	U	50	U	5	U	50	U	100	U	5	U	10	U	50	U	10	U	200	U	20	U	20	U	20	U	50	U	200	U
Tetrachloroethene	ug/l	5		100	U	50	U	50	U	46		50	U	2	J	5	U	10	U	50	U	10	U	200	U	20	U	20	U	20	U	50	U	200	U
Toluene	ug/l	5		13	J	7.9	J	5.8	J	7		8.5	J	7.1	J	5.8		4.3	J	50	U	28		200	U	20	U	20	U	20	U	50	U	200	U
trans-1,2-Dichloroethene	ug/l	5		7.2	J	8.2	J	11	J	28		36	J	11	J	8.3		13		50	U	10	U	200	U	20	U	25		50	U	50	U	200	U
trans-1,3-Dichloropropene	ug/l	0.4		100	U	50	U	50	U	5	U	50	U	100	U	5	U	10	U	50	U	10	U	200	U	20	U	20	U	20	U	50	U	200	U
Trichloroethene	ug/l	5		100	U	50	U	50	U	67		78		2.1	J	5	U	10	U	50	U	10	U	200	U	20	U	20		20	U	50	U	200	U
Trichlorofluoromethane	ug/l	5		100	U	50	U	50	U	5	U	50	U	100	U	5	U	10	U	50	U	NA		NA		NA		NA		NA		NA		NA	
Vinyl chloride	ug/l	2		1600		580		760		5800	E	7400		1500		510		1000		320		2100	E	2100		400		3200		780		1700	J	1600	
Xylenes, Total	ug/l	5		1.5	J	1.3	J	2.3	J	3.9	J	150		100	U	1.8		30	U	50	U	10	U	200	U	20	U	20	U	20	U	50	U	200	U

Notes: - indicates value exceeds Class GA Standard or Guidance level.

Data Qualifiers:
ND - Not Detected, U-undetected,
J or E - Estimated value,
RE - re-extraction, D-Diluted
B-Analyte found in associated blank as well as in the sample.
NA-Parameter Not Analyzed

Pioneer Midler Avenue LLC

Summary of Groundwater VOC Data

Parameter	Units	NYSDEC GA		MW-14D		MW-14D		MW-14D		MW-14D		MW-14D		MW-14D		MW-14D		MW-14D		MW-14D		MW-14D		MW-14D		MW-14D		MW-14D	
Sample Date		Std	Guid	06/02/08		10/06/08		12/23/08		03/02/09		06/02/09		09/30/09		12/21/09		03/02/10		06/07/10		10/26/10		05/12/11		06/27/12		12/17/12		06/20/13		12/20/13	
1,1,1-Trichloroethane	ug/l	5		1000	U	50	U	400	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	100	U	20	U	20	U	20	U
1,1,2,2-Tetrachloroethane	ug/l	5		1000	U	50	U	400	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	100	U	20	U	20	U	20	U
1,1,2-Trichloroethane	ug/l	5		1000	U	50	U	400	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	100	U	20	U	20	U	20	U
1,1,2-Tricloro-1,2,2,-triflouroethane	ug/l	5		1000	U	50	U	400	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	100	U	NA		NA		NA	
1,1-Dichloroethane	ug/l	5		1000	U	50	U	400	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	100	U	20	U	20	U	20	U
1,1-Dichloroethene	ug/l	5		1000	U	50	U	400	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	100	U	20	U	20	U	20	U
1,2,4-Trichlorobenzene	ug/l	5		1000	U	50	U	400	U	0.32	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	100	U	20	U	20	U	20	U
1,2-Dibromo-3-chloropropane	ug/l	0.04		1000	U	50	U	400	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	NA		NA		20	U	20	U
1,2-Dibromoethane	ug/l			1000	U	50	U	400	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	100	U	20	U	20	U	20	U
1,2-Dichlorobenzene	ug/l	3		1000	U	50	U	400	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	100	U	20	U	20	U	20	U
1,2-Dichloroethane	ug/l	0.6		1000	U	50	U	400	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	100	U	20	U	20	U	20	U
1,2-Dichloropropane	ug/l	1		1000	U	50	U	400	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	100	U	20	U	20	U	20	U
1,3-Dichlorobenzene	ug/l	3		1000	U	50	U	400	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	100	U	20	U	20	U	20	U
1,4-Dichlorobenzene	ug/l	3		1000	U	50	U	400	U	0.3	J	0.14	J	10	U	10	U	0.12	J	10	U	1	U	1	U	100	U	100	U	100	U	100	U
2-Butanone (MEK)	ug/l		50	2100	J	290		56	J	2.5	J	10	U	10	U	0.72	J	1	U	10	U	1	U	1	U	100	U	100	U	100	U	100	U
2-Hexanone	ug/l		50	1000	U	50	U	400	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	100	U	100	U	100	U	100	U
4-Methyl-2-pentanone (MIBK)	ug/l			1000	U	17	J	400	U	5.5	J	2.8	J	1.4	J	10	U	0.98	J	0.86	J	0.71	J	1	U	100	U	100	U	100	U	100	U
Acetone	ug/l		50	8000	J	840		170	J	7.8	JB	120	J	2.6	JB	2.4	JB	1.3	B	4	JB	1.5	B	1.2	B	100	U	20	U	20	U	20	U
Benzene	ug/l	1		1000	U	5.8	J	400	U	3	J	3.6	J	2.7	J	2.9	J	2.7		2.3	J	2.3		1.6		100	U	20	U	20	U	20	U
Bromodichloromethane	ug/l		50	1000	U	50	U	400	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	100	U	20	U	20	U	20	U
Bromoform	ug/l		50	1000	U	50	U	400	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	100	U	20	U	20	U	20	U
Bromomethane	ug/l			1000	U	50	U	400	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	100	U	20	U	20	U	20	U
Carbon disulfide	ug/l	60		1000	U	2.7	U	400	U	10	U	10	U	19		2.6	J	1	U	0.68	J	0.53	J	1.4		100	U	20	U	20	U	20	U
Carbon tetrachloride	ug/l	5		1000	U	50	U	400	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	100	U	20	U	20	U	20	U
Chlorobenzene	ug/l	5		1000	U	50	U	400	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	100	U	20	U	20	U	20	U
Chloroethane	ug/l	5		1000	U	50	U	400	U	3.7	J	10	U	10	U	10	U	1	U	10	U	1	U	1	U	100	U	20	U	20	U	20	U
Chloroform	ug/l	7		1000	U	50	U	400	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	100	U	20	U	20	U	20	U
Chloromethane	ug/l			1000	U	50	U	400	U	10	U	10	U	0.47	J	10	U	1	U	10	U	1	U	1	U	100	U	20	U	20	U	20	U
cis-1,2-Dichloroethene	ug/l	5		1000	U	50	U	400	U	10	U	0.12	J	0.18	J	0.29	J	0.8	J	0.77	J	0.43	J	0.23	J	100	U	20	U	8.4	J	20	U
cis-1,3-Dichloropropene	ug/l	0.4		1000	U	50	U	400	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	100	U	20	U	20	U	20	U
Cyclohexane	ug/l			1000	U	50	U	400	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	100	U	NA		NA		NA	
Dibromochloromethane	ug/l	5		1000	U	50	U	400	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	100	U	20	U	20	U	20	U
Dichlorodifluoromethane	ug/l	5		1000	U	50	U	400	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	100	U	NA		NA		NA	
Ethylbenzene	ug/l	5		1000	U	2.3	J	400	U	1.4	J	1.4	J	0.99	J	1.3	J	1.1		0.92	J	1		0.65	J	100	U	20	U	20	U	20	U
Isopropylbenzene	ug/l	5		1000	U	50	U	400	U	10	U	0.11	J	10	U	10	U	1	U	10	U	1	U	1	U	100	U	NA		NA		NA	
Methyl acetate	ug/l			1000	U	30	J	400	U	10	U	10	U	6.3	J	10	U	3.3		10	U	1	U	1	U	100	U	NA		NA		NA	
Methyl tert butyl ether	ug/l	10		1000	U	50	U	400	U	10	U	10	U	10	U	10	U	0.1	J	10	U	1	U	1	U	100	U	NA		NA		NA	
Methylcyclohexane	ug/l			1000	U	50	U	400	U	0.83	J	0.75	J	10	U	0.63	J	0.96	J	10	U	0.72	J	1	U	100	U	NA		NA		NA	
Methylene chloride	ug/l	5		1000	U	3.2	U	83	J	0.19	U	0.12	U	0.27	JB	0.35	JB	0.25	J B	0.18	JB	0.29	JB	0.3	J B	100	U	20	U	40	U	40	U
Styrene	ug/l	5		1000	U	50	U	400	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	100	U	20	U	20	U	20	U
Tetrachloroethene	ug/l	5		1000	U	50	U	400	U	0.28	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	100	U	20	U	20	U	20	U
Toluene	ug/l	5		1000	U	24	J	400	U	14		17		14		15		14		13		12		8.9		100	U	20	U	20	U	20	U
trans-1,2-Dichloroethene	ug/l	5		1200		270		150	J	21		13		6.9	J	4	J	3.4		3.1	J	2		2.4		100	U	20	U	20	U	20	U
trans-1,3-Dichloropropene	ug/l	0.4		1000	U	50	U	400	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	100	U	20	U	20	U	20	U
Trichloroethene	ug/l	5		1000	U	50	U	400	U	10	U	0.13	J	0.24	J	0.35	J	0.45	J	0.32	J	0.34	J	0.21	J	100	U	20	U	20	U	20	U
Trichlorofluoromethane	ug/l	5		1000	U	50	U	400	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	100	U	NA		NA		NA	
Vinyl chloride	ug/l	2		####		530		400	U	4.5	J	5.4	J	3.7	J	3.1	J	5.3		4.3	J	3.6		3.6		100	U	20	U	54		8.4	J
Xylenes, Total	ug/l	5		1000	U	10	J	400	U	6.3	JB	6.9	J	4.9	J	6.2	J	5.2		4.6	J	4.8		3.1		100	U	20	U	20	U	20	U

Notes: - indicates value exceeds Class GA Standard or Guidance level.

Data Qualifiers:
ND - Not Detected, U-undetected,
J or E - Estimated value,
RE - re-extraction, D-Diluted
B-Analyte found in associated blank as well as in the sample.
NA-Parameter Not Analyzed

Pioneer Midler Avenue LLC

Summary of Groundwater VOC Data

Parameter	Units	NYSDEC GA		MW-15D		MW-15D		MW-15D		MW-15D		MW-15D		MW-15D		MW-15D		MW-15D		MW-15D		MW-15D		MW-15D		MW-15D		MW-15D		MW-15D		MW-15D	
Sample Date		Std	Guid	02/12/08		06/02/08		10/06/08		12/23/08		03/02/09		06/02/09		09/30/09		12/21/09		03/02/10		06/07/10		10/26/10		05/12/11		06/27/12		12/17/12		06/20/13		12/20/13		07/01/14		12/22/14	
1,1,1-Trichloroethane	ug/l	5		40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	4	U	4	U	4	U	4	U	1	U
1,1,2,2-Tetrachloroethane	ug/l	5		40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	4	U	4	U	4	U	4	U	1	U
1,1,2-Trichloroethane	ug/l	5		40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	4	U	4	U	4	U	4	U	1	U
1,1,2-Tricloro-1,2,2,-triflouroethane	ug/l	5		40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	NA		NA		NA		NA		NA	
1,1-Dichloroethane	ug/l	5		40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	4	U	4	U	4	U	4	U	1	U
1,1-Dichloroethene	ug/l	5		40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	4	U	4	U	4	U	4	U	1	U
1,2,4-Trichlorobenzene	ug/l	5		40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	4	U	4	U	4	U	4	U	1	U
1,2-Dibromo-3-chloropropane	ug/l	0.04		40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	NA		NA		4	U	4	U	4	U	1	U
1,2-Dibromoethane	ug/l			40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	4	U	4	U	4	U	4	U	1	U
1,2-Dichlorobenzene	ug/l	3		40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	4	U	4	U	4	U	4	U	1	U
1,2-Dichloroethane	ug/l	0.6		40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	4	U	4	U	4	U	4	U	1	U
1,2-Dichloropropane	ug/l	1		40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	4	U	4	U	4	U	4	U	1	U
1,3-Dichlorobenzene	ug/l	3		40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	4	U	4	U	4	U	4	U	1	U
1,4-Dichlorobenzene	ug/l	3		40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	4	U	4	U	4	U	4	U	1	U
2-Butanone (MEK)	ug/l		50	40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	20	U	20	U	20	U	20	U	5	U
2-Hexanone	ug/l		50	40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	20	U	20	U	20	U	20	U	5	U
4-Methyl-2-pentanone (MIBK)	ug/l			40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	20	U	20	U	20	U	20	U	5	U
Acetone	ug/l		50	5	J	40	U	1	U	10	U	10	U	1.6	U	1.6	JB	0.72	JB	1.5	B	2.9	JB	0.6	JB	0.71	J E	20	U	20	U	20	U	20	U	1.5	J	5	U
Benzene	ug/l	1		40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	4	U	4	U	4	U	4	U	1	U
Bromodichloromethane	ug/l		50	40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	4	U	4	U	4	U	4	U	1	U
Bromoform	ug/l		50	40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	4	U	4	U	4	U	4	U	1	U
Bromomethane	ug/l			40	U	40	U	0.32	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	4	U	4	U	4	U	4	U	1	U
Carbon disulfide	ug/l	60		40	U	40	U	0.35	U	10	U	10	U	1.1	J	3.8	J	1.3	J	0.71	J	0.45	J	0.14	J	0.87	J	20	U	4	U	1.3	J	4	U	4	U	1	U
Carbon tetrachloride	ug/l	5		40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	4	U	4	U	4	U	4	U	1	U
Chlorobenzene	ug/l	5		40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	4	U	4	U	4	U	4	U	1	U
Chloroethane	ug/l	5		40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	4	U	4	U	4	U	4	U	1	U
Chloroform	ug/l	7		40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	4	U	4	U	4	U	4	U	1	U
Chloromethane	ug/l			40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	4	U	4	U	4	U	4	U	1	U
cis-1,2-Dichloroethene	ug/l	5		6	J	4	J	4.1	J	10	U	4.9	J	4.4	J	4.4	J	4.4	J	4.5		5.3	J	3.6		4		20	U	5.1		3.7	J	3.9	J	4.9		4.2	
cis-1,3-Dichloropropene	ug/l	0.4		40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	4	U	4	U	4	U	4	U	1	U
Cyclohexane	ug/l			40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	NA		NA		NA		NA		NA	
Dibromochloromethane	ug/l	5		40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	4	U	4	U	4	U	4	U	1	U
Dichlorodifluoromethane	ug/l	5		40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	NA		NA		NA		NA		NA	
Ethylbenzene	ug/l	5		40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	4	U	4	U	4	U	4	U	1	U
Isopropylbenzene	ug/l	5		40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	NA		NA		NA		NA		NA	
Methyl acetate	ug/l			40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	NA		NA		NA		NA		NA	
Methyl tert butyl ether	ug/l	10		40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	NA		NA		NA		NA		NA	
Methylcyclohexane	ug/l			40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	NA		NA		NA		NA		NA	
Methylene chloride	ug/l	5		4	J	4	U	0.16	U	10	U	10	U	0.11	U	0.28	JB	0.34	JB	0.28	J B	0.18	JB	0.3	JB	0.28	J E	20	U	8	U	8	U	8	U	8	U	2	U
Styrene	ug/l	5		40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	4	U	4	U	4	U	4	U	1	U
Tetrachloroethene	ug/l	5		40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	4	U	4	U	4	U	4	U	1	U
Toluene	ug/l	5		40	U	40	U	0.11	U	10	U	0.12	U	10	U	0.15	J	10	U	1	U	10	U	1	U	1	U	20	U	4	U	4	U	4	U	4	U	1	U
trans-1,2-Dichloroethene	ug/l	5		40	U	40	U	0.67	J	10	U	1.1	J	1.2	J	1.2	J	1.2	J	0.91	J	1.1	J	0.58	J	0.86	J	20	U	4	U	4	U	4	U	1		0.77	J
trans-1,3-Dichloropropene	ug/l	0.4		40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	4	U	4	U	4	U	4	U	1	U
Trichloroethene	ug/l	5		40	U	40	U	10	U	10	U	0.25	J	0.21	J	0.2	J	0.23	J	0.27	J	10	U	1	U	0.16	J	20	U	4	U	4	U	4	U	4	U	1	U
Trichlorofluoromethane	ug/l	5		40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	20	U	NA		NA		NA		NA		NA	
Vinyl chloride	ug/l	2		40	U	40	U	2.7	J	10	U	2.6	J	2.3	J	1.9	J	1.9	J	2.2		2.5	J	1.8		2		20	U	4	U	4	U	4	U	4	U	1	U
Xylenes, Total	ug/l	5		40	U	40	U	10	U	10	U	10	U	10	U	10	U	10	U	3	U	10	U	1	U	3	U	20	U	4	U	4	U	4	U	4	U	1	U

Notes: [ ] - indicates value exceeds Class GA Standard or Guidance level.

Data Qualifiers:
ND - Not Detected, U-undetected,
J or E - Estimated value,
RE - re-extraction, D-Diluted
B-Analyte found in associated blank as well as in the sample.
NA-Parameter Not Analyzed

Pioneer Midler Avenue LLC

Summary of Groundwater VOC Data

Parameter	Units	NYSDEC GA		MW-16D		MW-16D		MW-16D		MW-16D		MW-16D		MW-16D		MW-16D		MW-16D		MW-16D		MW-16D		MW-16D		MW-16D		MW-16D		MW-16D		MW-16D		MW-16D	
Sample Date		Std	Guid	02/12/08		06/02/08		10/06/08		12/23/08		03/02/09		06/02/09		09/30/09		12/21/09		03/02/10		06/07/10		10/26/10		05/12/11		06/27/12		12/17/12		06/20/13		12/20/13	
1,1,1-Trichloroethane	ug/l	5		400	U	400	U	10	U	200	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	25	U	5	U	5	U	5	U
1,1,2,2-Tetrachloroethane	ug/l	5		400	U	400	U	10	U	200	U	10	U	10	U	0.64	J	10	U	1	U	10	U	1	U	1	U	25	U	5	U	5	U	5	U
1,1,2-Trichloroethane	ug/l	5		400	U	400	U	10	U	200	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	25	U	5	U	5	U	5	U
1,1,2-Tricloro-1,2,2,-triflouroethane	ug/l	5		400	U	400	U	10	U	200	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	25	U	NA		NA		NA	
1,1-Dichloroethane	ug/l	5		400	U	400	U	10	U	200	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	25	U	5	U	5	U	5	U
1,1-Dichloroethene	ug/l	5		400	U	400	U	10	U	200	U	10	U	10	U	10	U	0.12	J	1	U	10	U	1	U	1	U	25	U	5	U	5	U	5	U
1,2,4-Trichlorobenzene	ug/l	5		400	U	400	U	10	U	200	U	10	U	10	U	0.33	J	10	U	1	U	10	U	1	U	1	U	25	U	5	U	5	U	5	U
1,2-Dibromo-3-chloropropane	ug/l	0.04		400	U	400	U	10	U	200	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	NA		NA		5	U	5	U
1,2-Dibromoethane	ug/l			400	U	400	U	10	U	200	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	25	U	5	U	5	U	5	U
1,2-Dichlorobenzene	ug/l	3		400	U	400	U	10	U	200	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	25	U	5	U	5	U	5	U
1,2-Dichloroethane	ug/l	0.6		400	U	400	U	10	U	200	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	25	U	5	U	5	U	5	U
1,2-Dichloropropane	ug/l	1		400	U	400	U	10	U	200	U	10	U	10	U	0.12	J	10	U	1	U	10	U	1	U	1	U	25	U	5	U	5	U	5	U
1,3-Dichlorobenzene	ug/l	3		400	U	400	U	10	U	200	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	0.14	J	25	U	5	U	5	U	5	U
1,4-Dichlorobenzene	ug/l	3		400	U	400	U	10	U	200	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	25	U	5	U	5	U	5	U
2-Butanone (MEK)	ug/l		50	400	U	400	U	10	U	200	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	25	U	25	U	25	U	25	U
2-Hexanone	ug/l		50	400	U	400	U	10	U	200	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	25	U	25	U	25	U	25	U
4-Methyl-2-pentanone (MIBK)	ug/l			400	U	400	U	1.6	J	200	U	10	U	10	U	2.3	J	10	U	1	U	10	U	1	U	1	U	25	U	25	U	25	U	25	U
Acetone	ug/l		50	81	J	400	U	10	U	200	U	1	U	1.2	U	10	JB	1.6	JB	1.4	B	3.5	JB	1.3	B	0.95	J B	25	U	25	U	25	U	25	U
Benzene	ug/l	1		400	U	400	U	0.71	J	200	U	0.58	J	0.36	J	10	U	0.36	J	0.4	J	0.27	J	0.31	J	0.23	J	25	U	5	U	5	U	5	U
Bromodichloromethane	ug/l		50	400	U	400	U	10	U	200	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	25	U	5	U	5	U	5	U
Bromoform	ug/l		50	400	U	400	U	10	U	200	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	25	U	5	U	5	U	5	U
Bromomethane	ug/l			400	U	400	U	10	U	200	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	25	U	5	U	5	U	5	U
Carbon disulfide	ug/l	60		400	U	400	U	0.52	U	200	U	10	U	0.68	J	0.36	J	1.5	J	0.6	J B	0.22	J	0.26	J	1.4	B	25	U	5	U	5	U	5	U
Carbon tetrachloride	ug/l	5		400	U	400	U	10	U	200	U	10	U	10	U	0.33	J	10	U	1	U	10	U	1	U	1	U	25	U	5	U	5	U	5	U
Chlorobenzene	ug/l	5		400	U	400	U	10	U	200	U	10	U	10	U	0.2	J	0.2	J	1	U	10	U	1	U	1	U	25	U	5	U	5	U	5	U
Chloroethane	ug/l	5		400	U	400	U	10	U	200	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	25	U	5	U	5	U	5	U
Chloroform	ug/l	7		400	U	400	U	10	U	200	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	25	U	5	U	5	U	5	U
Chloromethane	ug/l			400	U	400	U	10	U	200	U	10	U	10	U	1.9	J	10	U	1	U	10	U	1	U	1	U	25	U	5	U	5	U	5	U
cis-1,2-Dichloroethene	ug/l	5		64	J	400	U	0.29	J	200	U	10	U	0.13	J	2.8	J	0.3	J	0.4	J	10	U	0.28	J	0.22	J	25	U	5	U	5	U	5	U
cis-1,3-Dichloropropene	ug/l	0.4		400	U	400	U	10	U	200	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	25	U	5	U	5	U	5	U
Cyclohexane	ug/l			400	U	400	U	10	U	200	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	25	U	NA		NA		NA	
Dibromochloromethane	ug/l	5		400	U	400	U	10	U	200	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	25	U	5	U	5	U	5	U
Dichlorodifluoromethane	ug/l	5		400	U	400	U	10	U	200	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	25	U	NA		NA		NA	
Ethylbenzene	ug/l	5		400	U	400	U	0.35	J	200	U	0.37	J	0.22	J	10	U	0.2	J	0.2	J	10	U	1	U	0.12	J	25	U	5	U	5	U	5	U
Isopropylbenzene	ug/l	5		400	U	400	U	10	U	200	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	25	U	NA		NA		NA	
Methyl acetate	ug/l			400	U	400	U	10	U	200	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	25	U	NA		NA		NA	
Methyl tert butyl ether	ug/l	10		400	U	400	U	10	U	200	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	25	U	NA		NA		NA	
Methylcyclohexane	ug/l			400	U	400	U	10	U	200	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	25	U	NA		NA		NA	
Methylene chloride	ug/l	5		31	J	33	J	0.15	U	200	U	10	U	0.12	U	0.25	JB	0.3	JB	0.3	J B	0.19	JB	0.3	J B	0.27	J B	25	U	10	U	10	U	10	U
Styrene	ug/l	5		400	U	400	U	10	U	200	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	25	U	5	U	5	U	5	U
Tetrachloroethene	ug/l	5		400	U	400	U	10	U	200	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	25	U	5	U	5	U	5	U
Toluene	ug/l	5		400	U	400	U	4.9	J	200	U	3.7	J	3	J	10	U	2	J	2		1.2	J	0.83	J	0.14	J	25	U	5	U	5	U	5	U
trans-1,2-Dichloroethene	ug/l	5		30	J	400	U	1.6	J	200	U	2.5	J	2.7	J	10	U	2.9	J	2.5		2	J	2.2		2.2		25	U	2.5	J	5	U	5	U
trans-1,3-Dichloropropene	ug/l	0.4		400	U	400	U	10	U	200	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	25	U	5	U	5	U	5	U
Trichloroethene	ug/l	5		400	U	400	U	10	U	200	U	10	U	0.12	J	10	U	0.21	J	0.3	J	10	U	0.19	J	0.2	J	25	U	5	U	5	U	5	U
Trichlorofluoromethane	ug/l	5		400	U	400	U	10	U	200	U	10	U	10	U	10	U	10	U	1	U	10	U	1	U	1	U	25	U	NA		NA		NA	
Vinyl chloride	ug/l	2		190	J	400	U	1.6	J	200	U	1.9	J	1.6	J	1.9	J	1.9	J	2.6		1.3	J	1.6		1	U	25	U	5	U	5	U	5	U
Xylenes, Total	ug/l	5		400	U	400	U	1.3	J	200	U	1	JB	0.9	J	0.31	J	0.59	J	0.8	J	0.34	J	0.53	J	3	U	25	U	5	U	5	U	5	U

Notes: ☐ - indicates value exceeds Class GA Standard or Guidance level.

Data Qualifiers:
ND - Not Detected, U-undetected,
J or E - Estimated value,
RE - re-extraction, D-Diluted
B-Analyte found in associated blank as well as in the sample.
NA-Parameter Not Analyzed

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-63037-1
Client Project/Site: Midler Semi-Annual Groundwater

For:
C&S Engineers, Inc.
499 Col. Eileen Collins Blvd
Syracuse, New York 13212

Attn: Mr. Wayne N Randall

Joseph V. Giacomazza

Authorized for release by:
7/17/2014 11:19:14 AM
Joe Giacomazza, Project Management Assistant II
joe.giacomazza@testamericainc.com

Designee for

Judy Stone, Senior Project Manager
(484)685-0868
judy.stone@testamericainc.com

Table of Contents

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery exceeds the control limits
E	Result exceeded calibration range.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-63037-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-63037-1

Receipt
The samples were received on 7/2/2014 1:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.4º C.

Except:

The client requested on 7/2/14 that the test for dissolved inorganic carbon (samples in amber vials with H2SO4) be cancelled. They did not filter these before putting into the preserved vials.

GC/MS VOA
Method(s) OLC02.1: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-10D (480-63037-3), MW-13D (480-63037-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

HPLC/IC
Method(s) 300.0: The following samples were diluted to bring the concentration of target analytes within the calibration range: (480-63037-3 MS), MW-10D (480-63037-3), MW-13D (480-63037-1), MW-9D (480-63037-2). Elevated reporting limits (RLs) are provided.

Method(s) 300.0: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: MW-15D (480-63037-4). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
Method(s) SM 3500 FE D: The following sample(s) was received outside of holding time: MW-10D (480-63037-3), MW-13D (480-63037-1), MW-15D (480-63037-4), MW-9D (480-63037-2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: Midler Semi-Annual Groundwater

TestAmerica Job ID: 480-63037-1

Client Sample ID: MW-13D — Lab Sample ID: 480-63037-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	360		50	17	ug/L	50		OLC02.1	Total/NA
Vinyl chloride	780		50	14	ug/L	50		OLC02.1	Total/NA
Sulfate	250		10.0	1.7	mg/L	5		300.0	Total/NA
Nitrate as N	0.020	J	0.050	0.020	mg/L	1		Nitrate by calc	Total/NA
Ferric Iron	0.25		0.10	0.075	mg/L	1		SM 3500	Total/NA
Sulfide	30.2		1.0	0.67	mg/L	1		SM 4500 S2 F	Total/NA
Dissolved Organic Carbon	45.3		1.0	0.43	mg/L	1		SM5310_D	Dissolved

Client Sample ID: MW-9D — Lab Sample ID: 480-63037-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.0	J	5.0	1.5	ug/L	1		OLC02.1	Total/NA
cis-1,2-Dichloroethene	2.3		1.0	0.34	ug/L	1		OLC02.1	Total/NA
Sulfate	389		20.0	3.5	mg/L	10		300.0	Total/NA
Nitrate as N	0.037	J	0.050	0.020	mg/L	1		Nitrate by calc	Total/NA
Ferric Iron	0.33		0.10	0.075	mg/L	1		SM 3500	Total/NA
Ferrous Iron	0.11	HF	0.10	0.075	mg/L	1		SM 3500 FE D	Total/NA
Sulfide	12.4		1.0	0.67	mg/L	1		SM 4500 S2 F	Total/NA
Dissolved Organic Carbon	6.1		1.0	0.43	mg/L	1		SM5310_D	Dissolved

Client Sample ID: MW-10D — Lab Sample ID: 480-63037-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	510	E	20	6.8	ug/L	20		OLC02.1	Total/NA
trans-1,2-Dichloroethene	25		20	8.5	ug/L	20		OLC02.1	Total/NA
Vinyl chloride	84		20	5.4	ug/L	20		OLC02.1	Total/NA
cis-1,2-Dichloroethene - DL	490		40	14	ug/L	40		OLC02.1	Total/NA
trans-1,2-Dichloroethene - DL	24	J	40	17	ug/L	40		OLC02.1	Total/NA
Vinyl chloride - DL	79		40	11	ug/L	40		OLC02.1	Total/NA
Sulfate	620		20.0	3.5	mg/L	10		300.0	Total/NA
Sulfide	27.4		1.0	0.67	mg/L	1		SM 4500 S2 F	Total/NA
Dissolved Organic Carbon	6.9		1.0	0.43	mg/L	1		SM5310_D	Dissolved

Client Sample ID: MW-15D — Lab Sample ID: 480-63037-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.5	J	5.0	1.5	ug/L	1		OLC02.1	Total/NA
cis-1,2-Dichloroethene	4.9		1.0	0.34	ug/L	1		OLC02.1	Total/NA
trans-1,2-Dichloroethene	1.0		1.0	0.43	ug/L	1		OLC02.1	Total/NA
Sulfate	609		20.0	3.5	mg/L	10		300.0	Total/NA
Ferric Iron	0.14		0.10	0.075	mg/L	1		SM 3500	Total/NA
Sulfide	32.2		1.0	0.67	mg/L	1		SM 4500 S2 F	Total/NA
Dissolved Organic Carbon	10.2		1.0	0.43	mg/L	1		SM5310_D	Dissolved

Client Sample ID: TRIP BLANK — Lab Sample ID: 480-63037-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.8	J	5.0	1.5	ug/L	1		OLC02.1	Total/NA
Methylene Chloride	0.59	J	2.0	0.46	ug/L	1		OLC02.1	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-13D
Date Collected: 07/01/14 09:30
Date Received: 07/02/14 01:00

Lab Sample ID: 480-63037-1
Matrix: Water

Method: OLC02.1 - Volatile Organic Compounds, Low Concetration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	14	ug/L			07/10/14 02:06	50
1,1,2,2-Tetrachloroethane	ND		50	20	ug/L			07/10/14 02:06	50
1,1,2-Trichloroethane	ND		50	10	ug/L			07/10/14 02:06	50
1,1-Dichloroethane	ND		50	16	ug/L			07/10/14 02:06	50
1,1-Dichloroethene	ND		50	13	ug/L			07/10/14 02:06	50
1,2,4-Trichlorobenzene	ND		50	14	ug/L			07/10/14 02:06	50
1,2-Dibromo-3-Chloropropane	ND		50	25	ug/L			07/10/14 02:06	50
1,2-Dibromoethane	ND		50	12	ug/L			07/10/14 02:06	50
1,2-Dichlorobenzene	ND		50	7.5	ug/L			07/10/14 02:06	50
1,2-Dichloroethane	ND		50	8.0	ug/L			07/10/14 02:06	50
1,2-Dichloropropane	ND		50	8.5	ug/L			07/10/14 02:06	50
1,3-Dichlorobenzene	ND		50	15	ug/L			07/10/14 02:06	50
1,4-Dichlorobenzene	ND		50	13	ug/L			07/10/14 02:06	50
2-Butanone (MEK)	ND		250	91	ug/L			07/10/14 02:06	50
2-Hexanone	ND		250	28	ug/L			07/10/14 02:06	50
4-Methyl-2-pentanone (MIBK)	ND		250	58	ug/L			07/10/14 02:06	50
Acetone	ND		250	73	ug/L			07/10/14 02:06	50
Benzene	ND		50	9.0	ug/L			07/10/14 02:06	50
Bromodichloromethane	ND		50	13	ug/L			07/10/14 02:06	50
Bromoform	ND		50	15	ug/L			07/10/14 02:06	50
Bromomethane	ND		50	10	ug/L			07/10/14 02:06	50
Carbon disulfide	ND		50	11	ug/L			07/10/14 02:06	50
Carbon tetrachloride	ND		50	15	ug/L			07/10/14 02:06	50
Chlorobenzene	ND		50	14	ug/L			07/10/14 02:06	50
Dibromochloromethane	ND		50	7.5	ug/L			07/10/14 02:06	50
Chloroethane	ND		50	8.5	ug/L			07/10/14 02:06	50
Chloroform	ND		50	14	ug/L			07/10/14 02:06	50
Chloromethane	ND		50	11	ug/L			07/10/14 02:06	50
cis-1,2-Dichloroethene	**360**		50	17	ug/L			07/10/14 02:06	50
cis-1,3-Dichloropropene	ND		50	11	ug/L			07/10/14 02:06	50
Ethylbenzene	ND		50	16	ug/L			07/10/14 02:06	50
Methylene Chloride	ND		100	23	ug/L			07/10/14 02:06	50
Styrene	ND		50	14	ug/L			07/10/14 02:06	50
Tetrachloroethene	ND		50	18	ug/L			07/10/14 02:06	50
Toluene	ND		50	15	ug/L			07/10/14 02:06	50
trans-1,2-Dichloroethene	ND		50	21	ug/L			07/10/14 02:06	50
trans-1,3-Dichloropropene	ND		50	15	ug/L			07/10/14 02:06	50
Trichloroethene	ND		50	13	ug/L			07/10/14 02:06	50
Vinyl chloride	**780**		50	14	ug/L			07/10/14 02:06	50
Xylenes, Total	ND		50	21	ug/L			07/10/14 02:06	50
m-Xylene & p-Xylene	ND		50	21	ug/L			07/10/14 02:06	50
o-Xylene	ND		50	21	ug/L			07/10/14 02:06	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*80 - 120*		*07/10/14 02:06*	*50*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**250**		10.0	1.7	mg/L			07/10/14 21:00	5
Nitrate as N	**0.020**	**J**	0.050	0.020	mg/L			07/02/14 18:23	1

Client: C&S Engineers, Inc.
Project/Site: Midler Semi-Annual Groundwater

TestAmerica Job ID: 480-63037-1

Client Sample ID: MW-13D
Date Collected: 07/01/14 09:30
Date Received: 07/02/14 01:00

Lab Sample ID: 480-63037-1
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferric Iron	0.25		0.10	0.075	mg/L			07/15/14 06:27	1
Ferrous Iron	ND	HF	0.10	0.075	mg/L			07/03/14 18:20	1
Sulfide	30.2		1.0	0.67	mg/L			07/08/14 06:20	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	45.3		1.0	0.43	mg/L			07/04/14 02:48	1

Client Sample ID: MW-9D
Date Collected: 07/01/14 10:30
Date Received: 07/02/14 01:00

Lab Sample ID: 480-63037-2
Matrix: Water

Method: OLC02.1 - Volatile Organic Compounds, Low Concetration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.28	ug/L			07/10/14 02:31	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.39	ug/L			07/10/14 02:31	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			07/10/14 02:31	1
1,1-Dichloroethane	ND		1.0	0.32	ug/L			07/10/14 02:31	1
1,1-Dichloroethene	ND		1.0	0.26	ug/L			07/10/14 02:31	1
1,2,4-Trichlorobenzene	ND		1.0	0.27	ug/L			07/10/14 02:31	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			07/10/14 02:31	1
1,2-Dibromoethane	ND		1.0	0.25	ug/L			07/10/14 02:31	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/10/14 02:31	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			07/10/14 02:31	1
1,2-Dichloropropane	ND		1.0	0.17	ug/L			07/10/14 02:31	1
1,3-Dichlorobenzene	ND		1.0	0.29	ug/L			07/10/14 02:31	1
1,4-Dichlorobenzene	ND		1.0	0.27	ug/L			07/10/14 02:31	1
2-Butanone (MEK)	ND		5.0	1.8	ug/L			07/10/14 02:31	1
2-Hexanone	ND		5.0	0.55	ug/L			07/10/14 02:31	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.2	ug/L			07/10/14 02:31	1
Acetone	**4.0**	**J**	5.0	1.5	ug/L			07/10/14 02:31	1
Benzene	ND		1.0	0.18	ug/L			07/10/14 02:31	1
Bromodichloromethane	ND		1.0	0.26	ug/L			07/10/14 02:31	1
Bromoform	ND		1.0	0.30	ug/L			07/10/14 02:31	1
Bromomethane	ND		1.0	0.20	ug/L			07/10/14 02:31	1
Carbon disulfide	ND		1.0	0.21	ug/L			07/10/14 02:31	1
Carbon tetrachloride	ND		1.0	0.30	ug/L			07/10/14 02:31	1
Chlorobenzene	ND		1.0	0.29	ug/L			07/10/14 02:31	1
Dibromochloromethane	ND		1.0	0.15	ug/L			07/10/14 02:31	1
Chloroethane	ND		1.0	0.17	ug/L			07/10/14 02:31	1
Chloroform	ND		1.0	0.28	ug/L			07/10/14 02:31	1
Chloromethane	ND		1.0	0.22	ug/L			07/10/14 02:31	1
cis-1,2-Dichloroethene	**2.3**		1.0	0.34	ug/L			07/10/14 02:31	1
cis-1,3-Dichloropropene	ND		1.0	0.22	ug/L			07/10/14 02:31	1
Ethylbenzene	ND		1.0	0.32	ug/L			07/10/14 02:31	1
Methylene Chloride	ND		2.0	0.46	ug/L			07/10/14 02:31	1
Styrene	ND		1.0	0.28	ug/L			07/10/14 02:31	1
Tetrachloroethene	ND		1.0	0.35	ug/L			07/10/14 02:31	1
Toluene	ND		1.0	0.30	ug/L			07/10/14 02:31	1
trans-1,2-Dichloroethene	ND		1.0	0.43	ug/L			07/10/14 02:31	1
trans-1,3-Dichloropropene	ND		1.0	0.29	ug/L			07/10/14 02:31	1
Trichloroethene	ND		1.0	0.27	ug/L			07/10/14 02:31	1
Vinyl chloride	ND		1.0	0.27	ug/L			07/10/14 02:31	1
Xylenes, Total	ND		1.0	0.42	ug/L			07/10/14 02:31	1
m-Xylene & p-Xylene	ND		1.0	0.42	ug/L			07/10/14 02:31	1
o-Xylene	ND		1.0	0.42	ug/L			07/10/14 02:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*80 - 120*		*07/10/14 02:31*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**389**		20.0	3.5	mg/L			07/10/14 21:10	10
Nitrate as N	**0.037**	**J**	0.050	0.020	mg/L			07/02/14 18:25	1

Client: C&S Engineers, Inc.
Project/Site: Midler Semi-Annual Groundwater

TestAmerica Job ID: 480-63037-1

Client Sample ID: MW-9D
Date Collected: 07/01/14 10:30
Date Received: 07/02/14 01:00

Lab Sample ID: 480-63037-2
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferric Iron	0.33		0.10	0.075	mg/L			07/15/14 06:27	1
Ferrous Iron	0.11	HF	0.10	0.075	mg/L			07/03/14 18:22	1
Sulfide	12.4		1.0	0.67	mg/L			07/08/14 06:20	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	6.1		1.0	0.43	mg/L			07/04/14 03:16	1

Client Sample ID: MW-10D
Date Collected: 07/01/14 11:15
Date Received: 07/02/14 01:00

Lab Sample ID: 480-63037-3
Matrix: Water

Method: OLC02.1 - Volatile Organic Compounds, Low Concetration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		20	5.7	ug/L			07/10/14 00:47	20
1,1,2,2-Tetrachloroethane	ND		20	7.8	ug/L			07/10/14 00:47	20
1,1,2-Trichloroethane	ND		20	4.0	ug/L			07/10/14 00:47	20
1,1-Dichloroethane	ND		20	6.3	ug/L			07/10/14 00:47	20
1,1-Dichloroethene	ND		20	5.2	ug/L			07/10/14 00:47	20
1,2,4-Trichlorobenzene	ND		20	5.4	ug/L			07/10/14 00:47	20
1,2-Dibromo-3-Chloropropane	ND		20	9.9	ug/L			07/10/14 00:47	20
1,2-Dibromoethane	ND		20	4.9	ug/L			07/10/14 00:47	20
1,2-Dichlorobenzene	ND		20	3.0	ug/L			07/10/14 00:47	20
1,2-Dichloroethane	ND		20	3.2	ug/L			07/10/14 00:47	20
1,2-Dichloropropane	ND		20	3.4	ug/L			07/10/14 00:47	20
1,3-Dichlorobenzene	ND		20	5.9	ug/L			07/10/14 00:47	20
1,4-Dichlorobenzene	ND		20	5.3	ug/L			07/10/14 00:47	20
2-Butanone (MEK)	ND		100	36	ug/L			07/10/14 00:47	20
2-Hexanone	ND		100	11	ug/L			07/10/14 00:47	20
4-Methyl-2-pentanone (MIBK)	ND		100	23	ug/L			07/10/14 00:47	20
Acetone	ND		100	29	ug/L			07/10/14 00:47	20
Benzene	ND		20	3.6	ug/L			07/10/14 00:47	20
Bromodichloromethane	ND		20	5.1	ug/L			07/10/14 00:47	20
Bromoform	ND		20	6.0	ug/L			07/10/14 00:47	20
Bromomethane	ND		20	4.0	ug/L			07/10/14 00:47	20
Carbon disulfide	ND		20	4.2	ug/L			07/10/14 00:47	20
Carbon tetrachloride	ND		20	6.0	ug/L			07/10/14 00:47	20
Chlorobenzene	ND		20	5.7	ug/L			07/10/14 00:47	20
Dibromochloromethane	ND		20	3.0	ug/L			07/10/14 00:47	20
Chloroethane	ND		20	3.4	ug/L			07/10/14 00:47	20
Chloroform	ND		20	5.6	ug/L			07/10/14 00:47	20
Chloromethane	ND		20	4.4	ug/L			07/10/14 00:47	20
cis-1,2-Dichloroethene	**510**	**E**	20	6.8	ug/L			07/10/14 00:47	20
cis-1,3-Dichloropropene	ND		20	4.3	ug/L			07/10/14 00:47	20
Ethylbenzene	ND		20	6.3	ug/L			07/10/14 00:47	20
Methylene Chloride	ND		40	9.2	ug/L			07/10/14 00:47	20
Styrene	ND		20	5.6	ug/L			07/10/14 00:47	20
Tetrachloroethene	ND		20	7.0	ug/L			07/10/14 00:47	20
Toluene	ND		20	6.1	ug/L			07/10/14 00:47	20
trans-1,2-Dichloroethene	**25**		20	8.5	ug/L			07/10/14 00:47	20
trans-1,3-Dichloropropene	ND		20	5.9	ug/L			07/10/14 00:47	20
Trichloroethene	ND		20	5.4	ug/L			07/10/14 00:47	20
Vinyl chloride	**84**		20	5.4	ug/L			07/10/14 00:47	20
Xylenes, Total	ND		20	8.4	ug/L			07/10/14 00:47	20
m-Xylene & p-Xylene	ND		20	8.4	ug/L			07/10/14 00:47	20
o-Xylene	ND		20	8.4	ug/L			07/10/14 00:47	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*80 - 120*		*07/10/14 00:47*	*20*

Method: OLC02.1 - Volatile Organic Compounds, Low Concetration (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		40	11	ug/L			07/10/14 03:45	40
1,1,2,2-Tetrachloroethane	ND		40	16	ug/L			07/10/14 03:45	40

Client Sample ID: MW-10D
Date Collected: 07/01/14 11:15
Date Received: 07/02/14 01:00

Lab Sample ID: 480-63037-3
Matrix: Water

Method: OLC02.1 - Volatile Organic Compounds, Low Concetration (GC/MS) - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		40	8.0	ug/L			07/10/14 03:45	40
1,1-Dichloroethane	ND		40	13	ug/L			07/10/14 03:45	40
1,1-Dichloroethene	ND		40	10	ug/L			07/10/14 03:45	40
1,2,4-Trichlorobenzene	ND		40	11	ug/L			07/10/14 03:45	40
1,2-Dibromo-3-Chloropropane	ND		40	20	ug/L			07/10/14 03:45	40
1,2-Dibromoethane	ND		40	9.8	ug/L			07/10/14 03:45	40
1,2-Dichlorobenzene	ND		40	6.0	ug/L			07/10/14 03:45	40
1,2-Dichloroethane	ND		40	6.4	ug/L			07/10/14 03:45	40
1,2-Dichloropropane	ND		40	6.8	ug/L			07/10/14 03:45	40
1,3-Dichlorobenzene	ND		40	12	ug/L			07/10/14 03:45	40
1,4-Dichlorobenzene	ND		40	11	ug/L			07/10/14 03:45	40
2-Butanone (MEK)	ND		200	72	ug/L			07/10/14 03:45	40
2-Hexanone	ND		200	22	ug/L			07/10/14 03:45	40
4-Methyl-2-pentanone (MIBK)	ND		200	46	ug/L			07/10/14 03:45	40
Acetone	ND		200	58	ug/L			07/10/14 03:45	40
Benzene	ND		40	7.2	ug/L			07/10/14 03:45	40
Bromodichloromethane	ND		40	10	ug/L			07/10/14 03:45	40
Bromoform	ND		40	12	ug/L			07/10/14 03:45	40
Bromomethane	ND		40	8.0	ug/L			07/10/14 03:45	40
Carbon disulfide	ND		40	8.4	ug/L			07/10/14 03:45	40
Carbon tetrachloride	ND		40	12	ug/L			07/10/14 03:45	40
Chlorobenzene	ND		40	11	ug/L			07/10/14 03:45	40
Dibromochloromethane	ND		40	6.0	ug/L			07/10/14 03:45	40
Chloroethane	ND		40	6.8	ug/L			07/10/14 03:45	40
Chloroform	ND		40	11	ug/L			07/10/14 03:45	40
Chloromethane	ND		40	8.8	ug/L			07/10/14 03:45	40
cis-1,2-Dichloroethene	**490**		40	14	ug/L			07/10/14 03:45	40
cis-1,3-Dichloropropene	ND		40	8.6	ug/L			07/10/14 03:45	40
Ethylbenzene	ND		40	13	ug/L			07/10/14 03:45	40
Methylene Chloride	ND		80	18	ug/L			07/10/14 03:45	40
Styrene	ND		40	11	ug/L			07/10/14 03:45	40
Tetrachloroethene	ND		40	14	ug/L			07/10/14 03:45	40
Toluene	ND		40	12	ug/L			07/10/14 03:45	40
trans-1,2-Dichloroethene	**24**	**J**	40	17	ug/L			07/10/14 03:45	40
trans-1,3-Dichloropropene	ND		40	12	ug/L			07/10/14 03:45	40
Trichloroethene	ND		40	11	ug/L			07/10/14 03:45	40
Vinyl chloride	**79**		40	11	ug/L			07/10/14 03:45	40
Xylenes, Total	ND		40	17	ug/L			07/10/14 03:45	40
m-Xylene & p-Xylene	ND		40	17	ug/L			07/10/14 03:45	40
o-Xylene	ND		40	17	ug/L			07/10/14 03:45	40

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*80 - 120*		*07/10/14 03:45*	*40*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**620**		20.0	3.5	mg/L			07/10/14 21:20	10
Nitrate as N	ND		0.050	0.020	mg/L			07/02/14 18:26	1
Ferric Iron	ND		0.10	0.075	mg/L			07/15/14 06:27	1
Ferrous Iron	ND	HF	0.10	0.075	mg/L			07/03/14 18:24	1

Client: C&S Engineers, Inc.
Project/Site: Midler Semi-Annual Groundwater

TestAmerica Job ID: 480-63037-1

Client Sample ID: MW-10D
Date Collected: 07/01/14 11:15
Date Received: 07/02/14 01:00

Lab Sample ID: 480-63037-3
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	27.4		1.0	0.67	mg/L			07/08/14 06:20	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	6.9		1.0	0.43	mg/L			07/04/14 03:44	1

Client Sample ID: MW-15D
Date Collected: 07/01/14 12:00
Date Received: 07/02/14 01:00

Lab Sample ID: 480-63037-4
Matrix: Water

Method: OLC02.1 - Volatile Organic Compounds, Low Concetration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.28	ug/L			07/10/14 04:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.39	ug/L			07/10/14 04:10	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			07/10/14 04:10	1
1,1-Dichloroethane	ND		1.0	0.32	ug/L			07/10/14 04:10	1
1,1-Dichloroethene	ND		1.0	0.26	ug/L			07/10/14 04:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.27	ug/L			07/10/14 04:10	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			07/10/14 04:10	1
1,2-Dibromoethane	ND		1.0	0.25	ug/L			07/10/14 04:10	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/10/14 04:10	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			07/10/14 04:10	1
1,2-Dichloropropane	ND		1.0	0.17	ug/L			07/10/14 04:10	1
1,3-Dichlorobenzene	ND		1.0	0.29	ug/L			07/10/14 04:10	1
1,4-Dichlorobenzene	ND		1.0	0.27	ug/L			07/10/14 04:10	1
2-Butanone (MEK)	ND		5.0	1.8	ug/L			07/10/14 04:10	1
2-Hexanone	ND		5.0	0.55	ug/L			07/10/14 04:10	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.2	ug/L			07/10/14 04:10	1
Acetone	**1.5**	**J**	5.0	1.5	ug/L			07/10/14 04:10	1
Benzene	ND		1.0	0.18	ug/L			07/10/14 04:10	1
Bromodichloromethane	ND		1.0	0.26	ug/L			07/10/14 04:10	1
Bromoform	ND		1.0	0.30	ug/L			07/10/14 04:10	1
Bromomethane	ND		1.0	0.20	ug/L			07/10/14 04:10	1
Carbon disulfide	ND		1.0	0.21	ug/L			07/10/14 04:10	1
Carbon tetrachloride	ND		1.0	0.30	ug/L			07/10/14 04:10	1
Chlorobenzene	ND		1.0	0.29	ug/L			07/10/14 04:10	1
Dibromochloromethane	ND		1.0	0.15	ug/L			07/10/14 04:10	1
Chloroethane	ND		1.0	0.17	ug/L			07/10/14 04:10	1
Chloroform	ND		1.0	0.28	ug/L			07/10/14 04:10	1
Chloromethane	ND		1.0	0.22	ug/L			07/10/14 04:10	1
cis-1,2-Dichloroethene	**4.9**		1.0	0.34	ug/L			07/10/14 04:10	1
cis-1,3-Dichloropropene	ND		1.0	0.22	ug/L			07/10/14 04:10	1
Ethylbenzene	ND		1.0	0.32	ug/L			07/10/14 04:10	1
Methylene Chloride	ND		2.0	0.46	ug/L			07/10/14 04:10	1
Styrene	ND		1.0	0.28	ug/L			07/10/14 04:10	1
Tetrachloroethene	ND		1.0	0.35	ug/L			07/10/14 04:10	1
Toluene	ND		1.0	0.30	ug/L			07/10/14 04:10	1
trans-1,2-Dichloroethene	**1.0**		1.0	0.43	ug/L			07/10/14 04:10	1
trans-1,3-Dichloropropene	ND		1.0	0.29	ug/L			07/10/14 04:10	1
Trichloroethene	ND		1.0	0.27	ug/L			07/10/14 04:10	1
Vinyl chloride	ND		1.0	0.27	ug/L			07/10/14 04:10	1
Xylenes, Total	ND		1.0	0.42	ug/L			07/10/14 04:10	1
m-Xylene & p-Xylene	ND		1.0	0.42	ug/L			07/10/14 04:10	1
o-Xylene	ND		1.0	0.42	ug/L			07/10/14 04:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*80 - 120*		*07/10/14 04:10*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**609**		20.0	3.5	mg/L			07/14/14 16:49	10
Nitrate as N	ND		0.050	0.020	mg/L			07/02/14 18:27	1

Client: C&S Engineers, Inc.
Project/Site: Midler Semi-Annual Groundwater

TestAmerica Job ID: 480-63037-1

Client Sample ID: MW-15D
Date Collected: 07/01/14 12:00
Date Received: 07/02/14 01:00

Lab Sample ID: 480-63037-4
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferric Iron	0.14		0.10	0.075	mg/L			07/15/14 06:27	1
Ferrous Iron	ND	HF	0.10	0.075	mg/L			07/03/14 18:26	1
Sulfide	32.2		1.0	0.67	mg/L			07/08/14 06:20	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	10.2		1.0	0.43	mg/L			07/04/14 04:12	1

Client: C&S Engineers, Inc.
Project/Site: Midler Semi-Annual Groundwater

TestAmerica Job ID: 480-63037-1

Client Sample ID: TRIP BLANK
Date Collected: 07/01/14 00:00
Date Received: 07/02/14 01:00

Lab Sample ID: 480-63037-5
Matrix: Water

Method: OLC02.1 - Volatile Organic Compounds, Low Concetration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.28	ug/L			07/10/14 04:35	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.39	ug/L			07/10/14 04:35	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			07/10/14 04:35	1
1,1-Dichloroethane	ND		1.0	0.32	ug/L			07/10/14 04:35	1
1,1-Dichloroethene	ND		1.0	0.26	ug/L			07/10/14 04:35	1
1,2,4-Trichlorobenzene	ND		1.0	0.27	ug/L			07/10/14 04:35	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			07/10/14 04:35	1
1,2-Dibromoethane	ND		1.0	0.25	ug/L			07/10/14 04:35	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/10/14 04:35	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			07/10/14 04:35	1
1,2-Dichloropropane	ND		1.0	0.17	ug/L			07/10/14 04:35	1
1,3-Dichlorobenzene	ND		1.0	0.29	ug/L			07/10/14 04:35	1
1,4-Dichlorobenzene	ND		1.0	0.27	ug/L			07/10/14 04:35	1
2-Butanone (MEK)	ND		5.0	1.8	ug/L			07/10/14 04:35	1
2-Hexanone	ND		5.0	0.55	ug/L			07/10/14 04:35	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.2	ug/L			07/10/14 04:35	1
Acetone	**1.8**	**J**	5.0	1.5	ug/L			07/10/14 04:35	1
Benzene	ND		1.0	0.18	ug/L			07/10/14 04:35	1
Bromodichloromethane	ND		1.0	0.26	ug/L			07/10/14 04:35	1
Bromoform	ND		1.0	0.30	ug/L			07/10/14 04:35	1
Bromomethane	ND		1.0	0.20	ug/L			07/10/14 04:35	1
Carbon disulfide	ND		1.0	0.21	ug/L			07/10/14 04:35	1
Carbon tetrachloride	ND		1.0	0.30	ug/L			07/10/14 04:35	1
Chlorobenzene	ND		1.0	0.29	ug/L			07/10/14 04:35	1
Dibromochloromethane	ND		1.0	0.15	ug/L			07/10/14 04:35	1
Chloroethane	ND		1.0	0.17	ug/L			07/10/14 04:35	1
Chloroform	ND		1.0	0.28	ug/L			07/10/14 04:35	1
Chloromethane	ND		1.0	0.22	ug/L			07/10/14 04:35	1
cis-1,2-Dichloroethene	ND		1.0	0.34	ug/L			07/10/14 04:35	1
cis-1,3-Dichloropropene	ND		1.0	0.22	ug/L			07/10/14 04:35	1
Ethylbenzene	ND		1.0	0.32	ug/L			07/10/14 04:35	1
Methylene Chloride	**0.59**	**J**	2.0	0.46	ug/L			07/10/14 04:35	1
Styrene	ND		1.0	0.28	ug/L			07/10/14 04:35	1
Tetrachloroethene	ND		1.0	0.35	ug/L			07/10/14 04:35	1
Toluene	ND		1.0	0.30	ug/L			07/10/14 04:35	1
trans-1,2-Dichloroethene	ND		1.0	0.43	ug/L			07/10/14 04:35	1
trans-1,3-Dichloropropene	ND		1.0	0.29	ug/L			07/10/14 04:35	1
Trichloroethene	ND		1.0	0.27	ug/L			07/10/14 04:35	1
Vinyl chloride	ND		1.0	0.27	ug/L			07/10/14 04:35	1
Xylenes, Total	ND		1.0	0.42	ug/L			07/10/14 04:35	1
m-Xylene & p-Xylene	ND		1.0	0.42	ug/L			07/10/14 04:35	1
o-Xylene	ND		1.0	0.42	ug/L			07/10/14 04:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*80 - 120*		*07/10/14 04:35*	*1*

Surrogate Summary

Client: C&S Engineers, Inc.
Project/Site: Midler Semi-Annual Groundwater

TestAmerica Job ID: 480-63037-1

Method: OLC02.1 - Volatile Organic Compounds, Low Concetration (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
		BFB								
Lab Sample ID	Client Sample ID	(80-120)								
480-63037-1	MW-13D	87								
480-63037-2	MW-9D	84								
480-63037-2 MS	MW-9D	100								
480-63037-2 MSD	MW-9D	98								
480-63037-3	MW-10D	88								
480-63037-3 - DL	MW-10D	82								
480-63037-4	MW-15D	84								
480-63037-5	TRIP BLANK	83								
LCS 480-191973/5	Lab Control Sample	98								
MB 480-191973/6	Method Blank	82								

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

Method: OLC02.1 - Volatile Organic Compounds, Low Concetration (GC/MS)

Lab Sample ID: MB 480-191973/6
Matrix: Water
Analysis Batch: 191973

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.28	ug/L			07/09/14 22:22	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.39	ug/L			07/09/14 22:22	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			07/09/14 22:22	1
1,1-Dichloroethane	ND		1.0	0.32	ug/L			07/09/14 22:22	1
1,1-Dichloroethene	ND		1.0	0.26	ug/L			07/09/14 22:22	1
1,2,4-Trichlorobenzene	ND		1.0	0.27	ug/L			07/09/14 22:22	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			07/09/14 22:22	1
1,2-Dibromoethane	ND		1.0	0.25	ug/L			07/09/14 22:22	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			07/09/14 22:22	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			07/09/14 22:22	1
1,2-Dichloropropane	ND		1.0	0.17	ug/L			07/09/14 22:22	1
1,3-Dichlorobenzene	ND		1.0	0.29	ug/L			07/09/14 22:22	1
1,4-Dichlorobenzene	ND		1.0	0.27	ug/L			07/09/14 22:22	1
2-Butanone (MEK)	ND		5.0	1.8	ug/L			07/09/14 22:22	1
2-Hexanone	ND		5.0	0.55	ug/L			07/09/14 22:22	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.2	ug/L			07/09/14 22:22	1
Acetone	ND		5.0	1.5	ug/L			07/09/14 22:22	1
Benzene	ND		1.0	0.18	ug/L			07/09/14 22:22	1
Bromodichloromethane	ND		1.0	0.26	ug/L			07/09/14 22:22	1
Bromoform	ND		1.0	0.30	ug/L			07/09/14 22:22	1
Bromomethane	ND		1.0	0.20	ug/L			07/09/14 22:22	1
Carbon disulfide	ND		1.0	0.21	ug/L			07/09/14 22:22	1
Carbon tetrachloride	ND		1.0	0.30	ug/L			07/09/14 22:22	1
Chlorobenzene	ND		1.0	0.29	ug/L			07/09/14 22:22	1
Dibromochloromethane	ND		1.0	0.15	ug/L			07/09/14 22:22	1
Chloroethane	ND		1.0	0.17	ug/L			07/09/14 22:22	1
Chloroform	ND		1.0	0.28	ug/L			07/09/14 22:22	1
Chloromethane	ND		1.0	0.22	ug/L			07/09/14 22:22	1
cis-1,2-Dichloroethene	ND		1.0	0.34	ug/L			07/09/14 22:22	1
cis-1,3-Dichloropropene	ND		1.0	0.22	ug/L			07/09/14 22:22	1
Ethylbenzene	ND		1.0	0.32	ug/L			07/09/14 22:22	1
Methylene Chloride	ND		2.0	0.46	ug/L			07/09/14 22:22	1
Styrene	ND		1.0	0.28	ug/L			07/09/14 22:22	1
Tetrachloroethene	ND		1.0	0.35	ug/L			07/09/14 22:22	1
Toluene	ND		1.0	0.30	ug/L			07/09/14 22:22	1
trans-1,2-Dichloroethene	ND		1.0	0.43	ug/L			07/09/14 22:22	1
trans-1,3-Dichloropropene	ND		1.0	0.29	ug/L			07/09/14 22:22	1
Trichloroethene	ND		1.0	0.27	ug/L			07/09/14 22:22	1
Vinyl chloride	ND		1.0	0.27	ug/L			07/09/14 22:22	1
Xylenes, Total	ND		1.0	0.42	ug/L			07/09/14 22:22	1
m-Xylene & p-Xylene	ND		1.0	0.42	ug/L			07/09/14 22:22	1
o-Xylene	ND		1.0	0.42	ug/L			07/09/14 22:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*80 - 120*		*07/09/14 22:22*	*1*

Method: OLC02.1 - Volatile Organic Compounds, Low Concetration (GC/MS) (Continued)

Lab Sample ID: LCS 480-191973/5
Matrix: Water
Analysis Batch: 191973

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	5.00	5.68		ug/L		114	60 - 140
Benzene	5.00	5.53		ug/L		111	60 - 140
Chlorobenzene	5.00	5.18		ug/L		104	60 - 140
Toluene	5.00	5.34		ug/L		107	60 - 140
Trichloroethene	5.00	6.19		ug/L		124	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*

Lab Sample ID: 480-63037-2 MS
Matrix: Water
Analysis Batch: 191973

Client Sample ID: MW-9D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	ND		5.00	7.07	F1	ug/L		141	60 - 140
Benzene	ND		5.00	6.47		ug/L		129	60 - 140
Chlorobenzene	ND		5.00	5.94		ug/L		119	60 - 140
Toluene	ND		5.00	6.26		ug/L		125	60 - 140
Trichloroethene	ND		5.00	6.42		ug/L		128	60 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*

Lab Sample ID: 480-63037-2 MSD
Matrix: Water
Analysis Batch: 191973

Client Sample ID: MW-9D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	ND		5.00	6.77		ug/L		135	60 - 140	4	20
Benzene	ND		5.00	6.13		ug/L		123	60 - 140	5	20
Chlorobenzene	ND		5.00	5.72		ug/L		114	60 - 140	4	20
Toluene	ND		5.00	5.99		ug/L		120	60 - 140	4	20
Trichloroethene	ND		5.00	6.18		ug/L		124	60 - 140	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*

Method: 300.0 - Sulfate

Lab Sample ID: MB 480-192158/28
Matrix: Water
Analysis Batch: 192158

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		2.0	0.35	mg/L			07/10/14 20:09	1

Method: 300.0 - Sulfate (Continued)

Lab Sample ID: LCS 480-192158/27
Matrix: Water
Analysis Batch: 192158

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	20.0	19.27		mg/L		96	90 - 110

Lab Sample ID: 480-63037-3 MS
Matrix: Water
Analysis Batch: 192158

Client Sample ID: MW-10D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	620		250	860.7		mg/L		96	90 - 110

Lab Sample ID: MB 480-192659/4
Matrix: Water
Analysis Batch: 192659

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		2.0	0.35	mg/L			07/14/14 16:09	1

Lab Sample ID: LCS 480-192659/3
Matrix: Water
Analysis Batch: 192659

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	20.0	18.98		mg/L		95	90 - 110

Method: SM 3500 FE D - Iron, Ferrous and Ferric

Lab Sample ID: MB 480-191285/3
Matrix: Water
Analysis Batch: 191285

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	ND		0.10	0.075	mg/L			07/03/14 18:16	1

Lab Sample ID: LCS 480-191285/4
Matrix: Water
Analysis Batch: 191285

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ferrous Iron	2.00	2.14		mg/L		107	90 - 110

Lab Sample ID: 480-63037-4 MS
Matrix: Water
Analysis Batch: 191285

Client Sample ID: MW-15D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ferrous Iron	ND	HF	1.00	0.702		mg/L		70	70 - 130

Method: SM 3500 FE D - Iron, Ferrous and Ferric (Continued)

Lab Sample ID: 480-63037-4 DU
Matrix: Water
Analysis Batch: 191285

Client Sample ID: MW-15D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Ferrous Iron	ND	HF		ND		mg/L				NC	20

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 480-191569/3
Matrix: Water
Analysis Batch: 191569

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	ND		1.0	0.67	mg/L			07/08/14 06:20	1

Lab Sample ID: LCS 480-191569/4
Matrix: Water
Analysis Batch: 191569

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide			10.0	9.20		mg/L		92	90 - 110		

Method: SM5310_D - Organic Carbon, Dissolved (DOC)

Lab Sample ID: MB 480-191727/3
Matrix: Water
Analysis Batch: 191727

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	ND		1.0	0.43	mg/L			07/04/14 00:56	1

Lab Sample ID: LCS 480-191727/4
Matrix: Water
Analysis Batch: 191727

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Dissolved Organic Carbon			60.0	62.69		mg/L		104	90 - 110		

GC/MS VOA

Analysis Batch: 191973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-63037-1	MW-13D	Total/NA	Water	OLC02.1	
480-63037-2	MW-9D	Total/NA	Water	OLC02.1	
480-63037-2 MS	MW-9D	Total/NA	Water	OLC02.1	
480-63037-2 MSD	MW-9D	Total/NA	Water	OLC02.1	
480-63037-3	MW-10D	Total/NA	Water	OLC02.1	
480-63037-3 - DL	MW-10D	Total/NA	Water	OLC02.1	
480-63037-4	MW-15D	Total/NA	Water	OLC02.1	
480-63037-5	TRIP BLANK	Total/NA	Water	OLC02.1	
LCS 480-191973/5	Lab Control Sample	Total/NA	Water	OLC02.1	
MB 480-191973/6	Method Blank	Total/NA	Water	OLC02.1	

General Chemistry

Analysis Batch: 191122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-63037-1	MW-13D	Total/NA	Water	Nitrate by calc	
480-63037-2	MW-9D	Total/NA	Water	Nitrate by calc	
480-63037-3	MW-10D	Total/NA	Water	Nitrate by calc	
480-63037-4	MW-15D	Total/NA	Water	Nitrate by calc	

Analysis Batch: 191285

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-63037-1	MW-13D	Total/NA	Water	SM 3500 FE D	
480-63037-2	MW-9D	Total/NA	Water	SM 3500 FE D	
480-63037-3	MW-10D	Total/NA	Water	SM 3500 FE D	
480-63037-4	MW-15D	Total/NA	Water	SM 3500 FE D	
480-63037-4 DU	MW-15D	Total/NA	Water	SM 3500 FE D	
480-63037-4 MS	MW-15D	Total/NA	Water	SM 3500 FE D	
LCS 480-191285/4	Lab Control Sample	Total/NA	Water	SM 3500 FE D	
MB 480-191285/3	Method Blank	Total/NA	Water	SM 3500 FE D	

Analysis Batch: 191569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-63037-1	MW-13D	Total/NA	Water	SM 4500 S2 F	
480-63037-2	MW-9D	Total/NA	Water	SM 4500 S2 F	
480-63037-3	MW-10D	Total/NA	Water	SM 4500 S2 F	
480-63037-4	MW-15D	Total/NA	Water	SM 4500 S2 F	
LCS 480-191569/4	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	
MB 480-191569/3	Method Blank	Total/NA	Water	SM 4500 S2 F	

Analysis Batch: 191727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-63037-1	MW-13D	Dissolved	Water	SM5310_D	
480-63037-2	MW-9D	Dissolved	Water	SM5310_D	
480-63037-3	MW-10D	Dissolved	Water	SM5310_D	
480-63037-4	MW-15D	Dissolved	Water	SM5310_D	
LCS 480-191727/4	Lab Control Sample	Dissolved	Water	SM5310_D	
MB 480-191727/3	Method Blank	Dissolved	Water	SM5310_D	

General Chemistry (Continued)

Analysis Batch: 192158

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-63037-1	MW-13D	Total/NA	Water	300.0	
480-63037-2	MW-9D	Total/NA	Water	300.0	
480-63037-3	MW-10D	Total/NA	Water	300.0	
480-63037-3 MS	MW-10D	Total/NA	Water	300.0	
LCS 480-192158/27	Lab Control Sample	Total/NA	Water	300.0	
MB 480-192158/28	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 192659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-63037-4	MW-15D	Total/NA	Water	300.0	
LCS 480-192659/3	Lab Control Sample	Total/NA	Water	300.0	
MB 480-192659/4	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 192765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-63037-1	MW-13D	Total/NA	Water	SM 3500	
480-63037-2	MW-9D	Total/NA	Water	SM 3500	
480-63037-3	MW-10D	Total/NA	Water	SM 3500	
480-63037-4	MW-15D	Total/NA	Water	SM 3500	

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Midler Semi-Annual Groundwater

TestAmerica Job ID: 480-63037-1

Client Sample ID: MW-13D

Lab Sample ID: 480-63037-1

Date Collected: 07/01/14 09:30

Matrix: Water

Date Received: 07/02/14 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	OLC02.1		50	191973	07/10/14 02:06	CDC	TAL BUF
Total/NA	Analysis	300.0		5	192158	07/10/14 21:00	KAC	TAL BUF
Total/NA	Analysis	Nitrate by calc		1	191122	07/02/14 18:23	RS	TAL BUF
Total/NA	Analysis	SM 3500		1	192765	07/15/14 06:27	MTM2	TAL BUF
Total/NA	Analysis	SM 3500 FE D		1	191285	07/03/14 18:20	KS	TAL BUF
Total/NA	Analysis	SM 4500 S2 F		1	191569	07/08/14 06:20	LAW	TAL BUF
Dissolved	Analysis	SM5310_D		1	191727	07/04/14 02:48	KAC	TAL BUF

Client Sample ID: MW-9D

Lab Sample ID: 480-63037-2

Date Collected: 07/01/14 10:30

Matrix: Water

Date Received: 07/02/14 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	OLC02.1		1	191973	07/10/14 02:31	CDC	TAL BUF
Total/NA	Analysis	300.0		10	192158	07/10/14 21:10	KAC	TAL BUF
Total/NA	Analysis	Nitrate by calc		1	191122	07/02/14 18:25	RS	TAL BUF
Total/NA	Analysis	SM 3500		1	192765	07/15/14 06:27	MTM2	TAL BUF
Total/NA	Analysis	SM 3500 FE D		1	191285	07/03/14 18:22	KS	TAL BUF
Total/NA	Analysis	SM 4500 S2 F		1	191569	07/08/14 06:20	LAW	TAL BUF
Dissolved	Analysis	SM5310_D		1	191727	07/04/14 03:16	KAC	TAL BUF

Client Sample ID: MW-10D

Lab Sample ID: 480-63037-3

Date Collected: 07/01/14 11:15

Matrix: Water

Date Received: 07/02/14 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	OLC02.1		20	191973	07/10/14 00:47	CDC	TAL BUF
Total/NA	Analysis	OLC02.1	DL	40	191973	07/10/14 03:45	CDC	TAL BUF
Total/NA	Analysis	300.0		10	192158	07/10/14 21:20	KAC	TAL BUF
Total/NA	Analysis	Nitrate by calc		1	191122	07/02/14 18:26	RS	TAL BUF
Total/NA	Analysis	SM 3500		1	192765	07/15/14 06:27	MTM2	TAL BUF
Total/NA	Analysis	SM 3500 FE D		1	191285	07/03/14 18:24	KS	TAL BUF
Total/NA	Analysis	SM 4500 S2 F		1	191569	07/08/14 06:20	LAW	TAL BUF
Dissolved	Analysis	SM5310_D		1	191727	07/04/14 03:44	KAC	TAL BUF

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Midler Semi-Annual Groundwater

TestAmerica Job ID: 480-63037-1

Client Sample ID: MW-15D

Lab Sample ID: 480-63037-4

Date Collected: 07/01/14 12:00
Matrix: Water
Date Received: 07/02/14 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	OLC02.1		1	191973	07/10/14 04:10	CDC	TAL BUF
Total/NA	Analysis	300.0		10	192659	07/14/14 16:49	KRC	TAL BUF
Total/NA	Analysis	Nitrate by calc		1	191122	07/02/14 18:27	RS	TAL BUF
Total/NA	Analysis	SM 3500		1	192765	07/15/14 06:27	MTM2	TAL BUF
Total/NA	Analysis	SM 3500 FE D		1	191285	07/03/14 18:26	KS	TAL BUF
Total/NA	Analysis	SM 4500 S2 F		1	191569	07/08/14 06:20	LAW	TAL BUF
Dissolved	Analysis	SM5310_D		1	191727	07/04/14 04:12	KAC	TAL BUF

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-63037-5

Date Collected: 07/01/14 00:00
Matrix: Water
Date Received: 07/02/14 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	OLC02.1		1	191973	07/10/14 04:35	CDC	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: C&S Engineers, Inc.
Project/Site: Midler Semi-Annual Groundwater

TestAmerica Job ID: 480-63037-1

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-14 *
California	State Program	9	1169CA	09-30-14
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-15
Georgia	State Program	4	N/A	03-31-15
Illinois	NELAP	5	200003	09-30-14
Iowa	State Program	7	374	03-01-15
Kansas	NELAP	7	E-10187	01-31-15
Kentucky (DW)	State Program	4	90029	12-31-14
Kentucky (UST)	State Program	4	30	03-31-15
Louisiana	NELAP	6	02031	06-30-14 *
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-15
Massachusetts	State Program	1	M-NY044	06-30-15
Michigan	State Program	5	9937	03-31-15
Minnesota	NELAP	5	036-999-337	12-31-14
New Hampshire	NELAP	1	2337	11-17-14
New Jersey	NELAP	2	NY455	06-30-15
New York	NELAP	2	10026	03-31-15
North Dakota	State Program	8	R-176	03-31-14 *
Oklahoma	State Program	6	9421	08-31-14
Oregon	NELAP	10	NY200003	06-09-15
Pennsylvania	NELAP	3	68-00281	07-31-14
Rhode Island	State Program	1	LAO00328	12-30-14
Tennessee	State Program	4	TN02970	03-31-15
Texas	NELAP	6	T104704412-11-2	07-31-14
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-14
Washington	State Program	10	C784	02-10-15
Wisconsin	State Program	5	998310390	08-31-14

* Certification renewal pending - certification considered valid.

Method Summary

Client: C&S Engineers, Inc.
Project/Site: Midler Semi-Annual Groundwater

TestAmerica Job ID: 480-63037-1

Method	Method Description	Protocol	Laboratory
OLC02.1	Volatile Organic Compounds, Low Concetration (GC/MS)	OCLP	TAL BUF
300.0	Sulfate	40CFR136A	TAL BUF
Nitrate by calc	Nitrogen, Nitrate-Nitrite	SM	TAL BUF
SM 3500	Iron, Ferric	SM	TAL BUF
SM 3500 FE D	Iron, Ferrous and Ferric	SM	TAL BUF
SM 4500 S2 F	Sulfide, Total	SM	TAL BUF
SM5310_D	Organic Carbon, Dissolved (DOC)	SM	TAL BUF

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.
OCLP = USEPA Contract Laboratory Program Statement Of Work For Inorganics Analysis, Multi-Media, Multi-Concentration.
SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: C&S Engineers, Inc.
Project/Site: Midler Semi-Annual Groundwater

TestAmerica Job ID: 480-63037-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-63037-1	MW-13D	Water	07/01/14 09:30	07/02/14 01:00
480-63037-2	MW-9D	Water	07/01/14 10:30	07/02/14 01:00
480-63037-3	MW-10D	Water	07/01/14 11:15	07/02/14 01:00
480-63037-4	MW-15D	Water	07/01/14 12:00	07/02/14 01:00
480-63037-5	TRIP BLANK	Water	07/01/14 00:00	07/02/14 01:00

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Wayne Randall	Lab PM:	Carrier Tracking No(s):	COC No: 480-51536-13743.1
Client Contact: Mr. Wayne Randall	Phone: 315 455 2000			Page: Page 1 of 1
Company: C&S Engineers, Inc.				Job #:
Address: 499 Col. Eileen Collins Blvd	Due Date Requested:			
City: Syracuse	TAT Requested (days):			
State, Zip: NY, 13212				
Phone: 315-455-2000(Tel) 315-455-9667(Fax)	PO #: Purchase Order not required			
Email: wrandall@cscos.com	WO #:			
Project Name: Midler Semi-Annual Groundwater	Project #: 48002877			
Site:	SSOW#:			

480-63037 Chain of Custody

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300.0_28D - Sulfate	200.7 - Iron	OLC02.1_Vol - (MOD) Copy Analytes	SM5310_DOC_D - Dissolved Organic Carbon	SM4500_S2_F - Sulfide	353.2, 353.2_Nitrite, Nitrate_Calc	3500_FE_D - Ferrous Iron	SM5310_DOC_C - Dissolved Inorganic Carbon Result	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	A	A	CB	N	N	S		
MW-13D	7/1/14	9:30	G	Water			1	1	3	2	1	2	1	2		Matrix Spike / Matrix Spike Dup VOAs only
MW-9D		10:30		Water			1	1	3	2	1	2	1	2		
MW-10D		11:15		Water			1	1	3	2	1	2	1	2		
MW-15D		12:00		Water			1	1	3	2	1	2	1	2		
				Water												DOC - field filtered
																[redacted]

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) ASP 00 on VOCs - Cat B deliv

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		7/1/14 14:40	C&S		7/1/14 14:40	STL
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 7-2-14 0100	Company TAL
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 2.1 #1

Login Sample Receipt Checklist

Client: C&S Engineers, Inc.

Job Number: 480-63037-1

Login Number: 63037

List Source: TestAmerica Buffalo

List Number: 1

Creator: Wienke, Robert K

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	C&S
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-73491-1
Client Project/Site: Midler Semi-Annual Groundwater

For:
C&S Engineers, Inc.
499 Col. Eileen Collins Blvd
Syracuse, New York 13212

Attn: Mr. Wayne N Randall

Joseph V. Giacomazza

Authorized for release by:
1/16/2015 3:51:33 PM
Joe Giacomazza, Project Management Assistant II
joe.giacomazza@testamericainc.com

Designee for

Judy Stone, Senior Project Manager
(484)685-0868
judy.stone@testamericainc.com

Table of Contents

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
H	Sample was prepped or analyzed beyond the specified holding time

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-73491-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-73491-1

Receipt
The samples were received on 12/24/2014 11:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.6º C.

Except:

The following samples were received outside of holding time: .

GC/MS VOA
Method(s) OLC02.1: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-10D (480-73491-3), MW-10D (480-73491-3 MS), MW-10D (480-73491-3 MSD), MW-13D (480-73491-1). Elevated reporting limits (RLs) are provided.

Method(s) OLC02.1: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: (480-73491-1 MS), (480-73491-1 MSD), MW-13D (480-73491-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

HPLC/IC
Method(s) 300.0: The following sample(s) was diluted due to elevated conductivity readings indicating a high presence of ions and other constituents: MW-10D (480-73491-3), MW-13D (480-73491-1), MW-15D (480-73491-4), MW-9D (480-73491-2). Elevated reporting limits (RLs) are provided.

Method(s) 300.0, SM 4110B: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: (480-73491-4 MS), MW-10D (480-73321-1), MW-10D MS1 (480-73321-1 MS), MW-10D MSD1 (480-73321-1 MSD). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Field Service / Mobile Lab
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
Method(s) 353.2: The following sample(s) was received outside of holding time: MW-10D (480-73491-3), MW-13D (480-73491-1), MW-15D (480-73491-4), MW-9D (480-73491-2).

Method(s) SM 3500 FE D: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample(s) has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: MW-10D (480-73491-3), MW-13D (480-73491-1), MW-15D (480-73491-4), MW-9D (480-73491-2).

Method(s) 353.2: The following sample(s) was received outside of holding time: MW-10D (480-73491-3), MW-13D (480-73491-1), MW-15D (480-73491-4), MW-9D (480-73491-2).

Method(s) Nitrate by calc: The following sample(s) was received outside of holding time: MW-10D (480-73491-3), MW-13D (480-73491-1), MW-15D (480-73491-4), MW-9D (480-73491-2).

Method(s) SM 5310C: Lab filtered: (480-73491-2 MS), MW-10D (480-73491-3), MW-13D (480-73491-1), MW-15D (480-73491-4), MW-9D (480-73491-2).

Job ID: 480-73491-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: Midler Semi-Annual Groundwater

TestAmerica Job ID: 480-73491-1

Client Sample ID: MW-13D — Lab Sample ID: 480-73491-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1300	E	50	17	ug/L	50		OLC02.1	Total/NA
Vinyl chloride	1700	E	50	14	ug/L	50		OLC02.1	Total/NA
cis-1,2-Dichloroethene - DL	1200		200	68	ug/L	200		OLC02.1	Total/NA
Vinyl chloride - DL	1600		200	54	ug/L	200		OLC02.1	Total/NA
Iron	0.23		0.050	0.019	mg/L	1		200.7 Rev 4.4	Total/NA
Sulfate	180		40.0	7.0	mg/L	20		300.0	Total/NA
Sulfide	18.8		1.0	0.67	mg/L	1		SM 4500 S2 F	Total/NA
Dissolved Inorganic Carbon	66.2		2.0	0.28	mg/L	2		SM 5310C	Dissolved
Dissolved Organic Carbon	50.6		1.0	0.43	mg/L	1		SM5310_D	Dissolved

Client Sample ID: MW-9D — Lab Sample ID: 480-73491-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.84	J	1.0	0.34	ug/L	1		OLC02.1	Total/NA
Toluene	0.58	J	1.0	0.30	ug/L	1		OLC02.1	Total/NA
Iron	0.20		0.050	0.019	mg/L	1		200.7 Rev 4.4	Total/NA
Sulfate	609		40.0	7.0	mg/L	20		300.0	Total/NA
Sulfide	24.8		1.0	0.67	mg/L	1		SM 4500 S2 F	Total/NA
Dissolved Inorganic Carbon	66.8		2.0	0.28	mg/L	2		SM 5310C	Dissolved
Dissolved Organic Carbon	5.4		1.0	0.43	mg/L	1		SM5310_D	Dissolved

Client Sample ID: MW-10D — Lab Sample ID: 480-73491-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	410		40	14	ug/L	40		OLC02.1	Total/NA
trans-1,2-Dichloroethene	19	J	40	17	ug/L	40		OLC02.1	Total/NA
Vinyl chloride	74		40	11	ug/L	40		OLC02.1	Total/NA
Iron	0.040	J	0.050	0.019	mg/L	1		200.7 Rev 4.4	Total/NA
Sulfate	674		40.0	7.0	mg/L	20		300.0	Total/NA
Sulfide	21.2		1.0	0.67	mg/L	1		SM 4500 S2 F	Total/NA
Dissolved Inorganic Carbon	74.9		2.0	0.28	mg/L	2		SM 5310C	Dissolved
Dissolved Organic Carbon	4.5		1.0	0.43	mg/L	1		SM5310_D	Dissolved

Client Sample ID: MW-15D — Lab Sample ID: 480-73491-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	4.2		1.0	0.34	ug/L	1		OLC02.1	Total/NA
trans-1,2-Dichloroethene	0.77	J	1.0	0.43	ug/L	1		OLC02.1	Total/NA
Iron	0.19		0.050	0.019	mg/L	1		200.7 Rev 4.4	Total/NA
Sulfate	556		40.0	7.0	mg/L	20		300.0	Total/NA
Sulfide	28.2		1.0	0.67	mg/L	1		SM 4500 S2 F	Total/NA
Dissolved Inorganic Carbon	100		5.0	0.70	mg/L	5		SM 5310C	Dissolved
Dissolved Organic Carbon	7.6		1.0	0.43	mg/L	1		SM5310_D	Dissolved

Client Sample ID: TRIP BLANK — Lab Sample ID: 480-73491-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-13D
Date Collected: 12/22/14 08:00
Date Received: 12/24/14 11:00

Lab Sample ID: 480-73491-1
Matrix: Water

Method: OLC02.1 - Volatile Organic Compounds, Low Concetration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	14	ug/L			12/31/14 14:49	50
1,1,2,2-Tetrachloroethane	ND		50	20	ug/L			12/31/14 14:49	50
1,1,2-Trichloroethane	ND		50	10	ug/L			12/31/14 14:49	50
1,1-Dichloroethane	ND		50	16	ug/L			12/31/14 14:49	50
1,1-Dichloroethene	ND		50	13	ug/L			12/31/14 14:49	50
1,2,4-Trichlorobenzene	ND		50	14	ug/L			12/31/14 14:49	50
1,2-Dibromo-3-Chloropropane	ND		50	25	ug/L			12/31/14 14:49	50
1,2-Dibromoethane	ND		50	12	ug/L			12/31/14 14:49	50
1,2-Dichlorobenzene	ND		50	7.5	ug/L			12/31/14 14:49	50
1,2-Dichloroethane	ND		50	8.0	ug/L			12/31/14 14:49	50
1,2-Dichloropropane	ND		50	8.5	ug/L			12/31/14 14:49	50
1,3-Dichlorobenzene	ND		50	15	ug/L			12/31/14 14:49	50
1,4-Dichlorobenzene	ND		50	13	ug/L			12/31/14 14:49	50
2-Butanone (MEK)	ND		250	91	ug/L			12/31/14 14:49	50
2-Hexanone	ND		250	28	ug/L			12/31/14 14:49	50
4-Methyl-2-pentanone (MIBK)	ND		250	58	ug/L			12/31/14 14:49	50
Acetone	ND		250	73	ug/L			12/31/14 14:49	50
Benzene	ND		50	9.0	ug/L			12/31/14 14:49	50
Bromodichloromethane	ND		50	13	ug/L			12/31/14 14:49	50
Bromoform	ND		50	15	ug/L			12/31/14 14:49	50
Bromomethane	ND		50	10	ug/L			12/31/14 14:49	50
Carbon disulfide	ND		50	11	ug/L			12/31/14 14:49	50
Carbon tetrachloride	ND		50	15	ug/L			12/31/14 14:49	50
Chlorobenzene	ND		50	14	ug/L			12/31/14 14:49	50
Dibromochloromethane	ND		50	7.5	ug/L			12/31/14 14:49	50
Chloroethane	ND		50	8.5	ug/L			12/31/14 14:49	50
Chloroform	ND		50	14	ug/L			12/31/14 14:49	50
Chloromethane	ND		50	11	ug/L			12/31/14 14:49	50
cis-1,2-Dichloroethene	**1300**	**E**	50	17	ug/L			12/31/14 14:49	50
cis-1,3-Dichloropropene	ND		50	11	ug/L			12/31/14 14:49	50
Ethylbenzene	ND		50	16	ug/L			12/31/14 14:49	50
Methylene Chloride	ND		100	23	ug/L			12/31/14 14:49	50
Styrene	ND		50	14	ug/L			12/31/14 14:49	50
Tetrachloroethene	ND		50	18	ug/L			12/31/14 14:49	50
Toluene	ND		50	15	ug/L			12/31/14 14:49	50
trans-1,2-Dichloroethene	ND		50	21	ug/L			12/31/14 14:49	50
trans-1,3-Dichloropropene	ND		50	15	ug/L			12/31/14 14:49	50
Trichloroethene	ND		50	13	ug/L			12/31/14 14:49	50
Vinyl chloride	**1700**	**E**	50	14	ug/L			12/31/14 14:49	50
Xylenes, Total	ND		50	21	ug/L			12/31/14 14:49	50
m-Xylene & p-Xylene	ND		50	21	ug/L			12/31/14 14:49	50
o-Xylene	ND		50	21	ug/L			12/31/14 14:49	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*12/31/14 14:49*	*50*

Method: OLC02.1 - Volatile Organic Compounds, Low Concetration (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		200	57	ug/L			01/02/15 13:23	200
1,1,2,2-Tetrachloroethane	ND		200	78	ug/L			01/02/15 13:23	200

Client: C&S Engineers, Inc.
Project/Site: Midler Semi-Annual Groundwater

TestAmerica Job ID: 480-73491-1

Client Sample ID: MW-13D
Date Collected: 12/22/14 08:00
Date Received: 12/24/14 11:00

Lab Sample ID: 480-73491-1
Matrix: Water

Method: OLC02.1 - Volatile Organic Compounds, Low Concetration (GC/MS) - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		200	40	ug/L			01/02/15 13:23	200
1,1-Dichloroethane	ND		200	63	ug/L			01/02/15 13:23	200
1,1-Dichloroethene	ND		200	52	ug/L			01/02/15 13:23	200
1,2,4-Trichlorobenzene	ND		200	54	ug/L			01/02/15 13:23	200
1,2-Dibromo-3-Chloropropane	ND		200	99	ug/L			01/02/15 13:23	200
1,2-Dibromoethane	ND		200	49	ug/L			01/02/15 13:23	200
1,2-Dichlorobenzene	ND		200	30	ug/L			01/02/15 13:23	200
1,2-Dichloroethane	ND		200	32	ug/L			01/02/15 13:23	200
1,2-Dichloropropane	ND		200	34	ug/L			01/02/15 13:23	200
1,3-Dichlorobenzene	ND		200	59	ug/L			01/02/15 13:23	200
1,4-Dichlorobenzene	ND		200	53	ug/L			01/02/15 13:23	200
2-Butanone (MEK)	ND		1000	360	ug/L			01/02/15 13:23	200
2-Hexanone	ND		1000	110	ug/L			01/02/15 13:23	200
4-Methyl-2-pentanone (MIBK)	ND		1000	230	ug/L			01/02/15 13:23	200
Acetone	ND		1000	290	ug/L			01/02/15 13:23	200
Benzene	ND		200	36	ug/L			01/02/15 13:23	200
Bromodichloromethane	ND		200	51	ug/L			01/02/15 13:23	200
Bromoform	ND		200	60	ug/L			01/02/15 13:23	200
Bromomethane	ND		200	40	ug/L			01/02/15 13:23	200
Carbon disulfide	ND		200	42	ug/L			01/02/15 13:23	200
Carbon tetrachloride	ND		200	60	ug/L			01/02/15 13:23	200
Chlorobenzene	ND		200	57	ug/L			01/02/15 13:23	200
Dibromochloromethane	ND		200	30	ug/L			01/02/15 13:23	200
Chloroethane	ND		200	34	ug/L			01/02/15 13:23	200
Chloroform	ND		200	56	ug/L			01/02/15 13:23	200
Chloromethane	ND		200	44	ug/L			01/02/15 13:23	200
cis-1,2-Dichloroethene	**1200**		200	68	ug/L			01/02/15 13:23	200
cis-1,3-Dichloropropene	ND		200	43	ug/L			01/02/15 13:23	200
Ethylbenzene	ND		200	63	ug/L			01/02/15 13:23	200
Methylene Chloride	ND		400	92	ug/L			01/02/15 13:23	200
Styrene	ND		200	56	ug/L			01/02/15 13:23	200
Tetrachloroethene	ND		200	70	ug/L			01/02/15 13:23	200
Toluene	ND		200	61	ug/L			01/02/15 13:23	200
trans-1,2-Dichloroethene	ND		200	85	ug/L			01/02/15 13:23	200
trans-1,3-Dichloropropene	ND		200	59	ug/L			01/02/15 13:23	200
Trichloroethene	ND		200	54	ug/L			01/02/15 13:23	200
Vinyl chloride	**1600**		200	54	ug/L			01/02/15 13:23	200
Xylenes, Total	ND		200	84	ug/L			01/02/15 13:23	200
m-Xylene & p-Xylene	ND		200	84	ug/L			01/02/15 13:23	200
o-Xylene	ND		200	84	ug/L			01/02/15 13:23	200

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*01/02/15 13:23*	*200*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.23**		0.050	0.019	mg/L		12/29/14 09:45	12/30/14 13:13	1

Client: C&S Engineers, Inc.
Project/Site: Midler Semi-Annual Groundwater

TestAmerica Job ID: 480-73491-1

Client Sample ID: MW-13D
Date Collected: 12/22/14 08:00
Date Received: 12/24/14 11:00

Lab Sample ID: 480-73491-1
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**180**		40.0	7.0	mg/L			01/08/15 10:18	20
Nitrate as N	ND	H	0.050	0.020	mg/L			12/24/14 13:50	1
Ferrous Iron	ND	HF	0.10	0.075	mg/L			12/24/14 15:08	1
Sulfide	**18.8**		1.0	0.67	mg/L			12/29/14 06:45	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Inorganic Carbon	**66.2**		2.0	0.28	mg/L			01/08/15 12:25	2
Dissolved Organic Carbon	**50.6**		1.0	0.43	mg/L			12/29/14 23:38	1

Client Sample ID: MW-9D
Date Collected: 12/22/14 09:00
Date Received: 12/24/14 11:00

Lab Sample ID: 480-73491-2
Matrix: Water

Method: OLC02.1 - Volatile Organic Compounds, Low Concetration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.28	ug/L			01/02/15 12:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.39	ug/L			01/02/15 12:58	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			01/02/15 12:58	1
1,1-Dichloroethane	ND		1.0	0.32	ug/L			01/02/15 12:58	1
1,1-Dichloroethene	ND		1.0	0.26	ug/L			01/02/15 12:58	1
1,2,4-Trichlorobenzene	ND		1.0	0.27	ug/L			01/02/15 12:58	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			01/02/15 12:58	1
1,2-Dibromoethane	ND		1.0	0.25	ug/L			01/02/15 12:58	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			01/02/15 12:58	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			01/02/15 12:58	1
1,2-Dichloropropane	ND		1.0	0.17	ug/L			01/02/15 12:58	1
1,3-Dichlorobenzene	ND		1.0	0.29	ug/L			01/02/15 12:58	1
1,4-Dichlorobenzene	ND		1.0	0.27	ug/L			01/02/15 12:58	1
2-Butanone (MEK)	ND		5.0	1.8	ug/L			01/02/15 12:58	1
2-Hexanone	ND		5.0	0.55	ug/L			01/02/15 12:58	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.2	ug/L			01/02/15 12:58	1
Acetone	ND		5.0	1.5	ug/L			01/02/15 12:58	1
Benzene	ND		1.0	0.18	ug/L			01/02/15 12:58	1
Bromodichloromethane	ND		1.0	0.26	ug/L			01/02/15 12:58	1
Bromoform	ND		1.0	0.30	ug/L			01/02/15 12:58	1
Bromomethane	ND		1.0	0.20	ug/L			01/02/15 12:58	1
Carbon disulfide	ND		1.0	0.21	ug/L			01/02/15 12:58	1
Carbon tetrachloride	ND		1.0	0.30	ug/L			01/02/15 12:58	1
Chlorobenzene	ND		1.0	0.29	ug/L			01/02/15 12:58	1
Dibromochloromethane	ND		1.0	0.15	ug/L			01/02/15 12:58	1
Chloroethane	ND		1.0	0.17	ug/L			01/02/15 12:58	1
Chloroform	ND		1.0	0.28	ug/L			01/02/15 12:58	1
Chloromethane	ND		1.0	0.22	ug/L			01/02/15 12:58	1
cis-1,2-Dichloroethene	**0.84**	**J**	1.0	0.34	ug/L			01/02/15 12:58	1
cis-1,3-Dichloropropene	ND		1.0	0.22	ug/L			01/02/15 12:58	1
Ethylbenzene	ND		1.0	0.32	ug/L			01/02/15 12:58	1
Methylene Chloride	ND		2.0	0.46	ug/L			01/02/15 12:58	1
Styrene	ND		1.0	0.28	ug/L			01/02/15 12:58	1
Tetrachloroethene	ND		1.0	0.35	ug/L			01/02/15 12:58	1
Toluene	**0.58**	**J**	1.0	0.30	ug/L			01/02/15 12:58	1
trans-1,2-Dichloroethene	ND		1.0	0.43	ug/L			01/02/15 12:58	1
trans-1,3-Dichloropropene	ND		1.0	0.29	ug/L			01/02/15 12:58	1
Trichloroethene	ND		1.0	0.27	ug/L			01/02/15 12:58	1
Vinyl chloride	ND		1.0	0.27	ug/L			01/02/15 12:58	1
Xylenes, Total	ND		1.0	0.42	ug/L			01/02/15 12:58	1
m-Xylene & p-Xylene	ND		1.0	0.42	ug/L			01/02/15 12:58	1
o-Xylene	ND		1.0	0.42	ug/L			01/02/15 12:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*01/02/15 12:58*	*1*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.20**		0.050	0.019	mg/L		12/29/14 09:45	12/30/14 13:16	1

Client: C&S Engineers, Inc.
Project/Site: Midler Semi-Annual Groundwater

TestAmerica Job ID: 480-73491-1

Client Sample ID: MW-9D
Date Collected: 12/22/14 09:00
Date Received: 12/24/14 11:00

Lab Sample ID: 480-73491-2
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**609**		40.0	7.0	mg/L			01/08/15 10:26	20
Nitrate as N	ND	H	0.050	0.020	mg/L			12/24/14 13:53	1
Ferrous Iron	ND	HF	0.10	0.075	mg/L			12/24/14 15:08	1
Sulfide	**24.8**		1.0	0.67	mg/L			12/29/14 06:45	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Inorganic Carbon	**66.8**		2.0	0.28	mg/L			01/08/15 12:25	2
Dissolved Organic Carbon	**5.4**		1.0	0.43	mg/L			12/29/14 23:54	1

Client: C&S Engineers, Inc.
Project/Site: Midler Semi-Annual Groundwater

TestAmerica Job ID: 480-73491-1

Client Sample ID: MW-10D
Date Collected: 12/22/14 09:45
Date Received: 12/24/14 11:00

Lab Sample ID: 480-73491-3
Matrix: Water

Method: OLC02.1 - Volatile Organic Compounds, Low Concetration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		40	11	ug/L			12/31/14 15:38	40
1,1,2,2-Tetrachloroethane	ND		40	16	ug/L			12/31/14 15:38	40
1,1,2-Trichloroethane	ND		40	8.0	ug/L			12/31/14 15:38	40
1,1-Dichloroethane	ND		40	13	ug/L			12/31/14 15:38	40
1,1-Dichloroethene	ND		40	10	ug/L			12/31/14 15:38	40
1,2,4-Trichlorobenzene	ND		40	11	ug/L			12/31/14 15:38	40
1,2-Dibromo-3-Chloropropane	ND		40	20	ug/L			12/31/14 15:38	40
1,2-Dibromoethane	ND		40	9.8	ug/L			12/31/14 15:38	40
1,2-Dichlorobenzene	ND		40	6.0	ug/L			12/31/14 15:38	40
1,2-Dichloroethane	ND		40	6.4	ug/L			12/31/14 15:38	40
1,2-Dichloropropane	ND		40	6.8	ug/L			12/31/14 15:38	40
1,3-Dichlorobenzene	ND		40	12	ug/L			12/31/14 15:38	40
1,4-Dichlorobenzene	ND		40	11	ug/L			12/31/14 15:38	40
2-Butanone (MEK)	ND		200	72	ug/L			12/31/14 15:38	40
2-Hexanone	ND		200	22	ug/L			12/31/14 15:38	40
4-Methyl-2-pentanone (MIBK)	ND		200	46	ug/L			12/31/14 15:38	40
Acetone	ND		200	58	ug/L			12/31/14 15:38	40
Benzene	ND		40	7.2	ug/L			12/31/14 15:38	40
Bromodichloromethane	ND		40	10	ug/L			12/31/14 15:38	40
Bromoform	ND		40	12	ug/L			12/31/14 15:38	40
Bromomethane	ND		40	8.0	ug/L			12/31/14 15:38	40
Carbon disulfide	ND		40	8.4	ug/L			12/31/14 15:38	40
Carbon tetrachloride	ND		40	12	ug/L			12/31/14 15:38	40
Chlorobenzene	ND		40	11	ug/L			12/31/14 15:38	40
Dibromochloromethane	ND		40	6.0	ug/L			12/31/14 15:38	40
Chloroethane	ND		40	6.8	ug/L			12/31/14 15:38	40
Chloroform	ND		40	11	ug/L			12/31/14 15:38	40
Chloromethane	ND		40	8.8	ug/L			12/31/14 15:38	40
cis-1,2-Dichloroethene	**410**		40	14	ug/L			12/31/14 15:38	40
cis-1,3-Dichloropropene	ND		40	8.6	ug/L			12/31/14 15:38	40
Ethylbenzene	ND		40	13	ug/L			12/31/14 15:38	40
Methylene Chloride	ND		80	18	ug/L			12/31/14 15:38	40
Styrene	ND		40	11	ug/L			12/31/14 15:38	40
Tetrachloroethene	ND		40	14	ug/L			12/31/14 15:38	40
Toluene	ND		40	12	ug/L			12/31/14 15:38	40
trans-1,2-Dichloroethene	**19**	**J**	40	17	ug/L			12/31/14 15:38	40
trans-1,3-Dichloropropene	ND		40	12	ug/L			12/31/14 15:38	40
Trichloroethene	ND		40	11	ug/L			12/31/14 15:38	40
Vinyl chloride	**74**		40	11	ug/L			12/31/14 15:38	40
Xylenes, Total	ND		40	17	ug/L			12/31/14 15:38	40
m-Xylene & p-Xylene	ND		40	17	ug/L			12/31/14 15:38	40
o-Xylene	ND		40	17	ug/L			12/31/14 15:38	40

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*12/31/14 15:38*	*40*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.040**	**J**	0.050	0.019	mg/L		12/29/14 09:45	12/30/14 13:18	1

Client: C&S Engineers, Inc.
Project/Site: Midler Semi-Annual Groundwater

TestAmerica Job ID: 480-73491-1

Client Sample ID: MW-10D
Date Collected: 12/22/14 09:45
Date Received: 12/24/14 11:00

Lab Sample ID: 480-73491-3
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**674**		40.0	7.0	mg/L			01/08/15 10:34	20
Nitrate as N	ND	H	0.050	0.020	mg/L			12/24/14 13:54	1
Ferrous Iron	ND	HF	0.10	0.075	mg/L			12/24/14 15:08	1
Sulfide	**21.2**		1.0	0.67	mg/L			12/29/14 06:45	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Inorganic Carbon	**74.9**		2.0	0.28	mg/L			01/08/15 12:25	2
Dissolved Organic Carbon	**4.5**		1.0	0.43	mg/L			12/30/14 00:09	1

Client Sample ID: MW-15D
Date Collected: 12/22/14 10:00
Date Received: 12/24/14 11:00

Lab Sample ID: 480-73491-4
Matrix: Water

Method: OLC02.1 - Volatile Organic Compounds, Low Concetration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.28	ug/L			12/31/14 16:02	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.39	ug/L			12/31/14 16:02	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			12/31/14 16:02	1
1,1-Dichloroethane	ND		1.0	0.32	ug/L			12/31/14 16:02	1
1,1-Dichloroethene	ND		1.0	0.26	ug/L			12/31/14 16:02	1
1,2,4-Trichlorobenzene	ND		1.0	0.27	ug/L			12/31/14 16:02	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			12/31/14 16:02	1
1,2-Dibromoethane	ND		1.0	0.25	ug/L			12/31/14 16:02	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			12/31/14 16:02	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			12/31/14 16:02	1
1,2-Dichloropropane	ND		1.0	0.17	ug/L			12/31/14 16:02	1
1,3-Dichlorobenzene	ND		1.0	0.29	ug/L			12/31/14 16:02	1
1,4-Dichlorobenzene	ND		1.0	0.27	ug/L			12/31/14 16:02	1
2-Butanone (MEK)	ND		5.0	1.8	ug/L			12/31/14 16:02	1
2-Hexanone	ND		5.0	0.55	ug/L			12/31/14 16:02	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.2	ug/L			12/31/14 16:02	1
Acetone	ND		5.0	1.5	ug/L			12/31/14 16:02	1
Benzene	ND		1.0	0.18	ug/L			12/31/14 16:02	1
Bromodichloromethane	ND		1.0	0.26	ug/L			12/31/14 16:02	1
Bromoform	ND		1.0	0.30	ug/L			12/31/14 16:02	1
Bromomethane	ND		1.0	0.20	ug/L			12/31/14 16:02	1
Carbon disulfide	ND		1.0	0.21	ug/L			12/31/14 16:02	1
Carbon tetrachloride	ND		1.0	0.30	ug/L			12/31/14 16:02	1
Chlorobenzene	ND		1.0	0.29	ug/L			12/31/14 16:02	1
Dibromochloromethane	ND		1.0	0.15	ug/L			12/31/14 16:02	1
Chloroethane	ND		1.0	0.17	ug/L			12/31/14 16:02	1
Chloroform	ND		1.0	0.28	ug/L			12/31/14 16:02	1
Chloromethane	ND		1.0	0.22	ug/L			12/31/14 16:02	1
cis-1,2-Dichloroethene	**4.2**		1.0	0.34	ug/L			12/31/14 16:02	1
cis-1,3-Dichloropropene	ND		1.0	0.22	ug/L			12/31/14 16:02	1
Ethylbenzene	ND		1.0	0.32	ug/L			12/31/14 16:02	1
Methylene Chloride	ND		2.0	0.46	ug/L			12/31/14 16:02	1
Styrene	ND		1.0	0.28	ug/L			12/31/14 16:02	1
Tetrachloroethene	ND		1.0	0.35	ug/L			12/31/14 16:02	1
Toluene	ND		1.0	0.30	ug/L			12/31/14 16:02	1
trans-1,2-Dichloroethene	**0.77**	**J**	1.0	0.43	ug/L			12/31/14 16:02	1
trans-1,3-Dichloropropene	ND		1.0	0.29	ug/L			12/31/14 16:02	1
Trichloroethene	ND		1.0	0.27	ug/L			12/31/14 16:02	1
Vinyl chloride	ND		1.0	0.27	ug/L			12/31/14 16:02	1
Xylenes, Total	ND		1.0	0.42	ug/L			12/31/14 16:02	1
m-Xylene & p-Xylene	ND		1.0	0.42	ug/L			12/31/14 16:02	1
o-Xylene	ND		1.0	0.42	ug/L			12/31/14 16:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*12/31/14 16:02*	*1*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.19**		0.050	0.019	mg/L		12/29/14 09:45	12/30/14 13:21	1

Client: C&S Engineers, Inc.
Project/Site: Midler Semi-Annual Groundwater

TestAmerica Job ID: 480-73491-1

Client Sample ID: MW-15D
Date Collected: 12/22/14 10:00
Date Received: 12/24/14 11:00

Lab Sample ID: 480-73491-4
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**556**		40.0	7.0	mg/L			01/08/15 10:42	20
Nitrate as N	ND	H	0.050	0.020	mg/L			12/24/14 13:55	1
Ferrous Iron	ND	HF	0.10	0.075	mg/L			12/24/14 15:08	1
Sulfide	**28.2**		1.0	0.67	mg/L			12/29/14 06:45	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Inorganic Carbon	**100**		5.0	0.70	mg/L			01/08/15 12:25	5
Dissolved Organic Carbon	**7.6**		1.0	0.43	mg/L			12/30/14 00:25	1

Client: C&S Engineers, Inc.
Project/Site: Midler Semi-Annual Groundwater

TestAmerica Job ID: 480-73491-1

Client Sample ID: TRIP BLANK
Date Collected: 12/22/14 00:00
Date Received: 12/24/14 11:00

Lab Sample ID: 480-73491-5
Matrix: Water

Method: OLC02.1 - Volatile Organic Compounds, Low Concetration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.28	ug/L			12/31/14 16:27	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.39	ug/L			12/31/14 16:27	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			12/31/14 16:27	1
1,1-Dichloroethane	ND		1.0	0.32	ug/L			12/31/14 16:27	1
1,1-Dichloroethene	ND		1.0	0.26	ug/L			12/31/14 16:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.27	ug/L			12/31/14 16:27	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			12/31/14 16:27	1
1,2-Dibromoethane	ND		1.0	0.25	ug/L			12/31/14 16:27	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			12/31/14 16:27	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			12/31/14 16:27	1
1,2-Dichloropropane	ND		1.0	0.17	ug/L			12/31/14 16:27	1
1,3-Dichlorobenzene	ND		1.0	0.29	ug/L			12/31/14 16:27	1
1,4-Dichlorobenzene	ND		1.0	0.27	ug/L			12/31/14 16:27	1
2-Butanone (MEK)	ND		5.0	1.8	ug/L			12/31/14 16:27	1
2-Hexanone	ND		5.0	0.55	ug/L			12/31/14 16:27	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.2	ug/L			12/31/14 16:27	1
Acetone	ND		5.0	1.5	ug/L			12/31/14 16:27	1
Benzene	ND		1.0	0.18	ug/L			12/31/14 16:27	1
Bromodichloromethane	ND		1.0	0.26	ug/L			12/31/14 16:27	1
Bromoform	ND		1.0	0.30	ug/L			12/31/14 16:27	1
Bromomethane	ND		1.0	0.20	ug/L			12/31/14 16:27	1
Carbon disulfide	ND		1.0	0.21	ug/L			12/31/14 16:27	1
Carbon tetrachloride	ND		1.0	0.30	ug/L			12/31/14 16:27	1
Chlorobenzene	ND		1.0	0.29	ug/L			12/31/14 16:27	1
Dibromochloromethane	ND		1.0	0.15	ug/L			12/31/14 16:27	1
Chloroethane	ND		1.0	0.17	ug/L			12/31/14 16:27	1
Chloroform	ND		1.0	0.28	ug/L			12/31/14 16:27	1
Chloromethane	ND		1.0	0.22	ug/L			12/31/14 16:27	1
cis-1,2-Dichloroethene	ND		1.0	0.34	ug/L			12/31/14 16:27	1
cis-1,3-Dichloropropene	ND		1.0	0.22	ug/L			12/31/14 16:27	1
Ethylbenzene	ND		1.0	0.32	ug/L			12/31/14 16:27	1
Methylene Chloride	ND		2.0	0.46	ug/L			12/31/14 16:27	1
Styrene	ND		1.0	0.28	ug/L			12/31/14 16:27	1
Tetrachloroethene	ND		1.0	0.35	ug/L			12/31/14 16:27	1
Toluene	ND		1.0	0.30	ug/L			12/31/14 16:27	1
trans-1,2-Dichloroethene	ND		1.0	0.43	ug/L			12/31/14 16:27	1
trans-1,3-Dichloropropene	ND		1.0	0.29	ug/L			12/31/14 16:27	1
Trichloroethene	ND		1.0	0.27	ug/L			12/31/14 16:27	1
Vinyl chloride	ND		1.0	0.27	ug/L			12/31/14 16:27	1
Xylenes, Total	ND		1.0	0.42	ug/L			12/31/14 16:27	1
m-Xylene & p-Xylene	ND		1.0	0.42	ug/L			12/31/14 16:27	1
o-Xylene	ND		1.0	0.42	ug/L			12/31/14 16:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*12/31/14 16:27*	*1*

Surrogate Summary

Client: C&S Engineers, Inc.
Project/Site: Midler Semi-Annual Groundwater

TestAmerica Job ID: 480-73491-1

Method: OLC02.1 - Volatile Organic Compounds, Low Concetration (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
		BFB								
Lab Sample ID	Client Sample ID	(80-120)								
480-73491-1	MW-13D	98								
480-73491-1 - DL	MW-13D	94								
480-73491-1 MS	MW-13D	96								
480-73491-1 MSD	MW-13D	96								
480-73491-2	MW-9D	93								
480-73491-3	MW-10D	98								
480-73491-3 MS	MW-10D	102								
480-73491-3 MSD	MW-10D	99								
480-73491-4	MW-15D	94								
480-73491-5	TRIP BLANK	95								
LCS 480-221330/10	Lab Control Sample	102								
LCS 480-221502/5	Lab Control Sample	96								
MB 480-221330/11	Method Blank	98								
MB 480-221502/6	Method Blank	94								

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

Method: OLC02.1 - Volatile Organic Compounds, Low Concetration (GC/MS)

Lab Sample ID: MB 480-221330/11
Matrix: Water
Analysis Batch: 221330

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.28	ug/L			12/31/14 14:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.39	ug/L			12/31/14 14:04	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			12/31/14 14:04	1
1,1-Dichloroethane	ND		1.0	0.32	ug/L			12/31/14 14:04	1
1,1-Dichloroethene	ND		1.0	0.26	ug/L			12/31/14 14:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.27	ug/L			12/31/14 14:04	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			12/31/14 14:04	1
1,2-Dibromoethane	ND		1.0	0.25	ug/L			12/31/14 14:04	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			12/31/14 14:04	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			12/31/14 14:04	1
1,2-Dichloropropane	ND		1.0	0.17	ug/L			12/31/14 14:04	1
1,3-Dichlorobenzene	ND		1.0	0.29	ug/L			12/31/14 14:04	1
1,4-Dichlorobenzene	ND		1.0	0.27	ug/L			12/31/14 14:04	1
2-Butanone (MEK)	ND		5.0	1.8	ug/L			12/31/14 14:04	1
2-Hexanone	ND		5.0	0.55	ug/L			12/31/14 14:04	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.2	ug/L			12/31/14 14:04	1
Acetone	ND		5.0	1.5	ug/L			12/31/14 14:04	1
Benzene	ND		1.0	0.18	ug/L			12/31/14 14:04	1
Bromodichloromethane	ND		1.0	0.26	ug/L			12/31/14 14:04	1
Bromoform	ND		1.0	0.30	ug/L			12/31/14 14:04	1
Bromomethane	ND		1.0	0.20	ug/L			12/31/14 14:04	1
Carbon disulfide	ND		1.0	0.21	ug/L			12/31/14 14:04	1
Carbon tetrachloride	ND		1.0	0.30	ug/L			12/31/14 14:04	1
Chlorobenzene	ND		1.0	0.29	ug/L			12/31/14 14:04	1
Dibromochloromethane	ND		1.0	0.15	ug/L			12/31/14 14:04	1
Chloroethane	ND		1.0	0.17	ug/L			12/31/14 14:04	1
Chloroform	ND		1.0	0.28	ug/L			12/31/14 14:04	1
Chloromethane	ND		1.0	0.22	ug/L			12/31/14 14:04	1
cis-1,2-Dichloroethene	ND		1.0	0.34	ug/L			12/31/14 14:04	1
cis-1,3-Dichloropropene	ND		1.0	0.22	ug/L			12/31/14 14:04	1
Ethylbenzene	ND		1.0	0.32	ug/L			12/31/14 14:04	1
Methylene Chloride	ND		2.0	0.46	ug/L			12/31/14 14:04	1
Styrene	ND		1.0	0.28	ug/L			12/31/14 14:04	1
Tetrachloroethene	ND		1.0	0.35	ug/L			12/31/14 14:04	1
Toluene	ND		1.0	0.30	ug/L			12/31/14 14:04	1
trans-1,2-Dichloroethene	ND		1.0	0.43	ug/L			12/31/14 14:04	1
trans-1,3-Dichloropropene	ND		1.0	0.29	ug/L			12/31/14 14:04	1
Trichloroethene	ND		1.0	0.27	ug/L			12/31/14 14:04	1
Vinyl chloride	ND		1.0	0.27	ug/L			12/31/14 14:04	1
Xylenes, Total	ND		1.0	0.42	ug/L			12/31/14 14:04	1
m-Xylene & p-Xylene	ND		1.0	0.42	ug/L			12/31/14 14:04	1
o-Xylene	ND		1.0	0.42	ug/L			12/31/14 14:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*12/31/14 14:04*	*1*

Method: OLC02.1 - Volatile Organic Compounds, Low Concetration (GC/MS) (Continued)

Lab Sample ID: LCS 480-221330/10
Matrix: Water
Analysis Batch: 221330

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	5.00	5.55		ug/L		111	60 - 140
Benzene	5.00	5.36		ug/L		107	60 - 140
Chlorobenzene	5.00	5.39		ug/L		108	60 - 140
Toluene	5.00	5.42		ug/L		108	60 - 140
Trichloroethene	5.00	5.58		ug/L		112	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*

Lab Sample ID: 480-73491-3 MS
Matrix: Water
Analysis Batch: 221330

Client Sample ID: MW-10D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	ND		200	156		ug/L		78	60 - 140
Benzene	ND		200	178		ug/L		89	60 - 140
Chlorobenzene	ND		200	189		ug/L		94	60 - 140
Toluene	ND		200	181		ug/L		91	60 - 140
Trichloroethene	ND		200	173		ug/L		86	60 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*

Lab Sample ID: 480-73491-3 MSD
Matrix: Water
Analysis Batch: 221330

Client Sample ID: MW-10D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	ND		200	171		ug/L		85	60 - 140	9	20
Benzene	ND		200	182		ug/L		91	60 - 140	2	20
Chlorobenzene	ND		200	190		ug/L		95	60 - 140	1	20
Toluene	ND		200	186		ug/L		93	60 - 140	3	20
Trichloroethene	ND		200	189		ug/L		94	60 - 140	9	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*

Lab Sample ID: MB 480-221502/6
Matrix: Water
Analysis Batch: 221502

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.28	ug/L			01/02/15 12:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.39	ug/L			01/02/15 12:04	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			01/02/15 12:04	1
1,1-Dichloroethane	ND		1.0	0.32	ug/L			01/02/15 12:04	1
1,1-Dichloroethene	ND		1.0	0.26	ug/L			01/02/15 12:04	1

Method: OLC02.1 - Volatile Organic Compounds, Low Concetration (GC/MS) (Continued)

Lab Sample ID: MB 480-221502/6
Matrix: Water
Analysis Batch: 221502

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		1.0	0.27	ug/L			01/02/15 12:04	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			01/02/15 12:04	1
1,2-Dibromoethane	ND		1.0	0.25	ug/L			01/02/15 12:04	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			01/02/15 12:04	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			01/02/15 12:04	1
1,2-Dichloropropane	ND		1.0	0.17	ug/L			01/02/15 12:04	1
1,3-Dichlorobenzene	ND		1.0	0.29	ug/L			01/02/15 12:04	1
1,4-Dichlorobenzene	ND		1.0	0.27	ug/L			01/02/15 12:04	1
2-Butanone (MEK)	ND		5.0	1.8	ug/L			01/02/15 12:04	1
2-Hexanone	ND		5.0	0.55	ug/L			01/02/15 12:04	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.2	ug/L			01/02/15 12:04	1
Acetone	ND		5.0	1.5	ug/L			01/02/15 12:04	1
Benzene	ND		1.0	0.18	ug/L			01/02/15 12:04	1
Bromodichloromethane	ND		1.0	0.26	ug/L			01/02/15 12:04	1
Bromoform	ND		1.0	0.30	ug/L			01/02/15 12:04	1
Bromomethane	ND		1.0	0.20	ug/L			01/02/15 12:04	1
Carbon disulfide	ND		1.0	0.21	ug/L			01/02/15 12:04	1
Carbon tetrachloride	ND		1.0	0.30	ug/L			01/02/15 12:04	1
Chlorobenzene	ND		1.0	0.29	ug/L			01/02/15 12:04	1
Dibromochloromethane	ND		1.0	0.15	ug/L			01/02/15 12:04	1
Chloroethane	ND		1.0	0.17	ug/L			01/02/15 12:04	1
Chloroform	ND		1.0	0.28	ug/L			01/02/15 12:04	1
Chloromethane	ND		1.0	0.22	ug/L			01/02/15 12:04	1
cis-1,2-Dichloroethene	ND		1.0	0.34	ug/L			01/02/15 12:04	1
cis-1,3-Dichloropropene	ND		1.0	0.22	ug/L			01/02/15 12:04	1
Ethylbenzene	ND		1.0	0.32	ug/L			01/02/15 12:04	1
Methylene Chloride	ND		2.0	0.46	ug/L			01/02/15 12:04	1
Styrene	ND		1.0	0.28	ug/L			01/02/15 12:04	1
Tetrachloroethene	ND		1.0	0.35	ug/L			01/02/15 12:04	1
Toluene	ND		1.0	0.30	ug/L			01/02/15 12:04	1
trans-1,2-Dichloroethene	ND		1.0	0.43	ug/L			01/02/15 12:04	1
trans-1,3-Dichloropropene	ND		1.0	0.29	ug/L			01/02/15 12:04	1
Trichloroethene	ND		1.0	0.27	ug/L			01/02/15 12:04	1
Vinyl chloride	ND		1.0	0.27	ug/L			01/02/15 12:04	1
Xylenes, Total	ND		1.0	0.42	ug/L			01/02/15 12:04	1
m-Xylene & p-Xylene	ND		1.0	0.42	ug/L			01/02/15 12:04	1
o-Xylene	ND		1.0	0.42	ug/L			01/02/15 12:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*01/02/15 12:04*	*1*

Lab Sample ID: LCS 480-221502/5
Matrix: Water
Analysis Batch: 221502

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	5.00	5.08		ug/L		102	60 - 140
Benzene	5.00	5.20		ug/L		104	60 - 140

Method: OLC02.1 - Volatile Organic Compounds, Low Concetration (GC/MS) (Continued)

Lab Sample ID: LCS 480-221502/5
Matrix: Water
Analysis Batch: 221502

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chlorobenzene			5.00	5.05		ug/L		101	60 - 140		
Toluene			5.00	5.17		ug/L		103	60 - 140		
Trichloroethene			5.00	5.27		ug/L		105	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*

Lab Sample ID: 480-73491-1 MS
Matrix: Water
Analysis Batch: 221502

Client Sample ID: MW-13D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene	ND		1000	974		ug/L		97	60 - 140		
Benzene	ND		1000	982		ug/L		98	60 - 140		
Chlorobenzene	ND		1000	982		ug/L		98	60 - 140		
Toluene	ND		1000	995		ug/L		100	60 - 140		
Trichloroethene	ND		1000	992		ug/L		99	60 - 140		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*

Lab Sample ID: 480-73491-1 MSD
Matrix: Water
Analysis Batch: 221502

Client Sample ID: MW-13D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	ND		1000	894		ug/L		89	60 - 140	9	20
Benzene	ND		1000	919		ug/L		92	60 - 140	7	20
Chlorobenzene	ND		1000	945		ug/L		95	60 - 140	4	20
Toluene	ND		1000	946		ug/L		95	60 - 140	5	20
Trichloroethene	ND		1000	901		ug/L		90	60 - 140	10	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-220996/1-A
Matrix: Water
Analysis Batch: 221229

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 220996

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.050	0.019	mg/L		12/29/14 09:45	12/30/14 12:35	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-220996/2-A
Matrix: Water
Analysis Batch: 221229

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 220996

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	9.38		mg/L		94	85 - 115

Method: 300.0 - Sulfate

Lab Sample ID: MB 480-222121/32
Matrix: Water
Analysis Batch: 222121

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		2.0	0.35	mg/L			01/08/15 13:25	1

Lab Sample ID: MB 480-222121/4
Matrix: Water
Analysis Batch: 222121

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		2.0	0.35	mg/L			01/08/15 09:37	1

Lab Sample ID: LCS 480-222121/3
Matrix: Water
Analysis Batch: 222121

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	20.0	21.89		mg/L		109	80 - 129

Lab Sample ID: LCS 480-222121/31
Matrix: Water
Analysis Batch: 222121

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	20.0	21.47		mg/L		107	80 - 129

Lab Sample ID: MB 480-222406/32
Matrix: Water
Analysis Batch: 222406

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		2.0	0.35	mg/L			01/09/15 16:10	1

Lab Sample ID: LCS 480-222406/31
Matrix: Water
Analysis Batch: 222406

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	20.0	21.09		mg/L		105	80 - 129

Method: 300.0 - Sulfate (Continued)

Lab Sample ID: MB 480-222594/4
Matrix: Water
Analysis Batch: 222594

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		2.0	0.35	mg/L			01/12/15 15:23	1

Lab Sample ID: LCS 480-222594/3
Matrix: Water
Analysis Batch: 222594

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	20.0	19.71		mg/L		99	80 - 129

Lab Sample ID: 480-73491-4 MS
Matrix: Water
Analysis Batch: 222594

Client Sample ID: MW-15D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	559		250	802.6		mg/L		97	80 - 129

Method: SM 3500 FE D - Iron, Ferrous and Ferric

Lab Sample ID: MB 480-220873/3
Matrix: Water
Analysis Batch: 220873

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	ND		0.10	0.075	mg/L			12/24/14 15:08	1

Lab Sample ID: LCS 480-220873/4
Matrix: Water
Analysis Batch: 220873

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ferrous Iron	2.00	1.86		mg/L		93	90 - 110

Lab Sample ID: 480-73491-4 MS
Matrix: Water
Analysis Batch: 220873

Client Sample ID: MW-15D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ferrous Iron	ND	HF	1.00	1.24		mg/L		124	70 - 130

Lab Sample ID: 480-73491-4 MSD
Matrix: Water
Analysis Batch: 220873

Client Sample ID: MW-15D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ferrous Iron	ND	HF	1.00	1.24		mg/L		124	70 - 130	0	20

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 480-221002/3
Matrix: Water
Analysis Batch: 221002

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	ND		1.0	0.67	mg/L			12/29/14 06:45	1

Lab Sample ID: LCS 480-221002/4
Matrix: Water
Analysis Batch: 221002

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	10.0	9.20		mg/L		92	90 - 110

Lab Sample ID: 480-73491-1 DU
Matrix: Water
Analysis Batch: 221002

Client Sample ID: MW-13D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfide	18.8		18.80		mg/L		0	20

Method: SM 5310C - Organic Carbon, Dissolved (DOC)

Lab Sample ID: MB 490-219226/3
Matrix: Water
Analysis Batch: 219226

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Inorganic Carbon	ND		1.0	0.14	mg/L			01/08/15 12:25	1

Lab Sample ID: LCS 490-219226/2
Matrix: Water
Analysis Batch: 219226

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Inorganic Carbon	10.1	10.02		mg/L		100	90 - 110

Lab Sample ID: 480-73491-2 MS
Matrix: Water
Analysis Batch: 219226

Client Sample ID: MW-9D
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Inorganic Carbon	66.8		20.1	87.99		mg/L		105	80 - 120

Method: SM5310_D - Organic Carbon, Dissolved (DOC)

Lab Sample ID: MB 480-221137/10
Matrix: Water
Analysis Batch: 221137

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	ND		1.0	0.43	mg/L			12/29/14 19:21	1

Method: SM5310_D - Organic Carbon, Dissolved (DOC) (Continued)

Lab Sample ID: LCS 480-221137/11
Matrix: Water
Analysis Batch: 221137

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Organic Carbon	60.0	61.07		mg/L		102	90 - 110

Lab Sample ID: MB 480-221746/3
Matrix: Water
Analysis Batch: 221746

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	ND		1.0	0.43	mg/L			12/29/14 19:21	1

Lab Sample ID: LCS 480-221746/4
Matrix: Water
Analysis Batch: 221746

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Organic Carbon	60.0	61.07		mg/L		102	90 - 110

GC/MS VOA

Analysis Batch: 221330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-73491-1	MW-13D	Total/NA	Water	OLC02.1	
480-73491-3	MW-10D	Total/NA	Water	OLC02.1	
480-73491-3 MS	MW-10D	Total/NA	Water	OLC02.1	
480-73491-3 MSD	MW-10D	Total/NA	Water	OLC02.1	
480-73491-4	MW-15D	Total/NA	Water	OLC02.1	
480-73491-5	TRIP BLANK	Total/NA	Water	OLC02.1	
LCS 480-221330/10	Lab Control Sample	Total/NA	Water	OLC02.1	
MB 480-221330/11	Method Blank	Total/NA	Water	OLC02.1	

Analysis Batch: 221502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-73491-1 - DL	MW-13D	Total/NA	Water	OLC02.1	
480-73491-1 MS	MW-13D	Total/NA	Water	OLC02.1	
480-73491-1 MSD	MW-13D	Total/NA	Water	OLC02.1	
480-73491-2	MW-9D	Total/NA	Water	OLC02.1	
LCS 480-221502/5	Lab Control Sample	Total/NA	Water	OLC02.1	
MB 480-221502/6	Method Blank	Total/NA	Water	OLC02.1	

Metals

Prep Batch: 220996

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-73491-1	MW-13D	Total/NA	Water	200.7	
480-73491-2	MW-9D	Total/NA	Water	200.7	
480-73491-3	MW-10D	Total/NA	Water	200.7	
480-73491-4	MW-15D	Total/NA	Water	200.7	
LCS 480-220996/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-220996/1-A	Method Blank	Total/NA	Water	200.7	

Analysis Batch: 221229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-73491-1	MW-13D	Total/NA	Water	200.7 Rev 4.4	220996
480-73491-2	MW-9D	Total/NA	Water	200.7 Rev 4.4	220996
480-73491-3	MW-10D	Total/NA	Water	200.7 Rev 4.4	220996
480-73491-4	MW-15D	Total/NA	Water	200.7 Rev 4.4	220996
LCS 480-220996/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	220996
MB 480-220996/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	220996

General Chemistry

Analysis Batch: 219226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-73491-1	MW-13D	Dissolved	Water	SM 5310C	
480-73491-2	MW-9D	Dissolved	Water	SM 5310C	
480-73491-2 MS	MW-9D	Dissolved	Water	SM 5310C	
480-73491-3	MW-10D	Dissolved	Water	SM 5310C	
480-73491-4	MW-15D	Dissolved	Water	SM 5310C	
LCS 490-219226/2	Lab Control Sample	Dissolved	Water	SM 5310C	
MB 490-219226/3	Method Blank	Dissolved	Water	SM 5310C	

General Chemistry (Continued)

Analysis Batch: 220873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-73491-1	MW-13D	Total/NA	Water	SM 3500 FE D	
480-73491-2	MW-9D	Total/NA	Water	SM 3500 FE D	
480-73491-3	MW-10D	Total/NA	Water	SM 3500 FE D	
480-73491-4	MW-15D	Total/NA	Water	SM 3500 FE D	
480-73491-4 MS	MW-15D	Total/NA	Water	SM 3500 FE D	
480-73491-4 MSD	MW-15D	Total/NA	Water	SM 3500 FE D	
LCS 480-220873/4	Lab Control Sample	Total/NA	Water	SM 3500 FE D	
MB 480-220873/3	Method Blank	Total/NA	Water	SM 3500 FE D	

Analysis Batch: 220876

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-73491-1	MW-13D	Total/NA	Water	Nitrate by calc	
480-73491-2	MW-9D	Total/NA	Water	Nitrate by calc	
480-73491-3	MW-10D	Total/NA	Water	Nitrate by calc	
480-73491-4	MW-15D	Total/NA	Water	Nitrate by calc	

Analysis Batch: 221002

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-73491-1	MW-13D	Total/NA	Water	SM 4500 S2 F	
480-73491-1 DU	MW-13D	Total/NA	Water	SM 4500 S2 F	
480-73491-2	MW-9D	Total/NA	Water	SM 4500 S2 F	
480-73491-3	MW-10D	Total/NA	Water	SM 4500 S2 F	
480-73491-4	MW-15D	Total/NA	Water	SM 4500 S2 F	
LCS 480-221002/4	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	
MB 480-221002/3	Method Blank	Total/NA	Water	SM 4500 S2 F	

Analysis Batch: 221137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-73491-1	MW-13D	Dissolved	Water	SM5310_D	
480-73491-2	MW-9D	Dissolved	Water	SM5310_D	
480-73491-3	MW-10D	Dissolved	Water	SM5310_D	
LCS 480-221137/11	Lab Control Sample	Dissolved	Water	SM5310_D	
MB 480-221137/10	Method Blank	Dissolved	Water	SM5310_D	

Analysis Batch: 221746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-73491-4	MW-15D	Dissolved	Water	SM5310_D	
LCS 480-221746/4	Lab Control Sample	Dissolved	Water	SM5310_D	
MB 480-221746/3	Method Blank	Dissolved	Water	SM5310_D	

Analysis Batch: 222121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-73491-1	MW-13D	Total/NA	Water	300.0	
480-73491-2	MW-9D	Total/NA	Water	300.0	
480-73491-3	MW-10D	Total/NA	Water	300.0	
480-73491-4	MW-15D	Total/NA	Water	300.0	
LCS 480-222121/3	Lab Control Sample	Total/NA	Water	300.0	
LCS 480-222121/31	Lab Control Sample	Total/NA	Water	300.0	
MB 480-222121/32	Method Blank	Total/NA	Water	300.0	
MB 480-222121/4	Method Blank	Total/NA	Water	300.0	

General Chemistry (Continued)

Analysis Batch: 222406

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-222406/31	Lab Control Sample	Total/NA	Water	300.0	
MB 480-222406/32	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 222594

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-73491-4 MS	MW-15D	Total/NA	Water	300.0	
LCS 480-222594/3	Lab Control Sample	Total/NA	Water	300.0	
MB 480-222594/4	Method Blank	Total/NA	Water	300.0	

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Midler Semi-Annual Groundwater

TestAmerica Job ID: 480-73491-1

Client Sample ID: MW-13D

Lab Sample ID: 480-73491-1

Date Collected: 12/22/14 08:00

Matrix: Water

Date Received: 12/24/14 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	OLC02.1	DL	200	221502	01/02/15 13:23	CDC	TAL BUF
Total/NA	Analysis	OLC02.1		50	221330	12/31/14 14:49	RAS	TAL BUF
Total/NA	Prep	200.7			220996	12/29/14 09:45	EJT	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	221229	12/30/14 13:13	JRK	TAL BUF
Total/NA	Analysis	300.0		20	222121	01/08/15 10:18	NDB	TAL BUF
Total/NA	Analysis	Nitrate by calc		1	220876	12/24/14 13:50	ELR	TAL BUF
Total/NA	Analysis	SM 3500 FE D		1	220873	12/24/14 15:08	KMF	TAL BUF
Total/NA	Analysis	SM 4500 S2 F		1	221002	12/29/14 06:45	LAW	TAL BUF
Dissolved	Analysis	SM 5310C		2	219226	01/08/15 12:25	JAB	TAL NSH
Dissolved	Analysis	SM5310_D		1	221137	12/29/14 23:38	CAS	TAL BUF

Client Sample ID: MW-9D

Lab Sample ID: 480-73491-2

Date Collected: 12/22/14 09:00

Matrix: Water

Date Received: 12/24/14 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	OLC02.1		1	221502	01/02/15 12:58	CDC	TAL BUF
Total/NA	Prep	200.7			220996	12/29/14 09:45	EJT	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	221229	12/30/14 13:16	JRK	TAL BUF
Total/NA	Analysis	300.0		20	222121	01/08/15 10:26	NDB	TAL BUF
Total/NA	Analysis	Nitrate by calc		1	220876	12/24/14 13:53	ELR	TAL BUF
Total/NA	Analysis	SM 3500 FE D		1	220873	12/24/14 15:08	KMF	TAL BUF
Total/NA	Analysis	SM 4500 S2 F		1	221002	12/29/14 06:45	LAW	TAL BUF
Dissolved	Analysis	SM 5310C		2	219226	01/08/15 12:25	JAB	TAL NSH
Dissolved	Analysis	SM5310_D		1	221137	12/29/14 23:54	CAS	TAL BUF

Client Sample ID: MW-10D

Lab Sample ID: 480-73491-3

Date Collected: 12/22/14 09:45

Matrix: Water

Date Received: 12/24/14 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	OLC02.1		40	221330	12/31/14 15:38	RAS	TAL BUF
Total/NA	Prep	200.7			220996	12/29/14 09:45	EJT	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	221229	12/30/14 13:18	JRK	TAL BUF
Total/NA	Analysis	300.0		20	222121	01/08/15 10:34	NDB	TAL BUF
Total/NA	Analysis	Nitrate by calc		1	220876	12/24/14 13:54	ELR	TAL BUF
Total/NA	Analysis	SM 3500 FE D		1	220873	12/24/14 15:08	KMF	TAL BUF
Total/NA	Analysis	SM 4500 S2 F		1	221002	12/29/14 06:45	LAW	TAL BUF
Dissolved	Analysis	SM 5310C		2	219226	01/08/15 12:25	JAB	TAL NSH
Dissolved	Analysis	SM5310_D		1	221137	12/30/14 00:09	CAS	TAL BUF

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Midler Semi-Annual Groundwater

TestAmerica Job ID: 480-73491-1

Client Sample ID: MW-15D

Lab Sample ID: 480-73491-4

Date Collected: 12/22/14 10:00
Matrix: Water
Date Received: 12/24/14 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	OLC02.1		1	221330	12/31/14 16:02	RAS	TAL BUF
Total/NA	Prep	200.7			220996	12/29/14 09:45	EJT	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	221229	12/30/14 13:21	JRK	TAL BUF
Total/NA	Analysis	300.0		20	222121	01/08/15 10:42	NDB	TAL BUF
Total/NA	Analysis	Nitrate by calc		1	220876	12/24/14 13:55	ELR	TAL BUF
Total/NA	Analysis	SM 3500 FE D		1	220873	12/24/14 15:08	KMF	TAL BUF
Total/NA	Analysis	SM 4500 S2 F		1	221002	12/29/14 06:45	LAW	TAL BUF
Dissolved	Analysis	SM 5310C		5	219226	01/08/15 12:25	JAB	TAL NSH
Dissolved	Analysis	SM5310_D		1	221746	12/30/14 00:25	CAS	TAL BUF

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-73491-5

Date Collected: 12/22/14 00:00
Matrix: Water
Date Received: 12/24/14 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	OLC02.1		1	221330	12/31/14 16:27	RAS	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: C&S Engineers, Inc.
Project/Site: Midler Semi-Annual Groundwater

TestAmerica Job ID: 480-73491-1

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-15

The following analytes are included in this report, but are not certified under this certification:

Analysis Method	Prep Method	Matrix	Analyte
Nitrate by calc		Water	Nitrate as N
SM5310_D		Water	Dissolved Organic Carbon

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
OLC02.1		Water	1,1,1-Trichloroethane
OLC02.1		Water	1,1,2,2-Tetrachloroethane
OLC02.1		Water	1,1,2-Trichloroethane
OLC02.1		Water	1,1-Dichloroethane
OLC02.1		Water	1,1-Dichloroethene
OLC02.1		Water	1,2,4-Trichlorobenzene
OLC02.1		Water	1,2-Dibromo-3-Chloropropane
OLC02.1		Water	1,2-Dibromoethane
OLC02.1		Water	1,2-Dichlorobenzene
OLC02.1		Water	1,2-Dichloroethane
OLC02.1		Water	1,2-Dichloropropane
OLC02.1		Water	1,3-Dichlorobenzene
OLC02.1		Water	1,4-Dichlorobenzene
OLC02.1		Water	2-Butanone (MEK)
OLC02.1		Water	2-Hexanone
OLC02.1		Water	4-Methyl-2-pentanone (MIBK)
OLC02.1		Water	Acetone
OLC02.1		Water	Benzene
OLC02.1		Water	Bromodichloromethane
OLC02.1		Water	Bromoform
OLC02.1		Water	Bromomethane
OLC02.1		Water	Carbon disulfide
OLC02.1		Water	Carbon tetrachloride
OLC02.1		Water	Chlorobenzene
OLC02.1		Water	Chloroethane
OLC02.1		Water	Chloroform
OLC02.1		Water	Chloromethane
OLC02.1		Water	cis-1,2-Dichloroethene
OLC02.1		Water	cis-1,3-Dichloropropene
OLC02.1		Water	Dibromochloromethane
OLC02.1		Water	Ethylbenzene
OLC02.1		Water	Methylene Chloride
OLC02.1		Water	m-Xylene & p-Xylene
OLC02.1		Water	o-Xylene
OLC02.1		Water	Styrene
OLC02.1		Water	Tetrachloroethene
OLC02.1		Water	Toluene
OLC02.1		Water	trans-1,2-Dichloroethene
OLC02.1		Water	trans-1,3-Dichloropropene
OLC02.1		Water	Trichloroethene
OLC02.1		Water	Vinyl chloride
OLC02.1		Water	Xylenes, Total

Certification Summary

Client: C&S Engineers, Inc.
Project/Site: Midler Semi-Annual Groundwater

TestAmerica Job ID: 480-73491-1

Laboratory: TestAmerica Buffalo (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-15

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
SM 3500 FE D		Water	Ferrous Iron

Laboratory: TestAmerica Nashville

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	A2LA		NA: NELAP & A2LA	12-31-15
A2LA	ISO/IEC 17025		0453.07	12-31-15
Alaska (UST)	State Program	10	UST-087	10-31-15
Arizona	State Program	9	AZ0473	05-05-15
Arkansas DEQ	State Program	6	88-0737	04-25-15
California	NELAP	9	1168CA	10-31-14 *
Connecticut	State Program	1	PH-0220	12-31-15
Florida	NELAP	4	E87358	06-30-15
Illinois	NELAP	5	200010	12-09-15
Iowa	State Program	7	131	04-01-16
Kansas	NELAP	7	E-10229	03-31-15 *
Kentucky (UST)	State Program	4	19	06-30-15
Kentucky (WW)	State Program	4	90038	12-31-15
Louisiana	NELAP	6	30613	06-30-15
Maryland	State Program	3	316	03-31-15
Massachusetts	State Program	1	M-TN032	06-30-15
Minnesota	NELAP	5	047-999-345	12-31-15
Mississippi	State Program	4	N/A	06-30-15
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-15
New Hampshire	NELAP	1	2963	10-09-15
New Jersey	NELAP	2	TN965	06-30-15
New York	NELAP	2	11342	03-31-15
North Carolina (WW/SW)	State Program	4	387	12-31-15
North Dakota	State Program	8	R-146	06-30-15
Ohio VAP	State Program	5	CL0033	10-16-15
Oklahoma	State Program	6	9412	08-31-15
Oregon	NELAP	10	TN200001	04-29-15
Pennsylvania	NELAP	3	68-00585	06-30-15
Rhode Island	State Program	1	LAO00268	12-30-14 *
South Carolina	State Program	4	84009 (001)	02-28-15
South Carolina (DW)	State Program	4	84009 (002)	02-23-17
Tennessee	State Program	4	2008	02-23-17
Texas	NELAP	6	T104704077	08-31-15
USDA	Federal		S-48469	10-30-16
Utah	NELAP	8	TN00032	07-31-15
Virginia	NELAP	3	460152	06-14-15
Washington	State Program	10	C789	07-19-15
West Virginia DEP	State Program	3	219	02-28-15
Wisconsin	State Program	5	998020430	08-31-15
Wyoming (UST)	A2LA	8	453.07	12-31-15

* Certification renewal pending - certification considered valid.

Method Summary

Client: C&S Engineers, Inc.
Project/Site: Midler Semi-Annual Groundwater

TestAmerica Job ID: 480-73491-1

Method	Method Description	Protocol	Laboratory
OLC02.1	Volatile Organic Compounds, Low Concetration (GC/MS)	OCLP	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
300.0	Sulfate	40CFR136A	TAL BUF
Nitrate by calc	Nitrogen, Nitrate-Nitrite	SM	TAL BUF
SM 3500 FE D	Iron, Ferrous and Ferric	SM	TAL BUF
SM 4500 S2 F	Sulfide, Total	SM	TAL BUF
SM 5310C	Organic Carbon, Dissolved (DOC)	SM	TAL NSH
SM5310_D	Organic Carbon, Dissolved (DOC)	SM	TAL BUF

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.
EPA = US Environmental Protection Agency
OCLP = USEPA Contract Laboratory Program Statement Of Work For Inorganics Analysis, Multi-Media, Multi-Concentration.
SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: C&S Engineers, Inc.
Project/Site: Midler Semi-Annual Groundwater

TestAmerica Job ID: 480-73491-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-73491-1	MW-13D	Water	12/22/14 08:00	12/24/14 11:00
480-73491-2	MW-9D	Water	12/22/14 09:00	12/24/14 11:00
480-73491-3	MW-10D	Water	12/22/14 09:45	12/24/14 11:00
480-73491-4	MW-15D	Water	12/22/14 10:00	12/24/14 11:00
480-73491-5	TRIP BLANK	Water	12/22/14 00:00	12/24/14 11:00

TestAmerica Syracuse
118 Boss Rd
Syracuse, NY 13211
Phone (315) 431-0171 Fax (315) xxx-xxxx

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information
Client Contact: Mr. Wayne Randall
Company: C&S Engineers, Inc.
Address: 499 Col. Eileen Collins Blvd
City: Syracuse
State, Zip: NY, 13212
Phone: 315-455-2000(Tel) 315-455-9667(Fax)
Email: wrandall@cscos.com
Project Name: Midler Semi-Annual Groundwater
Site: Midler

Sampler: Wayne Randall
Phone: 315 455 2000
Lab PM: Stone, Judy L
E-Mail: judy.stone@testamericainc.com
Carrier Tracking No(s):
COC No: 480-59426-15518.1
Page: Page 1 of 1
Job #:
Due Date Requested: Standard
TAT Requested (days): 1
PO #: Purchase Order not required
WO #:
Project #: 48002877
SSOW#:

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300.0_28D - Sulfate	200.7 - Iron	OLC02.1_Vol - (MOD) Copy Analytes	SM5310_DOC_D - Dissolved Organic Carbon	SM4500_S2_F - Sulfide	353.2, 353.2_Nitrite, Nitrate_Calc	3500_FE_D - Ferrous Iron	SM5310_DOC_C - Dissolved Inorganic Carbon Result 1	Total Number of containers	Special Instructions/Note:
		Preservation Code:					N	D	A	A	CB	N	N	S		
MW-13D	12/22/14	800	C	Water			1	1	3	2	1	2	1	2		Matrix Spike/
MW-9D		900	C	Water			1	1	3	2	1	2	1	2		matrix Spike Dup
MW-10D		945	C	Water			1	1	3	2	1	2	1	2		for VOAs only
MW-15D		1000	C	Water			1	1	3	2	1	2	1	2		
MW-10D MS		945	C	Water					3							
MW-10D MSD		945	C	Water					3							DIC/DOC Field
																filtered

480-73491 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) Cat B

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: Wayne Randall	Date/Time: 12/22/14 13:54	Company: C&S	Received by:	Date/Time: 12/22/14 1354	Company: SVR
Relinquished by:	Date/Time: 12/23/14 900	Company: SVR	Received by: Cameron Wallace	Date/Time: 12/24/14 11:00	Company: TAS
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: #1 2.6

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

1/16/2015

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-22437.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: judy.stone@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Analysis Requested		Job #: 480-73491-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 1/8/2015			Preservation Codes:
City: Nashville	TAT Requested (days):			A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2SO3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - ph 4-5 L - EDA Z - other (specify)
State, Zip: TN, 37204				
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:			Other:
Email:	WO #:			
Project Name: Midler Semi-Annual Groundwater	Project #: 48002877			
Site:	SSOW#:			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM5310_DOC_C/FIELD_FLTRD (MOD) Dissolved Inorganic Carbon (Averag	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-13D (480-73491-1)	12/22/14	08:00 Eastern		Water			X		
MW-9D (480-73491-2)	12/22/14	09:00 Eastern		Water			X		
MW-10D (480-73491-3)	12/22/14	09:45 Eastern		Water			X		
MW-15D (480-73491-4)	12/22/14	10:00 Eastern		Water			X		

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	1/5/15 1700	TA BUF	[signature]	1-7-15 @ 0830	TAN
2	[signature]	Date/Time:	Company	Received by:	Date/Time:	Company
3	[signature]	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.3

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

Loc: 480
73491

COOLER RECEIPT FORM

Cooler Received/Opened On 1/7/2015 @ 0830

1. Tracking # 7927 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 96210146

2. Temperature of rep. sample or temp blank when opened: 0.3 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 (Front)

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) CH

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) mam

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) mam

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) mam

I certify that I attached a label with the unique LIMS number to each container (intial) mam

21. Were there Non-Conformance issues at login? YES..NO Was a PIPE generated? YES..NO..#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/2012

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

1/16/2015

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-22384.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: judy.stone@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc				Job #: 480-73491-1

Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 1/8/2015
City: Nashville	TAT Requested (days):
State, Zip: TN, 37204	
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:
Email:	WO #:
Project Name: Midler Semi-Annual Groundwater	Project #: 48002877
Site:	SSOW#:

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM6310_DOC_C/FIELD_FLTRD (MOD) Dissolved Inorganic Carbon (Averag	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-13D (480-73491-1)	12/22/14	08:00 Eastern		Water			X	2	
MW-9D (480-73491-2)	12/22/14	09:00 Eastern		Water			X	2	
MW-10D (480-73491-3)	12/22/14	09:45 Eastern		Water			X	2	
MW-15D (480-73491-4)	12/22/14	10:00 Eastern		Water			X	2	

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 12/29/14 1700	Company TA Buff	Received by:	Date/Time: 12-30-14 @ 0830	Company TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.4c

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

Loc: 480
73491

COOLER RECEIPT FORM

Cooler Received/Opened On 12/30/2014 @ 0830

1. Tracking # 7673 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 12080142

2. Temperature of rep. sample or temp blank when opened: 1.6 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...(NA)

4. Were custody seals on outside of cooler? (YES)...NO...NA

If yes, how many and where: one front

5. Were the seals intact, signed, and dated correctly? (YES)...NO...NA

6. Were custody papers inside cooler? (YES)...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) DA

7. Were custody seals on containers: YES (NO) and Intact YES...NO...(NA)

Were these signed and dated correctly? YES...NO...(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)...NO...NA

12. Did all container labels and tags agree with custody papers? (YES)...NO...NA

13a. Were VOA vials received? (YES)...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...(NA)

14. Was there a Trip Blank in this cooler? YES...(NO)...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) mam

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? (YES) NO..NA

b. Did the bottle labels indicate that the correct preservatives were used (YES)...NO...NA

16. Was residual chlorine present? YES...(NO)...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) mam

17. Were custody papers properly filled out (ink, signed, etc)? (YES)...NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)...NO...NA

19. Were correct containers used for the analysis requested? (YES)...NO...NA

20. Was sufficient amount of sample sent in each container? (YES)...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) mam

I certify that I attached a label with the unique LIMS number to each container (intial) mam

21. Were there Non-Conformance issues at login? YES...(NO) Was a NCM generated? YES...(NO)...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

1/16/2015

Login Sample Receipt Checklist

Client: C&S Engineers, Inc.

Job Number: 480-73491-1

Login Number: 73491

List Source: TestAmerica Buffalo

List Number: 1

Creator: Robison, Zachary J

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	C&S
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: C&S Engineers, Inc.

Job Number: 480-73491-1

Login Number: 73491
List Number: 2
Creator: McBride, Mike

List Source: TestAmerica Nashville
List Creation: 12/30/14 01:03 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Appendix B-2

Data Usability Summary Reports for
2014 Groundwater Quality Samples

ALPHA GEOSCIENCE
Geology
Hydrology
Remediation
Water Supply

March 10, 2015

Mr. Wayne N. Randall
C&S Companies
499 Col. Eileen Collins Blvd.
Syracuse, New York 13212

Re: DUSRs and Data Validation Reports
Midler Ave. Project
July & December 2014 Ground Water Sampling Events

Dear Mr. Randall:

The data usability summary reports (DUSRs) and data validation QA/QC reviews for the July and December 2014 ground water sampling events are enclosed with this letter. The data were acceptable for TestAmerica Buffalo job numbers 480-63037-1 and 480-73491-1 with minor issues outlined in the QA/QC reviews. There were no data that were flagged as unusable (R) in these data packs.

A list of data validation acronyms and qualifiers is attached to assist you in interpreting the data validation reviews. If you have any questions concerning the work performed, please contact me at (518) 348-6995. Thank you for the opportunity to assist C&S Companies.

Sincerely,
Alpha Geoscience

Donald Anné

Donald Anné
Senior Chemist

DCA:dca
enclosures

Z:\projects\2007\07600 - 07620\07618-midler ave\2015\midler-151.ltr.wpd

Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

U = Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.

R = Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.

N = Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.

J = Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.

UJ = Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

Data Validation Acronyms

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene
CCB	Continuing calibration blank
CCC	Calibration check compound
CCV	Continuing calibration verification
CN	Cyanide
CRDL	Contract required detection limit
CRQL	Contract required quantitation limit
CVAA	Atomic adsorption, cold vapor technique
DCAA	2,4-Dichlophenylacetic acid
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenyl phosphine
ECD	Electron capture detector
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas chromatography
GC/MS	Gas chromatography/mass spectrometry
GPC	Gel permeation chromatography
ICB	Initial calibration blank
ICP	Inductively coupled plasma-atomic emission spectrometer
ICV	Initial calibration verification
IDL	Instrument detection limit
IS	Internal standard
LCS	Laboratory control sample
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate
MSA	Method of standard additions
MS/MSD	Matrix spike/matrix spike duplicate
PID	Photo ionization detector
PCB	Polychlorinated biphenyl
PCDD	Polychlorinated dibenzodioxins
PCDF	Polychlorinated dibenzofurans
QA	Quality assurance
QC	Quality control
RF	Response factor
RPD	Relative percent difference
RRF	Relative response factor
RRF(number)	Relative response factor at concentration of the number following
RT	Retention time
RRT	Relative retention time
SDG	Sample delivery group
SPCC	System performance check compound
TCX	Tetrachloro-m-xylene
%D	Percent difference
%R	Percent recovery
%RSD	Percent relative standard deviation

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

Data Usability Summary Report for
TestAmerica Buffalo, Job No. 480-63037-1

4 Ground Water Samples and 1 Trip Blank
Collected July 1, 2014

Prepared by: Donald Anné
March 10, 2015

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data packs contained the results for 4 ground water samples and 1 trip blank analyzed for volatiles.

The overall performances of the analyses are acceptable. TestAmerica Buffalo did fulfill the requirements of the analytical method.

The data are acceptable with some minor issues that are identified in the accompanying data validation review. The following data were flagged:

- Positive volatile result for acetone was flagged as "not detected" (U) in sample MW9D because the level reported in the sample was not significantly greater than (more than 10 times) the highest associated blank level.

- The volatile result for cis-1,2-dichloroethene in sample MW-10D was quantitated using data that was extrapolated beyond the highest calibration standard and flagged "E" by the laboratory. The result for cis-1,2-dichloroethene marked "E" in the sample MW-10D were qualified as estimated (J).

All data are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation review.

Z:\projects\2007\07600 - 07620\07618-midler ave\2015\480-63037-1.dus.wpd

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

QA/QC Review of Method OLC02.1 Volatiles Data for TestAmerica Buffalo, Job No: 480-63037-1

4 Ground Water Samples and 1 Trip Blank Collected July 1, 2014

Prepared by: Donald Anné
March 10, 2015

Holding Times: Samples were analyzed within NYSDEC ASP holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The compounds with method criteria for minimum average RRFs and maximum %RSDs met those requirements.

The average RRFs for target compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The compounds with method criteria for minimum RRFs met those requirements. The %Ds for bromomethane and trichloroethene were above the method allowable maximum (30%) on 07-09-14 (P8902.D). No action is taken on less than 20% of the compounds with method requirements outside criteria.

The RRFs for target compounds were above the allowable minimum (0.010), as required.

The %Ds for bromomethane, chloroethane, and trichloroethene were above the allowable maximum (25%) on 07-09-14 (P8902.D). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: The analysis of the method blank reported target compounds as not detected. The trip blank contained traces of acetone (1.8 ug/L) and methylene chloride (0.59 ug/L). Positive results for acetone and methylene chloride that are less than ten times the highest blank level should be reported as not detected (U) in associated samples.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

679 Plank Road ▪ Clifton Park, New York 12065 ▪ (518) 348-6995 ▪ FAX (518) 348-6966
www.alphageoscience.com

Surrogate Recovery: The surrogate recoveries were within control limits for the ground water samples and trip blank.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for spiked compounds were below the allowable maximums, but 1 of 10 the percent recoveries was above QC limits for aqueous MS/MSD sample MW-9D. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

Laboratory Control Sample: The percent recoveries for spiked compounds were within QC limits for aqueous sample LCS 480-191973/5.

Compound ID: Checked compounds were within GC/MS quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in SW846.

The result for cis-1,2-dichloroethene in sample MW-10D was quantitated by extrapolating data above the highest calibration standard and marked 'E' by the laboratory. The sample was diluted by the laboratory and re-analyzed; therefore, the result that is flagged as 'E' in the undiluted sample should be considered estimated (J). The use of the diluted result for cis-1,2-dichloroethene is recommended for sample MW-10D. It is recommended that the undiluted results be used for all other compounds.

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

Data Usability Summary Report for
TestAmerica Buffalo, Job No. 480-73491-1

4 Ground Water Samples and 1 Trip Blank
Collected December 22, 2014

Prepared by: Donald Anné
March 10, 2015

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data packs contained the results for 4 ground water samples and 1 trip blank analyzed for volatiles.

The overall performances of the analyses are acceptable. TestAmerica Buffalo did fulfill the requirements of the analytical method.

The data are acceptable with some minor issues that are identified in the accompanying data validation review. The following data were flagged:

- The volatile results for vinyl chloride and cis-1,2-dichloroethene in sample MW-13D were quantitated using data that were extrapolated beyond the highest calibration standard and flagged "E" by the laboratory. The results for vinyl chloride and cis-1,2-dichloroethene marked "E" in the sample MW-13D were qualified as estimated (J).

All data are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation review.

Z:\projects\2007\07600 - 07620\07618-midler ave\2015\480-73491-1.dus.wpd

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

QA/QC Review of Method OLC02.1 Volatiles Data
for TestAmerica Buffalo, Job No: 480-63037-1

4 Ground Water Samples and 1 Trip Blank
Collected December 22, 2014

Prepared by: Donald Anné
March 10, 2015

Holding Times: Samples were analyzed within NYSDEC ASP holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The compounds with method criteria for minimum average RRFs and maximum %RSDs met those requirements.

The average RRFs for target compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The compounds with method criteria for minimum RRFs and maximum %Ds met those requirements.

The RRFs for target compounds were above the allowable minimum (0.010) and the %Ds were below the allowable maximum (25%), as required.

Blanks: The analyses of method and trip blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for the ground water samples and trip blank.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for spiked compounds were below the allowable maximums and the percent recoveries were within QC limits for aqueous MS/MSD samples MW-10D and MW-13D.

679 Plank Road ▪ Clifton Park, New York 12065 ▪ (518) 348-6995 ▪ FAX (518) 348-6966
www.alphageoscience.com

Laboratory Control Sample: The percent recoveries for spiked compounds were within QC limits for aqueous samples LCS 480-221330/10 and LCS 480-221502/5.

Compound ID: Checked compounds and surrogates were within GC/MS quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in SW846.

The results for vinyl chloride and cis-1,2-dichloroethene in sample MW-13D were quantitated by extrapolating data above the highest calibration standard and marked 'E' by the laboratory. The sample was diluted by the laboratory and re-analyzed; therefore, the results that are flagged as 'E' in the undiluted sample should be considered estimated (J). The use of the diluted results for vinyl chloride and cis-1,2-dichloroethene are recommended for sample MW-13D DL. It is recommended that the undiluted results be used for all other compounds.

Appendix B-3

Monitored Natural Attenuation Parameters
Through December 2014
And
2014 Laboratory Reports

Pioneer Midler Avenue LLC
Monitoring Natural Attenuation
Water Quality Parameters

Parameter	Units	MW-2D	MW-2D	MW-2D	MW-2D	MW-2D	MW-2D	MW-2D	MW-2D	MW-2D	MW-2D
Sample Date		02/12/08	06/02/08	10/06/08	12/23/08	03/02/09	06/02/09	09/30/09	12/21/09	03/02/10	06/07/10
Field Parameters											
pH		6.62	7.01	7.00	7.06	7.20	7.42	6.66	7.12	7.06	6.92
Conductivity	S/m	3.25	3.49	3.19	3.40	3.50	5.38	3.15	3.51	3.53	3.77
Temperature	°F	51.08	55.31	57.81	53.82	49.82	55.96	57.38	53.61	51.64	54.86
Oxidation/Reduction Potential (ORP)	mV	-325	-268	-273	-249	-286	-245	-192	-318	-300	-272
Dissolved Oxygen	mg/L	0.0	0.0	0.66	0.0	0.0	0.0	0.0	7.7	0.0	0.0
Laboratory Analytical Parameters											
Dissolved Inorganic Carbon	mg/L	110	69	92	81	77	81	47.7	49.8	88.23	67.3
Dissolved Organic Carbon	mg/L	11	3.10	1.60	2.40	1.10	1.50	4.22	2.90	4.00	3.80
Iron (total)	mg/L	0.128	0.094	0.233	0.339	0.32	0.501	0.023	0.176	0.742	0.171
Ferric Iron	mg/L	<0.10	<0.10	<0.10	<0.10	-0.036	0.293	<0.10	<0.10	0.408	<0.10
Ferrous Iron	mg/L	0.19	0.12	0.19	0.31	0.36	0.208	<0.10	<0.10	0.334	0.367
Nitrite-Nitrate as Nitrogen	mg/L	NS	NS	<0.060	<0.060	NS	<0.02	NS	NS	NS	NS
Nitrate as Nitrogen	mg/L	NS	NS	NS	NS	<0.1	NS	<0.05	<0.05	<0.05	<0.10
Sulfate	mg/L	441	435	549	530	630	580	496	589	542	546
Sulfide	mg/L	1.60	2.40	1.60	1.20	0.80	0.80	17.20	0.80	2.80	2.00
Methane	mg/L	1.80	0.35	0.53	0.27	0.33	0.29	0.50	0.37	0.50	0.55
Ethene	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.02
Ethane	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.02
Dehalococcoides (Dhc) Enumeration	per liter	ND[(2)]	1×10^7	ND[(2)]	$7 \times 10^{2(1,2)}$	ND[(2,3)]	ND[(2,3)]	1×10^3	1×10^4	2×10^3	1×10^4
% Dhc		NA	0.3 - 0.8	NA	.00007 - .0002	NA	NA	.0003 - .0009	0.003 - 0.008	0.0002 - 0.0006	0.002 - 0.006
Vinyl Chloride Reductase (vcrA)	per liter	NA	2×10^4	NA	Inconclusive	NA	NA	ND[(4)]	8×10^3	Inconclusive	1×10^4
% vcrA		NA	0.003 - 0.008	NA	NA	NA	NA	NA	0.002 - 0.005	NA	0.002 - 0.006

[(1)] = Correction factor applied to correct for non-specific PCR amplification products.

[(2)] = Dehalococcoides DNA detected but below sample specific quantitation limit. The sample specific quantitation limit is 4×10^3/liter. Additional explanation provided in: Interpretation of Quantitative Gene-Trac Dehalococcoides Test Results.

[(3)] = Dehalococcoides DNA detected but below sample specific quantitation limit. The sample specific quantitation limit is 5×10^3/liter. Additional explanation provided in: Interpretation of Quantitative Gene-Trac Dehalococcoides Test Results.

[(4)] = vcrA DNA detected but below sample specific quantitation limit.

NS = Not Sampled.

NA = Not applicable as Dehalococcoides or vcrA DNA not detected.

ND [(1)] = Not Detected. The quantitation limit is 7×10^3/liter

ND [(2)]= Not Detected. The quantitation limit is 4×10^3/liter

ND [(3)]= Sample inhibited testing; this increases the probability that test result is a false negative.

NR = Any inclusion of NR indicates that the project specific requirements do not require reporting estimated values below the laboratory reporting limit.

Inconclusive = Inconclusive results may indicate extremely low concentrations of *Dehalococcoides* DNA or *vcrA* DNA at or below the sample specific quantitation limit (4 x 103/liter), however, test results were insufficient to assign a conclusive positive result for this sample.

Pioneer Midler Avenue LLC
Monitoring Natural Attenuation
Water Quality Parameters

Parameter	Units	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D
Sample Date		02/12/08	06/02/08	10/06/08	12/23/08	03/02/09	06/02/09	09/30/09	12/21/09	03/02/10	06/07/10	10/26/10	05/12/11	06/27/12	12/17/12	06/20/13	12/20/13	07/01/14	12/22/14
Field Parameters																			
pH		6.53	6.72	6.86	6.96	7.05	6.99	6.69	6.77	6.87	7.75	7.01	7.3	7.39	7.81	7.45	7.39	7.11	7.18
Conductivity	S/m	2.63	2.61	2.11	2.70	2.67	4.29	2.66	3.11	3.38	2.58	2.73	2.29	2.18	2	2.55	2.3	2.29	2.46
Temperature	°F	47.48	54.16	60.46	52.81	46.27	52.25	57.97	53.96	49.86	54.32	60.93	59.13	64.47	54.896	61.358	53.924	63.266	52.48
Oxidation/Reduction Potential (ORP)	mV	-356	-325	-352	-338	-349	-327	-377	-380	-350	-346	-343	-374	-340	-291	-250	-302	-309	-377
Dissolved Oxygen	mg/L	0.0	0.0	0.74	4.56	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Laboratory Analytical Parameters																			
Dissolved Inorganic Carbon	mg/L	130	89	110	110	120	110	74	57	116	88	92	76	81.7	78.6	80.8	82	NS	66.8
Dissolved Organic Carbon	mg/L	8	6.20	1.60	5.60	3.20	3.50	4.49	6.10	8.70	7.4	6.5	<1.0	5.7	6.4	5.7	6.9	6.1	5.4
Iron (total)	mg/L	0.123	<0.05	<0.05	0.68	0.06	0.029	21	0.095	<0.05	0.147	0.074	0.207	0.033	0.049	0.38	0.15	0.44	0.2
Ferric Iron	mg/L	0.12	<0.10	<0.10	0.68	0.00008	NR	<0.10	0.0946	<0.10	0.147	<0.100	<0.5	NS	NS	NS	0.15	0.33	NS
Ferrous Iron	mg/L	<0.10	<0.10	0.19	<0.10	0.062	<.015	<0.10	<0.10	<0.10	<0.10	<0.100	0.18	<0.075	<0.075	<0.01	<0.1	0.11	<0.1
Nitrite-Nitrate as Nitrogen	mg/L	NS	NS	<0.060	<0.060	NS	<0.02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nitrate as Nitrogen	mg/L	NS	NS	NS	NS	<0.1	NS	<0.05	<0.05	<0.05	0.026	0.032	0.18	<0.011	<0.011	<0.05	<0.05	0.037	<0.05
Sulfate	mg/L	368	340	549	391	430	380	425	377	328	320	461	380	466	590	411	470	389	609
Sulfide	mg/L	13.20	12.40	1.60	13.60	22.00	17.20	18.40	14.00	18.40	13.6	29.6	22.4	20.4	24.4	22	16	12.4	24.8
Methane	mg/L	3.80	2.80	4.10	3.00	3.40	3.20	3.20	2.50	2.90	2.4	3	2.9	2.6	NS	NS	NS	NS	NS
Ethene	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.02	<0.01	<0.01	<0.01	NS	NS	NS	NS	NS
Ethane	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.02	<0.01	<0.01	<0.01	NS	NS	NS	NS	NS
Dehalococcoides (Dhc) Enumeration	per liter	ND[2]	Inconclusive	ND[2]	9×10^{2}[1,3]	ND[1,3]	4×10^{3}	NA	3×10^{4}	1×10^{3}	7×10^{3}	7×10^{2}	4×10^{4}	3×10^{3}[1]	3×10^{3}	6×10^{3} [4]	6×10^{3}	2×10^{7}	3×10^{3}
% Dhc		NA	NA	NA	.00006 - .0002	NA	0.001 - 0.003	NA	0.004 - 0.01	0.0002 - 0.0005	0.0006 - 0.002	0.00002 - 0.00005	0.003 - 0.008	NA	NA	NA	0.0003 - 0.0008	NA	NA
Vinyl Chloride Reductase (vcrA)	per liter	NA	Inconclusive	NA	4×10^{3}[1]	NA	NA	NA	4×10^{4}	5×10^{3}	3×10^{4}	ND	NA	NA	NS	NS	NS	NS	NS
% vcrA		NA	NA	NA	0.003 - 0.001	NA	ND[2]	NA	0.005 - 0.01	0.0007 - 0.002	0.002 - 0.007	NA	4×10^{3} U	NA	NS	NS	NS	NS	NS

[1] = Correction factor applied to correct for non-specific PCR amplification products.

[2] = Dehalococcoides DNA detected but below sample specific quantitation limit. The sample specific quantitation limit is 4×10^{3}/liter. Additional explanation provided in: Interpretation of Quantitative Gene-Trac Dehalococcoides Test Results.

[3] = Dehalococcoides DNA detected but below sample specific quantitation limit. The sample specific quantitation limit is 5×10^{3}/liter. Additional explanation provided in: Interpretation of Quantitative Gene-Trac Dehalococcoides Test Results.

[4] = vcrA DNA detected but below sample specific quantitation limit.

NS = Not Sampled.

NA = Not applicable as Dehalococcoides or vcrA DNA not detected.

ND [1] = Not Detected. The quantitation limit is 7×10^{3}/liter

ND [2]= Not Detected. The quantitation limit is 4×10^{3}/liter

ND [3]= Sample inhibited testing; this increases the probability that test result is a false negative.

ND [4]= Not Detected. The quantitation limit is 6×10^{3}/liter

NR = Any inclusion of NR indicates that the project specific requirements do not require reporting estimated values below the laboratory reporting limit.

Inconclusive = Inconclusive results may indicate extremely low concentrations of *Dehalococcoides* DNA or *vcrA* DNA at or below the sample specific quantitation limit (4×10^{3}/liter), however, test results were insufficient to assign a conclusive positive result for this sample.

Pioneer Midler Avenue LLC
Monitoring Natural Attenuation
Water Quality Parameters

Parameter	Units	MW-10D	MW-10D	MW-10D	MW-10D	MW-10D	MW-10D	MW-10D	MW-10D	MW-10D	MW-10D	MW-10D	MW-10D	MW-10D	MW-10D	MW-10D	MW-10D	MW-10D	MW-10D
Sample Date		02/12/08	06/02/08	10/06/08	12/23/08	03/02/09	06/02/09	09/30/09	12/21/09	03/02/10	06/07/10	10/26/10	05/12/11	06/27/12	12/17/12	06/20/13	12/20/13	07/01/14	12/22/14
Field Parameters																			
pH		6.36	6.93	6.90	7.03	6.96	7.10	6.67	6.85	6.97	7.87	7.11	7.49	7.54	7.73	7.22	11.59	7.14	7.41
Conductivity	S/m	2.07	2.05	2.12	2.20	2.23	3.27	2.16	2.43	2.53	2.42	2.11	1.83	1.53	1.47	2.16	1.95	1.91	1.71
Temperature	°F	47.12	54.75	59.14	50.58	48.02	53.55	58.71	49.12	49.57	55.4	62	63.86	71.6	54.28	56.93	52.86	44.852	50.72
Oxidation/Reduction Potential (ORP)	mV	-297	-338	-342	-329	-341	-309	-346	-374	-349	-350	-313	-347	-324	-280	-260	-294	-300	-347
Dissolved Oxygen	mg/L	0.0	0.0	0.69	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.09	0.00	0.00	0.00	0.00	0.00
Laboratory Analytical Parameters																			
Dissolved Inorganic Carbon	mg/L	120	76	91	85	120	110	71.6	54.7	103	77.5	89	84.8	72.5	70.4	80.6	86.1	NS	74.9
Dissolved Organic Carbon	mg/L	7.50	2.60	3.20	4.70	5.40	3.20	1.82	4.90	5.9	7.1	5	0.47	4.5	5.5	4.4	4.9	6.9	4.5
Iron (total)	mg/L	0.0641	<0.05	<0.05	0.0504	0.084	<0.019	0.11	0.07	0.065	<0.050	<0.050	0.0332	0.019	0.052	0.024	0.027	0.02	0.04
Ferric Iron	mg/L	<0.10	<0.10	<0.10	<0.10	-0.013	NR	0.109	<0.10	<0.10	<0.10	<0.100	<0.50	NS	NS	NS	<0.100	<0.075	NS
Ferrous Iron	mg/L	<0.10	<0.10	<0.10	<0.10	0.096	<0.015	<0.10	<0.10	<0.10	<0.10	<0.100	0.17	<0.075	<0.075	<0.1	<0.1	<0.075	<0.1
Nitrite-Nitrate as Nitrogen	mg/L	NS	NS	<0.060	<0.060	NS	<0.02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nitrate as Nitrogen	mg/L	NS	NS	NS	NS	<0.1	NS	<0.05	<0.05	<0.05	<0.10	<0.050	<0.10	<0.011	<0.011	<0.05	<0.05	<0.05	<0.05
Sulfate	mg/L	572	609	621	594	430	640	545	684	614	565	557	506	497	541	612	623	620	674
Sulfide	mg/L	8.80	26.80	24.80	25.2	12	19.60	0.80	14.00	18.8	19.2	25.6	24	28	16.8	30	26.6	27.4	21.2
Methane	mg/L	2.60	0.82	1.10	1.30	6.50	3.30	3.80	1.30	2.5	2.2	1.1	2.2	1.6	NS	NS	NS	NS	NS
Ethene	mg/L	0.06	0.02	0.05	<0.02	<0.10	0.05	0.04	0.03	0.03	0.03	<0.01	0.01	<0.01	NS	NS	NS	NS	NS
Ethane	mg/L	<0.02	<0.02	<0.02	<0.02	<0.10	<0.01	<0.01	<0.01	<0.02	<0.02	<0.01	<0.01	<0.01	NS	NS	NS	NS	NS
Dehalococcoides (Dhc) Enumeration	per liter	6×10^6	9×10^5	6×10^5	8×10^5	4×10^6	1×10^6	3×10^6	2×10^7	6×10^6	1×10^7	7×10^6	2×10^6	6×10^5	1×10^6	8×10^5	1×10^6	3×10^5	3×10^5
% Dhc		0.5 - 1.0	0.06 - 0.2	0.03 - 0.1	.08 - 0.2	0.7 - 2	0.2 - 0.7	0.5 - 1	2 - 5	0.7 - 2	0.8 - 2	0.8 - 2	0.3 - 0.8	0.08 - 0.2	0.1 - 0.3	0.2 - 0.6	0.3 - 1	0.02 - 0.05	0.02 - 0.06
Vinyl Chloride Reductase (vcrA)	per liter	2×10^7	7×10^6	1×10^6	2×10^6	4×10^6	8×10^5	4×10^6	7×10^7	2×10^7	3×10^7	2×10^7	7×10^6	1×10^6	NS	NS	NS	NS	NS
% vcrA		1 - 4	0.5 - 1	0.05 - 0.2	0.1 -0.4	0.6 - 2	0.2 - 0.6	0.6 - 2	6 - 17	2 - 6	2 - 6	2 - 7	1 - 3	0.3 - 1	NS	NS	NS	NS	NS

(1) = Correction factor applied to correct for non-specific PCR amplification products.

(2) = Dehalococcoides DNA detected but below sample specific quantitation limit. The sample specific quantitation limit is 4 x 10^3/liter. Additional explanation provided in: Interpretation of Quantitative Gene-Trac Dehalococcoides Test Results.

(3) = Dehalococcoides DNA detected but below sample specific quantitation limit. The sample specific quantitation limit is 5 x 10^3/liter. Additional explanation provided in: Interpretation of Quantitative Gene-Trac Dehalococcoides Test Results.

(4) = vcrA DNA detected but below sample specific quantitation limit.

NS = Not Sampled.

NA = Not applicable as Dehalococcoides or vcrA DNA not detected.

ND (1) = Not Detected. The quantitation limit is 7 x 10^3/liter

ND (2)= Not Detected. The quantitation limit is 4 x 10^3/liter

ND (3)= Sample inhibited testing; this increases the probability that test result is a false negative.

NR = Any inclusion of NR indicates that the project specific requirements do not require reporting estimated values below the laboratory reporting limit.

Inconclusive = Inconclusive results may indicate extremely low concentrations of *Dehalococcoides* DNA or *vcrA* DNA at or below the sample specific quantitation limit (4 x 103/liter), however, test results were insufficient to assign a conclusive positive result for this sample.

Pioneer Midler Avenue LLC
Monitoring Natural Attenuation
Water Quality Parameters

Parameter	Units	MW-13D	MW-13D	MW-13D	MW-13D	MW-13D	MW-13D	MW-13D	MW-13D	MW-13D	MW-13D	MW-13D	MW-13D	MW-13D	MW-13D	MW-13D	MW-13D	MW-13D	MW-13D
Sample Date		10/11/07	02/12/08	06/02/08	10/06/08	12/23/08	03/02/09	06/02/09	09/30/09	12/21/09	03/02/10	06/07/10	10/26/10	05/12/11	06/27/12	12/17/12	06/20/13	12/20/13	07/01/14	12/22/14
Field Parameters																				
pH		7.23	6.80	7.01	7.18	7.21	7.37	7.03	7.22	6.82	7.19	7.71	7.38	7.34	7.41	8	7.13	7.17	7.26	7.25
Conductivity	S/m	2.83	2.78	2.42	3.07	2.71	3.09	4.4	3.12	2.61	2.97	2.58	2.65	2.35	1.99	1.7	2.41	2	1.95	2.17
Temperature	°F	85.6	64.58	70.99	72.14	61.16	55.71	61.48	64.94	59.68	53.91	59.54	69.91	62.6	64.6	58.28	59.09	57.42	71.366	55.42
Oxidation/Reduction Potential (ORP)	mV	-324	-400	-334	-369	-350	-408	-377	-403	-409	-371	-347	-364	-374	-335	-301	-255	-328	-294	-282
Dissolved Oxygen	mg/L	0.0	0.0	0.0	0.69	0.0	0.0	0.0	1.5	5.6	0.47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Laboratory Analytical Parameters																				
Dissolved Inorganic Carbon	mg/L	110	120	75	96	91	130	100	97	20	43.4	34.4	63	66.8	47.4	54.5	64.4	63.3	NS	66.2
Dissolved Organic Carbon	mg/L	41.00	42.90	36.00	29.40	41.90	35	42.50	48.90	32.70	39.6	32.6	24.9	1.1	12.4	11.5	21.2	23.7	45.3	50.6
Iron (total)	mg/L	1.15	4.26	0.162	0.421	1.26	1.80	5.94	5.89	5.24	8.84	1.43	0.347	0.966	0.051	0.23	0.06	0.17	0.25	0.23
Ferric Iron	mg/L	1.20	4.3	<0.10	<0.10	1.3	1.80	5.95	5.82	4.98	8.84	1.43	0.347	0.04	NS	NS	NS	0.17	0.25	NS
Ferrous Iron	mg/L	<0.05	<0.10	0.13	0.36	<0.10	<0.10	<0.075	0.08	0.26	<0.10	<0.1	<0.100	0.93	0.075	0.094	<0.1	<0.1	<0.075	<0.1
Nitrite-Nitrate as Nitrogen	mg/L	<0.05	NS	NS	<0.060	<0.060	NS	<0.02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nitrate as Nitrogen	mg/L	NS	NS	NS	NS	NS	<0.1	NS	<0.05	<0.05	<0.05	<0.014	<0.050	<0.1	0.048	<0.01	<0.050	<0.050	0.02	<0.050
Sulfate	mg/L	<25.0	61.7	60.1	128	129	86	99	53	128	156	104	62.6	122	184	159	160	202	250	180
Sulfide	mg/L	0.80	8	27.2	14.4	14.4	13	13.60	9.60	9.60	20.4	27.2	4.4	37.7	27.2	24	40	18.8	30.2	18.8
Methane	mg/L	13	13	9.90	14	12	18	16	11	11	19	13	16	12	8.2	NS	NS	NS	NS	NS
Ethene	mg/L	6.00	9.10	3.90	7.00	3.00	5.30	9.10	4.90	5.50	3.2	0.59	0.53	1.4	0.76	NS	NS	NS	NS	NS
Ethane	mg/L	4.60	1.10	0.99	1.90	2.20	3.3	3.1	2.4	2.4	3.8	1.6	2.1	0.8	0.57	NS	NS	NS	NS	NS
Dehalococcoides (Dhc) Enumeration	per liter	2×10^8	8×10^8	7×10^6	3×10^7	9×10^6	6×10^7	5×10^7	2×10^8	3×10^8	5×10^7	5×10^8	4×10^8	2×10^8	5×10^7	6×10^7	5×10^7	6×10^3	2×10^7	3×10^7
% Dhc		100	13 - 34	0.2 - 0.6	0.5 - 1.0	0.2 - 0.7	5 - 15	3 - 9	8 - 22	7 - 20	2 - 7	22 - 52	9 - 25	10 - 28	1 - 4	3 - 8	3 - 8	4 - 12	0.8 - 2	0.9 - 3
Vinyl Chloride Reductase (vcrA)	per liter	6×10^7	2×10^9	8×10^7	4×10^7	2×10^6	4×10^7	5×10^7	8×10^7	4×10^8	1×10^8	5×10^8	4×10^8	2×10^8	4×10^7	NS	NS	NS	NS	NS
% vcrA		>93	36 - 75	2 - 6	0.7 - 2	0.1 - 0.4	3 - 10	3 - 9	3 - 10	9 - 24	4 - 13	23 - 54	8 - 23	12 - 30	3 - 7	NS	NS	NS	NS	NS

(1) = Correction factor applied to correct for non-specific PCR amplification products.

(2) = Dehalococcoides DNA detected but below sample specific quantitation limit. The sample specific quantitation limit is 4×10^3/liter. Additional explanation provided in: Interpretation of Quantitative Gene-Trac Dehalococcoides Test Results.

(3) = Dehalococcoides DNA detected but below sample specific quantitation limit. The sample specific quantitation limit is 5×10^3/liter. Additional explanation provided in: Interpretation of Quantitative Gene-Trac Dehalococcoides Test Results.

(4) = vcrA DNA detected but below sample specific quantitation limit.

NS = Not Sampled.

NA = Not applicable as Dehalococcoides or vcrA DNA not detected.

ND (1) = Not Detected. The quantitation limit is 7×10^3/liter

ND (2)= Not Detected. The quantitation limit is 4×10^3/liter

ND (3)= Sample inhibited testing; this increases the probability that test result is a false negative.

NR = Any inclusion of NR indicates that the project specific requirements do not require reporting estimated values below the laboratory reporting limit.

Inconclusive = Inconclusive results may indicate extremely low concentrations of *Dehalococcoides* DNA or *vcrA* DNA at or below the sample specific quantitation limit (4 x 103/liter), however, test results were insufficient to assign a conclusive positive result for this sample.

Pioneer Midler Avenue LLC
Monitoring Natural Attenuation
Water Quality Parameters

Parameter	Units	MW-14D	MW-14D	MW-14D	MW-14D	MW-14D	MW-14D	MW-14D	MW-14D	MW-14D	MW-14D	MW-14D	MW-14D	MW-14D	MW-14D	MW-14D	MW-14D
Sample Date		02/12/08	06/02/08	10/06/08	12/23/08	03/02/09	06/02/09	09/30/09	12/21/09	03/02/10	06/07/10	10/26/10	05/12/11	06/27/12	12/17/12	06/20/13	12/20/13
Field Parameters																	
pH		6.08	6.33	6.35	6.56	6.66	6.58	6.55	6.27	6.46	7.39	6.57	7.00	6.67	7.36	6.82	6.68
Conductivity	S/m	7.10	5.57	5.10	4.22	4.36	6.87	4.53	4.90	5.17	4.89	4.66	4.31	3.99	3.3	4.6	4.32
Temperature	°F	46.94	59.28	61.88	59.66	57.00	59.94	61.52	60.28	59.18	59.36	64.31	63.7	64.05	61.448	63.392	56.77
Oxidation/Reduction Potential (ORP)	mV	-367	-333	-342	-338	-345	-344	-366	-397	-359	-365	-342	-379	-348	-297	-277	-326
Dissolved Oxygen	mg/L	2.18	0.0	0.98	0.0	0.0	0.0	1.6	2.8	0.26	0.0	0.0	0.0	0.0	0.0	0.0	1.2
Laboratory Analytical Parameters																	
Dissolved Inorganic Carbon	mg/L	240	220	260	260	290	270	209	206	250	172	210	169	202	167	152	175
Dissolved Organic Carbon	mg/L	570	900	179	181	190	124	95	123	118	89.8	79	28.1	64.1	52.4	63.2	54.4
Iron (total)	mg/L	1.34	0.152	0.107	0.209	0.14	0.093	0.076	0.048	0.058	0.133	0.051	0.0995	0.076	0.056	0.096	0.055
Ferric Iron	mg/L	1.30	0.15	0.11	0.21	0.14	NR	0.076	<0.10	<0.10	0.133	<0.100	<0.50	NS	NS	NS	NS
Ferrous Iron	mg/L	<0.10	<0.10	<0.10	<0.50	<0.10	<0.015	<0.10	<0.10	<0.10	<0.10	<0.100	0.39	0.16	0.082	<0.10	0.084
Nitrite-Nitrate as Nitrogen	mg/L	NS	NS	<0.060	<0.060	NS	<0.02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nitrate as Nitrogen	mg/L-N	NS	NS	NS	NS	0.14	NS	<0.50	<0.50	<0.50	<0.10	<0.050	<0.01	<0.011	<0.01	<0.05	<0.05
Sulfate	mg/L	10.50	<2.0	<20.0	<4.0	<100	3.2	8.92	17.8	12	34.2	32.5	60.6	99	62.6	121	120
Sulfide	mg/L	62.40	65.60	74.40	69.60	66	73.20	70.80	58.40	69.2	62.8	69.2	48	48	56.4	60	52.4
Methane	mg/L	11	11	22	25	25	29	28	27	29	20	24	20	16	NS	NS	NS
Ethene	mg/L	0.48	0.63	2.70	1.9	1.7	2	1.9	1.9	1.7	1.2	0.88	0.18	0.13	NS	NS	NS
Ethane	mg/L	<0.10	<0.10	<0.02	<0.10	<0.10	<0.01	<0.10	<0.10	<0.02	<0.1	0.03	0.06	<0.01	NS	NS	NS
Dehalococcoides (Dhc) Enumeration	per liter	1×10^9	9×10^8	3×10^8	7×10^7	1×10^8	2×10^7	2×10^7	3×10^7	4×10^6	2×10^7	2×10^7	5×10^6	8×10^5	4×10^5	2×10^5	3×10^5
% Dhc		17 - 43	27 - 62	7 - 18	3 - 9	6 - 16	1 - 4	1 - 4	2 - 5	0.5 - 1	0.8 - 2	2 - 5	0.5 - 1	0.05 - 0.2	0.04 - 0.1	0.02 - 0.07	0.08 - 0.2
Vinyl Chloride Reductase (vcrA)	per liter	2×10^7	3×10^7	2×10^8	3×10^7	2×10^7	2×10^6	3×10^6	1×10^7	1×10^6	9×10^6	9×10^6	4×10^6	3×10^5	NS	NS	NS
% vcrA		0.5 - 2	0.9 - 3	4 - 11	1 - 4	1 - 3	0.2 -0.5	0.2 -0.7	0.7 - 2	0.2 -0.5	0.3 -0.9	0.6 - 2	0.3 - 1	0.05 - 0.1	NS	NS	NS

(1) = Correction factor applied to correct for non-specific PCR amplification products.

(2) = Dehalococcoides DNA detected but below sample specific quantitation limit. The sample specific quantitation limit is 4×10^3/liter. Additional explanation provided in: Interpretation of Quantitative Gene-Trac Dehalococcoides Test Results.

(3) = Dehalococcoides DNA detected but below sample specific quantitation limit. The sample specific quantitation limit is 5×10^3/liter. Additional explanation provided in: Interpretation of Quantitative Gene-Trac Dehalococcoides Test Results.

(4) = vcrA DNA detected but below sample specific quantitation limit.

NS = Not Sampled.

NA = Not applicable as Dehalococcoides or vcrA DNA not detected.

ND (1) = Not Detected. The quantitation limit is 7×10^3/liter

ND (2)= Not Detected. The quantitation limit is 4×10^3/liter

ND (3)= Sample inhibited testing; this increases the probability that test result is a false negative.

NR = Any inclusion of NR indicates that the project specific requirements do not require reporting estimated values below the laboratory reporting limit.

Inconclusive = Inconclusive results may indicate extremely low concentrations of *Dehalococcoides* DNA or *vcrA* DNA at or below the sample specific quantitation limit (4 x 103/liter), however, test results were insufficient to assign a conclusive positive result for this sample.

Pioneer Midler Avenue LLC
Monitoring Natural Attenuation
Water Quality Parameters

Parameter	Units	MW-15D	MW-15D	MW-15D	MW-15D	MW-15D	MW-15D	MW-15D	MW-15D	MW-15D	MW-15D	MW-15D	MW-15D	MW-15D	MW-15D	MW-15D	MW-15D	MW-15D	MW-15D
Sample Date		02/12/08	06/02/08	10/06/08	12/23/08	03/02/09	06/02/09	09/30/09	12/21/09	03/02/10	06/07/10	10/26/10	05/12/11	06/27/12	12/17/12	06/20/13	12/20/13	07/01/14	12/22/14
Field Parameters																			
pH		6.42	6.73	6.72	6.97	6.96	6.93	6.61	6.53	6.78	7.91	7.04	7.30	7.43	7.95	7.33	7.4	7.23	6.94
Conductivity	S/m	1.53	2.00	2.12	2.37	1.90	2.96	2.20	2.41	2.26	2.42	2.42	1.85	2.22	1.72	2.42	1.95	2.01	1.95
Temperature	°F	46.76	55.11	58.73	53.31	46.2	54.82	57.65	50.92	49.55	54.68	60.46	61.18	61.16	55.94	58.748	55.83	73.238	51.962
Oxidation/Reduction Potential (ORP)	mV	-218	-319	-347	-323	-340	-324	-373	-380	-344	-350	-291	-375	-301	-292	-292	-271	-286	-375
Dissolved Oxygen	mg/L	4.39	0.0	0.69	0.0	0.0	0.0	0.0	0.0	0.0	3.23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Laboratory Analytical Parameters																			
Dissolved Inorganic Carbon	mg/L	190	150	130	130	160	160	97.3	104	159	106	130	118	101	114	114	138	NS	100
Dissolved Organic Carbon	mg/L	17	11.90	6.30	8.10	5.80	7.20	7.76	10.60	11.6	150	8.1	2.4	7.4	7.7	5.2	9.8	10.2	7.6
Iron (total)	mg/L	1.27	0.094	0.135	0.624	0.450	0.11	0.398	0.055	0.097	0.05	0.105	0.174	0.087	0.36	0.33	0.19	0.14	0.19
Ferric Iron	mg/L	1.10	<0.10	<0.10	0.62	0.37	0.11	0.398	<0.10	<0.10	<0.10	0.105	0.18	NS	NS	NS	NS	0.14	NS
Ferrous Iron	mg/L	0.14	0.55	0.22	<0.10	0.084	<0.0150	<0.10	<0.10	<0.10	<0.10	<0.100	<0.5	0.075	0.076	<0.05	<0.05	<0.075	<0.1
Nitrite-Nitrate as Nitrogen	mg/L	NS	NS	<0.060	<0.060	NS	<0.02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nitrate as Nitrogen	mg/L-N	NS	NS	NS	NS	<0.10	NS	<0.05	<0.05	<0.05	<0.10	<0.050	<0.100	<0.011	<0.011	<0.10	<0.10	<0.020	<0.05
Sulfate	mg/L	126	309	637	623	420	380	479	441	440	559	786	519	612	569	612	494	609	556
Sulfide	mg/L	4	16.80	17.20	22.40	14	0.80	20.00	16.40	18.4	26.4	32.4	36	32.8	37.2	44	30.8	32.2	28.2
Methane	mg/L	4.10	8.20	11	6.50	15	16	13	17	18	13	9.1	12	9.3	NS	NS	NS	NS	NS
Ethene	mg/L	<0.02	<0.10	<0.02	<0.02	<0.10	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.04	<0.01	NS	NS	NS	NS	NS
Ethane	mg/L	<0.02	<0.10	<0.02	<0.02	<0.10	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.04	<0.01	NS	NS	NS	NS	NS
Dehalococcoides (Dhc) Enumeration	per liter	ND [(1)]	7×10^6	ND[(2)]	NA	ND[(1,3)]	1×10^5	Inconclusive	1×10^4	NA	Inconclusive	1×10^3	4×10^3	$3 \times 10^{3(1)}$	3×10^3	$3 \times 10^{3(1)}$	4×10^3	1×10^3	1×10^3
% Dhc		NA	0.2 - 0.6	NA	Inconclusive	NA	0.2 - 0.05	NA	0.0008 - 0.002	ND[(3)]	NA	0.00001 - 0.00004	0.0009 - 0.003	NA	NA	NA	0.0005 - 0.001	0.00005 - 0.0002	0.00006 - 0.0002
Vinyl Chloride Reductase (vcrA)	per liter	NA	Inconclusive	NA	ND[(2)]	NA	1×10^4	Inconclusive	4×10^4	NA	ND[(2)]	ND	4×10^3 U	NA	NS	NS	NS	NS	NS
% vcrA		NA	NA	ND[(2)]	NA	NA	0.001 - 0.004	NA	0.003 - 0.008	NA	NA	NA	NA	NA	NS	NS	NS	NS	NS

[(1)] = Correction factor applied to correct for non-specific PCR amplification products.

[(2)] = Dehalococcoides DNA detected but below sample specific quantitation limit. The sample specific quantitation limit is 4×10^3/liter. Additional explanation provided in: Interpretation of Quantitative Gene-Trac Dehalococcoides Test Results.

[(3)] = Dehalococcoides DNA detected but below sample specific quantitation limit. The sample specific quantitation limit is 5×10^3/liter. Additional explanation provided in: Interpretation of Quantitative Gene-Trac Dehalococcoides Test Results.

[(4)] = vcrA DNA detected but below sample specific quantitation limit.

NS = Not Sampled.

NA = Not applicable as Dehalococcoides or vcrA DNA not detected.

ND [(1)] = Not Detected. The quantitation limit is 7×10^3/liter

ND [(2)]= Not Detected. The quantitation limit is 4×10^3/liter

ND [(3)]= Sample inhibited testing; this increases the probability that test result is a false negative.

NR = Any inclusion of NR indicates that the project specific requirements do not require reporting estimated values below the laboratory reporting limit.

Inconclusive = Inconclusive results may indicate extremely low concentrations of *Dehalococcoides* DNA or *vcrA* DNA at or below the sample specific quantitation limit (4 x 103/liter), however, test results were insufficient to assign a conclusive positive result for this sample.

Pioneer Midler Avenue LLC
Monitoring Natural Attenuation
Water Quality Parameters

Parameter	Units	MW-16D	MW-16D	MW-16D	MW-16D	MW-16D	MW-16D	MW-16D	MW-16D	MW-16D	MW-16D	MW-16D	MW-16D	MW-16D	MW-16D	MW-16D	MW-16D
Sample Date		02/12/08	06/02/08	10/06/08	12/23/08	03/02/09	06/02/09	09/30/09	12/21/10	03/02/10	06/07/10	10/26/10	05/12/11	06/27/12	12/17/12	06/20/13	12/20/13
Field Parameters																	
pH		6.35	6.68	6.61	6.77	6.89	6.73	6.89	6.56	6.66	6.77	6.80	7.02	7.00	7.54	7.03	7.53
Conductivity	S/m	3.75	3.46	4.62	4.34	4.29	6.78	4.79	5.55	5.54	5.64	5.62	4.92	5.15	4.22	5.09	1.95
Temperature	°F	56.12	61.32	64.18	59.22	56.64	60.22	62.96	60.51	56.32	60.98	66.42	60.33	65.37	62.204	62.708	52.862
Oxidation/Reduction Potential (ORP)	mV	-375	-336	-342	-336	-340	-324	-366	-364	-324	-336	-337	-347	-259	-253	-228	-294
Dissolved Oxygen	mg/L	0.79	0.0	0.84	1.51	0.0	0.0	1.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Laboratory Analytical Parameters																	
Dissolved Inorganic Carbon	mg/L	240	160	150	160	170	140	129	117	150	113	130	123	129	115	195	111
Dissolved Organic Carbon	mg/L	194.00	105.00	45.70	35.00	19.00	16.80	18.10	27.20	26.20	19.00	20.40	4.90	13.40	16.60	12.60	13.60
Iron (total)	mg/L	0.338	0.076	0.512	0.094	0.18	0.106	0.031	0.138	0.163	0.118	0.039	0.181	0.18	0.11	0.23	0.15
Ferric Iron	mg/L	0.34	<0.10	0.51	<0.10	0.18	0.106	<0.10	0.138	0.163	<0.10	<0.100	<0.5	NS	NS	NS	<0.10
Ferrous Iron	mg/L	<0.10	<0.20	<0.10	<0.10	<0.10	<0.0150	<0.10	<0.10	<0.10	0.184	<0.10	0.21	<0.10	0.1	<0.10	0.15
Nitrite-Nitrate as Nitrogen	mg/L	NS	NS	<0.060	<0.060	NS	<0.02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nitrate as Nitrogen	mg/L-N	NS	NS	NS	NS	<0.1	NS	<0.05	<0.05	<0.05	<0.1	<0.050	<0.1	<0.011	<0.01	<0.05	<0.05
Sulfate	mg/L	10.40	<2.0	<20.0	13.4	24	44	63.4	155	91.6	147	83.6	98.8	91.3	69.2	82.7	103
Sulfide	mg/L	21.60	26.00	36.00	37.20	38.00	33.60	28.40	17.20	19.60	14.80	20.40	17.20	11.00	16.0	13.6	10.2
Methane	mg/L	22	19	27	23	24	27	29	24	24	12	22	21	13	NS	NS	NS
Ethene	mg/L	0.29	<0.10	0.06	<0.10	<0.10	0.1	0.11	<0.10	0.06	<0.1	0.01	<0.04	<0.1	NS	NS	NS
Ethane	mg/L	<0.10	0.18	0.18	0.12	<0.10	<0.10	<0.10	<0.10	<0.02	<0.1	0.02	<0.04	<0.1	NS	NS	NS
Dehalococcoides (Dhc) Enumeration	per liter	2×10^8	1×10^7	1×10^7	3×10^7	3×10^6	1×10^6	1×10^6	2×10^7	2×10^6	2×10^6	2×10^6	8×10^5	2×10^5	2×10^5	1×10^5	3×10^5
% Dhc		5 - 14	0.3 - 0.8	0.2 - 0.6	3 - 9	0.5 - 2	0.2 - 0.7	0.3 - 0.9	3 - 9	0.3 - 1	0.3 - 0.8	0.2 - 0.6	0.1 - 0.3	0.03 - 0.09	0.02 - 0.06	0.009 - 0.03	0.08 - 0.2
Vinyl Chloride Reductase (vcrA)	per liter	2×10^8	3×10^7	6×10^6	2×10^6	9×10^5	5×10^5	3×10^5	3×10^6	2×10^6	2×10^6	1×10^6	9×10^5	3×10^5	NS	NS	NS
% vcrA		5 - 14	0.8 - 2	0.1 -0.4	0.1 - 0.4	0.1 - 0.4	0.08 - 0.3	0.06 - 0.2	0.4 - 1	0.2 - 0.6	0.2 - 0.6	0.2 - 0.5	0.1 - 0.4	0.1 - 0.3	NS	NS	NS

(1) = Correction factor applied to correct for non-specific PCR amplification products.

(2) = Dehalococcoides DNA detected but below sample specific quantitation limit. The sample specific quantitation limit is 4×10^3/liter. Additional explanation provided in: Interpretation of Quantitative Gene-Trac Dehalococcoides Test Results.

(3) = Dehalococcoides DNA detected but below sample specific quantitation limit. The sample specific quantitation limit is 5×10^3/liter. Additional explanation provided in: Interpretation of Quantitative Gene-Trac Dehalococcoides Test Results.

(4) = vcrA DNA detected but below sample specific quantitation limit.

NS = Not Sampled.

NA = Not applicable as Dehalococcoides or vcrA DNA not detected.

ND (1) = Not Detected. The quantitation limit is 7×10^3/liter

ND (2)= Not Detected. The quantitation limit is 4×10^3/liter

ND (3)= Sample inhibited testing; this increases the probability that test result is a false negative.

NR = Any inclusion of NR indicates that the project specific requirements do not require reporting estimated values below the laboratory reporting limit.

Inconclusive = Inconclusive results may indicate extremely low concentrations of *Dehalococcoides* DNA or *vcrA* DNA at or below the sample specific quantitation limit (4 x 103/liter), however, test results were insufficient to assign a conclusive positive result for this sample.

SiREM
Leading Science · Lasting Solutions

130 Research Lane, Ste 2
Guelph ON N1G 5G3
(519) 822-2265

Certificate of Analysis: Gene-Trac® *Dehalococcoides* Assay

Customer: Wayne Randall, C & S Engineering Inc.
Project: Midler GW
Reference #: C81.006.001

SiREM Reference: S-3267
Report Date: 15-Jul-14
Data Files: MyiQ-DHC-QPCR-1129
MyiQ-DB-DHC-QPCR-0485

Table 1: Test Results

Customer Sample ID	SiREM Sample ID	Sample Collection Date	Sample Matrix	Percent Dhc *	*Dehalococcoides* Enumeration/Liter **
MW-13D	DHC-10605	1-Jul-14	Groundwater	0.8 - 2 %	2×10^7
MW-9D	DHC-10606	1-Jul-14	Groundwater	NA	3×10^3 U
MW-10D	DHC-10607	1-Jul-14	Groundwater	0.02 - 0.05 %	3×10^5
MW-15D	DHC-10608	1-Jul-14	Groundwater	0.00005 - 0.0002 %	1×10^3 J

Notes:

* Percent *Dehalococcoides* (Dhc) in microbial population. This value is calculated by dividing the number of Dhc 16S ribosomal ribonucleic acid (rRNA) gene copies by the total number of bacteria as estimated by the mass of DNA extracted from the sample. Range represents normal variation in Dhc enumeration.

** Based on quantification of Dhc 16S rRNA gene copies. Dhc are generally reported to contain one 16S rRNA gene copy per cell; therefore, this number is often interpreted to represent the number of Dhc cells present in the sample.

J The associated value is an estimated quantity between the method detection limit and quantitation limit.
U Not detected, associated value is the quantification limit.
B Analyte was detected in the method blank within an order of magnitude of the test sample
NA Not applicable as *Dehalococcoides* not detected and/or quantifiable DNA not extracted from the sample.
I Sample inhibited the test reaction based on inability to PCR amplify extracted DNA with universal primers.
E Extracted genomic DNA was not detected in sample.

Analyst: _____
Ben Reside
Laboratory Technician

Approved: _____
Ximena Druar, B.Sc.
Genetic Testing Coordinator

Table 2: Detailed Test Parameters, Gene-Trac Test Reference S-3267

Customer Sample ID	MW-13D	MW-9D	MW-10D	MW-15D
SiREM Dhc Sample ID	DHC-10605	DHC-10606	DHC-10607	DHC-10608
Date Received	3-Jul-14	3-Jul-14	3-Jul-14	3-Jul-14
Sample Temperature	15 ºC	15 ºC	15 ºC	15 ºC
Filtration Date	8-Jul-14	8-Jul-14	8-Jul-14	8-Jul-14
Volume Used for DNA Extraction	500 mL	500 mL	500 mL	500 mL
DNA Extraction Date	9-Jul-14	9-Jul-14	9-Jul-14	9-Jul-14
DNA Concentration in Sample (extractable)	4751 ng/L	<600 ng/L [1]	3566 ng/L	<600 ng/L [1]
PCR Amplifiable DNA	Detected	Detected	Detected	Detected
Dhc qPCR Date Analyzed	9-Jul-14	9-Jul-14	9-Jul-14	9-Jul-14
Laboratory Controls (see Table 3)	Passed	Passed	Passed	Passed
Comments	--	--	--	--

Notes:

°C = degrees Celsius

[1] Detected below stated detection limit.

Dhc = *Dehalococcoides*

DNA = Deoxyribonucleic acid

mL = milliliters

ng/L = nanograms per liter

PCR = polymerase chain reaction

qPCR = quantitative PCR

Table 3: Gene-Trac Dhc Control Results, Test Reference S-3267

Laboratory Control	Analysis Date	Control Description	Spiked Dhc 16S rRNA Gene Copies per Liter	Recovered Dhc 16S rRNA Gene Copies per Liter	Comments
Positive Control Low Concentration	9-Jul-14	qPCR with KB1 genomic DNA (CSLD-0767)	1.4×10^5	1.4×10^5	--
Positive Control High Concentration	9-Jul-14	qPCR with KB1 genomic DNA (CSHD-0767)	1.5×10^7	1.0×10^7	--
DNA Extraction Blank	9-Jul-14	DNA extraction sterile water (FB-2219)	0	2.6×10^3 U	--
Negative Control	9-Jul-14	Tris Reagent Blank (TBD-0726)	0	2.6×10^3 U	--

Notes:

Dhc = *Dehalococcoides*

DNA = Deoxyribonucleic acid

qPCR = quantitative PCR

16S rRNA = 16S ribosomal ribonucleic acid

U Not detected, associated value is the quantification limit.

SiREM
Leading Science · Lasting Solutions

Chain-of-Custody Form

130 Research Lane, Suite 2 ◦ Guelph, Ontario, Canada N1G 5G3 ◦ Phone (519) 822-2265 or toll free 1-866-251-1747 Fax (519) 822-3151
www.siremlab.com

12 3850

Page 1 of 1

Lab # 5-3267

Project Name	Midler GW
Project #	C81.006.001
Project Manager	Wayne Randall
Email Address	wrandall@cscos.com
Company	C&S Engineers, Inc.
Address	499 Col. Eileen Collins Blvd.
Phone #	315 455 2000
Fax #	315 455 5167
Sampler's Signature	
Sampler's Printed Name	Wayne Randall

Analysis

Preservative: 0

Gene-Trac Dhc | Gene-Trac VC | Gene-Trac Dhb

Preservative Key
0. None
1. HCl
2. Other _____
3. Other _____

Customer Sample ID	Sampling Date	Sampling Time	Matrix	# of Containers	Gene-Trac Dhc	Gene-Trac VC	Gene-Trac Dhb	Other Information
MW-13D	7/1/14	9:30	H_2O	1	X			
MW-9D		10:30			X			
MW-10D		11:15			X			
MW-15D		12:00			X			

Sample Receipt
Cooler Condition: GOOD.
Cooler Temperature: 15°C
Custody Seals: Yes ☐ No ☒

Billing Information
P.O. # C81.006.001
Bill To: Wayne Randall C&S Engineers, Inc
wrandall@cscos.com

Turnaround Time Requested
Normal ☒
Rush ☐

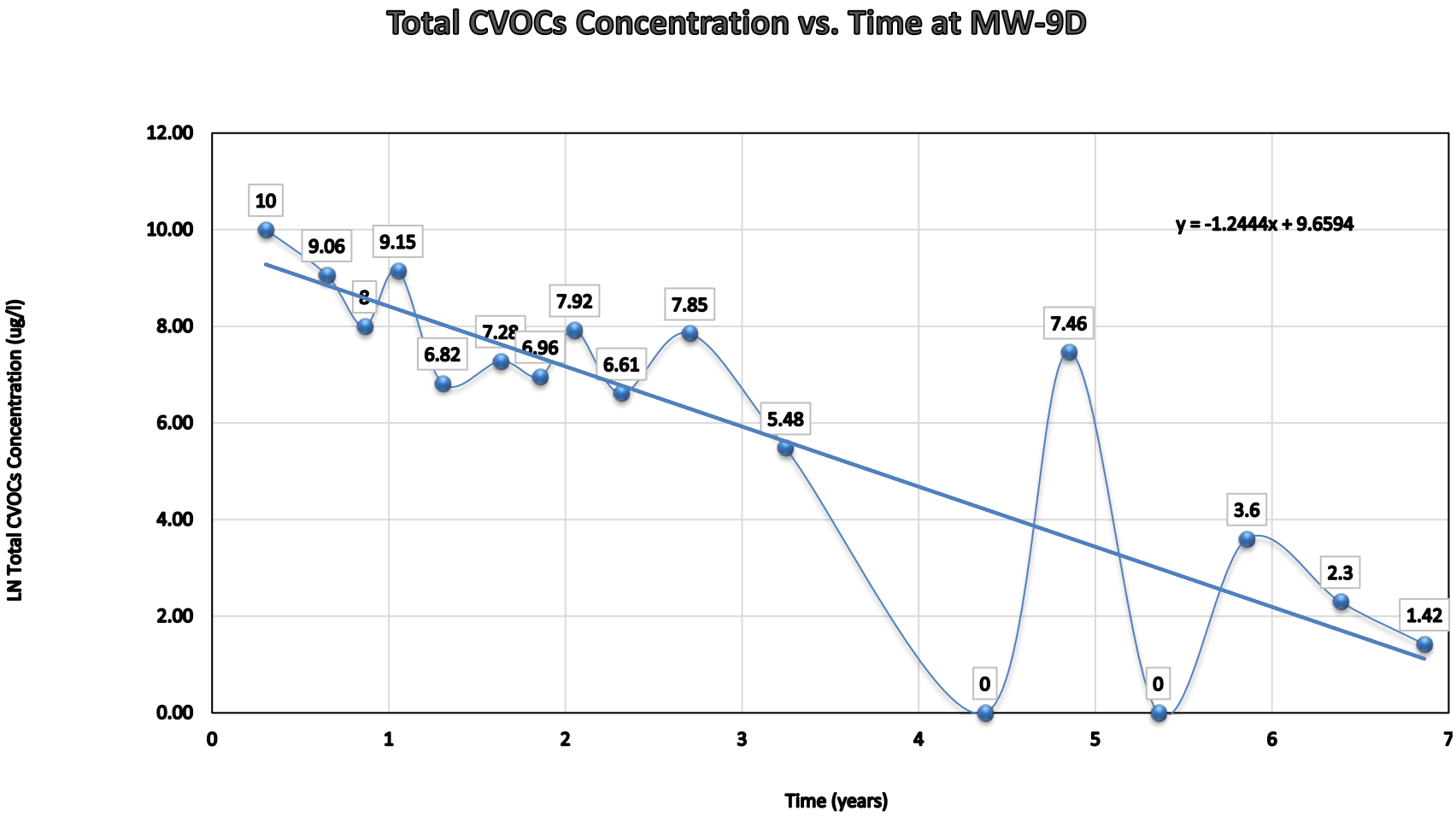
For Lab Use Only
Bottles
B-01033 - B-01036
Proposal #: _____

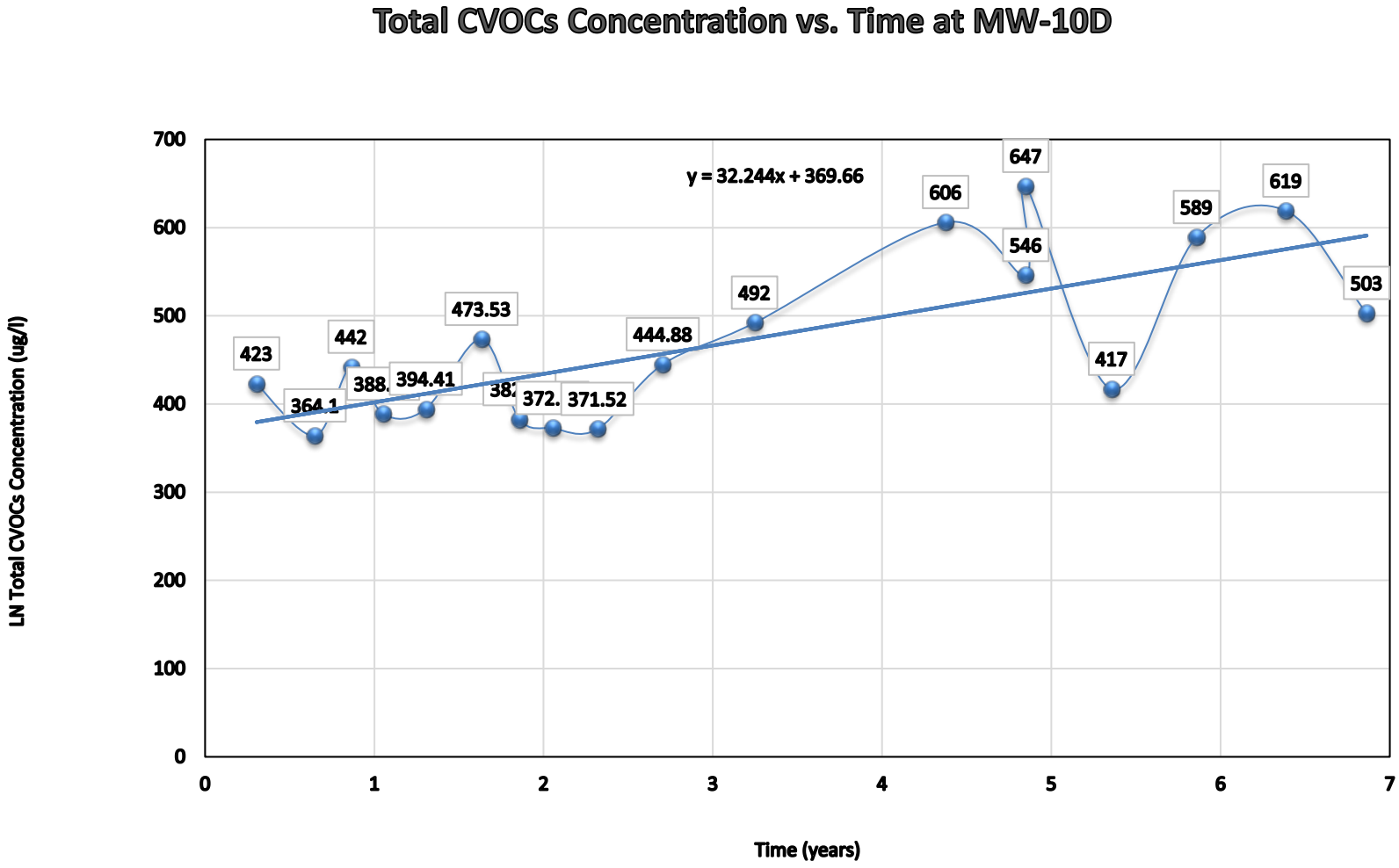
Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature	Signature	Signature	Signature	Signature	Signature
Printed Name: Wayne Randall	Printed Name: D. Vespoli	Printed Name	Printed Name	Printed Name	Printed Name
Firm: C&S	Firm: SiREM	Firm	Firm	Firm	Firm
Date/Time: 7/1/14 14:00	Date/Time: July 3 '14 12:20pm	Date/Time	Date/Time	Date/Time	Date/Time

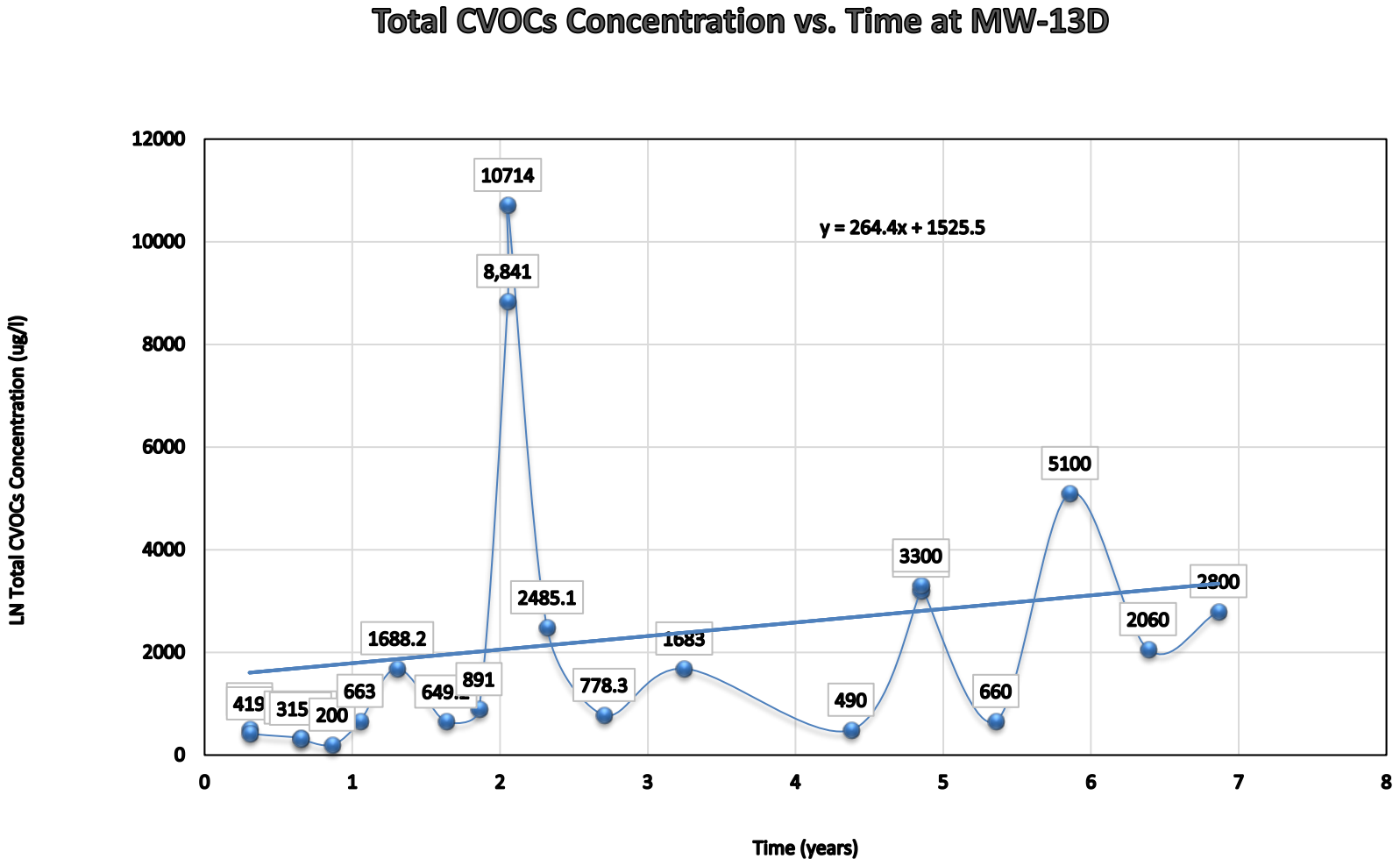
Distribution: White - Return to Originator: Yellow - Lab Copy: Pink - Retained by Client

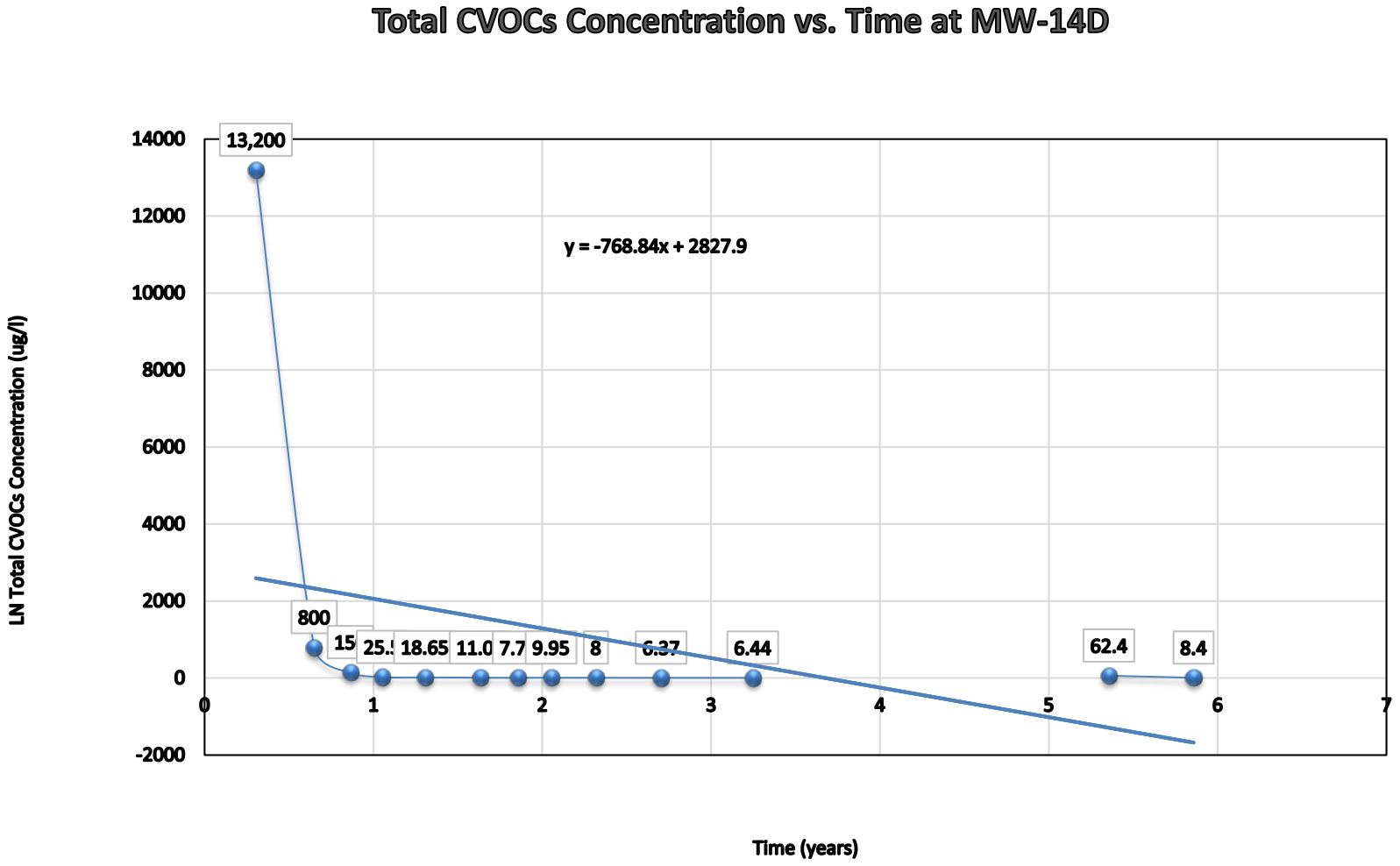
Appendix B-4

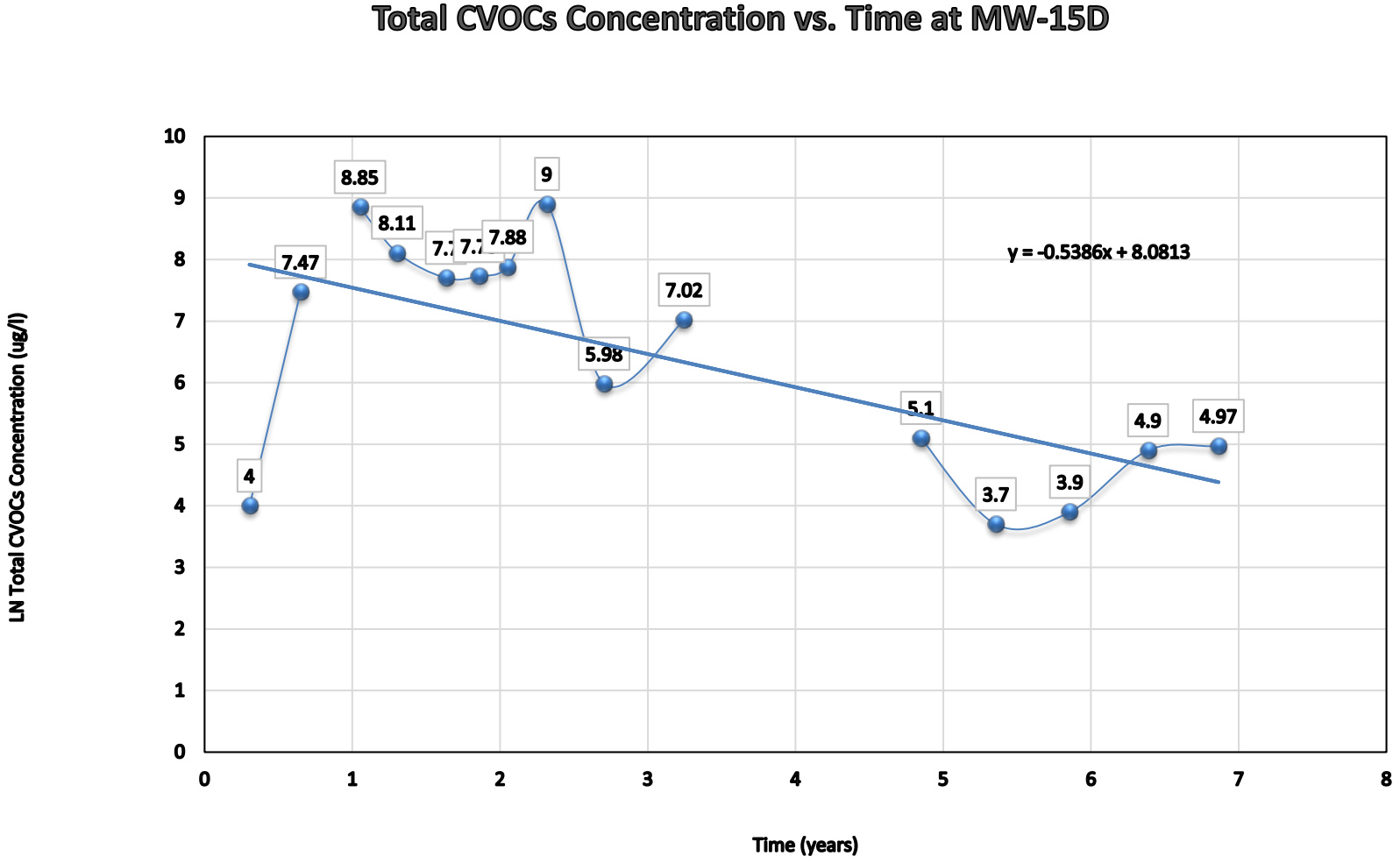
TOTAL CVOCS VS. TIME CHARTS

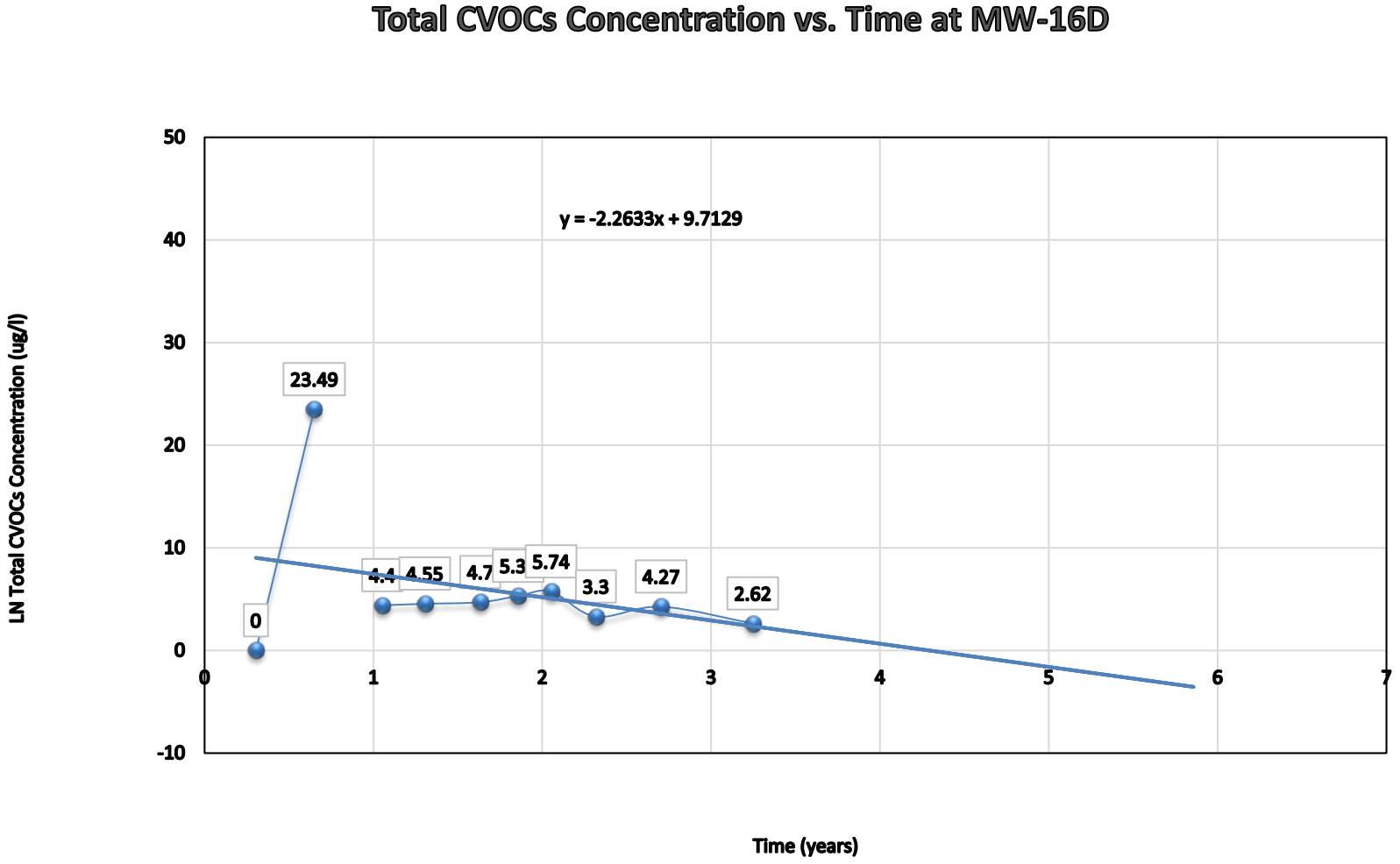

Total CVOCs Concentration vs. Time at MW-9D
LN Total CVOCs Concentration (ug/l)
Time (years)
y = -1.2444x + 9.6594
12.00
10.00
8.00
6.00
4.00
2.00
0.00
0
1
2
3
4
5
6
7
10
9.06
9.15
6.82
7.92
6.96
6.61
7.85
5.48
0
7.46
0
3.6
2.3
1.42


Total CVOCs Concentration vs. Time at MW-10D
y = 32.244x + 369.66
LN Total CVOCs Concentration (ug/l)
Time (years)
700
600
500
400
300
200
100
0
0
1
2
3
4
5
6
7
423
364.1
442
388.
394.41
473.53
38
372.
371.52
444.88
492
606
647
546
417
589
619
503


Total CVOCs Concentration vs. Time at MW-13D
LN Total CVOCs Concentration (ug/l)
Time (years)
y = 264.4x + 1525.5
12000
10000
8000
6000
4000
2000
0
0
1
2
3
4
5
6
7
8
10714
8,841
2485.1
1688.2
1683
778.3
663
649.2
891
419
315
200
490
3300
660
5100
2060
2800

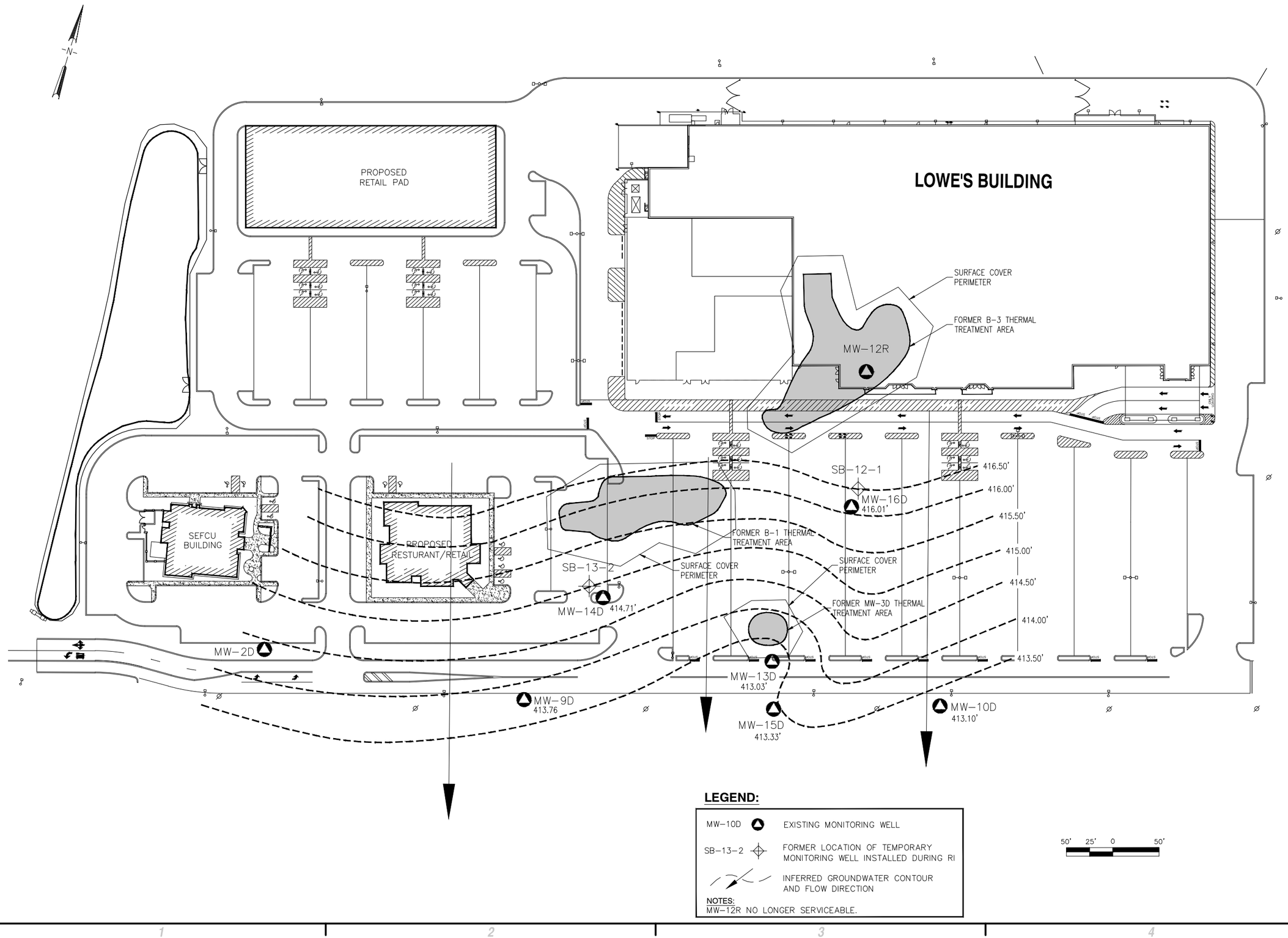

Total CVOCs Concentration vs. Time at MW-14D
LN Total CVOCs Concentration (ug/l)
14000
12000
10000
8000
6000
4000
2000
0
-2000
0
1
2
3
4
5
6
7
y = -768.84x + 2827.9
13,200
800
15
25.
18.65
11.0
7.7
9.95
8
6.37
6.44
62.4
8.4
Time (years)


Total CVOCs Concentration vs. Time at MW-15D
LN Total CVOCs Concentration (ug/l)
Time (years)
y = -0.5386x + 8.0813
4
7.47
8.85
8.11
7.88
9
5.98
7.02
5.1
3.7
3.9
4.9
4.97
0
1
2
3
4
5
6
7
8
9
10


Total CVOCs Concentration vs. Time at MW-16D
y = -2.2633x + 9.7129
LN Total CVOCs Concentration (ug/l)
Time (years)
50
40
30
20
10
0
-10
0
1
2
3
4
5
6
7
23.49
0
4.55
4.7
5.3
5.74
3.3
4.27
2.62

Appendix B-5

Groundwater Contour Maps 2014



C&S COMPANIES
C&S Engineers, Inc.
499 Col. Eileen Collins Blvd.
Syracuse, New York 13212
Phone: 315-455-2000
Fax: 315-455-9667
www.cscos.com

PIONEER MIDLER AVENUE, LLC
POST IRM MONITORING
MIDLER CITY
INDUSTRIAL PARK
BROWNFIELD CLEANUP
SYRACUSE, NY
NYSDEC BROWNFIELD SITE No. C734103

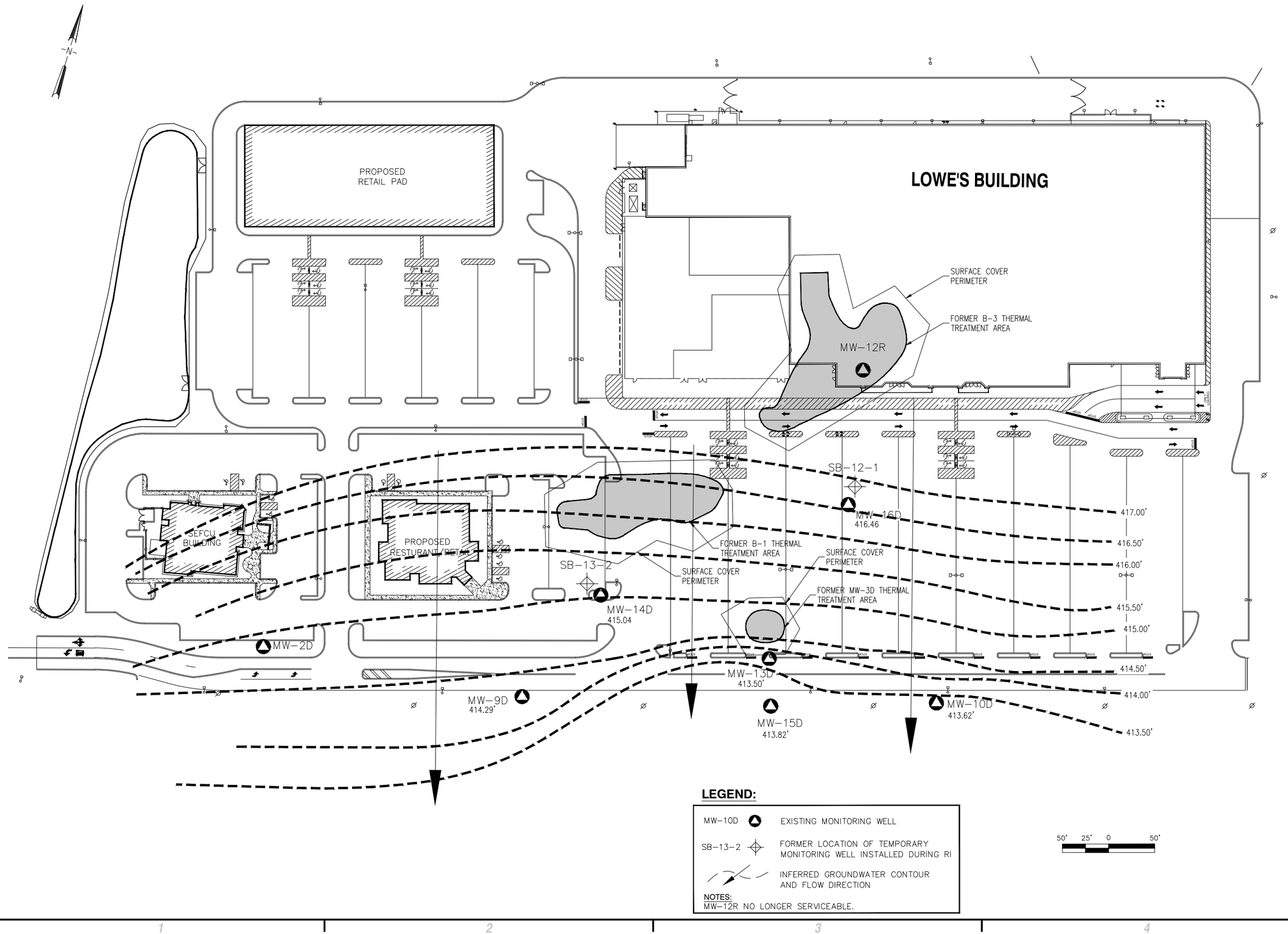
MARK	DATE	DESCRIPTION
		REVISIONS

PROJECT NO:	
DATE:	MARCH 2014
SCALE:	AS SHOWN
DRAWN BY:	M. BUCKINGHAM
DESIGNED BY:	
CHECKED BY:	

JUNE, 2014 GROUNDWATER CONTOUR MAP

FIGURE 1

Mar 16, 2015 - 8:54am F:\Project\C81 - Pioneer Development\C81006001\Post IRM GW Monitoring\2014 Groundwater Sampling\June 2014\CAD\FIGURE 1 JUNE2014.dwg



C&S COMPANIES
C&S Engineers, Inc.
499 Col. Eileen Collins Blvd.
Syracuse, New York 13212
Phone: 315-455-2000
Fax: 315-455-9667
www.cscos.com

PIONEER MIDLER AVENUE, LLC
POST IRM MONITORING
MIDLER CITY
INDUSTRIAL PARK
BROWNFIELD CLEANUP
SYRACUSE, NY
NYSDEC BROWNFIELD SITE No. C734103

MARK	DATE	DESCRIPTION
		REVISIONS

PROJECT NO:	
DATE:	DECEMBER 2014
SCALE:	AS SHOWN
DRAWN BY:	M. BUCKINGHAM
DESIGNED BY:	
CHECKED BY:	

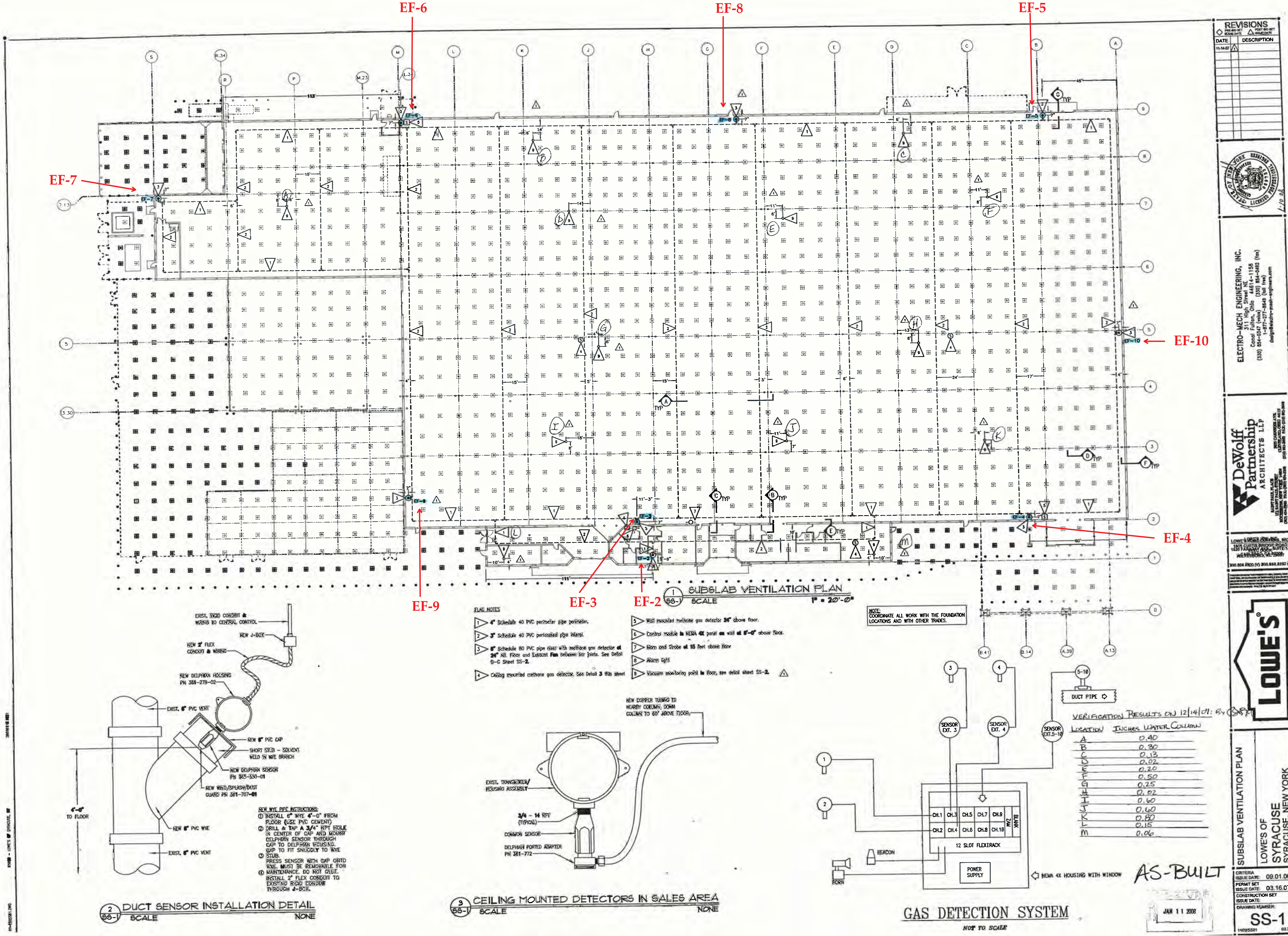
DECEMBER, 2014 GROUNDWATER CONTOUR MAP

FIGURE 2

Mar 16, 2015 - 9:03am F:\Project\C81 - Pioneer Development\C81006001Post IRM GW Monitoring\2014 Groundwater Sampling\December 2014\CAD\FIGURE 2 DEC2014.dwg

Appendix C

SSDS Layout and Inspection/Operational Documentation


EF-6
EF-8
EF-5
EF-7
EF-10
EF-4
EF-9
EF-3
EF-2
REVISIONS
DATE
DESCRIPTION
ELECTRO-MECH ENGINEERING, INC.
311 High Street NE
Canal Fulton, Ohio 44614-1158
(330) 854-0347 (voice) (330) 854-0492 (fax)
1-877-277-8648 (toll free)
design@electro-mech-engineers.com
DeWolff Partnership ARCHITECTS LLP
LOWE'S
SUBSLAB VENTILATION PLAN
LOWE'S OF SYRACUSE
SYRACUSE, NEW YORK
ISSUE DATE: 09.01.06
ISSUE DATE: 03.16.07
CONSTRUCTION SET
DRAWING NUMBER:
SS-1
AS-BUILT
JAN 11 2008
1 SUBSLAB VENTILATION PLAN
SS-1 SCALE 1" = 20'-0"
FLAG NOTES
1 4" Schedule 40 PVC perimeter pipe perimeter.
2 3" Schedule 40 PVC perforated pipe lateral.
3 6" Schedule 80 PVC pipe riser with methane gas detector at 24" AB. Floor and Exhaust Fan between bar joists. See Detail G-C Sheet SS-2.
4 Ceiling mounted methane gas detector. See Detail 3 this sheet
5 Wall mounted methane gas detector 24" above floor.
6 Control module in NEMA 4X panel on wall at 5'-0" above floor.
7 Horn and Strobe at 15 feet above floor
8 Alarm light
9 Vacuum monitoring point in floor, see detail sheet SS-2.
NOTE: COORDINATE ALL WORK WITH THE FOUNDATION LOCATIONS AND WITH OTHER TRADES.
VERIFICATION RESULTS ON 12/14/07
LOCATION INCHES WATER COLUMN
A 0.40
B 0.30
C 0.13
D 0.02
E 0.20
F 0.50
G 0.25
H 0.02
I 0.60
J 0.60
K 0.80
L 0.15
M 0.06
DUCT PIPE
SENSOR EXT. 3
SENSOR EXT. 4
SENSOR EXT.5-10
CH.1 CH.3 CH.5 CH.7 CH.9 BLANK
CH.2 CH.4 CH.6 CH.8 CH.10 ZAM
12 SLOT FLEXRACK
POWER SUPPLY
BEACON
HORN
NEMA 4X HOUSING WITH WINDOW
GAS DETECTION SYSTEM
NOT TO SCALE
NEW COPPER TUBING TO NEARBY COLUMN, DOWN COLUMN TO 60" ABOVE FLOOR.
EXIST. TRANSMITTER/HOUSING ASSEMBLY
3/4 - 14 NPT (TYPICAL)
COMMON SENSOR
DELPHIAN PORTED ADAPTER PN 381-772
3 CEILING MOUNTED DETECTORS IN SALES AREA
SS-1 SCALE NONE
EXIST. RIGID CONDUIT & WIRING TO CENTRAL CONTROL
NEW J-BOX
NEW 2" FLEX CONDUIT & WIRING
NEW DELPHIAN HOUSING PN 381-279-02
EXIST. 6" PVC VENT
NEW 6" PVC CAP
SHORT STUB - SOLVENT WELD IN WYE BRANCH
NEW DELPHIAN SENSOR PN 365-530-01
NEW WIND/SPLASH/DUST GUARD PN 381-707-01
NEW 6" PVC WYE
EXIST. 6" PVC VENT
4'-0" TO FLOOR
NEW WYE PIPE INSTRUCTIONS:
1 INSTALL 6" WYE 4'-0" FROM FLOOR (USE PVC CEMENT)
2 DRILL & TAP A 3/4" NPT HOLE IN CENTER OF CAP AND MOUNT DELPHIAN SENSOR THROUGH CAP TO DELPHIAN HOUSING.
3 CAP TO FIT SNUGGLY TO WYE STUB.
PRESS SENSOR WITH CAP ONTO WYE. MUST BE REMOVABLE FOR MAINTENANCE. DO NOT GLUE.
4 INSTALL 2" FLEX CONDUIT TO EXISTING RIGID CONDUIT THROUGH J-BOX.
2 DUCT SENSOR INSTALLATION DETAIL
SS-1 SCALE NONE

DATE: 01/03/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1040	SEFCU @ 1028
2	-1.0	1 -1.0
3	-1.0	
4	-1.0	
5	-0.85	
6	-1.0	
7	-0.9	
8	-1.0	
9	-1.0	
10	-1.0	

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David F. O'Brien
(Print Name)

(Signature)

DATE: 1/10/19

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 14900	SEFCU @ 12.54
2	-1.0	1 -1.0
3	-1.0	
4	-1.0	
5	-0.85	
6	-1.0	
7	-0.9	
8	-1.0	
9	-1.0	
10	-1.0	

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David F. O'Brien
(Print Name)

(Signature)

DATE: 1/17/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @1421	SEFCU @1435
2	-1.0	1 -1.0
3	-1.0	
4	-1.0	
5	-0.85	
6	-1.0	
7	-0.9	
8	-1.0	
9	-1.0	
10	-1.0	

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David F O'Brien
(Print Name)

(Signature)

DATE: 1/24/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1416	SEFCU @ 1204
2	-1.0	1 -1.0
3	-1.0	
4	-1.0	
5	-0.85	
6	-1.0	
7	-0.85	
8	-1.0	
9	-1.0	
10	-1.0	

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

DAVID K. O'BRIEN
(Print Name)

(Signature)

DATE: 01/31/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1450	SEFCU @ 0945
2	- 1.0	
3	- 1.0	
4	- 1.0	
5	- 0.85	
6	- 1.0	
7	- 0.85	
8	- 1.0	
9	- 1.0	
10	- 1.0	
1		- 1.0

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David F. O'Brien
(Print Name)

(Signature)

DATE: 02/07/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 0978	SEFCU @ 0942
1		-1.0
2	-1.0	
3	-1.0	
4	-1.0	
5	-0.85	
6	-1.0	
7	-0.85	
8	-1.0	
9	-1.0	
10	-1.0	

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

DAVID F. O'BRYAN
(Print Name)

(Signature)

DATE: 02/14/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1236	SEFCU @
2	-1.0	1 -1.0
3	-1.0	
4	-1.0	
5	-0.85	
6	-1.0	
7	-0.85	
8	-1.0	
9	-1.0	
10	-1.0	

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David F. O'Bryan
(Print Name)

(Signature)

DATE: 02/21/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1402	SEFCU @ 1424
2	-1.0	
3	-1.0	
4	-1.0	
5	-0.85	
6	-1.0	
7	-0.9	
8	-1.0	
9	-1.0	
10	-1.0	
1		-1.0

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David P. O'Brien
(Print Name)

(Signature)

DATE: 02/28/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1200	SEFCU @ 0950
2	- 1.0	1 - 1.0
3	- 1.0	
4	- 1.0	
5	- 0.85	
6	- 1.0	
7	- 0.85	
8	- 1.0	
9	- 1.0	
10	- 1.0	

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

#8 Pipe leaking.

Replaced cap for #3 sensor (Power Com)

FAN Replacements scheduled 3/4/14 for #5 & #7

INSPECTED BY:

DAVID F. O'BRYAN
(Print Name)

(Signature)

DATE: 03/07/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1348	SEFCU @ 1247
2	-1.0	1 -1.0
3	-1.0	
4	-1.0	
5	-1.0	
6	-1.0	
7	-1.0	
8	-1.0	
9	-1.0	
10	-1.0	

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:
CHANGED FANS ON #5 & #7

INSPECTED BY:

DAVID F. O'BRYAN
(Print Name)

(Signature)

Power-Comm Electric Co., Inc.

Invoice

PO Box 5435
Syracuse, NY 13220
ph: 315-963-0671 fax: 315-963-0681
Fed Id #16-1614225
pce@twcny.rr.com

powercommelectric.com

Date	Invoice #
3/11/2014	8081

Bill To
PIONEER COMPANIES C/O PIONEER MGMT. GROUP 333 WEST WASHINGTON ST SUITE 600 SYRACUSE, NY 13202-5254

RECEIVED
MAR 14 2014
1650
3/07

P.O. No.	Terms	Project
LOWES BLDG	Net 30	1433 LOWES BLDG FA...

Quantity	Description	Rate	Amount
	WORK COMPLETED AT LOWES - ARGON GAS FANS TO REPLACE 6" CAP AND REMOUNT SENSOR IN END OF IT AND INSTALLED TO ARGON FANS FURNISHED BY OWNER. WORK DONE ON 2/28 AND 3/7/14.		
6	LABOR REG HOURS	82.00	492.00T
	MATERIAL:	33.60	33.60T
	Sales Tax	8.00%	42.05

We are now accepting all major credit cards. Please contact our office to make your payment today.

Total $567.65

DATE: 03/14/19

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1226	SEFCU @ 1206
1		-6.0
2	-1.0	
3	-1.0	
4	-1.0	
5	-1.0	
6	-1.0	
7	-1.0	
8	-1.0	
9	-1.0	
10	-1.0	

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David F. O'Bryan
(Print Name)

David F. O'Bryan
(Signature)

DATE: 03/21/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1325	SEFCU @ 1335
2	-1.0	1 -1.0
3	-1.0	
4	-1.0	
5	-1.0	
6	-1.0	
7	-1.0	
8	-1.0	
9	-1.0	
10	-1.0	

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:
#8 RISER HAS WATER DRIPPING / bldg engineer discussed with property mgr. DCG

INSPECTED BY:

David F. OBrien
(Print Name)

David F. O'Brien
(Signature)

DATE: 03/28/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1145	SEFCU @ 1130
1		-1.0
2	-1.0	
3	-1.0	
4	-1.0	
5	-1.0	
6	-1.0	
7	-1.0	
8	-1.0	
9	-1.0	
10	-1.0	

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David F. O'Bryan
(Print Name)

(Signature)

DATE: 04/04/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S	SEFCU @ 1046
2	-1.0	
3	-1.0	
4	-1.0	
5	-1.0	
6	-1.0	
7	-1.0	
8	-1.0	
9	-1.0	
10	-1.0	
1		-1.0

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David F. O'Brien
(Print Name)

David F. O'Brien
(Signature)

DATE: 09/11/18

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 40	SEFCU @ 1127
2	-1.0	1 -1.0
3	-1.0	
4	-1.0	
5	-1.0	
6	-1.0	
7	-1.0	
8	-1.0	
9	-1.0	
10	-1.0	

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David F. O'Bryan
(Print Name)

(Signature)

DATE: 04/18/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1140	SEFCU @ 1149
2	-1.0	
3	-1.0	
4	-1.0	
5	-1.0	
6	-1.0	
7	-1.0	
8	-1.0	
9	-1.0	
10	-1.0	
1		-1.0

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David F. O'Bryan
(Print Name)

(Signature)

DATE: 04/25/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1210	SEFCU @ 1156
2	-1.0	1 -1.0
3	-1.0	
4	-1.0	
5	-1.0	
6	-1.0	
7	-1.0	
8	-1.0	
9	-1.0	
10	-1.0	

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David F. O'Bryan
(Print Name)

David F. O'Bryan
(Signature)

DATE: 5/2/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1218	SEFCU @ 1210
2	-1.0	
3	-1.0	
4	-1.0	
5	-1.0	
6	-1.0	
7	-1.0	
8	-1.0	
9	-1.0	
10	-1.0	
1		-1.0

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David F. C'Bryan
(Print Name)

David F. C'Bryan
(Signature)

DATE: 05/09/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1320	SEFCU @ 1310
2	-1.0	
3	-1.0	
4	-1.0	
5	-1.0	
6	-1.0	
7	-1.0	
8	-1.0	
9	-1.0	
10	-1.0	
1		-1.0

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David F. O'Brien
(Print Name)

(Signature)

DATE: 05/16/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1201	SEFCU @ 1140
2	-1.0	
3	-1.0	
4	-1.0	
5	-1.0	
6	-1.0	
7	-1.0	
8	-1.0	
9	-1.0	
10	-1.0	
1		-1.0

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David F. O'Brien
(Print Name)

(Signature)

DATE: 05/23/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S	SEFCU
2	-1.0	1 -1.0
3	-1.0	
4	-1.0	
5	-1.0	
6	-1.0	
7	-1.0	
8	-1.0	
9	-1.0	
10	-1.0	

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David F. O'Brien
(Print Name)

(Signature)

DATE: 5/30/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S 1500	SEFCU @ 1950
2	-1.0	
3	-1.0	
4	-1.0	
5	-1.0	
6	-1.0	
7	-1.0	
8	-1.0	
9	-1.0	
10	-1.0	
1		-1.0

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David F. O'Bryan
(Print Name)

David F. O'Bryan
(Signature)

DATE: 06/06/18

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1323	SEFCU @ 1315
2	-1	
3	-1	
4	-1	
5	-1	
6	-1	
7	-1	
8	-1	
9	-1	
10	-1	
1		-1

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David F. O'Brien
(Print Name)

(Signature)

DATE: 06/13/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1435	SEFCU @ 1427
2	-1.0	1 -1.0
3	-1.0	
4	-1.0	
5	-1.0	
6	-1.0	
7	-1.0	
8	-1.0	
9	-1.0	
10	-1.0	

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David F. O'Bryan
(Print Name)

(Signature)

DATE: 06/29/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1502	SEFCU @ 1524
2	-1.0	
3	-1.0	
4	-1.0	
5	-1.0	
6	-1.0	
7	-1.0	
8	-1.0	
9	-1.0	
10	-1.0	
1		-1.0

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David E. O'Brien
(Print Name)

(Signature)

DATE: 06/27/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1354	SEFCU @ 1349
2	-1.0	1 -1.0
3	-1.0	
4	-1.0	
5	-1.0	
6	-1.0	
7	-1.0	
8	-1.0	
9	-1.0	
10	-1.0	

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

DAVID F. O'BRYAN
(Print Name)

(Signature)

DATE: 07/07/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S 1359	SEFCU @ 1345
2	-1.0	
3	-1.0	
4	-1.0	
5	-1.0	
6	-1.0	
7	-1.0	
8	-1.0	
9	-1.0	
10	-1.0	
1		-1.0

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David F. O'Brien
(Print Name)

(Signature)

DATE: 07/11/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1300	SEFCU @
2	-/	1 -/
3	-/	
4	-/	
5	-/	
6	-/	
7	-/	
8	-/	
9	-/	
10	-/	

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

DAVID F. O'BRYAN
(Print Name)

David F. O'Bryan
(Signature)

DATE: 07/18/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1158	SEFCU @ 1218
2	-1.0	1 -1.0
3	-1.0	
4	-1.0	
5	-1.0	
6	-1.0	
7	-1.0	
8	-1.0	
9	-1.0	
10	-1.0	

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David F. O'Brien
(Print Name)

(Signature)

DATE: 07/25/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1050	SEFCU @ 1036
2	-1.0	1 -1.0
3	-1.0	
4	-1.0	
5	-1.0	
6	-1.0	
7	-1.0	
8	-1.0	
9	-1.0	
10	-1.0	

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David F. O'Bryan
(Print Name)

(Signature)

DATE: 08/01/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1330	SEFCU @ 1315
2	-1	
3	-1	
4	-1	
5	-1	
6	-1	
7	-1	
8	-1	
9	-1	
10	-1	
1		-1

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David F. O'Bryan
(Print Name)

David F. Bryan
(Signature)

DATE: 08/08/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 2415	SEFCU @ 1350
2	-1	
3	-1	
4	-1	
5	-1	
6	-1	
7	-1	
8	-1	
9	-1	
10	-1	
1		-1

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

DAVID F. O'BRYAN
(Print Name)

(Signature)

DATE: @ 8/15/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 14455	SEFCU @ 1505
2	-1	
3	-1	
4	-1	
5	-1	
6	-1	
7	-1	
8	-1	
9	-1	
10	-1	
1		-1

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David F. O'Brien
(Print Name)

(Signature)

DATE: 08-22-14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S	SEFCU
2	-1	1 -1
3	-1	
4	-1	
5	-1	
6	-1	
7	-1	
8	-1	
9	-1	
10	-1	

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David O'Bryan
(Print Name)

David O'Bryan
(Signature)

DATE: 08/29/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1025	SEFCU @ 1000
2	-1	
3	-1	
4	-1	
5	-1	
6	-1	
7	-1	
8	-1	
9	-1	
10	-1	
1		-1

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David O'Bryan
(Print Name)

(Signature)

DATE: 09/05/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1203	SEFCU @ 1223
2	-1	
3	-1	
4	-1	
5	-1	
6	-1	
7	-1	
8	-1	
9	-1	
10	-1	
1		-1

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David O'Bryan
(Print Name)

(Signature)

DATE: 09/12/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1255	SEFCU @ 1310
2	-1	1 -1
3	-1	
4	-1	
5	-1	
6	-1	
7	-1	
8	-1	
9	-1	
10	-1	

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David O'Bryan
(Print Name)

(Signature)

DATE: 09/19/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 14"	SEFCU @ 34
2	~ /	
3	– /	
4	– /	
5	~ /	
6	~ /	
7	~ /	
8	~ /	
9	~ /	
10	~ /	
1		– /

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David F. O'Brien
(Print Name)

(Signature)

DATE: 09/29/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1255	SEFCU @ 1317
2	-1	1 -1
3	-1	
4	-1	
5	-1	
6	-1	
7	-1	
8	-1	
9	-1	
10	-1	

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David F. O'Brien — (Print Name)

(Signature)

DATE: 10/06/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @1224	SEFCU @ 1155
2	-1	
3	-1	
4	-1	
5	-1	
6	-1	
7	-1	
8	-1	
9	-1	
10	-1	
1		-1

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

DAVID F. O'BRYAN
(Print Name)

(Signature)

DATE: 10/10/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1500	SEFCU @ 1345
2	-1	1 -1
3	-1	
4	-1	
5	-1	
6	-1	
7	-1	
8	-1	
9	-1	
10	-1	

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David F. O'Brien
(Print Name)

(Signature)

DATE: 10/17/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1330	SEFCU @ 1340
2	-1	
3	-1	
4	-1	
5	-1	
6	-1	
7	-1	
8	-1	
9	-1	
10	-1	
1		-1

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic guages.

COMMENTS:

INSPECTED BY:

David F. O'Bryan
(Print Name)

(Signature)

DATE: 10/24/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 0850	SEFCU @ 0910
2	-1	1 -1
3	-1	
4	-1	
5	-1	
6	-1	
7	-1	
8	-1	
9	-1	
10	-1	

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic guages.

COMMENTS:

INSPECTED BY:

DAVID F. OSBAND
(Print Name)

(Signature)

DATE: 10/31/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1045	SEFCU @ 1035
1		-1
2	-1	
3	-1	
4	-1	
5	-1	
6	-1	
7	-1	
8	-1	
9	-1	
10	-1	

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic guages.

COMMENTS:

INSPECTED BY:

David F. O'Brynas
(Print Name)

David F O'Brynas
(Signature)

DATE: 11-07-17

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1205	SEFCU @ 1155
2	-/	1 -/
3	-/	
4	-/	
5	-/	
6	-/	
7	-/	
8	-/	
9	-/	
10	-/	

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic guages.

COMMENTS:

INSPECTED BY:

DAVID F. O'BRYAN
(Print Name)

(Signature)

DATE: 11/14/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @	SEFCU @ 1335
2	-1	1 -1
3	-1	
4	-1	
5	-1	
6	-1	
7	-1	
8	-1	
9	-1	
10	-1	

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic guages.

COMMENTS:

INSPECTED BY:

DAVID F. O'BRYAN
(Print Name)

(Signature)

DATE: 11/21/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 0947	SEFCU @ 0935
2	-1	
3	-1	
4	-1	
5	-1	
6	-1	
7	-1	
8	-1	
9	-1	
10	-1	
1		-1

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David F. O'Bryan
(Print Name)

(Signature)

DATE: 10/28/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S	SEFCU 8121
2	-/	1 -/
3	-/	
4	-/	
5	-/	
6	-/	
7	-/	
8	-/	
9	-/	
10	-/	

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic guages.

COMMENTS:

INSPECTED BY:

David F. O'Brien
(Print Name)

(Signature)

DATE: 12/8/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1140	SEFCU @ 1136
2	-1	
3	-1	
4	-1	
5	-1	
6	-1	
7	-1	
8	-1	
9	-1	
10	-1	
1		-1

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic guages.

COMMENTS:

INSPECTED BY:

David F O'Bryan
(Print Name)

(Signature)

DATE: 12/15/16

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1225	SEFCU @ 1200
2	-1	
3	-1	
4	-1	
5	-1	
6	-1	
7	-1	
8	-1	
9	-1	
10	-1	
1		-1

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic guages.

COMMENTS:

INSPECTED BY:

David E. O'Boyle
(Print Name)

(Signature)

DATE: 12/19/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1131	SEFCU @ 1128
2	~1	
3	~1	
4	~1	
5	~1	
6	~1	
7	~1	
8	~1	
9	~1	
10	~1	
1		~1

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic guages.

COMMENTS:

INSPECTED BY:

David F. O'Brynn
(Print Name)

(Signature)

DATE: 12/26/14

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1500	SEFCU @ 1510
2	-1	
3	-1	
4	-1	
5	-1	
6	-1	
7	-1	
8	-1	
9	-1	
10	-1	
1		-1

*The above measurements are in "inches of water" taken from Dwyer Series 2000, Magnehelic gages.

COMMENTS:

INSPECTED BY:

David F. O'Bryan
(Print Name)

David F. O'Bryan
(Signature)

Appendix D

Property Inspection Forms

SHOPPING CENTER
PROPERTY INSPECTION

PROPERTY NAME Midtown Crossing
PROPERTY NO. 1650

Inspected By Greg Heinen Property Manager
Date 4/7/14
Approved _____

I. Exterior: ~~Site & Building~~ LOT CONDITION ONLY

* A. Parking Lot Asphalt (holes, fractures, low spots, liability hazards, oil & stone, shim).
No Pot Holes or any other tripping hazards noted at time of inspection.

B. Storm Water Drainage (catch basins, swails, ditches, culverts: clean & operating, pumps operating and PM program in force, hour meters working; clean out catch basins). Weekly
All required MAintenance completed at time of inspection

C. Fire Hydrants (protected, painted, visibility, access, shown on drawing).
All hydrants painted & visible at time of inspection

D. Fire Lanes and Handicapped Parking (properly marked & signed).
All fire lanes & handicapped spots properly marked at time of inspection

* E. Snow removal (stock pile areas established, delineator posts needed, drainage problems, damaged areas).
N/A

* F. Parking Lot Lighting (operation, test to verify operation, lens/lamp replacement, paint, photocell, timeclocks, manual override switch, anchor bolts & base secure, base cover secure).
N/A

G. Water/Gas Shutoffs, Sewer Cleanouts (properly covered, locations known and shown on drawing, test shutoffs).
N/A

*Monthly Inspection

* H. Buffer Areas (properly cut, debris removed).

All areas were in good Shape At time of inspection.

* I. Sidewalks & Curbs (maintenance, drainage, handicap ramps, re-caulk, refuse containers, tripping hazards).

All areas were in good Shape At time of inspection

J. Striping (condition of paint, areas to be relined, skip next year).

Completed At time of inspection

* K. Traffic Control Devices (traffic signal operation, speed limit/vehicle signage - faded/additions needed).

N/A

L. Paint (exterior walls, trim, service doors, trash areas, compactors, canopies).

N/A

M. Caulking (type of failures & extent).

N/A

* N. Landscaping (cleanliness, maintenance program, drainage, add plantings, weed killer at curbs, cracks, etc.).

Spring Clean up Completed At time of inspection

* O. Pylon & other signs (paint, rusting, fading, lighting, time clock control, reader board letter inventory).

N/A

* P. Other Items (compactor locked off, propane tank safety, water silcocks, loading areas; Put tenant info on tenant sheets).

N/A

SHOPPING CENTER
PROPERTY INSPECTION

PROPERTY NAME Mitter Crossing
PROPERTY NO. 1650

Inspected By Greg Hensel Property Manager
Date 9/14/14
Approved _____

I. Exterior: Site ~~& Building~~ LOT CONDITION ONLY

* A. Parking Lot Asphalt (holes, fractures, low spots, liability hazards, oil & stone, shim).
No Pot holes or trip hazards to report

B. Storm Water Drainage (catch basins, swails, ditches, culverts: clean & operating, pumps operating and PM program in force, hour meters working; clean out catch basins).
All areas in good condition

C. Fire Hydrants (protected, painted, visibility, access, shown on drawing).
All hydrants painted & visible

D. Fire Lanes and Handicapped Parking (properly marked & signed).
All fire lanes & handicapped parking spots well marked

* E. Snow removal (stock pile areas established, delineator posts needed, drainage problems, damaged areas).
N/A

* F. Parking Lot Lighting (operation, test to verify operation, lens/lamp replacement, paint, photocell, timeclocks, manual override switch, anchor bolts & base secure, base cover secure).
All parking lot lights operational at time of inspection

G. Water/Gas Shutoffs, Sewer Cleanouts (properly covered, locations known and shown on drawing, test shutoffs).
N/A

*Monthly Inspection

* H. Buffer Areas (properly cut, debris removed).

All buffer areas well groomed and free of debris at time of inspection

* I. Sidewalks & Curbs (maintenance, drainage, handicap ramps, re-caulk, refuse containers, tripping hazards).

All areas in good condition at time of inspection

J. Striping (condition of paint, areas to be relined, skip next year).

Completed

* K. Traffic Control Devices (traffic signal operation, speed limit/vehicle signage - faded/additions needed).

N/A

L. Paint (exterior walls, trim, service doors, trash areas, compactors, canopies).

N/A

M. Caulking (type of failures & extent).

N/A

* N. Landscaping (cleanliness, maintenance program, drainage, add plantings, weed killer at curbs, cracks, etc.).

All landscaped areas were in good condition at time of inspection

* O. Pylon & other signs (paint, rusting, fading, lighting, time clock control, reader board letter inventory).

N/A

* P. Other Items (compactor locked off, propane tank safety, water silcocks, loading areas; Put tenant info on tenant sheets).

N/A

Appendix E

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. C734103

Site Name Midler City Industrial Park

Site Address: 621 S. Midler Ave. (aka 701 Nichols Ave.) Zip Code: 13206
City/Town: Syracuse
County: Onondaga
Site Acreage: 21.7

Reporting Period: March 01, 2014 to March 01, 2015

	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?	☐	☑
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	☑

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Commercial and 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

Box 2A

	YES	NO
8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?	☐	☑
9. Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years)	☑	☐

If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.

If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.

SITE NO. C734103 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
033.1-01-01.3	Pioneer Midler Avenue, LLC	Site Management Plan Ground Water Use Restriction Soil Management Plan

The Controlled Property may be used for commercial use as long as the following long-term engineering controls are employed:

(i) compliance with the Department-approved Site Management Plan ("SMP") for the implemented remedy until the remedial goals for the Controlled Property are attained or deemed complete by the Department;

(ii) maintenance at a minimum of a one foot cover system or a six inch pavement system or buildings over the Site and any disturbance of or excavation from the Site cover system at depths greater than the one foot shall be done in accordance of the requirements of the SMP;

(iii) the groundwater beneath the Controlled Property cannot be used as a potable water source or for any other use without prior written permission of the Department and the pumping and discharge of groundwater to the waters of the State shall not be allowed without appropriate treatment and approval of the governing State, County or Municipal authority;

(iv) continued groundwater monitoring in accordance with the SMP until the Department determines that such monitoring is unnecessary;

(v) installation and maintenance in accordance with the standards and procedures specified in the SMP of subslab depressurization ("SSD") systems for all buildings and building additions to be constructed on the Site and the continued operation and maintenance in accordance with the SMP of those SSD systems already installed on the Site;

033.1-01-01.4	Pioneer Midler Avenue, LLC	Site Management Plan Ground Water Use Restriction Soil Management Plan

The Controlled Property may be used for commercial use as long as the following long-term engineering controls are employed:

(i) compliance with the Department-approved Site Management Plan ("SMP") for the implemented remedy until the remedial goals for the Controlled Property are attained or deemed complete by the Department;

(ii) maintenance at a minimum of a one foot cover system or a six inch pavement system or buildings over the Site and any disturbance of or excavation from the Site cover system at depths greater than the one foot shall be done in accordance of the requirements of the SMP;

(iii) the groundwater beneath the Controlled Property cannot be used as a potable water source or for any other use without prior written permission of the Department and the pumping and discharge of groundwater to the waters of the State shall not be allowed without appropriate treatment and approval of the governing State, County or Municipal authority;

(iv) continued groundwater monitoring in accordance with the SMP until the Department determines that such monitoring is unnecessary;

(v) installation and maintenance in accordance with the standards and procedures specified in the SMP of subslab depressurization ("SSD") systems for all buildings and building additions to be constructed on the Site and the continued operation and maintenance in accordance with the SMP of those SSD systems already installed on the Site;

033.1-01-01.5	Pioneer Midler Avenue, LLC	Ground Water Use Restriction Soil Management Plan

Site Management Plan

The Controlled Property may be used for commercial use as long as the following long-term engineering controls are employed:

(i) compliance with the Department-approved Site Management Plan ("SMP") for the implemented remedy until the remedial goals for the Controlled Property are attained or deemed complete by the Department;

(ii) maintenance at a minimum of a one foot cover system or a six inch pavement system or buildings over the Site and any disturbance of or excavation from the Site cover system at depths greater than the one foot shall be done in accordance of the requirements of the SMP;

(iii) the groundwater beneath the Controlled Property cannot be used as a potable water source or for any other use without prior written permission of the Department and the pumping and discharge of groundwater to the waters of the State shall not be allowed without appropriate treatment and approval of the governing State, County or Municipal authority;

(iv) continued groundwater monitoring in accordance with the SMP until the Department determines that such monitoring is unnecessary;

(v) installation and maintenance in accordance with the standards and procedures specified in the SMP of subslab depressurization ("SSD") systems for all buildings and building additions to be constructed on the Site and the continued operation and maintenance in accordance with the SMP of those SSD systems already installed on the Site;

033.1-01-01.6 Pioneer Midler Avenue, LLC

Site Management Plan
Ground Water Use Restriction
Soil Management Plan

The Controlled Property may be used for commercial use as long as the following long-term engineering controls are employed:

(i) compliance with the Department-approved Site Management Plan ("SMP") for the implemented remedy until the remedial goals for the Controlled Property are attained or deemed complete by the Department;

(ii) maintenance at a minimum of a one foot cover system or a six inch pavement system or buildings over the Site and any disturbance of or excavation from the Site cover system at depths greater than the one foot shall be done in accordance of the requirements of the SMP;

(iii) the groundwater beneath the Controlled Property cannot be used as a potable water source or for any other use without prior written permission of the Department and the pumping and discharge of groundwater to the waters of the State shall not be allowed without appropriate treatment and approval of the governing State, County or Municipal authority;

(iv) continued groundwater monitoring in accordance with the SMP until the Department determines that such monitoring is unnecessary;

(v) installation and maintenance in accordance with the standards and procedures specified in the SMP of subslab depressurization ("SSD") systems for all buildings and building additions to be constructed on the Site and the continued operation and maintenance in accordance with the SMP of those SSD systems already installed on the Site;

033.1-01-01.7 Pioneer Midler Avenue, LLC

Ground Water Use Restriction
Soil Management Plan

Site Management Plan

The Controlled Property may be used for commercial use as long as the following long-term engineering controls are employed:

(i) compliance with the Department-approved Site Management Plan ("SMP") for the implemented remedy until the remedial goals for the Controlled Property are attained or deemed complete by the

Department;

(ii) maintenance at a minimum of a one foot cover system or a six inch pavement system or buildings over the Site and any disturbance of or excavation from the Site cover system at depths greater than the one foot shall be done in accordance of the requirements of the SMP;

(iii) the groundwater beneath the Controlled Property cannot be used as a potable water source or for any other use without prior written permission of the Department and the pumping and discharge of groundwater to the waters of the State shall not be allowed without appropriate treatment and approval of the governing State, County or Municipal authority;

(iv) continued groundwater monitoring in accordance with the SMP until the Department determines that such monitoring is unnecessary;

(v) installation and maintenance in accordance with the standards and procedures specified in the SMP of subslab depressurization ("SSD") systems for all buildings and building additions to be constructed on the Site and the continued operation and maintenance in accordance with the SMP of those SSD systems already installed on the Site;

033.1-01-02.4 Lowe's Home Centers, Inc.

Site Management Plan
Ground Water Use Restriction
Soil Management Plan

The Controlled Property may be used for commercial use as long as the following long-term engineering controls are employed:

(i) compliance with the Department-approved Site Management Plan ("SMP") for the implemented remedy until the remedial goals for the Controlled Property are attained or deemed complete by the Department;

(ii) maintenance at a minimum of a one foot cover system or a six inch pavement system or buildings over the Site and any disturbance of or excavation from the Site cover system at depths greater than the one foot shall be done in accordance of the requirements of the SMP;

(iii) the groundwater beneath the Controlled Property cannot be used as a potable water source or for any other use without prior written permission of the Department and the pumping and discharge of groundwater to the waters of the State shall not be allowed without appropriate treatment and approval of the governing State, County or Municipal authority;

(iv) continued groundwater monitoring in accordance with the SMP until the Department determines that such monitoring is unnecessary;

(v) installation and maintenance in accordance with the standards and procedures specified in the SMP of subslab depressurization ("SSD") systems for all buildings and building additions to be constructed on the Site and the continued operation and maintenance in accordance with the SMP of those SSD systems already installed on the Site;

033.1-01-20.0 Pioneer Midler Avenue, LLC

Site Management Plan
Ground Water Use Restriction
Soil Management Plan

The Controlled Property may be used for commercial use as long as the following long-term engineering controls are employed:

(i) compliance with the Department-approved Site Management Plan ("SMP") for the implemented remedy until the remedial goals for the Controlled Property are attained or deemed complete by the Department;

(ii) maintenance at a minimum of a one foot cover system or a six inch pavement system or buildings over the Site and any disturbance of or excavation from the Site cover system at depths greater than the one foot shall be done in accordance of the requirements of the SMP;

(iii) the groundwater beneath the Controlled Property cannot be used as a potable water source or for any other use without prior written permission of the Department and the pumping and discharge of groundwater to the waters of the State shall not be allowed without appropriate treatment and approval of the governing State, County or Municipal authority;

(iv) continued groundwater monitoring in accordance with the SMP until the Department determines that such monitoring is unnecessary;

(v) installation and maintenance in accordance with the standards and procedures specified in the SMP of subslab depressurization ("SSD") systems for all buildings and building additions to be constructed on the Site and the continued operation and maintenance in accordance with the SMP of those SSD systems already installed on the Site;

Box 4

Description of Engineering Controls

Parcel	Engineering Control
033.1-01-01.3	Vapor Mitigation Cover System
033.1-01-01.4	Vapor Mitigation Cover System
033.1-01-01.5	Vapor Mitigation Cover System
033.1-01-01.6	Vapor Mitigation Cover System
033.1-01-01.7	Vapor Mitigation Cover System
033.1-01-02.4	Vapor Mitigation Cover System
033.1-01-20.0	Vapor Mitigation Cover System

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. C734103

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 Edward A. Marshall (print name) at 333 W. Washington St., Suite 600, Syracuse, NY 13202 (print business address)

am certifying as Agent for Owner, Pioneer Midler Avenue,LLC (Owner or Remedial Party)

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

Pioneer Midler Avenue LLC Edward A Marshall — Signature of Owner, Remedial Party, or Designated Representative

Date 2/26/15

Rendering Certification Agent

IC/EC CERTIFICATIONS

Box 7

Qualified Environmental Professional 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 Wayne Randall (print name) at C&S Engineers, Inc. Syracuse, NY (print business address),

am certifying as a Qualified Environmental Professional for the Pioneer Midler, LLC (Owner or Remedial Party)

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

Stamp (Required for PE)

March 13, 2015
Date